



# Full wwPDB X-ray Structure Validation Report ⓘ

May 20, 2025 – 07:34 am BST

PDB ID : 8PNN / pdb\_00008pnn  
Title : 80S yeast ribosome in complex with Bromolisoclimide  
Authors : Terrosu, S.; Yusupov, M.  
Deposited on : 2023-06-30  
Resolution : 2.90 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

MolProbity : 4-5-2 with Phenix2.0rc1  
Mogul : 1.8.4, CSD as541be (2020)  
Xtriage (Phenix) : 2.0rc1  
EDS : 3.0  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)  
CCP4 : 9.0.003 (Gargrove)  
Density-Fitness : 1.0.11  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.43.1

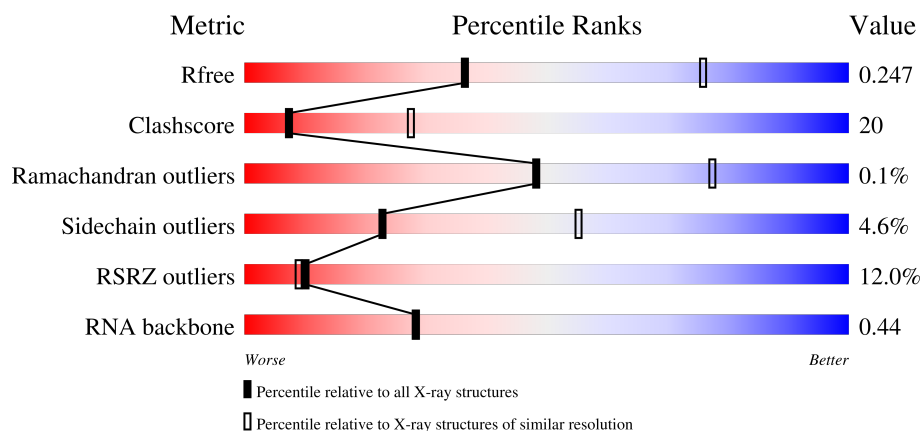
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.90 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	164625	2335 (2.90-2.90)
Clashscore	180529	2564 (2.90-2.90)
Ramachandran outliers	177936	2514 (2.90-2.90)
Sidechain outliers	177891	2516 (2.90-2.90)
RSRZ outliers	164620	2337 (2.90-2.90)
RNA backbone	3690	1039 (3.10-2.70)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	3	121	<div> <div>6%</div> <div> <div></div> <div>53%</div> <div>38%</div> <div>9%</div> </div> </div>
1	AS	121	<div> <div>2%</div> <div> <div></div> <div>50%</div> <div>45%</div> <div>6%</div> </div> </div>
2	AB	149	<div> <div>7%</div> <div> <div></div> <div>49%</div> <div>43%</div> <div>7%</div> <div>..</div> </div> </div>
2	DC	149	<div> <div>4%</div> <div> <div></div> <div>49%</div> <div>48%</div> <div>..</div> </div> </div>

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Mol	Chain	Length	Quality of chain
3	CJ	256	
3	p	256	
4	AI	120	
4	DJ	120	
5	Q	142	
5	c5	142	
6	H	236	
6	s6	236	
7	4	158	
7	AT	158	
8	AC	59	
8	DD	59	
9	CK	191	
9	q	191	
10	AJ	100	
10	DK	100	
11	R	143	
11	c6	143	
12	I	190	
12	s7	190	
13	CD	254	
13	j	254	
14	AD	105	
14	DE	105	
15	CL	221	

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Mol	Chain	Length	Quality of chain
15	r	221	
16	AK	88	
16	DL	88	
17	S	136	
17	c7	136	
18	J	200	
18	s8	200	
19	CE	387	
19	k	387	
20	AE	113	
20	DF	113	
21	CM	174	
21	s	174	
22	AL	78	
22	DM	78	
23	T	146	
23	c8	146	
24	K	197	
24	s9	197	
25	CF	362	
25	l	362	
26	AF	130	
26	DG	130	
27	CN	199	
27	t	199	

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Mol	Chain	Length	Quality of chain
28	AM	51	
28	DN	51	
29	U	144	
29	c9	144	
30	L	105	
30	c0	105	
31	CG	297	
31	m	297	
32	AG	107	
32	DH	107	
33	CO	138	
33	u	138	
34	AN	128	
34	DO	128	
35	V	121	
35	d0	121	
36	M	156	
36	c1	156	
37	CH	176	
37	n	176	
38	AH	121	
38	DI	121	
39	CP	204	
39	v	204	
40	AO	25	

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Mol	Chain	Length	Quality of chain
40	DP	25	
41	W	87	
41	d1	87	
42	O	151	
42	c3	151	
43	CI	244	
43	o	244	
44	CQ	199	
44	w	199	
45	AP	106	
45	DQ	106	
46	X	130	
46	d2	130	
47	P	138	
47	c4	138	
48	CR	184	
48	x	184	
49	AQ	92	
49	DR	92	
50	Y	145	
50	d3	145	
51	CS	186	
51	y	186	
52	p0	311	
53	Z	135	

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Mol	Chain	Length	Quality of chain
53	d4	135	
54	CT	189	
54	z	189	
55	i	273	
55	sM	273	
56	a	108	
56	d5	108	
57	0	172	
57	CU	172	
58	A	1800	
58	sR	1800	
59	b	119	
59	d6	119	
60	2	160	
60	CV	160	
61	B	252	
61	s0	252	
62	c	82	
62	d7	82	
63	5	121	
63	CW	121	
64	C	255	
64	s1	255	
65	d	67	
65	d8	67	

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Mol	Chain	Length	Quality of chain
66	6	137	
66	CX	137	
67	D	254	
67	s2	254	
68	d9	56	
68	e	56	
69	7	155	
69	CY	155	
70	E	240	
70	s3	240	
71	e0	63	
71	f	63	
72	8	142	
72	CZ	142	
73	F	261	
73	s4	261	
74	g	152	
75	1	3396	
75	AR	3396	
76	9	127	
76	DA	127	
77	G	225	
77	s5	225	
78	Rb	319	
78	h	319	

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Mol	Chain	Length	Quality of chain
79	AA	136	
79	DB	136	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
80	OHX	1	3424	-	-	X	-
80	OHX	1	3603	-	-	X	-
80	OHX	1	3631	-	-	X	-
80	OHX	1	4028	-	-	X	-
80	OHX	1	4083	-	-	X	-
80	OHX	A	1944	-	-	X	-
80	OHX	A	1964	-	-	X	-
80	OHX	A	2003	-	-	X	-
80	OHX	A	2110	-	-	X	-
80	OHX	AK	103	-	-	X	-
80	OHX	AR	3856	-	-	X	-
80	OHX	AR	3956	-	-	X	-
80	OHX	AR	3973	-	-	X	-
80	OHX	AR	4135	-	-	X	-
80	OHX	sR	1945	-	-	X	-
80	OHX	sR	2198	-	-	X	-
81	MG	1	3500	-	-	-	X
81	MG	1	3584	-	-	-	X
81	MG	1	3900	-	-	-	X
81	MG	1	3955	-	-	-	X
81	MG	1	4041	-	-	-	X
81	MG	1	4046	-	-	-	X
81	MG	1	4109	-	-	-	X
81	MG	A	2008	-	-	-	X
81	MG	A	2021	-	-	-	X
81	MG	AR	3433	-	-	-	X
81	MG	AR	3434	-	-	-	X
81	MG	AR	3726	-	-	-	X
81	MG	AR	3905	-	-	-	X
81	MG	AR	4129	-	-	-	X
81	MG	AR	4148	-	-	-	X
81	MG	c8	202	-	-	-	X
81	MG	sR	2059	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
81	MG	sR	2080	-	-	-	X
81	MG	sR	2106	-	-	-	X
81	MG	sR	2152	-	-	-	X

## 2 Entry composition

There are 86 unique types of molecules in this entry. The entry contains 402407 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	3	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			
1	AS	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			

- Molecule 2 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			
2	DC	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			

- Molecule 3 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	CJ	227	Total	C	N	O	S	0	0	0
			1762	1128	315	316	3			
3	p	233	Total	C	N	O	S	0	0	0
			1804	1151	323	327	3			

- Molecule 4 is a protein called 60S ribosomal protein L35-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	DJ	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			
4	AI	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			

- Molecule 5 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	Q	117	Total	C	N	O	S	0	0	0
			928	589	174	158	7			
5	c5	135	Total	C	N	O	S	0	0	0
			1039	658	196	178	7			

- Molecule 6 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	s6	218	Total	C	N	O	S	0	0	0
			1755	1102	337	313	3			
6	H	226	Total	C	N	O	S	0	0	0
			1799	1129	346	321	3			

- Molecule 7 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	4	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			
7	AT	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			

- Molecule 8 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
8	AC	54	Total	C	N	O	0	0	0
			434	271	94	69			
8	DD	58	Total	C	N	O	0	0	0
			462	289	100	73			

- Molecule 9 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	CK	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			
9	q	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			

- Molecule 10 is a protein called 60S ribosomal protein L36-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	DK	97	Total	C	N	O	S	0	0	0
			750	469	149	130	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			

- Molecule 11 is a protein called 40S ribosomal protein S16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	R	141	Total	C	N	O		0	0	0
			1105	708	203	194				
11	c6	142	Total	C	N	O		0	0	0
			1111	711	204	196				

- Molecule 12 is a protein called 40S ribosomal protein S7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	s7	186	Total	C	N	O		0	0	0
			1491	957	267	267				
12	I	184	Total	C	N	O		0	0	0
			1481	951	265	265				

- Molecule 13 is a protein called 60S ribosomal protein L2-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	j	252	Total	C	N	O	S	0	0	0
			1914	1191	388	334	1			
13	CD	252	Total	C	N	O	S	0	0	0
			1914	1191	388	334	1			

- Molecule 14 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AD	97	Total	C	N	O	S	0	0	0
			740	476	124	139	1			
14	DE	97	Total	C	N	O	S	0	0	0
			743	479	124	139	1			

- Molecule 15 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	CL	207	Total	C	N	O	S	0	0	0
			1685	1071	318	290	6			
15	r	211	Total	C	N	O	S	0	0	0
			1705	1083	322	294	6			

- Molecule 16 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	DL	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			
16	AK	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			

- Molecule 17 is a protein called 40S ribosomal protein S17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	S	111	Total	C	N	O	S	0	0	0
			863	536	166	159	2			
17	c7	117	Total	C	N	O	S	0	0	0
			906	563	174	167	2			

- Molecule 18 is a protein called 40S ribosomal protein S8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	s8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			
18	J	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

- Molecule 19 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	k	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			
19	CE	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			

- Molecule 20 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AE	109	Total	C	N	O	S	0	0	0
			876	556	167	152	1			
20	DF	107	Total	C	N	O	S	0	0	0
			866	550	165	150	1			

- Molecule 21 is a protein called Large ribosomal subunit protein uL5B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	CM	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			
21	s	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			

- Molecule 22 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	DM	73	Total	C	N	O		0	0	0
			586	376	109	101				
22	AL	77	Total	C	N	O		0	0	0
			612	391	115	106				

- Molecule 23 is a protein called 40S ribosomal protein S18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	T	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			
23	c8	135	Total	C	N	O	S	0	0	0
			1116	695	225	194	2			

- Molecule 24 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	s9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			
24	K	177	Total	C	N	O	S	0	0	0
			1436	910	277	248	1			

- Molecule 25 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	l	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			
25	CF	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			

- Molecule 26 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	AF	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	DG	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

- Molecule 27 is a protein called 60S ribosomal protein L13-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	CN	193	Total	C	N	O		0	0	0
			1543	962	315	266				
27	t	193	Total	C	N	O		0	0	0
			1543	962	315	266				

- Molecule 28 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	DN	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			
28	AM	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			

- Molecule 29 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	U	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			
29	c9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			

- Molecule 30 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	c0	72	Total	C	N	O	S	0	0	0
			609	395	98	114	2			
30	L	90	Total	C	N	O	S	0	0	0
			742	481	120	139	2			

- Molecule 31 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	m	296	Total	C	N	O	S	0	0	0
			2375	1501	414	458	2			
31	CG	292	Total	C	N	O	S	0	0	0
			2348	1486	408	452	2			



- Molecule 32 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	AG	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			
32	DH	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			

- Molecule 33 is a protein called 60S ribosomal protein L14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	CO	136	Total	C	N	O	S	0	0	0
			1053	675	199	177	2			
33	u	136	Total	C	N	O	S	0	0	0
			1053	675	199	177	2			

- Molecule 34 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	DO	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			
34	AN	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			

- Molecule 35 is a protein called Small ribosomal subunit protein uS10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	V	107	Total	C	N	O	S	0	0	0
			855	539	156	159	1			
35	d0	72	Total	C	N	O	S	0	0	0
			585	367	109	108	1			

- Molecule 36 is a protein called 40S ribosomal protein S11-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	c1	146	Total	C	N	O	S	0	0	0
			1168	747	221	197	3			
36	M	138	Total	C	N	O	S	0	0	0
			1119	718	213	185	3			

- Molecule 37 is a protein called 60S ribosomal protein L6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	n	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			
37	CH	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			

- Molecule 38 is a protein called 60S ribosomal protein L34-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	AH	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			
38	DI	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			

- Molecule 39 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	CP	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			
39	v	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			

- Molecule 40 is a protein called Large ribosomal subunit protein eL41B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	DP	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			
40	AO	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			

- Molecule 41 is a protein called 40S ribosomal protein S21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	W	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			
41	d1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			

- Molecule 42 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	c3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	O	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			

- Molecule 43 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	o	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			
43	CI	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			

- Molecule 44 is a protein called 60S ribosomal protein L16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	CQ	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			
44	w	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			

- Molecule 45 is a protein called 60S ribosomal protein L42-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	DQ	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			
45	AP	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			

- Molecule 46 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	X	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			
46	d2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			

- Molecule 47 is a protein called 40S ribosomal protein S14-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	c4	128	Total	C	N	O	S	0	0	0
			949	582	188	176	3			
47	P	88	Total	C	N	O	S	0	0	0
			600	361	121	117	1			

- Molecule 48 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
48	CR	155	Total	C	N	O	0	0	0
			1227	764	238	225			
48	x	182	Total	C	N	O	0	0	0
			1415	879	280	256			

- Molecule 49 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	DR	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			
49	AQ	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			

- Molecule 50 is a protein called 40S ribosomal protein S23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	Y	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			
50	d3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			

- Molecule 51 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	CS	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			
51	y	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			

- Molecule 52 is a protein called Large ribosomal subunit protein uL10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	p0	120	Total	C	N	O	S	0	0	0
			962	618	169	172	3			

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
p0	111	GLY	ARG	conflict	UNP P05317
p0	112	LEU	ALA	conflict	UNP P05317
p0	113	THR	GLY	conflict	UNP P05317

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Chain	Residue	Modelled	Actual	Comment	Reference
p0	114	VAL	ALA	conflict	UNP P05317
p0	116	GLN	ALA	conflict	UNP P05317
p0	117	VAL	PRO	conflict	UNP P05317
p0	118	TYR	GLU	conflict	UNP P05317
p0	?	-	VAL	deletion	UNP P05317
p0	126	GLY	THR	conflict	UNP P05317
p0	127	GLN	GLY	conflict	UNP P05317
p0	128	VAL	MET	conflict	UNP P05317
p0	129	PHE	GLU	conflict	UNP P05317

- Molecule 53 is a protein called 40S ribosomal protein S24-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
53	Z	134	Total	C	N	O	0	0	0
			1073	676	208	189			
53	d4	134	Total	C	N	O	0	0	0
			1073	676	208	189			

- Molecule 54 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
54	CT	180	Total	C	N	O	0	0	0
			1461	898	317	246			
54	z	183	Total	C	N	O	0	0	0
			1482	911	320	251			

- Molecule 55 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
55	sM	63	Total	C	N	O	0	0	0
			475	280	99	96			
55	i	140	Total	C	N	O	0	0	0
			1010	596	202	212			

- Molecule 56 is a protein called 40S ribosomal protein S25-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
56	a	64	Total	C	N	O	0	0	0
			514	328	95	91			
56	d5	69	Total	C	N	O	0	0	0
			558	357	103	98			

- Molecule 57 is a protein called 60S ribosomal protein L20-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	CU	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			
57	0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

- Molecule 58 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	A	1722	Total	C	N	O	P	0	0	0
			36700	16407	6500	12071	1722			
58	sR	1783	Total	C	N	O	P	0	0	0
			37990	16984	6723	12500	1783			

- Molecule 59 is a protein called Small ribosomal subunit protein eS26B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	b	93	Total	C	N	O	S	0	0	0
			743	459	156	123	5			
59	d6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

- Molecule 60 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	CV	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			
60	2	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			

- Molecule 61 is a protein called 40S ribosomal protein S0-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	B	206	Total	C	N	O	S	0	0	0
			1577	1014	278	283	2			
61	s0	206	Total	C	N	O	S	0	0	0
			1583	1017	281	283	2			

- Molecule 62 is a protein called 40S ribosomal protein S27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	c	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			
62	d7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			

- Molecule 63 is a protein called 60S ribosomal protein L22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	CW	98	Total	C	N	O	S	0	0	0
			778	505	127	146				
63	5	100	Total	C	N	O	S	0	0	0
			796	516	131	149				

- Molecule 64 is a protein called 40S ribosomal protein S1-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	C	116	Total	C	N	O	S	0	0	0
			943	600	171	170	2			
64	s1	216	Total	C	N	O	S	0	0	0
			1722	1091	312	315	4			

- Molecule 65 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	d	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			
65	d8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			

- Molecule 66 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	CX	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			
66	6	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			

- Molecule 67 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	D	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	s2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			

- Molecule 68 is a protein called Small ribosomal subunit protein uS14A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	e	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			
68	d9	49	Total	C	N	O	S	0	0	0
			404	249	86	65	4			

- Molecule 69 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	CY	116	Total	C	N	O	S	0	0	0
			796	501	158	136	1			
69	7	63	Total	C	N	O	S	0	0	0
			521	336	102	82	1			

- Molecule 70 is a protein called Small ribosomal subunit protein uS3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	E	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			
70	s3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			

- Molecule 71 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	f	60	Total	C	N	O	S	0	0	0
			475	299	98	77	1			
71	e0	62	Total	C	N	O	S	0	0	0
			491	309	101	80	1			

- Molecule 72 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	CZ	117	Total	C	N	O	S	0	0	0
			937	602	164	169	2			
72	8	117	Total	C	N	O	S	0	0	0
			937	602	164	169	2			



- Molecule 73 is a protein called 40S ribosomal protein S4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	F	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			
73	s4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			

- Molecule 74 is a protein called Ubiquitin.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	g	71	Total	C	N	O	S	0	0	0
			566	362	106	94	4			

- Molecule 75 is a RNA chain called 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	AR	3136	Total	C	N	O	P	0	0	0
			67082	29963	12096	21887	3136			
75	1	3149	Total	C	N	O	P	0	0	0
			67355	30086	12142	21978	3149			

- Molecule 76 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
76	DA	124	Total	C	N	O	0	0	0
			976	614	190	172			
76	9	126	Total	C	N	O	0	0	0
			993	625	192	176			

- Molecule 77 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	G	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			
77	s5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			

- Molecule 78 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	h	310	Total	C	N	O	S	0	0	0
			2379	1504	409	458	8			

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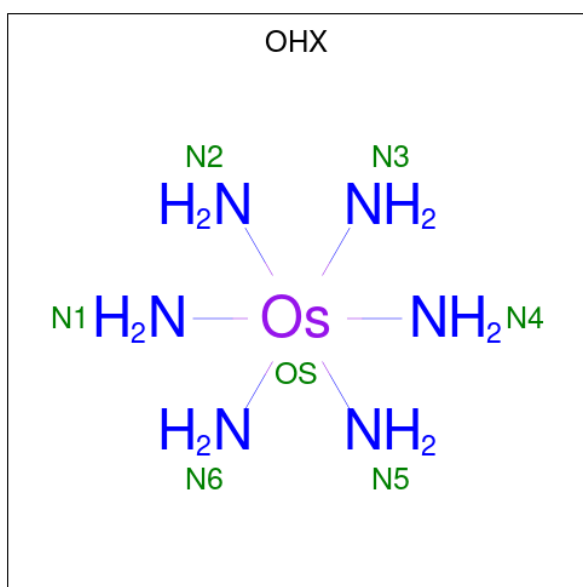
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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	Rb	318	Total	C	N	O	S	0	0	0
			2442	1544	418	472	8			

- Molecule 79 is a protein called 60S ribosomal protein L27-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
79	DB	135	Total	C	N	O	0	0	0
			1092	710	202	180			
79	AA	135	Total	C	N	O	0	0	0
			1092	710	202	180			

- Molecule 80 is osmium (III) hexammine (CCD ID: OHX) (formula:  $\text{H}_{12}\text{N}_6\text{Os}$ ).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	3	1	Total	N	Os	0	0
			7	6	1		
80	3	1	Total	N	Os	0	0
			7	6	1		
80	3	1	Total	N	Os	0	0
			7	6	1		
80	3	1	Total	N	Os	0	0
			7	6	1		
80	3	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	3	1	Total	N	Os	0	0
			7	6	1		
80	3	1	Total	N	Os	0	0
			7	6	1		
80	3	1	Total	N	Os	0	0
			7	6	1		
80	3	1	Total	N	Os	0	0
			7	6	1		
80	Q	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	4	1	Total	N	Os	0	0
			7	6	1		
80	AC	1	Total	N	Os	0	0
			7	6	1		
80	CK	1	Total	N	Os	0	0
			7	6	1		
80	CL	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	CL	1	Total	N	Os	0	0
			7	6	1		
80	DL	1	Total	N	Os	0	0
			7	6	1		
80	k	1	Total	N	Os	0	0
			7	6	1		
80	k	1	Total	N	Os	0	0
			7	6	1		
80	T	1	Total	N	Os	0	0
			7	6	1		
80	U	1	Total	N	Os	0	0
			7	6	1		
80	AG	1	Total	N	Os	0	0
			7	6	1		
80	CP	1	Total	N	Os	0	0
			7	6	1		
80	c3	1	Total	N	Os	0	0
			7	6	1		
80	c5	1	Total	N	Os	0	0
			7	6	1		
80	AK	1	Total	N	Os	0	0
			7	6	1		
80	AK	1	Total	N	Os	0	0
			7	6	1		
80	CS	1	Total	N	Os	0	0
			7	6	1		
80	r	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			6	5	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			6	5	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			6	5	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	A	1	Total	N	Os	0	0
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80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	1
			14	12	2		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	A	1	Total	N	Os	0	0
			7	6	1		
80	c8	1	Total	N	Os	0	0
			7	6	1		
80	CV	1	Total	N	Os	0	0
			7	6	1		
80	C	1	Total	N	Os	0	0
			7	6	1		
80	w	1	Total	N	Os	0	0
			7	6	1		
80	CX	1	Total	N	Os	0	0
			7	6	1		
80	x	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			6	5	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	1
			14	12	2		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			6	5	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
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80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		
80	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	h	1	Total	N	Os	0	0
			7	6	1		
80	d4	1	Total	N	Os	0	0
			7	6	1		
80	AS	1	Total	N	Os	0	0
			7	6	1		
80	AS	1	Total	N	Os	0	0
			7	6	1		
80	AS	1	Total	N	Os	0	0
			7	6	1		
80	AS	1	Total	N	Os	0	0
			7	6	1		
80	AS	1	Total	N	Os	0	0
			7	6	1		
80	AS	1	Total	N	Os	0	0
			7	6	1		
80	AS	1	Total	N	Os	0	0
			7	6	1		
80	AS	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	sR	1	Total	N	Os	0	0
			7	6	1		
80	2	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	1
			14	12	2		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	AT	1	Total	N	Os	0	0
			7	6	1		
80	Rb	1	Total	N	Os	0	0
			7	6	1		
80	DD	1	Total	N	Os	0	0
			7	6	1		
80	J	1	Total	N	Os	0	0
			7	6	1		
80	CE	1	Total	N	Os	0	0
			7	6	1		
80	CE	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	s1	1	Total	N	Os	0	0
			7	6	1		
80	CG	1	Total	N	Os	0	0
			7	6	1		
80	CG	1	Total	N	Os	0	0
			7	6	1		
80	DH	1	Total	N	Os	0	0
			7	6	1		
80	O	1	Total	N	Os	0	0
			7	6	1		
80	s4	1	Total	N	Os	0	0
			7	6	1		
80	v	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			6	5	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		
80	1	1	Total	N	Os	0	0
			7	6	1		

- Molecule 81 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	3	12	Total	Mg	0	0
			12	12		
81	AB	7	Total	Mg	0	0
			7	7		
81	CJ	1	Total	Mg	0	0
			1	1		
81	4	20	Total	Mg	0	0
			20	20		
81	CK	2	Total	Mg	0	0
			2	2		
81	j	2	Total	Mg	0	0
			2	2		
81	CL	1	Total	Mg	0	0
			1	1		
81	DL	2	Total	Mg	0	0
			2	2		
81	s8	2	Total	Mg	0	0
			2	2		
81	k	2	Total	Mg	0	0
			2	2		
81	CM	2	Total	Mg	0	0
			2	2		
81	s9	1	Total	Mg	0	0
			1	1		
81	l	4	Total	Mg	0	0
			4	4		
81	AF	4	Total	Mg	0	0
			4	4		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	U	1	Total 1	Mg 1	0	0
81	m	1	Total 1	Mg 1	0	0
81	CO	1	Total 1	Mg 1	0	0
81	DO	1	Total 1	Mg 1	0	0
81	AH	1	Total 1	Mg 1	0	0
81	CP	4	Total 4	Mg 4	0	0
81	DP	1	Total 1	Mg 1	0	0
81	o	2	Total 2	Mg 2	0	0
81	CQ	3	Total 3	Mg 3	0	0
81	DQ	2	Total 2	Mg 2	0	0
81	c4	1	Total 1	Mg 1	0	0
81	CR	6	Total 6	Mg 6	0	0
81	Y	1	Total 1	Mg 1	0	0
81	AK	2	Total 2	Mg 2	0	0
81	CS	1	Total 1	Mg 1	0	0
81	c6	2	Total 2	Mg 2	0	0
81	r	3	Total 3	Mg 3	0	0
81	sM	2	Total 2	Mg 2	0	0
81	c7	1	Total 1	Mg 1	0	0
81	s	1	Total 1	Mg 1	0	0
81	CU	2	Total 2	Mg 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	A	134	Total 134	Mg 134	0	0
81	c8	1	Total 1	Mg 1	0	0
81	t	2	Total 2	Mg 2	0	0
81	c9	1	Total 1	Mg 1	0	0
81	AO	1	Total 1	Mg 1	0	0
81	w	1	Total 1	Mg 1	0	0
81	CX	1	Total 1	Mg 1	0	0
81	D	1	Total 1	Mg 1	0	0
81	e	1	Total 1	Mg 1	0	0
81	x	8	Total 8	Mg 8	0	0
81	d2	1	Total 1	Mg 1	0	0
81	d3	3	Total 3	Mg 3	0	0
81	z	1	Total 1	Mg 1	0	0
81	AR	506	Total 506	Mg 506	0	0
81	DA	2	Total 2	Mg 2	0	0
81	d4	1	Total 1	Mg 1	0	0
81	AS	22	Total 22	Mg 22	0	0
81	sR	160	Total 160	Mg 160	0	0
81	d5	1	Total 1	Mg 1	0	0
81	AT	18	Total 18	Mg 18	0	0
81	DC	3	Total 3	Mg 3	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	d6	2	Total 2	Mg 2	0	0
81	CD	3	Total 3	Mg 3	0	0
81	DD	1	Total 1	Mg 1	0	0
81	6	3	Total 3	Mg 3	0	0
81	CE	4	Total 4	Mg 4	0	0
81	s1	1	Total 1	Mg 1	0	0
81	CF	2	Total 2	Mg 2	0	0
81	s2	1	Total 1	Mg 1	0	0
81	CG	3	Total 3	Mg 3	0	0
81	DG	1	Total 1	Mg 1	0	0
81	9	1	Total 1	Mg 1	0	0
81	DH	2	Total 2	Mg 2	0	0
81	s4	2	Total 2	Mg 2	0	0
81	v	4	Total 4	Mg 4	0	0
81	CI	2	Total 2	Mg 2	0	0
81	DI	1	Total 1	Mg 1	0	0
81	1	487	Total 487	Mg 487	0	0

- Molecule 82 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
82	DL	1	Total 1	Zn 1	0	0
82	DO	1	Total 1	Zn 1	0	0

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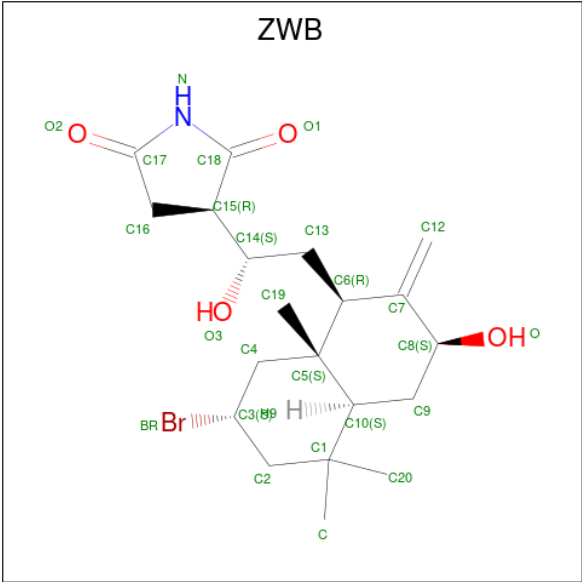
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
82	DQ	1	Total 1	Zn 1	0	0
82	DR	1	Total 1	Zn 1	0	0
82	AK	1	Total 1	Zn 1	0	0
82	b	1	Total 1	Zn 1	0	0
82	AN	1	Total 1	Zn 1	0	0
82	c	1	Total 1	Zn 1	0	0
82	AP	1	Total 1	Zn 1	0	0
82	e	1	Total 1	Zn 1	0	0
82	AQ	1	Total 1	Zn 1	0	0
82	g	1	Total 1	Zn 1	0	0
82	d6	1	Total 1	Zn 1	0	0
82	d7	1	Total 1	Zn 1	0	0
82	d9	1	Total 1	Zn 1	0	0

- Molecule 83 is POTASSIUM ION (CCD ID: K) (formula: K).

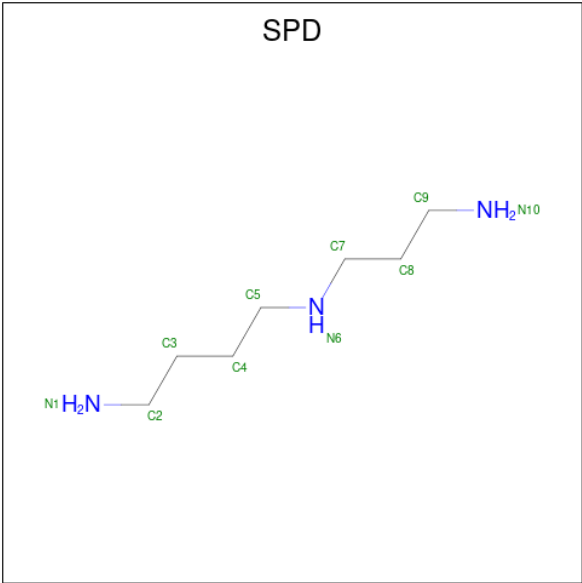
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
83	AR	3	Total 3	K 3	0	0
83	1	1	Total 1	K 1	0	0

- Molecule 84 is (3 {R})-3-[(1 {S})-2-[(1 {R},3 {S},4 {a} {S},7 {S},8 {a} {S})-7-bromanyl-5,5,8 {a}-trimethyl-2-methylidene-3-oxidanyl-3,4,4 {a},6,7,8-hexahydro-1 {H}-naphthalen-1-yl]-1-oxidanyl-ethyl]pyrrolidine-2,5-dione (CCD ID: ZWB) (formula: C<sub>20</sub>H<sub>30</sub>BrNO<sub>4</sub>) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
84	AR	1	Total	Br	C	N	O	0	0
			26	1	20	1	4		
84	1	1	Total	Br	C	N	O	0	0
			26	1	20	1	4		

- Molecule 85 is SPERMIDINE (CCD ID: SPD) (formula: C<sub>7</sub>H<sub>19</sub>N<sub>3</sub>).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	AR	1	Total	C	N	0	0
			10	7	3		
85	AR	1	Total	C	N	0	0
			10	7	3		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	AR	1	Total	C	N	0	0
			10	7	3		
85	1	1	Total	C	N	0	0
			10	7	3		

- Molecule 86 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	3	3	Total	O	0	0
			3	3		
86	CK	3	Total	O	0	0
			3	3		
86	R	1	Total	O	0	0
			1	1		
86	s8	1	Total	O	0	0
			1	1		
86	k	1	Total	O	0	0
			1	1		
86	AE	1	Total	O	0	0
			1	1		
86	CM	1	Total	O	0	0
			1	1		
86	s9	2	Total	O	0	0
			2	2		
86	DN	2	Total	O	0	0
			2	2		
86	CP	3	Total	O	0	0
			3	3		
86	CQ	2	Total	O	0	0
			2	2		
86	CR	3	Total	O	0	0
			3	3		
86	DR	1	Total	O	0	0
			1	1		
86	AK	3	Total	O	0	0
			3	3		
86	A	46	Total	O	0	0
			46	46		
86	AR	131	Total	O	0	0
			131	131		
86	sR	61	Total	O	0	0
			61	61		

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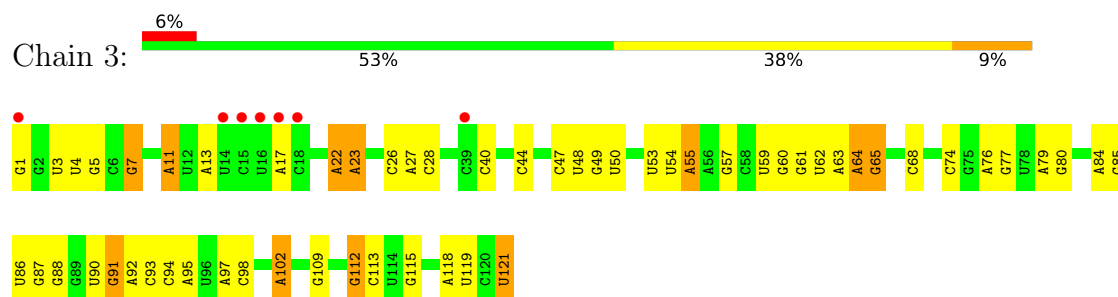
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	AT	8	Total 8	O 8	0	0
86	J	1	Total 1	O 1	0	0
86	v	1	Total 1	O 1	0	0
86	1	137	Total 137	O 137	0	0

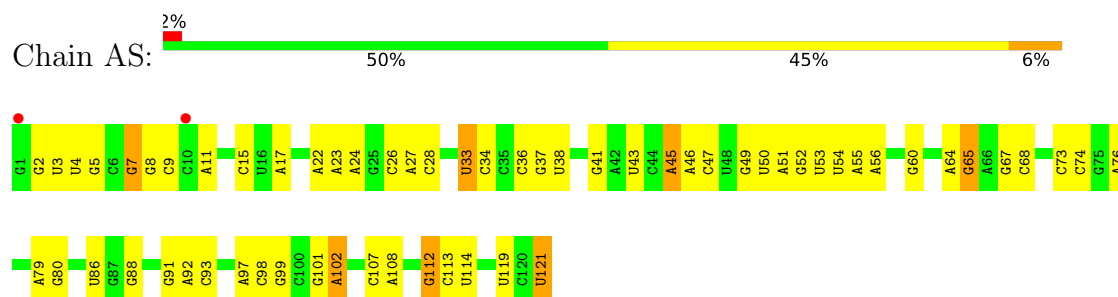
### 3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ( $RSRZ > 2$ ). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

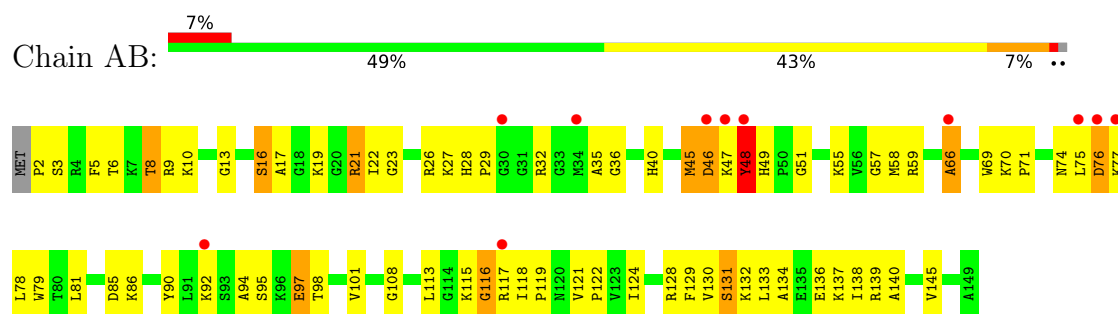
#### • Molecule 1: 5S ribosomal RNA



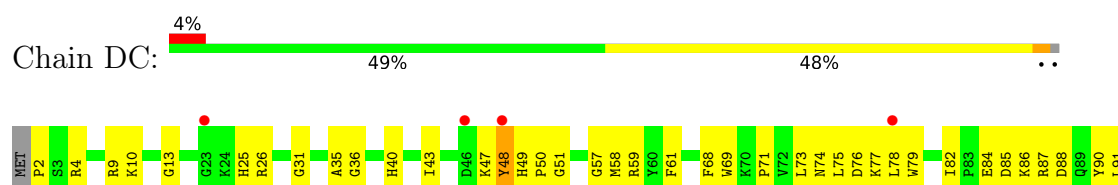
#### • Molecule 1: 5S ribosomal RNA



#### • Molecule 2: 60S ribosomal protein L28

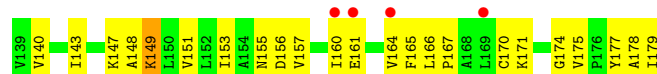
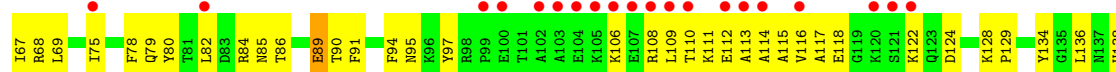
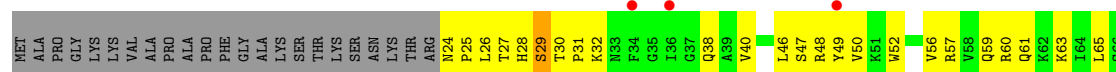


#### • Molecule 2: 60S ribosomal protein L28

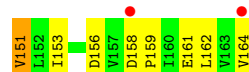
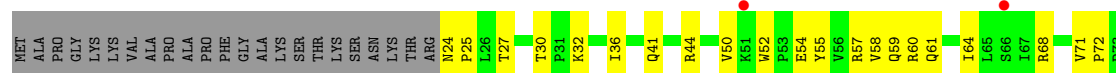




• Molecule 3: 60S ribosomal protein L8-A



• Molecule 3: 60S ribosomal protein L8-A

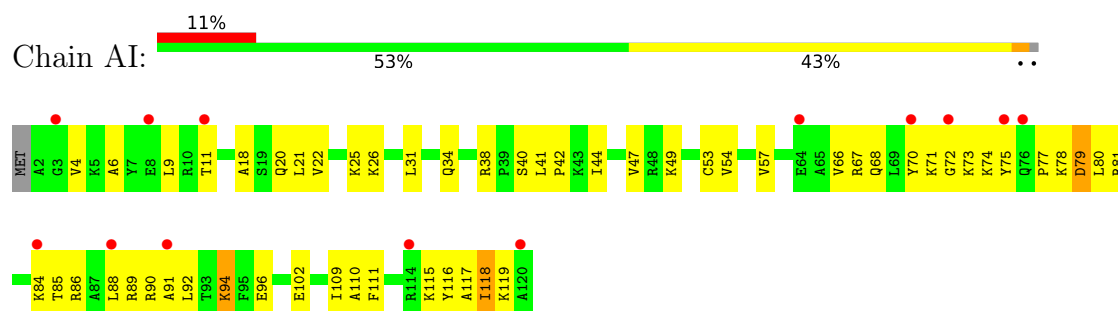


• Molecule 4: 60S ribosomal protein L35-A

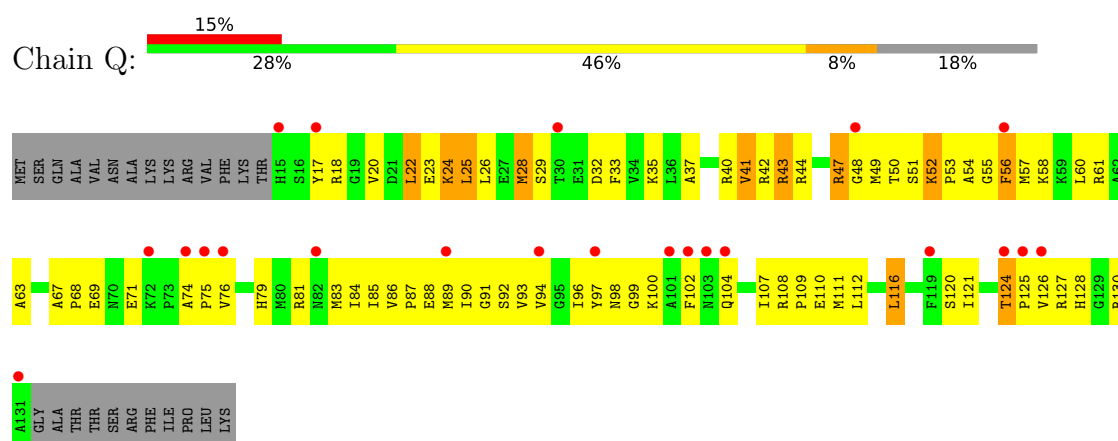




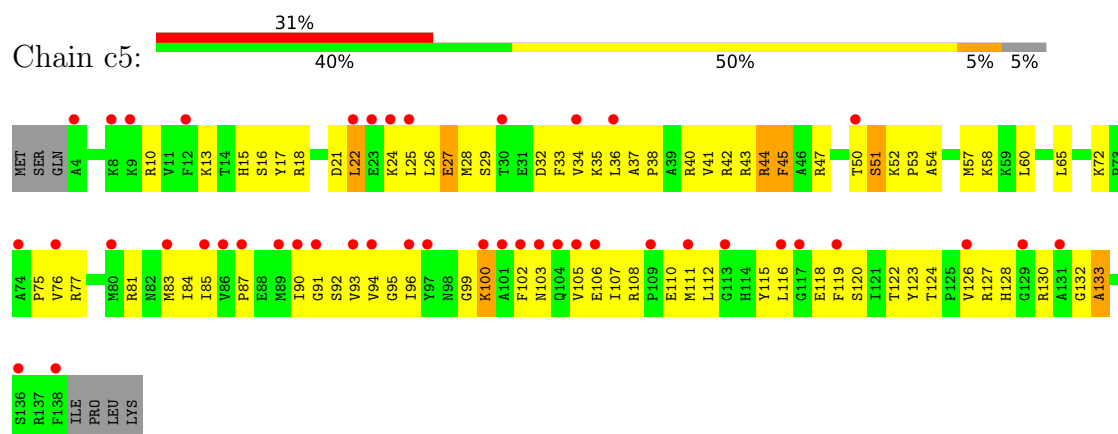
- Molecule 4: 60S ribosomal protein L35-A



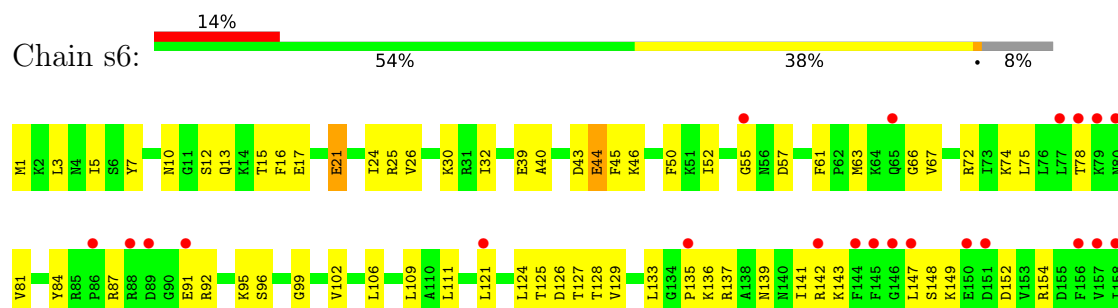
- Molecule 5: 40S ribosomal protein S15



- Molecule 5: 40S ribosomal protein S15

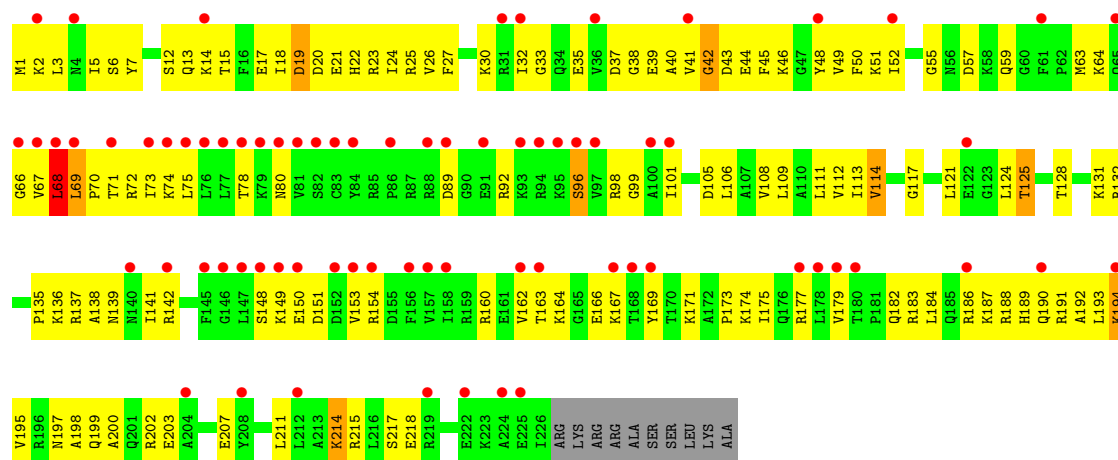
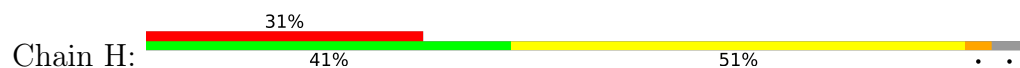


- Molecule 6: 40S ribosomal protein S6-A

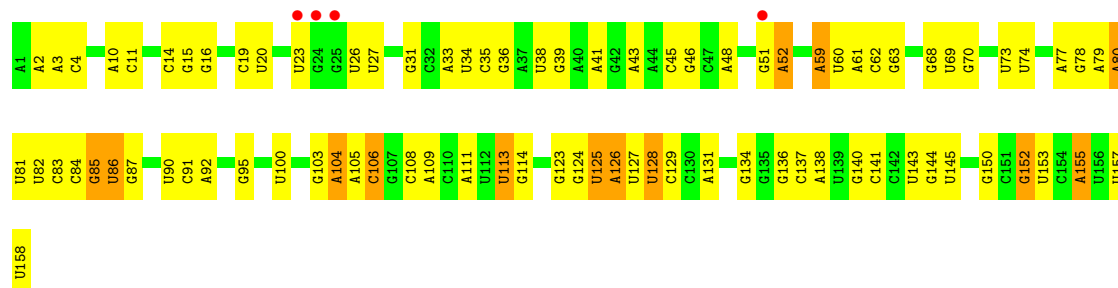




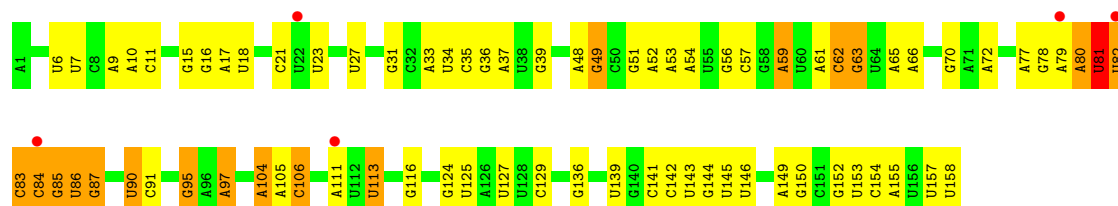
• Molecule 6: 40S ribosomal protein S6-A



• Molecule 7: 5.8S ribosomal RNA

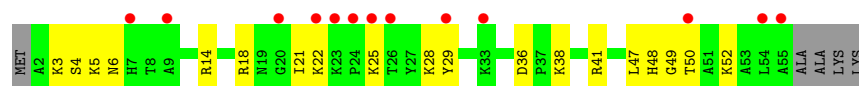


• Molecule 7: 5.8S ribosomal RNA

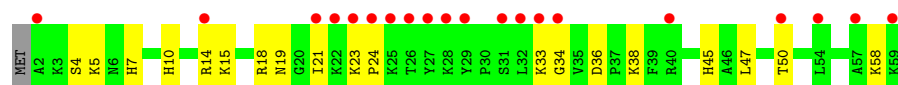


• Molecule 8: 60S ribosomal protein L29

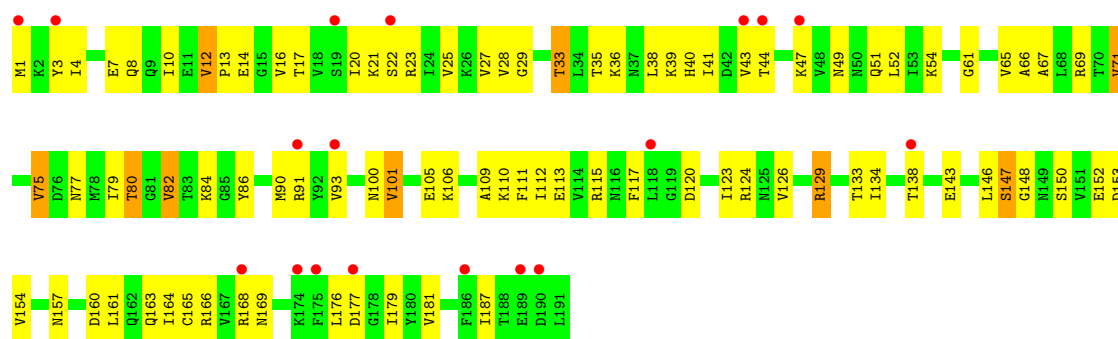




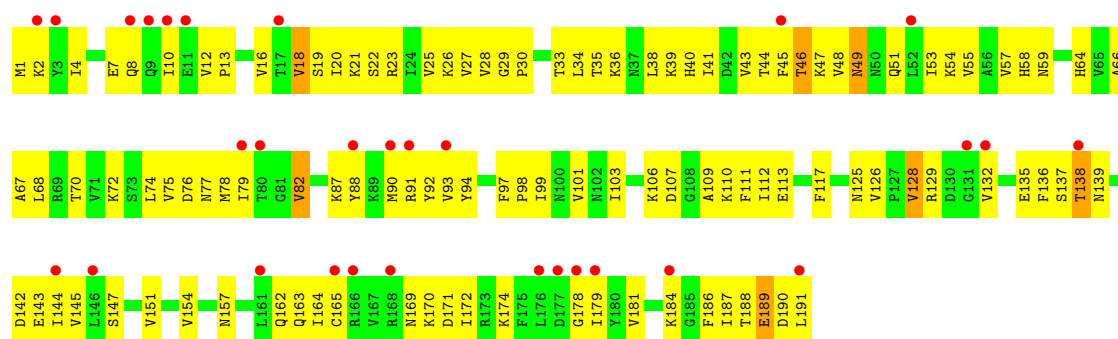
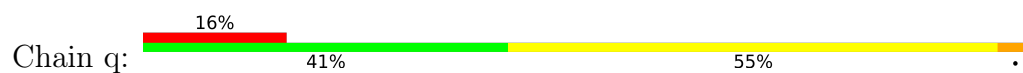
- Molecule 8: 60S ribosomal protein L29



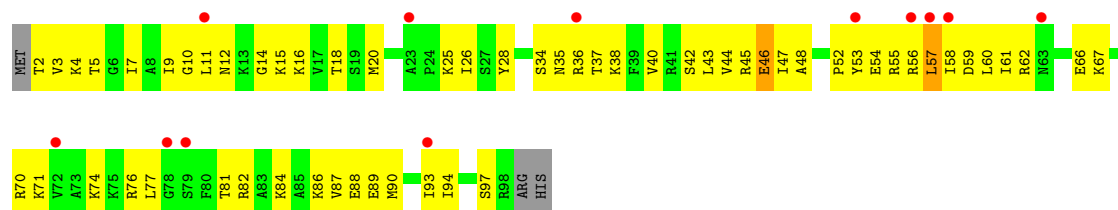
- Molecule 9: 60S ribosomal protein L9-A



- Molecule 9: 60S ribosomal protein L9-A



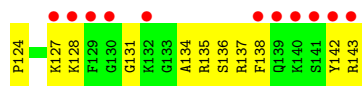
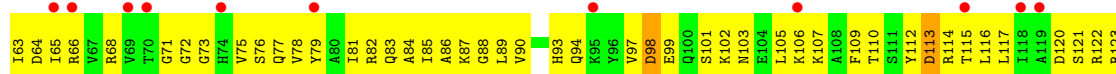
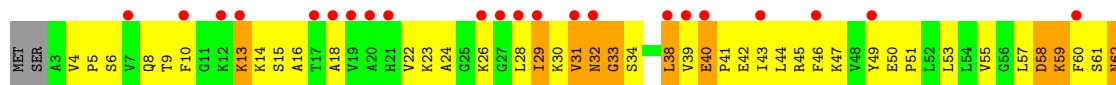
- Molecule 10: 60S ribosomal protein L36-A



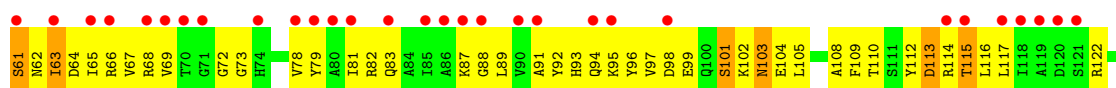
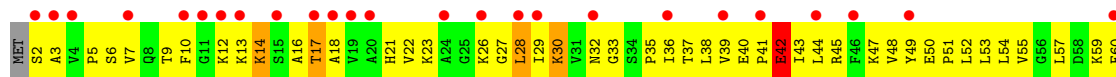
- Molecule 10: 60S ribosomal protein L36-A



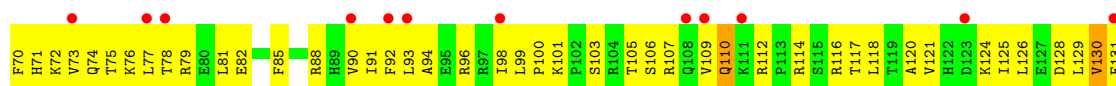
- Molecule 11: 40S ribosomal protein S16-A



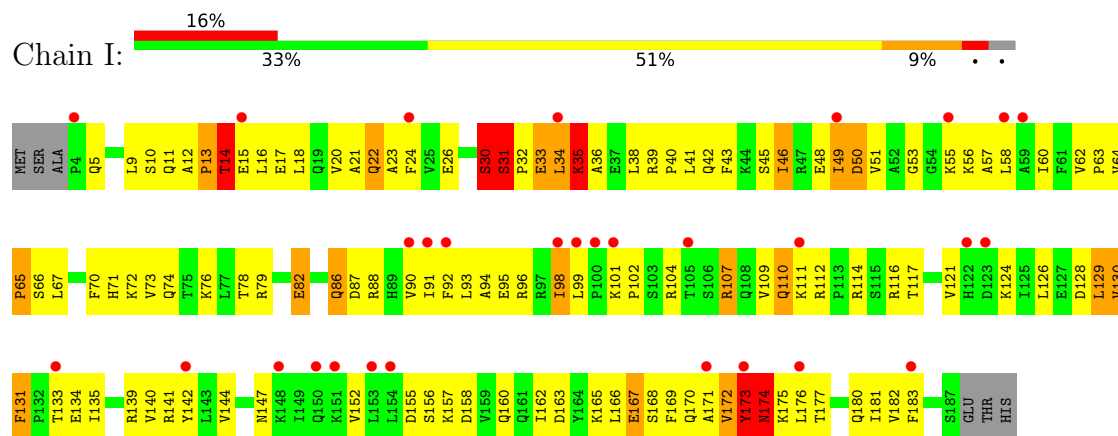
- Molecule 11: 40S ribosomal protein S16-A



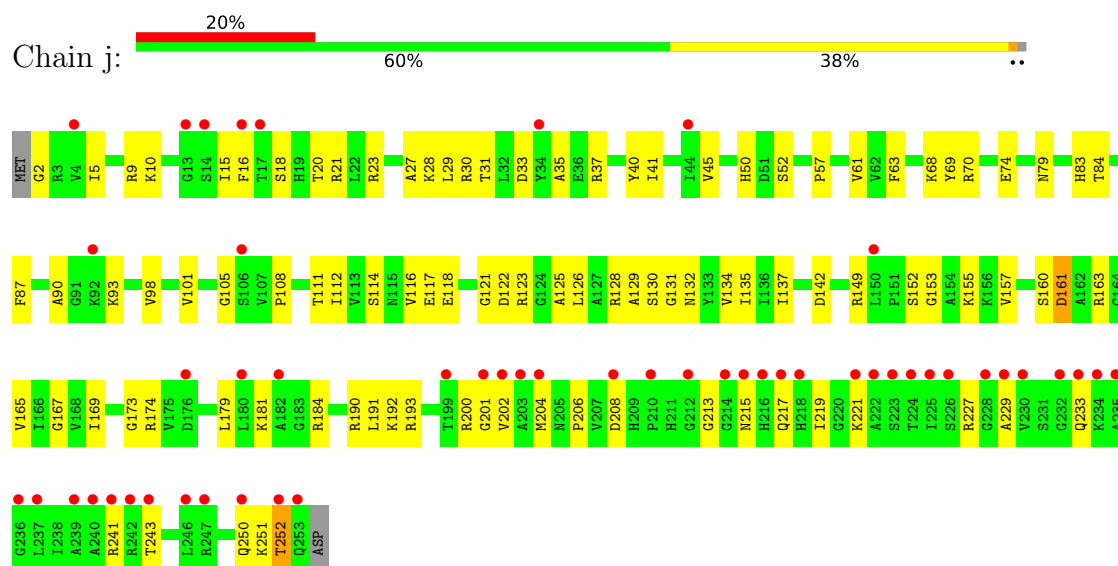
- Molecule 12: 40S ribosomal protein S7-A



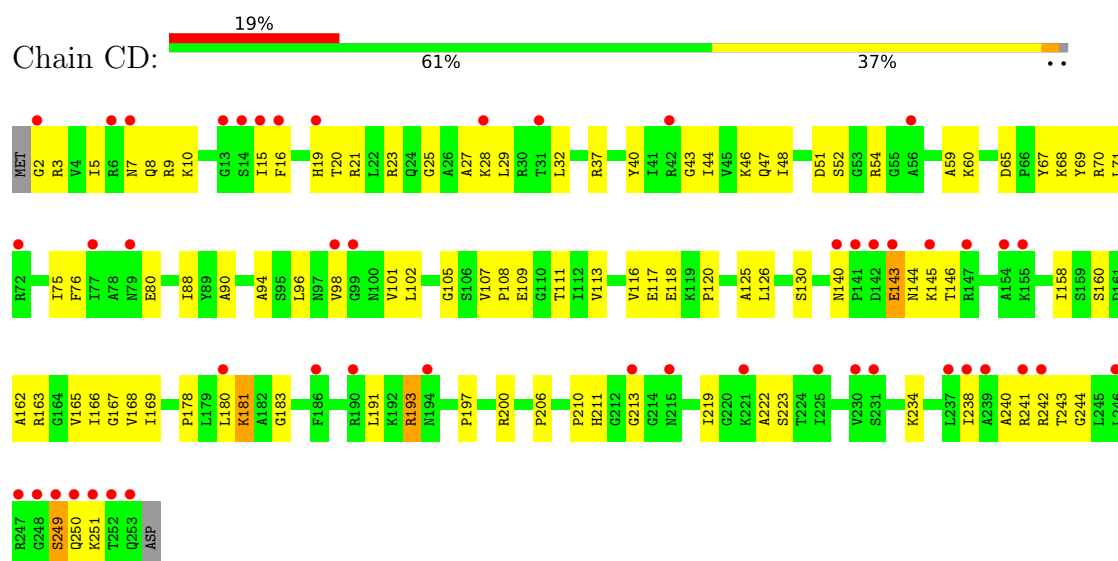
- Molecule 12: 40S ribosomal protein S7-A



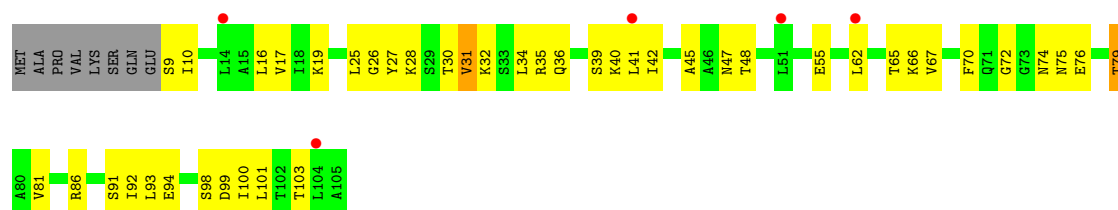
- Molecule 13: 60S ribosomal protein L2-A



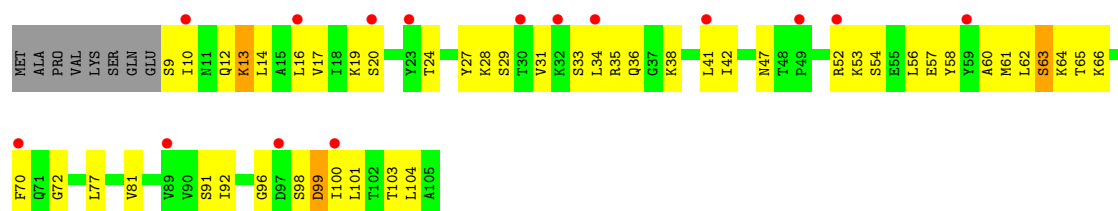
- Molecule 13: 60S ribosomal protein L2-A



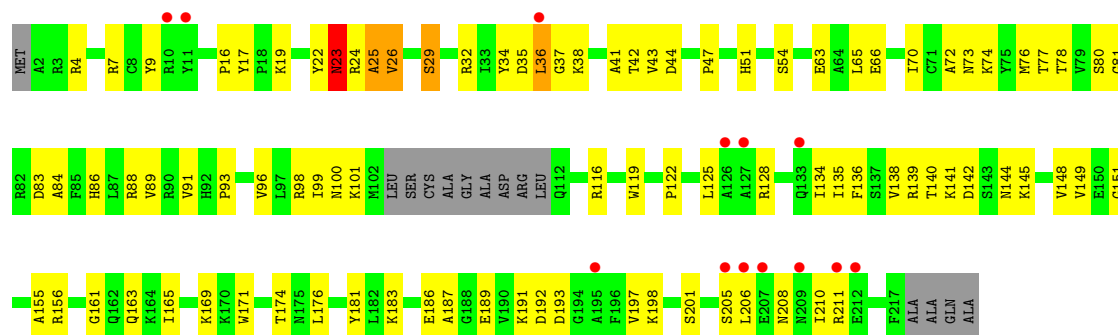
- Molecule 14: 60S ribosomal protein L30



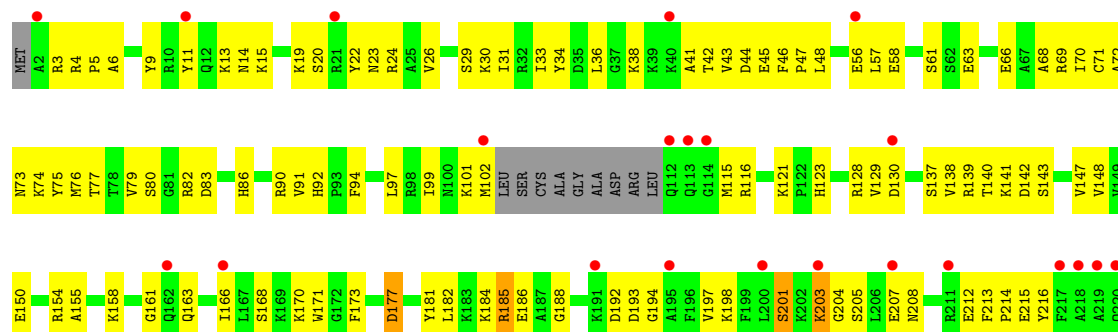
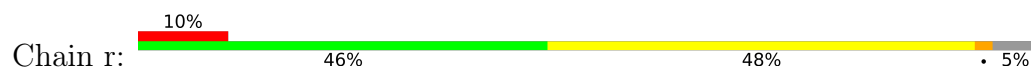
- Molecule 14: 60S ribosomal protein L30



- Molecule 15: 60S ribosomal protein L10

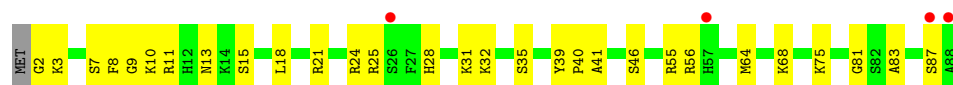


- Molecule 15: 60S ribosomal protein L10





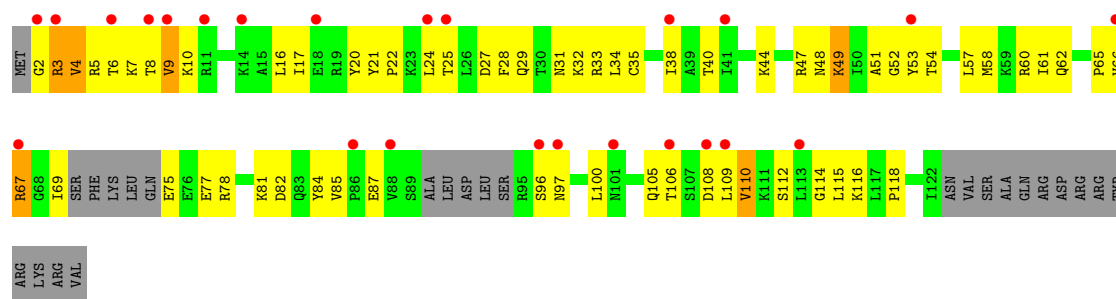
- Molecule 16: 60S ribosomal protein L37-A



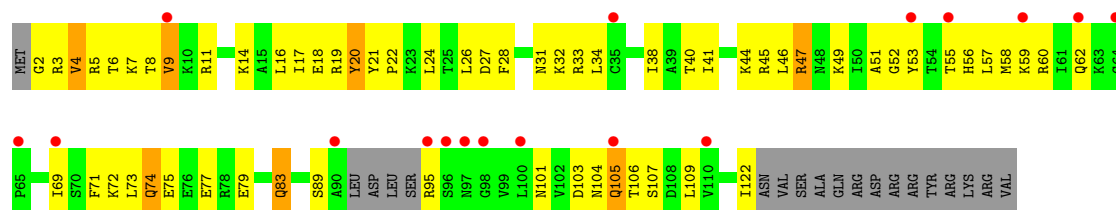
- Molecule 16: 60S ribosomal protein L37-A



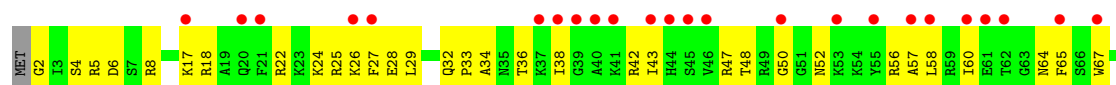
- Molecule 17: 40S ribosomal protein S17-A

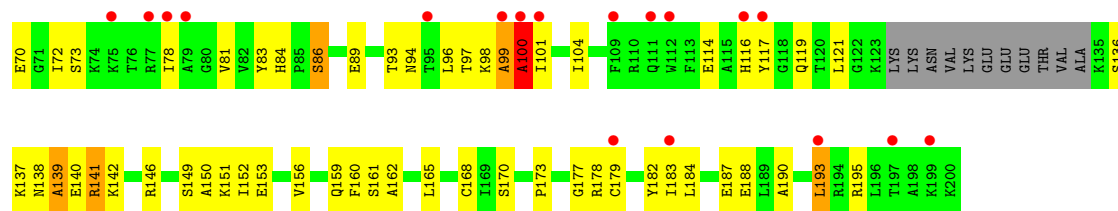


- Molecule 17: 40S ribosomal protein S17-A

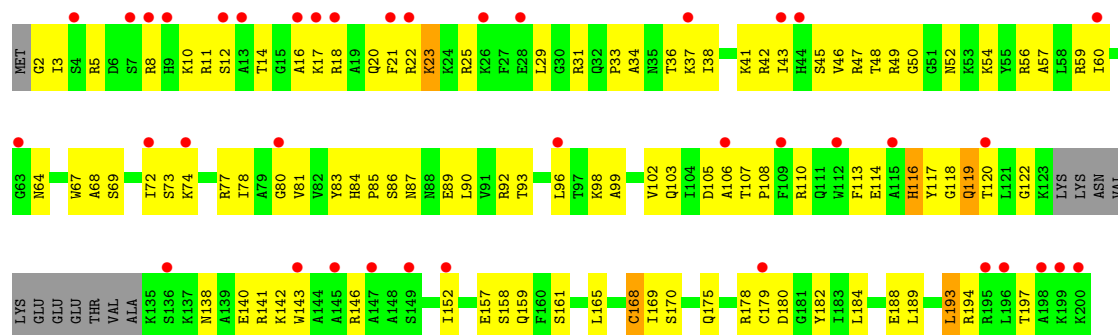
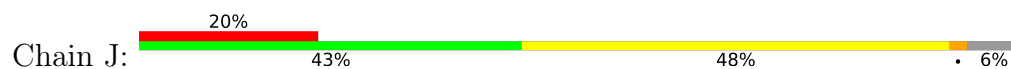


- Molecule 18: 40S ribosomal protein S8-A

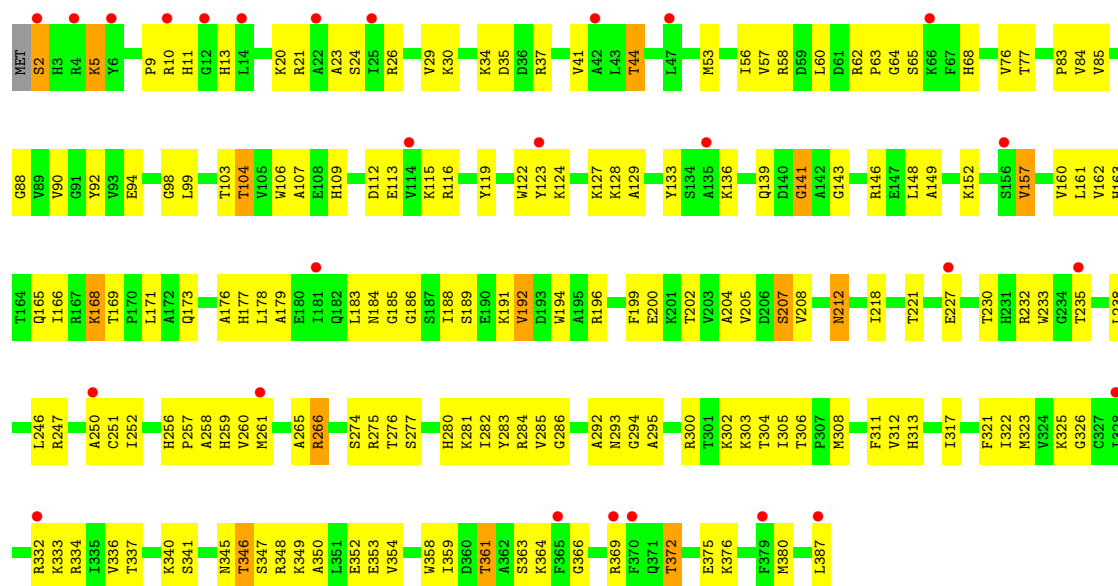




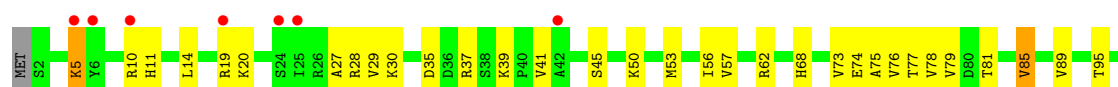
• Molecule 18: 40S ribosomal protein S8-A



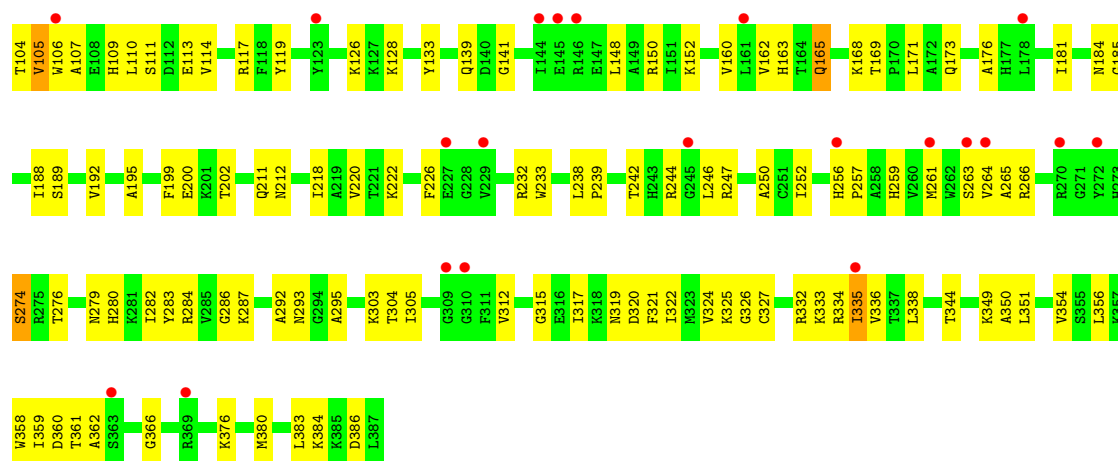
• Molecule 19: 60S ribosomal protein L3



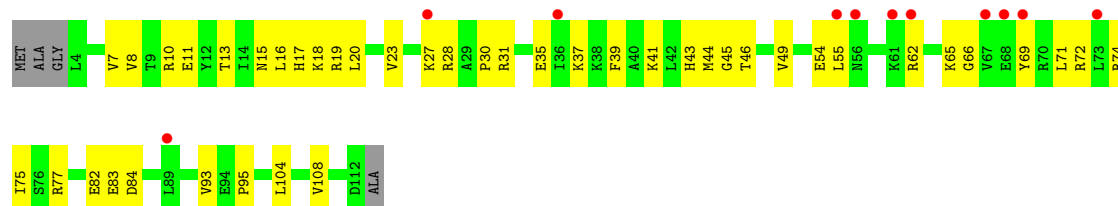
• Molecule 19: 60S ribosomal protein L3



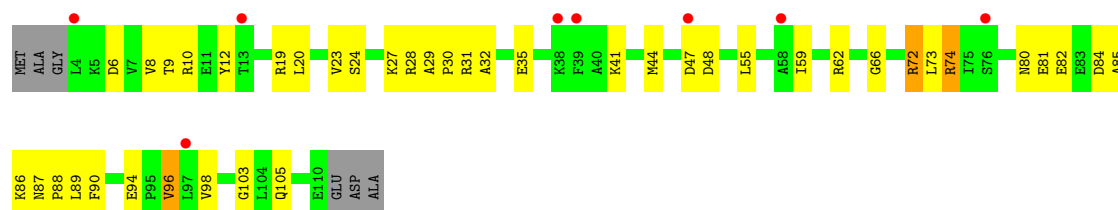




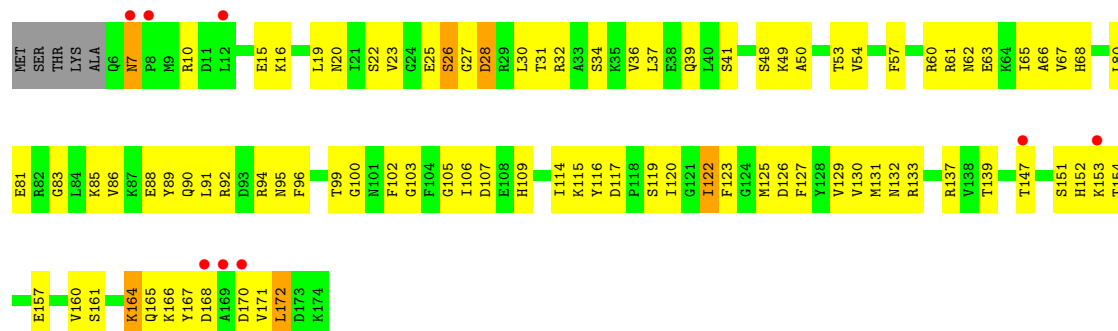
• Molecule 20: 60S ribosomal protein L31-A



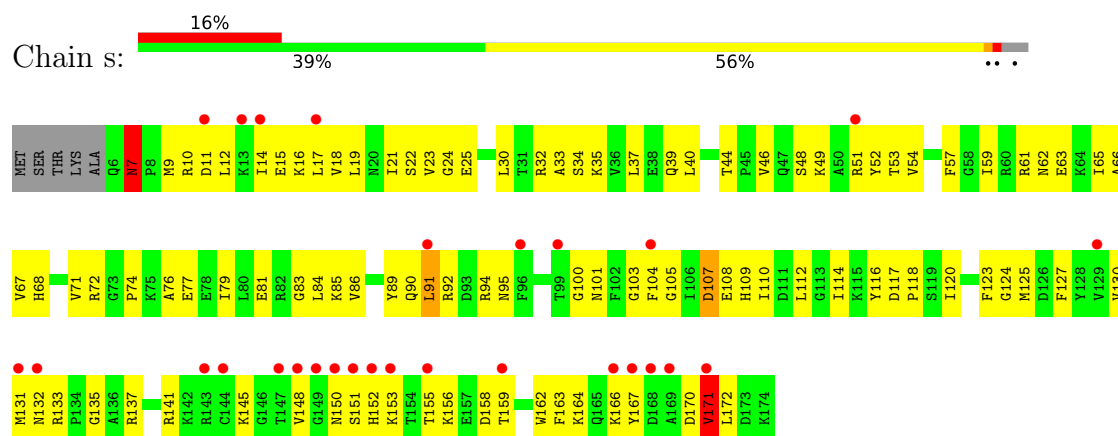
• Molecule 20: 60S ribosomal protein L31-A



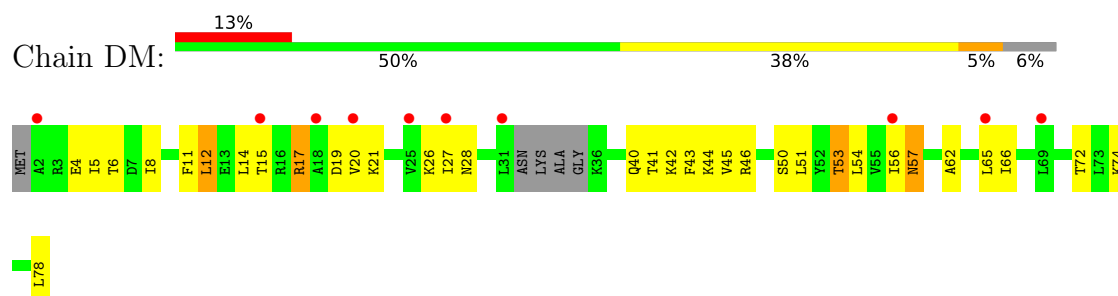
• Molecule 21: Large ribosomal subunit protein uL5B



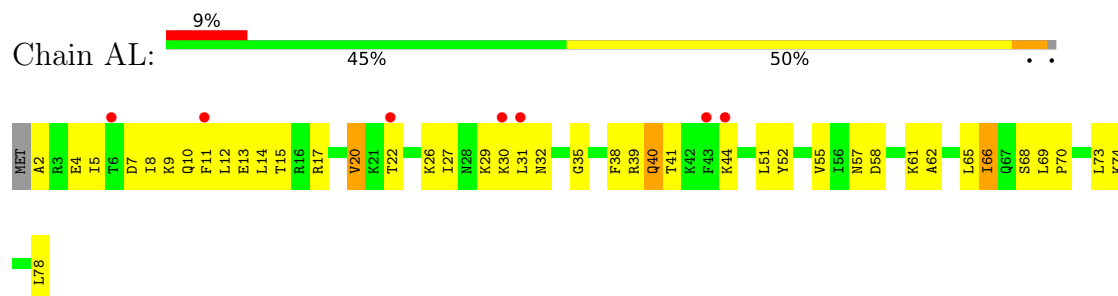
- Molecule 21: Large ribosomal subunit protein uL5B



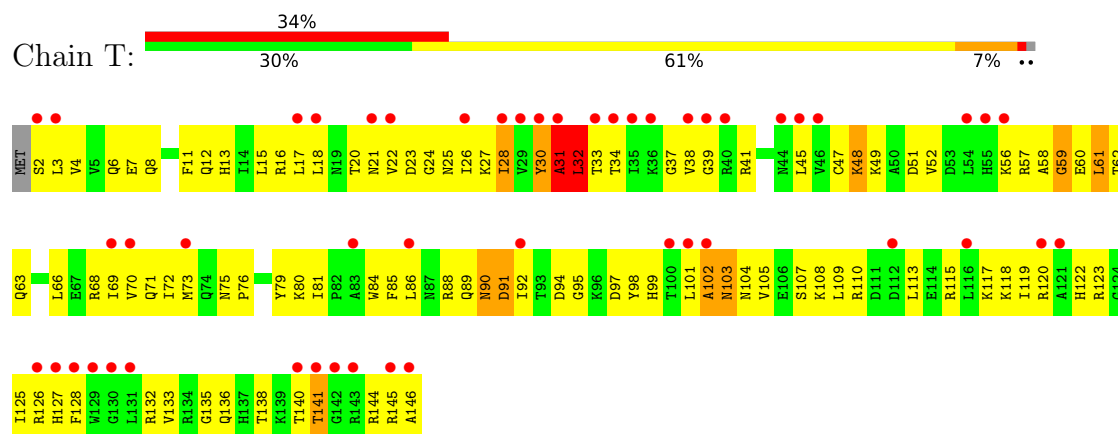
- Molecule 22: 60S ribosomal protein L38



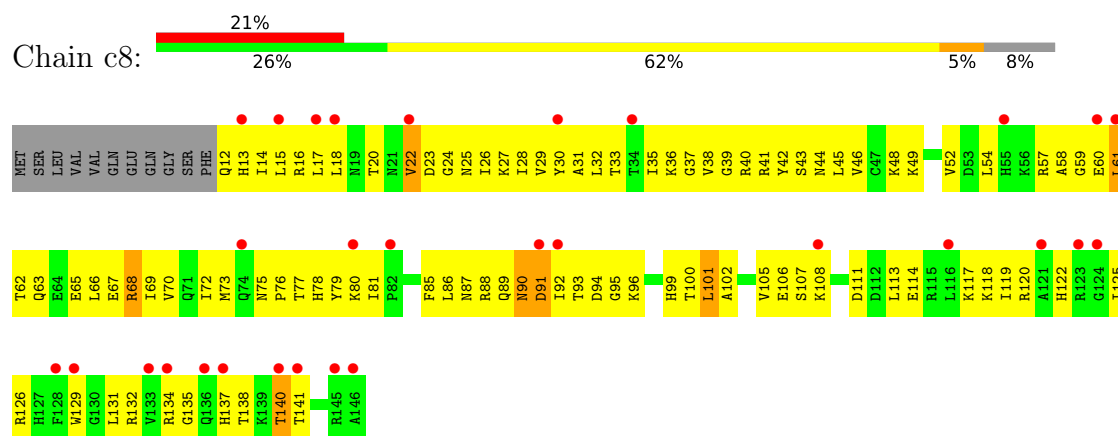
- Molecule 22: 60S ribosomal protein L38



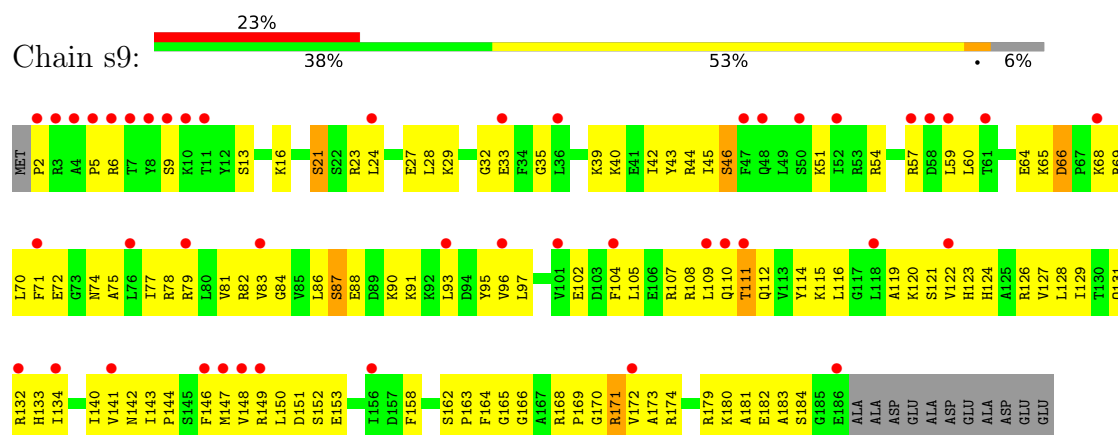
- Molecule 23: 40S ribosomal protein S18-A

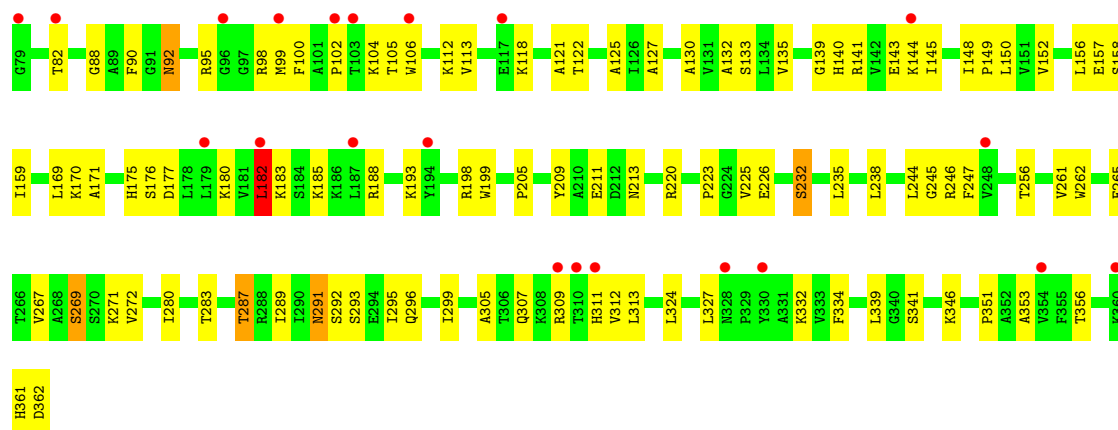


- Molecule 23: 40S ribosomal protein S18-A

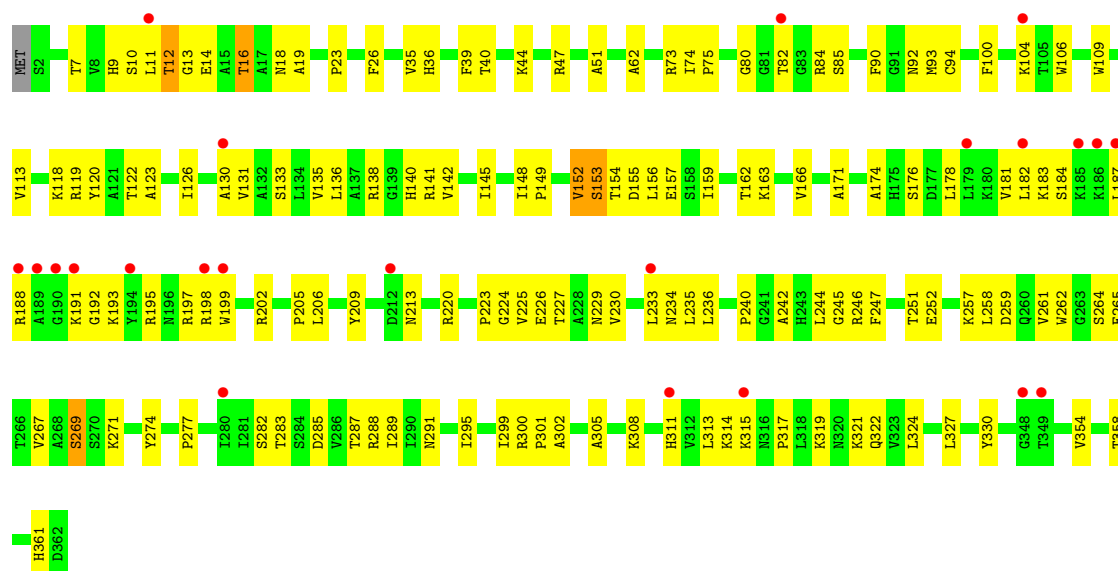


- Molecule 24: 40S ribosomal protein S9-A





• Molecule 25: 60S ribosomal protein L4-A

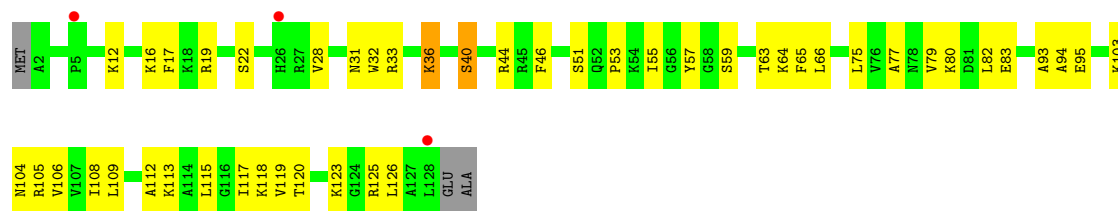


• Molecule 26: 60S ribosomal protein L32

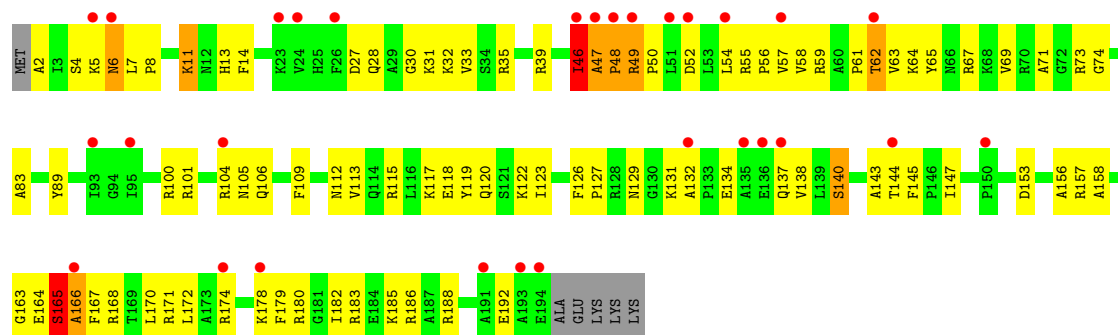


• Molecule 26: 60S ribosomal protein L32

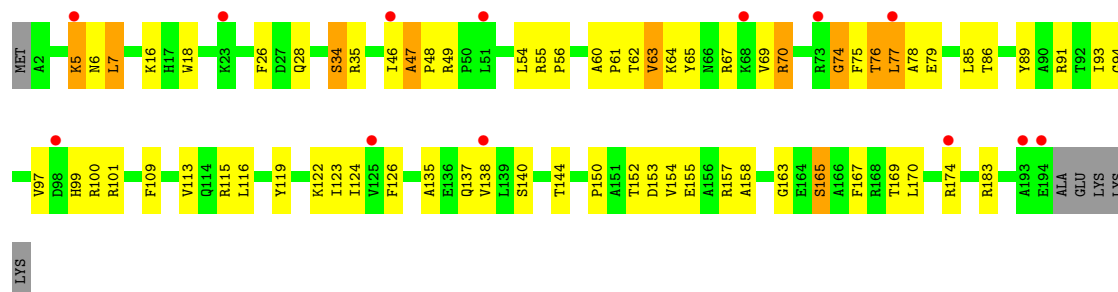




• Molecule 27: 60S ribosomal protein L13-A



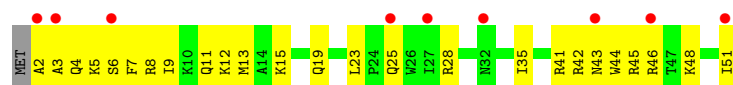
• Molecule 27: 60S ribosomal protein L13-A



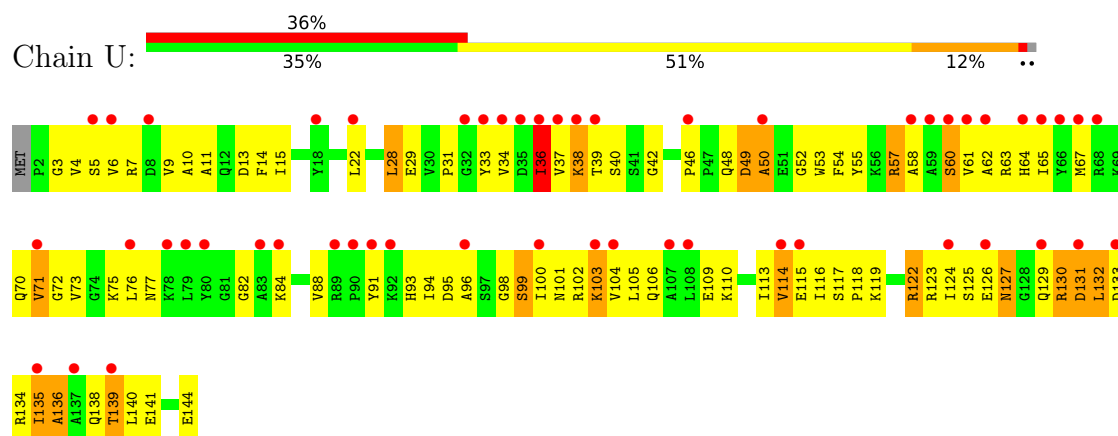
• Molecule 28: 60S ribosomal protein L39



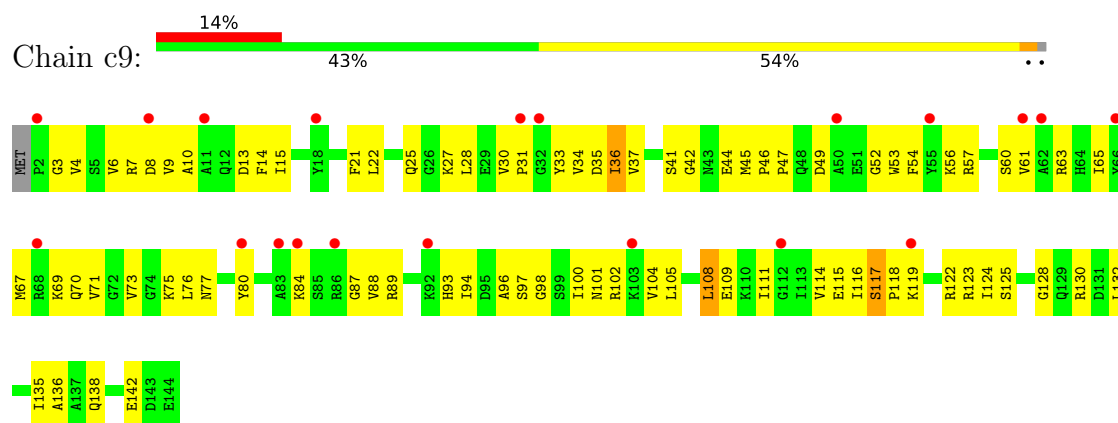
• Molecule 28: 60S ribosomal protein L39



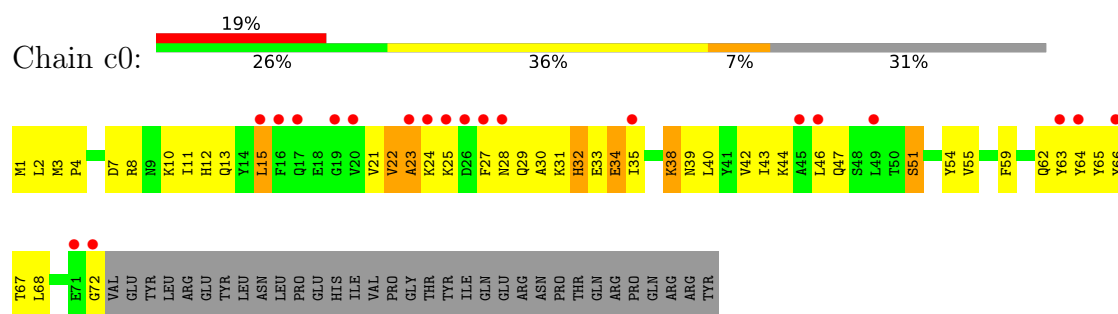
- Molecule 29: 40S ribosomal protein S19-A



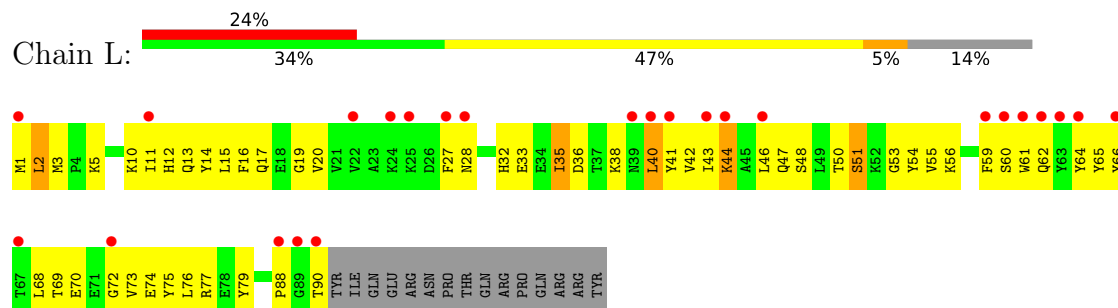
- Molecule 29: 40S ribosomal protein S19-A



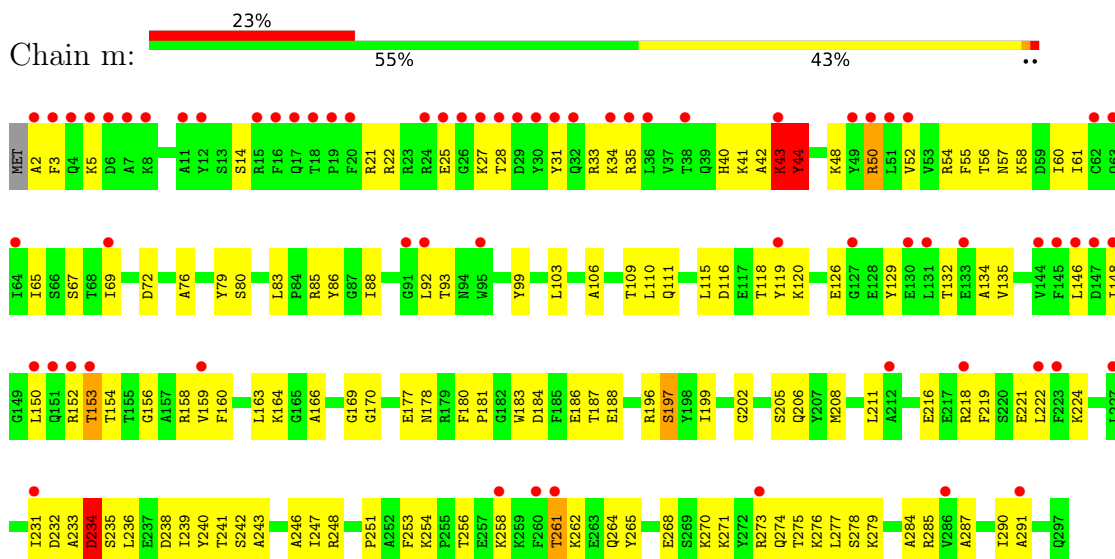
- Molecule 30: 40S ribosomal protein S10-A



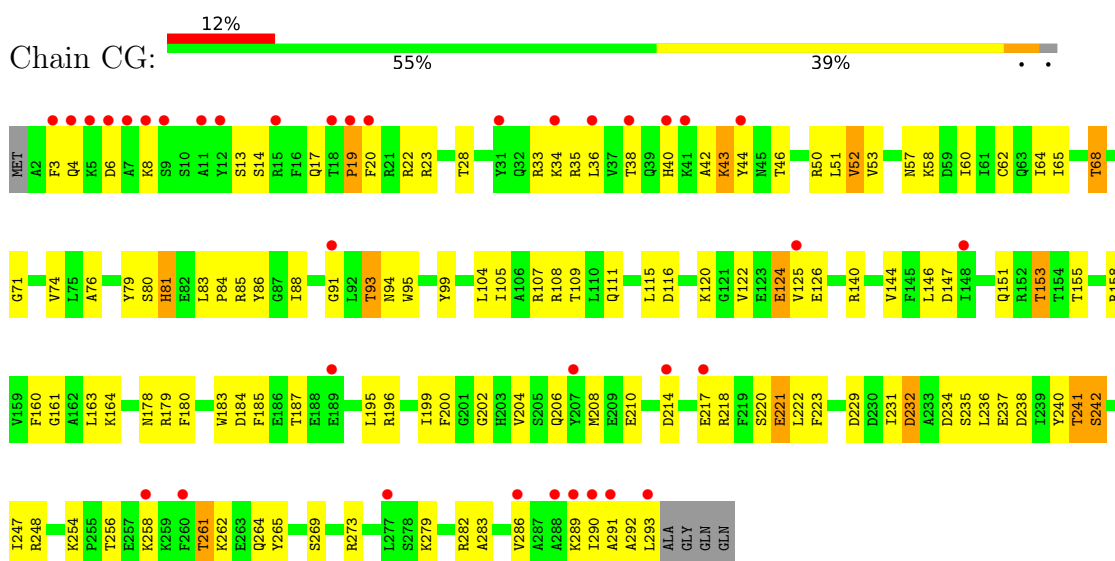
- Molecule 30: 40S ribosomal protein S10-A



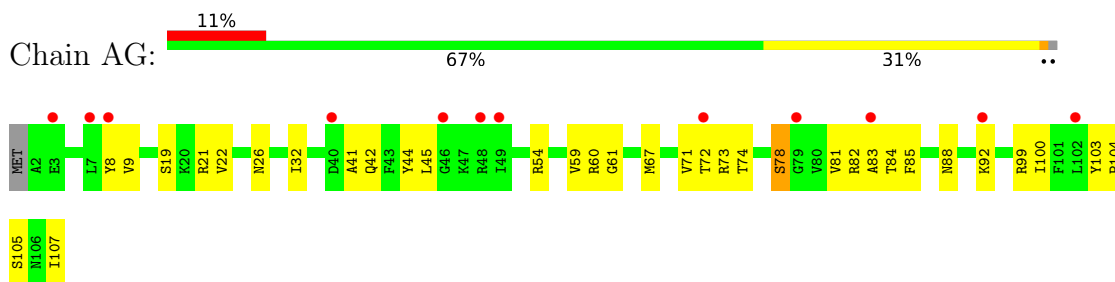
- Molecule 31: 60S ribosomal protein L5



- Molecule 31: 60S ribosomal protein L5

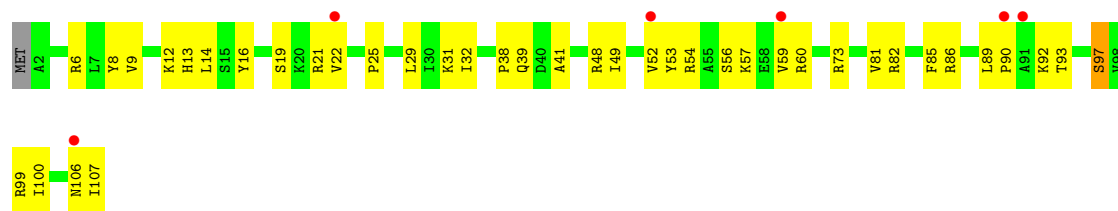


- Molecule 32: 60S ribosomal protein L33-A



- Molecule 32: 60S ribosomal protein L33-A





- Molecule 33: 60S ribosomal protein L14-A



- Molecule 33: 60S ribosomal protein L14-A



- Molecule 34: Ubiquitin-60S ribosomal protein L40

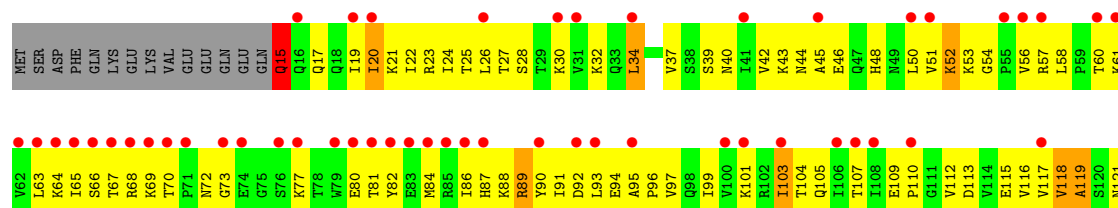


- Molecule 34: Ubiquitin-60S ribosomal protein L40

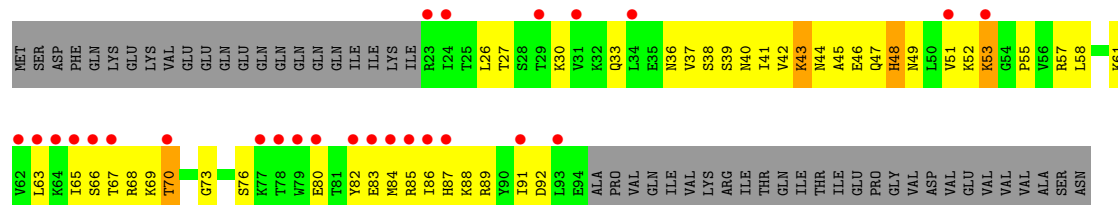
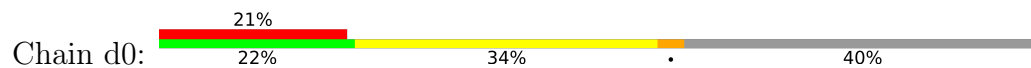


- Molecule 35: Small ribosomal subunit protein uS10

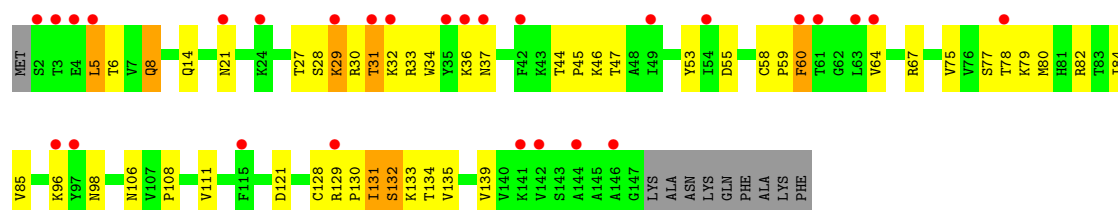




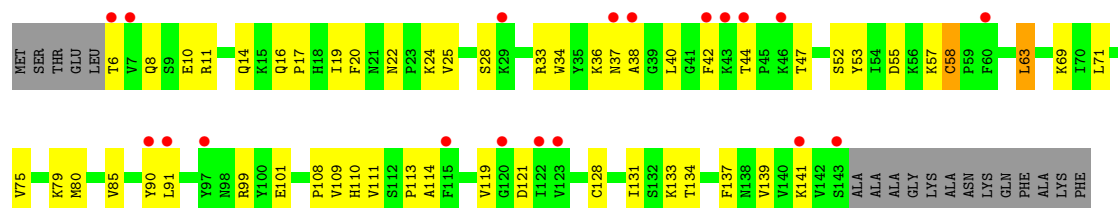
- Molecule 35: Small ribosomal subunit protein uS10



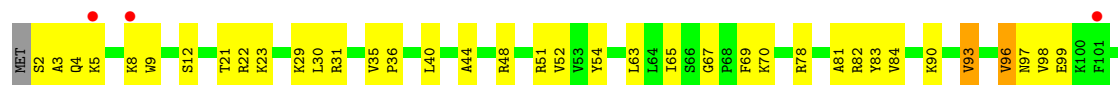
- Molecule 36: 40S ribosomal protein S11-A



- Molecule 36: 40S ribosomal protein S11-A

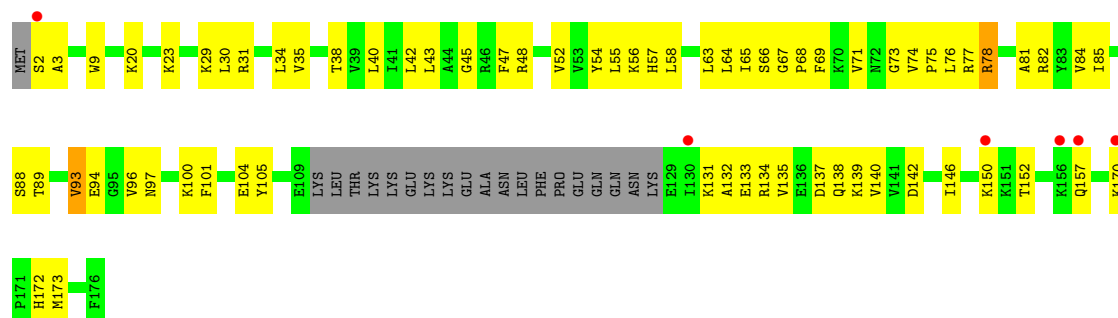


- Molecule 37: 60S ribosomal protein L6-A

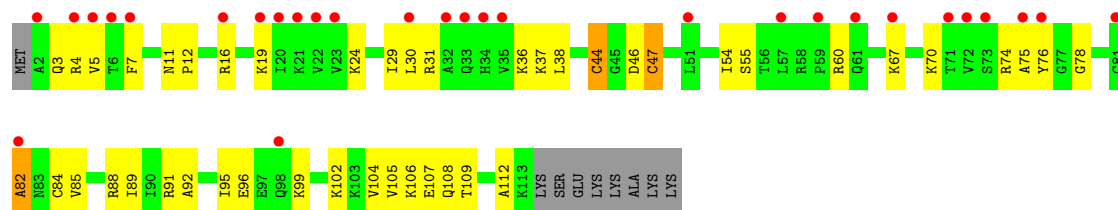




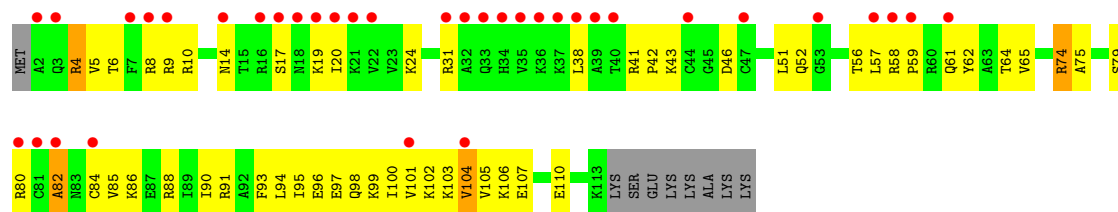
- Molecule 37: 60S ribosomal protein L6-A



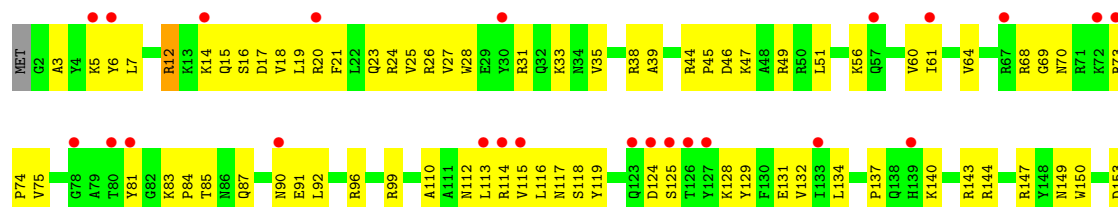
- Molecule 38: 60S ribosomal protein L34-A

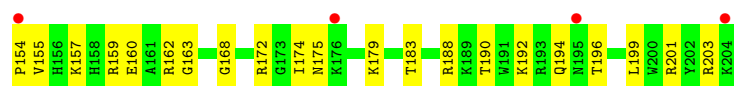


- Molecule 38: 60S ribosomal protein L34-A

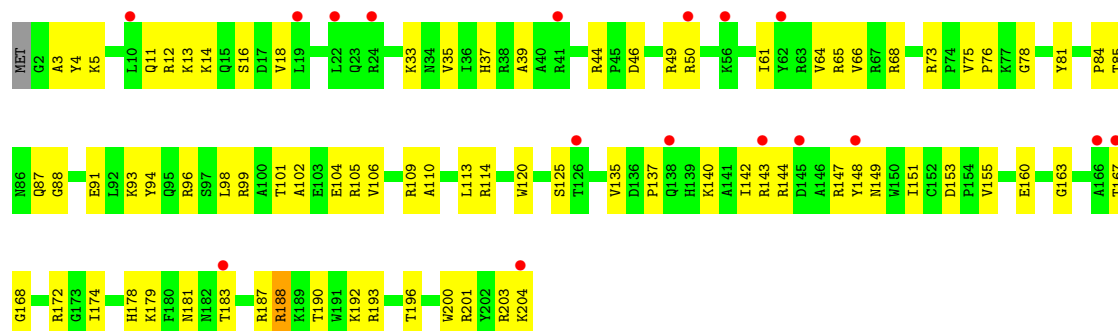


- Molecule 39: 60S ribosomal protein L15-A

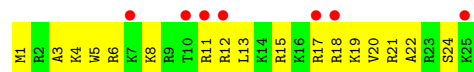




- Molecule 39: 60S ribosomal protein L15-A



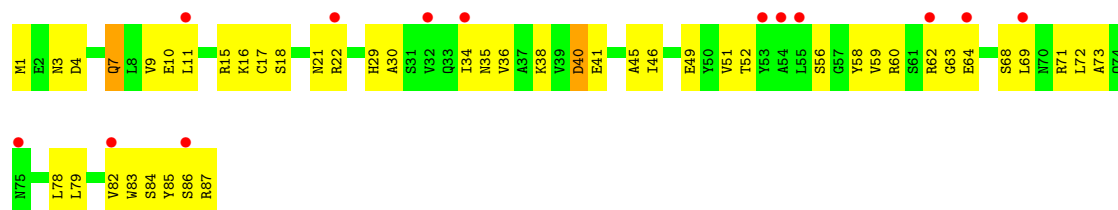
- Molecule 40: Large ribosomal subunit protein eL41B



- Molecule 40: Large ribosomal subunit protein eL41B



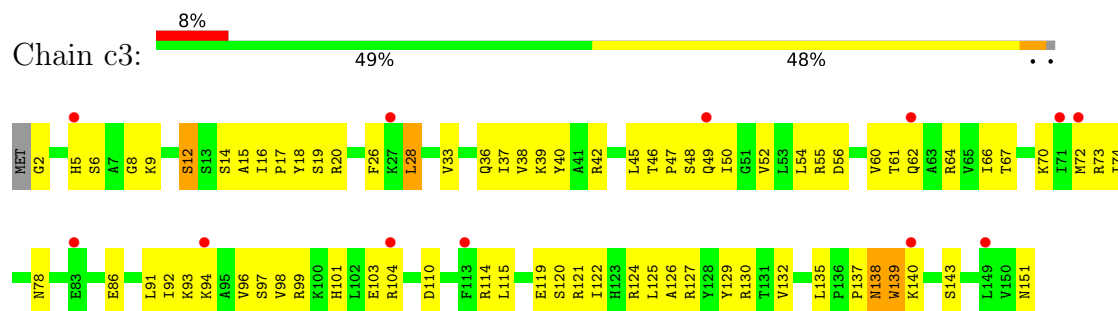
- Molecule 41: 40S ribosomal protein S21-A



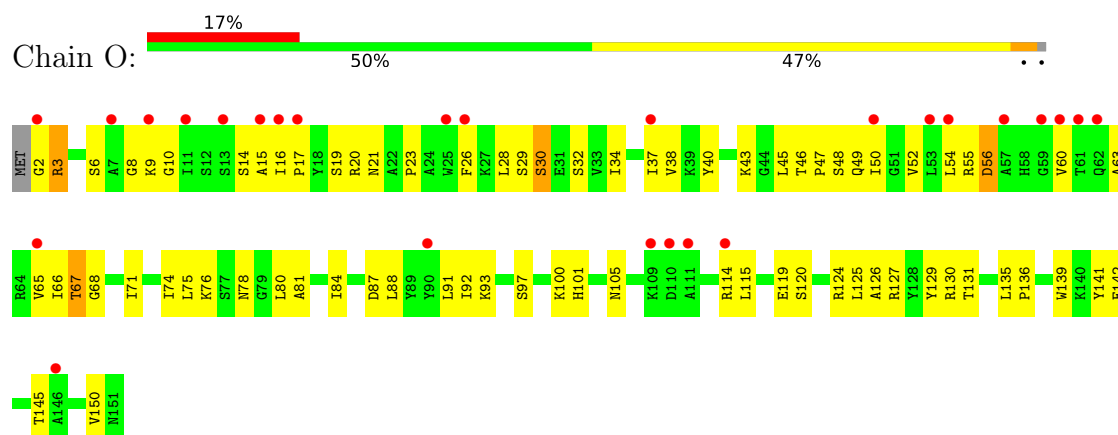
- Molecule 41: 40S ribosomal protein S21-A



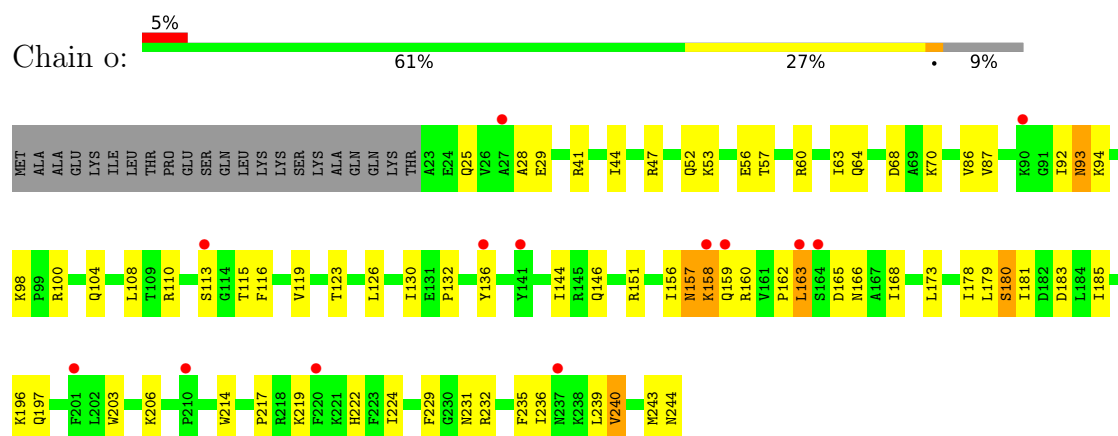
- Molecule 42: 40S ribosomal protein S13



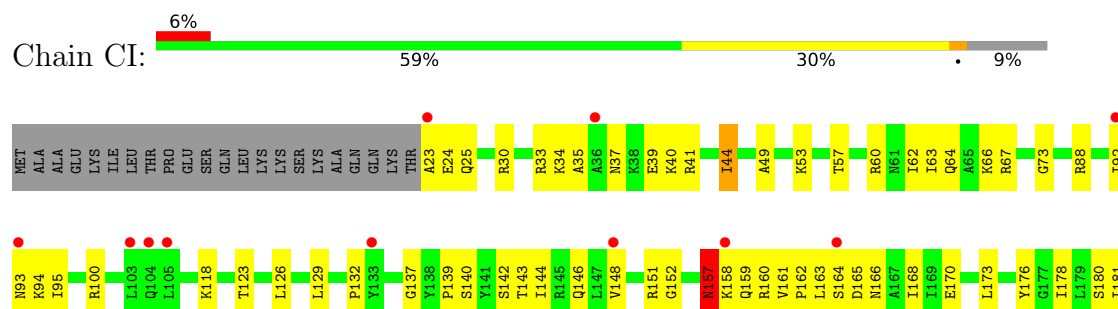
- Molecule 42: 40S ribosomal protein S13



- Molecule 43: 60S ribosomal protein L7-A

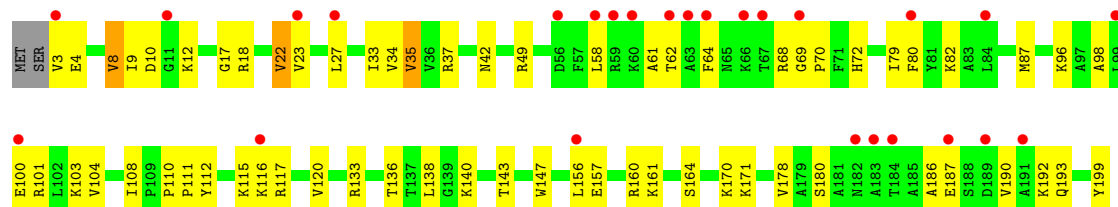


- Molecule 43: 60S ribosomal protein L7-A

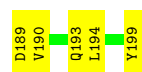
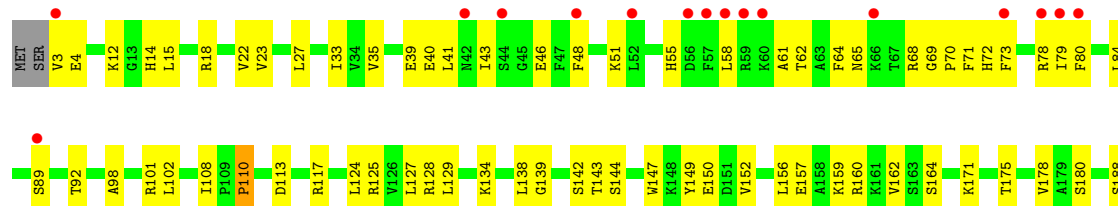




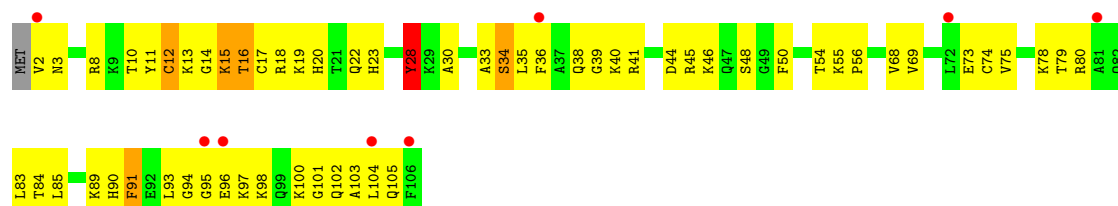
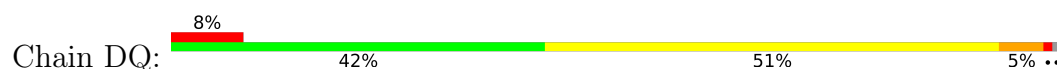
- Molecule 44: 60S ribosomal protein L16-A



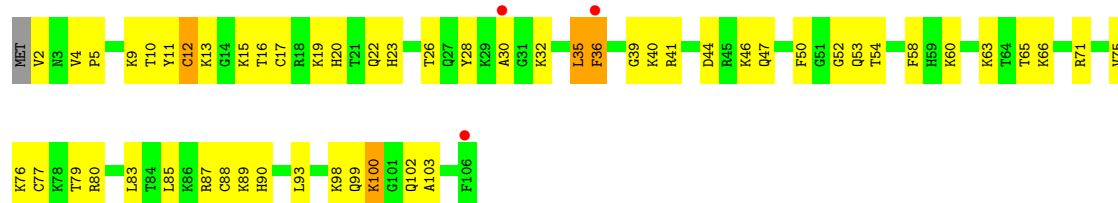
- Molecule 44: 60S ribosomal protein L16-A



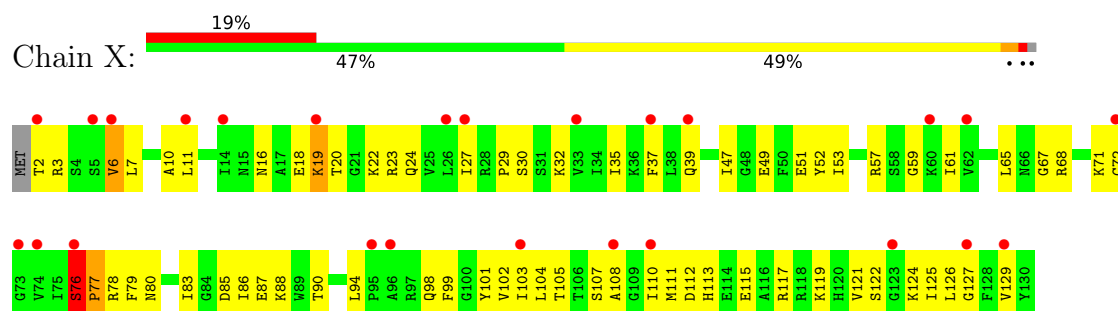
- Molecule 45: 60S ribosomal protein L42-A



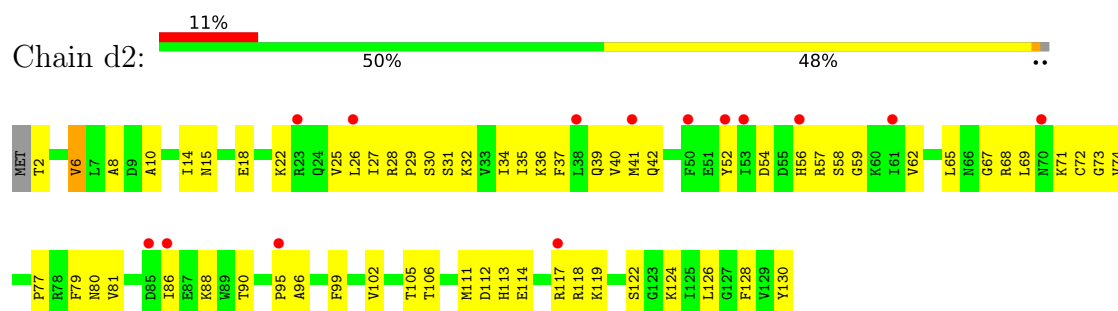
- Molecule 45: 60S ribosomal protein L42-A



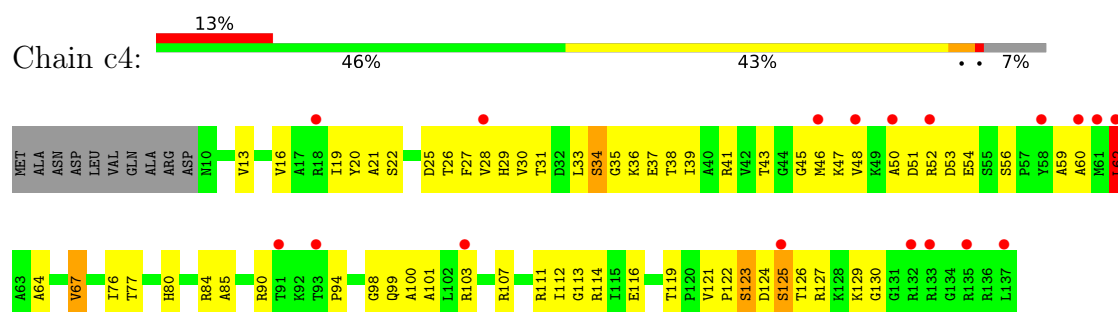
- Molecule 46: 40S ribosomal protein S22-A



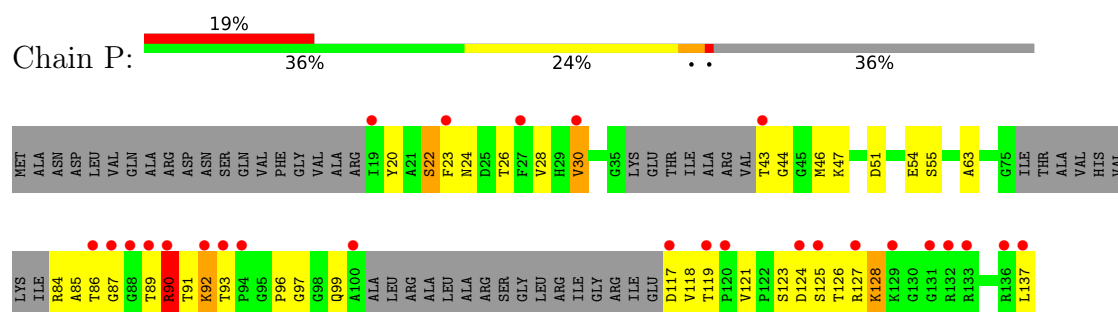
- Molecule 46: 40S ribosomal protein S22-A



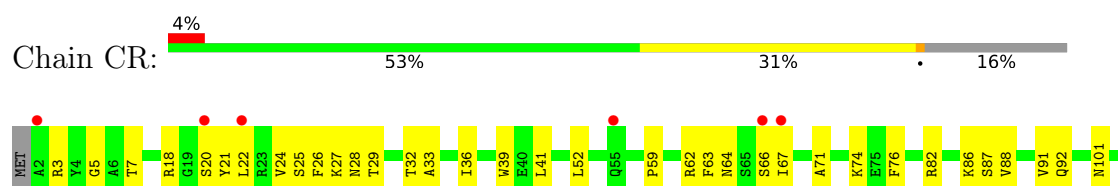
- Molecule 47: 40S ribosomal protein S14-B

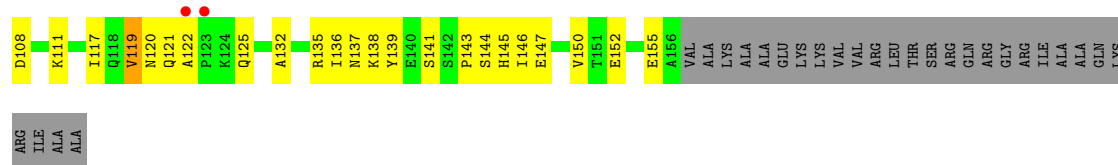


- Molecule 47: 40S ribosomal protein S14-B

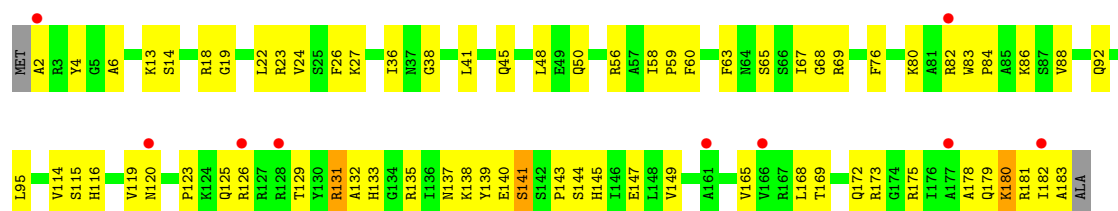


- Molecule 48: 60S ribosomal protein L17-A

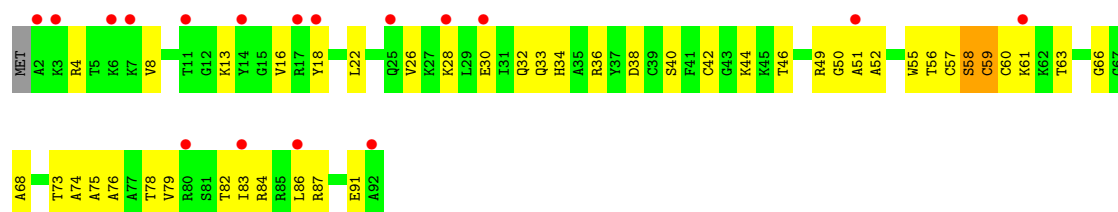




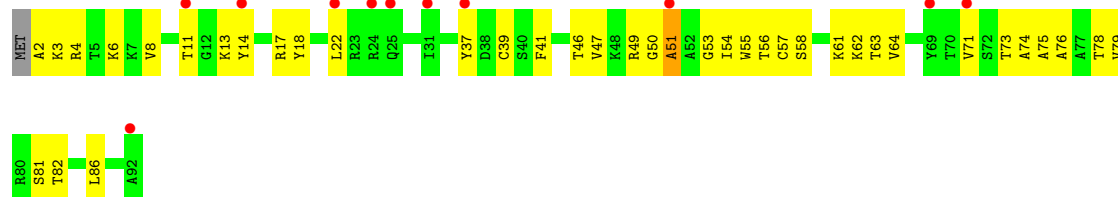
• Molecule 48: 60S ribosomal protein L17-A



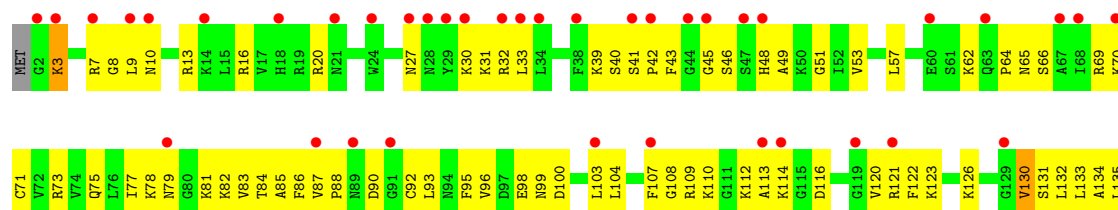
• Molecule 49: 60S ribosomal protein L43-A



• Molecule 49: 60S ribosomal protein L43-A

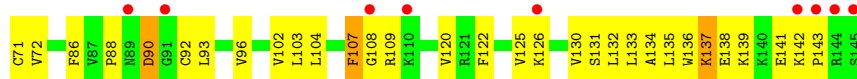
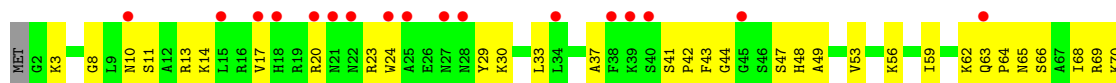


• Molecule 50: 40S ribosomal protein S23-A

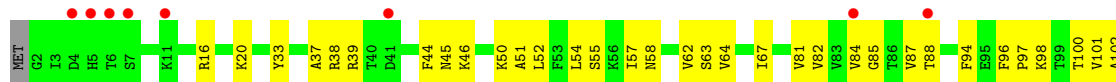




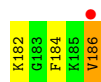
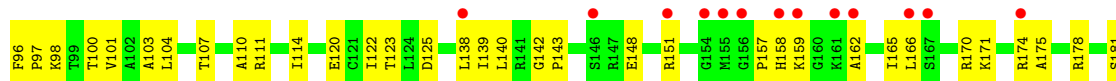
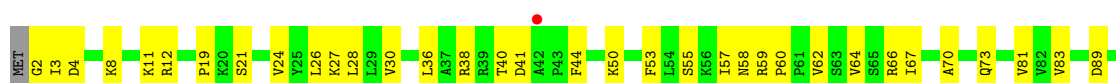
- Molecule 50: 40S ribosomal protein S23-A



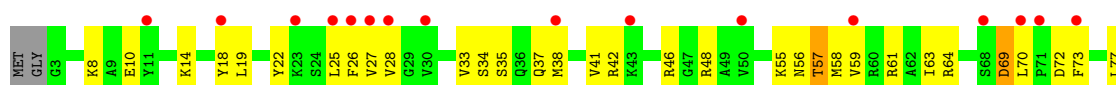
- Molecule 51: 60S ribosomal protein L18-A



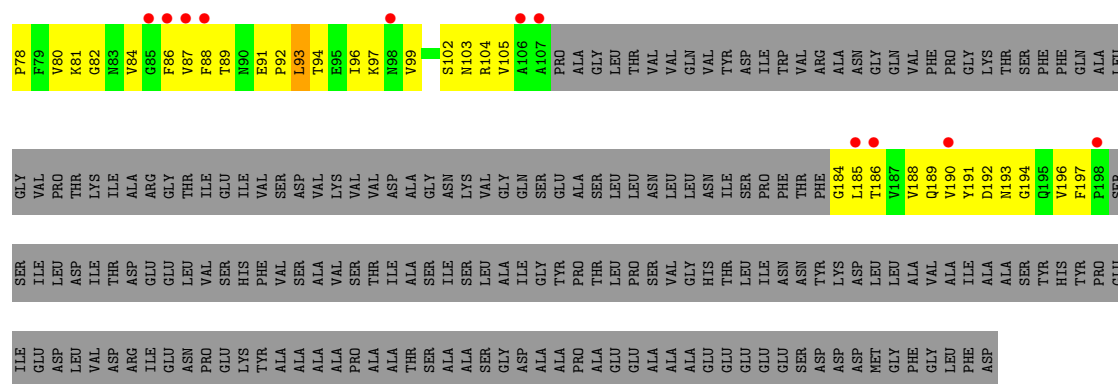
- Molecule 51: 60S ribosomal protein L18-A



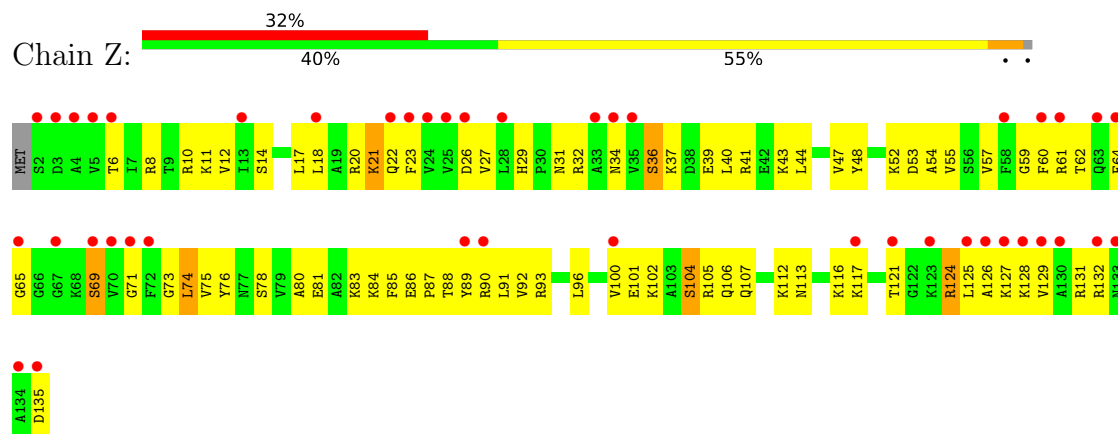
- Molecule 52: Large ribosomal subunit protein uL10



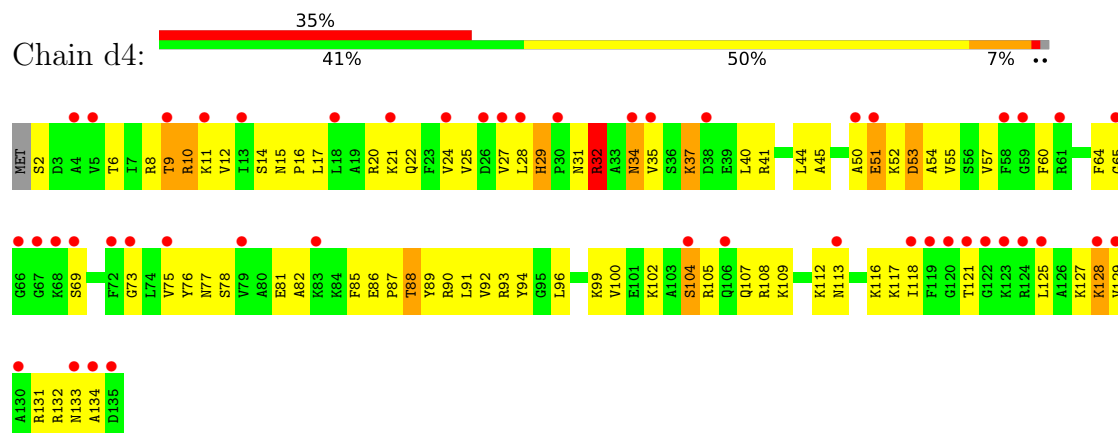




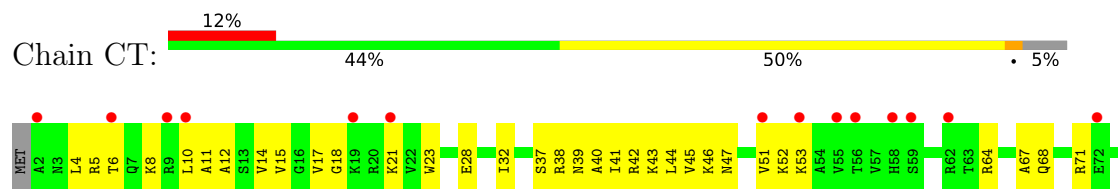
• Molecule 53: 40S ribosomal protein S24-A

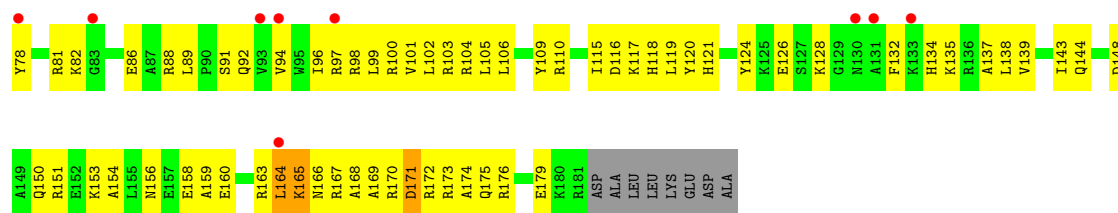


• Molecule 53: 40S ribosomal protein S24-A

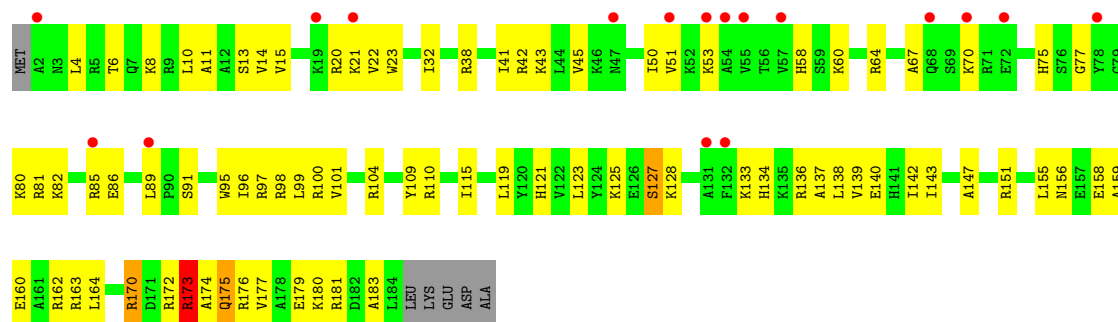


• Molecule 54: 60S ribosomal protein L19-A

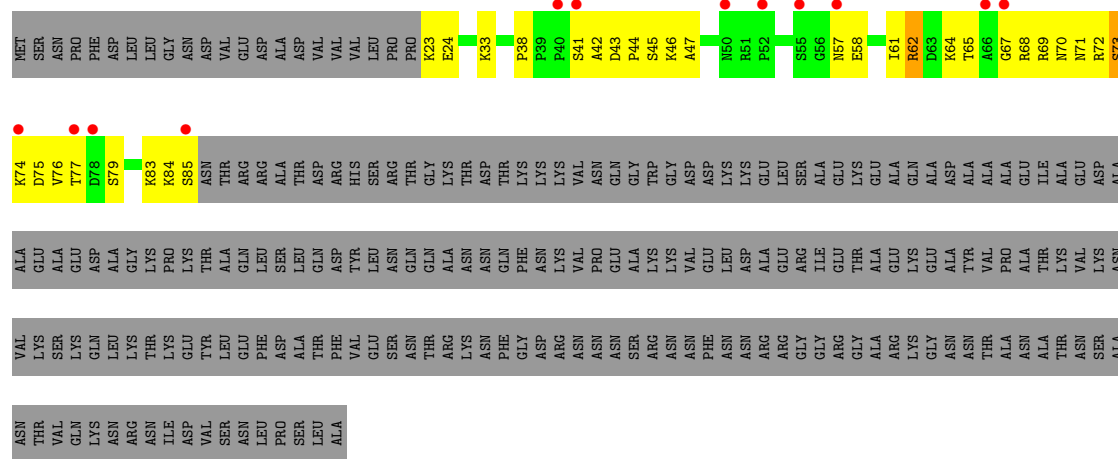




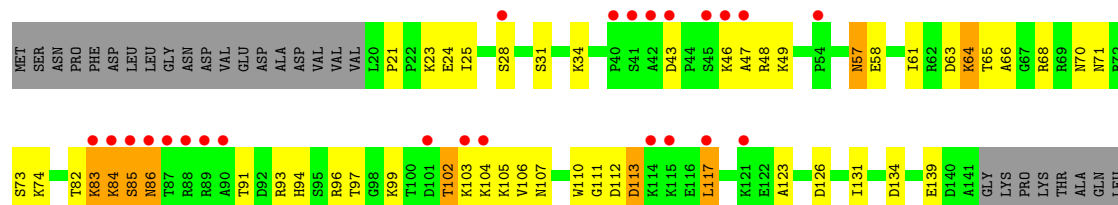
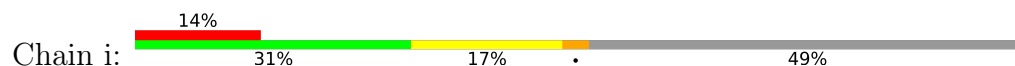
• Molecule 54: 60S ribosomal protein L19-A

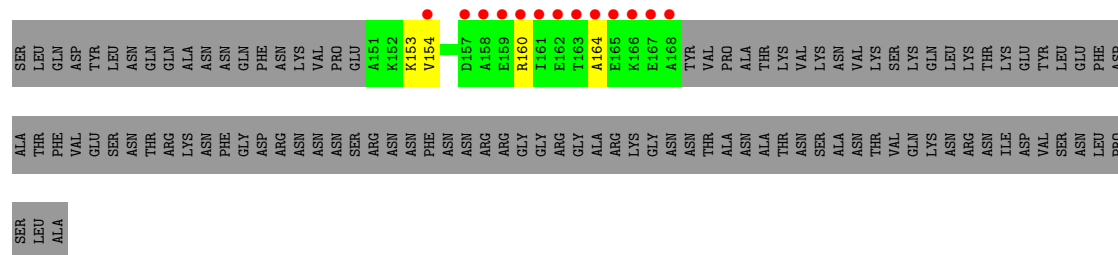


• Molecule 55: Suppressor protein STM1

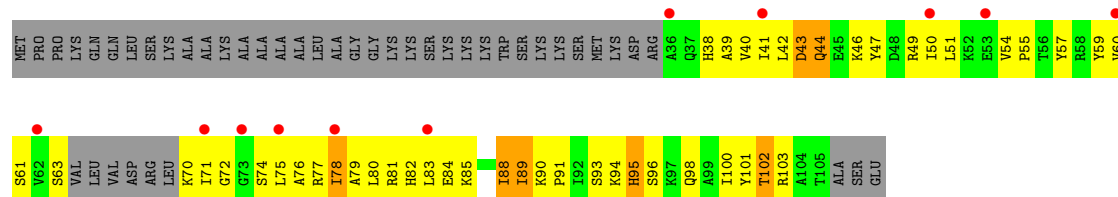


• Molecule 55: Suppressor protein STM1

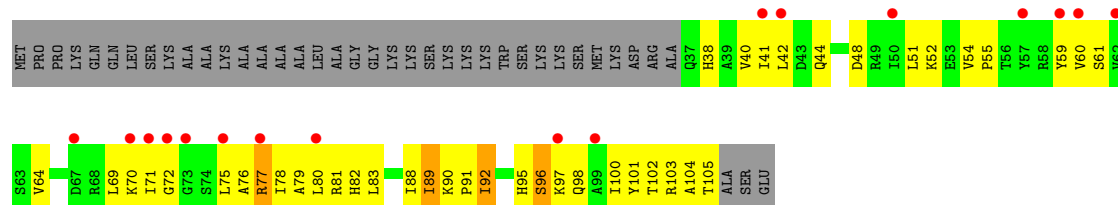
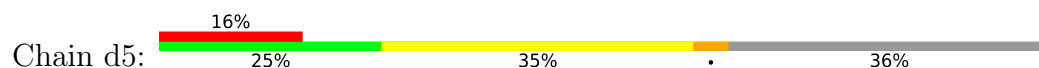




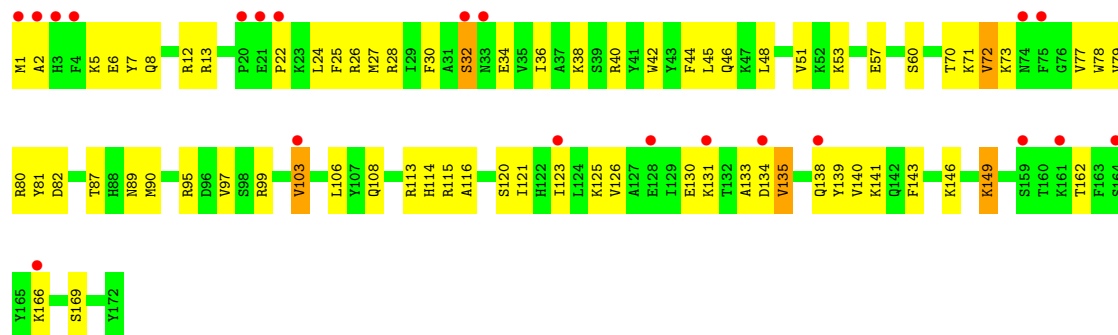
• Molecule 56: 40S ribosomal protein S25-A



• Molecule 56: 40S ribosomal protein S25-A

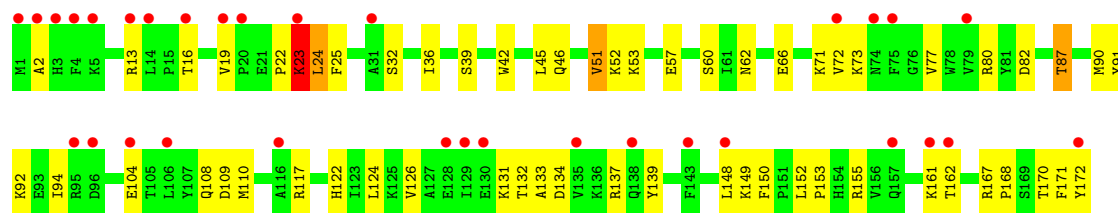


• Molecule 57: 60S ribosomal protein L20-A

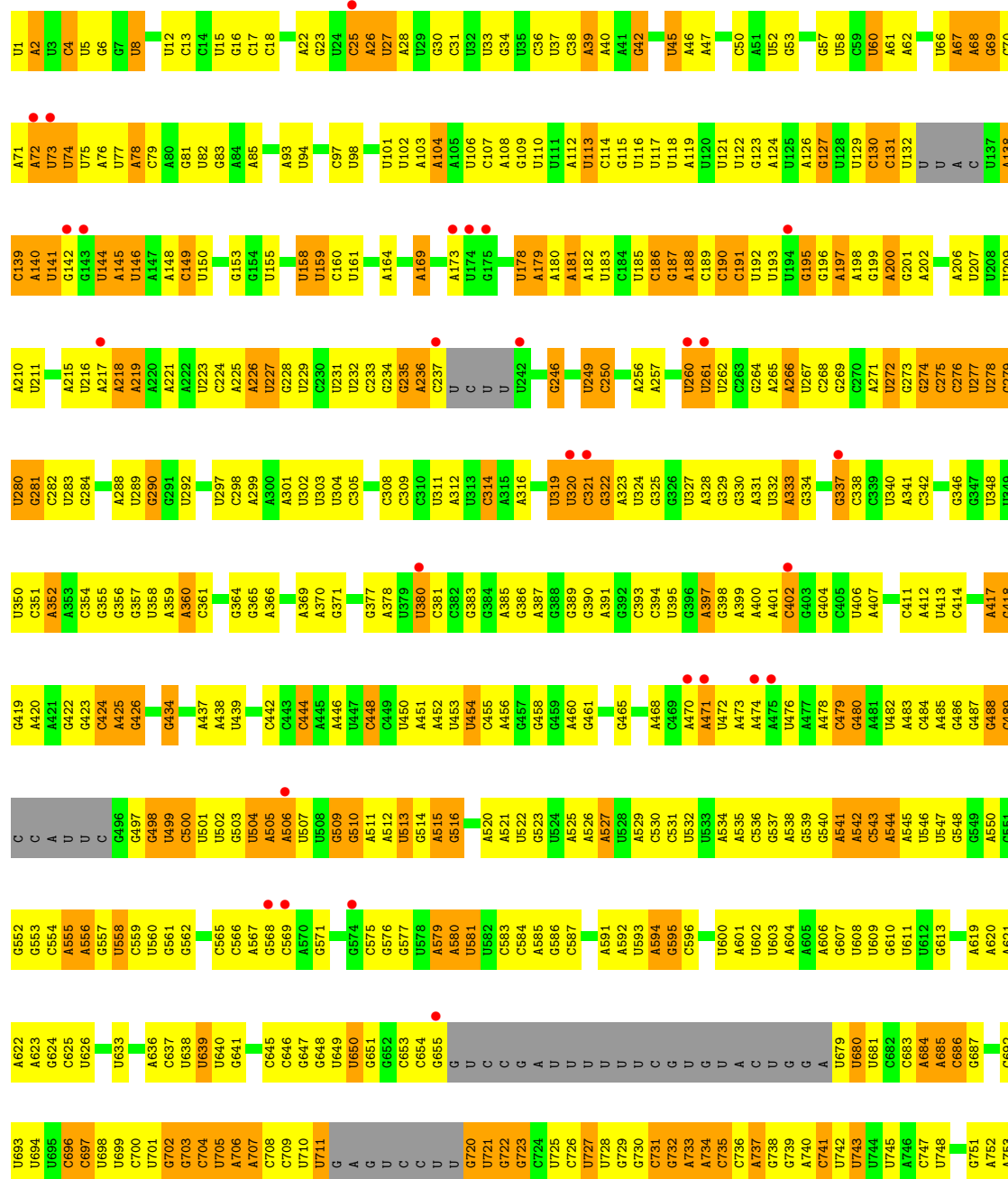


• Molecule 57: 60S ribosomal protein L20-A





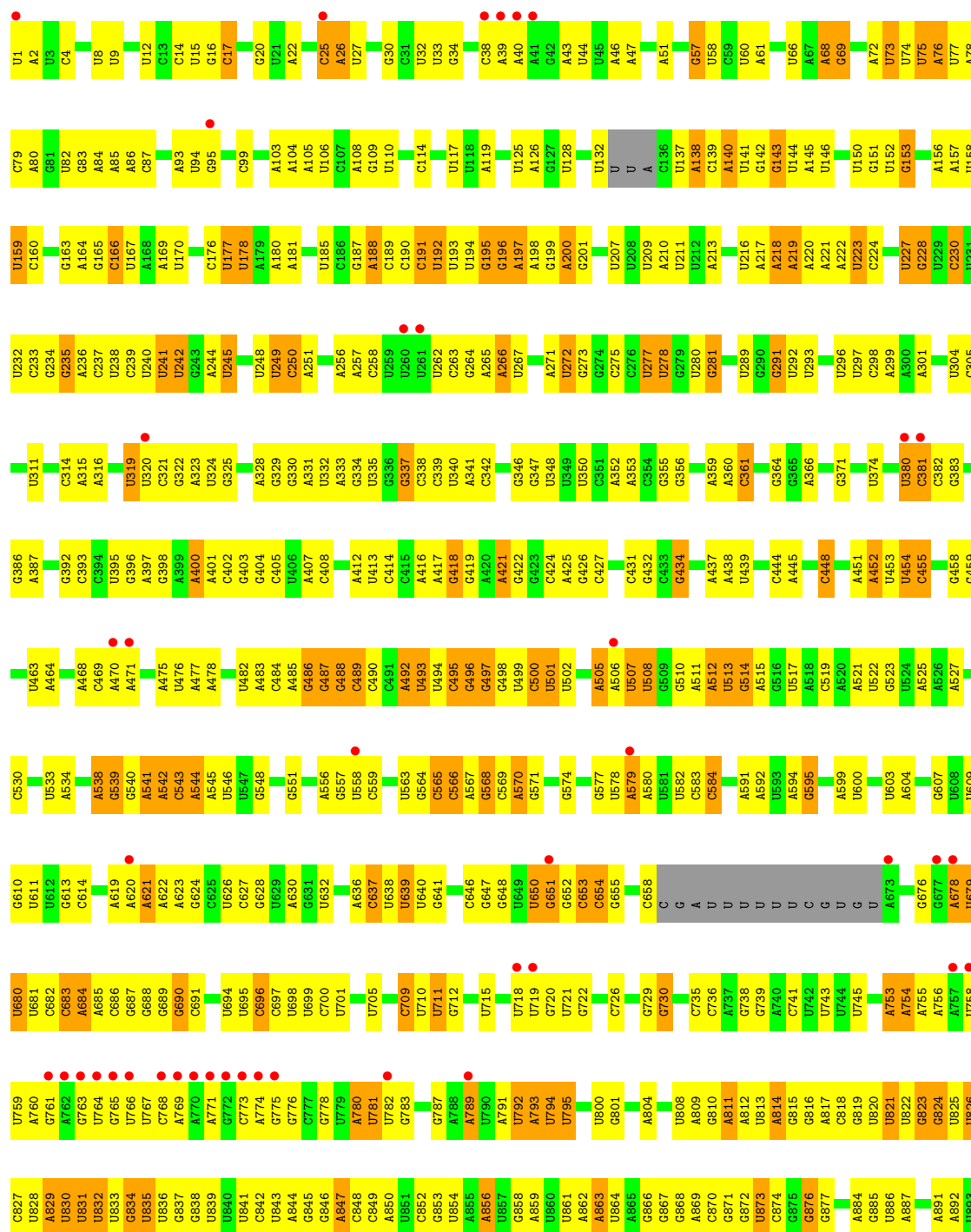
● Molecule 58: 16S ribosomal RNA

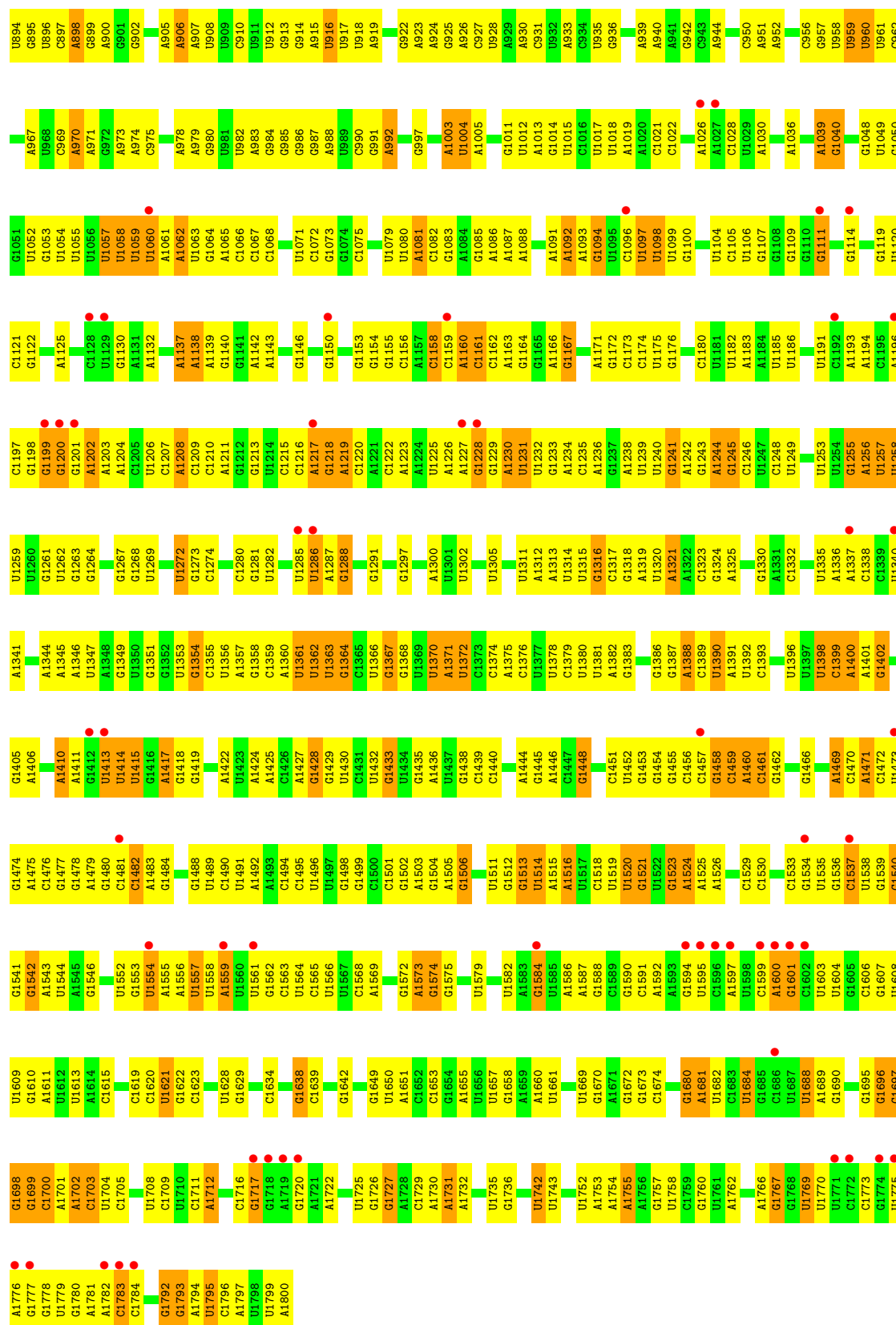


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A	A1613	C1549	G1484	A1410	A1337	U1259	G1189	U1115	U961	C890	U822	A756
G	A1614	A1550	C1485	A1411	C1338	U1260	G1190	G1119	A966	A891	U823	A757
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C		A1559	C1494	A1425	U1350	A1275	G1199	C1134	U978	U832	U832	C769
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C	G1638	U1568	C1500	G1431	C1355	G1280	C1207	G1140	U983	U838	U838	G775
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G1718	C1653	C1580	U1517	U1451	G1367	G1294	G1153	C1071	A924	U853	U853	G787
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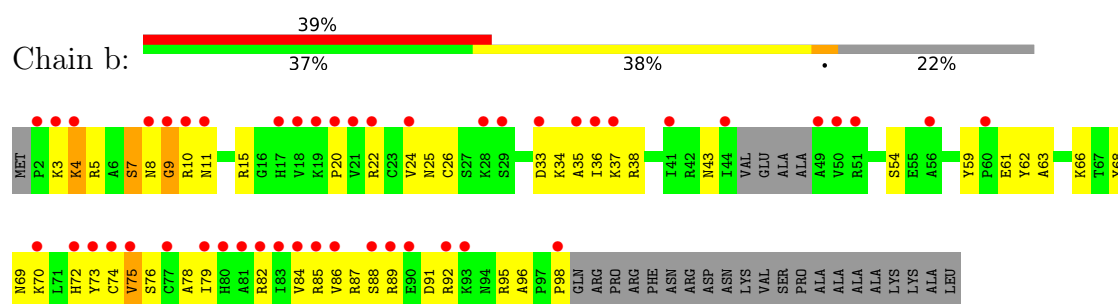


● Molecule 58: 16S ribosomal RNA

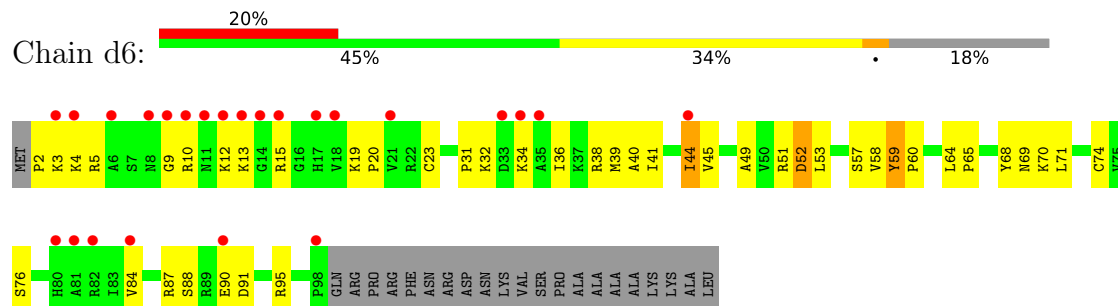




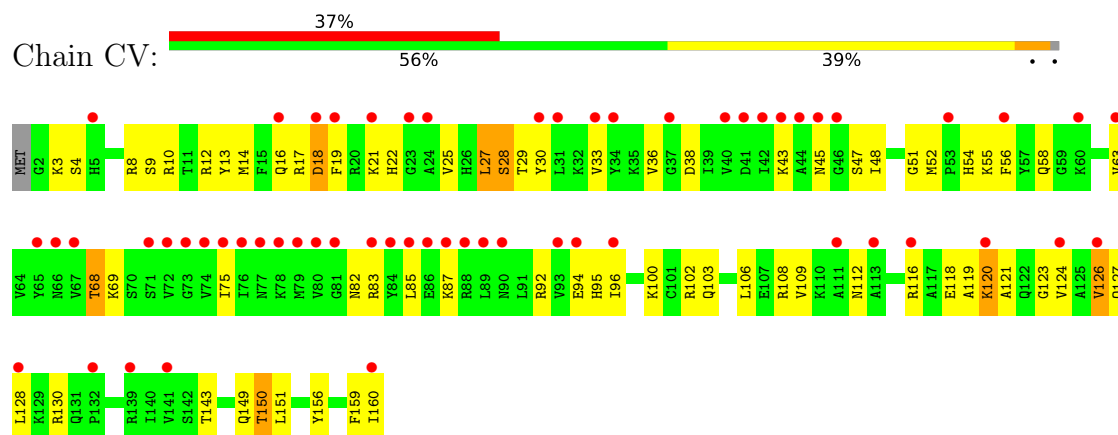
- Molecule 59: Small ribosomal subunit protein eS26B



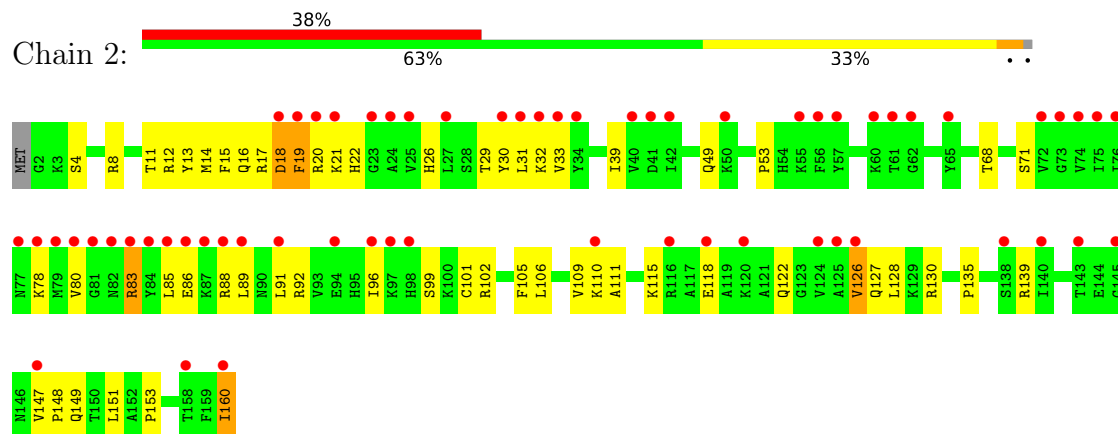
- Molecule 59: Small ribosomal subunit protein eS26B



- Molecule 60: 60S ribosomal protein L21-A

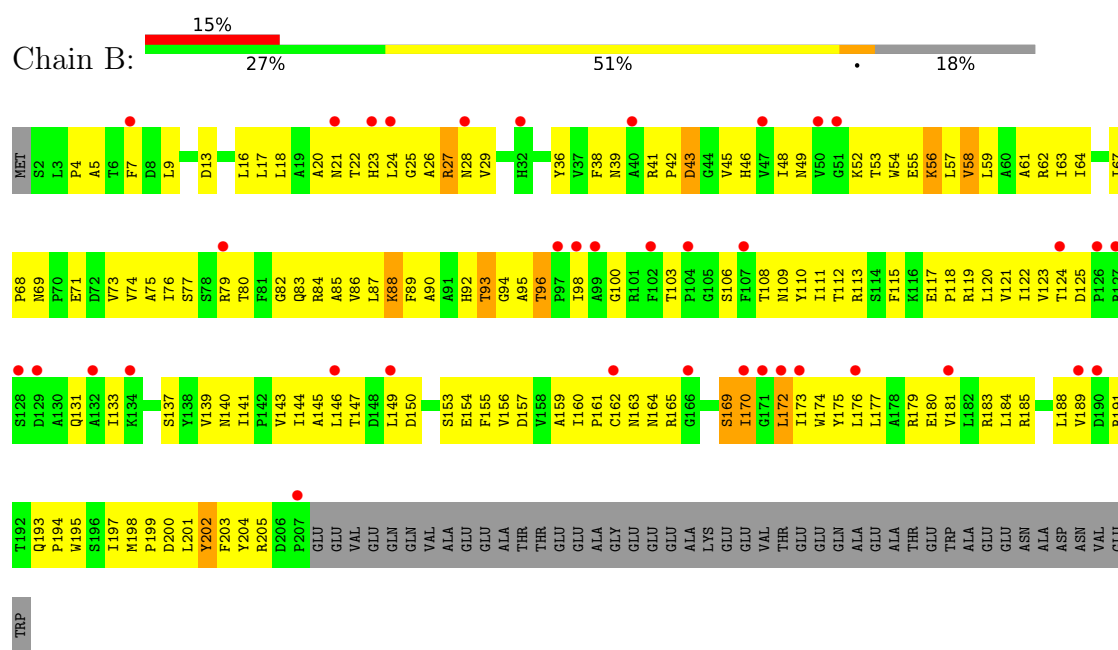


- Molecule 60: 60S ribosomal protein L21-A

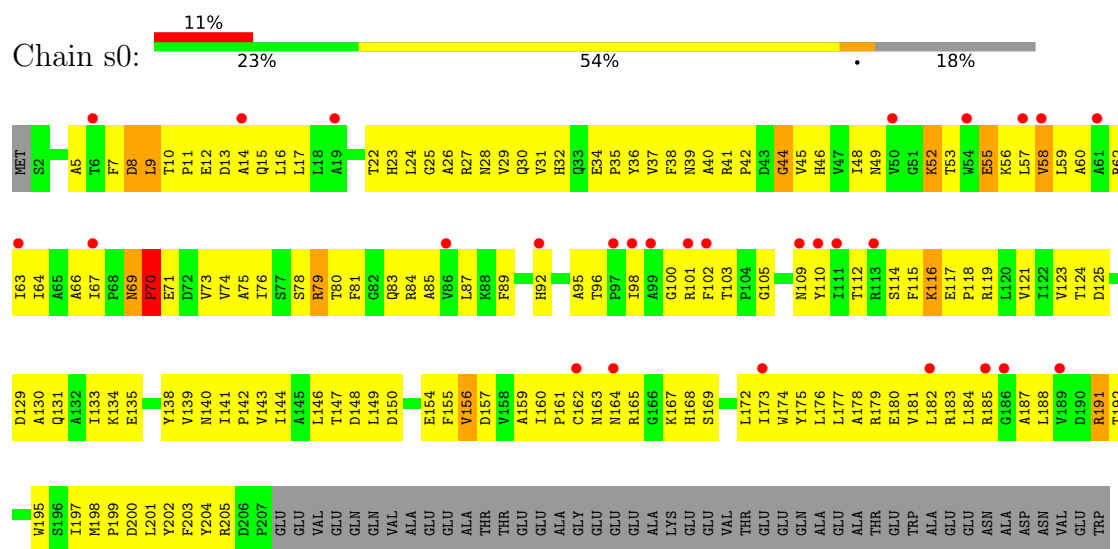


- Molecule 61: 40S ribosomal protein S0-A

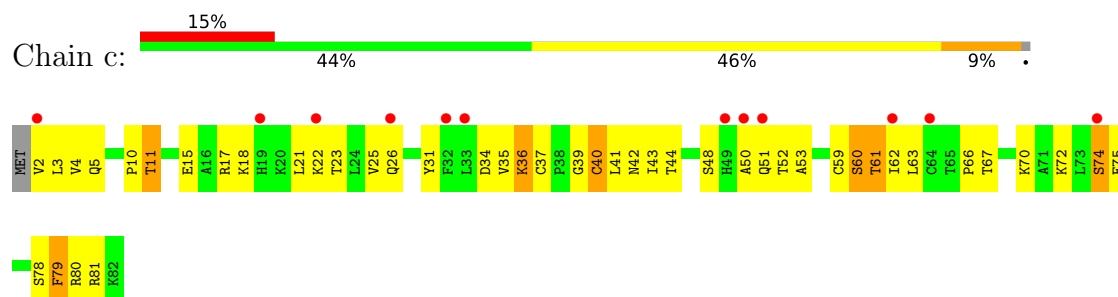




- Molecule 61: 40S ribosomal protein S0-A

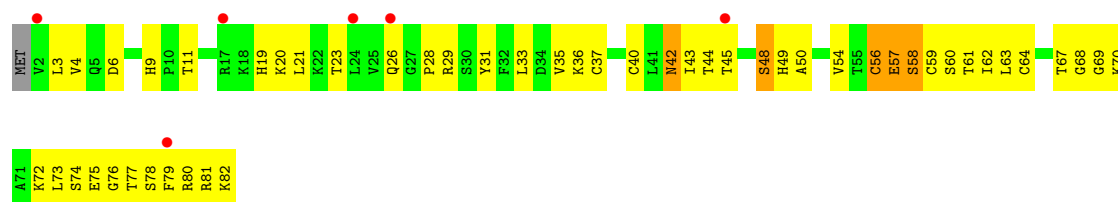


- Molecule 62: 40S ribosomal protein S27-A

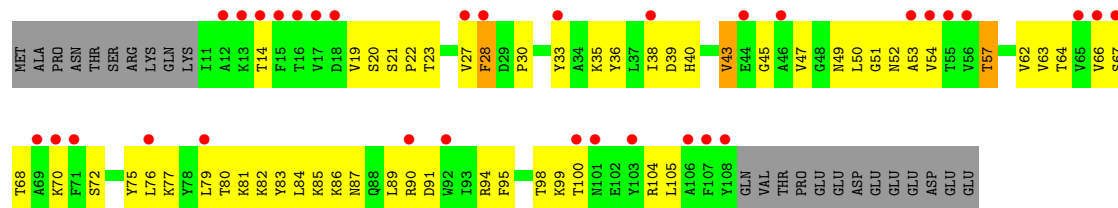


- Molecule 62: 40S ribosomal protein S27-A

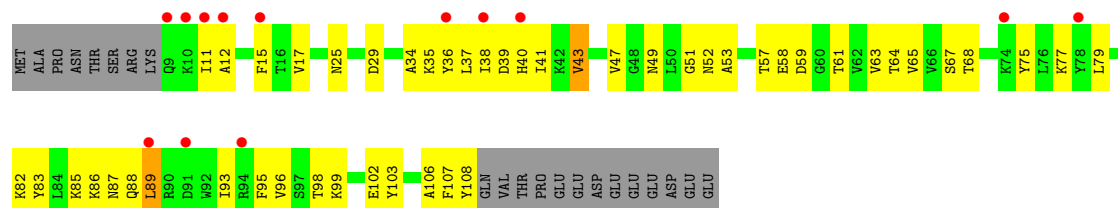




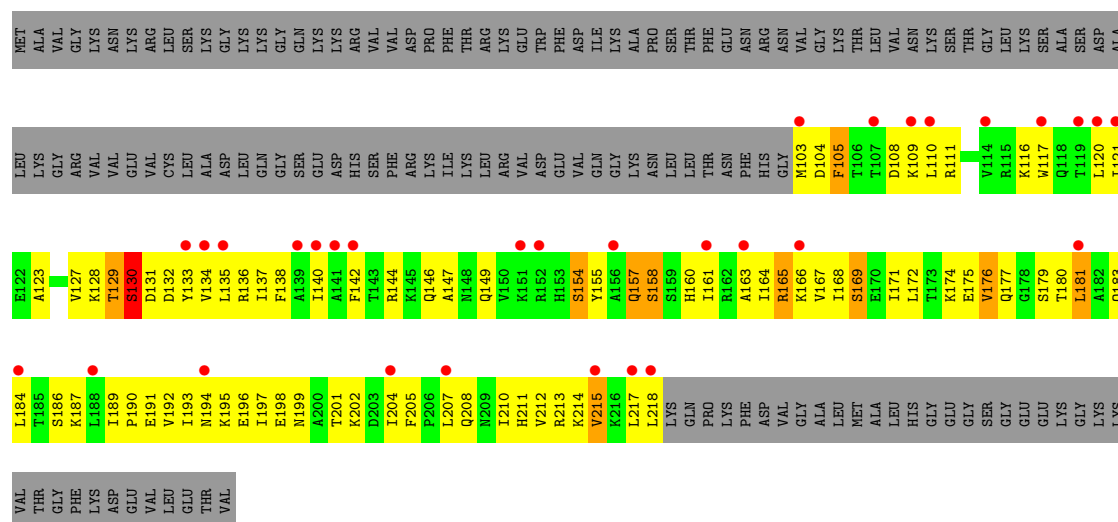
- Molecule 63: 60S ribosomal protein L22-A



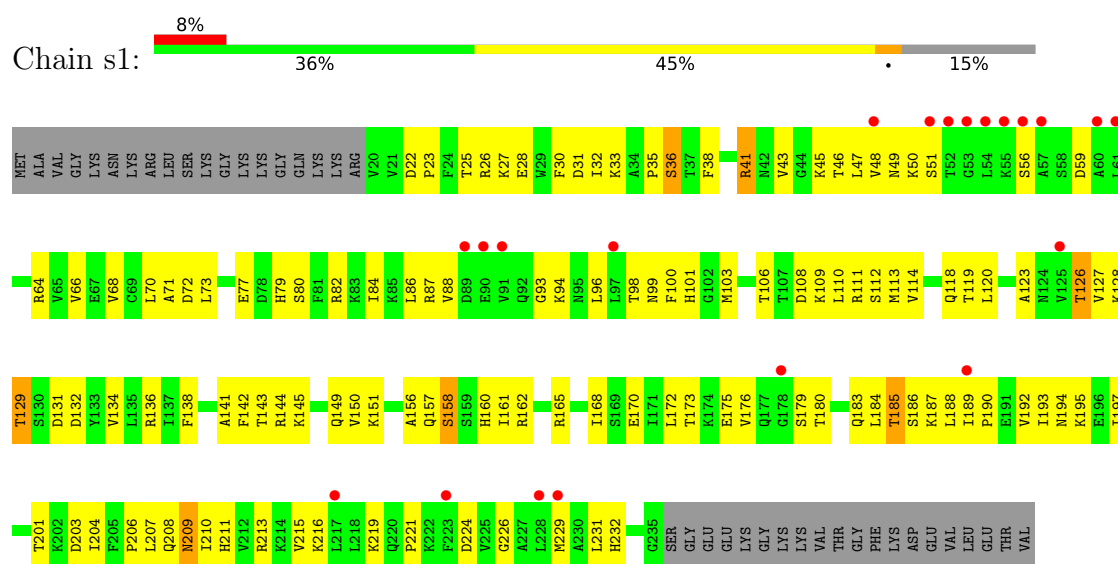
- Molecule 63: 60S ribosomal protein L22-A



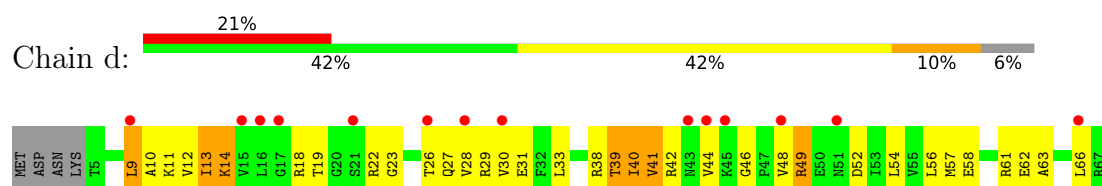
- Molecule 64: 40S ribosomal protein S1-A



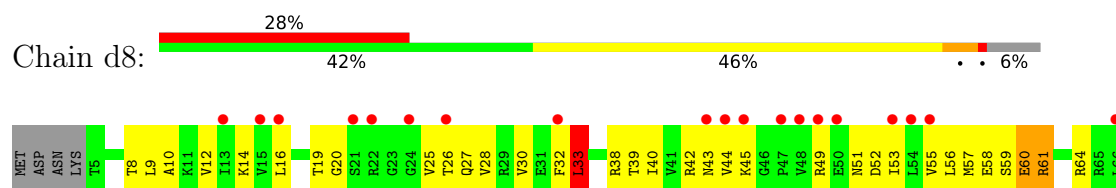
- Molecule 64: 40S ribosomal protein S1-A



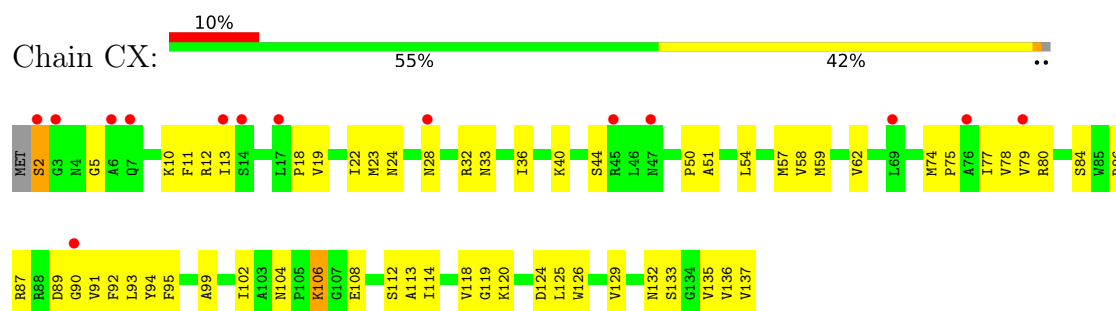
- Molecule 65: 40S ribosomal protein S28-A



- Molecule 65: 40S ribosomal protein S28-A

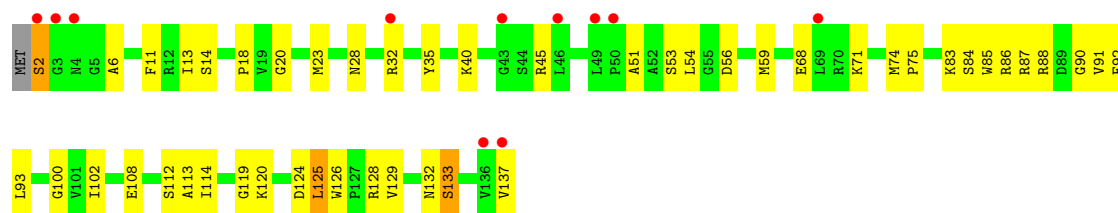


- Molecule 66: 60S ribosomal protein L23-A

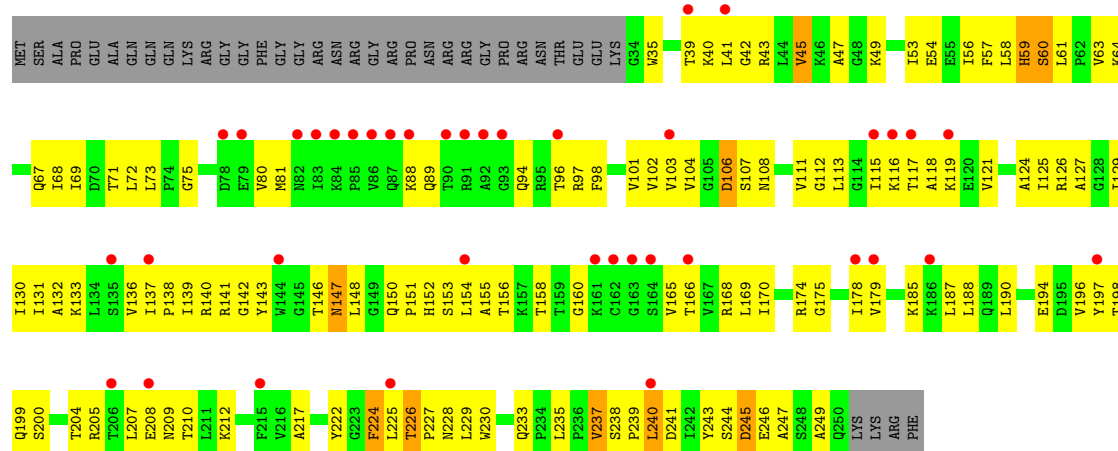


- Molecule 66: 60S ribosomal protein L23-A

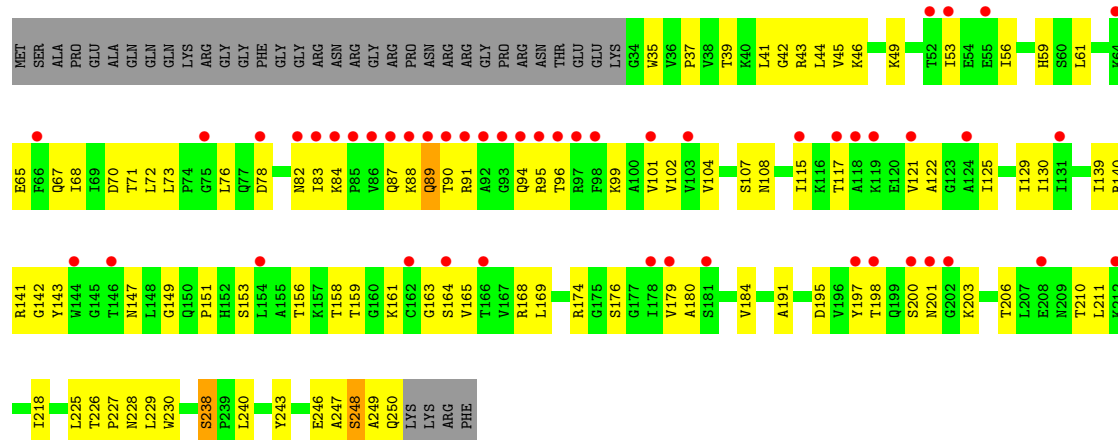




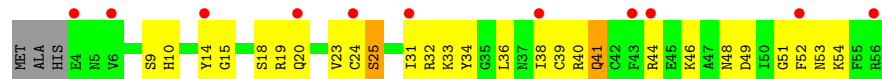
• Molecule 67: 40S ribosomal protein S2



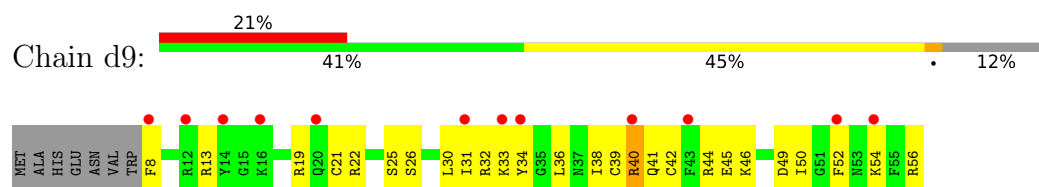
• Molecule 67: 40S ribosomal protein S2



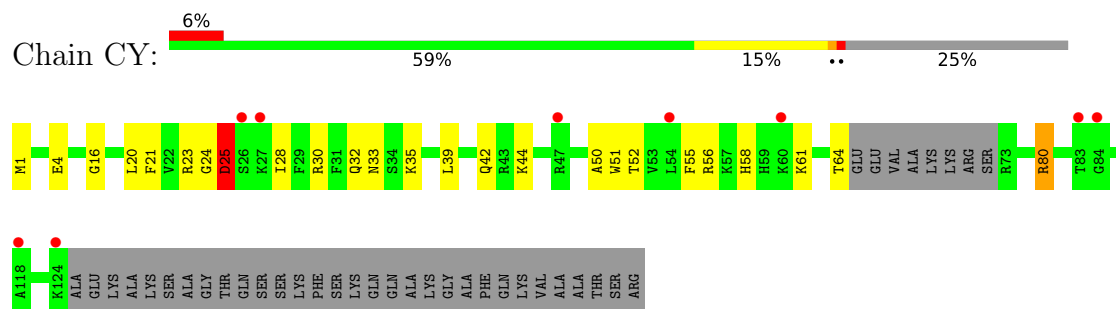
• Molecule 68: Small ribosomal subunit protein uS14A



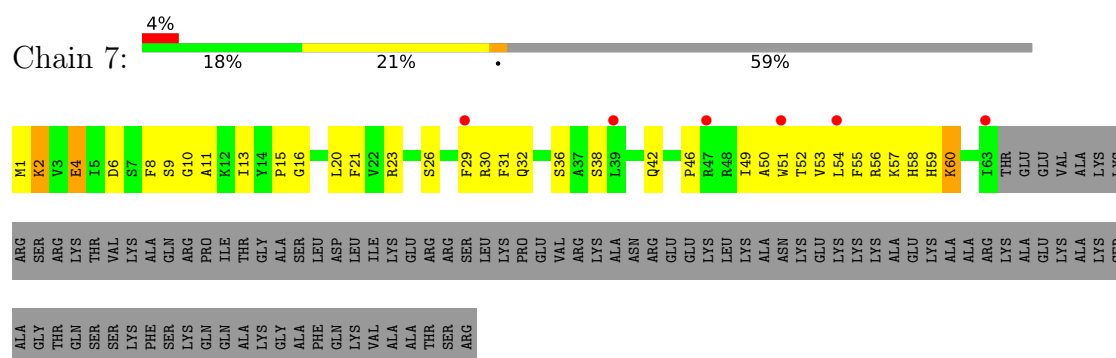
- Molecule 68: Small ribosomal subunit protein uS14A



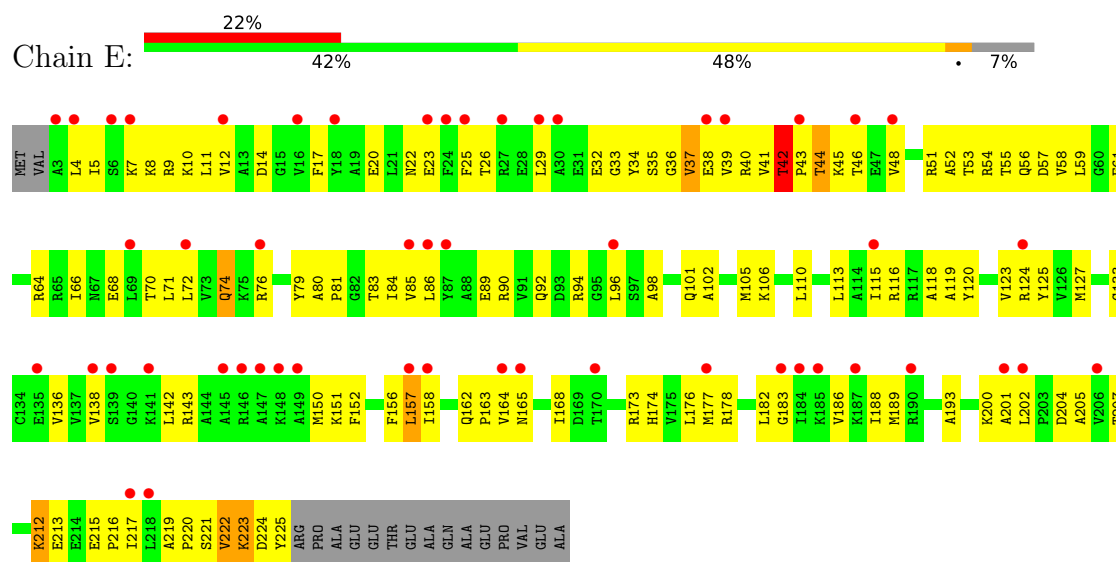
- Molecule 69: 60S ribosomal protein L24-A



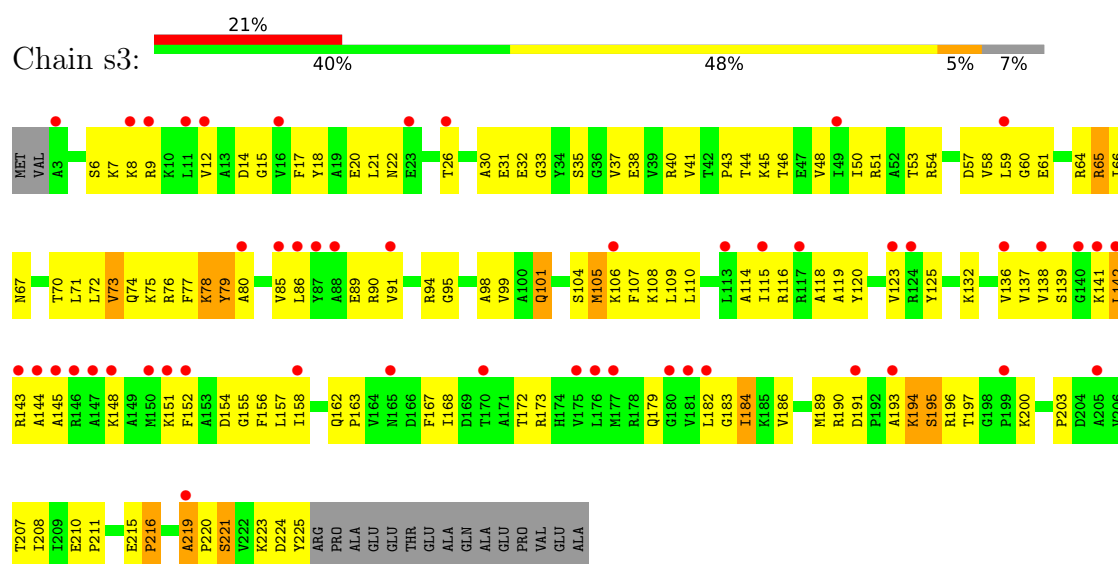
- Molecule 69: 60S ribosomal protein L24-A



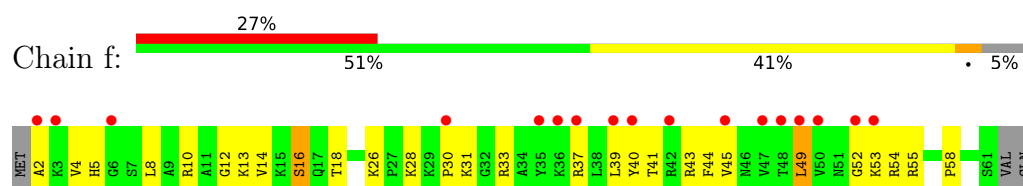
- Molecule 70: Small ribosomal subunit protein uS3



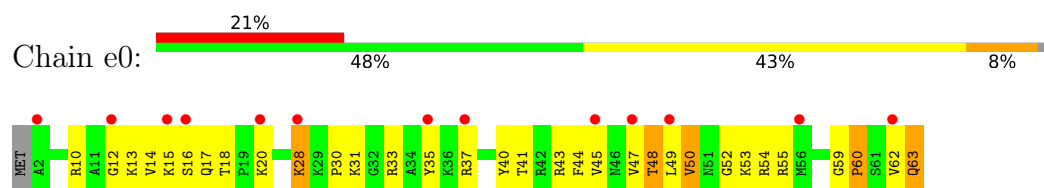
- Molecule 70: Small ribosomal subunit protein uS3



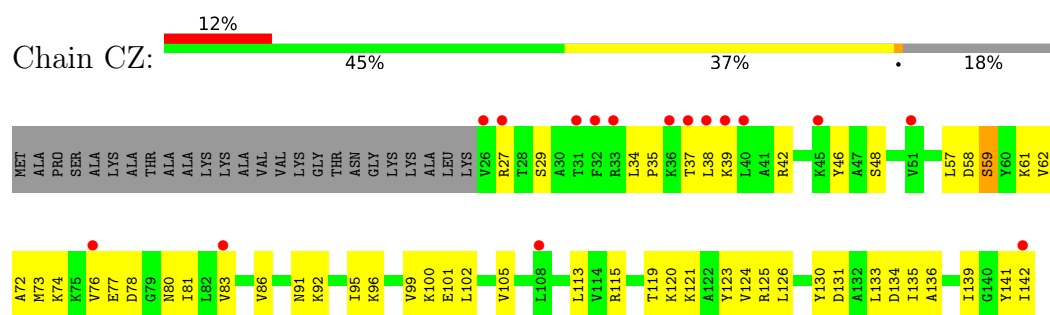
• Molecule 71: 40S ribosomal protein S30-A



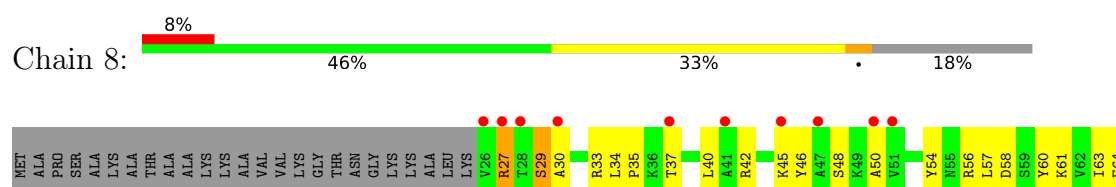
• Molecule 71: 40S ribosomal protein S30-A



• Molecule 72: 60S ribosomal protein L25

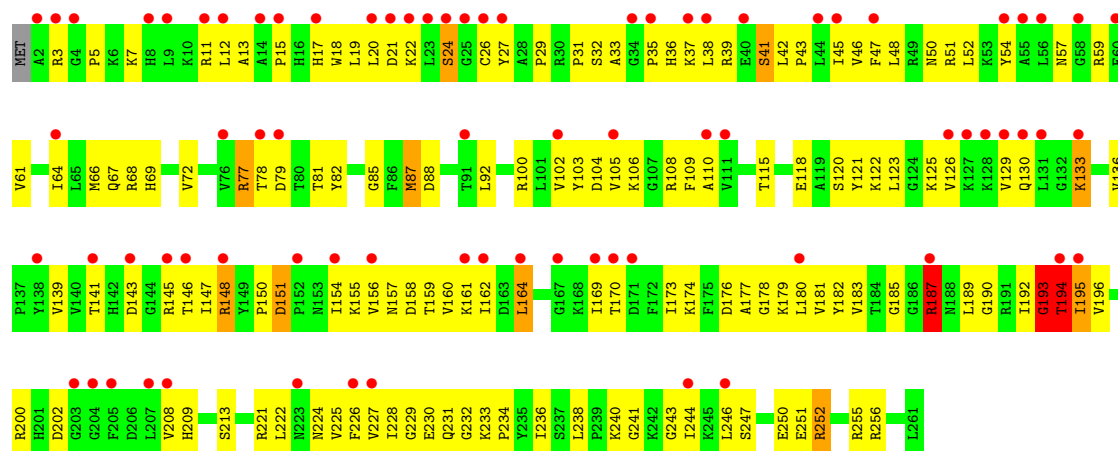
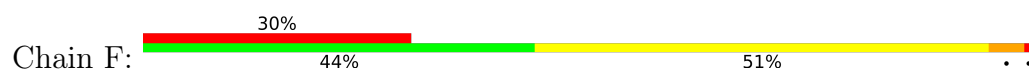


• Molecule 72: 60S ribosomal protein L25

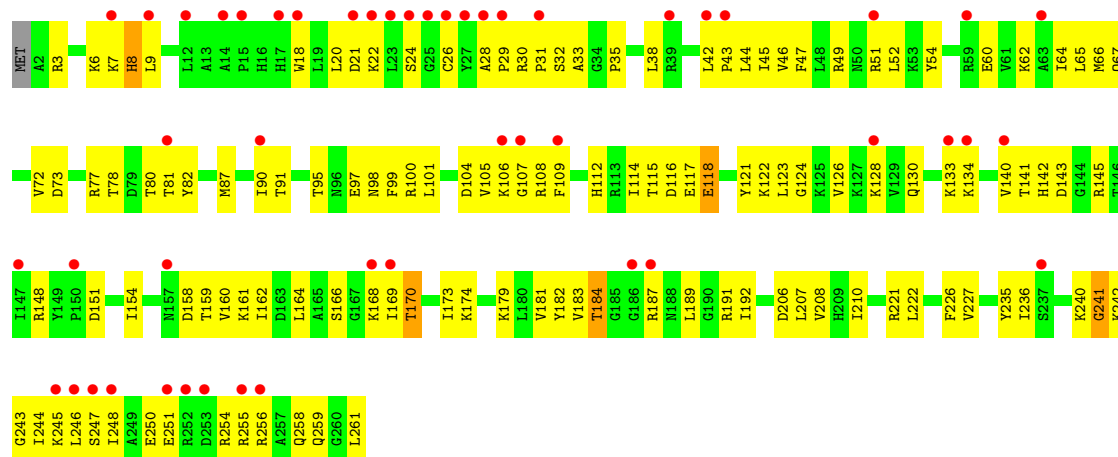




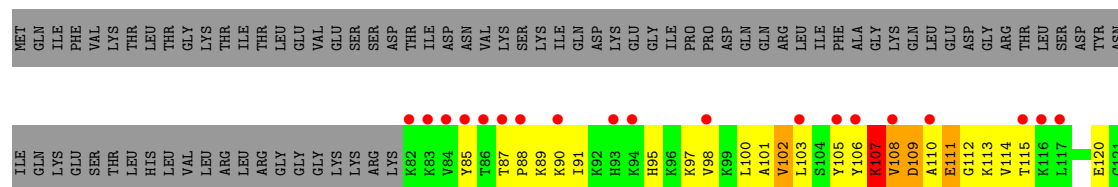
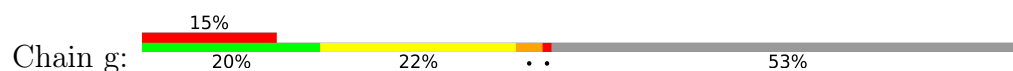
• Molecule 73: 40S ribosomal protein S4-A



• Molecule 73: 40S ribosomal protein S4-A

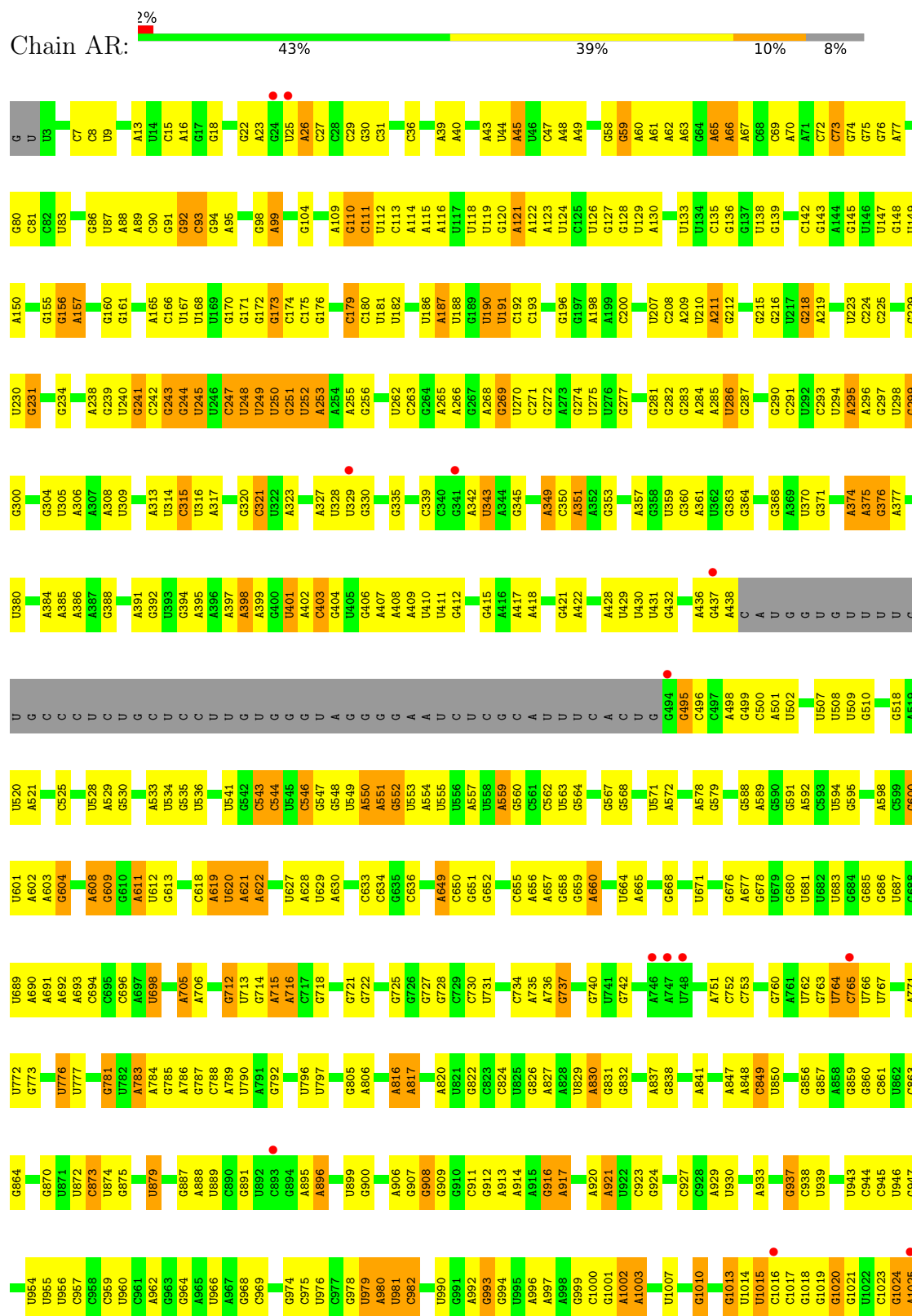


• Molecule 74: Ubiquitin





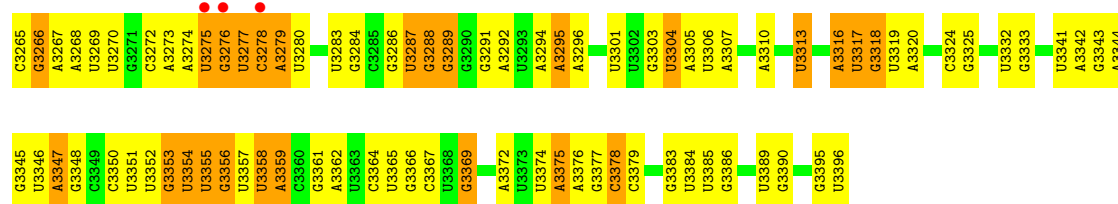
- Molecule 75: 25S ribosomal RNA



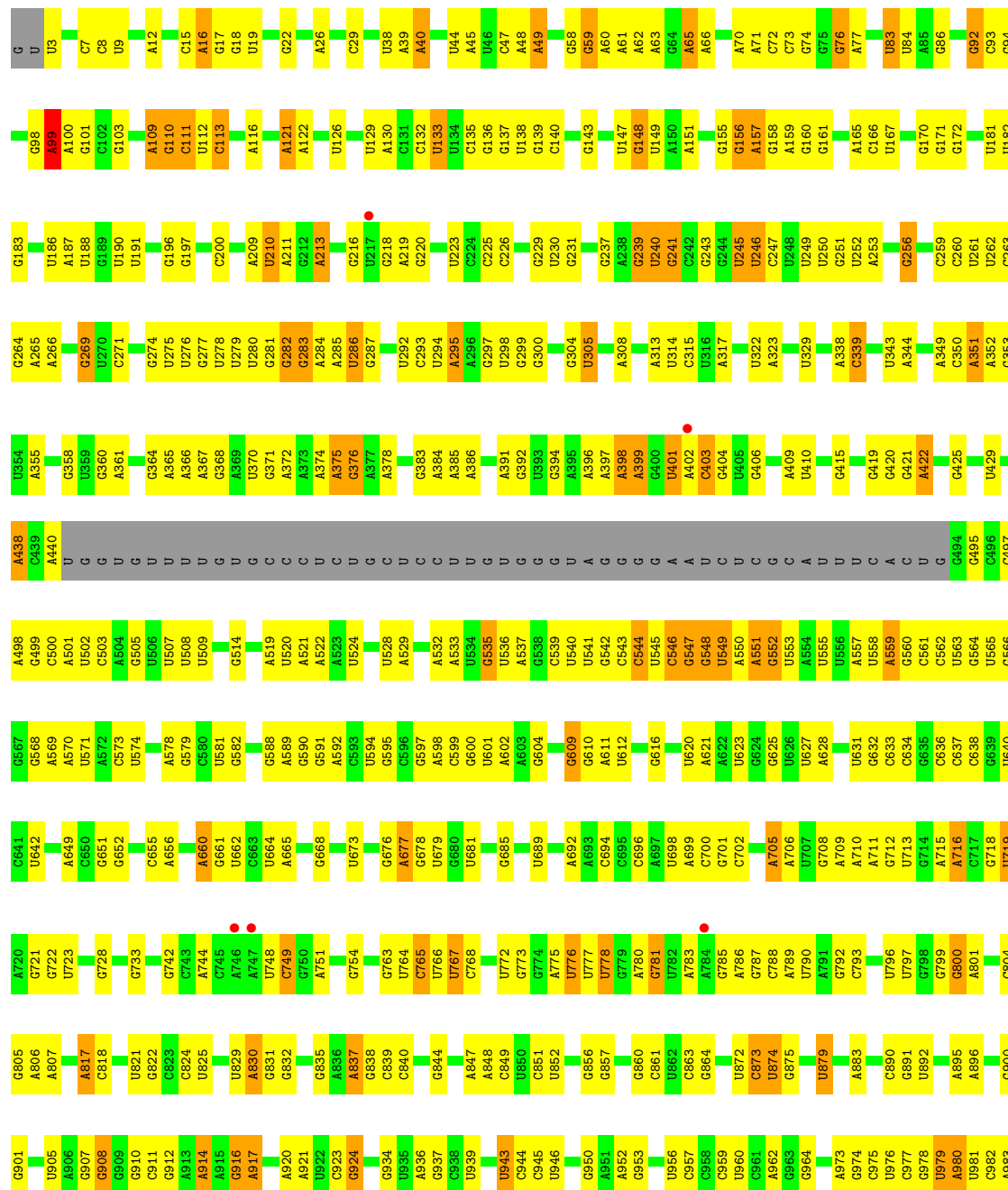
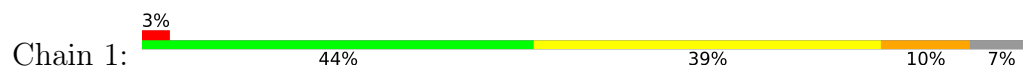


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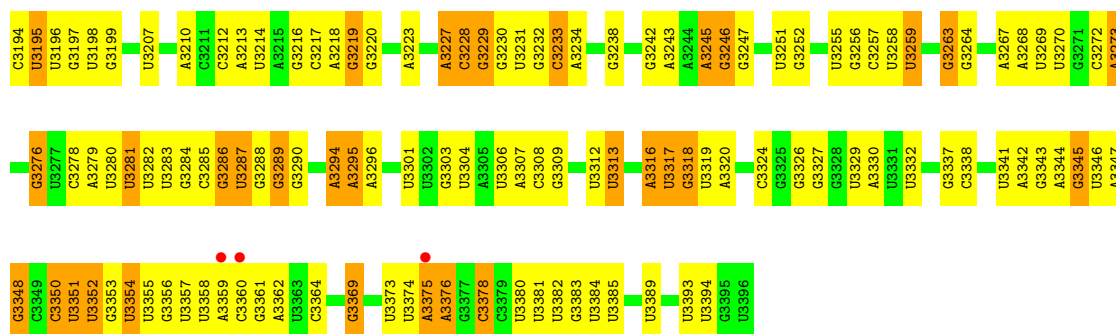


## • Molecule 75: 25S ribosomal RNA

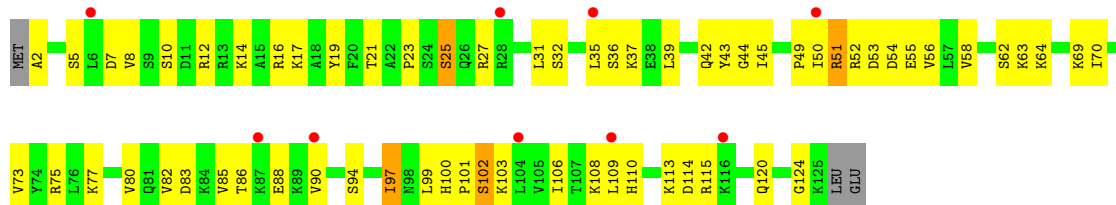


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G	C		A1809		U1567	U1567				U1073	G993
U	G		A1810		U1568	G1464				U1074	G994
C	C	U1880	G1811		A1642	U1570	A1386			A1075	U995
C	A			G1730							
C	G		A1814	G1734	U1639	A1571				U1081	G999
U	C	A1886	U1815	G1735			G1389	C1292	A1153	U1082	C1000
U	G	A1887	A1816	G1736	C1657	U1572		U1293	A1154	G1083	G1001
G	G		U1817		G1658	G1573		C1298	A1158		A1002
G	G		G1817	U1740	U1659	U1574	G1392	U1299	A1159	C1086	A1003
G	G	A1895	U1818	A1741	C1660	A1575	A1393	G1300	G1160	U1087	U1004
U	G		U1819	U1742	G1661	A1474	A1394	U1235	G1161	G1088	G1005
G	C	G1899	U1820	U1743	G1662	G1577	G1395	A1301	G1162	G1089	A1006
U	U	A1900	U1821	G1744	C1663	C1578		A1302		G1090	U1007
A	C		C1822	C1745	U1664	A1477		A1303		A1091	A1008
C	C	G1906	A1823		C1665	A1580	U1398		G1166	U1092	A1009
C	C		U1824	G1750	G1666	G1581	G1400	G1306	U1167	C1092	A1010
A	C	A1911	G1825	G1751	A1667	A1481	G1404	G1307	U1168	A1093	
G	G	C1826	C1827	A1752	G1668	A1482		A1308	U1169	U1094	
G	U	U1915	C1827	G1753	C1669	A1583	G1404	U1309	A1170	G1101	G1020
C	C	U1916				G1586	U1405		U1095	A1102	G1021
C	C	C1917	U1831	A1760	C1677	A1587	U1408	G1243	U1096	A1103	
C	C	C1918	C1832	C1761	U1682	A1588	G1408	A1244	G1097	G1104	G1024
C	U	G1919	U1833	C1762	A1683	A1589			A1098		A1025
G	U		G1834	U1763	U1684		G1412	U1247	A1099	C1107	A1026
G	G	G1927	A1835	U1764	C1685		G1413	U1317	U1100	U1088	A1027
C	C			U1765	C1686	A1593	U1414	A1318	A1179	G1101	A1030
U	A	G1934	G1838	C1766	U1686	A1594	U1415	U1322	C1185	U1114	C1032
U	U	G1935	A1839	C1767	U1687	A1595	G1416	C1254	U1108	G1115	U1033
G	G	A1936	U1840	U1768	C1688	C1496	G1417	U1330	C1186	G1116	U1034
G	C	U1937	A1841	G1769	U1689	C1497	A1418	U1331	U1109	G1117	G1035
C	U		A1842	G1770	U1689	C1498	A1419	U1334	U1188	U1111	A1036
U	G	G1940	C1843	C1771	C1693	C1499	G1422	U1334	C1189		
C	C	C1941	U1941	U1772	U1694	G1500			U1191		
G	G	U1942			U1695	A1506	U1425	A1259	A190		
U	C	G1948	A1847	G1775	A1696	A1507	U1426	A1260	U1191	U1114	C1032
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C	C	U1955	C1854	G1784	U1703	U1615	A1433	U1265	C1197		
C	C		C1855	G1785	C1706	U1616	A1539	G1347	A1197		
G	C		U1855	G1786	C1706	U1617	U1540	U1348		U1123	C1037
U	G	G	C1856	U1787	A1707	G1618	G1434	U1349	G1268	U1124	U1038
C	C	U	C1857		C1708	G1619	A1541	G1349	U1269	U1125	A1039
C	U	U	A1858	C1709	C1709	U1620	U1436	U1351			
C	A	G	C1859	C1710	C1710	A1621	C1437	U1351	A1270	U1128	U1041
C	A	A	A1859	U1792	C1711	G1622	G1440	A1352	A1271	U1128	A1047
G	G		G1860		C1711	U1623		U1353	C1272	A1129	A1048
U	G	G	C1861	U1795	A1715	G1624	U1549	G1354	A1273	U1207	C1049
C	C		U1862	G1796	C1716		U1554	A1355	G1208	A1130	
C	G	C	G1863	A1797	U1716	U1629	U1555	U1355	G1209	G1131	
C	G	C	U1864	A1798	U1717	U1630	C1556	A1357	G1210	G1134	A1057
A	A	U	A1865	A1799	C1718	U1639	G1447	G1357	U1276	A1211	
C	U	U			G1719	C1631		C1358	C1277	G1137	U1060
C	C		C1866		U1720	A1559	U1447	U1358	A1278	A1061	A1062
C	U	C		C1869	U1720	A1560	G1450	U1361	C1279	G1141	

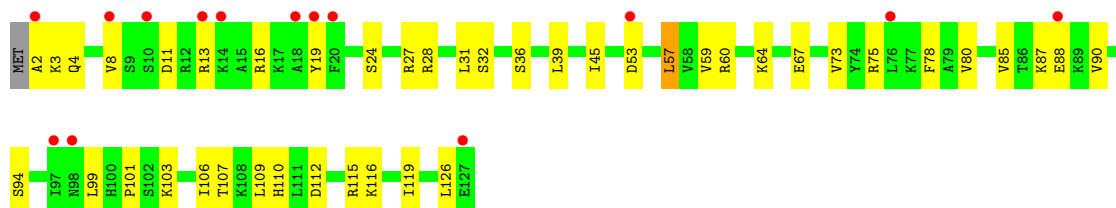
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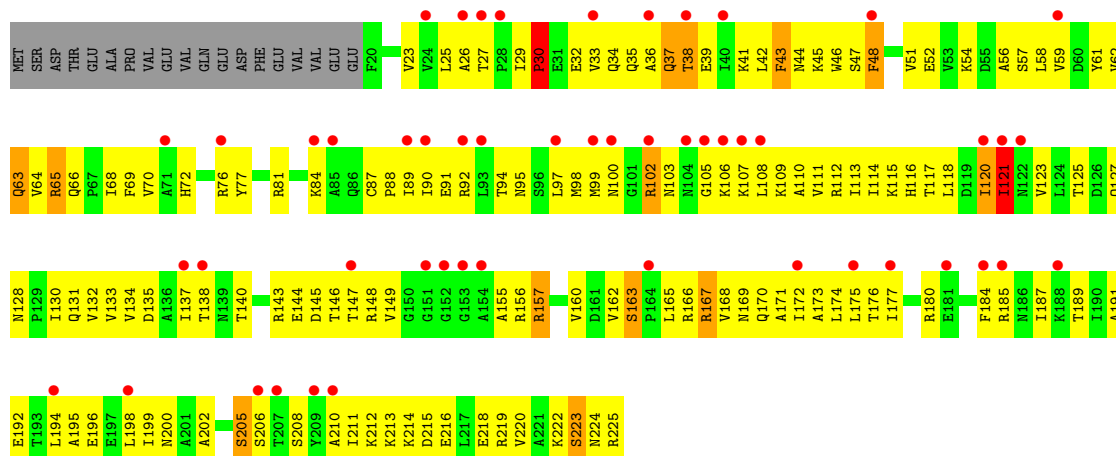
• Molecule 76: 60S ribosomal protein L26-A



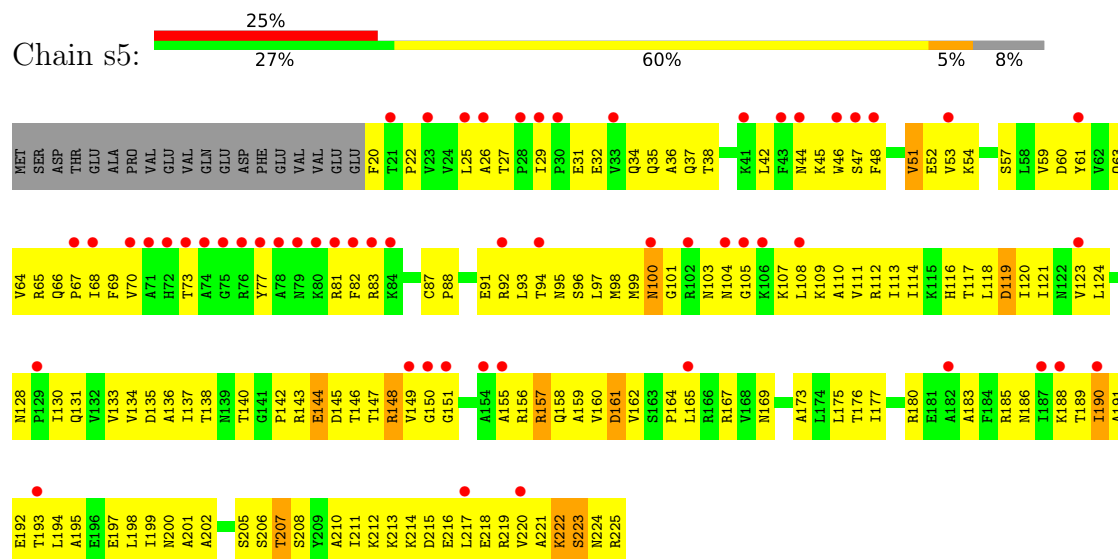
• Molecule 76: 60S ribosomal protein L26-A



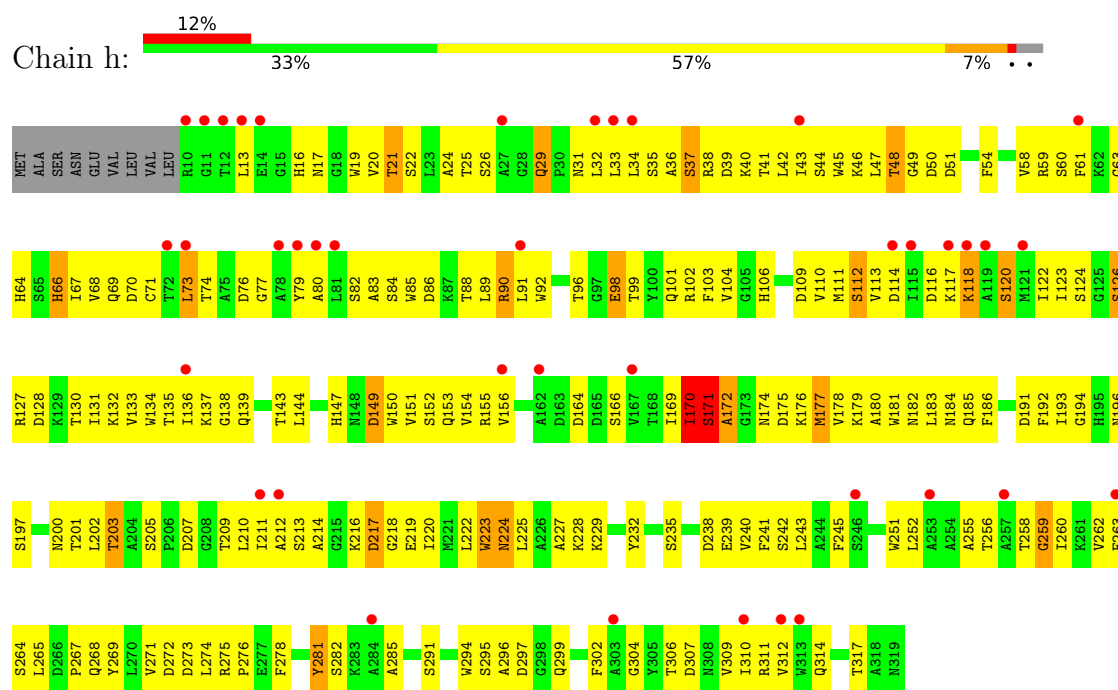
• Molecule 77: 40S ribosomal protein S5



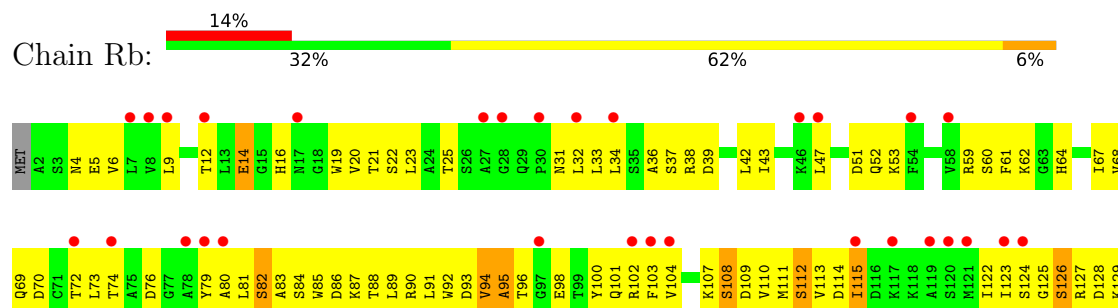
- Molecule 77: 40S ribosomal protein S5

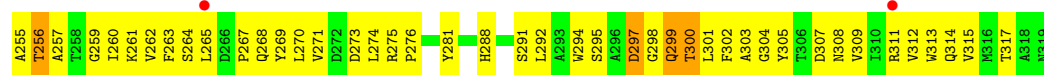


- Molecule 78: Guanine nucleotide-binding protein subunit beta-like protein

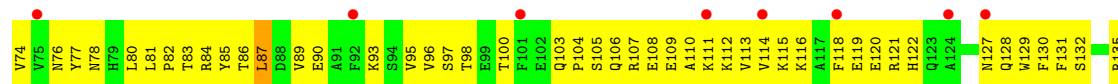


- Molecule 78: Guanine nucleotide-binding protein subunit beta-like protein

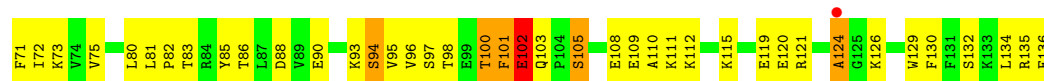
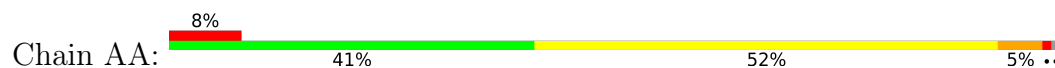




• Molecule 79: 60S ribosomal protein L27-A



• Molecule 79: 60S ribosomal protein L27-A





## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	302.09Å 285.96Å 433.31Å 90.00° 98.92° 90.00°	Depositor
Resolution (Å)	95.96 – 2.90 95.96 – 2.90	Depositor EDS
% Data completeness (in resolution range)	99.8 (95.96-2.90) 91.1 (95.96-2.90)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	0.69 (at 2.91Å)	Xtriage
Refinement program	PHENIX (1.20.1_4487: ???)	Depositor
R, $R_{free}$	0.218 , 0.230 0.218 , 0.247	Depositor DCC
$R_{free}$ test set	1573356 reflections (1.56%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	67.8	Xtriage
Anisotropy	0.209	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.31 , 69.0	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.47$ , $\langle L^2 \rangle = 0.29$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
$F_o, F_c$ correlation	0.92	EDS
Total number of atoms	402407	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	97.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.37% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: K, ZN, MG, OHX, SPD, ZWB

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
1	3	0.12	0/2883	0.32	0/4491
1	AS	0.12	0/2883	0.32	0/4491
2	AB	0.24	0/1204	0.78	7/1612 (0.4%)
2	DC	0.23	0/1204	0.75	3/1612 (0.2%)
3	CJ	0.29	0/1794	0.61	0/2425
3	p	0.22	0/1836	0.55	0/2481
4	AI	0.21	0/978	0.62	2/1301 (0.2%)
4	DJ	0.20	0/978	0.65	4/1301 (0.3%)
5	Q	0.30	0/948	0.74	2/1273 (0.2%)
5	c5	0.30	0/1060	0.78	0/1426
6	H	0.29	0/1823	0.70	3/2439 (0.1%)
6	s6	0.20	0/1779	0.49	0/2379
7	4	0.12	0/3746	0.35	0/5832
7	AT	0.12	0/3746	0.34	2/5832 (0.0%)
8	AC	0.19	0/445	0.56	0/593
8	DD	0.22	0/473	0.66	0/629
9	CK	0.20	0/1539	0.50	0/2073
9	q	0.29	0/1539	0.65	0/2073
10	AJ	0.22	0/778	0.58	0/1034
10	DK	0.25	0/756	0.63	0/1005
11	R	0.27	0/1125	0.79	2/1510 (0.1%)
11	c6	0.28	0/1131	0.72	1/1518 (0.1%)
12	I	0.40	0/1506	1.05	10/2028 (0.5%)
12	s7	0.38	0/1516	0.89	3/2043 (0.1%)
13	CD	0.18	0/1948	0.50	0/2617
13	j	0.19	0/1948	0.54	0/2617
14	AD	0.21	0/748	0.51	0/1004
14	DE	0.23	0/751	0.52	0/1008
15	CL	0.20	0/1721	0.58	4/2307 (0.2%)
15	r	0.44	3/1741 (0.2%)	0.55	1/2335 (0.0%)
16	AK	0.19	0/696	0.52	0/923
16	DL	0.16	0/696	0.45	0/923

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	S	0.31	0/870	0.87	0/1165
17	c7	0.28	0/914	0.68	2/1224 (0.2%)
18	J	0.24	0/1514	0.64	0/2021
18	s8	0.23	0/1514	0.69	5/2021 (0.2%)
19	CE	0.18	0/3146	0.52	0/4228
19	k	0.19	0/3146	0.55	0/4228
20	AE	0.20	0/890	0.52	0/1196
20	DF	0.20	0/880	0.49	0/1182
21	CM	0.23	0/1374	0.56	0/1842
21	s	0.34	0/1374	0.80	5/1842 (0.3%)
22	AL	0.22	0/618	0.57	0/826
22	DM	0.23	0/591	0.56	0/789
23	T	0.39	0/1211	0.91	10/1628 (0.6%)
23	c8	0.25	0/1134	0.70	2/1524 (0.1%)
24	K	0.28	0/1461	0.71	1/1959 (0.1%)
24	s9	0.26	0/1519	0.67	1/2035 (0.0%)
25	CF	0.20	0/2800	0.53	0/3790
25	l	0.20	0/2800	0.55	1/3790 (0.0%)
26	AF	0.27	0/1041	0.56	2/1394 (0.1%)
26	DG	0.15	0/1041	0.45	0/1394
27	CN	0.25	0/1568	0.66	1/2106 (0.0%)
27	t	0.17	0/1568	0.52	0/2106
28	AM	0.18	0/443	0.54	0/588
28	DN	0.17	0/443	0.51	0/588
29	U	0.26	0/1130	0.78	3/1517 (0.2%)
29	c9	0.22	0/1130	0.56	0/1517
30	L	0.20	0/759	0.57	0/1025
30	c0	0.28	0/623	0.87	2/838 (0.2%)
31	CG	0.20	0/2398	0.54	0/3235
31	m	0.23	0/2425	0.63	5/3271 (0.2%)
32	AG	0.18	0/868	0.51	0/1168
32	DH	0.21	0/868	0.52	0/1168
33	CO	0.20	0/1068	0.51	0/1438
33	u	0.24	0/1068	0.56	1/1438 (0.1%)
34	AN	0.19	0/423	0.49	0/562
34	DO	0.21	0/423	0.55	0/562
35	V	0.35	0/865	0.84	0/1169
35	d0	0.24	0/593	0.71	0/797
36	M	0.19	0/1145	0.51	0/1543
36	c1	0.19	0/1194	0.52	0/1610
37	CH	0.20	0/1260	0.54	0/1694
37	n	0.17	0/1260	0.46	0/1694
38	AH	0.19	0/890	0.55	0/1189

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
38	DI	0.29	0/890	0.73	0/1189
39	CP	0.16	0/1757	0.43	0/2354
39	v	0.18	0/1757	0.46	0/2354
40	AO	0.14	0/234	0.50	0/300
40	DP	0.17	0/234	0.45	0/300
41	W	0.28	0/693	0.67	0/935
41	d1	0.21	0/693	0.61	2/935 (0.2%)
42	O	0.23	0/1215	0.60	0/1638
42	c3	0.21	0/1215	0.60	2/1638 (0.1%)
43	CI	0.18	0/1821	0.52	0/2451
43	o	0.17	0/1821	0.49	0/2451
44	CQ	0.17	0/1585	0.46	0/2128
44	w	0.17	0/1585	0.48	0/2128
45	AP	0.58	0/860	0.97	0/1136
45	DQ	0.69	1/860 (0.1%)	0.99	4/1136 (0.4%)
46	X	0.31	0/1038	0.71	1/1395 (0.1%)
46	d2	0.22	0/1038	0.55	0/1395
47	P	0.29	0/605	0.88	2/813 (0.2%)
47	c4	0.23	0/960	0.66	1/1290 (0.1%)
48	CR	0.15	0/1250	0.44	0/1683
48	x	0.17	0/1438	0.47	0/1937
49	AQ	0.17	0/701	0.60	0/934
49	DR	0.17	0/701	0.62	0/934
50	Y	0.22	0/1139	0.62	0/1518
50	d3	0.26	0/1139	0.68	1/1518 (0.1%)
51	CS	0.20	0/1465	0.56	0/1965
51	y	0.19	0/1465	0.51	2/1965 (0.1%)
52	p0	0.32	0/977	0.69	0/1313
53	Z	0.30	0/1087	0.63	0/1449
53	d4	0.28	0/1087	0.76	2/1449 (0.1%)
54	CT	0.21	0/1478	0.54	0/1969
54	z	0.21	0/1499	0.55	0/1998
55	i	0.25	0/1019	0.70	1/1371 (0.1%)
55	sM	0.40	1/480 (0.2%)	0.74	1/642 (0.2%)
56	a	0.28	0/521	0.82	0/698
56	d5	0.29	0/566	0.78	1/761 (0.1%)
57	0	0.22	0/1481	0.50	0/1990
57	CU	0.17	0/1481	0.44	0/1990
58	A	0.14	0/41046	0.39	1/63949 (0.0%)
58	sR	0.14	0/42490	0.38	0/66207
59	b	0.27	0/755	0.76	0/1008
59	d6	0.45	1/782 (0.1%)	0.74	1/1047 (0.1%)
60	2	0.19	0/1300	0.53	0/1743

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
60	CV	0.19	0/1300	0.52	0/1743
61	B	0.32	0/1617	0.85	3/2215 (0.1%)
61	s0	0.45	0/1623	0.82	3/2222 (0.1%)
62	c	0.21	0/620	0.75	0/838
62	d7	0.27	0/620	0.81	2/838 (0.2%)
63	5	0.26	0/812	0.64	0/1099
63	CW	0.28	0/794	0.66	0/1076
64	C	0.29	0/955	0.90	4/1286 (0.3%)
64	s1	0.27	0/1748	0.62	1/2352 (0.0%)
65	d	0.26	0/499	1.14	8/670 (1.2%)
65	d8	0.37	0/499	0.91	2/670 (0.3%)
66	6	0.20	0/1018	0.50	0/1369
66	CX	0.18	0/1018	0.46	0/1369
67	D	0.25	0/1665	0.64	2/2263 (0.1%)
67	s2	0.24	0/1665	0.65	1/2263 (0.0%)
68	d9	0.30	0/412	0.73	0/544
68	e	0.21	0/452	0.71	2/600 (0.3%)
69	7	0.38	0/533	0.79	4/707 (0.6%)
69	CY	0.18	0/807	0.47	0/1087
70	E	0.31	0/1759	0.67	0/2368
70	s3	0.28	0/1759	0.74	1/2368 (0.0%)
71	e0	0.30	0/499	0.65	0/665
71	f	0.21	0/483	0.67	0/643
72	8	0.16	0/952	0.48	0/1285
72	CZ	0.18	0/952	0.54	0/1285
73	F	0.29	0/2109	0.79	6/2839 (0.2%)
73	s4	0.25	0/2109	0.65	2/2839 (0.1%)
74	g	0.30	0/577	0.89	2/770 (0.3%)
75	1	0.13	0/75394	0.37	2/117545 (0.0%)
75	AR	0.13	0/75088	0.36	1/117067 (0.0%)
76	9	0.16	0/1004	0.51	0/1341
76	DA	0.17	0/987	0.49	0/1318
77	G	0.61	3/1629 (0.2%)	0.94	7/2202 (0.3%)
77	s5	0.42	1/1629 (0.1%)	0.88	6/2202 (0.3%)
78	Rb	0.36	1/2495 (0.0%)	0.75	1/3395 (0.0%)
78	h	0.27	0/2432	0.77	8/3309 (0.2%)
79	AA	0.24	0/1118	0.61	0/1497
79	DB	0.25	0/1118	0.68	0/1497
All	All	0.20	11/423127 (0.0%)	0.49	175/621686 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a

sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	AB	0	5
2	DC	0	1
3	CJ	0	2
3	p	0	2
4	AI	0	2
4	DJ	0	3
5	Q	0	3
5	c5	0	3
6	H	0	4
6	s6	0	1
9	CK	0	1
9	q	0	4
11	R	0	6
11	c6	0	2
12	I	0	19
12	s7	0	5
13	CD	0	2
13	j	0	1
14	DE	0	1
15	CL	0	3
15	r	0	2
16	AK	0	1
17	S	0	2
17	c7	0	2
18	J	0	3
18	s8	0	3
19	CE	0	2
19	k	0	2
21	CM	0	1
21	s	0	3
22	DM	0	2
23	T	0	4
23	c8	0	4
24	K	0	3
24	s9	0	3
25	CF	0	1
25	l	0	6
26	AF	0	2
26	DG	0	1
27	CN	0	6
27	t	0	4
28	DN	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
29	U	0	7
29	c9	0	1
30	L	0	1
30	c0	0	4
31	CG	0	7
31	m	0	4
32	DH	0	1
33	u	0	2
35	V	0	6
35	d0	0	4
36	c1	0	4
37	CH	0	1
38	AH	0	2
38	DI	0	2
41	d1	0	1
42	O	0	2
42	c3	0	2
43	CI	0	3
43	o	0	4
44	CQ	0	1
44	w	0	1
45	AP	0	1
46	X	0	2
46	d2	0	1
47	P	0	1
47	c4	0	2
49	AQ	0	1
49	DR	0	1
50	Y	0	2
50	d3	0	2
53	Z	0	2
53	d4	0	5
54	CT	0	4
54	z	0	3
55	i	0	5
55	sM	0	3
56	a	0	5
56	d5	0	1
57	0	0	3
57	CU	0	1
59	b	0	1
60	2	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
60	CV	0	1
61	B	0	9
61	s0	0	6
62	c	0	4
62	d7	0	3
63	CW	0	1
64	C	0	6
65	d	0	1
65	d8	0	3
67	D	0	1
68	e	0	2
69	CY	0	1
70	E	0	7
70	s3	0	11
71	e0	0	4
73	F	0	5
73	s4	0	4
74	g	0	7
77	G	0	7
77	s5	0	6
78	Rb	0	4
78	h	0	7
79	AA	0	5
79	DB	0	2
All	All	0	342

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	DQ	56	PRO	N-CD	-11.46	1.31	1.47
77	G	30	PRO	CG-CD	-10.35	1.15	1.50
77	G	30	PRO	N-CA	8.28	1.57	1.47
77	G	30	PRO	CA-CB	-7.98	1.42	1.53
15	r	213	PHE	C-O	-7.96	1.20	1.23
55	sM	38	PRO	CA-C	6.85	1.55	1.51
59	d6	60	PRO	CG-CD	-5.57	1.31	1.50
15	r	213	PHE	N-CA	-5.51	1.41	1.46
15	r	214	PRO	CG-CD	-5.49	1.32	1.50
77	s5	51	VAL	CB-CG2	5.33	1.70	1.52
78	Rb	231	MET	SD-CE	-5.28	1.66	1.79

All (175) bond angle outliers are listed below:



Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	I	173	TYR	CA-C-N	12.91	146.20	121.54
12	I	173	TYR	C-N-CA	12.91	146.20	121.54
78	h	171	SER	CA-C-N	10.69	141.95	121.54
78	h	171	SER	C-N-CA	10.69	141.95	121.54
61	B	172	LEU	CB-CG-CD1	-10.08	80.47	110.70
77	G	30	PRO	CA-N-CD	-9.69	98.43	112.00
30	c0	34	GLU	CA-C-N	9.22	138.29	121.70
30	c0	34	GLU	C-N-CA	9.22	138.29	121.70
2	DC	48	TYR	CA-C-N	-8.94	112.67	122.59
2	DC	48	TYR	C-N-CA	-8.94	112.67	122.59
75	1	99	A	OP1-P-O3'	-8.93	81.23	108.00
73	F	194	THR	N-CA-C	8.90	127.25	113.28
50	d3	137	LYS	CD-CE-NZ	-8.89	83.45	111.90
65	d	39	THR	CA-C-N	8.86	134.14	120.13
65	d	39	THR	C-N-CA	8.86	134.14	120.13
73	F	193	GLY	CA-C-N	8.57	141.62	126.45
73	F	193	GLY	C-N-CA	8.57	141.62	126.45
23	T	31	ALA	CA-C-N	8.51	137.79	121.54
23	T	31	ALA	C-N-CA	8.51	137.79	121.54
29	U	131	ASP	CA-C-N	8.12	137.06	121.54
29	U	131	ASP	C-N-CA	8.12	137.06	121.54
69	7	2	LYS	CD-CE-NZ	-8.07	86.08	111.90
12	s7	72	LYS	CA-C-N	-7.82	107.89	121.97
12	s7	72	LYS	C-N-CA	-7.82	107.89	121.97
78	h	172	ALA	N-CA-C	-7.82	94.14	110.80
75	1	99	A	OP2-P-O3'	-7.76	84.71	108.00
77	G	121	ILE	N-CA-CB	7.49	123.59	111.23
64	C	130	SER	CA-C-N	7.46	135.80	121.54
64	C	130	SER	C-N-CA	7.46	135.80	121.54
67	s2	149	GLY	N-CA-C	7.35	130.60	113.18
77	G	121	ILE	CA-CB-CG1	7.29	122.78	110.40
47	P	90	ARG	CA-C-N	7.25	135.38	121.54
47	P	90	ARG	C-N-CA	7.25	135.38	121.54
65	d	40	ILE	N-CA-C	7.17	120.84	110.09
73	F	194	THR	CB-CA-C	-7.13	99.80	110.06
18	s8	100	ALA	CA-C-N	7.11	134.77	121.97
18	s8	100	ALA	C-N-CA	7.11	134.77	121.97
11	R	31	VAL	CA-C-N	7.05	135.01	121.54
11	R	31	VAL	C-N-CA	7.05	135.01	121.54
12	I	34	LEU	CA-C-N	7.05	132.66	122.23
12	I	34	LEU	C-N-CA	7.05	132.66	122.23
77	G	120	ILE	CA-C-N	7.00	134.58	121.97
77	G	120	ILE	C-N-CA	7.00	134.58	121.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
65	d	38	ARG	CA-C-N	6.99	134.89	121.54
65	d	38	ARG	C-N-CA	6.99	134.89	121.54
73	F	193	GLY	N-CA-C	6.95	129.65	113.18
65	d	14	LYS	CA-CB-CG	6.92	127.93	114.10
53	d4	32	ARG	CA-C-N	6.92	141.72	122.15
53	d4	32	ARG	C-N-CA	6.92	141.72	122.15
4	DJ	84	LYS	CA-C-N	6.64	136.29	122.41
4	DJ	84	LYS	C-N-CA	6.64	136.29	122.41
12	I	35	LYS	CA-C-N	6.61	134.16	121.54
12	I	35	LYS	C-N-CA	6.61	134.16	121.54
12	I	65	PRO	CA-C-N	6.60	134.14	121.54
12	I	65	PRO	C-N-CA	6.60	134.14	121.54
2	AB	47	LYS	CA-C-N	6.33	137.36	125.66
2	AB	47	LYS	C-N-CA	6.33	137.36	125.66
64	C	129	THR	CA-C-N	-6.32	111.41	120.89
64	C	129	THR	C-N-CA	-6.32	111.41	120.89
78	Rb	231	MET	CG-SD-CE	-6.29	87.05	100.90
2	AB	48	TYR	CB-CA-C	-6.26	98.39	110.35
23	T	32	LEU	CB-CG-CD2	-6.21	92.06	110.70
12	s7	14	THR	N-CA-C	6.20	119.46	109.86
15	r	214	PRO	CA-N-CD	-6.19	103.33	112.00
45	DQ	33	ALA	CA-C-N	-6.19	113.71	122.63
45	DQ	33	ALA	C-N-CA	-6.19	113.71	122.63
21	s	171	VAL	CA-C-N	6.16	133.31	121.54
21	s	171	VAL	C-N-CA	6.16	133.31	121.54
42	c3	138	ASN	CA-C-N	6.15	133.28	121.54
42	c3	138	ASN	C-N-CA	6.15	133.28	121.54
78	h	170	ILE	CA-C-N	-6.14	111.69	120.89
78	h	170	ILE	C-N-CA	-6.14	111.69	120.89
55	i	154	VAL	N-CA-C	6.13	120.64	112.98
33	u	8	LYS	N-CA-C	6.10	120.49	111.04
23	T	59	GLY	CA-C-N	6.09	135.69	123.20
23	T	59	GLY	C-N-CA	6.09	135.69	123.20
4	AI	91	ALA	CA-C-N	6.09	133.17	121.54
4	AI	91	ALA	C-N-CA	6.09	133.17	121.54
74	g	108	VAL	CA-C-N	6.04	133.79	121.95
74	g	108	VAL	C-N-CA	6.04	133.79	121.95
31	m	43	LYS	CA-C-N	6.04	133.07	121.54
31	m	43	LYS	C-N-CA	6.04	133.07	121.54
61	B	172	LEU	CA-CB-CG	6.01	137.35	116.30
23	T	61	LEU	CA-CB-CG	6.00	137.30	116.30
27	CN	48	PRO	N-CA-C	-5.97	105.23	113.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
64	s1	41	ARG	CB-CG-CD	-5.97	97.57	111.30
69	7	4	GLU	CB-CA-C	-5.96	98.41	111.71
65	d8	60	GLU	CA-C-N	5.96	132.93	121.54
65	d8	60	GLU	C-N-CA	5.96	132.93	121.54
15	CL	23	ASN	CA-C-N	5.96	132.92	121.54
15	CL	23	ASN	C-N-CA	5.96	132.92	121.54
24	s9	122	VAL	N-CA-C	-5.82	106.81	111.81
58	A	1424	A	O5'-P-OP1	-5.81	90.58	108.00
6	H	69	LEU	N-CA-C	5.76	122.55	109.81
69	7	2	LYS	CB-CA-C	5.76	119.35	109.51
31	m	44	TYR	CB-CA-C	-5.70	99.08	110.42
77	s5	148	ARG	CA-C-N	5.66	128.22	120.35
77	s5	148	ARG	C-N-CA	5.66	128.22	120.35
59	d6	9	GLY	N-CA-C	-5.65	101.21	111.16
18	s8	99	ALA	CA-C-N	-5.65	112.42	120.89
18	s8	99	ALA	C-N-CA	-5.65	112.42	120.89
6	H	37	ASP	CA-C-N	5.62	132.43	121.41
6	H	37	ASP	C-N-CA	5.62	132.43	121.41
77	s5	51	VAL	CA-C-N	-5.62	112.70	122.64
77	s5	51	VAL	C-N-CA	-5.62	112.70	122.64
24	K	93	LEU	CA-CB-CG	5.61	135.94	116.30
77	s5	190	ILE	N-CA-C	-5.61	107.81	113.47
2	DC	48	TYR	CB-CA-C	-5.58	101.61	110.04
23	c8	61	LEU	CA-C-N	5.58	129.02	120.82
23	c8	61	LEU	C-N-CA	5.58	129.02	120.82
55	sM	38	PRO	O-C-N	5.58	123.87	121.31
62	d7	58	SER	CA-C-N	5.56	132.15	121.54
62	d7	58	SER	C-N-CA	5.56	132.15	121.54
29	U	36	ILE	CA-CB-CG1	5.54	119.82	110.40
5	Q	28	MET	CG-SD-CE	5.53	113.06	100.90
26	AF	5	PRO	CA-C-N	-5.51	113.25	123.11
26	AF	5	PRO	C-N-CA	-5.51	113.25	123.11
65	d	13	ILE	CA-C-N	5.50	132.31	122.09
65	d	13	ILE	C-N-CA	5.50	132.31	122.09
23	T	61	LEU	CA-C-N	5.49	130.13	121.56
23	T	61	LEU	C-N-CA	5.49	130.13	121.56
75	AR	1064	A	P-O3'-C3'	5.47	128.41	120.20
2	AB	48	TYR	N-CA-C	5.46	124.22	113.29
31	m	44	TYR	CA-CB-CG	5.46	123.73	113.90
21	s	170	ASP	CA-C-N	-5.44	112.17	121.97
21	s	170	ASP	C-N-CA	-5.44	112.17	121.97
69	7	4	GLU	CA-CB-CG	5.44	124.97	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	e	23	VAL	CA-C-N	-5.43	114.41	122.56
68	e	23	VAL	C-N-CA	-5.43	114.41	122.56
17	c7	95	ARG	CA-C-N	5.42	131.46	121.70
17	c7	95	ARG	C-N-CA	5.42	131.46	121.70
12	I	129	LEU	CB-CG-CD1	-5.42	94.43	110.70
47	c4	62	LEU	CA-CB-CG	5.40	135.21	116.30
5	Q	125	PRO	N-CA-C	5.37	123.53	112.47
45	DQ	28	TYR	CB-CA-C	-5.37	102.51	110.67
73	F	87	MET	CG-SD-CE	-5.34	89.15	100.90
23	T	30	TYR	CA-C-N	-5.32	114.31	121.71
23	T	30	TYR	C-N-CA	-5.32	114.31	121.71
21	s	171	VAL	N-CA-C	5.32	120.40	109.34
46	X	77	PRO	N-CA-C	-5.32	101.22	111.69
4	DJ	83	LYS	CA-C-N	5.29	131.64	121.54
4	DJ	83	LYS	C-N-CA	5.29	131.64	121.54
61	s0	70	PRO	CA-C-O	-5.27	111.01	120.60
11	c6	30	LYS	CD-CE-NZ	-5.25	95.10	111.90
61	B	172	LEU	CB-CG-CD2	5.22	126.37	110.70
2	AB	116	GLY	N-CA-C	5.21	125.54	113.18
78	h	73	LEU	CA-CB-CG	5.21	134.53	116.30
41	d1	8	LEU	CA-C-N	5.20	131.33	121.97
41	d1	8	LEU	C-N-CA	5.20	131.33	121.97
25	l	182	LEU	CA-CB-CG	5.19	134.46	116.30
56	d5	89	ILE	CG1-CB-CG2	-5.19	95.13	110.70
2	AB	76	ASP	CA-C-N	-5.19	111.64	121.54
2	AB	76	ASP	C-N-CA	-5.19	111.64	121.54
12	I	31	SER	N-CA-C	5.17	121.24	109.81
31	m	44	TYR	N-CA-C	5.15	121.77	110.80
73	s4	170	THR	CA-C-N	5.14	133.15	122.41
73	s4	170	THR	C-N-CA	5.14	133.15	122.41
67	D	106	ASP	CA-C-N	5.12	131.32	121.54
67	D	106	ASP	C-N-CA	5.12	131.32	121.54
51	y	174	ARG	CA-C-N	5.10	131.02	122.15
51	y	174	ARG	C-N-CA	5.10	131.02	122.15
77	s5	51	VAL	CG1-CB-CG2	5.07	121.96	110.80
15	CL	25	ALA	CA-C-N	-5.07	112.75	122.13
15	CL	25	ALA	C-N-CA	-5.07	112.75	122.13
77	G	36	ALA	CA-C-N	5.07	131.88	121.95
77	G	36	ALA	C-N-CA	5.07	131.88	121.95
70	s3	216	PRO	N-CA-C	5.06	122.89	112.47
61	s0	191	ARG	CA-CB-CG	5.06	124.22	114.10
61	s0	9	LEU	N-CA-C	5.05	119.70	111.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
78	h	50	ASP	CA-C-N	5.04	131.17	121.54
78	h	50	ASP	C-N-CA	5.04	131.17	121.54
7	AT	81	U	P-O3'-C3'	5.04	127.76	120.20
18	s8	193	LEU	CA-CB-CG	5.04	133.93	116.30
45	DQ	16	THR	N-CA-C	-5.02	105.90	112.23
7	AT	81	U	C2'-C3'-O3'	5.00	117.00	109.50

There are no chirality outliers.

All (342) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
57	0	133	ALA	Peptide
57	0	22	PRO	Peptide
57	0	23	LYS	Peptide
60	2	18	ASP	Peptide
79	AA	101	PHE	Peptide
79	AA	102	GLU	Peptide
79	AA	124	ALA	Peptide
79	AA	58	GLY	Peptide
79	AA	60	LYS	Peptide
2	AB	116	GLY	Peptide
2	AB	45	MET	Peptide
2	AB	66	ALA	Peptide
2	AB	92	LYS	Peptide
2	AB	97	GLU	Peptide
26	AF	11	LYS	Peptide
26	AF	12	LYS	Peptide
38	AH	106	LYS	Peptide
38	AH	82	ALA	Peptide
4	AI	118	ILE	Peptide
4	AI	84	LYS	Peptide
16	AK	86	ALA	Peptide
45	AP	100	LYS	Peptide
49	AQ	51	ALA	Peptide
61	B	113	ARG	Peptide
61	B	157	ASP	Peptide
61	B	169	SER	Peptide
61	B	170	ILE	Peptide
61	B	194	PRO	Peptide
61	B	202	TYR	Peptide
61	B	27	ARG	Peptide
61	B	4	PRO	Peptide

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Group</b>
61	B	93	THR	Peptide
64	C	130	SER	Peptide
64	C	157	GLN	Peptide
64	C	158	SER	Peptide
64	C	174	LYS	Peptide
64	C	176	VAL	Peptide
64	C	212	VAL	Peptide
13	CD	143	GLU	Peptide
13	CD	250	GLN	Peptide
19	CE	349	LYS	Peptide
19	CE	5	LYS	Peptide
25	CF	13	GLY	Peptide
31	CG	124	GLU	Peptide
31	CG	19	PRO	Peptide
31	CG	20	PHE	Peptide
31	CG	221	GLU	Peptide
31	CG	261	THR	Peptide
31	CG	4	GLN	Peptide
31	CG	43	LYS	Peptide
37	CH	97	ASN	Peptide
43	CI	157	ASN	Peptide
43	CI	190	THR	Peptide
43	CI	232	ARG	Peptide
3	CJ	189	LEU	Peptide
3	CJ	40	VAL	Peptide
9	CK	21	LYS	Peptide
15	CL	186	GLU	Peptide
15	CL	23	ASN	Peptide
15	CL	36	LEU	Peptide
21	CM	172	LEU	Peptide
27	CN	165	SER	Peptide
27	CN	166	ALA	Peptide
27	CN	180	ARG	Peptide
27	CN	4	SER	Peptide
27	CN	49	ARG	Sidechain
27	CN	61	PRO	Peptide
44	CQ	110	PRO	Peptide
54	CT	159	ALA	Peptide
54	CT	164	LEU	Peptide
54	CT	165	LYS	Peptide
54	CT	171	ASP	Peptide
57	CU	133	ALA	Peptide

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Mol	Chain	Res	Type	Group
60	CV	120	LYS	Peptide
63	CW	43	VAL	Peptide
69	CY	25	ASP	Peptide
67	D	237	VAL	Peptide
79	DB	59	ALA	Peptide
79	DB	60	LYS	Peptide
2	DC	115	LYS	Peptide
14	DE	99	ASP	Peptide
26	DG	12	LYS	Peptide
32	DH	59	VAL	Peptide
38	DI	104	VAL	Peptide
38	DI	82	ALA	Peptide
4	DJ	118	ILE	Peptide
4	DJ	83	LYS	Peptide
4	DJ	84	LYS	Peptide
22	DM	12	LEU	Peptide
22	DM	17	ARG	Peptide
28	DN	3	ALA	Peptide
49	DR	51	ALA	Peptide
70	E	212	LYS	Peptide
70	E	216	PRO	Peptide
70	E	219	ALA	Peptide
70	E	42	THR	Peptide
70	E	43	PRO	Peptide
70	E	44	THR	Peptide
70	E	45	LYS	Peptide
73	F	164	LEU	Peptide
73	F	187	ARG	Peptide
73	F	193	GLY	Peptide
73	F	194	THR	Peptide
73	F	195	ILE	Peptide
77	G	205	SER	Peptide
77	G	30	PRO	Peptide
77	G	37	GLN	Peptide
77	G	38	THR	Peptide
77	G	58	LEU	Peptide
77	G	63	GLN	Peptide
77	G	65	ARG	Peptide
6	H	19	ASP	Peptide
6	H	214	LYS	Peptide
6	H	42	GLY	Peptide
6	H	68	LEU	Peptide

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Mol	Chain	Res	Type	Group
12	I	107	ARG	Sidechain
12	I	110	GLN	Peptide
12	I	13	PRO	Peptide
12	I	130	VAL	Peptide
12	I	131	PHE	Peptide
12	I	14	THR	Peptide
12	I	167	GLU	Peptide
12	I	172	VAL	Peptide
12	I	173	TYR	Peptide
12	I	174	ASN	Peptide
12	I	22	GLN	Peptide
12	I	30	SER	Peptide
12	I	31	SER	Peptide
12	I	33	GLU	Peptide
12	I	35	LYS	Peptide
12	I	65	PRO	Peptide
12	I	73	VAL	Peptide
12	I	82	GLU	Peptide
12	I	86	GLN	Peptide
18	J	116	HIS	Peptide
18	J	119	GLN	Peptide
18	J	23	LYS	Peptide
24	K	133	HIS	Peptide
24	K	175	ARG	Peptide
24	K	54	ARG	Peptide
30	L	44	LYS	Peptide
42	O	67	THR	Peptide
42	O	68	GLY	Peptide
47	P	30	VAL	Peptide
5	Q	100	LYS	Peptide
5	Q	124	THR	Peptide
5	Q	24	LYS	Peptide
11	R	13	LYS	Peptide
11	R	32	ASN	Peptide
11	R	33	GLY	Peptide
11	R	40	GLU	Peptide
11	R	41	PRO	Peptide
11	R	58	ASP	Peptide
78	Rb	161	LYS	Peptide
78	Rb	163	ASP	Peptide
78	Rb	94	VAL	Peptide
78	Rb	95	ALA	Peptide

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Group</b>
17	S	108	ASP	Peptide
17	S	3	ARG	Peptide
23	T	102	ALA	Peptide
23	T	31	ALA	Peptide
23	T	90	ASN	Peptide
23	T	91	ASP	Peptide
29	U	103	LYS	Peptide
29	U	130	ARG	Peptide
29	U	132	LEU	Peptide
29	U	136	ALA	Peptide
29	U	36	ILE	Peptide
29	U	49	ASP	Peptide
29	U	50	ALA	Peptide
35	V	103	ILE	Peptide
35	V	105	GLN	Peptide
35	V	118	VAL	Peptide
35	V	119	ALA	Peptide
35	V	15	GLN	Peptide
35	V	44	ASN	Peptide
46	X	19	LYS	Peptide
46	X	76	SER	Peptide
50	Y	130	VAL	Peptide
50	Y	88	PRO	Peptide
53	Z	100	VAL	Peptide
53	Z	31	ASN	Peptide
56	a	38	HIS	Peptide
56	a	43	ASP	Peptide
56	a	78	ILE	Peptide
56	a	88	ILE	Peptide
56	a	94	LYS	Peptide
59	b	9	GLY	Peptide
62	c	60	SER	Peptide
62	c	61	THR	Peptide
62	c	74	SER	Peptide
62	c	75	GLU	Peptide
30	c0	15	LEU	Peptide
30	c0	22	VAL	Peptide
30	c0	23	ALA	Peptide
30	c0	32	HIS	Peptide
36	c1	128	CYS	Peptide
36	c1	28	SER	Peptide
36	c1	29	LYS	Peptide

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Mol	Chain	Res	Type	Group
36	c1	5	LEU	Peptide
42	c3	139	TRP	Peptide
42	c3	28	LEU	Peptide
47	c4	34	SER	Peptide
47	c4	90	ARG	Peptide
5	c5	13	LYS	Peptide
5	c5	27	GLU	Peptide
5	c5	72	LYS	Peptide
11	c6	103	ASN	Peptide
11	c6	14	LYS	Peptide
17	c7	105	GLN	Peptide
17	c7	74	GLN	Peptide
23	c8	101	LEU	Peptide
23	c8	13	HIS	Peptide
23	c8	90	ASN	Peptide
23	c8	91	ASP	Peptide
29	c9	108	LEU	Peptide
65	d	39	THR	Peptide
35	d0	43	LYS	Peptide
35	d0	47	GLN	Peptide
35	d0	48	HIS	Peptide
35	d0	53	LYS	Peptide
41	d1	41	GLU	Peptide
46	d2	54	ASP	Peptide
50	d3	44	GLY	Peptide
50	d3	62	LYS	Peptide
53	d4	29	HIS	Peptide
53	d4	32	ARG	Peptide
53	d4	34	ASN	Peptide
53	d4	51	GLU	Peptide
53	d4	77	ASN	Peptide
56	d5	103	ARG	Peptide
62	d7	56	CYS	Peptide
62	d7	57	GLU	Peptide
62	d7	58	SER	Peptide
65	d8	32	PHE	Peptide
65	d8	33	LEU	Peptide
65	d8	61	ARG	Peptide
68	e	24	CYS	Peptide
68	e	25	SER	Peptide
71	e0	47	VAL	Peptide
71	e0	48	THR	Peptide

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Mol	Chain	Res	Type	Group
71	e0	50	VAL	Peptide
71	e0	60	PRO	Peptide
74	g	101	ALA	Peptide
74	g	102	VAL	Peptide
74	g	106	TYR	Peptide
74	g	107	LYS	Peptide
74	g	109	ASP	Peptide
74	g	111	GLU	Peptide
74	g	147	VAL	Peptide
78	h	166	SER	Peptide
78	h	170	ILE	Peptide
78	h	171	SER	Peptide
78	h	177	MET	Peptide
78	h	259	GLY	Peptide
78	h	317	THR	Peptide
78	h	51	ASP	Peptide
55	i	104	LYS	Peptide
55	i	153	LYS	Peptide
55	i	64	LYS	Peptide
55	i	85	SER	Peptide
55	i	86	ASN	Peptide
13	j	142	ASP	Peptide
19	k	141	GLY	Peptide
19	k	346	THR	Peptide
25	l	13	GLY	Peptide
25	l	139	GLY	Peptide
25	l	15	ALA	Peptide
25	l	182	LEU	Peptide
25	l	291	ASN	Peptide
25	l	60	THR	Peptide
31	m	234	ASP	Peptide
31	m	251	PRO	Peptide
31	m	43	LYS	Peptide
31	m	44	TYR	Peptide
43	o	157	ASN	Peptide
43	o	158	LYS	Peptide
43	o	163	LEU	Peptide
43	o	231	ASN	Peptide
3	p	116	VAL	Peptide
3	p	76	ALA	Peptide
9	q	189	GLU	Peptide
9	q	21	LYS	Peptide

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Mol	Chain	Res	Type	Group
9	q	48	VAL	Peptide
9	q	49	ASN	Peptide
15	r	215	GLU	Mainchain
15	r	23	ASN	Peptide
21	s	171	VAL	Peptide
21	s	39	GLN	Peptide
21	s	7	ASN	Peptide
61	s0	187	ALA	Peptide
61	s0	44	GLY	Peptide
61	s0	69	ASN	Peptide
61	s0	70	PRO	Mainchain,Peptide
61	s0	8	ASP	Peptide
70	s3	105	MET	Peptide
70	s3	194	LYS	Peptide
70	s3	195	SER	Peptide
70	s3	215	GLU	Peptide
70	s3	216	PRO	Peptide
70	s3	219	ALA	Peptide
70	s3	220	PRO	Peptide
70	s3	43	PRO	Peptide
70	s3	65	ARG	Peptide
70	s3	73	VAL	Peptide
70	s3	80	ALA	Peptide
73	s4	118	GLU	Peptide
73	s4	170	THR	Peptide
73	s4	187	ARG	Peptide
73	s4	241	GLY	Peptide
77	s5	100	ASN	Peptide
77	s5	150	GLY	Peptide
77	s5	222	LYS	Peptide
77	s5	44	ASN	Peptide
77	s5	53	VAL	Peptide
77	s5	54	LYS	Peptide
6	s6	143	LYS	Peptide
12	s7	110	GLN	Peptide
12	s7	13	PRO	Peptide
12	s7	130	VAL	Peptide
12	s7	32	PRO	Peptide
12	s7	34	LEU	Peptide
18	s8	100	ALA	Peptide
18	s8	139	ALA	Peptide
18	s8	149	SER	Peptide

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Mol	Chain	Res	Type	Group
24	s9	166	GLY	Peptide
24	s9	171	ARG	Peptide
24	s9	87	SER	Peptide
55	sM	41	SER	Peptide
55	sM	45	SER	Peptide
55	sM	62	ARG	Peptide
27	t	135	ALA	Peptide
27	t	47	ALA	Peptide
27	t	74	GLY	Peptide
27	t	76	THR	Peptide
33	u	7	VAL	Peptide
33	u	8	LYS	Peptide
44	w	110	PRO	Peptide
54	z	170	ARG	Peptide
54	z	173	ARG	Peptide
54	z	175	GLN	Peptide

## 5.2 Too-close contacts [i](#)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	3	2579	0	1303	61	0
1	AS	2579	0	1304	44	0
2	AB	1173	0	1215	69	0
2	DC	1173	0	1215	87	0
3	CJ	1762	0	1839	126	0
3	p	1804	0	1877	84	0
4	AI	969	0	1078	51	0
4	DJ	969	0	1078	58	0
5	Q	928	0	958	90	0
5	c5	1039	0	1050	100	0
6	H	1799	0	1879	147	0
6	s6	1755	0	1845	82	0
7	4	3353	0	1695	78	0
7	AT	3353	0	1695	76	0
8	AC	434	0	455	22	0
8	DD	462	0	491	24	0
9	CK	1518	0	1587	72	1

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
9	q	1518	0	1587	110	0
10	AJ	771	0	849	40	0
10	DK	750	0	829	65	0
11	R	1105	0	1166	119	0
11	c6	1111	0	1171	117	1
12	I	1481	0	1572	150	0
12	s7	1491	0	1578	125	0
13	CD	1914	0	1981	87	0
13	j	1914	0	1981	84	0
14	AD	740	0	788	35	0
14	DE	743	0	797	51	0
15	CL	1685	0	1719	80	0
15	r	1705	0	1736	92	0
16	AK	681	0	683	26	0
16	DL	681	0	683	22	0
17	S	863	0	872	74	0
17	c7	906	0	909	73	0
18	J	1489	0	1525	103	0
18	s8	1489	0	1525	102	0
19	CE	3075	0	3142	119	0
19	k	3075	0	3142	163	0
20	AE	876	0	912	45	0
20	DF	866	0	908	30	0
21	CM	1353	0	1383	86	0
21	s	1353	0	1383	99	0
22	AL	612	0	682	30	0
22	DM	586	0	654	31	0
23	T	1192	0	1222	111	0
23	c8	1116	0	1149	105	1
24	K	1436	0	1517	134	0
24	s9	1494	0	1573	130	0
25	CF	2748	0	2859	118	0
25	l	2748	0	2858	114	0
26	AF	1020	0	1090	36	0
26	DG	1020	0	1090	40	0
27	CN	1543	0	1608	104	0
27	t	1543	0	1608	74	0
28	AM	436	0	475	24	0
28	DN	436	0	475	22	0
29	U	1112	0	1124	101	0
29	c9	1112	0	1124	91	0
30	L	742	0	715	57	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	c0	609	0	603	59	0
31	CG	2348	0	2301	114	0
31	m	2375	0	2325	128	0
32	AG	850	0	880	31	0
32	DH	850	0	880	38	0
33	CO	1053	0	1149	49	0
33	u	1053	0	1149	56	0
34	AN	417	0	455	17	0
34	DO	417	0	455	13	0
35	V	855	0	917	88	0
35	d0	585	0	622	41	0
36	M	1119	0	1186	54	0
36	c1	1168	0	1233	41	0
37	CH	1239	0	1326	71	0
37	n	1239	0	1326	46	0
38	AH	880	0	942	44	0
38	DI	880	0	945	58	0
39	CP	1720	0	1779	97	0
39	v	1720	0	1779	78	0
40	AO	233	0	284	13	0
40	DP	233	0	284	14	0
41	W	684	0	672	64	0
41	d1	684	0	672	40	0
42	O	1192	0	1255	65	0
42	c3	1192	0	1255	72	0
43	CI	1784	0	1862	65	0
43	o	1784	0	1862	58	0
44	CQ	1555	0	1659	55	0
44	w	1555	0	1659	65	0
45	AP	847	0	916	68	0
45	DQ	847	0	914	87	0
46	X	1021	0	1060	81	0
46	d2	1021	0	1060	64	0
47	P	600	0	559	39	0
47	c4	949	0	985	69	0
48	CR	1227	0	1236	44	0
48	x	1415	0	1432	56	0
49	AQ	694	0	734	33	0
49	DR	694	0	734	37	0
50	Y	1121	0	1196	77	0
50	d3	1121	0	1196	59	0
51	CS	1441	0	1543	61	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
51	y	1441	0	1543	65	0
52	p0	962	0	989	59	0
53	Z	1073	0	1132	101	0
53	d4	1073	0	1132	70	0
54	CT	1461	0	1558	89	0
54	z	1482	0	1578	78	0
55	i	1010	0	958	57	0
55	sM	475	0	492	35	0
56	a	514	0	545	63	0
56	d5	558	0	598	54	0
57	0	1445	0	1487	48	0
57	CU	1445	0	1487	54	0
58	A	36700	0	18465	1145	0
58	sR	37990	0	19116	989	0
59	b	743	0	788	55	0
59	d6	769	0	814	60	0
60	2	1276	0	1323	55	0
60	CV	1276	0	1323	59	0
61	B	1577	0	1567	157	0
61	s0	1583	0	1578	168	0
62	c	610	0	632	37	0
62	d7	610	0	631	60	0
63	5	796	0	812	51	0
63	CW	778	0	791	45	0
64	C	943	0	1003	93	0
64	s1	1722	0	1793	127	0
65	d	497	0	535	35	0
65	d8	497	0	535	45	0
66	6	1003	0	1048	34	0
66	CX	1003	0	1048	46	0
67	D	1635	0	1723	139	0
67	s2	1635	0	1723	81	0
68	d9	404	0	397	34	0
68	e	442	0	428	23	0
69	7	521	0	551	34	0
69	CY	796	0	701	24	0
70	E	1734	0	1817	134	0
70	s3	1734	0	1817	145	0
71	e0	491	0	542	34	0
71	f	475	0	525	36	0
72	8	937	0	994	47	0
72	CZ	937	0	994	42	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
73	F	2068	0	2154	178	0
73	s4	2068	0	2154	125	0
74	g	566	0	602	37	0
75	1	67355	0	33846	1366	1
75	AR	67082	0	33708	1421	0
76	9	993	0	1081	33	0
76	DA	976	0	1064	51	0
77	G	1609	0	1675	213	0
77	s5	1609	0	1675	205	0
78	Rb	2442	0	2392	249	0
78	h	2379	0	2324	206	0
79	AA	1092	0	1155	72	0
79	DB	1092	0	1155	87	0
80	1	2044	0	0	232	0
80	2	7	0	0	2	0
80	3	70	0	0	8	0
80	4	91	0	0	15	0
80	A	865	0	0	121	0
80	AC	7	0	0	1	0
80	AG	7	0	0	1	0
80	AK	14	0	0	4	0
80	AR	2089	0	0	243	0
80	AS	63	0	0	1	0
80	AT	98	0	0	8	0
80	C	7	0	0	2	0
80	CE	14	0	0	0	0
80	CG	14	0	0	2	0
80	CK	7	0	0	1	0
80	CL	14	0	0	1	0
80	CP	7	0	0	1	0
80	CS	7	0	0	0	0
80	CV	7	0	0	1	0
80	CX	7	0	0	0	0
80	DD	7	0	0	0	0
80	DH	7	0	0	1	0
80	DL	7	0	0	0	0
80	J	7	0	0	1	0
80	O	7	0	0	0	0
80	Q	7	0	0	2	0
80	Rb	7	0	0	1	0
80	T	7	0	0	2	0
80	U	7	0	0	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
80	c3	7	0	0	1	0
80	c5	7	0	0	1	0
80	c8	7	0	0	1	0
80	d4	7	0	0	0	0
80	h	7	0	0	1	0
80	k	14	0	0	3	0
80	r	7	0	0	1	0
80	s1	7	0	0	2	0
80	s4	7	0	0	0	0
80	sR	966	0	0	109	0
80	v	7	0	0	0	0
80	w	7	0	0	1	0
80	x	7	0	0	0	0
81	1	487	0	0	0	0
81	3	12	0	0	0	0
81	4	20	0	0	0	0
81	6	3	0	0	0	0
81	9	1	0	0	0	0
81	A	134	0	0	0	0
81	AB	7	0	0	0	0
81	AF	4	0	0	0	0
81	AH	1	0	0	0	0
81	AK	2	0	0	0	0
81	AO	1	0	0	0	0
81	AR	506	0	0	0	0
81	AS	22	0	0	0	0
81	AT	18	0	0	0	0
81	CD	3	0	0	0	0
81	CE	4	0	0	0	0
81	CF	2	0	0	0	0
81	CG	3	0	0	0	0
81	CI	2	0	0	0	0
81	CJ	1	0	0	0	0
81	CK	2	0	0	0	0
81	CL	1	0	0	0	0
81	CM	2	0	0	0	0
81	CO	1	0	0	0	0
81	CP	4	0	0	0	0
81	CQ	3	0	0	0	0
81	CR	6	0	0	0	0
81	CS	1	0	0	0	0
81	CU	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
81	CX	1	0	0	0	0
81	D	1	0	0	0	0
81	DA	2	0	0	0	0
81	DC	3	0	0	0	0
81	DD	1	0	0	0	0
81	DG	1	0	0	0	0
81	DH	2	0	0	0	0
81	DI	1	0	0	0	0
81	DL	2	0	0	0	0
81	DO	1	0	0	0	0
81	DP	1	0	0	0	0
81	DQ	2	0	0	0	0
81	U	1	0	0	0	0
81	Y	1	0	0	0	0
81	c4	1	0	0	0	0
81	c6	2	0	0	0	0
81	c7	1	0	0	0	0
81	c8	1	0	0	0	0
81	c9	1	0	0	0	0
81	d2	1	0	0	0	0
81	d3	3	0	0	0	0
81	d4	1	0	0	0	0
81	d5	1	0	0	0	0
81	d6	2	0	0	0	0
81	e	1	0	0	0	0
81	j	2	0	0	0	0
81	k	2	0	0	0	0
81	l	4	0	0	0	0
81	m	1	0	0	0	0
81	o	2	0	0	0	0
81	r	3	0	0	0	0
81	s	1	0	0	0	0
81	s1	1	0	0	0	0
81	s2	1	0	0	0	0
81	s4	2	0	0	0	0
81	s8	2	0	0	0	0
81	s9	1	0	0	0	0
81	sM	2	0	0	0	0
81	sR	160	0	0	0	0
81	t	2	0	0	0	0
81	v	4	0	0	0	0
81	w	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
81	x	8	0	0	0	0
81	z	1	0	0	0	0
82	AK	1	0	0	0	0
82	AN	1	0	0	0	0
82	AP	1	0	0	0	0
82	AQ	1	0	0	0	0
82	DL	1	0	0	0	0
82	DO	1	0	0	0	0
82	DQ	1	0	0	0	0
82	DR	1	0	0	0	0
82	b	1	0	0	0	0
82	c	1	0	0	0	0
82	d6	1	0	0	0	0
82	d7	1	0	0	0	0
82	d9	1	0	0	0	0
82	e	1	0	0	0	0
82	g	1	0	0	0	0
83	1	1	0	0	0	0
83	AR	3	0	0	0	0
84	1	26	0	0	1	0
84	AR	26	0	0	0	0
85	1	10	0	19	5	0
85	AR	30	0	57	4	0
86	1	137	0	0	8	0
86	3	3	0	0	0	0
86	A	46	0	0	0	0
86	AE	1	0	0	0	0
86	AK	3	0	0	0	0
86	AR	131	0	0	4	0
86	AT	8	0	0	0	0
86	CK	3	0	0	2	0
86	CM	1	0	0	0	0
86	CP	3	0	0	0	0
86	CQ	2	0	0	0	0
86	CR	3	0	0	1	0
86	DN	2	0	0	0	0
86	DR	1	0	0	0	0
86	J	1	0	0	1	0
86	R	1	0	0	0	0
86	k	1	0	0	0	0
86	s8	1	0	0	0	0
86	s9	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
86	sR	61	0	0	5	0
86	v	1	0	0	0	0
All	All	402407	0	291063	13733	2

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 20.

All (13733) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DQ:78:LYS:O	45:DQ:78:LYS:HD3	1.32	1.21
45:DQ:100:LYS:CD	45:DQ:101:GLY:H	1.60	1.15
59:b:79:ILE:HA	59:b:84:VAL:HG11	1.28	1.12
46:X:20:THR:HB	46:X:22:LYS:HD2	1.31	1.10
12:I:101:LYS:HA	12:I:112:ARG:HH12	0.93	1.07
6:H:70:PRO:HB3	6:H:101:ILE:HB	1.36	1.07
45:DQ:95:GLY:O	45:DQ:96:GLU:HG3	1.54	1.05
45:DQ:100:LYS:HD2	45:DQ:101:GLY:H	1.16	1.05
45:AP:35:LEU:O	45:AP:36:PHE:HB2	1.54	1.04
78:h:19:TRP:HB2	78:h:38:ARG:HG3	1.36	1.03
70:E:48:VAL:HB	70:E:86:LEU:HD11	1.40	1.02
12:I:14:THR:HG21	12:I:18:LEU:H	1.19	1.01
58:sR:1572:G:H1'	77:s5:185:ARG:HH12	1.21	1.01
73:F:87:MET:HE1	73:F:123:LEU:HB2	1.40	1.00
78:Rb:131:ILE:HD11	78:Rb:154:VAL:HG11	1.40	0.99
77:s5:121:ILE:HD12	77:s5:199:ILE:HD11	1.42	0.99
56:d5:83:LEU:HD12	56:d5:89:ILE:HG12	1.44	0.99
77:s5:206:SER:H	77:s5:211:ILE:HD11	1.25	0.99
12:I:101:LYS:HA	12:I:112:ARG:NH1	1.78	0.98
35:d0:27:THR:HG21	70:s3:7:LYS:HD3	1.41	0.98
61:B:122:ILE:HG22	61:B:144:ILE:HB	1.46	0.97
38:DI:46:ASP:HB2	38:DI:84:CYS:SG	2.05	0.97
69:7:4:GLU:HB2	69:7:13:ILE:HG13	1.47	0.96
61:s0:179:ARG:HE	61:s0:183:ARG:HE	1.07	0.96
77:s5:156:ARG:HG3	77:s5:224:ASN:HD21	1.28	0.95
3:p:249:ARG:O	3:p:249:ARG:NH1	1.99	0.95
50:Y:107:PHE:HE1	50:Y:123:LYS:HB3	1.30	0.95
12:I:31:SER:HB2	12:I:35:LYS:HG3	1.48	0.95
78:Rb:34:LEU:HD22	78:Rb:80:ALA:HB1	1.48	0.95
17:c7:3:ARG:HH22	58:sR:1415:U:H5''	1.30	0.95
15:CL:23:ASN:O	15:CL:24:ARG:NH1	2.00	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:s7:76:LYS:HA	12:s7:79:ARG:HB3	1.48	0.94
64:s1:113:MET:SD	64:s1:209:ASN:ND2	2.40	0.94
12:I:36:ALA:HB1	12:I:39:ARG:HE	1.32	0.94
33:CO:48:GLY:HA3	33:CO:53:VAL:HB	1.49	0.94
75:1:1222:G:HO2'	75:1:1285:G:H1	1.02	0.94
75:1:3103:A:OP2	80:1:3695:OHX:N6	2.01	0.94
30:c0:3:MET:HE1	30:c0:7:ASP:HB2	1.47	0.94
9:CK:1:MET:HE1	57:CU:138:GLN:HB3	1.50	0.94
23:T:48:LYS:HE2	23:T:51:ASP:HA	1.48	0.94
24:s9:126:ARG:NH1	58:sR:475:A:OP2	2.01	0.94
79:DB:60:LYS:HG3	79:DB:63:ALA:HB3	1.47	0.93
38:DI:82:ALA:HA	38:DI:85:VAL:HG22	1.48	0.93
53:d4:16:PRO:HG2	73:s4:95:THR:HG22	1.48	0.92
58:sR:228:G:H1	58:sR:236:A:H61	1.13	0.92
70:E:105:MET:HE1	70:E:136:VAL:HG21	1.52	0.92
50:Y:103:LEU:HD13	50:Y:126:LYS:HB2	1.50	0.92
9:q:128:VAL:HA	9:q:157:ASN:HD21	1.31	0.92
56:d5:60:VAL:HA	56:d5:64:VAL:HG11	1.50	0.92
14:DE:41:LEU:HB3	14:DE:92:ILE:HD11	1.52	0.92
41:W:40:ASP:HB3	41:W:46:ILE:HD11	1.50	0.92
58:sR:1361:U:H2'	58:sR:1362:U:H3'	1.52	0.92
58:A:927:C:O2'	47:P:124:ASP:O	1.86	0.92
73:s4:87:MET:HE3	73:s4:123:LEU:HB2	1.51	0.91
75:AR:2261:G:O2'	75:AR:2263:C:N4	2.02	0.91
11:c6:22:VAL:HG22	11:c6:65:ILE:HG22	1.50	0.91
77:G:25:LEU:HD23	77:G:26:ALA:H	1.35	0.91
64:C:180:THR:HG23	64:C:183:GLN:H	1.34	0.91
35:V:56:VAL:O	35:V:89:ARG:NH1	2.04	0.91
58:A:1610:G:H4'	77:G:98:MET:HE1	1.53	0.91
64:s1:30:PHE:HB3	64:s1:96:LEU:HD21	1.52	0.91
43:o:217:PRO:O	80:1:4083:OHX:N5	2.04	0.91
66:CX:126:TRP:HB2	66:CX:129:VAL:HG12	1.52	0.91
2:DC:104:THR:HG21	2:DC:112:ILE:HD11	1.52	0.91
21:s:92:ARG:HG2	21:s:172:LEU:HD12	1.53	0.90
59:d6:10:ARG:HB2	59:d6:34:LYS:HA	1.52	0.90
9:CK:17:THR:HG22	9:CK:28:VAL:HG22	1.52	0.90
31:m:106:ALA:HB2	31:m:166:ALA:HA	1.53	0.90
3:p:91:PHE:HE2	3:p:185:ARG:HG2	1.36	0.90
78:h:69:GLN:OE1	78:h:85:TRP:NE1	2.04	0.90
58:sR:1588:G:H1	58:sR:1608:U:H3	1.16	0.90
29:c9:63:ARG:NH1	29:c9:67:MET:SD	2.44	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:i:34:LYS:NZ	75:1:2707:C:OP1	2.05	0.90
2:AB:58:MET:HE1	75:1:2775:U:H1'	1.53	0.90
50:Y:107:PHE:HD2	50:Y:114:LYS:HB2	1.34	0.90
10:DK:61:ILE:HD11	10:DK:87:VAL:HG23	1.52	0.90
61:B:169:SER:HB2	61:B:172:LEU:HD12	1.54	0.90
58:A:895:G:H1	58:A:917:U:H3	1.20	0.90
77:G:189:THR:HG22	77:G:191:ALA:H	1.37	0.90
25:CF:26:PHE:HD2	25:CF:130:ALA:HB2	1.36	0.89
78:Rb:178:VAL:HB	78:Rb:192:PHE:HB2	1.53	0.89
3:CJ:91:PHE:O	3:CJ:95:ASN:ND2	2.06	0.89
62:d7:59:CYS:SG	62:d7:61:THR:OG1	2.30	0.89
24:s9:179:ARG:HH22	24:s9:183:ALA:H	1.19	0.89
45:AP:98:LYS:HG2	45:AP:99:GLN:H	1.38	0.89
75:1:240:U:H4'	75:1:241:G:H5'	1.54	0.89
53:Z:17:LEU:HD12	73:F:54:TYR:HD2	1.37	0.89
23:c8:88:ARG:HH11	23:c8:91:ASP:HB2	1.37	0.89
75:1:3344:A:H2	75:1:3361:G:H21	1.21	0.89
69:7:4:GLU:HG3	69:7:30:ARG:HD2	1.52	0.89
15:CL:193:ASP:OD1	75:AR:1010:G:N2	2.06	0.89
12:s7:143:LEU:HD13	12:s7:145:GLY:H	1.36	0.89
75:AR:3194:C:O2	75:AR:3197:G:N2	2.05	0.89
19:CE:41:VAL:HA	19:CE:185:GLY:HA3	1.54	0.89
75:AR:2775:U:H1'	2:DC:58:MET:HE1	1.53	0.88
11:c6:13:LYS:HD2	11:c6:14:LYS:H	1.38	0.88
21:s:7:ASN:HB3	21:s:10:ARG:HB3	1.55	0.88
23:c8:63:GLN:HA	23:c8:66:LEU:HD13	1.55	0.88
58:sR:44:U:H4'	86:sR:2205:HOH:O	1.72	0.88
6:s6:39:GLU:HG3	6:s6:46:LYS:HG3	1.54	0.88
66:CX:10:LYS:HB2	66:CX:125:LEU:HD11	1.56	0.88
79:AA:88:ASP:HB3	79:AA:121:ARG:HH22	1.38	0.88
29:U:72:GLY:HA3	58:A:1498:G:H5''	1.55	0.87
64:s1:141:ALA:HB2	64:s1:210:ILE:HG23	1.56	0.87
65:d8:56:LEU:HD21	77:s5:144:GLU:HB3	1.55	0.87
64:C:175:GLU:O	64:C:187:LYS:NZ	2.08	0.87
37:CH:76:LEU:H	37:CH:138:GLN:HE22	1.23	0.87
3:p:171:LYS:NZ	3:p:223:ALA:O	2.06	0.87
35:V:43:LYS:HG3	35:V:46:GLU:HB3	1.54	0.87
48:x:132:ALA:O	48:x:135:ARG:NH1	2.08	0.87
58:sR:486:G:H22	58:sR:501:U:H3	1.22	0.87
42:c3:15:ALA:HA	62:d7:26:GLN:HE21	1.40	0.87
12:I:51:VAL:HG12	12:I:53:GLY:H	1.39	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1726:G:N7	80:sR:1988:OHX:N3	2.22	0.87
39:v:110:ALA:HB1	39:v:113:LEU:HD23	1.54	0.87
24:K:93:LEU:HD22	24:K:96:VAL:HG11	1.57	0.86
77:s5:96:SER:O	77:s5:180:ARG:NH2	2.08	0.86
45:DQ:105:GLN:N	45:DQ:105:GLN:OE1	2.09	0.86
58:A:702:G:O6	58:A:736:C:N4	2.06	0.86
59:b:36:ILE:HD11	59:b:73:TYR:HB2	1.58	0.86
63:CW:19:VAL:HG21	63:CW:63:VAL:HG23	1.57	0.86
58:sR:1595:U:H3	58:sR:1600:A:H2	1.22	0.86
23:T:61:LEU:HD13	23:T:66:LEU:HD21	1.57	0.86
29:c9:9:VAL:HG11	29:c9:136:ALA:HB1	1.56	0.86
12:I:171:ALA:HA	12:I:174:ASN:HD21	1.41	0.86
61:s0:165:ARG:O	61:s0:165:ARG:HD2	1.74	0.86
18:s8:36:THR:HG21	18:s8:173:PRO:HB2	1.57	0.86
18:s8:138:ASN:O	18:s8:141:ARG:NE	2.08	0.86
24:s9:179:ARG:HG3	24:s9:180:LYS:HD2	1.57	0.86
80:AR:3571:OHX:N2	37:CH:29:LYS:O	2.08	0.86
65:d8:57:MET:HG2	77:s5:222:LYS:NZ	1.91	0.86
33:CO:66:THR:HG22	33:CO:68:LEU:H	1.38	0.86
58:A:853:G:OP2	54:z:173:ARG:NE	2.09	0.86
75:AR:1887:A:OP1	80:AR:3828:OHX:N4	2.09	0.86
6:H:199:GLN:HA	6:H:202:ARG:HG2	1.58	0.86
73:F:196:VAL:HB	73:F:209:HIS:HB3	1.58	0.85
12:s7:20:VAL:HA	12:s7:23:ALA:HB3	1.58	0.85
35:V:20:ILE:HD11	35:V:94:GLU:HA	1.55	0.85
13:CD:44:ILE:HD13	13:CD:46:LYS:HG2	1.59	0.85
77:G:165:LEU:O	77:G:169:ASN:ND2	2.09	0.85
52:p0:96:ILE:HA	52:p0:99:VAL:HG12	1.55	0.85
77:G:140:THR:HG21	77:G:210:ALA:HB1	1.58	0.85
18:J:110:ARG:NH2	75:1:3354:U:H3	1.75	0.85
61:B:83:GLN:HA	61:B:86:VAL:HG12	1.58	0.85
64:s1:189:ILE:HG13	64:s1:190:PRO:HD3	1.57	0.85
39:v:125:SER:HB3	75:1:2433:U:H1'	1.58	0.85
18:s8:152:ILE:HD13	18:s8:156:VAL:HG13	1.59	0.84
75:AR:2311:G:OP2	80:AR:4135:OHX:N3	2.10	0.84
3:CJ:157:VAL:O	3:CJ:160:ILE:HD12	1.76	0.84
75:1:3289:G:N7	80:1:3813:OHX:N1	2.26	0.84
35:V:20:ILE:HD12	35:V:21:LYS:H	1.42	0.84
58:A:1795:U:H3'	59:b:5:ARG:HH12	1.39	0.84
58:sR:895:G:H1	58:sR:917:U:H3	1.26	0.84
75:AR:1694:U:O3'	38:DI:24:LYS:NZ	2.10	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:2185:G:O2'	75:AR:2314:U:OP2	1.92	0.84
77:G:121:ILE:HG12	77:G:198:LEU:HD21	1.59	0.84
18:s8:36:THR:OG1	18:s8:96:LEU:O	1.96	0.84
21:CM:153:LYS:HD2	21:CM:154:THR:H	1.41	0.84
35:V:24:ILE:HD13	35:V:116:VAL:HB	1.59	0.84
63:5:36:TYR:HE1	63:5:40:HIS:HD1	1.21	0.84
11:R:55:VAL:HG21	11:R:105:LEU:HD23	1.57	0.84
25:l:211:GLU:OE2	25:l:213:ASN:ND2	2.10	0.84
21:s:95:ASN:ND2	21:s:103:GLY:O	2.11	0.84
67:D:119:LYS:NZ	70:E:120:TYR:OH	2.11	0.84
18:J:120:THR:O	80:J:301:OHX:N3	2.10	0.84
58:A:641:G:H1	58:A:693:U:H3	1.22	0.84
45:AP:15:LYS:HE3	75:1:2772:C:OP2	1.78	0.84
75:1:419:G:N7	80:1:3479:OHX:N3	2.26	0.84
45:DQ:78:LYS:O	45:DQ:78:LYS:CD	2.22	0.84
51:CS:51:ALA:HB1	51:CS:84:VAL:HG21	1.60	0.84
77:s5:146:THR:OG1	77:s5:157:ARG:HG3	1.78	0.84
23:T:115:ARG:O	23:T:119:ILE:HG12	1.78	0.83
75:AR:2513:U:OP2	80:AR:4132:OHX:N6	2.11	0.83
75:AR:3054:U:O4	80:AR:4142:OHX:N3	2.10	0.83
11:R:13:LYS:HD2	11:R:14:LYS:H	1.43	0.83
11:R:120:ASP:HA	77:G:76:ARG:HH22	1.42	0.83
58:A:1615:C:H2'	77:G:81:ARG:HG3	1.57	0.83
61:s0:9:LEU:HD21	61:s0:14:ALA:HB2	1.59	0.83
12:s7:17:GLU:OE2	12:s7:47:ARG:NH2	2.10	0.83
17:S:21:TYR:OH	17:S:62:GLN:OE1	1.96	0.83
27:t:62:THR:O	27:t:64:LYS:N	2.11	0.83
61:B:82:GLY:HA2	61:B:170:ILE:HD11	1.60	0.83
78:h:42:LEU:HD11	78:h:82:SER:HB3	1.60	0.83
75:1:3316:A:OP1	75:1:3318:G:N2	2.11	0.83
33:CO:16:GLU:HB3	57:CU:149:LYS:HB3	1.60	0.83
58:sR:566:C:O2	71:e0:13:LYS:NZ	2.12	0.83
58:A:186:C:H42	58:A:199:G:H1	1.24	0.83
78:Rb:85:TRP:HD1	78:Rb:109:ASP:HB3	1.44	0.83
2:AB:26:ARG:NH2	75:1:939:U:OP2	2.12	0.83
18:s8:48:THR:HG22	18:s8:52:ASN:O	1.78	0.83
9:CK:105:GLU:HB2	9:CK:109:ALA:H	1.44	0.83
39:CP:114:ARG:HG2	39:CP:137:PRO:HG3	1.61	0.83
58:A:1672:G:N7	80:A:2086:OHX:N6	2.27	0.83
78:Rb:19:TRP:HB2	78:Rb:38:ARG:HG3	1.60	0.83
35:V:28:SER:HB2	35:V:112:VAL:HA	1.61	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:p:107:GLU:O	3:p:111:LYS:HD3	1.79	0.83
78:h:211:ILE:HD11	78:h:223:TRP:HD1	1.42	0.83
75:1:2964:G:N7	80:1:3970:OHX:N1	2.27	0.83
58:A:190:C:N4	58:A:196:G:O6	2.11	0.83
44:w:12:LYS:O	57:0:167:ARG:NH2	2.11	0.83
73:F:122:LYS:HB3	73:F:162:ILE:HB	1.61	0.83
75:AR:410:U:O4	80:AR:3485:OHX:N1	2.12	0.83
58:A:982:U:OP1	80:A:2063:OHX:N5	2.12	0.82
70:s3:95:GLY:HA2	70:s3:101:GLN:HE22	1.42	0.82
77:s5:42:LEU:HD22	77:s5:48:PHE:H	1.44	0.82
35:V:57:ARG:HA	35:V:89:ARG:HH12	1.43	0.82
56:a:77:ARG:NH2	58:A:1532:U:O5'	2.11	0.82
75:AR:1095:U:H4'	75:AR:1096:U:H5''	1.61	0.82
64:s1:180:THR:H	64:s1:183:GLN:HG2	1.44	0.82
35:d0:27:THR:HG22	35:d0:88:LYS:HG3	1.60	0.82
55:sM:58:GLU:HA	55:sM:61:ILE:HG22	1.59	0.82
38:DI:58:ARG:HG3	38:DI:59:PRO:HD2	1.60	0.82
12:s7:150:GLN:HB2	12:s7:181:ILE:HG22	1.61	0.82
77:s5:131:GLN:NE2	77:s5:135:ASP:OD1	2.13	0.82
39:CP:147:ARG:NH2	75:AR:113:C:OP1	2.12	0.82
65:d8:42:ARG:HH22	65:d8:58:GLU:HB2	1.45	0.82
33:CO:132:LYS:HD3	75:AR:3230:G:H4'	1.61	0.82
6:H:57:ASP:HA	6:H:106:LEU:HA	1.60	0.82
75:1:2347:U:O4	80:1:4023:OHX:N4	2.13	0.82
39:v:147:ARG:NH1	75:1:113:C:OP1	2.11	0.82
1:3:112:G:OP2	80:3:204:OHX:N3	2.12	0.82
5:c5:110:GLU:OE2	5:c5:110:GLU:N	2.12	0.82
53:Z:65:GLY:HA2	24:K:140:ILE:HG13	1.61	0.82
15:r:38:LYS:HD2	15:r:83:ASP:HB3	1.59	0.82
21:s:63:GLU:HG2	21:s:65:ILE:HG22	1.62	0.82
45:AP:65:THR:OG1	45:AP:87:ARG:HD3	1.79	0.82
78:h:214:ALA:HB1	78:h:240:VAL:HB	1.60	0.82
58:sR:1098:U:OP2	67:s2:168:ARG:NE	2.12	0.82
31:CG:64:ILE:HD12	31:CG:109:THR:HG21	1.62	0.82
75:1:409:A:OP2	80:1:3663:OHX:N2	2.13	0.81
5:Q:108:ARG:H	5:Q:111:MET:HE2	1.43	0.81
35:V:24:ILE:HG23	35:V:91:ILE:HG23	1.60	0.81
23:c8:46:VAL:HG11	23:c8:73:MET:HG3	1.61	0.81
58:A:40:A:O2'	80:A:1983:OHX:N6	2.14	0.81
7:AT:83:C:H1'	7:AT:85:G:H21	1.45	0.81
78:Rb:42:LEU:HD21	78:Rb:68:VAL:HG21	1.62	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:s1:129:THR:OG1	64:s1:131:ASP:OD1	1.97	0.81
77:s5:42:LEU:HD13	77:s5:47:SER:HA	1.61	0.81
75:1:3199:G:O6	80:1:3783:OHX:N3	2.13	0.81
53:Z:17:LEU:HD12	73:F:54:TYR:CD2	2.15	0.81
77:s5:189:THR:O	77:s5:193:THR:OG1	1.99	0.81
58:A:438:A:OP1	80:A:1925:OHX:N1	2.14	0.81
41:d1:3:ASN:HD21	41:d1:7:GLN:HB3	1.42	0.81
75:AR:370:U:OP1	80:AR:4049:OHX:N5	2.13	0.81
58:sR:1699:G:O2'	58:sR:1702:A:N6	2.13	0.81
7:AT:141:C:OP2	80:AT:227:OHX:N2	2.13	0.81
45:DQ:100:LYS:CD	45:DQ:101:GLY:N	2.43	0.81
75:AR:1764:U:H3'	75:AR:1765:U:H4'	1.63	0.81
78:h:149:ASP:HB2	78:h:175:ASP:HB3	1.60	0.81
58:sR:218:A:H2'	58:sR:219:A:H5''	1.61	0.81
56:d5:83:LEU:HD13	56:d5:88:ILE:HG23	1.63	0.81
10:DK:71:LYS:NZ	75:AR:2221:G:O6	2.14	0.81
21:s:14:ILE:HG23	21:s:131:MET:HE3	1.62	0.81
49:AQ:17:ARG:NH1	75:1:860:G:OP1	2.14	0.81
75:AR:600:G:N7	80:AR:4017:OHX:N4	2.28	0.81
79:DB:51:LEU:HB2	79:DB:65:ARG:HD3	1.62	0.81
10:AJ:26:ILE:HD11	75:1:155:G:H1'	1.62	0.81
58:A:322:G:O2'	18:J:10:LYS:NZ	2.12	0.81
6:H:1:MET:HE1	6:H:106:LEU:HB2	1.61	0.81
30:L:69:THR:HG23	30:L:72:GLY:H	1.46	0.81
70:s3:141:LYS:HB3	70:s3:145:ALA:HA	1.61	0.81
58:sR:1130:G:OP2	80:sR:2179:OHX:N1	2.14	0.81
69:7:46:PRO:HB2	69:7:54:LEU:HD11	1.62	0.81
75:1:1806:A:OP2	80:1:4141:OHX:N5	2.14	0.81
75:1:2730:G:OP2	80:1:3751:OHX:N4	2.14	0.81
58:A:470:A:OP2	80:A:1973:OHX:N4	2.13	0.81
74:g:107:LYS:HD3	74:g:108:VAL:H	1.45	0.81
75:AR:832:G:OP1	80:AR:3696:OHX:N5	2.13	0.81
75:AR:1171:G:N7	80:AR:3603:OHX:N1	2.28	0.81
67:s2:142:GLY:N	67:s2:153:SER:O	2.13	0.81
75:1:2402:A:OP2	80:1:3641:OHX:N3	2.14	0.81
5:Q:107:ILE:HA	5:Q:111:MET:HE1	1.63	0.80
58:A:1599:C:O2	80:A:2003:OHX:N2	2.14	0.80
58:sR:959:U:H5''	62:d7:28:PRO:HB3	1.62	0.80
7:4:36:G:OP2	4:AI:85:THR:OG1	1.99	0.80
22:DM:26:LYS:NZ	22:DM:27:ILE:O	2.14	0.80
35:V:27:THR:HG21	70:E:7:LYS:HD3	1.62	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:2386:A:OP1	80:AR:4136:OHX:N5	2.14	0.80
78:h:211:ILE:HD11	78:h:223:TRP:CD1	2.16	0.80
38:DI:41:ARG:HH11	38:DI:41:ARG:HG2	1.45	0.80
21:CM:88:GLU:HG2	5:c5:10:ARG:HA	1.64	0.80
17:c7:16:LEU:HD12	70:s3:208:ILE:HD11	1.63	0.80
34:AN:100:TYR:O	75:1:2895:G:O2'	1.99	0.80
75:1:1345:G:N7	80:1:3966:OHX:N6	2.29	0.80
45:DQ:83:LEU:HD23	45:DQ:84:THR:H	1.44	0.80
48:CR:74:LYS:NZ	75:AR:3310:A:OP1	2.13	0.80
56:a:95:HIS:ND1	58:A:1530:C:OP2	2.13	0.80
49:AQ:46:THR:HB	49:AQ:58:SER:HB2	1.64	0.80
15:CL:192:ASP:HA	15:CL:197:VAL:HG23	1.64	0.80
17:c7:74:GLN:HA	17:c7:77:GLU:H	1.47	0.80
57:CU:2:ALA:HB3	57:CU:32:SER:HB3	1.64	0.80
29:c9:132:LEU:HA	29:c9:135:ILE:HG22	1.63	0.80
64:C:134:VAL:O	64:C:217:LEU:HD11	1.81	0.80
67:D:54:GLU:N	67:D:54:GLU:OE1	2.14	0.80
75:AR:899:U:O4	80:AR:4070:OHX:N5	2.15	0.80
75:AR:2836:C:H5	75:AR:2852:C:H42	1.29	0.80
77:G:52:GLU:H	77:G:131:GLN:HE22	1.29	0.80
58:sR:482:U:H3	58:sR:505:A:H61	1.26	0.80
63:5:36:TYR:HE1	63:5:40:HIS:ND1	1.79	0.80
42:c3:52:VAL:HG12	58:sR:960:U:H1'	1.64	0.80
75:AR:3136:G:OP2	80:AR:3609:OHX:N3	2.15	0.80
58:sR:930:A:H4'	59:d6:70:LYS:HG2	1.62	0.80
12:I:14:THR:HG21	12:I:18:LEU:N	1.95	0.80
12:s7:60:ILE:HG22	12:s7:92:PHE:HA	1.61	0.80
6:H:164:LYS:H	6:H:167:LYS:HB2	1.47	0.80
4:DJ:6:ALA:HB1	4:DJ:10:ARG:HH21	1.47	0.80
23:T:23:ASP:OD1	23:T:25:ASN:N	2.13	0.80
10:AJ:34:SER:OG	10:AJ:37:THR:OG1	1.98	0.80
53:d4:6:THR:HB	53:d4:28:LEU:HD13	1.64	0.80
79:DB:27:LYS:NZ	79:DB:97:SER:OG	2.15	0.80
5:Q:67:ALA:O	80:Q:201:OHX:N6	2.15	0.80
5:Q:81:ARG:NH1	5:Q:97:TYR:O	2.14	0.80
15:CL:140:THR:HG21	15:CL:144:ASN:HB3	1.62	0.80
53:Z:64:PHE:HD1	53:Z:65:GLY:H	1.27	0.80
17:c7:44:LYS:HG2	17:c7:47:ARG:HH12	1.46	0.80
29:c9:57:ARG:NH1	29:c9:101:ASN:OD1	2.13	0.80
51:y:36:LEU:O	51:y:40:THR:OG1	1.97	0.80
58:sR:1418:G:N7	80:sR:2025:OHX:N3	2.29	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DI:41:ARG:HG2	38:DI:56:THR:HG21	1.64	0.80
24:s9:133:HIS:HD2	24:s9:162:SER:HB2	1.45	0.80
75:AR:3346:U:O4	75:AR:3359:A:N6	2.14	0.80
58:sR:1572:G:H1'	77:s5:185:ARG:NH1	1.97	0.80
30:L:44:LYS:HG3	30:L:47:GLN:HB3	1.64	0.80
77:s5:200:ASN:OD1	77:s5:208:SER:HB3	1.82	0.80
3:CJ:84:ARG:NH1	3:CJ:85:ASN:OD1	2.15	0.79
16:DL:24:ARG:NH2	75:AR:361:A:OP1	2.15	0.79
36:c1:5:LEU:HD22	36:c1:6:THR:HG23	1.64	0.79
35:d0:68:ARG:O	68:d9:40:ARG:NH2	2.15	0.79
73:F:129:VAL:HG12	73:F:139:VAL:HG12	1.64	0.79
75:AR:1023:C:H42	75:AR:1029:G:H1	1.29	0.79
78:Rb:216:LYS:HA	78:Rb:239:GLU:HG3	1.65	0.79
75:1:2274:U:OP2	80:1:4086:OHX:N4	2.14	0.79
47:c4:20:TYR:HB3	47:c4:27:PHE:HB2	1.62	0.79
73:F:180:LEU:HG	73:F:228:ILE:HG13	1.65	0.79
53:d4:45:ALA:HA	53:d4:50:ALA:HB3	1.63	0.79
25:CF:182:LEU:HD22	25:CF:223:PRO:HG2	1.65	0.79
58:A:702:G:N7	80:A:2043:OHX:N1	2.31	0.79
72:CZ:34:LEU:HD12	72:CZ:35:PRO:HD2	1.64	0.79
56:d5:77:ARG:HH11	56:d5:77:ARG:HG3	1.44	0.79
16:DL:75:LYS:NZ	75:AR:181:U:O3'	2.15	0.79
46:X:27:ILE:HD11	46:X:61:ILE:HD12	1.62	0.79
1:AS:64:A:H5'	1:AS:65:G:H5''	1.63	0.79
70:s3:70:THR:O	70:s3:73:VAL:HG12	1.82	0.79
75:1:1851:G:OP2	80:1:3608:OHX:N1	2.15	0.79
75:1:1887:A:OP2	80:1:4023:OHX:N1	2.15	0.79
11:R:46:PHE:HA	11:R:49:TYR:HB2	1.63	0.79
77:G:57:SER:OG	77:G:167:ARG:NH2	2.15	0.79
61:B:20:ALA:O	61:B:169:SER:OG	2.00	0.79
70:E:61:GLU:OE2	70:E:64:ARG:NH2	2.16	0.79
58:sR:565:C:O2	80:sR:2005:OHX:N1	2.16	0.79
78:Rb:220:ILE:HD11	78:Rb:234:LEU:HB2	1.65	0.79
17:S:17:ILE:HG12	17:S:58:MET:HE2	1.64	0.79
50:Y:16:ARG:NH2	36:M:101:GLU:OE2	2.16	0.79
60:CV:63:VAL:HB	60:CV:75:ILE:HD11	1.65	0.79
44:w:61:ALA:HA	44:w:70:PRO:HD2	1.65	0.79
31:CG:279:LYS:O	31:CG:279:LYS:NZ	2.15	0.79
25:l:158:SER:HA	25:l:213:ASN:HB2	1.62	0.79
50:Y:107:PHE:CD2	50:Y:114:LYS:HB2	2.17	0.79
9:q:135:GLU:HG3	9:q:145:VAL:HB	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:d4:117:LYS:HB3	58:sR:159:U:H5'	1.63	0.79
56:d5:77:ARG:HH12	56:d5:81:ARG:HG3	1.47	0.79
10:DK:90:MET:HA	10:DK:93:ILE:HG22	1.65	0.79
53:Z:10:ARG:HH21	58:A:778:G:N2	1.80	0.79
53:Z:61:ARG:NH2	58:A:530:C:O2	2.14	0.79
12:I:129:LEU:HD11	12:I:172:VAL:HG11	1.65	0.79
58:A:1467:C:O2	58:A:1601:G:N2	2.16	0.79
61:B:85:ALA:HA	61:B:202:TYR:HB3	1.65	0.79
39:v:188:ARG:HH11	39:v:188:ARG:HG2	1.49	0.79
13:j:130:SER:HB3	13:j:174:ARG:HH21	1.47	0.78
35:V:57:ARG:HA	35:V:89:ARG:NH1	1.98	0.78
46:X:20:THR:CB	46:X:22:LYS:HD2	2.12	0.78
28:AM:2:ALA:N	75:1:1493:G:O6	2.16	0.78
58:A:878:G:N7	80:A:1956:OHX:N2	2.32	0.78
75:AR:3364:C:OP1	80:AR:3413:OHX:N3	2.16	0.78
78:h:42:LEU:HD21	78:h:68:VAL:HG11	1.65	0.78
58:A:1282:U:OP1	80:A:1907:OHX:N2	2.16	0.78
75:AR:912:G:OP2	13:CD:9:ARG:NH2	2.17	0.78
75:AR:1064:A:H4'	75:AR:1065:A:O5'	1.83	0.78
6:H:67:VAL:HG23	6:H:99:GLY:HA2	1.64	0.78
66:6:93:LEU:HB3	69:7:20:LEU:HB3	1.65	0.78
75:1:917:A:OP2	80:1:3642:OHX:N6	2.16	0.78
25:l:226:GLU:HG3	25:l:246:ARG:HH22	1.48	0.78
39:CP:188:ARG:NH2	75:AR:31:C:OP2	2.16	0.78
46:X:111:MET:HE1	46:X:119:LYS:HG3	1.65	0.78
5:c5:87:PRO:O	5:c5:90:ILE:HG13	1.84	0.78
29:c9:7:ARG:HH12	29:c9:67:MET:HA	1.47	0.78
64:C:103:MET:HB3	64:C:215:VAL:HG13	1.65	0.78
75:AR:668:G:OP1	80:AR:3610:OHX:N1	2.17	0.78
75:AR:3374:U:O4	80:AR:3825:OHX:N6	2.17	0.78
77:G:120:ILE:HA	77:G:123:VAL:HG23	1.65	0.78
53:d4:20:ARG:HB3	53:d4:76:TYR:CD1	2.19	0.78
70:s3:74:GLN:HB2	70:s3:79:TYR:HB2	1.66	0.78
75:1:508:U:O4	80:1:4178:OHX:N3	2.16	0.78
55:sM:61:ILE:HD13	23:c8:125:ILE:HA	1.65	0.78
75:AR:300:G:O6	80:AR:3642:OHX:N2	2.15	0.78
77:G:25:LEU:HD23	77:G:26:ALA:N	1.98	0.78
24:K:27:GLU:HB3	24:K:39:LYS:HD3	1.63	0.78
30:c0:23:ALA:HB3	30:c0:64:TYR:HB2	1.64	0.78
58:A:562:G:N7	80:A:1944:OHX:N3	2.31	0.78
64:C:217:LEU:HG	64:C:218:LEU:HG	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
74:g:110:ALA:H	74:g:113:LYS:HB3	1.47	0.78
63:5:51:GLY:O	63:5:52:ASN:ND2	2.17	0.78
75:1:2962:U:OP1	80:1:3631:OHX:N3	2.16	0.78
15:r:193:ASP:OD1	75:1:1010:G:N2	2.16	0.78
22:AL:58:ASP:OD1	22:AL:61:LYS:N	2.11	0.78
17:c7:22:PRO:HG3	17:c7:73:LEU:HD21	1.65	0.78
73:F:123:LEU:HA	73:F:160:VAL:O	1.83	0.78
58:sR:228:G:N2	58:sR:237:C:N3	2.31	0.78
78:Rb:171:SER:HB3	78:Rb:181:TRP:HE1	1.48	0.78
58:A:38:C:H4'	24:K:6:ARG:HH21	1.49	0.78
61:B:13:ASP:OD2	61:B:179:ARG:NH1	2.11	0.78
6:H:5:ILE:HD12	6:H:111:LEU:HB2	1.63	0.78
75:1:778:U:O4	80:1:3457:OHX:N6	2.16	0.78
75:1:3060:C:OP1	80:1:4113:OHX:N3	2.17	0.78
1:3:109:G:H5''	31:m:279:LYS:HE2	1.65	0.78
19:k:23:ALA:O	80:k:403:OHX:N2	2.16	0.78
5:c5:100:LYS:HG2	58:sR:1211:A:H4'	1.64	0.78
28:AM:48:LYS:NZ	75:1:1843:C:OP1	2.16	0.78
61:B:146:LEU:HD11	61:B:173:ILE:HD13	1.64	0.78
67:D:40:LYS:HB3	67:D:43:ARG:HH21	1.49	0.78
72:CZ:115:ARG:HD2	72:CZ:121:LYS:HB2	1.62	0.78
77:G:42:LEU:HB3	77:G:47:SER:HA	1.66	0.78
61:s0:12:GLU:HA	61:s0:15:GLN:HE21	1.49	0.78
64:s1:27:LYS:NZ	64:s1:49:ASN:OD1	2.17	0.78
5:Q:63:ALA:HB1	5:Q:74:ALA:HB3	1.65	0.78
20:AE:19:ARG:HD2	20:AE:35:GLU:HG3	1.65	0.78
45:DQ:78:LYS:HE2	45:DQ:80:ARG:CZ	2.12	0.78
35:d0:44:ASN:O	35:d0:48:HIS:NE2	2.17	0.78
78:h:74:THR:HG23	78:h:77:GLY:H	1.49	0.78
18:J:85:PRO:HA	36:M:11:ARG:HG2	1.66	0.78
77:s5:20:PHE:CD1	77:s5:35:GLN:HB3	2.19	0.78
45:DQ:22:GLN:O	45:DQ:75:VAL:HG22	1.84	0.78
58:A:1291:G:N2	58:A:1324:G:H22	1.82	0.78
64:C:199:ASN:HA	64:C:202:LYS:HE2	1.66	0.78
75:AR:1019:G:H22	75:AR:1033:U:H3	1.31	0.78
75:AR:2233:A:OP2	80:AR:4039:OHX:N5	2.16	0.78
6:H:23:ARG:HD3	6:H:41:VAL:O	1.84	0.78
47:c4:107:ARG:NH1	59:d6:52:ASP:OD2	2.16	0.77
73:F:240:LYS:HD2	73:F:240:LYS:H	1.49	0.77
36:M:109:VAL:HG12	36:M:137:PHE:HB2	1.64	0.77
75:1:3042:U:OP2	75:1:3092:C:N4	2.17	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AL:26:LYS:HD3	22:AL:27:ILE:H	1.49	0.77
58:A:1239:U:O2	58:A:1246:C:N4	2.17	0.77
77:G:38:THR:HA	77:G:41:LYS:HD2	1.65	0.77
77:G:64:VAL:HG23	77:G:65:ARG:HG3	1.63	0.77
75:1:651:G:O2'	75:1:1435:A:OP1	2.01	0.77
46:X:16:ASN:O	46:X:20:THR:HG23	1.84	0.77
22:AL:13:GLU:N	22:AL:13:GLU:OE2	2.17	0.77
21:s:22:SER:OG	75:1:2675:C:N4	2.17	0.77
58:A:479:C:N3	58:A:509:G:N2	2.32	0.77
59:d6:87:ARG:NH2	59:d6:91:ASP:O	2.17	0.77
1:3:26:C:H5'	31:m:56:THR:HB	1.66	0.77
58:A:321:C:N4	58:A:1667:A:OP1	2.18	0.77
18:J:138:ASN:HA	18:J:141:ARG:HD2	1.66	0.77
36:M:108:PRO:HG2	36:M:134:THR:HB	1.67	0.77
5:Q:120:SER:HA	55:i:57:ASN:HD21	1.50	0.77
17:S:84:TYR:HD1	17:S:85:VAL:H	1.30	0.77
39:CP:56:LYS:NZ	75:AR:150:A:OP1	2.18	0.77
46:X:30:SER:HB3	46:X:61:ILE:HG13	1.66	0.77
33:u:55:ARG:HD2	33:u:78:THR:HG23	1.66	0.77
65:d8:57:MET:HG2	77:s5:222:LYS:HZ3	1.46	0.77
79:AA:48:ARG:HB3	79:AA:69:LYS:HB3	1.67	0.77
5:Q:22:LEU:HD12	5:Q:109:PRO:HG3	1.66	0.77
66:CX:54:LEU:HD21	66:CX:119:GLY:HA3	1.65	0.77
70:E:224:ASP:OD1	70:E:225:TYR:N	2.17	0.77
6:H:20:ASP:OD2	6:H:23:ARG:HD2	1.85	0.77
56:d5:98:GLN:HE22	77:s5:189:THR:HG21	1.48	0.77
75:1:1464:G:O6	80:1:3424:OHX:N5	2.16	0.77
58:A:650:U:O4	58:A:684:A:N6	2.16	0.77
48:x:67:ILE:HB	48:x:82:ARG:HH11	1.50	0.77
64:s1:157:GLN:OE1	80:s1:301:OHX:N3	2.17	0.77
75:1:1443:G:N7	80:1:3841:OHX:N1	2.33	0.77
14:AD:30:THR:HG23	14:AD:91:SER:HB2	1.64	0.77
58:sR:1216:C:O2'	58:sR:1444:A:N1	2.16	0.77
61:s0:177:LEU:O	61:s0:181:VAL:HG23	1.85	0.77
2:AB:27:LYS:NZ	75:1:801:A:OP1	2.17	0.77
6:s6:13:GLN:HE21	58:sR:164:A:H1'	1.49	0.77
9:CK:41:ILE:HD13	9:CK:71:VAL:HG23	1.66	0.77
49:DR:46:THR:OG1	49:DR:57:CYS:SG	2.43	0.77
62:c:21:LEU:HD22	62:c:26:GLN:HE21	1.49	0.77
75:1:3165:A:H61	75:1:3285:C:H42	1.33	0.77
16:AK:52:LYS:HA	16:AK:55:ARG:HD2	1.67	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:p0:102:SER:HA	52:p0:105:VAL:HG21	1.67	0.77
23:c8:92:ILE:HG23	23:c8:93:THR:HG23	1.67	0.77
75:AR:1078:U:O4	80:AR:3510:OHX:N5	2.18	0.77
76:DA:56:VAL:HG12	76:DA:106:ILE:HA	1.66	0.77
79:DB:107:ARG:O	79:DB:111:LYS:N	2.18	0.77
11:R:28:LEU:HD12	77:G:27:THR:HG23	1.66	0.76
39:CP:12:ARG:HD2	75:AR:268:A:C4	2.20	0.76
48:x:67:ILE:HD11	48:x:80:LYS:HB3	1.66	0.76
60:2:118:GLU:O	60:2:122:GLN:NE2	2.17	0.76
13:j:250:GLN:O	13:j:251:LYS:HD3	1.86	0.76
35:V:50:LEU:HD13	35:V:94:GLU:HG2	1.67	0.76
45:DQ:48:SER:O	80:AR:3980:OHX:N6	2.18	0.76
23:c8:138:THR:OG1	58:sR:1459:C:OP2	2.01	0.76
27:t:5:LYS:O	27:t:7:LEU:HG	1.85	0.76
75:AR:3103:A:OP2	80:AR:3956:OHX:N1	2.18	0.76
71:e0:50:VAL:HG13	71:e0:54:ARG:H	1.48	0.76
75:1:2850:G:O6	80:1:3635:OHX:N5	2.18	0.76
19:k:128:LYS:HZ1	75:1:3151:U:P	2.08	0.76
5:c5:53:PRO:O	5:c5:57:MET:N	2.17	0.76
15:r:14:ASN:O	15:r:128:ARG:NH2	2.18	0.76
70:E:25:PHE:HB3	70:E:34:TYR:CE2	2.20	0.76
61:s0:24:LEU:O	61:s0:163:ASN:ND2	2.18	0.76
64:s1:113:MET:HB3	64:s1:142:PHE:HE2	1.50	0.76
75:1:2278:C:OP1	80:1:4053:OHX:N1	2.19	0.76
45:DQ:100:LYS:HD3	45:DQ:101:GLY:H	1.51	0.76
6:H:214:LYS:O	6:H:214:LYS:HD2	1.85	0.76
75:1:1257:C:H42	75:1:1261:G:H22	1.31	0.76
12:s7:98:ILE:HD13	12:s7:118:LEU:HA	1.66	0.76
47:c4:43:THR:H	47:c4:46:MET:HE3	1.51	0.76
47:c4:43:THR:OG1	58:sR:900:A:OP1	2.03	0.76
63:5:36:TYR:HD2	63:5:83:TYR:HB2	1.50	0.76
75:1:552:G:O6	80:1:3991:OHX:N5	2.18	0.76
47:c4:25:ASP:OD1	47:c4:26:THR:N	2.19	0.76
49:DR:4:ARG:NH2	75:AR:838:G:O6	2.19	0.76
58:A:301:A:OP2	80:A:2094:OHX:N2	2.19	0.76
58:A:591:A:H5''	24:K:24:LEU:HD21	1.68	0.76
75:AR:978:G:OP1	80:AR:4104:OHX:N1	2.18	0.76
75:AR:1070:U:O4	80:AR:3604:OHX:N2	2.19	0.76
19:CE:139:GLN:HG3	19:CE:141:GLY:H	1.49	0.76
77:s5:97:LEU:O	77:s5:180:ARG:NH1	2.18	0.76
58:A:1367:G:N7	80:A:2143[B]:OHX:N2	2.33	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:s0:78:SER:OG	61:s0:129:ASP:OD1	2.03	0.76
70:s3:91:VAL:HG21	70:s3:94:ARG:HB3	1.66	0.76
53:Z:37:LYS:NZ	58:A:523:G:OP2	2.17	0.76
35:d0:33:GLN:N	35:d0:33:GLN:OE1	2.19	0.76
69:7:4:GLU:HB2	69:7:13:ILE:CG1	2.16	0.76
17:S:105:GLN:N	17:S:105:GLN:OE1	2.19	0.76
35:V:50:LEU:HB3	35:V:94:GLU:OE1	1.85	0.76
47:c4:121:VAL:O	58:sR:886:U:O2'	2.04	0.76
54:CT:102:LEU:HD12	54:CT:138:LEU:HD13	1.66	0.76
58:A:1720:G:O6	80:A:1966:OHX:N3	2.19	0.76
77:G:114:ILE:HA	77:G:117:THR:OG1	1.86	0.76
58:sR:419:G:N7	80:sR:1989:OHX:N2	2.33	0.76
75:1:1148:G:N7	86:1:4204:HOH:O	2.19	0.76
2:AB:57:GLY:HA3	51:y:170:ARG:NE	2.01	0.76
29:U:4:VAL:HG13	29:U:133:ASP:HB3	1.68	0.76
17:c7:83:GLN:O	17:c7:83:GLN:NE2	2.14	0.76
64:C:179:SER:OG	64:C:180:THR:O	2.04	0.76
75:AR:3128:G:OP2	80:AR:3956:OHX:N2	2.19	0.76
75:AR:3272:C:OP2	37:CH:78:ARG:NH1	2.19	0.76
58:sR:868:G:H1	58:sR:960:U:H3	1.31	0.76
13:CD:20:THR:HG22	13:CD:23:ARG:HE	1.51	0.76
61:s0:69:ASN:HB3	61:s0:71:GLU:OE2	1.86	0.76
75:1:1171:G:N7	80:1:4083:OHX:N2	2.34	0.76
75:1:2356:A:H61	75:1:2983:C:H5	1.34	0.76
7:4:150:G:N7	80:4:232:OHX:N1	2.33	0.75
24:s9:163:PRO:HB3	24:s9:169:PRO:HA	1.67	0.75
58:A:142:G:H22	58:A:173:A:H2	1.32	0.75
61:B:84:ARG:HD2	61:B:204:TYR:HA	1.66	0.75
67:D:49:LYS:HB3	67:D:243:TYR:CE2	2.21	0.75
75:AR:2402:A:OP2	80:AR:3671:OHX:N4	2.19	0.75
58:sR:68:A:O2'	58:sR:69:G:OP2	2.03	0.75
64:s1:36:SER:HB3	64:s1:231:LEU:HD22	1.68	0.75
25:l:82:THR:OG1	75:1:355:A:N1	2.18	0.75
25:l:122:THR:HG22	25:l:235:LEU:HB2	1.66	0.75
3:p:101:THR:HG22	3:p:104:GLU:HG3	1.67	0.75
5:c5:33:PHE:CD2	5:c5:87:PRO:HD3	2.21	0.75
58:A:356:G:OP2	80:A:2110:OHX:N1	2.19	0.75
58:sR:1610:G:H4'	77:s5:98:MET:HE1	1.67	0.75
75:1:978:G:O2'	75:1:979:U:O2	2.04	0.75
46:X:68:ARG:HD3	67:D:230:TRP:CD2	2.21	0.75
58:A:722:G:H3'	58:A:723:G:H5'	1.67	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AP:46:LYS:NZ	75:1:92:G:O5'	2.20	0.75
75:AR:25:U:O4	80:AR:3973:OHX:N2	2.20	0.75
58:sR:1202:A:OP1	80:sR:2052:OHX:N1	2.19	0.75
2:AB:69:TRP:CD1	27:t:64:LYS:HD2	2.22	0.75
75:AR:371:G:O6	80:AR:3799:OHX:N5	2.19	0.75
67:s2:39:THR:HG23	67:s2:42:GLY:H	1.52	0.75
27:CN:48:PRO:HA	27:CN:137:GLN:HB2	1.69	0.75
35:V:113:ASP:OD2	70:E:7:LYS:NZ	2.19	0.75
15:r:76:MET:HE1	15:r:138:VAL:HG21	1.66	0.75
73:F:125:LYS:NZ	73:F:157:ASN:OD1	2.19	0.75
58:sR:1158:C:OP2	80:sR:2180:OHX:N1	2.20	0.75
64:s1:28:GLU:OE1	64:s1:94:LYS:NZ	2.13	0.75
14:AD:74:ASN:HD22	14:AD:86:ARG:HB3	1.51	0.75
5:c5:16:SER:OG	5:c5:21:ASP:OD1	2.05	0.75
33:u:48:GLY:HA3	33:u:53:VAL:HB	1.68	0.75
75:AR:1207:G:N7	80:AR:3639:OHX:N2	2.35	0.75
70:s3:76:ARG:HG3	70:s3:77:PHE:CD1	2.21	0.75
5:Q:111:MET:HG2	23:T:119:ILE:CG2	2.17	0.75
9:q:59:ASN:OD1	33:u:41:GLN:NE2	2.19	0.75
58:A:487:G:H1	58:A:500:C:H42	1.32	0.75
58:A:720:G:H1'	58:A:721:U:H5''	1.67	0.75
41:d1:60:ARG:NH1	61:s0:157:ASP:OD1	2.20	0.75
73:F:180:LEU:HA	73:F:194:THR:HG22	1.68	0.75
58:sR:75:U:O2'	58:sR:76:A:O4'	2.04	0.75
58:sR:1085:G:N7	80:sR:2061:OHX:N1	2.34	0.75
59:d6:52:ASP:OD1	59:d6:52:ASP:N	2.20	0.75
35:V:70:THR:OG1	35:V:72:ASN:OD1	2.04	0.75
58:A:320:U:H3'	58:A:321:C:H5''	1.69	0.75
78:h:36:ALA:HA	78:h:42:LEU:HD22	1.69	0.75
6:H:7:TYR:HB3	6:H:12:SER:HB2	1.68	0.75
77:s5:200:ASN:OD1	77:s5:201:ALA:N	2.20	0.75
26:AF:100:ILE:O	26:AF:125:ARG:NH1	2.19	0.75
58:A:1339:C:O2'	58:A:1341:A:N7	2.20	0.75
66:CX:44:SER:HB3	75:AR:2916:U:H1'	1.67	0.75
73:F:88:ASP:HA	73:F:122:LYS:HE3	1.68	0.75
70:s3:105:MET:HA	70:s3:108:LYS:HB2	1.69	0.75
75:1:1878:G:OP1	80:1:4024:OHX:N6	2.19	0.75
5:Q:18:ARG:NE	23:T:90:ASN:OD1	2.19	0.74
19:k:152:LYS:HG2	19:k:192:VAL:HG11	1.69	0.74
21:CM:60:ARG:NH2	45:DQ:104:LEU:O	2.20	0.74
21:s:14:ILE:HD11	21:s:77:GLU:HG2	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:1258:U:H4'	30:L:2:LEU:HB2	1.68	0.74
73:F:178:GLY:H	73:F:195:ILE:HB	1.50	0.74
75:AR:3324:C:OP1	20:DF:19:ARG:NH2	2.20	0.74
58:sR:478:A:OP1	71:e0:37:ARG:NH1	2.20	0.74
61:s0:84:ARG:HD2	61:s0:204:TYR:HA	1.67	0.74
64:s1:194:ASN:ND2	64:s1:211:HIS:HA	2.02	0.74
77:s5:130:ILE:HA	77:s5:133:VAL:HG12	1.69	0.74
75:1:300:G:N7	80:1:3452:OHX:N4	2.34	0.74
19:k:169:THR:O	80:k:404:OHX:N5	2.19	0.74
45:DQ:28:TYR:C	45:DQ:28:TYR:CD1	2.64	0.74
3:p:161:GLU:HA	3:p:164:VAL:HG22	1.69	0.74
55:i:82:THR:HA	55:i:83:LYS:HE2	1.68	0.74
73:F:182:TYR:HB2	73:F:228:ILE:HD13	1.69	0.74
75:AR:1814:A:OP1	80:AR:3456:OHX:N3	2.21	0.74
12:s7:140:VAL:HG22	46:d2:52:TYR:HB3	1.69	0.74
18:s8:34:ALA:HB2	18:s8:56:ARG:HD3	1.67	0.74
31:m:50:ARG:NH1	31:m:72:ASP:OD2	2.21	0.74
45:DQ:78:LYS:HD3	45:DQ:78:LYS:C	2.13	0.74
46:X:32:LYS:N	58:A:637:C:OP1	2.21	0.74
53:Z:104:SER:H	53:Z:107:GLN:HE21	1.35	0.74
58:sR:826:U:O4	80:sR:1934:OHX:N1	2.20	0.74
24:K:102:GLU:HA	24:K:105:LEU:HD13	1.69	0.74
75:1:2836:C:H5	75:1:2852:C:H42	1.35	0.74
50:Y:107:PHE:CE1	50:Y:123:LYS:HB3	2.20	0.74
58:A:33:U:O4	80:A:2035:OHX:N1	2.20	0.74
75:AR:392:G:N7	80:AR:4015:OHX:N1	2.36	0.74
75:AR:1486:G:OP2	80:AR:3761:OHX:N4	2.20	0.74
79:DB:108:GLU:HA	79:DB:111:LYS:HB2	1.68	0.74
58:sR:647:G:N2	58:sR:687:G:H22	1.84	0.74
58:sR:1533:C:H4'	58:sR:1539:G:N1	2.01	0.74
63:5:107:PHE:HD1	63:5:108:TYR:H	1.35	0.74
70:s3:191:ASP:HB3	70:s3:194:LYS:HB2	1.70	0.74
73:s4:104:ASP:N	73:s4:108:ARG:O	2.19	0.74
14:AD:39:SER:OG	14:AD:91:SER:OG	2.05	0.74
25:l:334:PHE:HA	25:l:339:LEU:HD23	1.68	0.74
55:sM:57:ASN:HB3	23:c8:125:ILE:HD11	1.68	0.74
58:A:1482:C:OP2	58:A:1521:G:N1	2.21	0.74
73:F:5:PRO:HB2	73:F:7:LYS:HE2	1.69	0.74
75:AR:1778:G:O2'	75:AR:1780:G:OP2	2.04	0.74
75:AR:1919:G:N7	80:AR:4170:OHX:N1	2.34	0.74
58:sR:486:G:N2	58:sR:487:G:N7	2.35	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:U:50:ALA:H	29:U:53:TRP:HD1	1.34	0.74
30:c0:29:GLN:NE2	30:c0:31:LYS:O	2.19	0.74
50:Y:103:LEU:HD22	50:Y:126:LYS:HD3	1.69	0.74
58:A:1247:U:OP2	80:A:2093:OHX:N1	2.19	0.74
58:A:1389:C:N4	58:A:1412:G:O6	2.19	0.74
44:w:160:ARG:NH2	75:1:3182:G:OP1	2.21	0.74
75:AR:2686:A:OP2	80:AR:3504:OHX:N5	2.21	0.74
18:s8:178:ARG:NH1	58:sR:258:C:O2	2.21	0.74
47:c4:85:ALA:HB2	47:c4:94:PRO:HA	1.67	0.74
64:C:193:ILE:HA	64:C:196:GLU:HB2	1.68	0.74
45:AP:35:LEU:O	45:AP:36:PHE:CB	2.32	0.74
45:AP:58:PHE:CZ	45:AP:60:LYS:O	2.41	0.74
75:AR:1538:G:OP2	80:AR:3727:OHX:N4	2.19	0.74
64:s1:184:LEU:HG	64:s1:188:LEU:HD11	1.68	0.74
75:1:2897:A:H2'	75:1:2899:C:H5''	1.69	0.74
33:CO:50:LYS:NZ	33:CO:82:SER:O	2.20	0.74
67:D:63:VAL:HG11	67:D:69:ILE:HD11	1.69	0.74
50:d3:47:SER:C	50:d3:48:HIS:HD1	1.96	0.74
78:h:40:LYS:HA	78:h:68:VAL:HG23	1.70	0.74
79:DB:87:LEU:HD12	79:DB:127:ASN:HB3	1.70	0.74
61:s0:124:THR:HA	61:s0:146:LEU:HD13	1.68	0.74
67:s2:246:GLU:OE2	67:s2:246:GLU:N	2.18	0.74
75:1:1236:G:N2	75:1:1272:C:OP1	2.19	0.74
7:4:43:A:OP1	80:4:209:OHX:N2	2.21	0.74
15:CL:42:THR:HG22	15:CL:44:ASP:H	1.53	0.74
54:CT:115:ILE:HB	54:CT:119:LEU:HD12	1.69	0.74
58:A:985:G:O6	80:A:2062:OHX:N2	2.21	0.74
75:AR:128:G:O6	80:AR:3944:OHX:N1	2.21	0.74
78:Rb:173:GLY:N	78:Rb:199:ILE:HD11	2.03	0.74
77:s5:156:ARG:HG3	77:s5:224:ASN:ND2	2.02	0.74
75:1:1541:G:OP2	80:1:3819:OHX:N6	2.21	0.74
3:CJ:38:GLN:HA	75:AR:2557:A:H2	1.53	0.74
12:s7:17:GLU:HG3	12:s7:46:ILE:HD12	1.69	0.74
3:p:41:GLN:OE1	3:p:44:ARG:NH2	2.20	0.74
33:u:20:VAL:O	33:u:66:THR:OG1	2.05	0.74
35:d0:41:ILE:HA	35:d0:44:ASN:HB3	1.67	0.74
75:AR:2553:U:O3'	38:DI:91:ARG:NH2	2.20	0.74
57:0:161:LYS:HD3	57:0:162:THR:H	1.53	0.74
58:sR:235:G:H2'	58:sR:236:A:C8	2.23	0.74
58:sR:438:A:OP1	80:sR:1912:OHX:N6	2.20	0.74
7:AT:139:U:O4	80:AT:205:OHX:N5	2.21	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:J:159:GLN:HB2	18:J:165:LEU:HD22	1.69	0.74
65:d8:10:ALA:HB1	65:d8:30:VAL:HB	1.68	0.74
47:P:55:SER:HB2	47:P:96:PRO:HG2	1.70	0.74
10:DK:4:LYS:NZ	75:AR:73:C:OP2	2.21	0.73
58:A:903:U:O4	47:P:24:ASN:ND2	2.19	0.73
58:A:992:A:O2'	58:A:1785:U:O2	2.06	0.73
61:B:117:GLU:HG3	67:D:40:LYS:HE3	1.68	0.73
64:C:137:ILE:HG21	64:C:172:LEU:HD11	1.69	0.73
75:AR:2369:G:OP2	80:AR:4035:OHX:N5	2.21	0.73
80:AR:3609:OHX:N1	19:CE:30:LYS:O	2.21	0.73
77:G:63:GLN:HE22	77:G:66:GLN:HG3	1.52	0.73
18:J:5:ARG:NH1	18:J:29:LEU:O	2.21	0.73
18:J:141:ARG:HD3	18:J:142:LYS:HZ3	1.52	0.73
61:s0:53:THR:HG22	61:s0:161:PRO:HG2	1.70	0.73
17:S:65:PRO:O	17:S:66:VAL:HG23	1.89	0.73
29:U:136:ALA:HA	29:U:139:THR:HG23	1.70	0.73
54:CT:8:LYS:NZ	75:AR:1473:G:OP2	2.20	0.73
75:AR:65:A:H4'	75:AR:66:A:O5'	1.88	0.73
75:AR:740:G:O6	80:AR:4163:OHX:N6	2.20	0.73
30:L:10:LYS:NZ	30:L:36:ASP:OD2	2.22	0.73
31:CG:104:LEU:HD11	31:CG:108:ARG:HH21	1.53	0.73
73:s4:251:GLU:O	73:s4:255:ARG:HG2	1.88	0.73
19:k:41:VAL:HG12	19:k:185:GLY:HA3	1.69	0.73
28:AM:25:GLN:OE1	28:AM:28:ARG:NH2	2.21	0.73
58:A:67:A:H5''	6:H:171:LYS:HZ1	1.52	0.73
58:A:1369:U:O4	80:A:2143[A]:OHX:N5	2.21	0.73
23:c8:24:GLY:HA2	23:c8:58:ALA:HB3	1.69	0.73
55:i:131:ILE:HA	55:i:134:ASP:HB2	1.70	0.73
75:AR:343:U:OP2	80:AR:3690:OHX:N6	2.20	0.73
75:AR:3353:G:H1'	75:AR:3356:G:H5'	1.70	0.73
58:sR:452:A:OP2	80:sR:2188:OHX:N1	2.22	0.73
25:CF:122:THR:HG22	25:CF:235:LEU:HB2	1.70	0.73
2:AB:51:GLY:HA2	51:y:175:ALA:O	1.88	0.73
25:l:289:ILE:O	25:l:292:SER:HB3	1.88	0.73
3:p:91:PHE:CE2	3:p:185:ARG:HG2	2.22	0.73
53:Z:18:LEU:HD21	73:F:64:ILE:HG13	1.70	0.73
51:y:101:VAL:HG21	51:y:114:ILE:HD13	1.70	0.73
6:H:135:PRO:HB2	6:H:141:ILE:HG13	1.68	0.73
78:Rb:4:ASN:OD1	78:Rb:5:GLU:N	2.21	0.73
75:1:1796:G:N7	80:1:3963:OHX:N1	2.37	0.73
6:s6:215:ARG:NH2	73:s4:151:ASP:OD1	2.20	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:4:137:C:OP2	80:4:208:OHX:N5	2.21	0.73
25:l:95:ARG:HG3	75:1:343:U:H1'	1.69	0.73
3:p:136:LEU:HD22	39:v:3:ALA:HB2	1.70	0.73
21:s:148:VAL:O	21:s:153:LYS:NZ	2.21	0.73
59:b:54:SER:OG	59:b:61:GLU:HG3	1.88	0.73
23:c:8:45:LEU:HD21	29:c:9:36:ILE:HG22	1.71	0.73
63:CW:85:LYS:NZ	75:AR:1683:A:OP2	2.21	0.73
75:AR:2268:U:H3'	75:AR:2269:U:H5''	1.70	0.73
75:AR:2535:A:H2'	75:AR:2536:A:H5'	1.71	0.73
77:G:34:GLN:HA	77:G:37:GLN:HE22	1.52	0.73
77:G:63:GLN:NE2	77:G:66:GLN:HG3	2.03	0.73
58:sR:1015:U:OP1	80:sR:2121:OHX:N3	2.22	0.73
77:s5:63:GLN:HE22	77:s5:66:GLN:H	1.37	0.73
27:t:61:PRO:HB2	27:t:62:THR:HG23	1.70	0.73
45:AP:20:HIS:ND1	75:1:2741:C:O2'	2.16	0.73
78:h:155:ARG:HB2	78:h:170:ILE:HD11	1.71	0.73
61:s0:191:ARG:O	61:s0:191:ARG:HD2	1.89	0.73
17:S:60:ARG:CZ	17:S:66:VAL:HG21	2.18	0.73
75:AR:2659:G:N7	80:AR:4004:OHX:N4	2.37	0.73
75:AR:2897:A:H2'	75:AR:2899:C:H5''	1.69	0.73
58:sR:158:U:O2'	58:sR:160:C:OP2	2.05	0.73
58:sR:653:C:N4	58:sR:676:G:O6	2.20	0.73
12:I:170:GLN:HG3	12:I:171:ALA:N	2.02	0.73
38:DI:46:ASP:OD1	38:DI:80:ARG:HG2	1.87	0.73
75:1:1753:G:N7	80:1:3610:OHX:N6	2.37	0.73
5:Q:110:GLU:OE1	5:Q:110:GLU:N	2.20	0.73
8:AC:18:ARG:O	80:AC:101:OHX:N2	2.21	0.73
10:DK:55:ARG:NH2	39:CP:17:ASP:OD1	2.17	0.73
18:s8:26:LYS:NZ	58:sR:395:U:O4	2.21	0.73
24:s9:163:PRO:HB3	24:s9:170:GLY:H	1.53	0.73
3:p:249:ARG:HH12	3:p:253:SER:HB2	1.53	0.73
75:AR:1696:A:OP2	80:AR:3423:OHX:N6	2.21	0.73
75:AR:2754:G:OP2	80:AR:4169:OHX:N3	2.22	0.73
78:h:156:VAL:HB	78:h:169:ILE:HG22	1.70	0.73
58:sR:412:A:H2	58:sR:421:A:H61	1.36	0.73
78:Rb:31:ASN:HA	78:Rb:47:LEU:HD22	1.69	0.73
78:Rb:225:LEU:HD23	78:Rb:225:LEU:H	1.54	0.73
63:5:82:LYS:NZ	75:1:1682:U:O2	2.22	0.73
25:CF:138:ARG:HH11	25:CF:138:ARG:HG2	1.51	0.73
58:A:402:C:OP2	80:A:1964:OHX:N1	2.22	0.73
78:Rb:300:THR:HA	78:Rb:314:GLN:HB2	1.71	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DM:40:GLN:HE22	22:DM:42:LYS:HE3	1.53	0.73
5:c5:33:PHE:HD2	5:c5:87:PRO:HD3	1.54	0.73
61:B:170:ILE:O	61:B:174:TRP:HD1	1.72	0.73
27:CN:64:LYS:HG3	2:DC:69:TRP:CG	2.24	0.72
35:V:34:LEU:HD21	35:V:87:HIS:HB2	1.71	0.72
38:AH:44:CYS:SG	38:AH:47:CYS:N	2.59	0.72
54:CT:46:LYS:HE3	54:CT:47:ASN:HB3	1.71	0.72
21:s:171:VAL:HG23	21:s:172:LEU:H	1.53	0.72
58:A:727:U:O2'	58:A:728:U:H5''	1.89	0.72
75:AR:764:U:H3'	75:AR:765:C:H5''	1.71	0.72
78:Rb:42:LEU:HD12	78:Rb:61:PHE:HD2	1.52	0.72
70:s3:101:GLN:HA	70:s3:104:SER:HB3	1.70	0.72
75:1:900:G:H1'	75:1:1589:A:N6	2.04	0.72
1:3:49:G:N7	31:m:58:LYS:HG3	2.04	0.72
5:Q:29:SER:OG	5:Q:32:ASP:OD1	2.06	0.72
13:j:27:ALA:O	13:j:128:ARG:NH2	2.17	0.72
21:CM:15:GLU:CD	21:CM:132:ASN:HD21	1.97	0.72
31:m:146:LEU:HD22	31:m:163:LEU:HD22	1.71	0.72
58:A:584:C:H1'	71:f:18:THR:HG21	1.71	0.72
71:f:55:ARG:HB3	71:f:58:PRO:HG3	1.71	0.72
38:DI:100:ILE:HA	38:DI:103:LYS:HB3	1.71	0.72
75:1:2877:G:HO2'	75:1:2923:U:HO2'	1.36	0.72
11:R:22:VAL:HG22	11:R:65:ILE:HG12	1.70	0.72
29:U:122:ARG:NH2	58:A:1500:C:OP1	2.22	0.72
35:V:20:ILE:HB	35:V:22:ILE:HG13	1.72	0.72
38:AH:36:LYS:NZ	75:1:1594:A:OP1	2.23	0.72
49:DR:73:THR:HG23	49:DR:76:ALA:H	1.53	0.72
58:A:8:U:O2'	80:A:1943:OHX:N2	2.23	0.72
50:d3:137:LYS:HD3	50:d3:137:LYS:N	2.03	0.72
6:H:59:GLN:OE1	6:H:72:ARG:NH1	2.15	0.72
31:CG:40:HIS:HD2	31:CG:42:ALA:H	1.35	0.72
9:CK:41:ILE:HD11	9:CK:67:ALA:HB1	1.70	0.72
11:R:94:GLN:NE2	78:h:60:SER:OG	2.19	0.72
13:j:221:LYS:NZ	75:1:2965:U:O2	2.23	0.72
31:m:69:ILE:HD12	31:m:69:ILE:H	1.55	0.72
34:DO:125:LYS:HG3	75:AR:2897:A:H5''	1.71	0.72
54:z:173:ARG:HA	54:z:176:ARG:H	1.54	0.72
75:AR:277:G:OP1	80:AR:3597:OHX:N6	2.22	0.72
78:h:16:HIS:CE1	78:h:37:SER:HB3	2.25	0.72
75:1:2250:G:N7	80:1:4084:OHX:N3	2.37	0.72
1:3:53:U:OP1	80:3:222:OHX:N4	2.23	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:h:207:ASP:OD1	78:h:209:THR:OG1	2.06	0.72
58:sR:874:C:OP1	80:s1:301:OHX:N5	2.22	0.72
58:sR:877:G:OP1	80:sR:2190:OHX:N6	2.22	0.72
56:d5:38:HIS:HA	56:d5:70:LYS:HB2	1.72	0.72
19:CE:56:ILE:HD11	19:CE:356:LEU:HD13	1.71	0.72
9:CK:40:HIS:HA	86:CK:301:HOH:O	1.88	0.72
10:DK:93:ILE:O	10:DK:97:SER:HB3	1.90	0.72
29:U:102:ARG:NH2	58:A:1502:G:N7	2.38	0.72
43:o:217:PRO:O	80:1:4083:OHX:N1	2.22	0.72
50:Y:109:ARG:HD3	50:Y:114:LYS:HA	1.71	0.72
46:d2:81:VAL:O	46:d2:122:SER:OG	2.07	0.72
72:CZ:77:GLU:HB3	72:CZ:133:LEU:HD22	1.71	0.72
75:AR:2574:G:H2'	75:AR:2575:G:H8	1.54	0.72
58:sR:1539:G:H5'	58:sR:1539:G:H8	1.54	0.72
29:U:5:SER:HA	29:U:133:ASP:OD1	1.90	0.72
48:CR:82:ARG:NH2	86:CR:301:HOH:O	2.22	0.72
58:A:699:U:OP2	58:A:733:A:N6	2.23	0.72
23:c8:28:ILE:HD11	23:c8:54:LEU:HA	1.71	0.72
73:F:180:LEU:O	73:F:228:ILE:N	2.16	0.72
75:AR:252:U:H5'	75:AR:253:A:H5'	1.72	0.72
2:DC:76:ASP:HB2	2:DC:115:LYS:HB3	1.71	0.72
8:DD:18:ARG:HA	8:DD:18:ARG:HE	1.55	0.72
39:v:183:THR:HG22	39:v:187:ARG:HB2	1.71	0.72
75:1:425:G:O6	80:1:3540:OHX:N6	2.23	0.72
19:k:161:LEU:HD12	19:k:178:LEU:HD11	1.70	0.72
48:CR:101:ASN:HD21	75:AR:388:G:N2	1.88	0.72
58:A:58:U:O4	80:A:1965:OHX:N1	2.22	0.72
58:A:947:U:OP1	64:C:165:ARG:NH1	2.22	0.72
80:CV:201:OHX:N3	75:AR:993:G:OP1	2.23	0.72
51:y:21:SER:OG	75:1:673:U:OP1	2.08	0.72
75:AR:678:G:O6	80:AR:4012:OHX:N2	2.22	0.72
75:AR:1861:G:O6	80:AR:3576:OHX:N5	2.22	0.72
13:CD:67:TYR:HB2	13:CD:68:LYS:HE3	1.70	0.72
1:3:87:G:OP2	80:1:4175:OHX:N4	2.22	0.72
5:Q:18:ARG:NH2	58:A:1548:G:OP1	2.22	0.72
5:Q:128:HIS:HB2	55:i:71:ASN:OD1	1.89	0.72
17:S:7:LYS:HA	17:S:10:LYS:HB2	1.72	0.72
24:s9:71:PHE:HE2	73:s4:248:ILE:HB	1.54	0.72
35:V:110:PRO:HA	70:E:41:VAL:HG22	1.72	0.72
10:AJ:9:ILE:HD12	27:t:174:ARG:HB2	1.72	0.72
49:DR:46:THR:HB	49:DR:58:SER:HB3	1.72	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:CT:68:GLN:OE1	54:CT:71:ARG:NH1	2.21	0.72
58:A:487:G:O6	58:A:498:G:N1	2.18	0.72
58:A:651:G:H1	58:A:683:C:H42	1.37	0.72
75:AR:173:G:O6	75:AR:245:U:N3	2.19	0.72
75:AR:2169:G:O6	80:AR:3787:OHX:N2	2.23	0.72
24:K:40:LYS:HA	24:K:43:TYR:HD2	1.54	0.72
75:1:2643:A:OP1	80:1:3935:OHX:N4	2.22	0.72
49:DR:44:LYS:HB2	49:DR:46:THR:HG23	1.72	0.72
17:c7:3:ARG:NH2	58:sR:1415:U:H5''	2.05	0.72
67:D:227:PRO:HA	67:D:230:TRP:CE2	2.24	0.72
54:z:101:VAL:HA	54:z:104:ARG:HD2	1.71	0.72
75:AR:145:G:O6	80:AR:4105:OHX:N5	2.22	0.72
78:h:184:ASN:OD1	78:h:185:GLN:N	2.22	0.72
61:s0:144:ILE:HD11	61:s0:160:ILE:HD11	1.72	0.72
66:6:68:GLU:OE2	66:6:68:GLU:N	2.20	0.72
37:CH:131:LYS:HD3	37:CH:132:ALA:H	1.55	0.72
75:1:2571:U:H1'	75:1:2572:C:H2'	1.71	0.72
19:k:92:TYR:HB2	19:k:157:VAL:HG22	1.72	0.71
36:c1:78:THR:HA	36:c1:84:ILE:HG22	1.71	0.71
42:c3:70:LYS:NZ	58:sR:962:C:OP2	2.23	0.71
58:A:1533:C:H4'	58:A:1539:G:H1	1.53	0.71
73:F:122:LYS:HB2	73:F:164:LEU:HD23	1.70	0.71
54:z:125:LYS:NZ	75:1:1720:U:O4	2.22	0.71
75:AR:1124:U:O4	80:AR:3734:OHX:N3	2.23	0.71
58:sR:1370:U:O4	80:sR:2191:OHX:N6	2.23	0.71
78:Rb:115:ILE:HG23	78:Rb:122:ILE:HD12	1.72	0.71
11:R:26:LYS:O	77:G:25:LEU:HD21	1.90	0.71
11:R:39:VAL:H	11:R:45:ARG:NH1	1.88	0.71
52:p0:99:VAL:O	52:p0:103:ASN:ND2	2.22	0.71
54:CT:106:LEU:HD21	54:CT:138:LEU:HD11	1.71	0.71
58:A:1280:C:H2'	58:A:1281:G:H8	1.54	0.71
75:AR:2823:G:O6	80:AR:3755:OHX:N4	2.23	0.71
76:DA:106:ILE:HG21	76:DA:109:LEU:HD23	1.72	0.71
77:G:43:PHE:CZ	77:G:115:LYS:HE2	2.25	0.71
79:DB:48:ARG:HB3	79:DB:69:LYS:HB3	1.70	0.71
58:sR:228:G:H1	58:sR:236:A:N6	1.88	0.71
58:sR:356:G:OP2	80:sR:1945:OHX:N6	2.23	0.71
4:DJ:43:LYS:NZ	7:AT:80:A:OP1	2.22	0.71
13:j:27:ALA:O	13:j:28:LYS:HD3	1.89	0.71
14:AD:9:SER:OG	14:AD:10:ILE:N	2.22	0.71
39:CP:192:LYS:O	39:CP:196:THR:OG1	2.06	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:h:106:HIS:CE1	78:h:126:SER:HB3	2.25	0.71
6:H:32:ILE:HD11	6:H:63:MET:HE2	1.73	0.71
12:I:48:GLU:HG3	12:I:58:LEU:HB3	1.72	0.71
12:I:96:ARG:NH2	12:I:128:ASP:OD2	2.23	0.71
75:1:2762:A:OP2	80:1:3901:OHX:N3	2.23	0.71
3:CJ:106:LYS:O	3:CJ:110:THR:HG23	1.89	0.71
7:4:155:A:OP2	3:p:84:ARG:NH1	2.23	0.71
39:CP:194:GLN:NE2	75:AR:99:A:OP1	2.22	0.71
44:CQ:8:VAL:HG23	44:CQ:117:ARG:HG3	1.72	0.71
10:AJ:30:LYS:NZ	75:1:317:A:OP2	2.23	0.71
58:A:478:A:O2'	24:K:124:HIS:ND1	2.23	0.71
58:A:856:A:C6	12:I:116:ARG:HG2	2.25	0.71
64:C:164:ILE:HD13	64:C:207:LEU:HD11	1.70	0.71
75:AR:718:G:C2	75:AR:721:G:H1'	2.25	0.71
75:AR:2274:U:OP2	80:AR:3885:OHX:N2	2.22	0.71
58:sR:987:G:O6	80:sR:1947:OHX:N4	2.23	0.71
31:CG:122:VAL:HG12	31:CG:125:VAL:HG12	1.73	0.71
39:v:85:THR:HG23	75:1:44:U:H5''	1.71	0.71
11:R:71:GLY:O	11:R:77:GLN:NE2	2.23	0.71
12:s7:33:GLU:N	12:s7:33:GLU:OE1	2.23	0.71
24:s9:119:ALA:HA	24:s9:124:HIS:CE1	2.25	0.71
45:DQ:89:LYS:HD2	75:AR:2652:U:O3'	1.90	0.71
45:DQ:100:LYS:HD2	45:DQ:101:GLY:N	1.99	0.71
53:Z:17:LEU:HD21	73:F:92:LEU:HD21	1.71	0.71
11:c6:16:ALA:HB2	11:c6:72:GLY:HA3	1.72	0.71
15:r:82:ARG:HG2	15:r:83:ASP:OD1	1.90	0.71
58:A:1041:G:OP1	80:A:2047:OHX:N1	2.23	0.71
58:A:1065:A:OP1	80:C:301:OHX:N3	2.23	0.71
70:E:217:ILE:HA	78:h:196:ASN:HD21	1.53	0.71
75:AR:2748:A:H1'	31:CG:36:LEU:HD23	1.72	0.71
79:DB:108:GLU:OE2	79:DB:108:GLU:N	2.15	0.71
58:sR:530:C:OP1	80:sR:2051:OHX:N1	2.23	0.71
58:sR:867:G:N7	80:sR:2144:OHX:N4	2.38	0.71
58:sR:1066:C:OP1	64:s1:151:LYS:NZ	2.22	0.71
78:Rb:85:TRP:CD1	78:Rb:109:ASP:HB3	2.24	0.71
37:CH:131:LYS:HG3	37:CH:133:GLU:HG2	1.72	0.71
75:1:625:G:OP1	80:1:3580:OHX:N1	2.24	0.71
75:1:3031:G:O6	80:1:4150:OHX:N4	2.24	0.71
12:s7:14:THR:OG1	12:s7:15:GLU:N	2.19	0.71
27:CN:55:ARG:NH1	27:CN:73:ARG:O	2.22	0.71
31:m:274:GLN:NE2	31:m:275:THR:O	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:c6:33:GLY:O	29:c9:7:ARG:HD2	1.90	0.71
59:b:4:LYS:O	59:b:5:ARG:HG3	1.89	0.71
67:D:238:SER:HB2	67:D:239:PRO:HD2	1.73	0.71
54:z:155:LEU:HA	54:z:158:GLU:HG2	1.72	0.71
25:CF:152:VAL:HG11	25:CF:156:LEU:HD12	1.72	0.71
7:AT:16:G:O6	80:AT:226:OHX:N6	2.22	0.71
12:I:171:ALA:CA	12:I:174:ASN:HD21	2.03	0.71
18:J:182:TYR:OH	18:J:188:GLU:OE2	2.07	0.71
37:CH:157:GLN:OE1	37:CH:157:GLN:N	2.21	0.71
79:AA:33:SER:HB3	79:AA:40:HIS:HE1	1.54	0.71
75:1:1623:G:OP2	80:1:3603:OHX:N6	2.24	0.71
75:1:1808:G:O6	80:1:4141:OHX:N4	2.24	0.71
75:1:3238:G:O6	80:1:4146:OHX:N4	2.24	0.71
27:CN:5:LYS:O	27:CN:7:LEU:HD13	1.90	0.71
29:U:42:GLY:HA3	29:U:94:ILE:HD11	1.70	0.71
38:AH:82:ALA:HA	38:AH:85:VAL:HB	1.73	0.71
11:c6:28:LEU:N	11:c6:64:ASP:OD1	2.23	0.71
58:A:355:G:OP1	80:A:2110:OHX:N4	2.24	0.71
73:F:77:ARG:HG3	73:F:82:TYR:CE2	2.26	0.71
46:X:10:ALA:HB1	46:X:27:ILE:HD12	1.71	0.71
48:CR:101:ASN:HD21	75:AR:388:G:H21	1.38	0.71
58:A:365:G:N7	80:A:1994:OHX:N3	2.38	0.71
63:CW:99:LYS:HD2	63:CW:100:THR:H	1.54	0.71
79:DB:76:ASN:OD1	79:DB:78:ASN:N	2.22	0.71
6:H:39:GLU:HB3	6:H:46:LYS:HD3	1.73	0.71
58:sR:512:A:H2'	58:sR:513:U:H6	1.54	0.71
7:AT:70:G:O6	80:AT:228:OHX:N5	2.24	0.71
75:1:544:C:H1'	75:1:548:G:H22	1.56	0.71
24:s9:87:SER:HB2	24:s9:90:LYS:HG3	1.73	0.71
25:l:143:GLU:OE2	25:l:143:GLU:N	2.20	0.71
45:DQ:15:LYS:HA	45:DQ:18:ARG:CD	2.21	0.71
23:c8:61:LEU:O	23:c8:66:LEU:HD11	1.91	0.71
61:B:172:LEU:O	61:B:176:LEU:HD12	1.91	0.71
46:d2:99:PHE:HZ	67:s2:156:THR:HG22	1.55	0.71
73:F:157:ASN:HD21	73:F:222:LEU:HD21	1.56	0.71
14:DE:63:SER:HG	14:DE:65:THR:HG1	1.37	0.71
75:1:1235:U:O4	75:1:1263:A:N6	2.24	0.71
75:1:1481:A:O2'	75:1:1858:A:N3	2.21	0.71
12:s7:177:THR:HG23	12:s7:179:LYS:H	1.55	0.70
23:T:27:LYS:HB3	23:T:30:TYR:HB2	1.73	0.70
23:T:66:LEU:HA	23:T:69:ILE:HG12	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:s9:121:SER:OG	24:s9:124:HIS:N	2.23	0.70
38:AH:109:THR:HA	38:AH:112:ALA:HB3	1.71	0.70
45:DQ:14:GLY:O	45:DQ:15:LYS:CB	2.39	0.70
15:r:193:ASP:OD1	15:r:194:GLY:N	2.22	0.70
51:y:38:ARG:NH2	75:1:1348:U:OP2	2.23	0.70
75:AR:1235:U:H4'	75:AR:1236:G:H5'	1.73	0.70
75:AR:2923:U:O4	80:AR:3763:OHX:N4	2.24	0.70
58:sR:1680:G:O6	80:sR:1916:OHX:N3	2.23	0.70
18:J:11:ARG:O	36:M:133:LYS:NZ	2.23	0.70
70:s3:41:VAL:HA	70:s3:46:THR:OG1	1.91	0.70
12:s7:110:GLN:HE22	58:sR:817:A:C1'	2.04	0.70
17:S:31:ASN:HA	17:S:34:LEU:HG	1.73	0.70
42:c3:2:GLY:HA3	42:c3:9:LYS:HD2	1.72	0.70
50:Y:64:PRO:O	80:A:2129:OHX:N6	2.24	0.70
58:A:1202:A:OP1	80:A:2003:OHX:N6	2.24	0.70
58:A:1537:C:O2'	58:A:1540:G:O6	2.09	0.70
58:A:1585:U:H3	58:A:1611:A:H2	1.35	0.70
46:d2:68:ARG:HD2	67:s2:230:TRP:CE2	2.26	0.70
75:AR:2667:A:O2'	75:AR:2691:A:OP1	2.07	0.70
58:sR:915:A:OP1	80:sR:1990:OHX:N6	2.24	0.70
11:R:106:LYS:O	11:R:106:LYS:HD2	1.91	0.70
20:AE:44:MET:CE	20:AE:75:ILE:HD13	2.21	0.70
27:CN:47:ALA:HB3	27:CN:49:ARG:HG3	1.74	0.70
22:AL:14:LEU:O	22:AL:20:VAL:HG21	1.90	0.70
61:B:41:ARG:NH1	61:B:42:PRO:O	2.23	0.70
61:B:195:TRP:HE1	61:B:197:ILE:HD12	1.55	0.70
54:z:128:LYS:NZ	75:1:1724:U:OP2	2.24	0.70
58:sR:454:U:H5'	58:sR:455:C:C5	2.27	0.70
58:sR:819:G:N2	58:sR:852:C:O2	2.19	0.70
38:DI:103:LYS:HG3	38:DI:104:VAL:N	2.05	0.70
77:s5:37:GLN:HG3	77:s5:69:PHE:HE1	1.56	0.70
12:s7:46:ILE:O	12:s7:47:ARG:NE	2.24	0.70
21:CM:60:ARG:HH21	45:DQ:105:GLN:HA	1.55	0.70
23:T:123:ARG:HG3	23:T:133:VAL:CG2	2.20	0.70
36:c1:33:ARG:NH1	36:c1:53:TYR:O	2.24	0.70
23:c8:15:LEU:HD22	23:c8:16:ARG:H	1.57	0.70
23:c8:41:ARG:HG2	58:sR:1565:C:H5''	1.72	0.70
1:AS:37:G:N2	1:AS:43:U:O4	2.20	0.70
78:Rb:91:LEU:HG	78:Rb:100:TYR:HB2	1.72	0.70
24:K:84:GLY:HA3	24:K:150:LEU:HD23	1.72	0.70
32:DH:39:GLN:OE1	32:DH:39:GLN:N	2.20	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:AA:33:SER:HB3	79:AA:40:HIS:CE1	2.26	0.70
75:1:799:G:O6	80:1:3698:OHX:N6	2.25	0.70
75:1:1231:A:OP2	80:1:3611:OHX:N6	2.25	0.70
6:s6:57:ASP:HA	6:s6:106:LEU:HA	1.71	0.70
10:DK:9:ILE:HD13	27:CN:174:ARG:HG3	1.73	0.70
10:DK:54:GLU:HB3	10:DK:90:MET:HE1	1.73	0.70
28:DN:10:LYS:HD3	75:AR:1833:G:H5''	1.73	0.70
45:DQ:11:TYR:HE1	45:DQ:13:LYS:HB3	1.55	0.70
22:AL:38:PHE:HE2	22:AL:57:ASN:HB3	1.55	0.70
17:c7:62:GLN:O	17:c7:62:GLN:NE2	2.24	0.70
17:c7:74:GLN:HG3	17:c7:77:GLU:HB3	1.73	0.70
58:A:1757:G:O6	80:A:2013:OHX:N1	2.25	0.70
45:AP:65:THR:HG1	45:AP:87:ARG:HD3	1.56	0.70
75:AR:394:G:N7	80:AR:3723:OHX:N1	2.40	0.70
75:AR:1386:A:OP2	26:DG:80:LYS:NZ	2.25	0.70
75:AR:2717:U:OP1	80:AR:4046:OHX:N5	2.24	0.70
18:J:41:LYS:HA	18:J:59:ARG:O	1.90	0.70
77:s5:51:VAL:HG22	77:s5:131:GLN:HG2	1.72	0.70
75:1:2263:C:OP1	80:1:3788:OHX:N5	2.24	0.70
11:R:13:LYS:HD2	11:R:14:LYS:N	2.06	0.70
19:k:312:VAL:O	19:k:332:ARG:NH1	2.24	0.70
43:o:25:GLN:HG2	43:o:29:GLU:HG2	1.73	0.70
46:X:27:ILE:HG12	46:X:61:ILE:HB	1.73	0.70
9:q:132:VAL:HG21	9:q:157:ASN:HD22	1.55	0.70
21:s:7:ASN:N	21:s:7:ASN:OD1	2.25	0.70
58:A:377:G:O6	80:A:1926:OHX:N5	2.24	0.70
65:d8:58:GLU:HG3	77:s5:222:LYS:HZ2	1.56	0.70
46:X:6:VAL:HG23	46:X:29:PRO:HD2	1.72	0.70
58:A:535:A:OP1	24:K:168:ARG:NH2	2.17	0.70
58:A:739:G:O6	80:A:2066:OHX:N4	2.24	0.70
64:C:157:GLN:OE1	80:C:301:OHX:N5	2.25	0.70
75:AR:773:G:O6	80:AR:4099:OHX:N5	2.24	0.70
75:AR:3055:U:O2'	75:AR:3057:U:OP1	2.10	0.70
58:sR:1067:C:H5''	64:s1:150:VAL:HG12	1.73	0.70
25:l:341:SER:OG	75:1:514:G:N3	2.24	0.70
48:CR:24:VAL:HG12	48:CR:86:LYS:HG2	1.72	0.70
52:p0:89:THR:HG22	52:p0:91:GLU:H	1.56	0.70
55:i:113:ASP:OD1	55:i:113:ASP:N	2.22	0.70
75:AR:549:U:H2'	75:AR:550:A:C8	2.27	0.70
75:AR:939:U:OP2	2:DC:26:ARG:NH2	2.25	0.70
58:sR:654:C:H2'	58:sR:655:G:H8	1.55	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:I:99:LEU:O	12:I:112:ARG:NH2	2.24	0.70
61:s0:76:ILE:HD13	61:s0:98:ILE:HB	1.72	0.70
65:d8:60:GLU:HG2	65:d8:61:ARG:H	1.56	0.70
3:CJ:190:VAL:HB	3:CJ:192:GLN:HG2	1.74	0.70
65:d:54:LEU:HD11	77:G:162:VAL:O	1.92	0.70
55:i:31:SER:OG	75:1:2667:A:OP1	2.10	0.70
58:sR:1203:A:OP2	80:sR:2052:OHX:N1	2.24	0.70
58:sR:1600:A:H4'	58:sR:1601:G:OP1	1.92	0.70
60:2:86:GLU:OE1	60:2:88:ARG:NH1	2.24	0.70
59:d6:49:ALA:HB1	59:d6:53:LEU:HD21	1.74	0.70
24:K:56:ALA:HA	24:K:59:LEU:HD13	1.72	0.70
32:DH:9:VAL:HG22	32:DH:100:ILE:HB	1.73	0.70
15:CL:23:ASN:C	15:CL:24:ARG:HD3	2.17	0.70
58:A:567:A:H1'	71:f:14:VAL:HG13	1.74	0.70
51:y:11:LYS:HD3	51:y:11:LYS:H	1.56	0.70
72:CZ:39:LYS:HD3	72:CZ:39:LYS:H	1.57	0.70
75:1:1171:G:O6	80:1:4083:OHX:N6	2.25	0.70
75:1:2261:G:O2'	75:1:2263:C:N4	2.24	0.70
3:p:97:TYR:HD2	3:p:200:LEU:HD21	1.57	0.69
58:A:1535:U:O2'	58:A:1536:G:N3	2.21	0.69
77:G:63:GLN:HG3	77:G:88:PRO:HA	1.74	0.69
6:H:136:LYS:HG3	6:H:173:PRO:HB2	1.72	0.69
39:v:73:ARG:O	39:v:75:VAL:HG22	1.92	0.69
43:CI:118:LYS:HG3	43:CI:191:VAL:HG21	1.72	0.69
75:1:2112:U:H4'	75:1:2113:A:H5'	1.73	0.69
3:CJ:82:LEU:HD13	3:CJ:86:THR:HB	1.72	0.69
21:CM:28:ASP:OD1	21:CM:32:ARG:NH1	2.23	0.69
30:c0:22:VAL:HG11	70:s3:76:ARG:HB2	1.74	0.69
31:m:110:LEU:H	31:m:110:LEU:HD12	1.56	0.69
39:CP:125:SER:HB3	75:AR:2433:U:H1'	1.74	0.69
9:q:188:THR:HG22	9:q:191:LEU:HD23	1.73	0.69
62:c:67:THR:HG21	62:c:70:LYS:O	1.92	0.69
41:d1:79:LEU:HD11	61:s0:55:GLU:HB3	1.74	0.69
46:d2:73:GLY:HA3	46:d2:128:PHE:CE1	2.28	0.69
75:AR:196:G:N7	80:AR:3475:OHX:N3	2.39	0.69
75:AR:510:G:O6	80:AR:3450:OHX:N2	2.26	0.69
75:AR:1949:G:H1	75:AR:2097:U:H3	1.40	0.69
56:d5:90:LYS:HD2	56:d5:91:PRO:HD2	1.74	0.69
24:K:48:GLN:O	24:K:52:ILE:HG12	1.92	0.69
75:1:2233:A:OP2	80:1:3633:OHX:N4	2.26	0.69
75:1:3035:A:OP2	80:1:4180:OHX:N3	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:3343:G:H21	75:1:3362:A:H2	1.40	0.69
4:DJ:7:TYR:HA	4:DJ:10:ARG:HD2	1.74	0.69
17:S:2:GLY:N	58:A:1414:U:OP2	2.25	0.69
36:c1:37:ASN:HA	36:c1:44:THR:HG21	1.73	0.69
58:A:1292:G:H21	61:B:111:ILE:HD11	1.57	0.69
61:B:28:ASN:HA	61:B:46:HIS:CE1	2.26	0.69
73:F:123:LEU:HB3	73:F:159:THR:HG22	1.74	0.69
79:DB:59:ALA:O	79:DB:61:LYS:N	2.22	0.69
59:d6:53:LEU:HD22	59:d6:53:LEU:H	1.57	0.69
18:J:168:CYS:HB3	18:J:184:LEU:HD21	1.74	0.69
14:DE:14:LEU:HA	14:DE:17:VAL:HG23	1.74	0.69
20:DF:80:ASN:HD21	20:DF:85:ALA:HB3	1.58	0.69
75:1:1887:A:OP1	80:1:3665:OHX:N2	2.25	0.69
3:CJ:129:PRO:HB3	75:AR:121:A:C2	2.27	0.69
48:CR:18:ARG:NH2	48:CR:147:GLU:OE1	2.24	0.69
54:CT:46:LYS:HE2	75:AR:1765:U:C5	2.27	0.69
58:A:1239:U:O4	80:A:2149:OHX:N6	2.26	0.69
29:c9:117:SER:OG	29:c9:118:PRO:O	2.09	0.69
70:E:115:ILE:HD11	70:E:138:VAL:HG11	1.73	0.69
58:sR:992:A:OP1	80:sR:2097:OHX:N5	2.25	0.69
25:CF:138:ARG:HG2	25:CF:138:ARG:NH1	2.08	0.69
2:AB:21:ARG:NH2	75:1:640:U:OP1	2.25	0.69
7:4:150:G:OP1	72:8:27:ARG:NH2	2.25	0.69
16:DL:56:ARG:NH2	75:AR:363:G:OP2	2.26	0.69
21:CM:81:GLU:OE2	21:CM:89:TYR:OH	2.09	0.69
29:U:144:GLU:N	29:U:144:GLU:OE1	2.25	0.69
36:c1:132:SER:OG	58:sR:325:G:OP1	2.11	0.69
4:AI:85:THR:HG22	4:AI:88:LEU:HD12	1.73	0.69
48:CR:132:ALA:O	48:CR:135:ARG:NH1	2.26	0.69
53:Z:132:ARG:HG3	53:Z:135:ASP:HB3	1.74	0.69
75:AR:1145:G:OP1	26:DG:44:ARG:NH1	2.22	0.69
78:h:256:THR:HG23	78:h:260:ILE:HA	1.74	0.69
58:sR:1518:C:OP2	80:sR:2191:OHX:N4	2.25	0.69
7:AT:124:G:OP2	80:AT:206:OHX:N2	2.26	0.69
12:I:129:LEU:CD1	12:I:172:VAL:HG11	2.22	0.69
13:CD:118:GLU:HG3	13:CD:126:LEU:HD21	1.74	0.69
75:1:1064:A:H4'	75:1:1065:A:O5'	1.91	0.69
75:1:1134:G:N7	80:1:3846:OHX:N5	2.40	0.69
6:s6:26:VAL:HG11	6:s6:40:ALA:HB1	1.75	0.69
17:S:75:GLU:HA	17:S:78:ARG:HH12	1.57	0.69
18:s8:32:GLN:HE21	58:sR:1727:G:H21	1.39	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:Z:88:THR:HA	53:Z:91:LEU:HD13	1.74	0.69
56:a:61:SER:HG	56:a:63:SER:HG	1.39	0.69
58:A:1588:G:H1	58:A:1608:U:H3	1.40	0.69
67:D:108:ASN:O	67:D:141:ARG:NH2	2.24	0.69
51:y:12:ARG:NH2	75:1:973:A:OP2	2.26	0.69
75:AR:297:G:OP2	75:AR:297:G:N2	2.25	0.69
75:AR:1236:G:N2	75:AR:1244:A:OP1	2.26	0.69
75:AR:1887:A:OP2	80:AR:3881:OHX:N5	2.25	0.69
77:G:94:THR:HG22	77:G:114:ILE:HG12	1.75	0.69
67:s2:165:VAL:HG11	67:s2:210:THR:HG22	1.74	0.69
68:d9:33:LYS:O	68:d9:36:LEU:HD12	1.92	0.69
36:M:37:ASN:HD22	36:M:44:THR:HG23	1.57	0.69
73:s4:18:TRP:HH2	73:s4:31:PRO:HD3	1.56	0.69
75:1:2822:U:OP2	80:1:3421:OHX:N2	2.25	0.69
9:CK:49:ASN:OD1	9:CK:52:LEU:N	2.25	0.69
44:CQ:164:SER:HG	75:AR:3181:C:HO2'	1.35	0.69
45:DQ:15:LYS:HA	45:DQ:18:ARG:CG	2.23	0.69
58:A:1280:C:H2'	58:A:1281:G:C8	2.28	0.69
23:c8:29:VAL:HG21	23:c8:44:ASN:HD22	1.56	0.69
72:CZ:131:ASP:HB3	72:CZ:134:ASP:HB2	1.72	0.69
80:AR:3603:OHX:N3	43:CI:217:PRO:O	2.26	0.69
58:sR:986:G:OP2	80:sR:1947:OHX:N2	2.26	0.69
60:2:128:LEU:N	75:1:1095:U:O2	2.25	0.69
61:s0:139:VAL:HG13	61:s0:141:ILE:HG12	1.74	0.69
75:1:2771:U:O2'	75:1:2772:C:H4'	1.92	0.69
5:Q:61:ARG:NH2	5:Q:88:GLU:OE1	2.25	0.69
20:AE:23:VAL:O	20:AE:28:ARG:NH1	2.26	0.69
20:AE:55:LEU:HB2	20:AE:95:PRO:HD3	1.75	0.69
25:l:125:ALA:HB1	25:l:238:LEU:HB3	1.74	0.69
26:AF:19:ARG:HD2	26:AF:33:ARG:HB2	1.74	0.69
37:n:31:ARG:NH2	37:n:81:ALA:O	2.26	0.69
39:CP:91:GLU:OE2	80:AR:3597:OHX:N1	2.25	0.69
9:q:90:MET:HG3	9:q:181:VAL:HA	1.74	0.69
53:Z:8:ARG:HB2	53:Z:26:ASP:HB3	1.75	0.69
53:Z:131:ARG:NH1	53:Z:131:ARG:HB3	2.08	0.69
58:A:488:G:N7	58:A:498:G:N2	2.41	0.69
58:A:523:G:O6	80:A:2005:OHX:N1	2.26	0.69
58:A:1150:G:H2'	58:A:1768:G:H21	1.58	0.69
59:b:74:CYS:O	59:b:76:SER:N	2.25	0.69
23:c8:67:GLU:HA	23:c8:70:VAL:HG23	1.73	0.69
61:B:9:LEU:HD23	61:B:54:TRP:CD2	2.28	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:c9:122:ARG:HH21	58:sR:1499:G:H5''	1.56	0.69
33:u:92:GLU:OE2	33:u:92:GLU:N	2.21	0.69
40:AO:13:LEU:HD11	40:AO:17:ARG:CZ	2.22	0.69
75:AR:2429:G:OP2	80:AR:4138:OHX:N5	2.26	0.69
75:AR:2718:U:OP2	80:AR:4046:OHX:N2	2.26	0.69
78:h:110:VAL:HA	78:h:126:SER:HB2	1.74	0.69
6:H:98:ARG:HG3	6:H:99:GLY:H	1.58	0.69
58:sR:595:G:OP2	80:sR:2063:OHX:N3	2.26	0.69
12:I:67:LEU:HD12	12:I:71:HIS:NE2	2.07	0.69
78:Rb:93:ASP:HB3	78:Rb:96:THR:HG22	1.74	0.69
75:1:1298:C:OP2	80:1:4056:OHX:N5	2.26	0.69
75:1:2395:G:N7	86:1:4206:HOH:O	2.24	0.69
75:1:2960:C:H2'	75:1:2961:G:H8	1.57	0.69
75:1:3375:A:O2'	75:1:3378:C:OP2	2.10	0.69
11:R:113:ASP:OD2	11:R:116:LEU:N	2.25	0.69
41:W:71:ARG:HA	41:W:83:TRP:CE3	2.28	0.69
46:X:7:LEU:HD21	46:X:11:LEU:HD12	1.75	0.69
11:c6:101:SER:HA	11:c6:104:GLU:HG2	1.74	0.69
58:A:513:U:H4'	24:K:131:GLN:HB3	1.73	0.69
58:A:856:A:N6	12:I:96:ARG:HB3	2.08	0.69
55:i:84:LYS:HZ3	55:i:86:ASN:HB2	1.57	0.69
73:F:159:THR:OG1	73:F:227:VAL:O	2.11	0.69
75:AR:2108:C:H1'	75:AR:3344:A:C8	2.27	0.69
75:AR:3276:G:OP2	37:CH:48:ARG:NH1	2.26	0.69
79:DB:46:ILE:HD13	79:DB:68:ILE:HG23	1.75	0.69
58:sR:486:G:N2	58:sR:501:U:H3	1.90	0.69
58:sR:918:U:H2'	58:sR:919:A:H8	1.58	0.69
78:Rb:9:LEU:HD13	78:Rb:314:GLN:HE21	1.57	0.69
78:Rb:21:THR:HG21	78:Rb:68:VAL:O	1.93	0.69
78:Rb:69:GLN:N	78:Rb:83:ALA:O	2.26	0.69
42:O:54:LEU:HD13	42:O:60:VAL:HG21	1.75	0.69
79:AA:88:ASP:CB	79:AA:121:ARG:HH22	2.03	0.69
75:1:129:U:O4	80:1:3842:OHX:N5	2.26	0.69
75:1:367:A:OP1	80:1:3661:OHX:N2	2.25	0.69
75:1:1414:G:N7	80:1:3753:OHX:N2	2.40	0.69
75:1:3074:G:O6	80:1:3843:OHX:N4	2.26	0.69
9:CK:20:ILE:HG12	9:CK:25:VAL:HG22	1.75	0.69
45:DQ:35:LEU:HG	45:DQ:36:PHE:N	2.06	0.69
56:a:43:ASP:HB3	56:a:46:LYS:HD3	1.75	0.69
56:a:90:LYS:HB3	56:a:102:THR:HG23	1.75	0.69
58:A:45:U:O2'	58:A:46:A:H2'	1.93	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:420:A:OP1	6:H:96:SER:OG	2.11	0.69
58:A:1130:G:OP2	80:A:1906:OHX:N2	2.26	0.69
23:c8:108:LYS:HA	23:c8:111:ASP:HB2	1.73	0.69
63:CW:43:VAL:HG11	63:CW:50:LEU:HA	1.74	0.69
66:CX:62:VAL:HG23	66:CX:74:MET:HE1	1.75	0.69
70:E:92:GLN:N	70:E:92:GLN:OE1	2.25	0.69
73:F:240:LYS:H	73:F:240:LYS:CD	2.05	0.69
75:AR:408:A:OP1	80:AR:3485:OHX:N6	2.25	0.69
75:1:2974:U:O4	80:1:3574:OHX:N6	2.26	0.69
12:s7:26:GLU:CD	12:s7:27:LEU:H	2.01	0.68
23:T:31:ALA:H	23:T:32:LEU:HD23	1.58	0.68
39:CP:110:ALA:HB1	39:CP:113:LEU:HD23	1.74	0.68
50:Y:93:LEU:HD21	71:f:8:LEU:HD22	1.75	0.68
53:d4:8:ARG:HD2	53:d4:28:LEU:HD11	1.73	0.68
58:sR:1611:A:OP1	77:s5:107:LYS:NZ	2.23	0.68
77:s5:32:GLU:OE2	77:s5:32:GLU:N	2.22	0.68
18:s8:187:GLU:HA	18:s8:190:ALA:HB3	1.75	0.68
35:V:96:PRO:HD2	35:V:99:ILE:HD11	1.75	0.68
39:CP:39:ALA:HB3	39:CP:61:ILE:HG22	1.74	0.68
44:CQ:8:VAL:HG12	44:CQ:34:VAL:HG22	1.74	0.68
3:p:86:THR:HG21	3:p:217:THR:HG21	1.74	0.68
22:AL:31:LEU:HD11	22:AL:35:GLY:O	1.93	0.68
58:A:126:A:H2'	6:H:194:LYS:HE3	1.74	0.68
58:A:550:A:OP2	80:A:2072:OHX:N2	2.26	0.68
61:B:146:LEU:HD11	61:B:173:ILE:CD1	2.23	0.68
75:AR:900:G:H1'	75:AR:1589:A:N6	2.08	0.68
75:AR:964:G:OP1	80:AR:3791:OHX:N1	2.27	0.68
75:AR:2427:U:OP1	80:AR:3511:OHX:N2	2.26	0.68
75:AR:2941:A:N7	19:CE:256:HIS:HE1	1.91	0.68
58:sR:1533:C:H4'	58:sR:1539:G:H1	1.56	0.68
63:5:95:PHE:HD1	63:5:96:VAL:N	1.91	0.68
18:J:8:ARG:HD3	18:J:20:GLN:HA	1.75	0.68
67:s2:226:THR:OG1	67:s2:228:ASN:OD1	2.08	0.68
5:Q:44:ARG:HD2	5:Q:84:ILE:HD11	1.75	0.68
25:l:332:LYS:NZ	75:1:599:C:OP1	2.23	0.68
27:CN:50:PRO:HB3	27:CN:138:VAL:O	1.93	0.68
29:U:109:GLU:HB2	29:U:114:VAL:HG13	1.75	0.68
42:c3:110:ASP:OD1	42:c3:114:ARG:NH2	2.25	0.68
52:p0:93:LEU:HD12	52:p0:94:THR:H	1.58	0.68
53:Z:18:LEU:HA	53:Z:85:PHE:CE2	2.28	0.68
15:r:36:LEU:HD11	15:r:69:ARG:HD2	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:r:115:MET:HE1	75:1:1129:A:N6	2.09	0.68
22:AL:9:LYS:HD2	22:AL:9:LYS:H	1.58	0.68
58:A:73:U:O2'	58:A:74:U:O5'	2.10	0.68
58:A:1235:C:H5'	74:g:146:SER:HA	1.76	0.68
58:A:1795:U:H4'	59:b:84:VAL:HG23	1.75	0.68
64:s1:207:LEU:O	64:s1:210:ILE:HD11	1.93	0.68
65:d8:49:ARG:N	65:d8:52:ASP:OD2	2.26	0.68
29:U:122:ARG:NH1	58:A:1499:G:OP1	2.26	0.68
52:p0:33:VAL:HG21	52:p0:185:LEU:HB3	1.76	0.68
58:A:6:G:N7	67:D:205:ARG:NH2	2.41	0.68
58:A:1474:G:H2'	58:A:1475:A:C8	2.27	0.68
78:h:127:ARG:HG2	78:h:150:TRP:CE2	2.28	0.68
58:sR:563:U:H4'	71:e0:17:GLN:NE2	2.08	0.68
58:sR:1757:G:O6	80:sR:2013:OHX:N6	2.26	0.68
56:d5:61:SER:H	56:d5:64:VAL:HG12	1.59	0.68
39:v:114:ARG:HG2	39:v:137:PRO:HG3	1.74	0.68
19:k:252:ILE:HD11	19:k:266:ARG:CZ	2.23	0.68
32:AG:54:ARG:NH2	75:1:3278:C:OP1	2.26	0.68
37:n:97:ASN:OD1	37:n:99:GLU:HG2	1.93	0.68
9:q:20:ILE:HG12	9:q:25:VAL:HG22	1.76	0.68
58:A:393:C:OP2	18:J:2:GLY:N	2.26	0.68
58:A:579:A:N6	70:E:143:ARG:HH21	1.92	0.68
75:AR:118:U:O2	75:AR:121:A:H5'	1.93	0.68
53:d4:109:LYS:O	53:d4:113:ASN:ND2	2.26	0.68
58:sR:800:U:H2'	58:sR:801:G:H8	1.59	0.68
66:6:93:LEU:HD23	69:7:20:LEU:HD13	1.76	0.68
77:s5:64:VAL:HG13	77:s5:65:ARG:HH11	1.56	0.68
75:1:3151:U:H4'	75:1:3294:A:H1'	1.76	0.68
7:4:85:G:N1	76:9:112:ASP:OD2	2.22	0.68
13:j:20:THR:HA	13:j:23:ARG:HD2	1.74	0.68
34:DO:99:CYS:HB2	34:DO:114:LYS:HD2	1.74	0.68
15:r:72:ALA:HB2	15:r:155:ALA:HB2	1.76	0.68
54:CT:105:LEU:HD13	54:CT:138:LEU:HD22	1.74	0.68
55:sM:65:THR:HA	55:sM:70:ASN:HD22	1.59	0.68
59:b:84:VAL:HG13	59:b:85:ARG:H	1.58	0.68
23:c8:41:ARG:NH2	29:c9:36:ILE:O	2.27	0.68
63:CW:22:PRO:HB2	63:CW:28:PHE:HB2	1.74	0.68
64:C:217:LEU:HG	64:C:218:LEU:H	1.58	0.68
80:w:201:OHX:N6	75:1:2384:A:OP1	2.26	0.68
46:d2:25:VAL:HG23	46:d2:65:LEU:HD11	1.76	0.68
6:H:160:ARG:NH1	6:H:171:LYS:HE2	2.09	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:729:G:O2'	58:sR:730:G:O5'	2.11	0.68
2:DC:138:ILE:HD11	2:DC:145:VAL:HG12	1.75	0.68
70:s3:168:ILE:HG13	70:s3:189:MET:HG3	1.75	0.68
75:1:1245:A:N6	75:1:1272:C:O2'	2.26	0.68
7:4:41:A:O2'	16:AK:59:THR:HG22	1.94	0.68
10:DK:90:MET:O	10:DK:94:ILE:HG22	1.93	0.68
11:R:57:LEU:HD23	11:R:57:LEU:H	1.58	0.68
19:k:76:VAL:HG12	19:k:325:LYS:HA	1.76	0.68
19:k:345:ASN:HD21	19:k:347:SER:HB3	1.57	0.68
47:c4:34:SER:HB2	64:s1:66:VAL:HA	1.76	0.68
58:A:140:A:H4'	6:H:179:VAL:HG21	1.76	0.68
75:AR:415:G:OP2	80:AR:3926:OHX:N4	2.26	0.68
75:AR:1554:U:H4'	75:AR:1555:U:H5'	1.74	0.68
75:AR:1633:C:OP1	79:DB:69:LYS:NZ	2.24	0.68
78:h:205:SER:HB3	78:h:210:LEU:HB2	1.76	0.68
43:CI:44:ILE:HG12	43:CI:180:SER:HB3	1.74	0.68
5:Q:43:ARG:NH2	58:A:1552:U:OP2	2.26	0.68
10:DK:82:ARG:HD3	75:AR:295:A:H1'	1.73	0.68
14:AD:26:GLY:O	14:AD:30:THR:OG1	2.07	0.68
28:DN:9:ILE:O	28:DN:13:MET:HG3	1.94	0.68
53:Z:18:LEU:HA	53:Z:85:PHE:HE2	1.59	0.68
58:A:364:G:OP1	80:A:1994:OHX:N3	2.26	0.68
58:A:647:G:H22	58:A:687:G:H1	1.42	0.68
58:A:838:G:N7	80:A:1915:OHX:N3	2.42	0.68
75:AR:1634:G:N7	79:DB:17:ARG:NH1	2.41	0.68
75:AR:2687:G:N7	80:AR:3504:OHX:N1	2.42	0.68
75:AR:3155:U:N3	86:AR:4305:HOH:O	2.26	0.68
6:H:98:ARG:HE	6:H:106:LEU:HD21	1.58	0.68
18:J:48:THR:HG21	18:J:54:LYS:HE2	1.74	0.68
19:CE:29:VAL:HG22	19:CE:218:ILE:HD12	1.75	0.68
73:s4:181:VAL:HG12	73:s4:227:VAL:HA	1.75	0.68
17:S:16:LEU:HD12	17:S:17:ILE:N	2.09	0.68
21:CM:15:GLU:OE1	21:CM:132:ASN:ND2	2.26	0.68
24:s9:77:ILE:HG23	24:s9:86:LEU:HD23	1.76	0.68
26:AF:105:ARG:NH2	75:1:1412:G:OP1	2.27	0.68
58:sR:567:A:H1'	71:e0:14:VAL:HG13	1.75	0.68
58:sR:1557:U:OP2	58:sR:1559:A:O2'	2.11	0.68
78:Rb:5:GLU:HA	78:Rb:317:THR:HA	1.75	0.68
61:s0:10:THR:O	61:s0:13:ASP:N	2.25	0.68
25:CF:26:PHE:CD2	25:CF:130:ALA:HB2	2.26	0.68
70:s3:48:VAL:HG13	70:s3:86:LEU:HG	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:AA:38:PHE:O	79:AA:40:HIS:ND1	2.27	0.68
77:s5:35:GLN:HA	77:s5:38:THR:HG22	1.76	0.68
24:s9:64:GLU:N	24:s9:64:GLU:OE1	2.26	0.68
39:CP:172:ARG:NH2	75:AR:63:A:OP1	2.26	0.68
9:q:49:ASN:O	9:q:51:GLN:N	2.25	0.68
54:CT:104:ARG:NH1	75:AR:1949:G:OP1	2.27	0.68
58:A:389:G:O2'	80:A:1904:OHX:N5	2.26	0.68
58:A:706:A:N1	58:A:734:A:N6	2.42	0.68
59:b:79:ILE:HG12	59:b:84:VAL:HG21	1.76	0.68
75:AR:1114:U:OP2	80:AR:3791:OHX:N2	2.27	0.68
18:s8:36:THR:HG22	18:s8:57:ALA:O	1.93	0.67
26:AF:63:THR:HA	26:AF:66:LEU:HD22	1.76	0.67
31:m:238:ASP:O	31:m:242:SER:HB3	1.94	0.67
3:p:206:GLU:N	3:p:206:GLU:OE2	2.27	0.67
50:Y:75:GLN:HG3	50:Y:82:LYS:HG3	1.76	0.67
51:CS:175:ALA:O	2:DC:51:GLY:HA2	1.94	0.67
54:CT:110:ARG:HH11	54:CT:110:ARG:HG2	1.58	0.67
58:A:69:G:H1	58:A:82:U:H3	1.40	0.67
79:DB:104:PRO:HA	79:DB:107:ARG:HD3	1.75	0.67
73:s4:241:GLY:O	73:s4:244:ILE:HG12	1.94	0.67
3:CJ:109:LEU:HA	3:CJ:112:GLU:HG3	1.76	0.67
24:s9:158:PHE:HE2	24:s9:164:PHE:HD2	1.41	0.67
32:AG:107:ILE:O	37:n:31:ARG:NH1	2.27	0.67
5:c5:126:VAL:O	5:c5:128:HIS:N	2.27	0.67
51:CS:37:ALA:O	51:CS:46:LYS:NZ	2.27	0.67
57:CU:42:TRP:O	57:CU:46:GLN:HG3	1.95	0.67
58:A:575:C:H5'	55:i:102:THR:HG21	1.74	0.67
58:A:1291:G:H22	58:A:1324:G:H22	1.42	0.67
61:B:76:ILE:HG13	61:B:98:ILE:HB	1.74	0.67
75:AR:2404:A:N7	75:AR:2872:A:N6	2.43	0.67
75:AR:3301:U:O4	80:AR:3753:OHX:N3	2.27	0.67
77:G:146:THR:HG21	77:G:220:VAL:HG23	1.76	0.67
13:CD:109:GLU:N	13:CD:109:GLU:OE2	2.27	0.67
75:1:1317:A:OP1	86:1:4201:HOH:O	2.12	0.67
8:AC:50:THR:OG1	75:1:1072:G:N2	2.26	0.67
18:s8:2:GLY:N	58:sR:393:C:OP2	2.27	0.67
20:AE:55:LEU:HG	20:AE:93:VAL:HG12	1.76	0.67
23:T:135:GLY:HA3	58:A:1559:A:H5''	1.74	0.67
49:DR:56:THR:HG23	49:DR:63:THR:HG22	1.76	0.67
50:Y:92:CYS:HA	50:Y:95:PHE:HD2	1.59	0.67
61:B:20:ALA:O	61:B:21:ASN:ND2	2.27	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:E:212:LYS:HB3	70:E:213:GLU:HG3	1.76	0.67
77:G:125:THR:HG22	77:G:127:GLN:HB2	1.74	0.67
78:Rb:16:HIS:CE1	78:Rb:43:ILE:HG12	2.29	0.67
79:AA:55:LYS:NZ	75:1:2565:U:O4	2.23	0.67
75:1:275:U:O4	80:1:3450:OHX:N5	2.27	0.67
21:CM:105:GLY:HA3	75:AR:2674:A:H5''	1.75	0.67
27:CN:192:GLU:N	27:CN:192:GLU:OE1	2.26	0.67
21:s:105:GLY:HA3	75:1:2674:A:H5''	1.77	0.67
58:A:734:A:H5''	58:A:735:C:OP1	1.93	0.67
49:AQ:37:TYR:HB2	49:AQ:47:VAL:HG13	1.76	0.67
75:AR:764:U:O4	80:AR:3921:OHX:N4	2.27	0.67
75:AR:1160:C:OP1	80:AR:3636:OHX:N1	2.27	0.67
75:AR:1662:G:O6	80:AR:3535:OHX:N1	2.27	0.67
53:d4:57:VAL:HG22	53:d4:60:PHE:HE1	1.60	0.67
58:sR:1240:U:O4	80:sR:1991:OHX:N2	2.28	0.67
78:Rb:199:ILE:HA	78:Rb:215:GLY:HA2	1.76	0.67
62:d7:31:TYR:OH	62:d7:70:LYS:NZ	2.27	0.67
19:CE:218:ILE:HG12	19:CE:276:THR:HG23	1.76	0.67
75:1:2371:G:O6	80:1:3570:OHX:N4	2.27	0.67
3:CJ:161:GLU:HA	3:CJ:164:VAL:HG22	1.77	0.67
11:c6:142:TYR:O	58:sR:1191:U:O2'	2.12	0.67
56:a:81:ARG:CD	56:a:84:GLU:HG3	2.24	0.67
21:s:49:LYS:HB3	21:s:62:ASN:HA	1.76	0.67
58:A:140:A:OP2	6:H:187:LYS:NZ	2.25	0.67
58:A:290:G:O6	80:A:2057:OHX:N6	2.28	0.67
58:A:1653:C:OP2	80:A:1986:OHX:N6	2.28	0.67
75:AR:357:A:H1'	25:CF:80:GLY:HA3	1.75	0.67
77:G:215:ASP:HA	77:G:218:GLU:HG3	1.76	0.67
78:h:42:LEU:HB2	78:h:61:PHE:HB2	1.77	0.67
78:h:70:ASP:OD2	78:h:112:SER:OG	2.09	0.67
78:h:302:PHE:HA	78:h:312:VAL:HG12	1.74	0.67
79:DB:22:LYS:NZ	79:DB:132:SER:O	2.25	0.67
6:H:163:THR:HA	6:H:167:LYS:O	1.93	0.67
24:K:133:HIS:HD2	24:K:162:SER:HB2	1.60	0.67
64:s1:103:MET:HB3	64:s1:215:VAL:HG12	1.77	0.67
64:s1:113:MET:HB3	64:s1:142:PHE:CE2	2.29	0.67
77:s5:51:VAL:HG21	77:s5:128:ASN:ND2	2.10	0.67
10:DK:37:THR:HA	10:DK:40:VAL:HG22	1.76	0.67
25:l:145:ILE:HD11	25:l:150:LEU:HD22	1.77	0.67
29:U:93:HIS:HB2	58:A:1525:A:H5'	1.76	0.67
11:c6:12:LYS:NZ	58:sR:1380:U:OP1	2.27	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:c6:59:LYS:HD2	11:c6:59:LYS:H	1.60	0.67
58:A:1167:G:O3'	80:A:1984:OHX:N6	2.28	0.67
23:c8:52:VAL:HG21	23:c8:69:ILE:HD11	1.75	0.67
67:D:170:ILE:HB	67:D:197:TYR:HB2	1.77	0.67
68:e:19:ARG:HD3	68:e:32:ARG:HD3	1.75	0.67
58:sR:315:A:O2'	80:sR:2017:OHX:N1	2.28	0.67
78:Rb:305:TYR:HE2	78:Rb:311:ARG:CD	2.07	0.67
20:DF:41:LYS:HE3	20:DF:47:ASP:HA	1.77	0.67
43:CI:33:ARG:HH11	43:CI:33:ARG:HG2	1.60	0.67
14:AD:40:LYS:NZ	14:AD:93:LEU:O	2.28	0.67
5:c5:51:SER:OG	5:c5:52:LYS:N	2.24	0.67
5:c5:83:MET:HE3	5:c5:84:ILE:H	1.59	0.67
16:AK:17:THR:HG22	16:AK:18:LEU:H	1.59	0.67
58:A:267:U:OP1	6:H:183:ARG:NE	2.26	0.67
23:c8:40:ARG:HB2	29:c9:45:MET:HE1	1.75	0.67
72:CZ:92:LYS:NZ	75:AR:1831:U:OP2	2.25	0.67
75:AR:3066:U:O4	80:AR:3578:OHX:N6	2.28	0.67
75:AR:3375:A:O2'	75:AR:3378:C:OP2	2.11	0.67
77:G:90:ILE:O	77:G:94:THR:HG23	1.94	0.67
53:d4:10:ARG:NH2	58:sR:778:G:N7	2.39	0.67
1:AS:45:A:OP1	31:CG:151:GLN:NE2	2.26	0.67
65:d8:25:VAL:HG23	65:d8:44:VAL:O	1.93	0.67
20:DF:81:GLU:HB2	20:DF:82:GLU:HG3	1.75	0.67
77:s5:158:GLN:HG2	77:s5:225:ARG:HA	1.76	0.67
75:1:1819:U:O4	80:1:3603:OHX:N1	2.28	0.67
75:1:2712:U:HO2'	75:1:2743:A:HO2'	1.37	0.67
9:CK:22:SER:OG	9:CK:39:LYS:NZ	2.28	0.67
17:S:110:VAL:O	17:S:114:GLY:N	2.27	0.67
18:s8:141:ARG:HG2	18:s8:142:LYS:HD3	1.76	0.67
41:W:82:VAL:HA	61:B:52:LYS:HD3	1.75	0.67
53:Z:57:VAL:HG13	53:Z:73:GLY:HA3	1.77	0.67
11:c6:29:ILE:HG23	11:c6:65:ILE:HD11	1.75	0.67
58:A:584:C:OP2	80:A:2072:OHX:N1	2.28	0.67
23:c8:49:LYS:NZ	29:c9:35:ASP:OD2	2.28	0.67
75:AR:1251:A:H2'	75:AR:1252:A:H8	1.59	0.67
78:h:170:ILE:HD12	78:h:170:ILE:O	1.95	0.67
58:sR:1207:C:H42	58:sR:1456:C:H5	1.40	0.67
12:I:67:LEU:HA	12:I:70:PHE:HB2	1.76	0.67
38:DI:98:GLN:HA	38:DI:101:VAL:HG22	1.76	0.67
75:1:1095:U:H4'	75:1:1096:U:H5''	1.76	0.67
5:Q:49:MET:HA	5:Q:52:LYS:HE3	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:k:303:LYS:HD2	19:k:361:THR:HG21	1.75	0.67
3:p:25:PRO:HD2	3:p:27:THR:HG22	1.76	0.67
15:r:38:LYS:HG2	15:r:41:ALA:HB2	1.77	0.67
56:a:46:LYS:HE3	56:a:70:LYS:HD2	1.77	0.67
61:B:57:LEU:HD21	61:B:173:ILE:HG23	1.77	0.67
75:AR:1752:A:OP2	80:AR:3577:OHX:N3	2.28	0.67
78:h:13:LEU:HB3	78:h:310:ILE:HG13	1.76	0.67
78:Rb:182:ASN:HB2	78:Rb:189:GLU:HG2	1.75	0.67
73:s4:242:LYS:HB2	73:s4:244:ILE:HD11	1.77	0.67
77:s5:51:VAL:O	77:s5:65:ARG:NH1	2.28	0.67
75:1:3128:G:OP2	80:1:3695:OHX:N5	2.28	0.67
22:DM:11:PHE:O	22:DM:14:LEU:HB2	1.94	0.67
43:o:173:LEU:HB3	43:o:178:ILE:HB	1.77	0.67
5:c5:90:ILE:HA	5:c5:107:ILE:HG22	1.77	0.67
53:Z:127:LYS:O	53:Z:131:ARG:HG3	1.94	0.67
56:a:81:ARG:HD3	56:a:84:GLU:HG3	1.75	0.67
67:D:56:ILE:HA	67:D:61:LEU:HD23	1.77	0.67
77:G:89:ILE:HD12	77:G:90:ILE:N	2.10	0.67
24:K:40:LYS:HA	24:K:43:TYR:CD2	2.30	0.67
25:CF:206:LEU:HD23	25:CF:226:GLU:HB2	1.77	0.67
70:s3:94:ARG:NH1	70:s3:125:TYR:OH	2.28	0.67
73:s4:143:ASP:OD2	73:s4:145:ARG:NH1	2.26	0.67
15:CL:72:ALA:O	15:CL:76:MET:HG2	1.96	0.66
24:s9:158:PHE:CD2	24:s9:164:PHE:HB3	2.29	0.66
38:AH:60:ARG:HG2	75:1:1593:A:H4'	1.76	0.66
41:W:3:ASN:HD21	41:W:7:GLN:HB3	1.61	0.66
43:o:206:LYS:HB3	75:1:1334:U:H5''	1.75	0.66
15:r:161:GLY:O	15:r:163:GLN:NE2	2.28	0.66
57:CU:71:LYS:O	57:CU:73:LYS:NZ	2.27	0.66
58:A:1290:U:H2'	58:A:1291:G:C8	2.30	0.66
75:AR:3157:U:H4'	75:AR:3158:G:H5'	1.77	0.66
77:G:130:ILE:HA	77:G:133:VAL:HG12	1.76	0.66
77:G:166:ARG:NH1	77:G:170:GLN:OE1	2.28	0.66
78:h:260:ILE:HD11	78:h:274:LEU:HD23	1.76	0.66
12:I:39:ARG:HG3	12:I:40:PRO:HD3	1.75	0.66
71:e0:20:LYS:H	71:e0:20:LYS:HD2	1.60	0.66
38:DI:104:VAL:HG22	38:DI:107:GLU:HB2	1.76	0.66
75:1:1918:C:OP2	80:1:3669:OHX:N4	2.28	0.66
12:s7:45:SER:HB3	12:s7:47:ARG:NH1	2.10	0.66
14:AD:16:LEU:HA	14:AD:19:LYS:NZ	2.10	0.66
21:CM:60:ARG:O	21:CM:63:GLU:HB2	1.95	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:s9:42:ILE:O	24:s9:46:SER:OG	2.12	0.66
25:l:156:LEU:HD12	25:l:159:ILE:HD12	1.78	0.66
56:a:71:ILE:HG12	56:a:76:ALA:HB2	1.77	0.66
58:A:513:U:H2'	58:A:514:G:C8	2.29	0.66
67:D:208:GLU:O	67:D:212:LYS:HG3	1.95	0.66
75:AR:92:G:H5'	75:AR:93:C:H5''	1.77	0.66
53:d4:133:ASN:OD1	53:d4:134:ALA:N	2.29	0.66
58:sR:827:C:H2'	58:sR:828:U:H6	1.60	0.66
64:s1:175:GLU:O	64:s1:187:LYS:NZ	2.27	0.66
72:8:90:ALA:O	72:8:120:LYS:NZ	2.18	0.66
79:AA:109:GLU:HA	79:AA:112:LYS:HG3	1.77	0.66
77:s5:205:SER:O	77:s5:206:SER:OG	2.11	0.66
6:s6:13:GLN:HE22	58:sR:151:G:H21	1.42	0.66
21:CM:53:THR:HG22	21:CM:61:ARG:H	1.60	0.66
24:s9:109:LEU:HB2	24:s9:146:PHE:HB3	1.76	0.66
4:AI:92:LEU:HB3	39:v:143:ARG:CZ	2.25	0.66
51:CS:158:HIS:H	51:CS:186:VAL:HG12	1.61	0.66
53:Z:84:LYS:HG3	53:Z:85:PHE:CD1	2.30	0.66
17:c7:21:TYR:HD2	17:c7:71:PHE:CG	2.14	0.66
58:A:1600:A:H4'	58:A:1601:G:OP1	1.93	0.66
23:c8:30:TYR:HE1	23:c8:40:ARG:HB3	1.59	0.66
61:B:120:LEU:HD12	61:B:121:VAL:H	1.59	0.66
64:C:158:SER:HA	64:C:161:ILE:HG12	1.77	0.66
73:F:118:GLU:HA	73:F:121:TYR:HE1	1.59	0.66
78:h:20:VAL:HA	78:h:37:SER:HB2	1.77	0.66
58:sR:1140:G:OP2	80:sR:2002:OHX:N6	2.28	0.66
58:sR:1282:U:OP1	80:sR:2136:OHX:N4	2.27	0.66
75:1:410:U:O4	80:1:3663:OHX:N2	2.29	0.66
9:CK:91:ARG:HD2	9:CK:143:GLU:HG3	1.77	0.66
9:CK:181:VAL:HG22	34:DO:89:TYR:OH	1.95	0.66
24:s9:149:ARG:HD2	24:s9:149:ARG:H	1.60	0.66
31:m:236:LEU:HA	31:m:239:ILE:HD12	1.78	0.66
16:AK:55:ARG:HD3	75:1:353:G:N7	2.10	0.66
58:A:164:A:H1'	6:H:13:GLN:HE21	1.59	0.66
58:A:732:G:H1'	58:A:734:A:N6	2.11	0.66
58:A:992:A:OP1	80:A:2101:OHX:N6	2.27	0.66
61:B:112:THR:HG23	61:B:115:PHE:HB2	1.78	0.66
70:E:162:GLN:OE1	70:E:165:ASN:HB2	1.96	0.66
76:DA:113:LYS:NZ	76:DA:114:ASP:OD1	2.22	0.66
78:h:260:ILE:HG13	78:h:274:LEU:HB2	1.77	0.66
75:1:1635:G:N2	75:1:1638:A:OP2	2.21	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:s6:177:ARG:NH2	58:sR:143:G:O6	2.29	0.66
17:S:40:THR:OG1	70:E:207:THR:O	2.14	0.66
24:s9:120:LYS:O	24:s9:120:LYS:HD2	1.95	0.66
29:U:101:ASN:HA	29:U:104:VAL:HG12	1.78	0.66
48:CR:67:ILE:HD11	75:AR:1447:G:H3'	1.78	0.66
22:AL:66:ILE:O	22:AL:69:LEU:HD22	1.94	0.66
65:d:40:ILE:HD11	65:d:62:GLU:OE1	1.95	0.66
46:d2:71:LYS:NZ	58:sR:1099:U:OP1	2.27	0.66
73:F:26:CYS:HB3	73:F:27:TYR:CE1	2.30	0.66
50:d3:90:ASP:CB	58:sR:568:G:H4'	2.26	0.66
75:AR:2187:G:OP2	80:AR:3539:OHX:N1	2.28	0.66
58:sR:699:U:O4	80:sR:2026:OHX:N1	2.29	0.66
58:sR:1018:U:OP1	80:sR:2135:OHX:N1	2.28	0.66
58:sR:1058:U:H4'	58:sR:1059:U:OP1	1.95	0.66
78:Rb:67:ILE:HG13	78:Rb:85:TRP:HE3	1.59	0.66
78:Rb:112:SER:OG	78:Rb:153:GLN:HA	1.95	0.66
61:s0:13:ASP:OD2	61:s0:191:ARG:NH2	2.28	0.66
61:s0:36:TYR:HB3	61:s0:48:ILE:HD11	1.76	0.66
73:s4:72:VAL:HG12	73:s4:77:ARG:HG3	1.77	0.66
75:1:2169:G:O6	80:1:3781:OHX:N3	2.29	0.66
75:1:2534:G:O6	80:1:3998:OHX:N4	2.28	0.66
50:Y:51:GLY:HA2	50:Y:77:ILE:HG23	1.78	0.66
15:r:56:GLU:HB3	15:r:58:GLU:HG2	1.77	0.66
58:A:793:A:H5'	58:A:794:U:C6	2.30	0.66
58:A:1175:U:H3	58:A:1464:G:H1	1.41	0.66
27:t:74:GLY:O	27:t:101:ARG:NH1	2.28	0.66
33:u:121:MET:HG3	75:1:3214:U:C4	2.31	0.66
64:C:135:LEU:HD12	64:C:217:LEU:HD22	1.75	0.66
74:g:108:VAL:HG22	74:g:109:ASP:H	1.60	0.66
77:G:143:ARG:HH22	77:G:218:GLU:HG2	1.61	0.66
78:h:90:ARG:NH2	78:h:102:ARG:HH21	1.93	0.66
58:sR:738:G:O6	80:sR:2026:OHX:N4	2.29	0.66
56:d5:42:LEU:HD22	56:d5:44:GLN:HG3	1.76	0.66
78:Rb:173:GLY:H	78:Rb:199:ILE:HD11	1.58	0.66
24:K:128:LEU:O	24:K:133:HIS:HB2	1.96	0.66
73:s4:62:LYS:HE3	73:s4:66:MET:HE3	1.77	0.66
75:1:528:U:H2'	75:1:529:A:C8	2.31	0.66
75:1:807:A:H61	75:1:934:G:H22	1.42	0.66
75:1:1142:G:O6	80:1:4173:OHX:N2	2.29	0.66
3:CJ:177:TYR:CE1	3:CJ:222:PHE:HB3	2.30	0.66
19:k:128:LYS:NZ	75:1:3150:A:O3'	2.28	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:l:220:ARG:HD2	75:1:211:A:OP1	1.95	0.66
37:n:8:LYS:O	75:1:1353:U:O2'	2.14	0.66
51:CS:100:THR:HB	51:CS:120:GLU:HB2	1.78	0.66
53:Z:47:VAL:HG23	53:Z:48:TYR:CD1	2.31	0.66
56:a:60:VAL:HG21	56:a:101:TYR:HB2	1.77	0.66
58:A:67:A:O2'	58:A:69:G:OP1	2.12	0.66
23:c8:20:THR:HG21	23:c8:35:ILE:HG23	1.77	0.66
75:AR:3019:U:O4	80:AR:4042:OHX:N6	2.29	0.66
75:AR:3348:G:H1	75:AR:3357:U:H3	1.43	0.66
1:AS:15:C:O3'	31:CG:8:LYS:NZ	2.29	0.66
58:sR:679:U:H2'	58:sR:680:U:C4'	2.26	0.66
12:I:14:THR:HG22	12:I:18:LEU:HD13	1.77	0.66
12:I:129:LEU:HD11	12:I:172:VAL:HG21	1.77	0.66
63:5:40:HIS:HA	63:5:47:VAL:HB	1.77	0.66
19:CE:10:ARG:NH2	19:CE:263:SER:O	2.28	0.66
75:1:1549:U:O4	80:1:3541:OHX:N3	2.28	0.66
12:s7:7:LYS:HE2	12:s7:7:LYS:HA	1.77	0.66
23:T:7:GLU:HG2	56:a:42:LEU:HD21	1.75	0.66
27:CN:158:ALA:HA	2:DC:97:GLU:HA	1.78	0.66
29:U:127:ASN:OD1	29:U:127:ASN:N	2.20	0.66
41:W:16:LYS:NZ	41:W:21:ASN:O	2.29	0.66
50:Y:62:LYS:NZ	58:A:1136:U:OP1	2.28	0.66
5:c5:106:GLU:N	5:c5:106:GLU:OE1	2.29	0.66
17:c7:28:PHE:CE1	17:c7:32:LYS:HE2	2.31	0.66
29:c9:115:GLU:OE2	29:c9:125:SER:HB3	1.96	0.66
45:AP:53:GLN:O	75:1:2802:A:N6	2.26	0.66
67:D:240:LEU:HD23	67:D:241:ASP:H	1.61	0.66
75:AR:1238:C:H2'	75:AR:1239:C:H6	1.61	0.66
57:0:161:LYS:HE2	57:0:161:LYS:HA	1.77	0.66
59:d6:40:ALA:HB3	59:d6:69:ASN:HB3	1.77	0.66
59:d6:53:LEU:HD22	59:d6:53:LEU:N	2.10	0.66
77:s5:113:ILE:HD11	77:s5:190:ILE:HG12	1.77	0.66
75:1:979:U:H4'	75:1:980:A:O5'	1.96	0.66
75:1:1094:U:O2'	75:1:1095:U:O5'	2.11	0.66
15:CL:193:ASP:OD2	15:CL:198:LYS:NZ	2.20	0.66
25:l:98:ARG:HG2	25:l:99:MET:O	1.96	0.66
52:p0:91:GLU:HB3	52:p0:92:PRO:HD2	1.78	0.66
58:A:324:U:OP1	36:M:133:LYS:NZ	2.26	0.66
34:AN:125:LYS:NZ	75:1:2898:G:N7	2.44	0.66
61:B:90:ALA:O	61:B:93:THR:OG1	2.14	0.66
58:sR:1040:G:H5''	61:s0:31:VAL:HG21	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:s0:115:PHE:HD1	61:s0:116:LYS:N	1.94	0.66
64:s1:208:GLN:OE1	64:s1:209:ASN:HB2	1.96	0.66
77:s5:37:GLN:HG2	77:s5:45:LYS:HE3	1.77	0.66
75:1:1573:G:N2	75:1:1574:C:O2'	2.28	0.66
7:4:39:G:O2'	80:4:228:OHX:N4	2.29	0.66
11:R:83:GLN:HG2	11:R:87:LYS:HE2	1.77	0.66
18:s8:56:ARG:HH22	58:sR:332:U:P	2.18	0.66
24:s9:124:HIS:CE1	24:s9:128:LEU:HD11	2.31	0.66
43:o:87:VAL:HG11	43:o:243:MET:HE1	1.78	0.66
53:Z:93:ARG:NH1	58:A:526:A:OP1	2.30	0.66
21:s:133:ARG:NH2	21:s:158:ASP:OD2	2.28	0.66
57:CU:26:ARG:NH1	25:CF:358:THR:O	2.28	0.66
58:A:422:G:OP1	80:A:1945:OHX:N6	2.29	0.66
75:AR:546:C:H5'	75:AR:547:G:H5'	1.78	0.66
58:sR:1050:G:N7	80:sR:2198:OHX:N6	2.43	0.66
12:I:134:GLU:HG3	42:O:21:ASN:HD21	1.60	0.66
78:Rb:9:LEU:HB2	78:Rb:314:GLN:H	1.60	0.66
64:s1:144:ARG:HB2	64:s1:208:GLN:HG2	1.76	0.66
31:CG:262:LYS:HD2	31:CG:262:LYS:H	1.61	0.66
75:1:2818:U:H5'	75:1:2818:U:H6	1.59	0.66
1:3:48:U:O4	31:m:58:LYS:HE2	1.96	0.65
3:CJ:56:VAL:O	3:CJ:60:ARG:HG3	1.96	0.65
10:DK:25:LYS:HB2	10:DK:28:TYR:HD2	1.61	0.65
27:CN:27:ASP:OD2	27:CN:31:LYS:NZ	2.28	0.65
29:U:126:GLU:OE1	80:U:202:OHX:N1	2.29	0.65
38:AH:24:LYS:NZ	75:1:1669:C:OP1	2.26	0.65
44:CQ:49:ARG:NH2	75:AR:1193:A:OP2	2.30	0.65
49:DR:66:GLY:HA2	13:CD:80:GLU:HG3	1.77	0.65
53:Z:87:PRO:HD2	53:Z:90:ARG:HH12	1.60	0.65
58:A:698:U:H2'	58:A:699:U:O4'	1.95	0.65
62:c:80:ARG:HB2	62:c:80:ARG:NH1	2.12	0.65
64:C:160:HIS:CD2	64:C:204:ILE:HD11	2.30	0.65
77:G:165:LEU:HA	77:G:168:VAL:HG12	1.78	0.65
53:d4:57:VAL:HG22	53:d4:60:PHE:CE1	2.31	0.65
57:0:155:ARG:HD3	57:0:172:TYR:CE1	2.31	0.65
58:sR:1524:A:H2'	58:sR:1525:A:C8	2.31	0.65
78:Rb:67:ILE:O	78:Rb:85:TRP:N	2.28	0.65
78:Rb:67:ILE:HB	78:Rb:85:TRP:HB2	1.76	0.65
78:Rb:122:ILE:O	78:Rb:134:TRP:HB2	1.95	0.65
78:Rb:251:TRP:HD1	78:Rb:264:SER:HB2	1.61	0.65
78:Rb:273:ASP:O	78:Rb:275:ARG:NH1	2.28	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:AA:93:LYS:HD3	79:AA:94:SER:H	1.61	0.65
75:1:901:G:N7	80:1:3483:OHX:N2	2.44	0.65
23:T:123:ARG:HG3	23:T:133:VAL:HG21	1.78	0.65
24:s9:9:SER:OG	58:sR:771:A:OP1	2.12	0.65
29:U:122:ARG:HH22	58:A:1500:C:P	2.18	0.65
30:c0:27:PHE:HD1	30:c0:40:LEU:HD23	1.61	0.65
45:DQ:102:GLN:CD	45:DQ:102:GLN:C	2.63	0.65
5:c5:124:THR:HG21	58:sR:1182:U:H4'	1.78	0.65
9:q:46:THR:HG23	9:q:54:LYS:HB2	1.78	0.65
15:r:86:HIS:HB3	15:r:139:ARG:HG2	1.79	0.65
58:A:835:U:OP1	80:A:2017:OHX:N2	2.29	0.65
45:AP:71:ARG:NH2	45:AP:80:ARG:HH21	1.94	0.65
75:AR:618:C:O2'	75:AR:620:U:O2	2.14	0.65
58:sR:188:A:H2'	58:sR:189:C:O4'	1.96	0.65
58:sR:499:U:O2	58:sR:500:C:N4	2.29	0.65
58:sR:1280:C:H2'	58:sR:1281:G:H8	1.61	0.65
58:sR:1795:U:O2	59:d6:10:ARG:NH1	2.29	0.65
14:DE:13:LYS:HE2	14:DE:103:THR:HG21	1.78	0.65
2:AB:6:THR:HG23	2:AB:8:THR:HG23	1.79	0.65
18:s8:136:SER:O	18:s8:139:ALA:N	2.18	0.65
39:CP:31:ARG:NH1	39:CP:124:ASP:OD2	2.28	0.65
47:c4:21:ALA:HB2	47:c4:98:GLY:HA3	1.78	0.65
58:A:868:G:H1	58:A:960:U:H3	1.45	0.65
29:c9:22:LEU:HD13	29:c9:28:LEU:HD22	1.76	0.65
29:c9:54:PHE:CZ	29:c9:104:VAL:HG12	2.31	0.65
64:C:105:PHE:CD1	64:C:213:ARG:HA	2.32	0.65
35:d0:26:LEU:N	35:d0:89:ARG:O	2.26	0.65
35:d0:43:LYS:HA	35:d0:46:GLU:H	1.59	0.65
75:AR:93:C:OP1	85:AR:4164:SPD:N1	2.29	0.65
75:AR:330:G:N7	80:AR:3452:OHX:N1	2.44	0.65
75:AR:1076:C:O3'	8:DD:38:LYS:HE3	1.97	0.65
58:sR:250:C:H2'	58:sR:251:A:C8	2.31	0.65
63:5:87:ASN:HB2	63:5:89:LEU:HD22	1.79	0.65
19:CE:171:LEU:HD21	19:CE:333:LYS:HB3	1.79	0.65
75:1:62:A:OP2	86:1:4202:HOH:O	2.13	0.65
75:1:655:C:H2'	75:1:656:A:C8	2.32	0.65
2:AB:45:MET:O	2:AB:49:HIS:N	2.28	0.65
2:AB:59:ARG:NH1	75:1:283:G:O2'	2.25	0.65
24:s9:179:ARG:O	24:s9:181:ALA:N	2.29	0.65
35:V:60:THR:HG23	58:A:1382:A:H5''	1.78	0.65
56:a:49:ARG:HD3	56:a:70:LYS:HZ3	1.61	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:42:G:O6	80:A:1925:OHX:N6	2.30	0.65
58:A:708:C:N4	58:A:730:G:O6	2.29	0.65
58:A:1169:G:O2'	58:A:1576:A:N6	2.30	0.65
58:A:1669:U:OP2	80:A:1913:OHX:N1	2.28	0.65
29:c9:105:LEU:HB3	29:c9:122:ARG:NH1	2.09	0.65
71:f:49:LEU:HD22	71:f:54:ARG:HA	1.77	0.65
46:d2:14:ILE:HG22	46:d2:25:VAL:HG21	1.77	0.65
75:AR:239:G:N2	75:AR:241:G:O6	2.30	0.65
6:H:150:GLU:N	6:H:150:GLU:OE1	2.29	0.65
58:sR:1062:A:H5''	58:sR:1063:U:C5	2.32	0.65
13:CD:116:VAL:HG22	13:CD:126:LEU:HB2	1.79	0.65
79:AA:22:LYS:NZ	79:AA:132:SER:O	2.25	0.65
51:CS:111:ARG:O	51:CS:115:VAL:HG12	1.96	0.65
28:AM:43:ASN:HB3	28:AM:46:ARG:HB2	1.78	0.65
57:CU:123:ILE:HD12	57:CU:123:ILE:O	1.96	0.65
58:A:1678:A:OP1	18:J:59:ARG:NH2	2.30	0.65
29:c9:30:VAL:HG22	29:c9:34:VAL:HG21	1.77	0.65
75:AR:541:U:O4	80:AR:3950:OHX:N1	2.30	0.65
77:G:148:ARG:NH2	77:G:155:ALA:HB3	2.11	0.65
58:sR:33:U:O4	80:sR:2189:OHX:N4	2.29	0.65
2:DC:13:GLY:O	26:DG:36:LYS:HD2	1.96	0.65
18:J:89:GLU:OE1	18:J:92:ARG:NE	2.30	0.65
67:s2:53:ILE:HG13	67:s2:72:LEU:HB3	1.77	0.65
36:M:57:LYS:HB2	36:M:110:HIS:CE1	2.32	0.65
73:s4:141:THR:OG1	73:s4:143:ASP:OD1	2.15	0.65
75:1:420:G:O6	80:1:4112:OHX:N6	2.29	0.65
75:1:2790:A:O2'	80:1:4171:OHX:N6	2.30	0.65
75:1:2871:G:H5''	75:1:2872:A:H5''	1.77	0.65
75:1:3018:C:OP2	80:1:3848:OHX:N5	2.29	0.65
14:AD:25:LEU:HD21	14:AD:81:VAL:HG21	1.79	0.65
35:V:20:ILE:HD12	35:V:21:LYS:N	2.12	0.65
45:DQ:10:THR:OG1	75:AR:2714:G:OP2	2.12	0.65
3:p:72:PRO:HG3	39:v:18:VAL:HA	1.79	0.65
5:c5:43:ARG:CZ	5:c5:47:ARG:HD3	2.27	0.65
57:CU:12:ARG:HD2	57:CU:13:ARG:O	1.97	0.65
58:A:209:U:H2'	58:A:210:A:C8	2.31	0.65
58:A:366:A:OP1	58:A:758:U:O2'	2.10	0.65
58:A:703:G:H2'	58:A:704:C:H5'	1.79	0.65
58:A:851:U:H2'	58:A:852:C:C6	2.32	0.65
58:A:861:U:H4'	42:O:20:ARG:HH12	1.61	0.65
27:t:47:ALA:CB	27:t:49:ARG:H	2.10	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:c9:57:ARG:HD3	58:sR:1479:A:OP1	1.96	0.65
64:C:108:ASP:OD1	64:C:109:LYS:N	2.29	0.65
75:AR:1878:G:OP1	80:AR:3883:OHX:N5	2.30	0.65
32:DH:85:PHE:O	80:DH:202:OHX:N4	2.30	0.65
38:DI:14:ASN:OD1	38:DI:19:LYS:HE2	1.97	0.65
13:j:108:PRO:HG2	49:AQ:86:LEU:HD22	1.78	0.65
32:AG:72:THR:HG21	32:AG:84:THR:HG23	1.79	0.65
48:CR:33:ALA:HB1	48:CR:117:ILE:HG12	1.78	0.65
9:q:44:THR:HG21	33:u:12:TRP:CH2	2.32	0.65
58:A:22:A:OP2	80:A:2023:OHX:N2	2.30	0.65
49:AQ:82:THR:O	49:AQ:86:LEU:HD12	1.96	0.65
73:F:77:ARG:HH11	73:F:77:ARG:HG2	1.60	0.65
77:G:32:GLU:HA	77:G:35:GLN:NE2	2.11	0.65
58:sR:1670:G:O6	80:sR:1944:OHX:N4	2.29	0.65
12:I:102:PRO:HD3	12:I:112:ARG:NH1	2.12	0.65
12:I:167:GLU:C	12:I:170:GLN:HG2	2.21	0.65
36:M:57:LYS:HD3	36:M:131:ILE:HG23	1.78	0.65
73:s4:18:TRP:HE3	73:s4:20:LEU:HD11	1.61	0.65
7:4:69:U:OP2	80:AK:103:OHX:N6	2.30	0.65
12:s7:28:GLU:HG2	12:s7:35:LYS:HB3	1.78	0.65
17:c7:79:GLU:CD	17:c7:79:GLU:H	2.04	0.65
21:s:95:ASN:ND2	21:s:95:ASN:O	2.30	0.65
58:A:917:U:OP2	80:A:1974:OHX:N5	2.30	0.65
23:c8:88:ARG:NH1	23:c8:91:ASP:HB2	2.11	0.65
67:D:179:VAL:O	67:D:198:THR:HB	1.96	0.65
75:AR:1631:C:H5''	75:AR:1632:A:H5''	1.79	0.65
75:AR:2700:G:N7	80:AR:3913:OHX:N6	2.45	0.65
78:h:21:THR:HG22	78:h:38:ARG:HG2	1.79	0.65
78:h:224:ASN:HB2	78:h:227:ALA:HB3	1.77	0.65
58:sR:1534:G:O2'	56:d5:72:GLY:O	2.14	0.65
63:5:87:ASN:HB2	63:5:89:LEU:CD2	2.26	0.65
18:J:68:ALA:HB1	36:M:20:PHE:HE2	1.62	0.65
18:J:140:GLU:OE1	18:J:140:GLU:N	2.21	0.65
61:s0:79:ARG:NH1	61:s0:164:ASN:O	2.29	0.65
76:9:106:ILE:HG21	76:9:109:LEU:HD23	1.77	0.65
38:DI:95:ILE:O	38:DI:99:LYS:N	2.27	0.65
75:1:792:G:N7	86:1:4208:HOH:O	2.29	0.65
6:s6:13:GLN:NE2	58:sR:164:A:H1'	2.10	0.65
9:CK:124:ARG:HB3	9:CK:164:ILE:HG12	1.79	0.65
25:l:38:VAL:HG13	25:l:113:VAL:HG11	1.79	0.65
25:l:346:LYS:HD3	25:l:346:LYS:H	1.62	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CO:55:ARG:NH1	33:CO:76:ALA:O	2.30	0.65
40:DP:8:LYS:HG3	40:DP:11:ARG:HH21	1.62	0.65
58:A:1668:G:OP2	80:A:2025:OHX:N6	2.30	0.65
60:CV:28:SER:HB3	1:AS:9:C:OP1	1.97	0.65
75:AR:2396:G:N7	80:AR:3856:OHX:N5	2.43	0.65
6:H:42:GLY:HA3	6:H:45:PHE:HD1	1.61	0.65
56:d5:100:ILE:HG21	77:s5:120:ILE:HD11	1.78	0.65
78:Rb:129:LYS:HA	78:Rb:151:VAL:HG23	1.78	0.65
70:s3:142:LEU:HD23	70:s3:143:ARG:H	1.61	0.65
76:9:3:LYS:HG3	76:9:8:VAL:HG13	1.79	0.65
75:1:678:G:O6	80:1:4111:OHX:N5	2.29	0.65
7:4:77:A:OP2	80:4:230:OHX:N4	2.29	0.65
11:R:89:LEU:HD21	11:R:105:LEU:HD22	1.79	0.65
24:s9:74:ASN:HA	24:s9:77:ILE:HD12	1.79	0.65
58:A:587:C:OP1	71:f:26:LYS:NZ	2.28	0.65
61:B:76:ILE:HB	61:B:123:VAL:HG12	1.76	0.65
64:C:103:MET:HG2	64:C:104:ASP:N	2.12	0.65
48:x:179:GLN:HA	48:x:182:ILE:HB	1.78	0.65
75:AR:2957:G:OP2	80:AR:4097:OHX:N5	2.30	0.65
58:sR:1769:U:OP2	80:sR:1904:OHX:N2	2.30	0.65
25:CF:10:SER:HB3	25:CF:14:GLU:HB2	1.78	0.65
73:s4:44:LEU:HD23	73:s4:65:LEU:HD21	1.79	0.65
73:s4:191:ARG:CZ	73:s4:245:LYS:HD3	2.27	0.65
75:1:831:G:O6	80:1:3812:OHX:N4	2.30	0.65
5:Q:57:MET:HA	5:Q:60:LEU:CD2	2.26	0.64
12:s7:91:ILE:HD12	12:s7:92:PHE:H	1.61	0.64
23:T:95:GLY:O	80:T:201:OHX:N1	2.30	0.64
5:c5:57:MET:HA	5:c5:60:LEU:HB2	1.78	0.64
11:c6:7:VAL:HG23	11:c6:22:VAL:HB	1.79	0.64
58:A:796:A:OP2	80:A:2045:OHX:N3	2.29	0.64
23:c8:49:LYS:HB3	23:c8:72:ILE:HD13	1.79	0.64
61:B:20:ALA:HB1	61:B:169:SER:HB3	1.78	0.64
45:AP:2:VAL:N	45:AP:90:HIS:O	2.30	0.64
45:AP:63:LYS:HE3	75:1:2796:G:N7	2.12	0.64
50:d3:48:HIS:HB3	50:d3:103:LEU:HD11	1.79	0.64
75:AR:870:G:N7	80:AR:4194:OHX:N5	2.45	0.64
75:AR:1334:U:O2'	43:CI:151:ARG:NH2	2.30	0.64
75:AR:1740:U:H1'	75:AR:1741:A:H2	1.62	0.64
75:AR:1754:G:OP1	80:AR:3453:OHX:N1	2.30	0.64
75:AR:2895:G:H2'	75:AR:2896:A:H5''	1.79	0.64
60:2:13:TYR:HD2	75:1:994:G:H3'	1.61	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:I:130:VAL:HG11	12:I:133:THR:OG1	1.97	0.64
78:Rb:201:THR:HG21	78:Rb:243:LEU:H	1.62	0.64
62:d7:56:CYS:HB3	62:d7:59:CYS:SG	2.37	0.64
69:7:58:HIS:ND1	69:7:58:HIS:O	2.31	0.64
47:P:24:ASN:H	47:P:55:SER:HB3	1.62	0.64
75:1:3056:U:OP2	80:1:3453:OHX:N1	2.30	0.64
75:1:3348:G:H1	75:1:3357:U:H3	1.42	0.64
2:AB:23:GLY:HA3	80:1:4021:OHX:N6	2.12	0.64
3:CJ:38:GLN:HA	75:AR:2557:A:C2	2.31	0.64
6:s6:179:VAL:HG11	58:sR:140:A:H1'	1.80	0.64
9:CK:105:GLU:HA	9:CK:109:ALA:HB3	1.78	0.64
39:CP:90:ASN:ND2	75:AR:2424:A:OP1	2.31	0.64
45:DQ:15:LYS:HA	45:DQ:18:ARG:HD3	1.79	0.64
50:Y:90:ASP:O	50:Y:136:TRP:NE1	2.17	0.64
57:CU:26:ARG:NH2	25:CF:361:HIS:O	2.28	0.64
58:A:228:G:N1	58:A:834:G:N3	2.45	0.64
58:A:337:G:H3'	36:M:133:LYS:HB2	1.80	0.64
58:A:591:A:H2'	58:A:592:A:C8	2.32	0.64
58:A:826:U:H2'	58:A:827:C:C6	2.32	0.64
75:AR:792:G:H5''	2:DC:2:PRO:HD3	1.79	0.64
75:AR:1348:U:O2	75:AR:1349:G:N2	2.30	0.64
75:AR:1561:G:O6	75:AR:1578:C:N4	2.31	0.64
75:AR:2534:G:N2	75:AR:2535:A:H62	1.94	0.64
75:AR:3192:U:O4	80:AR:3672:OHX:N6	2.30	0.64
79:DB:10:VAL:HG12	79:DB:24:VAL:HG22	1.78	0.64
58:sR:1208:A:N1	58:sR:1455:G:N2	2.44	0.64
12:I:22:GLN:O	12:I:26:GLU:HG3	1.97	0.64
19:CE:56:ILE:HG22	19:CE:74:GLU:HB2	1.79	0.64
70:s3:223:LYS:HD3	70:s3:225:TYR:HE1	1.62	0.64
76:9:4:GLN:HB2	75:1:229:G:H5''	1.79	0.64
4:DJ:85:THR:O	4:DJ:89:ARG:NH1	2.29	0.64
9:CK:106:LYS:O	9:CK:109:ALA:HB2	1.97	0.64
9:q:106:LYS:O	9:q:109:ALA:HB2	1.97	0.64
53:Z:84:LYS:HE2	53:Z:85:PHE:HE1	1.63	0.64
56:a:77:ARG:NH2	58:A:1532:U:H3'	2.12	0.64
21:s:131:MET:HE1	21:s:162:TRP:CZ2	2.32	0.64
58:A:218:A:N6	58:A:844:A:H1'	2.12	0.64
58:A:221:A:OP2	58:A:832:U:O2'	2.14	0.64
60:CV:14:MET:HE3	60:CV:55:LYS:HB2	1.79	0.64
61:B:124:THR:HA	61:B:146:LEU:HB2	1.79	0.64
64:C:135:LEU:HA	64:C:217:LEU:HD13	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:x:69:ARG:NH1	75:1:2992:U:H1'	2.12	0.64
51:y:67:ILE:HD12	51:y:81:VAL:HG21	1.79	0.64
54:z:11:ALA:O	54:z:15:VAL:HG12	1.96	0.64
75:AR:651:G:OP1	80:AR:3671:OHX:N3	2.31	0.64
75:AR:2242:A:H5'	13:CD:243:THR:HG23	1.78	0.64
78:h:39:ASP:O	78:h:40:LYS:HG2	1.97	0.64
12:I:36:ALA:HA	12:I:39:ARG:HG2	1.79	0.64
78:Rb:108:SER:O	78:Rb:126:SER:OG	2.14	0.64
61:s0:173:ILE:H	61:s0:173:ILE:HD12	1.62	0.64
65:d8:25:VAL:CG2	65:d8:43:ASN:HB2	2.27	0.64
71:e0:50:VAL:HG22	71:e0:54:ARG:HA	1.80	0.64
77:s5:42:LEU:HB3	77:s5:46:TRP:O	1.98	0.64
75:1:2754:G:OP2	80:1:3487:OHX:N6	2.29	0.64
11:R:15:SER:OG	58:A:1608:U:OP1	2.11	0.64
11:R:99:GLU:OE2	78:h:60:SER:OG	2.13	0.64
15:CL:76:MET:HE3	15:CL:151:GLY:HA3	1.77	0.64
21:CM:15:GLU:HG2	21:CM:16:LYS:HG2	1.78	0.64
22:DM:8:ILE:H	22:DM:8:ILE:HD12	1.61	0.64
24:s9:28:LEU:HD12	71:e0:44:PHE:CE2	2.32	0.64
30:c0:65:TYR:HD2	70:s3:72:LEU:HD11	1.62	0.64
41:W:38:LYS:HD2	41:W:49:GLU:HB3	1.80	0.64
9:q:99:ILE:HG22	9:q:117:PHE:HA	1.80	0.64
53:Z:11:LYS:NZ	58:A:775:G:N7	2.45	0.64
58:A:1055:U:O4	80:A:2077:OHX:N6	2.30	0.64
23:c8:129:TRP:HB3	23:c8:131:LEU:HD13	1.79	0.64
75:AR:1013:G:O6	80:AR:3516:OHX:N3	2.30	0.64
75:AR:1487:G:H1	75:AR:1855:U:H3	1.46	0.64
75:AR:2705:A:OP2	80:AR:3751:OHX:N4	2.30	0.64
76:DA:27:ARG:NH1	76:DA:75:ARG:O	2.29	0.64
6:H:18:ILE:HG22	6:H:20:ASP:HB3	1.79	0.64
58:sR:1414:U:O2'	80:sR:2025:OHX:N2	2.30	0.64
78:Rb:179:LYS:HZ2	78:Rb:191:ASP:HB3	1.62	0.64
61:s0:110:TYR:HA	61:s0:115:PHE:CE2	2.33	0.64
68:d9:45:GLU:C	68:d9:46:LYS:HD2	2.23	0.64
75:1:1696:A:OP2	80:1:3785:OHX:N1	2.30	0.64
3:CJ:213:LYS:O	3:CJ:213:LYS:HD3	1.97	0.64
7:4:86:U:OP2	7:AT:81:U:O2'	2.15	0.64
10:DK:4:LYS:HD2	10:DK:14:GLY:HA3	1.78	0.64
12:s7:173:TYR:O	12:s7:177:THR:HG22	1.97	0.64
13:j:31:THR:OG1	13:j:123:ARG:NH1	2.31	0.64
19:k:261:MET:HG2	44:w:64:PHE:HA	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:s9:28:LEU:HD11	71:e0:40:TYR:HA	1.79	0.64
24:s9:158:PHE:HD2	24:s9:164:PHE:HB3	1.62	0.64
43:o:160:ARG:HB2	43:o:203:TRP:CE3	2.33	0.64
48:CR:62:ARG:NH1	75:AR:412:G:OP1	2.30	0.64
11:c6:27:GLY:HA3	77:s5:26:ALA:H	1.63	0.64
11:c6:55:VAL:HG21	11:c6:105:LEU:HD12	1.78	0.64
58:A:5:U:H2'	58:A:6:G:H8	1.61	0.64
58:A:927:C:H1'	47:P:125:SER:HB2	1.78	0.64
58:A:1202:A:OP1	80:A:2003:OHX:N3	2.31	0.64
71:f:37:ARG:HB2	24:K:123:HIS:HE1	1.61	0.64
73:F:26:CYS:HB3	73:F:27:TYR:CD1	2.33	0.64
77:G:62:VAL:HG22	77:G:89:ILE:HG12	1.79	0.64
59:d6:39:MET:HE1	59:d6:70:LYS:HG3	1.79	0.64
70:s3:73:VAL:HG13	70:s3:74:GLN:HB3	1.79	0.64
75:1:322:U:OP2	86:1:4203:HOH:O	2.15	0.64
75:1:1015:U:O2'	75:1:1017:C:OP2	2.14	0.64
75:1:2259:A:OP2	80:1:4174:OHX:N4	2.31	0.64
1:3:4:U:H2'	1:3:5:G:C8	2.32	0.64
1:3:40:C:O2	21:s:72:ARG:NH1	2.30	0.64
10:DK:43:LEU:HD22	10:DK:47:ILE:HD11	1.79	0.64
29:U:125:SER:OG	29:U:127:ASN:OD1	2.16	0.64
3:p:83:ASP:OD1	3:p:86:THR:OG1	2.15	0.64
9:q:47:LYS:H	33:u:7:VAL:HB	1.63	0.64
53:Z:84:LYS:HG3	53:Z:85:PHE:HD1	1.63	0.64
57:CU:116:ALA:HB1	57:CU:121:ILE:HD11	1.78	0.64
58:A:579:A:O3'	80:A:1944:OHX:N4	2.31	0.64
58:A:933:A:OP1	59:b:70:LYS:NZ	2.26	0.64
61:B:27:ARG:HD2	61:B:45:VAL:HB	1.79	0.64
35:d0:38:SER:O	35:d0:42:VAL:HG13	1.97	0.64
41:d1:79:LEU:HD22	61:s0:59:LEU:HD12	1.79	0.64
46:d2:95:PRO:HD3	46:d2:130:TYR:CD2	2.32	0.64
73:F:178:GLY:H	73:F:195:ILE:CB	2.11	0.64
75:AR:696:C:OP2	25:CF:119:ARG:NH2	2.28	0.64
75:AR:2730:G:OP2	80:AR:3946:OHX:N4	2.31	0.64
75:AR:3259:U:H5''	75:AR:3261:C:H5	1.62	0.64
78:Rb:305:TYR:HE2	78:Rb:311:ARG:HD3	1.63	0.64
2:AB:85:ASP:OD1	2:AB:86:LYS:N	2.27	0.64
5:c5:122:THR:OG1	58:sR:1454:G:O3'	2.15	0.64
58:A:647:G:H2'	58:A:648:G:H8	1.63	0.64
27:t:100:ARG:NH1	75:1:76:G:O2'	2.27	0.64
64:C:183:GLN:O	64:C:187:LYS:HG3	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:d1:1:MET:HE1	67:s2:142:GLY:HA2	1.79	0.64
75:AR:1806:A:OP2	80:AR:3481:OHX:N3	2.30	0.64
78:h:106:HIS:CE1	78:h:132:LYS:HE3	2.32	0.64
12:I:30:SER:HB2	12:I:34:LEU:HB3	1.80	0.64
78:Rb:224:ASN:HB2	78:Rb:231:MET:HE1	1.78	0.64
78:Rb:267:PRO:HD2	78:Rb:269:TYR:HE1	1.61	0.64
61:s0:183:ARG:NH1	61:s0:188:LEU:HD22	2.13	0.64
25:CF:104:LYS:HD2	25:CF:106:TRP:CZ2	2.33	0.64
20:DF:80:ASN:OD1	20:DF:81:GLU:N	2.31	0.64
72:8:37:THR:HG21	75:1:12:A:H1'	1.80	0.64
24:s9:54:ARG:HG3	58:sR:1:U:C4	2.33	0.64
31:m:290:ILE:HD12	31:m:291:ALA:N	2.13	0.64
46:X:71:LYS:HD2	58:A:1098:U:H1'	1.79	0.64
48:CR:125:GLN:HB2	48:CR:141:SER:HB2	1.80	0.64
58:A:76:A:N7	80:A:2083:OHX:N2	2.46	0.64
60:CV:12:ARG:HD3	60:CV:13:TYR:CE2	2.33	0.64
33:u:13:ARG:NH1	33:u:65:LEU:O	2.30	0.64
64:C:110:LEU:HD21	64:C:213:ARG:HG3	1.78	0.64
35:d0:46:GLU:HA	35:d0:49:ASN:HA	1.80	0.64
73:F:103:TYR:CD2	73:F:189:LEU:HD11	2.33	0.64
73:F:105:VAL:HA	73:F:190:GLY:HA3	1.80	0.64
54:z:180:LYS:HD2	54:z:183:ALA:HB3	1.80	0.64
75:AR:2982:A:OP1	80:AR:4019:OHX:N3	2.31	0.64
12:I:91:ILE:HG22	12:I:92:PHE:H	1.61	0.64
19:CE:10:ARG:HH21	19:CE:263:SER:HB2	1.62	0.64
19:CE:286:GLY:HA3	19:CE:321:PHE:CE1	2.32	0.64
71:e0:50:VAL:HG12	71:e0:52:GLY:N	2.12	0.64
1:3:115:G:N2	31:m:72:ASP:O	2.27	0.64
4:DJ:46:THR:O	4:DJ:50:SER:OG	2.14	0.64
15:CL:142:ASP:OD1	15:CL:142:ASP:N	2.31	0.64
36:c1:27:THR:OG1	36:c1:30:ARG:HA	1.98	0.64
45:DQ:11:TYR:CE1	45:DQ:13:LYS:HB3	2.32	0.64
48:CR:88:VAL:O	48:CR:92:GLN:HG2	1.96	0.64
11:c6:51:PRO:HA	11:c6:109:PHE:HE1	1.63	0.64
56:a:83:LEU:HD23	56:a:88:ILE:HG21	1.79	0.64
58:A:848:C:H2'	58:A:849:C:C6	2.33	0.64
23:c8:12:GLN:N	23:c8:59:GLY:O	2.31	0.64
70:E:10:LYS:HG3	70:E:11:LEU:HD23	1.80	0.64
75:AR:215:G:OP1	76:DA:12:ARG:NH1	2.31	0.64
75:AR:1717:U:H2'	75:AR:1718:G:C8	2.33	0.64
6:H:74:LYS:NZ	6:H:96:SER:OG	2.29	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Rb:23:LEU:HG	78:Rb:291:SER:HB2	1.78	0.64
59:d6:10:ARG:NH2	59:d6:36:ILE:HG12	2.12	0.64
24:K:114:TYR:HA	24:K:119:ALA:HB3	1.79	0.64
67:s2:44:LEU:HD11	67:s2:247:ALA:HB2	1.79	0.64
70:s3:48:VAL:CG1	70:s3:86:LEU:HG	2.28	0.64
37:CH:47:PHE:HE2	37:CH:77:ARG:HH11	1.43	0.64
75:1:368:G:OP1	80:1:3661:OHX:N6	2.31	0.64
3:CJ:48:ARG:NH1	75:AR:2526:C:N3	2.46	0.64
5:Q:22:LEU:HD23	5:Q:23:GLU:HA	1.80	0.64
12:s7:116:ARG:HH11	12:s7:116:ARG:HG3	1.63	0.64
13:j:10:LYS:HA	13:j:16:PHE:CD2	2.33	0.64
20:AE:75:ILE:HD12	20:AE:75:ILE:O	1.97	0.64
21:CM:53:THR:HG22	21:CM:60:ARG:HA	1.80	0.64
36:c1:29:LYS:HZ2	36:c1:31:THR:H	1.47	0.64
53:Z:21:LYS:HD2	53:Z:21:LYS:N	2.13	0.64
54:CT:5:ARG:NH1	75:AR:1471:U:OP1	2.31	0.64
58:A:1050:G:N7	80:A:2150:OHX:N3	2.46	0.64
61:B:147:THR:HG21	61:B:159:ALA:HB1	1.80	0.64
45:AP:41:ARG:NH1	75:1:284:A:OP2	2.30	0.64
67:D:53:ILE:HG23	67:D:72:LEU:HD23	1.79	0.64
46:d2:88:LYS:NZ	58:sR:371:G:O3'	2.31	0.64
73:F:238:LEU:H	73:F:238:LEU:HD12	1.63	0.64
75:AR:651:G:O2'	75:AR:1435:A:OP1	2.16	0.64
75:AR:1542:G:N7	80:AR:4016:OHX:N5	2.46	0.64
75:AR:1911:A:OP1	80:AR:3728:OHX:N1	2.29	0.64
79:DB:104:PRO:O	79:DB:107:ARG:N	2.29	0.64
64:s1:126:THR:HG22	64:s1:136:ARG:HD3	1.80	0.64
38:DI:110:GLU:N	38:DI:110:GLU:OE1	2.30	0.64
75:1:964:G:OP1	80:1:4021:OHX:N2	2.31	0.64
1:3:60:G:H2'	1:3:61:G:H8	1.63	0.63
2:AB:79:TRP:HE1	2:AB:119:PRO:HD2	1.63	0.63
4:DJ:20:GLN:O	4:DJ:24:LEU:HD12	1.97	0.63
11:R:50:GLU:OE2	11:R:82:ARG:NH2	2.32	0.63
12:s7:48:GLU:HA	12:s7:58:LEU:HB3	1.80	0.63
58:A:346:G:H5'	36:M:79:LYS:HB3	1.80	0.63
61:B:103:THR:O	61:B:106:SER:OG	2.16	0.63
44:w:18:ARG:NH2	75:1:1318:A:OP1	2.31	0.63
75:AR:1089:G:N7	80:AR:3611:OHX:N3	2.46	0.63
75:AR:3139:A:OP2	19:CE:30:LYS:NZ	2.32	0.63
58:sR:103:A:OP1	80:sR:1945:OHX:N1	2.31	0.63
58:sR:482:U:H3	58:sR:505:A:N6	1.96	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:I:36:ALA:HB1	12:I:39:ARG:NE	2.11	0.63
78:Rb:9:LEU:HB3	78:Rb:313:TRP:HA	1.79	0.63
78:Rb:132:LYS:HZ1	78:Rb:144:LEU:H	1.44	0.63
19:CE:383:LEU:N	19:CE:386:ASP:OD2	2.28	0.63
77:s5:100:ASN:HD22	77:s5:180:ARG:HD2	1.63	0.63
75:1:3057:U:H5'	75:1:3086:A:H61	1.63	0.63
2:AB:130:VAL:HG21	2:AB:145:VAL:HG11	1.78	0.63
4:AI:6:ALA:HA	4:AI:9:LEU:HD23	1.78	0.63
58:A:190:C:O2'	58:A:191:C:H5'	1.98	0.63
58:A:647:G:N2	58:A:687:G:H22	1.96	0.63
58:A:1051:G:N7	80:A:2150:OHX:N5	2.45	0.63
23:c8:15:LEU:HD11	23:c8:17:LEU:HD23	1.80	0.63
61:B:26:ALA:O	61:B:45:VAL:HG23	1.98	0.63
66:CX:129:VAL:O	66:CX:133:SER:OG	2.14	0.63
46:d2:31:SER:HB2	58:sR:636:A:H5''	1.79	0.63
73:F:230:GLU:HB2	73:F:233:LYS:HB3	1.80	0.63
75:AR:437:G:H21	75:AR:622:A:H62	1.44	0.63
58:sR:1564:U:H2'	58:sR:1565:C:C6	2.33	0.63
78:Rb:207:ASP:HB2	78:Rb:209:THR:HG23	1.80	0.63
13:CD:249:SER:HB2	13:CD:251:LYS:HG2	1.81	0.63
61:s0:23:HIS:HA	61:s0:48:ILE:HG22	1.80	0.63
20:DF:23:VAL:O	20:DF:28:ARG:NH1	2.30	0.63
70:s3:76:ARG:HG3	70:s3:77:PHE:CE1	2.32	0.63
75:1:1233:G:O2'	75:1:1256:G:N2	2.31	0.63
11:R:136:SER:O	11:R:137:ARG:NH1	2.31	0.63
20:AE:44:MET:HE3	20:AE:75:ILE:HD13	1.80	0.63
27:CN:48:PRO:O	27:CN:137:GLN:HG3	1.98	0.63
27:CN:119:TYR:HD1	27:CN:145:PHE:CE2	2.17	0.63
30:c0:55:VAL:HG12	30:c0:68:LEU:HD23	1.80	0.63
35:V:37:VAL:HG11	35:V:107:THR:O	1.98	0.63
38:AH:104:VAL:HA	38:AH:107:GLU:HG2	1.79	0.63
16:AK:87:SER:O	80:AK:103:OHX:N3	2.32	0.63
58:A:558:U:OP1	71:f:55:ARG:NH2	2.32	0.63
75:AR:1134:G:N7	80:AR:3917:OHX:N3	2.47	0.63
78:h:34:LEU:HD22	78:h:73:LEU:HD23	1.80	0.63
58:sR:845:G:H2'	58:sR:846:G:H8	1.64	0.63
58:sR:848:C:H2'	58:sR:849:C:C6	2.34	0.63
18:J:3:ILE:H	18:J:3:ILE:HD12	1.63	0.63
64:s1:56:SER:HB3	64:s1:59:ASP:OD1	1.98	0.63
26:DG:77:ALA:HB2	37:CH:3:ALA:HB2	1.80	0.63
76:9:2:ALA:N	75:1:213:A:OP1	2.31	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:CH:43:LEU:HD21	37:CH:85:ILE:HG13	1.79	0.63
39:v:144:ARG:NH1	75:1:126:U:OP1	2.32	0.63
79:AA:48:ARG:NH2	75:1:1631:C:OP2	2.31	0.63
38:DI:100:ILE:O	38:DI:103:LYS:HG2	1.98	0.63
8:AC:14:ARG:NH1	75:1:952:A:OP1	2.31	0.63
23:T:49:LYS:NZ	23:T:79:TYR:O	2.31	0.63
28:DN:31:THR:HG21	76:DA:77:LYS:HE3	1.80	0.63
31:m:234:ASP:OD1	31:m:234:ASP:N	2.31	0.63
32:AG:59:VAL:O	32:AG:61:GLY:N	2.31	0.63
35:V:26:LEU:N	35:V:89:ARG:O	2.26	0.63
45:DQ:45:ARG:NH1	45:DQ:45:ARG:HG2	2.13	0.63
45:DQ:78:LYS:HE2	45:DQ:80:ARG:NE	2.14	0.63
9:q:92:TYR:HB3	9:q:99:ILE:HD11	1.80	0.63
11:c6:35:PRO:HB2	11:c6:37:THR:HG22	1.80	0.63
58:A:123:G:H21	73:F:146:THR:HG21	1.63	0.63
58:A:227:U:O2	58:A:834:G:N2	2.15	0.63
60:CV:83:ARG:NH2	75:AR:2728:G:O5'	2.23	0.63
48:x:138:LYS:HG3	48:x:140:GLU:HG3	1.79	0.63
49:AQ:22:LEU:HD21	75:1:2150:G:H4'	1.79	0.63
75:AR:979:U:H1'	75:AR:980:A:C8	2.33	0.63
75:AR:1034:U:H2'	75:AR:1035:G:C8	2.33	0.63
75:AR:2400:G:O2'	75:AR:2401:A:OP1	2.14	0.63
58:sR:871:G:O2'	62:d7:67:THR:O	2.16	0.63
58:sR:1690:G:H1	58:sR:1711:C:H42	1.46	0.63
61:s0:13:ASP:OD2	61:s0:179:ARG:NH2	2.30	0.63
19:CE:303:LYS:HD2	19:CE:361:THR:HG21	1.79	0.63
64:s1:127:VAL:HG11	64:s1:176:VAL:HG11	1.80	0.63
70:s3:142:LEU:HD11	70:s3:148:LYS:HE2	1.81	0.63
77:s5:92:ARG:NH2	77:s5:169:ASN:OD1	2.31	0.63
13:j:21:ARG:HD3	75:1:824:C:H5''	1.81	0.63
45:DQ:28:TYR:CE1	45:DQ:30:ALA:HA	2.34	0.63
10:AJ:58:ILE:HG23	10:AJ:90:MET:HE3	1.81	0.63
48:CR:108:ASP:N	48:CR:152:GLU:OE2	2.31	0.63
15:r:44:ASP:OD1	15:r:185:ARG:NH1	2.31	0.63
55:sM:44:PRO:O	55:sM:47:ALA:N	2.32	0.63
58:A:1219:A:O2'	30:L:48:SER:HA	1.98	0.63
27:t:70:ARG:NH2	75:1:103:G:OP1	2.22	0.63
61:B:198:MET:HG2	61:B:199:PRO:HD2	1.80	0.63
70:E:72:LEU:HD21	30:L:20:VAL:HB	1.80	0.63
51:y:165:ILE:HD12	51:y:166:LEU:H	1.63	0.63
75:AR:2724:U:O4	80:AR:3946:OHX:N3	2.31	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1235:C:H2'	58:sR:1236:A:H8	1.63	0.63
2:DC:92:LYS:HD2	2:DC:93:SER:N	2.13	0.63
78:Rb:251:TRP:CD1	78:Rb:264:SER:HB2	2.33	0.63
64:s1:176:VAL:HA	64:s1:179:SER:HB2	1.81	0.63
73:s4:100:ARG:HH11	73:s4:100:ARG:HG2	1.64	0.63
77:s5:31:GLU:HA	77:s5:34:GLN:HB3	1.79	0.63
4:DJ:28:LEU:HD21	4:DJ:48:ARG:HD3	1.81	0.63
19:k:128:LYS:NZ	19:k:128:LYS:HB3	2.14	0.63
27:CN:119:TYR:HD1	27:CN:145:PHE:HE2	1.46	0.63
39:CP:85:THR:HG22	75:AR:44:U:H5''	1.81	0.63
50:Y:69:ARG:NH2	50:Y:116:ASP:OD2	2.18	0.63
11:c6:69:VAL:HG21	11:c6:81:ILE:HD11	1.80	0.63
54:CT:10:LEU:O	54:CT:14:VAL:HG23	1.99	0.63
67:D:47:ALA:O	67:D:49:LYS:N	2.31	0.63
51:y:107:THR:HG22	51:y:110:ALA:HB2	1.79	0.63
72:CZ:73:MET:HE1	72:CZ:141:TYR:HE1	1.64	0.63
54:z:58:HIS:CD2	75:1:3067:C:H5''	2.34	0.63
75:AR:1427:U:OP2	2:DC:4:ARG:NH2	2.31	0.63
76:DA:27:ARG:O	76:DA:31:LEU:HD12	1.98	0.63
62:d7:23:THR:HG21	62:d7:29:ARG:HH12	1.62	0.63
77:s5:51:VAL:HG11	77:s5:130:ILE:CD1	2.29	0.63
77:s5:200:ASN:ND2	77:s5:207:THR:OG1	2.32	0.63
3:CJ:136:LEU:O	3:CJ:140:VAL:HG23	1.99	0.63
4:DJ:49:LYS:NZ	7:AT:61:A:OP1	2.30	0.63
6:s6:129:VAL:O	69:CY:80:ARG:NH1	2.30	0.63
16:DL:35:SER:OG	75:AR:361:A:H5'	1.98	0.63
19:k:345:ASN:ND2	19:k:347:SER:HB3	2.13	0.63
24:s9:23:ARG:NE	24:s9:27:GLU:OE2	2.25	0.63
24:s9:108:ARG:HB2	24:s9:111:THR:HG23	1.81	0.63
42:c3:101:HIS:HA	42:c3:104:ARG:HE	1.64	0.63
45:DQ:95:GLY:C	45:DQ:96:GLU:HG3	2.24	0.63
9:q:92:TYR:HE1	9:q:144:ILE:HG12	1.64	0.63
52:p0:28:VAL:HG21	52:p0:185:LEU:HD13	1.80	0.63
53:Z:105:ARG:NH2	58:A:458:G:OP2	2.32	0.63
22:AL:27:ILE:HD12	22:AL:27:ILE:O	1.98	0.63
64:C:128:LYS:HD2	64:C:134:VAL:HG22	1.81	0.63
64:C:131:ASP:OD2	64:C:181:LEU:HD12	1.98	0.63
45:AP:60:LYS:HD3	45:AP:60:LYS:C	2.23	0.63
67:D:67:GLN:O	67:D:71:THR:HG23	1.99	0.63
70:E:14:ASP:HA	70:E:17:PHE:HB3	1.80	0.63
58:sR:488:G:H21	58:sR:499:U:H3	1.47	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1154:G:N7	80:sR:2112:OHX:N2	2.46	0.63
12:I:171:ALA:HA	12:I:174:ASN:ND2	2.11	0.63
19:CE:113:GLU:HB3	19:CE:176:ALA:HB2	1.80	0.63
24:K:41:GLU:HG2	24:K:44:ARG:HH21	1.62	0.63
64:s1:197:ILE:O	64:s1:201:THR:HG23	1.98	0.63
75:1:371:G:O6	80:1:4120:OHX:N2	2.30	0.63
75:1:1349:G:O2'	75:1:1350:A:O4'	2.15	0.63
13:j:135:ILE:HG13	13:j:149:ARG:HB3	1.79	0.63
25:l:311:HIS:CD2	43:o:162:PRO:HG2	2.33	0.63
51:CS:144:ARG:NH2	75:AR:976:U:OP1	2.31	0.63
11:c6:44:LEU:HD21	77:s5:108:LEU:HD21	1.81	0.63
58:A:732:G:O2'	58:A:733:A:O4'	2.15	0.63
61:B:180:GLU:HA	61:B:183:ARG:HB2	1.80	0.63
66:CX:118:VAL:HG21	66:CX:133:SER:HB3	1.80	0.63
67:D:39:THR:O	67:D:42:GLY:N	2.18	0.63
75:AR:437:G:H21	75:AR:622:A:N6	1.96	0.63
75:AR:1222:G:H8	75:AR:1222:G:OP2	1.82	0.63
75:AR:1863:G:N1	75:AR:1866:C:OP2	2.28	0.63
1:AS:7:G:O3'	31:CG:33:ARG:NH1	2.32	0.63
7:AT:83:C:H1'	7:AT:85:G:N2	2.11	0.63
67:s2:53:ILE:H	67:s2:53:ILE:HD12	1.63	0.63
75:1:385:A:H2'	75:1:386:A:C8	2.34	0.63
75:1:668:G:OP1	80:1:3430:OHX:N6	2.32	0.63
18:s8:64:ASN:HD22	18:s8:64:ASN:C	2.05	0.63
24:s9:21:SER:HA	24:s9:24:LEU:HG	1.81	0.63
24:s9:171:ARG:HG2	24:s9:174:ARG:HB2	1.81	0.63
35:V:88:LYS:O	35:V:89:ARG:NH2	2.32	0.63
3:p:100:GLU:OE2	3:p:108:ARG:NH1	2.28	0.63
11:c6:114:ARG:HG2	77:s5:73:THR:HG23	1.81	0.63
54:CT:92:GLN:O	54:CT:96:ILE:HG12	1.98	0.63
21:s:166:LYS:HE3	21:s:167:TYR:H	1.63	0.63
58:A:1085:G:N2	58:A:1088:A:OP2	2.27	0.63
64:C:167:VAL:O	64:C:171:ILE:HG22	1.97	0.63
46:d2:71:LYS:HD2	58:sR:1098:U:O2'	1.98	0.63
46:d2:119:LYS:HG2	58:sR:687:G:H5''	1.80	0.63
73:F:185:GLY:N	73:F:189:LEU:HD13	2.14	0.63
75:AR:2175:U:O2	13:CD:25:GLY:HA2	1.99	0.63
80:AR:3419:OHX:N6	7:AT:31:G:OP2	2.32	0.63
80:AR:3954:OHX:N2	7:AT:18:U:OP1	2.31	0.63
58:sR:628:G:N1	58:sR:970:A:OP2	2.27	0.63
59:d6:65:PRO:HB3	64:s1:108:ASP:OD2	1.99	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:s4:77:ARG:HD2	73:s4:82:TYR:CE2	2.34	0.63
73:s4:240:LYS:HE2	73:s4:240:LYS:H	1.63	0.63
9:CK:23:ARG:HH11	9:CK:23:ARG:HG3	1.64	0.62
12:s7:162:ILE:HG22	12:s7:165:LYS:HD2	1.81	0.62
29:U:138:GLN:O	29:U:141:GLU:HB3	1.98	0.62
3:p:86:THR:O	3:p:90:THR:OG1	2.14	0.62
28:AM:41:ARG:HH11	28:AM:41:ARG:HG2	1.64	0.62
57:CU:113:ARG:NH1	75:AR:1211:U:O2'	2.32	0.62
58:A:800:U:H2'	58:A:801:G:H8	1.64	0.62
73:F:123:LEU:HB3	73:F:159:THR:CG2	2.29	0.62
75:AR:27:C:O2'	75:AR:327:A:N3	2.28	0.62
53:d4:37:LYS:HA	53:d4:40:LEU:HD13	1.81	0.62
58:sR:1561:U:H4'	58:sR:1599:C:H4'	1.81	0.62
78:Rb:72:THR:HG21	78:Rb:122:ILE:HD11	1.81	0.62
78:Rb:176:LYS:O	78:Rb:195:HIS:HB2	1.98	0.62
18:J:89:GLU:O	18:J:93:THR:HG22	1.99	0.62
64:s1:158:SER:HA	64:s1:161:ILE:HD13	1.80	0.62
71:e0:48:THR:HG23	71:e0:49:LEU:HD23	1.81	0.62
39:v:39:ALA:HB3	39:v:61:ILE:HG22	1.81	0.62
8:AC:3:LYS:NZ	75:1:2618:G:OP2	2.33	0.62
12:s7:73:VAL:C	12:s7:75:THR:H	2.06	0.62
19:k:112:ASP:O	19:k:116:ARG:HG3	1.99	0.62
19:k:375:GLU:OE2	19:k:375:GLU:N	2.25	0.62
21:CM:60:ARG:NH2	45:DQ:105:GLN:HA	2.13	0.62
24:s9:143:ILE:HG21	58:sR:768:C:H1'	1.80	0.62
44:CQ:64:PHE:HA	19:CE:261:MET:HG2	1.81	0.62
45:DQ:28:TYR:HE1	45:DQ:30:ALA:HA	1.63	0.62
53:Z:124:ARG:HB2	53:Z:127:LYS:HZ2	1.64	0.62
15:r:185:ARG:HG3	15:r:186:GLU:N	2.13	0.62
17:c7:7:LYS:N	58:sR:1316:G:OP1	2.31	0.62
45:AP:89:LYS:HB2	75:1:2653:C:P	2.39	0.62
67:D:98:PHE:CZ	55:i:113:ASP:HB3	2.34	0.62
49:AQ:4:ARG:NH2	75:1:838:G:O6	2.32	0.62
75:AR:208:C:OP2	25:CF:163:LYS:NZ	2.31	0.62
53:d4:20:ARG:NH2	53:d4:22:GLN:OE1	2.31	0.62
58:sR:820:U:O2'	58:sR:821:U:H5''	1.99	0.62
58:sR:1720:G:O6	80:sR:1957:OHX:N6	2.32	0.62
56:d5:90:LYS:HB3	56:d5:102:THR:HG22	1.81	0.62
2:DC:127:ALA:C	2:DC:148:ILE:HG22	2.24	0.62
78:Rb:221:MET:HA	78:Rb:233:THR:HG23	1.81	0.62
67:s2:161:LYS:HG2	67:s2:163:GLY:H	1.63	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DH:106:ASN:O	32:DH:106:ASN:ND2	2.33	0.62
75:1:863:C:OP1	80:1:3692:OHX:N6	2.33	0.62
75:1:1466:G:O6	80:1:3601:OHX:N5	2.32	0.62
75:1:2534:G:H1	75:1:2545:C:H42	1.45	0.62
75:1:2768:U:H2'	75:1:2769:A:C8	2.33	0.62
9:CK:112:ILE:HB	9:CK:126:VAL:HG22	1.80	0.62
19:k:30:LYS:O	80:1:4085:OHX:N6	2.32	0.62
29:U:100:ILE:H	29:U:100:ILE:HD12	1.63	0.62
30:c0:32:HIS:HD2	30:c0:42:VAL:HG21	1.64	0.62
4:AI:102:GLU:H	4:AI:102:GLU:CD	2.07	0.62
52:p0:63:ILE:HG13	52:p0:77:LEU:HD21	1.81	0.62
55:sM:72:ARG:HD3	58:sR:1460:A:H4'	1.81	0.62
58:A:401:A:H5''	80:A:1964:OHX:N6	2.13	0.62
58:A:1330:G:N2	70:E:204:ASP:OD1	2.29	0.62
59:b:43:ASN:HA	59:b:66:LYS:HB3	1.81	0.62
59:b:79:ILE:HA	59:b:84:VAL:CG1	2.18	0.62
48:x:116:HIS:HB3	48:x:149:VAL:HG22	1.81	0.62
72:CZ:72:ALA:HB1	72:CZ:83:VAL:HG21	1.80	0.62
64:s1:161:ILE:H	64:s1:161:ILE:HD12	1.64	0.62
65:d8:57:MET:SD	65:d8:57:MET:N	2.71	0.62
75:1:1574:C:H2'	75:1:1575:A:H8	1.65	0.62
1:3:118:A:H5''	31:m:253:PHE:CZ	2.34	0.62
6:s6:126:ASP:OD1	6:s6:127:THR:N	2.33	0.62
15:CL:171:TRP:O	15:CL:174:THR:HG22	1.99	0.62
18:s8:32:GLN:NE2	58:sR:1727:G:H21	1.96	0.62
19:k:41:VAL:HG12	19:k:186:GLY:H	1.64	0.62
19:k:53:MET:HE1	75:1:3047:U:O2'	1.99	0.62
21:CM:153:LYS:HD2	21:CM:154:THR:N	2.12	0.62
26:AF:77:ALA:HB2	37:n:3:ALA:HB2	1.81	0.62
29:U:105:LEU:HD11	29:U:122:ARG:HG2	1.79	0.62
39:CP:73:ARG:HB3	39:CP:75:VAL:HG22	1.80	0.62
39:CP:116:LEU:HA	39:CP:159:ARG:HH12	1.64	0.62
39:CP:118:SER:HB3	39:CP:132:VAL:HG23	1.82	0.62
41:W:35:ASN:HD22	41:W:52:THR:HG22	1.65	0.62
54:CT:168:ALA:O	54:CT:172:ARG:HG3	2.00	0.62
57:CU:138:GLN:HA	57:CU:141:LYS:HB2	1.80	0.62
58:A:145:A:O2'	58:A:146:U:O5'	2.13	0.62
58:A:211:U:H5''	36:M:20:PHE:HD2	1.64	0.62
58:A:544:A:H1'	71:f:28:LYS:HE2	1.81	0.62
58:A:768:C:C2	24:K:143:ILE:HG12	2.34	0.62
58:A:886:U:OP1	64:C:214:LYS:NZ	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:1767:G:OP2	58:A:1770:U:O2'	2.17	0.62
72:CZ:101:GLU:HG2	72:CZ:102:LEU:HD23	1.82	0.62
75:AR:2842:U:OP1	75:AR:2844:C:N4	2.32	0.62
6:H:64:LYS:O	6:H:67:VAL:HG22	1.99	0.62
58:sR:492:A:H1'	58:sR:496:G:H1	1.63	0.62
65:d8:67:ARG:NH2	77:s5:151:GLY:O	2.32	0.62
79:AA:26:VAL:HG21	79:AA:96:VAL:HG11	1.80	0.62
77:s5:149:VAL:HG11	77:s5:155:ALA:HB1	1.82	0.62
75:1:1278:A:O2'	75:1:1279:C:O5'	2.17	0.62
75:1:2658:G:OP2	80:1:3632:OHX:N5	2.32	0.62
75:1:3082:C:OP2	80:1:3453:OHX:N2	2.32	0.62
13:j:112:ILE:HG13	49:AQ:79:VAL:HG13	1.80	0.62
17:c7:52:GLY:HA3	58:sR:1389:C:O2'	2.00	0.62
58:A:207:U:O2	18:J:178:ARG:NH2	2.32	0.62
58:A:1508:U:O4	80:A:2037:OHX:N2	2.32	0.62
23:c8:49:LYS:HE3	23:c8:80:LYS:HB3	1.81	0.62
66:CX:12:ARG:HG3	66:CX:13:ILE:N	2.13	0.62
73:F:157:ASN:ND2	73:F:222:LEU:HD21	2.14	0.62
75:AR:827:A:H5''	38:DI:14:ASN:O	2.00	0.62
75:AR:2268:U:H3'	75:AR:2269:U:C5'	2.30	0.62
78:h:297:ASP:HB2	78:h:299:GLN:HG2	1.80	0.62
6:H:192:ALA:O	6:H:195:VAL:HG12	2.00	0.62
58:sR:190:C:N4	58:sR:196:G:O6	2.33	0.62
12:I:33:GLU:C	12:I:35:LYS:H	2.05	0.62
78:Rb:68:VAL:HA	78:Rb:84:SER:HA	1.80	0.62
79:AA:3:LYS:HZ1	79:AA:5:LEU:HB2	1.65	0.62
75:1:2108:C:H1'	75:1:3344:A:C8	2.34	0.62
75:1:2960:C:H2'	75:1:2961:G:C8	2.33	0.62
75:1:3290:G:N7	80:1:3813:OHX:N5	2.48	0.62
4:DJ:117:ALA:HB2	27:CN:48:PRO:HB2	1.82	0.62
5:Q:57:MET:HA	5:Q:60:LEU:HD23	1.81	0.62
15:CL:169:LYS:HG3	60:CV:159:PHE:HA	1.80	0.62
19:k:275:ARG:NH1	75:1:3045:G:O3'	2.33	0.62
58:A:1199:G:C5	68:e:40:ARG:HD3	2.35	0.62
73:F:208:VAL:HG21	73:F:225:VAL:HG11	1.81	0.62
75:AR:2522:G:O6	13:CD:70:ARG:NH1	2.33	0.62
79:DB:116:LYS:HA	79:DB:119:GLU:HG3	1.81	0.62
58:sR:514:G:HO2'	58:sR:515:A:H8	1.48	0.62
58:sR:794:U:H4'	58:sR:795:U:OP2	1.99	0.62
12:I:74:GLN:O	12:I:78:THR:N	2.21	0.62
70:s3:195:SER:HB2	70:s3:200:LYS:HG2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:CH:40:LEU:HD22	37:CH:54:TYR:HB2	1.82	0.62
73:s4:162:ILE:HG13	73:s4:169:ILE:HG22	1.81	0.62
75:1:132:C:H2'	75:1:133:U:H5''	1.79	0.62
75:1:1246:G:H1'	75:1:1264:G:H2'	1.82	0.62
15:CL:93:PRO:O	15:CL:125:LEU:HD23	1.99	0.62
41:W:73:ALA:HB1	41:W:78:LEU:HB2	1.81	0.62
53:Z:18:LEU:HB3	53:Z:85:PHE:HD2	1.63	0.62
53:Z:87:PRO:HG3	73:F:59:ARG:NH2	2.14	0.62
53:Z:104:SER:N	53:Z:107:GLN:HE21	1.97	0.62
17:c7:5:ARG:NH1	58:sR:1402:G:OP2	2.32	0.62
21:s:95:ASN:HA	75:1:2672:G:O3'	1.99	0.62
58:A:273:G:H1	58:A:283:U:H3	1.46	0.62
58:A:555:A:C5	24:K:19:TYR:CE2	2.87	0.62
67:D:43:ARG:NH2	67:D:249:ALA:HB2	2.14	0.62
67:D:81:MET:HB2	67:D:101:VAL:HG13	1.80	0.62
75:AR:1251:A:H2'	75:AR:1252:A:C8	2.34	0.62
58:sR:329:G:N7	80:sR:1911:OHX:N2	2.47	0.62
58:sR:488:G:O2'	58:sR:500:C:N4	2.32	0.62
65:d8:56:LEU:HD21	77:s5:144:GLU:CB	2.30	0.62
77:s5:37:GLN:OE1	77:s5:42:LEU:N	2.28	0.62
77:s5:173:ALA:O	77:s5:177:ILE:HG22	2.00	0.62
75:1:2827:U:O4	80:1:4170:OHX:N1	2.32	0.62
19:k:44:THR:HG21	19:k:184:ASN:HD22	1.65	0.62
16:AK:75:LYS:NZ	75:1:182:U:OP1	2.32	0.62
55:sM:84:LYS:O	55:sM:85:SER:OG	2.11	0.62
58:A:567:A:H5'	71:f:10:ARG:HB2	1.80	0.62
58:A:768:C:H1'	24:K:143:ILE:HG21	1.82	0.62
58:A:1413:U:O2'	80:A:1953:OHX:N2	2.33	0.62
75:AR:728:G:OP1	80:AR:4104:OHX:N5	2.33	0.62
75:AR:1938:U:O4	80:AR:3661:OHX:N4	2.32	0.62
75:AR:2857:C:OP1	80:AR:3729:OHX:N5	2.33	0.62
77:G:46:TRP:CZ3	77:G:118:LEU:HB3	2.34	0.62
24:K:109:LEU:HB2	24:K:146:PHE:HB3	1.81	0.62
31:CG:292:ALA:O	80:CG:303:OHX:N3	2.33	0.62
43:CI:53:LYS:O	43:CI:57:THR:HG23	1.99	0.62
6:s6:84:TYR:OH	6:s6:91:GLU:O	2.15	0.62
26:AF:47:ARG:HD3	75:1:634:C:HO2'	1.65	0.62
29:U:50:ALA:H	29:U:53:TRP:CD1	2.15	0.62
31:m:83:LEU:HD23	31:m:88:ILE:HD12	1.82	0.62
49:DR:79:VAL:O	49:DR:83:ILE:HG13	1.99	0.62
50:Y:130:VAL:HG23	50:Y:135:LEU:HD11	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:p0:26:PHE:HB2	52:p0:87:VAL:HG13	1.82	0.62
52:p0:69:ASP:HB2	52:p0:70:LEU:HD22	1.81	0.62
58:A:1592:A:H2'	58:A:1593:A:H8	1.64	0.62
23:c8:76:PRO:HG2	23:c8:86:LEU:HD21	1.81	0.62
60:CV:102:ARG:HD2	60:CV:103:GLN:N	2.15	0.62
29:c9:102:ARG:NH2	58:sR:1502:G:N7	2.48	0.62
65:d:46:GLY:HA3	77:G:163:SER:HB3	1.79	0.62
45:AP:77:CYS:SG	45:AP:79:THR:OG1	2.51	0.62
50:d3:23:ARG:HB3	50:d3:29:TYR:CE2	2.34	0.62
75:AR:437:G:N1	75:AR:621:A:N1	2.38	0.62
75:AR:2534:G:H21	75:AR:2535:A:H62	1.45	0.62
53:d4:29:HIS:HE2	53:d4:69:SER:HG	1.48	0.62
6:H:52:ILE:HA	6:H:111:LEU:HD23	1.81	0.62
62:d7:36:LYS:HZ2	62:d7:43:ILE:HA	1.65	0.62
77:s5:20:PHE:CE1	77:s5:22:PRO:HB3	2.35	0.62
75:1:70:A:N1	75:1:313:A:O2'	2.31	0.62
75:1:160:G:N7	80:1:3484:OHX:N2	2.48	0.62
75:1:2128:C:OP1	80:1:4053:OHX:N6	2.33	0.62
18:s8:137:LYS:HD2	18:s8:138:ASN:N	2.15	0.62
22:DM:4:GLU:OE1	75:AR:1746:U:O2'	2.13	0.62
30:c0:34:GLU:O	70:s3:75:LYS:NZ	2.33	0.62
50:Y:46:SER:OG	50:Y:48:HIS:O	2.17	0.62
15:r:38:LYS:NZ	15:r:45:GLU:OE2	2.27	0.62
21:s:12:LEU:HD21	21:s:131:MET:HB3	1.81	0.62
58:A:1171:A:H2'	58:A:1172:G:C8	2.35	0.62
63:CW:80:THR:O	63:CW:84:LEU:HD12	2.00	0.62
65:d:13:ILE:C	65:d:14:LYS:HD3	2.24	0.62
70:E:53:THR:HG21	70:E:94:ARG:HD3	1.80	0.62
75:AR:1110:U:H2'	75:AR:1111:U:C6	2.35	0.62
77:G:121:ILE:H	77:G:123:VAL:H	1.47	0.62
53:d4:60:PHE:O	58:sR:523:G:H5'	2.00	0.62
6:H:67:VAL:CG2	6:H:99:GLY:HA2	2.29	0.62
63:5:35:LYS:HG2	63:5:38:ILE:HD11	1.82	0.62
24:K:48:GLN:CD	24:K:48:GLN:H	2.08	0.62
31:CG:19:PRO:HB2	31:CG:23:ARG:HB3	1.81	0.62
70:s3:17:PHE:CE2	70:s3:77:PHE:HE2	2.17	0.62
75:1:1265:U:N3	75:1:1277:C:O2	2.33	0.62
75:1:2273:G:O6	80:1:3631:OHX:N5	2.33	0.62
5:Q:67:ALA:HB3	80:Q:201:OHX:N2	2.14	0.61
8:AC:47:LEU:HD21	75:1:1086:C:H1'	1.82	0.61
9:CK:39:LYS:O	86:CK:301:HOH:O	2.16	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:R:123:ARG:HG3	11:R:124:PRO:HD2	1.82	0.61
13:j:79:ASN:HD21	13:j:165:VAL:HG23	1.65	0.61
15:CL:73:ASN:O	15:CL:77:THR:HG23	1.99	0.61
23:T:102:ALA:H	23:T:105:VAL:HG23	1.64	0.61
24:s9:102:GLU:HA	24:s9:105:LEU:HB2	1.80	0.61
45:DQ:45:ARG:HG2	45:DQ:45:ARG:HH11	1.63	0.61
49:DR:75:ALA:O	49:DR:79:VAL:HG13	1.99	0.61
5:c5:37:ALA:O	5:c5:42:ARG:NH1	2.34	0.61
9:q:22:SER:HA	33:u:8:LYS:HE3	1.82	0.61
57:CU:28:ARG:NH1	25:CF:361:HIS:O	2.31	0.61
58:A:837:G:N7	80:A:1915:OHX:N6	2.48	0.61
58:A:935:U:O4	59:b:15:ARG:NH2	2.32	0.61
59:b:36:ILE:O	59:b:36:ILE:HD12	1.99	0.61
41:d1:36:VAL:O	41:d1:51:VAL:N	2.22	0.61
54:z:176:ARG:HA	54:z:179:GLU:HB3	1.81	0.61
75:AR:83:U:OP1	80:AR:3831:OHX:N4	2.32	0.61
75:AR:2676:A:H4'	75:AR:2677:G:O5'	1.99	0.61
77:G:215:ASP:HB2	77:G:216:GLU:OE2	2.00	0.61
53:d4:86:GLU:HB3	53:d4:91:LEU:HD21	1.82	0.61
58:sR:831:U:O2'	58:sR:832:U:H5'	2.00	0.61
58:sR:1238:A:OP2	80:sR:1991:OHX:N5	2.33	0.61
63:5:36:TYR:CD2	63:5:83:TYR:HB2	2.34	0.61
70:s3:6:SER:HB3	70:s3:9:ARG:HG3	1.82	0.61
39:v:140:LYS:O	39:v:144:ARG:HD3	1.99	0.61
1:3:1:G:H4'	31:m:273:ARG:NH1	2.16	0.61
6:s6:63:MET:HG2	6:s6:99:GLY:O	2.00	0.61
11:R:29:ILE:HG22	11:R:65:ILE:HB	1.80	0.61
15:CL:165:ILE:HD12	15:CL:165:ILE:O	2.00	0.61
23:T:136:GLN:OE1	23:T:136:GLN:N	2.25	0.61
24:s9:179:ARG:NH2	24:s9:182:GLU:H	1.98	0.61
25:l:26:PHE:HA	25:l:127:ALA:HA	1.82	0.61
46:X:57:ARG:N	46:X:57:ARG:HD2	2.15	0.61
48:CR:41:LEU:HD12	48:CR:150:VAL:HG11	1.82	0.61
54:CT:99:LEU:HD23	75:AR:1722:U:H5''	1.81	0.61
58:A:472:U:H2'	58:A:473:A:C8	2.35	0.61
58:A:1203:A:OP2	80:A:2003:OHX:N3	2.33	0.61
69:CY:35:LYS:HD3	75:AR:3332:U:OP1	2.00	0.61
73:F:126:VAL:HG22	73:F:158:ASP:H	1.65	0.61
75:AR:911:C:N4	13:CD:3:ARG:HD3	2.15	0.61
75:AR:2604:U:OP2	80:AR:4043:OHX:N1	2.33	0.61
19:CE:10:ARG:HG2	19:CE:11:HIS:N	2.15	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:d8:38:ARG:HG3	65:d8:40:ILE:CD1	2.31	0.61
30:L:73:VAL:O	30:L:77:ARG:HB2	2.00	0.61
73:s4:31:PRO:HA	73:s4:81:THR:OG1	2.00	0.61
3:CJ:171:LYS:HD3	3:CJ:174:GLY:HA2	1.82	0.61
5:Q:53:PRO:HB2	5:Q:57:MET:HE2	1.83	0.61
8:AC:21:ILE:HD12	8:AC:21:ILE:O	2.00	0.61
15:CL:205:SER:OG	15:CL:208:ASN:OD1	2.17	0.61
20:AE:10:ARG:H	20:AE:75:ILE:HD12	1.65	0.61
20:AE:75:ILE:HG22	20:AE:93:VAL:HG22	1.80	0.61
26:AF:47:ARG:HD3	75:1:634:C:O2'	1.99	0.61
37:n:132:ALA:O	37:n:136:GLU:HG2	2.00	0.61
47:c4:31:THR:HA	47:c4:38:THR:HA	1.82	0.61
10:AJ:95:ALA:O	10:AJ:99:ARG:HB2	2.01	0.61
48:CR:138:LYS:NZ	75:AR:2356:A:OP1	2.31	0.61
58:A:108:A:H2'	58:A:109:G:C8	2.35	0.61
58:A:1297:G:N2	58:A:1300:A:OP2	2.27	0.61
62:c:10:PRO:HG2	62:c:15:GLU:OE1	2.00	0.61
75:AR:1043:C:OP2	80:AR:3512:OHX:N1	2.33	0.61
75:AR:2371:G:O6	80:AR:4035:OHX:N6	2.34	0.61
75:AR:3344:A:H2	75:AR:3361:G:H21	1.49	0.61
58:sR:1368:G:O6	80:sR:2156:OHX:N1	2.33	0.61
58:sR:1537:C:O2'	58:sR:1540:G:O6	2.18	0.61
56:d5:98:GLN:NE2	77:s5:189:THR:HG21	2.15	0.61
78:Rb:182:ASN:OD1	78:Rb:184:ASN:ND2	2.33	0.61
67:s2:139:ILE:HD11	67:s2:191:ALA:O	1.99	0.61
70:s3:20:GLU:OE2	70:s3:76:ARG:NH2	2.33	0.61
73:s4:192:ILE:HD11	73:s4:242:LYS:O	1.99	0.61
77:s5:140:THR:HG21	77:s5:175:LEU:HD11	1.81	0.61
75:1:2659:G:N7	80:1:3632:OHX:N1	2.48	0.61
75:1:2907:G:OP1	80:1:3995:OHX:N3	2.34	0.61
7:4:70:G:O6	80:AK:103:OHX:N2	2.33	0.61
11:R:28:LEU:HD21	11:R:30:LYS:HD2	1.82	0.61
17:S:32:LYS:HG3	17:S:47:ARG:NH1	2.15	0.61
19:k:212:ASN:HD22	19:k:353:GLU:HA	1.64	0.61
21:CM:57:PHE:HB3	75:AR:2680:A:C2	2.35	0.61
25:l:59:GLN:O	16:AK:52:LYS:NZ	2.25	0.61
36:c1:8:GLN:OE1	36:c1:14:GLN:N	2.31	0.61
39:CP:160:GLU:OE1	39:CP:160:GLU:N	2.30	0.61
42:c3:120:SER:O	42:c3:124:ARG:HG3	2.00	0.61
3:p:68:ARG:HG3	75:1:2514:U:H5'	1.82	0.61
53:Z:39:GLU:O	53:Z:43:LYS:N	2.18	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:c6:59:LYS:HD2	11:c6:59:LYS:N	2.15	0.61
58:A:1199:G:H1	68:e:31:ILE:HG12	1.66	0.61
63:CW:30:PRO:HA	63:CW:33:TYR:HB3	1.82	0.61
67:D:175:GLY:O	24:K:53:ARG:NE	2.34	0.61
75:AR:1440:G:N7	80:AR:4101:OHX:N4	2.48	0.61
80:AR:3985:OHX:N3	1:AS:88:G:OP1	2.33	0.61
77:G:30:PRO:HD2	77:G:33:VAL:HG12	1.82	0.61
1:AS:49:G:C5	31:CG:58:LYS:HG3	2.35	0.61
58:sR:176:C:OP1	80:sR:1979:OHX:N6	2.33	0.61
58:sR:787:G:OP1	73:s4:255:ARG:NH1	2.33	0.61
58:sR:894:U:H2'	58:sR:895:G:C8	2.36	0.61
58:sR:1011:G:OP2	80:sR:1958:OHX:N1	2.33	0.61
7:AT:84:C:H5''	7:AT:85:G:C5	2.35	0.61
63:5:53:ALA:O	63:5:68:THR:HG22	2.00	0.61
62:d7:6:ASP:CG	62:d7:9:HIS:HD1	2.08	0.61
3:CJ:148:ALA:HA	3:CJ:201:THR:HG22	1.81	0.61
9:CK:134:ILE:HG12	9:CK:146:LEU:HG	1.81	0.61
11:R:75:VAL:HG12	58:A:1609:U:H5''	1.82	0.61
18:s8:178:ARG:NH2	58:sR:207:U:O2	2.31	0.61
23:T:39:GLY:HA3	58:A:1566:U:OP1	2.00	0.61
26:AF:9:ILE:HG23	26:AF:63:THR:HB	1.81	0.61
29:U:131:ASP:O	29:U:135:ILE:HG23	2.00	0.61
49:DR:49:ARG:HG2	49:DR:50:GLY:H	1.66	0.61
9:q:10:ILE:HD13	9:q:75:VAL:HG11	1.82	0.61
58:A:211:U:H5''	36:M:20:PHE:CD2	2.36	0.61
27:t:119:TYR:O	27:t:123:ILE:HG23	1.99	0.61
54:z:86:GLU:OE2	54:z:91:SER:N	2.28	0.61
75:AR:3171:U:H3	75:AR:3279:A:H61	1.49	0.61
75:AR:3242:G:O6	19:CE:150:ARG:NH1	2.34	0.61
76:DA:17:LYS:O	76:DA:21:THR:OG1	2.19	0.61
76:DA:73:VAL:HA	76:DA:80:VAL:HG23	1.82	0.61
6:H:182:GLN:CD	6:H:182:GLN:H	2.07	0.61
78:Rb:126:SER:OG	78:Rb:127:ARG:N	2.32	0.61
78:Rb:211:ILE:HD11	78:Rb:225:LEU:HD22	1.80	0.61
43:CI:159:GLN:O	43:CI:161:VAL:HG23	1.99	0.61
77:s5:164:PRO:HA	77:s5:167:ARG:HD3	1.82	0.61
9:CK:100:ASN:HB3	9:CK:115:ARG:HB3	1.83	0.61
11:R:39:VAL:H	11:R:45:ARG:HH12	1.48	0.61
18:s8:153:GLU:HG3	18:s8:156:VAL:HG12	1.83	0.61
25:l:12:THR:HA	25:l:171:ALA:HB1	1.83	0.61
43:o:98:LYS:NZ	75:1:986:U:OP1	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:o:239:LEU:O	43:o:243:MET:HG3	2.00	0.61
17:c7:104:ASN:O	17:c7:105:GLN:HG2	2.00	0.61
58:A:918:U:H2'	58:A:919:A:H8	1.65	0.61
59:b:36:ILE:HD11	59:b:78:ALA:HB2	1.81	0.61
59:b:37:LYS:O	59:b:38:ARG:NH1	2.33	0.61
75:AR:3383:G:H2'	75:AR:3384:U:H6	1.65	0.61
79:DB:18:TYR:CE1	79:DB:47:GLU:HG3	2.35	0.61
60:2:80:VAL:HG11	60:2:85:LEU:HD22	1.83	0.61
18:J:46:VAL:HG22	18:J:54:LYS:HB3	1.83	0.61
64:s1:108:ASP:OD1	64:s1:108:ASP:N	2.32	0.61
25:CF:192:GLY:HA2	25:CF:195:ARG:HB2	1.82	0.61
25:CF:354:VAL:O	25:CF:358:THR:HG23	2.01	0.61
26:DG:103:LYS:O	26:DG:106:VAL:HG12	2.01	0.61
39:v:98:LEU:HA	39:v:101:THR:HG22	1.83	0.61
39:v:201:ARG:NH2	75:1:692:A:OP1	2.31	0.61
75:1:19:U:O4	80:1:4118:OHX:N6	2.33	0.61
75:1:2213:A:H2'	75:1:2214:A:C8	2.35	0.61
11:R:58:ASP:O	11:R:60:PHE:N	2.32	0.61
12:s7:114:ARG:O	12:s7:117:THR:HG22	2.00	0.61
13:j:9:ARG:NH2	75:1:912:G:OP2	2.32	0.61
14:AD:76:GLU:N	14:AD:76:GLU:OE1	2.32	0.61
15:CL:77:THR:O	15:CL:81:GLY:N	2.30	0.61
42:c3:48:SER:O	42:c3:52:VAL:HG13	2.01	0.61
47:c4:123:SER:HB2	58:sR:885:G:H21	1.65	0.61
48:CR:26:PHE:HE1	48:CR:120:ASN:HA	1.65	0.61
49:DR:49:ARG:HB2	49:DR:55:TRP:CZ3	2.35	0.61
52:p0:91:GLU:HB2	52:p0:96:ILE:HD11	1.83	0.61
52:p0:189:GLN:HG2	52:p0:196:VAL:HG22	1.81	0.61
53:Z:55:VAL:HG22	53:Z:75:VAL:HG23	1.82	0.61
58:A:482:U:H2'	58:A:483:A:C8	2.36	0.61
58:A:1073:G:H2'	58:A:1074:G:H5''	1.81	0.61
27:t:157:ARG:HG2	27:t:158:ALA:N	2.14	0.61
33:u:78:THR:OG1	75:1:524:U:O3'	2.19	0.61
64:C:207:LEU:O	64:C:210:ILE:HD11	2.00	0.61
49:AQ:55:TRP:HB2	49:AQ:64:VAL:HG23	1.81	0.61
46:d2:37:PHE:O	46:d2:41:MET:HG3	2.01	0.61
51:y:98:LYS:HD3	51:y:98:LYS:O	2.01	0.61
75:AR:283:G:OP2	75:AR:285:A:O2'	2.16	0.61
75:AR:2234:G:O6	80:AR:4039:OHX:N1	2.33	0.61
75:AR:2310:U:OP1	80:AR:4135:OHX:N6	2.34	0.61
75:AR:3276:G:H5'	37:CH:48:ARG:NH2	2.16	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:h:58:VAL:HG22	78:h:59:ARG:HG3	1.83	0.61
57:0:137:ARG:NH2	75:1:1214:U:OP2	2.34	0.61
79:DB:23:VAL:HG22	79:DB:45:GLY:HA3	1.82	0.61
58:sR:151:G:H1	58:sR:163:G:H1	1.48	0.61
58:sR:241:U:H2'	58:sR:242:U:H5	1.66	0.61
78:Rb:81:LEU:HD11	78:Rb:91:LEU:HD13	1.82	0.61
78:Rb:172:ALA:HB2	78:Rb:202:LEU:HD22	1.83	0.61
59:d6:44:ILE:HD11	59:d6:65:PRO:HB2	1.82	0.61
64:s1:168:ILE:O	64:s1:172:LEU:HD12	2.00	0.61
70:s3:54:ARG:HD2	70:s3:57:ASP:CG	2.25	0.61
32:DH:60:ARG:HA	32:DH:60:ARG:NE	2.16	0.61
73:s4:133:LYS:O	73:s4:134:LYS:HG2	2.00	0.61
75:1:45:A:OP1	80:1:3990:OHX:N1	2.34	0.61
75:1:1555:U:H5	75:1:1559:A:H61	1.49	0.61
75:1:2121:G:O6	80:1:3691:OHX:N1	2.33	0.61
75:1:2945:G:O2'	75:1:2948:C:OP2	2.15	0.61
13:j:87:PHE:HE2	75:1:2554:A:H5'	1.65	0.61
18:s8:47:ARG:HH11	18:s8:47:ARG:HG2	1.64	0.61
31:m:41:LYS:NZ	60:2:32:LYS:O	2.34	0.61
34:DO:98:LYS:HD2	34:DO:118:THR:HG21	1.82	0.61
9:q:90:MET:O	9:q:144:ILE:N	2.32	0.61
15:r:101:LYS:O	80:r:304:OHX:N3	2.34	0.61
17:c7:19:ARG:HD3	70:s3:211:PRO:HD2	1.82	0.61
58:A:639:U:OP1	12:I:117:THR:OG1	2.19	0.61
58:A:820:U:H2'	58:A:821:U:H4'	1.82	0.61
58:A:1208:A:N1	58:A:1455:G:N2	2.49	0.61
33:u:60:LEU:HD13	57:0:152:LEU:HD11	1.82	0.61
64:C:133:TYR:HE1	64:C:218:LEU:HD11	1.65	0.61
44:w:128:ARG:NH2	75:1:1318:A:OP1	2.34	0.61
75:AR:1007:U:O4	80:AR:3863:OHX:N4	2.33	0.61
75:AR:1190:A:C8	75:AR:1193:A:H1'	2.36	0.61
75:AR:2395:G:N7	80:AR:3856:OHX:N6	2.49	0.61
75:AR:2552:C:H5	14:DE:53:LYS:HE2	1.66	0.61
78:h:83:ALA:HB1	78:h:110:VAL:HG23	1.83	0.61
58:sR:1268:G:H1'	58:sR:1448:G:H5''	1.83	0.61
63:5:37:LEU:O	63:5:41:ILE:HG12	2.00	0.61
24:K:175:ARG:HG3	24:K:178:ALA:HB3	1.82	0.61
79:AA:16:GLY:O	79:AA:19:ALA:N	2.21	0.61
75:1:2299:A:OP1	80:1:3696:OHX:N3	2.34	0.61
3:CJ:238:LEU:HD13	3:CJ:243:GLN:HG3	1.83	0.61
12:s7:130:VAL:O	12:s7:133:THR:OG1	2.18	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:T:125:ILE:HG13	55:i:61:ILE:HG23	1.81	0.61
9:q:93:VAL:HG22	34:AN:82:LEU:HB3	1.83	0.61
54:CT:143:ILE:HD12	54:CT:144:GLN:N	2.15	0.61
56:a:84:GLU:HB3	56:a:89:ILE:HG12	1.82	0.61
21:s:44:THR:HG21	55:i:23:LYS:HB2	1.82	0.61
28:AM:3:ALA:O	28:AM:4:GLN:HG2	2.00	0.61
58:A:701:U:H3	58:A:737:A:H61	1.48	0.61
61:B:69:ASN:ND2	67:D:244:SER:O	2.33	0.61
33:u:6:ILE:HD11	75:1:3198:U:O2'	2.01	0.61
63:CW:14:THR:HG22	63:CW:66:VAL:HG22	1.83	0.61
44:w:68:ARG:NH2	75:1:2987:A:OP1	2.33	0.61
49:AQ:73:THR:HG23	49:AQ:76:ALA:H	1.65	0.61
58:sR:828:U:H2'	58:sR:829:A:H5''	1.82	0.61
58:sR:1285:U:O2'	58:sR:1286:U:OP1	2.17	0.61
67:s2:203:LYS:HG2	67:s2:206:THR:HG23	1.80	0.61
75:1:293:C:OP2	80:1:3545:OHX:N5	2.34	0.61
1:3:61:G:H4'	31:m:274:GLN:HG3	1.83	0.61
12:s7:96:ARG:NH2	12:s7:128:ASP:OD2	2.33	0.61
24:s9:84:GLY:HA3	24:s9:107:ARG:NH1	2.15	0.61
35:V:110:PRO:HB3	70:E:40:ARG:HG3	1.82	0.61
46:X:72:CYS:HB3	46:X:129:VAL:HG23	1.83	0.61
10:AJ:61:ILE:HG23	10:AJ:66:GLU:HA	1.82	0.61
5:c5:22:LEU:HB2	5:c5:25:LEU:HD21	1.81	0.61
5:c5:115:TYR:N	5:c5:118:GLU:OE1	2.34	0.61
58:A:110:U:O4	80:A:1936:OHX:N1	2.34	0.61
23:c8:32:LEU:O	23:c8:35:ILE:HG13	2.01	0.61
64:C:138:PHE:CD1	64:C:214:LYS:HB3	2.35	0.61
70:E:55:THR:O	70:E:58:VAL:N	2.33	0.61
73:F:32:SER:OG	73:F:81:THR:OG1	2.19	0.61
75:AR:1820:U:H4'	75:AR:1821:U:O5'	2.01	0.61
53:d4:112:LYS:NZ	58:sR:57:G:OP1	2.25	0.61
6:H:184:LEU:O	6:H:188:ARG:HG3	2.00	0.61
66:6:87:ARG:HH22	66:6:137:VAL:HG22	1.66	0.61
24:K:23:ARG:HH11	24:K:27:GLU:CD	2.09	0.61
75:1:2834:G:OP1	80:1:3995:OHX:N1	2.34	0.61
12:s7:173:TYR:CD1	12:s7:177:THR:HG21	2.36	0.60
18:s8:138:ASN:O	18:s8:141:ARG:HB3	2.01	0.60
21:CM:22:SER:OG	75:AR:2675:C:N4	2.34	0.60
23:T:41:ARG:NH1	29:U:46:PRO:HG3	2.15	0.60
29:U:136:ALA:O	29:U:140:LEU:N	2.24	0.60
48:CR:67:ILE:HD12	48:CR:82:ARG:CZ	2.31	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:CS:94:PHE:CE2	2:DC:119:PRO:HD3	2.36	0.60
11:c6:89:LEU:HD21	11:c6:105:LEU:HD11	1.82	0.60
54:CT:38:ARG:NH2	75:AR:1603:A:OP1	2.34	0.60
23:c8:94:ASP:OD1	23:c8:96:LYS:HG3	2.00	0.60
61:B:56:LYS:HG3	61:B:159:ALA:O	2.01	0.60
48:x:58:ILE:HG13	48:x:84:PRO:HD2	1.81	0.60
73:F:185:GLY:HA3	73:F:224:ASN:CG	2.26	0.60
50:d3:63:GLN:HB2	50:d3:65:ASN:H	1.65	0.60
50:d3:132:LEU:HA	50:d3:135:LEU:HB2	1.82	0.60
75:AR:1047:A:N3	75:AR:2633:U:O2'	2.33	0.60
75:AR:1103:A:C8	43:CI:158:LYS:HE3	2.36	0.60
75:AR:1764:U:H3'	75:AR:1765:U:C4'	2.31	0.60
75:AR:2244:A:OP1	13:CD:243:THR:OG1	2.19	0.60
6:H:148:SER:OG	6:H:151:ASP:OD1	2.10	0.60
58:sR:87:C:O2'	58:sR:169:A:N1	2.30	0.60
58:sR:1579:U:OP1	86:sR:2201:HOH:O	2.15	0.60
60:2:4:SER:OG	75:1:2631:U:OP2	2.19	0.60
78:Rb:228:LYS:HD2	70:s3:224:ASP:HB2	1.81	0.60
63:5:11:ILE:HG22	63:5:12:ALA:H	1.64	0.60
66:6:54:LEU:HD21	66:6:119:GLY:HA3	1.83	0.60
64:s1:35:PRO:HA	64:s1:231:LEU:HD11	1.81	0.60
67:s2:43:ARG:HH12	67:s2:248:SER:N	1.97	0.60
19:k:300:ARG:HD2	6:H:25:ARG:HH12	1.65	0.60
23:T:4:VAL:HG12	56:a:82:HIS:CG	2.36	0.60
23:T:13:HIS:O	23:T:24:GLY:N	2.34	0.60
23:T:41:ARG:HH11	23:T:41:ARG:HG3	1.65	0.60
24:s9:65:LYS:HA	24:s9:70:LEU:HD11	1.83	0.60
25:l:262:TRP:C	25:l:269:SER:HB2	2.26	0.60
30:c0:15:LEU:HD23	30:c0:68:LEU:HD21	1.83	0.60
45:DQ:28:TYR:HB3	45:DQ:69:VAL:HB	1.83	0.60
46:X:57:ARG:HD2	46:X:57:ARG:H	1.65	0.60
47:c4:85:ALA:H	47:c4:119:THR:CG2	2.14	0.60
5:c5:28:MET:HG3	5:c5:29:SER:H	1.65	0.60
52:p0:102:SER:HA	52:p0:105:VAL:CG2	2.31	0.60
15:r:92:HIS:HB2	15:r:94:PHE:CE2	2.36	0.60
54:CT:144:GLN:NE2	54:CT:148:ASP:OD1	2.34	0.60
58:A:25:C:O2	80:A:1983:OHX:N3	2.35	0.60
58:A:471:A:N7	80:A:1973:OHX:N6	2.49	0.60
58:A:803:A:C5	12:I:104:ARG:HG3	2.36	0.60
58:A:927:C:H2'	58:A:928:U:C6	2.36	0.60
58:A:976:G:O6	80:A:1903:OHX:N5	2.33	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:y:11:LYS:H	51:y:11:LYS:CD	2.13	0.60
75:AR:2273:G:N7	80:AR:4135:OHX:N1	2.48	0.60
75:AR:2841:G:OP2	80:AR:3548:OHX:N5	2.33	0.60
14:DE:27:TYR:CE1	14:DE:52:ARG:HD2	2.36	0.60
37:CH:85:ILE:HG23	32:DH:107:ILE:HG22	1.82	0.60
77:s5:118:LEU:HA	77:s5:121:ILE:HG12	1.84	0.60
77:s5:214:LYS:O	77:s5:217:LEU:N	2.27	0.60
75:1:1090:G:H2'	75:1:1091:A:H8	1.65	0.60
6:s6:7:TYR:CD2	6:s6:125:THR:HA	2.36	0.60
17:S:35:CYS:HA	17:S:38:ILE:HG22	1.83	0.60
17:S:105:GLN:NE2	61:B:41:ARG:HB2	2.15	0.60
21:CM:23:VAL:HG12	21:CM:65:ILE:O	2.01	0.60
21:CM:53:THR:HG22	21:CM:61:ARG:N	2.16	0.60
24:s9:129:ILE:HG22	24:s9:142:ASN:HA	1.81	0.60
38:AH:91:ARG:O	38:AH:95:ILE:HG22	2.02	0.60
11:c6:38:LEU:HA	11:c6:45:ARG:HH21	1.65	0.60
17:c7:53:TYR:O	17:c7:57:LEU:HD12	2.00	0.60
58:A:1514:U:O2'	70:E:5:ILE:O	2.13	0.60
49:AQ:75:ALA:O	49:AQ:79:VAL:HG23	2.01	0.60
75:AR:430:U:OP2	80:AR:3853:OHX:N2	2.34	0.60
75:AR:908:G:OP1	80:AR:4107:OHX:N3	2.33	0.60
75:AR:1019:G:N2	75:AR:1033:U:H3	1.97	0.60
78:h:21:THR:C	78:h:291:SER:HB3	2.26	0.60
78:h:278:PHE:O	80:h:401:OHX:N3	2.34	0.60
58:sR:1495:C:OP1	80:sR:2157:OHX:N6	2.35	0.60
12:I:82:GLU:O	12:I:86:GLN:HB2	2.01	0.60
78:Rb:262:VAL:HG23	78:Rb:271:VAL:HB	1.83	0.60
8:DD:21:ILE:HD12	8:DD:21:ILE:O	2.01	0.60
18:J:57:ALA:HB1	18:J:60:ILE:HD13	1.83	0.60
42:O:46:THR:O	42:O:50:ILE:HG13	2.01	0.60
73:s4:208:VAL:HG23	73:s4:210:ILE:HD11	1.82	0.60
43:CI:34:LYS:O	43:CI:34:LYS:HD2	2.01	0.60
75:1:829:U:H3	75:1:895:A:H62	1.48	0.60
11:R:75:VAL:HA	11:R:78:VAL:HG12	1.84	0.60
24:s9:81:VAL:HG12	24:s9:86:LEU:HB3	1.84	0.60
24:s9:104:PHE:O	24:s9:147:MET:HE1	2.02	0.60
25:l:100:PHE:CD2	75:1:660:A:H5''	2.37	0.60
29:U:49:ASP:HB3	29:U:53:TRP:HB3	1.82	0.60
31:m:238:ASP:HA	31:m:241:THR:HG22	1.84	0.60
42:c3:17:PRO:HG3	62:d7:28:PRO:HG3	1.82	0.60
5:c5:130:ARG:O	5:c5:130:ARG:HG3	2.00	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:q:57:VAL:HG23	9:q:68:LEU:HD13	1.83	0.60
58:A:1081:A:O2'	58:A:1082:C:O5'	2.19	0.60
46:d:15:ASN:HD21	46:d:72:CYS:H	1.47	0.60
73:F:47:PHE:HD2	73:F:48:LEU:HD23	1.67	0.60
75:AR:13:A:OP1	80:AR:3792:OHX:N1	2.35	0.60
75:AR:658:G:OP1	80:AR:3954:OHX:N5	2.35	0.60
75:AR:2745:G:N7	80:AR:3415:OHX:N5	2.49	0.60
58:sR:1360:A:C3'	58:sR:1361:U:H4'	2.31	0.60
58:sR:1380:U:O2'	58:sR:1516:A:N1	2.32	0.60
72:8:64:GLU:OE1	72:8:85:GLN:NE2	2.33	0.60
5:Q:40:ARG:NH2	58:A:1553:G:O6	2.34	0.60
12:s7:99:LEU:HD13	12:s7:112:ARG:HG2	1.82	0.60
35:V:61:LYS:HB2	35:V:86:ILE:HB	1.81	0.60
10:AJ:95:ALA:HA	10:AJ:99:ARG:HG3	1.83	0.60
53:Z:59:GLY:O	58:A:523:G:H5''	2.00	0.60
11:c6:83:GLN:O	11:c6:87:LYS:HB2	2.01	0.60
22:AL:44:LYS:HB3	22:AL:51:LEU:HD21	1.82	0.60
21:s:62:ASN:HB2	45:AP:103:ALA:HB2	1.82	0.60
58:A:1592:A:H2'	58:A:1593:A:C8	2.36	0.60
29:c9:6:VAL:O	29:c9:9:VAL:HG22	2.02	0.60
44:w:62:THR:OG1	44:w:69:GLY:HA2	2.00	0.60
70:E:39:VAL:HG22	70:E:48:VAL:HG22	1.84	0.60
55:i:103:LYS:HA	55:i:106:VAL:HG12	1.84	0.60
75:AR:25:U:O4	80:AR:3973:OHX:N5	2.34	0.60
80:AR:3541:OHX:N2	1:AS:86:U:O2	2.34	0.60
6:H:98:ARG:NE	6:H:106:LEU:HD21	2.16	0.60
58:sR:263:C:H4'	58:sR:292:U:H5'	1.83	0.60
78:Rb:129:LYS:HE2	78:Rb:149:ASP:HA	1.82	0.60
61:s0:7:PHE:CZ	61:s0:184:LEU:HD11	2.36	0.60
26:DG:59:SER:HB2	26:DG:64:LYS:HG3	1.84	0.60
3:CJ:179:ILE:H	3:CJ:222:PHE:HE2	1.50	0.60
17:S:105:GLN:HE21	61:B:42:PRO:HD2	1.67	0.60
20:AE:37:LYS:HG2	20:AE:49:VAL:HG13	1.83	0.60
27:CN:156:ALA:HB2	2:DC:90:TYR:HE2	1.67	0.60
29:U:118:PRO:HD2	29:U:123:ARG:NH2	2.17	0.60
32:AG:78:SER:OG	75:1:1180:A:OP1	2.17	0.60
41:W:35:ASN:HD21	67:D:237:VAL:HG21	1.67	0.60
50:Y:7:ARG:O	36:M:99:ARG:NH1	2.34	0.60
11:c6:65:ILE:HD12	11:c6:65:ILE:O	2.01	0.60
56:a:49:ARG:CZ	56:a:70:LYS:HG2	2.31	0.60
58:A:593:U:OP1	24:K:40:LYS:HB3	2.00	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:c8:36:LYS:HB3	23:c8:105:VAL:HG11	1.82	0.60
29:c9:57:ARG:O	29:c9:61:VAL:HG23	2.01	0.60
75:AR:1952:G:H3'	75:AR:1953:G:H5''	1.83	0.60
58:sR:1111:G:O6	80:sR:1978:OHX:N1	2.35	0.60
58:sR:1680:G:O6	80:sR:1916:OHX:N1	2.34	0.60
12:I:87:ASP:O	12:I:88:ARG:HD2	2.01	0.60
20:DF:96:VAL:HG23	20:DF:98:VAL:HG13	1.83	0.60
70:s3:22:ASN:O	70:s3:26:THR:HG23	2.01	0.60
73:s4:73:ASP:HB3	73:s4:164:LEU:HD21	1.82	0.60
43:CI:23:ALA:HB1	43:CI:25:GLN:HG2	1.83	0.60
18:s8:117:TYR:CE2	18:s8:150:ALA:HA	2.36	0.60
25:l:34:ILE:O	25:l:38:VAL:HG23	2.02	0.60
27:CN:129:ASN:HD22	27:CN:131:LYS:HG2	1.66	0.60
38:AH:3:GLN:HB3	38:AH:30:LEU:HD12	1.84	0.60
38:AH:7:PHE:CE2	75:1:1856:C:H1'	2.37	0.60
45:DQ:74:CYS:O	45:DQ:78:LYS:HA	2.01	0.60
50:Y:92:CYS:HG	50:Y:136:TRP:CD1	2.20	0.60
52:p0:189:GLN:HG2	52:p0:196:VAL:CG2	2.32	0.60
52:p0:189:GLN:HE21	52:p0:196:VAL:HG22	1.67	0.60
17:c7:47:ARG:HH11	17:c7:47:ARG:HB3	1.67	0.60
58:A:545:A:N1	58:A:593:U:O2'	2.33	0.60
58:A:1088:A:O3'	59:b:89:ARG:NH2	2.34	0.60
59:b:87:ARG:NE	59:b:92:ARG:HA	2.17	0.60
62:c:50:ALA:C	62:c:52:THR:H	2.10	0.60
63:CW:98:THR:OG1	63:CW:99:LYS:N	2.34	0.60
41:d1:66:ASP:HA	61:s0:157:ASP:O	2.01	0.60
78:h:112:SER:HB3	78:h:154:VAL:H	1.66	0.60
58:sR:1239:U:O4	80:sR:1991:OHX:N2	2.35	0.60
58:sR:1539:G:H5'	58:sR:1539:G:C8	2.35	0.60
24:K:31:ALA:HB2	24:K:42:ILE:HD11	1.84	0.60
70:s3:141:LYS:NZ	70:s3:179:GLN:HE21	2.00	0.60
73:s4:247:SER:O	73:s4:251:GLU:HG3	2.00	0.60
77:s5:51:VAL:HG11	77:s5:130:ILE:HD11	1.84	0.60
75:1:92:G:OP2	75:1:93:C:H5''	2.02	0.60
15:CL:43:VAL:HG21	15:CL:197:VAL:HB	1.84	0.60
17:S:115:LEU:HD22	17:S:116:LYS:H	1.65	0.60
35:V:20:ILE:HG12	35:V:95:ALA:H	1.67	0.60
45:DQ:14:GLY:O	45:DQ:15:LYS:HB2	2.00	0.60
15:r:48:LEU:HD13	15:r:142:ASP:HA	1.83	0.60
56:a:100:ILE:HG12	77:G:120:ILE:HG23	1.83	0.60
21:s:109:HIS:O	21:s:114:ILE:HD11	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:1015:U:OP1	80:A:2139:OHX:N1	2.33	0.60
58:A:1479:A:H2'	58:A:1480:G:H8	1.67	0.60
58:A:1628:U:H2'	58:A:1629:G:C8	2.36	0.60
58:A:1672:G:O6	80:A:2086:OHX:N3	2.35	0.60
64:C:135:LEU:HD21	64:C:215:VAL:HG23	1.82	0.60
65:d:61:ARG:HG3	77:G:225:ARG:HD3	1.83	0.60
44:w:89:SER:O	44:w:92:THR:OG1	2.16	0.60
73:F:177:ALA:HA	73:F:195:ILE:HG21	1.84	0.60
73:F:196:VAL:HB	73:F:209:HIS:CB	2.31	0.60
50:d3:8:GLY:O	50:d3:11:SER:OG	2.19	0.60
75:AR:1331:U:OP1	80:AR:3783:OHX:N1	2.35	0.60
75:AR:2407:C:H2'	75:AR:2408:U:H6	1.67	0.60
75:AR:3139:A:OP1	19:CE:274:SER:OG	2.18	0.60
58:sR:1514:U:H1'	70:s3:6:SER:HA	1.83	0.60
12:I:17:GLU:HA	12:I:20:VAL:HG22	1.83	0.60
12:I:163:ASP:HA	12:I:166:LEU:HD21	1.82	0.60
78:Rb:83:ALA:HB2	78:Rb:113:VAL:HG13	1.83	0.60
78:Rb:150:TRP:O	78:Rb:174:ASN:N	2.25	0.60
63:5:59:ASP:OD1	63:5:61:THR:OG1	2.19	0.60
25:CF:259:ASP:HB3	25:CF:267:VAL:HG11	1.83	0.60
71:e0:41:THR:HA	71:e0:45:VAL:HG22	1.84	0.60
75:1:1262:G:H2'	75:1:1264:G:C8	2.37	0.60
2:AB:35:ALA:HB2	75:1:39:A:H5''	1.83	0.60
7:4:52:A:H4'	28:AM:19:GLN:HA	1.81	0.60
24:s9:90:LYS:HD2	24:s9:95:TYR:CE2	2.36	0.60
24:s9:133:HIS:NE2	58:sR:513:U:OP1	2.35	0.60
29:U:9:VAL:HG11	29:U:136:ALA:HB3	1.83	0.60
44:CQ:8:VAL:HA	44:CQ:34:VAL:O	2.02	0.60
17:c7:8:THR:HG21	58:sR:1330:G:H21	1.65	0.60
28:AM:42:ARG:HH22	75:1:1494:U:P	2.24	0.60
58:A:707:A:O2'	58:A:731:C:N4	2.35	0.60
60:CV:116:ARG:HA	60:CV:119:ALA:HB2	1.84	0.60
61:B:26:ALA:HA	61:B:165:ARG:HD3	1.84	0.60
64:C:128:LYS:HA	64:C:133:TYR:O	2.02	0.60
67:D:156:THR:HG21	67:D:224:PHE:CD2	2.37	0.60
49:AQ:58:SER:O	49:AQ:61:LYS:NZ	2.24	0.60
70:E:22:ASN:O	70:E:26:THR:HG23	2.02	0.60
75:AR:629:U:H2'	75:AR:630:A:C8	2.37	0.60
75:AR:1024:G:N2	75:AR:1027:A:OP2	2.34	0.60
75:AR:2818:U:H5'	75:AR:2818:U:H6	1.66	0.60
58:sR:190:C:O2'	58:sR:191:C:O5'	2.20	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1370:U:H4'	58:sR:1371:A:H4'	1.81	0.60
12:I:9:LEU:HD21	12:I:17:GLU:HG3	1.84	0.60
78:Rb:131:ILE:O	78:Rb:132:LYS:NZ	2.35	0.60
13:CD:5:ILE:HG13	13:CD:8:GLN:HG3	1.82	0.60
66:6:120:LYS:H	66:6:137:VAL:HG23	1.65	0.60
24:K:47:PHE:HE1	24:K:51:LYS:HE2	1.67	0.60
43:CI:95:ILE:HD13	43:CI:100:ARG:HG3	1.82	0.60
75:1:1752:A:OP2	80:1:3610:OHX:N3	2.34	0.60
6:s6:121:LEU:O	6:s6:125:THR:HG22	2.01	0.60
17:S:66:VAL:H	17:S:69:ILE:HD13	1.66	0.60
19:k:35:ASP:OD2	19:k:37:ARG:NE	2.35	0.60
24:s9:28:LEU:HD12	71:e0:44:PHE:HE2	1.66	0.60
30:c0:33:GLU:OE2	30:c0:33:GLU:N	2.23	0.60
35:V:15:GLN:N	35:V:15:GLN:HE21	2.00	0.60
42:c3:99:ARG:NH1	42:c3:119:GLU:OE2	2.35	0.60
47:c4:114:ARG:NH1	64:s1:77:GLU:OE2	2.28	0.60
58:A:541:A:O2'	58:A:542:A:H4'	2.02	0.60
58:A:929:A:O4'	47:P:124:ASP:HB2	2.02	0.60
58:A:1796:C:O2'	59:b:95:ARG:NH2	2.35	0.60
23:c8:137:HIS:ND1	58:sR:1175:U:OP2	2.33	0.60
27:t:56:PRO:HG3	27:t:74:GLY:O	2.02	0.60
61:B:5:ALA:HB3	61:B:7:PHE:HB2	1.83	0.60
44:w:98:ALA:HA	44:w:101:ARG:HH11	1.66	0.60
54:z:109:TYR:HB3	54:z:115:ILE:HG22	1.84	0.60
75:AR:275:U:O4	80:AR:3953:OHX:N2	2.35	0.60
75:AR:655:C:H2'	75:AR:656:A:C8	2.37	0.60
75:AR:734:C:H2'	75:AR:735:A:O4'	2.02	0.60
75:AR:2896:A:H8	75:AR:2896:A:H5'	1.66	0.60
61:s0:109:ASN:O	61:s0:109:ASN:ND2	2.33	0.60
31:CG:88:ILE:HG12	31:CG:240:TYR:HE1	1.65	0.60
31:CG:279:LYS:HZ2	31:CG:283:ALA:HB2	1.66	0.60
70:s3:64:ARG:HA	70:s3:67:ASN:HB2	1.82	0.60
42:O:97:SER:HA	42:O:100:LYS:HE3	1.84	0.60
75:1:908:G:OP1	80:1:3728:OHX:N6	2.35	0.60
75:1:3092:C:O2'	75:1:3094:A:OP2	2.13	0.60
15:CL:206:LEU:O	15:CL:210:ILE:HD12	2.02	0.59
17:S:47:ARG:HH11	17:S:47:ARG:HG3	1.67	0.59
23:T:133:VAL:HG12	58:A:1545:A:OP1	2.01	0.59
27:CN:119:TYR:CD1	27:CN:145:PHE:HE2	2.20	0.59
49:DR:4:ARG:NH1	75:AR:837:A:OP2	2.33	0.59
16:AK:39:TYR:CD1	16:AK:40:PRO:HA	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:1201:G:N2	58:A:1600:A:H5''	2.16	0.59
59:b:84:VAL:HG13	59:b:85:ARG:N	2.17	0.59
23:c8:22:VAL:HG11	23:c8:31:ALA:O	2.01	0.59
29:c9:117:SER:HB2	29:c9:123:ARG:HB2	1.83	0.59
71:f:30:PRO:C	71:f:31:LYS:HD3	2.27	0.59
53:d4:86:GLU:OE2	53:d4:90:ARG:NH1	2.34	0.59
57:0:91:TYR:O	57:0:137:ARG:NH1	2.28	0.59
12:I:50:ASP:OD1	12:I:50:ASP:N	2.32	0.59
78:Rb:69:GLN:HG2	78:Rb:111:MET:HG2	1.84	0.59
64:s1:170:GLU:HA	64:s1:173:THR:HG22	1.83	0.59
72:8:115:ARG:HD3	72:8:121:LYS:HE3	1.84	0.59
73:s4:51:ARG:N	73:s4:51:ARG:HD2	2.17	0.59
73:s4:115:THR:OG1	73:s4:117:GLU:O	2.20	0.59
73:s4:256:ARG:HA	73:s4:259:GLN:HG3	1.83	0.59
38:DI:79:SER:HB3	38:DI:80:ARG:HD2	1.84	0.59
75:1:543:C:H42	75:1:548:G:H1	1.50	0.59
75:1:2573:G:N7	80:1:4028:OHX:N3	2.50	0.59
9:CK:109:ALA:HB1	9:CK:111:PHE:CZ	2.36	0.59
11:R:33:GLY:HA3	29:U:7:ARG:HH11	1.67	0.59
17:S:6:THR:HG22	17:S:8:THR:H	1.67	0.59
19:k:37:ARG:HA	19:k:185:GLY:O	2.03	0.59
23:T:141:THR:HG21	58:A:1174:C:OP2	2.02	0.59
25:l:36:HIS:O	25:l:40:THR:HG23	2.02	0.59
27:CN:6:ASN:HB2	2:DC:48:TYR:CG	2.37	0.59
38:AH:31:ARG:HH11	38:AH:31:ARG:HG3	1.67	0.59
46:X:85:ASP:OD1	46:X:88:LYS:NZ	2.25	0.59
46:X:98:GLN:NE2	67:D:143:TYR:O	2.36	0.59
49:DR:87:ARG:O	49:DR:91:GLU:HG3	2.02	0.59
51:CS:96:PHE:CZ	51:CS:114:ILE:HD13	2.38	0.59
52:p0:27:VAL:HG12	52:p0:28:VAL:H	1.66	0.59
58:A:1202:A:H1'	58:A:1207:C:H42	1.67	0.59
64:C:189:ILE:HG13	64:C:190:PRO:HD3	1.84	0.59
48:x:138:LYS:HE2	75:1:2356:A:H5'	1.83	0.59
70:E:225:TYR:OH	78:h:191:ASP:HB2	2.02	0.59
75:AR:274:G:N7	80:AR:3953:OHX:N5	2.49	0.59
75:AR:2366:C:H5'	19:CE:259:HIS:CE1	2.36	0.59
58:sR:1175:U:H2'	58:sR:1176:G:C8	2.37	0.59
58:sR:1213:G:O6	80:sR:2014:OHX:N3	2.35	0.59
58:sR:1263:G:H2'	58:sR:1264:G:O4'	2.02	0.59
58:sR:1360:A:H3'	58:sR:1361:U:H4'	1.82	0.59
78:Rb:220:ILE:HD12	78:Rb:220:ILE:O	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CE:188:ILE:H	19:CE:188:ILE:HD12	1.67	0.59
75:1:1464:G:OP2	80:1:4002:OHX:N6	2.35	0.59
21:CM:34:SER:HB3	21:CM:67:VAL:HG11	1.84	0.59
26:AF:100:ILE:O	26:AF:105:ARG:NH1	2.36	0.59
31:m:120:LYS:O	31:m:248:ARG:NH2	2.36	0.59
11:c6:93:HIS:HA	11:c6:97:VAL:HB	1.84	0.59
58:A:256:A:H2'	58:A:257:A:O4'	2.01	0.59
58:A:730:G:H21	58:A:731:C:H5'	1.67	0.59
58:A:1217:A:C5	30:L:40:LEU:HD21	2.37	0.59
58:A:1533:C:H4'	58:A:1539:G:N1	2.17	0.59
60:CV:43:LYS:HG3	60:CV:58:GLN:HE22	1.66	0.59
70:E:223:LYS:NZ	70:E:224:ASP:O	2.35	0.59
46:d2:105:THR:HG22	58:sR:804:A:N3	2.16	0.59
75:AR:1239:C:H42	75:AR:1249:G:H22	1.48	0.59
75:AR:1378:U:OP1	80:AR:3574:OHX:N5	2.36	0.59
75:AR:3395:G:O2'	80:AR:3487:OHX:N1	2.35	0.59
77:G:125:THR:HG21	77:G:132:VAL:HG11	1.84	0.59
53:d4:52:LYS:HA	53:d4:55:VAL:HG12	1.83	0.59
58:sR:1302:U:O4	80:sR:1967:OHX:N1	2.35	0.59
61:s0:183:ARG:HD3	61:s0:191:ARG:HD3	1.84	0.59
64:s1:134:VAL:HG22	64:s1:219:LYS:HB3	1.83	0.59
64:s1:184:LEU:O	64:s1:188:LEU:HD12	2.02	0.59
32:DH:14:LEU:HD11	32:DH:31:LYS:HB2	1.84	0.59
3:CJ:57:ARG:O	3:CJ:61:GLN:HG3	2.01	0.59
13:j:79:ASN:ND2	13:j:165:VAL:HG23	2.18	0.59
14:AD:100:ILE:HD12	14:AD:101:LEU:N	2.17	0.59
17:S:77:GLU:HG2	17:S:78:ARG:HH11	1.66	0.59
25:l:144:LYS:HE2	25:l:176:SER:HB3	1.85	0.59
38:AH:31:ARG:NH2	75:1:1598:G:OP2	2.28	0.59
4:AI:71:LYS:HA	4:AI:71:LYS:HE2	1.84	0.59
3:p:129:PRO:HB3	75:1:121:A:C2	2.38	0.59
11:c6:27:GLY:O	77:s5:25:LEU:HD13	2.02	0.59
58:A:520:A:H2'	58:A:521:A:C8	2.37	0.59
58:A:1606:C:H2'	58:A:1607:G:C8	2.36	0.59
23:c8:14:ILE:HG13	23:c8:23:ASP:HA	1.84	0.59
45:AP:98:LYS:HG2	45:AP:99:GLN:N	2.14	0.59
49:AQ:47:VAL:HA	49:AQ:56:THR:O	2.02	0.59
50:d3:20:ARG:HD2	58:sR:311:U:OP2	2.03	0.59
75:AR:1352:A:H4'	75:AR:1353:U:OP1	2.02	0.59
75:AR:2538:U:H3'	75:AR:2539:C:O4'	2.03	0.59
53:d4:34:ASN:ND2	58:sR:521:A:O2'	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:DB:110:ALA:O	79:DB:114:VAL:HG23	2.01	0.59
12:I:170:GLN:O	12:I:174:ASN:ND2	2.34	0.59
78:Rb:150:TRP:HB2	78:Rb:174:ASN:HB2	1.83	0.59
67:s2:139:ILE:HG21	67:s2:218:ILE:HG12	1.84	0.59
77:s5:100:ASN:HD22	77:s5:180:ARG:CD	2.14	0.59
75:1:2438:A:H2'	75:1:2439:A:C8	2.37	0.59
13:j:30:ARG:HG3	13:j:74:GLU:HG3	1.83	0.59
20:AE:10:ARG:HB2	20:AE:75:ILE:HD11	1.83	0.59
24:s9:179:ARG:HH22	24:s9:183:ALA:N	1.96	0.59
31:m:83:LEU:HB3	31:m:88:ILE:HB	1.83	0.59
4:AI:25:LYS:NZ	72:8:58:ASP:OD2	2.36	0.59
61:B:139:VAL:HG23	61:B:141:ILE:HG12	1.84	0.59
63:CW:35:LYS:HA	63:CW:38:ILE:HG12	1.81	0.59
64:C:133:TYR:CE1	64:C:218:LEU:HD11	2.37	0.59
66:CX:126:TRP:HB2	66:CX:129:VAL:CG1	2.31	0.59
73:F:87:MET:CE	73:F:123:LEU:HB2	2.26	0.59
75:AR:896:A:H5'	13:CD:183:GLY:HA2	1.83	0.59
75:AR:1238:C:H2'	75:AR:1239:C:C6	2.36	0.59
6:H:3:LEU:HD22	6:H:109:LEU:HB3	1.85	0.59
78:Rb:281:TYR:O	80:Rb:401:OHX:N1	2.36	0.59
78:Rb:297:ASP:HB2	78:Rb:299:GLN:H	1.67	0.59
14:DE:20:SER:HB3	14:DE:96:GLY:HA3	1.84	0.59
25:CF:311:HIS:CE1	43:CI:164:SER:HB3	2.38	0.59
9:CK:150:SER:O	9:CK:154:VAL:HG12	2.02	0.59
12:s7:155:ASP:O	12:s7:159:VAL:HG11	2.02	0.59
15:CL:98:ARG:NH1	75:AR:1127:G:OP2	2.35	0.59
17:S:33:ARG:HG2	78:h:109:ASP:OD2	2.02	0.59
33:CO:94:TRP:O	33:CO:97:SER:OG	2.20	0.59
39:CP:83:LYS:NZ	75:AR:36:C:OP2	2.31	0.59
43:o:25:GLN:HA	43:o:28:ALA:HB3	1.84	0.59
47:c4:85:ALA:H	47:c4:119:THR:HG22	1.65	0.59
5:c5:130:ARG:NH1	5:c5:132:GLY:O	2.35	0.59
9:q:12:VAL:HB	9:q:51:GLN:HA	1.85	0.59
9:q:106:LYS:H	9:q:109:ALA:HB3	1.67	0.59
58:A:555:A:C4	24:K:19:TYR:HE2	2.20	0.59
58:A:1612:U:OP1	77:G:95:ASN:ND2	2.35	0.59
33:u:131:VAL:O	33:u:135:LEU:N	2.33	0.59
75:AR:1355:A:H4'	75:AR:1356:U:O5'	2.02	0.59
75:AR:2273:G:O6	80:AR:3725:OHX:N2	2.35	0.59
75:AR:2697:A:H2'	75:AR:2698:G:C8	2.38	0.59
57:0:80:ARG:HB3	57:0:122:HIS:HB2	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:79:A:OP2	80:AS:223:OHX:N3	2.35	0.59
6:H:179:VAL:HG22	6:H:184:LEU:HD11	1.84	0.59
58:sR:512:A:H2'	58:sR:513:U:C6	2.36	0.59
78:Rb:267:PRO:HD2	78:Rb:269:TYR:CE1	2.38	0.59
78:Rb:274:LEU:HG	78:Rb:311:ARG:HH22	1.66	0.59
70:s3:31:GLU:CD	70:s3:31:GLU:H	2.09	0.59
77:s5:63:GLN:HE22	77:s5:66:GLN:N	1.98	0.59
9:CK:105:GLU:HB2	9:CK:109:ALA:N	2.15	0.59
10:DK:36:ARG:HH11	10:DK:36:ARG:HG3	1.67	0.59
23:T:88:ARG:HH22	23:T:92:ILE:HG22	1.65	0.59
39:CP:38:ARG:NH2	7:AT:143:U:OP1	2.36	0.59
5:c5:85:ILE:HG22	5:c5:112:LEU:HD23	1.85	0.59
15:r:212:GLU:CD	15:r:212:GLU:H	2.02	0.59
57:CU:90:MET:HG2	75:AR:1213:G:H4'	1.84	0.59
54:z:41:ILE:O	54:z:45:VAL:HG23	2.01	0.59
75:AR:1059:G:OP2	80:AR:3798:OHX:N1	2.35	0.59
75:AR:3140:G:N7	19:CE:28:ARG:NH2	2.50	0.59
78:h:114:ASP:OD2	78:h:156:VAL:N	2.36	0.59
58:sR:140:A:N6	58:sR:281:G:OP1	2.35	0.59
58:sR:1171:A:H2'	58:sR:1172:G:C8	2.38	0.59
56:d5:77:ARG:HG3	56:d5:77:ARG:NH1	2.12	0.59
78:Rb:19:TRP:N	78:Rb:38:ARG:HB2	2.17	0.59
78:Rb:255:ALA:HB2	78:Rb:292:LEU:HD12	1.83	0.59
18:J:34:ALA:HB2	18:J:56:ARG:HG3	1.84	0.59
18:J:52:ASN:ND2	86:J:401:HOH:O	2.35	0.59
62:d7:31:TYR:HE2	62:d7:33:LEU:HD21	1.68	0.59
67:s2:101:VAL:HG22	67:s2:115:ILE:HG22	1.85	0.59
79:AA:56:LYS:HA	80:1:4028:OHX:N4	2.17	0.59
75:1:507:U:H2'	75:1:508:U:C6	2.37	0.59
75:1:1624:G:O6	80:1:3603:OHX:N5	2.36	0.59
75:1:2768:U:H2'	75:1:2769:A:H8	1.66	0.59
14:AD:16:LEU:HA	14:AD:19:LYS:HZ3	1.66	0.59
19:k:250:ALA:HB3	75:1:2880:U:H1'	1.84	0.59
24:s9:24:LEU:HA	24:s9:27:GLU:HB2	1.85	0.59
3:p:231:LYS:HD3	3:p:231:LYS:O	2.03	0.59
48:CR:66:SER:HB2	75:AR:1448:U:H5''	1.84	0.59
5:c5:127:ARG:NH1	55:sM:65:THR:OG1	2.36	0.59
17:c7:33:ARG:NH1	78:Rb:109:ASP:OD1	2.35	0.59
58:A:1234:A:O2'	74:g:145:HIS:O	2.21	0.59
58:A:1583:A:N1	58:A:1611:A:H5''	2.18	0.59
61:B:13:ASP:HA	61:B:16:LEU:HD13	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:u:133:LYS:NZ	75:1:3227:A:O3'	2.36	0.59
45:AP:9:LYS:O	75:1:2713:U:H3'	2.03	0.59
75:AR:2247:G:OP2	80:AR:3725:OHX:N3	2.35	0.59
75:AR:2880:U:H1'	19:CE:250:ALA:HB3	1.84	0.59
75:AR:3098:G:N7	80:AR:3566:OHX:N6	2.51	0.59
58:sR:40:A:O2'	80:sR:2123:OHX:N6	2.36	0.59
58:sR:1269:U:OP1	80:sR:2176:OHX:N1	2.36	0.59
12:I:33:GLU:H	12:I:35:LYS:HB3	1.68	0.59
66:6:85:TRP:CZ2	66:6:93:LEU:HD11	2.37	0.59
14:DE:63:SER:O	14:DE:64:LYS:HG3	2.03	0.59
24:K:34:PHE:CE2	24:K:106:GLU:HG2	2.38	0.59
39:v:91:GLU:OE1	80:1:4050:OHX:N5	2.35	0.59
75:1:1580:A:H4'	75:1:1581:C:H5'	1.83	0.59
75:1:2443:A:O2'	75:1:2444:C:OP2	2.19	0.59
75:1:3027:A:H2'	75:1:3028:G:O4'	2.02	0.59
75:1:3147:G:OP1	80:1:3723:OHX:N5	2.36	0.59
4:DJ:30:GLU:O	4:DJ:34:GLN:HG3	2.03	0.59
11:R:127:LYS:NZ	11:R:131:GLY:O	2.36	0.59
13:j:108:PRO:O	13:j:111:THR:OG1	2.21	0.59
16:DL:28:HIS:ND1	16:DL:31:LYS:HG3	2.18	0.59
19:k:113:GLU:HB3	19:k:176:ALA:HB2	1.84	0.59
23:T:57:ARG:N	23:T:60:GLU:OE1	2.36	0.59
43:o:163:LEU:O	43:o:168:ILE:HD12	2.03	0.59
45:DQ:83:LEU:HD23	45:DQ:84:THR:N	2.16	0.59
50:Y:131:SER:OG	58:A:30:G:O3'	2.20	0.59
51:CS:158:HIS:H	51:CS:186:VAL:CG1	2.15	0.59
58:A:1073:G:H4'	42:O:10:GLY:HA2	1.84	0.59
58:A:1213:G:O6	80:A:2082:OHX:N5	2.36	0.59
61:B:93:THR:HB	61:B:95:ALA:N	2.17	0.59
33:u:27:GLN:OE1	33:u:27:GLN:N	2.20	0.59
46:d2:6:VAL:HG13	46:d2:29:PRO:HD2	1.83	0.59
73:F:151:ASP:OD1	73:F:151:ASP:N	2.34	0.59
73:F:173:ILE:HD12	73:F:173:ILE:H	1.68	0.59
75:AR:968:G:N3	8:DD:15:LYS:NZ	2.51	0.59
12:I:173:TYR:CD2	12:I:181:ILE:HD11	2.38	0.59
18:J:142:LYS:N	18:J:142:LYS:HD3	2.17	0.59
61:s0:7:PHE:HZ	61:s0:184:LEU:HD11	1.68	0.59
61:s0:172:LEU:O	61:s0:175:TYR:HB3	2.02	0.59
64:s1:22:ASP:O	64:s1:25:THR:HG23	2.02	0.59
65:d8:45:LYS:N	77:s5:161:ASP:O	2.36	0.59
79:AA:88:ASP:HB3	79:AA:121:ARG:NH2	2.11	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:CI:30:ARG:O	43:CI:34:LYS:HB3	2.03	0.59
75:1:786:A:H4'	75:1:787:G:H5'	1.84	0.59
75:1:1103:A:H1'	75:1:1104:G:OP1	2.02	0.59
75:1:1565:G:H8	75:1:1565:G:O5'	1.86	0.59
75:1:2686:A:OP2	80:1:4082:OHX:N4	2.36	0.59
4:DJ:85:THR:HG23	4:DJ:88:LEU:HD12	1.85	0.59
15:CL:100:ASN:OD1	80:CL:302:OHX:N2	2.35	0.59
19:k:20:LYS:NZ	75:1:3140:G:OP1	2.30	0.59
24:s9:110:GLN:HE22	24:s9:126:ARG:HD2	1.67	0.59
35:V:23:ARG:HD3	35:V:92:ASP:OD1	2.03	0.59
22:AL:7:ASP:OD1	22:AL:10:GLN:N	2.29	0.59
56:a:98:GLN:HB3	77:G:116:HIS:ND1	2.18	0.59
21:s:92:ARG:HA	21:s:172:LEU:HB2	1.84	0.59
21:s:150:ASN:HA	21:s:153:LYS:HE2	1.85	0.59
58:A:776:G:H22	58:A:785:U:H1'	1.68	0.59
58:A:1274:C:H5	55:i:96:ARG:H	1.50	0.59
61:B:87:LEU:HB2	61:B:88:LYS:HZ2	1.68	0.59
70:E:202:LEU:HD12	70:E:204:ASP:HB2	1.85	0.59
46:d2:35:ILE:HD12	46:d2:36:LYS:N	2.17	0.59
72:CZ:105:VAL:HA	72:CZ:130:TYR:CE2	2.38	0.59
74:g:85:TYR:CE1	74:g:87:THR:HG21	2.38	0.59
75:AR:370:U:H4'	75:AR:404:G:H5'	1.85	0.59
75:AR:1351:U:O2'	75:AR:1352:A:H5'	2.02	0.59
75:AR:1534:A:OP1	80:AR:3628:OHX:N4	2.36	0.59
75:AR:1591:G:O2'	75:AR:1799:A:N1	2.32	0.59
75:AR:2228:A:H2'	75:AR:2229:A:C8	2.38	0.59
12:I:14:THR:CG2	12:I:18:LEU:H	2.05	0.59
78:Rb:9:LEU:HD22	78:Rb:314:GLN:HB3	1.84	0.59
78:Rb:85:TRP:HE1	78:Rb:111:MET:HE2	1.67	0.59
59:d6:19:LYS:HE2	59:d6:20:PRO:O	2.02	0.59
13:CD:32:LEU:HD13	13:CD:163:ARG:HD2	1.85	0.59
75:1:3159:C:H2'	75:1:3160:U:H6	1.67	0.59
2:AB:129:PHE:HE1	10:AJ:9:ILE:HG23	1.68	0.58
3:CJ:27:THR:C	3:CJ:28:HIS:HD1	2.11	0.58
3:CJ:106:LYS:O	3:CJ:110:THR:N	2.33	0.58
5:Q:52:LYS:HD2	5:Q:52:LYS:H	1.68	0.58
12:s7:62:VAL:HG13	12:s7:63:PRO:O	2.03	0.58
12:s7:73:VAL:HG13	12:s7:74:GLN:H	1.68	0.58
13:j:229:ALA:HB1	13:j:233:GLN:HG3	1.84	0.58
27:CN:39:ARG:NH2	75:AR:685:G:OP1	2.36	0.58
28:DN:35:ILE:HD12	28:DN:35:ILE:H	1.67	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:W:41:GLU:OE1	41:W:41:GLU:N	2.23	0.58
42:c3:33:VAL:O	42:c3:37:ILE:HD12	2.03	0.58
3:p:134:TYR:CD2	3:p:190:VAL:HG11	2.38	0.58
5:c5:18:ARG:NH1	23:c8:90:ASN:O	2.35	0.58
5:c5:51:SER:C	5:c5:53:PRO:HD3	2.27	0.58
5:c5:65:LEU:O	80:c5:201:OHX:N2	2.36	0.58
17:c7:20:TYR:CE2	17:c7:38:ILE:HD12	2.38	0.58
58:A:864:U:H5	62:c:22:LYS:HG3	1.68	0.58
58:A:1586:A:H1'	58:A:1611:A:N6	2.18	0.58
23:c8:113:LEU:O	23:c8:117:LYS:HG3	2.03	0.58
67:D:101:VAL:HG23	67:D:115:ILE:HG13	1.84	0.58
70:E:29:LEU:HD13	70:E:32:GLU:HG3	1.83	0.58
46:d2:35:ILE:HD12	46:d2:36:LYS:HG2	1.86	0.58
55:i:123:ALA:HA	55:i:126:ASP:HB2	1.84	0.58
75:AR:1661:G:H2'	75:AR:1662:G:C8	2.38	0.58
75:AR:2516:U:O2'	75:AR:2595:A:N6	2.34	0.58
75:AR:2991:A:P	19:CE:20:LYS:HB2	2.43	0.58
58:sR:1230:A:C5	58:sR:1231:U:H1'	2.38	0.58
58:sR:1767:G:OP1	58:sR:1770:U:H4'	2.02	0.58
76:9:45:ILE:HD13	76:9:119:ILE:HG23	1.85	0.58
79:AA:54:THR:HG22	79:AA:56:LYS:H	1.68	0.58
75:1:1565:G:H2'	75:1:1566:A:O4'	2.03	0.58
3:CJ:227:ASP:OD1	3:CJ:227:ASP:N	2.36	0.58
5:Q:111:MET:HG2	23:T:119:ILE:HG22	1.83	0.58
11:R:23:LYS:N	11:R:64:ASP:O	2.32	0.58
17:S:87:GLU:O	17:S:87:GLU:HG3	2.04	0.58
18:s8:48:THR:OG1	58:sR:333:A:P	2.61	0.58
19:k:284:ARG:NH2	19:k:295:ALA:O	2.33	0.58
23:T:144:ARG:HD2	23:T:145:ARG:HG2	1.84	0.58
24:s9:83:VAL:O	24:s9:107:ARG:NH1	2.36	0.58
25:l:98:ARG:NH2	75:1:804:C:OP1	2.36	0.58
32:AG:85:PHE:O	80:AG:201:OHX:N1	2.34	0.58
45:DQ:2:VAL:N	45:DQ:90:HIS:O	2.35	0.58
5:c5:123:TYR:OH	23:c8:126:ARG:NH2	2.30	0.58
51:CS:165:ILE:HD12	51:CS:166:LEU:H	1.67	0.58
53:Z:40:LEU:O	53:Z:44:LEU:HB2	2.04	0.58
15:r:141:LYS:HD3	15:r:142:ASP:H	1.67	0.58
17:c7:17:ILE:HG12	17:c7:58:MET:HE2	1.85	0.58
58:A:1389:C:N3	58:A:1412:G:N1	2.46	0.58
29:c9:105:LEU:HB3	29:c9:122:ARG:HH11	1.68	0.58
44:w:15:LEU:HD11	44:w:125:ARG:HA	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:y:100:THR:HG23	51:y:120:GLU:HB3	1.84	0.58
73:F:252:ARG:HH22	24:K:74:ASN:ND2	2.01	0.58
75:AR:1072:G:H21	8:DD:50:THR:HG21	1.67	0.58
75:AR:2106:A:H2'	75:AR:2107:A:H8	1.69	0.58
75:AR:2508:U:H2'	75:AR:2509:U:C6	2.37	0.58
75:AR:3166:C:H42	75:AR:3284:G:H1	1.51	0.58
77:G:62:VAL:HA	77:G:89:ILE:HG21	1.86	0.58
78:h:169:ILE:HG13	78:h:181:TRP:HB2	1.85	0.58
58:sR:150:U:H2'	58:sR:151:G:O4'	2.04	0.58
58:sR:241:U:H2'	58:sR:242:U:C5	2.38	0.58
12:I:11:GLN:HB3	12:I:13:PRO:HD3	1.83	0.58
12:I:43:PHE:CZ	12:I:46:ILE:HG12	2.38	0.58
61:s0:13:ASP:OD1	61:s0:179:ARG:NH1	2.34	0.58
30:L:59:PHE:CZ	30:L:62:GLN:HA	2.38	0.58
75:1:1170:A:OP2	80:1:4083:OHX:N4	2.36	0.58
13:j:227:ARG:NH2	75:1:2155:G:O2'	2.35	0.58
14:AD:100:ILE:HD12	14:AD:101:LEU:H	1.67	0.58
15:CL:54:SER:HB2	15:CL:135:ILE:HD11	1.83	0.58
26:AF:59:SER:OG	75:1:1405:U:OP2	2.21	0.58
4:AI:21:LEU:HB2	4:AI:54:VAL:HG11	1.85	0.58
4:AI:77:PRO:HG2	72:8:50:ALA:HB2	1.84	0.58
9:q:44:THR:HG23	75:1:3186:A:H1'	1.85	0.58
51:CS:51:ALA:HA	51:CS:54:LEU:HD22	1.85	0.58
21:s:171:VAL:HG23	21:s:172:LEU:N	2.18	0.58
58:A:1231:U:H4'	58:A:1258:U:H6	1.67	0.58
23:c8:126:ARG:HD3	23:c8:132:ARG:O	2.03	0.58
61:B:29:VAL:HG21	61:B:150:ASP:HB3	1.85	0.58
70:E:80:ALA:O	70:E:83:THR:OG1	2.19	0.58
73:F:103:TYR:CE2	73:F:189:LEU:HD11	2.38	0.58
74:g:102:VAL:HG22	74:g:103:LEU:H	1.68	0.58
75:AR:1915:A:H2'	75:AR:1916:U:C6	2.38	0.58
78:h:109:ASP:HB2	78:h:127:ARG:HD2	1.86	0.58
58:sR:361:C:OP1	86:sR:2202:HOH:O	2.17	0.58
58:sR:1160:A:H2'	58:sR:1161:C:C6	2.37	0.58
56:d5:79:ALA:O	56:d5:83:LEU:HB2	2.03	0.58
12:I:56:LYS:HB2	12:I:88:ARG:HH21	1.68	0.58
24:K:72:GLU:HA	24:K:75:ALA:HB3	1.86	0.58
30:L:43:ILE:HD13	30:L:64:TYR:HE2	1.67	0.58
67:s2:139:ILE:HD12	67:s2:218:ILE:HD11	1.85	0.58
36:M:20:PHE:HE1	36:M:22:ASN:HA	1.68	0.58
75:1:3231:U:H2'	75:1:3232:G:H8	1.68	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:3346:U:H3	75:1:3359:A:N6	2.01	0.58
1:3:62:U:O3'	31:m:285:ARG:NH1	2.36	0.58
6:s6:176:GLN:HG2	58:sR:169:A:H5''	1.86	0.58
19:k:41:VAL:HA	19:k:185:GLY:HA3	1.84	0.58
19:k:123:TYR:CE2	19:k:124:LYS:HG3	2.38	0.58
30:c0:2:LEU:O	58:sR:1257:U:H1'	2.03	0.58
31:m:22:ARG:HB3	31:m:28:THR:OG1	2.02	0.58
4:AI:79:ASP:OD1	4:AI:79:ASP:N	2.36	0.58
46:X:87:GLU:OE1	46:X:87:GLU:N	2.25	0.58
50:Y:70:LYS:HG3	50:Y:93:LEU:HD22	1.85	0.58
15:r:99:ILE:HG22	15:r:123:HIS:HB2	1.85	0.58
54:CT:126:GLU:HA	75:AR:841:A:H4'	1.86	0.58
17:c7:11:ARG:HH12	58:sR:1325:A:P	2.26	0.58
17:c7:103:ASP:O	17:c7:106:THR:OG1	2.20	0.58
58:A:260:U:H3'	58:A:261:U:C5'	2.33	0.58
58:A:747:C:H2'	58:A:748:U:C6	2.38	0.58
63:CW:83:TYR:O	63:CW:87:ASN:ND2	2.36	0.58
51:y:110:ALA:O	51:y:114:ILE:HG13	2.04	0.58
78:h:200:ASN:HD22	78:h:241:PHE:HA	1.68	0.58
58:sR:885:G:OP1	64:s1:216:LYS:NZ	2.36	0.58
58:sR:1230:A:H8	58:sR:1258:U:C6	2.20	0.58
70:s3:66:ILE:O	70:s3:70:THR:HG22	2.03	0.58
70:s3:154:ASP:OD1	70:s3:155:GLY:N	2.37	0.58
75:1:582:G:O6	80:1:4178:OHX:N6	2.37	0.58
2:AB:23:GLY:O	80:1:4021:OHX:N6	2.37	0.58
4:DJ:54:VAL:O	4:DJ:58:ILE:HG22	2.03	0.58
7:4:15:G:H1'	75:1:409:A:H61	1.69	0.58
9:CK:115:ARG:HG3	9:CK:123:ILE:HG22	1.85	0.58
11:R:79:TYR:HA	11:R:82:ARG:HD3	1.85	0.58
11:R:110:THR:HA	11:R:113:ASP:HB3	1.86	0.58
18:s8:162:ALA:HA	75:AR:3354:U:H5''	1.85	0.58
19:k:139:GLN:OE1	19:k:139:GLN:N	2.33	0.58
23:T:61:LEU:CD1	23:T:66:LEU:HD21	2.31	0.58
25:l:35:VAL:HG21	25:l:244:LEU:HD21	1.85	0.58
25:l:140:HIS:H	25:l:180:LYS:NZ	2.00	0.58
27:CN:67:ARG:HB3	2:DC:105:LEU:HD21	1.86	0.58
35:V:20:ILE:HD11	35:V:94:GLU:CA	2.32	0.58
39:CP:116:LEU:HA	39:CP:159:ARG:NH1	2.18	0.58
4:AI:78:LYS:HA	4:AI:81:ARG:HD2	1.86	0.58
46:X:7:LEU:CD2	46:X:11:LEU:HD12	2.33	0.58
58:A:73:U:O4	80:A:2083:OHX:N3	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:702:G:O6	58:A:737:A:N6	2.36	0.58
73:F:15:PRO:HG2	73:F:18:TRP:CE2	2.39	0.58
74:g:147:VAL:HG12	74:g:148:TYR:CD1	2.38	0.58
50:d3:66:SER:OG	58:sR:566:C:OP2	2.22	0.58
75:AR:655:C:H2'	75:AR:656:A:H8	1.69	0.58
75:AR:1930:A:O2'	80:AR:3785:OHX:N6	2.37	0.58
75:AR:2279:A:O5'	75:AR:2280:A:H5''	2.03	0.58
76:DA:32:SER:HA	76:DA:49:PRO:HA	1.85	0.58
78:h:170:ILE:HA	78:h:180:ALA:HA	1.85	0.58
58:sR:1280:C:H2'	58:sR:1281:G:C8	2.39	0.58
58:sR:1398:U:H3'	58:sR:1399:C:H4'	1.85	0.58
78:Rb:249:ARG:NH1	78:Rb:298:GLY:O	2.37	0.58
64:s1:157:GLN:HB2	64:s1:160:HIS:CD2	2.38	0.58
30:L:43:ILE:HD13	30:L:64:TYR:CE2	2.38	0.58
37:CH:40:LEU:HG	37:CH:84:VAL:HG11	1.86	0.58
39:v:147:ARG:NH2	75:1:151:A:OP1	2.36	0.58
75:1:398:A:O2'	75:1:1416:C:OP1	2.18	0.58
75:1:1365:G:OP2	80:1:4116:OHX:N6	2.36	0.58
75:1:1578:C:H3'	75:1:1579:C:C6	2.39	0.58
75:1:3233:C:H2'	75:1:3234:A:C8	2.39	0.58
3:CJ:86:THR:O	3:CJ:90:THR:HG23	2.03	0.58
28:DN:3:ALA:HB2	75:AR:1836:C:N4	2.18	0.58
39:CP:31:ARG:HG3	39:CP:129:TYR:OH	2.04	0.58
44:CQ:27:LEU:HD21	44:CQ:33:ILE:HB	1.84	0.58
5:c5:77:ARG:HE	58:sR:1241:G:P	2.26	0.58
17:c7:72:LYS:HD2	17:c7:72:LYS:H	1.69	0.58
58:A:1791:A:H5''	59:b:8:ASN:HD22	1.68	0.58
34:AN:95:VAL:HA	34:AN:101:ALA:O	2.04	0.58
35:d0:58:LEU:HD13	35:d0:88:LYS:HE2	1.85	0.58
73:F:79:ASP:HB3	73:F:82:TYR:HB2	1.85	0.58
75:AR:609:G:OP2	25:CF:315:LYS:NZ	2.24	0.58
77:G:34:GLN:HA	77:G:37:GLN:NE2	2.17	0.58
58:sR:694:U:H3'	58:sR:695:U:O2	2.03	0.58
58:sR:1336:A:OP1	80:sR:2148:OHX:N5	2.37	0.58
78:Rb:131:ILE:CD1	78:Rb:154:VAL:HG11	2.25	0.58
61:s0:38:PHE:HD1	61:s0:39:ASN:HB2	1.69	0.58
62:d7:74:SER:OG	62:d7:75:GLU:OE1	2.21	0.58
64:s1:110:LEU:HD11	64:s1:213:ARG:HD2	1.85	0.58
25:CF:317:PRO:C	25:CF:319:LYS:H	2.11	0.58
20:DF:55:LEU:HD21	20:DF:73:LEU:HD22	1.86	0.58
39:v:14:LYS:HE3	75:1:269:G:H5''	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DI:102:LYS:HA	38:DI:105:VAL:HG13	1.85	0.58
75:1:2261:G:H21	75:1:2262:A:N6	2.02	0.58
75:1:3351:U:O2'	75:1:3352:U:OP1	2.19	0.58
13:j:149:ARG:HH11	13:j:155:LYS:NZ	2.01	0.58
17:S:77:GLU:N	17:S:77:GLU:OE1	2.36	0.58
19:k:169:THR:HG22	19:k:171:LEU:HG	1.84	0.58
28:DN:7:PHE:HB3	7:AT:113:U:H5''	1.86	0.58
38:AH:82:ALA:HA	38:AH:85:VAL:H	1.68	0.58
41:W:29:HIS:HA	61:B:140:ASN:HD21	1.68	0.58
44:CQ:18:ARG:NH1	75:AR:1315:U:OP1	2.37	0.58
44:CQ:62:THR:HA	75:AR:1306:G:C6	2.39	0.58
11:c6:32:ASN:HD21	11:c6:69:VAL:H	1.52	0.58
58:A:1113:A:H5''	40:AO:6:ARG:HH22	1.68	0.58
58:A:1641:C:H2'	58:A:1642:G:C8	2.38	0.58
61:B:53:THR:HA	61:B:56:LYS:HB2	1.84	0.58
45:AP:13:LYS:HZ1	75:1:2718:U:P	2.27	0.58
66:CX:79:VAL:HB	66:CX:118:VAL:HG12	1.86	0.58
67:D:154:LEU:HD21	67:D:158:THR:HG22	1.85	0.58
67:D:169:LEU:HD11	67:D:217:ALA:HB1	1.86	0.58
75:AR:3005:A:OP2	80:AR:3609:OHX:N2	2.36	0.58
76:DA:100:HIS:ND1	76:DA:102:SER:HB3	2.19	0.58
78:h:82:SER:O	78:h:89:LEU:HD23	2.04	0.58
58:sR:709:C:O2	58:sR:730:G:N2	2.37	0.58
8:DD:18:ARG:HA	8:DD:18:ARG:NE	2.18	0.58
18:J:117:TYR:N	18:J:146:ARG:HH12	2.01	0.58
62:d7:54:VAL:HG23	62:d7:63:LEU:HB2	1.84	0.58
24:K:74:ASN:HA	24:K:77:ILE:HD11	1.85	0.58
26:DG:19:ARG:HD2	26:DG:33:ARG:HB2	1.86	0.58
47:P:22:SER:OG	47:P:23:PHE:N	2.35	0.58
77:s5:68:ILE:HD13	77:s5:88:PRO:HB3	1.85	0.58
77:s5:211:ILE:O	77:s5:215:ASP:HB2	2.03	0.58
7:4:15:G:OP2	80:4:226:OHX:N4	2.36	0.58
10:DK:40:VAL:HG12	39:CP:6:TYR:CE1	2.39	0.58
15:CL:140:THR:CG2	15:CL:144:ASN:HB3	2.32	0.58
21:CM:16:LYS:HE2	21:CM:130:VAL:HG21	1.86	0.58
25:l:205:PRO:HG2	25:l:225:VAL:HG22	1.86	0.58
29:U:116:ILE:HA	29:U:122:ARG:HD2	1.85	0.58
43:o:47:ARG:NH1	43:o:183:ASP:OD2	2.37	0.58
47:c4:112:ILE:H	59:d6:57:SER:HA	1.68	0.58
47:c4:122:PRO:HB3	47:c4:125:SER:HB3	1.86	0.58
16:AK:35:SER:OG	75:1:361:A:H5'	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:424:C:O2'	58:A:426:G:OP1	2.18	0.58
58:A:1358:G:H2'	58:A:1359:C:C6	2.38	0.58
27:t:18:TRP:NE1	75:1:799:G:O2'	2.34	0.58
60:CV:45:ASN:OD1	60:CV:47:SER:OG	2.22	0.58
61:B:195:TRP:NE1	61:B:197:ILE:HD12	2.18	0.58
29:c9:97:SER:HB2	29:c9:100:ILE:HB	1.85	0.58
70:E:222:VAL:HB	78:h:192:PHE:HA	1.85	0.58
75:AR:619:A:H4'	75:AR:620:U:H5'	1.85	0.58
75:AR:3267:A:O2'	37:CH:73:GLY:O	2.18	0.58
77:G:29:ILE:O	77:G:34:GLN:NE2	2.36	0.58
77:G:47:SER:HB2	77:G:128:ASN:HD21	1.69	0.58
12:I:111:LYS:HG2	12:I:112:ARG:N	2.19	0.58
78:Rb:130:THR:HB	78:Rb:132:LYS:HE2	1.85	0.58
78:Rb:156:VAL:HA	78:Rb:169:ILE:HG22	1.86	0.58
32:DH:73:ARG:HG3	32:DH:82:ARG:HG3	1.85	0.58
2:AB:13:GLY:HA2	75:1:943:U:H3'	1.86	0.58
3:CJ:29:SER:O	3:CJ:31:PRO:HD3	2.03	0.58
7:4:141:C:OP2	80:4:204:OHX:N4	2.37	0.58
17:S:16:LEU:HD11	17:S:54:THR:CG2	2.34	0.58
18:s8:138:ASN:HD22	58:sR:197:A:H61	1.52	0.58
21:CM:62:ASN:O	45:DQ:103:ALA:HB2	2.04	0.58
25:l:292:SER:O	25:l:293:SER:OG	2.22	0.58
28:DN:23:LEU:HD12	28:DN:24:PRO:HD2	1.85	0.58
35:V:48:HIS:O	35:V:48:HIS:CG	2.56	0.58
42:c3:129:TYR:HB3	42:c3:135:LEU:HD22	1.86	0.58
9:q:129:ARG:H	9:q:157:ASN:ND2	2.02	0.58
15:r:31:ILE:HB	15:r:66:GLU:HB2	1.86	0.58
58:A:505:A:H3'	58:A:506:A:H5''	1.86	0.58
58:A:894:U:H2'	58:A:895:G:C8	2.39	0.58
58:A:926:A:OP1	58:A:1016:C:O2'	2.15	0.58
58:A:1542:G:N2	58:A:1568:C:H1'	2.19	0.58
63:CW:43:VAL:O	63:CW:45:GLY:N	2.36	0.58
45:AP:9:LYS:HD3	75:1:2713:U:OP1	2.04	0.58
45:AP:10:THR:HG22	45:AP:23:HIS:CE1	2.38	0.58
54:z:10:LEU:O	54:z:14:VAL:HG12	2.04	0.58
75:AR:119:U:H4'	75:AR:120:G:H3'	1.85	0.58
75:AR:187:A:OP2	80:AR:4066:OHX:N2	2.37	0.58
75:AR:528:U:H2'	75:AR:529:A:C8	2.38	0.58
75:AR:567:G:H2'	75:AR:568:G:C8	2.39	0.58
75:AR:980:A:H2'	75:AR:981:U:C2	2.37	0.58
75:AR:1750:A:H4'	75:AR:1751:G:H5'	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:d4:8:ARG:CD	53:d4:28:LEU:HD11	2.34	0.58
57:0:66:GLU:OE2	57:0:73:LYS:NZ	2.34	0.58
79:DB:64:LYS:HD3	79:DB:64:LYS:O	2.04	0.58
6:H:138:ALA:HA	6:H:175:ILE:HD11	1.86	0.58
58:sR:1359:C:O5'	58:sR:1359:C:H6	1.87	0.58
78:Rb:87:LYS:HZ1	78:Rb:107:LYS:C	2.11	0.58
13:CD:249:SER:CB	13:CD:251:LYS:HG2	2.34	0.58
72:8:105:VAL:HA	72:8:130:TYR:CE2	2.38	0.58
77:s5:116:HIS:O	77:s5:120:ILE:HD13	2.03	0.58
75:1:1471:U:OP2	80:1:4024:OHX:N1	2.37	0.58
31:m:243:ALA:O	31:m:247:ILE:HD12	2.04	0.58
39:CP:150:TRP:CZ3	75:AR:321:C:H5''	2.39	0.58
42:c3:40:TYR:HB3	42:c3:45:LEU:HD12	1.85	0.58
46:X:105:THR:HG22	58:A:804:A:N3	2.19	0.58
44:w:156:LEU:HD22	75:1:3243:A:C8	2.39	0.58
75:AR:1605:A:O2'	75:AR:1607:U:OP2	2.22	0.58
77:G:51:VAL:HA	77:G:131:GLN:NE2	2.19	0.58
79:DB:64:LYS:HD3	79:DB:64:LYS:C	2.29	0.58
58:sR:340:U:H2'	58:sR:341:A:C8	2.39	0.58
58:sR:679:U:H2'	58:sR:680:U:H4'	1.86	0.58
78:Rb:197:SER:OG	78:Rb:198:ASN:O	2.21	0.58
64:s1:144:ARG:HB2	64:s1:208:GLN:CG	2.34	0.58
31:CG:232:ASP:O	31:CG:235:SER:OG	2.21	0.58
77:s5:51:VAL:HG21	77:s5:128:ASN:CG	2.28	0.58
77:s5:136:ALA:HA	77:s5:202:ALA:HA	1.85	0.58
1:3:85:G:O6	80:3:219:OHX:N5	2.36	0.57
19:k:53:MET:HE2	19:k:77:THR:HG22	1.85	0.57
30:c0:54:TYR:HD1	30:c0:72:GLY:HA2	1.69	0.57
39:CP:68:ARG:HB3	75:AR:291:C:OP1	2.03	0.57
43:o:236:ILE:O	43:o:240:VAL:HG13	2.04	0.57
45:DQ:98:LYS:HD2	75:AR:2656:A:O5'	2.04	0.57
9:q:103:ILE:HG23	9:q:136:PHE:HE2	1.68	0.57
52:p0:8:LYS:HD3	52:p0:58:MET:SD	2.44	0.57
54:CT:170:ARG:O	54:CT:174:ALA:N	2.35	0.57
58:A:992:A:H2'	58:A:993:A:H5'	1.86	0.57
27:t:124:ILE:HG13	27:t:126:PHE:HE1	1.68	0.57
60:CV:100:LYS:HB3	75:AR:990:U:H4'	1.86	0.57
75:AR:980:A:H2'	75:AR:981:U:N1	2.18	0.57
75:AR:1587:A:OP1	80:AR:4072:OHX:N6	2.36	0.57
75:AR:2407:C:H2'	75:AR:2408:U:C6	2.39	0.57
58:sR:517:U:O4	80:sR:2051:OHX:N4	2.37	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:K:14:THR:HG22	24:K:15:PRO:HD2	1.86	0.57
73:s4:206:ASP:HB2	73:s4:222:LEU:HD12	1.86	0.57
77:s5:198:LEU:O	77:s5:202:ALA:N	2.37	0.57
75:1:94:G:OP1	85:1:3478:SPD:N1	2.37	0.57
75:1:623:U:OP2	80:1:4058:OHX:N3	2.37	0.57
75:1:1464:G:O3'	80:1:3601:OHX:N6	2.37	0.57
9:CK:150:SER:HB3	9:CK:153:ASP:HB2	1.85	0.57
11:R:43:ILE:HD11	77:G:112:ARG:NH1	2.19	0.57
11:R:87:LYS:NZ	11:R:117:LEU:O	2.37	0.57
12:s7:73:VAL:O	12:s7:75:THR:N	2.37	0.57
17:S:67:ARG:NH1	58:A:1318:G:OP2	2.36	0.57
18:s8:18:ARG:NH1	58:sR:105:A:OP1	2.37	0.57
20:AE:65:LYS:NZ	75:1:3076:C:OP1	2.35	0.57
23:T:2:SER:OG	23:T:3:LEU:N	2.32	0.57
25:l:74:ILE:HD13	25:l:88:GLY:HA2	1.86	0.57
29:U:133:ASP:HA	29:U:135:ILE:HG13	1.86	0.57
37:n:22:ARG:O	37:n:23:LYS:HD3	2.04	0.57
39:CP:199:LEU:HB3	39:CP:203:ARG:NH1	2.19	0.57
41:W:1:MET:O	41:W:1:MET:HG3	2.03	0.57
43:o:108:LEU:HD21	43:o:115:THR:HG22	1.86	0.57
4:AI:66:VAL:HG11	72:8:50:ALA:HB1	1.85	0.57
45:DQ:100:LYS:HD3	45:DQ:101:GLY:N	2.14	0.57
46:X:77:PRO:O	46:X:79:PHE:N	2.37	0.57
10:AJ:54:GLU:OE2	10:AJ:86:LYS:NZ	2.33	0.57
58:A:103:A:OP2	80:A:1933:OHX:N3	2.38	0.57
63:CW:76:LEU:O	63:CW:80:THR:HG23	2.04	0.57
45:AP:75:VAL:HG23	45:AP:76:LYS:N	2.19	0.57
75:AR:224:C:H2'	75:AR:225:C:H6	1.69	0.57
75:AR:533:A:OP2	80:AR:3701:OHX:N6	2.38	0.57
78:h:101:GLN:OE1	78:h:137:LYS:NZ	2.37	0.57
12:I:35:LYS:HE2	12:I:36:ALA:HB2	1.86	0.57
78:Rb:129:LYS:HD3	78:Rb:149:ASP:C	2.29	0.57
18:J:119:GLN:N	18:J:119:GLN:OE1	2.38	0.57
61:s0:191:ARG:HD2	61:s0:191:ARG:C	2.29	0.57
25:CF:138:ARG:HG2	25:CF:138:ARG:O	2.03	0.57
76:9:88:GLU:HG3	76:9:94:SER:HB2	1.84	0.57
79:AA:102:GLU:OE2	79:AA:102:GLU:HA	2.03	0.57
43:CI:157:ASN:O	43:CI:159:GLN:HG2	2.03	0.57
47:P:85:ALA:H	47:P:119:THR:HG22	1.68	0.57
77:s5:25:LEU:HD12	77:s5:29:ILE:HD11	1.86	0.57
75:1:1266:G:N2	75:1:1275:C:O2	2.34	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:1487:G:H1	75:1:1855:U:H3	1.50	0.57
75:1:1767:C:H2'	75:1:1768:U:C6	2.38	0.57
12:s7:20:VAL:O	12:s7:24:PHE:HD1	1.88	0.57
12:s7:77:LEU:O	12:s7:81:LEU:HG	2.04	0.57
17:S:84:TYR:HD1	17:S:85:VAL:N	2.01	0.57
23:T:31:ALA:H	23:T:32:LEU:CD2	2.17	0.57
25:l:132:ALA:HB2	25:l:148:ILE:HG21	1.86	0.57
44:CQ:79:ILE:HG21	44:CQ:138:LEU:HD11	1.86	0.57
47:c4:29:HIS:NE2	47:c4:38:THR:HB	2.20	0.57
52:p0:34:SER:HB2	75:AR:1230:G:O3'	2.03	0.57
53:Z:57:VAL:HG13	53:Z:73:GLY:CA	2.35	0.57
53:Z:131:ARG:HB3	53:Z:131:ARG:HH11	1.67	0.57
54:CT:163:ARG:HD2	58:sR:813:U:C2	2.38	0.57
58:A:387:A:N7	80:A:1964:OHX:N1	2.52	0.57
58:A:420:A:OP1	6:H:74:LYS:NZ	2.38	0.57
27:t:47:ALA:HB3	27:t:49:ARG:HB2	1.85	0.57
27:t:76:THR:HG22	27:t:101:ARG:HB3	1.86	0.57
61:B:9:LEU:HD23	61:B:54:TRP:CG	2.39	0.57
61:B:93:THR:HB	61:B:95:ALA:H	1.67	0.57
61:B:109:ASN:O	61:B:112:THR:HG22	2.04	0.57
51:y:67:ILE:CD1	51:y:81:VAL:HG21	2.34	0.57
73:F:87:MET:HE1	73:F:123:LEU:CB	2.25	0.57
54:z:159:ALA:HA	54:z:162:ARG:HE	1.69	0.57
75:AR:1624:G:O6	80:AR:3483:OHX:N5	2.37	0.57
76:DA:16:ARG:NH1	7:AT:23:U:OP1	2.37	0.57
59:d6:4:LYS:HG2	59:d6:5:ARG:HG3	1.86	0.57
64:s1:30:PHE:CD2	64:s1:94:LYS:HA	2.40	0.57
64:s1:158:SER:HB2	64:s1:162:ARG:HH21	1.69	0.57
69:7:55:PHE:O	69:7:59:HIS:HB2	2.04	0.57
37:CH:131:LYS:HD3	37:CH:132:ALA:N	2.17	0.57
73:s4:121:TYR:OH	73:s4:235:TYR:O	2.21	0.57
77:s5:219:ARG:O	77:s5:223:SER:OG	2.22	0.57
75:1:1281:G:H2'	75:1:1282:G:H8	1.69	0.57
75:1:3117:C:OP1	80:1:3999:OHX:N3	2.36	0.57
11:R:40:GLU:H	11:R:45:ARG:HH22	1.53	0.57
19:k:204:ALA:O	19:k:207:SER:OG	2.21	0.57
19:k:212:ASN:ND2	19:k:353:GLU:HA	2.19	0.57
24:s9:132:ARG:NH2	58:sR:533:U:OP2	2.37	0.57
30:c0:24:LYS:HG2	30:c0:63:TYR:HE2	1.69	0.57
38:AH:7:PHE:HE2	75:1:1856:C:H1'	1.69	0.57
42:c3:138:ASN:HB2	42:c3:140:LYS:HE3	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AI:81:ARG:NH2	75:1:18:G:OP1	2.37	0.57
3:p:50:VAL:HA	72:8:30:ALA:HB1	1.85	0.57
17:c7:26:LEU:HD23	17:c7:59:LYS:HA	1.86	0.57
57:CU:108:GLN:NE2	75:AR:1322:U:O2	2.37	0.57
61:B:80:THR:HA	61:B:83:GLN:HG3	1.86	0.57
29:c9:7:ARG:HE	58:sR:1367:G:P	2.27	0.57
67:D:154:LEU:HD12	67:D:155:ALA:H	1.70	0.57
71:f:14:VAL:O	71:f:18:THR:HG23	2.03	0.57
46:d2:35:ILE:O	46:d2:39:GLN:HG3	2.05	0.57
75:AR:314:U:H2'	75:AR:315:C:C6	2.38	0.57
75:AR:2945:G:O2'	75:AR:2948:C:OP2	2.13	0.57
6:H:23:ARG:O	6:H:26:VAL:HG12	2.04	0.57
12:I:15:GLU:N	12:I:15:GLU:OE1	2.37	0.57
78:Rb:93:ASP:HB2	78:Rb:100:TYR:CE2	2.40	0.57
61:s0:34:GLU:O	61:s0:37:VAL:HG12	2.04	0.57
61:s0:56:LYS:HD3	61:s0:159:ALA:O	2.04	0.57
24:K:107:ARG:NH2	24:K:148:VAL:O	2.37	0.57
31:CG:104:LEU:HD11	31:CG:108:ARG:NH2	2.18	0.57
31:CG:107:ARG:HH22	31:CG:120:LYS:HA	1.68	0.57
73:s4:98:ASN:ND2	73:s4:116:ASP:HA	2.19	0.57
39:v:66:VAL:HG23	39:v:98:LEU:HD23	1.86	0.57
75:1:1564:U:H2'	75:1:1565:G:C8	2.39	0.57
75:1:3005:A:OP2	80:1:4085:OHX:N1	2.38	0.57
75:1:3242:G:N2	75:1:3245:A:OP2	2.37	0.57
2:AB:75:LEU:HA	2:AB:78:LEU:HB2	1.86	0.57
13:j:215:ASN:ND2	75:1:2969:A:N7	2.52	0.57
23:T:32:LEU:O	23:T:38:VAL:HG21	2.04	0.57
28:DN:4:GLN:NE2	75:AR:1833:G:H21	2.02	0.57
41:W:1:MET:SD	41:W:10:GLU:HB2	2.44	0.57
3:p:24:ASN:HB3	3:p:25:PRO:HD3	1.86	0.57
54:CT:128:LYS:NZ	75:AR:1721:U:O4	2.33	0.57
55:sM:46:LYS:HA	75:AR:1018:G:H4'	1.87	0.57
58:A:927:C:H2'	58:A:928:U:H6	1.69	0.57
58:A:1150:G:H2'	58:A:1768:G:N2	2.19	0.57
58:A:1248:C:H2'	58:A:1249:U:C6	2.40	0.57
58:A:1645:G:O2'	75:1:2259:A:N1	2.36	0.57
58:A:1678:A:P	18:J:59:ARG:HH22	2.27	0.57
23:c8:41:ARG:HD3	58:sR:1565:C:OP1	2.04	0.57
67:D:165:VAL:HG21	67:D:210:THR:HG22	1.87	0.57
67:D:179:VAL:HG22	67:D:197:TYR:HA	1.86	0.57
73:F:104:ASP:OD1	73:F:110:ALA:HB2	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:67:A:OP1	80:AR:3819:OHX:N6	2.38	0.57
75:AR:849:C:H2'	75:AR:850:U:C6	2.40	0.57
75:AR:1845:G:H5'	75:AR:1846:C:H5''	1.86	0.57
58:sR:108:A:H2'	58:sR:109:G:C8	2.39	0.57
61:s0:31:VAL:HA	61:s0:34:GLU:OE2	2.04	0.57
24:K:13:SER:N	24:K:47:PHE:HD2	2.02	0.57
31:CG:88:ILE:HG12	31:CG:240:TYR:CE1	2.39	0.57
73:s4:21:ASP:OD2	73:s4:24:SER:OG	2.22	0.57
43:CI:188:ILE:O	43:CI:191:VAL:HG12	2.05	0.57
77:s5:110:ALA:HA	77:s5:113:ILE:HG22	1.87	0.57
77:s5:161:ASP:OD1	77:s5:161:ASP:N	2.37	0.57
75:1:533:A:O2'	75:1:535:G:OP2	2.21	0.57
75:1:2258:U:OP1	80:1:4174:OHX:N2	2.38	0.57
75:1:2882:U:H2'	75:1:2883:U:C6	2.39	0.57
4:DJ:84:LYS:O	4:DJ:85:THR:HG23	2.05	0.57
4:DJ:120:ALA:HA	27:CN:122:LYS:HA	1.85	0.57
10:DK:84:LYS:O	10:DK:88:GLU:HG3	2.04	0.57
19:k:139:GLN:HG2	19:k:141:GLY:H	1.69	0.57
24:s9:90:LYS:HD2	24:s9:95:TYR:CZ	2.39	0.57
36:c1:59:PRO:HA	36:c1:64:VAL:HG23	1.87	0.57
39:CP:199:LEU:HB3	39:CP:203:ARG:HH12	1.68	0.57
49:DR:13:LYS:NZ	49:DR:30:GLU:OE1	2.27	0.57
55:sM:68:ARG:HA	55:sM:71:ASN:HB2	1.86	0.57
58:A:740:A:H2'	58:A:741:C:H5'	1.85	0.57
58:A:1201:G:O2'	80:A:2003:OHX:N6	2.38	0.57
41:d1:82:VAL:HG12	61:s0:52:LYS:HB3	1.87	0.57
46:d2:80:ASN:OD1	46:d2:124:LYS:NZ	2.37	0.57
75:AR:2557:A:OP1	13:CD:69:TYR:OH	2.23	0.57
75:AR:3075:G:O6	80:AR:3578:OHX:N6	2.37	0.57
76:DA:85:VAL:HG21	76:DA:99:LEU:HD11	1.87	0.57
77:G:43:PHE:CE2	77:G:115:LYS:HE2	2.39	0.57
78:h:73:LEU:HD22	78:h:79:TYR:O	2.05	0.57
79:DB:114:VAL:HG12	79:DB:118:PHE:CE2	2.39	0.57
6:H:14:LYS:HG2	6:H:15:THR:H	1.70	0.57
58:sR:454:U:H6	58:sR:454:U:H5''	1.69	0.57
58:sR:1413:U:O2'	80:sR:2178:OHX:N6	2.38	0.57
78:Rb:76:ASP:OD1	78:Rb:76:ASP:N	2.34	0.57
24:K:23:ARG:O	24:K:23:ARG:HD2	2.04	0.57
64:s1:194:ASN:HD22	64:s1:211:HIS:HA	1.68	0.57
31:CG:44:TYR:HD1	31:CG:44:TYR:H	1.53	0.57
37:CH:47:PHE:CD1	37:CH:74:VAL:HG12	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:29:C:H4'	75:1:62:A:H4'	1.86	0.57
12:s7:62:VAL:HG22	12:s7:63:PRO:HD2	1.86	0.57
12:s7:64:VAL:HG23	12:s7:65:PRO:HD3	1.87	0.57
17:S:105:GLN:NE2	61:B:42:PRO:HD2	2.19	0.57
22:DM:44:LYS:HB3	22:DM:51:LEU:HD11	1.87	0.57
31:m:153:THR:O	31:m:153:THR:OG1	2.22	0.57
43:o:222:HIS:CE1	43:o:224:ILE:HG13	2.40	0.57
9:q:174:LYS:HB2	34:AN:127:LEU:HD21	1.87	0.57
54:CT:82:LYS:HE3	75:AR:2115:G:O2'	2.04	0.57
54:CT:121:HIS:ND1	75:AR:1719:G:OP2	2.34	0.57
58:A:1474:G:H2'	58:A:1475:A:H8	1.68	0.57
67:D:142:GLY:N	67:D:153:SER:O	2.37	0.57
48:x:41:LEU:O	48:x:45:GLN:HG2	2.05	0.57
75:AR:2213:A:H2'	75:AR:2214:A:C8	2.38	0.57
75:AR:2260:U:O4	80:AR:3599:OHX:N5	2.37	0.57
75:AR:2604:U:O4	80:AR:3879:OHX:N5	2.38	0.57
77:G:110:ALA:O	77:G:114:ILE:HD12	2.04	0.57
1:AS:49:G:N7	31:CG:58:LYS:HG3	2.18	0.57
56:d5:98:GLN:HE22	77:s5:189:THR:CG2	2.15	0.57
2:DC:96:LYS:O	2:DC:97:GLU:HG2	2.05	0.57
18:J:11:ARG:HB2	18:J:16:ALA:O	2.05	0.57
24:K:30:LEU:HD12	24:K:105:LEU:HD22	1.86	0.57
72:8:135:ILE:O	72:8:139:ILE:HG22	2.04	0.57
31:CG:282:ARG:O	31:CG:286:VAL:HG13	2.05	0.57
70:s3:224:ASP:OD1	70:s3:225:TYR:N	2.37	0.57
77:s5:96:SER:HB2	77:s5:176:THR:HG21	1.85	0.57
77:s5:134:VAL:O	77:s5:138:THR:HG23	2.04	0.57
75:1:415:G:OP2	80:1:3454:OHX:N4	2.38	0.57
75:1:900:G:H1'	75:1:1589:A:H61	1.70	0.57
75:1:1734:G:H2'	75:1:1735:G:O4'	2.04	0.57
1:3:49:G:C5	31:m:58:LYS:HG3	2.40	0.57
16:DL:2:GLY:N	75:AR:2138:A:HO2'	2.02	0.57
16:DL:15:SER:OG	75:AR:816:A:OP1	2.19	0.57
16:DL:81:GLY:O	7:AT:95:G:H1'	2.05	0.57
54:CT:101:VAL:HG12	54:CT:104:ARG:NH2	2.19	0.57
54:CT:172:ARG:O	54:CT:176:ARG:HG2	2.04	0.57
57:CU:139:TYR:OH	75:AR:1213:G:OP1	2.12	0.57
58:A:1064:G:H2'	58:A:1065:A:C8	2.38	0.57
58:A:1494:C:H2'	58:A:1495:C:H6	1.69	0.57
48:x:50:GLN:OE1	48:x:56:ARG:NH1	2.37	0.57
73:F:102:VAL:HG13	73:F:182:TYR:HE2	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:112:U:O2'	75:AR:113:C:OP2	2.21	0.57
75:AR:1953:G:H3'	75:AR:1954:G:H5''	1.87	0.57
75:AR:3287:U:H2'	75:AR:3288:G:H5'	1.87	0.57
58:sR:895:G:H2'	58:sR:896:U:C6	2.38	0.57
78:Rb:21:THR:HG22	78:Rb:36:ALA:C	2.30	0.57
67:s2:227:PRO:HA	67:s2:230:TRP:CD1	2.39	0.57
70:s3:76:ARG:NE	70:s3:77:PHE:HE1	2.01	0.57
71:e0:48:THR:HG23	71:e0:49:LEU:HA	1.86	0.57
7:4:124:G:OP2	80:4:205:OHX:N4	2.38	0.57
8:AC:4:SER:HB2	75:1:1117:G:OP1	2.04	0.57
11:R:28:LEU:N	11:R:64:ASP:OD1	2.37	0.57
12:s7:25:VAL:HA	12:s7:28:GLU:CB	2.35	0.57
17:S:81:LYS:O	17:S:81:LYS:HD2	2.05	0.57
20:AE:54:GLU:CD	20:AE:54:GLU:H	2.12	0.57
25:l:38:VAL:O	25:l:42:VAL:HG23	2.05	0.57
25:l:289:ILE:HD13	51:y:125:ASP:HB2	1.85	0.57
41:W:71:ARG:HG2	41:W:72:LEU:HD22	1.87	0.57
42:c3:55:ARG:NH1	42:c3:56:ASP:OD1	2.37	0.57
45:DQ:78:LYS:HE2	45:DQ:80:ARG:NH2	2.18	0.57
46:X:24:GLN:NE2	62:c:5:GLN:H	2.02	0.57
11:c6:26:LYS:HA	11:c6:61:SER:O	2.04	0.57
21:s:57:PHE:HB3	75:1:2680:A:C2	2.40	0.57
58:A:856:A:N6	12:I:116:ARG:HG2	2.20	0.57
33:u:77:ARG:O	33:u:81:VAL:HG23	2.05	0.57
35:d0:36:ASN:OD1	35:d0:37:VAL:N	2.37	0.57
45:AP:30:ALA:O	75:1:2767:U:O2'	2.19	0.57
55:i:102:THR:HB	55:i:105:LYS:HB3	1.87	0.57
77:G:41:LYS:HG3	77:G:69:PHE:HZ	1.70	0.57
78:h:37:SER:OG	78:h:38:ARG:N	2.38	0.57
79:DB:90:GLU:OE1	79:DB:93:LYS:HE2	2.04	0.57
6:H:139:ASN:HA	6:H:142:ARG:HG3	1.87	0.57
58:sR:654:C:H2'	58:sR:655:G:C8	2.39	0.57
61:s0:13:ASP:CG	61:s0:179:ARG:HH22	2.12	0.57
62:d7:31:TYR:O	62:d7:48:SER:OG	2.23	0.57
66:6:129:VAL:O	66:6:133:SER:OG	2.15	0.57
24:K:10:LYS:HE2	24:K:47:PHE:HE2	1.70	0.57
64:s1:123:ALA:HB2	64:s1:165:ARG:HG3	1.87	0.57
20:DF:10:ARG:HG3	20:DF:44:MET:HE1	1.86	0.57
70:s3:33:GLY:HA3	70:s3:53:THR:OG1	2.05	0.57
70:s3:119:ALA:HB3	70:s3:152:PHE:CD2	2.40	0.57
77:s5:25:LEU:CD1	77:s5:29:ILE:HD11	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:952:A:N3	75:1:1114:U:O2'	2.34	0.57
75:1:1029:G:H2'	75:1:1030:A:H8	1.69	0.57
75:1:1575:A:N6	75:1:1576:G:N7	2.52	0.57
75:1:2767:U:O4	80:1:3756:OHX:N4	2.37	0.57
2:AB:128:ARG:HG2	10:AJ:8:ALA:HB2	1.87	0.57
2:AB:130:VAL:HG13	2:AB:134:ALA:HB3	1.87	0.57
3:CJ:241:LYS:HG3	75:AR:2586:G:C8	2.40	0.57
5:Q:54:ALA:O	5:Q:56:PHE:N	2.38	0.57
7:4:100:U:OP2	80:4:228:OHX:N5	2.38	0.57
10:DK:53:TYR:O	10:DK:57:LEU:N	2.37	0.57
12:s7:82:GLU:N	12:s7:82:GLU:OE2	2.36	0.57
13:j:83:HIS:HB3	49:AQ:64:VAL:HG12	1.87	0.57
13:j:132:ASN:HD21	75:1:2178:A:H3'	1.70	0.57
23:T:33:THR:HA	23:T:38:VAL:HG21	1.87	0.57
24:s9:65:LYS:H	24:s9:70:LEU:HD21	1.70	0.57
35:V:32:LYS:O	35:V:32:LYS:HG3	2.04	0.57
36:c1:79:LYS:HE2	36:c1:79:LYS:HA	1.86	0.57
49:DR:42:CYS:SG	49:DR:44:LYS:HG3	2.45	0.57
22:AL:65:LEU:HA	22:AL:68:SER:OG	2.05	0.57
17:c7:28:PHE:HE1	17:c7:32:LYS:HE2	1.69	0.57
17:c7:51:ALA:O	17:c7:55:THR:OG1	2.21	0.57
58:A:61:A:H8	58:A:269:G:HO2'	1.52	0.57
29:c9:100:ILE:O	29:c9:104:VAL:HG13	2.05	0.57
41:d1:56:SER:OG	41:d1:59:VAL:HG23	2.04	0.57
69:CY:23:ARG:HG2	69:CY:24:GLY:H	1.70	0.57
70:E:193:ALA:HA	70:E:200:LYS:HB3	1.87	0.57
75:AR:1066:G:OP1	80:AR:3988:OHX:N2	2.38	0.57
77:G:34:GLN:CA	77:G:37:GLN:HE22	2.18	0.57
77:G:45:LYS:O	77:G:45:LYS:HG3	2.04	0.57
56:d5:48:ASP:OD1	56:d5:48:ASP:N	2.33	0.57
62:d7:60:SER:O	62:d7:60:SER:OG	2.20	0.57
24:K:133:HIS:CD2	24:K:162:SER:HB2	2.40	0.57
64:s1:175:GLU:HG2	64:s1:193:ILE:HD12	1.87	0.57
65:d8:19:THR:HG22	65:d8:20:GLY:H	1.68	0.57
42:O:47:PRO:HB3	42:O:71:ILE:HG22	1.87	0.57
43:CI:95:ILE:O	43:CI:95:ILE:HD12	2.05	0.57
5:Q:56:PHE:CZ	5:Q:60:LEU:HD21	2.40	0.56
8:AC:29:TYR:OH	75:1:723:U:O2'	2.20	0.56
31:m:58:LYS:HA	31:m:93:THR:OG1	2.04	0.56
39:CP:149:ASN:OD1	80:CP:303:OHX:N1	2.38	0.56
39:CP:174:ILE:C	39:CP:175:ASN:HD22	2.13	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AI:70:TYR:O	4:AI:73:LYS:HG3	2.04	0.56
11:c6:97:VAL:HG12	11:c6:98:ASP:N	2.20	0.56
54:CT:106:LEU:HB3	54:CT:120:TYR:CE2	2.40	0.56
54:CT:167:ARG:HD2	54:CT:167:ARG:N	2.20	0.56
17:c7:109:LEU:HD21	61:s0:49:ASN:HA	1.86	0.56
58:A:515:A:N6	58:A:537:G:O2'	2.35	0.56
58:A:1150:G:H4'	58:A:1151:A:OP2	2.05	0.56
58:A:1475:A:H2'	58:A:1476:C:O4'	2.05	0.56
61:B:202:TYR:H	61:B:203:PHE:HD2	1.51	0.56
61:B:202:TYR:N	61:B:203:PHE:HD2	2.03	0.56
66:CX:40:LYS:HE2	66:CX:59:MET:HE2	1.87	0.56
70:E:35:SER:O	70:E:35:SER:OG	2.19	0.56
73:F:183:VAL:HG12	73:F:189:LEU:HA	1.87	0.56
73:F:193:GLY:HA2	73:F:194:THR:HG23	1.87	0.56
75:AR:1194:G:OP1	80:AR:3981:OHX:N6	2.38	0.56
75:AR:1239:C:H42	75:AR:1249:G:H1	1.52	0.56
75:AR:2259:A:OP2	80:AR:3599:OHX:N1	2.38	0.56
75:AR:2960:C:OP1	80:AR:3539:OHX:N6	2.37	0.56
75:AR:3276:G:H5'	37:CH:48:ARG:HH22	1.70	0.56
78:Rb:154:VAL:HG12	78:Rb:171:SER:HA	1.86	0.56
73:s4:166:SER:OG	73:s4:168:LYS:HB2	2.05	0.56
43:CI:142:SER:O	43:CI:146:GLN:HG3	2.05	0.56
47:P:84:ARG:HB2	47:P:118:VAL:HG12	1.87	0.56
75:1:1317:A:O2'	75:1:1318:A:H3'	2.04	0.56
75:1:2538:U:H4'	75:1:2539:C:OP2	2.04	0.56
12:s7:46:ILE:HG12	12:s7:60:ILE:HD12	1.86	0.56
24:s9:143:ILE:HD13	58:sR:767:U:H5	1.70	0.56
24:s9:143:ILE:HG12	58:sR:768:C:C2	2.39	0.56
29:U:132:LEU:HD13	29:U:133:ASP:H	1.70	0.56
31:m:85:ARG:NH1	31:m:254:LYS:H	2.03	0.56
42:c3:130:ARG:HD2	42:c3:137:PRO:O	2.05	0.56
46:X:115:GLU:O	46:X:119:LYS:HG2	2.05	0.56
47:c4:99:GLN:NE2	59:d6:44:ILE:O	2.38	0.56
11:c6:38:LEU:HD11	29:c9:9:VAL:C	2.30	0.56
58:A:959:U:H5'	42:O:15:ALA:O	2.05	0.56
23:c8:95:GLY:O	80:c8:201:OHX:N1	2.38	0.56
60:CV:118:GLU:HA	60:CV:121:ALA:HB3	1.86	0.56
35:d0:83:GLU:OE2	35:d0:85:ARG:NE	2.35	0.56
44:w:189:ASP:O	44:w:193:GLN:HG3	2.05	0.56
70:E:102:ALA:HB1	70:E:173:ARG:HG3	1.87	0.56
54:z:115:ILE:HG13	54:z:119:LEU:HD23	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:H:121:LEU:H	6:H:125:THR:CG2	2.18	0.56
58:sR:822:U:H2'	58:sR:823:G:H5''	1.87	0.56
58:sR:1795:U:OP2	59:d6:5:ARG:NH2	2.38	0.56
78:Rb:195:HIS:N	78:Rb:221:MET:HE1	2.20	0.56
59:d6:69:ASN:OD1	59:d6:71:LEU:HD23	2.04	0.56
61:s0:198:MET:HG3	61:s0:199:PRO:HD2	1.87	0.56
61:s0:198:MET:HG2	61:s0:200:ASP:HB2	1.86	0.56
14:DE:24:THR:OG1	14:DE:29:SER:HB2	2.06	0.56
24:K:54:ARG:HB2	24:K:57:ARG:NH2	2.20	0.56
65:d8:12:VAL:HB	65:d8:28:VAL:HG21	1.87	0.56
67:s2:121:VAL:HG12	70:s3:116:ARG:HH21	1.70	0.56
37:CH:56:LYS:NZ	37:CH:101:PHE:O	2.30	0.56
75:1:2652:U:O2'	80:1:4143:OHX:N1	2.38	0.56
75:1:2947:G:OP2	75:1:2947:G:H4'	2.05	0.56
75:1:3121:U:H1'	75:1:3122:A:H5''	1.87	0.56
3:CJ:225:LYS:O	3:CJ:229:VAL:HG13	2.06	0.56
4:DJ:63:ARG:HH21	7:AT:97:A:P	2.28	0.56
6:s6:30:LYS:O	6:s6:102:VAL:HG23	2.05	0.56
8:AC:14:ARG:CZ	8:AC:18:ARG:HD3	2.35	0.56
12:s7:46:ILE:CG1	12:s7:60:ILE:HD12	2.35	0.56
13:j:50:HIS:HB2	49:AQ:51:ALA:HB1	1.87	0.56
18:s8:64:ASN:HD22	18:s8:65:PHE:N	2.02	0.56
19:k:292:ALA:HB2	19:k:302:LYS:HA	1.86	0.56
21:CM:166:LYS:NZ	21:CM:166:LYS:HB3	2.21	0.56
23:T:11:PHE:HA	23:T:59:GLY:O	2.04	0.56
25:l:353:ALA:HA	25:l:356:THR:HG22	1.86	0.56
27:CN:73:ARG:NH1	75:AR:110:G:OP2	2.39	0.56
31:m:21:ARG:O	31:m:25:GLU:HG3	2.05	0.56
31:m:110:LEU:HD12	31:m:110:LEU:N	2.20	0.56
35:V:53:LYS:HB3	58:A:1345:A:H5'	1.87	0.56
43:o:53:LYS:O	43:o:57:THR:OG1	2.19	0.56
45:DQ:78:LYS:CD	45:DQ:78:LYS:C	2.75	0.56
3:p:249:ARG:O	3:p:252:ASN:HB3	2.05	0.56
10:AJ:98:ARG:O	10:AJ:98:ARG:HG3	2.05	0.56
48:CR:25:SER:O	48:CR:29:THR:HG23	2.06	0.56
9:q:88:TYR:OH	75:1:3111:U:OP1	2.23	0.56
11:c6:32:ASN:N	11:c6:67:VAL:O	2.38	0.56
11:c6:53:LEU:HD11	77:s5:69:PHE:CZ	2.39	0.56
11:c6:57:LEU:HA	11:c6:60:PHE:CE2	2.40	0.56
15:r:47:PRO:HD2	15:r:141:LYS:HA	1.87	0.56
54:CT:143:ILE:HD12	54:CT:144:GLN:H	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:189:C:H2'	58:A:190:C:H5'	1.86	0.56
58:A:393:C:H4'	58:A:1673:G:O2'	2.05	0.56
58:A:918:U:H2'	58:A:919:A:C8	2.39	0.56
58:A:1672:G:H2'	58:A:1673:G:C8	2.40	0.56
27:t:16:LYS:NZ	75:l:49:A:OP1	2.33	0.56
60:CV:69:LYS:HA	31:CG:40:HIS:CD2	2.40	0.56
61:B:175:TYR:O	61:B:179:ARG:N	2.38	0.56
33:u:135:LEU:HD11	44:w:178:VAL:HG12	1.87	0.56
49:AQ:8:VAL:O	49:AQ:11:THR:HG22	2.04	0.56
70:E:94:ARG:NH2	55:i:134:ASP:OD1	2.38	0.56
55:i:73:SER:OG	55:i:74:LYS:HG3	2.05	0.56
75:AR:47:C:OP2	75:AR:48:A:O2'	2.23	0.56
75:AR:1110:U:O4	80:AR:4041:OHX:N6	2.39	0.56
75:AR:1651:U:H5'	13:CD:71:LEU:HD13	1.87	0.56
75:AR:2384:A:OP1	80:AR:3758:OHX:N3	2.38	0.56
75:AR:2659:G:H4'	75:AR:2751:G:O2'	2.04	0.56
77:G:145:ASP:OD1	77:G:146:THR:N	2.33	0.56
78:h:171:SER:HB3	78:h:181:TRP:NE1	2.20	0.56
79:DB:122:HIS:CD2	79:DB:131:PHE:HD2	2.23	0.56
6:H:98:ARG:HE	6:H:106:LEU:CD2	2.18	0.56
6:H:190:GLN:HA	6:H:193:LEU:HB2	1.87	0.56
58:sR:9:U:O4	80:sR:1926:OHX:N1	2.38	0.56
58:sR:678:A:H2'	58:sR:679:U:C2	2.40	0.56
58:sR:711:U:H3'	58:sR:712:G:H8	1.70	0.56
56:d5:51:LEU:O	56:d5:54:VAL:HG12	2.05	0.56
12:I:30:SER:O	12:I:34:LEU:HB2	2.04	0.56
14:DE:13:LYS:HD3	14:DE:100:ILE:HG22	1.88	0.56
24:K:45:ILE:HA	24:K:48:GLN:OE1	2.05	0.56
24:K:47:PHE:CE1	24:K:51:LYS:HE2	2.40	0.56
67:s2:78:ASP:HB3	67:s2:104:VAL:HG12	1.87	0.56
31:CG:124:GLU:OE1	31:CG:124:GLU:N	2.37	0.56
70:s3:17:PHE:CE2	70:s3:77:PHE:CE2	2.92	0.56
42:O:126:ALA:O	42:O:130:ARG:HG3	2.06	0.56
4:DJ:66:VAL:HG23	4:DJ:80:LEU:HD21	1.88	0.56
5:Q:33:PHE:CD2	5:Q:87:PRO:HD3	2.40	0.56
6:s6:95:LYS:NZ	58:sR:160:C:O3'	2.39	0.56
7:4:16:G:N2	75:l:406:G:H1'	2.20	0.56
18:s8:182:TYR:OH	18:s8:188:GLU:OE2	2.21	0.56
20:AE:31:ARG:O	20:AE:35:GLU:HB2	2.04	0.56
31:m:48:LYS:NZ	75:l:2748:A:O3'	2.38	0.56
35:V:17:GLN:H	35:V:97:VAL:HG12	1.71	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:CP:132:VAL:HG13	39:CP:134:LEU:HD11	1.86	0.56
42:c3:26:PHE:CE2	42:c3:28:LEU:HB3	2.39	0.56
43:o:151:ARG:NH2	75:1:1334:U:O2'	2.36	0.56
45:DQ:3:ASN:OD1	45:DQ:94:GLY:O	2.23	0.56
3:p:82:LEU:HD13	3:p:178:ALA:HB1	1.86	0.56
3:p:180:VAL:HG11	3:p:186:LEU:HD21	1.87	0.56
50:Y:93:LEU:O	50:Y:96:VAL:HG22	2.04	0.56
9:q:92:TYR:CD2	9:q:142:ASP:HB3	2.40	0.56
58:A:121:U:O2'	73:F:33:ALA:O	2.18	0.56
23:c8:72:ILE:HA	23:c8:79:TYR:CD2	2.40	0.56
61:B:41:ARG:HH12	61:B:43:ASP:C	2.12	0.56
64:C:158:SER:HA	64:C:161:ILE:CG1	2.35	0.56
45:AP:39:GLY:HA3	75:1:2765:C:O3'	2.06	0.56
45:AP:100:LYS:O	45:AP:102:GLN:N	2.38	0.56
70:E:20:GLU:OE2	70:E:76:ARG:NE	2.38	0.56
70:E:23:GLU:OE1	30:L:61:TRP:NE1	2.30	0.56
70:E:34:TYR:HA	70:E:52:ALA:HA	1.87	0.56
51:y:158:HIS:H	51:y:186:VAL:HG12	1.70	0.56
72:CZ:59:SER:HB2	72:CZ:102:LEU:HD21	1.87	0.56
80:AR:3764:OHX:N5	1:AS:102:A:OP1	2.38	0.56
78:h:88:THR:HG22	78:h:104:VAL:HG12	1.88	0.56
78:h:114:ASP:HB3	78:h:123:ILE:HD11	1.88	0.56
6:H:38:GLY:O	6:H:41:VAL:HG12	2.05	0.56
58:sR:407:A:H2'	58:sR:408:C:C6	2.40	0.56
70:s3:21:LEU:HD12	70:s3:21:LEU:H	1.70	0.56
71:e0:48:THR:OG1	71:e0:50:VAL:HG23	2.05	0.56
37:CH:135:VAL:HG12	37:CH:139:LYS:HZ1	1.70	0.56
73:s4:183:VAL:HG12	73:s4:191:ARG:O	2.05	0.56
43:CI:189:ILE:HG23	43:CI:190:THR:HG23	1.87	0.56
75:1:1566:A:N6	75:1:1567:U:O2	2.39	0.56
25:l:295:ILE:O	25:l:299:ILE:HG12	2.05	0.56
28:DN:42:ARG:HG2	28:DN:43:ASN:H	1.69	0.56
39:CP:49:ARG:NH1	75:AR:115:A:OP1	2.39	0.56
43:o:100:ARG:O	43:o:104:GLN:HG3	2.06	0.56
47:c4:107:ARG:HB2	47:c4:107:ARG:HH11	1.71	0.56
51:CS:51:ALA:HA	51:CS:54:LEU:CD2	2.35	0.56
15:r:61:SER:OG	75:1:2854:U:OP1	2.23	0.56
21:s:107:ASP:OD1	21:s:107:ASP:N	2.28	0.56
58:A:322:G:HO2'	18:J:10:LYS:HZ2	1.49	0.56
58:A:479:C:H2'	58:A:480:G:O4'	2.05	0.56
58:A:702:G:C2	58:A:703:G:H1'	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:1070:C:H4'	62:c:17:ARG:HE	1.71	0.56
64:C:172:LEU:HD13	64:C:172:LEU:O	2.05	0.56
67:D:40:LYS:HB3	67:D:43:ARG:NH2	2.18	0.56
67:D:67:GLN:H	67:D:67:GLN:CD	2.13	0.56
75:AR:1104:G:H2'	75:AR:1105:A:H8	1.70	0.56
75:AR:1405:U:OP2	26:DG:59:SER:OG	2.21	0.56
78:h:209:THR:O	78:h:210:LEU:HD13	2.05	0.56
53:d4:37:LYS:HA	53:d4:40:LEU:HB2	1.86	0.56
78:Rb:109:ASP:HB2	78:Rb:111:MET:HE3	1.87	0.56
18:J:77:ARG:HB3	18:J:77:ARG:NH1	2.19	0.56
62:d7:36:LYS:HD3	62:d7:42:ASN:C	2.30	0.56
19:CE:79:VAL:HG13	19:CE:81:THR:HG23	1.88	0.56
24:K:158:PHE:HB2	24:K:165:GLY:HA3	1.87	0.56
65:d8:57:MET:CG	77:s5:222:LYS:HZ3	2.18	0.56
31:CG:104:LEU:HD13	31:CG:247:ILE:HG23	1.88	0.56
79:AA:135:ARG:NH1	75:1:2556:C:O3'	2.39	0.56
75:1:1853:U:O4	80:1:3608:OHX:N5	2.37	0.56
75:1:3228:C:H4'	75:1:3229:G:O5'	2.05	0.56
4:DJ:22:VAL:O	4:DJ:26:LYS:HG2	2.05	0.56
13:j:131:GLY:H	13:j:169:ILE:HG22	1.71	0.56
17:S:78:ARG:O	17:S:81:LYS:HB3	2.06	0.56
18:s8:33:PRO:HA	58:sR:331:A:H5'	1.85	0.56
23:T:123:ARG:HH21	58:A:1546:G:P	2.29	0.56
24:s9:179:ARG:NH2	24:s9:183:ALA:H	1.98	0.56
26:AF:123:LYS:NZ	26:AF:126:LEU:HB3	2.20	0.56
35:V:112:VAL:H	70:E:41:VAL:HG21	1.70	0.56
38:AH:19:LYS:HE2	75:1:1784:G:H5''	1.87	0.56
43:o:44:ILE:HD11	43:o:179:LEU:HD13	1.88	0.56
44:CQ:18:ARG:O	44:CQ:22:VAL:HG13	2.05	0.56
46:X:57:ARG:HH21	42:O:16:ILE:HB	1.70	0.56
47:c4:53:ASP:O	47:c4:56:SER:OG	2.20	0.56
10:AJ:34:SER:HB2	75:1:265:A:H5''	1.88	0.56
49:DR:49:ARG:NH1	49:DR:52:ALA:HB2	2.21	0.56
9:q:16:VAL:HG12	9:q:30:PRO:HD3	1.88	0.56
9:q:22:SER:HB2	75:1:3187:A:OP1	2.04	0.56
57:CU:81:TYR:CE1	57:CU:90:MET:HE3	2.40	0.56
61:B:119:ARG:NH2	67:D:240:LEU:HG	2.20	0.56
70:E:113:LEU:HB3	70:E:118:ALA:HB2	1.87	0.56
51:y:96:PHE:CD1	51:y:97:PRO:HD2	2.40	0.56
75:AR:1167:U:P	32:DH:73:ARG:HH22	2.29	0.56
75:AR:1562:C:H2'	75:AR:1563:C:C6	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:1863:G:O6	80:AR:4196:OHX:N5	2.38	0.56
75:AR:1899:G:O2'	75:AR:2334:U:O4	2.23	0.56
12:I:35:LYS:CE	12:I:36:ALA:HB2	2.36	0.56
78:Rb:125:GLY:O	78:Rb:126:SER:HB3	2.05	0.56
78:Rb:248:ASN:ND2	78:Rb:297:ASP:O	2.39	0.56
24:K:34:PHE:HE2	24:K:106:GLU:HG2	1.71	0.56
73:s4:240:LYS:H	73:s4:240:LYS:CE	2.19	0.56
43:CI:160:ARG:HB2	43:CI:203:TRP:CD2	2.41	0.56
75:1:2651:G:OP1	80:1:4143:OHX:N3	2.38	0.56
75:1:3113:A:OP2	80:1:3999:OHX:N5	2.38	0.56
11:R:44:LEU:HD21	77:G:108:LEU:HG	1.87	0.56
12:s7:81:LEU:O	12:s7:85:PHE:HD1	1.89	0.56
15:CL:86:HIS:HB3	15:CL:139:ARG:HG3	1.87	0.56
25:l:31:ARG:O	25:l:35:VAL:HG23	2.06	0.56
29:U:54:PHE:O	29:U:58:ALA:N	2.35	0.56
5:c5:122:THR:HG22	58:sR:1558:U:H3	1.70	0.56
9:q:110:LYS:O	9:q:128:VAL:HG13	2.04	0.56
52:p0:103:ASN:OD1	52:p0:104:ARG:HG2	2.06	0.56
57:CU:80:ARG:HH21	60:CV:156:TYR:HA	1.71	0.56
57:CU:115:ARG:NH1	75:AR:1295:G:O2'	2.37	0.56
58:A:17:C:O2'	58:A:1137:A:N1	2.33	0.56
58:A:127:G:C4	6:H:195:VAL:HG23	2.41	0.56
35:d0:45:ALA:O	35:d0:49:ASN:N	2.39	0.56
48:x:178:ALA:O	48:x:182:ILE:N	2.37	0.56
49:AQ:46:THR:OG1	49:AQ:57:CYS:SG	2.62	0.56
70:E:35:SER:O	70:E:51:ARG:NH2	2.39	0.56
50:d3:90:ASP:HB2	58:sR:568:G:H4'	1.88	0.56
50:d3:125:VAL:HG23	50:d3:126:LYS:HG3	1.86	0.56
75:AR:2254:U:H3	75:AR:2263:C:H42	1.52	0.56
75:AR:2537:U:O2'	75:AR:2538:U:O5'	2.21	0.56
57:0:2:ALA:HB3	57:0:32:SER:HB2	1.87	0.56
58:sR:151:G:H2'	58:sR:152:U:C6	2.41	0.56
56:d5:60:VAL:HG22	56:d5:80:LEU:HD11	1.87	0.56
2:DC:36:GLY:HA3	2:DC:40:HIS:CE1	2.41	0.56
2:DC:88:ASP:HA	2:DC:91:LEU:HB2	1.87	0.56
78:Rb:199:ILE:HD12	78:Rb:199:ILE:O	2.06	0.56
13:CD:178:PRO:HB2	13:CD:180:LEU:CD2	2.35	0.56
24:K:161:THR:O	24:K:163:PRO:HD3	2.05	0.56
65:d8:45:LYS:HB3	77:s5:162:VAL:HA	1.87	0.56
65:d8:57:MET:HG2	77:s5:222:LYS:HZ1	1.71	0.56
30:L:50:THR:HG23	30:L:55:VAL:O	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:300:G:O6	80:1:3452:OHX:N4	2.39	0.56
75:1:655:C:H2'	75:1:656:A:H8	1.71	0.56
10:DK:61:ILE:HD11	10:DK:87:VAL:CG2	2.30	0.56
11:R:86:ALA:O	11:R:90:VAL:HG13	2.04	0.56
29:U:15:ILE:HD11	29:U:63:ARG:HD2	1.87	0.56
31:m:55:PHE:CZ	31:m:158:ARG:HG3	2.40	0.56
10:AJ:9:ILE:HD11	27:t:170:LEU:O	2.06	0.56
11:c6:44:LEU:CD2	77:s5:108:LEU:HD21	2.34	0.56
56:a:77:ARG:HH22	58:A:1532:U:P	2.29	0.56
58:A:1410:A:H2'	58:A:1411:A:O4'	2.06	0.56
60:CV:27:LEU:HD11	31:CG:34:LYS:HA	1.88	0.56
67:D:112:GLY:HA3	67:D:136:VAL:HG12	1.88	0.56
51:y:27:LYS:O	51:y:30:VAL:HG22	2.05	0.56
75:AR:335:G:OP2	76:DA:14:LYS:NZ	2.32	0.56
75:AR:1365:G:OP2	80:AR:3636:OHX:N3	2.39	0.56
75:AR:3295:A:H2'	75:AR:3296:A:C8	2.41	0.56
58:sR:808:U:H2'	58:sR:809:A:C8	2.41	0.56
58:sR:1472:C:H5'	58:sR:1474:G:O4'	2.06	0.56
78:Rb:38:ARG:HA	78:Rb:67:ILE:HD13	1.87	0.56
78:Rb:149:ASP:HB2	78:Rb:175:ASP:N	2.21	0.56
14:DE:24:THR:HG22	14:DE:91:SER:HB3	1.87	0.56
31:CG:160:PHE:HA	31:CG:163:LEU:HB3	1.88	0.56
70:s3:74:GLN:HB2	70:s3:79:TYR:CB	2.35	0.56
37:CH:172:HIS:CD2	37:CH:173:MET:HG3	2.40	0.56
42:O:38:VAL:HG11	42:O:78:ASN:ND2	2.21	0.56
75:1:209:A:H4'	75:1:211:A:C8	2.41	0.56
75:1:1846:C:H5'	75:1:1849:C:N4	2.21	0.56
75:1:2107:A:H2	75:1:3344:A:C8	2.24	0.56
12:s7:116:ARG:HG3	12:s7:116:ARG:NH1	2.20	0.56
15:CL:140:THR:HG22	15:CL:141:LYS:N	2.21	0.56
19:k:250:ALA:HB1	75:1:2947:G:C2	2.41	0.56
24:s9:114:TYR:HD2	24:s9:115:LYS:HG2	1.70	0.56
27:CN:165:SER:O	27:CN:167:PHE:N	2.31	0.56
41:W:3:ASN:ND2	41:W:7:GLN:HB3	2.21	0.56
46:X:76:SER:HB2	46:X:78:ARG:HG2	1.88	0.56
5:c5:43:ARG:HH12	58:sR:1555:A:P	2.28	0.56
9:q:172:ILE:HD12	34:AN:90:ASN:HB3	1.87	0.56
52:p0:27:VAL:HB	52:p0:188:VAL:CG2	2.35	0.56
54:CT:172:ARG:HH21	58:sR:852:C:P	2.28	0.56
58:A:579:A:C8	70:E:178:ARG:CZ	2.89	0.56
58:A:580:A:OP1	80:A:1944:OHX:N6	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:c8:27:LYS:O	23:c8:31:ALA:N	2.37	0.56
23:c8:60:GLU:HG3	23:c8:61:LEU:H	1.71	0.56
27:t:124:ILE:HG13	27:t:126:PHE:CE1	2.41	0.56
60:CV:118:GLU:O	60:CV:121:ALA:N	2.36	0.56
45:AP:58:PHE:HZ	45:AP:60:LYS:O	1.89	0.56
67:D:60:SER:O	67:D:60:SER:OG	2.24	0.56
41:d1:4:ASP:OD1	41:d1:5:LYS:N	2.39	0.56
46:d2:30:SER:HB3	46:d2:59:GLY:HA3	1.86	0.56
55:i:139:GLU:N	55:i:139:GLU:OE2	2.38	0.56
73:F:43:PRO:HA	73:F:82:TYR:O	2.06	0.56
75:AR:212:G:OP2	76:DA:2:ALA:N	2.38	0.56
78:h:192:PHE:HD2	78:h:223:TRP:CD2	2.22	0.56
57:0:71:LYS:NZ	75:1:563:U:OP1	2.33	0.56
58:sR:1193:A:OP1	80:sR:2136:OHX:N6	2.39	0.56
78:Rb:305:TYR:CE2	78:Rb:311:ARG:HD3	2.41	0.56
24:K:171:ARG:NE	24:K:174:ARG:HH21	2.03	0.56
76:9:73:VAL:HA	76:9:80:VAL:HG23	1.88	0.56
42:O:87:ASP:OD1	42:O:88:LEU:N	2.38	0.56
75:1:138:U:H2'	75:1:139:G:C8	2.41	0.56
75:1:3163:A:N1	75:1:3164:C:N4	2.54	0.56
6:s6:10:ASN:ND2	6:s6:127:THR:O	2.33	0.56
10:DK:15:LYS:HD3	10:DK:16:LYS:N	2.21	0.56
14:AD:47:ASN:ND2	14:AD:74:ASN:OD1	2.38	0.56
24:s9:140:ILE:HD13	53:d4:65:GLY:HA3	1.86	0.56
29:U:9:VAL:HG11	29:U:136:ALA:CB	2.36	0.56
44:CQ:96:LYS:O	44:CQ:100:GLU:HG3	2.06	0.56
3:p:101:THR:CG2	3:p:104:GLU:HG3	2.36	0.56
50:Y:133:LEU:HD23	50:Y:134:ALA:H	1.71	0.56
51:CS:81:VAL:HG22	51:CS:101:VAL:HG22	1.88	0.56
52:p0:25:LEU:HD23	52:p0:88:PHE:CD2	2.41	0.56
53:Z:104:SER:O	53:Z:107:GLN:HG3	2.06	0.56
57:CU:38:LYS:NZ	43:CI:233:GLU:OE2	2.39	0.56
58:A:603:U:H2'	58:A:604:A:C8	2.41	0.56
58:A:1774:G:N7	40:AO:4:LYS:NZ	2.47	0.56
59:b:22:ARG:NH2	47:P:128:LYS:O	2.39	0.56
23:c8:27:LYS:HA	23:c8:57:ARG:HB3	1.86	0.56
33:u:77:ARG:HD3	75:1:562:C:OP2	2.06	0.56
35:d0:69:LYS:O	68:d9:44:ARG:NH1	2.38	0.56
45:AP:5:PRO:HD3	75:1:2655:U:O2'	2.06	0.56
72:CZ:61:LYS:NZ	7:AT:59:A:O2'	2.39	0.56
75:AR:2181:C:OP1	13:CD:193:ARG:NH1	2.29	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:2651:G:H4'	75:AR:2652:U:OP2	2.06	0.56
75:AR:2953:U:H2'	75:AR:2954:U:H2'	1.88	0.56
76:DA:25:SER:HB3	7:AT:91:C:O2'	2.06	0.56
78:h:201:THR:CB	78:h:242:SER:HA	2.36	0.56
6:H:21:GLU:N	6:H:21:GLU:OE1	2.36	0.56
58:sR:486:G:H4'	58:sR:486:G:OP1	2.05	0.56
58:sR:1381:U:O4	58:sR:1382:A:N6	2.39	0.56
58:sR:1573:A:H4'	58:sR:1574:G:H5'	1.88	0.56
2:DC:74:ASN:OD1	2:DC:113:LEU:HB2	2.05	0.56
64:s1:187:LYS:O	64:s1:192:VAL:HG12	2.06	0.56
69:7:59:HIS:O	69:7:60:LYS:HG3	2.05	0.56
31:CG:273:ARG:O	31:CG:273:ARG:HG3	2.07	0.56
36:M:22:ASN:HD21	36:M:24:LYS:HB2	1.71	0.56
70:s3:141:LYS:HZ3	70:s3:179:GLN:HE21	1.53	0.56
38:DI:61:GLN:HA	38:DI:64:THR:HG23	1.88	0.56
9:CK:20:ILE:HB	33:CO:7:VAL:HG22	1.88	0.55
16:DL:55:ARG:NH2	75:AR:353:G:O6	2.38	0.55
19:k:133:TYR:O	19:k:136:LYS:HG3	2.06	0.55
21:CM:153:LYS:HD2	21:CM:154:THR:HG23	1.88	0.55
29:U:38:LYS:HZ3	58:A:1503:A:H8	1.53	0.55
35:V:50:LEU:HD22	35:V:94:GLU:HG3	1.88	0.55
16:AK:54:LYS:O	16:AK:58:THR:HG23	2.06	0.55
52:p0:105:VAL:HG13	52:p0:184:GLY:HA3	1.87	0.55
54:CT:150:GLN:HA	54:CT:153:LYS:HB3	1.87	0.55
17:c7:44:LYS:NZ	58:sR:1387:G:O6	2.39	0.55
58:A:472:U:H5''	24:K:11:THR:HG23	1.88	0.55
58:A:751:G:H2'	58:A:752:A:H8	1.71	0.55
58:A:776:G:N2	58:A:785:U:H1'	2.21	0.55
58:A:1473:U:OP2	77:G:189:THR:HA	2.06	0.55
29:c9:7:ARG:HH12	29:c9:67:MET:CA	2.17	0.55
64:C:144:ARG:HB2	64:C:208:GLN:HB3	1.88	0.55
64:C:165:ARG:HA	64:C:168:ILE:HB	1.88	0.55
67:D:121:VAL:O	67:D:125:ILE:HG13	2.06	0.55
48:x:126:ARG:HD3	48:x:126:ARG:H	1.71	0.55
51:y:107:THR:OG1	75:1:676:G:O5'	2.23	0.55
75:AR:2298:U:O4	75:AR:2923:U:H5	1.90	0.55
6:H:20:ASP:O	6:H:24:ILE:HG12	2.04	0.55
58:sR:1438:G:O2'	70:s3:179:GLN:OE1	2.12	0.55
58:sR:1797:A:N6	59:d6:84:VAL:HB	2.20	0.55
78:Rb:9:LEU:CD1	78:Rb:314:GLN:HE21	2.19	0.55
75:1:3119:U:OP2	80:1:3872:OHX:N3	2.39	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:90:TYR:O	2:AB:94:ALA:HB2	2.06	0.55
6:s6:212:LEU:O	6:s6:215:ARG:HG2	2.06	0.55
7:4:85:G:H4'	7:4:86:U:OP1	2.07	0.55
10:DK:35:ASN:HA	10:DK:38:LYS:HG3	1.89	0.55
10:DK:76:ARG:HH21	75:AR:293:C:H4'	1.70	0.55
18:s8:137:LYS:HD2	18:s8:137:LYS:C	2.31	0.55
19:k:41:VAL:HG12	19:k:185:GLY:CA	2.35	0.55
19:k:282:ILE:HD13	19:k:322:ILE:HD12	1.88	0.55
22:DM:46:ARG:HH21	22:DM:50:SER:C	2.15	0.55
22:DM:57:ASN:OD1	22:DM:57:ASN:N	2.39	0.55
24:s9:127:VAL:O	24:s9:131:GLN:HB2	2.06	0.55
41:W:22:ARG:NH1	46:X:18:GLU:OE1	2.39	0.55
41:W:85:TYR:O	41:W:85:TYR:HD1	1.89	0.55
45:DQ:93:LEU:HD23	45:DQ:93:LEU:H	1.69	0.55
47:c4:38:THR:HG21	58:sR:895:G:H21	1.71	0.55
5:c5:75:PRO:HA	5:c5:93:VAL:HG13	1.87	0.55
58:A:420:A:P	6:H:74:LYS:HZ1	2.28	0.55
58:A:1253:U:H4'	74:g:143:LYS:H	1.71	0.55
58:A:1667:A:OP2	80:A:2025:OHX:N3	2.40	0.55
63:CW:19:VAL:O	63:CW:23:THR:HG23	2.06	0.55
73:F:57:ASN:HD21	73:F:59:ARG:NH2	2.05	0.55
73:F:126:VAL:HG23	73:F:156:VAL:HA	1.89	0.55
75:AR:978:G:O2'	75:AR:979:U:O2	2.25	0.55
75:AR:1419:A:H5''	25:CF:193:LYS:NZ	2.21	0.55
75:AR:1562:C:O2'	75:AR:1563:C:O5'	2.20	0.55
77:G:84:LYS:HG2	77:G:92:ARG:HH12	1.70	0.55
78:h:171:SER:HB3	78:h:181:TRP:HE1	1.70	0.55
78:h:259:GLY:HA3	78:h:275:ARG:HG2	1.88	0.55
79:DB:41:ALA:O	79:DB:43:VAL:HG13	2.06	0.55
58:sR:678:A:H5''	58:sR:679:U:OP2	2.06	0.55
56:d5:51:LEU:HD22	56:d5:54:VAL:HG11	1.87	0.55
62:d7:81:ARG:O	62:d7:82:LYS:HB3	2.04	0.55
24:K:29:LYS:O	24:K:33:GLU:HB2	2.06	0.55
25:CF:39:PHE:CD2	25:CF:242:ALA:HB2	2.41	0.55
31:CG:40:HIS:CD2	31:CG:42:ALA:H	2.22	0.55
31:CG:76:ALA:HB3	31:CG:109:THR:HG22	1.87	0.55
31:CG:111:GLN:HA	31:CG:116:ASP:HB3	1.87	0.55
73:s4:9:LEU:HG	73:s4:28:ALA:HB3	1.88	0.55
75:1:1581:C:H2'	75:1:1582:C:H5'	1.87	0.55
75:1:2516:U:O2'	75:1:2595:A:N6	2.38	0.55
75:1:2718:U:OP2	80:1:4171:OHX:N1	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:3026:G:O6	80:1:3513:OHX:N3	2.39	0.55
2:AB:8:THR:HG21	75:1:662:U:OP1	2.07	0.55
2:AB:66:ALA:HB1	27:t:64:LYS:HD3	1.88	0.55
4:DJ:85:THR:HG1	4:DJ:88:LEU:H	1.48	0.55
6:s6:17:GLU:CD	6:s6:17:GLU:H	2.15	0.55
6:s6:21:GLU:HA	6:s6:24:ILE:HD12	1.89	0.55
6:s6:66:GLY:HA3	58:sR:1681:A:H1'	1.89	0.55
10:DK:4:LYS:HZ1	75:AR:73:C:H5'	1.70	0.55
11:R:57:LEU:HD22	77:G:37:GLN:HE21	1.70	0.55
23:T:57:ARG:HG3	56:a:41:ILE:HG22	1.88	0.55
25:l:309:ARG:NH1	75:1:590:G:O2'	2.39	0.55
30:c0:65:TYR:HB3	70:s3:72:LEU:HD21	1.89	0.55
41:W:11:LEU:O	67:D:222:TYR:OH	2.24	0.55
4:AI:4:VAL:CG1	4:AI:9:LEU:HD21	2.35	0.55
45:DQ:11:TYR:HA	45:DQ:20:HIS:HD2	1.71	0.55
49:DR:33:GLN:HG2	49:DR:34:HIS:CD2	2.41	0.55
15:r:69:ARG:HG3	15:r:70:ILE:N	2.20	0.55
56:a:79:ALA:O	56:a:83:LEU:HD12	2.07	0.55
58:A:129:U:O2	80:A:2092:OHX:N3	2.40	0.55
58:A:144:U:HO2'	58:A:145:A:H8	1.54	0.55
58:A:1208:A:OP1	80:A:2075:OHX:N4	2.39	0.55
23:c8:30:TYR:CE1	23:c8:40:ARG:HB3	2.41	0.55
60:CV:128:LEU:HD13	75:AR:1097:G:C8	2.40	0.55
33:u:59:ASN:ND2	75:1:1185:C:OP1	2.18	0.55
64:C:160:HIS:O	64:C:164:ILE:HG13	2.07	0.55
35:d0:39:SER:HA	35:d0:42:VAL:HG22	1.88	0.55
71:f:37:ARG:HD2	24:K:123:HIS:CE1	2.41	0.55
50:d3:130:VAL:HG12	50:d3:135:LEU:HG	1.88	0.55
75:AR:186:U:OP2	80:AR:4066:OHX:N4	2.40	0.55
75:AR:796:U:H2'	75:AR:797:U:C6	2.42	0.55
75:AR:2111:G:H4'	75:AR:2112:U:OP2	2.07	0.55
79:DB:86:THR:O	79:DB:127:ASN:ND2	2.39	0.55
58:sR:1419:G:O4'	68:d9:56:ARG:HA	2.07	0.55
12:I:31:SER:HB2	12:I:35:LYS:CG	2.28	0.55
18:J:68:ALA:CB	36:M:20:PHE:HE2	2.18	0.55
24:K:76:LEU:O	24:K:80:LEU:HD22	2.05	0.55
36:M:69:LYS:HB3	36:M:71:LEU:HD21	1.89	0.55
73:s4:60:GLU:O	73:s4:64:ILE:HG13	2.06	0.55
2:AB:22:ILE:HG23	75:1:642:U:OP1	2.06	0.55
5:Q:68:PRO:HG2	5:Q:71:GLU:HB2	1.88	0.55
10:DK:38:LYS:O	10:DK:42:SER:HB3	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:j:116:VAL:HB	13:j:126:LEU:HB2	1.88	0.55
30:c0:47:GLN:O	30:c0:51:SER:OG	2.24	0.55
45:DQ:40:LYS:HE3	45:DQ:44:ASP:OD1	2.07	0.55
5:c5:60:LEU:HD21	5:c5:92:SER:CB	2.37	0.55
52:p0:8:LYS:NZ	75:AR:1221:A:O3'	2.40	0.55
54:CT:23:TRP:HB3	54:CT:51:VAL:HG22	1.88	0.55
54:CT:154:ALA:O	54:CT:158:GLU:N	2.39	0.55
58:A:383:G:N7	80:A:1977:OHX:N1	2.54	0.55
58:A:867:G:H21	42:O:87:ASP:HB3	1.71	0.55
58:A:1738:U:H2'	58:A:1739:C:C6	2.41	0.55
33:u:20:VAL:HG11	33:u:90:VAL:HG21	1.88	0.55
66:CX:18:PRO:HA	66:CX:51:ALA:HA	1.88	0.55
75:AR:374:A:N3	75:AR:376:G:H5''	2.21	0.55
75:AR:783:A:OP2	80:AR:3635:OHX:N4	2.39	0.55
77:G:30:PRO:O	77:G:34:GLN:HG3	2.07	0.55
77:G:38:THR:O	77:G:41:LYS:NZ	2.40	0.55
58:sR:604:A:OP1	80:sR:1948:OHX:N5	2.40	0.55
60:2:17:ARG:NH1	60:2:21:LYS:O	2.40	0.55
2:DC:73:LEU:HB2	2:DC:109:TYR:CD2	2.42	0.55
59:d6:68:TYR:CD2	64:s1:111:ARG:HB2	2.42	0.55
69:7:13:ILE:HG22	69:7:32:GLN:HG2	1.88	0.55
31:CG:204:VAL:O	31:CG:208:MET:HG3	2.06	0.55
75:1:1440:G:O6	80:1:3964:OHX:N4	2.39	0.55
75:1:1580:A:H5''	75:1:2522:G:C2	2.42	0.55
1:3:88:G:OP1	80:1:4175:OHX:N2	2.40	0.55
12:s7:120:ALA:O	12:s7:124:LYS:HG3	2.05	0.55
20:AE:83:GLU:OE1	80:1:3424:OHX:N1	2.40	0.55
21:CM:25:GLU:HG3	21:CM:26:SER:O	2.07	0.55
21:CM:48:SER:OG	75:AR:2682:C:OP1	2.24	0.55
24:s9:140:ILE:HD12	24:s9:140:ILE:H	1.72	0.55
24:s9:150:LEU:O	24:s9:153:GLU:HB2	2.06	0.55
27:CN:144:THR:HG23	27:CN:145:PHE:CD1	2.42	0.55
43:o:214:TRP:CD2	43:o:219:LYS:HD3	2.41	0.55
9:q:34:LEU:HB3	9:q:78:MET:HE3	1.89	0.55
16:AK:8:PHE:O	16:AK:11:ARG:HG3	2.07	0.55
17:c7:14:LYS:HZ3	17:c7:69:ILE:HA	1.72	0.55
57:CU:113:ARG:NH1	75:AR:1212:A:H5'	2.21	0.55
58:A:327:U:H2'	58:A:328:A:C8	2.41	0.55
58:A:1341:A:OP1	78:h:63:GLY:HA2	2.07	0.55
61:B:82:GLY:CA	61:B:170:ILE:HD11	2.35	0.55
45:AP:4:VAL:HG23	75:1:2655:U:C5	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:D:53:ILE:HD12	67:D:57:PHE:CZ	2.42	0.55
77:G:128:ASN:HB3	77:G:131:GLN:HB2	1.88	0.55
78:h:132:LYS:HG2	78:h:143:THR:HG22	1.89	0.55
57:0:124:LEU:HD23	60:2:153:PRO:HB2	1.88	0.55
58:sR:355:G:OP2	80:sR:1945:OHX:N2	2.40	0.55
58:sR:500:C:H2'	58:sR:501:U:C6	2.41	0.55
58:sR:1018:U:H2'	58:sR:1019:A:C8	2.42	0.55
58:sR:1354:G:H5'	58:sR:1355:C:OP2	2.07	0.55
2:DC:92:LYS:HD2	2:DC:93:SER:H	1.72	0.55
13:CD:51:ASP:HB3	13:CD:54:ARG:HD2	1.89	0.55
75:l:383:G:N7	80:l:3791:OHX:N3	2.53	0.55
75:l:1499:C:H2'	75:l:1500:G:H8	1.70	0.55
3:CJ:160:ILE:HG22	3:CJ:164:VAL:HG13	1.87	0.55
5:Q:126:VAL:HG21	58:A:1460:A:OP1	2.07	0.55
11:R:57:LEU:CD2	77:G:37:GLN:HE21	2.20	0.55
12:s7:164:TYR:OH	12:s7:165:LYS:NZ	2.35	0.55
12:s7:185:ILE:HG23	12:s7:186:PRO:HD2	1.89	0.55
25:l:3:ARG:HH21	25:l:22:LEU:HB3	1.72	0.55
26:AF:27:ARG:NH1	75:l:1433:A:N3	2.55	0.55
31:m:268:GLU:HA	31:m:271:LYS:HE3	1.87	0.55
32:AG:45:LEU:HA	32:AG:71:VAL:HG12	1.88	0.55
35:V:43:LYS:HG3	35:V:46:GLU:CB	2.34	0.55
39:CP:3:ALA:HA	39:CP:6:TYR:HD2	1.70	0.55
39:CP:23:GLN:O	39:CP:27:VAL:HG12	2.07	0.55
45:DQ:73:GLU:OE1	45:DQ:80:ARG:NH2	2.39	0.55
47:c4:33:LEU:HB3	64:s1:66:VAL:HG21	1.89	0.55
51:CS:164:ARG:NH2	75:AR:1110:U:OP1	2.40	0.55
22:AL:38:PHE:CE2	22:AL:57:ASN:HB3	2.38	0.55
54:CT:4:LEU:HB2	75:AR:1472:U:H5'	1.89	0.55
56:a:77:ARG:HH21	58:A:1532:U:H3'	1.72	0.55
56:a:81:ARG:O	56:a:81:ARG:HD2	2.07	0.55
58:A:1201:G:H22	58:A:1600:A:H5''	1.72	0.55
58:A:1570:A:H2'	58:A:1571:C:O4'	2.07	0.55
29:c9:7:ARG:HH21	58:sR:1367:G:H4'	1.71	0.55
64:C:130:SER:N	64:C:131:ASP:HB2	2.21	0.55
73:F:141:THR:OG1	73:F:143:ASP:OD1	2.23	0.55
54:z:138:LEU:O	54:z:142:ILE:HG13	2.06	0.55
75:AR:126:U:H2'	75:AR:127:G:O4'	2.06	0.55
75:AR:1019:G:H1	75:AR:1033:U:H3	1.55	0.55
75:AR:2103:U:H2'	75:AR:2104:A:C8	2.41	0.55
75:AR:2571:U:H2'	75:AR:2571:U:OP1	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:119:U:P	31:CG:258:LYS:HZ3	2.30	0.55
79:DB:95:VAL:HG21	79:DB:113:VAL:HG21	1.89	0.55
58:sR:876:G:H1'	58:sR:944:A:O4'	2.07	0.55
78:Rb:242:SER:H	78:Rb:255:ALA:HB3	1.71	0.55
62:d7:75:GLU:HG2	62:d7:76:GLY:N	2.22	0.55
64:s1:27:LYS:HD2	64:s1:47:LEU:HD13	1.89	0.55
65:d8:58:GLU:HB3	65:d8:61:ARG:HG3	1.88	0.55
36:M:75:VAL:HG12	36:M:121:ASP:O	2.07	0.55
70:s3:17:PHE:CE1	70:s3:21:LEU:HD11	2.41	0.55
70:s3:167:PHE:O	70:s3:190:ARG:HG3	2.07	0.55
43:CI:132:PRO:HA	43:CI:229:PHE:CG	2.42	0.55
7:4:73:U:OP1	76:9:24:SER:OG	2.19	0.55
7:4:157:U:H1'	75:1:3:U:C2	2.41	0.55
17:S:57:LEU:O	17:S:60:ARG:HG2	2.07	0.55
31:m:178:ASN:HA	31:m:183:TRP:CD2	2.42	0.55
43:o:232:ARG:HB2	43:o:235:PHE:HB2	1.87	0.55
11:c6:57:LEU:H	11:c6:57:LEU:HD12	1.72	0.55
58:A:1382:A:O2'	58:A:1383:G:H5''	2.07	0.55
58:A:1449:U:H2'	58:A:1450:U:C6	2.41	0.55
44:w:108:ILE:HD12	44:w:160:ARG:CZ	2.36	0.55
50:d3:141:GLU:HG3	50:d3:142:LYS:N	2.22	0.55
75:AR:2155:G:OP1	13:CD:241:ARG:HG2	2.07	0.55
53:d4:53:ASP:N	53:d4:53:ASP:OD1	2.39	0.55
58:sR:753:A:H2'	58:sR:754:A:O4'	2.07	0.55
58:sR:1119:G:O6	80:sR:2125:OHX:N2	2.40	0.55
58:sR:1458:G:H5''	58:sR:1459:C:OP2	2.05	0.55
58:sR:1797:A:OP2	59:d6:10:ARG:NH1	2.39	0.55
12:I:147:ASN:OD1	12:I:147:ASN:N	2.40	0.55
78:Rb:205:SER:HB3	78:Rb:210:LEU:HD23	1.89	0.55
59:d6:70:LYS:HE2	59:d6:70:LYS:H	1.72	0.55
18:J:67:TRP:HB3	18:J:72:ILE:HG23	1.88	0.55
24:K:44:ARG:O	24:K:48:GLN:NE2	2.39	0.55
24:K:96:VAL:HA	24:K:99:LEU:CD1	2.37	0.55
73:s4:44:LEU:HD13	73:s4:82:TYR:HB3	1.88	0.55
43:CI:160:ARG:HD2	43:CI:203:TRP:CD1	2.42	0.55
47:P:28:VAL:O	47:P:43:THR:HG21	2.07	0.55
77:s5:123:VAL:HG23	77:s5:124:LEU:HD23	1.88	0.55
75:1:92:G:C8	85:1:3478:SPD:H41	2.41	0.55
18:s8:137:LYS:HA	18:s8:140:GLU:HG2	1.89	0.55
19:k:277:SER:HB3	19:k:280:HIS:NE2	2.22	0.55
19:k:380:MET:HE3	75:1:3369:G:C6	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:U:37:VAL:HG12	29:U:39:THR:H	1.72	0.55
44:CQ:187:GLU:O	44:CQ:192:LYS:NZ	2.39	0.55
46:X:86:ILE:HD12	46:X:87:GLU:N	2.22	0.55
53:Z:8:ARG:HB3	58:A:780:A:H8	1.72	0.55
58:A:545:A:H4'	58:A:546:U:OP1	2.05	0.55
58:A:1445:G:C4	74:g:91:ILE:HB	2.42	0.55
48:x:69:ARG:NH2	75:1:2389:C:H1'	2.21	0.55
70:E:8:LYS:O	70:E:12:VAL:HG12	2.06	0.55
75:AR:571:U:H2'	75:AR:572:A:H8	1.72	0.55
75:AR:1786:G:H2'	75:AR:1787:A:C8	2.42	0.55
75:AR:3128:G:OP2	80:AR:3956:OHX:N5	2.39	0.55
75:AR:3218:A:H4'	75:AR:3219:G:O5'	2.06	0.55
57:0:57:GLU:OE2	60:2:139:ARG:NH1	2.40	0.55
6:H:42:GLY:HA3	6:H:45:PHE:CD1	2.42	0.55
58:sR:74:U:H5''	58:sR:75:U:OP2	2.07	0.55
58:sR:249:U:H3'	58:sR:250:C:H5'	1.89	0.55
19:CE:334:ARG:HH11	19:CE:334:ARG:HG3	1.71	0.55
30:L:11:ILE:HD12	30:L:12:HIS:N	2.21	0.55
30:L:32:HIS:HB3	30:L:35:ILE:HB	1.88	0.55
39:v:75:VAL:HG23	39:v:78:GLY:HA2	1.89	0.55
75:1:1786:G:H2'	75:1:1787:A:C8	2.41	0.55
3:CJ:108:ARG:O	3:CJ:111:LYS:HB3	2.07	0.55
3:CJ:178:ALA:HA	3:CJ:222:PHE:CD2	2.41	0.55
5:Q:107:ILE:HA	5:Q:111:MET:CE	2.36	0.55
7:4:79:A:C3'	7:4:80:A:H4'	2.37	0.55
19:k:286:GLY:HA3	19:k:321:PHE:CE2	2.42	0.55
39:CP:7:LEU:HD12	39:CP:46:ASP:HB3	1.88	0.55
41:W:16:LYS:NZ	41:W:21:ASN:OD1	2.24	0.55
5:c5:37:ALA:HB1	5:c5:38:PRO:HD2	1.89	0.55
52:p0:78:PRO:O	52:p0:81:LYS:NZ	2.39	0.55
58:A:289:U:H2'	58:A:290:G:O4'	2.07	0.55
58:A:705:U:H2'	58:A:706:A:N7	2.22	0.55
58:A:978:A:H2'	58:A:979:A:O4'	2.06	0.55
58:A:1011:G:N7	80:A:2026:OHX:N5	2.55	0.55
58:A:1217:A:H5''	30:L:1:MET:SD	2.47	0.55
58:A:1234:A:N3	74:g:140:TYR:OH	2.32	0.55
58:A:1397:U:C4	58:A:1399:C:H1'	2.41	0.55
60:CV:17:ARG:HB3	60:CV:22:HIS:NE2	2.21	0.55
67:D:73:LEU:HD13	67:D:75:GLY:H	1.71	0.55
48:x:125:GLN:HB2	48:x:141:SER:HB2	1.89	0.55
53:d4:94:TYR:HB2	53:d4:96:LEU:HG	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:DB:41:ALA:HB2	79:DB:77:TYR:HE1	1.70	0.55
63:5:85:LYS:O	63:5:85:LYS:HD3	2.07	0.55
65:d8:25:VAL:HG21	65:d8:43:ASN:HB2	1.89	0.55
25:CF:283:THR:HG23	25:CF:285:ASP:H	1.70	0.55
30:L:11:ILE:HG22	30:L:35:ILE:HD12	1.87	0.55
31:CG:232:ASP:OD1	31:CG:232:ASP:N	2.40	0.55
31:CG:237:GLU:O	31:CG:241:THR:OG1	2.24	0.55
75:1:2593:A:H4'	75:1:2594:C:O5'	2.07	0.55
75:1:2674:A:OP2	80:1:3640:OHX:N3	2.40	0.55
8:AC:28:LYS:HG2	8:AC:29:TYR:HD1	1.71	0.55
9:CK:101:VAL:O	80:CK:201:OHX:N6	2.40	0.55
18:s8:22:ARG:HD3	18:s8:25:ARG:HH11	1.72	0.55
18:s8:60:ILE:HG21	18:s8:179:CYS:HB2	1.89	0.55
18:s8:137:LYS:NZ	58:sR:196:G:O6	2.37	0.55
24:s9:35:GLY:O	24:s9:110:GLN:NE2	2.40	0.55
31:m:119:TYR:CZ	31:m:135:VAL:HG13	2.41	0.55
31:m:148:ILE:HB	31:m:159:VAL:HG21	1.89	0.55
35:V:119:ALA:HB1	35:V:121:ASN:H	1.72	0.55
39:CP:128:LYS:NZ	75:AR:291:C:OP2	2.40	0.55
42:c3:99:ARG:O	42:c3:103:GLU:HG2	2.07	0.55
45:DQ:38:GLN:HA	45:DQ:38:GLN:NE2	2.22	0.55
9:q:36:LYS:NZ	9:q:74:LEU:HB3	2.22	0.55
51:CS:85:GLY:O	51:CS:104:LEU:HB2	2.06	0.55
17:c7:19:ARG:HD3	70:s3:210:GLU:HB3	1.88	0.55
58:A:38:C:C2'	58:A:39:A:H5'	2.36	0.55
58:A:62:A:OP1	80:A:2103:OHX:N1	2.40	0.55
58:A:417:A:H4'	58:A:418:G:O5'	2.07	0.55
58:A:1670:G:N7	80:A:1913:OHX:N5	2.55	0.55
33:u:55:ARG:NH2	33:u:76:ALA:O	2.30	0.55
33:u:88:ALA:O	33:u:93:LYS:NZ	2.40	0.55
48:x:86:LYS:HB2	75:1:2353:G:H5''	1.87	0.55
48:x:181:ARG:HH22	75:1:3268:A:P	2.29	0.55
70:E:116:ARG:HD2	55:i:111:GLY:HA3	1.89	0.55
73:F:240:LYS:HD2	73:F:240:LYS:N	2.20	0.55
54:z:20:ARG:HG2	75:1:1875:G:OP2	2.07	0.55
75:AR:776:U:H5	75:AR:2719:U:O2	1.89	0.55
75:AR:1018:G:C2	75:AR:1019:G:H1'	2.42	0.55
75:AR:1863:G:N7	80:AR:3703:OHX:N2	2.55	0.55
77:G:117:THR:CG2	77:G:191:ALA:HA	2.37	0.55
78:h:203:THR:HG21	78:h:245:PHE:H	1.70	0.55
57:0:92:LYS:HD2	57:0:110:MET:HE3	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:170:U:H3	58:sR:289:U:HO2'	1.55	0.55
58:sR:565:C:H4'	58:sR:566:C:O5'	2.07	0.55
58:sR:1405:G:H2'	58:sR:1406:A:C8	2.42	0.55
56:d5:54:VAL:HG21	56:d5:88:ILE:HG13	1.89	0.55
61:s0:124:THR:HG22	61:s0:174:TRP:HE1	1.72	0.55
64:s1:141:ALA:HB1	64:s1:207:LEU:HD22	1.89	0.55
79:AA:36:HIS:HB3	79:AA:38:PHE:CZ	2.42	0.55
75:1:891:G:OP1	80:1:3692:OHX:N5	2.40	0.55
75:1:1088:U:H2'	75:1:1089:G:H8	1.71	0.55
5:Q:79:HIS:CD2	5:Q:97:TYR:CD2	2.95	0.54
9:CK:109:ALA:HB1	9:CK:111:PHE:CE1	2.43	0.54
13:j:118:GLU:HG3	13:j:125:ALA:HB3	1.88	0.54
15:CL:70:ILE:H	15:CL:70:ILE:HD12	1.71	0.54
17:S:31:ASN:HD22	17:S:34:LEU:HD11	1.72	0.54
21:CM:15:GLU:HB2	21:CM:132:ASN:ND2	2.23	0.54
24:s9:114:TYR:CD2	24:s9:115:LYS:HG2	2.42	0.54
4:AI:78:LYS:HG3	4:AI:81:ARG:HH11	1.71	0.54
44:CQ:3:VAL:HG13	44:CQ:4:GLU:HG3	1.89	0.54
48:CR:25:SER:HB3	48:CR:28:ASN:HB2	1.88	0.54
9:q:16:VAL:HG12	9:q:29:GLY:HA2	1.88	0.54
53:Z:64:PHE:HD1	53:Z:65:GLY:N	2.01	0.54
15:r:43:VAL:HG21	15:r:197:VAL:HG13	1.89	0.54
56:a:89:ILE:HD13	56:a:91:PRO:HD3	1.89	0.54
17:c7:33:ARG:HD3	78:Rb:109:ASP:OD2	2.06	0.54
17:c7:34:LEU:HA	78:Rb:150:TRP:CZ2	2.42	0.54
58:A:498:G:O2'	58:A:499:U:O5'	2.24	0.54
58:A:555:A:C4	24:K:19:TYR:CE2	2.95	0.54
59:b:35:ALA:O	59:b:37:LYS:HE3	2.08	0.54
23:c8:40:ARG:HB2	29:c9:45:MET:CE	2.37	0.54
61:B:71:GLU:O	61:B:96:THR:HG22	2.07	0.54
67:D:67:GLN:OE1	67:D:67:GLN:N	2.21	0.54
70:E:33:GLY:O	70:E:53:THR:HG23	2.07	0.54
46:d2:114:GLU:HA	46:d2:117:ARG:HB2	1.88	0.54
50:d3:30:LYS:NZ	58:sR:1132:A:OP1	2.31	0.54
75:AR:90:C:OP1	2:DC:59:ARG:NH1	2.34	0.54
75:AR:359:U:H4'	75:AR:817:A:N6	2.22	0.54
75:AR:1124:U:OP1	80:AR:3670:OHX:N6	2.40	0.54
75:AR:1170:A:OP2	80:AR:3603:OHX:N3	2.41	0.54
75:AR:1639:C:OP2	38:DI:74:ARG:NH2	2.38	0.54
75:AR:1856:C:H2'	75:AR:1857:C:H6	1.71	0.54
75:AR:3294:A:H5''	19:CE:128:LYS:HD2	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
76:DA:51:ARG:HG2	76:DA:115:ARG:NH1	2.22	0.54
76:DA:53:ASP:HB2	76:DA:110:HIS:CD2	2.43	0.54
53:d4:57:VAL:HG23	53:d4:73:GLY:HA3	1.88	0.54
79:DB:62:VAL:O	79:DB:66:THR:HG23	2.07	0.54
58:sR:647:G:H22	58:sR:687:G:H1	1.54	0.54
58:sR:978:A:H2'	58:sR:979:A:O4'	2.07	0.54
7:AT:6:U:H2'	7:AT:7:U:C6	2.42	0.54
12:I:67:LEU:HD12	12:I:71:HIS:CD2	2.42	0.54
61:s0:26:ALA:HB3	61:s0:149:LEU:HB2	1.88	0.54
24:K:53:ARG:O	24:K:57:ARG:N	2.36	0.54
64:s1:180:THR:OG1	64:s1:183:GLN:OE1	2.23	0.54
69:7:4:GLU:CG	69:7:30:ARG:HD2	2.32	0.54
31:CG:195:LEU:O	31:CG:199:ILE:HD12	2.07	0.54
26:DG:105:ARG:HH21	26:DG:125:ARG:HH11	1.55	0.54
37:CH:146:ILE:O	37:CH:150:LYS:HG3	2.08	0.54
73:s4:105:VAL:HG11	73:s4:245:LYS:H	1.72	0.54
47:P:85:ALA:H	47:P:119:THR:CG2	2.20	0.54
75:1:2539:C:H5'	75:1:2541:U:O4	2.06	0.54
75:1:2986:U:H2'	75:1:2987:A:C8	2.42	0.54
3:CJ:97:TYR:HE2	3:CJ:204:ARG:H	1.55	0.54
19:k:361:THR:O	19:k:361:THR:OG1	2.25	0.54
33:CO:26:GLY:O	33:CO:29:ALA:HB2	2.07	0.54
33:CO:109:ARG:HD3	44:CQ:199:TYR:CZ	2.42	0.54
48:CR:59:PRO:HG3	48:CR:76:PHE:CD2	2.41	0.54
53:Z:20:ARG:NE	53:Z:22:GLN:OE1	2.38	0.54
15:r:3:ARG:HD2	15:r:63:GLU:HG2	1.88	0.54
55:sM:69:ARG:HA	55:sM:72:ARG:HB2	1.88	0.54
17:c7:14:LYS:NZ	17:c7:69:ILE:HA	2.21	0.54
58:A:1234:A:O2'	58:A:1235:C:O5'	2.25	0.54
58:A:1301:U:H5'	67:D:88:LYS:HD2	1.89	0.54
58:A:1497:U:OP2	80:A:2037:OHX:N4	2.39	0.54
23:c8:137:HIS:CD2	58:sR:1457:C:H4'	2.43	0.54
44:w:124:LEU:HD21	57:0:167:ARG:HH21	1.73	0.54
67:D:243:TYR:HB3	67:D:246:GLU:HB2	1.88	0.54
48:x:129:THR:HG23	48:x:131:ARG:HD3	1.89	0.54
48:x:168:LEU:HD12	48:x:173:ARG:HG3	1.88	0.54
51:y:107:THR:HG22	51:y:110:ALA:CB	2.37	0.54
72:CZ:80:ASN:ND2	72:CZ:126:LEU:O	2.40	0.54
73:F:195:ILE:HG22	73:F:196:VAL:C	2.32	0.54
75:AR:824:C:H5''	13:CD:21:ARG:HD3	1.89	0.54
75:AR:1034:U:H2'	75:AR:1035:G:H8	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:1077:U:O4	80:AR:3510:OHX:N2	2.39	0.54
75:AR:1334:U:H5''	43:CI:206:LYS:HB3	1.88	0.54
75:AR:3291:G:H2'	75:AR:3292:A:C8	2.41	0.54
76:DA:102:SER:OG	76:DA:103:LYS:NZ	2.40	0.54
78:h:19:TRP:CD2	78:h:306:THR:HG22	2.42	0.54
6:H:18:ILE:HG22	6:H:20:ASP:CB	2.38	0.54
58:sR:191:C:O2'	58:sR:192:U:O5'	2.26	0.54
58:sR:773:C:OP1	73:s4:22:LYS:N	2.39	0.54
58:sR:984:G:H2'	58:sR:985:G:O4'	2.08	0.54
12:I:36:ALA:CB	12:I:39:ARG:HE	2.14	0.54
64:s1:172:LEU:O	64:s1:176:VAL:HG12	2.08	0.54
25:CF:321:LYS:HA	25:CF:324:LEU:HB3	1.88	0.54
67:s2:67:GLN:HA	67:s2:70:ASP:HB2	1.89	0.54
68:d9:22:ARG:HB2	68:d9:38:ILE:HG13	1.88	0.54
70:s3:17:PHE:HE2	70:s3:77:PHE:CE2	2.25	0.54
37:CH:100:LYS:HE2	37:CH:105:TYR:HE2	1.71	0.54
73:s4:73:ASP:HA	73:s4:164:LEU:HD11	1.90	0.54
39:v:178:HIS:O	39:v:181:ASN:ND2	2.41	0.54
79:AA:70:PRO:HD3	79:AA:115:LYS:HG3	1.89	0.54
75:1:263:C:H2'	75:1:264:G:O4'	2.07	0.54
75:1:3374:U:O4	80:1:3789:OHX:N6	2.40	0.54
7:4:27:U:O2'	25:l:49:ALA:O	2.21	0.54
11:R:4:VAL:HG13	11:R:5:PRO:HD2	1.88	0.54
11:R:114:ARG:O	11:R:115:THR:HG22	2.07	0.54
18:s8:138:ASN:HB2	18:s8:141:ARG:HE	1.73	0.54
24:s9:142:ASN:HD21	53:d4:64:PHE:HZ	1.55	0.54
31:m:236:LEU:HA	31:m:239:ILE:CD1	2.37	0.54
39:CP:45:PRO:O	39:CP:49:ARG:HG2	2.07	0.54
4:AI:31:LEU:HD11	4:AI:47:VAL:HG21	1.87	0.54
3:p:101:THR:HG23	3:p:104:GLU:H	1.72	0.54
5:c5:32:ASP:HA	5:c5:35:LYS:HG3	1.88	0.54
17:c7:34:LEU:HA	78:Rb:150:TRP:HZ2	1.72	0.54
58:A:142:G:N2	58:A:173:A:H2	2.04	0.54
58:A:197:A:H2'	58:A:198:A:C8	2.42	0.54
58:A:322:G:HO2'	18:J:10:LYS:NZ	2.04	0.54
58:A:851:U:P	54:z:172:ARG:HH12	2.30	0.54
58:A:1564:U:H2'	58:A:1565:C:C6	2.41	0.54
64:C:194:ASN:OD1	64:C:211:HIS:HA	2.07	0.54
46:d2:15:ASN:ND2	46:d2:72:CYS:SG	2.81	0.54
75:AR:359:U:H2'	75:AR:360:G:O4'	2.07	0.54
75:AR:374:A:H1'	75:AR:375:A:H5''	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:1238:C:N4	75:AR:1251:A:N1	2.55	0.54
75:AR:2180:G:H2'	75:AR:2181:C:C6	2.43	0.54
75:AR:2946:A:OP1	85:AR:3858:SPD:H42	2.07	0.54
75:AR:3355:U:H3'	75:AR:3356:G:H5''	1.89	0.54
58:sR:1273:G:O5'	58:sR:1274:C:H3'	2.07	0.54
56:d5:89:ILE:HG21	56:d5:101:TYR:HB3	1.89	0.54
60:2:13:TYR:CD2	75:1:994:G:H3'	2.42	0.54
59:d6:4:LYS:HE2	59:d6:5:ARG:NH2	2.22	0.54
63:5:93:ILE:HA	63:5:106:ALA:O	2.08	0.54
18:J:72:ILE:HD11	18:J:74:LYS:HE3	1.89	0.54
66:6:45:ARG:HD3	75:1:3043:C:OP1	2.07	0.54
64:s1:70:LEU:HB3	64:s1:79:HIS:HB3	1.88	0.54
31:CG:43:LYS:O	31:CG:46:THR:OG1	2.26	0.54
70:s3:141:LYS:NZ	70:s3:179:GLN:HB3	2.22	0.54
39:v:5:LYS:HZ1	75:1:266:A:P	2.30	0.54
39:v:94:TYR:CE2	39:v:96:ARG:HB2	2.43	0.54
77:s5:101:GLY:HA2	77:s5:104:ASN:CG	2.31	0.54
75:1:2201:G:OP2	80:1:4151:OHX:N2	2.40	0.54
5:Q:124:THR:OG1	58:A:1182:U:H4'	2.06	0.54
9:CK:4:ILE:HD11	57:CU:143:PHE:CE1	2.43	0.54
9:CK:168:ARG:HB3	9:CK:169:ASN:HD22	1.71	0.54
11:R:75:VAL:HG11	58:A:1610:G:P	2.47	0.54
37:n:40:LEU:HG	37:n:84:VAL:HG11	1.90	0.54
41:W:17:CYS:SG	41:W:18:SER:N	2.81	0.54
44:CQ:190:VAL:HA	44:CQ:193:GLN:HG3	1.89	0.54
5:c5:128:HIS:CE1	58:sR:1180:C:H1'	2.42	0.54
11:c6:21:HIS:O	11:c6:65:ILE:HA	2.07	0.54
11:c6:79:TYR:HA	11:c6:82:ARG:HG2	1.88	0.54
11:c6:110:THR:HA	11:c6:113:ASP:HB2	1.90	0.54
54:CT:6:THR:HG23	75:AR:1498:A:OP1	2.07	0.54
57:CU:131:LYS:HB2	57:CU:134:ASP:OD2	2.07	0.54
58:A:197:A:H2'	58:A:198:A:H8	1.73	0.54
58:A:555:A:C5	24:K:19:TYR:HE2	2.26	0.54
58:A:973:A:H2'	58:A:974:A:H8	1.72	0.54
58:A:1219:A:HO2'	30:L:51:SER:HG	1.54	0.54
58:A:1332:C:O2'	70:E:162:GLN:HB3	2.08	0.54
58:A:1524:A:N3	58:A:1590:G:O2'	2.32	0.54
67:D:148:LEU:HD11	24:K:95:TYR:OH	2.07	0.54
49:AQ:74:ALA:O	49:AQ:78:THR:HG23	2.07	0.54
46:d2:18:GLU:HG2	46:d2:65:LEU:HD22	1.89	0.54
54:z:97:ARG:HH22	75:1:1779:C:C5'	2.19	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:86:G:O2'	75:AR:98:G:O6	2.23	0.54
75:AR:1032:C:H2'	75:AR:1033:U:C6	2.43	0.54
75:AR:2244:A:HO2'	13:CD:223:SER:HG	1.54	0.54
75:AR:2574:G:H2'	75:AR:2575:G:C8	2.40	0.54
75:AR:3112:G:N7	80:AR:3473:OHX:N6	2.56	0.54
78:h:89:LEU:HB2	78:h:103:PHE:HB2	1.90	0.54
6:H:68:LEU:O	6:H:69:LEU:HB2	2.07	0.54
58:sR:200:A:H2'	58:sR:201:G:C8	2.42	0.54
58:sR:417:A:H4'	58:sR:418:G:O5'	2.07	0.54
58:sR:1620:C:H2'	58:sR:1621:U:C6	2.43	0.54
12:I:182:VAL:HG12	12:I:183:PHE:H	1.72	0.54
61:s0:89:PHE:CD2	61:s0:178:ALA:HB2	2.43	0.54
62:d7:67:THR:OG1	62:d7:70:LYS:O	2.26	0.54
24:K:54:ARG:HB2	24:K:57:ARG:HH21	1.72	0.54
75:1:559:A:OP1	75:1:559:A:H4'	2.06	0.54
75:1:2233:A:OP2	80:1:3633:OHX:N6	2.41	0.54
6:s6:10:ASN:HB3	6:s6:128:THR:HA	1.89	0.54
11:R:97:VAL:HG22	11:R:98:ASP:H	1.73	0.54
11:R:114:ARG:HA	11:R:114:ARG:NE	2.23	0.54
15:CL:74:LYS:O	15:CL:78:THR:HG23	2.08	0.54
16:DL:39:TYR:CD1	16:DL:40:PRO:HA	2.42	0.54
18:s8:33:PRO:HB3	58:sR:330:G:O2'	2.07	0.54
23:T:58:ALA:C	23:T:60:GLU:H	2.15	0.54
29:U:31:PRO:HD3	29:U:54:PHE:HE2	1.72	0.54
35:V:109:GLU:OE1	35:V:110:PRO:HD2	2.07	0.54
4:AI:41:LEU:O	4:AI:44:ILE:HG22	2.08	0.54
3:p:78:PHE:O	3:p:79:GLN:HG2	2.08	0.54
11:c6:6:SER:HB2	11:c6:23:LYS:HA	1.89	0.54
58:A:340:U:H2'	58:A:341:A:C8	2.43	0.54
58:A:647:G:N2	58:A:687:G:H1	2.04	0.54
58:A:1571:C:H3'	58:A:1572:G:H5''	1.90	0.54
58:A:1684:U:H2'	58:A:1685:G:H8	1.73	0.54
65:d:11:LYS:O	65:d:31:GLU:N	2.30	0.54
67:D:116:LYS:HD2	67:D:117:THR:N	2.22	0.54
48:x:139:TYR:CE1	75:1:2355:G:H4'	2.42	0.54
70:E:70:THR:HG22	70:E:86:LEU:HB2	1.89	0.54
73:F:193:GLY:CA	73:F:194:THR:HG23	2.37	0.54
75:AR:1255:C:H2'	75:AR:1256:G:H8	1.72	0.54
75:AR:2761:G:H1'	75:AR:2800:G:H21	1.72	0.54
76:DA:52:ARG:O	76:DA:70:ILE:HB	2.07	0.54
77:G:91:GLU:O	77:G:94:THR:N	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:G:95:ASN:OD1	77:G:95:ASN:N	2.40	0.54
6:H:98:ARG:HG3	6:H:99:GLY:N	2.22	0.54
58:sR:180:A:H2'	58:sR:181:A:O4'	2.07	0.54
58:sR:1146:G:O3'	67:s2:91:ARG:HA	2.07	0.54
56:d5:52:LYS:N	56:d5:52:LYS:HD2	2.23	0.54
7:AT:150:G:OP2	80:AT:201:OHX:N5	2.39	0.54
18:J:37:LYS:HG3	18:J:38:ILE:N	2.23	0.54
70:s3:106:LYS:O	70:s3:110:LEU:HG	2.08	0.54
76:9:57:LEU:HD23	76:9:67:GLU:HB3	1.88	0.54
77:s5:36:ALA:O	77:s5:37:GLN:NE2	2.40	0.54
75:1:1715:A:H4'	75:1:1716:U:OP1	2.07	0.54
75:1:1942:U:O2'	75:1:3345:G:O2'	2.20	0.54
75:1:2704:A:OP2	80:1:3539:OHX:N5	2.40	0.54
75:1:2898:G:H5''	75:1:2899:C:H5'	1.89	0.54
15:CL:23:ASN:O	15:CL:24:ARG:HD3	2.08	0.54
17:S:77:GLU:HG2	17:S:78:ARG:HG3	1.89	0.54
19:k:106:TRP:HB2	19:k:133:TYR:CE2	2.43	0.54
30:c0:24:LYS:HA	30:c0:63:TYR:CD2	2.43	0.54
31:m:106:ALA:HB1	31:m:169:GLY:HA3	1.89	0.54
35:V:56:VAL:HG21	35:V:90:TYR:CE1	2.42	0.54
36:c1:77:SER:OG	58:sR:347:G:OP1	2.15	0.54
42:c3:55:ARG:HA	42:c3:60:VAL:O	2.07	0.54
44:CQ:98:ALA:HA	44:CQ:101:ARG:HE	1.71	0.54
3:p:82:LEU:HD11	3:p:218:ILE:HG22	1.90	0.54
58:A:1:U:OP1	24:K:50:SER:OG	2.25	0.54
58:A:480:G:N1	58:A:509:G:H1'	2.22	0.54
60:CV:30:TYR:CE1	31:CG:34:LYS:HE2	2.42	0.54
64:C:144:ARG:HD2	64:C:208:GLN:NE2	2.23	0.54
67:D:101:VAL:HG23	67:D:115:ILE:CG1	2.36	0.54
70:E:115:ILE:HG21	55:i:110:TRP:HA	1.90	0.54
51:y:2:GLY:N	75:1:1160:C:OP1	2.41	0.54
72:CZ:58:ASP:O	72:CZ:62:VAL:HG23	2.07	0.54
74:g:110:ALA:N	74:g:113:LYS:HB3	2.19	0.54
75:AR:1722:U:H2'	75:AR:1723:A:O4'	2.07	0.54
75:AR:2261:G:H21	75:AR:2262:A:N6	2.05	0.54
75:AR:3022:G:O2'	75:AR:3031:G:O6	2.19	0.54
76:DA:54:ASP:CG	76:DA:115:ARG:HH12	2.16	0.54
77:G:117:THR:HG21	77:G:194:LEU:HD13	1.89	0.54
77:G:149:VAL:HG12	77:G:156:ARG:O	2.07	0.54
77:G:173:ALA:O	77:G:177:ILE:HG12	2.07	0.54
78:h:272:ASP:OD1	78:h:273:ASP:N	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:H:138:ALA:CA	6:H:175:ILE:HD11	2.38	0.54
58:sR:291:G:H2'	58:sR:292:U:C6	2.43	0.54
58:sR:1353:U:H2'	58:sR:1354:G:H8	1.72	0.54
58:sR:1702:A:H4'	58:sR:1702:A:OP1	2.07	0.54
12:I:167:GLU:O	12:I:167:GLU:HG3	2.08	0.54
19:CE:252:ILE:HA	19:CE:264:VAL:HG21	1.90	0.54
64:s1:87:ARG:HD3	64:s1:101:HIS:ND1	2.22	0.54
31:CG:85:ARG:NH2	31:CG:86:TYR:OH	2.41	0.54
26:DG:22:SER:HA	26:DG:28:VAL:HB	1.90	0.54
70:s3:141:LYS:HE3	70:s3:145:ALA:HA	1.90	0.54
73:s4:31:PRO:HG2	73:s4:38:LEU:HG	1.90	0.54
75:1:2093:A:H2'	75:1:2094:C:O4'	2.07	0.54
75:1:2254:U:H2'	75:1:2261:G:N2	2.23	0.54
6:s6:164:LYS:HG3	6:s6:167:LYS:O	2.08	0.54
6:s6:201:GLN:OE1	73:s4:148:ARG:NH1	2.41	0.54
9:CK:146:LEU:HD12	9:CK:146:LEU:N	2.23	0.54
9:CK:163:GLN:O	9:CK:166:ARG:NE	2.39	0.54
18:s8:141:ARG:NH1	58:sR:187:G:N7	2.56	0.54
19:k:160:VAL:HG23	19:k:162:VAL:HG13	1.90	0.54
28:DN:42:ARG:HG2	28:DN:43:ASN:N	2.23	0.54
31:m:61:ILE:HG23	31:m:79:TYR:CE1	2.43	0.54
31:m:69:ILE:HG13	60:2:31:LEU:HB3	1.88	0.54
37:n:52:VAL:HG12	37:n:67:GLY:HA2	1.89	0.54
48:CR:87:SER:O	48:CR:91:VAL:HG23	2.08	0.54
49:DR:13:LYS:HG3	75:AR:859:G:H4'	1.90	0.54
16:AK:10:LYS:NZ	75:1:818:C:OP1	2.23	0.54
53:Z:37:LYS:HG3	53:Z:60:PHE:HE2	1.72	0.54
17:c7:14:LYS:HE3	17:c7:18:GLU:OE1	2.08	0.54
17:c7:44:LYS:HG2	17:c7:47:ARG:NH1	2.20	0.54
28:AM:9:ILE:O	28:AM:13:MET:HG3	2.07	0.54
58:A:1241:G:H2'	58:A:1242:A:O4'	2.07	0.54
58:A:1368:G:O6	80:A:2143[A]:OHX:N5	2.41	0.54
58:A:1777:G:H2'	58:A:1778:G:C8	2.42	0.54
35:d0:55:PRO:HA	35:d0:91:ILE:HG12	1.89	0.54
66:CX:57:MET:HE2	66:CX:75:PRO:HB2	1.90	0.54
41:d1:3:ASN:ND2	41:d1:7:GLN:HB3	2.19	0.54
55:i:47:ALA:HB2	75:1:2678:A:C8	2.43	0.54
55:i:84:LYS:O	55:i:85:SER:OG	2.24	0.54
75:AR:409:A:H61	7:AT:15:G:H1'	1.73	0.54
75:AR:550:A:H2'	75:AR:551:A:C8	2.42	0.54
75:AR:1094:U:H4'	75:AR:1095:U:OP1	2.06	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:1345:G:N7	80:AR:3984:OHX:N1	2.56	0.54
75:AR:1856:C:H2'	75:AR:1857:C:C6	2.42	0.54
75:AR:2395:G:OP2	80:AR:3856:OHX:N4	2.41	0.54
75:AR:2415:C:OP1	13:CD:2:GLY:HA2	2.07	0.54
75:AR:2508:U:H2'	75:AR:2509:U:H6	1.72	0.54
78:h:19:TRP:O	78:h:38:ARG:N	2.34	0.54
79:DB:46:ILE:HD11	79:DB:48:ARG:O	2.08	0.54
58:sR:1754:A:H4'	58:sR:1755:A:O5'	2.08	0.54
25:CF:12:THR:HA	25:CF:171:ALA:HB1	1.89	0.54
67:s2:67:GLN:O	67:s2:71:THR:HG23	2.08	0.54
71:e0:13:LYS:O	71:e0:17:GLN:HG2	2.08	0.54
71:e0:15:LYS:HD3	71:e0:16:SER:N	2.23	0.54
42:O:55:ARG:HA	42:O:60:VAL:O	2.07	0.54
39:v:183:THR:O	39:v:183:THR:OG1	2.24	0.54
77:s5:189:THR:HG23	77:s5:192:GLU:H	1.73	0.54
75:1:2314:U:O4	80:1:3631:OHX:N2	2.41	0.54
75:1:2794:G:N7	80:1:3901:OHX:N1	2.56	0.54
75:1:2881:C:H2'	75:1:2882:U:C6	2.43	0.54
75:1:3112:G:N7	80:1:3872:OHX:N5	2.55	0.54
4:DJ:52:ALA:O	4:DJ:56:THR:OG1	2.17	0.54
6:s6:5:ILE:HG22	6:s6:111:LEU:HB2	1.90	0.54
6:s6:44:GLU:HG3	6:s6:45:PHE:CD1	2.43	0.54
6:s6:135:PRO:HB2	6:s6:141:ILE:HG13	1.89	0.54
19:k:284:ARG:H	19:k:323:MET:HB3	1.73	0.54
24:s9:163:PRO:HB3	24:s9:170:GLY:N	2.22	0.54
25:l:170:LYS:HG2	25:l:175:HIS:HB2	1.90	0.54
27:CN:7:LEU:HD21	75:AR:796:U:H1'	1.90	0.54
28:DN:4:GLN:NE2	38:DI:10:ARG:HD2	2.23	0.54
41:W:21:ASN:HB2	46:X:23:ARG:NH1	2.23	0.54
43:o:92:ILE:HD11	51:y:4:ASP:N	2.22	0.54
10:AJ:36:ARG:O	10:AJ:40:VAL:HG23	2.08	0.54
5:c5:22:LEU:O	5:c5:22:LEU:HG	2.07	0.54
53:Z:10:ARG:HH21	58:A:778:G:H22	1.56	0.54
53:Z:60:PHE:CD1	53:Z:71:GLY:HA3	2.42	0.54
22:AL:31:LEU:HD12	22:AL:32:ASN:H	1.71	0.54
28:AM:6:SER:OG	28:AM:9:ILE:HG12	2.08	0.54
64:C:164:ILE:HG22	64:C:168:ILE:CD1	2.38	0.54
41:d1:37:ALA:H	61:s0:66:ALA:HB2	1.72	0.54
41:d1:71:ARG:HB3	41:d1:83:TRP:CD2	2.43	0.54
70:E:119:ALA:O	70:E:123:VAL:HG23	2.08	0.54
73:F:105:VAL:HB	73:F:243:GLY:HA2	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
74:g:109:ASP:HB3	74:g:113:LYS:O	2.08	0.54
74:g:138:ARG:O	74:g:139:LEU:HD13	2.08	0.54
75:AR:993:G:N3	75:AR:2637:A:H2'	2.23	0.54
75:AR:1729:A:H62	14:DE:47:ASN:HD22	1.55	0.54
75:AR:1764:U:C5	75:AR:1765:U:H1'	2.43	0.54
75:AR:3283:U:H2'	75:AR:3284:G:C8	2.42	0.54
77:G:114:ILE:O	77:G:118:LEU:HB2	2.07	0.54
1:AS:26:C:H2'	1:AS:27:A:O4'	2.08	0.54
58:sR:1672:G:H2'	58:sR:1673:G:C8	2.43	0.54
2:DC:112:ILE:HB	2:DC:130:VAL:HG12	1.89	0.54
24:K:163:PRO:HB3	24:K:168:ARG:O	2.06	0.54
76:9:112:ASP:HB3	76:9:115:ARG:H	1.72	0.54
42:O:28:LEU:H	42:O:28:LEU:HD22	1.73	0.54
42:O:119:GLU:OE1	42:O:141:TYR:OH	2.09	0.54
39:v:46:ASP:OD2	39:v:50:ARG:NH2	2.41	0.54
39:v:192:LYS:O	39:v:196:THR:HG23	2.08	0.54
75:1:1016:C:H1'	75:1:1028:U:C2	2.43	0.54
75:1:1566:A:H2'	75:1:1573:G:O6	2.07	0.54
75:1:3193:C:H2'	75:1:3194:C:O4'	2.08	0.54
2:AB:94:ALA:HB3	2:AB:121:VAL:HG13	1.89	0.54
8:AC:49:GLY:HA3	75:1:1073:U:O2'	2.08	0.54
12:s7:172:VAL:O	12:s7:176:LEU:HD12	2.07	0.54
19:k:166:ILE:HD11	19:k:173:GLN:HB3	1.90	0.54
21:CM:30:LEU:HD13	21:CM:65:ILE:O	2.07	0.54
25:l:140:HIS:CD2	25:l:247:PHE:H	2.25	0.54
27:CN:183:ARG:HA	27:CN:186:ARG:HG2	1.90	0.54
32:AG:92:LYS:HG2	75:1:3173:G:O6	2.06	0.54
41:W:15:ARG:HE	67:D:59:HIS:HA	1.73	0.54
49:DR:16:VAL:HG23	75:AR:1927:G:N7	2.22	0.54
49:DR:44:LYS:HE3	49:DR:59:CYS:SG	2.48	0.54
15:r:3:ARG:NH2	75:1:2854:U:OP2	2.41	0.54
58:A:603:U:H2'	58:A:604:A:H8	1.73	0.54
58:A:1489:U:P	70:E:9:ARG:HH21	2.31	0.54
23:c8:33:THR:HA	23:c8:38:VAL:HG23	1.90	0.54
27:t:138:VAL:HG11	27:t:144:THR:HG21	1.89	0.54
60:CV:13:TYR:HA	60:CV:16:GLN:HB2	1.90	0.54
50:d3:63:GLN:HB2	50:d3:64:PRO:HA	1.89	0.54
75:AR:308:A:H5'	75:AR:2223:A:O2'	2.08	0.54
75:AR:911:C:H5''	13:CD:15:ILE:HD13	1.90	0.54
75:AR:2397:A:H8	75:AR:2941:A:N1	2.06	0.54
75:AR:2608:G:OP1	13:CD:2:GLY:N	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:3232:G:H1	75:AR:3255:U:H3	1.55	0.54
78:h:29:GLN:NE2	78:h:77:GLY:O	2.41	0.54
1:AS:91:G:H2'	1:AS:92:A:C8	2.43	0.54
58:sR:832:U:H2'	58:sR:833:U:O4'	2.08	0.54
58:sR:1375:A:H2'	58:sR:1376:C:O4'	2.07	0.54
58:sR:1712:A:H4'	58:sR:1712:A:OP1	2.07	0.54
18:J:29:LEU:HD21	18:J:31:ARG:HG3	1.89	0.54
42:O:48:SER:O	42:O:52:VAL:HG12	2.08	0.54
77:s5:218:GLU:HA	77:s5:221:ALA:HB3	1.90	0.54
75:1:392:G:N7	80:1:4029:OHX:N2	2.56	0.54
1:3:80:G:OP2	80:3:220:OHX:N2	2.40	0.54
7:4:10:A:H2'	7:4:11:C:C6	2.43	0.54
25:l:305:ALA:HB2	75:1:1347:U:H4'	1.89	0.54
27:CN:119:TYR:HA	27:CN:145:PHE:CE2	2.43	0.54
29:U:6:VAL:O	29:U:9:VAL:HG22	2.07	0.54
43:o:110:ARG:O	43:o:113:SER:OG	2.24	0.54
43:o:214:TRP:CE2	43:o:219:LYS:HD3	2.42	0.54
50:Y:39:LYS:HD3	58:A:1742:U:OP1	2.08	0.54
58:A:1097:U:H5''	58:A:1099:U:O4'	2.08	0.54
27:t:183:ARG:NH1	75:1:765:C:O2'	2.41	0.54
61:B:201:LEU:HD12	61:B:202:TYR:CD1	2.43	0.54
65:d:29:ARG:HA	65:d:41:VAL:HB	1.89	0.54
67:D:45:VAL:HG11	67:D:68:ILE:HD13	1.89	0.54
49:AQ:78:THR:O	49:AQ:82:THR:HG23	2.07	0.54
46:d2:111:MET:HG3	46:d2:112:ASP:O	2.08	0.54
73:F:158:ASP:HB3	73:F:173:ILE:O	2.09	0.54
54:z:123:LEU:O	54:z:127:SER:OG	2.25	0.54
75:AR:1643:A:H2'	75:AR:1644:C:C2	2.43	0.54
75:AR:2162:U:OP1	13:CD:234:LYS:NZ	2.39	0.54
75:AR:2610:G:O6	86:AR:4301:HOH:O	2.18	0.54
75:AR:3383:G:H2'	75:AR:3384:U:C6	2.42	0.54
78:h:38:ARG:O	78:h:67:ILE:HD13	2.08	0.54
79:DB:54:THR:CG2	79:DB:57:HIS:HD2	2.21	0.54
58:sR:405:C:OP1	80:sR:2133:OHX:N5	2.41	0.54
58:sR:564:G:N2	58:sR:577:G:OP1	2.41	0.54
58:sR:591:A:H2'	58:sR:592:A:C8	2.43	0.54
80:sR:1966:OHX:N4	80:sR:2198:OHX:N1	2.56	0.54
60:2:83:ARG:HG3	60:2:83:ARG:HH11	1.73	0.54
12:I:102:PRO:HD3	12:I:112:ARG:HH11	1.73	0.54
78:Rb:61:PHE:O	78:Rb:62:LYS:HD3	2.07	0.54
78:Rb:256:THR:OG1	78:Rb:259:GLY:N	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Rb:256:THR:HG23	78:Rb:260:ILE:HA	1.90	0.54
63:5:75:TYR:CE2	75:1:1687:U:H1'	2.43	0.54
61:s0:105:GLY:O	61:s0:109:ASN:HB3	2.07	0.54
75:1:1740:U:H1'	75:1:1741:A:H2	1.73	0.54
75:1:1940:G:H21	75:1:3362:A:H8	1.55	0.54
10:DK:43:LEU:O	10:DK:46:GLU:N	2.38	0.53
15:CL:29:SER:HB2	15:CL:125:LEU:HD22	1.90	0.53
24:s9:51:LYS:HA	24:s9:54:ARG:HB3	1.90	0.53
45:DQ:8:ARG:HG2	45:DQ:10:THR:HB	1.90	0.53
47:c4:107:ARG:NH1	47:c4:107:ARG:HB2	2.23	0.53
5:c5:57:MET:HA	5:c5:60:LEU:CB	2.37	0.53
5:c5:83:MET:HE3	5:c5:84:ILE:HD12	1.90	0.53
55:sM:64:LYS:HD3	55:sM:64:LYS:H	1.72	0.53
55:sM:67:GLY:HA2	23:c8:129:TRP:CD1	2.43	0.53
21:s:148:VAL:HG23	21:s:153:LYS:HG2	1.90	0.53
58:A:66:U:H5'	6:H:173:PRO:HA	1.88	0.53
58:A:187:G:H4'	58:A:188:A:OP1	2.07	0.53
58:A:1166:A:OP1	77:G:100:ASN:ND2	2.41	0.53
27:t:28:GLN:OE1	39:v:201:ARG:NH1	2.39	0.53
67:D:49:LYS:HB3	67:D:243:TYR:HE2	1.69	0.53
70:E:46:THR:O	70:E:84:ILE:HG13	2.09	0.53
71:f:37:ARG:HB2	24:K:123:HIS:CE1	2.42	0.53
51:y:123:THR:OG1	51:y:125:ASP:OD1	2.24	0.53
55:i:24:GLU:O	55:i:25:ILE:HD13	2.08	0.53
75:AR:104:G:O2'	75:AR:698:U:O2	2.25	0.53
75:AR:591:G:N2	75:AR:612:U:OP1	2.38	0.53
75:AR:1104:G:H2'	75:AR:1105:A:C8	2.43	0.53
75:AR:2273:G:O6	80:AR:4135:OHX:N1	2.41	0.53
75:AR:2537:U:H4'	64:s1:229:MET:HB2	1.90	0.53
78:h:48:THR:OG1	78:h:49:GLY:N	2.39	0.53
6:H:27:PHE:O	6:H:30:LYS:HB2	2.08	0.53
58:sR:68:A:H3'	58:sR:68:A:N3	2.24	0.53
58:sR:1120:U:H2'	58:sR:1121:C:C6	2.42	0.53
58:sR:1451:C:H2'	58:sR:1452:U:C6	2.43	0.53
58:sR:1615:C:P	77:s5:81:ARG:HH21	2.31	0.53
78:Rb:265:LEU:HA	78:Rb:268:GLN:HA	1.90	0.53
37:CH:30:LEU:HD21	37:CH:57:HIS:CE1	2.43	0.53
37:CH:45:GLY:O	37:CH:48:ARG:HD3	2.07	0.53
73:s4:126:VAL:HG11	73:s4:154:ILE:HG21	1.90	0.53
75:1:776:U:H5	75:1:2719:U:O2	1.91	0.53
75:1:1567:U:H3'	75:1:1568:U:H5''	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:3194:C:H2'	75:1:3195:U:H5''	1.89	0.53
1:3:44:C:OP2	21:s:137:ARG:NH2	2.41	0.53
3:CJ:140:VAL:HG21	39:CP:3:ALA:HB2	1.90	0.53
6:s6:12:SER:HB2	6:s6:124:LEU:HD12	1.89	0.53
11:R:79:TYR:OH	77:G:72:HIS:O	2.26	0.53
23:T:48:LYS:HG3	23:T:48:LYS:O	2.08	0.53
31:m:60:ILE:H	31:m:80:SER:HB3	1.74	0.53
39:CP:69:GLY:O	75:AR:290:G:H4'	2.08	0.53
43:o:44:ILE:CD1	43:o:179:LEU:HD13	2.38	0.53
3:p:225:LYS:O	3:p:229:VAL:HG13	2.07	0.53
52:p0:189:GLN:HG3	52:p0:197:PHE:O	2.08	0.53
22:AL:8:ILE:H	22:AL:8:ILE:HD12	1.73	0.53
54:CT:116:ASP:OD1	54:CT:118:HIS:N	2.41	0.53
56:a:39:ALA:HB1	56:a:43:ASP:OD2	2.08	0.53
21:s:51:ARG:HH21	21:s:52:TYR:HE1	1.57	0.53
58:A:30:G:H2'	58:A:31:C:C6	2.43	0.53
58:A:1649:G:H2'	58:A:1650:U:C6	2.43	0.53
27:t:99:HIS:CE1	27:t:100:ARG:HG3	2.43	0.53
65:d:18:ARG:NH2	77:G:81:ARG:HH22	2.06	0.53
72:CZ:80:ASN:HD21	72:CZ:126:LEU:HB2	1.73	0.53
75:AR:530:G:N7	80:AR:3630:OHX:N6	2.55	0.53
75:AR:1117:G:OP1	8:DD:4:SER:HB2	2.09	0.53
75:AR:1729:A:N6	14:DE:47:ASN:HD22	2.07	0.53
75:AR:1945:A:H2'	75:AR:1946:A:C8	2.43	0.53
75:AR:2941:A:O5'	75:AR:2943:G:H4'	2.07	0.53
77:G:95:ASN:O	77:G:98:MET:HG2	2.08	0.53
58:sR:621:A:N3	58:sR:1107:G:H1'	2.22	0.53
58:sR:1241:G:H2'	58:sR:1242:A:O4'	2.09	0.53
56:d5:61:SER:H	56:d5:64:VAL:CG1	2.20	0.53
56:d5:92:ILE:HD13	56:d5:102:THR:HB	1.90	0.53
56:d5:100:ILE:CG2	77:s5:120:ILE:HD11	2.38	0.53
78:Rb:32:LEU:HD23	78:Rb:73:LEU:HD21	1.91	0.53
78:Rb:59:ARG:HH11	78:Rb:95:ALA:HB1	1.73	0.53
67:s2:41:LEU:HD12	67:s2:61:LEU:HD11	1.89	0.53
73:s4:133:LYS:C	73:s4:134:LYS:HG2	2.33	0.53
79:AA:120:GLU:OE2	79:AA:120:GLU:HA	2.09	0.53
47:P:51:ASP:HA	47:P:54:GLU:HG3	1.90	0.53
75:1:2651:G:H4'	75:1:2652:U:OP2	2.07	0.53
75:1:2662:G:O6	80:1:3539:OHX:N2	2.42	0.53
75:1:3166:C:H42	75:1:3284:G:H1	1.56	0.53
1:3:11:A:H4'	1:3:13:A:C8	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:DJ:85:THR:OG1	4:DJ:88:LEU:N	2.28	0.53
12:s7:114:ARG:HH11	12:s7:114:ARG:HG2	1.73	0.53
19:k:188:ILE:HA	19:k:191:LYS:HD2	1.90	0.53
24:s9:29:LYS:O	24:s9:33:GLU:HG3	2.08	0.53
25:l:95:ARG:NH1	75:1:366:A:OP1	2.37	0.53
28:DN:2:ALA:N	75:AR:1492:G:N7	2.56	0.53
39:CP:179:LYS:HD3	75:AR:287:G:OP1	2.09	0.53
44:CQ:22:VAL:HG21	44:CQ:120:VAL:HG11	1.89	0.53
53:Z:112:LYS:O	53:Z:116:LYS:HG3	2.08	0.53
11:c6:94:GLN:NE2	78:Rb:60:SER:O	2.40	0.53
56:a:95:HIS:HD2	77:G:116:HIS:CE1	2.25	0.53
58:A:226:A:H2'	58:A:227:U:H5'	1.88	0.53
58:A:1594:G:OP2	58:A:1596:C:N4	2.41	0.53
27:t:113:VAL:HA	27:t:116:LEU:HD12	1.90	0.53
61:B:175:TYR:CE2	61:B:199:PRO:HA	2.43	0.53
45:AP:11:TYR:CD1	45:AP:11:TYR:C	2.85	0.53
67:D:187:LEU:HD23	67:D:188:LEU:HD23	1.90	0.53
48:x:88:VAL:O	48:x:92:GLN:HG2	2.08	0.53
75:AR:29:C:H4'	75:AR:62:A:H4'	1.90	0.53
75:AR:1454:A:OP2	80:AR:3667[B]:OHX:N3	2.41	0.53
75:AR:1941:C:O2'	75:AR:3344:A:N6	2.42	0.53
75:AR:3147:G:OP1	80:AR:3895:OHX:N1	2.41	0.53
78:h:201:THR:HG21	78:h:243:LEU:HG	1.91	0.53
57:0:13:ARG:HD2	57:0:51:VAL:HG13	1.91	0.53
58:sR:852:C:H2'	58:sR:853:G:C8	2.43	0.53
58:sR:1060:U:H4'	58:sR:1061:A:H5''	1.91	0.53
58:sR:1199:G:N7	68:d9:40:ARG:NH1	2.55	0.53
61:s0:175:TYR:CD2	61:s0:176:LEU:HD12	2.43	0.53
62:d7:48:SER:HB2	62:d7:49:HIS:HD2	1.73	0.53
67:s2:184:VAL:HG12	67:s2:211:LEU:HD23	1.88	0.53
36:M:16:GLN:HE22	36:M:34:TRP:H	1.56	0.53
32:DH:48:ARG:HH12	32:DH:86:ARG:NH2	2.06	0.53
77:s5:176:THR:O	77:s5:180:ARG:HB2	2.08	0.53
75:1:279:U:H2'	75:1:280:U:H6	1.73	0.53
75:1:1554:U:H4'	75:1:1555:U:H5'	1.90	0.53
75:1:1764:U:H3'	75:1:1765:U:H4'	1.89	0.53
13:j:2:GLY:N	75:1:2415:C:OP1	2.41	0.53
25:l:23:PRO:HD2	25:l:26:PHE:CD2	2.43	0.53
43:o:180:SER:H	43:o:183:ASP:HB2	1.73	0.53
55:sM:44:PRO:HB3	75:AR:2678:A:C5	2.43	0.53
58:A:1488:G:H3'	58:A:1515:A:H61	1.73	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:B:124:THR:HG23	61:B:146:LEU:HG	1.89	0.53
33:u:109:ARG:HD3	44:w:199:TYR:CE1	2.44	0.53
73:F:57:ASN:HD21	73:F:59:ARG:HH21	1.54	0.53
75:AR:1317:A:O2'	75:AR:1318:A:H3'	2.08	0.53
75:AR:1420:C:OP2	25:CF:193:LYS:NZ	2.41	0.53
75:AR:1631:C:OP2	79:DB:69:LYS:HD2	2.07	0.53
6:H:12:SER:HB3	6:H:124:LEU:HG	1.90	0.53
58:sR:542:A:O2'	58:sR:543:C:O5'	2.20	0.53
58:sR:760:A:OP2	80:sR:2145:OHX:N3	2.42	0.53
58:sR:1628:U:H2'	58:sR:1629:G:C8	2.43	0.53
60:2:88:ARG:O	75:1:2722:U:O2'	2.25	0.53
78:Rb:256:THR:CG2	78:Rb:261:LYS:H	2.22	0.53
63:5:77:LYS:HA	63:5:95:PHE:CD2	2.43	0.53
19:CE:152:LYS:HD3	19:CE:189:SER:HA	1.91	0.53
20:DF:62:ARG:HB2	20:DF:66:GLY:O	2.08	0.53
26:DG:16:LYS:HZ3	26:DG:17:PHE:H	1.56	0.53
70:s3:53:THR:CG2	70:s3:94:ARG:HD2	2.39	0.53
70:s3:95:GLY:CA	70:s3:101:GLN:HE22	2.17	0.53
73:s4:43:PRO:HA	73:s4:82:TYR:O	2.08	0.53
79:AA:71:PHE:O	79:AA:72:ILE:HD13	2.08	0.53
75:1:1354:G:O6	75:1:1358:C:H5'	2.08	0.53
75:1:1486:G:OP2	80:1:3822:OHX:N3	2.41	0.53
2:AB:129:PHE:CE1	10:AJ:9:ILE:HG23	2.44	0.53
7:4:68:G:OP1	16:AK:85:LYS:HB3	2.08	0.53
9:CK:10:ILE:HD13	9:CK:75:VAL:HG21	1.90	0.53
15:CL:47:PRO:HD2	15:CL:141:LYS:HA	1.90	0.53
24:s9:44:ARG:HG2	24:s9:45:ILE:HD12	1.90	0.53
24:s9:163:PRO:CB	24:s9:170:GLY:H	2.19	0.53
25:l:99:MET:HG2	25:l:100:PHE:N	2.24	0.53
53:Z:54:ALA:HB1	53:Z:76:TYR:H	1.72	0.53
11:c6:39:VAL:HG21	11:c6:48:VAL:HG11	1.91	0.53
54:CT:17:VAL:HG21	54:CT:52:LYS:HE3	1.90	0.53
58:A:274:G:H3'	58:A:275:C:C6	2.43	0.53
58:A:579:A:O2'	80:A:1944:OHX:N4	2.42	0.53
58:A:808:U:H2'	58:A:809:A:C8	2.44	0.53
58:A:877:G:H5'	58:A:937:C:H1'	1.89	0.53
58:A:925:G:N7	80:A:1914:OHX:N1	2.57	0.53
58:A:1503:A:H2'	58:A:1504:G:O4'	2.08	0.53
29:c9:34:VAL:HG13	29:c9:53:TRP:CZ2	2.43	0.53
29:c9:130:ARG:HB3	58:sR:1358:G:O3'	2.09	0.53
73:F:36:HIS:CD2	73:F:85:GLY:HA3	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:F:241:GLY:O	73:F:244:ILE:HD12	2.08	0.53
50:d3:37:ALA:O	50:d3:41:SER:HB2	2.08	0.53
75:AR:602:A:H2'	75:AR:603:A:C8	2.43	0.53
75:AR:1239:C:H42	75:AR:1249:G:N2	2.07	0.53
75:AR:3364:C:H2'	75:AR:3365:U:H6	1.74	0.53
76:DA:5:SER:HB3	76:DA:8:VAL:HG13	1.90	0.53
77:G:43:PHE:HD1	77:G:45:LYS:H	1.51	0.53
57:0:46:GLN:HE21	57:0:52:LYS:HA	1.73	0.53
6:H:189:HIS:O	6:H:193:LEU:HB2	2.08	0.53
58:sR:138:A:N3	58:sR:138:A:H5''	2.23	0.53
58:sR:1003:A:H4'	58:sR:1004:U:O5'	2.09	0.53
58:sR:1049:U:H5''	62:d7:70:LYS:HD2	1.89	0.53
58:sR:1374:C:H2'	58:sR:1375:A:C8	2.43	0.53
7:AT:77:A:H2'	7:AT:78:G:O4'	2.08	0.53
12:I:157:LYS:HG3	12:I:158:ASP:HB2	1.90	0.53
61:s0:74:VAL:HG23	61:s0:118:PRO:HB3	1.90	0.53
25:CF:47:ARG:NH2	25:CF:109:TRP:O	2.29	0.53
25:CF:74:ILE:HD12	25:CF:75:PRO:HD2	1.90	0.53
67:s2:41:LEU:HD12	67:s2:61:LEU:CD1	2.39	0.53
31:CG:52:VAL:HA	31:CG:147:ASP:HB3	1.90	0.53
76:9:85:VAL:HG11	76:9:99:LEU:HD11	1.89	0.53
73:s4:124:GLY:HA2	73:s4:142:HIS:CE1	2.44	0.53
39:v:181:ASN:OD1	75:1:100:A:H4'	2.09	0.53
77:s5:160:VAL:HG12	77:s5:161:ASP:H	1.72	0.53
75:1:65:A:H3'	75:1:111:C:N4	2.24	0.53
3:CJ:221:ASN:C	3:CJ:222:PHE:HD1	2.17	0.53
6:s6:173:PRO:O	58:sR:78:A:O2'	2.24	0.53
12:s7:45:SER:HB3	12:s7:47:ARG:HH12	1.74	0.53
13:j:243:THR:OG1	75:1:2244:A:H5''	2.07	0.53
17:S:75:GLU:N	17:S:75:GLU:OE1	2.42	0.53
19:k:112:ASP:HA	19:k:115:LYS:HB2	1.91	0.53
25:l:62:ALA:HB3	25:l:90:PHE:HE2	1.73	0.53
27:CN:5:LYS:NZ	75:AR:1112:A:OP1	2.26	0.53
35:V:64:LYS:O	35:V:65:ILE:HD13	2.09	0.53
45:DQ:3:ASN:O	75:AR:2655:U:H2'	2.08	0.53
3:p:215:VAL:O	3:p:219:ASP:HB2	2.08	0.53
16:AK:17:THR:HG22	16:AK:18:LEU:N	2.24	0.53
53:Z:34:ASN:OD1	58:A:521:A:H1'	2.09	0.53
53:Z:87:PRO:HD2	53:Z:90:ARG:NH1	2.24	0.53
54:CT:81:ARG:HG2	54:CT:88:ARG:CZ	2.39	0.53
57:CU:1:MET:HA	57:CU:1:MET:HE3	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:144:U:O2'	58:A:145:A:H8	1.91	0.53
58:A:454:U:C6	73:F:66:MET:HG3	2.43	0.53
58:A:1253:U:O3'	74:g:143:LYS:HG2	2.08	0.53
58:A:1330:G:H1	70:E:204:ASP:CG	2.15	0.53
58:A:1682:U:O2'	58:A:1683:C:H5'	2.08	0.53
23:c8:41:ARG:NH1	29:c9:46:PRO:HG3	2.24	0.53
23:c8:135:GLY:HA3	58:sR:1559:A:H5''	1.89	0.53
71:f:12:GLY:O	71:f:16:SER:OG	2.25	0.53
73:F:100:ARG:HG2	73:F:102:VAL:HG23	1.91	0.53
73:F:181:VAL:O	73:F:192:ILE:HG23	2.09	0.53
54:z:38:ARG:HG3	75:1:1602:A:H5''	1.91	0.53
75:AR:26:A:N3	75:AR:328:U:O2'	2.38	0.53
75:AR:172:G:H3'	75:AR:173:G:H5''	1.91	0.53
75:AR:820:A:OP1	80:AR:3508:OHX:N4	2.41	0.53
75:AR:1075:A:C5	8:DD:45:HIS:CD2	2.96	0.53
75:AR:2986:U:H2'	75:AR:2987:A:C8	2.43	0.53
75:AR:3169:U:H2'	75:AR:3170:A:C8	2.43	0.53
78:h:31:ASN:O	78:h:46:LYS:HA	2.07	0.53
6:H:44:GLU:CD	6:H:44:GLU:H	2.16	0.53
58:sR:58:U:O2'	58:sR:451:A:N3	2.39	0.53
58:sR:827:C:H2'	58:sR:828:U:C6	2.42	0.53
58:sR:922:G:H2'	58:sR:923:A:H8	1.74	0.53
58:sR:1050:G:O6	80:sR:2198:OHX:N2	2.41	0.53
7:AT:63:G:OP1	7:AT:90:U:H5''	2.08	0.53
18:J:110:ARG:NH2	75:1:3354:U:N3	2.52	0.53
61:s0:27:ARG:HA	61:s0:46:HIS:ND1	2.24	0.53
19:CE:37:ARG:HA	19:CE:185:GLY:O	2.09	0.53
24:K:45:ILE:HD12	24:K:105:LEU:HG	1.91	0.53
20:DF:10:ARG:NH1	20:DF:12:TYR:OH	2.42	0.53
30:L:27:PHE:HB3	30:L:40:LEU:HD22	1.91	0.53
26:DG:103:LYS:HG3	26:DG:104:ASN:H	1.73	0.53
76:9:27:ARG:HH21	76:9:78:PHE:HE1	1.54	0.53
39:v:35:VAL:HG23	75:1:1543:G:P	2.49	0.53
38:DI:99:LYS:O	38:DI:103:LYS:HB3	2.08	0.53
77:s5:42:LEU:CD1	77:s5:47:SER:HA	2.35	0.53
75:1:18:G:O6	80:1:4118:OHX:N6	2.42	0.53
75:1:1499:C:H2'	75:1:1500:G:C8	2.42	0.53
11:R:83:GLN:O	11:R:87:LYS:HG3	2.08	0.53
13:j:117:GLU:OE1	13:j:122:ASP:N	2.41	0.53
19:k:63:PRO:HA	19:k:68:HIS:CD2	2.43	0.53
23:T:99:HIS:HD2	23:T:101:LEU:HD11	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:V:24:ILE:HD12	35:V:115:GLU:O	2.08	0.53
45:DQ:15:LYS:HA	45:DQ:18:ARG:HG3	1.90	0.53
53:Z:17:LEU:HD11	73:F:92:LEU:HD21	1.91	0.53
11:c6:69:VAL:HG21	11:c6:81:ILE:CD1	2.39	0.53
57:CU:78:TRP:CE3	57:CU:125:LYS:HG2	2.43	0.53
58:A:331:A:H5'	18:J:33:PRO:HA	1.90	0.53
58:A:788:A:C4	73:F:19:LEU:HD13	2.44	0.53
27:t:157:ARG:HG2	27:t:158:ALA:H	1.73	0.53
61:B:200:ASP:OD1	61:B:200:ASP:N	2.41	0.53
29:c9:84:LYS:HE2	58:sR:1563:C:OP1	2.09	0.53
67:D:238:SER:OG	67:D:240:LEU:HD22	2.07	0.53
54:z:80:LYS:NZ	75:l:3065:G:OP1	2.41	0.53
75:AR:689:U:O4	25:CF:209:TYR:OH	2.23	0.53
75:AR:1658:G:O6	80:AR:3957:OHX:N6	2.42	0.53
75:AR:2373:A:N7	75:AR:2867:C:H1'	2.23	0.53
75:AR:3317:U:H4'	75:AR:3318:G:O5'	2.09	0.53
78:h:19:TRP:HB2	78:h:38:ARG:CG	2.24	0.53
58:sR:152:U:C2	58:sR:163:G:N2	2.77	0.53
56:d5:77:ARG:HH12	56:d5:81:ARG:CG	2.19	0.53
24:K:163:PRO:HA	24:K:167:ALA:HB3	1.90	0.53
25:CF:174:ALA:O	25:CF:178:LEU:HD22	2.09	0.53
25:CF:181:VAL:HG21	25:CF:224:GLY:HA3	1.91	0.53
20:DF:31:ARG:O	20:DF:35:GLU:HB2	2.08	0.53
30:L:46:LEU:O	30:L:50:THR:OG1	2.27	0.53
26:DG:103:LYS:HG3	26:DG:104:ASN:N	2.24	0.53
37:CH:55:LEU:HD21	37:CH:66:SER:HB3	1.89	0.53
75:l:239:G:O2'	75:l:240:U:H5'	2.08	0.53
75:l:1574:C:H2'	75:l:1575:A:C8	2.44	0.53
3:CJ:161:GLU:OE2	39:CP:26:ARG:NH1	2.37	0.53
7:4:33:A:O2'	75:l:59:G:H2'	2.09	0.53
14:AD:62:LEU:HD13	79:AA:82:PRO:HB2	1.91	0.53
23:T:146:ALA:HB2	55:i:68:ARG:HD3	1.89	0.53
27:CN:32:LYS:HA	27:CN:35:ARG:NH1	2.24	0.53
29:U:117:SER:OG	29:U:118:PRO:O	2.26	0.53
30:c0:33:GLU:H	30:c0:33:GLU:CD	2.15	0.53
31:m:153:THR:HB	31:m:160:PHE:HZ	1.74	0.53
35:V:27:THR:HG22	35:V:88:LYS:HG3	1.91	0.53
36:c1:98:ASN:HB3	46:d2:79:PHE:HE2	1.73	0.53
4:AI:92:LEU:HB2	4:AI:96:GLU:OE1	2.09	0.53
52:p0:25:LEU:HD22	52:p0:26:PHE:O	2.09	0.53
53:Z:80:ALA:O	53:Z:84:LYS:HG2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:c6:66:ARG:NH2	58:sR:1351:G:H5''	2.24	0.53
58:A:74:U:O2'	58:A:75:U:H5''	2.08	0.53
58:A:140:A:N6	58:A:281:G:OP1	2.40	0.53
58:A:397:A:O3'	18:J:50:GLY:HA2	2.08	0.53
58:A:848:C:H2'	58:A:849:C:H6	1.74	0.53
58:A:1160:A:H2'	58:A:1161:C:C6	2.44	0.53
23:c8:36:LYS:O	23:c8:102:ALA:HA	2.09	0.53
62:c:2:VAL:N	62:c:5:GLN:HE21	2.07	0.53
33:u:76:ALA:HB1	33:u:80:THR:OG1	2.09	0.53
49:AQ:13:LYS:HE2	49:AQ:14:TYR:CZ	2.44	0.53
75:AR:249:U:H4'	75:AR:250:U:O5'	2.09	0.53
75:AR:929:A:H2'	75:AR:930:U:C6	2.44	0.53
75:AR:1827:C:H2'	75:AR:1828:A:C8	2.44	0.53
75:AR:3107:U:H2'	75:AR:3108:G:C8	2.44	0.53
75:AR:3163:A:H2'	75:AR:3164:C:H5'	1.90	0.53
77:G:37:GLN:O	77:G:39:GLU:N	2.42	0.53
77:G:99:MET:O	77:G:103:ASN:HB2	2.09	0.53
79:DB:17:ARG:NH2	79:DB:18:TYR:OH	2.42	0.53
58:sR:138:A:H61	58:sR:266:A:H61	1.55	0.53
58:sR:139:C:H4'	58:sR:140:A:O5'	2.08	0.53
58:sR:292:U:H2'	58:sR:293:U:C6	2.44	0.53
78:Rb:201:THR:CB	78:Rb:242:SER:HA	2.39	0.53
24:K:36:LEU:HA	24:K:126:ARG:NH2	2.23	0.53
25:CF:187:LEU:HD12	25:CF:198:ARG:O	2.09	0.53
30:L:15:LEU:O	30:L:19:GLY:N	2.37	0.53
73:s4:8:HIS:O	73:s4:30:ARG:HD3	2.09	0.53
43:CI:137:GLY:CA	43:CI:233:GLU:HA	2.38	0.53
75:1:962:A:N1	75:1:2814:G:O2'	2.37	0.53
75:1:994:G:N2	75:1:995:U:O4	2.37	0.53
75:1:1238:C:N4	75:1:1245:A:OP2	2.42	0.53
75:1:1574:C:H2'	75:1:1575:A:H5''	1.91	0.53
75:1:2094:C:H2'	75:1:2095:G:H8	1.73	0.53
3:CJ:47:SER:O	3:CJ:50:VAL:HG12	2.09	0.53
3:CJ:225:LYS:HG2	3:CJ:228:GLU:HB3	1.91	0.53
4:DJ:47:VAL:O	4:DJ:51:ILE:HD12	2.08	0.53
11:R:9:THR:HA	58:A:1340:U:O4	2.09	0.53
21:CM:49:LYS:HB2	21:CM:62:ASN:HA	1.91	0.53
31:m:41:LYS:HB2	60:2:68:THR:O	2.08	0.53
31:m:60:ILE:HB	31:m:80:SER:CB	2.39	0.53
31:m:60:ILE:HB	31:m:80:SER:HB2	1.90	0.53
33:CO:19:ARG:HA	33:CO:69:THR:HG22	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:n:93:VAL:HG22	37:n:96:VAL:HG11	1.90	0.53
37:n:142:ASP:O	37:n:146:ILE:HG13	2.09	0.53
38:AH:54:ILE:HD11	38:AH:78:GLY:HA2	1.91	0.53
44:CQ:112:TYR:HA	44:CQ:115:LYS:HB2	1.90	0.53
47:c4:99:GLN:HE22	59:d6:45:VAL:HA	1.74	0.53
49:DR:22:LEU:O	49:DR:26:VAL:HG23	2.09	0.53
53:Z:128:LYS:HA	53:Z:131:ARG:HB2	1.91	0.53
15:r:33:ILE:HD11	15:r:69:ARG:NH2	2.24	0.53
55:sM:65:THR:HA	55:sM:70:ASN:ND2	2.22	0.53
58:A:358:U:OP2	80:A:2006:OHX:N3	2.42	0.53
58:A:947:U:H2'	58:A:948:G:C8	2.43	0.53
58:A:1017:U:H2'	58:A:1018:U:C6	2.44	0.53
58:A:1248:C:H2'	58:A:1249:U:H6	1.74	0.53
58:A:1726:G:N7	80:A:2130:OHX:N4	2.57	0.53
62:c:59:CYS:SG	62:c:60:SER:N	2.82	0.53
29:c9:77:ASN:HD21	29:c9:98:GLY:HA2	1.74	0.53
35:d0:68:ARG:NH2	35:d0:70:THR:OG1	2.42	0.53
44:w:62:THR:HG23	75:1:1306:G:O6	2.09	0.53
67:D:53:ILE:O	67:D:56:ILE:N	2.42	0.53
70:E:25:PHE:HB3	70:E:34:TYR:HE2	1.72	0.53
55:i:49:LYS:HD3	75:1:1020:G:OP1	2.09	0.53
73:F:159:THR:OG1	73:F:227:VAL:HG13	2.09	0.53
75:AR:430:U:O4'	32:DH:90:PRO:HG3	2.09	0.53
75:AR:1807:G:H5''	79:DB:135:ARG:HE	1.73	0.53
75:AR:2146:C:OP1	13:CD:200:ARG:NH2	2.41	0.53
75:AR:2569:A:O2'	75:AR:2570:U:O5'	2.25	0.53
78:h:96:THR:OG1	78:h:98:GLU:N	2.42	0.53
58:sR:213:A:OP2	80:sR:2154:OHX:N1	2.41	0.53
58:sR:683:C:H5'	58:sR:684:A:OP2	2.09	0.53
58:sR:922:G:H2'	58:sR:923:A:C8	2.44	0.53
78:Rb:240:VAL:HA	78:Rb:255:ALA:O	2.08	0.53
24:K:41:GLU:O	24:K:45:ILE:HG12	2.09	0.53
64:s1:119:THR:HG21	64:s1:156:ALA:H	1.74	0.53
71:e0:52:GLY:C	71:e0:53:LYS:HD3	2.34	0.53
75:1:129:U:H2'	75:1:130:A:C8	2.44	0.53
3:CJ:32:LYS:HG2	75:AR:2561:A:C2	2.44	0.53
14:AD:34:LEU:HD11	14:AD:42:ILE:HG21	1.91	0.53
19:k:252:ILE:HG22	75:1:2394:G:H5'	1.90	0.53
27:CN:64:LYS:HG3	2:DC:69:TRP:CD1	2.43	0.53
30:c0:32:HIS:CD2	30:c0:42:VAL:HG21	2.43	0.53
36:c1:34:TRP:CH2	36:c1:36:LYS:HD3	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:X:23:ARG:HG2	46:X:65:LEU:O	2.09	0.53
9:q:1:MET:C	9:q:2:LYS:HG3	2.34	0.53
51:CS:171:LYS:HE2	75:AR:89:A:OP2	2.09	0.53
53:Z:89:TYR:O	53:Z:92:VAL:HG12	2.09	0.53
11:c6:122:ARG:HB3	58:sR:1584:G:H5''	1.91	0.53
21:s:32:ARG:HD3	21:s:120:ILE:HA	1.91	0.53
58:A:72:A:O2'	58:A:73:U:H5''	2.09	0.53
58:A:472:U:H2'	58:A:473:A:H8	1.74	0.53
58:A:486:G:C2	58:A:487:G:H1'	2.44	0.53
58:A:1316:G:HO2'	58:A:1401:A:HO2'	1.53	0.53
58:A:1473:U:O2'	77:G:103:ASN:ND2	2.37	0.53
58:A:1536:G:C6	58:A:1538:U:H1'	2.43	0.53
58:A:1553:G:N2	58:A:1555:A:H3'	2.23	0.53
58:A:1591:C:H2'	58:A:1592:A:C8	2.44	0.53
29:c9:109:GLU:HG3	29:c9:114:VAL:O	2.08	0.53
29:c9:125:SER:OG	29:c9:128:GLY:N	2.32	0.53
45:AP:13:LYS:HE2	75:1:2717:U:H4'	1.91	0.53
50:d3:90:ASP:OD2	71:e0:12:GLY:HA2	2.08	0.53
75:AR:1108:U:H2'	75:AR:1109:U:C6	2.44	0.53
75:AR:1284:C:O2'	75:AR:1285:G:H5'	2.08	0.53
75:AR:2112:U:H4'	75:AR:2113:A:O5'	2.09	0.53
75:AR:3157:U:H4'	75:AR:3158:G:C5'	2.39	0.53
76:DA:37:LYS:HD2	76:DA:37:LYS:H	1.74	0.53
77:G:43:PHE:HZ	77:G:115:LYS:HE2	1.70	0.53
77:G:184:PHE:HE1	77:G:185:ARG:CD	2.21	0.53
78:h:182:ASN:OD1	78:h:184:ASN:N	2.38	0.53
57:0:42:TRP:CD1	57:0:53:LYS:HB2	2.43	0.53
1:AS:4:U:H2'	1:AS:5:G:H8	1.73	0.53
58:sR:1332:C:H4'	70:s3:203:PRO:HB3	1.90	0.53
2:DC:75:LEU:HA	2:DC:78:LEU:HB2	1.90	0.53
2:DC:114:GLY:O	2:DC:137:LYS:NZ	2.42	0.53
78:Rb:224:ASN:OD1	78:Rb:227:ALA:N	2.39	0.53
63:5:12:ALA:HA	63:5:67:SER:O	2.09	0.53
14:DE:9:SER:HB2	14:DE:12:GLN:OE1	2.09	0.53
25:CF:311:HIS:CD2	43:CI:162:PRO:HG2	2.44	0.53
72:8:100:LYS:HG2	72:8:105:VAL:O	2.09	0.53
26:DG:94:ALA:O	26:DG:120:THR:HG23	2.09	0.53
75:1:1862:U:OP2	80:1:3882:OHX:N1	2.42	0.53
1:3:22:A:H2'	1:3:23:A:C8	2.44	0.52
1:3:60:G:H2'	1:3:61:G:C8	2.44	0.52
3:CJ:108:ARG:O	3:CJ:112:GLU:HG3	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:s8:50:GLY:HA2	58:sR:397:A:O3'	2.09	0.52
20:AE:28:ARG:NH2	75:1:3058:U:OP1	2.42	0.52
24:s9:141:VAL:HG11	24:s9:146:PHE:CE2	2.44	0.52
29:U:122:ARG:NH2	58:A:1500:C:P	2.82	0.52
43:o:94:LYS:NZ	75:1:1155:C:OP1	2.42	0.52
4:AI:117:ALA:HB2	27:t:48:PRO:HB2	1.90	0.52
47:c4:80:HIS:HA	47:c4:113:GLY:O	2.08	0.52
3:p:156:ASP:OD1	3:p:156:ASP:N	2.41	0.52
11:c6:18:ALA:HB2	11:c6:69:VAL:HG13	1.91	0.52
17:c7:26:LEU:H	17:c7:26:LEU:HD12	1.73	0.52
58:A:560:U:H2'	58:A:561:G:H8	1.74	0.52
58:A:1277:G:H2'	58:A:1278:G:O4'	2.09	0.52
27:t:55:ARG:O	27:t:115:ARG:NH2	2.36	0.52
65:d:28:VAL:C	65:d:41:VAL:HG23	2.34	0.52
65:d:56:LEU:HD12	65:d:57:MET:H	1.74	0.52
44:w:127:LEU:HD21	57:0:168:PRO:HG2	1.89	0.52
45:AP:71:ARG:NH2	45:AP:80:ARG:NH2	2.57	0.52
66:CX:28:ASN:OD1	66:CX:113:ALA:N	2.43	0.52
73:F:36:HIS:CG	73:F:85:GLY:HA3	2.45	0.52
54:z:82:LYS:HG3	75:1:1863:G:H4'	1.91	0.52
75:AR:608:A:OP1	25:CF:315:LYS:NZ	2.32	0.52
78:h:240:VAL:HA	78:h:255:ALA:O	2.10	0.52
78:h:269:TYR:H	78:h:269:TYR:HD1	1.56	0.52
6:H:2:LYS:HG3	6:H:17:GLU:HG2	1.91	0.52
58:sR:187:G:H4'	58:sR:188:A:OP1	2.09	0.52
12:I:30:SER:HB2	12:I:34:LEU:CB	2.39	0.52
78:Rb:206:PRO:HG2	78:Rb:247:PRO:HA	1.89	0.52
59:d6:51:ARG:HD3	59:d6:52:ASP:N	2.23	0.52
61:s0:133:ILE:HD12	61:s0:134:LYS:N	2.24	0.52
65:d8:60:GLU:HG2	65:d8:61:ARG:HD2	1.91	0.52
68:d9:40:ARG:CZ	68:d9:40:ARG:HB2	2.38	0.52
31:CG:91:GLY:O	31:CG:94:ASN:ND2	2.43	0.52
31:CG:202:GLY:O	31:CG:206:GLN:HB2	2.09	0.52
37:CH:34:LEU:HD13	37:CH:63:LEU:HD21	1.91	0.52
37:CH:135:VAL:HG12	37:CH:139:LYS:NZ	2.23	0.52
73:s4:184:THR:C	73:s4:189:LEU:HD12	2.34	0.52
47:P:47:LYS:HG3	47:P:63:ALA:HB2	1.91	0.52
1:3:3:U:H2'	1:3:4:U:C6	2.44	0.52
4:DJ:63:ARG:O	4:DJ:66:VAL:HG22	2.09	0.52
5:Q:79:HIS:CD2	5:Q:97:TYR:HD2	2.28	0.52
5:Q:79:HIS:HD1	58:A:1241:G:Cl'	2.22	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:s6:3:LEU:O	6:s6:15:THR:HA	2.09	0.52
10:DK:53:TYR:HA	10:DK:56:ARG:HG2	1.91	0.52
11:R:66:ARG:NH1	58:A:1366:U:OP2	2.42	0.52
11:R:105:LEU:O	11:R:109:PHE:N	2.40	0.52
19:k:44:THR:HG21	19:k:184:ASN:ND2	2.25	0.52
19:k:349:LYS:NZ	75:1:3038:U:OP1	2.40	0.52
23:T:118:LYS:NZ	21:s:108:GLU:OE2	2.40	0.52
24:s9:39:LYS:HB3	24:s9:43:TYR:CE2	2.44	0.52
26:AF:95:GLU:HG3	26:AF:120:THR:OG1	2.09	0.52
30:c0:3:MET:CE	30:c0:7:ASP:HB2	2.32	0.52
3:p:94:PHE:HB3	3:p:189:LEU:HD21	1.90	0.52
48:CR:27:LYS:HD3	48:CR:63:PHE:HB3	1.91	0.52
5:c5:122:THR:HG22	5:c5:123:TYR:HD1	1.74	0.52
11:c6:13:LYS:HD2	11:c6:14:LYS:N	2.17	0.52
11:c6:22:VAL:HA	11:c6:64:ASP:O	2.10	0.52
11:c6:41:PRO:O	11:c6:42:GLU:HB2	2.10	0.52
58:A:358:U:O2'	58:A:360:A:H5''	2.09	0.52
58:A:547:U:O2'	58:A:596:C:O2'	2.19	0.52
58:A:986:G:H2'	58:A:987:G:O4'	2.09	0.52
80:A:2110:OHX:N6	18:J:17:LYS:O	2.43	0.52
61:B:53:THR:HG22	61:B:161:PRO:HD2	1.92	0.52
33:u:6:ILE:HD12	75:1:3199:G:H5''	1.89	0.52
67:D:150:GLN:NE2	67:D:194:GLU:OE2	2.43	0.52
67:D:246:GLU:N	67:D:246:GLU:OE2	2.42	0.52
75:AR:1580:A:H4'	75:AR:1581:C:H5'	1.92	0.52
75:AR:2094:C:H2'	75:AR:2095:G:H8	1.75	0.52
75:AR:2534:G:H2'	75:AR:2536:A:N7	2.24	0.52
75:AR:3160:U:OP1	80:AR:3487:OHX:N5	2.42	0.52
6:H:199:GLN:HB3	6:H:202:ARG:HD3	1.91	0.52
58:sR:817:A:H2'	58:sR:818:C:C6	2.45	0.52
58:sR:845:G:H2'	58:sR:846:G:C8	2.42	0.52
58:sR:1542:G:N2	58:sR:1568:C:H1'	2.24	0.52
12:I:35:LYS:O	12:I:38:LEU:HD13	2.09	0.52
62:d7:56:CYS:HB2	62:d7:63:LEU:HD11	1.90	0.52
19:CE:10:ARG:NH2	19:CE:263:SER:HB2	2.24	0.52
14:DE:61:MET:SD	14:DE:62:LEU:HD12	2.49	0.52
70:s3:125:TYR:C	70:s3:125:TYR:HD1	2.17	0.52
43:CI:144:ILE:O	43:CI:148:VAL:HG23	2.09	0.52
75:1:239:G:H4'	75:1:240:U:OP1	2.08	0.52
75:1:246:U:H2'	75:1:247:C:C6	2.44	0.52
75:1:3326:G:O6	80:1:3423:OHX:N4	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:57:GLY:HA3	51:y:170:ARG:HE	1.73	0.52
11:R:29:ILE:HA	11:R:65:ILE:O	2.08	0.52
16:DL:56:ARG:HD3	75:AR:364:G:O6	2.09	0.52
19:k:41:VAL:CA	19:k:185:GLY:HA3	2.40	0.52
20:AE:19:ARG:HD2	20:AE:35:GLU:CG	2.37	0.52
21:CM:20:ASN:OD1	21:CM:126:ASP:HB2	2.09	0.52
21:CM:125:MET:HE2	21:CM:127:PHE:HE1	1.75	0.52
22:DM:19:ASP:OD2	75:AR:1825:G:H5''	2.10	0.52
23:T:63:GLN:HA	23:T:66:LEU:HG	1.91	0.52
24:s9:9:SER:O	58:sR:471:A:O2'	2.26	0.52
24:s9:40:LYS:HA	24:s9:43:TYR:CD2	2.45	0.52
30:c0:10:LYS:HA	30:c0:13:GLN:HB3	1.90	0.52
30:c0:25:LYS:HB2	30:c0:64:TYR:CE2	2.45	0.52
31:m:186:GLU:HA	31:m:186:GLU:OE1	2.10	0.52
42:c3:38:VAL:HG11	42:c3:78:ASN:OD1	2.08	0.52
44:CQ:35:VAL:HG21	44:CQ:80:PHE:HE2	1.75	0.52
46:X:53:ILE:HG13	12:I:139:ARG:HD2	1.91	0.52
47:c4:113:GLY:HA3	59:d6:59:TYR:HE2	1.74	0.52
10:AJ:43:LEU:O	10:AJ:47:ILE:HG13	2.09	0.52
49:DR:28:LYS:O	49:DR:32:GLN:HG3	2.08	0.52
52:p0:96:ILE:HA	52:p0:99:VAL:CG1	2.33	0.52
11:c6:99:GLU:O	11:c6:102:LYS:HB3	2.09	0.52
56:a:71:ILE:CG1	56:a:76:ALA:HB2	2.39	0.52
28:AM:44:TRP:O	28:AM:48:LYS:HE2	2.09	0.52
57:CU:13:ARG:HG3	57:CU:51:VAL:HG23	1.90	0.52
58:A:180:A:H2'	58:A:181:A:O4'	2.08	0.52
58:A:218:A:O2'	58:A:219:A:OP1	2.23	0.52
58:A:1291:G:H22	58:A:1324:G:N2	2.06	0.52
59:b:88:SER:OG	59:b:89:ARG:N	2.39	0.52
61:B:121:VAL:O	61:B:143:VAL:HA	2.10	0.52
44:w:79:ILE:HG21	44:w:138:LEU:HD11	1.91	0.52
67:D:81:MET:HE3	67:D:81:MET:HA	1.90	0.52
41:d1:63:GLY:O	61:s0:32:HIS:ND1	2.43	0.52
46:d2:15:ASN:ND2	46:d2:72:CYS:O	2.43	0.52
46:d2:105:THR:OG1	46:d2:126:LEU:HG	2.09	0.52
75:AR:1728:G:H4'	75:AR:1729:A:H5''	1.92	0.52
62:d7:20:LYS:HG3	62:d7:21:LEU:HD23	1.91	0.52
19:CE:293:ASN:HB2	19:CE:304:THR:HA	1.90	0.52
25:CF:36:HIS:O	25:CF:40:THR:HG23	2.09	0.52
20:DF:55:LEU:O	20:DF:59:ILE:HG12	2.09	0.52
75:1:172:G:N7	80:1:3908:OHX:N2	2.58	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:561:C:H2'	75:1:562:C:H6	1.75	0.52
75:1:1220:U:O4	75:1:1286:A:O2'	2.16	0.52
75:1:1764:U:H3'	75:1:1765:U:C4'	2.39	0.52
75:1:1934:G:N7	80:1:3691:OHX:N2	2.57	0.52
3:CJ:46:LEU:HD21	75:AR:2524:A:C8	2.44	0.52
9:CK:105:GLU:HB3	9:CK:110:LYS:H	1.73	0.52
11:R:62:ASN:N	11:R:62:ASN:OD1	2.42	0.52
12:s7:31:SER:HA	12:s7:35:LYS:HD3	1.92	0.52
12:s7:37:GLU:N	12:s7:37:GLU:OE1	2.42	0.52
12:s7:93:LEU:HD11	12:s7:129:LEU:HD22	1.91	0.52
13:j:152:SER:OG	75:1:2157:G:N7	2.33	0.52
80:k:403:OHX:N6	75:1:3312:U:OP1	2.43	0.52
21:CM:96:PHE:HE2	21:CM:160:VAL:HG23	1.75	0.52
22:DM:17:ARG:O	22:DM:17:ARG:HD2	2.09	0.52
23:T:28:ILE:HD12	23:T:58:ALA:HA	1.92	0.52
30:c0:67:THR:OG1	70:s3:65:ARG:NH1	2.41	0.52
31:m:110:LEU:HB3	31:m:115:LEU:O	2.10	0.52
31:m:219:PHE:HD1	31:m:219:PHE:O	1.92	0.52
38:AH:37:LYS:NZ	75:1:1592:G:OP2	2.25	0.52
42:c3:28:LEU:HD12	42:c3:33:VAL:HG12	1.91	0.52
46:X:68:ARG:HD3	67:D:230:TRP:CG	2.44	0.52
10:AJ:54:GLU:HB3	10:AJ:90:MET:HE1	1.91	0.52
50:Y:121:ARG:NH1	58:A:1135:U:OP1	2.43	0.52
9:q:137:SER:HB3	9:q:143:GLU:HB3	1.90	0.52
53:Z:44:LEU:HA	53:Z:47:VAL:HG22	1.92	0.52
58:A:886:U:O2	47:P:123:SER:N	2.42	0.52
58:A:1427:A:OP2	55:i:93:ARG:HD2	2.09	0.52
59:b:88:SER:O	59:b:92:ARG:HG2	2.09	0.52
27:t:46:ILE:HG22	27:t:47:ALA:HB3	1.91	0.52
29:c9:75:LYS:N	58:sR:1498:G:OP1	2.39	0.52
65:d:9:LEU:HB3	65:d:33:LEU:HB2	1.91	0.52
70:E:102:ALA:HA	70:E:186:VAL:HG21	1.90	0.52
46:d2:86:ILE:O	46:d2:90:THR:HG23	2.10	0.52
75:AR:90:C:H2'	75:AR:91:G:H5'	1.89	0.52
75:AR:848:A:C2	58:sR:973:A:H5'	2.44	0.52
75:AR:1468:A:N6	75:AR:1508:C:O2	2.43	0.52
75:AR:1906:G:N2	75:AR:1909:A:N1	2.57	0.52
75:AR:2144:A:H1'	75:AR:2281:A:N6	2.24	0.52
75:AR:2662:G:O6	80:AR:3751:OHX:N5	2.43	0.52
76:DA:82:VAL:HB	76:DA:85:VAL:HG22	1.91	0.52
77:G:143:ARG:NH2	77:G:218:GLU:HG2	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:h:22:SER:OG	78:h:70:ASP:HA	2.10	0.52
58:sR:15:U:H2'	58:sR:16:G:O4'	2.09	0.52
58:sR:872:G:H2'	58:sR:873:U:O4'	2.10	0.52
63:5:36:TYR:CE1	63:5:40:HIS:ND1	2.69	0.52
18:J:106:ALA:HB2	18:J:165:LEU:HG	1.90	0.52
61:s0:110:TYR:HA	61:s0:115:PHE:CD2	2.44	0.52
66:6:23:MET:HE3	66:6:100:GLY:HA3	1.91	0.52
25:CF:23:PRO:HG2	25:CF:258:LEU:HD12	1.92	0.52
25:CF:40:THR:O	25:CF:44:LYS:HE2	2.09	0.52
36:M:16:GLN:NE2	36:M:33:ARG:HA	2.24	0.52
70:s3:40:ARG:O	70:s3:46:THR:OG1	2.26	0.52
79:AA:9:LYS:HA	79:AA:86:THR:HG22	1.92	0.52
38:DI:106:LYS:O	38:DI:106:LYS:HD2	2.09	0.52
77:s5:149:VAL:HG22	77:s5:151:GLY:N	2.24	0.52
75:1:1621:A:H2'	75:1:1622:U:C6	2.44	0.52
12:s7:45:SER:HB2	12:s7:61:PHE:CD2	2.44	0.52
15:CL:22:TYR:HB3	75:AR:2647:A:H4'	1.90	0.52
15:CL:42:THR:HG22	15:CL:44:ASP:N	2.21	0.52
15:CL:208:ASN:HA	15:CL:211:ARG:HB2	1.91	0.52
16:DL:3:LYS:HG2	75:AR:2138:A:O2'	2.10	0.52
17:S:60:ARG:NH2	17:S:66:VAL:HG21	2.25	0.52
19:k:34:LYS:HG3	19:k:35:ASP:N	2.25	0.52
21:CM:91:LEU:O	21:CM:172:LEU:HB3	2.09	0.52
25:l:193:LYS:HA	25:l:198:ARG:HA	1.91	0.52
27:CN:63:VAL:HG23	75:AR:72:C:H5'	1.90	0.52
31:m:40:HIS:CE1	31:m:42:ALA:HB3	2.44	0.52
4:AI:75:TYR:HD2	72:8:45:LYS:HG3	1.74	0.52
44:CQ:9:ILE:HD11	44:CQ:33:ILE:HD12	1.92	0.52
9:q:16:VAL:HB	9:q:28:VAL:O	2.10	0.52
58:A:327:U:O2'	36:M:10:GLU:HG2	2.10	0.52
58:A:1157:A:H61	58:A:1621:U:H3	1.55	0.52
60:CV:75:ILE:HD12	60:CV:75:ILE:O	2.09	0.52
61:B:119:ARG:HH22	67:D:241:ASP:CG	2.17	0.52
62:c:37:CYS:O	62:c:39:GLY:N	2.40	0.52
29:c9:108:LEU:HB2	29:c9:114:VAL:HG22	1.92	0.52
64:C:140:ILE:HB	64:C:213:ARG:HD3	1.90	0.52
35:d0:63:LEU:HD11	70:s3:8:LYS:HG3	1.91	0.52
73:F:136:VAL:HG11	73:F:148:ARG:NH2	2.25	0.52
50:d3:90:ASP:HB3	58:sR:568:G:H4'	1.91	0.52
75:AR:830:A:H2'	75:AR:831:G:O4'	2.10	0.52
75:AR:2299:A:OP2	80:AR:3977:OHX:N1	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:d4:104:SER:HB3	53:d4:107:GLN:HG3	1.91	0.52
58:sR:918:U:H2'	58:sR:919:A:C8	2.40	0.52
58:sR:1320:U:N3	58:sR:1323:C:OP1	2.37	0.52
58:sR:1591:C:H2'	58:sR:1592:A:C8	2.44	0.52
12:I:87:ASP:C	12:I:88:ARG:HD2	2.35	0.52
59:d6:59:TYR:OH	64:s1:72:ASP:OD2	2.27	0.52
24:K:83:VAL:HA	24:K:149:ARG:HA	1.90	0.52
65:d8:8:THR:O	65:d8:55:VAL:HG23	2.09	0.52
70:s3:116:ARG:HG3	70:s3:120:TYR:HD2	1.74	0.52
76:9:16:ARG:NH1	75:1:216:G:OP1	2.41	0.52
75:1:223:U:OP1	75:1:225:C:N4	2.38	0.52
75:1:549:U:H2'	75:1:550:A:C8	2.45	0.52
75:1:835:G:HO2'	75:1:857:G:H22	1.56	0.52
75:1:1028:U:H5''	75:1:1029:G:H5'	1.91	0.52
75:1:1659:U:H2'	75:1:1660:C:C6	2.45	0.52
75:1:2110:G:O2'	75:1:2111:G:O5'	2.25	0.52
75:1:2697:A:H2'	75:1:2698:G:C8	2.45	0.52
75:1:2910:A:O2'	75:1:3130:A:N1	2.39	0.52
75:1:2925:C:H2'	75:1:2926:A:O4'	2.10	0.52
6:s6:66:GLY:CA	58:sR:1681:A:H1'	2.40	0.52
6:s6:159:ARG:NH2	58:sR:79:C:OP1	2.43	0.52
7:4:152:G:O4'	3:p:59:GLN:NE2	2.43	0.52
10:DK:36:ARG:HG3	10:DK:36:ARG:NH1	2.23	0.52
10:DK:52:PRO:HD2	39:CP:15:GLN:HB3	1.91	0.52
13:j:98:VAL:HG23	13:j:167:GLY:HA3	1.91	0.52
18:s8:99:ALA:HA	18:s8:168:CYS:SG	2.50	0.52
20:AE:31:ARG:HH11	20:AE:31:ARG:HG2	1.75	0.52
25:l:72:ALA:O	25:l:76:ARG:NH1	2.36	0.52
25:l:313:LEU:HD23	75:1:610:G:H21	1.75	0.52
25:l:351:PRO:HB3	43:o:70:LYS:HB3	1.90	0.52
36:c1:96:LYS:NZ	58:sR:374:U:OP1	2.37	0.52
41:W:64:GLU:OE1	62:c:3:LEU:HB2	2.09	0.52
43:o:41:ARG:NH2	75:1:598:A:OP1	2.43	0.52
4:AI:40:SER:OG	4:AI:42:PRO:HD3	2.09	0.52
3:p:139:VAL:HA	3:p:142:LEU:HD12	1.92	0.52
50:Y:42:PRO:HB3	50:Y:81:LYS:HD2	1.92	0.52
5:c5:34:VAL:HG11	5:c5:45:PHE:CE2	2.44	0.52
9:q:13:PRO:CD	9:q:16:VAL:HG22	2.40	0.52
9:q:20:ILE:HG22	33:u:8:LYS:NZ	2.25	0.52
53:Z:91:LEU:H	53:Z:91:LEU:HD12	1.74	0.52
54:CT:132:PHE:CD2	54:CT:138:LEU:HD12	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:a:95:HIS:HD2	77:G:116:HIS:NE2	2.06	0.52
56:a:95:HIS:HB2	58:A:1530:C:OP1	2.08	0.52
58:A:325:G:OP1	36:M:134:THR:OG1	2.25	0.52
45:AP:60:LYS:O	45:AP:60:LYS:CG	2.57	0.52
73:F:180:LEU:HD23	73:F:234:PRO:HA	1.92	0.52
75:AR:508:U:H2'	75:AR:509:U:H6	1.75	0.52
75:AR:611:A:OP1	37:CH:23:LYS:NZ	2.43	0.52
75:AR:1596:C:H2'	75:AR:1597:C:C6	2.45	0.52
75:AR:3056:U:OP2	80:AR:4192:OHX:N2	2.43	0.52
78:h:89:LEU:HD11	78:h:124:SER:HB3	1.90	0.52
79:DB:18:TYR:HE1	79:DB:47:GLU:HG3	1.74	0.52
58:sR:485:A:N6	58:sR:486:G:N3	2.56	0.52
58:sR:1392:U:H2'	58:sR:1393:C:C6	2.44	0.52
60:2:14:MET:HG2	60:2:15:PHE:CD1	2.44	0.52
12:I:63:PRO:C	12:I:66:SER:HG	2.10	0.52
12:I:129:LEU:HD11	12:I:172:VAL:CG1	2.38	0.52
78:Rb:300:THR:HG22	78:Rb:314:GLN:OE1	2.09	0.52
67:s2:99:LYS:HA	67:s2:117:THR:HA	1.91	0.52
72:8:141:TYR:O	72:8:142:ILE:HG12	2.09	0.52
75:1:539:C:H2'	75:1:540:U:H6	1.74	0.52
75:1:821:U:OP2	80:1:3668:OHX:N3	2.42	0.52
75:1:2207:A:H2'	75:1:2208:A:C8	2.43	0.52
13:j:149:ARG:HH11	13:j:155:LYS:HZ1	1.57	0.52
15:CL:93:PRO:HB2	15:CL:125:LEU:HB3	1.90	0.52
19:k:44:THR:CG2	19:k:184:ASN:HD22	2.22	0.52
21:CM:60:ARG:HG3	21:CM:60:ARG:HH11	1.74	0.52
22:DM:41:THR:HG23	22:DM:56:ILE:HG23	1.92	0.52
22:DM:56:ILE:HD12	22:DM:57:ASN:H	1.75	0.52
23:T:103:ASN:OD1	23:T:103:ASN:N	2.36	0.52
31:m:284:ALA:HA	31:m:287:ALA:HB3	1.91	0.52
38:AH:84:CYS:O	38:AH:88:ARG:HG3	2.09	0.52
42:c3:8:GLY:C	42:c3:9:LYS:HD3	2.35	0.52
46:X:22:LYS:HZ1	58:A:1039:A:P	2.31	0.52
54:CT:28:GLU:O	54:CT:32:ILE:HG13	2.10	0.52
58:A:200:A:H2'	58:A:201:G:C8	2.45	0.52
23:c8:44:ASN:CG	23:c8:48:LYS:HZ1	2.18	0.52
65:d:58:GLU:OE2	77:G:222:LYS:NZ	2.42	0.52
48:x:36:ILE:HD11	48:x:48:LEU:HD11	1.91	0.52
75:AR:251:G:H4'	75:AR:252:U:OP1	2.10	0.52
75:AR:507:U:H2'	75:AR:508:U:C6	2.44	0.52
75:AR:787:G:H2'	75:AR:788:C:C6	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:2536:A:H4'	64:s1:226:GLY:HA3	1.91	0.52
75:AR:2947:G:C2	19:CE:250:ALA:HB1	2.43	0.52
77:G:189:THR:HB	77:G:192:GLU:HG3	1.91	0.52
78:h:24:ALA:HB2	78:h:71:CYS:HB3	1.91	0.52
78:h:111:MET:HE3	78:h:111:MET:HA	1.91	0.52
53:d4:15:ASN:OD1	53:d4:17:LEU:HB2	2.10	0.52
58:sR:700:C:H2'	58:sR:701:U:C6	2.45	0.52
63:5:98:THR:HG23	63:5:99:LYS:H	1.74	0.52
13:CD:5:ILE:HG21	13:CD:210:PRO:HD3	1.91	0.52
13:CD:116:VAL:HG23	13:CD:126:LEU:HD23	1.92	0.52
24:K:15:PRO:HD3	24:K:43:TYR:CE1	2.45	0.52
64:s1:26:ARG:HB2	64:s1:50:LYS:HD3	1.90	0.52
69:7:13:ILE:HD11	69:7:30:ARG:HB3	1.92	0.52
67:s2:87:GLN:HG2	67:s2:96:THR:HA	1.91	0.52
31:CG:51:LEU:HB2	31:CG:144:VAL:CG1	2.39	0.52
79:AA:90:GLU:O	79:AA:93:LYS:HD2	2.10	0.52
75:1:283:G:O6	75:1:304:G:H1'	2.10	0.52
75:1:1498:A:H2'	75:1:1499:C:C6	2.44	0.52
75:1:2093:A:H3'	75:1:2093:A:N3	2.25	0.52
75:1:3255:U:H2'	75:1:3256:G:C8	2.45	0.52
75:1:3283:U:H2'	75:1:3284:G:C8	2.45	0.52
3:CJ:149:LYS:HB2	3:CJ:200:LEU:O	2.10	0.52
6:s6:75:LEU:HD21	58:sR:1722:A:H5''	1.91	0.52
7:4:141:C:OP1	39:v:109:ARG:NH1	2.35	0.52
9:CK:168:ARG:NH2	9:CK:169:ASN:HD21	2.08	0.52
12:s7:107:ARG:NH2	58:sR:741:C:O2	2.42	0.52
12:s7:177:THR:CG2	12:s7:179:LYS:H	2.21	0.52
15:CL:116:ARG:HD3	75:AR:2618:G:OP1	2.10	0.52
15:CL:176:LEU:HD23	15:CL:181:TYR:HA	1.90	0.52
19:k:300:ARG:HH11	6:H:25:ARG:HH22	1.58	0.52
25:l:3:ARG:O	25:l:5:GLN:HG2	2.09	0.52
25:l:62:ALA:HB3	25:l:90:PHE:CE2	2.45	0.52
27:CN:14:PHE:CZ	75:AR:665:A:H1'	2.44	0.52
27:CN:100:ARG:NH1	75:AR:66:A:OP2	2.42	0.52
35:V:61:LYS:HZ2	70:E:8:LYS:HE3	1.75	0.52
39:CP:201:ARG:NH2	75:AR:692:A:OP1	2.34	0.52
3:p:230:LYS:O	3:p:230:LYS:NZ	2.35	0.52
48:CR:3:ARG:HD2	75:AR:398:A:H5''	1.90	0.52
51:CS:170:ARG:O	51:CS:171:LYS:HB2	2.09	0.52
11:c6:27:GLY:HA2	77:s5:25:LEU:HD22	1.92	0.52
11:c6:105:LEU:HA	11:c6:108:ALA:HB3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AL:12:LEU:HA	22:AL:15:THR:HG23	1.91	0.52
58:A:866:G:H5''	42:O:2:GLY:HA2	1.92	0.52
58:A:1133:A:N3	58:A:1650:U:O2'	2.42	0.52
58:A:1291:G:H22	58:A:1324:G:H1	1.58	0.52
23:c8:28:ILE:HG23	23:c8:57:ARG:HA	1.90	0.52
23:c8:132:ARG:HD2	58:sR:1544:U:O3'	2.10	0.52
34:AN:100:TYR:OH	75:1:2848:G:OP1	2.16	0.52
60:CV:109:VAL:HG23	75:AR:1063:G:N1	2.24	0.52
29:c9:36:ILE:HG13	29:c9:37:VAL:HG13	1.92	0.52
40:AO:23:ARG:NH2	75:1:2303:A:OP2	2.42	0.52
67:D:126:ARG:O	67:D:130:ILE:HD12	2.09	0.52
70:E:38:GLU:OE2	70:E:39:VAL:N	2.43	0.52
51:y:8:LYS:O	51:y:11:LYS:HD2	2.09	0.52
54:z:97:ARG:HH11	54:z:97:ARG:HG2	1.75	0.52
75:AR:398:A:O2'	75:AR:1416:C:OP1	2.19	0.52
75:AR:2407:C:H1'	75:AR:2818:U:C2	2.45	0.52
77:G:214:LYS:HD2	77:G:214:LYS:C	2.35	0.52
1:AS:8:G:P	31:CG:33:ARG:HH12	2.32	0.52
79:DB:22:LYS:H	79:DB:49:TYR:HH	1.55	0.52
58:sR:845:G:O6	80:sR:1934:OHX:N4	2.43	0.52
58:sR:1234:A:H2'	58:sR:1235:C:C5	2.44	0.52
58:sR:1701:A:H3'	58:sR:1702:A:O4'	2.10	0.52
2:DC:85:ASP:OD1	2:DC:86:LYS:N	2.43	0.52
61:s0:130:ALA:HA	61:s0:133:ILE:HG13	1.91	0.52
25:CF:82:THR:HG23	25:CF:85:SER:H	1.73	0.52
70:s3:61:GLU:N	70:s3:61:GLU:OE2	2.42	0.52
79:AA:26:VAL:HG11	79:AA:96:VAL:HG13	1.91	0.52
75:1:535:G:O6	80:1:3880:OHX:N1	2.43	0.52
75:1:546:C:H5'	75:1:547:G:O4'	2.10	0.52
75:1:597:G:H2'	75:1:598:A:H8	1.75	0.52
75:1:979:U:H1'	75:1:980:A:N7	2.25	0.52
75:1:1596:C:H2'	75:1:1597:C:C6	2.45	0.52
6:s6:136:LYS:NZ	58:sR:66:U:OP1	2.32	0.52
7:4:14:C:H5''	48:x:123:PRO:HD3	1.91	0.52
9:CK:41:ILE:HG23	9:CK:43:VAL:HG13	1.91	0.52
9:CK:176:LEU:HB3	34:DO:86:ALA:HB1	1.92	0.52
10:DK:74:LYS:NZ	75:AR:2224:A:OP1	2.43	0.52
19:k:21:ARG:NH1	75:1:3306:U:H5''	2.25	0.52
19:k:274:SER:OG	75:1:3139:A:OP1	2.28	0.52
24:s9:27:GLU:HB3	24:s9:39:LYS:HE2	1.92	0.52
26:AF:123:LYS:HZ3	26:AF:126:LEU:HB3	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:n:51:ARG:NH1	33:u:114:ASP:OD2	2.43	0.52
39:CP:119:TYR:OH	39:CP:131:GLU:OE1	2.22	0.52
44:CQ:61:ALA:HA	44:CQ:70:PRO:HD2	1.91	0.52
45:DQ:40:LYS:HE3	45:DQ:44:ASP:CG	2.34	0.52
9:q:4:ILE:HD11	57:0:148:LEU:HD11	1.91	0.52
51:CS:170:ARG:HH11	2:DC:57:GLY:H	1.57	0.52
53:Z:93:ARG:HH12	58:A:526:A:P	2.33	0.52
54:CT:139:VAL:O	54:CT:143:ILE:HG13	2.10	0.52
56:a:95:HIS:HD2	77:G:116:HIS:HE2	1.58	0.52
21:s:34:SER:HA	21:s:37:LEU:HD12	1.92	0.52
58:A:479:C:O2	58:A:510:G:N2	2.35	0.52
58:A:955:A:H4'	58:A:1073:G:O2'	2.10	0.52
59:b:69:ASN:HD21	47:P:92:LYS:HD2	1.74	0.52
61:B:145:ALA:HB2	61:B:156:VAL:HB	1.92	0.52
44:w:23:VAL:HB	44:w:84:LEU:HD21	1.91	0.52
66:CX:23:MET:SD	66:CX:78:VAL:HG22	2.50	0.52
66:CX:32:ARG:HD3	66:CX:32:ARG:C	2.35	0.52
70:E:106:LYS:O	70:E:110:LEU:HB2	2.10	0.52
73:F:196:VAL:N	73:F:209:HIS:O	2.33	0.52
73:F:252:ARG:HA	73:F:255:ARG:HB3	1.92	0.52
75:AR:2213:A:N1	75:AR:2429:G:H1'	2.25	0.52
75:AR:2269:U:O2'	75:AR:2270:A:C8	2.60	0.52
75:AR:2393:G:O2'	75:AR:2394:G:OP2	2.28	0.52
79:DB:104:PRO:HA	79:DB:107:ARG:CD	2.39	0.52
58:sR:626:U:H2'	58:sR:627:C:H6	1.74	0.52
56:d5:88:ILE:O	56:d5:89:ILE:HD13	2.09	0.52
78:Rb:208:GLY:O	78:Rb:225:LEU:HD21	2.10	0.52
19:CE:233:TRP:CD1	19:CE:265:ALA:HB1	2.44	0.52
31:CG:65:ILE:HD13	31:CG:74:VAL:HB	1.91	0.52
73:s4:73:ASP:OD2	73:s4:122:LYS:NZ	2.36	0.52
75:1:792:G:H2'	75:1:793:C:C6	2.44	0.52
75:1:2956:A:OP1	80:1:3602:OHX:N1	2.43	0.52
75:1:3033:A:H2'	75:1:3034:C:H6	1.75	0.52
3:CJ:48:ARG:NH1	75:AR:2584:G:N1	2.57	0.52
3:CJ:48:ARG:HH12	75:AR:2584:G:H1	1.57	0.52
11:R:121:SER:H	77:G:76:ARG:NH2	2.08	0.52
25:l:23:PRO:HD2	25:l:26:PHE:HD2	1.73	0.52
26:AF:14:THR:O	80:1:3482:OHX:N5	2.43	0.52
27:CN:14:PHE:CE2	75:AR:665:A:H1'	2.45	0.52
29:U:42:GLY:HA2	29:U:84:LYS:HB2	1.92	0.52
31:m:34:LYS:HE2	60:2:30:TYR:CE1	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CO:46:ILE:HD13	33:CO:58:ILE:HG21	1.91	0.52
38:AH:70:LYS:HE3	75:1:1804:A:H5'	1.92	0.52
43:o:116:PHE:CZ	43:o:144:ILE:HG12	2.45	0.52
4:AI:53:CYS:O	4:AI:57:VAL:HG12	2.10	0.52
44:CQ:10:ASP:OD1	44:CQ:37:ARG:HD3	2.09	0.52
9:q:59:ASN:HD21	33:u:41:GLN:CD	2.18	0.52
9:q:76:ASP:O	9:q:79:ILE:HG12	2.10	0.52
51:CS:173:GLU:HA	2:DC:51:GLY:C	2.35	0.52
11:c6:27:GLY:O	77:s5:27:THR:HG23	2.10	0.52
21:s:52:TYR:OH	75:1:2679:A:O2'	2.08	0.52
58:A:188:A:N7	58:A:197:A:H2	2.08	0.52
58:A:327:U:H2'	58:A:328:A:H8	1.74	0.52
58:A:1169:G:N1	58:A:1575:G:OP2	2.35	0.52
58:A:1579:U:H2'	58:A:1580:C:H6	1.74	0.52
34:AN:114:LYS:NZ	75:1:3107:U:OP1	2.33	0.52
61:B:76:ILE:HA	61:B:98:ILE:O	2.10	0.52
73:F:133:LYS:O	73:F:136:VAL:HG12	2.09	0.52
74:g:144:CYS:HB3	74:g:147:VAL:O	2.10	0.52
54:z:13:SER:OG	54:z:38:ARG:NH2	2.41	0.52
75:AR:406:G:H1'	7:AT:16:G:N2	2.25	0.52
75:AR:544:C:H2'	75:AR:547:G:H1	1.75	0.52
75:AR:650:C:H2'	75:AR:651:G:C8	2.45	0.52
75:AR:736:A:C5	75:AR:737:G:H1'	2.45	0.52
75:AR:2534:G:N2	75:AR:2546:C:N3	2.58	0.52
75:AR:2655:U:H4'	75:AR:2656:A:O4'	2.10	0.52
77:G:198:LEU:O	77:G:202:ALA:N	2.43	0.52
78:h:26:SER:HB2	78:h:73:LEU:CD1	2.39	0.52
78:h:262:VAL:HG13	78:h:271:VAL:HB	1.92	0.52
57:0:16:THR:OG1	57:0:19:VAL:N	2.43	0.52
6:H:197:ASN:HA	6:H:200:ALA:HB3	1.92	0.52
58:sR:545:A:H4'	58:sR:546:U:H5'	1.91	0.52
58:sR:930:A:OP1	59:d6:32:LYS:NZ	2.38	0.52
78:Rb:185:GLN:O	78:Rb:185:GLN:HG3	2.10	0.52
63:5:99:LYS:HD2	63:5:102:GLU:OE2	2.09	0.52
19:CE:56:ILE:HD11	19:CE:359:ILE:HG12	1.91	0.52
42:O:142:GLU:HG3	42:O:145:THR:HG23	1.92	0.52
79:AA:4:PHE:HA	79:AA:6:LYS:HD3	1.92	0.52
79:AA:43:VAL:HG22	79:AA:73:LYS:O	2.09	0.52
79:AA:72:ILE:HG12	79:AA:111:LYS:HG2	1.91	0.52
75:1:1623:G:N7	80:1:3603:OHX:N3	2.57	0.52
75:1:2946:A:H5''	75:1:2947:G:H5'	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:3159:C:H2'	75:1:3160:U:C6	2.44	0.52
8:AC:48:HIS:HE1	8:AC:52:LYS:HE3	1.75	0.51
9:CK:12:VAL:HG13	9:CK:51:GLN:C	2.35	0.51
9:CK:38:LEU:HD13	9:CK:71:VAL:HG22	1.91	0.51
19:k:41:VAL:HG12	19:k:186:GLY:N	2.24	0.51
27:CN:119:TYR:O	27:CN:123:ILE:HG23	2.09	0.51
29:U:34:VAL:HG23	29:U:34:VAL:O	2.10	0.51
35:V:58:LEU:N	35:V:89:ARG:HH22	2.07	0.51
35:V:110:PRO:HB3	70:E:40:ARG:HA	1.91	0.51
37:n:170:LYS:HB3	37:n:172:HIS:CE1	2.45	0.51
38:AH:31:ARG:HH21	75:1:1598:G:P	2.33	0.51
42:c3:126:ALA:O	42:c3:130:ARG:HG3	2.10	0.51
54:CT:109:TYR:HB3	54:CT:115:ILE:HG12	1.92	0.51
55:sM:61:ILE:HG23	55:sM:62:ARG:H	1.75	0.51
58:A:52:U:H2'	58:A:53:G:C8	2.45	0.51
58:A:602:U:H2'	58:A:603:U:C6	2.46	0.51
58:A:800:U:H2'	58:A:801:G:C8	2.44	0.51
58:A:1393:C:H2'	58:A:1394:G:O4'	2.10	0.51
61:B:74:VAL:HG21	61:B:118:PRO:HG3	1.91	0.51
61:B:84:ARG:NH1	61:B:205:ARG:O	2.43	0.51
64:C:130:SER:OG	64:C:131:ASP:OD1	2.13	0.51
35:d0:88:LYS:HZ1	58:sR:1516:A:P	2.33	0.51
45:AP:11:TYR:HD1	45:AP:12:CYS:N	2.08	0.51
45:AP:93:LEU:H	45:AP:93:LEU:HD23	1.76	0.51
67:D:35:TRP:CZ2	67:D:67:GLN:HB2	2.45	0.51
68:e:20:GLN:HG3	68:e:25:SER:O	2.09	0.51
75:AR:2257:C:H2'	75:AR:2258:U:O4'	2.10	0.51
79:DB:54:THR:HG22	79:DB:57:HIS:CD2	2.44	0.51
58:sR:831:U:HO2'	58:sR:832:U:H5'	1.74	0.51
58:sR:924:A:H2'	58:sR:925:G:C8	2.44	0.51
58:sR:1067:C:H2'	58:sR:1068:C:C6	2.45	0.51
78:Rb:93:ASP:HB2	78:Rb:100:TYR:HE2	1.74	0.51
78:Rb:124:SER:O	78:Rb:131:ILE:HD13	2.10	0.51
63:5:34:ALA:O	63:5:38:ILE:HG13	2.10	0.51
62:d7:35:VAL:O	62:d7:36:LYS:HG3	2.10	0.51
30:L:55:VAL:HG21	30:L:66:TYR:HB3	1.90	0.51
31:CG:184:ASP:OD1	31:CG:187:THR:N	2.40	0.51
31:CG:290:ILE:HG13	31:CG:291:ALA:H	1.75	0.51
26:DG:82:LEU:HD12	26:DG:108:ILE:HG23	1.92	0.51
70:s3:53:THR:HG22	70:s3:94:ARG:HD2	1.92	0.51
79:AA:18:TYR:O	79:AA:21:LYS:HG2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:P:24:ASN:OD1	47:P:24:ASN:O	2.28	0.51
75:1:1488:G:H5''	75:1:1838:G:O6	2.09	0.51
75:1:2840:C:OP1	80:1:3612:OHX:N2	2.43	0.51
75:1:2993:G:H2'	75:1:3142:A:N6	2.25	0.51
11:R:123:ARG:H	58:A:1584:G:H5'	1.75	0.51
12:s7:25:VAL:HA	12:s7:28:GLU:HB3	1.91	0.51
12:s7:51:VAL:HG13	12:s7:53:GLY:N	2.26	0.51
15:CL:36:LEU:HG	15:CL:37:GLY:H	1.75	0.51
18:s8:64:ASN:HD21	18:s8:73:SER:HB3	1.75	0.51
24:s9:77:ILE:HG21	24:s9:91:LYS:HB3	1.92	0.51
25:l:185:LYS:HE3	25:l:199:TRP:HB3	1.91	0.51
25:l:346:LYS:H	25:l:346:LYS:CD	2.22	0.51
29:U:37:VAL:HG11	29:U:100:ILE:HG12	1.91	0.51
39:CP:28:TRP:CD1	75:AR:2515:A:H5''	2.45	0.51
3:p:52:TRP:NE1	3:p:60:ARG:HH12	2.09	0.51
9:q:41:ILE:HD11	9:q:67:ALA:HB1	1.92	0.51
9:q:99:ILE:HG21	9:q:117:PHE:HD1	1.75	0.51
53:Z:17:LEU:HD11	73:F:92:LEU:HD11	1.91	0.51
15:r:170:LYS:HA	15:r:177:ASP:HA	1.92	0.51
54:CT:166:ASN:OD1	54:CT:167:ARG:HD2	2.10	0.51
17:c7:21:TYR:O	17:c7:21:TYR:HD1	1.93	0.51
58:A:69:G:N2	58:A:82:U:O2	2.42	0.51
58:A:195:G:H2'	58:A:196:G:H5''	1.92	0.51
58:A:350:U:H5''	58:A:352:A:H5'	1.92	0.51
58:A:823:G:H3'	58:A:824:G:H8	1.75	0.51
58:A:1119:G:N7	80:A:2073:OHX:N6	2.57	0.51
59:b:87:ARG:HE	59:b:92:ARG:HA	1.75	0.51
60:CV:120:LYS:HA	60:CV:123:GLY:H	1.74	0.51
60:CV:150:THR:HG21	25:CF:361:HIS:ND1	2.25	0.51
63:CW:79:LEU:H	63:CW:79:LEU:HD12	1.75	0.51
44:w:127:LEU:HD11	57:0:168:PRO:HG3	1.92	0.51
73:F:187:ARG:HA	73:F:189:LEU:H	1.75	0.51
75:AR:981:U:H2'	75:AR:982:C:O4'	2.09	0.51
75:AR:2261:G:O6	80:AR:3599:OHX:N5	2.42	0.51
75:AR:3026:G:N7	80:AR:4161:OHX:N6	2.58	0.51
58:sR:86:A:OP2	80:sR:1905:OHX:N2	2.43	0.51
60:2:102:ARG:O	60:2:106:LEU:HD12	2.10	0.51
32:DH:13:HIS:ND1	32:DH:93:THR:OG1	2.38	0.51
3:CJ:25:PRO:HB2	3:CJ:26:LEU:HD22	1.92	0.51
3:CJ:117:ALA:N	3:CJ:118:GLU:OE2	2.44	0.51
11:R:73:GLY:H	11:R:76:SER:HB3	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:s7:177:THR:HG23	12:s7:178:GLY:N	2.25	0.51
23:T:86:LEU:HB3	23:T:99:HIS:ND1	2.26	0.51
24:s9:81:VAL:O	24:s9:150:LEU:HD11	2.10	0.51
36:c1:79:LYS:HG3	58:sR:346:G:C5'	2.41	0.51
45:DQ:34:SER:O	45:DQ:34:SER:OG	2.25	0.51
46:X:51:GLU:OE1	12:I:141:ARG:NH1	2.41	0.51
49:DR:78:THR:O	49:DR:82:THR:HG23	2.11	0.51
9:q:25:VAL:O	9:q:35:THR:HA	2.10	0.51
15:r:46:PHE:CD1	15:r:140:THR:HA	2.46	0.51
54:CT:96:ILE:HG22	75:AR:1722:U:O4'	2.10	0.51
58:A:395:U:O2'	6:H:89:ASP:HB3	2.09	0.51
58:A:787:G:P	73:F:255:ARG:HH12	2.32	0.51
58:A:895:G:N2	58:A:917:U:O2	2.41	0.51
58:A:983:A:OP1	80:A:2063:OHX:N6	2.43	0.51
58:A:1784:C:H2'	58:A:1785:U:C6	2.44	0.51
59:b:59:TYR:O	59:b:61:GLU:N	2.43	0.51
50:d3:42:PRO:HG2	50:d3:122:PHE:HZ	1.75	0.51
50:d3:43:PHE:HZ	50:d3:104:LEU:HB2	1.74	0.51
75:AR:1949:G:N2	75:AR:2098:C:H1'	2.25	0.51
77:G:147:THR:HG22	77:G:148:ARG:H	1.75	0.51
58:sR:1607:G:H2'	58:sR:1608:U:C6	2.46	0.51
78:Rb:67:ILE:HG13	78:Rb:85:TRP:CE3	2.43	0.51
78:Rb:87:LYS:HD3	78:Rb:109:ASP:HA	1.91	0.51
78:Rb:197:SER:HG	78:Rb:216:LYS:H	1.57	0.51
30:L:32:HIS:HD1	30:L:33:GLU:N	2.09	0.51
72:8:95:ILE:HG13	72:8:110:VAL:HG21	1.92	0.51
31:CG:34:LYS:O	31:CG:38:THR:OG1	2.20	0.51
70:s3:163:PRO:O	70:s3:167:PHE:HD1	1.94	0.51
75:1:155:G:H5''	75:1:156:G:C8	2.45	0.51
75:1:2149:A:N6	75:1:2187:G:O2'	2.40	0.51
7:4:83:C:H4'	7:4:85:G:N3	2.25	0.51
19:k:88:GLY:O	19:k:161:LEU:N	2.31	0.51
23:T:6:GLN:OE1	56:a:44:GLN:HB2	2.10	0.51
24:s9:5:PRO:HB3	58:sR:380:U:N3	2.26	0.51
25:l:141:ARG:N	25:l:177:ASP:OD1	2.42	0.51
29:U:37:VAL:HG11	29:U:100:ILE:CD1	2.40	0.51
29:U:141:GLU:HA	29:U:144:GLU:HB3	1.92	0.51
39:CP:150:TRP:CE3	75:AR:321:C:H5''	2.46	0.51
43:o:64:GLN:HG3	43:o:68:ASP:OD1	2.10	0.51
3:p:147:LYS:O	3:p:201:THR:OG1	2.24	0.51
11:c6:28:LEU:O	11:c6:29:ILE:HD12	2.09	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:c6:29:ILE:HD11	11:c6:63:ILE:HD13	1.91	0.51
17:c7:79:GLU:OE1	17:c7:79:GLU:N	2.24	0.51
58:A:101:U:OP1	80:A:2006:OHX:N4	2.44	0.51
71:f:37:ARG:HD2	24:K:123:HIS:ND1	2.25	0.51
73:F:179:LYS:N	73:F:194:THR:O	2.43	0.51
75:AR:211:A:OP1	25:CF:220:ARG:HD2	2.10	0.51
75:AR:1018:G:H2'	75:AR:1019:G:O4'	2.10	0.51
75:AR:1064:A:N6	75:AR:1096:U:H3	2.09	0.51
75:AR:1354:G:C6	75:AR:1358:C:H5'	2.45	0.51
75:AR:3162:C:H2'	75:AR:3163:A:H8	1.76	0.51
78:h:150:TRP:HB2	78:h:174:ASN:HB2	1.92	0.51
78:h:153:GLN:OE1	78:h:202:LEU:N	2.43	0.51
1:AS:68:C:OP1	31:CG:14:SER:OG	2.28	0.51
58:sR:422:G:OP1	80:sR:2133:OHX:N1	2.44	0.51
58:sR:647:G:N2	58:sR:687:G:N2	2.56	0.51
61:s0:79:ARG:O	61:s0:83:GLN:HG2	2.10	0.51
62:d7:23:THR:HG21	62:d7:29:ARG:NH1	2.25	0.51
20:DF:72:ARG:NH1	20:DF:105:GLN:O	2.40	0.51
31:CG:79:TYR:HB2	31:CG:81:HIS:ND1	2.25	0.51
36:M:16:GLN:HE22	36:M:33:ARG:HA	1.76	0.51
75:1:1768:U:H2'	75:1:1769:G:O4'	2.11	0.51
75:1:1826:C:H2'	75:1:1827:C:C6	2.46	0.51
75:1:1863:G:N1	75:1:1866:C:OP2	2.38	0.51
75:1:2964:G:N2	75:1:2967:A:OP2	2.40	0.51
2:AB:55:LYS:O	51:y:182:LYS:NZ	2.42	0.51
4:DJ:7:TYR:HA	4:DJ:10:ARG:CD	2.41	0.51
5:Q:17:TYR:CD2	5:Q:18:ARG:HG3	2.44	0.51
5:Q:75:PRO:HA	5:Q:93:VAL:HB	1.91	0.51
9:CK:101:VAL:HA	9:CK:113:GLU:O	2.10	0.51
10:DK:15:LYS:HE2	10:DK:15:LYS:HA	1.93	0.51
13:j:204:MET:HB3	13:j:208:ASP:HB2	1.92	0.51
19:k:346:THR:OG1	19:k:347:SER:N	2.43	0.51
23:T:15:LEU:O	23:T:22:VAL:HG12	2.10	0.51
25:l:104:LYS:HD2	25:l:106:TRP:CZ2	2.45	0.51
30:c0:39:ASN:O	30:c0:43:ILE:HD12	2.10	0.51
31:m:103:LEU:HA	31:m:106:ALA:HB3	1.92	0.51
31:m:208:MET:HB2	31:m:233:ALA:HB2	1.92	0.51
38:AH:38:LEU:HD12	38:AH:38:LEU:H	1.75	0.51
51:CS:67:ILE:HG12	51:CS:140:LEU:HD12	1.91	0.51
51:CS:110:ALA:O	51:CS:114:ILE:HG12	2.10	0.51
17:c7:27:ASP:OD2	78:Rb:38:ARG:NH2	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:141:U:OP2	6:H:149:LYS:NZ	2.38	0.51
58:A:1147:A:H2'	58:A:1148:C:C6	2.46	0.51
29:c9:93:HIS:HB2	58:sR:1525:A:H5'	1.93	0.51
44:w:15:LEU:HD12	44:w:15:LEU:N	2.24	0.51
44:w:84:LEU:HD13	44:w:102:LEU:HD21	1.93	0.51
67:D:68:ILE:HG22	67:D:72:LEU:HD22	1.93	0.51
74:g:85:TYR:CZ	74:g:87:THR:HG21	2.46	0.51
75:AR:437:G:N2	75:AR:622:A:H62	2.09	0.51
75:AR:1080:A:OP1	31:CG:140:ARG:HG3	2.11	0.51
75:AR:2230:C:H2'	75:AR:2231:C:O4'	2.10	0.51
78:h:21:THR:CG2	78:h:38:ARG:HG2	2.40	0.51
78:h:171:SER:N	78:h:179:LYS:O	2.40	0.51
57:0:25:PHE:HB3	60:2:151:LEU:HD23	1.91	0.51
58:sR:487:G:H3'	58:sR:488:G:C5'	2.41	0.51
12:I:126:LEU:HD23	12:I:126:LEU:H	1.75	0.51
78:Rb:74:THR:HG22	78:Rb:79:TYR:O	2.10	0.51
64:s1:70:LEU:HD23	64:s1:82:ARG:HE	1.75	0.51
30:L:12:HIS:HD1	30:L:79:TYR:HE2	1.57	0.51
75:1:565:U:H2'	75:1:566:G:H8	1.76	0.51
75:1:1667:A:H2'	75:1:1668:G:C8	2.45	0.51
75:1:2357:A:H2'	75:1:2358:A:C8	2.45	0.51
75:1:2427:U:H2'	75:1:2428:U:C6	2.45	0.51
75:1:2537:U:H1'	75:1:2538:U:O5'	2.10	0.51
75:1:3318:G:H2'	75:1:3318:G:OP2	2.10	0.51
1:3:26:C:C5'	31:m:56:THR:HB	2.39	0.51
2:AB:36:GLY:HA3	2:AB:40:HIS:CE1	2.45	0.51
2:AB:132:LYS:O	2:AB:136:GLU:HG3	2.10	0.51
2:AB:137:LYS:O	2:AB:137:LYS:HD2	2.10	0.51
12:s7:28:GLU:CG	12:s7:35:LYS:HB3	2.40	0.51
15:CL:145:LYS:O	15:CL:149:VAL:HG13	2.11	0.51
17:S:44:LYS:HE2	58:A:1386:G:OP2	2.10	0.51
22:DM:28:ASN:HD22	22:DM:40:GLN:NE2	2.09	0.51
22:DM:41:THR:HG21	22:DM:62:ALA:CB	2.40	0.51
24:s9:59:LEU:HD22	24:s9:69:ARG:HA	1.92	0.51
24:s9:78:ARG:HH22	24:s9:82:ARG:CZ	2.23	0.51
33:CO:32:LEU:HD11	33:CO:94:TRP:CD2	2.45	0.51
39:CP:154:PRO:O	39:CP:157:LYS:HG3	2.10	0.51
42:c3:15:ALA:HA	62:d7:26:GLN:NE2	2.17	0.51
54:CT:98:ARG:O	54:CT:101:VAL:HG22	2.11	0.51
57:CU:77:VAL:HG21	57:CU:106:LEU:HD12	1.92	0.51
23:c8:41:ARG:HG3	23:c8:85:PHE:CZ	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:t:48:PRO:HA	27:t:137:GLN:HB2	1.92	0.51
61:B:193:GLN:O	61:B:195:TRP:N	2.43	0.51
40:AO:24:SER:O	40:AO:24:SER:OG	2.22	0.51
44:w:164:SER:HG	75:1:3181:C:HO2'	1.45	0.51
67:D:96:THR:HG21	55:i:113:ASP:OD2	2.11	0.51
73:F:222:LEU:O	73:F:225:VAL:HG12	2.11	0.51
75:AR:2108:C:H1'	75:AR:3344:A:H8	1.75	0.51
75:AR:2430:A:H2'	75:AR:2431:C:C6	2.45	0.51
75:AR:2516:U:O2	75:AR:2594:C:N4	2.43	0.51
75:AR:2759:U:H5''	75:AR:2760:C:H5'	1.93	0.51
75:AR:3267:A:H2'	37:CH:69:PHE:CZ	2.45	0.51
75:AR:3304:U:O2'	19:CE:334:ARG:NH1	2.41	0.51
1:AS:3:U:H2'	1:AS:4:U:C6	2.45	0.51
58:sR:366:A:OP2	80:sR:1977:OHX:N6	2.43	0.51
58:sR:1613:U:OP1	77:s5:169:ASN:HB3	2.10	0.51
18:J:38:ILE:HD13	18:J:78:ILE:HG22	1.92	0.51
18:J:54:LYS:HD2	18:J:175:GLN:NE2	2.25	0.51
18:J:189:LEU:HD23	18:J:193:LEU:HG	1.91	0.51
61:s0:38:PHE:HB2	61:s0:49:ASN:HB2	1.93	0.51
66:6:20:GLY:HA2	66:6:35:TYR:CE1	2.46	0.51
24:K:118:LEU:HD13	24:K:158:PHE:HE1	1.75	0.51
37:CH:52:VAL:HG22	37:CH:74:VAL:HG21	1.91	0.51
42:O:45:LEU:HB3	42:O:49:GLN:HB2	1.92	0.51
75:1:1580:A:OP2	75:1:2522:G:N1	2.44	0.51
75:1:1688:U:H2'	75:1:1689:U:C6	2.45	0.51
75:1:2107:A:H2	75:1:3344:A:H8	1.59	0.51
75:1:2683:U:H2'	75:1:2684:C:C6	2.45	0.51
75:1:2942:C:O2	80:1:3725:OHX:N4	2.44	0.51
2:AB:2:PRO:HG2	2:AB:5:PHE:CD2	2.46	0.51
4:AI:18:ALA:O	4:AI:22:VAL:HG23	2.11	0.51
47:c4:41:ARG:NH1	58:sR:916:U:H3	2.09	0.51
48:CR:20:SER:HB3	48:CR:21:TYR:CD1	2.45	0.51
51:CS:84:VAL:O	51:CS:84:VAL:HG23	2.09	0.51
54:CT:15:VAL:HG11	54:CT:52:LYS:HG3	1.92	0.51
56:a:74:SER:HA	56:a:77:ARG:HD3	1.92	0.51
58:A:959:U:C6	42:O:17:PRO:HG3	2.45	0.51
58:A:1078:C:H2'	58:A:1079:U:C6	2.46	0.51
61:B:22:THR:OG1	61:B:172:LEU:HD11	2.11	0.51
33:u:77:ARG:NH1	75:1:524:U:OP1	2.43	0.51
75:AR:715:A:H4'	75:AR:716:A:OP1	2.11	0.51
76:DA:39:LEU:HD22	76:DA:43:TYR:CE2	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:h:26:SER:HB2	78:h:73:LEU:HD12	1.93	0.51
78:h:171:SER:HB3	78:h:181:TRP:CD1	2.45	0.51
78:h:201:THR:HB	78:h:242:SER:HA	1.91	0.51
2:DC:43:ILE:O	2:DC:47:LYS:HB3	2.11	0.51
12:I:14:THR:HG23	12:I:15:GLU:C	2.36	0.51
78:Rb:20:VAL:CG2	78:Rb:304:GLY:HA3	2.40	0.51
18:J:184:LEU:O	18:J:189:LEU:HD12	2.11	0.51
14:DE:99:ASP:OD1	14:DE:99:ASP:N	2.42	0.51
64:s1:184:LEU:O	64:s1:187:LYS:N	2.44	0.51
65:d8:38:ARG:HG3	65:d8:40:ILE:HD11	1.92	0.51
30:L:32:HIS:CD2	30:L:35:ILE:HG13	2.46	0.51
73:s4:105:VAL:HG22	73:s4:243:GLY:HA2	1.92	0.51
79:AA:56:LYS:O	80:1:4028:OHX:N1	2.43	0.51
79:AA:58:GLY:O	79:AA:62:VAL:HG23	2.11	0.51
43:CI:37:ASN:O	43:CI:41:ARG:HG3	2.10	0.51
47:P:23:PHE:O	47:P:24:ASN:HB3	2.11	0.51
75:1:287:G:O5'	75:1:287:G:H8	1.93	0.51
75:1:748:U:H2'	75:1:749:C:C6	2.46	0.51
75:1:1033:U:H2'	75:1:1034:U:C6	2.46	0.51
75:1:1576:G:H3'	75:1:1577:G:C8	2.45	0.51
75:1:2808:A:O2'	75:1:2969:A:OP1	2.21	0.51
1:3:77:G:N2	1:3:102:A:OP2	2.27	0.51
5:Q:86:VAL:H	5:Q:89:MET:HE2	1.76	0.51
14:AD:70:PHE:CE1	14:AD:72:GLY:HA3	2.46	0.51
15:CL:76:MET:HE2	15:CL:148:VAL:HA	1.92	0.51
15:CL:161:GLY:O	15:CL:163:GLN:NE2	2.43	0.51
18:s8:98:LYS:HD3	58:sR:329:G:OP1	2.11	0.51
23:T:97:ASP:OD1	80:T:201:OHX:N4	2.44	0.51
24:s9:64:GLU:O	24:s9:65:LYS:HB2	2.10	0.51
31:m:132:THR:HG21	31:m:170:GLY:HA2	1.93	0.51
36:c1:34:TRP:HH2	36:c1:36:LYS:HD3	1.76	0.51
47:c4:16:VAL:HA	47:c4:80:HIS:O	2.11	0.51
54:CT:99:LEU:O	54:CT:103:ARG:HG3	2.10	0.51
21:s:141:ARG:O	21:s:145:LYS:HE2	2.10	0.51
58:A:542:A:H3'	58:A:543:C:H5'	1.92	0.51
58:A:567:A:H4'	71:f:10:ARG:O	2.11	0.51
58:A:1182:U:O2	58:A:1184:A:H8	1.94	0.51
58:A:1352:G:H2'	58:A:1353:U:O4'	2.11	0.51
34:AN:98:LYS:HE2	34:AN:118:THR:HB	1.92	0.51
61:B:56:LYS:HG2	61:B:161:PRO:HD2	1.92	0.51
29:c9:49:ASP:O	29:c9:53:TRP:HD1	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:c9:70:GLN:N	29:c9:70:GLN:OE1	2.43	0.51
66:CX:133:SER:O	80:sR:1989:OHX:N3	2.44	0.51
67:D:169:LEU:CD1	67:D:217:ALA:HB1	2.40	0.51
75:AR:188:U:C4	75:AR:223:U:H4'	2.46	0.51
75:AR:1382:G:O6	80:AR:4068:OHX:N6	2.44	0.51
77:G:45:LYS:HG2	77:G:46:TRP:CE2	2.46	0.51
77:G:223:SER:C	77:G:224:ASN:HD22	2.17	0.51
58:sR:227:U:H1'	58:sR:228:G:C8	2.45	0.51
58:sR:1039:A:O2'	58:sR:1040:G:OP2	2.23	0.51
58:sR:1660:A:H2'	58:sR:1661:U:C6	2.46	0.51
7:AT:6:U:H2'	7:AT:7:U:H6	1.76	0.51
63:5:57:THR:OG1	63:5:58:GLU:N	2.44	0.51
18:J:110:ARG:HH22	75:1:3354:U:H3	1.58	0.51
30:L:27:PHE:CD1	30:L:40:LEU:HD13	2.45	0.51
36:M:6:THR:O	36:M:6:THR:OG1	2.22	0.51
36:M:22:ASN:ND2	36:M:25:VAL:HG13	2.25	0.51
73:s4:91:THR:HG23	73:s4:98:ASN:OD1	2.11	0.51
38:DI:104:VAL:CG2	38:DI:107:GLU:HB2	2.41	0.51
77:s5:27:THR:O	77:s5:29:ILE:HD12	2.11	0.51
75:1:86:G:O2'	75:1:98:G:O6	2.27	0.51
75:1:1110:U:H2'	75:1:1111:U:C6	2.46	0.51
75:1:1240:A:H3'	75:1:1241:U:H5'	1.92	0.51
75:1:1615:C:H2'	75:1:1616:U:C6	2.46	0.51
75:1:2373:A:N7	75:1:2867:C:H1'	2.26	0.51
75:1:2438:A:H2'	75:1:2439:A:H8	1.75	0.51
75:1:2874:G:N2	75:1:2945:G:N7	2.59	0.51
6:s6:182:GLN:OE1	6:s6:182:GLN:N	2.36	0.51
10:DK:5:THR:HG23	10:DK:12:ASN:O	2.10	0.51
13:j:128:ARG:N	75:1:2178:A:OP1	2.44	0.51
15:CL:51:HIS:HB3	15:CL:134:ILE:HG23	1.93	0.51
18:s8:84:HIS:NE2	18:s8:97:THR:OG1	2.33	0.51
26:AF:118:LYS:NZ	75:1:438:A:OP1	2.32	0.51
30:c0:46:LEU:HD13	30:c0:66:TYR:CE2	2.46	0.51
35:V:68:ARG:CZ	35:V:77:LYS:HA	2.41	0.51
41:W:35:ASN:HD21	67:D:237:VAL:CG2	2.24	0.51
47:c4:19:ILE:HA	47:c4:27:PHE:O	2.11	0.51
3:p:78:PHE:C	3:p:80:TYR:H	2.18	0.51
10:AJ:43:LEU:HD13	10:AJ:47:ILE:HD11	1.91	0.51
48:CR:82:ARG:HD3	75:AR:2352:A:P	2.50	0.51
5:c5:53:PRO:HB2	5:c5:57:MET:HG2	1.92	0.51
9:q:109:ALA:HB1	9:q:111:PHE:CZ	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:c6:41:PRO:HG2	11:c6:78:VAL:CG2	2.40	0.51
54:CT:160:GLU:HA	54:CT:163:ARG:HB3	1.92	0.51
55:sM:84:LYS:C	55:sM:85:SER:HG	2.15	0.51
58:A:60:U:H5'	58:A:455:C:N4	2.26	0.51
58:A:155:U:H4'	6:H:59:GLN:H	1.76	0.51
58:A:514:G:O2'	58:A:515:A:H5'	2.10	0.51
58:A:707:A:N6	58:A:730:G:H1	2.08	0.51
58:A:951:A:H4'	42:O:100:LYS:HZ2	1.76	0.51
58:A:1200:G:H4'	58:A:1201:G:C5'	2.40	0.51
61:B:71:GLU:HA	61:B:94:GLY:O	2.10	0.51
64:C:137:ILE:HD13	64:C:172:LEU:HG	1.93	0.51
35:d0:57:ARG:HG2	35:d0:89:ARG:HD2	1.93	0.51
66:CX:10:LYS:HG2	66:CX:11:PHE:O	2.11	0.51
66:CX:80:ARG:HD2	66:CX:95:PHE:CD2	2.46	0.51
67:D:98:PHE:CE2	55:i:113:ASP:HB3	2.46	0.51
68:e:48:ASN:ND2	68:e:53:ASN:OD1	2.44	0.51
50:d3:13:ARG:O	50:d3:17:VAL:HG12	2.11	0.51
54:z:121:HIS:ND1	75:1:1719:G:OP2	2.33	0.51
54:z:155:LEU:HD12	54:z:155:LEU:N	2.26	0.51
75:AR:432:G:OP1	32:DH:57:LYS:HB3	2.11	0.51
75:AR:595:G:N1	75:AR:609:G:H5''	2.26	0.51
77:G:43:PHE:CE1	77:G:46:TRP:CE3	2.99	0.51
53:d4:35:VAL:HB	53:d4:40:LEU:HD11	1.93	0.51
58:sR:973:A:H2'	58:sR:974:A:C8	2.46	0.51
58:sR:1615:C:OP1	77:s5:81:ARG:NH2	2.41	0.51
60:2:39:ILE:HG22	60:2:99:SER:HB3	1.93	0.51
78:Rb:242:SER:O	78:Rb:292:LEU:HB2	2.10	0.51
63:5:15:PHE:N	63:5:65:VAL:O	2.43	0.51
62:d7:62:ILE:O	62:d7:62:ILE:HD12	2.11	0.51
24:K:59:LEU:O	24:K:62:ARG:HG3	2.11	0.51
69:7:2:LYS:HD2	69:7:2:LYS:C	2.36	0.51
31:CG:256:THR:OG1	31:CG:258:LYS:NZ	2.42	0.51
79:AA:72:ILE:HG22	79:AA:101:PHE:CE2	2.45	0.51
75:1:246:U:H2'	75:1:247:C:H6	1.76	0.51
75:1:3364:C:OP1	80:1:4054:OHX:N2	2.44	0.51
1:3:59:U:OP2	80:3:203:OHX:N6	2.44	0.51
6:s6:44:GLU:HG3	6:s6:45:PHE:CE1	2.46	0.51
12:s7:10:SER:OG	12:s7:42:GLN:OE1	2.20	0.51
14:AD:70:PHE:HE1	14:AD:72:GLY:HA3	1.76	0.51
18:s8:5:ARG:HG3	18:s8:28:GLU:O	2.11	0.51
26:AF:103:LYS:O	26:AF:106:VAL:HG22	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:U:106:GLN:OE1	58:A:1500:C:H5'	2.10	0.51
31:m:184:ASP:OD1	31:m:187:THR:N	2.43	0.51
35:V:72:ASN:HD22	58:A:1430:U:C1'	2.24	0.51
36:c1:133:LYS:HB2	58:sR:337:G:H3'	1.92	0.51
43:o:93:ASN:OD1	43:o:93:ASN:N	2.42	0.51
46:X:98:GLN:HB2	46:X:99:PHE:HD1	1.76	0.51
16:AK:2:GLY:HA2	16:AK:6:PRO:HG2	1.92	0.51
52:p0:69:ASP:OD1	52:p0:69:ASP:N	2.28	0.51
57:CU:135:VAL:HG22	57:CU:141:LYS:HG2	1.93	0.51
58:A:1773:C:OP1	40:AO:3:ALA:HB3	2.11	0.51
58:A:1777:G:H2'	58:A:1778:G:H8	1.75	0.51
27:t:165:SER:O	27:t:169:THR:HG22	2.11	0.51
61:B:180:GLU:O	61:B:184:LEU:HD12	2.11	0.51
70:E:168:ILE:O	70:E:168:ILE:HD12	2.11	0.51
75:AR:1015:U:H3'	75:AR:1016:C:H5''	1.92	0.51
75:AR:1778:G:N7	80:AR:3573:OHX:N6	2.58	0.51
78:h:197:SER:HB3	78:h:216:LYS:H	1.75	0.51
6:H:167:LYS:HB3	6:H:169:TYR:CE1	2.46	0.51
58:sR:868:G:O6	80:sR:2144:OHX:N1	2.44	0.51
58:sR:1248:C:H2'	58:sR:1249:U:C6	2.46	0.51
78:Rb:257:ALA:HA	78:Rb:288:HIS:HB2	1.92	0.51
13:CD:65:ASP:HB3	13:CD:68:LYS:O	2.11	0.51
18:J:78:ILE:HG23	18:J:102:VAL:HG11	1.93	0.51
61:s0:167:LYS:C	61:s0:169:SER:H	2.17	0.51
70:s3:76:ARG:C	70:s3:77:PHE:HD1	2.19	0.51
43:CI:95:ILE:HD13	43:CI:100:ARG:CG	2.41	0.51
38:DI:42:PRO:O	38:DI:43:LYS:HD3	2.11	0.51
77:s5:113:ILE:HD12	77:s5:190:ILE:HG23	1.93	0.51
75:1:279:U:H2'	75:1:280:U:C6	2.46	0.51
75:1:627:U:H2'	75:1:628:A:C8	2.46	0.51
75:1:1724:U:H1'	75:1:1725:C:C6	2.45	0.51
75:1:1869:C:H4'	75:1:3077:A:O2'	2.11	0.51
75:1:2510:U:O2'	75:1:2511:A:H8	1.94	0.51
3:CJ:193:LYS:HB3	75:AR:7:C:H5''	1.93	0.50
10:DK:84:LYS:NZ	75:AR:309:U:OP1	2.41	0.50
17:S:5:ARG:NH1	58:A:1402:G:OP2	2.44	0.50
17:S:16:LEU:HD12	17:S:17:ILE:H	1.76	0.50
27:CN:117:LYS:HA	27:CN:120:GLN:HE21	1.76	0.50
31:m:233:ALA:O	31:m:234:ASP:C	2.53	0.50
35:V:37:VAL:HA	35:V:40:ASN:HB3	1.92	0.50
37:n:21:THR:OG1	75:1:612:U:OP1	2.29	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:AH:74:ARG:HD2	38:AH:75:ALA:O	2.11	0.50
41:W:45:ALA:N	61:B:185:ARG:HB2	2.26	0.50
42:c3:47:PRO:HG3	42:c3:72:MET:HE2	1.93	0.50
48:CR:136:ILE:O	48:CR:137:ASN:ND2	2.44	0.50
5:c5:34:VAL:HG11	5:c5:45:PHE:CD2	2.46	0.50
9:q:132:VAL:HG21	9:q:157:ASN:ND2	2.24	0.50
11:c6:99:GLU:HB2	78:Rb:59:ARG:HA	1.93	0.50
54:CT:67:ALA:O	54:CT:71:ARG:HG2	2.11	0.50
17:c7:2:GLY:N	58:sR:1312:A:OP1	2.45	0.50
58:A:4:C:OP2	67:D:200:SER:OG	2.29	0.50
58:A:1198:G:O3'	68:e:40:ARG:NH2	2.40	0.50
65:d:58:GLU:OE1	65:d:58:GLU:N	2.42	0.50
44:w:164:SER:OG	75:1:3181:C:O2'	2.20	0.50
44:w:175:THR:HA	44:w:178:VAL:HG22	1.93	0.50
48:x:24:VAL:HG12	48:x:86:LYS:HD3	1.93	0.50
50:d3:42:PRO:HG2	50:d3:122:PHE:CZ	2.46	0.50
75:AR:225:C:O3'	76:DA:32:SER:OG	2.29	0.50
75:AR:722:G:O6	80:AR:3919:OHX:N5	2.44	0.50
75:AR:2667:A:N6	75:AR:2687:G:H1'	2.26	0.50
78:h:20:VAL:HG23	78:h:37:SER:HB2	1.93	0.50
78:h:84:SER:O	78:h:110:VAL:HG22	2.11	0.50
57:0:77:VAL:HG21	57:0:94:ILE:HD12	1.93	0.50
1:AS:3:U:H2'	1:AS:4:U:H6	1.76	0.50
79:DB:43:VAL:O	79:DB:72:ILE:HD12	2.11	0.50
6:H:55:GLY:O	6:H:63:MET:HG3	2.11	0.50
58:sR:83:G:OP2	80:sR:2003:OHX:N6	2.44	0.50
58:sR:319:U:H1'	58:sR:323:A:C4	2.46	0.50
58:sR:489:C:H5	58:sR:498:G:H22	1.58	0.50
58:sR:940:A:N1	58:sR:975:C:O2'	2.44	0.50
58:sR:1255:G:H4'	58:sR:1256:A:OP1	2.11	0.50
7:AT:86:U:H4'	7:AT:87:G:C8	2.46	0.50
12:I:46:ILE:HD11	12:I:60:ILE:HG23	1.93	0.50
78:Rb:85:TRP:HZ2	78:Rb:127:ARG:HH12	1.58	0.50
25:CF:141:ARG:HB3	25:CF:176:SER:HB2	1.93	0.50
26:DG:113:LYS:O	26:DG:113:LYS:HD2	2.11	0.50
37:CH:47:PHE:CE2	37:CH:77:ARG:NH1	2.79	0.50
37:CH:67:GLY:HA2	37:CH:74:VAL:CG2	2.41	0.50
42:O:52:VAL:HG23	42:O:55:ARG:NH2	2.26	0.50
77:s5:51:VAL:O	77:s5:65:ARG:NH2	2.43	0.50
77:s5:146:THR:HG1	77:s5:157:ARG:HG3	1.76	0.50
77:s5:192:GLU:HA	77:s5:195:ALA:HB3	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:1194:G:H2'	75:1:1195:A:C8	2.46	0.50
75:1:1268:G:N2	75:1:1269:U:O4	2.44	0.50
7:4:74:U:O2	80:4:230:OHX:N6	2.45	0.50
7:4:91:C:H2'	7:4:92:A:C8	2.46	0.50
9:CK:163:GLN:NE2	75:AR:3108:G:H21	2.09	0.50
13:j:137:ILE:HG12	13:j:137:ILE:O	2.12	0.50
15:CL:208:ASN:HB3	15:CL:211:ARG:HH21	1.77	0.50
20:AE:44:MET:HE2	20:AE:75:ILE:HD13	1.92	0.50
21:CM:133:ARG:HD2	21:CM:152:HIS:O	2.12	0.50
27:CN:157:ARG:NH2	2:DC:146:GLU:OE1	2.44	0.50
31:m:31:TYR:O	31:m:35:ARG:HD2	2.11	0.50
31:m:221:GLU:O	31:m:224:LYS:HB2	2.11	0.50
41:W:68:SER:O	41:W:72:LEU:HD23	2.10	0.50
3:p:54:GLU:O	3:p:58:VAL:HG12	2.11	0.50
9:q:92:TYR:CG	9:q:142:ASP:HB3	2.46	0.50
51:CS:170:ARG:HD3	2:DC:57:GLY:HA3	1.93	0.50
11:c6:50:GLU:OE1	11:c6:82:ARG:NH2	2.43	0.50
17:c7:28:PHE:CE2	58:sR:1389:C:H1'	2.46	0.50
17:c7:72:LYS:HA	17:c7:75:GLU:OE1	2.11	0.50
28:AM:41:ARG:HG2	28:AM:41:ARG:NH1	2.26	0.50
58:A:1:U:N3	24:K:54:ARG:HD2	2.25	0.50
58:A:983:A:P	80:A:2063:OHX:N6	2.83	0.50
58:A:1654:G:O6	80:A:1986:OHX:N3	2.44	0.50
59:b:36:ILE:CD1	59:b:73:TYR:HB2	2.35	0.50
61:B:26:ALA:H	61:B:149:LEU:CD1	2.23	0.50
66:CX:19:VAL:HG23	66:CX:50:PRO:O	2.12	0.50
48:x:18:ARG:NH2	48:x:147:GLU:OE1	2.45	0.50
75:AR:1770:G:H5'	75:AR:1771:C:OP2	2.11	0.50
75:AR:1936:A:H2'	75:AR:1937:U:O4'	2.11	0.50
75:AR:2960:C:H2'	75:AR:2961:G:C8	2.46	0.50
75:AR:3347:A:H61	75:AR:3358:U:H3	1.58	0.50
79:DB:130:PHE:HD1	79:DB:131:PHE:CD1	2.29	0.50
58:sR:82:U:H2'	58:sR:83:G:O4'	2.11	0.50
58:sR:852:C:H2'	58:sR:853:G:H8	1.77	0.50
58:sR:1064:G:H2'	58:sR:1065:A:C8	2.46	0.50
58:sR:1092:A:O2'	58:sR:1093:A:H3'	2.11	0.50
58:sR:1650:U:H2'	58:sR:1651:A:C8	2.46	0.50
58:sR:1696:G:H22	58:sR:1704:U:H3	1.59	0.50
78:Rb:157:VAL:HG22	78:Rb:158:PRO:O	2.11	0.50
78:Rb:207:ASP:OD1	78:Rb:207:ASP:N	2.44	0.50
13:CD:29:LEU:HA	13:CD:76:PHE:HE1	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CD:90:ALA:HB1	13:CD:101:VAL:HG22	1.93	0.50
61:s0:169:SER:O	61:s0:169:SER:OG	2.28	0.50
66:6:108:GLU:HB3	66:6:128:ARG:NH1	2.27	0.50
24:K:40:LYS:CA	24:K:43:TYR:HD2	2.24	0.50
24:K:56:ALA:O	24:K:60:LEU:HD12	2.11	0.50
30:L:44:LYS:HZ2	30:L:47:GLN:HG2	1.75	0.50
76:9:73:VAL:HG12	76:9:75:ARG:HG2	1.93	0.50
37:CH:76:LEU:N	37:CH:138:GLN:HE22	2.01	0.50
47:P:91:THR:O	47:P:93:THR:HB	2.12	0.50
75:1:182:U:H2'	75:1:183:G:H8	1.76	0.50
75:1:956:U:H2'	75:1:957:C:C6	2.47	0.50
75:1:1261:G:OP2	75:1:1261:G:N2	2.44	0.50
9:CK:47:LYS:O	9:CK:47:LYS:HD2	2.11	0.50
10:DK:44:VAL:O	10:DK:48:ALA:N	2.33	0.50
11:R:6:SER:OG	11:R:23:LYS:HA	2.11	0.50
18:s8:84:HIS:HA	18:s8:100:ALA:O	2.12	0.50
18:s8:89:GLU:O	18:s8:93:THR:HG22	2.11	0.50
20:AE:7:VAL:HG13	20:AE:77:ARG:O	2.11	0.50
23:T:104:ASN:HA	23:T:107:SER:HB3	1.92	0.50
24:s9:66:ASP:O	24:s9:70:LEU:HG	2.11	0.50
31:m:258:LYS:CG	31:m:261:THR:HG22	2.42	0.50
39:CP:70:ASN:HB3	39:CP:92:LEU:O	2.10	0.50
4:AI:67:ARG:HB2	4:AI:80:LEU:HD23	1.93	0.50
45:DQ:97:LYS:HB3	75:AR:2656:A:OP2	2.11	0.50
48:CR:26:PHE:CE1	48:CR:120:ASN:HA	2.44	0.50
5:c5:43:ARG:NH2	58:sR:1553:G:N7	2.59	0.50
9:q:45:PHE:CD1	9:q:55:VAL:HG12	2.46	0.50
54:CT:117:LYS:HG3	54:CT:118:HIS:CD2	2.46	0.50
57:CU:5:LYS:HB2	57:CU:7:TYR:CE2	2.47	0.50
57:CU:7:TYR:CE1	57:CU:34:GLU:HG2	2.47	0.50
58:A:391:A:OP2	18:J:23:LYS:HD3	2.11	0.50
58:A:761:G:O2'	58:A:789:A:N6	2.44	0.50
58:A:813:U:H4'	58:A:814:A:OP2	2.10	0.50
58:A:820:U:H3'	58:A:821:U:H5''	1.92	0.50
58:A:1579:U:H2'	58:A:1580:C:C6	2.47	0.50
58:A:1683:C:O2'	58:A:1684:U:O5'	2.26	0.50
27:t:35:ARG:HH11	75:1:685:G:P	2.34	0.50
48:x:168:LEU:CD1	48:x:173:ARG:HG3	2.41	0.50
75:AR:265:A:H5''	75:AR:266:A:OP2	2.12	0.50
75:AR:1393:A:N3	75:AR:1419:A:O2'	2.38	0.50
75:AR:3103:A:OP2	80:AR:3956:OHX:N4	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:G:63:GLN:O	77:G:89:ILE:HG13	2.12	0.50
78:h:171:SER:OG	78:h:179:LYS:HB2	2.11	0.50
53:d4:81:GLU:O	53:d4:85:PHE:HB2	2.12	0.50
56:d5:38:HIS:HD2	56:d5:72:GLY:H	1.58	0.50
12:I:109:VAL:HG12	12:I:110:GLN:H	1.75	0.50
78:Rb:128:ASP:OD1	78:Rb:130:THR:OG1	2.28	0.50
63:5:82:LYS:O	63:5:86:LYS:N	2.44	0.50
20:DF:74:ARG:HB3	20:DF:94:GLU:HG3	1.93	0.50
30:L:53:GLY:O	30:L:69:THR:HG21	2.11	0.50
37:CH:142:ASP:O	37:CH:146:ILE:HG13	2.11	0.50
42:O:127:ARG:O	42:O:131:THR:HG22	2.12	0.50
43:CI:40:LYS:NZ	43:CI:170:GLU:OE2	2.43	0.50
75:1:1480:G:H4'	75:1:1481:A:OP1	2.12	0.50
75:1:3255:U:H2'	75:1:3256:G:H8	1.75	0.50
75:1:3393:U:H2'	75:1:3394:U:H6	1.75	0.50
5:Q:43:ARG:O	5:Q:47:ARG:HG3	2.11	0.50
21:CM:100:GLY:HA3	21:CM:154:THR:OG1	2.11	0.50
22:DM:15:THR:O	22:DM:20:VAL:HG21	2.11	0.50
25:l:100:PHE:CG	75:1:660:A:H5''	2.47	0.50
25:l:289:ILE:O	25:l:295:ILE:HD12	2.12	0.50
42:c3:5:HIS:CE1	42:c3:121:ARG:HG3	2.46	0.50
11:c6:112:TYR:HE1	77:s5:67:PRO:O	1.94	0.50
56:a:95:HIS:CD2	77:G:116:HIS:HE2	2.29	0.50
58:A:566:C:O2	71:f:13:LYS:NZ	2.33	0.50
58:A:702:G:O2'	58:A:703:G:O4'	2.27	0.50
58:A:732:G:H2'	58:A:732:G:N3	2.26	0.50
58:A:1098:U:P	67:D:168:ARG:HH11	2.34	0.50
58:A:1585:U:N3	58:A:1611:A:H2	2.06	0.50
58:A:1638:G:H2'	58:A:1639:C:O4'	2.12	0.50
27:t:63:VAL:HG22	75:1:72:C:H5'	1.92	0.50
29:c9:89:ARG:NH2	58:sR:1562:G:OP1	2.42	0.50
64:C:213:ARG:O	64:C:213:ARG:HG2	2.10	0.50
70:E:105:MET:HE1	70:E:136:VAL:CG2	2.33	0.50
75:AR:94:G:H2'	75:AR:95:A:C8	2.46	0.50
75:AR:328:U:O4	80:AR:3419:OHX:N1	2.45	0.50
75:AR:550:A:O2'	75:AR:551:A:O5'	2.16	0.50
75:AR:627:U:H2'	75:AR:628:A:C8	2.46	0.50
75:AR:864:G:OP2	80:AR:3442:OHX:N3	2.44	0.50
75:AR:1423:C:H2'	75:AR:1424:C:C6	2.47	0.50
75:AR:3251:U:H2'	75:AR:3252:G:C8	2.46	0.50
77:G:107:LYS:O	77:G:111:VAL:HG23	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:830:U:C2'	58:sR:831:U:H5'	2.41	0.50
18:J:114:GLU:OE2	18:J:120:THR:HA	2.11	0.50
14:DE:64:LYS:O	14:DE:64:LYS:HD2	2.11	0.50
26:DG:32:TRP:CZ2	26:DG:53:PRO:HD2	2.47	0.50
70:s3:17:PHE:O	70:s3:21:LEU:HD12	2.11	0.50
37:CH:133:GLU:HG3	37:CH:134:ARG:N	2.26	0.50
39:v:188:ARG:HG2	39:v:188:ARG:NH1	2.23	0.50
75:1:999:G:C6	75:1:1000:C:N4	2.79	0.50
75:1:2983:C:O2'	75:1:2984:C:H5'	2.11	0.50
1:3:68:C:OP1	31:m:14:SER:OG	2.28	0.50
3:CJ:179:ILE:N	3:CJ:222:PHE:HE2	2.10	0.50
15:CL:38:LYS:HD3	15:CL:41:ALA:HB2	1.93	0.50
18:s8:72:ILE:HA	58:sR:256:A:H1'	1.93	0.50
23:T:27:LYS:NZ	58:A:1533:C:H5'	2.26	0.50
25:l:309:ARG:NH2	25:l:312:VAL:HB	2.26	0.50
29:U:118:PRO:HD2	29:U:123:ARG:HH22	1.74	0.50
31:m:99:TYR:CD2	31:m:199:ILE:HG12	2.47	0.50
33:CO:77:ARG:HD2	75:AR:525:C:OP2	2.12	0.50
36:c1:36:LYS:HD2	58:sR:248:U:H4'	1.93	0.50
44:CQ:116:LYS:HB2	75:AR:3180:A:H5'	1.92	0.50
45:DQ:38:GLN:HA	45:DQ:38:GLN:HE21	1.76	0.50
46:X:101:TYR:HB3	46:X:112:ASP:HB2	1.93	0.50
15:r:139:ARG:HB3	15:r:173:PHE:CE1	2.46	0.50
17:c7:21:TYR:HD2	17:c7:71:PHE:CD2	2.29	0.50
28:AM:45:ARG:NH2	75:1:1841:A:N3	2.57	0.50
58:A:320:U:H2'	58:A:321:C:C6	2.47	0.50
58:A:323:A:OP2	18:J:10:LYS:HA	2.11	0.50
58:A:1340:U:O4'	58:A:1378:U:H5'	2.12	0.50
58:A:1642:G:H2'	58:A:1643:U:H6	1.76	0.50
27:t:76:THR:O	27:t:78:ALA:N	2.44	0.50
62:c:43:ILE:HG22	62:c:44:THR:H	1.76	0.50
67:D:106:ASP:OD1	67:D:108:ASN:N	2.41	0.50
41:d1:69:LEU:HA	41:d1:72:LEU:HB2	1.93	0.50
46:d2:57:ARG:HG2	58:sR:863:A:O5'	2.12	0.50
75:AR:659:G:H4'	25:CF:92:ASN:O	2.11	0.50
75:AR:1240:A:N6	75:AR:1241:U:O4	2.44	0.50
75:AR:1334:U:H5'	43:CI:207:LEU:O	2.11	0.50
75:AR:2395:G:C8	80:AR:3856:OHX:N2	2.80	0.50
75:AR:3191:G:H2'	75:AR:3192:U:C6	2.46	0.50
75:AR:3195:U:H6	75:AR:3197:G:H21	1.59	0.50
77:G:125:THR:CG2	77:G:127:GLN:HB2	2.39	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:G:222:LYS:C	77:G:224:ASN:H	2.19	0.50
58:sR:982:U:OP1	80:sR:2050:OHX:N4	2.45	0.50
58:sR:1091:A:H4'	58:sR:1092:A:O5'	2.12	0.50
58:sR:1183:A:N3	58:sR:1210:C:O2'	2.44	0.50
78:Rb:16:HIS:NE2	78:Rb:43:ILE:HG12	2.27	0.50
59:d6:53:LEU:H	59:d6:53:LEU:CD2	2.25	0.50
59:d6:88:SER:OG	59:d6:90:GLU:OE1	2.30	0.50
66:6:28:ASN:HD21	66:6:112:SER:H	1.59	0.50
19:CE:10:ARG:NH2	19:CE:14:LEU:HD21	2.26	0.50
19:CE:35:ASP:HA	19:CE:184:ASN:ND2	2.26	0.50
14:DE:63:SER:O	14:DE:65:THR:OG1	2.29	0.50
25:CF:148:ILE:HA	25:CF:149:PRO:C	2.36	0.50
31:CG:279:LYS:NZ	31:CG:283:ALA:HB2	2.26	0.50
73:s4:87:MET:HA	73:s4:100:ARG:HD2	1.92	0.50
43:CI:165:ASP:O	43:CI:168:ILE:HD12	2.11	0.50
47:P:125:SER:OG	47:P:126:THR:N	2.43	0.50
75:1:371:G:H4'	75:1:396:A:N1	2.27	0.50
75:1:839:C:O2'	75:1:1724:U:OP1	2.28	0.50
75:1:844:G:O6	80:1:3904:OHX:N5	2.44	0.50
75:1:1770:G:H5'	75:1:1771:C:OP2	2.11	0.50
5:Q:22:LEU:CD1	5:Q:109:PRO:HG3	2.38	0.50
9:CK:86:TYR:N	9:CK:187:ILE:HG13	2.27	0.50
14:AD:27:TYR:O	14:AD:31:VAL:HG13	2.12	0.50
14:AD:41:LEU:N	14:AD:92:ILE:HD11	2.27	0.50
18:s8:137:LYS:HZ1	58:sR:190:C:N4	2.10	0.50
19:k:169:THR:CG2	19:k:171:LEU:HG	2.41	0.50
29:U:113:ILE:C	29:U:125:SER:HB3	2.37	0.50
31:m:126:GLU:HA	31:m:196:ARG:HD2	1.93	0.50
4:AI:86:ARG:O	4:AI:90:ARG:HD2	2.12	0.50
47:c4:45:GLY:HA2	47:c4:54:GLU:HG2	1.93	0.50
10:AJ:94:ILE:HD12	10:AJ:95:ALA:N	2.26	0.50
50:Y:57:LEU:HD11	50:Y:73:ARG:HB2	1.94	0.50
50:Y:96:VAL:O	50:Y:100:ASP:HB2	2.11	0.50
5:c5:76:VAL:O	5:c5:94:VAL:HA	2.11	0.50
9:q:143:GLU:O	9:q:144:ILE:HD13	2.12	0.50
16:AK:87:SER:O	80:AK:103:OHX:N6	2.45	0.50
53:Z:37:LYS:HG3	53:Z:60:PHE:CE2	2.47	0.50
53:Z:74:LEU:HD12	53:Z:76:TYR:CE2	2.47	0.50
53:Z:81:GLU:HA	53:Z:84:LYS:HG2	1.92	0.50
54:CT:11:ALA:O	54:CT:15:VAL:HG23	2.11	0.50
58:A:488:G:OP1	58:A:488:G:H4'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:594:A:N3	58:A:595:G:H1'	2.26	0.50
58:A:855:A:C2	58:A:857:U:H1'	2.46	0.50
58:A:1142:A:H2'	58:A:1143:A:C8	2.47	0.50
58:A:1424:A:H2'	58:A:1425:A:O4'	2.11	0.50
58:A:1679:G:N7	80:A:2153:OHX:N3	2.59	0.50
61:B:29:VAL:CG2	61:B:150:ASP:HB3	2.42	0.50
65:d:12:VAL:HG12	65:d:30:VAL:HG12	1.92	0.50
35:d0:88:LYS:NZ	58:sR:1516:A:P	2.85	0.50
45:AP:11:TYR:C	45:AP:11:TYR:HD1	2.19	0.50
67:D:80:VAL:HA	67:D:102:VAL:HG23	1.93	0.50
49:AQ:51:ALA:O	49:AQ:54:ILE:HD12	2.11	0.50
70:E:39:VAL:HG13	70:E:48:VAL:HG22	1.92	0.50
70:E:55:THR:O	70:E:58:VAL:HG22	2.11	0.50
46:d2:96:ALA:HB3	46:d2:99:PHE:CE1	2.46	0.50
73:F:29:PRO:O	73:F:31:PRO:HD3	2.12	0.50
75:AR:789:A:H2'	75:AR:790:U:C6	2.46	0.50
75:AR:1367:G:HO2'	75:AR:1368:U:H6	1.58	0.50
77:G:131:GLN:O	77:G:134:VAL:HG22	2.12	0.50
78:h:118:LYS:HD3	78:h:120:SER:HB3	1.93	0.50
6:H:160:ARG:HH12	6:H:171:LYS:HE2	1.75	0.50
58:sR:843:U:H2'	58:sR:844:A:C8	2.46	0.50
58:sR:1206:U:OP2	58:sR:1207:C:O2'	2.27	0.50
63:5:41:ILE:HD12	63:5:79:LEU:HD13	1.92	0.50
19:CE:105:VAL:HG21	19:CE:148:LEU:HD21	1.93	0.50
64:s1:77:GLU:O	64:s1:80:SER:OG	2.29	0.50
65:d8:39:THR:C	65:d8:40:ILE:HD12	2.36	0.50
75:1:789:A:H2'	75:1:790:U:C6	2.47	0.50
75:1:1071:U:O2'	75:1:1072:G:OP2	2.30	0.50
75:1:3010:U:OP2	80:1:3875:OHX:N6	2.45	0.50
75:1:3102:G:N7	80:1:4022:OHX:N4	2.59	0.50
5:Q:90:ILE:HD11	5:Q:112:LEU:HD21	1.93	0.50
6:s6:5:ILE:HD11	6:s6:16:PHE:CD1	2.46	0.50
7:4:46:G:OP2	28:AM:15:LYS:NZ	2.45	0.50
11:R:122:ARG:HB3	58:A:1584:G:H5''	1.93	0.50
11:R:135:ARG:N	58:A:1586:A:OP1	2.43	0.50
13:j:200:ARG:NH1	75:1:2186:U:OP2	2.38	0.50
18:s8:137:LYS:NZ	58:sR:190:C:N4	2.60	0.50
19:k:5:LYS:HG2	19:k:5:LYS:O	2.12	0.50
23:T:45:LEU:HD13	23:T:45:LEU:C	2.36	0.50
31:m:268:GLU:O	31:m:268:GLU:HG3	2.11	0.50
42:c3:73:ARG:NH1	58:sR:859:A:C4	2.79	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:Y:53:VAL:CG2	50:Y:98:GLU:HA	2.42	0.50
50:Y:78:LYS:HB3	58:A:434:G:H5'	1.92	0.50
5:c5:60:LEU:HG	5:c5:76:VAL:HG21	1.94	0.50
52:p0:59:VAL:O	52:p0:63:ILE:HG12	2.11	0.50
28:AM:5:LYS:HE2	75:1:1834:U:OP1	2.11	0.50
58:A:67:A:N6	58:A:83:G:O2'	2.45	0.50
58:A:641:G:N2	58:A:693:U:O2	2.37	0.50
58:A:743:U:OP1	12:I:107:ARG:HG3	2.12	0.50
58:A:793:A:H5''	58:A:794:U:H5'	1.94	0.50
60:CV:55:LYS:HG3	60:CV:56:PHE:N	2.26	0.50
61:B:18:LEU:HD12	61:B:23:HIS:ND1	2.27	0.50
64:C:142:PHE:O	64:C:207:LEU:HA	2.12	0.50
35:d0:88:LYS:O	35:d0:89:ARG:HD3	2.12	0.50
46:d2:68:ARG:HD2	67:s2:230:TRP:CD2	2.46	0.50
75:AR:191:U:H2'	75:AR:192:C:H6	1.77	0.50
75:AR:271:C:H2'	75:AR:272:G:O4'	2.11	0.50
75:AR:908:G:H4'	75:AR:909:G:O5'	2.12	0.50
78:h:16:HIS:CD2	78:h:17:ASN:H	2.30	0.50
78:h:169:ILE:O	78:h:181:TRP:N	2.43	0.50
53:d4:8:ARG:NH2	58:sR:780:A:N1	2.60	0.50
6:H:138:ALA:N	6:H:175:ILE:HD11	2.26	0.50
58:sR:470:A:OP2	80:sR:2063:OHX:N4	2.45	0.50
58:sR:837:G:H2'	58:sR:838:G:H8	1.77	0.50
58:sR:1097:U:H1'	58:sR:1098:U:OP2	2.11	0.50
58:sR:1349:G:O2'	58:sR:1379:C:N3	2.36	0.50
78:Rb:42:LEU:HD11	78:Rb:82:SER:HB3	1.94	0.50
8:DD:58:LYS:HG2	8:DD:58:LYS:O	2.12	0.50
61:s0:143:VAL:HG13	61:s0:156:VAL:HA	1.93	0.50
61:s0:179:ARG:HE	61:s0:183:ARG:NE	1.91	0.50
32:DH:32:ILE:HG12	32:DH:100:ILE:HG13	1.93	0.50
79:AA:111:LYS:NZ	75:1:1629:U:O4	2.39	0.50
77:s5:130:ILE:O	77:s5:134:VAL:HG13	2.12	0.50
75:1:595:G:H1	75:1:609:G:H5''	1.76	0.50
75:1:718:G:N2	75:1:721:G:H1'	2.27	0.50
75:1:1222:G:O6	80:1:4031:OHX:N2	2.45	0.50
75:1:3009:G:N7	80:1:3721:OHX:N2	2.60	0.50
2:AB:118:ILE:HD12	2:AB:119:PRO:O	2.12	0.50
4:DJ:101:THR:HG23	4:DJ:104:GLN:H	1.76	0.50
5:Q:32:ASP:HA	5:Q:35:LYS:HE2	1.94	0.50
5:Q:91:GLY:H	5:Q:107:ILE:HB	1.77	0.50
12:s7:103:SER:HG	12:s7:106:SER:H	1.59	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AD:35:ARG:HA	79:AA:4:PHE:CZ	2.47	0.50
18:s8:25:ARG:HA	58:sR:400:A:H5''	1.94	0.50
23:T:66:LEU:HD23	23:T:66:LEU:N	2.26	0.50
29:U:52:GLY:C	29:U:54:PHE:H	2.18	0.50
30:c0:32:HIS:HB3	30:c0:35:ILE:O	2.11	0.50
5:c5:108:ARG:HB2	5:c5:110:GLU:OE2	2.11	0.50
51:CS:175:ALA:HB3	2:DC:51:GLY:O	2.12	0.50
52:p0:55:LYS:O	52:p0:59:VAL:HG13	2.12	0.50
52:p0:190:VAL:HG12	52:p0:197:PHE:O	2.11	0.50
53:Z:105:ARG:HG3	58:A:444:C:OP2	2.12	0.50
15:r:15:LYS:NZ	75:l:1125:U:OP1	2.45	0.50
21:s:91:LEU:O	21:s:171:VAL:O	2.30	0.50
58:A:304:U:H2'	58:A:305:C:C6	2.47	0.50
58:A:1227:A:OP1	58:A:1228:G:H2'	2.12	0.50
61:B:54:TRP:O	61:B:58:VAL:HG13	2.11	0.50
29:c9:88:VAL:CG2	58:sR:1172:G:H21	2.25	0.50
44:w:14:HIS:O	44:w:41:LEU:HD12	2.11	0.50
66:CX:2:SER:N	66:CX:57:MET:H	2.10	0.50
67:D:113:LEU:CD1	67:D:115:ILE:HD11	2.41	0.50
67:D:179:VAL:O	67:D:179:VAL:HG23	2.12	0.50
48:x:59:PRO:HG3	48:x:76:PHE:CD2	2.45	0.50
70:E:71:LEU:HB3	30:L:20:VAL:HG21	1.94	0.50
75:AR:243:G:H2'	75:AR:244:G:O4'	2.11	0.50
75:AR:2619:G:N7	80:AR:3570:OHX:N5	2.60	0.50
75:AR:2746:A:H2'	75:AR:2747:A:O4'	2.12	0.50
6:H:49:VAL:HG23	6:H:114:VAL:HG12	1.93	0.50
58:sR:138:A:N6	58:sR:266:A:H61	2.09	0.50
58:sR:151:G:H2'	58:sR:152:U:H6	1.76	0.50
58:sR:496:G:O6	58:sR:497:G:N2	2.45	0.50
58:sR:898:A:N3	58:sR:899:G:H1'	2.27	0.50
58:sR:1340:U:C2	58:sR:1378:U:H4'	2.47	0.50
58:sR:1477:G:H2'	58:sR:1478:G:C8	2.46	0.50
58:sR:1698:G:O2'	58:sR:1699:G:O5'	2.28	0.50
58:sR:1776:A:H2'	58:sR:1777:G:C8	2.47	0.50
56:d5:40:VAL:O	56:d5:75:LEU:HD11	2.11	0.50
56:d5:98:GLN:NE2	77:s5:191:ALA:HB3	2.27	0.50
61:s0:23:HIS:HA	61:s0:48:ILE:CG2	2.41	0.50
24:K:108:ARG:HG2	24:K:144:PRO:O	2.12	0.50
64:s1:127:VAL:HG11	64:s1:176:VAL:CG1	2.41	0.50
25:CF:74:ILE:HG12	25:CF:94:CYS:SG	2.52	0.50
70:s3:31:GLU:HA	70:s3:107:PHE:HE2	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:CH:54:TYR:CE1	37:CH:63:LEU:HG	2.47	0.50
43:CI:88:ARG:NH2	43:CI:92:ILE:HA	2.27	0.50
77:s5:51:VAL:HG22	77:s5:131:GLN:CG	2.41	0.50
77:s5:68:ILE:CD1	77:s5:88:PRO:HB3	2.42	0.50
75:1:65:A:H3'	75:1:111:C:H41	1.76	0.50
75:1:109:A:H4'	75:1:110:G:OP1	2.11	0.50
75:1:627:U:O4	80:1:4055:OHX:N2	2.44	0.50
75:1:1176:C:H2'	75:1:1177:G:N2	2.27	0.50
75:1:2592:G:H4'	75:1:2594:C:C2	2.47	0.50
1:3:121:U:OP2	31:m:265:TYR:OH	2.25	0.50
3:CJ:56:VAL:HA	3:CJ:59:GLN:NE2	2.27	0.50
3:CJ:116:VAL:HG13	3:CJ:117:ALA:H	1.77	0.50
3:CJ:157:VAL:HA	75:AR:147:U:O4	2.12	0.50
7:4:129:C:H1'	75:1:1618:G:H4'	1.93	0.50
11:R:4:VAL:CG1	11:R:24:ALA:HB3	2.42	0.50
17:S:75:GLU:HA	17:S:78:ARG:HH22	1.77	0.50
19:k:160:VAL:HG13	19:k:183:LEU:HD13	1.94	0.50
19:k:238:LEU:HB2	19:k:246:LEU:HB2	1.93	0.50
20:AE:41:LYS:O	20:AE:45:GLY:HA2	2.11	0.50
21:CM:54:VAL:HG21	21:CM:57:PHE:CD2	2.47	0.50
23:T:28:ILE:C	23:T:32:LEU:HD21	2.37	0.50
25:l:307:GLN:OE1	75:1:1345:G:N2	2.45	0.50
29:U:11:ALA:HA	29:U:63:ARG:HH22	1.77	0.50
38:AH:24:LYS:HZ1	75:1:1669:C:P	2.33	0.50
39:CP:81:TYR:OH	75:AR:908:G:H3'	2.12	0.50
42:c3:26:PHE:CD2	42:c3:66:ILE:HD11	2.47	0.50
44:CQ:34:VAL:HG21	44:CQ:112:TYR:CE1	2.46	0.50
10:AJ:58:ILE:HA	10:AJ:61:ILE:HD12	1.94	0.50
11:c6:47:LYS:NZ	11:c6:79:TYR:OH	2.45	0.50
11:c6:99:GLU:OE2	78:Rb:60:SER:HB3	2.12	0.50
58:A:351:C:H4'	58:A:352:A:OP2	2.11	0.50
58:A:398:G:P	18:J:47:ARG:HH22	2.35	0.50
58:A:740:A:C2'	58:A:741:C:H5'	2.42	0.50
58:A:851:U:O5'	54:z:172:ARG:NH1	2.43	0.50
58:A:861:U:H4'	42:O:20:ARG:NH1	2.27	0.50
58:A:1154:G:O6	80:A:2087:OHX:N5	2.45	0.50
60:CV:106:LEU:HA	60:CV:109:VAL:HG12	1.93	0.50
63:CW:40:HIS:HA	63:CW:47:VAL:HG11	1.94	0.50
63:CW:54:VAL:HG12	63:CW:67:SER:HB2	1.93	0.50
35:d0:57:ARG:HA	35:d0:89:ARG:HD3	1.93	0.50
66:CX:24:ASN:O	66:CX:99:ALA:HA	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:E:217:ILE:HA	78:h:196:ASN:ND2	2.26	0.50
72:CZ:96:LYS:O	72:CZ:100:LYS:HB2	2.12	0.50
50:d3:59:ILE:H	50:d3:59:ILE:HD12	1.77	0.50
75:AR:176:G:H1	75:AR:242:C:N4	2.10	0.50
75:AR:943:U:H3'	2:DC:13:GLY:HA2	1.92	0.50
75:AR:2255:A:N3	58:sR:1758:U:H1'	2.27	0.50
75:AR:2403:G:N7	75:AR:2870:C:H4'	2.27	0.50
75:AR:2871:G:H5''	75:AR:2872:A:H5'	1.92	0.50
75:AR:3305:A:OP1	19:CE:334:ARG:NH2	2.45	0.50
79:DB:7:ALA:HB1	79:DB:89:VAL:HG11	1.94	0.50
79:DB:81:LEU:HD22	38:DI:90:ILE:HG22	1.94	0.50
79:DB:85:TYR:HE2	79:DB:129:TRP:CE2	2.30	0.50
7:AT:149:A:H2'	7:AT:150:G:C8	2.47	0.50
12:I:63:PRO:O	12:I:66:SER:OG	2.13	0.50
64:s1:38:PHE:CG	64:s1:73:LEU:HD23	2.47	0.50
64:s1:161:ILE:O	64:s1:165:ARG:HB2	2.12	0.50
64:s1:201:THR:O	64:s1:203:ASP:N	2.45	0.50
25:CF:193:LYS:HA	25:CF:198:ARG:HA	1.94	0.50
30:L:13:GLN:O	30:L:17:GLN:HG2	2.12	0.50
26:DG:75:LEU:HD23	37:CH:3:ALA:HB1	1.93	0.50
36:M:37:ASN:HD22	36:M:44:THR:CG2	2.25	0.50
70:s3:125:TYR:C	70:s3:125:TYR:CD1	2.89	0.50
37:CH:38:THR:O	37:CH:40:LEU:HD13	2.12	0.50
75:1:210:U:C2	75:1:230:U:H4'	2.47	0.50
75:1:541:U:H2'	75:1:542:G:C8	2.47	0.50
75:1:924:G:OP1	80:1:3642:OHX:N3	2.45	0.50
3:CJ:183:LYS:NZ	75:AR:147:U:O4	2.30	0.49
6:s6:180:THR:O	6:s6:184:LEU:HD12	2.12	0.49
9:CK:29:GLY:HA3	9:CK:82:VAL:HG13	1.94	0.49
12:s7:126:LEU:HD21	12:s7:173:TYR:HE2	1.77	0.49
13:j:179:LEU:O	13:j:184:ARG:HD2	2.12	0.49
20:AE:44:MET:O	20:AE:46:THR:N	2.38	0.49
25:l:183:LYS:HD3	75:1:1386:A:N7	2.27	0.49
29:U:136:ALA:HA	29:U:139:THR:H	1.77	0.49
34:DO:99:CYS:HB3	34:DO:115:CYS:HB3	1.94	0.49
39:CP:172:ARG:O	39:CP:183:THR:OG1	2.30	0.49
41:W:63:GLY:HA2	61:B:154:GLU:HA	1.93	0.49
43:o:146:GLN:O	43:o:244:ASN:ND2	2.44	0.49
46:X:53:ILE:HA	12:I:139:ARG:HD3	1.93	0.49
9:q:170:LYS:NZ	75:1:2902:A:OP1	2.45	0.49
52:p0:192:ASP:OD1	52:p0:193:ASN:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:r:171:TRP:CZ3	15:r:182:LEU:HD21	2.46	0.49
54:CT:176:ARG:HH22	58:sR:852:C:H5''	1.77	0.49
17:c7:21:TYR:CD2	17:c7:71:PHE:CD2	2.99	0.49
57:CU:73:LYS:NZ	57:CU:97:VAL:O	2.36	0.49
58:A:122:U:O3'	73:F:77:ARG:NH2	2.44	0.49
58:A:679:U:H2'	58:A:680:U:C5	2.46	0.49
58:A:773:C:H5''	73:F:21:ASP:HB2	1.94	0.49
58:A:920:U:H2'	58:A:921:U:O4'	2.12	0.49
59:b:68:TYR:HB2	64:C:111:ARG:HB3	1.94	0.49
61:B:38:PHE:CD1	61:B:49:ASN:HB2	2.47	0.49
62:c:53:ALA:HB2	62:c:66:PRO:HD3	1.94	0.49
45:AP:32:LYS:NZ	75:1:2227:C:OP1	2.45	0.49
50:d3:136:TRP:CD2	50:d3:137:LYS:NZ	2.79	0.49
75:AR:284:A:H4'	75:AR:285:A:C2	2.46	0.49
75:AR:551:A:O2'	75:AR:552:G:H8	1.94	0.49
75:AR:589:A:H1'	75:AR:1337:A:H5''	1.93	0.49
75:AR:1471:U:H2'	75:AR:1472:U:C6	2.47	0.49
75:AR:2129:U:O4	80:AR:3422:OHX:N1	2.45	0.49
75:AR:2163:C:H4'	13:CD:8:GLN:HA	1.93	0.49
75:AR:2426:U:H2'	75:AR:2427:U:C6	2.47	0.49
75:AR:2775:U:H1'	2:DC:58:MET:CE	2.33	0.49
75:AR:3295:A:OP2	19:CE:126:LYS:N	2.37	0.49
78:h:34:LEU:HB3	78:h:71:CYS:SG	2.52	0.49
6:H:166:GLU:C	6:H:167:LYS:HG2	2.36	0.49
58:sR:869:A:H2'	58:sR:870:C:O4'	2.12	0.49
78:Rb:195:HIS:CD2	78:Rb:199:ILE:HG21	2.47	0.49
61:s0:36:TYR:CD1	61:s0:161:PRO:HG3	2.46	0.49
61:s0:180:GLU:HA	61:s0:183:ARG:HB2	1.94	0.49
62:d7:48:SER:HB2	62:d7:49:HIS:CD2	2.46	0.49
62:d7:80:ARG:HD3	62:d7:82:LYS:HG2	1.93	0.49
64:s1:187:LYS:O	64:s1:190:PRO:HD2	2.12	0.49
31:CG:93:THR:O	31:CG:93:THR:OG1	2.28	0.49
70:s3:14:ASP:O	70:s3:17:PHE:HB3	2.11	0.49
79:AA:57:HIS:HB3	79:AA:62:VAL:HG22	1.94	0.49
79:AA:88:ASP:OD1	79:AA:90:GLU:HG2	2.11	0.49
43:CI:137:GLY:HA3	43:CI:233:GLU:HA	1.93	0.49
38:DI:74:ARG:HG2	38:DI:75:ALA:O	2.12	0.49
47:P:26:THR:HG21	47:P:97:GLY:O	2.11	0.49
77:s5:165:LEU:O	77:s5:169:ASN:ND2	2.35	0.49
75:1:1348:U:O4'	75:1:1349:G:N2	2.45	0.49
75:1:3263:G:H2'	75:1:3264:G:H8	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CJ:91:PHE:CE2	3:CJ:185:ARG:NH1	2.77	0.49
7:4:45:C:H4'	28:AM:11:GLN:NE2	2.27	0.49
10:DK:86:LYS:O	10:DK:90:MET:HG3	2.12	0.49
15:CL:210:ILE:HG21	31:CG:293:LEU:HD12	1.93	0.49
23:T:88:ARG:NH1	23:T:91:ASP:HB2	2.26	0.49
25:l:209:TYR:HE1	75:1:689:U:O4	1.95	0.49
27:CN:185:LYS:HD3	27:CN:188:ARG:HG2	1.94	0.49
31:m:93:THR:HG22	31:m:158:ARG:NH1	2.27	0.49
5:c5:91:GLY:N	5:c5:107:ILE:O	2.26	0.49
9:q:171:ASP:HA	75:1:2899:C:C5	2.47	0.49
58:A:355:G:O6	80:A:2131:OHX:N6	2.46	0.49
58:A:442:C:O2'	58:A:525:A:N1	2.42	0.49
58:A:577:G:C5	55:i:99:LYS:HD3	2.47	0.49
58:A:1317:C:H2'	58:A:1318:G:O4'	2.12	0.49
59:b:24:VAL:HG23	59:b:72:HIS:O	2.12	0.49
61:B:80:THR:HG22	61:B:83:GLN:HE21	1.77	0.49
67:D:104:VAL:HG22	67:D:132:ALA:HB1	1.93	0.49
70:E:54:ARG:HG3	70:E:57:ASP:HB2	1.94	0.49
46:d2:18:GLU:HG3	46:d2:69:LEU:HB3	1.93	0.49
55:i:23:LYS:HD3	55:i:23:LYS:N	2.27	0.49
54:z:110:ARG:HH22	75:1:1720:U:P	2.35	0.49
75:AR:339:C:OP2	25:CF:197:ARG:NH2	2.44	0.49
75:AR:385:A:H2'	75:AR:386:A:C8	2.47	0.49
76:DA:53:ASP:HB2	76:DA:110:HIS:HD2	1.75	0.49
77:G:184:PHE:CE1	77:G:185:ARG:CD	2.95	0.49
78:h:70:ASP:OD2	78:h:155:ARG:NH1	2.44	0.49
78:h:117:LYS:HD3	78:h:117:LYS:H	1.77	0.49
79:DB:73:LYS:HG2	79:DB:74:VAL:O	2.11	0.49
79:DB:84:ARG:HG2	79:DB:85:TYR:CE1	2.48	0.49
58:sR:82:U:OP2	80:sR:2003:OHX:N2	2.45	0.49
58:sR:1022:C:O2'	58:sR:1125:A:N1	2.41	0.49
58:sR:1316:G:O2'	58:sR:1401:A:O2'	2.10	0.49
12:I:11:GLN:HB3	12:I:13:PRO:CD	2.42	0.49
8:DD:23:LYS:CG	8:DD:24:PRO:HD2	2.41	0.49
36:M:110:HIS:O	36:M:139:VAL:HG23	2.12	0.49
70:s3:138:VAL:HG22	70:s3:184:ILE:HG22	1.94	0.49
37:CH:40:LEU:CD2	37:CH:54:TYR:HB2	2.42	0.49
73:s4:90:ILE:H	73:s4:90:ILE:HD12	1.78	0.49
79:AA:95:VAL:HG21	79:AA:110:ALA:HA	1.94	0.49
77:s5:37:GLN:HE21	77:s5:45:LYS:HD2	1.77	0.49
77:s5:137:ILE:HA	77:s5:140:THR:OG1	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:230:U:H2'	75:1:231:G:O4'	2.11	0.49
75:1:3286:G:H5'	75:1:3287:U:OP2	2.12	0.49
1:3:27:A:P	31:m:57:ASN:H	2.34	0.49
3:CJ:48:ARG:NH1	75:AR:2584:G:H1	2.10	0.49
3:CJ:52:TRP:HB3	3:CJ:56:VAL:CG1	2.41	0.49
16:DL:9:GLY:HA3	75:AR:1852:G:H1'	1.95	0.49
19:k:65:SER:OG	75:1:3039:C:OP1	2.25	0.49
19:k:247:ARG:NH1	75:1:2341:A:OP2	2.45	0.49
23:T:3:LEU:HD23	23:T:4:VAL:O	2.12	0.49
23:T:102:ALA:HB3	23:T:104:ASN:H	1.76	0.49
33:CO:121:MET:O	33:CO:125:LYS:HG3	2.13	0.49
36:c1:37:ASN:HA	36:c1:44:THR:CG2	2.41	0.49
41:W:71:ARG:HG2	41:W:72:LEU:CD2	2.43	0.49
42:c3:64:ARG:NH1	58:sR:861:U:OP1	2.45	0.49
47:c4:33:LEU:HB3	64:s1:66:VAL:CG2	2.42	0.49
47:c4:100:ALA:HA	47:c4:103:ARG:CZ	2.42	0.49
47:c4:103:ARG:HA	59:d6:53:LEU:HD11	1.94	0.49
48:CR:22:LEU:HD12	48:CR:146:ILE:HG13	1.94	0.49
11:c6:7:VAL:CG2	11:c6:22:VAL:HB	2.42	0.49
11:c6:12:LYS:H	11:c6:83:GLN:HE22	1.60	0.49
15:r:34:TYR:HD2	75:1:1008:U:H4'	1.78	0.49
15:r:63:GLU:CD	15:r:63:GLU:H	2.20	0.49
58:A:50:C:N4	58:A:425:A:OP2	2.38	0.49
58:A:607:G:H5'	58:A:613:G:N2	2.27	0.49
58:A:901:G:H2'	58:A:902:G:C8	2.47	0.49
23:c8:117:LYS:O	23:c8:120:ARG:HD2	2.13	0.49
61:B:58:VAL:O	61:B:62:ARG:HB2	2.12	0.49
29:c9:84:LYS:HB3	29:c9:94:ILE:HG12	1.95	0.49
64:C:103:MET:HG2	64:C:104:ASP:H	1.76	0.49
73:F:194:THR:O	73:F:195:ILE:HG12	2.11	0.49
1:AS:11:A:N1	1:AS:67:G:O2'	2.41	0.49
58:sR:353:A:OP2	80:sR:2073:OHX:N3	2.44	0.49
58:sR:1226:A:O2'	58:sR:1256:A:N6	2.46	0.49
56:d5:98:GLN:HG3	56:d5:100:ILE:CG2	2.42	0.49
78:Rb:218:GLY:HA3	78:Rb:238:ASP:O	2.12	0.49
64:s1:36:SER:CB	64:s1:231:LEU:HD22	2.41	0.49
26:DG:95:GLU:OE1	26:DG:120:THR:OG1	2.25	0.49
42:O:3:ARG:HB2	42:O:8:GLY:O	2.12	0.49
75:1:92:G:H8	85:1:3478:SPD:H41	1.77	0.49
75:1:905:U:O2'	75:1:910:G:O3'	2.28	0.49
75:1:1188:U:OP1	75:1:1210:U:O2'	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:1273:A:O2'	75:1:1274:A:OP1	2.30	0.49
2:AB:2:PRO:HD3	75:1:792:G:H5''	1.94	0.49
5:Q:79:HIS:ND1	58:A:1241:G:O4'	2.46	0.49
12:s7:173:TYR:CE1	12:s7:177:THR:HG21	2.47	0.49
15:CL:72:ALA:HB2	15:CL:155:ALA:HB2	1.93	0.49
17:S:4:VAL:HG21	58:A:1315:U:O2	2.12	0.49
25:l:235:LEU:HA	25:l:238:LEU:HB2	1.94	0.49
29:U:11:ALA:HB1	58:A:1480:G:H4'	1.94	0.49
37:n:146:ILE:O	37:n:150:LYS:HG2	2.12	0.49
39:CP:140:LYS:O	39:CP:144:ARG:HG3	2.11	0.49
43:o:60:ARG:HA	43:o:63:ILE:HD12	1.93	0.49
43:o:158:LYS:CD	43:o:158:LYS:H	2.25	0.49
45:DQ:15:LYS:CA	45:DQ:18:ARG:HG3	2.42	0.49
9:q:8:GLN:HG3	9:q:68:LEU:HG	1.95	0.49
9:q:38:LEU:O	9:q:41:ILE:HG22	2.12	0.49
21:s:133:ARG:HB2	21:s:152:HIS:HE2	1.77	0.49
58:A:97:C:H2'	58:A:98:U:C6	2.48	0.49
58:A:179:A:H2'	58:A:180:A:O4'	2.12	0.49
58:A:1199:G:C4	68:e:40:ARG:HD3	2.47	0.49
58:A:1278:G:O4'	70:E:174:HIS:HE1	1.95	0.49
23:c8:131:LEU:O	23:c8:132:ARG:NH1	2.45	0.49
62:c:42:ASN:C	62:c:43:ILE:HD13	2.37	0.49
69:CY:80:ARG:NH2	58:sR:165:G:O2'	2.45	0.49
73:F:100:ARG:NH2	73:F:121:TYR:O	2.45	0.49
73:F:100:ARG:HD3	73:F:236:ILE:HD13	1.94	0.49
73:F:126:VAL:HG13	73:F:158:ASP:O	2.12	0.49
73:F:213:SER:O	73:F:213:SER:OG	2.26	0.49
54:z:43:LYS:HE3	75:1:1765:U:H5'	1.92	0.49
54:z:134:HIS:CE1	54:z:137:ALA:HB2	2.47	0.49
75:AR:209:A:H4'	75:AR:211:A:C8	2.47	0.49
75:AR:551:A:HO2'	75:AR:552:G:H8	1.59	0.49
75:AR:3121:U:H1'	75:AR:3122:A:H5''	1.95	0.49
77:G:92:ARG:HG3	77:G:92:ARG:HH11	1.78	0.49
53:d4:20:ARG:O	53:d4:21:LYS:HD3	2.12	0.49
1:AS:107:C:H2'	1:AS:108:A:C8	2.47	0.49
79:DB:70:PRO:HG3	79:DB:115:LYS:HB2	1.94	0.49
58:sR:482:U:H2'	58:sR:483:A:C8	2.48	0.49
12:I:50:ASP:HB3	12:I:56:LYS:CG	2.42	0.49
12:I:160:GLN:CD	12:I:160:GLN:H	2.20	0.49
78:Rb:9:LEU:HB3	78:Rb:313:TRP:CD1	2.47	0.49
61:s0:195:TRP:CD1	61:s0:197:ILE:O	2.66	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:d7:36:LYS:NZ	62:d7:43:ILE:HA	2.27	0.49
14:DE:52:ARG:HH12	38:DI:90:ILE:HD12	1.76	0.49
24:K:126:ARG:HD3	24:K:144:PRO:HG3	1.94	0.49
64:s1:114:VAL:HG23	64:s1:114:VAL:O	2.12	0.49
67:s2:43:ARG:NH1	67:s2:248:SER:N	2.60	0.49
70:s3:30:ALA:HB1	70:s3:107:PHE:HZ	1.77	0.49
75:1:1709:C:H2'	75:1:1710:C:C6	2.47	0.49
75:1:1818:U:H2'	75:1:1819:U:O4'	2.11	0.49
75:1:1911:A:H8	75:1:1911:A:O5'	1.95	0.49
75:1:2225:U:H2'	75:1:2226:U:C6	2.47	0.49
75:1:3128:G:OP2	80:1:3695:OHX:N2	2.45	0.49
3:CJ:63:LYS:NZ	7:AT:153:U:OP1	2.30	0.49
7:4:136:G:OP1	72:8:48:SER:OG	2.28	0.49
12:s7:71:HIS:CE1	12:s7:131:PHE:CD1	3.00	0.49
12:s7:110:GLN:O	12:s7:110:GLN:CG	2.59	0.49
13:j:84:THR:HG23	49:AQ:63:THR:HB	1.93	0.49
17:S:16:LEU:HD11	17:S:54:THR:HG21	1.95	0.49
23:T:16:ARG:HE	23:T:21:ASN:CG	2.20	0.49
23:T:41:ARG:NH2	29:U:36:ILE:O	2.36	0.49
25:l:188:ARG:O	25:l:193:LYS:HE3	2.11	0.49
29:U:29:GLU:OE1	29:U:110:LYS:HD3	2.12	0.49
37:n:5:LYS:HE3	75:1:1422:G:H21	1.77	0.49
41:W:10:GLU:OE1	67:D:140:ARG:NE	2.36	0.49
53:Z:29:HIS:HE1	53:Z:34:ASN:H	1.58	0.49
54:CT:110:ARG:HG2	54:CT:110:ARG:NH1	2.26	0.49
58:A:15:U:H2'	58:A:16:G:O4'	2.12	0.49
58:A:16:G:H2'	58:A:17:C:C6	2.48	0.49
58:A:645:C:H2'	58:A:646:C:C6	2.48	0.49
58:A:836:U:H2'	58:A:837:G:C8	2.48	0.49
58:A:1490:C:H4'	58:A:1491:U:OP1	2.11	0.49
80:A:1934:OHX:N2	80:A:1944:OHX:N1	2.60	0.49
67:D:178:ILE:HG21	67:D:185:LYS:HA	1.94	0.49
48:x:83:TRP:O	75:1:2352:A:H5''	2.13	0.49
46:d2:114:GLU:OE2	46:d2:118:ARG:HG3	2.13	0.49
75:AR:3279:A:C6	32:DH:54:ARG:NH1	2.80	0.49
77:G:146:THR:CG2	77:G:220:VAL:HG23	2.41	0.49
53:d4:29:HIS:CE1	53:d4:34:ASN:HA	2.48	0.49
58:sR:1353:U:H2'	58:sR:1354:G:C8	2.47	0.49
58:sR:1473:U:OP2	77:s5:190:ILE:HG22	2.11	0.49
58:sR:1613:U:OP2	77:s5:92:ARG:NH2	2.45	0.49
56:d5:83:LEU:HD13	56:d5:83:LEU:O	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:2:4:SER:HB2	75:1:2630:C:C5	2.47	0.49
60:2:19:PHE:CE2	60:2:20:ARG:HG3	2.47	0.49
78:Rb:248:ASN:ND2	78:Rb:298:GLY:HA3	2.27	0.49
19:CE:350:ALA:O	19:CE:351:LEU:HB3	2.11	0.49
24:K:77:ILE:HD12	24:K:78:ARG:N	2.27	0.49
64:s1:31:ASP:OD1	64:s1:45:LYS:HD3	2.13	0.49
70:s3:74:GLN:O	70:s3:78:LYS:N	2.45	0.49
73:s4:90:ILE:CD1	73:s4:101:LEU:HD13	2.43	0.49
73:s4:114:ILE:HB	73:s4:118:GLU:OE1	2.11	0.49
77:s5:111:VAL:O	77:s5:114:ILE:HG22	2.13	0.49
75:1:1355:A:H1'	75:1:1356:U:OP2	2.12	0.49
75:1:1823:A:H2'	75:1:1824:U:C6	2.47	0.49
1:3:28:C:OP1	21:s:141:ARG:NH1	2.46	0.49
2:AB:51:GLY:HA2	51:y:175:ALA:C	2.37	0.49
5:Q:87:PRO:HA	5:Q:90:ILE:HG13	1.94	0.49
13:j:243:THR:OG1	75:1:2244:A:OP1	2.30	0.49
14:AD:17:VAL:HG11	14:AD:92:ILE:HG22	1.94	0.49
19:k:141:GLY:O	19:k:143:GLY:N	2.42	0.49
20:AE:18:LYS:HA	75:1:3376:A:N3	2.28	0.49
23:T:31:ALA:C	23:T:33:THR:H	2.20	0.49
23:T:84:TRP:CZ3	23:T:85:PHE:HD1	2.30	0.49
23:T:118:LYS:HZ3	21:s:108:GLU:CD	2.20	0.49
38:AH:29:ILE:HD11	38:AH:31:ARG:NH2	2.28	0.49
39:CP:35:VAL:HG23	75:AR:1543:G:OP1	2.12	0.49
41:W:56:SER:OG	41:W:59:VAL:HG12	2.13	0.49
44:CQ:140:LYS:HE2	44:CQ:140:LYS:HA	1.94	0.49
3:p:95:ASN:OD1	3:p:98:ARG:NE	2.45	0.49
9:q:165:CYS:HB3	9:q:178:GLY:HA2	1.93	0.49
52:p0:10:GLU:O	52:p0:14:LYS:HG2	2.12	0.49
53:Z:29:HIS:CE1	53:Z:34:ASN:H	2.30	0.49
11:c6:114:ARG:O	11:c6:115:THR:HG22	2.11	0.49
58:A:38:C:H2'	58:A:39:A:H5'	1.94	0.49
58:A:142:G:O6	6:H:177:ARG:NH1	2.45	0.49
58:A:158:U:O2'	58:A:160:C:OP2	2.29	0.49
58:A:319:U:OP1	18:J:11:ARG:NH1	2.46	0.49
58:A:1654:G:OP1	40:AO:21:ARG:NH1	2.45	0.49
64:C:165:ARG:O	64:C:169:SER:OG	2.29	0.49
64:C:193:ILE:O	64:C:197:ILE:HD12	2.13	0.49
67:D:69:ILE:H	67:D:69:ILE:HD12	1.77	0.49
69:CY:4:GLU:HG3	69:CY:30:ARG:NE	2.27	0.49
73:F:118:GLU:HA	73:F:121:TYR:CE1	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:979:U:H4'	75:AR:980:A:OP1	2.12	0.49
75:AR:1156:C:OP2	43:CI:94:LYS:NZ	2.39	0.49
75:AR:1243:G:H8	75:AR:1243:G:OP2	1.96	0.49
75:AR:1528:G:O2'	75:AR:1588:A:N3	2.42	0.49
75:AR:2413:A:H2'	75:AR:2414:G:C8	2.47	0.49
75:AR:3153:U:H5''	75:AR:3154:C:C5	2.47	0.49
76:DA:110:HIS:O	76:DA:115:ARG:HD3	2.13	0.49
1:AS:112:G:H2'	1:AS:113:C:C6	2.47	0.49
6:H:68:LEU:CB	6:H:101:ILE:HD11	2.43	0.49
58:sR:1684:U:O2	58:sR:1717:G:N2	2.41	0.49
7:AT:9:A:H2'	7:AT:10:A:C8	2.47	0.49
78:Rb:81:LEU:HD11	78:Rb:91:LEU:HA	1.95	0.49
78:Rb:195:HIS:CE1	78:Rb:199:ILE:HG21	2.48	0.49
61:s0:38:PHE:CD1	61:s0:39:ASN:HB2	2.48	0.49
61:s0:179:ARG:NE	61:s0:183:ARG:HE	1.91	0.49
64:s1:132:ASP:HB2	64:s1:221:PRO:HB3	1.93	0.49
25:CF:289:ILE:O	25:CF:295:ILE:HD12	2.12	0.49
72:8:137:ASN:HB3	72:8:142:ILE:HG13	1.95	0.49
70:s3:70:THR:HG23	70:s3:71:LEU:H	1.78	0.49
73:s4:47:PHE:HA	73:s4:51:ARG:HG2	1.94	0.49
73:s4:158:ASP:OD1	73:s4:174:LYS:HE2	2.13	0.49
43:CI:62:ILE:O	43:CI:66:LYS:HG3	2.12	0.49
75:1:261:U:H2'	75:1:262:U:C6	2.48	0.49
75:1:1029:G:H2'	75:1:1030:A:C8	2.46	0.49
3:CJ:30:THR:O	3:CJ:30:THR:OG1	2.27	0.49
8:AC:48:HIS:CE1	8:AC:52:LYS:HE3	2.47	0.49
15:CL:80:SER:HB3	15:CL:84:ALA:HB3	1.95	0.49
19:k:139:GLN:OE1	19:k:141:GLY:HA2	2.12	0.49
22:DM:41:THR:HG21	22:DM:62:ALA:HB2	1.93	0.49
24:s9:88:GLU:O	24:s9:91:LYS:HE2	2.13	0.49
27:CN:109:PHE:O	27:CN:113:VAL:HG12	2.12	0.49
27:CN:179:PHE:O	27:CN:182:ILE:HG22	2.13	0.49
29:U:40:SER:HB2	29:U:96:ALA:HA	1.94	0.49
30:c0:22:VAL:CG1	70:s3:76:ARG:HB2	2.42	0.49
31:m:270:LYS:O	31:m:270:LYS:HD3	2.12	0.49
39:CP:51:LEU:HB3	39:CP:117:ASN:HD22	1.78	0.49
39:CP:153:ASP:CG	39:CP:155:VAL:HG12	2.37	0.49
41:W:3:ASN:HD22	41:W:9:VAL:HG13	1.77	0.49
44:CQ:37:ARG:HH22	75:AR:3183:A:P	2.36	0.49
44:CQ:62:THR:OG1	44:CQ:69:GLY:HA2	2.12	0.49
47:c4:125:SER:OG	47:c4:126:THR:N	2.44	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DR:79:VAL:HG21	13:CD:168:VAL:HG23	1.95	0.49
49:DR:86:LEU:HD13	13:CD:111:THR:HG22	1.94	0.49
9:q:92:TYR:CE1	9:q:144:ILE:HG12	2.45	0.49
17:c7:4:VAL:HG23	58:sR:1313:A:H62	1.77	0.49
17:c7:21:TYR:CD1	17:c7:21:TYR:C	2.91	0.49
58:A:298:C:H5''	73:F:38:LEU:HB2	1.95	0.49
58:A:625:C:H2'	58:A:626:U:C6	2.48	0.49
58:A:839:U:H5''	36:M:28:SER:HB3	1.94	0.49
58:A:968:U:O3'	58:A:1032:G:N2	2.45	0.49
58:A:1227:A:H61	58:A:1256:A:H2'	1.76	0.49
58:A:1244:A:O2'	58:A:1245:G:OP1	2.31	0.49
58:A:1433:G:H2'	58:A:1434:U:C6	2.48	0.49
58:A:1451:C:H2'	58:A:1452:U:C6	2.48	0.49
58:A:1542:G:N2	58:A:1569:A:OP2	2.45	0.49
58:A:1784:C:H2'	58:A:1785:U:H6	1.78	0.49
58:A:1792:G:O5'	59:b:3:LYS:HA	2.13	0.49
58:A:1794:A:H1'	59:b:79:ILE:HD13	1.94	0.49
23:c8:42:TYR:HA	23:c8:85:PHE:HE1	1.77	0.49
64:C:135:LEU:HA	64:C:217:LEU:CD1	2.42	0.49
64:C:217:LEU:CG	64:C:218:LEU:H	2.26	0.49
67:D:243:TYR:N	67:D:243:TYR:CD1	2.79	0.49
72:CZ:74:LYS:O	72:CZ:78:ASP:HB2	2.13	0.49
75:AR:1495:U:H5	75:AR:1835:A:C2	2.30	0.49
75:AR:1853:U:O4	80:AR:3952:OHX:N6	2.45	0.49
75:AR:2660:G:O3'	75:AR:2749:G:N2	2.45	0.49
75:AR:2793:G:N7	80:AR:4010:OHX:N1	2.60	0.49
76:DA:58:VAL:HG12	76:DA:64:LYS:HA	1.94	0.49
57:0:148:LEU:HD12	57:0:149:LYS:N	2.28	0.49
6:H:199:GLN:HA	6:H:202:ARG:CG	2.37	0.49
58:sR:4:C:OP1	67:s2:200:SER:OG	2.24	0.49
58:sR:264:G:O6	80:sR:2155:OHX:N2	2.45	0.49
58:sR:696:C:H4'	58:sR:697:C:C6	2.47	0.49
58:sR:1255:G:O2'	58:sR:1256:A:O5'	2.30	0.49
60:2:102:ARG:HB3	60:2:106:LEU:HD11	1.95	0.49
78:Rb:37:SER:OG	78:Rb:38:ARG:N	2.46	0.49
78:Rb:91:LEU:HB3	78:Rb:101:GLN:H	1.78	0.49
78:Rb:192:PHE:HD2	78:Rb:223:TRP:CG	2.31	0.49
18:J:85:PRO:CA	36:M:11:ARG:HG2	2.40	0.49
24:K:23:ARG:HD2	24:K:23:ARG:C	2.38	0.49
64:s1:35:PRO:CA	64:s1:231:LEU:HD11	2.42	0.49
30:L:13:GLN:HG3	30:L:14:TYR:N	2.26	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CG:210:GLU:O	31:CG:214:ASP:HB2	2.13	0.49
36:M:22:ASN:HD22	36:M:25:VAL:H	1.59	0.49
36:M:40:LEU:HB2	36:M:42:PHE:CE2	2.48	0.49
70:s3:58:VAL:O	70:s3:66:ILE:HG23	2.11	0.49
76:9:53:ASP:O	76:9:110:HIS:HB2	2.12	0.49
38:DI:38:LEU:HD12	38:DI:38:LEU:H	1.77	0.49
77:s5:81:ARG:HD3	77:s5:82:PHE:CE1	2.47	0.49
75:1:1302:A:OP1	80:1:3700:OHX:N5	2.46	0.49
75:1:1661:G:H2'	75:1:1662:G:C8	2.47	0.49
75:1:1710:C:H2'	75:1:1711:C:H6	1.77	0.49
75:1:2617:U:H5	75:1:2621:G:OP2	1.95	0.49
75:1:2913:C:H2'	75:1:2914:G:C8	2.47	0.49
75:1:3060:C:H2'	75:1:3061:G:C8	2.48	0.49
75:1:3327:G:OP2	80:1:3789:OHX:N1	2.46	0.49
3:CJ:155:ASN:OD1	3:CJ:155:ASN:N	2.43	0.49
3:CJ:213:LYS:O	3:CJ:217:THR:HG23	2.13	0.49
6:s6:178:LEU:HD13	6:s6:179:VAL:N	2.26	0.49
11:R:57:LEU:HD22	77:G:37:GLN:HG3	1.95	0.49
11:R:58:ASP:HB3	77:G:23:VAL:HG21	1.95	0.49
12:s7:58:LEU:O	12:s7:90:VAL:HA	2.13	0.49
16:DL:83:ALA:HB2	7:AT:95:G:C5	2.48	0.49
18:s8:137:LYS:NZ	58:sR:190:C:H41	2.11	0.49
19:k:258:ALA:HB1	75:1:2395:G:H4'	1.95	0.49
19:k:308:MET:HE2	19:k:308:MET:HB3	1.70	0.49
20:AE:13:THR:HG22	20:AE:72:ARG:CD	2.42	0.49
24:s9:133:HIS:HE1	58:sR:512:A:O2'	1.95	0.49
25:l:272:VAL:N	75:1:696:C:OP1	2.38	0.49
27:CN:28:GLN:HB3	39:CP:201:ARG:HD3	1.95	0.49
31:m:152:ARG:CZ	75:1:2663:G:H4'	2.43	0.49
38:AH:4:ARG:HD2	75:1:1485:G:N2	2.28	0.49
40:DP:15:ARG:HG3	40:DP:18:ARG:CZ	2.43	0.49
43:o:206:LYS:HE2	75:1:1334:U:OP1	2.12	0.49
43:o:222:HIS:ND1	43:o:224:ILE:HG13	2.26	0.49
43:o:224:ILE:HG23	57:0:36:ILE:HG12	1.95	0.49
4:AI:75:TYR:O	72:8:46:TYR:HB3	2.12	0.49
46:X:51:GLU:HG3	12:I:141:ARG:HG2	1.93	0.49
46:X:105:THR:HG21	58:A:805:U:O4'	2.12	0.49
47:c4:127:ARG:HD3	58:sR:990:C:O2'	2.12	0.49
5:c5:123:TYR:HE1	23:c8:122:HIS:HE1	1.59	0.49
51:CS:147:ARG:O	51:CS:150:VAL:HG22	2.13	0.49
15:r:198:LYS:NZ	75:1:1040:A:N3	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:s:74:PRO:HA	21:s:77:GLU:HG3	1.95	0.49
28:AM:44:TRP:CH2	28:AM:45:ARG:HD3	2.48	0.49
57:CU:25:PHE:HA	60:CV:149:GLN:O	2.12	0.49
58:A:474:A:OP1	24:K:145:SER:OG	2.21	0.49
58:A:685:A:HO2'	58:A:686:C:P	2.36	0.49
58:A:696:C:H1'	58:A:697:C:H2'	1.95	0.49
58:A:707:A:C2	58:A:731:C:H2'	2.48	0.49
58:A:1078:C:H2'	58:A:1079:U:H6	1.76	0.49
58:A:1097:U:H4'	58:A:1098:U:O5'	2.13	0.49
58:A:1445:G:C5	74:g:91:ILE:HB	2.47	0.49
23:c8:30:TYR:OH	23:c8:40:ARG:NH2	2.46	0.49
27:t:153:ASP:CG	27:t:154:VAL:H	2.20	0.49
61:B:117:GLU:HG3	67:D:40:LYS:CE	2.41	0.49
33:u:15:VAL:HG13	57:0:150:PHE:O	2.13	0.49
63:CW:77:LYS:O	63:CW:81:LYS:HG3	2.12	0.49
63:CW:80:THR:C	63:CW:84:LEU:HD12	2.38	0.49
65:d:11:LYS:HE3	65:d:33:LEU:HD21	1.95	0.49
45:AP:28:TYR:CD1	45:AP:28:TYR:C	2.91	0.49
67:D:121:VAL:HG11	55:i:117:LEU:HB2	1.94	0.49
68:e:14:TYR:N	68:e:18:SER:HB3	2.28	0.49
41:d1:63:GLY:HA2	61:s0:154:GLU:HA	1.95	0.49
75:AR:1115:G:O6	80:AR:3791:OHX:N3	2.46	0.49
75:AR:1273:A:H3'	75:AR:1274:A:H8	1.78	0.49
75:AR:2696:A:H2'	75:AR:2697:A:C8	2.48	0.49
75:AR:2748:A:C2	31:CG:35:ARG:HB2	2.47	0.49
75:AR:3194:C:H2'	75:AR:3195:U:H2'	1.94	0.49
75:AR:3228:C:H4'	75:AR:3229:G:O5'	2.12	0.49
77:G:157:ARG:HB2	77:G:224:ASN:OD1	2.13	0.49
78:h:20:VAL:HG11	78:h:310:ILE:HG23	1.93	0.49
79:DB:114:VAL:HG12	79:DB:118:PHE:HE2	1.77	0.49
6:H:39:GLU:HB3	6:H:46:LYS:CD	2.43	0.49
13:CD:27:ALA:HA	13:CD:75:ILE:HG22	1.95	0.49
14:DE:92:ILE:HD12	14:DE:92:ILE:O	2.13	0.49
65:d8:45:LYS:NZ	77:s5:145:ASP:OD2	2.43	0.49
70:s3:38:GLU:HG2	70:s3:51:ARG:NH2	2.26	0.49
70:s3:219:ALA:O	70:s3:221:SER:OG	2.29	0.49
32:DH:29:LEU:HD23	32:DH:82:ARG:HB3	1.94	0.49
42:O:37:ILE:CD1	42:O:74:ILE:HD13	2.43	0.49
39:v:85:THR:HG21	75:1:45:A:P	2.52	0.49
38:DI:91:ARG:O	38:DI:95:ILE:HG13	2.12	0.49
75:1:821:U:H2'	75:1:822:G:C8	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:2144:A:H1'	75:1:2281:A:N6	2.28	0.49
75:1:2575:G:H2'	75:1:2576:G:H8	1.78	0.49
75:1:3380:U:H2'	75:1:3381:U:C6	2.47	0.49
75:1:3393:U:H2'	75:1:3394:U:C6	2.48	0.49
4:DJ:28:LEU:O	4:DJ:32:LYS:HG2	2.13	0.49
9:CK:1:MET:HG2	9:CK:3:TYR:CE2	2.48	0.49
12:s7:45:SER:O	12:s7:61:PHE:N	2.37	0.49
12:s7:46:ILE:HA	12:s7:59:ALA:O	2.12	0.49
12:s7:78:THR:O	12:s7:82:GLU:OE2	2.31	0.49
17:S:28:PHE:HE1	17:S:51:ALA:HB3	1.76	0.49
31:m:197:SER:OG	31:m:202:GLY:HA3	2.13	0.49
35:V:25:THR:HA	35:V:90:TYR:HA	1.95	0.49
35:V:67:THR:HG22	35:V:68:ARG:O	2.12	0.49
37:n:129:GLU:N	37:n:129:GLU:OE1	2.46	0.49
39:CP:14:LYS:HE3	75:AR:269:G:H5''	1.94	0.49
3:p:158:ASP:HB3	3:p:159:PRO:HD3	1.95	0.49
5:c5:22:LEU:HA	5:c5:25:LEU:HG	1.94	0.49
5:c5:124:THR:CG2	58:sR:1182:U:H4'	2.42	0.49
9:q:27:VAL:HG11	9:q:79:ILE:HA	1.94	0.49
9:q:97:PHE:CZ	75:1:3024:A:H4'	2.47	0.49
11:c6:110:THR:HA	11:c6:113:ASP:CB	2.42	0.49
15:r:31:ILE:HG12	15:r:34:TYR:CE1	2.47	0.49
58:A:1277:G:O3'	70:E:183:GLY:HA3	2.12	0.49
27:t:79:GLU:HG3	27:t:109:PHE:CD1	2.48	0.49
61:B:48:ILE:HG21	61:B:161:PRO:HB2	1.94	0.49
44:w:62:THR:HA	75:1:1306:G:C6	2.48	0.49
41:d1:28:ASP:O	41:d1:31:SER:OG	2.22	0.49
69:CY:52:THR:O	69:CY:56:ARG:HG3	2.13	0.49
71:f:10:ARG:O	71:f:13:LYS:HB2	2.13	0.49
50:d3:139:LYS:HE3	58:sR:32:U:OP1	2.13	0.49
75:AR:123:A:C6	75:AR:150:A:C5	3.01	0.49
75:AR:863:C:OP1	80:AR:3442:OHX:N3	2.45	0.49
75:AR:996:A:H2'	75:AR:997:A:O4'	2.13	0.49
75:AR:1688:U:H2'	75:AR:1689:U:C6	2.48	0.49
75:AR:1768:U:H2'	75:AR:1769:G:O4'	2.12	0.49
75:AR:1913:A:N3	75:AR:2120:A:H2'	2.28	0.49
75:AR:2209:U:O2'	75:AR:2210:G:OP2	2.29	0.49
75:AR:2267:C:H2'	75:AR:2268:U:C6	2.48	0.49
6:H:23:ARG:HB3	6:H:40:ALA:O	2.13	0.49
58:sR:14:C:OP1	67:s2:164:SER:OG	2.31	0.49
58:sR:51:A:OP2	80:sR:1956:OHX:N6	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1438:G:H2'	58:sR:1439:C:C6	2.48	0.49
58:sR:1700:C:H5''	58:sR:1702:A:N1	2.27	0.49
12:I:167:GLU:HB2	12:I:170:GLN:HB3	1.95	0.49
78:Rb:305:TYR:HE2	78:Rb:311:ARG:HD2	1.76	0.49
13:CD:143:GLU:O	13:CD:145:LYS:N	2.40	0.49
61:s0:165:ARG:HD2	61:s0:165:ARG:C	2.35	0.49
19:CE:19:ARG:HB3	19:CE:232:ARG:NH2	2.28	0.49
24:K:126:ARG:HA	24:K:129:ILE:HD12	1.95	0.49
69:7:23:ARG:HB2	69:7:29:PHE:HE1	1.78	0.49
25:CF:162:THR:O	25:CF:166:VAL:HG23	2.13	0.49
67:s2:53:ILE:O	67:s2:56:ILE:HD12	2.13	0.49
70:s3:54:ARG:HD2	70:s3:57:ASP:OD2	2.13	0.49
73:s4:245:LYS:HG2	73:s4:245:LYS:O	2.12	0.49
43:CI:140:SER:O	43:CI:144:ILE:HG13	2.12	0.49
75:1:245:U:H2'	75:1:246:U:C6	2.48	0.49
75:1:679:U:O4	80:1:4111:OHX:N3	2.45	0.49
75:1:873:C:H5''	75:1:874:U:O5'	2.12	0.49
75:1:1230:G:H1	75:1:1279:C:H42	1.61	0.49
75:1:1240:A:H3'	75:1:1241:U:C5'	2.43	0.49
75:1:1597:C:H2'	75:1:1598:G:H8	1.77	0.49
75:1:3192:U:H2'	75:1:3193:C:C6	2.48	0.49
75:1:3259:U:H5'	75:1:3259:U:H6	1.76	0.49
75:1:3281:U:H2'	75:1:3282:U:C6	2.47	0.49
2:AB:74:ASN:HB2	2:AB:76:ASP:HB2	1.94	0.49
10:DK:58:ILE:HD12	10:DK:59:ASP:N	2.28	0.49
11:R:73:GLY:N	11:R:76:SER:HB3	2.28	0.49
13:j:241:ARG:HG2	75:1:2155:G:OP1	2.13	0.49
15:CL:193:ASP:OD1	15:CL:193:ASP:O	2.31	0.49
18:s8:52:ASN:OD1	80:sR:2124:OHX:N3	2.45	0.49
19:k:163:HIS:HA	19:k:177:HIS:O	2.12	0.49
19:k:311:PHE:HB3	19:k:332:ARG:NH1	2.28	0.49
23:T:6:GLN:HG2	56:a:42:LEU:HD13	1.94	0.49
26:AF:111:ARG:CZ	26:AF:115:LEU:HD21	2.42	0.49
35:V:58:LEU:H	35:V:89:ARG:HH22	1.59	0.49
42:c3:94:LYS:O	42:c3:98:VAL:HG12	2.13	0.49
43:o:197:GLN:OE1	43:o:197:GLN:N	2.39	0.49
46:X:19:LYS:O	46:X:19:LYS:HD2	2.12	0.49
15:r:66:GLU:O	15:r:70:ILE:HG23	2.12	0.49
21:s:109:HIS:O	21:s:112:LEU:HD23	2.13	0.49
58:A:521:A:H2'	58:A:522:U:O4'	2.13	0.49
58:A:830:U:O2'	58:A:831:U:H6	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:1202:A:H1'	58:A:1207:C:N4	2.28	0.49
58:A:1285:U:H4'	58:A:1286:U:OP2	2.13	0.49
27:t:91:ARG:NH2	27:t:97:VAL:O	2.45	0.49
61:B:22:THR:HG21	61:B:172:LEU:HD21	1.95	0.49
61:B:120:LEU:HD12	61:B:121:VAL:N	2.28	0.49
62:c:36:LYS:HD2	62:c:78:SER:OG	2.13	0.49
45:AP:26:THR:HB	45:AP:71:ARG:HB3	1.94	0.49
48:x:2:ALA:HB1	48:x:4:TYR:CE1	2.48	0.49
71:f:40:TYR:HD1	71:f:44:PHE:HD2	1.59	0.49
73:F:78:THR:O	73:F:78:THR:OG1	2.24	0.49
75:AR:39:A:H5''	2:DC:35:ALA:HB2	1.94	0.49
75:AR:160:G:H2'	75:AR:161:G:O4'	2.13	0.49
75:AR:316:U:H4'	75:AR:317:A:H5'	1.93	0.49
75:AR:368:G:OP1	80:AR:3690:OHX:N4	2.46	0.49
75:AR:1618:G:H4'	7:AT:129:C:H1'	1.93	0.49
75:AR:2258:U:H2'	75:AR:2259:A:O4'	2.12	0.49
75:AR:3251:U:H2'	75:AR:3252:G:H8	1.78	0.49
77:G:48:PHE:HE2	77:G:68:ILE:O	1.96	0.49
77:G:116:HIS:O	77:G:120:ILE:HG12	2.13	0.49
79:DB:25:ILE:HG23	79:DB:41:ALA:HB1	1.94	0.49
6:H:98:ARG:NH2	6:H:101:ILE:O	2.39	0.49
58:sR:566:C:O3'	71:e0:10:ARG:NH1	2.46	0.49
58:sR:1530:C:OP2	56:d5:96:SER:OG	2.31	0.49
58:sR:1573:A:OP2	77:s5:185:ARG:NH2	2.45	0.49
58:sR:1700:C:H6	58:sR:1702:A:H2	1.61	0.49
78:Rb:123:ILE:HA	78:Rb:134:TRP:HD1	1.76	0.49
61:s0:84:ARG:NH1	61:s0:205:ARG:H	2.10	0.49
19:CE:79:VAL:HG12	19:CE:322:ILE:HB	1.94	0.49
19:CE:305:ILE:HD11	19:CE:317:ILE:HG21	1.95	0.49
67:s2:225:LEU:HD21	67:s2:230:TRP:CD1	2.48	0.49
38:DI:41:ARG:HG2	38:DI:41:ARG:NH1	2.19	0.49
38:DI:86:LYS:O	38:DI:90:ILE:HG12	2.13	0.49
75:1:1166:G:O6	80:1:4110:OHX:N6	2.45	0.49
75:1:1915:A:H2'	75:1:1916:U:C6	2.48	0.49
75:1:2746:A:H2'	75:1:2747:A:O4'	2.13	0.49
11:R:102:LYS:O	11:R:105:LEU:HD12	2.12	0.48
12:s7:44:LYS:NZ	12:s7:63:PRO:HG3	2.28	0.48
12:s7:98:ILE:HG12	12:s7:121:VAL:HG21	1.95	0.48
12:s7:100:PRO:HG3	58:sR:695:U:H4'	1.95	0.48
20:AE:17:HIS:HB2	20:AE:69:TYR:HD1	1.78	0.48
4:AI:109:ILE:HD12	4:AI:110:ALA:N	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DQ:14:GLY:HA2	45:DQ:79:THR:HG21	1.94	0.48
5:c5:24:LYS:O	5:c5:28:MET:HB2	2.13	0.48
51:CS:173:GLU:O	51:CS:178:ARG:HD2	2.13	0.48
58:A:68:A:H5''	6:H:162:VAL:HG21	1.94	0.48
58:A:755:A:H2'	58:A:756:A:C8	2.48	0.48
58:A:1450:U:H2'	58:A:1451:C:C6	2.48	0.48
23:c8:18:LEU:HD21	23:c8:70:VAL:HG13	1.94	0.48
61:B:36:TYR:CE1	61:B:56:LYS:HE2	2.48	0.48
40:AO:22:ALA:O	40:AO:25:LYS:HB2	2.13	0.48
45:AP:11:TYR:CD1	45:AP:12:CYS:N	2.81	0.48
66:CX:92:PHE:CE2	75:AR:3051:U:H1'	2.48	0.48
51:y:12:ARG:HG3	75:1:1342:C:H5''	1.95	0.48
51:y:81:VAL:HG22	51:y:101:VAL:HA	1.94	0.48
50:d3:10:ASN:O	58:sR:632:U:H5''	2.13	0.48
50:d3:48:HIS:HE1	58:sR:599:A:H1'	1.78	0.48
54:z:4:LEU:HB2	75:1:1472:U:H5'	1.94	0.48
75:AR:22:G:H1'	7:AT:104:A:N3	2.28	0.48
75:AR:90:C:C2'	75:AR:91:G:H5'	2.43	0.48
75:AR:609:G:C6	25:CF:308:LYS:HD2	2.48	0.48
75:AR:619:A:H4'	75:AR:620:U:C5'	2.43	0.48
75:AR:2986:U:H2'	75:AR:2987:A:H8	1.78	0.48
77:G:42:LEU:HD22	77:G:47:SER:HA	1.94	0.48
78:h:38:ARG:HD2	78:h:67:ILE:HD12	1.94	0.48
57:0:82:ASP:HA	57:0:87:THR:HA	1.95	0.48
58:sR:43:A:O2'	58:sR:99:C:OP1	2.27	0.48
58:sR:217:A:H61	58:sR:845:G:H1'	1.78	0.48
58:sR:584:C:O2'	71:e0:18:THR:OG1	2.29	0.48
58:sR:758:U:OP1	73:s4:22:LYS:NZ	2.45	0.48
58:sR:1272:U:H5''	58:sR:1273:G:OP2	2.13	0.48
58:sR:1287:A:H4'	58:sR:1288:G:OP1	2.13	0.48
58:sR:1481:C:O2'	58:sR:1482:C:O5'	2.28	0.48
60:2:8:ARG:O	60:2:11:THR:OG1	2.24	0.48
78:Rb:195:HIS:CG	78:Rb:199:ILE:HG21	2.48	0.48
18:J:105:ASP:OD1	18:J:107:THR:HG23	2.13	0.48
61:s0:36:TYR:O	61:s0:48:ILE:HD12	2.13	0.48
65:d8:61:ARG:HD2	65:d8:61:ARG:N	2.27	0.48
25:CF:113:VAL:HG13	25:CF:118:LYS:HD2	1.95	0.48
36:M:55:ASP:OD2	36:M:58:CYS:N	2.45	0.48
37:CH:93:VAL:O	37:CH:96:VAL:HG22	2.12	0.48
39:v:153:ASP:OD1	39:v:155:VAL:HG23	2.13	0.48
77:s5:99:MET:HG2	77:s5:100:ASN:H	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:847:A:H2'	75:1:848:A:C8	2.48	0.48
4:DJ:66:VAL:HA	4:DJ:69:LEU:HD11	1.95	0.48
11:R:32:ASN:HA	11:R:68:ARG:HE	1.78	0.48
11:R:89:LEU:HD21	11:R:105:LEU:CD2	2.44	0.48
12:s7:101:LYS:HA	12:s7:112:ARG:NH2	2.29	0.48
18:s8:151:LYS:HD3	18:s8:152:ILE:H	1.78	0.48
27:CN:63:VAL:CG2	75:AR:72:C:H5'	2.42	0.48
32:AG:72:THR:HG23	32:AG:83:ALA:HA	1.94	0.48
35:V:26:LEU:O	35:V:88:LYS:HA	2.12	0.48
37:n:29:LYS:HE3	37:n:30:LEU:O	2.13	0.48
44:CQ:42:ASN:HA	44:CQ:136:THR:O	2.13	0.48
46:X:86:ILE:O	46:X:90:THR:HG23	2.12	0.48
46:X:90:THR:O	46:X:94:LEU:HB2	2.14	0.48
47:c4:59:ALA:HA	47:c4:62:LEU:HD22	1.96	0.48
50:Y:92:CYS:SG	50:Y:132:LEU:HD21	2.53	0.48
50:Y:95:PHE:CE1	50:Y:135:LEU:HB3	2.48	0.48
15:r:73:ASN:O	15:r:77:THR:HG23	2.13	0.48
22:AL:17:ARG:NH2	22:AL:52:TYR:OH	2.46	0.48
56:a:74:SER:OG	58:A:1533:C:H3'	2.14	0.48
58:A:761:G:O6	80:A:2065:OHX:N4	2.46	0.48
58:A:992:A:C2	58:A:1012:U:N3	2.80	0.48
58:A:1200:G:H4'	58:A:1201:G:H5''	1.95	0.48
58:A:1257:U:H1'	30:L:3:MET:O	2.14	0.48
58:A:1617:U:H1'	65:d:22:ARG:O	2.12	0.48
58:A:1657:U:H4'	58:A:1658:G:O5'	2.12	0.48
29:c9:123:ARG:HG2	29:c9:124:ILE:N	2.28	0.48
63:CW:19:VAL:CG2	63:CW:63:VAL:HG23	2.39	0.48
64:C:128:LYS:HG3	64:C:129:THR:H	1.78	0.48
66:CX:24:ASN:OD1	66:CX:32:ARG:NH1	2.47	0.48
51:y:107:THR:HG21	75:1:677:A:OP2	2.12	0.48
75:AR:191:U:H2'	75:AR:192:C:C6	2.47	0.48
75:AR:2278:C:H2'	75:AR:2279:A:H5''	1.95	0.48
79:DB:84:ARG:HG2	79:DB:85:TYR:CD1	2.47	0.48
58:sR:12:U:H1'	58:sR:1300:A:N3	2.27	0.48
58:sR:1316:G:HO2'	58:sR:1401:A:HO2'	1.36	0.48
58:sR:1424:A:H2'	58:sR:1425:A:O4'	2.12	0.48
12:I:173:TYR:HB3	12:I:181:ILE:HD11	1.95	0.48
18:J:142:LYS:O	18:J:146:ARG:N	2.45	0.48
61:s0:27:ARG:HD3	61:s0:44:GLY:O	2.13	0.48
61:s0:146:LEU:HB3	61:s0:162:CYS:SG	2.53	0.48
24:K:23:ARG:NH1	24:K:27:GLU:OE1	2.44	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CF:120:TYR:CE2	25:CF:277:PRO:HB3	2.48	0.48
70:s3:132:LYS:HG2	70:s3:156:PHE:HB3	1.95	0.48
42:O:30:SER:O	42:O:34:ILE:HG22	2.13	0.48
39:v:163:GLY:O	39:v:172:ARG:NH1	2.47	0.48
75:1:308:A:H5'	75:1:2223:A:O2'	2.12	0.48
75:1:1470:U:H2'	75:1:1471:U:C6	2.48	0.48
75:1:2242:A:OP2	80:1:3906:OHX:N2	2.46	0.48
75:1:3096:C:H2'	75:1:3097:C:C6	2.48	0.48
3:CJ:114:ALA:O	3:CJ:118:GLU:HG2	2.13	0.48
4:DJ:117:ALA:HB2	27:CN:48:PRO:CB	2.42	0.48
5:Q:55:GLY:O	5:Q:58:LYS:HB2	2.13	0.48
8:AC:14:ARG:O	8:AC:18:ARG:HG2	2.13	0.48
17:S:115:LEU:HD13	17:S:116:LYS:N	2.28	0.48
20:AE:65:LYS:NZ	75:1:3076:C:P	2.86	0.48
22:DM:26:LYS:HE3	75:AR:1750:A:H4'	1.95	0.48
25:l:40:THR:O	25:l:44:LYS:HE2	2.13	0.48
27:CN:178:LYS:HB3	27:CN:178:LYS:HE3	1.70	0.48
28:DN:4:GLN:HE21	38:DI:10:ARG:HD2	1.77	0.48
29:U:100:ILE:HD12	29:U:100:ILE:N	2.28	0.48
35:V:53:LYS:HB3	58:A:1345:A:C5'	2.43	0.48
39:CP:44:ARG:HH22	75:AR:269:G:P	2.36	0.48
41:W:40:ASP:HB3	41:W:46:ILE:CD1	2.34	0.48
46:X:22:LYS:CB	62:c:3:LEU:HA	2.43	0.48
46:X:110:ILE:HG12	46:X:126:LEU:HD11	1.95	0.48
10:AJ:90:MET:O	10:AJ:93:ILE:HG13	2.14	0.48
53:Z:32:ARG:O	53:Z:32:ARG:HG3	2.11	0.48
11:c6:113:ASP:OD2	11:c6:116:LEU:N	2.46	0.48
15:r:91:VAL:HG11	15:r:129:VAL:HG12	1.95	0.48
56:a:61:SER:OG	56:a:63:SER:OG	2.18	0.48
17:c7:49:LYS:HA	58:sR:1389:C:H4'	1.94	0.48
58:A:178:U:O4	6:H:191:ARG:HG2	2.13	0.48
58:A:224:C:H2'	58:A:225:A:C8	2.48	0.48
58:A:357:G:N7	80:A:1933:OHX:N2	2.60	0.48
58:A:1320:U:O2	58:A:1322:A:H5'	2.13	0.48
58:A:1738:U:O4	80:A:1935:OHX:N3	2.46	0.48
69:CY:1:MET:HE2	19:CE:358:TRP:CG	2.47	0.48
73:F:156:VAL:O	73:F:157:ASN:HB2	2.13	0.48
50:d3:86:PHE:HB2	50:d3:120:VAL:HG11	1.96	0.48
75:AR:361:A:N1	75:AR:927:C:O2'	2.44	0.48
75:AR:1255:C:H2'	75:AR:1256:G:C8	2.48	0.48
75:AR:1767:C:H2'	75:AR:1768:U:O4'	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:G:121:ILE:HG12	77:G:198:LEU:HD11	1.96	0.48
78:h:265:LEU:HA	78:h:268:GLN:HA	1.95	0.48
53:d4:55:VAL:HA	53:d4:75:VAL:HA	1.95	0.48
6:H:22:HIS:O	6:H:25:ARG:HG2	2.13	0.48
58:sR:8:U:O2'	80:sR:2002:OHX:N1	2.45	0.48
58:sR:1217:A:H61	68:d9:8:PHE:HE2	1.61	0.48
12:I:14:THR:HB	12:I:17:GLU:HG2	1.96	0.48
78:Rb:42:LEU:C	78:Rb:43:ILE:HD13	2.38	0.48
78:Rb:47:LEU:HD21	78:Rb:302:PHE:CZ	2.48	0.48
63:5:35:LYS:HD3	63:5:35:LYS:O	2.13	0.48
63:5:57:THR:HG23	63:5:64:THR:HB	1.95	0.48
13:CD:96:LEU:HD11	13:CD:108:PRO:HD2	1.96	0.48
14:DE:60:ALA:HB1	14:DE:65:THR:O	2.12	0.48
72:8:131:ASP:O	72:8:135:ILE:HG12	2.13	0.48
70:s3:105:MET:O	70:s3:109:LEU:HG	2.13	0.48
37:CH:40:LEU:HG	37:CH:84:VAL:CG1	2.43	0.48
39:v:33:LYS:HE3	39:v:37:HIS:CD2	2.48	0.48
75:1:1074:U:O2'	75:1:1075:A:H2'	2.14	0.48
75:1:2254:U:H2'	75:1:2261:G:H22	1.77	0.48
75:1:2616:C:H3'	75:1:2617:U:O2	2.14	0.48
1:3:27:A:OP2	31:m:57:ASN:HB2	2.12	0.48
4:DJ:59:ASN:ND2	7:AT:97:A:O2'	2.47	0.48
7:4:38:U:C4	4:AI:89:ARG:HD3	2.48	0.48
7:4:106:C:O2'	80:4:208:OHX:N4	2.46	0.48
9:CK:28:VAL:HG12	9:CK:33:THR:HB	1.94	0.48
12:s7:99:LEU:HD12	12:s7:116:ARG:HB3	1.95	0.48
13:j:84:THR:O	49:AQ:62:LYS:NZ	2.45	0.48
25:l:68:GLY:HA2	75:1:2401:A:O3'	2.12	0.48
28:DN:28:ARG:HA	28:DN:33:ASN:OD1	2.14	0.48
29:U:105:LEU:HD21	29:U:122:ARG:CZ	2.43	0.48
30:c0:62:GLN:NE2	68:d9:25:SER:HB3	2.28	0.48
33:CO:38:ILE:HG23	33:CO:44:VAL:HG12	1.95	0.48
36:c1:79:LYS:HG3	58:sR:346:G:H5'	1.94	0.48
52:p0:56:ASN:ND2	52:p0:82:GLY:O	2.46	0.48
11:c6:87:LYS:HG3	11:c6:117:LEU:HD12	1.95	0.48
58:A:446:A:N6	58:A:461:G:H21	2.12	0.48
27:t:76:THR:O	27:t:76:THR:OG1	2.29	0.48
62:c:23:THR:OG1	62:c:25:VAL:O	2.31	0.48
33:u:38:ILE:H	33:u:38:ILE:HD12	1.79	0.48
33:u:46:ILE:HD13	33:u:58:ILE:HG21	1.95	0.48
66:CX:87:ARG:HH12	66:CX:137:VAL:HG21	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:x:27:LYS:HD3	48:x:63:PHE:HB3	1.95	0.48
75:AR:269:G:N2	75:AR:295:A:OP2	2.32	0.48
75:AR:847:A:H2'	75:AR:848:A:C8	2.48	0.48
75:AR:1072:G:H21	8:DD:50:THR:CG2	2.27	0.48
75:AR:1350:A:H2'	75:AR:1351:U:H5'	1.94	0.48
75:AR:1577:G:H2'	75:AR:1578:C:C6	2.49	0.48
75:AR:2534:G:H1	75:AR:2545:C:H42	1.60	0.48
75:AR:3317:U:H1'	80:AR:3579:OHX:N6	2.28	0.48
78:h:239:GLU:OE1	78:h:240:VAL:N	2.46	0.48
6:H:194:LYS:HA	6:H:194:LYS:HD3	1.46	0.48
58:sR:364:G:OP1	80:sR:2100:OHX:N5	2.46	0.48
58:sR:609:U:H4'	58:sR:610:G:O5'	2.12	0.48
58:sR:1317:C:O2'	58:sR:1400:A:N3	2.36	0.48
58:sR:1783:C:H2'	58:sR:1784:C:H6	1.78	0.48
78:Rb:154:VAL:O	78:Rb:155:ARG:HD3	2.13	0.48
61:s0:154:GLU:N	61:s0:154:GLU:OE1	2.45	0.48
31:CG:85:ARG:HG2	31:CG:86:TYR:CD2	2.49	0.48
31:CG:155:THR:HA	31:CG:179:ARG:HA	1.94	0.48
73:s4:241:GLY:O	73:s4:243:GLY:N	2.47	0.48
75:1:1481:A:H2'	75:1:1481:A:N3	2.28	0.48
75:1:2097:U:H2'	75:1:2098:C:C6	2.48	0.48
75:1:2778:G:H2'	75:1:2779:A:H5'	1.94	0.48
75:1:3231:U:H2'	75:1:3232:G:C8	2.47	0.48
9:CK:36:LYS:HZ1	9:CK:152:GLU:CD	2.22	0.48
10:DK:15:LYS:HE2	2:DC:149:ALA:HB3	1.94	0.48
13:j:52:SER:HB3	13:j:191:LEU:HD23	1.95	0.48
14:AD:94:GLU:OE2	14:AD:94:GLU:HA	2.13	0.48
26:AF:32:TRP:CZ2	26:AF:53:PRO:HD2	2.48	0.48
27:CN:62:THR:O	27:CN:65:TYR:N	2.40	0.48
29:U:38:LYS:NZ	58:A:1503:A:H8	2.11	0.48
33:CO:37:GLU:HB3	57:CU:72:VAL:HG21	1.96	0.48
36:c1:64:VAL:HG11	36:c1:131:ILE:HD11	1.94	0.48
37:n:145:LEU:O	37:n:149:ILE:HG13	2.13	0.48
40:DP:17:ARG:HA	40:DP:20:VAL:HG12	1.95	0.48
43:o:163:LEU:O	43:o:165:ASP:N	2.47	0.48
50:Y:71:CYS:SG	50:Y:86:PHE:HA	2.53	0.48
50:Y:78:LYS:HA	58:A:434:G:OP1	2.14	0.48
50:Y:110:LYS:NZ	58:A:601:A:OP1	2.41	0.48
9:q:88:TYR:CD1	9:q:154:VAL:HG12	2.49	0.48
51:CS:178:ARG:HG3	2:DC:50:PRO:HB2	1.96	0.48
11:c6:73:GLY:HA3	58:sR:1608:U:O3'	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:c6:95:LYS:HG3	11:c6:96:TYR:CE1	2.49	0.48
56:a:81:ARG:HD2	56:a:84:GLU:HG3	1.95	0.48
17:c7:40:THR:OG1	70:s3:207:THR:HG22	2.14	0.48
58:A:25:C:OP2	58:A:26:A:H2'	2.14	0.48
58:A:130:C:O2'	58:A:131:C:OP1	2.28	0.48
58:A:201:G:H2'	58:A:202:A:C8	2.48	0.48
58:A:504:U:H2'	58:A:505:A:H4'	1.95	0.48
58:A:912:U:H4'	58:A:913:G:O5'	2.12	0.48
58:A:1000:C:O2'	58:A:1002:G:N7	2.39	0.48
58:A:1783:C:H2'	58:A:1784:C:C6	2.49	0.48
67:D:127:ALA:O	67:D:131:ILE:HD12	2.13	0.48
48:x:131:ARG:NH1	48:x:137:ASN:OD1	2.46	0.48
69:CY:61:LYS:HE3	75:AR:3369:G:OP2	2.13	0.48
51:y:60:PRO:HG2	51:y:142:GLY:C	2.38	0.48
74:g:108:VAL:HG23	74:g:114:VAL:HG12	1.95	0.48
50:d3:53:VAL:HG23	50:d3:72:VAL:HB	1.96	0.48
54:z:43:LYS:NZ	75:1:1765:U:H5'	2.28	0.48
75:AR:299:G:N7	80:AR:3580:OHX:N2	2.62	0.48
75:AR:796:U:H2'	75:AR:797:U:H6	1.78	0.48
75:AR:1488:G:O2'	38:DI:10:ARG:O	2.32	0.48
75:AR:1667:A:H2'	75:AR:1668:G:C8	2.49	0.48
77:G:118:LEU:HD12	77:G:121:ILE:CD1	2.44	0.48
53:d4:41:ARG:HH21	53:d4:53:ASP:HA	1.77	0.48
1:AS:64:A:OP2	31:CG:289:LYS:NZ	2.36	0.48
58:sR:768:C:H2'	58:sR:769:A:O4'	2.13	0.48
58:sR:836:U:H2'	58:sR:837:G:C8	2.48	0.48
58:sR:1261:G:H2'	58:sR:1262:U:C6	2.48	0.48
58:sR:1471:A:N6	58:sR:1472:C:H41	2.10	0.48
61:s0:5:ALA:O	61:s0:8:ASP:HB2	2.12	0.48
61:s0:85:ALA:HA	61:s0:202:TYR:CD2	2.48	0.48
25:CF:140:HIS:CG	25:CF:247:PHE:HB2	2.49	0.48
25:CF:330:TYR:CE2	43:CI:49:ALA:HA	2.48	0.48
79:AA:47:GLU:HB3	79:AA:69:LYS:HG2	1.95	0.48
77:s5:205:SER:HB2	77:s5:207:THR:HG23	1.95	0.48
75:1:499:G:H2'	75:1:500:C:C6	2.49	0.48
75:1:821:U:H2'	75:1:822:G:H8	1.77	0.48
75:1:1710:C:H2'	75:1:1711:C:C6	2.49	0.48
75:1:3095:U:H2'	75:1:3096:C:C6	2.49	0.48
4:DJ:40:SER:OG	4:DJ:42:PRO:HD3	2.13	0.48
11:R:143:ARG:HB3	58:A:1191:U:H4'	1.94	0.48
13:j:29:LEU:HB2	13:j:123:ARG:HA	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:j:112:ILE:HD13	13:j:135:ILE:HG22	1.96	0.48
18:s8:81:VAL:N	18:s8:94:ASN:OD1	2.47	0.48
19:k:283:TYR:CZ	19:k:325:LYS:HB2	2.48	0.48
21:CM:164:LYS:HZ1	21:CM:171:VAL:HG13	1.77	0.48
24:s9:162:SER:OG	24:s9:165:GLY:N	2.46	0.48
25:l:309:ARG:NH2	75:1:610:G:O6	2.46	0.48
25:l:313:LEU:HD11	75:1:505:G:C4'	2.44	0.48
30:c0:3:MET:HE2	30:c0:8:ARG:N	2.28	0.48
30:c0:25:LYS:HD3	30:c0:59:PHE:CE1	2.49	0.48
41:W:60:ARG:NH1	61:B:155:PHE:O	2.47	0.48
53:Z:14:SER:OG	53:Z:21:LYS:HE3	2.14	0.48
17:c7:44:LYS:HE2	58:sR:1386:G:OP2	2.13	0.48
21:s:53:THR:OG1	21:s:61:ARG:N	2.46	0.48
58:A:119:A:H1'	58:A:397:A:C4	2.49	0.48
58:A:273:G:N2	58:A:283:U:O2	2.40	0.48
58:A:1292:G:N2	61:B:111:ILE:HD11	2.27	0.48
23:c8:23:ASP:OD2	23:c8:25:ASN:ND2	2.47	0.48
23:c8:76:PRO:CB	23:c8:81:ILE:HD11	2.44	0.48
60:CV:87:LYS:HD3	75:AR:2723:U:OP1	2.13	0.48
67:D:42:GLY:HA2	67:D:68:ILE:CD1	2.44	0.48
41:d1:85:TYR:CD2	62:d7:6:ASP:HB2	2.49	0.48
73:F:238:LEU:HD12	73:F:238:LEU:N	2.28	0.48
50:d3:3:LYS:HE2	58:sR:614:C:P	2.54	0.48
50:d3:132:LEU:O	50:d3:136:TRP:N	2.43	0.48
75:AR:70:A:N1	75:AR:313:A:O2'	2.41	0.48
75:AR:563:U:H2'	75:AR:564:G:C8	2.48	0.48
75:AR:912:G:N7	13:CD:9:ARG:NH1	2.60	0.48
75:AR:3033:A:H2'	75:AR:3034:C:C6	2.49	0.48
75:AR:3060:C:H1'	75:AR:3332:U:H1'	1.95	0.48
58:sR:1244:A:H3'	58:sR:1244:A:N3	2.29	0.48
58:sR:1429:G:H2'	58:sR:1430:U:C6	2.49	0.48
58:sR:1603:U:H2'	58:sR:1604:U:C6	2.48	0.48
8:DD:33:LYS:HG2	8:DD:34:GLY:H	1.78	0.48
62:d7:59:CYS:O	62:d7:61:THR:OG1	2.30	0.48
64:s1:86:LEU:HB3	64:s1:98:THR:HG21	1.95	0.48
76:9:116:LYS:HB2	76:9:126:LEU:HD22	1.94	0.48
39:v:11:GLN:HG2	39:v:44:ARG:HH21	1.77	0.48
77:s5:156:ARG:CG	77:s5:224:ASN:HD21	2.13	0.48
75:1:92:G:N7	85:1:3478:SPD:N6	2.61	0.48
75:1:835:G:O2'	75:1:857:G:N2	2.31	0.48
75:1:1096:U:H4'	75:1:1097:G:O5'	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:2103:U:H2'	75:1:2104:A:C8	2.48	0.48
75:1:3160:U:H2'	75:1:3161:C:C6	2.49	0.48
1:3:94:C:H2'	1:3:95:A:C8	2.49	0.48
3:CJ:65:LEU:HD12	39:CP:25:VAL:HG23	1.96	0.48
4:DJ:104:GLN:O	4:DJ:108:GLN:HG3	2.14	0.48
5:Q:33:PHE:CG	5:Q:87:PRO:HD3	2.48	0.48
5:Q:97:TYR:HE1	5:Q:99:GLY:C	2.22	0.48
12:s7:60:ILE:HG21	12:s7:92:PHE:CD2	2.49	0.48
13:j:57:PRO:HG3	49:AQ:53:GLY:O	2.14	0.48
13:j:132:ASN:ND2	75:1:2178:A:H3'	2.29	0.48
18:s8:104:ILE:HD11	18:s8:165:LEU:HB2	1.95	0.48
23:T:27:LYS:HG3	23:T:57:ARG:HH12	1.77	0.48
29:U:58:ALA:HA	29:U:61:VAL:HB	1.96	0.48
43:o:132:PRO:HA	43:o:229:PHE:CG	2.49	0.48
3:p:64:ILE:O	3:p:68:ARG:HG2	2.14	0.48
3:p:241:LYS:HB2	75:1:2586:G:C5	2.49	0.48
50:Y:3:LYS:O	50:Y:3:LYS:HD2	2.14	0.48
53:Z:117:LYS:NZ	58:A:159:U:OP2	2.47	0.48
17:c7:57:LEU:HD12	17:c7:57:LEU:H	1.79	0.48
58:A:555:A:C6	58:A:556:A:N1	2.82	0.48
58:A:751:G:H2'	58:A:752:A:C8	2.47	0.48
58:A:1301:U:H2'	58:A:1302:U:O4'	2.14	0.48
58:A:1472:C:H4'	58:A:1473:U:H5'	1.95	0.48
58:A:1600:A:O2'	58:A:1602:C:N4	2.47	0.48
59:b:7:SER:C	59:b:9:GLY:H	2.22	0.48
23:c8:134:ARG:HD3	58:sR:1559:A:C6	2.48	0.48
33:u:37:GLU:HB3	57:0:72:VAL:HG21	1.95	0.48
63:CW:86:LYS:O	63:CW:86:LYS:HD3	2.14	0.48
64:C:120:LEU:HD23	64:C:121:ILE:N	2.29	0.48
65:d:42:ARG:HD3	65:d:56:LEU:HD22	1.95	0.48
67:D:133:LYS:O	67:D:136:VAL:HG13	2.14	0.48
70:E:215:GLU:N	70:E:215:GLU:OE2	2.46	0.48
51:y:57:ILE:HG13	51:y:58:ASN:N	2.27	0.48
50:d3:63:GLN:OE1	50:d3:64:PRO:HA	2.14	0.48
50:d3:69:ARG:NH2	58:sR:569:C:H41	2.10	0.48
50:d3:108:GLY:HA2	58:sR:600:U:OP2	2.14	0.48
75:AR:1385:C:HO2'	37:CH:2:SER:N	2.11	0.48
75:AR:2347:U:O4	80:AR:3881:OHX:N3	2.47	0.48
75:AR:2413:A:H2'	75:AR:2414:G:H8	1.79	0.48
53:d4:34:ASN:HD21	58:sR:521:A:C2'	2.26	0.48
58:sR:1241:G:H3'	58:sR:1242:A:H8	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1526:A:N1	58:sR:1608:U:O2'	2.39	0.48
2:DC:48:TYR:O	2:DC:49:HIS:CG	2.67	0.48
12:I:16:LEU:HD23	12:I:16:LEU:H	1.77	0.48
12:I:167:GLU:HA	12:I:170:GLN:HB3	1.95	0.48
78:Rb:20:VAL:O	78:Rb:20:VAL:HG23	2.13	0.48
78:Rb:141:LEU:HD23	78:Rb:142:ALA:HB2	1.95	0.48
78:Rb:165:ASP:OD1	78:Rb:165:ASP:N	2.46	0.48
63:5:39:ASP:C	63:5:40:HIS:CD2	2.91	0.48
19:CE:334:ARG:HG3	19:CE:334:ARG:NH1	2.29	0.48
68:d9:40:ARG:HG3	68:d9:41:GLN:N	2.29	0.48
31:CG:221:GLU:HG3	31:CG:222:LEU:H	1.79	0.48
73:s4:121:TYR:HB2	73:s4:162:ILE:O	2.12	0.48
39:v:73:ARG:NH1	39:v:88:GLY:O	2.44	0.48
79:AA:22:LYS:HD3	79:AA:129:TRP:CZ3	2.49	0.48
38:DI:88:ARG:HA	38:DI:91:ARG:HB3	1.95	0.48
75:1:1798:A:H2'	75:1:1799:A:C8	2.48	0.48
75:1:2180:G:H2'	75:1:2181:C:C6	2.49	0.48
75:1:2433:U:OP1	80:1:3545:OHX:N2	2.47	0.48
3:CJ:94:PHE:HB3	3:CJ:189:LEU:CD1	2.44	0.48
8:AC:28:LYS:HG2	8:AC:29:TYR:CD1	2.48	0.48
18:s8:47:ARG:HG2	18:s8:47:ARG:NH1	2.28	0.48
19:k:233:TRP:CD1	19:k:265:ALA:HB1	2.49	0.48
20:AE:10:ARG:HG2	20:AE:108:VAL:HG22	1.96	0.48
22:DM:74:LYS:HD3	22:DM:74:LYS:HA	1.55	0.48
27:CN:168:ARG:CZ	27:CN:172:LEU:HD11	2.44	0.48
32:AG:22:VAL:HA	75:1:633:C:O2'	2.14	0.48
37:n:78:ARG:NH2	75:1:3272:C:OP2	2.46	0.48
42:c3:129:TYR:CB	42:c3:135:LEU:HD22	2.43	0.48
44:CQ:143:THR:HG22	44:CQ:147:TRP:O	2.14	0.48
46:X:119:LYS:NZ	58:A:687:G:H5'	2.29	0.48
3:p:161:GLU:HA	3:p:164:VAL:CG2	2.42	0.48
50:Y:109:ARG:CD	50:Y:114:LYS:HA	2.41	0.48
9:q:66:ALA:O	75:1:3113:A:O2'	2.27	0.48
52:p0:42:ARG:HB3	52:p0:46:ARG:NH1	2.29	0.48
53:Z:40:LEU:H	53:Z:40:LEU:HD12	1.79	0.48
22:AL:11:PHE:HD1	22:AL:12:LEU:HB3	1.79	0.48
58:A:38:C:H4'	24:K:6:ARG:NH2	2.24	0.48
58:A:448:C:O3'	73:F:29:PRO:HA	2.14	0.48
58:A:560:U:H2'	58:A:561:G:C8	2.48	0.48
58:A:591:A:H2'	58:A:592:A:H8	1.75	0.48
58:A:1031:U:H4'	58:A:1032:G:OP2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:1783:C:H2'	58:A:1784:C:H6	1.78	0.48
48:x:38:GLY:H	48:x:114:VAL:HG13	1.78	0.48
49:AQ:3:LYS:HE2	49:AQ:6:LYS:HA	1.94	0.48
46:d2:113:HIS:HE2	46:d2:117:ARG:NH2	2.12	0.48
72:CZ:115:ARG:HD2	72:CZ:121:LYS:CB	2.39	0.48
73:F:41:SER:OG	73:F:42:LEU:N	2.46	0.48
73:F:256:ARG:HD2	73:F:256:ARG:C	2.38	0.48
54:z:89:LEU:HD13	75:1:1779:C:C4	2.48	0.48
75:AR:595:G:C8	75:AR:609:G:C6	3.01	0.48
75:AR:1330:A:OP2	32:DH:19:SER:HB3	2.13	0.48
75:AR:3058:U:OP1	20:DF:28:ARG:NH2	2.45	0.48
75:AR:3295:A:H5'	19:CE:119:TYR:HE1	1.79	0.48
75:AR:3379:C:H4'	19:CE:315:GLY:HA2	1.95	0.48
77:G:120:ILE:O	77:G:121:ILE:HD12	2.14	0.48
78:h:42:LEU:O	78:h:61:PHE:N	2.46	0.48
53:d4:29:HIS:O	53:d4:31:ASN:N	2.47	0.48
58:sR:339:C:H2'	58:sR:340:U:H6	1.79	0.48
58:sR:542:A:C8	58:sR:543:C:H2'	2.48	0.48
58:sR:640:U:H2'	58:sR:641:G:O4'	2.14	0.48
58:sR:1200:G:H4'	58:sR:1201:G:C5'	2.44	0.48
56:d5:38:HIS:CD2	56:d5:72:GLY:H	2.31	0.48
78:Rb:82:SER:O	78:Rb:113:VAL:HG11	2.14	0.48
78:Rb:123:ILE:HB	78:Rb:132:LYS:O	2.14	0.48
78:Rb:157:VAL:HG12	78:Rb:168:THR:O	2.13	0.48
61:s0:25:GLY:O	61:s0:45:VAL:HG23	2.13	0.48
61:s0:75:ALA:HB1	61:s0:174:TRP:CH2	2.49	0.48
14:DE:36:GLN:O	14:DE:38:LYS:NZ	2.46	0.48
24:K:110:GLN:HE21	24:K:126:ARG:HB2	1.79	0.48
70:s3:195:SER:HB2	70:s3:200:LYS:HE2	1.95	0.48
70:s3:223:LYS:HD3	70:s3:225:TYR:CE1	2.47	0.48
37:CH:65:ILE:O	37:CH:76:LEU:HA	2.13	0.48
32:DH:6:ARG:HG3	32:DH:8:TYR:CD1	2.49	0.48
39:v:4:TYR:OH	75:1:148:G:OP2	2.19	0.48
43:CI:35:ALA:O	43:CI:39:GLU:HG3	2.13	0.48
77:s5:142:PRO:O	77:s5:162:VAL:HG11	2.14	0.48
75:1:2107:A:C2	75:1:3344:A:H8	2.31	0.48
75:1:3251:U:H2'	75:1:3252:G:C8	2.48	0.48
9:CK:93:VAL:O	9:CK:177:ASP:HA	2.14	0.48
15:CL:32:ARG:HD2	15:CL:32:ARG:HA	1.59	0.48
18:s8:42:ARG:O	18:s8:43:ILE:HD12	2.13	0.48
19:k:56:ILE:HG22	19:k:359:ILE:HG12	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:T:102:ALA:HB3	23:T:104:ASN:CG	2.39	0.48
32:AG:104:PRO:HA	37:n:82:ARG:O	2.14	0.48
46:X:35:ILE:HD12	46:X:61:ILE:HD11	1.96	0.48
47:c4:51:ASP:HA	47:c4:54:GLU:HG3	1.95	0.48
47:c4:122:PRO:HB3	58:sR:887:A:H1'	1.94	0.48
47:c4:129:LYS:HG3	47:c4:130:GLY:N	2.29	0.48
48:CR:5:GLY:O	48:CR:7:THR:HG23	2.14	0.48
50:Y:43:PHE:C	50:Y:45:GLY:H	2.21	0.48
9:q:112:ILE:N	9:q:126:VAL:O	2.35	0.48
11:c6:7:VAL:HG11	11:c6:91:ALA:C	2.39	0.48
54:CT:173:ARG:HA	54:CT:176:ARG:HG3	1.95	0.48
55:sM:58:GLU:OE1	23:c8:120:ARG:NE	2.26	0.48
56:a:93:SER:HG	56:a:100:ILE:H	1.58	0.48
58:A:609:U:H4'	58:A:610:G:O5'	2.13	0.48
58:A:747:C:H2'	58:A:748:U:H6	1.79	0.48
58:A:827:C:H2'	58:A:828:U:O4'	2.14	0.48
58:A:1114:G:O2'	58:A:1130:G:O6	2.25	0.48
58:A:1354:G:H5'	58:A:1355:C:OP2	2.13	0.48
58:A:1535:U:O2'	58:A:1536:G:H5''	2.14	0.48
58:A:1558:U:H3'	58:A:1559:A:H4'	1.95	0.48
23:c8:114:GLU:O	23:c8:118:LYS:HB2	2.14	0.48
61:B:89:PHE:O	61:B:93:THR:HG23	2.13	0.48
29:c9:93:HIS:C	29:c9:94:ILE:HD13	2.39	0.48
63:CW:90:ARG:O	63:CW:91:ASP:HB3	2.14	0.48
63:CW:94:ARG:NH1	75:AR:1757:A:OP1	2.44	0.48
65:d:13:ILE:HG13	65:d:14:LYS:H	1.79	0.48
44:w:65:ASN:HB3	44:w:68:ARG:HD2	1.96	0.48
45:AP:46:LYS:HD3	45:AP:54:THR:HB	1.94	0.48
67:D:125:ILE:O	67:D:129:ILE:HG13	2.13	0.48
67:D:226:THR:HG23	67:D:229:LEU:HD13	1.95	0.48
68:e:15:GLY:O	68:e:18:SER:OG	2.29	0.48
70:E:54:ARG:NH2	70:E:56:GLN:HB3	2.29	0.48
72:CZ:100:LYS:HG3	72:CZ:105:VAL:O	2.14	0.48
73:F:46:VAL:HG23	73:F:50:ASN:HB2	1.96	0.48
75:AR:1629:U:O2'	75:AR:1630:U:H4'	2.14	0.48
75:AR:1857:C:H1'	38:DI:5:VAL:O	2.14	0.48
75:AR:2403:G:C8	75:AR:2870:C:H4'	2.49	0.48
1:AS:46:A:OP1	31:CG:158:ARG:HG2	2.14	0.48
58:sR:1071:U:H2'	58:sR:1072:C:C6	2.49	0.48
12:I:14:THR:OG1	12:I:17:GLU:OE1	2.31	0.48
78:Rb:85:TRP:CD1	78:Rb:109:ASP:CB	2.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Rb:114:ASP:HB3	78:Rb:156:VAL:HG13	1.96	0.48
18:J:116:HIS:O	18:J:118:GLY:N	2.47	0.48
61:s0:63:ILE:O	61:s0:67:ILE:HD13	2.14	0.48
31:CG:68:THR:O	31:CG:71:GLY:N	2.39	0.48
39:v:179:LYS:NZ	75:1:286:U:O3'	2.47	0.48
77:s5:120:ILE:O	77:s5:124:LEU:HG	2.13	0.48
77:s5:158:GLN:CD	77:s5:225:ARG:HG2	2.39	0.48
75:1:274:G:O6	80:1:3450:OHX:N5	2.47	0.48
75:1:733:G:O6	80:1:4000:OHX:N4	2.47	0.48
75:1:839:C:H4'	75:1:1724:U:C2'	2.44	0.48
75:1:1461:A:H2'	75:1:1462:A:C8	2.49	0.48
75:1:2369:G:H2'	75:1:2370:G:C8	2.49	0.48
75:1:3212:C:H2'	75:1:3213:A:O4'	2.14	0.48
5:Q:97:TYR:HA	5:Q:102:PHE:HD1	1.79	0.48
6:s6:57:ASP:OD2	6:s6:72:ARG:NH1	2.42	0.48
10:DK:56:ARG:O	10:DK:60:LEU:HD22	2.14	0.48
11:R:131:GLY:HA2	11:R:138:PHE:CE1	2.49	0.48
12:s7:24:PHE:O	12:s7:28:GLU:HB2	2.14	0.48
13:j:105:GLY:CA	13:j:160:SER:HB3	2.43	0.48
19:k:347:SER:C	19:k:349:LYS:H	2.22	0.48
23:T:128:PHE:HD2	55:i:61:ILE:HG22	1.79	0.48
27:CN:33:VAL:HG21	75:AR:690:A:C2	2.49	0.48
28:DN:19:GLN:NE2	7:AT:53:A:OP1	2.45	0.48
30:c0:24:LYS:HG3	30:c0:33:GLU:OE1	2.13	0.48
32:AG:88:ASN:O	75:1:429:U:H4'	2.13	0.48
33:CO:8:LYS:C	33:CO:8:LYS:HD2	2.39	0.48
43:o:52:GLN:O	43:o:56:GLU:HG2	2.14	0.48
3:p:116:VAL:HG13	3:p:120:LYS:H	1.79	0.48
10:AJ:89:GLU:O	10:AJ:93:ILE:HG23	2.14	0.48
48:CR:122:ALA:HB3	48:CR:143:PRO:HB2	1.95	0.48
9:q:36:LYS:HZ3	9:q:74:LEU:HB3	1.77	0.48
54:CT:41:ILE:O	54:CT:45:VAL:HG12	2.14	0.48
21:s:91:LEU:CD2	21:s:104:PHE:HB3	2.44	0.48
58:A:249:U:H3'	58:A:250:C:H5'	1.96	0.48
58:A:276:C:O2'	58:A:277:U:H5''	2.14	0.48
58:A:542:A:H5''	58:A:544:A:C8	2.49	0.48
23:c8:39:GLY:N	58:sR:1566:U:H5''	2.29	0.48
44:w:3:VAL:HG22	44:w:4:GLU:OE1	2.14	0.48
41:d1:11:LEU:HD13	41:d1:11:LEU:O	2.14	0.48
48:x:175:ARG:O	48:x:179:GLN:HG3	2.14	0.48
69:CY:50:ALA:HA	69:CY:55:PHE:CD2	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:E:151:LYS:O	70:E:151:LYS:HG3	2.13	0.48
73:F:129:VAL:CG1	73:F:139:VAL:HG12	2.39	0.48
75:AR:1419:A:H5''	25:CF:193:LYS:HZ2	1.77	0.48
76:DA:31:LEU:HB3	76:DA:101:PRO:HG3	1.96	0.48
58:sR:93:A:C6	58:sR:398:G:C6	3.02	0.48
58:sR:514:G:O2'	58:sR:515:A:H5''	2.14	0.48
58:sR:1211:A:H61	58:sR:1452:U:H3	1.61	0.48
58:sR:1305:U:O2	80:sR:2062:OHX:N4	2.47	0.48
58:sR:1505:A:C5	58:sR:1506:G:H1'	2.49	0.48
58:sR:1588:G:OP1	80:sR:2004:OHX:N2	2.46	0.48
58:sR:1688:U:H2'	58:sR:1689:A:C8	2.49	0.48
78:Rb:164:ASP:CG	78:Rb:165:ASP:H	2.21	0.48
24:K:171:ARG:HA	24:K:174:ARG:NH2	2.29	0.48
65:d8:16:LEU:N	65:d8:27:GLN:O	2.45	0.48
20:DF:72:ARG:HG2	20:DF:96:VAL:CG2	2.44	0.48
31:CG:58:LYS:HA	31:CG:93:THR:HG21	1.96	0.48
70:s3:8:LYS:O	70:s3:12:VAL:HG12	2.14	0.48
70:s3:17:PHE:HE2	70:s3:77:PHE:CD2	2.32	0.48
75:1:304:G:H5'	75:1:304:G:N3	2.28	0.48
75:1:2541:U:H1'	75:1:2542:U:H4'	1.96	0.48
5:Q:47:ARG:NH1	58:A:1555:A:OP1	2.47	0.47
7:4:143:U:H2'	7:4:144:G:O4'	2.14	0.47
10:DK:90:MET:CA	10:DK:93:ILE:HG22	2.42	0.47
11:R:40:GLU:HA	11:R:45:ARG:HH22	1.79	0.47
12:s7:109:VAL:HA	58:sR:810:G:H21	1.79	0.47
19:k:218:ILE:CG1	19:k:276:THR:HG23	2.44	0.47
19:k:221:THR:O	19:k:334:ARG:NH1	2.47	0.47
19:k:369:ARG:HH21	69:7:11:ALA:HB2	1.79	0.47
21:CM:105:GLY:C	21:CM:106:ILE:HD13	2.39	0.47
23:T:33:THR:HA	23:T:38:VAL:HG11	1.96	0.47
38:AH:91:ARG:NH1	75:1:2553:U:O2'	2.47	0.47
39:CP:49:ARG:NH2	75:AR:149:U:OP2	2.42	0.47
39:CP:172:ARG:HH11	75:AR:30:G:P	2.37	0.47
44:CQ:157:GLU:O	44:CQ:161:LYS:N	2.43	0.47
9:q:28:VAL:HG13	9:q:33:THR:HG22	1.96	0.47
56:a:50:ILE:O	56:a:54:VAL:HG13	2.14	0.47
58:A:304:U:O2'	36:M:69:LYS:HG3	2.13	0.47
58:A:333:A:OP1	18:J:31:ARG:NH2	2.47	0.47
58:A:406:U:H2'	58:A:407:A:C8	2.49	0.47
58:A:730:G:N2	58:A:731:C:H5'	2.28	0.47
58:A:1022:C:OP2	80:A:1903:OHX:N4	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:1050:G:O6	80:A:2150:OHX:N1	2.47	0.47
58:A:1274:C:H4'	58:A:1275:A:O5'	2.14	0.47
58:A:1314:U:OP1	80:A:2096:OHX:N5	2.47	0.47
58:A:1474:G:P	77:G:109:LYS:HZ1	2.36	0.47
23:c8:23:ASP:HB3	23:c8:26:ILE:HD11	1.96	0.47
27:t:79:GLU:O	27:t:113:VAL:HG12	2.13	0.47
63:CW:82:LYS:HG2	75:AR:1682:U:O2	2.14	0.47
64:C:197:ILE:O	64:C:201:THR:HG23	2.13	0.47
48:x:36:ILE:CG2	48:x:114:VAL:HG11	2.43	0.47
70:E:76:ARG:HD2	30:L:65:TYR:OH	2.13	0.47
72:CZ:91:ASN:O	72:CZ:95:ILE:HG13	2.14	0.47
54:z:14:VAL:HG11	54:z:41:ILE:CG2	2.44	0.47
75:AR:937:G:C6	75:AR:2410:U:H5''	2.49	0.47
75:AR:1103:A:O2'	75:AR:1104:G:OP1	2.28	0.47
75:AR:1394:A:H4'	75:AR:1420:C:H4'	1.95	0.47
77:G:38:THR:HA	77:G:41:LYS:CD	2.41	0.47
79:DB:25:ILE:HA	79:DB:43:VAL:HG12	1.96	0.47
58:sR:197:A:H2'	58:sR:198:A:H8	1.79	0.47
58:sR:1702:A:H5'	58:sR:1703:C:H5	1.79	0.47
56:d5:38:HIS:CD2	56:d5:70:LYS:HA	2.49	0.47
56:d5:95:HIS:CD2	77:s5:112:ARG:HD3	2.47	0.47
60:2:115:LYS:HA	60:2:118:GLU:HG3	1.95	0.47
2:DC:133:LEU:HD23	2:DC:137:LYS:HZ2	1.78	0.47
12:I:134:GLU:HG3	42:O:21:ASN:ND2	2.26	0.47
62:d7:6:ASP:OD2	62:d7:9:HIS:ND1	2.47	0.47
64:s1:93:GLY:C	64:s1:94:LYS:HG2	2.39	0.47
65:d8:61:ARG:H	65:d8:61:ARG:HD2	1.79	0.47
25:CF:11:LEU:HD11	25:CF:155:ASP:HB2	1.96	0.47
43:CI:173:LEU:HB3	43:CI:178:ILE:HB	1.95	0.47
77:s5:93:LEU:O	77:s5:96:SER:OG	2.32	0.47
77:s5:149:VAL:CG1	77:s5:155:ALA:HB1	2.42	0.47
75:1:83:U:H2'	75:1:84:U:O4'	2.14	0.47
75:1:2419:A:H2'	75:1:2420:C:C6	2.49	0.47
1:3:65:G:O3'	15:r:204:GLY:HA2	2.15	0.47
1:3:109:G:N7	80:3:202:OHX:N5	2.62	0.47
7:4:114:G:OP1	75:1:1831:U:O2'	2.14	0.47
11:R:23:LYS:O	11:R:64:ASP:N	2.46	0.47
19:k:41:VAL:CG1	19:k:185:GLY:HA3	2.40	0.47
24:s9:77:ILE:O	24:s9:81:VAL:HG13	2.13	0.47
25:l:272:VAL:HG23	75:1:696:C:OP1	2.14	0.47
26:AF:75:LEU:HD11	26:AF:97:ALA:HA	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:c0:2:LEU:HD23	30:c0:4:PRO:HD3	1.95	0.47
30:c0:24:LYS:HG2	30:c0:63:TYR:CE2	2.49	0.47
31:m:48:LYS:HZ1	75:1:2749:G:P	2.36	0.47
40:DP:6:ARG:HH12	58:sR:1114:G:P	2.37	0.47
10:AJ:4:LYS:HD2	10:AJ:14:GLY:HA3	1.96	0.47
50:Y:77:ILE:HD11	58:A:434:G:H5'	1.96	0.47
52:p0:28:VAL:HG23	52:p0:186:THR:O	2.13	0.47
11:c6:128:LYS:HZ2	11:c6:134:ALA:HB1	1.80	0.47
55:sM:61:ILE:HG21	23:c8:120:ARG:HG3	1.95	0.47
58:A:12:U:H2'	58:A:13:C:C6	2.48	0.47
58:A:1220:C:OP1	30:L:48:SER:OG	2.31	0.47
62:c:40:CYS:C	62:c:43:ILE:HD11	2.39	0.47
64:C:195:LYS:HB2	64:C:195:LYS:HE3	1.68	0.47
45:AP:50:PHE:O	80:1:3990:OHX:N5	2.47	0.47
67:D:140:ARG:HH11	67:D:140:ARG:HG2	1.80	0.47
41:d1:36:VAL:HG11	41:d1:78:LEU:CD1	2.44	0.47
54:z:151:ARG:O	54:z:155:LEU:HD13	2.15	0.47
54:z:173:ARG:O	54:z:173:ARG:HG2	2.14	0.47
75:AR:411:U:H2'	75:AR:412:G:H8	1.79	0.47
75:AR:508:U:H2'	75:AR:509:U:C6	2.49	0.47
75:AR:956:U:H2'	75:AR:957:C:C6	2.49	0.47
75:AR:1104:G:H8	75:AR:1104:G:P	2.37	0.47
75:AR:1232:C:C5	75:AR:1261:G:H2'	2.48	0.47
75:AR:1623:G:OP2	80:AR:3483:OHX:N4	2.47	0.47
75:AR:3049:A:C2	19:CE:75:ALA:HB2	2.50	0.47
77:G:137:ILE:HD12	77:G:138:THR:N	2.28	0.47
78:h:177:MET:SD	78:h:193:ILE:HG22	2.54	0.47
6:H:5:ILE:HD11	6:H:111:LEU:HD12	1.94	0.47
58:sR:230:C:N4	58:sR:235:G:H22	2.12	0.47
58:sR:485:A:C5	58:sR:486:G:H1'	2.49	0.47
58:sR:1079:U:H2'	58:sR:1080:U:O4'	2.14	0.47
58:sR:1496:U:H4'	58:sR:1519:U:O2'	2.14	0.47
61:s0:48:ILE:HD13	61:s0:149:LEU:HD11	1.96	0.47
62:d7:36:LYS:CE	62:d7:43:ILE:HA	2.44	0.47
24:K:100:LYS:H	24:K:100:LYS:HG3	1.50	0.47
64:s1:99:ASN:OD1	64:s1:100:PHE:N	2.46	0.47
72:8:91:ASN:OD1	72:8:93:TYR:N	2.47	0.47
36:M:19:ILE:HG12	36:M:34:TRP:HB2	1.96	0.47
39:v:104:GLU:HA	39:v:160:GLU:HG3	1.97	0.47
39:v:125:SER:HB3	75:1:2433:U:C1'	2.39	0.47
77:s5:120:ILE:HA	77:s5:123:VAL:HG22	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:277:G:H2'	75:1:278:U:C6	2.49	0.47
75:1:1559:A:H4'	75:1:1560:G:OP2	2.14	0.47
75:1:1682:U:H4'	75:1:1684:U:O4	2.14	0.47
75:1:1725:C:H2'	75:1:1726:C:C6	2.49	0.47
3:CJ:78:PHE:C	3:CJ:80:TYR:H	2.22	0.47
3:CJ:171:LYS:HZ1	3:CJ:175:VAL:C	2.22	0.47
6:s6:139:ASN:HA	6:s6:142:ARG:HB3	1.96	0.47
8:AC:5:LYS:HG3	8:AC:6:ASN:N	2.29	0.47
24:s9:78:ARG:HH22	24:s9:82:ARG:NH2	2.13	0.47
24:s9:110:GLN:OE1	24:s9:144:PRO:HB3	2.15	0.47
28:DN:21:ARG:NH1	7:AT:52:A:OP1	2.47	0.47
31:m:25:GLU:HB2	31:m:27:LYS:HG3	1.96	0.47
32:AG:32:ILE:HG12	32:AG:100:ILE:CD1	2.44	0.47
33:CO:32:LEU:HD11	33:CO:94:TRP:CG	2.49	0.47
33:CO:102:LYS:O	33:CO:102:LYS:HD3	2.15	0.47
36:c1:75:VAL:HG12	36:c1:121:ASP:O	2.14	0.47
36:c1:80:MET:SD	58:sR:324:U:O2'	2.66	0.47
39:CP:47:LYS:HE3	39:CP:51:LEU:HD11	1.96	0.47
11:c6:44:LEU:O	11:c6:47:LYS:N	2.47	0.47
58:A:312:A:C2	58:A:314:C:H2'	2.49	0.47
58:A:1217:A:H8	58:A:1217:A:H5'	1.79	0.47
58:A:1278:G:H2'	58:A:1279:C:O4'	2.14	0.47
58:A:1294:G:O2'	58:A:1321:A:N1	2.31	0.47
59:b:43:ASN:HA	59:b:66:LYS:CB	2.45	0.47
23:c8:66:LEU:O	23:c8:69:ILE:HB	2.15	0.47
23:c8:99:HIS:O	23:c8:101:LEU:HD13	2.14	0.47
27:t:85:LEU:H	27:t:85:LEU:HD23	1.79	0.47
29:c9:97:SER:O	29:c9:101:ASN:ND2	2.41	0.47
63:CW:80:THR:O	63:CW:83:TYR:N	2.47	0.47
45:AP:19:LYS:HG2	45:AP:20:HIS:N	2.29	0.47
67:D:235:LEU:O	67:D:235:LEU:HD23	2.14	0.47
70:E:54:ARG:HE	70:E:57:ASP:H	1.63	0.47
75:AR:856:G:C6	75:AR:857:G:N1	2.82	0.47
75:AR:1239:C:N4	75:AR:1249:G:H22	2.11	0.47
75:AR:1804:A:H2'	75:AR:1805:C:C6	2.50	0.47
77:G:130:ILE:HA	77:G:133:VAL:CG1	2.41	0.47
78:h:131:ILE:O	78:h:144:LEU:N	2.36	0.47
78:h:131:ILE:HB	78:h:144:LEU:HB2	1.95	0.47
78:h:209:THR:C	78:h:210:LEU:HD13	2.39	0.47
79:DB:81:LEU:HD23	38:DI:93:PHE:CD2	2.50	0.47
58:sR:891:A:H2'	58:sR:892:A:C8	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1473:U:P	77:s5:190:ILE:HG22	2.54	0.47
2:DC:126:LYS:HA	2:DC:146:GLU:O	2.14	0.47
18:J:12:SER:HB3	18:J:18:ARG:HD3	1.96	0.47
18:J:106:ALA:CB	18:J:165:LEU:HG	2.44	0.47
61:s0:112:THR:HG22	61:s0:114:SER:H	1.78	0.47
19:CE:292:ALA:HB1	19:CE:295:ALA:HB3	1.96	0.47
14:DE:10:ILE:O	14:DE:13:LYS:HB2	2.14	0.47
64:s1:109:LYS:O	64:s1:112:SER:OG	2.27	0.47
25:CF:10:SER:HB3	25:CF:14:GLU:CB	2.44	0.47
25:CF:118:LYS:O	25:CF:122:THR:HG23	2.14	0.47
20:DF:19:ARG:HD2	20:DF:35:GLU:HG3	1.95	0.47
30:L:60:SER:O	30:L:61:TRP:HB2	2.14	0.47
67:s2:73:LEU:O	67:s2:76:LEU:HD22	2.13	0.47
31:CG:95:TRP:CH2	31:CG:161:GLY:HA2	2.48	0.47
73:s4:181:VAL:HG12	73:s4:227:VAL:HG12	1.97	0.47
39:v:5:LYS:NZ	75:1:265:A:O3'	2.47	0.47
75:1:352:A:H61	75:1:365:A:H5''	1.79	0.47
75:1:1141:C:O2'	75:1:1153:A:N3	2.45	0.47
75:1:2767:U:H2'	75:1:2768:U:C6	2.49	0.47
4:DJ:6:ALA:HB1	4:DJ:10:ARG:NH2	2.23	0.47
6:s6:1:MET:SD	6:s6:24:ILE:HG21	2.54	0.47
12:s7:49:ILE:HD12	12:s7:50:ASP:H	1.80	0.47
13:j:101:VAL:HB	13:j:165:VAL:HG12	1.96	0.47
24:s9:123:HIS:O	24:s9:127:VAL:HG12	2.14	0.47
33:CO:39:ILE:O	57:CU:95:ARG:HD3	2.15	0.47
41:W:45:ALA:HB2	61:B:184:LEU:HB3	1.95	0.47
42:c3:110:ASP:OD2	58:sR:877:G:N2	2.43	0.47
49:DR:83:ILE:HD12	49:DR:84:ARG:N	2.29	0.47
51:CS:175:ALA:C	2:DC:51:GLY:HA2	2.39	0.47
22:AL:31:LEU:HD12	22:AL:32:ASN:N	2.30	0.47
55:sM:42:ALA:O	55:sM:43:ASP:HB3	2.15	0.47
58:A:164:A:H1'	6:H:13:GLN:NE2	2.26	0.47
58:A:196:G:O2'	58:A:197:A:H8	1.97	0.47
58:A:776:G:C6	58:A:777:C:C5	3.02	0.47
58:A:877:G:OP1	80:A:1956:OHX:N1	2.46	0.47
27:t:154:VAL:HG22	27:t:155:GLU:H	1.79	0.47
60:CV:22:HIS:N	31:CG:17:GLN:OE1	2.47	0.47
33:u:24:LYS:HD3	33:u:24:LYS:HA	1.71	0.47
64:C:180:THR:HG23	64:C:183:GLN:N	2.16	0.47
64:C:193:ILE:HD12	64:C:194:ASN:N	2.29	0.47
69:CY:32:GLN:OE1	69:CY:33:ASN:ND2	2.43	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:y:62:VAL:HG13	51:y:66:ARG:HD2	1.95	0.47
50:d3:24:TRP:CE3	50:d3:30:LYS:HG3	2.50	0.47
50:d3:70:LYS:HB3	50:d3:93:LEU:HD12	1.97	0.47
75:AR:216:G:H4'	76:DA:19:TYR:CZ	2.50	0.47
75:AR:1071:U:O4	80:AR:3604:OHX:N4	2.47	0.47
75:AR:1138:U:H2'	75:AR:1139:G:O4'	2.13	0.47
75:AR:1214:U:H2'	75:AR:1215:U:C6	2.49	0.47
75:AR:2366:C:H5'	19:CE:259:HIS:HE1	1.78	0.47
77:G:102:ARG:HG2	77:G:103:ASN:ND2	2.30	0.47
6:H:131:LYS:HD3	6:H:131:LYS:N	2.29	0.47
58:sR:1014:G:OP1	80:sR:2037:OHX:N6	2.47	0.47
58:sR:1609:U:O2'	77:s5:105:GLY:O	2.31	0.47
60:2:106:LEU:HA	60:2:109:VAL:HG12	1.97	0.47
7:AT:65:A:H2'	7:AT:66:A:O4'	2.15	0.47
7:AT:86:U:H5'	7:AT:87:G:OP1	2.14	0.47
2:DC:95:SER:C	2:DC:122:PRO:HG2	2.39	0.47
78:Rb:19:TRP:O	78:Rb:38:ARG:N	2.48	0.47
63:5:17:VAL:HG22	63:5:63:VAL:HB	1.96	0.47
13:CD:140:ASN:O	13:CD:144:ASN:HA	2.15	0.47
18:J:102:VAL:HG12	18:J:103:GLN:N	2.29	0.47
18:J:113:PHE:CZ	18:J:152:ILE:HD11	2.50	0.47
61:s0:135:GLU:HA	61:s0:138:TYR:HD2	1.79	0.47
61:s0:178:ALA:O	61:s0:182:LEU:HD23	2.14	0.47
61:s0:183:ARG:CD	61:s0:191:ARG:HD3	2.44	0.47
67:s2:102:VAL:HG11	67:s2:129:ILE:HG22	1.96	0.47
76:9:90:VAL:HG21	75:1:392:G:O2'	2.14	0.47
73:s4:134:LYS:HE3	73:s4:148:ARG:NH2	2.30	0.47
73:s4:250:GLU:OE1	73:s4:250:GLU:N	2.43	0.47
77:s5:175:LEU:HD23	77:s5:197:GLU:HG3	1.96	0.47
75:1:138:U:O4	80:1:3842:OHX:N1	2.47	0.47
75:1:595:G:N1	75:1:609:G:H5''	2.29	0.47
75:1:1495:U:H5	75:1:1835:A:N1	2.13	0.47
75:1:2400:G:H5''	75:1:2401:A:OP2	2.15	0.47
75:1:2609:A:H2'	75:1:2610:G:C8	2.49	0.47
75:1:2662:G:H2'	75:1:2663:G:C8	2.48	0.47
75:1:3084:C:H2'	75:1:3085:G:O4'	2.14	0.47
1:3:84:A:H2'	1:3:85:G:C8	2.50	0.47
2:AB:10:LYS:NZ	75:1:1374:G:O6	2.35	0.47
3:CJ:138:HIS:N	75:AR:148:G:O6	2.41	0.47
7:4:113:U:H5''	28:AM:7:PHE:HB3	1.95	0.47
10:DK:18:THR:OG1	27:CN:106:GLN:HB3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:s7:67:LEU:HG	12:s7:94:ALA:HB2	1.96	0.47
19:k:146:ARG:HD2	19:k:149:ALA:HB3	1.97	0.47
19:k:178:LEU:HD12	19:k:179:ALA:N	2.29	0.47
22:DM:20:VAL:O	22:DM:21:LYS:HD2	2.14	0.47
24:s9:60:LEU:HD11	24:s9:93:LEU:HB2	1.97	0.47
25:l:44:LYS:NZ	75:l:1427:U:OP1	2.48	0.47
25:l:283:THR:HG23	25:l:289:ILE:HD11	1.97	0.47
31:m:184:ASP:CG	31:m:187:THR:HG22	2.39	0.47
31:m:234:ASP:HB2	31:m:235:SER:HB3	1.95	0.47
31:m:262:LYS:N	31:m:262:LYS:HD3	2.29	0.47
32:AG:8:TYR:CE1	32:AG:99:ARG:HG2	2.49	0.47
34:DO:79:GLU:HB3	34:DO:82:LEU:HB2	1.96	0.47
35:V:50:LEU:HD23	35:V:50:LEU:HA	1.72	0.47
35:V:101:LYS:HD2	35:V:104:THR:OG1	2.15	0.47
42:c3:73:ARG:HH11	42:c3:73:ARG:HG2	1.78	0.47
42:c3:121:ARG:NH1	58:sR:868:G:OP1	2.48	0.47
44:CQ:37:ARG:HD2	44:CQ:108:ILE:HD11	1.96	0.47
45:DQ:91:PHE:CD1	45:DQ:91:PHE:C	2.92	0.47
46:X:32:LYS:NZ	58:A:638:U:OP1	2.44	0.47
46:X:57:ARG:HH22	42:O:16:ILE:H	1.61	0.47
46:X:124:LYS:HE2	58:A:805:U:O2	2.14	0.47
47:c4:19:ILE:HG12	47:c4:28:VAL:HG12	1.96	0.47
50:Y:41:SER:O	50:Y:43:PHE:O	2.33	0.47
5:c5:99:GLY:O	58:sR:1211:A:H1'	2.15	0.47
11:c6:29:ILE:H	77:s5:27:THR:CG2	2.28	0.47
17:c7:31:ASN:HA	17:c7:34:LEU:HB3	1.97	0.47
21:s:125:MET:HE2	21:s:127:PHE:CE1	2.50	0.47
58:A:452:A:H3'	58:A:453:U:C6	2.49	0.47
58:A:861:U:O3'	42:O:20:ARG:NH1	2.47	0.47
58:A:1727:G:H2'	58:A:1728:A:C8	2.49	0.47
59:b:34:LYS:O	59:b:34:LYS:HG3	2.14	0.47
23:c8:65:GLU:HG3	23:c8:68:ARG:NH2	2.29	0.47
61:B:131:GLN:OE1	61:B:131:GLN:N	2.41	0.47
29:c9:114:VAL:HB	29:c9:122:ARG:HB3	1.96	0.47
33:u:83:LYS:HD2	33:u:83:LYS:C	2.40	0.47
44:w:18:ARG:NH1	75:l:1315:U:OP1	2.47	0.47
48:x:19:GLY:HA3	48:x:22:LEU:HD11	1.96	0.47
48:x:23:ARG:HA	48:x:143:PRO:HB3	1.97	0.47
70:E:34:TYR:OH	70:E:37:VAL:HB	2.15	0.47
55:i:64:LYS:N	55:i:65:THR:HG23	2.29	0.47
73:F:11:ARG:HG2	73:F:27:TYR:C	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:22:G:O4'	7:AT:104:A:H1'	2.15	0.47
75:AR:431:U:OP1	32:DH:53:TYR:OH	2.26	0.47
75:AR:1456:A:N6	75:AR:1477:A:H4'	2.30	0.47
77:G:184:PHE:CE1	77:G:185:ARG:HD2	2.49	0.47
78:h:64:HIS:ND1	78:h:86:ASP:OD2	2.38	0.47
78:h:175:ASP:C	78:h:176:LYS:HG3	2.39	0.47
1:AS:4:U:H2'	1:AS:5:G:C8	2.48	0.47
79:DB:56:LYS:HD2	79:DB:56:LYS:HA	1.42	0.47
58:sR:1439:C:H2'	58:sR:1440:C:C6	2.49	0.47
58:sR:1469:A:H2'	58:sR:1470:C:C6	2.50	0.47
2:DC:122:PRO:HB3	2:DC:142:GLY:O	2.14	0.47
12:I:56:LYS:CB	12:I:88:ARG:HH21	2.27	0.47
12:I:111:LYS:HG2	12:I:112:ARG:H	1.79	0.47
78:Rb:42:LEU:HB2	78:Rb:61:PHE:CD2	2.49	0.47
78:Rb:135:THR:OG1	78:Rb:139:GLN:N	2.47	0.47
13:CD:143:GLU:O	13:CD:145:LYS:HG3	2.14	0.47
61:s0:143:VAL:HG11	61:s0:155:PHE:O	2.14	0.47
19:CE:53:MET:HG2	19:CE:77:THR:HG22	1.96	0.47
14:DE:13:LYS:O	14:DE:17:VAL:HG23	2.15	0.47
14:DE:31:VAL:O	14:DE:35:ARG:N	2.45	0.47
64:s1:103:MET:CE	64:s1:188:LEU:HD22	2.45	0.47
65:d8:58:GLU:HB3	65:d8:61:ARG:CG	2.44	0.47
69:7:60:LYS:O	69:7:60:LYS:HD2	2.14	0.47
31:CG:199:ILE:HD12	31:CG:199:ILE:H	1.79	0.47
31:CG:238:ASP:O	31:CG:242:SER:HB3	2.14	0.47
43:CI:232:ARG:CZ	43:CI:239:LEU:HD22	2.44	0.47
77:s5:165:LEU:HG	77:s5:169:ASN:ND2	2.30	0.47
75:1:631:U:H2'	75:1:632:G:C8	2.49	0.47
75:1:3064:U:O4	80:1:3843:OHX:N5	2.48	0.47
1:3:55:A:C4	21:s:9:MET:HG2	2.50	0.47
3:CJ:67:ILE:O	3:CJ:236:GLY:N	2.48	0.47
5:Q:48:GLY:O	5:Q:50:THR:N	2.47	0.47
6:s6:214:LYS:N	6:s6:214:LYS:HD2	2.30	0.47
7:4:104:A:N3	75:1:22:G:H1'	2.29	0.47
9:CK:165:CYS:SG	9:CK:179:ILE:HD12	2.53	0.47
11:R:16:ALA:HB2	11:R:72:GLY:HA3	1.95	0.47
12:s7:75:THR:O	12:s7:79:ARG:HB2	2.14	0.47
15:CL:156:ARG:HD2	15:CL:163:GLN:O	2.14	0.47
16:DL:13:ASN:O	75:AR:817:A:C4	2.66	0.47
33:CO:21:VAL:HB	33:CO:63:VAL:HG13	1.96	0.47
37:n:48:ARG:NH1	75:1:3276:G:H5'	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:c5:90:ILE:HA	5:c5:107:ILE:CG2	2.45	0.47
22:AL:17:ARG:NH1	75:1:1824:U:O3'	2.47	0.47
56:a:59:TYR:HB2	77:G:123:VAL:CG1	2.44	0.47
57:CU:48:LEU:HD13	60:CV:151:LEU:HD22	1.95	0.47
58:A:761:G:H4'	24:K:72:GLU:OE1	2.14	0.47
58:A:952:A:O2'	42:O:114:ARG:HD2	2.14	0.47
58:A:1062:A:H2'	58:A:1063:U:O4'	2.14	0.47
58:A:1528:U:O3'	77:G:112:ARG:NH1	2.48	0.47
58:A:1623:C:H2'	58:A:1624:C:H6	1.79	0.47
61:B:45:VAL:HG22	61:B:46:HIS:O	2.15	0.47
61:B:125:ASP:OD2	61:B:164:ASN:ND2	2.46	0.47
33:u:121:MET:HG3	75:1:3214:U:C5	2.50	0.47
63:CW:75:TYR:CD2	75:AR:1687:U:H1'	2.50	0.47
69:CY:16:GLY:O	75:AR:3050:U:O2'	2.32	0.47
46:d2:32:LYS:HD3	58:sR:637:C:O5'	2.15	0.47
75:AR:1348:U:H4'	75:AR:1349:G:OP1	2.10	0.47
75:AR:1940:G:H21	75:AR:3362:A:H8	1.62	0.47
75:AR:2174:G:H4'	75:AR:2175:U:O5'	2.14	0.47
75:AR:3160:U:H2'	75:AR:3161:C:C6	2.50	0.47
78:h:304:GLY:HA2	78:h:310:ILE:HG22	1.96	0.47
53:d4:12:VAL:HA	53:d4:22:GLN:O	2.14	0.47
53:d4:105:ARG:NH2	58:sR:459:G:OP2	2.48	0.47
57:0:60:SER:OG	57:0:62:ASN:OD1	2.28	0.47
1:AS:50:U:O2'	31:CG:221:GLU:O	2.28	0.47
79:DB:95:VAL:HG13	79:DB:96:VAL:HG13	1.96	0.47
58:sR:46:A:N1	58:sR:432:G:O2'	2.39	0.47
58:sR:403:G:H8	58:sR:403:G:P	2.37	0.47
58:sR:521:A:H2'	58:sR:522:U:O4'	2.14	0.47
58:sR:761:G:O6	80:sR:2145:OHX:N5	2.46	0.47
58:sR:1267:G:H2'	58:sR:1268:G:H8	1.78	0.47
58:sR:1514:U:H1'	70:s3:6:SER:CA	2.43	0.47
19:CE:238:LEU:HB2	19:CE:246:LEU:HB2	1.97	0.47
64:s1:127:VAL:HG21	64:s1:176:VAL:HG13	1.95	0.47
65:d8:64:ARG:HD3	65:d8:64:ARG:HA	1.68	0.47
69:7:31:PHE:HB3	69:7:36:SER:OG	2.14	0.47
25:CF:311:HIS:NE2	25:CF:314:LYS:HA	2.28	0.47
39:v:99:ARG:HD3	39:v:167:THR:HB	1.96	0.47
39:v:204:LYS:O	80:1:3724:OHX:N2	2.47	0.47
79:AA:115:LYS:NZ	75:1:1629:U:O3'	2.48	0.47
79:AA:135:ARG:HH22	75:1:2557:A:C5'	2.27	0.47
43:CI:24:GLU:H	43:CI:25:GLN:NE2	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:796:U:H2'	75:1:797:U:C6	2.49	0.47
75:1:817:A:H2'	75:1:920:A:C2	2.49	0.47
75:1:1565:G:H21	75:1:1575:A:N6	2.12	0.47
75:1:2213:A:N1	75:1:2429:G:H1'	2.29	0.47
1:3:112:G:H2'	1:3:113:C:C6	2.50	0.47
5:Q:121:ILE:HD13	23:T:122:HIS:HD2	1.79	0.47
9:CK:41:ILE:HD13	9:CK:71:VAL:CG2	2.41	0.47
10:DK:54:GLU:OE2	10:DK:86:LYS:NZ	2.48	0.47
11:R:42:GLU:CG	77:G:112:ARG:HH22	2.27	0.47
13:j:201:GLY:HA2	13:j:204:MET:HE3	1.95	0.47
17:S:6:THR:O	17:S:9:VAL:HG22	2.15	0.47
18:s8:27:PHE:C	18:s8:27:PHE:CD1	2.93	0.47
18:s8:138:ASN:CB	18:s8:141:ARG:HE	2.27	0.47
19:k:9:PRO:HG2	75:1:3043:C:H5'	1.96	0.47
19:k:37:ARG:HH12	19:k:188:ILE:HG23	1.80	0.47
19:k:41:VAL:CG1	19:k:186:GLY:H	2.26	0.47
19:k:83:PRO:O	19:k:165:GLN:HG3	2.15	0.47
20:AE:19:ARG:NH2	75:1:3324:C:OP1	2.48	0.47
20:AE:27:LYS:C	20:AE:30:PRO:HD2	2.39	0.47
21:CM:125:MET:HE2	21:CM:127:PHE:CE1	2.49	0.47
23:T:122:HIS:O	23:T:126:ARG:HG2	2.15	0.47
24:s9:71:PHE:C	24:s9:71:PHE:CD1	2.93	0.47
24:s9:71:PHE:C	24:s9:71:PHE:HD1	2.22	0.47
25:l:26:PHE:CD1	25:l:130:ALA:HB2	2.49	0.47
27:CN:54:LEU:HD22	27:CN:119:TYR:HB2	1.97	0.47
27:CN:140:SER:OG	27:CN:143:ALA:N	2.36	0.47
29:U:73:VAL:HG11	29:U:102:ARG:HB2	1.97	0.47
29:U:130:ARG:HB3	58:A:1358:G:O3'	2.15	0.47
31:m:83:LEU:H	31:m:83:LEU:HD12	1.79	0.47
31:m:164:LYS:HG2	31:m:180:PHE:CE2	2.50	0.47
33:CO:127:LYS:O	33:CO:131:VAL:HG23	2.15	0.47
34:DO:102:ARG:NE	75:AR:2896:A:OP1	2.30	0.47
38:AH:67:LYS:HB2	75:1:1821:U:C2	2.49	0.47
42:c3:49:GLN:HA	42:c3:52:VAL:HG22	1.97	0.47
43:o:158:LYS:H	43:o:158:LYS:HD2	1.79	0.47
4:AI:92:LEU:HD22	4:AI:96:GLU:HB3	1.97	0.47
46:X:83:ILE:HD13	46:X:122:SER:HB2	1.96	0.47
47:c4:84:ARG:HG3	47:c4:85:ALA:O	2.15	0.47
47:c4:114:ARG:NH2	64:s1:71:ALA:HB3	2.30	0.47
5:c5:90:ILE:HD12	5:c5:90:ILE:O	2.15	0.47
9:q:1:MET:O	9:q:2:LYS:HG3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:q:70:THR:O	9:q:74:LEU:HG	2.14	0.47
16:AK:22:CYS:SG	16:AK:24:ARG:HB2	2.55	0.47
52:p0:33:VAL:HG11	52:p0:185:LEU:HD23	1.97	0.47
52:p0:188:VAL:HG23	52:p0:189:GLN:H	1.79	0.47
11:c6:127:LYS:HD2	11:c6:132:LYS:O	2.14	0.47
15:r:44:ASP:HA	15:r:171:TRP:HZ2	1.79	0.47
55:sM:57:ASN:O	55:sM:61:ILE:N	2.45	0.47
17:c7:20:TYR:CD2	17:c7:38:ILE:HD12	2.49	0.47
21:s:59:ILE:HA	21:s:63:GLU:OE2	2.15	0.47
21:s:101:ASN:OD1	21:s:130:VAL:HG23	2.15	0.47
57:CU:8:GLN:OE1	57:CU:26:ARG:HD2	2.14	0.47
57:CU:42:TRP:CD1	57:CU:53:LYS:HG3	2.49	0.47
58:A:66:U:H4'	6:H:171:LYS:HE3	1.97	0.47
58:A:699:U:O4	80:A:2066:OHX:N1	2.47	0.47
58:A:844:A:H2'	58:A:845:G:H8	1.80	0.47
58:A:871:G:O2'	62:c:66:PRO:HB2	2.14	0.47
58:A:1060:U:H2'	58:A:1061:A:O4'	2.15	0.47
58:A:1349:G:H2'	58:A:1350:U:C6	2.49	0.47
58:A:1408:G:H2'	58:A:1409:G:O4'	2.15	0.47
58:A:1437:U:H5'	70:E:176:LEU:HD23	1.96	0.47
58:A:1535:U:H1'	58:A:1536:G:C2	2.49	0.47
58:A:1610:G:C4'	77:G:98:MET:HE1	2.36	0.47
58:A:1722:A:H1'	6:H:66:GLY:O	2.14	0.47
23:c8:25:ASN:HA	56:d5:40:VAL:HG21	1.96	0.47
64:C:127:VAL:HG21	64:C:176:VAL:HG13	1.97	0.47
64:C:133:TYR:CD2	64:C:181:LEU:HD21	2.50	0.47
45:AP:46:LYS:HG2	45:AP:46:LYS:O	2.13	0.47
67:D:41:LEU:O	67:D:45:VAL:HG12	2.14	0.47
69:CY:28:ILE:HD12	69:CY:28:ILE:H	1.79	0.47
70:E:48:VAL:HG23	70:E:84:ILE:HD11	1.96	0.47
46:d2:15:ASN:HD21	46:d2:72:CYS:N	2.12	0.47
51:y:44:PHE:CD1	51:y:139:ILE:HD11	2.49	0.47
73:F:17:HIS:HB2	73:F:108:ARG:HA	1.97	0.47
73:F:72:VAL:HG12	73:F:77:ARG:HG2	1.97	0.47
73:F:126:VAL:CG2	73:F:156:VAL:HA	2.45	0.47
50:d3:29:TYR:CZ	50:d3:33:LEU:HD12	2.50	0.47
50:d3:88:PRO:O	50:d3:92:CYS:HB2	2.14	0.47
75:AR:171:G:H2'	75:AR:172:G:O4'	2.15	0.47
75:AR:304:G:O2'	2:DC:61:PHE:HB3	2.14	0.47
75:AR:544:C:C2'	75:AR:547:G:H1	2.27	0.47
75:AR:634:C:H5'	32:DH:21:ARG:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:999:G:C6	75:AR:1000:C:N4	2.82	0.47
75:AR:1600:U:OP2	80:AR:3453:OHX:N6	2.48	0.47
75:AR:2102:U:H2'	75:AR:2103:U:C6	2.50	0.47
75:AR:2208:A:O2'	75:AR:2209:U:OP2	2.33	0.47
75:AR:2366:C:OP1	19:CE:259:HIS:HE1	1.97	0.47
75:AR:2395:G:N7	80:AR:3856:OHX:N2	2.63	0.47
75:AR:2398:A:OP2	85:AR:3858:SPD:N10	2.48	0.47
75:AR:2751:G:O6	80:AR:3542:OHX:N1	2.48	0.47
75:AR:2947:G:OP2	75:AR:2947:G:H4'	2.13	0.47
75:AR:3084:C:H2'	75:AR:3085:G:O4'	2.15	0.47
75:AR:3159:C:H4'	75:AR:3395:G:C5	2.49	0.47
77:G:205:SER:O	77:G:205:SER:OG	2.30	0.47
78:h:33:LEU:HB2	78:h:47:LEU:HD11	1.95	0.47
78:h:90:ARG:HH11	78:h:99:THR:HG21	1.80	0.47
78:h:126:SER:H	78:h:151:VAL:HG13	1.80	0.47
78:h:242:SER:H	78:h:255:ALA:HB3	1.80	0.47
57:0:131:LYS:O	57:0:134:ASP:HB2	2.15	0.47
79:DB:100:THR:HG23	79:DB:106:GLN:HG2	1.96	0.47
6:H:78:THR:HG22	6:H:92:ARG:HG2	1.96	0.47
58:sR:103:A:OP2	80:sR:2038:OHX:N1	2.48	0.47
58:sR:250:C:H2'	58:sR:251:A:H8	1.78	0.47
58:sR:297:U:O2'	73:s4:33:ALA:HA	2.15	0.47
58:sR:837:G:H2'	58:sR:838:G:C8	2.49	0.47
58:sR:884:A:H5''	64:s1:136:ARG:CZ	2.45	0.47
58:sR:1606:C:H2'	58:sR:1607:G:C8	2.50	0.47
58:sR:1783:C:H2'	58:sR:1784:C:C6	2.50	0.47
7:AT:15:G:C6	7:AT:16:G:N1	2.83	0.47
7:AT:90:U:H5'	7:AT:90:U:H6	1.78	0.47
12:I:114:ARG:O	12:I:117:THR:HG22	2.15	0.47
12:I:173:TYR:CE2	12:I:177:THR:HG21	2.50	0.47
78:Rb:132:LYS:HE3	78:Rb:143:THR:HG23	1.96	0.47
78:Rb:157:VAL:HG21	78:Rb:225:LEU:HD11	1.97	0.47
13:CD:101:VAL:HG12	13:CD:165:VAL:HB	1.96	0.47
8:DD:23:LYS:CD	8:DD:24:PRO:HD2	2.44	0.47
61:s0:28:ASN:HB2	61:s0:150:ASP:OD2	2.14	0.47
61:s0:168:HIS:HB3	61:s0:203:PHE:CZ	2.50	0.47
61:s0:200:ASP:HA	61:s0:203:PHE:CZ	2.50	0.47
19:CE:284:ARG:NH1	19:CE:293:ASN:O	2.42	0.47
14:DE:77:LEU:O	14:DE:81:VAL:HG22	2.14	0.47
64:s1:145:LYS:HG2	64:s1:149:GLN:CD	2.40	0.47
65:d8:49:ARG:HG3	77:s5:82:PHE:CZ	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CF:138:ARG:HH21	25:CF:240:PRO:HD2	1.80	0.47
30:L:69:THR:O	30:L:73:VAL:HG13	2.15	0.47
67:s2:37:PRO:HA	67:s2:65:GLU:OE2	2.15	0.47
72:8:34:LEU:HD22	72:8:35:PRO:HD2	1.96	0.47
36:M:36:LYS:O	36:M:44:THR:HG21	2.14	0.47
70:s3:189:MET:HE2	70:s3:190:ARG:O	2.15	0.47
37:CH:58:LEU:HD21	37:CH:64:LEU:HB2	1.96	0.47
32:DH:52:VAL:HG21	32:DH:99:ARG:NH2	2.30	0.47
42:O:56:ASP:OD1	42:O:56:ASP:N	2.48	0.47
39:v:75:VAL:HG23	39:v:75:VAL:O	2.14	0.47
79:AA:97:SER:O	79:AA:100:THR:OG1	2.32	0.47
38:DI:85:VAL:HA	38:DI:88:ARG:HG2	1.96	0.47
77:s5:95:ASN:CG	77:s5:107:LYS:HZ1	2.22	0.47
77:s5:217:LEU:HA	77:s5:220:VAL:HG12	1.95	0.47
75:1:239:G:O6	80:1:3428:OHX:N1	2.48	0.47
75:1:358:G:N2	75:1:361:A:OP2	2.46	0.47
75:1:616:G:N7	80:1:3909:OHX:N4	2.63	0.47
75:1:664:U:H2'	75:1:665:A:C8	2.50	0.47
75:1:872:U:H2'	75:1:873:C:C6	2.49	0.47
75:1:1301:A:H4'	75:1:1302:A:O5'	2.14	0.47
75:1:2407:C:H2'	75:1:2408:U:H6	1.79	0.47
75:1:2660:G:O3'	75:1:2749:G:N2	2.48	0.47
75:1:3358:U:H2'	75:1:3359:A:O4'	2.14	0.47
75:1:3375:A:O2'	75:1:3378:C:H5'	2.14	0.47
3:CJ:148:ALA:HA	3:CJ:201:THR:CG2	2.43	0.47
3:CJ:185:ARG:O	3:CJ:188:THR:OG1	2.30	0.47
5:Q:67:ALA:HA	5:Q:68:PRO:HD3	1.69	0.47
11:R:32:ASN:HA	11:R:68:ARG:NE	2.29	0.47
11:R:51:PRO:HB2	11:R:85:ILE:HD11	1.97	0.47
13:j:45:VAL:HG22	13:j:61:VAL:HG22	1.97	0.47
19:k:57:VAL:HG11	69:7:15:PRO:HG2	1.97	0.47
23:T:27:LYS:HG3	23:T:57:ARG:NH1	2.29	0.47
24:s9:121:SER:HB3	24:s9:124:HIS:HB3	1.95	0.47
27:CN:58:VAL:O	27:CN:69:VAL:HG23	2.15	0.47
46:X:86:ILE:HD12	46:X:87:GLU:H	1.80	0.47
5:c5:28:MET:HG3	5:c5:29:SER:N	2.30	0.47
51:CS:144:ARG:HH22	75:AR:976:U:P	2.37	0.47
11:c6:63:ILE:HD11	77:s5:25:LEU:HD22	1.96	0.47
15:r:201:SER:OG	15:r:203:LYS:O	2.31	0.47
22:AL:30:LYS:HE2	22:AL:40:GLN:NE2	2.30	0.47
58:A:139:C:H1'	58:A:140:A:OP2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:206:A:OP2	80:A:2104:OHX:N2	2.48	0.47
58:A:272:U:H2'	58:A:273:G:C8	2.50	0.47
58:A:278:U:OP1	58:A:279:G:N2	2.47	0.47
58:A:1254:U:H5'	74:g:143:LYS:HD3	1.96	0.47
58:A:1353:U:H2'	58:A:1354:G:H8	1.79	0.47
27:t:167:PHE:O	27:t:170:LEU:HB2	2.15	0.47
60:CV:22:HIS:ND1	75:AR:2701:U:OP2	2.47	0.47
65:d:42:ARG:HE	65:d:56:LEU:HD13	1.80	0.47
46:d2:18:GLU:OE2	46:d2:65:LEU:HB3	2.15	0.47
54:z:45:VAL:HG22	54:z:50:ILE:HB	1.97	0.47
75:AR:59:G:H2'	7:AT:33:A:O2'	2.15	0.47
75:AR:92:G:H5''	75:AR:94:G:N7	2.30	0.47
75:AR:207:U:H2'	75:AR:208:C:H6	1.79	0.47
75:AR:495:G:H2'	75:AR:496:C:O4'	2.15	0.47
75:AR:618:C:H2'	75:AR:619:A:C8	2.50	0.47
75:AR:1944:U:H2'	75:AR:1945:A:H8	1.80	0.47
75:AR:2859:U:O2'	80:AR:3815:OHX:N4	2.48	0.47
77:G:84:LYS:CG	77:G:92:ARG:HH12	2.28	0.47
78:h:169:ILE:CG1	78:h:181:TRP:HB2	2.44	0.47
58:sR:542:A:OP1	58:sR:542:A:H3'	2.15	0.47
58:sR:1083:G:HO2'	58:sR:1094:G:HO2'	1.63	0.47
58:sR:1541:G:N1	58:sR:1569:A:OP2	2.45	0.47
58:sR:1620:C:O2'	58:sR:1621:U:OP1	2.29	0.47
12:I:48:GLU:OE2	12:I:88:ARG:NH2	2.47	0.47
12:I:71:HIS:CD2	12:I:131:PHE:CE1	3.02	0.47
12:I:152:VAL:O	12:I:183:PHE:HA	2.15	0.47
61:s0:167:LYS:O	61:s0:169:SER:N	2.48	0.47
64:s1:32:ILE:HB	64:s1:43:VAL:CG2	2.44	0.47
69:7:6:ASP:HB3	69:7:10:GLY:H	1.79	0.47
67:s2:168:ARG:O	67:s2:198:THR:OG1	2.23	0.47
68:d9:21:CYS:HB2	68:d9:39:CYS:HB3	1.97	0.47
70:s3:137:VAL:HG22	70:s3:151:LYS:HB3	1.97	0.47
77:s5:31:GLU:HA	77:s5:34:GLN:CB	2.43	0.47
77:s5:113:ILE:CD1	77:s5:190:ILE:HG23	2.45	0.47
75:1:3317:U:O3'	80:1:3939:OHX:N1	2.47	0.47
2:AB:70:LYS:O	2:AB:70:LYS:HG3	2.14	0.47
5:Q:49:MET:HG2	5:Q:49:MET:O	2.14	0.47
9:CK:146:LEU:HD23	9:CK:157:ASN:HB3	1.97	0.47
9:CK:163:GLN:NE2	75:AR:3108:G:N3	2.62	0.47
10:DK:3:VAL:HG13	10:DK:16:LYS:HE3	1.95	0.47
13:j:117:GLU:HG3	13:j:163:ARG:H	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:s8:25:ARG:O	18:s8:28:GLU:HG2	2.14	0.47
19:k:20:LYS:HG3	19:k:21:ARG:O	2.14	0.47
20:AE:62:ARG:HB2	20:AE:66:GLY:O	2.15	0.47
23:T:132:ARG:HD2	23:T:132:ARG:N	2.29	0.47
27:CN:2:ALA:N	2:DC:31:GLY:O	2.47	0.47
29:U:10:ALA:HB3	29:U:13:ASP:OD1	2.15	0.47
35:V:28:SER:HB3	35:V:34:LEU:HD22	1.97	0.47
40:DP:1:MET:HE3	40:DP:1:MET:HB2	1.73	0.47
40:DP:3:ALA:HB3	58:sR:1773:C:OP1	2.14	0.47
43:o:144:ILE:HG22	43:o:185:ILE:HG23	1.96	0.47
5:c5:107:ILE:HA	5:c5:111:MET:HE1	1.97	0.47
53:Z:54:ALA:O	53:Z:75:VAL:HA	2.15	0.47
11:c6:10:PHE:CD1	58:sR:1379:C:H5'	2.50	0.47
54:CT:166:ASN:O	54:CT:170:ARG:HD3	2.15	0.47
21:s:89:TYR:O	21:s:90:GLN:HG2	2.15	0.47
58:A:67:A:H2'	58:A:69:G:O4'	2.15	0.47
58:A:130:C:HO2'	58:A:131:C:P	2.37	0.47
58:A:337:G:H1'	18:J:10:LYS:NZ	2.29	0.47
58:A:369:A:O2'	58:A:371:G:OP2	2.32	0.47
58:A:499:U:H4'	58:A:500:C:OP1	2.14	0.47
58:A:1041:G:H2'	58:A:1042:G:C8	2.50	0.47
58:A:1147:A:H2'	58:A:1148:C:H6	1.80	0.47
23:c8:29:VAL:O	23:c8:43:SER:OG	2.26	0.47
23:c8:33:THR:HG21	23:c8:40:ARG:HG2	1.96	0.47
29:c9:7:ARG:NH2	58:sR:1367:G:H4'	2.30	0.47
29:c9:52:GLY:C	29:c9:56:LYS:HZ3	2.23	0.47
64:C:164:ILE:HG22	64:C:168:ILE:HD12	1.96	0.47
35:d0:80:GLU:OE1	35:d0:82:TYR:OH	2.20	0.47
45:AP:35:LEU:HD12	45:AP:36:PHE:H	1.80	0.47
67:D:40:LYS:HB2	67:D:247:ALA:HB1	1.96	0.47
69:CY:39:LEU:HD22	69:CY:44:LYS:HG3	1.97	0.47
70:E:29:LEU:HD23	70:E:29:LEU:HA	1.67	0.47
70:E:98:ALA:O	70:E:101:GLN:N	2.48	0.47
74:g:122:SER:O	74:g:122:SER:OG	2.33	0.47
75:AR:1448:U:OP2	75:AR:2355:G:N1	2.19	0.47
75:AR:1616:U:H2'	75:AR:1617:G:C8	2.49	0.47
75:AR:2581:U:H2'	75:AR:2582:C:H6	1.80	0.47
78:h:38:ARG:CD	78:h:67:ILE:HD12	2.45	0.47
78:h:238:ASP:OD2	78:h:258:THR:HG23	2.14	0.47
79:DB:83:THR:HA	14:DE:58:TYR:HE2	1.80	0.47
58:sR:1218:G:O2'	58:sR:1219:A:OP2	2.26	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1273:G:H4'	58:sR:1274:C:H5''	1.97	0.47
58:sR:1405:G:H2'	58:sR:1406:A:H8	1.80	0.47
60:2:110:LYS:C	60:2:110:LYS:HD2	2.40	0.47
12:I:180:GLN:C	12:I:181:ILE:HG13	2.40	0.47
78:Rb:225:LEU:H	78:Rb:225:LEU:CD2	2.24	0.47
13:CD:29:LEU:HA	13:CD:76:PHE:CE1	2.49	0.47
18:J:85:PRO:HA	36:M:11:ARG:CG	2.43	0.47
61:s0:116:LYS:HA	61:s0:116:LYS:HD2	1.65	0.47
66:6:74:MET:HE2	66:6:102:ILE:HG21	1.97	0.47
32:DH:85:PHE:CZ	32:DH:89:LEU:HD11	2.50	0.47
73:s4:31:PRO:HA	73:s4:81:THR:HG1	1.78	0.47
77:s5:149:VAL:HG22	77:s5:151:GLY:H	1.80	0.47
75:1:541:U:H2'	75:1:542:G:H8	1.80	0.47
75:1:547:G:H4'	75:1:548:G:OP1	2.15	0.47
75:1:1108:U:H2'	75:1:1109:U:C6	2.50	0.47
75:1:2775:U:H2'	75:1:2776:C:C6	2.49	0.47
75:1:3111:U:O4	75:1:3120:C:H4'	2.15	0.47
14:AD:32:LYS:O	14:AD:36:GLN:HG3	2.14	0.47
17:S:24:LEU:HA	17:S:31:ASN:HD21	1.80	0.47
22:DM:28:ASN:N	22:DM:40:GLN:O	2.41	0.47
24:s9:119:ALA:HA	24:s9:124:HIS:HE1	1.79	0.47
24:s9:146:PHE:CD1	24:s9:148:VAL:HG12	2.49	0.47
25:l:313:LEU:HD11	75:1:505:G:H4'	1.96	0.47
32:AG:8:TYR:CZ	32:AG:99:ARG:HG2	2.50	0.47
33:CO:115:PHE:O	33:CO:119:GLN:HG3	2.14	0.47
35:V:39:SER:HA	35:V:42:VAL:HB	1.96	0.47
51:CS:148:GLU:O	51:CS:151:ARG:HB2	2.15	0.47
53:Z:10:ARG:HB3	53:Z:10:ARG:NH1	2.29	0.47
54:CT:42:ARG:HH22	75:AR:1601:U:P	2.37	0.47
54:CT:105:LEU:HD12	54:CT:135:LYS:HG3	1.97	0.47
21:s:17:LEU:HD21	21:s:19:LEU:HD21	1.97	0.47
28:AM:9:ILE:HD12	28:AM:51:ILE:HG23	1.96	0.47
58:A:93:A:H1'	73:F:3:ARG:HG2	1.96	0.47
58:A:279:G:H2'	58:A:281:G:H5'	1.96	0.47
58:A:529:A:H2'	58:A:530:C:O4'	2.15	0.47
60:CV:18:ASP:O	60:CV:21:LYS:HB2	2.15	0.47
64:C:201:THR:HA	64:C:204:ILE:HG22	1.97	0.47
67:D:146:THR:HG21	24:K:94:ASP:OD2	2.15	0.47
55:i:97:THR:HG22	55:i:99:LYS:HB2	1.97	0.47
50:d3:131:SER:HB2	58:sR:30:G:H5''	1.96	0.47
75:AR:1596:C:O2'	75:AR:1696:A:N3	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:3036:G:N7	80:AR:3514:OHX:N5	2.63	0.47
77:G:91:GLU:O	77:G:94:THR:OG1	2.23	0.47
78:h:212:ALA:HB1	78:h:243:LEU:HD13	1.97	0.47
53:d4:78:SER:OG	53:d4:81:GLU:OE1	2.26	0.47
1:AS:92:A:C5	1:AS:93:C:H1'	2.50	0.47
6:H:211:LEU:O	6:H:215:ARG:HG2	2.15	0.47
58:sR:829:A:H61	58:sR:844:A:N6	2.13	0.47
58:sR:1081:A:H8	58:sR:1081:A:OP2	1.99	0.47
58:sR:1257:U:O2'	58:sR:1258:U:O2	2.25	0.47
58:sR:1258:U:H5	58:sR:1259:U:C2	2.33	0.47
78:Rb:276:PRO:HG3	78:Rb:311:ARG:NH1	2.30	0.47
13:CD:180:LEU:C	13:CD:181:LYS:HG2	2.40	0.47
61:s0:17:LEU:O	61:s0:22:THR:HG22	2.15	0.47
61:s0:57:LEU:O	61:s0:60:ALA:HB3	2.15	0.47
14:DE:14:LEU:HA	14:DE:17:VAL:CG2	2.44	0.47
24:K:120:LYS:HD3	24:K:120:LYS:HA	1.73	0.47
64:s1:33:LYS:HD2	64:s1:33:LYS:HA	1.71	0.47
65:d8:26:THR:HB	65:d8:44:VAL:HG22	1.96	0.47
20:DF:80:ASN:ND2	20:DF:85:ALA:HB3	2.27	0.47
31:CG:34:LYS:HD3	31:CG:38:THR:OG1	2.15	0.47
70:s3:223:LYS:HG2	70:s3:224:ASP:H	1.80	0.47
79:AA:56:LYS:HD2	80:1:4028:OHX:N4	2.30	0.47
77:s5:99:MET:HA	77:s5:104:ASN:OD1	2.15	0.47
77:s5:213:LYS:O	77:s5:217:LEU:HB2	2.15	0.47
75:1:718:G:H3'	75:1:719:U:C5'	2.45	0.47
75:1:1189:C:H42	75:1:1315:U:H1'	1.80	0.47
75:1:1306:G:O2'	75:1:1307:G:H5''	2.14	0.47
75:1:3301:U:O4	80:1:3992:OHX:N5	2.47	0.47
7:4:140:G:H1	75:1:19:U:H3	1.64	0.46
15:CL:17:TYR:O	15:CL:96:VAL:HB	2.15	0.46
15:CL:169:LYS:N	60:CV:160:ILE:O	2.47	0.46
17:S:28:PHE:CE1	17:S:32:LYS:HB2	2.50	0.46
18:s8:98:LYS:HB3	58:sR:329:G:H5''	1.98	0.46
20:AE:15:ASN:HB3	20:AE:18:LYS:HE3	1.96	0.46
21:CM:102:PHE:C	21:CM:102:PHE:CD1	2.93	0.46
21:CM:116:TYR:CD1	21:CM:116:TYR:C	2.92	0.46
21:CM:171:VAL:HG23	21:CM:172:LEU:N	2.29	0.46
24:s9:29:LYS:HA	71:e0:40:TYR:CE1	2.50	0.46
26:AF:72:LYS:O	26:AF:92:TYR:HA	2.15	0.46
27:CN:48:PRO:O	27:CN:49:ARG:C	2.59	0.46
31:m:52:VAL:HG11	31:m:65:ILE:HD11	1.95	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:AG:71:VAL:HG13	32:AG:81:VAL:CG1	2.46	0.46
33:CO:21:VAL:HG11	33:CO:35:ILE:HD11	1.96	0.46
40:DP:21:ARG:HD2	58:sR:1653:C:O3'	2.15	0.46
4:AI:11:THR:O	76:DA:108:LYS:NZ	2.43	0.46
46:X:78:ARG:NH1	58:A:805:U:O2'	2.48	0.46
46:X:83:ILE:HG13	46:X:117:ARG:NH1	2.29	0.46
9:q:189:GLU:CD	9:q:190:ASP:H	2.23	0.46
51:CS:85:GLY:N	51:CS:104:LEU:HD12	2.30	0.46
53:Z:20:ARG:HB3	53:Z:76:TYR:CD1	2.50	0.46
11:c6:12:LYS:H	11:c6:83:GLN:NE2	2.12	0.46
21:s:110:ILE:HA	21:s:114:ILE:CD1	2.45	0.46
58:A:22:A:H2'	58:A:23:G:H8	1.80	0.46
58:A:116:U:H2'	58:A:117:U:C6	2.50	0.46
58:A:348:U:OP1	36:M:85:VAL:HG11	2.15	0.46
58:A:636:A:H2'	58:A:637:C:C6	2.50	0.46
60:CV:159:PHE:HD1	60:CV:159:PHE:O	1.97	0.46
61:B:159:ALA:O	61:B:160:ILE:HD13	2.16	0.46
46:d2:10:ALA:HB1	46:d2:27:ILE:HD13	1.97	0.46
55:i:64:LYS:O	55:i:66:ALA:N	2.47	0.46
55:i:107:ASN:CG	55:i:112:ASP:HB3	2.40	0.46
72:CZ:86:VAL:HG21	72:CZ:95:ILE:HD11	1.96	0.46
75:AR:255:A:H2'	75:AR:256:G:C8	2.50	0.46
75:AR:1781:C:H2'	75:AR:1782:U:C6	2.50	0.46
77:G:117:THR:HG22	77:G:191:ALA:O	2.15	0.46
78:h:251:TRP:CH2	78:h:271:VAL:HG11	2.49	0.46
79:DB:47:GLU:N	79:DB:69:LYS:O	2.45	0.46
58:sR:125:U:H5''	73:s4:148:ARG:NH1	2.29	0.46
58:sR:448:C:OP1	73:s4:29:PRO:HD3	2.15	0.46
58:sR:969:C:H4'	58:sR:1104:U:O2'	2.15	0.46
58:sR:1097:U:H6	67:s2:168:ARG:HD2	1.79	0.46
58:sR:1435:G:H4'	58:sR:1436:A:H5'	1.96	0.46
58:sR:1488:G:H3'	58:sR:1515:A:H61	1.80	0.46
58:sR:1696:G:O2'	58:sR:1698:G:N7	2.37	0.46
56:d5:54:VAL:CG1	56:d5:55:PRO:HD3	2.46	0.46
60:2:128:LEU:HD13	75:1:1097:G:C8	2.50	0.46
63:5:87:ASN:HB2	63:5:89:LEU:HD21	1.97	0.46
13:CD:40:TYR:HA	13:CD:90:ALA:O	2.15	0.46
18:J:48:THR:OG1	18:J:52:ASN:O	2.23	0.46
62:d7:54:VAL:HG22	62:d7:64:CYS:SG	2.54	0.46
62:d7:73:LEU:HD23	62:d7:73:LEU:HA	1.76	0.46
42:O:23:PRO:HG2	42:O:26:PHE:HB2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:s4:77:ARG:HD2	73:s4:82:TYR:HE2	1.77	0.46
79:AA:83:THR:HB	79:AA:85:TYR:HD1	1.79	0.46
79:AA:88:ASP:O	79:AA:121:ARG:NH1	2.48	0.46
43:CI:180:SER:H	43:CI:183:ASP:HB2	1.79	0.46
47:P:43:THR:N	47:P:46:MET:SD	2.87	0.46
47:P:90:ARG:HA	47:P:128:LYS:HE2	1.97	0.46
75:1:139:G:H2'	75:1:140:C:O4'	2.15	0.46
75:1:522:A:OP1	80:1:3606:OHX:N5	2.49	0.46
75:1:544:C:H1'	75:1:548:G:N2	2.28	0.46
75:1:1565:G:N3	75:1:1575:A:N6	2.63	0.46
5:Q:79:HIS:CE1	58:A:1241:G:N3	2.83	0.46
5:Q:97:TYR:CE1	5:Q:99:GLY:C	2.93	0.46
7:4:152:G:H2'	7:4:153:U:O4'	2.14	0.46
12:s7:64:VAL:HG21	58:sR:856:A:C1'	2.45	0.46
17:S:47:ARG:NH1	17:S:48:ASN:ND2	2.64	0.46
18:s8:67:TRP:HA	18:s8:183:ILE:CG2	2.45	0.46
19:k:53:MET:HG2	19:k:77:THR:HG22	1.96	0.46
24:s9:57:ARG:NH1	67:s2:197:TYR:OH	2.46	0.46
24:s9:75:ALA:O	24:s9:79:ARG:HG2	2.16	0.46
25:l:313:LEU:HD23	75:1:610:G:N2	2.29	0.46
27:CN:54:LEU:HD12	27:CN:54:LEU:HA	1.76	0.46
29:U:50:ALA:N	29:U:53:TRP:HD1	2.06	0.46
29:U:129:GLN:C	29:U:132:LEU:HB3	2.40	0.46
31:m:156:GLY:HA2	31:m:181:PRO:HD3	1.97	0.46
37:n:9:TRP:CE3	75:1:1354:G:C5	3.03	0.46
40:DP:8:LYS:O	40:DP:12:ARG:HG3	2.15	0.46
45:DQ:34:SER:OG	75:AR:2767:U:OP1	2.32	0.46
47:c4:111:ARG:NH2	59:d6:57:SER:O	2.44	0.46
5:c5:77:ARG:HB2	5:c5:102:PHE:CD1	2.50	0.46
5:c5:126:VAL:HG23	55:sM:71:ASN:OD1	2.15	0.46
51:CS:94:PHE:CZ	2:DC:119:PRO:HD3	2.51	0.46
58:A:505:A:N3	58:A:505:A:H2'	2.30	0.46
58:A:736:C:H5'	58:A:737:A:OP2	2.14	0.46
58:A:1105:C:H2'	58:A:1106:U:C6	2.51	0.46
58:A:1294:G:O2'	61:B:108:THR:OG1	2.33	0.46
58:A:1591:C:H2'	58:A:1592:A:H8	1.80	0.46
61:B:28:ASN:HA	61:B:46:HIS:HE1	1.80	0.46
33:u:28:SER:HB3	33:u:53:VAL:HG22	1.96	0.46
40:AO:14:LYS:O	40:AO:18:ARG:HB2	2.16	0.46
44:w:58:LEU:HA	44:w:72:HIS:CD2	2.50	0.46
66:CX:84:SER:HA	66:CX:94:TYR:HB3	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:AQ:4:ARG:NH1	75:1:837:A:OP2	2.42	0.46
49:AQ:49:ARG:HB2	49:AQ:55:TRP:CZ3	2.50	0.46
70:E:94:ARG:NH1	70:E:125:TYR:OH	2.47	0.46
70:E:177:MET:HG3	70:E:182:LEU:CD1	2.45	0.46
70:E:201:ALA:HB1	70:E:205:ALA:HB3	1.96	0.46
51:y:148:GLU:O	51:y:151:ARG:HG3	2.15	0.46
73:F:143:ASP:OD2	73:F:145:ARG:HD2	2.15	0.46
50:d3:70:LYS:HB3	50:d3:93:LEU:CD1	2.44	0.46
54:z:85:ARG:NH2	75:1:1916:U:O3'	2.48	0.46
75:AR:174:C:H2'	75:AR:175:C:H6	1.80	0.46
75:AR:501:A:H2'	75:AR:502:U:C6	2.50	0.46
75:AR:911:C:H42	13:CD:3:ARG:HD3	1.80	0.46
75:AR:1100:U:H2'	75:AR:1101:G:O4'	2.15	0.46
75:AR:1107:C:H2'	75:AR:1108:U:H6	1.80	0.46
75:AR:1382:G:OP2	25:CF:188:ARG:NH1	2.48	0.46
75:AR:1464:G:N7	80:AR:3601:OHX:N1	2.62	0.46
75:AR:3011:A:N3	75:AR:3012:A:H1'	2.30	0.46
75:AR:3060:C:OP1	80:AR:3861:OHX:N6	2.48	0.46
75:AR:3272:C:H5'	37:CH:78:ARG:HB2	1.97	0.46
75:AR:3275:U:H5	75:AR:3276:G:H21	1.64	0.46
77:G:103:ASN:HA	77:G:106:LYS:HG3	1.96	0.46
78:h:126:SER:OG	78:h:128:ASP:OD1	2.32	0.46
79:DB:5:LEU:HD12	79:DB:5:LEU:HA	1.78	0.46
79:DB:21:LYS:HE3	79:DB:47:GLU:O	2.15	0.46
58:sR:16:G:H2'	58:sR:17:C:C6	2.50	0.46
58:sR:689:G:H2'	58:sR:690:G:O4'	2.15	0.46
58:sR:1337:A:OP2	80:sR:2148:OHX:N2	2.48	0.46
78:Rb:262:VAL:C	78:Rb:263:PHE:HD1	2.23	0.46
59:d6:90:GLU:CD	59:d6:90:GLU:H	2.22	0.46
63:5:39:ASP:O	63:5:40:HIS:HD2	1.98	0.46
13:CD:10:LYS:HA	13:CD:16:PHE:CD2	2.49	0.46
19:CE:41:VAL:HA	19:CE:185:GLY:CA	2.35	0.46
14:DE:24:THR:CG2	14:DE:91:SER:HB3	2.45	0.46
14:DE:34:LEU:HD11	14:DE:42:ILE:HD13	1.97	0.46
14:DE:99:ASP:O	14:DE:103:THR:OG1	2.33	0.46
64:s1:35:PRO:HG2	64:s1:38:PHE:HE2	1.81	0.46
70:s3:139:SER:O	70:s3:182:LEU:HG	2.16	0.46
77:s5:147:THR:OG1	77:s5:148:ARG:N	2.48	0.46
77:s5:219:ARG:HD3	77:s5:219:ARG:C	2.40	0.46
75:1:374:A:H4'	75:1:375:A:OP1	2.14	0.46
75:1:709:A:H2'	75:1:710:A:O4'	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:1027:A:H2'	75:1:1029:G:H5''	1.96	0.46
75:1:1100:U:H2'	75:1:1101:G:O4'	2.16	0.46
75:1:2177:G:O6	80:1:3811:OHX:N5	2.49	0.46
75:1:2331:C:H2'	75:1:2332:A:O4'	2.16	0.46
75:1:3000:A:H2'	75:1:3001:C:C6	2.50	0.46
1:3:90:U:H2'	1:3:91:G:O4'	2.16	0.46
2:AB:101:VAL:HA	2:AB:124:ILE:O	2.16	0.46
3:CJ:56:VAL:HA	3:CJ:59:GLN:HE21	1.79	0.46
3:CJ:82:LEU:HD12	3:CJ:82:LEU:C	2.40	0.46
3:CJ:147:LYS:O	3:CJ:201:THR:HG21	2.15	0.46
3:CJ:215:VAL:O	3:CJ:219:ASP:N	2.31	0.46
7:4:129:C:C1'	75:1:1618:G:H4'	2.45	0.46
24:s9:126:ARG:HD3	71:e0:33:ARG:HD3	1.98	0.46
26:AF:4:LEU:HD22	26:AF:91:THR:HG22	1.97	0.46
30:c0:22:VAL:HG21	70:s3:76:ARG:HB2	1.97	0.46
38:AH:46:ASP:HB2	38:AH:84:CYS:SG	2.55	0.46
39:CP:154:PRO:HB2	75:AR:58:G:H5''	1.98	0.46
43:o:123:THR:HA	43:o:126:LEU:HD12	1.97	0.46
4:AI:26:LYS:HD3	72:8:60:TYR:OH	2.15	0.46
45:DQ:50:PHE:O	80:AR:3980:OHX:N3	2.49	0.46
5:c5:50:THR:O	5:c5:52:LYS:N	2.48	0.46
5:c5:83:MET:HB3	5:c5:116:LEU:HD13	1.97	0.46
11:c6:9:THR:HG21	11:c6:88:GLY:HA2	1.97	0.46
15:r:69:ARG:CZ	15:r:70:ILE:HG22	2.46	0.46
55:sM:61:ILE:HG23	55:sM:62:ARG:N	2.30	0.46
21:s:40:LEU:O	21:s:79:ILE:HD11	2.14	0.46
58:A:1:U:O2	58:A:369:A:H2'	2.16	0.46
58:A:460:A:H5'	58:A:461:G:OP2	2.15	0.46
23:c8:42:TYR:HA	23:c8:85:PHE:CE1	2.50	0.46
61:B:24:LEU:O	61:B:163:ASN:ND2	2.48	0.46
33:u:12:TRP:CZ2	57:0:153:PRO:HB3	2.50	0.46
63:CW:94:ARG:HG3	63:CW:95:PHE:N	2.31	0.46
45:AP:47:GLN:OE1	45:AP:54:THR:OG1	2.30	0.46
67:D:97:ARG:HB3	67:D:117:THR:OG1	2.15	0.46
67:D:158:THR:HG23	67:D:169:LEU:HD13	1.97	0.46
67:D:227:PRO:HA	67:D:230:TRP:CD2	2.50	0.46
70:E:158:ILE:HD13	70:E:202:LEU:HD13	1.98	0.46
71:f:41:THR:O	71:f:45:VAL:HG22	2.15	0.46
75:AR:129:U:H2'	75:AR:130:A:C8	2.50	0.46
75:AR:192:C:H2'	75:AR:193:C:C6	2.50	0.46
75:AR:1235:U:C4'	75:AR:1236:G:H5'	2.44	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:1406:A:OP1	80:AR:3449:OHX:N1	2.48	0.46
75:AR:1733:G:N7	80:AR:3446:OHX:N3	2.63	0.46
75:AR:2882:U:H2'	75:AR:2883:U:C6	2.49	0.46
75:AR:3343:G:N2	75:AR:3361:G:H2'	2.30	0.46
58:sR:639:U:H5	58:sR:695:U:C5	2.34	0.46
58:sR:823:G:H2'	58:sR:824:G:O4'	2.15	0.46
58:sR:835:U:H2'	58:sR:836:U:C6	2.51	0.46
58:sR:1057:U:H3'	58:sR:1058:U:O4'	2.16	0.46
58:sR:1564:U:H2'	58:sR:1565:C:H6	1.78	0.46
58:sR:1729:C:H2'	58:sR:1730:A:O4'	2.15	0.46
80:2:201:OHX:N3	75:1:993:G:OP1	2.48	0.46
78:Rb:64:HIS:HD1	78:Rb:86:ASP:CG	2.23	0.46
78:Rb:87:LYS:HZ3	78:Rb:87:LYS:HG3	1.57	0.46
13:CD:52:SER:HB3	13:CD:191:LEU:HD23	1.97	0.46
61:s0:135:GLU:O	61:s0:139:VAL:HG12	2.14	0.46
19:CE:165:GLN:HB3	19:CE:168:LYS:HG3	1.97	0.46
24:K:170:GLY:HA2	24:K:171:ARG:HH21	1.81	0.46
65:d8:16:LEU:HB3	65:d8:27:GLN:HB2	1.96	0.46
25:CF:11:LEU:CD2	25:CF:159:ILE:HD11	2.46	0.46
30:L:88:PRO:C	30:L:90:THR:H	2.24	0.46
31:CG:290:ILE:HG13	31:CG:291:ALA:N	2.31	0.46
31:CG:290:ILE:O	31:CG:293:LEU:N	2.48	0.46
36:M:90:TYR:C	36:M:91:LEU:HD12	2.40	0.46
76:9:28:ARG:HB2	76:9:75:ARG:CZ	2.45	0.46
32:DH:49:ILE:HG21	32:DH:85:PHE:CZ	2.50	0.46
39:v:12:ARG:NH1	75:1:297:G:O6	2.43	0.46
38:DI:61:GLN:O	38:DI:65:VAL:HG23	2.14	0.46
75:1:1599:G:OP1	80:1:3792:OHX:N5	2.48	0.46
75:1:2218:G:H2'	75:1:2219:A:H8	1.80	0.46
75:1:3295:A:H2'	75:1:3296:A:C8	2.50	0.46
4:DJ:7:TYR:CE1	4:DJ:8:GLU:HG3	2.50	0.46
4:DJ:118:ILE:HG23	27:CN:122:LYS:O	2.16	0.46
6:s6:1:MET:CE	6:s6:106:LEU:HB2	2.46	0.46
6:s6:39:GLU:HG3	6:s6:46:LYS:CG	2.37	0.46
9:CK:90:MET:HE1	9:CK:161:LEU:HB3	1.97	0.46
12:s7:7:LYS:HA	12:s7:7:LYS:CE	2.42	0.46
17:S:21:TYR:N	17:S:22:PRO:HD2	2.31	0.46
17:S:24:LEU:HB2	17:S:58:MET:HE3	1.97	0.46
19:k:57:VAL:HG13	19:k:358:TRP:CE3	2.50	0.46
23:T:26:ILE:HG23	23:T:31:ALA:HB2	1.98	0.46
23:T:47:CYS:O	23:T:52:VAL:HG22	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:CN:57:VAL:HB	27:CN:147:ILE:HD13	1.97	0.46
27:CN:166:ALA:HB3	2:DC:135:GLU:OE2	2.15	0.46
29:U:122:ARG:NH2	58:A:1499:G:O3'	2.49	0.46
35:V:24:ILE:CD1	35:V:116:VAL:HB	2.40	0.46
35:V:27:THR:HG22	35:V:88:LYS:CG	2.46	0.46
39:CP:14:LYS:HA	39:CP:19:LEU:HD13	1.98	0.46
40:DP:13:LEU:O	40:DP:17:ARG:HG2	2.15	0.46
3:p:55:TYR:O	3:p:59:GLN:HG2	2.15	0.46
3:p:140:VAL:HG11	39:v:3:ALA:N	2.29	0.46
10:AJ:25:LYS:HB2	10:AJ:28:TYR:HD1	1.79	0.46
5:c5:33:PHE:O	5:c5:36:LEU:HD23	2.16	0.46
5:c5:106:GLU:O	5:c5:107:ILE:HD13	2.15	0.46
9:q:41:ILE:HG23	9:q:43:VAL:HG22	1.98	0.46
51:CS:44:PHE:CD1	51:CS:139:ILE:HD11	2.50	0.46
51:CS:94:PHE:HZ	2:DC:79:TRP:CD1	2.34	0.46
52:p0:37:GLN:O	52:p0:41:VAL:HG13	2.16	0.46
11:c6:10:PHE:CE1	58:sR:1379:C:H5'	2.51	0.46
54:CT:86:GLU:OE2	54:CT:91:SER:N	2.46	0.46
55:sM:70:ASN:HA	55:sM:73:SER:OG	2.14	0.46
17:c7:101:ASN:HD22	17:c7:101:ASN:C	2.23	0.46
57:CU:12:ARG:HB3	57:CU:24:LEU:HD23	1.97	0.46
58:A:341:A:H2'	58:A:342:C:C6	2.50	0.46
58:A:585:A:H2'	58:A:586:G:C8	2.51	0.46
58:A:922:G:H2'	58:A:923:A:C8	2.50	0.46
58:A:1081:A:H2'	58:A:1083:G:N7	2.30	0.46
58:A:1602:C:H2'	58:A:1603:U:O4'	2.15	0.46
61:B:55:GLU:HA	61:B:58:VAL:HG22	1.97	0.46
61:B:80:THR:CG2	61:B:83:GLN:HE21	2.29	0.46
61:B:106:SER:O	61:B:115:PHE:HD1	1.98	0.46
29:c9:9:VAL:HG21	29:c9:14:PHE:CD2	2.50	0.46
46:d2:124:LYS:HZ2	46:d2:124:LYS:HG2	1.57	0.46
51:y:89:ASP:HB3	75:1:677:A:OP1	2.16	0.46
50:d3:107:PHE:HE2	50:d3:120:VAL:HG12	1.81	0.46
75:AR:92:G:H5'	75:AR:93:C:C5'	2.44	0.46
75:AR:933:A:H1'	86:AR:4370:HOH:O	2.16	0.46
75:AR:1302:A:N7	75:AR:2857:C:O2'	2.40	0.46
75:AR:1668:G:H2'	75:AR:1669:C:O4'	2.15	0.46
75:AR:1948:G:C2	75:AR:1949:G:C8	3.04	0.46
75:AR:2233:A:H2'	75:AR:2234:G:O4'	2.14	0.46
75:AR:2836:C:H5	75:AR:2852:C:N4	2.07	0.46
75:AR:2881:C:H2'	75:AR:2882:U:C6	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:3313:U:O5'	19:CE:173:GLN:NE2	2.48	0.46
78:h:24:ALA:HB1	78:h:73:LEU:HB3	1.97	0.46
78:h:281:TYR:HD1	78:h:282:SER:H	1.63	0.46
58:sR:513:U:H2'	58:sR:514:G:C8	2.50	0.46
58:sR:1356:U:H2'	58:sR:1357:A:C8	2.51	0.46
58:sR:1469:A:H4'	58:sR:1541:G:H4'	1.98	0.46
80:sR:1966:OHX:N1	80:sR:2198:OHX:N4	2.64	0.46
60:2:13:TYR:HA	60:2:16:GLN:HB2	1.96	0.46
12:I:62:VAL:HG13	12:I:94:ALA:HA	1.97	0.46
78:Rb:171:SER:OG	78:Rb:179:LYS:HB2	2.15	0.46
59:d6:20:PRO:HA	59:d6:31:PRO:HA	1.97	0.46
61:s0:183:ARG:HG2	61:s0:188:LEU:HB3	1.98	0.46
19:CE:211:GLN:HG3	19:CE:212:ASN:N	2.31	0.46
19:CE:212:ASN:OD1	19:CE:354:VAL:N	2.39	0.46
24:K:110:GLN:NE2	24:K:126:ARG:HB2	2.30	0.46
65:d8:30:VAL:O	65:d8:39:THR:HA	2.15	0.46
68:d9:21:CYS:HB3	68:d9:26:SER:H	1.81	0.46
72:8:92:LYS:HE2	72:8:112:THR:HG23	1.96	0.46
36:M:111:VAL:HG23	36:M:139:VAL:HG21	1.97	0.46
42:O:88:LEU:HB2	42:O:125:LEU:HD23	1.96	0.46
77:s5:63:GLN:HB3	77:s5:87:CYS:O	2.15	0.46
75:1:2541:U:H1'	75:1:2542:U:P	2.56	0.46
75:1:3282:U:H2'	75:1:3283:U:O4'	2.15	0.46
2:AB:48:TYR:CG	27:t:6:ASN:HB2	2.49	0.46
3:CJ:118:GLU:OE2	3:CJ:118:GLU:N	2.48	0.46
3:CJ:156:ASP:HB3	3:CJ:183:LYS:HD3	1.98	0.46
5:Q:76:VAL:O	5:Q:94:VAL:HA	2.15	0.46
9:CK:100:ASN:O	9:CK:115:ARG:N	2.41	0.46
12:s7:126:LEU:HA	12:s7:129:LEU:HB2	1.97	0.46
12:s7:141:ARG:HD3	12:s7:151:LYS:HD2	1.97	0.46
15:CL:35:ASP:OD2	15:CL:88:ARG:HD3	2.15	0.46
16:DL:64:MET:O	16:DL:68:LYS:HB3	2.15	0.46
21:CM:92:ARG:HA	21:CM:172:LEU:O	2.15	0.46
31:m:3:PHE:HB3	31:m:5:LYS:HE3	1.98	0.46
31:m:40:HIS:HB3	31:m:43:LYS:HG3	1.96	0.46
31:m:85:ARG:NH2	31:m:86:TYR:OH	2.47	0.46
41:W:29:HIS:HA	61:B:140:ASN:ND2	2.30	0.46
41:W:34:ILE:CG2	61:B:63:ILE:HD13	2.46	0.46
10:AJ:43:LEU:CD1	10:AJ:47:ILE:HD11	2.46	0.46
16:AK:5:THR:HA	16:AK:8:PHE:CD2	2.49	0.46
52:p0:48:ARG:NH1	52:p0:91:GLU:OE2	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:Z:104:SER:H	53:Z:107:GLN:NE2	2.08	0.46
28:AM:42:ARG:NH2	75:1:1494:U:OP1	2.44	0.46
58:A:226:A:C2'	58:A:227:U:H5'	2.45	0.46
58:A:228:G:N2	58:A:834:G:O2'	2.46	0.46
58:A:648:G:C2	58:A:687:G:C2	3.04	0.46
58:A:1338:C:H1'	58:A:1410:A:C4	2.51	0.46
61:B:74:VAL:HG12	61:B:76:ILE:HD11	1.97	0.46
64:C:172:LEU:HD13	64:C:172:LEU:C	2.41	0.46
35:d0:36:ASN:OD1	35:d0:37:VAL:HG22	2.14	0.46
44:w:108:ILE:HD12	44:w:160:ARG:NH1	2.30	0.46
44:w:142:SER:HB3	44:w:147:TRP:CB	2.46	0.46
51:y:151:ARG:HD2	75:1:781:G:OP1	2.15	0.46
73:F:234:PRO:CG	73:F:238:LEU:HD11	2.45	0.46
54:z:177:VAL:O	54:z:181:ARG:HB3	2.14	0.46
75:AR:262:U:H2'	75:AR:263:C:O4'	2.15	0.46
75:AR:594:U:O2'	75:AR:595:G:H5'	2.15	0.46
75:AR:1119:C:H2'	75:AR:1120:A:C8	2.51	0.46
75:AR:1483:G:N7	38:DI:4:ARG:NH2	2.63	0.46
75:AR:1813:A:H2'	75:AR:1814:A:H5''	1.97	0.46
75:AR:1888:U:OP1	19:CE:247:ARG:HD3	2.15	0.46
75:AR:2269:U:O2'	75:AR:2270:A:H8	1.97	0.46
76:DA:75:ARG:HD2	7:AT:72:A:H5'	1.98	0.46
77:G:98:MET:HE2	77:G:105:GLY:H	1.80	0.46
58:sR:74:U:H3'	58:sR:75:U:H3'	1.98	0.46
58:sR:476:U:H5''	58:sR:477:A:O4'	2.16	0.46
58:sR:789:A:O2'	73:s4:106:LYS:HE3	2.15	0.46
58:sR:836:U:H2'	58:sR:837:G:H8	1.81	0.46
58:sR:980:G:O6	80:sR:2121:OHX:N1	2.48	0.46
58:sR:1725:U:H2'	58:sR:1726:G:O4'	2.16	0.46
78:Rb:64:HIS:CE1	78:Rb:84:SER:HB3	2.50	0.46
19:CE:252:ILE:HG21	19:CE:266:ARG:NH2	2.30	0.46
14:DE:70:PHE:CD2	14:DE:77:LEU:HD13	2.51	0.46
65:d8:53:ILE:HD12	77:s5:57:SER:HA	1.98	0.46
69:7:53:VAL:HG12	69:7:57:LYS:HD2	1.96	0.46
67:s2:68:ILE:HG22	67:s2:72:LEU:HD12	1.98	0.46
37:CH:52:VAL:HG11	37:CH:65:ILE:HD12	1.98	0.46
42:O:37:ILE:HG22	42:O:54:LEU:CD1	2.46	0.46
42:O:88:LEU:O	42:O:92:ILE:HG13	2.16	0.46
39:v:101:THR:O	39:v:105:ARG:HG3	2.16	0.46
39:v:102:ALA:O	39:v:106:VAL:HG12	2.16	0.46
79:AA:103:GLN:CD	79:AA:103:GLN:H	2.24	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DI:96:GLU:O	38:DI:100:ILE:HG13	2.15	0.46
77:s5:194:LEU:O	77:s5:198:LEU:HD12	2.15	0.46
77:s5:214:LYS:HD2	77:s5:215:ASP:N	2.30	0.46
75:1:422:A:C2	75:1:2363:A:H4'	2.50	0.46
75:1:679:U:H1'	75:1:788:C:H1'	1.98	0.46
75:1:781:G:O6	80:1:3544:OHX:N5	2.48	0.46
75:1:2096:A:H8	75:1:2096:A:O5'	1.99	0.46
75:1:2278:C:H2'	75:1:2279:A:H5''	1.97	0.46
75:1:2341:A:O3'	75:1:3090:U:H4'	2.15	0.46
75:1:3094:A:H2'	75:1:3095:U:C6	2.51	0.46
75:1:3257:C:H2'	75:1:3258:U:O4'	2.15	0.46
2:AB:101:VAL:HG23	2:AB:124:ILE:HG22	1.98	0.46
3:CJ:116:VAL:N	3:CJ:118:GLU:OE2	2.48	0.46
4:DJ:4:VAL:HG11	4:DJ:9:LEU:HD11	1.97	0.46
11:R:131:GLY:HA2	11:R:138:PHE:CD1	2.51	0.46
12:s7:73:VAL:C	12:s7:75:THR:N	2.73	0.46
12:s7:110:GLN:HE22	58:sR:817:A:H1'	1.79	0.46
12:s7:110:GLN:NE2	58:sR:817:A:O4'	2.40	0.46
12:s7:153:LEU:CD1	12:s7:184:GLU:HB3	2.45	0.46
15:CL:140:THR:CG2	15:CL:141:LYS:N	2.78	0.46
21:CM:80:LEU:HD22	21:CM:129:VAL:HG21	1.96	0.46
24:s9:119:ALA:C	24:s9:121:SER:H	2.24	0.46
25:l:135:VAL:O	25:l:140:HIS:HB2	2.14	0.46
30:c0:24:LYS:HD3	30:c0:24:LYS:O	2.16	0.46
41:W:35:ASN:ND2	67:D:237:VAL:HG21	2.30	0.46
47:c4:28:VAL:HG11	47:c4:101:ALA:HB1	1.98	0.46
50:Y:16:ARG:HE	50:Y:16:ARG:HB3	1.43	0.46
50:Y:69:ARG:NH2	58:A:569:C:H41	2.14	0.46
9:q:91:ARG:HG3	9:q:142:ASP:O	2.15	0.46
16:AK:17:THR:CG2	16:AK:18:LEU:H	2.25	0.46
53:Z:62:THR:HA	53:Z:69:SER:HA	1.98	0.46
15:r:6:ALA:HB3	75:1:2855:U:OP2	2.15	0.46
15:r:116:ARG:HH12	75:1:2622:C:H42	1.64	0.46
54:CT:165:LYS:HG2	54:CT:165:LYS:O	2.15	0.46
58:A:834:G:H2'	58:A:835:U:C6	2.51	0.46
58:A:875:G:OP1	64:C:158:SER:OG	2.25	0.46
58:A:876:G:H1'	58:A:944:A:O4'	2.16	0.46
58:A:1380:U:H2'	58:A:1381:U:O4'	2.16	0.46
58:A:1654:G:H2'	58:A:1745:G:N2	2.31	0.46
58:A:1795:U:OP2	59:b:5:ARG:NH2	2.48	0.46
58:A:1797:A:OP1	59:b:10:ARG:HB3	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:AN:112:LYS:HE3	75:1:3107:U:P	2.56	0.46
61:B:75:ALA:HB1	61:B:174:TRP:CZ3	2.51	0.46
61:B:79:ARG:NH2	61:B:164:ASN:O	2.49	0.46
61:B:110:TYR:HD2	67:D:64:LYS:HG2	1.80	0.46
29:c9:61:VAL:HG12	29:c9:65:ILE:HD11	1.98	0.46
65:d:12:VAL:HA	65:d:30:VAL:HA	1.98	0.46
49:AQ:18:TYR:O	49:AQ:22:LEU:HD12	2.16	0.46
72:CZ:81:ILE:HG21	72:CZ:123:TYR:HB3	1.98	0.46
73:F:200:ARG:NH1	73:F:202:ASP:OD2	2.44	0.46
50:d3:137:LYS:O	50:d3:138:GLU:C	2.58	0.46
75:AR:916:G:H4'	75:AR:917:A:O5'	2.16	0.46
75:AR:1081:U:H4'	75:AR:1082:U:H5''	1.97	0.46
75:AR:1357:G:H2'	75:AR:1358:C:C6	2.51	0.46
75:AR:1562:C:HO2'	75:AR:1563:C:C5'	2.25	0.46
75:AR:3313:U:H4'	19:CE:173:GLN:HG2	1.97	0.46
78:h:291:SER:O	78:h:304:GLY:N	2.33	0.46
58:sR:329:G:H2'	58:sR:330:G:H8	1.80	0.46
58:sR:563:U:H4'	71:e0:17:GLN:HE21	1.80	0.46
58:sR:1232:U:H2'	58:sR:1233:G:O4'	2.16	0.46
58:sR:1620:C:H2'	58:sR:1621:U:H6	1.80	0.46
60:2:71:SER:OG	75:1:2736:A:O3'	2.26	0.46
2:DC:138:ILE:HD11	2:DC:145:VAL:CG1	2.45	0.46
12:I:50:ASP:HB3	12:I:56:LYS:HG2	1.97	0.46
78:Rb:227:ALA:O	78:Rb:228:LYS:HG2	2.16	0.46
61:s0:147:THR:OG1	61:s0:148:ASP:O	2.30	0.46
19:CE:332:ARG:HG2	19:CE:333:LYS:HG3	1.98	0.46
20:DF:90:PHE:C	20:DF:90:PHE:CD1	2.94	0.46
68:d9:21:CYS:HA	68:d9:30:LEU:HD11	1.97	0.46
37:CH:133:GLU:HG3	37:CH:134:ARG:H	1.81	0.46
38:DI:79:SER:HB3	38:DI:80:ARG:CD	2.45	0.46
75:1:1116:G:H8	86:1:4207:HOH:O	1.97	0.46
75:1:1233:G:H2'	75:1:1234:G:C8	2.51	0.46
75:1:1233:G:N2	75:1:1255:C:H42	2.13	0.46
75:1:1286:A:H2'	75:1:1286:A:OP2	2.16	0.46
75:1:3306:U:H2'	75:1:3307:A:H5''	1.98	0.46
2:AB:28:HIS:CD2	2:AB:32:ARG:HG2	2.51	0.46
4:DJ:90:ARG:O	39:CP:143:ARG:NH2	2.48	0.46
5:Q:128:HIS:O	55:i:74:LYS:HE2	2.16	0.46
6:s6:16:PHE:CZ	6:s6:121:LEU:HD11	2.51	0.46
11:R:101:SER:O	11:R:105:LEU:HD11	2.15	0.46
11:R:128:LYS:NZ	11:R:134:ALA:O	2.27	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CM:19:LEU:HB3	21:CM:125:MET:HE3	1.96	0.46
21:CM:117:ASP:OD1	21:CM:119:SER:OG	2.33	0.46
23:T:120:ARG:HD2	55:i:58:GLU:HG2	1.98	0.46
24:s9:82:ARG:NH2	58:sR:764:U:OP1	2.49	0.46
25:l:152:VAL:HG21	25:l:156:LEU:HD22	1.97	0.46
25:l:269:SER:C	25:l:271:LYS:H	2.23	0.46
31:m:118:THR:HG22	31:m:119:TYR:CD2	2.50	0.46
31:m:287:ALA:HA	31:m:290:ILE:HG13	1.97	0.46
36:c1:34:TRP:CD2	58:sR:249:U:H5	2.33	0.46
43:o:157:ASN:O	43:o:159:GLN:HG3	2.15	0.46
46:X:117:ARG:HD2	46:X:117:ARG:HA	1.56	0.46
47:c4:99:GLN:O	47:c4:103:ARG:HG2	2.15	0.46
49:DR:61:LYS:HD3	49:DR:61:LYS:HA	1.66	0.46
53:Z:124:ARG:HB2	53:Z:127:LYS:NZ	2.28	0.46
15:r:57:LEU:HD23	15:r:130:ASP:HA	1.98	0.46
57:CU:27:MET:HE2	57:CU:45:LEU:HD23	1.98	0.46
58:A:68:A:N7	6:H:132:ARG:NH2	2.64	0.46
58:A:399:A:OP1	18:J:49:ARG:NH1	2.42	0.46
58:A:810:G:C2	12:I:111:LYS:HG3	2.50	0.46
58:A:810:G:C5	12:I:111:LYS:HE3	2.51	0.46
58:A:1611:A:O2'	77:G:95:ASN:HB2	2.15	0.46
23:c8:141:THR:HG21	58:sR:1174:C:OP2	2.16	0.46
60:CV:3:LYS:HE3	75:AR:2642:A:OP2	2.15	0.46
60:CV:54:HIS:CD2	75:AR:2724:U:H4'	2.51	0.46
29:c9:14:PHE:C	29:c9:14:PHE:CD1	2.93	0.46
44:w:143:THR:HG21	44:w:150:GLU:OE1	2.16	0.46
67:D:143:TYR:OH	67:D:151:PRO:HD3	2.16	0.46
67:D:169:LEU:H	67:D:169:LEU:HD12	1.80	0.46
71:f:39:LEU:O	71:f:43:ARG:N	2.35	0.46
51:y:21:SER:HB3	51:y:26:LEU:HD23	1.97	0.46
51:y:50:LYS:HE3	51:y:50:LYS:HB3	1.70	0.46
72:CZ:115:ARG:HD3	72:CZ:119:THR:OG1	2.16	0.46
75:AR:660:A:H5''	25:CF:100:PHE:CD2	2.51	0.46
77:G:216:GLU:HG3	77:G:219:ARG:HH11	1.81	0.46
53:d4:14:SER:OG	53:d4:21:LYS:HD2	2.16	0.46
53:d4:88:THR:O	53:d4:92:VAL:HG13	2.15	0.46
53:d4:99:LYS:HB3	53:d4:99:LYS:HE3	1.71	0.46
79:DB:9:LYS:HB2	79:DB:9:LYS:HE3	1.70	0.46
79:DB:109:GLU:HA	79:DB:112:LYS:HE3	1.97	0.46
6:H:63:MET:HE3	6:H:99:GLY:O	2.15	0.46
58:sR:17:C:O2'	58:sR:1137:A:N1	2.44	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:296:U:H2'	58:sR:297:U:C6	2.50	0.46
58:sR:366:A:OP1	58:sR:758:U:O2'	2.21	0.46
58:sR:1735:U:H2'	58:sR:1736:G:O4'	2.16	0.46
56:d5:89:ILE:HG22	56:d5:90:LYS:N	2.31	0.46
12:I:12:ALA:N	12:I:13:PRO:HD3	2.31	0.46
78:Rb:84:SER:H	78:Rb:110:VAL:HG23	1.79	0.46
78:Rb:182:ASN:O	78:Rb:186:PHE:HA	2.16	0.46
78:Rb:190:ALA:HA	70:s3:223:LYS:HB3	1.98	0.46
78:Rb:195:HIS:CE1	78:Rb:221:MET:HE3	2.51	0.46
63:5:35:LYS:HA	63:5:38:ILE:HD11	1.97	0.46
18:J:43:ILE:HG12	18:J:60:ILE:HD11	1.98	0.46
18:J:83:TYR:OH	36:M:11:ARG:HG3	2.15	0.46
61:s0:53:THR:HA	61:s0:161:PRO:HD2	1.97	0.46
61:s0:163:ASN:HB3	61:s0:169:SER:OG	2.16	0.46
66:6:113:ALA:HA	66:6:132:ASN:HB3	1.97	0.46
19:CE:376:LYS:O	19:CE:380:MET:HB2	2.15	0.46
24:K:142:ASN:OD1	24:K:142:ASN:N	2.49	0.46
67:s2:122:ALA:O	67:s2:125:ILE:HG12	2.15	0.46
67:s2:140:ARG:NH1	67:s2:229:LEU:HD22	2.30	0.46
31:CG:51:LEU:HB3	31:CG:146:LEU:HA	1.98	0.46
31:CG:153:THR:O	31:CG:153:THR:OG1	2.32	0.46
26:DG:40:SER:O	26:DG:44:ARG:HG3	2.16	0.46
70:s3:76:ARG:HG3	70:s3:77:PHE:HD1	1.75	0.46
70:s3:119:ALA:HB3	70:s3:152:PHE:HD2	1.81	0.46
76:9:87:LYS:HD3	76:9:87:LYS:HA	1.57	0.46
32:DH:6:ARG:HG3	32:DH:8:TYR:CE1	2.51	0.46
39:v:200:TRP:O	39:v:203:ARG:HD3	2.16	0.46
79:AA:63:ALA:O	79:AA:67:LYS:HD3	2.16	0.46
77:s5:37:GLN:CG	77:s5:69:PHE:HE1	2.26	0.46
77:s5:136:ALA:O	77:s5:140:THR:HG23	2.16	0.46
75:1:566:G:N7	80:1:4148:OHX:N6	2.63	0.46
75:1:1035:G:H3'	75:1:1036:A:H8	1.80	0.46
75:1:2185:G:O2'	75:1:2314:U:OP2	2.33	0.46
2:AB:69:TRP:CE3	27:t:64:LYS:HA	2.50	0.46
6:s6:201:GLN:HG3	58:sR:126:A:OP1	2.16	0.46
10:DK:35:ASN:HA	10:DK:38:LYS:HE2	1.98	0.46
11:R:87:LYS:HA	11:R:90:VAL:HG22	1.97	0.46
11:R:109:PHE:O	11:R:113:ASP:N	2.49	0.46
13:j:69:TYR:OH	75:1:2557:A:OP1	2.32	0.46
14:AD:98:SER:OG	14:AD:100:ILE:HG13	2.16	0.46
17:S:29:GLN:OE1	17:S:32:LYS:NZ	2.38	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:k:60:LEU:HD11	19:k:62:ARG:HB2	1.96	0.46
24:s9:86:LEU:HD22	24:s9:96:VAL:HG12	1.98	0.46
25:l:287:THR:O	25:l:291:ASN:ND2	2.45	0.46
29:U:63:ARG:HD3	29:U:67:MET:HE1	1.97	0.46
30:c0:8:ARG:O	30:c0:12:HIS:ND1	2.49	0.46
32:AG:9:VAL:HG21	32:AG:44:TYR:HE2	1.81	0.46
35:V:66:SER:OG	35:V:81:THR:HG22	2.16	0.46
41:W:58:TYR:CD2	46:X:19:LYS:HE3	2.50	0.46
41:W:71:ARG:CD	62:c:4:VAL:HG21	2.45	0.46
10:AJ:25:LYS:HB2	10:AJ:28:TYR:CD1	2.50	0.46
50:Y:20:ARG:HD2	58:A:311:U:OP2	2.15	0.46
52:p0:72:ASP:OD2	52:p0:194:GLY:HA2	2.16	0.46
53:Z:121:THR:HG23	58:A:149:C:OP1	2.16	0.46
11:c6:44:LEU:HD22	11:c6:44:LEU:H	1.80	0.46
54:CT:32:ILE:HA	54:CT:44:LEU:HD21	1.97	0.46
58:A:329:G:H2'	58:A:330:G:C8	2.51	0.46
58:A:423:G:OP1	80:A:1945:OHX:N1	2.48	0.46
58:A:552:G:C6	58:A:553:G:C6	3.04	0.46
58:A:555:A:C5	58:A:556:A:C6	3.04	0.46
58:A:1472:C:H5'	58:A:1474:G:O4'	2.16	0.46
23:c8:75:ASN:HB3	23:c8:78:HIS:ND1	2.31	0.46
23:c8:132:ARG:HD3	23:c8:132:ARG:HA	1.49	0.46
27:t:47:ALA:HB3	27:t:49:ARG:H	1.80	0.46
27:t:77:LEU:H	27:t:77:LEU:HG	1.39	0.46
61:B:41:ARG:NH2	61:B:45:VAL:HG12	2.31	0.46
61:B:133:ILE:HD12	61:B:133:ILE:H	1.80	0.46
33:u:123:LEU:HB3	44:w:194:LEU:HG	1.97	0.46
45:AP:22:GLN:O	45:AP:75:VAL:HG13	2.15	0.46
45:AP:35:LEU:HD12	45:AP:36:PHE:N	2.30	0.46
67:D:111:VAL:O	67:D:136:VAL:HA	2.15	0.46
55:i:57:ASN:H	55:i:57:ASN:HD22	1.63	0.46
72:CZ:121:LYS:HD3	72:CZ:123:TYR:CZ	2.51	0.46
54:z:43:LYS:CE	75:1:1765:U:H5'	2.46	0.46
75:AR:594:U:H2'	75:AR:609:G:O6	2.16	0.46
75:AR:693:A:H2'	75:AR:694:C:C6	2.51	0.46
75:AR:955:U:H2'	75:AR:956:U:C6	2.50	0.46
75:AR:1039:U:H2'	75:AR:1040:A:C8	2.50	0.46
75:AR:1162:U:H4'	26:DG:57:TYR:CD1	2.51	0.46
75:AR:1258:U:O2	75:AR:1260:A:H8	1.99	0.46
75:AR:2689:A:N3	75:AR:2689:A:H2'	2.31	0.46
75:AR:2750:U:H2'	75:AR:2751:G:C8	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:2881:C:H2'	75:AR:2882:U:H6	1.81	0.46
75:AR:3223:A:C5	75:AR:3263:G:C6	3.03	0.46
77:G:89:ILE:HD12	77:G:90:ILE:H	1.77	0.46
78:h:251:TRP:CD1	78:h:264:SER:HB2	2.50	0.46
58:sR:679:U:H2'	58:sR:680:U:O4'	2.16	0.46
58:sR:1323:C:H5'	61:s0:103:THR:HG23	1.98	0.46
58:sR:1461:C:H2'	58:sR:1462:G:C8	2.50	0.46
78:Rb:9:LEU:HD23	78:Rb:312:VAL:HG23	1.97	0.46
78:Rb:211:ILE:CD1	78:Rb:225:LEU:HD22	2.45	0.46
78:Rb:312:VAL:HG23	78:Rb:313:TRP:HD1	1.80	0.46
13:CD:102:LEU:HD22	13:CD:107:VAL:HG12	1.97	0.46
19:CE:85:VAL:HB	19:CE:202:THR:HG22	1.97	0.46
24:K:105:LEU:O	24:K:111:THR:HG21	2.15	0.46
69:7:49:ILE:O	69:7:52:THR:HG22	2.16	0.46
36:M:53:TYR:CD1	36:M:113:PRO:HG2	2.51	0.46
42:O:120:SER:O	42:O:124:ARG:HG3	2.14	0.46
73:s4:184:THR:O	73:s4:189:LEU:HD12	2.15	0.46
77:s5:117:THR:HG21	77:s5:194:LEU:HG	1.96	0.46
75:1:8:C:H2'	75:1:9:U:O4'	2.15	0.46
75:1:370:U:H4'	75:1:404:G:H5'	1.97	0.46
75:1:1278:A:O2'	75:1:1279:C:H6	1.99	0.46
75:1:1506:A:H1'	75:1:1848:G:O6	2.16	0.46
2:AB:17:ALA:O	2:AB:19:LYS:HD3	2.16	0.46
3:CJ:24:ASN:HA	3:CJ:27:THR:OG1	2.16	0.46
12:s7:112:ARG:HD2	12:s7:112:ARG:C	2.41	0.46
12:s7:137:GLY:C	12:s7:153:LEU:HD23	2.41	0.46
18:s8:116:HIS:CE1	18:s8:146:ARG:HD3	2.51	0.46
19:k:107:ALA:HA	19:k:199:PHE:CD2	2.51	0.46
23:T:37:GLY:HA2	58:A:1566:U:O2'	2.16	0.46
25:l:232:SER:O	75:1:694:C:H4'	2.16	0.46
27:CN:153:ASP:OD1	27:CN:157:ARG:NH1	2.49	0.46
29:U:38:LYS:HG3	29:U:40:SER:O	2.16	0.46
29:U:70:GLN:NE2	29:U:119:LYS:HB2	2.31	0.46
31:m:129:TYR:CD1	31:m:177:GLU:HB3	2.51	0.46
32:AG:21:ARG:O	75:1:634:C:H5'	2.15	0.46
32:AG:60:ARG:HG2	32:AG:60:ARG:O	2.15	0.46
44:CQ:133:ARG:NE	75:AR:1316:C:OP2	2.46	0.46
46:X:67:GLY:O	67:D:225:LEU:HD13	2.16	0.46
47:c4:116:GLU:OE1	64:s1:106:THR:HA	2.16	0.46
48:CR:155:GLU:HG2	48:CR:155:GLU:O	2.16	0.46
9:q:77:ASN:HB3	9:q:151:VAL:HG11	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AK:35:SER:HG	75:1:360:G:HO2'	1.59	0.46
52:p0:18:TYR:O	52:p0:22:TYR:HB2	2.16	0.46
15:r:99:ILE:CG2	15:r:123:HIS:HB2	2.45	0.46
15:r:201:SER:OG	15:r:203:LYS:HG3	2.16	0.46
17:c7:44:LYS:O	17:c7:47:ARG:NH1	2.48	0.46
21:s:101:ASN:OD1	21:s:130:VAL:HA	2.16	0.46
58:A:61:A:H8	58:A:269:G:O2'	1.99	0.46
58:A:1739:C:H2'	58:A:1740:A:C8	2.50	0.46
23:c8:85:PHE:HD1	23:c8:85:PHE:O	1.99	0.46
44:w:3:VAL:CG1	44:w:4:GLU:H	2.29	0.46
44:w:129:LEU:HD12	44:w:129:LEU:HA	1.78	0.46
46:d2:8:ALA:CB	46:d2:74:VAL:HG11	2.46	0.46
46:d2:106:THR:HG22	46:d2:122:SER:C	2.41	0.46
72:CZ:115:ARG:NH1	72:CZ:119:THR:OG1	2.48	0.46
74:g:103:LEU:HA	74:g:105:TYR:HD1	1.80	0.46
54:z:4:LEU:HD12	54:z:32:ILE:HG22	1.98	0.46
54:z:75:HIS:ND1	75:1:1940:G:OP1	2.49	0.46
75:AR:1239:C:N4	75:AR:1249:G:H1	2.14	0.46
75:AR:1349:G:H5'	25:CF:291:ASN:OD1	2.16	0.46
75:AR:1423:C:H2'	75:AR:1424:C:H6	1.81	0.46
75:AR:2147:A:O3'	13:CD:197:PRO:HB2	2.16	0.46
75:AR:3366:G:H2'	75:AR:3367:C:C6	2.51	0.46
77:G:43:PHE:CD1	77:G:44:ASN:N	2.83	0.46
77:G:172:ILE:O	77:G:176:THR:HG22	2.16	0.46
78:h:114:ASP:HB2	78:h:155:ARG:HA	1.97	0.46
78:h:178:VAL:HG11	78:h:213:SER:OG	2.16	0.46
78:h:182:ASN:HD21	78:h:184:ASN:ND2	2.14	0.46
78:h:219:GLU:OE2	78:h:235:SER:OG	2.30	0.46
78:h:276:PRO:HG2	78:h:278:PHE:CZ	2.51	0.46
58:sR:119:A:H1'	58:sR:397:A:C5	2.51	0.46
58:sR:170:U:N3	58:sR:289:U:O2'	2.42	0.46
58:sR:448:C:OP2	73:s4:49:ARG:NH2	2.48	0.46
58:sR:939:A:H2'	58:sR:940:A:C8	2.50	0.46
58:sR:1267:G:H2'	58:sR:1268:G:C8	2.51	0.46
60:2:102:ARG:HB3	60:2:106:LEU:CD1	2.46	0.46
59:d6:41:ILE:HD11	59:d6:68:TYR:HE1	1.81	0.46
26:DG:115:LEU:HB2	26:DG:117:ILE:HG13	1.98	0.46
77:s5:195:ALA:O	77:s5:199:ILE:HG12	2.16	0.46
75:1:196:G:N7	80:1:3451:OHX:N4	2.64	0.46
75:1:543:C:H3'	75:1:544:C:C6	2.51	0.46
75:1:708:G:N2	75:1:711:A:OP2	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:1128:U:H2'	75:1:1129:A:O4'	2.15	0.46
75:1:1919:G:N7	80:1:3669:OHX:N2	2.63	0.46
75:1:2407:C:H1'	75:1:2818:U:O2	2.15	0.46
3:CJ:118:GLU:N	3:CJ:118:GLU:CD	2.74	0.46
4:DJ:75:TYR:O	72:CZ:46:TYR:HB3	2.16	0.46
5:Q:108:ARG:HB2	5:Q:109:PRO:HD2	1.97	0.46
12:s7:126:LEU:HD21	12:s7:173:TYR:CE2	2.51	0.46
13:j:149:ARG:HH12	13:j:252:THR:HB	1.81	0.46
17:S:75:GLU:HA	17:S:78:ARG:NH1	2.28	0.46
19:k:139:GLN:HG2	19:k:141:GLY:N	2.31	0.46
19:k:366:GLY:HA3	75:1:3330:A:H4'	1.97	0.46
21:CM:168:ASP:O	21:CM:168:ASP:CG	2.59	0.46
22:DM:44:LYS:HG2	22:DM:53:THR:HB	1.98	0.46
23:T:89:GLN:NE2	58:A:1548:G:H1'	2.31	0.46
24:s9:16:LYS:HD2	58:sR:22:A:O2'	2.16	0.46
27:CN:8:PRO:HA	51:CS:164:ARG:O	2.16	0.46
29:U:132:LEU:O	29:U:134:ARG:N	2.49	0.46
37:n:172:HIS:CD2	37:n:173:MET:HG2	2.51	0.46
38:AH:95:ILE:O	38:AH:99:LYS:N	2.47	0.46
41:W:35:ASN:ND2	41:W:52:THR:HG22	2.30	0.46
45:DQ:19:LYS:HA	75:AR:2741:C:H4'	1.97	0.46
48:CR:135:ARG:NH2	75:AR:879:U:O2'	2.47	0.46
50:Y:42:PRO:O	50:Y:79:ASN:ND2	2.49	0.46
50:Y:130:VAL:HG23	50:Y:130:VAL:O	2.15	0.46
52:p0:89:THR:CG2	52:p0:91:GLU:H	2.25	0.46
15:r:9:TYR:CG	15:r:97:LEU:HD13	2.51	0.46
21:s:137:ARG:HG3	21:s:141:ARG:HB3	1.98	0.46
21:s:155:THR:OG1	21:s:156:LYS:N	2.49	0.46
58:A:5:U:H2'	58:A:6:G:C8	2.47	0.46
58:A:190:C:OP2	58:A:190:C:H6	1.99	0.46
58:A:276:C:H2'	58:A:278:U:C4	2.51	0.46
58:A:872:G:H2'	58:A:873:U:O4'	2.16	0.46
58:A:993:A:H2'	58:A:994:G:O4'	2.15	0.46
58:A:1219:A:H3'	58:A:1220:C:C6	2.51	0.46
61:B:36:TYR:CG	61:B:161:PRO:HG3	2.51	0.46
61:B:146:LEU:HD13	61:B:162:CYS:SG	2.55	0.46
29:c9:49:ASP:OD2	29:c9:56:LYS:NZ	2.49	0.46
63:CW:49:ASN:OD1	63:CW:49:ASN:O	2.34	0.46
44:w:43:ILE:HD11	44:w:138:LEU:CD1	2.46	0.46
45:AP:41:ARG:HH11	75:1:284:A:P	2.38	0.46
66:CX:36:ILE:HG12	66:CX:58:VAL:HG21	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
66:CX:89:ASP:OD1	66:CX:91:VAL:HG12	2.15	0.46
66:CX:118:VAL:HG23	66:CX:136:VAL:HG12	1.98	0.46
46:d2:26:LEU:HD12	46:d2:27:ILE:H	1.81	0.46
73:F:103:TYR:HE1	73:F:109:PHE:CE1	2.34	0.46
73:F:179:LYS:H	73:F:195:ILE:HG12	1.81	0.46
73:F:231:GLN:C	73:F:233:LYS:H	2.24	0.46
50:d3:72:VAL:HG11	50:d3:96:VAL:HG11	1.98	0.46
54:z:67:ALA:O	54:z:70:LYS:HG2	2.16	0.46
75:AR:693:A:O2'	25:CF:234:ASN:HB2	2.16	0.46
75:AR:1128:U:H2'	75:AR:1129:A:O4'	2.15	0.46
75:AR:1190:A:H5'	75:AR:1191:U:OP1	2.15	0.46
75:AR:1289:G:H2'	75:AR:1290:A:C8	2.51	0.46
75:AR:1485:G:OP2	80:AR:3761:OHX:N1	2.49	0.46
75:AR:1565:G:N2	75:AR:1574:C:N3	2.64	0.46
75:AR:1580:A:H5'	75:AR:2522:G:N7	2.31	0.46
75:AR:1779:C:N3	80:AR:3696:OHX:N1	2.64	0.46
75:AR:1915:A:H2'	75:AR:1916:U:H6	1.81	0.46
76:DA:35:LEU:HD13	76:DA:39:LEU:HB3	1.98	0.46
6:H:98:ARG:CG	6:H:99:GLY:N	2.78	0.46
58:sR:277:U:O2'	58:sR:278:U:OP1	2.28	0.46
58:sR:492:A:O2'	58:sR:496:G:N2	2.49	0.46
58:sR:583:C:OP1	80:sR:2049:OHX:N6	2.48	0.46
58:sR:647:G:H8	58:sR:647:G:O5'	1.98	0.46
78:Rb:22:SER:OG	78:Rb:69:GLN:O	2.28	0.46
78:Rb:33:LEU:HD22	78:Rb:302:PHE:CD2	2.51	0.46
61:s0:69:ASN:HB3	61:s0:71:GLU:CD	2.41	0.46
61:s0:70:PRO:HB2	61:s0:95:ALA:H	1.80	0.46
61:s0:84:ARG:HA	61:s0:87:LEU:HD12	1.98	0.46
65:d8:14:LYS:C	65:d8:28:VAL:HG23	2.41	0.46
76:9:19:TYR:CZ	75:1:216:G:H4'	2.51	0.46
42:O:136:PRO:HG2	42:O:139:TRP:HD1	1.80	0.46
38:DI:42:PRO:C	38:DI:43:LYS:HD3	2.41	0.46
77:s5:205:SER:OG	77:s5:207:THR:N	2.46	0.46
75:1:274:G:H2'	75:1:275:U:O4'	2.16	0.46
75:1:789:A:H2'	75:1:790:U:H6	1.81	0.46
75:1:1229:G:H2'	75:1:1230:G:C8	2.50	0.46
75:1:2267:C:H2'	75:1:2268:U:O4'	2.16	0.46
75:1:2771:U:HO2'	75:1:2772:C:H4'	1.79	0.46
75:1:3246:G:O6	80:1:3723:OHX:N1	2.48	0.46
75:1:3301:U:O4	80:1:3992:OHX:N2	2.48	0.46
9:CK:129:ARG:NH2	9:CK:160:ASP:OD2	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:R:55:VAL:CG2	11:R:105:LEU:HD23	2.38	0.45
14:AD:28:LYS:HB2	75:1:1730:G:N7	2.32	0.45
15:CL:119:TRP:HZ3	75:AR:1126:G:H5''	1.81	0.45
17:S:20:TYR:HB2	17:S:24:LEU:HD11	1.97	0.45
18:s8:138:ASN:O	18:s8:141:ARG:CZ	2.63	0.45
19:k:58:ARG:HD2	19:k:354:VAL:HG23	1.99	0.45
19:k:119:TYR:HE1	19:k:129:ALA:HB2	1.80	0.45
21:CM:10:ARG:HG2	1:AS:55:A:H1'	1.98	0.45
24:s9:141:VAL:HG11	24:s9:146:PHE:HE2	1.80	0.45
29:U:91:TYR:HB2	58:A:1590:G:OP1	2.16	0.45
29:U:103:LYS:HE2	29:U:106:GLN:NE2	2.31	0.45
33:CO:15:VAL:HG23	33:CO:65:LEU:HD11	1.97	0.45
35:V:17:GLN:HB2	35:V:96:PRO:HB3	1.97	0.45
39:CP:84:PRO:O	39:CP:87:GLN:HB2	2.15	0.45
46:X:37:PHE:CZ	46:X:103:ILE:HD12	2.51	0.45
47:c4:34:SER:O	47:c4:36:LYS:N	2.49	0.45
10:AJ:86:LYS:O	10:AJ:90:MET:HG2	2.16	0.45
49:DR:49:ARG:HG2	49:DR:50:GLY:N	2.31	0.45
49:DR:74:ALA:O	49:DR:78:THR:HG23	2.15	0.45
53:Z:53:ASP:HB3	53:Z:96:LEU:HD11	1.98	0.45
56:a:95:HIS:CG	56:a:96:SER:N	2.84	0.45
21:s:116:TYR:CE2	21:s:118:PRO:HG3	2.50	0.45
58:A:411:C:H2'	58:A:412:A:O4'	2.15	0.45
58:A:576:G:H4'	58:A:580:A:C5	2.52	0.45
58:A:755:A:H2'	58:A:756:A:H8	1.82	0.45
58:A:1061:A:H2'	58:A:1062:A:H5'	1.98	0.45
58:A:1234:A:O4'	74:g:145:HIS:HB2	2.16	0.45
58:A:1484:G:H21	58:A:1606:C:H1'	1.81	0.45
58:A:1642:G:H2'	58:A:1643:U:C6	2.51	0.45
58:A:1769:U:H4'	47:P:137:LEU:HA	1.98	0.45
61:B:103:THR:O	61:B:103:THR:HG22	2.16	0.45
65:d:41:VAL:HG13	65:d:62:GLU:OE2	2.16	0.45
44:w:46:GLU:HB3	44:w:134:LYS:HE3	1.97	0.45
44:w:48:PHE:CE2	75:1:1191:U:C2	3.04	0.45
41:d1:71:ARG:HH11	62:d7:4:VAL:HG21	1.81	0.45
49:AQ:39:CYS:SG	49:AQ:41:PHE:HD1	2.38	0.45
70:E:133:GLY:HA3	70:E:156:PHE:O	2.17	0.45
71:f:2:ALA:O	71:f:4:VAL:HG23	2.15	0.45
51:y:142:GLY:O	75:1:744:A:H4'	2.16	0.45
50:d3:71:CYS:SG	50:d3:86:PHE:HA	2.56	0.45
75:AR:61:A:H2'	75:AR:62:A:O4'	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:762:U:OP2	80:AR:3921:OHX:N6	2.49	0.45
75:AR:1685:C:H2'	75:AR:1686:U:H6	1.80	0.45
75:AR:2263:C:OP1	80:AR:3851:OHX:N1	2.49	0.45
75:AR:2535:A:H2	64:s1:224:ASP:HA	1.81	0.45
75:AR:3016:A:H2'	75:AR:3017:A:C8	2.51	0.45
75:AR:3065:G:O6	80:AR:3578:OHX:N3	2.49	0.45
78:h:117:LYS:H	78:h:117:LYS:CD	2.28	0.45
6:H:113:ILE:H	6:H:113:ILE:HD12	1.81	0.45
58:sR:329:G:H2'	58:sR:330:G:C8	2.50	0.45
58:sR:639:U:H4'	58:sR:640:U:O5'	2.16	0.45
58:sR:646:C:H2'	58:sR:647:G:C8	2.51	0.45
58:sR:1109:G:O2'	58:sR:1138:A:N1	2.41	0.45
58:sR:1797:A:N1	59:d6:87:ARG:HD2	2.30	0.45
56:d5:60:VAL:HG13	56:d5:101:TYR:HB3	1.99	0.45
78:Rb:37:SER:HG	78:Rb:39:ASP:H	1.63	0.45
78:Rb:51:ASP:OD1	78:Rb:52:GLN:N	2.49	0.45
78:Rb:312:VAL:CG2	78:Rb:313:TRP:HD1	2.29	0.45
13:CD:94:ALA:HB3	13:CD:102:LEU:HG	1.98	0.45
62:d7:35:VAL:HG22	62:d7:78:SER:O	2.15	0.45
19:CE:279:ASN:HD22	19:CE:279:ASN:HA	1.58	0.45
64:s1:48:VAL:HG13	64:s1:49:ASN:O	2.15	0.45
75:1:1093:A:N3	75:1:1096:U:N3	2.64	0.45
75:1:1569:U:H5''	75:1:1570:U:H5''	1.98	0.45
75:1:2726:C:O2'	75:1:2727:A:H2'	2.16	0.45
75:1:3155:U:H4'	75:1:3156:U:H4'	1.97	0.45
2:AB:117:ARG:HG3	75:1:716:A:C5	2.51	0.45
6:s6:164:LYS:HB2	6:s6:166:GLU:OE1	2.17	0.45
7:4:91:C:H2'	7:4:92:A:H8	1.81	0.45
7:4:155:A:OP1	3:p:185:ARG:NH1	2.48	0.45
10:DK:15:LYS:HE3	2:DC:148:ILE:HD12	1.98	0.45
10:DK:52:PRO:HD2	39:CP:15:GLN:CB	2.46	0.45
11:R:32:ASN:OD1	11:R:68:ARG:HA	2.16	0.45
21:CM:15:GLU:HB2	21:CM:132:ASN:HD21	1.81	0.45
21:CM:63:GLU:O	21:CM:63:GLU:HG3	2.15	0.45
27:CN:32:LYS:HA	27:CN:35:ARG:CZ	2.47	0.45
35:V:19:ILE:HG22	35:V:20:ILE:H	1.81	0.45
35:V:46:GLU:HB2	35:V:52:LYS:HZ3	1.81	0.45
42:c3:125:LEU:HD22	42:c3:129:TYR:CE2	2.51	0.45
5:c5:22:LEU:HB2	5:c5:25:LEU:CD2	2.46	0.45
11:c6:102:LYS:HD2	11:c6:103:ASN:N	2.32	0.45
15:r:184:LYS:HD3	15:r:184:LYS:HA	1.75	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:sM:74:LYS:HD2	55:sM:75:ASP:H	1.81	0.45
57:CU:30:PHE:CD1	57:CU:103:VAL:HG11	2.51	0.45
58:A:66:U:C5'	6:H:173:PRO:HA	2.46	0.45
58:A:333:A:H2'	58:A:334:G:C8	2.51	0.45
58:A:413:U:H2'	58:A:414:C:C6	2.52	0.45
58:A:793:A:H4'	58:A:794:U:O5'	2.16	0.45
58:A:1327:C:H4'	70:E:157:LEU:O	2.16	0.45
58:A:1483:A:C6	58:A:1484:G:C6	3.04	0.45
58:A:1483:A:P	58:A:1521:G:H21	2.39	0.45
23:c8:49:LYS:CB	23:c8:72:ILE:HD13	2.46	0.45
23:c8:91:ASP:OD1	23:c8:91:ASP:N	2.50	0.45
60:CV:130:ARG:NE	75:AR:1098:A:OP1	2.45	0.45
61:B:57:LEU:O	61:B:61:ALA:N	2.38	0.45
29:c9:15:ILE:HG12	29:c9:63:ARG:HD2	1.97	0.45
66:CX:114:ILE:HG13	66:CX:132:ASN:O	2.17	0.45
67:D:118:ALA:H	67:D:124:ALA:HB2	1.82	0.45
68:e:41:GLN:H	68:e:41:GLN:HG2	1.64	0.45
41:d1:74:GLN:OE1	41:d1:83:TRP:N	2.47	0.45
46:d2:57:ARG:NH1	58:sR:864:U:OP2	2.49	0.45
73:F:21:ASP:OD1	73:F:24:SER:OG	2.26	0.45
75:AR:829:U:H3	75:AR:895:A:H62	1.63	0.45
75:AR:1094:U:O2	75:AR:1096:U:H2'	2.16	0.45
75:AR:1145:G:H5'	26:DG:46:PHE:CE1	2.51	0.45
75:AR:1812:G:O6	79:DB:64:LYS:HE3	2.15	0.45
75:AR:2291:A:O2'	58:sR:1655:A:N1	2.42	0.45
75:AR:3027:A:H2'	75:AR:3028:G:O4'	2.17	0.45
78:h:31:ASN:O	78:h:47:LEU:HD12	2.16	0.45
78:h:131:ILE:HG13	78:h:151:VAL:HG21	1.97	0.45
78:h:201:THR:HG22	78:h:214:ALA:HB3	1.97	0.45
53:d4:113:ASN:HA	53:d4:116:LYS:HB2	1.98	0.45
6:H:32:ILE:HG12	6:H:52:ILE:HG22	1.98	0.45
58:sR:244:A:C2'	58:sR:245:U:H5'	2.46	0.45
58:sR:876:G:O2'	58:sR:944:A:H5'	2.16	0.45
58:sR:1482:C:OP2	58:sR:1521:G:N1	2.48	0.45
58:sR:1669:U:OP2	80:sR:1944:OHX:N5	2.49	0.45
7:AT:37:A:H5''	7:AT:39:G:O4'	2.16	0.45
2:DC:124:ILE:HG23	2:DC:146:GLU:HG3	1.97	0.45
78:Rb:22:SER:OG	78:Rb:70:ASP:HA	2.17	0.45
78:Rb:89:LEU:HB2	78:Rb:103:PHE:HB2	1.97	0.45
78:Rb:149:ASP:N	78:Rb:175:ASP:HB3	2.31	0.45
61:s0:70:PRO:HB3	61:s0:73:VAL:HG22	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:s0:139:VAL:HG22	61:s0:139:VAL:O	2.16	0.45
19:CE:79:VAL:HG11	19:CE:338:LEU:HD11	1.98	0.45
64:s1:30:PHE:HB2	64:s1:46:THR:HG23	1.98	0.45
30:L:32:HIS:ND1	30:L:33:GLU:OE2	2.45	0.45
76:9:19:TYR:CE1	75:1:216:G:H4'	2.51	0.45
42:O:60:VAL:HG13	42:O:66:ILE:HD13	1.98	0.45
73:s4:67:GLN:HA	73:s4:67:GLN:NE2	2.31	0.45
79:AA:73:LYS:NZ	75:1:1637:A:OP1	2.49	0.45
43:CI:158:LYS:HG2	43:CI:159:GLN:H	1.80	0.45
75:1:99:A:H1'	75:1:281:G:N7	2.31	0.45
75:1:1222:G:HO2'	75:1:1285:G:N2	2.14	0.45
75:1:1276:U:OP1	80:1:3611:OHX:N1	2.49	0.45
75:1:2541:U:O2'	75:1:2542:U:OP2	2.33	0.45
75:1:2578:U:H2'	75:1:2579:G:O4'	2.16	0.45
75:1:2611:U:H2'	75:1:2612:U:C6	2.51	0.45
75:1:2710:C:H2'	75:1:2711:C:C6	2.52	0.45
2:AB:139:ARG:HH22	27:t:163:GLY:HA2	1.81	0.45
4:DJ:111:PHE:HE1	27:CN:89:TYR:HB2	1.81	0.45
6:s6:87:ARG:NH2	58:sR:159:U:O3'	2.48	0.45
11:R:47:LYS:O	11:R:82:ARG:NE	2.40	0.45
11:R:136:SER:C	11:R:137:ARG:HD2	2.40	0.45
12:s7:133:THR:CG2	12:s7:159:VAL:HA	2.47	0.45
12:s7:177:THR:HG23	12:s7:179:LYS:N	2.29	0.45
18:s8:141:ARG:CG	18:s8:142:LYS:HD3	2.46	0.45
20:AE:31:ARG:HG2	20:AE:31:ARG:NH1	2.31	0.45
22:DM:40:GLN:NE2	22:DM:42:LYS:HG3	2.31	0.45
23:T:31:ALA:N	23:T:32:LEU:HD23	2.29	0.45
23:T:75:ASN:N	23:T:76:PRO:HD3	2.30	0.45
24:s9:39:LYS:HB3	24:s9:43:TYR:CZ	2.51	0.45
31:m:232:ASP:O	31:m:235:SER:OG	2.34	0.45
32:AG:42:GLN:HA	32:AG:45:LEU:HG	1.97	0.45
35:V:21:LYS:O	35:V:118:VAL:HG23	2.16	0.45
46:X:35:ILE:CD1	46:X:61:ILE:HD11	2.46	0.45
47:c4:37:GLU:HB3	64:s1:47:LEU:HD11	1.97	0.45
50:Y:9:LEU:HD13	50:Y:9:LEU:O	2.16	0.45
52:p0:81:LYS:O	52:p0:84:VAL:HG23	2.16	0.45
52:p0:191:TYR:HE1	52:p0:194:GLY:H	1.62	0.45
53:Z:27:VAL:HG12	53:Z:29:HIS:CD2	2.51	0.45
22:AL:61:LYS:O	22:AL:65:LEU:HB3	2.17	0.45
58:A:223:U:H2'	58:A:224:C:C6	2.51	0.45
58:A:460:A:H3'	58:A:461:G:H8	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:793:A:H4'	58:A:794:U:H2'	1.98	0.45
27:t:86:THR:HG23	27:t:89:TYR:HB3	1.99	0.45
62:c:40:CYS:O	62:c:43:ILE:HD11	2.16	0.45
63:CW:99:LYS:HD2	63:CW:100:THR:N	2.25	0.45
44:w:43:ILE:HD11	44:w:138:LEU:HD13	1.98	0.45
44:w:171:LYS:O	44:w:175:THR:HG23	2.17	0.45
48:x:36:ILE:HG22	48:x:114:VAL:HG11	1.98	0.45
70:E:157:LEU:HD13	70:E:189:MET:HB2	1.98	0.45
51:y:64:VAL:O	51:y:67:ILE:HB	2.16	0.45
73:F:42:LEU:HB2	73:F:109:PHE:CD2	2.52	0.45
54:z:53:LYS:NZ	75:l:1474:A:OP2	2.46	0.45
54:z:60:LYS:O	54:z:64:ARG:HG3	2.15	0.45
75:AR:518:G:H2'	75:AR:520:U:H5'	1.98	0.45
75:AR:664:U:H4'	25:CF:106:TRP:HD1	1.81	0.45
75:AR:706:A:HO2'	75:AR:781:G:H1'	1.81	0.45
75:AR:1392:G:H3'	26:DG:125:ARG:NH2	2.30	0.45
75:AR:1899:G:N7	80:AR:3506:OHX:N6	2.64	0.45
75:AR:2201:G:H2'	75:AR:2202:C:C6	2.52	0.45
75:AR:2812:C:H2'	75:AR:2813:A:C8	2.51	0.45
75:AR:2987:A:O2'	19:CE:259:HIS:HB3	2.17	0.45
75:AR:3028:G:H2'	75:AR:3029:A:C8	2.51	0.45
76:DA:55:GLU:OE1	76:DA:69:LYS:HE3	2.17	0.45
77:G:206:SER:CA	77:G:212:LYS:HZ1	2.29	0.45
1:AS:27:A:P	31:CG:57:ASN:H	2.38	0.45
6:H:48:TYR:CE1	6:H:121:LEU:HD21	2.51	0.45
58:sR:38:C:H2'	58:sR:39:A:H5'	1.98	0.45
58:sR:151:G:N2	58:sR:163:G:N2	2.65	0.45
58:sR:469:C:O2	80:sR:2123:OHX:N4	2.50	0.45
58:sR:1473:U:O3'	77:s5:109:LYS:HE3	2.16	0.45
58:sR:1488:G:OP2	70:s3:8:LYS:HE3	2.16	0.45
58:sR:1703:C:H2'	58:sR:1704:U:H6	1.81	0.45
63:5:39:ASP:HB3	63:5:40:HIS:CD2	2.51	0.45
13:CD:48:ILE:HG22	13:CD:59:ALA:HA	1.97	0.45
19:CE:239:PRO:O	19:CE:242:THR:HG23	2.16	0.45
25:CF:10:SER:OG	25:CF:11:LEU:N	2.49	0.45
30:L:15:LEU:HD21	30:L:68:LEU:HB2	1.99	0.45
68:d9:41:GLN:H	68:d9:41:GLN:CD	2.18	0.45
76:9:53:ASP:HB2	76:9:110:HIS:ND1	2.32	0.45
73:s4:140:VAL:HA	73:s4:145:ARG:O	2.15	0.45
43:CI:166:ASN:OD1	43:CI:181:ILE:N	2.48	0.45
77:s5:91:GLU:HA	77:s5:94:THR:OG1	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:286:U:H2'	75:1:287:G:C8	2.51	0.45
75:1:772:U:H2'	75:1:773:G:C8	2.52	0.45
3:CJ:213:LYS:HD3	3:CJ:213:LYS:C	2.42	0.45
6:s6:75:LEU:CD2	58:sR:1722:A:H5''	2.47	0.45
15:CL:76:MET:O	15:CL:80:SER:HB2	2.16	0.45
18:s8:141:ARG:HG2	18:s8:142:LYS:N	2.31	0.45
19:k:208:VAL:O	19:k:340:LYS:HE2	2.16	0.45
19:k:364:LYS:HE2	75:1:3049:A:H4'	1.98	0.45
25:l:112:LYS:HB2	25:l:112:LYS:HE2	1.72	0.45
25:l:182:LEU:HD21	25:l:223:PRO:HG2	1.98	0.45
33:CO:115:PHE:HB2	37:CH:89:THR:HG21	1.97	0.45
39:CP:179:LYS:O	75:AR:287:G:H5'	2.16	0.45
41:W:36:VAL:HG12	41:W:51:VAL:O	2.17	0.45
42:c3:91:LEU:HB3	42:c3:122:ILE:HG12	1.98	0.45
4:AI:4:VAL:HG13	4:AI:9:LEU:HD21	1.98	0.45
47:c4:47:LYS:HE3	47:c4:62:LEU:HG	1.99	0.45
3:p:32:LYS:NZ	75:1:2561:A:O4'	2.50	0.45
3:p:61:GLN:HA	3:p:64:ILE:HG13	1.99	0.45
48:CR:64:ASN:C	48:CR:67:ILE:HG12	2.41	0.45
50:Y:33:LEU:HD23	50:Y:33:LEU:HA	1.72	0.45
50:Y:70:LYS:NZ	58:A:567:A:OP1	2.48	0.45
5:c5:122:THR:CG2	58:sR:1558:U:H3	2.29	0.45
9:q:72:LYS:HE2	9:q:76:ASP:OD2	2.16	0.45
52:p0:19:LEU:HD22	52:p0:73:PHE:CZ	2.51	0.45
53:Z:27:VAL:HG21	53:Z:40:LEU:HD21	1.99	0.45
11:c6:97:VAL:CG1	11:c6:98:ASP:N	2.79	0.45
15:r:69:ARG:NH1	15:r:70:ILE:HG22	2.32	0.45
54:CT:17:VAL:HG12	54:CT:18:GLY:O	2.15	0.45
54:CT:121:HIS:HE1	75:AR:1719:G:N7	2.14	0.45
56:a:85:LYS:HE3	56:a:85:LYS:HB3	1.71	0.45
57:CU:6:GLU:OE2	57:CU:99:ARG:NH2	2.44	0.45
57:CU:36:ILE:HG12	43:CI:224:ILE:HG23	1.99	0.45
58:A:109:G:O2'	58:A:796:A:N1	2.47	0.45
58:A:256:A:O2'	18:J:72:ILE:HD12	2.15	0.45
58:A:324:U:O2'	36:M:80:MET:HE1	2.16	0.45
58:A:1277:G:O2'	70:E:174:HIS:ND1	2.47	0.45
59:b:96:ALA:C	59:b:98:PRO:HD2	2.42	0.45
61:B:149:LEU:H	61:B:149:LEU:HD12	1.82	0.45
29:c9:116:ILE:HG22	29:c9:122:ARG:HE	1.81	0.45
64:C:123:ALA:HB2	64:C:165:ARG:HB3	1.97	0.45
65:d:61:ARG:NH2	65:d:63:ALA:HB2	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:d0:63:LEU:HB2	35:d0:84:MET:HB3	1.97	0.45
35:d0:63:LEU:HG	68:d9:34:TYR:CE1	2.51	0.45
70:E:162:GLN:O	70:E:165:ASN:N	2.49	0.45
51:y:125:ASP:OD1	51:y:125:ASP:N	2.50	0.45
50:d3:109:ARG:HH11	50:d3:109:ARG:HG2	1.81	0.45
54:z:95:TRP:CZ2	54:z:99:LEU:HD22	2.52	0.45
54:z:98:ARG:HD2	54:z:133:LYS:O	2.16	0.45
75:AR:544:C:O2'	75:AR:547:G:N2	2.36	0.45
75:AR:553:U:H2'	75:AR:554:A:O4'	2.17	0.45
75:AR:1759:C:H2'	75:AR:1760:A:O4'	2.16	0.45
77:G:47:SER:HB2	77:G:128:ASN:ND2	2.31	0.45
78:h:61:PHE:HB3	78:h:92:TRP:CZ3	2.51	0.45
57:0:90:MET:CG	75:1:1213:G:H4'	2.46	0.45
79:DB:46:ILE:CD1	79:DB:68:ILE:HG23	2.44	0.45
58:sR:478:A:H62	58:sR:539:G:H22	1.65	0.45
60:2:89:LEU:HB3	60:2:91:LEU:HD13	1.98	0.45
60:2:96:ILE:HD13	60:2:96:ILE:HA	1.83	0.45
60:2:130:ARG:O	75:1:1098:A:H4'	2.16	0.45
12:I:66:SER:O	12:I:70:PHE:HD2	1.99	0.45
78:Rb:115:ILE:N	78:Rb:122:ILE:HG13	2.32	0.45
78:Rb:125:GLY:HA2	78:Rb:131:ILE:HD13	1.99	0.45
18:J:36:THR:O	18:J:96:LEU:N	2.35	0.45
24:K:135:ALA:HB2	24:K:140:ILE:HA	1.98	0.45
64:s1:128:LYS:HB2	64:s1:134:VAL:HG12	1.97	0.45
25:CF:202:ARG:HA	25:CF:202:ARG:HD3	1.85	0.45
31:CG:164:LYS:HB2	31:CG:180:PHE:CE1	2.52	0.45
76:9:59:VAL:O	76:9:64:LYS:HE2	2.17	0.45
37:CH:20:LYS:HD3	37:CH:20:LYS:HA	1.86	0.45
37:CH:100:LYS:HE2	37:CH:105:TYR:CE2	2.50	0.45
73:s4:35:PRO:HB3	73:s4:143:ASP:O	2.17	0.45
43:CI:158:LYS:CG	43:CI:159:GLN:N	2.79	0.45
75:1:284:A:H4'	75:1:285:A:C2	2.52	0.45
75:1:1108:U:H2'	75:1:1109:U:H6	1.81	0.45
75:1:1294:A:O2'	75:1:1295:G:H5''	2.16	0.45
75:1:1337:A:OP1	80:1:4149:OHX:N2	2.49	0.45
75:1:2881:C:H2'	75:1:2882:U:H6	1.81	0.45
75:1:3263:G:H2'	75:1:3264:G:C8	2.51	0.45
5:Q:87:PRO:O	5:Q:90:ILE:HG13	2.16	0.45
15:CL:183:LYS:HE2	15:CL:183:LYS:HB3	1.70	0.45
18:s8:17:LYS:O	80:sR:1945:OHX:N5	2.50	0.45
18:s8:70:GLU:O	18:s8:72:ILE:HG13	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:k:37:ARG:O	19:k:186:GLY:HA2	2.15	0.45
19:k:173:GLN:HG3	75:l:3313:U:H4'	1.99	0.45
19:k:178:LEU:HD12	19:k:179:ALA:H	1.81	0.45
23:T:94:ASP:OD2	23:T:98:TYR:OH	2.34	0.45
24:s9:158:PHE:CE2	24:s9:164:PHE:HD2	2.26	0.45
27:CN:164:GLU:HA	27:CN:164:GLU:OE1	2.16	0.45
28:DN:42:ARG:HH22	75:AR:1494:U:P	2.39	0.45
30:c0:27:PHE:CD1	30:c0:40:LEU:HD23	2.48	0.45
46:X:77:PRO:HG3	36:M:99:ARG:NH1	2.32	0.45
47:c4:35:GLY:HA3	58:sR:919:A:H4'	1.99	0.45
50:Y:27:ASN:HA	50:Y:30:LYS:HE3	1.98	0.45
5:c5:43:ARG:NH2	58:sR:1553:G:C5	2.84	0.45
9:q:4:ILE:CD1	57:0:148:LEU:HD11	2.46	0.45
9:q:7:GLU:CD	9:q:54:LYS:HZ1	2.24	0.45
9:q:75:VAL:O	9:q:78:MET:HB2	2.17	0.45
9:q:87:LYS:HD2	9:q:145:VAL:CG1	2.46	0.45
52:p0:33:VAL:HG13	52:p0:37:GLN:CD	2.42	0.45
53:Z:113:ASN:HA	53:Z:116:LYS:HD3	1.97	0.45
55:sM:79:SER:O	55:sM:79:SER:OG	2.33	0.45
17:c7:89:SER:H	61:s0:198:MET:HE1	1.82	0.45
21:s:89:TYR:HD2	21:s:167:TYR:HB3	1.81	0.45
58:A:1:U:C2	24:K:54:ARG:HD2	2.52	0.45
58:A:117:U:H2'	58:A:118:U:O4'	2.16	0.45
58:A:722:G:H3'	58:A:723:G:C5'	2.41	0.45
58:A:1148:C:H2'	58:A:1149:G:H8	1.81	0.45
58:A:1458:G:H5''	58:A:1459:C:OP2	2.16	0.45
27:t:75:PHE:O	27:t:79:GLU:HB2	2.16	0.45
61:B:69:ASN:O	61:B:71:GLU:N	2.50	0.45
62:c:34:ASP:O	62:c:79:PHE:HA	2.17	0.45
29:c9:142:GLU:O	29:c9:142:GLU:HG3	2.17	0.45
63:CW:70:LYS:NZ	75:AR:1687:U:O2	2.46	0.45
64:C:135:LEU:HG	64:C:217:LEU:HD13	1.99	0.45
44:w:27:LEU:HG	44:w:98:ALA:O	2.16	0.45
67:D:49:LYS:HB3	67:D:243:TYR:CD2	2.51	0.45
67:D:169:LEU:HB3	67:D:196:VAL:HG21	1.99	0.45
41:d1:9:VAL:O	41:d1:10:GLU:HB3	2.16	0.45
48:x:27:LYS:HD3	48:x:63:PHE:CG	2.51	0.45
70:E:142:LEU:C	70:E:143:ARG:HG3	2.42	0.45
73:F:195:ILE:HD13	73:F:195:ILE:HA	1.85	0.45
54:z:160:GLU:HG3	54:z:164:LEU:CD2	2.46	0.45
75:AR:142:C:H2'	75:AR:143:G:O4'	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:272:G:OP2	80:AR:4201:OHX:N3	2.50	0.45
75:AR:816:A:H5'	75:AR:906:A:H61	1.81	0.45
75:AR:975:C:H2'	75:AR:976:U:H6	1.82	0.45
75:AR:1045:C:OP2	80:AR:4204:OHX:N5	2.49	0.45
78:h:122:ILE:O	78:h:133:VAL:HA	2.17	0.45
1:AS:2:G:O2'	1:AS:23:A:N1	2.47	0.45
6:H:214:LYS:HB2	6:H:217:SER:HB3	1.97	0.45
58:sR:980:G:H4'	58:sR:1776:A:H4'	1.98	0.45
58:sR:1087:A:H2	58:sR:1142:A:H4'	1.82	0.45
58:sR:1371:A:H5'	58:sR:1372:U:OP2	2.17	0.45
58:sR:1452:U:H2'	58:sR:1453:G:C8	2.52	0.45
7:AT:106:C:O2'	80:AT:208:OHX:N5	2.50	0.45
7:AT:143:U:H2'	7:AT:144:G:O4'	2.16	0.45
78:Rb:19:TRP:H	78:Rb:38:ARG:HB2	1.81	0.45
78:Rb:270:LEU:HD23	78:Rb:270:LEU:H	1.80	0.45
59:d6:70:LYS:H	59:d6:70:LYS:CD	2.30	0.45
63:5:87:ASN:C	63:5:88:GLN:HG3	2.42	0.45
13:CD:113:VAL:HG12	13:CD:166:ILE:HD13	1.98	0.45
13:CD:206:PRO:HG3	13:CD:213:GLY:HA3	1.99	0.45
61:s0:179:ARG:NE	61:s0:180:GLU:OE1	2.50	0.45
61:s0:184:LEU:O	61:s0:185:ARG:HG2	2.17	0.45
19:CE:109:HIS:O	19:CE:110:LEU:HD23	2.15	0.45
69:7:1:MET:O	69:7:1:MET:HG2	2.16	0.45
72:8:96:LYS:HG3	72:8:107:VAL:CG2	2.47	0.45
31:CG:120:LYS:O	31:CG:248:ARG:NH2	2.44	0.45
70:s3:37:VAL:HG23	70:s3:50:ILE:HG13	1.97	0.45
70:s3:157:LEU:HD22	70:s3:189:MET:HB2	1.98	0.45
37:CH:75:PRO:HG2	37:CH:77:ARG:HG3	1.97	0.45
32:DH:16:TYR:CD2	32:DH:25:PRO:HA	2.51	0.45
73:s4:47:PHE:CE1	73:s4:52:LEU:HD11	2.52	0.45
79:AA:62:VAL:O	79:AA:66:THR:HG22	2.17	0.45
79:AA:101:PHE:C	79:AA:102:GLU:O	2.59	0.45
75:1:394:G:N1	75:1:397:A:OP2	2.49	0.45
75:1:1272:C:H2'	75:1:1273:A:O4'	2.16	0.45
75:1:2543:U:H2'	75:1:2544:U:O4'	2.16	0.45
75:1:2772:C:H5'	75:1:2773:C:OP1	2.17	0.45
75:1:2941:A:O5'	75:1:2943:G:H4'	2.16	0.45
3:CJ:113:ALA:HA	3:CJ:116:VAL:HG12	1.99	0.45
3:CJ:165:PHE:HZ	39:CP:3:ALA:HB1	1.81	0.45
4:DJ:86:ARG:O	4:DJ:90:ARG:HD2	2.17	0.45
5:Q:85:ILE:HG22	5:Q:112:LEU:HA	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Q:130:ARG:H	55:i:74:LYS:HE2	1.81	0.45
6:s6:52:ILE:HG23	6:s6:109:LEU:HD11	1.99	0.45
7:4:15:G:C6	7:4:16:G:N1	2.85	0.45
9:CK:117:PHE:O	9:CK:120:ASP:HB2	2.17	0.45
11:R:9:THR:HG21	11:R:88:GLY:HA2	1.99	0.45
11:R:61:SER:HA	77:G:25:LEU:CD1	2.47	0.45
15:CL:156:ARG:HG3	15:CL:163:GLN:HG2	1.98	0.45
19:k:313:HIS:O	19:k:333:LYS:HE3	2.17	0.45
26:AF:4:LEU:HG	26:AF:5:PRO:HD3	1.99	0.45
30:c0:21:VAL:HG21	30:c0:46:LEU:HD11	1.98	0.45
36:c1:106:ASN:N	36:c1:106:ASN:HD22	2.14	0.45
36:c1:129:ARG:O	36:c1:129:ARG:HD3	2.16	0.45
37:n:90:LYS:HE2	37:n:90:LYS:HB3	1.60	0.45
39:CP:21:PHE:O	39:CP:25:VAL:HG12	2.16	0.45
39:CP:35:VAL:HG23	75:AR:1543:G:P	2.57	0.45
4:AI:96:GLU:HG2	39:v:143:ARG:HB3	1.98	0.45
44:CQ:187:GLU:O	44:CQ:187:GLU:CD	2.60	0.45
45:DQ:11:TYR:N	45:DQ:20:HIS:CD2	2.84	0.45
45:DQ:40:LYS:O	45:DQ:40:LYS:HG3	2.15	0.45
46:X:6:VAL:HG11	58:A:636:A:OP1	2.16	0.45
3:p:50:VAL:HG12	72:8:30:ALA:HA	1.97	0.45
3:p:136:LEU:HD11	3:p:162:LEU:HB3	1.98	0.45
50:Y:31:LYS:HE3	50:Y:31:LYS:HB2	1.69	0.45
50:Y:65:ASN:OD1	58:A:575:C:N4	2.49	0.45
50:Y:114:LYS:HE2	50:Y:114:LYS:HB3	1.74	0.45
51:CS:176:ARG:O	51:CS:176:ARG:HG3	2.16	0.45
11:c6:2:SER:OG	11:c6:3:ALA:N	2.49	0.45
15:r:102:MET:HE2	15:r:102:MET:HB3	1.84	0.45
54:CT:156:ASN:O	54:CT:156:ASN:ND2	2.50	0.45
55:sM:57:ASN:CB	23:c8:125:ILE:HD11	2.43	0.45
57:CU:82:ASP:OD1	57:CU:87:THR:HG22	2.17	0.45
58:A:281:G:H2'	58:A:282:C:O4'	2.17	0.45
58:A:973:A:H2'	58:A:974:A:C8	2.50	0.45
58:A:1344:A:H61	58:A:1382:A:H61	1.63	0.45
58:A:1483:A:OP2	58:A:1521:G:N2	2.42	0.45
29:c9:4:VAL:O	58:sR:1359:C:H1'	2.16	0.45
44:w:157:GLU:HA	44:w:157:GLU:OE1	2.17	0.45
66:CX:86:ARG:HD2	66:CX:92:PHE:CE1	2.52	0.45
41:d1:66:ASP:OD1	61:s0:36:TYR:OH	2.35	0.45
48:x:114:VAL:HG13	48:x:114:VAL:O	2.17	0.45
71:f:39:LEU:HB3	24:K:28:LEU:HD21	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:f:55:ARG:HE	71:f:58:PRO:HA	1.82	0.45
72:CZ:80:ASN:O	72:CZ:125:ARG:HG2	2.17	0.45
72:CZ:131:ASP:O	72:CZ:135:ILE:HG12	2.16	0.45
73:F:77:ARG:HG2	73:F:77:ARG:NH1	2.29	0.45
75:AR:167:U:H2'	75:AR:168:U:C6	2.51	0.45
75:AR:1108:U:H2'	75:AR:1109:U:H6	1.78	0.45
75:AR:1658:G:H2'	75:AR:1659:U:C6	2.51	0.45
75:AR:2218:G:H2'	75:AR:2219:A:H8	1.81	0.45
75:AR:2425:G:H2'	75:AR:2426:U:O4'	2.17	0.45
75:AR:3150:A:H4'	19:CE:128:LYS:O	2.17	0.45
75:AR:3307:A:OP1	19:CE:226:PHE:HB2	2.17	0.45
77:G:56:ALA:O	77:G:59:VAL:HG12	2.17	0.45
77:G:143:ARG:H	77:G:143:ARG:HG3	1.53	0.45
53:d4:11:LYS:HE2	58:sR:776:G:O6	2.17	0.45
53:d4:25:VAL:HG12	53:d4:27:VAL:HG23	1.99	0.45
57:0:155:ARG:O	57:0:170:THR:HG22	2.16	0.45
58:sR:791:A:H2'	58:sR:792:U:O4'	2.16	0.45
58:sR:826:U:H2'	58:sR:827:C:C6	2.51	0.45
58:sR:926:A:H1'	58:sR:988:A:C2	2.52	0.45
58:sR:1584:G:H22	58:sR:1611:A:P	2.39	0.45
7:AT:79:A:H5''	7:AT:80:A:OP2	2.16	0.45
12:I:58:LEU:O	12:I:58:LEU:HD12	2.16	0.45
63:5:103:TYR:OH	75:1:1677:G:OP2	2.22	0.45
63:5:107:PHE:HD1	63:5:108:TYR:N	2.10	0.45
13:CD:146:THR:N	13:CD:158:ILE:O	2.44	0.45
61:s0:48:ILE:HG12	61:s0:161:PRO:O	2.16	0.45
24:K:44:ARG:C	24:K:48:GLN:HE22	2.25	0.45
67:s2:53:ILE:H	67:s2:53:ILE:CD1	2.24	0.45
76:9:115:ARG:O	76:9:119:ILE:HG13	2.17	0.45
42:O:129:TYR:HB3	42:O:135:LEU:HG	1.97	0.45
42:O:130:ARG:HD3	42:O:139:TRP:O	2.16	0.45
73:s4:181:VAL:O	73:s4:192:ILE:HA	2.17	0.45
79:AA:75:VAL:HG21	79:AA:80:LEU:HD21	1.97	0.45
77:s5:206:SER:N	77:s5:211:ILE:HD11	2.10	0.45
75:1:839:C:H4'	75:1:1724:U:H2'	1.98	0.45
75:1:839:C:H2'	75:1:840:C:C6	2.52	0.45
75:1:1001:G:O2'	75:1:1041:U:OP2	2.28	0.45
75:1:1231:A:N1	75:1:1279:C:N4	2.64	0.45
75:1:2186:U:H2'	75:1:2187:G:O4'	2.16	0.45
75:1:2946:A:N6	86:1:4222:HOH:O	2.49	0.45
1:3:1:G:H4'	31:m:273:ARG:HH11	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:3:7:G:O3'	31:m:33:ARG:NH2	2.49	0.45
6:s6:171:LYS:HB3	6:s6:171:LYS:HE2	1.63	0.45
11:R:76:SER:N	58:A:1609:U:OP1	2.45	0.45
19:k:148:LEU:HD13	19:k:196:ARG:HG3	1.99	0.45
23:T:91:ASP:OD1	23:T:92:ILE:N	2.49	0.45
24:s9:173:ALA:HB2	58:sR:512:A:P	2.56	0.45
26:AF:4:LEU:HD22	26:AF:91:THR:CG2	2.47	0.45
26:AF:83:GLU:O	26:AF:86:THR:HG23	2.17	0.45
29:U:113:ILE:HG22	29:U:113:ILE:O	2.17	0.45
31:m:86:TYR:CD1	31:m:247:ILE:HG13	2.52	0.45
35:V:82:TYR:HB3	68:e:52:PHE:HB3	1.98	0.45
37:n:23:LYS:NZ	75:1:503:C:O2	2.46	0.45
37:n:174:LEU:HD23	37:n:174:LEU:HA	1.79	0.45
39:CP:12:ARG:HD2	75:AR:268:A:C5	2.51	0.45
41:W:63:GLY:O	61:B:153:SER:OG	2.35	0.45
42:c3:135:LEU:HG	42:c3:139:TRP:CD2	2.52	0.45
43:o:178:ILE:HG23	43:o:183:ASP:HB3	1.98	0.45
44:CQ:49:ARG:HH22	75:AR:1193:A:P	2.39	0.45
44:CQ:82:LYS:NZ	75:AR:1313:G:OP1	2.49	0.45
3:p:145:ASN:HB3	3:p:147:LYS:HE2	1.98	0.45
48:CR:67:ILE:HD12	48:CR:82:ARG:NH2	2.32	0.45
49:DR:26:VAL:HG12	49:DR:30:GLU:HG3	1.99	0.45
5:c5:130:ARG:HH12	5:c5:133:ALA:HB3	1.80	0.45
51:CS:64:VAL:HG13	51:CS:88:THR:O	2.17	0.45
52:p0:77:LEU:HA	52:p0:80:VAL:HG12	1.98	0.45
54:CT:42:ARG:NH2	75:AR:1601:U:OP2	2.50	0.45
58:A:149:C:H2'	58:A:150:U:C6	2.51	0.45
58:A:515:A:H2'	58:A:516:G:O4'	2.17	0.45
58:A:967:A:H2'	58:A:968:U:O4'	2.17	0.45
58:A:1035:G:OP2	42:O:9:LYS:HD2	2.16	0.45
58:A:1046:G:OP1	64:C:157:GLN:NE2	2.49	0.45
34:AN:99:CYS:HB2	34:AN:114:LYS:HE3	1.99	0.45
29:c9:105:LEU:HG	29:c9:122:ARG:HG3	1.97	0.45
44:w:51:LYS:NZ	44:w:144:SER:O	2.49	0.45
67:D:238:SER:HB2	67:D:239:PRO:CD	2.44	0.45
46:d2:57:ARG:NH1	62:d7:26:GLN:OE1	2.50	0.45
50:d3:126:LYS:HG2	50:d3:131:SER:HA	1.98	0.45
75:AR:612:U:H2'	75:AR:613:G:H8	1.82	0.45
75:AR:1196:C:O2	80:AR:3541:OHX:N3	2.50	0.45
77:G:163:SER:O	77:G:167:ARG:HB2	2.16	0.45
77:G:223:SER:O	77:G:224:ASN:ND2	2.45	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:d4:104:SER:O	53:d4:108:ARG:HG3	2.16	0.45
6:H:23:ARG:HB3	6:H:41:VAL:HA	1.99	0.45
6:H:218:GLU:HG2	6:H:218:GLU:O	2.17	0.45
58:sR:847:A:H2'	58:sR:848:C:O4'	2.16	0.45
58:sR:950:C:H2'	58:sR:951:A:C8	2.52	0.45
58:sR:1233:G:N2	58:sR:1253:U:H1'	2.32	0.45
58:sR:1428:G:H3'	58:sR:1428:G:OP2	2.17	0.45
60:2:111:ALA:O	60:2:115:LYS:HG3	2.17	0.45
2:DC:68:PHE:N	2:DC:68:PHE:HD1	2.15	0.45
12:I:21:ALA:O	12:I:24:PHE:HB2	2.16	0.45
78:Rb:21:THR:N	78:Rb:36:ALA:O	2.50	0.45
64:s1:110:LEU:CD1	64:s1:213:ARG:HD2	2.45	0.45
64:s1:119:THR:CG2	64:s1:156:ALA:H	2.29	0.45
69:7:9:SER:O	69:7:53:VAL:HG23	2.16	0.45
70:s3:85:VAL:HG12	70:s3:86:LEU:H	1.82	0.45
73:s4:47:PHE:HE1	73:s4:52:LEU:HD11	1.82	0.45
77:s5:59:VAL:C	77:s5:61:TYR:H	2.23	0.45
75:l:7:C:H2'	75:l:8:C:C6	2.52	0.45
75:l:1167:U:H2'	75:l:1168:U:O4'	2.16	0.45
2:AB:97:GLU:O	2:AB:98:THR:HG23	2.17	0.45
3:CJ:143:ILE:HG23	3:CJ:175:VAL:HG21	1.99	0.45
6:s6:194:LYS:HD2	58:sR:178:U:O4	2.17	0.45
10:DK:20:MET:HE1	27:CN:109:PHE:CB	2.47	0.45
11:R:97:VAL:HG22	11:R:98:ASP:N	2.31	0.45
12:s7:70:PHE:O	12:s7:74:GLN:HG3	2.17	0.45
19:k:230:THR:HA	19:k:235:THR:OG1	2.16	0.45
21:CM:48:SER:N	21:CM:66:ALA:O	2.29	0.45
24:s9:151:ASP:N	24:s9:151:ASP:OD1	2.49	0.45
25:l:8:VAL:CG2	25:l:20:LEU:HD11	2.47	0.45
31:m:150:LEU:H	31:m:150:LEU:HD12	1.81	0.45
31:m:243:ALA:O	31:m:246:ALA:N	2.50	0.45
33:CO:14:LEU:HB2	33:CO:19:ARG:HH21	1.82	0.45
42:c3:46:THR:O	42:c3:50:ILE:HG13	2.16	0.45
42:c3:78:ASN:HD22	42:c3:78:ASN:N	2.13	0.45
43:o:119:VAL:O	60:2:135:PRO:HD3	2.17	0.45
47:c4:37:GLU:HA	58:sR:895:G:O2'	2.17	0.45
3:p:81:THR:HG21	3:p:181:LYS:HE3	1.99	0.45
51:CS:135:GLN:OE1	51:CS:135:GLN:N	2.49	0.45
15:r:66:GLU:HA	15:r:69:ARG:HG2	1.99	0.45
15:r:171:TRP:CE3	15:r:181:TYR:HD2	2.35	0.45
54:CT:176:ARG:HH12	58:sR:853:G:P	2.40	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:AM:23:LEU:O	28:AM:25:GLN:NE2	2.50	0.45
58:A:197:A:H61	18:J:138:ASN:HD22	1.64	0.45
58:A:955:A:H5''	42:O:10:GLY:HA3	1.99	0.45
58:A:1235:C:O2	74:g:138:ARG:NE	2.49	0.45
58:A:1298:U:O2'	67:D:209:ASN:OD1	2.27	0.45
61:B:124:THR:HA	61:B:146:LEU:CB	2.44	0.45
65:d:56:LEU:HD12	65:d:57:MET:N	2.32	0.45
35:d0:73:GLY:HA3	58:sR:1198:G:O4'	2.17	0.45
44:w:3:VAL:HG13	44:w:4:GLU:N	2.32	0.45
41:d1:36:VAL:CG1	61:s0:62:ARG:HG2	2.47	0.45
50:d3:56:LYS:HD3	50:d3:93:LEU:HD21	1.98	0.45
50:d3:130:VAL:HG21	50:d3:143:PRO:HD3	1.98	0.45
54:z:58:HIS:HB2	75:1:1872:C:H5'	1.99	0.45
54:z:58:HIS:HE1	75:1:1860:G:H1'	1.81	0.45
54:z:85:ARG:HH22	75:1:1917:C:P	2.40	0.45
75:AR:686:G:H2'	75:AR:687:U:O4'	2.17	0.45
75:AR:789:A:H2'	75:AR:790:U:H6	1.80	0.45
75:AR:938:C:O2'	75:AR:2814:G:O2'	2.32	0.45
75:AR:969:C:OP1	8:DD:19:ASN:ND2	2.50	0.45
75:AR:1046:A:H2'	75:AR:1049:C:C5	2.52	0.45
75:AR:1257:C:H2'	75:AR:1258:U:O4'	2.17	0.45
75:AR:1621:A:H2'	75:AR:1622:U:C6	2.52	0.45
75:AR:1639:C:O2'	75:AR:1640:G:H5'	2.17	0.45
75:AR:1716:U:O2'	75:AR:1717:U:H4'	2.17	0.45
75:AR:2244:A:H5''	13:CD:243:THR:OG1	2.17	0.45
75:AR:2805:G:O2'	75:AR:2967:A:N1	2.47	0.45
75:AR:3364:C:H2'	75:AR:3365:U:C6	2.52	0.45
77:G:63:GLN:H	77:G:89:ILE:HG23	1.82	0.45
77:G:69:PHE:N	77:G:69:PHE:CD1	2.83	0.45
57:0:77:VAL:HG22	57:0:126:VAL:HG23	1.99	0.45
79:DB:104:PRO:HB2	79:DB:108:GLU:OE1	2.17	0.45
58:sR:329:G:O6	80:sR:1911:OHX:N2	2.50	0.45
58:sR:507:U:H2'	58:sR:508:U:C6	2.52	0.45
58:sR:1222:C:H2'	58:sR:1223:A:O4'	2.17	0.45
58:sR:1620:C:HO2'	58:sR:1621:U:P	2.39	0.45
78:Rb:199:ILE:HA	78:Rb:215:GLY:CA	2.44	0.45
78:Rb:210:LEU:HB2	78:Rb:223:TRP:O	2.17	0.45
13:CD:98:VAL:HG23	13:CD:167:GLY:HA3	1.98	0.45
18:J:107:THR:OG1	18:J:108:PRO:HD3	2.16	0.45
14:DE:52:ARG:O	14:DE:56:LEU:HG	2.17	0.45
24:K:45:ILE:CD1	24:K:105:LEU:HG	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:s1:98:THR:O	64:s1:232:HIS:HE1	1.98	0.45
67:s2:89:GLN:HA	67:s2:94:GLN:HA	1.99	0.45
31:CG:22:ARG:NH1	31:CG:28:THR:OG1	2.50	0.45
31:CG:86:TYR:CD1	31:CG:247:ILE:HG12	2.51	0.45
31:CG:234:ASP:HB3	80:CG:302:OHX:N2	2.32	0.45
37:CH:35:VAL:O	37:CH:38:THR:HG23	2.16	0.45
37:CH:137:ASP:HA	37:CH:140:VAL:HG22	1.99	0.45
32:DH:41:ALA:HB1	32:DH:81:VAL:CG1	2.47	0.45
73:s4:256:ARG:HB2	73:s4:259:GLN:HE21	1.82	0.45
75:1:1579:C:H2'	75:1:1580:A:C8	2.52	0.45
75:1:1708:C:H2'	75:1:1709:C:C6	2.52	0.45
75:1:2314:U:O2'	75:1:2315:G:OP1	2.33	0.45
75:1:2357:A:H2'	75:1:2358:A:H8	1.81	0.45
75:1:3356:G:H2'	75:1:3357:U:C6	2.52	0.45
1:3:65:G:H4'	15:r:204:GLY:C	2.42	0.45
2:AB:16:SER:O	2:AB:19:LYS:HB2	2.17	0.45
2:AB:77:LYS:C	2:AB:79:TRP:H	2.24	0.45
9:CK:47:LYS:HD2	9:CK:47:LYS:C	2.42	0.45
11:R:46:PHE:O	11:R:50:GLU:HG2	2.16	0.45
12:s7:37:GLU:C	12:s7:38:LEU:HD23	2.41	0.45
19:k:2:SER:HB3	75:1:2943:G:OP2	2.17	0.45
19:k:300:ARG:HD2	6:H:25:ARG:NH1	2.31	0.45
23:T:31:ALA:O	23:T:33:THR:N	2.46	0.45
27:CN:132:ALA:O	27:CN:134:GLU:N	2.50	0.45
29:U:77:ASN:HB3	29:U:95:ASP:HB3	1.97	0.45
29:U:132:LEU:HD13	29:U:133:ASP:CG	2.41	0.45
31:m:76:ALA:HB3	31:m:109:THR:HG22	1.99	0.45
35:V:20:ILE:CD1	35:V:21:LYS:N	2.79	0.45
38:AH:88:ARG:NH2	75:1:2556:C:OP1	2.50	0.45
41:W:45:ALA:H	61:B:185:ARG:HB2	1.81	0.45
42:c3:92:ILE:O	42:c3:96:VAL:HG13	2.17	0.45
4:AI:116:TYR:OH	27:t:94:GLY:HA3	2.17	0.45
5:c5:15:HIS:H	5:c5:22:LEU:HD23	1.82	0.45
15:r:61:SER:HB2	15:r:63:GLU:OE1	2.17	0.45
54:CT:21:LYS:HD3	54:CT:53:LYS:O	2.17	0.45
56:a:80:LEU:O	56:a:83:LEU:HB2	2.16	0.45
17:c7:45:ARG:HG3	58:sR:1389:C:OP2	2.16	0.45
21:s:18:VAL:HG21	75:1:2683:U:H5'	1.99	0.45
21:s:109:HIS:HB3	21:s:123:PHE:O	2.17	0.45
28:AM:8:ARG:O	28:AM:12:LYS:HG3	2.17	0.45
58:A:328:A:N3	18:J:86:SER:OG	2.44	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:786:C:O3'	73:F:255:ARG:NH1	2.50	0.45
58:A:862:A:H4'	58:A:863:A:O5'	2.17	0.45
23:c8:87:ASN:HD21	23:c8:100:THR:HG22	1.82	0.45
23:c8:87:ASN:O	58:sR:1546:G:N2	2.49	0.45
29:c9:25:GLN:O	29:c9:27:LYS:HG2	2.17	0.45
29:c9:73:VAL:HG11	29:c9:102:ARG:HB2	1.99	0.45
67:D:40:LYS:O	67:D:43:ARG:N	2.41	0.45
46:d2:102:VAL:O	46:d2:113:HIS:HB3	2.17	0.45
55:i:160:ARG:O	55:i:164:ALA:HB2	2.17	0.45
54:z:43:LYS:HE3	75:1:1765:U:C5'	2.47	0.45
75:AR:156:G:O2'	75:AR:157:A:H4'	2.16	0.45
75:AR:656:A:H2'	75:AR:657:A:C8	2.52	0.45
75:AR:1033:U:H2'	75:AR:1034:U:O4'	2.17	0.45
75:AR:1728:G:H5''	75:AR:1730:G:O4'	2.16	0.45
75:AR:1808:G:O6	80:AR:3481:OHX:N4	2.50	0.45
75:AR:2541:U:H1'	75:AR:2542:U:P	2.57	0.45
75:AR:2738:A:H5'	8:DD:36:ASP:OD1	2.16	0.45
75:AR:2810:C:OP2	75:AR:2955:U:O2'	2.35	0.45
75:AR:2990:G:H5'	19:CE:20:LYS:HB3	1.99	0.45
75:AR:3047:U:O2'	75:AR:3048:A:H5'	2.17	0.45
76:DA:7:ASP:OD1	76:DA:7:ASP:N	2.49	0.45
77:G:171:ALA:O	77:G:175:LEU:HD13	2.16	0.45
78:h:70:ASP:HB2	78:h:112:SER:HA	1.98	0.45
78:h:225:LEU:HD23	78:h:225:LEU:H	1.82	0.45
53:d4:27:VAL:HG21	53:d4:40:LEU:HD21	1.98	0.45
79:DB:10:VAL:HA	79:DB:23:VAL:O	2.17	0.45
6:H:6:SER:OG	6:H:112:VAL:HG12	2.17	0.45
6:H:33:GLY:O	6:H:51:LYS:HE2	2.17	0.45
6:H:136:LYS:HG2	6:H:136:LYS:O	2.17	0.45
58:sR:499:U:H2'	58:sR:500:C:C6	2.52	0.45
58:sR:760:A:H2'	58:sR:761:G:O4'	2.17	0.45
58:sR:897:C:OP1	64:s1:23:PRO:HG3	2.17	0.45
58:sR:1689:A:H2'	58:sR:1690:G:O4'	2.17	0.45
80:sR:1966:OHX:N1	80:sR:2198:OHX:N1	2.64	0.45
2:DC:77:LYS:O	2:DC:79:TRP:N	2.49	0.45
12:I:10:SER:HB3	12:I:42:GLN:OE1	2.16	0.45
78:Rb:42:LEU:O	78:Rb:43:ILE:HD13	2.17	0.45
59:d6:70:LYS:H	59:d6:70:LYS:CE	2.30	0.45
8:DD:47:LEU:HD23	8:DD:47:LEU:HA	1.85	0.45
61:s0:176:LEU:HA	61:s0:179:ARG:HB3	1.97	0.45
62:d7:37:CYS:HA	62:d7:77:THR:HG22	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:K:93:LEU:HD13	24:K:93:LEU:O	2.16	0.45
64:s1:68:VAL:HG22	64:s1:84:ILE:O	2.17	0.45
25:CF:233:LEU:HD23	25:CF:233:LEU:HA	1.61	0.45
67:s2:179:VAL:O	67:s2:198:THR:HG22	2.16	0.45
72:8:137:ASN:OD1	72:8:137:ASN:N	2.49	0.45
71:e0:28:LYS:HZ2	71:e0:31:LYS:HE3	1.82	0.45
37:CH:42:LEU:HD23	37:CH:84:VAL:HG22	1.99	0.45
42:O:76:LYS:HA	42:O:81:ALA:HB2	1.98	0.45
38:DI:20:ILE:O	38:DI:20:ILE:HD12	2.16	0.45
47:P:20:TYR:CE1	47:P:86:THR:HA	2.52	0.45
77:s5:48:PHE:O	77:s5:51:VAL:HG12	2.16	0.45
75:1:401:U:H4'	75:1:403:C:C2	2.52	0.45
75:1:945:C:H2'	75:1:946:U:C6	2.51	0.45
75:1:1019:G:N7	80:1:3820:OHX:N4	2.65	0.45
75:1:2423:U:H2'	75:1:2424:A:C8	2.51	0.45
1:3:26:C:H2'	1:3:57:G:H22	1.82	0.45
3:CJ:24:ASN:N	3:CJ:25:PRO:HD3	2.32	0.45
3:CJ:106:LYS:HA	3:CJ:109:LEU:HB2	1.97	0.45
3:CJ:149:LYS:HD2	3:CJ:149:LYS:HA	1.70	0.45
7:4:60:U:OP1	72:8:54:TYR:OH	2.34	0.45
9:CK:77:ASN:HA	9:CK:80:THR:OG1	2.17	0.45
11:R:14:LYS:O	11:R:123:ARG:NH1	2.50	0.45
12:s7:107:ARG:NH1	58:sR:698:U:H1'	2.32	0.45
12:s7:126:LEU:HD11	12:s7:173:TYR:CD2	2.52	0.45
13:j:18:SER:HB3	13:j:20:THR:HG22	1.99	0.45
13:j:114:SER:O	13:j:165:VAL:HG22	2.16	0.45
13:j:206:PRO:HD3	13:j:213:GLY:HA3	1.98	0.45
17:S:24:LEU:CB	17:S:58:MET:HE3	2.47	0.45
18:s8:137:LYS:O	18:s8:140:GLU:HG2	2.17	0.45
19:k:227:GLU:HB3	19:k:232:ARG:HB2	1.98	0.45
19:k:256:HIS:HA	19:k:257:PRO:C	2.41	0.45
27:CN:47:ALA:HB1	27:CN:48:PRO:HD2	1.99	0.45
29:U:28:LEU:HD22	29:U:55:TYR:CE1	2.51	0.45
32:AG:41:ALA:HB3	32:AG:74:THR:HG22	1.99	0.45
33:CO:119:GLN:O	33:CO:122:VAL:N	2.49	0.45
36:c1:46:LYS:HD2	36:c1:46:LYS:N	2.32	0.45
39:CP:5:LYS:NZ	75:AR:266:A:OP1	2.40	0.45
42:c3:28:LEU:HD12	42:c3:33:VAL:CG1	2.47	0.45
42:c3:91:LEU:HD23	42:c3:91:LEU:HA	1.79	0.45
3:p:74:THR:HB	39:v:18:VAL:HG11	1.98	0.45
3:p:153:ILE:HD11	3:p:166:LEU:HB3	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:CR:139:TYR:CE1	75:AR:2355:G:H4'	2.52	0.45
50:Y:53:VAL:HG23	50:Y:99:ASN:H	1.82	0.45
9:q:49:ASN:C	9:q:51:GLN:H	2.11	0.45
11:c6:5:PRO:HB2	11:c6:96:TYR:CZ	2.52	0.45
11:c6:47:LYS:HD3	77:s5:70:VAL:HG23	1.99	0.45
15:r:116:ARG:HH12	75:1:2622:C:N4	2.14	0.45
54:CT:46:LYS:HE2	75:AR:1765:U:H5	1.80	0.45
54:CT:110:ARG:HD3	54:CT:120:TYR:CG	2.52	0.45
21:s:63:GLU:HG3	21:s:63:GLU:O	2.17	0.45
58:A:58:U:OP1	58:A:456:A:O2'	2.28	0.45
58:A:915:A:N3	58:A:915:A:H2'	2.32	0.45
58:A:993:A:H61	58:A:1011:G:H1'	1.82	0.45
58:A:1291:G:H8	58:A:1291:G:O5'	2.00	0.45
58:A:1466:G:O2'	58:A:1602:C:OP1	2.29	0.45
61:B:170:ILE:C	61:B:172:LEU:N	2.75	0.45
29:c9:76:LEU:O	29:c9:80:TYR:HD1	2.00	0.45
29:c9:93:HIS:O	29:c9:94:ILE:HD13	2.16	0.45
45:AP:28:TYR:CE1	45:AP:30:ALA:HA	2.52	0.45
51:y:55:SER:O	51:y:59:ARG:HG2	2.17	0.45
75:AR:8:C:H2'	75:AR:9:U:O4'	2.17	0.45
75:AR:498:A:O2'	75:AR:3273:A:N1	2.46	0.45
75:AR:543:C:N4	75:AR:548:G:H1	2.15	0.45
75:AR:608:A:H5''	75:AR:609:G:OP2	2.17	0.45
75:AR:680:G:OP2	80:AR:3704:OHX:N2	2.50	0.45
75:AR:2106:A:H2'	75:AR:2107:A:C8	2.51	0.45
75:AR:2903:A:H2'	75:AR:2904:U:O4'	2.17	0.45
77:G:90:ILE:HD12	77:G:130:ILE:HG22	1.98	0.45
6:H:189:HIS:HD1	6:H:189:HIS:C	2.25	0.45
58:sR:1080:U:C2'	58:sR:1081:A:H5'	2.47	0.45
58:sR:1215:C:H2'	58:sR:1216:C:C5	2.52	0.45
58:sR:1269:U:H5'	58:sR:1432:U:OP2	2.17	0.45
58:sR:1461:C:H2'	58:sR:1462:G:H8	1.82	0.45
58:sR:1503:A:H2'	58:sR:1504:G:O4'	2.16	0.45
60:2:53:PRO:HB3	60:2:91:LEU:HD21	1.99	0.45
60:2:80:VAL:HG13	60:2:83:ARG:NH1	2.31	0.45
78:Rb:111:MET:HE1	78:Rb:127:ARG:NE	2.32	0.45
13:CD:43:GLY:O	13:CD:88:ILE:N	2.37	0.45
19:CE:77:THR:CG2	19:CE:327:CYS:HA	2.47	0.45
64:s1:144:ARG:HB3	64:s1:206:PRO:HB2	1.98	0.45
68:d9:50:ILE:HG23	70:s3:15:GLY:C	2.42	0.45
70:s3:35:SER:O	70:s3:99:VAL:HG11	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:s3:94:ARG:CZ	70:s3:125:TYR:OH	2.65	0.45
70:s3:195:SER:HB2	70:s3:200:LYS:CG	2.46	0.45
75:1:1740:U:C1'	75:1:1741:A:H2	2.30	0.45
1:3:119:U:OP1	31:m:256:THR:HG23	2.17	0.44
3:CJ:185:ARG:HH11	3:CJ:185:ARG:HB3	1.82	0.44
13:j:68:LYS:HE3	13:j:70:ARG:HD2	1.99	0.44
13:j:161:ASP:OD1	13:j:161:ASP:N	2.49	0.44
13:j:202:VAL:O	13:j:217:GLN:HG2	2.17	0.44
17:S:84:TYR:CE1	17:S:85:VAL:HG23	2.52	0.44
18:s8:195:ARG:HD3	18:s8:195:ARG:N	2.32	0.44
20:AE:75:ILE:O	20:AE:75:ILE:CD1	2.63	0.44
23:T:45:LEU:HD11	23:T:81:ILE:CD1	2.47	0.44
24:s9:184:SER:O	24:s9:184:SER:OG	2.33	0.44
26:AF:74:PHE:CE2	37:n:4:GLN:HG2	2.52	0.44
27:CN:6:ASN:HB2	2:DC:48:TYR:CB	2.47	0.44
37:n:162:SER:OG	75:1:3219:G:N1	2.43	0.44
42:c3:19:SER:O	42:c3:19:SER:OG	2.34	0.44
42:c3:46:THR:OG1	42:c3:49:GLN:HG2	2.17	0.44
4:AI:102:GLU:OE1	4:AI:102:GLU:N	2.26	0.44
44:CQ:17:GLY:HA3	75:AR:1313:G:O3'	2.17	0.44
44:CQ:170:LYS:HD3	44:CQ:170:LYS:HA	1.67	0.44
45:DQ:41:ARG:HH21	75:AR:2785:A:H4'	1.82	0.44
47:c4:45:GLY:CA	47:c4:54:GLU:HG2	2.47	0.44
47:c4:99:GLN:HE22	59:d6:45:VAL:CA	2.30	0.44
3:p:150:LEU:HD12	3:p:151:VAL:N	2.31	0.44
5:c5:27:GLU:HA	5:c5:27:GLU:OE1	2.16	0.44
51:CS:122:ILE:HG23	51:CS:126:GLN:HB2	1.99	0.44
51:CS:176:ARG:HA	51:CS:182:LYS:O	2.17	0.44
52:p0:89:THR:HG22	52:p0:91:GLU:N	2.30	0.44
53:Z:29:HIS:NE2	53:Z:69:SER:OG	2.47	0.44
53:Z:125:LEU:O	53:Z:129:VAL:HG22	2.17	0.44
15:r:13:LYS:HE2	75:1:1129:A:OP1	2.17	0.44
54:CT:12:ALA:HB1	54:CT:17:VAL:O	2.18	0.44
58:A:818:C:N4	58:A:819:G:N7	2.65	0.44
58:A:852:C:H2'	58:A:853:G:O4'	2.18	0.44
58:A:1156:C:C2'	58:A:1157:A:H5'	2.47	0.44
58:A:1468:U:O2'	58:A:1542:G:OP1	2.27	0.44
23:c8:23:ASP:HB3	23:c8:26:ILE:CD1	2.47	0.44
33:u:32:LEU:HD11	33:u:94:TRP:CD1	2.51	0.44
63:CW:100:THR:HA	75:AR:1677:G:OP1	2.16	0.44
64:C:130:SER:OG	64:C:131:ASP:N	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:D:68:ILE:H	67:D:68:ILE:HG12	1.58	0.44
67:D:103:VAL:HG13	67:D:190:LEU:HD12	1.99	0.44
49:AQ:49:ARG:HG2	49:AQ:50:GLY:N	2.31	0.44
72:CZ:136:ALA:O	72:CZ:139:ILE:HG22	2.17	0.44
73:F:155:LYS:H	73:F:174:LYS:NZ	2.15	0.44
50:d3:132:LEU:HD12	50:d3:133:LEU:N	2.31	0.44
75:AR:437:G:H8	75:AR:437:G:O5'	2.00	0.44
75:AR:1144:U:H1'	75:AR:1145:G:C8	2.53	0.44
75:AR:2177:G:O6	80:AR:3632:OHX:N3	2.51	0.44
75:AR:2683:U:H2'	75:AR:2684:C:C6	2.52	0.44
75:AR:2971:A:H3'	75:AR:2971:A:N3	2.32	0.44
75:AR:3232:G:N2	75:AR:3255:U:O2	2.40	0.44
77:G:117:THR:HG22	77:G:191:ALA:HA	1.97	0.44
77:G:225:ARG:C	77:G:225:ARG:HE	2.24	0.44
58:sR:25:C:H1'	58:sR:26:A:OP2	2.17	0.44
58:sR:195:G:H2'	58:sR:196:G:H5''	1.97	0.44
58:sR:834:G:H3'	58:sR:835:U:C5	2.52	0.44
58:sR:1143:A:P	59:d6:2:PRO:HG3	2.57	0.44
7:AT:84:C:H5''	7:AT:85:G:C6	2.51	0.44
12:I:169:PHE:O	12:I:172:VAL:HG12	2.16	0.44
78:Rb:25:THR:HG21	78:Rb:295:SER:HA	1.99	0.44
13:CD:65:ASP:OD2	13:CD:68:LYS:HD2	2.17	0.44
18:J:98:LYS:HA	18:J:169:ILE:HG22	1.99	0.44
61:s0:119:ARG:HA	61:s0:119:ARG:HD2	1.79	0.44
61:s0:203:PHE:N	61:s0:203:PHE:CD1	2.85	0.44
62:d7:44:THR:CG2	62:d7:57:GLU:HG2	2.46	0.44
25:CF:142:VAL:HB	25:CF:145:ILE:HG12	1.99	0.44
25:CF:152:VAL:HG11	25:CF:156:LEU:CD1	2.43	0.44
67:s2:49:LYS:HB3	67:s2:243:TYR:CD2	2.51	0.44
36:M:20:PHE:CD1	36:M:20:PHE:C	2.95	0.44
76:9:60:ARG:HB2	76:9:103:LYS:HB3	1.99	0.44
39:v:35:VAL:HG13	39:v:65:ARG:HG2	1.99	0.44
39:v:75:VAL:O	39:v:76:PRO:C	2.59	0.44
75:1:47:C:OP2	75:1:48:A:O2'	2.28	0.44
75:1:281:G:C6	75:1:282:G:C6	3.05	0.44
75:1:532:A:H2	75:1:560:G:H22	1.65	0.44
75:1:832:G:OP1	80:1:3455:OHX:N4	2.49	0.44
75:1:1155:C:O2'	75:1:1197:A:N1	2.44	0.44
75:1:1245:A:C3'	75:1:1246:G:H5''	2.47	0.44
75:1:1461:A:H2'	75:1:1462:A:H8	1.83	0.44
75:1:2513:U:OP2	80:1:3542:OHX:N3	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CJ:108:ARG:NH1	3:CJ:112:GLU:OE1	2.49	0.44
4:DJ:67:ARG:NH2	7:AT:97:A:OP1	2.51	0.44
7:4:43:A:OP1	80:4:209:OHX:N5	2.50	0.44
7:4:79:A:H3'	7:4:80:A:H4'	1.99	0.44
11:R:40:GLU:HG2	11:R:42:GLU:HB3	1.99	0.44
13:j:219:ILE:HG22	13:j:221:LYS:O	2.17	0.44
14:AD:27:TYR:OH	14:AD:55:GLU:OE1	2.25	0.44
17:S:110:VAL:HG12	17:S:114:GLY:H	1.81	0.44
18:s8:57:ALA:HB2	18:s8:177:GLY:HA2	1.98	0.44
25:l:361:HIS:CG	25:l:362:ASP:H	2.35	0.44
27:CN:47:ALA:HB1	27:CN:48:PRO:CD	2.47	0.44
27:CN:73:ARG:NH2	75:AR:77:A:N7	2.66	0.44
39:CP:163:GLY:HA2	39:CP:168:GLY:HA3	1.99	0.44
42:c3:12:SER:HB3	58:sR:956:C:OP2	2.17	0.44
45:DQ:23:HIS:N	45:DQ:23:HIS:CD2	2.84	0.44
45:DQ:93:LEU:HD23	45:DQ:93:LEU:N	2.32	0.44
3:p:116:VAL:HA	3:p:119:GLY:H	1.83	0.44
50:Y:84:THR:O	50:Y:120:VAL:HG23	2.17	0.44
5:c5:43:ARG:NH1	58:sR:1555:A:OP1	2.49	0.44
5:c5:115:TYR:OH	58:sR:1556:A:OP1	2.20	0.44
9:q:163:GLN:OE1	75:1:3108:G:N2	2.44	0.44
51:CS:20:LYS:HD3	75:AR:671:U:O2'	2.17	0.44
53:Z:8:ARG:HD2	58:A:780:A:C8	2.52	0.44
15:r:34:TYR:HD2	75:1:1008:U:C4'	2.31	0.44
15:r:207:GLU:HG3	15:r:208:ASN:H	1.82	0.44
22:AL:74:LYS:HD3	22:AL:74:LYS:C	2.41	0.44
21:s:24:GLY:HA3	75:1:2680:A:C2	2.52	0.44
57:CU:12:ARG:HB2	57:CU:22:PRO:HB2	1.99	0.44
58:A:78:A:C8	6:H:154:ARG:HB2	2.53	0.44
58:A:79:C:O2'	6:H:174:LYS:HB2	2.17	0.44
58:A:158:U:O4	58:A:420:A:H4'	2.17	0.44
58:A:547:U:HO2'	58:A:596:C:HO2'	1.58	0.44
58:A:577:G:H2'	55:i:99:LYS:NZ	2.32	0.44
58:A:788:A:H2'	73:F:19:LEU:HD11	2.00	0.44
58:A:851:U:H2'	58:A:852:C:C5	2.52	0.44
58:A:1105:C:H2'	58:A:1106:U:H6	1.81	0.44
34:AN:96:CYS:HB3	34:AN:101:ALA:H	1.82	0.44
61:B:68:PRO:HB2	67:D:244:SER:OG	2.16	0.44
61:B:123:VAL:O	61:B:146:LEU:HB2	2.17	0.44
61:B:201:LEU:HD12	61:B:202:TYR:HD1	1.80	0.44
29:c9:87:GLY:C	58:sR:1542:G:H5''	2.42	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:CW:62:VAL:HG23	63:CW:64:THR:HG23	1.99	0.44
63:CW:94:ARG:O	63:CW:105:LEU:HA	2.17	0.44
64:C:116:LYS:HE2	64:C:117:TRP:CZ3	2.52	0.44
64:C:181:LEU:O	64:C:184:LEU:HB3	2.17	0.44
44:w:110:PRO:HA	44:w:113:ASP:OD1	2.16	0.44
45:AP:10:THR:CG2	45:AP:23:HIS:CE1	3.00	0.44
70:E:222:VAL:CG1	78:h:229:LYS:HA	2.47	0.44
75:AR:1029:G:H2'	75:AR:1030:A:C8	2.51	0.44
75:AR:1334:U:H2'	75:AR:1335:C:C6	2.53	0.44
75:AR:1361:U:H2'	75:AR:1362:G:C8	2.52	0.44
75:AR:1390:A:N3	75:AR:1390:A:H5'	2.32	0.44
75:AR:2319:U:O4	80:AR:3417:OHX:N2	2.50	0.44
75:AR:2767:U:H2'	75:AR:2768:U:C6	2.52	0.44
75:AR:2822:U:OP2	80:AR:3755:OHX:N1	2.50	0.44
75:AR:3170:A:OP2	32:DH:56:SER:HB3	2.18	0.44
75:AR:3306:U:H2'	75:AR:3307:A:H5''	1.98	0.44
75:AR:3376:A:OP2	80:AR:4006:OHX:N4	2.50	0.44
77:G:52:GLU:H	77:G:131:GLN:NE2	2.07	0.44
77:G:223:SER:C	77:G:224:ASN:ND2	2.75	0.44
78:h:24:ALA:HB1	78:h:73:LEU:H	1.83	0.44
79:DB:81:LEU:CD2	38:DI:90:ILE:HG22	2.47	0.44
58:sR:25:C:OP2	58:sR:25:C:H4'	2.17	0.44
58:sR:886:U:H2'	58:sR:887:A:H8	1.82	0.44
58:sR:1017:U:H2'	58:sR:1018:U:C6	2.52	0.44
58:sR:1515:A:O2'	58:sR:1518:C:N4	2.50	0.44
2:DC:84:GLU:O	2:DC:87:ARG:HB2	2.16	0.44
78:Rb:19:TRP:O	78:Rb:37:SER:HA	2.16	0.44
78:Rb:203:THR:HG22	78:Rb:243:LEU:HD13	1.99	0.44
59:d6:12:LYS:HZ2	59:d6:12:LYS:HB3	1.83	0.44
59:d6:23:CYS:HB2	59:d6:74:CYS:H	1.82	0.44
61:s0:55:GLU:O	61:s0:58:VAL:HG22	2.16	0.44
67:s2:59:HIS:CE1	67:s2:238:SER:HA	2.52	0.44
67:s2:163:GLY:O	67:s2:164:SER:OG	2.34	0.44
36:M:37:ASN:HA	36:M:44:THR:CG2	2.47	0.44
37:CH:76:LEU:H	37:CH:138:GLN:NE2	2.01	0.44
79:AA:6:LYS:HE2	79:AA:6:LYS:HB2	1.83	0.44
79:AA:67:LYS:HA	79:AA:119:GLU:OE1	2.17	0.44
77:s5:200:ASN:HB2	77:s5:205:SER:CB	2.47	0.44
75:1:225:C:H2'	75:1:226:C:C6	2.52	0.44
75:1:1233:G:N1	75:1:1234:G:O6	2.50	0.44
75:1:2373:A:N3	75:1:2824:G:O2'	2.37	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CJ:52:TRP:HB3	3:CJ:56:VAL:HG13	1.99	0.44
3:CJ:115:ALA:HA	3:CJ:118:GLU:HB2	2.00	0.44
3:CJ:147:LYS:HE3	3:CJ:147:LYS:HB2	1.66	0.44
4:DJ:13:SER:O	4:DJ:17:LEU:HG	2.16	0.44
6:s6:61:PHE:CE2	6:s6:96:SER:HB2	2.52	0.44
6:s6:67:VAL:CG2	6:s6:99:GLY:HA2	2.47	0.44
7:4:126:A:OP2	80:4:205:OHX:N6	2.51	0.44
9:CK:66:ALA:O	75:AR:3113:A:O2'	2.32	0.44
11:R:9:THR:CG2	11:R:88:GLY:HA2	2.47	0.44
11:R:10:PHE:HA	11:R:18:ALA:O	2.17	0.44
11:R:137:ARG:HG2	58:A:1580:C:O3'	2.18	0.44
11:R:143:ARG:NH2	55:i:84:LYS:HD3	2.31	0.44
13:j:35:ALA:HA	3:p:36:ILE:HD13	1.98	0.44
18:s8:121:LEU:HD22	18:s8:160:PHE:CD2	2.53	0.44
21:CM:37:LEU:O	21:CM:41:SER:HB3	2.17	0.44
21:CM:171:VAL:HG23	21:CM:172:LEU:H	1.81	0.44
22:DM:62:ALA:O	22:DM:66:ILE:HD12	2.17	0.44
23:T:127:HIS:HE1	58:A:1546:G:OP1	2.00	0.44
27:CN:5:LYS:O	27:CN:6:ASN:C	2.60	0.44
30:c0:8:ARG:HA	30:c0:11:ILE:CD1	2.48	0.44
38:AH:89:ILE:HG13	79:AA:136:PHE:CE2	2.52	0.44
38:AH:91:ARG:HD2	75:1:2555:G:O4'	2.17	0.44
40:DP:8:LYS:HE3	58:sR:1778:G:O6	2.17	0.44
41:W:38:LYS:HG3	41:W:49:GLU:O	2.17	0.44
42:c3:8:GLY:O	42:c3:9:LYS:HD3	2.18	0.44
4:AI:34:GLN:HB3	4:AI:38:ARG:NH2	2.32	0.44
3:p:105:LYS:O	3:p:109:LEU:HD22	2.17	0.44
11:c6:47:LYS:HE2	11:c6:82:ARG:NH1	2.32	0.44
54:CT:167:ARG:HH21	58:sR:814:A:H5'	1.82	0.44
56:a:47:TYR:HA	56:a:50:ILE:HG12	1.98	0.44
56:a:84:GLU:HB3	56:a:89:ILE:CG1	2.47	0.44
58:A:17:C:H2'	58:A:18:C:C6	2.52	0.44
58:A:816:G:N3	12:I:110:GLN:NE2	2.62	0.44
58:A:894:U:H2'	58:A:895:G:H8	1.82	0.44
60:CV:48:ILE:HG13	60:CV:94:GLU:HG2	2.00	0.44
61:B:118:PRO:O	61:B:141:ILE:HG21	2.17	0.44
44:w:73:PHE:HB3	44:w:78:ARG:HB2	1.99	0.44
66:CX:93:LEU:HB2	69:CY:20:LEU:HD22	1.97	0.44
67:D:113:LEU:HD13	67:D:115:ILE:HD11	1.98	0.44
67:D:245:ASP:OD1	67:D:245:ASP:N	2.50	0.44
54:z:42:ARG:HH22	75:1:1601:U:P	2.41	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:z:147:ALA:HB1	54:z:151:ARG:HH22	1.82	0.44
75:AR:694:C:P	25:CF:118:LYS:HE2	2.58	0.44
75:AR:954:U:OP2	8:DD:5:LYS:HG2	2.17	0.44
75:AR:1029:G:H2'	75:AR:1030:A:H8	1.82	0.44
75:AR:1139:G:O6	8:DD:10:HIS:NE2	2.50	0.44
75:AR:2219:A:H2'	75:AR:2220:A:C8	2.53	0.44
75:AR:2947:G:OP2	19:CE:244:ARG:HD2	2.17	0.44
75:AR:3316:A:OP1	75:AR:3318:G:N2	2.51	0.44
78:h:31:ASN:C	78:h:47:LEU:HD12	2.41	0.44
6:H:46:LYS:O	6:H:117:GLY:HA3	2.18	0.44
58:sR:381:C:H2'	58:sR:382:C:C6	2.52	0.44
58:sR:591:A:P	71:e0:43:ARG:HH22	2.40	0.44
58:sR:1209:C:H42	58:sR:1454:G:H1	1.65	0.44
58:sR:1477:G:H2'	58:sR:1478:G:H8	1.82	0.44
56:d5:54:VAL:HG13	56:d5:55:PRO:HD3	1.99	0.44
7:AT:82:U:O2'	7:AT:87:G:H4'	2.17	0.44
2:DC:77:LYS:C	2:DC:79:TRP:H	2.24	0.44
18:J:41:LYS:O	18:J:42:ARG:HD2	2.17	0.44
61:s0:30:GLN:OE1	61:s0:31:VAL:N	2.50	0.44
61:s0:52:LYS:HA	61:s0:55:GLU:HG3	1.99	0.44
61:s0:83:GLN:NE2	61:s0:100:GLY:H	2.16	0.44
61:s0:175:TYR:HD2	61:s0:176:LEU:HD12	1.82	0.44
62:d7:35:VAL:HG22	62:d7:79:PHE:HA	1.98	0.44
14:DE:29:SER:O	14:DE:33:SER:HB3	2.17	0.44
30:L:56:LYS:HB3	30:L:56:LYS:HE2	1.81	0.44
72:8:40:LEU:HD23	72:8:40:LEU:HA	1.87	0.44
31:CG:84:PRO:HA	31:CG:88:ILE:O	2.17	0.44
70:s3:40:ARG:HA	70:s3:40:ARG:HD2	1.64	0.44
70:s3:119:ALA:O	70:s3:123:VAL:HG22	2.17	0.44
75:1:158:G:H2'	75:1:159:A:H8	1.82	0.44
75:1:783:A:OP2	80:1:3693:OHX:N2	2.50	0.44
75:1:985:U:H2'	75:1:986:U:C6	2.53	0.44
75:1:1039:U:H2'	75:1:1040:A:C8	2.53	0.44
75:1:1230:G:N2	75:1:1279:C:N3	2.61	0.44
75:1:1580:A:H1'	75:1:1581:C:H5	1.83	0.44
75:1:2541:U:C1'	75:1:2542:U:H4'	2.46	0.44
75:1:2662:G:H2'	75:1:2663:G:H8	1.81	0.44
1:3:92:A:C5	1:3:93:C:H1'	2.52	0.44
2:AB:132:LYS:HG3	2:AB:133:LEU:N	2.32	0.44
3:CJ:106:LYS:HA	3:CJ:109:LEU:H	1.83	0.44
3:CJ:128:LYS:HD2	3:CJ:129:PRO:HD2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CJ:134:TYR:CD2	3:CJ:190:VAL:HG11	2.53	0.44
10:DK:20:MET:O	27:CN:104:ARG:HA	2.18	0.44
11:R:98:ASP:OD1	11:R:98:ASP:C	2.61	0.44
12:s7:157:LYS:N	12:s7:157:LYS:HD3	2.33	0.44
17:S:106:THR:O	17:S:109:LEU:HG	2.18	0.44
19:k:94:GLU:HB3	44:w:152:VAL:HG21	2.00	0.44
19:k:122:TRP:CH2	19:k:127:LYS:HG2	2.53	0.44
19:k:128:LYS:HB3	19:k:128:LYS:HZ3	1.82	0.44
24:s9:143:ILE:HG12	58:sR:768:C:N1	2.32	0.44
25:l:64:SER:N	25:l:75:PRO:HA	2.32	0.44
31:m:88:ILE:HD11	31:m:240:TYR:CD1	2.53	0.44
31:m:234:ASP:CB	31:m:235:SER:HB3	2.48	0.44
40:DP:6:ARG:NH1	58:sR:1114:G:OP1	2.50	0.44
42:c3:16:ILE:HD13	42:c3:16:ILE:HA	1.81	0.44
50:Y:85:ALA:HA	50:Y:120:VAL:CG2	2.48	0.44
50:Y:108:GLY:HA2	58:A:600:U:OP2	2.17	0.44
11:c6:29:ILE:C	11:c6:30:LYS:HG2	2.42	0.44
11:c6:62:ASN:OD1	11:c6:62:ASN:N	2.46	0.44
21:s:133:ARG:HB2	21:s:152:HIS:NE2	2.32	0.44
58:A:158:U:O2'	58:A:159:U:H3'	2.17	0.44
58:A:927:C:H1'	47:P:125:SER:CB	2.45	0.44
58:A:1445:G:H5'	74:g:91:ILE:HD11	1.99	0.44
59:b:22:ARG:NH1	47:P:127:ARG:HG3	2.32	0.44
40:AO:7:LYS:O	40:AO:11:ARG:HG2	2.18	0.44
64:C:137:ILE:HG12	64:C:172:LEU:CD1	2.48	0.44
35:d0:40:ASN:O	35:d0:41:ILE:HD12	2.17	0.44
35:d0:65:ILE:HG22	68:d9:52:PHE:CE1	2.52	0.44
45:AP:50:PHE:CE2	39:v:88:GLY:HA2	2.52	0.44
67:D:233:GLN:HA	67:D:233:GLN:OE1	2.17	0.44
41:d1:38:LYS:HA	41:d1:38:LYS:HD2	1.89	0.44
69:CY:58:HIS:O	69:CY:58:HIS:CG	2.70	0.44
70:E:223:LYS:HD2	70:E:224:ASP:H	1.81	0.44
72:CZ:99:VAL:HG11	72:CZ:124:VAL:HG21	2.00	0.44
73:F:139:VAL:CG2	73:F:147:ILE:HB	2.46	0.44
75:AR:175:C:H2'	75:AR:176:G:H8	1.83	0.44
75:AR:601:U:H2'	75:AR:602:A:O4'	2.17	0.44
75:AR:664:U:H2'	75:AR:665:A:C8	2.52	0.44
75:AR:2400:G:HO2'	75:AR:2401:A:P	2.38	0.44
75:AR:3156:U:H4'	75:AR:3157:U:OP2	2.17	0.44
77:G:137:ILE:HG21	77:G:172:ILE:HG22	1.98	0.44
77:G:206:SER:C	77:G:212:LYS:HZ1	2.25	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:h:35:SER:HB3	78:h:45:TRP:CH2	2.52	0.44
78:h:74:THR:HG21	78:h:79:TYR:H	1.82	0.44
53:d4:9:THR:HA	53:d4:24:VAL:O	2.17	0.44
79:DB:84:ARG:HB2	14:DE:61:MET:HE1	1.99	0.44
58:sR:222:A:H2'	58:sR:223:U:O4'	2.17	0.44
58:sR:383:G:O6	86:sR:2203:HOH:O	2.20	0.44
58:sR:711:U:H3'	58:sR:712:G:C8	2.52	0.44
58:sR:753:A:H4'	73:s4:221:ARG:HH11	1.81	0.44
58:sR:1063:U:H2'	58:sR:1064:G:C8	2.52	0.44
58:sR:1097:U:O3'	67:s2:159:THR:HG21	2.17	0.44
2:DC:68:PHE:N	2:DC:68:PHE:CD1	2.85	0.44
2:DC:73:LEU:HB2	2:DC:109:TYR:CE2	2.52	0.44
12:I:62:VAL:O	12:I:95:GLU:HG2	2.18	0.44
12:I:71:HIS:CG	12:I:131:PHE:CZ	3.05	0.44
12:I:129:LEU:HD23	12:I:129:LEU:HA	1.78	0.44
78:Rb:143:THR:HG22	78:Rb:145:LEU:CD2	2.48	0.44
18:J:140:GLU:HA	18:J:143:TRP:HB2	1.98	0.44
61:s0:70:PRO:C	61:s0:71:GLU:OE2	2.61	0.44
19:CE:56:ILE:CD1	19:CE:359:ILE:HG12	2.48	0.44
14:DE:104:LEU:HD22	14:DE:104:LEU:H	1.82	0.44
24:K:149:ARG:H	24:K:149:ARG:HG2	1.51	0.44
68:d9:49:ASP:O	70:s3:18:TYR:HD2	2.00	0.44
73:s4:158:ASP:HB3	73:s4:173:ILE:O	2.18	0.44
47:P:51:ASP:O	47:P:51:ASP:OD1	2.36	0.44
77:s5:131:GLN:HA	77:s5:134:VAL:HG22	1.99	0.44
77:s5:162:VAL:HG22	77:s5:167:ARG:HG3	1.99	0.44
75:1:916:G:H5'	75:1:917:A:OP1	2.17	0.44
75:1:1090:G:H2'	75:1:1091:A:C8	2.50	0.44
75:1:1899:G:O2'	75:1:2334:U:O4	2.18	0.44
75:1:3384:U:H2'	75:1:3385:U:C6	2.52	0.44
3:CJ:32:LYS:HA	3:CJ:32:LYS:HD3	1.79	0.44
4:DJ:20:GLN:HG2	4:DJ:24:LEU:HD11	1.99	0.44
5:Q:97:TYR:CD1	5:Q:102:PHE:CD1	3.05	0.44
6:s6:213:ALA:O	6:s6:217:SER:OG	2.33	0.44
7:4:45:C:H2'	7:4:46:G:O4'	2.16	0.44
17:S:96:SER:HA	17:S:97:ASN:HA	1.84	0.44
18:s8:24:LYS:O	58:sR:400:A:H2'	2.17	0.44
18:s8:138:ASN:CG	18:s8:141:ARG:HH21	2.25	0.44
20:AE:72:ARG:NH1	20:AE:104:LEU:HB3	2.33	0.44
21:CM:36:VAL:HG21	21:CM:123:PHE:HD2	1.82	0.44
21:CM:105:GLY:O	21:CM:106:ILE:HD13	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CM:164:LYS:HZ2	21:CM:164:LYS:HG2	1.57	0.44
23:T:57:ARG:HD3	23:T:57:ARG:HA	1.74	0.44
24:s9:6:ARG:NH1	58:sR:39:A:OP1	2.50	0.44
24:s9:82:ARG:O	24:s9:150:LEU:HD12	2.17	0.44
24:s9:93:LEU:O	24:s9:96:VAL:HG22	2.18	0.44
27:CN:56:PRO:O	27:CN:71:ALA:HA	2.17	0.44
28:DN:3:ALA:HB2	75:AR:1836:C:H41	1.81	0.44
33:CO:121:MET:HB2	75:AR:3214:U:C4	2.52	0.44
35:V:22:ILE:CG2	35:V:93:LEU:HB2	2.47	0.44
35:V:80:GLU:O	35:V:80:GLU:HG3	2.18	0.44
41:W:62:ARG:NH1	58:A:1039:A:H5''	2.33	0.44
42:c3:48:SER:OG	42:c3:86:GLU:OE2	2.35	0.44
46:X:119:LYS:HZ2	58:A:687:G:H5'	1.82	0.44
47:c4:35:GLY:HA3	58:sR:919:A:C4'	2.47	0.44
47:c4:122:PRO:CB	47:c4:125:SER:HB3	2.47	0.44
3:p:30:THR:O	3:p:30:THR:OG1	2.24	0.44
50:Y:85:ALA:CB	50:Y:104:LEU:HD11	2.48	0.44
11:c6:38:LEU:HD21	29:c9:10:ALA:HA	2.00	0.44
54:CT:134:HIS:CE1	54:CT:137:ALA:HB2	2.52	0.44
55:sM:58:GLU:HB2	23:c8:120:ARG:HG2	1.99	0.44
21:s:156:LYS:O	21:s:159:THR:HG22	2.18	0.44
58:A:85:A:N3	58:A:148:A:O2'	2.49	0.44
58:A:260:U:H3'	58:A:261:U:H5''	1.98	0.44
58:A:452:A:OP2	80:A:2119:OHX:N1	2.51	0.44
58:A:707:A:H61	58:A:730:G:H1	1.66	0.44
58:A:811:A:C2	58:A:858:G:H1'	2.53	0.44
58:A:1119:G:O6	80:A:2073:OHX:N6	2.51	0.44
58:A:1263:G:H2'	58:A:1264:G:O4'	2.17	0.44
60:CV:9:SER:OG	60:CV:10:ARG:HG3	2.18	0.44
60:CV:83:ARG:O	60:CV:83:ARG:HG3	2.17	0.44
61:B:67:ILE:HD13	61:B:73:VAL:HG11	1.98	0.44
61:B:147:THR:O	61:B:162:CYS:N	2.49	0.44
61:B:188:LEU:HD12	61:B:188:LEU:HA	1.66	0.44
62:c:80:ARG:HB2	62:c:80:ARG:CZ	2.47	0.44
29:c9:37:VAL:HG21	29:c9:100:ILE:HD11	1.98	0.44
63:CW:87:ASN:HB2	63:CW:89:LEU:HG	2.00	0.44
45:AP:40:LYS:HG3	45:AP:44:ASP:OD2	2.17	0.44
67:D:112:GLY:HA3	67:D:132:ALA:O	2.17	0.44
67:D:140:ARG:HG2	67:D:140:ARG:NH1	2.32	0.44
67:D:152:HIS:CG	67:D:174:ARG:HG3	2.52	0.44
51:y:66:ARG:HH22	51:y:143:PRO:HG3	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:F:45:ILE:HA	73:F:61:VAL:HG11	1.99	0.44
73:F:176:ASP:OD1	73:F:179:LYS:HD3	2.18	0.44
75:AR:529:A:H2'	75:AR:530:G:C8	2.53	0.44
75:AR:598:A:H1'	25:CF:322:GLN:HE22	1.81	0.44
75:AR:945:C:H2'	75:AR:946:U:C6	2.52	0.44
75:AR:1038:C:H2'	75:AR:1039:U:C6	2.53	0.44
75:AR:1240:A:N3	75:AR:1249:G:N2	2.65	0.44
75:AR:1276:U:H2'	75:AR:1277:C:C6	2.53	0.44
75:AR:1375:G:O6	2:DC:10:LYS:HE2	2.18	0.44
75:AR:1534:A:H62	75:AR:1586:G:H2'	1.82	0.44
75:AR:1734:G:H2'	75:AR:1735:G:O4'	2.18	0.44
75:AR:2256:A:OP1	75:AR:2256:A:H8	2.00	0.44
75:AR:2262:A:N1	58:sR:1758:U:O2'	2.36	0.44
75:AR:2586:G:H4'	75:AR:2587:U:OP2	2.16	0.44
75:AR:2945:G:OP1	85:AR:3858:SPD:H41	2.18	0.44
75:AR:3035:A:OP2	80:AR:3514:OHX:N2	2.50	0.44
77:G:68:ILE:HD12	77:G:69:PHE:H	1.82	0.44
77:G:77:TYR:CD2	77:G:87:CYS:HB2	2.52	0.44
77:G:118:LEU:HA	77:G:121:ILE:HD12	2.00	0.44
77:G:200:ASN:HB2	77:G:208:SER:HB3	1.99	0.44
78:h:153:GLN:O	78:h:172:ALA:HB2	2.17	0.44
78:h:240:VAL:HG11	78:h:243:LEU:HD21	1.99	0.44
58:sR:75:U:O2'	58:sR:76:A:O5'	2.35	0.44
58:sR:381:C:H2'	58:sR:382:C:H6	1.82	0.44
58:sR:896:U:H2'	58:sR:897:C:C6	2.53	0.44
58:sR:1172:G:H2'	58:sR:1173:C:O4'	2.18	0.44
58:sR:1479:A:H2'	58:sR:1480:G:H8	1.81	0.44
58:sR:1793:G:N7	59:d6:34:LYS:NZ	2.63	0.44
7:AT:53:A:H2'	7:AT:54:A:C8	2.52	0.44
78:Rb:12:THR:HA	78:Rb:312:VAL:HG13	1.99	0.44
78:Rb:68:VAL:HG23	78:Rb:83:ALA:H	1.82	0.44
19:CE:287:LYS:HA	19:CE:320:ASP:OD1	2.18	0.44
24:K:60:LEU:HD12	24:K:60:LEU:H	1.83	0.44
24:K:93:LEU:HD22	24:K:96:VAL:CG1	2.39	0.44
67:s2:108:ASN:O	67:s2:108:ASN:ND2	2.50	0.44
67:s2:139:ILE:CD1	67:s2:191:ALA:HB1	2.47	0.44
72:8:56:ARG:O	72:8:61:LYS:HE3	2.18	0.44
73:s4:118:GLU:O	73:s4:118:GLU:HG2	2.16	0.44
43:CI:60:ARG:HA	43:CI:63:ILE:HD12	2.00	0.44
43:CI:132:PRO:HA	43:CI:229:PHE:CD1	2.52	0.44
43:CI:143:THR:HG22	43:CI:241:LYS:HE3	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:s5:216:GLU:HA	77:s5:219:ARG:HB3	1.99	0.44
75:1:339:C:OP1	75:1:1380:G:O2'	2.32	0.44
75:1:1189:C:N4	75:1:1315:U:H1'	2.33	0.44
75:1:1780:G:OP1	80:1:3760:OHX:N1	2.51	0.44
75:1:2219:A:H2'	75:1:2220:A:C8	2.53	0.44
75:1:2266:U:H2'	75:1:2267:C:C6	2.53	0.44
18:s8:26:LYS:O	18:s8:29:LEU:HG	2.17	0.44
18:s8:170:SER:OG	58:sR:209:U:O3'	2.28	0.44
19:k:77:THR:HG23	19:k:326:GLY:O	2.18	0.44
19:k:285:VAL:O	19:k:285:VAL:HG23	2.17	0.44
22:DM:14:LEU:O	22:DM:20:VAL:HG11	2.17	0.44
25:l:118:LYS:O	25:l:122:THR:HG23	2.17	0.44
27:CN:50:PRO:O	27:CN:52:ASP:N	2.50	0.44
29:U:100:ILE:H	29:U:100:ILE:CD1	2.30	0.44
33:CO:21:VAL:HG22	33:CO:33:ALA:O	2.17	0.44
33:CO:59:ASN:HB3	33:CO:62:GLN:HG3	1.98	0.44
35:V:84:MET:HE3	68:e:51:GLY:HA3	2.00	0.44
35:V:103:ILE:HG22	35:V:103:ILE:O	2.17	0.44
37:n:29:LYS:HA	37:n:29:LYS:HD2	1.80	0.44
39:CP:157:LYS:O	39:CP:162:ARG:NH1	2.51	0.44
42:c3:61:THR:OG1	42:c3:62:GLN:N	2.50	0.44
4:AI:80:LEU:HD12	4:AI:80:LEU:N	2.33	0.44
46:X:32:LYS:HE2	46:X:32:LYS:HB2	1.74	0.44
3:p:135:GLY:O	3:p:139:VAL:HG23	2.17	0.44
49:DR:8:VAL:HG22	75:AR:1927:G:OP1	2.18	0.44
9:q:10:ILE:HD13	9:q:75:VAL:CG1	2.46	0.44
51:CS:33:TYR:HE1	51:CS:45:ASN:HD22	1.65	0.44
53:Z:36:SER:O	53:Z:40:LEU:HD11	2.16	0.44
28:AM:35:ILE:HG23	75:1:351:A:N6	2.33	0.44
58:A:206:A:H1'	58:A:262:U:C2	2.52	0.44
58:A:476:U:C2	71:f:31:LYS:HG3	2.53	0.44
58:A:489:C:O5'	58:A:489:C:H6	2.01	0.44
58:A:939:A:H2'	58:A:940:A:C8	2.53	0.44
58:A:1183:A:C6	58:A:1184:A:N1	2.86	0.44
58:A:1494:C:H2'	58:A:1495:C:C6	2.50	0.44
58:A:1613:U:H2'	58:A:1614:A:H5''	1.99	0.44
59:b:75:VAL:HG12	59:b:76:SER:N	2.32	0.44
23:c8:87:ASN:HA	58:sR:1565:C:O2	2.18	0.44
62:c:50:ALA:HA	42:O:56:ASP:OD2	2.17	0.44
33:u:42:LYS:HE3	75:1:1185:C:OP1	2.18	0.44
35:d0:53:LYS:HB2	35:d0:92:ASP:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AP:83:LEU:HA	45:AP:83:LEU:HD12	1.64	0.44
72:CZ:39:LYS:H	72:CZ:39:LYS:CD	2.29	0.44
72:CZ:48:SER:OG	7:AT:136:G:OP1	2.29	0.44
50:d3:126:LYS:HB3	50:d3:126:LYS:HE3	1.61	0.44
75:AR:23:A:OP1	80:AR:3973:OHX:N3	2.51	0.44
75:AR:114:A:N1	75:AR:266:A:O2'	2.37	0.44
75:AR:621:A:H3'	80:AR:3924:OHX:N2	2.32	0.44
75:AR:1614:C:H2'	75:AR:1615:C:C6	2.52	0.44
75:AR:2752:U:H5	80:AR:3542:OHX:N3	2.16	0.44
75:AR:3141:A:H3'	75:AR:3142:A:O3'	2.16	0.44
75:AR:3268:A:N1	37:CH:135:VAL:HG13	2.33	0.44
77:G:117:THR:O	77:G:120:ILE:O	2.36	0.44
78:h:106:HIS:ND1	78:h:126:SER:HB3	2.32	0.44
53:d4:2:SER:N	53:d4:32:ARG:HG2	2.33	0.44
53:d4:100:VAL:O	53:d4:102:LYS:HE2	2.17	0.44
1:AS:79:A:H2'	1:AS:80:G:O4'	2.17	0.44
6:H:41:VAL:HG13	6:H:42:GLY:H	1.82	0.44
58:sR:603:U:H2'	58:sR:604:A:C8	2.52	0.44
58:sR:853:G:H2'	58:sR:854:U:C6	2.53	0.44
58:sR:1097:U:C6	67:s2:168:ARG:HD2	2.52	0.44
58:sR:1097:U:H5''	58:sR:1099:U:O4'	2.18	0.44
58:sR:1207:C:H4'	58:sR:1208:A:OP1	2.18	0.44
58:sR:1321:A:N7	61:s0:131:GLN:NE2	2.66	0.44
58:sR:1482:C:N4	58:sR:1524:A:OP2	2.34	0.44
58:sR:1543:A:H1'	58:sR:1569:A:C2	2.53	0.44
2:DC:4:ARG:HE	2:DC:4:ARG:HB3	1.58	0.44
2:DC:10:LYS:HD3	2:DC:10:LYS:HA	1.81	0.44
12:I:71:HIS:NE2	12:I:131:PHE:HE1	2.16	0.44
12:I:144:VAL:HG22	12:I:144:VAL:O	2.17	0.44
63:5:25:ASN:HB2	63:5:107:PHE:HE2	1.83	0.44
63:5:85:LYS:HE2	63:5:85:LYS:HA	2.00	0.44
18:J:194:ARG:HA	18:J:197:THR:HG22	2.00	0.44
19:CE:384:LYS:O	19:CE:384:LYS:HG3	2.17	0.44
64:s1:183:GLN:O	64:s1:187:LYS:HG3	2.17	0.44
69:7:38:SER:O	69:7:42:GLN:HG3	2.18	0.44
30:L:33:GLU:H	30:L:33:GLU:CD	2.23	0.44
30:L:46:LEU:HD13	30:L:66:TYR:CD2	2.53	0.44
37:CH:67:GLY:HA3	37:CH:68:PRO:C	2.43	0.44
73:s4:128:LYS:HD3	73:s4:130:GLN:OE1	2.17	0.44
77:s5:63:GLN:HG3	77:s5:88:PRO:HA	2.00	0.44
77:s5:133:VAL:O	77:s5:137:ILE:HG13	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:155:G:H4'	75:1:156:G:H2'	1.99	0.44
75:1:497:C:H2'	75:1:498:A:O4'	2.18	0.44
75:1:627:U:H4'	75:1:1399:A:O2'	2.17	0.44
75:1:1394:A:H2'	75:1:1395:G:O4'	2.17	0.44
75:1:1498:A:H5'	75:1:1602:A:H1'	2.00	0.44
75:1:1716:U:O2'	75:1:1717:U:H4'	2.16	0.44
75:1:1895:A:O2'	75:1:3053:G:H4'	2.17	0.44
75:1:2218:G:H2'	75:1:2219:A:C8	2.53	0.44
75:1:2573:G:O6	80:1:4028:OHX:N6	2.50	0.44
75:1:2887:A:H2'	75:1:2887:A:N3	2.33	0.44
5:Q:94:VAL:O	5:Q:104:GLN:HA	2.18	0.44
5:Q:126:VAL:HG13	5:Q:127:ARG:H	1.83	0.44
11:R:103:ASN:O	11:R:107:LYS:HB3	2.17	0.44
15:CL:138:VAL:HG21	15:CL:148:VAL:HB	2.00	0.44
17:S:40:THR:OG1	70:E:207:THR:OG1	2.16	0.44
18:s8:159:GLN:OE1	18:s8:165:LEU:HA	2.17	0.44
19:k:21:ARG:NH2	75:1:3309:G:O6	2.51	0.44
19:k:183:LEU:O	19:k:191:LYS:NZ	2.49	0.44
21:CM:27:GLY:O	21:CM:31:THR:HG23	2.18	0.44
21:CM:122:ILE:HD12	21:CM:122:ILE:O	2.17	0.44
23:T:56:LYS:HB3	23:T:60:GLU:OE1	2.18	0.44
23:T:57:ARG:HG3	56:a:41:ILE:CG2	2.48	0.44
30:c0:55:VAL:HA	30:c0:68:LEU:HA	2.00	0.44
31:m:276:LYS:HG2	31:m:277:LEU:N	2.32	0.44
33:CO:50:LYS:HZ1	33:CO:86:ALA:HB2	1.82	0.44
41:W:36:VAL:HA	61:B:63:ILE:CG1	2.47	0.44
46:X:3:ARG:HG2	58:A:1035:G:O2'	2.18	0.44
46:X:104:LEU:HB3	46:X:125:ILE:HA	2.00	0.44
47:c4:46:MET:HG2	58:sR:899:G:O5'	2.17	0.44
48:CR:119:VAL:HA	48:CR:145:HIS:O	2.18	0.44
9:q:88:TYR:CE2	9:q:184:LYS:HG2	2.53	0.44
9:q:129:ARG:O	9:q:132:VAL:HG22	2.17	0.44
54:CT:39:ASN:HA	54:CT:42:ARG:NH1	2.33	0.44
56:a:49:ARG:HD3	56:a:70:LYS:NZ	2.32	0.44
56:a:59:TYR:HB2	77:G:123:VAL:HG11	1.99	0.44
56:a:95:HIS:CD2	77:G:116:HIS:CE1	3.06	0.44
58:A:1146:G:C6	58:A:1147:A:C6	3.06	0.44
58:A:1174:C:H2'	58:A:1175:U:O4'	2.18	0.44
58:A:1413:U:H4'	58:A:1414:U:OP2	2.18	0.44
60:CV:126:VAL:HG23	60:CV:127:GLN:H	1.83	0.44
29:c9:35:ASP:OD1	29:c9:35:ASP:N	2.45	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:u:9:ALA:HB1	33:u:11:ASN:HB2	1.99	0.44
44:w:33:ILE:O	44:w:102:LEU:HA	2.18	0.44
68:e:44:ARG:HB3	68:e:44:ARG:CZ	2.47	0.44
70:E:70:THR:CG2	70:E:86:LEU:HB2	2.47	0.44
70:E:162:GLN:N	70:E:163:PRO:HD2	2.33	0.44
54:z:160:GLU:OE1	54:z:163:ARG:NH2	2.51	0.44
75:AR:114:A:H2'	75:AR:115:A:O4'	2.18	0.44
75:AR:407:A:C2	7:AT:17:A:H1'	2.53	0.44
75:AR:621:A:H4'	75:AR:622:A:OP1	2.18	0.44
75:AR:1239:C:H2'	75:AR:1240:A:H5'	1.98	0.44
75:AR:1280:C:H2'	75:AR:1281:G:O4'	2.18	0.44
75:AR:1541:G:H2'	75:AR:1542:G:O4'	2.17	0.44
75:AR:1639:C:OP2	38:DI:74:ARG:NH1	2.48	0.44
75:AR:1784:G:H2'	75:AR:1785:U:O4'	2.18	0.44
75:AR:2110:G:O2'	75:AR:2111:G:H5''	2.17	0.44
75:AR:2252:A:H2'	75:AR:2253:G:O4'	2.18	0.44
75:AR:2653:C:O2'	75:AR:2657:A:N1	2.46	0.44
77:G:208:SER:OG	77:G:211:ILE:HG23	2.18	0.44
78:h:135:THR:HG23	78:h:139:GLN:O	2.18	0.44
53:d4:90:ARG:O	53:d4:93:ARG:HB2	2.17	0.44
57:0:24:LEU:HD23	57:0:24:LEU:HA	1.86	0.44
6:H:2:LYS:O	6:H:108:VAL:HA	2.18	0.44
58:sR:209:U:H2'	58:sR:210:A:C8	2.53	0.44
58:sR:886:U:OP2	64:s1:216:LYS:NZ	2.51	0.44
58:sR:905:A:H2'	58:sR:906:A:O4'	2.17	0.44
12:I:98:ILE:HG22	12:I:121:VAL:HG11	1.99	0.44
78:Rb:14:GLU:H	78:Rb:53:LYS:NZ	2.16	0.44
78:Rb:115:ILE:HG23	78:Rb:122:ILE:CD1	2.46	0.44
66:6:125:LEU:HD12	66:6:126:TRP:CE2	2.52	0.44
64:s1:120:LEU:HD13	64:s1:142:PHE:HE1	1.83	0.44
65:d8:19:THR:HB	65:d8:25:VAL:HG13	2.00	0.44
25:CF:62:ALA:HB3	25:CF:90:PHE:HE2	1.82	0.44
67:s2:41:LEU:CD1	67:s2:61:LEU:HD11	2.48	0.44
67:s2:139:ILE:CG2	67:s2:218:ILE:HG12	2.47	0.44
68:d9:46:LYS:HD2	68:d9:46:LYS:N	2.32	0.44
31:CG:86:TYR:CE1	31:CG:247:ILE:HA	2.52	0.44
26:DG:79:VAL:O	26:DG:83:GLU:HG3	2.18	0.44
42:O:46:THR:HG23	42:O:49:GLN:OE1	2.17	0.44
43:CI:176:TYR:HB2	43:CI:178:ILE:HD12	2.00	0.44
38:DI:20:ILE:H	38:DI:20:ILE:HG13	1.66	0.44
77:s5:133:VAL:O	77:s5:136:ALA:HB3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:s5:183:ALA:HB2	77:s5:193:THR:HG21	1.99	0.44
75:1:589:A:H1'	75:1:1337:A:H5''	1.99	0.44
75:1:863:C:H2'	75:1:864:G:O4'	2.18	0.44
75:1:1725:C:H2'	75:1:1726:C:H6	1.83	0.44
75:1:1764:U:H3'	75:1:1765:U:C5'	2.48	0.44
75:1:2094:C:H2'	75:1:2095:G:C8	2.52	0.44
75:1:2504:U:H2'	75:1:2505:U:O4'	2.18	0.44
75:1:2508:U:H2'	75:1:2509:U:C6	2.53	0.44
75:1:2700:G:N7	80:1:3511:OHX:N1	2.66	0.44
75:1:2747:A:H2'	75:1:2748:A:C8	2.52	0.44
75:1:2922:G:H1'	75:1:2951:G:N3	2.33	0.44
3:CJ:68:ARG:O	3:CJ:236:GLY:HA2	2.17	0.44
6:s6:78:THR:O	6:s6:81:VAL:HG22	2.18	0.44
9:CK:148:GLY:N	9:CK:187:ILE:HD11	2.33	0.44
11:R:127:LYS:HG2	11:R:128:LYS:N	2.33	0.44
18:s8:83:TYR:HD2	18:s8:101:ILE:HG13	1.83	0.44
21:CM:96:PHE:CE2	21:CM:160:VAL:HG23	2.53	0.44
22:DM:44:LYS:HA	22:DM:53:THR:HA	1.99	0.44
23:T:70:VAL:HA	23:T:73:MET:HG2	2.00	0.44
23:T:113:LEU:O	23:T:117:LYS:HG3	2.18	0.44
24:s9:168:ARG:O	24:s9:169:PRO:C	2.61	0.44
29:U:71:VAL:HG21	29:U:76:LEU:HD11	1.99	0.44
29:U:130:ARG:HB3	58:A:1358:G:H4'	1.99	0.44
35:V:80:GLU:HB2	68:e:54:LYS:HE2	1.98	0.44
47:c4:13:VAL:N	47:c4:77:THR:OG1	2.51	0.44
50:Y:109:ARG:HG2	58:A:571:G:O2'	2.17	0.44
11:c6:27:GLY:HA2	77:s5:25:LEU:HB2	1.99	0.44
56:a:43:ASP:O	56:a:46:LYS:HB2	2.17	0.44
17:c7:6:THR:HG21	58:sR:1330:G:O2'	2.18	0.44
21:s:12:LEU:HD22	21:s:131:MET:HE2	2.00	0.44
21:s:124:GLY:HA3	75:1:2674:A:C4	2.53	0.44
21:s:132:ASN:N	21:s:132:ASN:OD1	2.50	0.44
21:s:133:ARG:NH1	21:s:152:HIS:O	2.44	0.44
58:A:164:A:N3	6:H:13:GLN:NE2	2.65	0.44
58:A:487:G:H1	58:A:500:C:N4	2.08	0.44
58:A:1587:A:H2'	58:A:1588:G:C8	2.53	0.44
58:A:1665:U:O4	80:A:1997:OHX:N1	2.51	0.44
59:b:75:VAL:O	59:b:79:ILE:N	2.41	0.44
27:t:109:PHE:O	27:t:113:VAL:HG22	2.18	0.44
61:B:119:ARG:CZ	61:B:119:ARG:HB3	2.47	0.44
29:c9:47:PRO:HB3	58:sR:1478:G:H5'	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:CW:39:ASP:C	63:CW:40:HIS:CD2	2.96	0.44
64:C:116:LYS:HE2	64:C:117:TRP:HZ3	1.83	0.44
64:C:127:VAL:O	64:C:134:VAL:HA	2.17	0.44
66:CX:22:ILE:HG22	66:CX:33:ASN:HB2	1.99	0.44
55:i:57:ASN:H	55:i:57:ASN:ND2	2.16	0.44
72:CZ:86:VAL:HG22	72:CZ:120:LYS:O	2.18	0.44
73:F:192:ILE:CD1	73:F:243:GLY:HA3	2.47	0.44
75:AR:216:G:H4'	76:DA:19:TYR:CE1	2.53	0.44
75:AR:283:G:O6	75:AR:304:G:H1'	2.16	0.44
75:AR:730:C:H2'	75:AR:731:U:C6	2.53	0.44
75:AR:805:G:H1'	25:CF:73:ARG:NH1	2.33	0.44
75:AR:1174:G:H1'	75:AR:1181:U:N3	2.33	0.44
75:AR:1606:U:O4	38:DI:9:ARG:NH2	2.50	0.44
75:AR:3276:G:H5'	37:CH:48:ARG:CZ	2.47	0.44
76:DA:55:GLU:HG3	76:DA:108:LYS:HB3	2.00	0.44
77:G:100:ASN:O	77:G:102:ARG:N	2.48	0.44
77:G:131:GLN:O	77:G:135:ASP:OD1	2.36	0.44
78:h:41:THR:O	78:h:42:LEU:HD23	2.18	0.44
78:h:267:PRO:HD2	78:h:269:TYR:HE1	1.82	0.44
79:DB:128:GLN:HG2	79:DB:131:PHE:HB2	1.99	0.44
58:sR:93:A:H1'	73:s4:3:ARG:HB3	1.99	0.44
58:sR:117:U:H5'	58:sR:333:A:O2'	2.18	0.44
58:sR:569:C:H2'	58:sR:570:A:O4'	2.17	0.44
58:sR:811:A:C2	58:sR:858:G:H1'	2.52	0.44
58:sR:1697:G:H8	58:sR:1705:C:N3	2.16	0.44
56:d5:51:LEU:O	56:d5:51:LEU:HD13	2.18	0.44
60:2:105:PHE:CD1	75:1:1062:A:H4'	2.51	0.44
12:I:172:VAL:HG13	12:I:173:TYR:N	2.32	0.44
78:Rb:32:LEU:HD11	78:Rb:94:VAL:HG11	2.00	0.44
78:Rb:102:ARG:HD2	78:Rb:102:ARG:H	1.83	0.44
8:DD:23:LYS:HG3	8:DD:24:PRO:HD2	1.99	0.44
61:s0:76:ILE:CD1	61:s0:98:ILE:HB	2.46	0.44
61:s0:124:THR:OG1	61:s0:125:ASP:N	2.51	0.44
61:s0:134:LYS:HB3	61:s0:134:LYS:HE2	1.84	0.44
66:6:93:LEU:CB	69:7:20:LEU:HB3	2.42	0.44
14:DE:58:TYR:CE1	38:DI:97:GLU:HG3	2.53	0.44
14:DE:103:THR:HG22	14:DE:104:LEU:H	1.83	0.44
24:K:127:VAL:O	24:K:131:GLN:HG3	2.17	0.44
64:s1:30:PHE:HB3	64:s1:96:LEU:CD2	2.35	0.44
72:8:42:ARG:NH1	75:1:15:C:OP1	2.51	0.44
31:CG:99:TYR:CG	31:CG:199:ILE:HG23	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:M:47:THR:OG1	36:M:114:ALA:O	2.35	0.44
70:s3:44:THR:OG1	70:s3:45:LYS:N	2.51	0.44
39:v:35:VAL:HG23	75:1:1543:G:OP1	2.17	0.44
77:s5:61:TYR:CD2	77:s5:164:PRO:HB2	2.52	0.44
77:s5:99:MET:HE3	77:s5:180:ARG:NH2	2.33	0.44
77:s5:214:LYS:O	77:s5:216:GLU:N	2.51	0.44
75:1:93:C:OP1	85:1:3478:SPD:H21	2.18	0.44
75:1:138:U:H2'	75:1:139:G:H8	1.82	0.44
75:1:280:U:O2	75:1:282:G:H3'	2.18	0.44
75:1:570:A:H2'	75:1:571:U:O4'	2.18	0.44
75:1:1060:U:H2'	75:1:1061:A:H8	1.83	0.44
75:1:1103:A:OP2	75:1:1103:A:H4'	2.18	0.44
75:1:1146:C:H4'	75:1:1331:U:C4	2.53	0.44
75:1:1455:U:O2'	75:1:1456:A:H8	2.01	0.44
75:1:1560:G:N1	75:1:1561:G:N7	2.66	0.44
75:1:3113:A:H2'	75:1:3114:A:O4'	2.18	0.44
3:CJ:157:VAL:O	3:CJ:157:VAL:HG23	2.16	0.44
3:CJ:166:LEU:HD12	3:CJ:166:LEU:HA	1.83	0.44
7:4:31:G:OP2	80:1:4176:OHX:N1	2.51	0.44
15:CL:65:LEU:HD23	15:CL:65:LEU:HA	1.84	0.44
15:CL:66:GLU:O	15:CL:70:ILE:HD12	2.18	0.44
17:S:75:GLU:CA	17:S:78:ARG:HH12	2.29	0.44
25:l:3:ARG:HA	25:l:3:ARG:HD2	1.65	0.44
28:DN:15:LYS:O	28:DN:19:GLN:HG3	2.18	0.44
29:U:135:ILE:HG13	29:U:135:ILE:H	1.57	0.44
31:m:111:GLN:HB3	31:m:116:ASP:OD2	2.17	0.44
37:n:52:VAL:HG21	37:n:65:ILE:HD13	1.99	0.44
41:W:15:ARG:HG3	67:D:58:LEU:O	2.18	0.44
41:W:79:LEU:CD1	41:W:82:VAL:HG21	2.48	0.44
42:c3:94:LYS:HD3	42:c3:94:LYS:HA	1.84	0.44
5:c5:33:PHE:CD1	5:c5:33:PHE:C	2.95	0.44
5:c5:77:ARG:HA	5:c5:95:GLY:H	1.83	0.44
5:c5:130:ARG:HH22	5:c5:133:ALA:HB3	1.83	0.44
9:q:34:LEU:HD23	9:q:34:LEU:HA	1.83	0.44
11:c6:60:PHE:O	77:s5:25:LEU:HD23	2.18	0.44
56:a:63:SER:HB3	77:G:187:ILE:HD11	2.00	0.44
21:s:54:VAL:HG23	21:s:57:PHE:H	1.81	0.44
58:A:169:A:H8	58:A:169:A:OP2	2.00	0.44
58:A:304:U:H2'	58:A:305:C:H6	1.83	0.44
58:A:320:U:H3'	58:A:321:C:C5'	2.44	0.44
58:A:871:G:O4'	62:c:51:GLN:HB2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:978:A:O2'	58:A:1787:C:O2	2.35	0.44
58:A:1445:G:N2	74:g:88:PRO:O	2.50	0.44
58:A:1565:C:H2'	58:A:1566:U:O4'	2.18	0.44
23:c8:30:TYR:CE2	58:sR:1539:G:N3	2.86	0.44
27:t:60:ALA:HB3	27:t:65:TYR:O	2.17	0.44
27:t:65:TYR:OH	75:1:700:C:OP1	2.25	0.44
61:B:117:GLU:CG	67:D:40:LYS:HE3	2.42	0.44
62:c:70:LYS:O	62:c:72:LYS:N	2.51	0.44
64:C:137:ILE:CD1	64:C:172:LEU:HG	2.47	0.44
44:w:35:VAL:HG21	44:w:80:PHE:HE2	1.83	0.44
44:w:51:LYS:HE3	44:w:55:HIS:CE1	2.52	0.44
44:w:124:LEU:HD23	44:w:124:LEU:HA	1.75	0.44
66:CX:54:LEU:HA	66:CX:54:LEU:HD12	1.84	0.44
66:CX:104:ASN:HD21	66:CX:108:GLU:HB3	1.82	0.44
67:D:53:ILE:HD12	67:D:57:PHE:HZ	1.83	0.44
67:D:89:GLN:NE2	67:D:94:GLN:OE1	2.44	0.44
70:E:25:PHE:CB	70:E:34:TYR:HE2	2.30	0.44
46:d2:15:ASN:ND2	46:d2:72:CYS:H	2.15	0.44
46:d2:28:ARG:HH12	58:sR:864:U:H3'	1.82	0.44
46:d2:31:SER:H	46:d2:34:ILE:HD12	1.83	0.44
51:y:157:PRO:HA	51:y:186:VAL:HG12	2.00	0.44
54:z:58:HIS:HD2	75:1:3067:C:H5''	1.81	0.44
75:AR:706:A:O2'	75:AR:781:G:H1'	2.17	0.44
75:AR:1162:U:H4'	26:DG:57:TYR:CE1	2.53	0.44
75:AR:1622:U:H2'	75:AR:1623:G:O4'	2.17	0.44
75:AR:1819:U:O4	80:AR:3483:OHX:N3	2.51	0.44
75:AR:3304:U:O2	19:CE:334:ARG:HG3	2.18	0.44
78:h:193:ILE:HD12	78:h:193:ILE:O	2.18	0.44
58:sR:453:U:O4	80:sR:2188:OHX:N1	2.51	0.44
58:sR:542:A:H3'	58:sR:542:A:P	2.58	0.44
58:sR:1594:G:H5'	68:d9:33:LYS:HD2	1.98	0.44
7:AT:10:A:H2'	7:AT:11:C:C6	2.53	0.44
2:DC:25:HIS:CD2	2:DC:25:HIS:C	2.95	0.44
2:DC:74:ASN:HA	2:DC:113:LEU:O	2.18	0.44
78:Rb:149:ASP:HB2	78:Rb:174:ASN:C	2.43	0.44
78:Rb:294:TRP:CZ3	78:Rb:301:LEU:HB2	2.53	0.44
18:J:114:GLU:HA	18:J:118:GLY:HA2	1.99	0.44
61:s0:115:PHE:CE1	61:s0:117:GLU:HG3	2.53	0.44
61:s0:119:ARG:HE	67:s2:240:LEU:HB2	1.82	0.44
66:6:6:ALA:HB2	66:6:126:TRP:CH2	2.53	0.44
19:CE:360:ASP:OD1	19:CE:362:ALA:N	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:K:86:LEU:HD13	24:K:99:LEU:HD11	1.99	0.44
64:s1:48:VAL:HG23	64:s1:64:ARG:NH2	2.32	0.44
64:s1:183:GLN:O	64:s1:186:SER:OG	2.32	0.44
65:d8:10:ALA:HB1	65:d8:30:VAL:CB	2.44	0.44
20:DF:20:LEU:HD11	20:DF:32:ALA:HB2	1.98	0.44
30:L:69:THR:OG1	30:L:70:GLU:N	2.51	0.44
72:8:29:SER:OG	72:8:30:ALA:N	2.49	0.44
72:8:92:LYS:HG3	75:1:1831:U:OP1	2.17	0.44
36:M:17:PRO:HG2	36:M:63:LEU:HD21	2.00	0.44
36:M:75:VAL:HG13	36:M:119:VAL:HA	1.99	0.44
37:CH:94:GLU:OE2	37:CH:94:GLU:HA	2.17	0.44
73:s4:18:TRP:CZ3	73:s4:29:PRO:HG2	2.52	0.44
38:DI:74:ARG:HG2	38:DI:75:ALA:N	2.32	0.44
77:s5:121:ILE:HD11	77:s5:195:ALA:HA	1.99	0.44
75:1:2689:A:H2'	75:1:2689:A:N3	2.33	0.44
75:1:3095:U:H2'	75:1:3096:C:H6	1.83	0.44
1:3:86:U:O2'	80:1:3993:OHX:N4	2.51	0.43
2:AB:95:SER:HA	2:AB:122:PRO:HG2	1.99	0.43
6:s6:21:GLU:O	6:s6:25:ARG:HG3	2.18	0.43
7:4:59:A:H5''	7:4:61:A:C8	2.52	0.43
9:CK:23:ARG:HG3	9:CK:23:ARG:NH1	2.31	0.43
10:DK:93:ILE:O	10:DK:93:ILE:HG13	2.18	0.43
13:j:149:ARG:HD2	13:j:153:GLY:O	2.18	0.43
14:AD:75:ASN:O	14:AD:79:THR:HG22	2.17	0.43
17:S:84:TYR:CD1	17:S:85:VAL:HG23	2.53	0.43
19:k:173:GLN:CG	75:1:3313:U:H4'	2.48	0.43
20:AE:71:LEU:HD23	20:AE:71:LEU:HA	1.89	0.43
21:CM:37:LEU:HD12	21:CM:37:LEU:HA	1.76	0.43
21:CM:83:GLY:O	21:CM:86:VAL:HG22	2.18	0.43
21:CM:131:MET:HE3	21:CM:131:MET:HB3	1.75	0.43
21:CM:132:ASN:HA	21:CM:154:THR:CG2	2.48	0.43
24:s9:112:GLN:HG3	24:s9:116:LEU:HD13	2.00	0.43
25:l:92:ASN:ND2	75:1:660:A:H5'	2.33	0.43
29:U:135:ILE:HD12	29:U:136:ALA:H	1.82	0.43
31:m:146:LEU:HG	31:m:148:ILE:HG22	2.00	0.43
31:m:290:ILE:HD12	31:m:291:ALA:H	1.82	0.43
32:AG:73:ARG:HH22	75:1:1167:U:P	2.41	0.43
33:CO:115:PHE:CB	37:CH:89:THR:HG21	2.48	0.43
36:c1:79:LYS:HD2	58:sR:346:G:OP1	2.18	0.43
36:c1:132:SER:OG	36:c1:135:VAL:HG23	2.18	0.43
37:n:40:LEU:HG	37:n:84:VAL:CG1	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:CP:16:SER:O	39:CP:20:ARG:HG3	2.18	0.43
39:CP:115:VAL:O	39:CP:159:ARG:NH1	2.49	0.43
39:CP:174:ILE:O	39:CP:175:ASN:ND2	2.30	0.43
47:c4:51:ASP:HB3	58:sR:902:G:O6	2.18	0.43
5:c5:32:ASP:OD1	5:c5:35:LYS:HE3	2.18	0.43
5:c5:77:ARG:NE	58:sR:1241:G:OP2	2.49	0.43
15:r:74:LYS:HE2	15:r:74:LYS:HB2	1.77	0.43
58:A:93:A:H1'	73:F:3:ARG:O	2.18	0.43
58:A:354:C:OP1	18:J:14:THR:OG1	2.25	0.43
58:A:698:U:C4	58:A:699:U:C4	3.06	0.43
58:A:857:U:O3'	12:I:116:ARG:NH2	2.51	0.43
58:A:1234:A:C1'	74:g:145:HIS:HB2	2.48	0.43
58:A:1261:G:H2'	58:A:1262:U:O4'	2.18	0.43
58:A:1264:G:H2'	58:A:1265:G:O4'	2.17	0.43
58:A:1573:A:H8	58:A:1573:A:O5'	2.01	0.43
61:B:36:TYR:CD2	61:B:161:PRO:HG3	2.53	0.43
62:c:35:VAL:HG11	62:c:63:LEU:HD13	2.00	0.43
29:c9:65:ILE:HG12	29:c9:71:VAL:HB	2.00	0.43
64:C:154:SER:O	64:C:154:SER:OG	2.24	0.43
45:AP:75:VAL:CG2	45:AP:76:LYS:N	2.80	0.43
55:i:47:ALA:HB2	75:1:2678:A:H8	1.83	0.43
74:g:139:LEU:HD23	74:g:152:ALA:N	2.33	0.43
75:AR:342:A:N1	75:AR:349:A:O2'	2.46	0.43
75:AR:595:G:H1	75:AR:609:G:H5''	1.82	0.43
75:AR:805:G:H1'	25:CF:73:ARG:HH11	1.82	0.43
75:AR:817:A:H2'	75:AR:920:A:C2	2.53	0.43
75:AR:1249:G:H2'	75:AR:1250:G:H8	1.82	0.43
75:AR:1798:A:H2'	75:AR:1799:A:C8	2.53	0.43
77:G:114:ILE:HD12	77:G:114:ILE:H	1.83	0.43
79:DB:30:ASP:OD1	79:DB:30:ASP:N	2.50	0.43
58:sR:109:G:H2'	58:sR:110:U:O4'	2.18	0.43
58:sR:1063:U:H2'	58:sR:1064:G:H8	1.82	0.43
58:sR:1222:C:N4	58:sR:1261:G:H1	2.15	0.43
58:sR:1363:U:H3'	58:sR:1364:G:H8	1.83	0.43
58:sR:1642:G:N7	80:sR:2013:OHX:N2	2.66	0.43
60:2:12:ARG:HG2	60:2:13:TYR:CD1	2.52	0.43
12:I:82:GLU:N	12:I:82:GLU:OE1	2.51	0.43
78:Rb:221:MET:SD	78:Rb:223:TRP:CZ2	3.11	0.43
62:d7:36:LYS:HD3	62:d7:42:ASN:O	2.18	0.43
62:d7:76:GLY:O	62:d7:77:THR:HG23	2.18	0.43
19:CE:62:ARG:O	19:CE:68:HIS:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:K:49:LEU:HD21	24:K:99:LEU:O	2.18	0.43
31:CG:105:ILE:O	31:CG:109:THR:HG23	2.18	0.43
31:CG:229:ASP:HB2	31:CG:231:ILE:HD12	2.00	0.43
26:DG:82:LEU:HD11	26:DG:112:ALA:HB2	2.00	0.43
39:v:5:LYS:HD2	39:v:5:LYS:HA	1.84	0.43
75:1:58:G:H1'	75:1:61:A:H5'	2.00	0.43
75:1:282:G:H3'	75:1:282:G:C8	2.53	0.43
75:1:374:A:N3	75:1:376:G:H5''	2.33	0.43
75:1:1231:A:H5''	75:1:1232:C:O4'	2.18	0.43
75:1:1264:G:H4'	75:1:1265:U:OP1	2.18	0.43
75:1:1508:C:C6	75:1:1880:U:H1'	2.53	0.43
75:1:1941:C:H1'	75:1:3362:A:C8	2.53	0.43
75:1:2585:G:H2'	75:1:2585:G:N3	2.33	0.43
75:1:2890:A:O2'	75:1:2933:A:N3	2.46	0.43
1:3:4:U:H2'	1:3:5:G:H8	1.82	0.43
4:DJ:119:LYS:HA	4:DJ:119:LYS:HD2	1.66	0.43
6:s6:50:PHE:HB3	6:s6:111:LEU:HB3	2.00	0.43
11:R:102:LYS:HE3	11:R:102:LYS:HB3	1.83	0.43
11:R:142:TYR:HE2	58:A:1579:U:OP1	2.01	0.43
19:k:58:ARG:NH2	19:k:352:GLU:OE2	2.50	0.43
21:CM:39:GLN:HG2	21:CM:39:GLN:O	2.18	0.43
21:CM:50:ALA:H	21:CM:63:GLU:H	1.66	0.43
22:DM:5:ILE:HG23	22:DM:54:LEU:HB2	2.00	0.43
23:T:68:ARG:HB3	23:T:71:GLN:HB3	2.00	0.43
24:s9:97:LEU:HD12	24:s9:97:LEU:HA	1.86	0.43
25:l:8:VAL:HG12	25:l:9:HIS:N	2.33	0.43
25:l:105:THR:O	27:t:26:PHE:HZ	2.01	0.43
28:DN:37:TYR:O	75:AR:351:A:N6	2.51	0.43
33:CO:41:GLN:O	33:CO:41:GLN:HG3	2.17	0.43
39:CP:85:THR:HG21	75:AR:45:A:P	2.58	0.43
44:CQ:186:ALA:O	44:CQ:187:GLU:HB3	2.17	0.43
3:p:81:THR:HB	3:p:181:LYS:HG3	1.99	0.43
5:c5:83:MET:O	5:c5:115:TYR:HA	2.18	0.43
52:p0:57:THR:OG1	75:AR:1222:G:OP2	2.26	0.43
52:p0:188:VAL:HG23	52:p0:189:GLN:N	2.33	0.43
11:c6:37:THR:O	11:c6:45:ARG:NE	2.50	0.43
15:r:115:MET:HE3	15:r:115:MET:HB2	1.86	0.43
56:a:74:SER:O	56:a:77:ARG:HG3	2.18	0.43
58:A:182:A:H2'	58:A:183:U:C6	2.53	0.43
58:A:275:C:H2'	58:A:276:C:C5	2.52	0.43
58:A:328:A:H2'	58:A:329:G:O4'	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:730:G:H3'	58:A:730:G:N3	2.32	0.43
58:A:784:C:H2'	58:A:785:U:O4'	2.18	0.43
58:A:960:U:H2'	58:A:961:U:H6	1.82	0.43
58:A:1166:A:O2'	58:A:1587:A:H4'	2.18	0.43
23:c8:140:THR:HG23	23:c8:141:THR:HG23	1.98	0.43
61:B:17:LEU:HA	61:B:20:ALA:HB3	2.00	0.43
61:B:67:ILE:HG21	61:B:119:ARG:HB2	1.99	0.43
62:c:31:TYR:HB2	62:c:81:ARG:HG3	2.00	0.43
33:u:40:ASP:OD1	33:u:41:GLN:N	2.51	0.43
64:C:191:GLU:O	64:C:194:ASN:HB2	2.18	0.43
66:CX:90:GLY:O	69:CY:16:GLY:HA2	2.18	0.43
67:D:224:PHE:O	67:D:226:THR:HG22	2.18	0.43
48:x:68:GLY:HA3	75:1:2350:C:O3'	2.17	0.43
48:x:133:HIS:HA	75:1:883:A:H5'	1.99	0.43
75:AR:230:U:H2'	75:AR:231:G:O4'	2.18	0.43
75:AR:571:U:H2'	75:AR:572:A:C8	2.52	0.43
75:AR:1438:U:H1'	25:CF:93:MET:O	2.18	0.43
75:AR:1945:A:H2'	75:AR:1946:A:H8	1.83	0.43
75:AR:2344:U:H2'	75:AR:2345:A:C8	2.53	0.43
75:AR:2534:G:O2'	75:AR:2535:A:H8	2.02	0.43
77:G:63:GLN:HB3	77:G:87:CYS:O	2.18	0.43
78:h:217:ASP:OD1	78:h:217:ASP:N	2.50	0.43
58:sR:647:G:N2	58:sR:688:G:C4	2.86	0.43
58:sR:696:C:O2	80:sR:2026:OHX:N3	2.51	0.43
58:sR:1584:G:O2'	58:sR:1610:G:O6	2.31	0.43
60:2:147:VAL:HA	60:2:148:PRO:HD3	1.80	0.43
12:I:93:LEU:HD23	12:I:93:LEU:HA	1.65	0.43
78:Rb:248:ASN:HD21	78:Rb:298:GLY:HA3	1.82	0.43
59:d6:45:VAL:HG21	59:d6:64:LEU:HD12	2.00	0.43
61:s0:183:ARG:HA	61:s0:188:LEU:HB3	2.00	0.43
68:d9:22:ARG:HD2	68:d9:36:LEU:O	2.18	0.43
31:CG:58:LYS:HD3	31:CG:93:THR:HG21	2.00	0.43
70:s3:91:VAL:CG2	70:s3:94:ARG:HB3	2.40	0.43
70:s3:115:ILE:H	70:s3:115:ILE:HD12	1.83	0.43
76:9:39:LEU:HD21	76:9:107:THR:O	2.18	0.43
73:s4:90:ILE:HD12	73:s4:90:ILE:N	2.33	0.43
73:s4:250:GLU:O	73:s4:254:ARG:HG2	2.18	0.43
43:CI:178:ILE:HG23	43:CI:183:ASP:HB3	2.00	0.43
75:1:547:G:H1'	75:1:548:G:C8	2.54	0.43
75:1:1157:G:H2'	75:1:1158:A:O4'	2.18	0.43
75:1:3279:A:C6	75:1:3280:U:C4	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:3:17:A:OP1	31:m:2:ALA:HB2	2.19	0.43
2:AB:76:ASP:N	2:AB:115:LYS:O	2.52	0.43
5:Q:91:GLY:N	5:Q:107:ILE:O	2.51	0.43
11:R:53:LEU:HD22	77:G:37:GLN:HB3	1.99	0.43
13:j:37:ARG:NH1	75:l:2526:C:OP1	2.48	0.43
18:s8:137:LYS:C	18:s8:140:GLU:HG2	2.44	0.43
21:CM:20:ASN:HB2	21:CM:68:HIS:HB3	1.99	0.43
21:CM:27:GLY:O	21:CM:30:LEU:HB3	2.18	0.43
25:l:38:VAL:HG21	25:l:121:ALA:HB2	2.00	0.43
26:AF:93:ALA:HB1	26:AF:120:THR:HG22	2.01	0.43
27:CN:30:GLY:O	27:CN:33:VAL:HG12	2.19	0.43
4:AI:111:PHE:HZ	75:l:256:G:H4'	1.82	0.43
46:X:49:GLU:HG3	12:I:142:TYR:O	2.18	0.43
49:DR:18:TYR:HA	75:AR:2131:A:N6	2.33	0.43
5:c5:108:ARG:HB3	5:c5:108:ARG:CZ	2.48	0.43
11:c6:50:GLU:O	11:c6:54:LEU:HG	2.18	0.43
11:c6:127:LYS:NZ	11:c6:131:GLY:O	2.49	0.43
15:r:80:SER:OG	15:r:147:VAL:HG11	2.18	0.43
15:r:115:MET:O	15:r:115:MET:HG2	2.18	0.43
17:c7:47:ARG:HB3	17:c7:47:ARG:NH1	2.33	0.43
21:s:46:VAL:HB	21:s:68:HIS:CD2	2.54	0.43
57:CU:79:VAL:O	57:CU:90:MET:N	2.51	0.43
58:A:66:U:H6	58:A:66:U:H2'	1.61	0.43
58:A:505:A:H3'	58:A:506:A:C5'	2.46	0.43
58:A:1151:A:H2'	58:A:1152:A:C8	2.53	0.43
58:A:1523:G:H2'	58:A:1523:G:OP1	2.19	0.43
60:CV:33:VAL:HG21	31:CG:44:TYR:HB3	1.99	0.43
61:B:189:VAL:HB	61:B:193:GLN:CB	2.48	0.43
62:c:40:CYS:HB2	62:c:43:ILE:CD1	2.48	0.43
29:c9:44:GLU:CD	58:sR:1476:C:H5''	2.43	0.43
29:c9:101:ASN:O	29:c9:104:VAL:HG22	2.17	0.43
65:d:10:ALA:HB3	65:d:54:LEU:O	2.18	0.43
70:E:74:GLN:NE2	70:E:79:TYR:O	2.48	0.43
73:F:67:GLN:C	73:F:68:ARG:HG2	2.42	0.43
73:F:180:LEU:N	73:F:229:GLY:O	2.45	0.43
50:d3:47:SER:O	50:d3:48:HIS:ND1	2.42	0.43
75:AR:242:C:O2'	75:AR:243:G:P	2.77	0.43
75:AR:392:G:O2'	76:DA:90:VAL:HG11	2.17	0.43
75:AR:1541:G:C5	75:AR:1542:G:H1'	2.53	0.43
75:AR:2522:G:H2'	75:AR:2522:G:N3	2.32	0.43
76:DA:88:GLU:HA	76:DA:94:SER:HA	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:G:114:ILE:HA	77:G:117:THR:HG1	1.82	0.43
77:G:117:THR:HG23	77:G:191:ALA:HA	2.00	0.43
78:h:85:TRP:HA	78:h:109:ASP:HA	2.00	0.43
78:h:291:SER:OG	78:h:304:GLY:HA3	2.18	0.43
58:sR:544:A:H4'	71:e0:28:LYS:NZ	2.33	0.43
58:sR:811:A:C4	58:sR:858:G:H1'	2.53	0.43
58:sR:871:G:H2'	58:sR:872:G:C8	2.54	0.43
58:sR:1199:G:C5	68:d9:40:ARG:NH1	2.87	0.43
58:sR:1317:C:H2'	58:sR:1318:G:O4'	2.18	0.43
7:AT:27:U:H4'	25:CF:51:ALA:HB3	1.99	0.43
12:I:33:GLU:HA	12:I:33:GLU:OE1	2.19	0.43
12:I:165:LYS:O	12:I:168:SER:N	2.49	0.43
78:Rb:187:GLN:HG2	78:Rb:188:ILE:H	1.83	0.43
63:5:43:VAL:HG12	63:5:49:ASN:HB3	2.00	0.43
19:CE:107:ALA:HB1	19:CE:200:GLU:HG2	2.00	0.43
19:CE:222:LYS:HB3	19:CE:222:LYS:HE3	1.81	0.43
64:s1:168:ILE:HG22	64:s1:172:LEU:HD11	1.99	0.43
64:s1:185:THR:O	64:s1:189:ILE:HG12	2.19	0.43
25:CF:262:TRP:C	25:CF:269:SER:HB2	2.43	0.43
67:s2:143:TYR:CD1	67:s2:147:ASN:HA	2.53	0.43
68:d9:46:LYS:O	68:d9:50:ILE:HD12	2.17	0.43
72:8:27:ARG:HG3	72:8:27:ARG:HH11	1.82	0.43
70:s3:58:VAL:C	70:s3:66:ILE:HG23	2.43	0.43
42:O:75:LEU:O	42:O:80:LEU:N	2.49	0.43
73:s4:7:LYS:HA	73:s4:7:LYS:HD2	1.77	0.43
73:s4:45:ILE:HB	73:s4:80:THR:HG23	1.99	0.43
79:AA:5:LEU:HD22	79:AA:25:ILE:HD11	2.00	0.43
75:1:536:U:H2'	75:1:537:A:H8	1.84	0.43
75:1:721:G:H2'	75:1:722:G:H8	1.83	0.43
75:1:916:G:H4'	75:1:917:A:O5'	2.18	0.43
75:1:1097:G:H1'	75:1:1098:A:OP2	2.18	0.43
75:1:1232:C:H2'	75:1:1233:G:O4'	2.18	0.43
75:1:2247:G:P	80:1:3631:OHX:N4	2.91	0.43
75:1:3033:A:H2'	75:1:3034:C:C6	2.53	0.43
75:1:3317:U:H4'	75:1:3318:G:O5'	2.17	0.43
1:3:28:C:O3'	21:s:135:GLY:HA2	2.18	0.43
2:AB:48:TYR:CD1	27:t:6:ASN:HB2	2.54	0.43
2:AB:137:LYS:HA	2:AB:140:ALA:HB3	1.99	0.43
3:CJ:48:ARG:NH2	75:AR:2588:U:OP1	2.51	0.43
6:s6:67:VAL:HG21	6:s6:99:GLY:HA2	2.00	0.43
10:DK:77:LEU:HD23	75:AR:294:U:H4'	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:R:30:LYS:HD3	58:A:1366:U:OP1	2.19	0.43
11:R:112:TYR:CD1	11:R:112:TYR:C	2.96	0.43
12:s7:45:SER:HB2	12:s7:61:PHE:HD2	1.83	0.43
12:s7:64:VAL:O	12:s7:67:LEU:HB2	2.18	0.43
12:s7:159:VAL:O	12:s7:160:GLN:C	2.61	0.43
15:CL:84:ALA:O	15:CL:140:THR:HG23	2.18	0.43
19:k:372:THR:OG1	19:k:375:GLU:OE2	2.21	0.43
21:CM:95:ASN:HA	75:AR:2672:G:O3'	2.19	0.43
30:c0:1:MET:CE	58:sR:1217:A:H5''	2.49	0.43
36:c1:21:ASN:HA	36:c1:32:LYS:HE3	2.00	0.43
37:n:83:TYR:CE2	75:1:3273:A:H1'	2.54	0.43
39:CP:172:ARG:HD2	75:AR:30:G:O5'	2.18	0.43
41:W:78:LEU:HD23	61:B:59:LEU:HD11	2.00	0.43
5:c5:105:VAL:HG12	5:c5:106:GLU:O	2.19	0.43
9:q:26:LYS:HB2	75:1:3198:U:O4	2.18	0.43
53:Z:60:PHE:HD1	53:Z:71:GLY:HA3	1.82	0.43
53:Z:84:LYS:HE3	53:Z:84:LYS:HB2	1.77	0.43
15:r:115:MET:HE1	75:1:1129:A:H62	1.81	0.43
22:AL:70:PRO:HB2	22:AL:73:LEU:HB2	2.00	0.43
54:CT:89:LEU:HD21	54:CT:97:ARG:HH12	1.83	0.43
56:a:95:HIS:CD2	77:G:116:HIS:NE2	2.85	0.43
21:s:150:ASN:HA	21:s:153:LYS:HG3	2.01	0.43
58:A:476:U:H2'	71:f:31:LYS:HG2	2.01	0.43
58:A:680:U:H2'	58:A:681:U:O4'	2.18	0.43
58:A:790:U:H2'	58:A:791:A:O4'	2.18	0.43
58:A:864:U:C5	62:c:22:LYS:HA	2.53	0.43
58:A:1622:G:H2'	58:A:1623:C:C6	2.53	0.43
60:CV:68:THR:HG21	75:AR:2736:A:O2'	2.18	0.43
29:c9:132:LEU:HA	29:c9:135:ILE:CG2	2.43	0.43
63:CW:85:LYS:O	63:CW:85:LYS:HD2	2.17	0.43
67:D:119:LYS:HD3	67:D:119:LYS:C	2.43	0.43
70:E:51:ARG:HA	70:E:89:GLU:O	2.18	0.43
51:y:170:ARG:O	51:y:171:LYS:HG2	2.18	0.43
75:AR:1276:U:OP2	80:AR:3759:OHX:N5	2.51	0.43
75:AR:1508:C:H2'	75:AR:1509:A:O4'	2.18	0.43
75:AR:1814:A:H4'	75:AR:1815:U:H5'	2.00	0.43
75:AR:2525:G:P	13:CD:37:ARG:HH22	2.41	0.43
75:AR:3288:G:O2'	75:AR:3289:G:OP2	2.33	0.43
78:h:154:VAL:HA	78:h:171:SER:O	2.19	0.43
1:AS:121:U:H5''	31:CG:265:TYR:HE1	1.83	0.43
6:H:141:ILE:H	6:H:141:ILE:HD12	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:93:A:N6	58:sR:396:G:H1'	2.34	0.43
58:sR:304:U:H2'	58:sR:305:C:C6	2.54	0.43
58:sR:607:G:H5'	58:sR:613:G:N2	2.34	0.43
58:sR:1040:G:H5''	61:s0:31:VAL:CG2	2.45	0.43
58:sR:1067:C:H2'	58:sR:1068:C:H6	1.83	0.43
58:sR:1297:G:N2	58:sR:1300:A:OP2	2.44	0.43
58:sR:1483:A:H2'	58:sR:1484:G:C8	2.53	0.43
12:I:72:LYS:HA	12:I:72:LYS:HD2	1.84	0.43
78:Rb:42:LEU:HD12	78:Rb:61:PHE:CD2	2.42	0.43
62:d7:33:LEU:O	62:d7:45:THR:HA	2.18	0.43
62:d7:35:VAL:O	62:d7:36:LYS:NZ	2.49	0.43
25:CF:35:VAL:HG11	25:CF:244:LEU:HD11	2.01	0.43
30:L:54:TYR:O	30:L:69:THR:HG22	2.18	0.43
36:M:8:GLN:OE1	36:M:14:GLN:N	2.47	0.43
32:DH:49:ILE:CD1	32:DH:100:ILE:HD12	2.48	0.43
77:s5:52:GLU:OE2	77:s5:65:ARG:NH2	2.51	0.43
75:1:985:U:H2'	75:1:986:U:H6	1.83	0.43
75:1:1169:A:P	80:1:4083:OHX:N4	2.92	0.43
75:1:1231:A:O2'	75:1:1261:G:O2'	2.25	0.43
75:1:1556:C:H5''	75:1:2169:G:N2	2.33	0.43
75:1:1614:C:H2'	75:1:1615:C:H6	1.84	0.43
75:1:1658:G:H2'	75:1:1659:U:O4'	2.18	0.43
75:1:2869:U:H5''	75:1:2870:C:OP2	2.19	0.43
6:s6:5:ILE:HD11	6:s6:16:PHE:CE1	2.54	0.43
6:s6:175:ILE:HG12	58:sR:78:A:H1'	2.00	0.43
7:4:145:U:OP1	75:1:143:G:H4'	2.17	0.43
15:CL:89:VAL:HG22	15:CL:136:PHE:CE1	2.53	0.43
17:S:105:GLN:HE21	61:B:41:ARG:HB2	1.82	0.43
18:s8:58:LEU:HD23	18:s8:58:LEU:HA	1.76	0.43
20:AE:19:ARG:HB3	20:AE:35:GLU:HG2	2.00	0.43
24:s9:119:ALA:HA	24:s9:124:HIS:ND1	2.33	0.43
29:U:135:ILE:HD12	29:U:136:ALA:N	2.32	0.43
30:c0:51:SER:HB3	58:sR:1219:A:N3	2.33	0.43
30:c0:55:VAL:CG1	30:c0:68:LEU:HD23	2.49	0.43
36:c1:85:VAL:HG11	58:sR:348:U:OP1	2.18	0.43
38:AH:11:ASN:HB2	75:1:1589:A:OP1	2.17	0.43
41:W:85:TYR:O	41:W:85:TYR:CD1	2.70	0.43
43:o:156:ILE:O	43:o:159:GLN:HB2	2.17	0.43
4:AI:34:GLN:OE1	4:AI:38:ARG:NH2	2.51	0.43
45:DQ:102:GLN:OE1	45:DQ:103:ALA:O	2.35	0.43
3:p:74:THR:CG2	10:AJ:47:ILE:HG22	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:Y:53:VAL:HG23	50:Y:98:GLU:HA	2.00	0.43
50:Y:87:VAL:HG11	50:Y:92:CYS:O	2.19	0.43
16:AK:85:LYS:HE2	16:AK:85:LYS:HB2	1.83	0.43
52:p0:19:LEU:HB3	52:p0:73:PHE:CE2	2.53	0.43
53:Z:41:ARG:O	53:Z:52:LYS:HB2	2.18	0.43
53:Z:41:ARG:HD2	53:Z:55:VAL:O	2.18	0.43
56:a:40:VAL:O	56:a:75:LEU:HD23	2.19	0.43
21:s:35:LYS:HE3	55:i:21:PRO:HA	2.00	0.43
58:A:380:U:C5	24:K:5:PRO:HB3	2.53	0.43
58:A:708:C:H6	58:A:708:C:H2'	1.62	0.43
58:A:980:G:H4'	58:A:1776:A:H4'	1.99	0.43
58:A:991:G:N7	80:A:2026:OHX:N2	2.66	0.43
58:A:1344:A:H61	58:A:1382:A:N6	2.17	0.43
58:A:1483:A:C2	58:A:1607:G:H1'	2.54	0.43
58:A:1663:G:H2'	58:A:1664:C:O4'	2.17	0.43
29:c9:102:ARG:HD2	58:sR:1501:C:OP2	2.18	0.43
64:C:128:LYS:HE3	64:C:132:ASP:HA	2.00	0.43
45:AP:85:LEU:HD23	45:AP:85:LEU:HA	1.79	0.43
45:AP:98:LYS:HE2	45:AP:98:LYS:HB3	1.64	0.43
68:e:38:ILE:HD13	68:e:38:ILE:HA	1.85	0.43
48:x:119:VAL:HA	48:x:145:HIS:O	2.18	0.43
69:CY:20:LEU:HD23	69:CY:21:PHE:N	2.33	0.43
72:CZ:57:LEU:HA	72:CZ:57:LEU:HD12	1.67	0.43
75:AR:80:G:H2'	75:AR:81:C:C6	2.53	0.43
75:AR:250:U:OP2	75:AR:251:G:H5''	2.19	0.43
75:AR:718:G:OP1	2:DC:117:ARG:NH2	2.51	0.43
75:AR:1691:U:H2'	75:AR:1692:U:C6	2.54	0.43
75:AR:1806:A:OP2	80:AR:3481:OHX:N6	2.51	0.43
75:AR:1944:U:H2'	75:AR:1945:A:C8	2.54	0.43
75:AR:2127:U:O4'	75:AR:2301:U:H5''	2.18	0.43
75:AR:2927:C:H2'	75:AR:2928:C:C6	2.54	0.43
75:AR:3376:A:H5'	75:AR:3377:G:H5''	1.99	0.43
77:G:189:THR:HG22	77:G:191:ALA:N	2.19	0.43
58:sR:476:U:OP1	58:sR:477:A:O2'	2.34	0.43
58:sR:780:A:H5''	58:sR:781:U:H5'	2.00	0.43
58:sR:800:U:H2'	58:sR:801:G:C8	2.45	0.43
58:sR:906:A:H2'	58:sR:907:A:C8	2.54	0.43
58:sR:1494:C:H2'	58:sR:1495:C:C6	2.53	0.43
58:sR:1511:U:H2'	58:sR:1512:G:C8	2.53	0.43
56:d5:41:ILE:HD12	56:d5:41:ILE:HA	1.87	0.43
56:d5:92:ILE:CD1	56:d5:100:ILE:HD12	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AT:85:G:H3'	7:AT:85:G:C8	2.54	0.43
2:DC:82:ILE:HD11	2:DC:102:ILE:HG12	2.00	0.43
63:5:77:LYS:HA	63:5:95:PHE:CE2	2.54	0.43
13:CD:120:PRO:HB3	13:CD:162:ALA:N	2.33	0.43
61:s0:147:THR:HG23	61:s0:161:PRO:HA	1.99	0.43
66:6:86:ARG:HA	66:6:91:VAL:O	2.19	0.43
19:CE:114:VAL:O	19:CE:117:ARG:N	2.49	0.43
14:DE:70:PHE:HD1	14:DE:72:GLY:N	2.16	0.43
24:K:64:GLU:C	24:K:65:LYS:HE2	2.43	0.43
24:K:91:LYS:HE2	24:K:91:LYS:HB2	1.73	0.43
64:s1:207:LEU:HD23	64:s1:207:LEU:HA	1.55	0.43
69:7:13:ILE:CG2	69:7:32:GLN:HA	2.48	0.43
25:CF:131:VAL:O	25:CF:135:VAL:HG23	2.19	0.43
76:9:109:LEU:HD22	76:9:115:ARG:NH2	2.34	0.43
42:O:50:ILE:O	42:O:54:LEU:HB2	2.18	0.43
73:s4:118:GLU:HA	73:s4:121:TYR:CE1	2.52	0.43
43:CI:123:THR:O	43:CI:126:LEU:HB2	2.19	0.43
43:CI:158:LYS:CG	43:CI:159:GLN:H	2.31	0.43
43:CI:191:VAL:HB	43:CI:195:PHE:CD1	2.53	0.43
75:1:71:A:C2	75:1:2778:G:H1'	2.53	0.43
75:1:742:G:N7	80:1:3546:OHX:N2	2.66	0.43
75:1:1247:U:H2'	75:1:1268:G:O6	2.17	0.43
75:1:1394:A:N6	75:1:1416:C:O2'	2.47	0.43
75:1:1940:G:H2'	75:1:1941:C:O4'	2.19	0.43
75:1:2537:U:H4'	75:1:2538:U:OP1	2.19	0.43
75:1:3151:U:H4'	75:1:3294:A:C1'	2.45	0.43
75:1:3219:G:H4'	75:1:3220:G:H5'	2.01	0.43
2:AB:48:TYR:O	2:AB:49:HIS:CG	2.72	0.43
3:CJ:112:GLU:O	3:CJ:116:VAL:HB	2.18	0.43
4:DJ:7:TYR:OH	7:AT:87:G:OP2	2.31	0.43
5:Q:47:ARG:HG3	5:Q:47:ARG:H	1.63	0.43
10:DK:15:LYS:HD3	10:DK:16:LYS:H	1.82	0.43
10:DK:34:SER:OG	10:DK:37:THR:HG23	2.19	0.43
13:j:129:ALA:HB3	75:1:2178:A:H5''	2.01	0.43
14:AD:99:ASP:O	14:AD:103:THR:HG23	2.19	0.43
15:CL:16:PRO:HD3	15:CL:128:ARG:NH2	2.34	0.43
21:CM:152:HIS:ND1	1:AS:55:A:O2'	2.45	0.43
23:T:45:LEU:HD11	23:T:81:ILE:HD13	2.00	0.43
27:CN:6:ASN:CB	2:DC:48:TYR:CG	3.01	0.43
27:CN:105:ASN:C	27:CN:105:ASN:HD22	2.27	0.43
27:CN:144:THR:O	27:CN:145:PHE:HD1	2.02	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:n:166:LYS:HE3	75:1:3214:U:H6	1.83	0.43
42:c3:56:ASP:HB3	62:d7:50:ALA:HB1	2.00	0.43
46:X:35:ILE:CG2	46:X:39:GLN:HE21	2.31	0.43
46:X:105:THR:OG1	46:X:126:LEU:HG	2.19	0.43
9:q:40:HIS:ND1	75:1:3123:A:O2'	2.49	0.43
11:c6:92:TYR:CE1	11:c6:96:TYR:HD2	2.36	0.43
15:r:150:GLU:O	15:r:154:ARG:HD2	2.18	0.43
22:AL:29:LYS:HE2	22:AL:39:ARG:HD2	2.01	0.43
58:A:236:A:H2'	58:A:237:C:O4'	2.19	0.43
58:A:399:A:H4'	73:F:3:ARG:HG3	2.01	0.43
58:A:452:A:H3'	58:A:453:U:C5	2.54	0.43
58:A:555:A:H2'	58:A:556:A:C8	2.54	0.43
58:A:1225:U:H2'	58:A:1226:A:O4'	2.18	0.43
58:A:1266:U:H2'	58:A:1267:G:C8	2.54	0.43
58:A:1762:A:H1'	58:A:1783:C:H5'	2.00	0.43
60:CV:118:GLU:O	60:CV:119:ALA:C	2.62	0.43
29:c9:104:VAL:O	29:c9:108:LEU:HG	2.18	0.43
29:c9:116:ILE:HD12	29:c9:116:ILE:O	2.18	0.43
35:d0:67:THR:OG1	68:d9:40:ARG:NH1	2.51	0.43
35:d0:68:ARG:N	68:d9:40:ARG:HH22	2.16	0.43
45:AP:19:LYS:HG2	45:AP:20:HIS:H	1.83	0.43
41:d1:29:HIS:HA	61:s0:140:ASN:ND2	2.34	0.43
48:x:60:PHE:CE1	48:x:82:ARG:HB2	2.52	0.43
70:E:85:VAL:HG22	70:E:86:LEU:H	1.83	0.43
71:f:39:LEU:HD23	71:f:43:ARG:NH1	2.33	0.43
71:f:52:GLY:C	71:f:53:LYS:HD2	2.44	0.43
46:d2:22:LYS:HA	62:d7:3:LEU:HG	2.00	0.43
46:d2:67:GLY:O	46:d2:68:ARG:HG2	2.19	0.43
46:d2:102:VAL:HA	46:d2:128:PHE:HA	2.01	0.43
51:y:157:PRO:O	51:y:159:LYS:NZ	2.45	0.43
73:F:19:LEU:HD23	73:F:19:LEU:HA	1.57	0.43
73:F:105:VAL:HG13	73:F:106:LYS:HE2	2.01	0.43
75:AR:80:G:H2'	75:AR:81:C:H6	1.83	0.43
75:AR:284:A:H4'	75:AR:285:A:N3	2.33	0.43
75:AR:384:A:H2'	75:AR:385:A:O4'	2.17	0.43
75:AR:1491:A:HO2'	75:AR:1843:C:HO2'	1.63	0.43
75:AR:1594:A:H1'	75:AR:1615:C:H1'	2.00	0.43
75:AR:2396:G:OP1	75:AR:2397:A:H4'	2.19	0.43
75:AR:2941:A:H8	75:AR:2941:A:OP2	2.01	0.43
75:AR:3049:A:C8	19:CE:53:MET:HE2	2.53	0.43
77:G:30:PRO:HB2	77:G:33:VAL:H	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:G:61:TYR:CE1	77:G:165:LEU:HD22	2.54	0.43
78:h:252:LEU:N	78:h:263:PHE:O	2.38	0.43
53:d4:125:LEU:O	53:d4:129:VAL:HG23	2.17	0.43
57:0:117:ARG:NH1	75:1:1322:U:OP1	2.52	0.43
6:H:6:SER:O	6:H:113:ILE:HD12	2.18	0.43
6:H:18:ILE:HG22	6:H:20:ASP:CG	2.43	0.43
58:sR:538:A:C8	58:sR:543:C:N4	2.80	0.43
58:sR:1523:G:OP2	58:sR:1523:G:N2	2.43	0.43
58:sR:1731:A:H5''	58:sR:1732:A:OP2	2.19	0.43
58:sR:1781:A:OP1	80:sR:2110:OHX:N5	2.52	0.43
56:d5:76:ALA:HA	56:d5:79:ALA:HB3	2.00	0.43
60:2:49:GLN:HB3	75:1:2756:C:H4'	2.00	0.43
12:I:155:ASP:OD1	12:I:156:SER:N	2.51	0.43
78:Rb:125:GLY:O	78:Rb:126:SER:CB	2.66	0.43
19:CE:50:LYS:HG2	19:CE:332:ARG:HA	2.01	0.43
19:CE:280:HIS:HB3	19:CE:324:VAL:HG13	2.01	0.43
30:L:14:TYR:CD1	30:L:14:TYR:C	2.97	0.43
30:L:28:ASN:N	30:L:28:ASN:HD22	2.16	0.43
67:s2:87:GLN:HA	67:s2:95:ARG:O	2.18	0.43
37:CH:82:ARG:HD2	37:CH:82:ARG:HA	1.75	0.43
42:O:66:ILE:H	42:O:66:ILE:HD12	1.83	0.43
79:AA:53:VAL:HA	79:AA:57:HIS:ND1	2.34	0.43
47:P:90:ARG:O	47:P:90:ARG:HG2	2.17	0.43
75:1:1115:G:H5''	75:1:1116:G:C5'	2.49	0.43
75:1:1209:G:H2'	75:1:1210:U:O4'	2.17	0.43
75:1:1556:C:H5''	75:1:2169:G:H22	1.83	0.43
75:1:2655:U:H4'	75:1:2656:A:O4'	2.18	0.43
3:CJ:48:ARG:HG2	3:CJ:49:TYR:CD1	2.53	0.43
13:j:61:VAL:HG12	13:j:63:PHE:CE1	2.54	0.43
15:CL:116:ARG:HD2	75:AR:2644:C:C2	2.54	0.43
16:DL:8:PHE:O	16:DL:11:ARG:HG3	2.18	0.43
17:S:51:ALA:HA	17:S:54:THR:OG1	2.19	0.43
21:CM:109:HIS:HE2	21:CM:114:ILE:HG21	1.84	0.43
22:DM:43:PHE:CE2	22:DM:66:ILE:HG13	2.53	0.43
25:l:324:LEU:O	25:l:324:LEU:HD12	2.19	0.43
27:CN:56:PRO:HG3	27:CN:74:GLY:C	2.43	0.43
27:CN:131:LYS:HG3	27:CN:132:ALA:H	1.83	0.43
29:U:102:ARG:HD2	58:A:1500:C:H5''	2.00	0.43
34:DO:92:ASP:O	34:DO:105:PRO:HG3	2.18	0.43
35:V:52:LYS:HD3	35:V:94:GLU:OE1	2.19	0.43
37:n:36:PRO:HA	37:n:54:TYR:CD2	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:n:70:LYS:HA	37:n:70:LYS:HD2	1.82	0.43
41:W:16:LYS:HB3	41:W:16:LYS:HE3	1.78	0.43
41:W:84:SER:OG	41:W:85:TYR:N	2.52	0.43
45:DQ:35:LEU:HB2	45:DQ:40:LYS:HG2	2.00	0.43
46:X:94:LEU:HD23	46:X:94:LEU:HA	1.84	0.43
49:DR:52:ALA:HB1	49:DR:68:ALA:O	2.18	0.43
9:q:187:ILE:HG22	9:q:188:THR:H	1.83	0.43
15:r:75:TYR:O	15:r:79:VAL:HG23	2.19	0.43
58:A:231:U:O2'	58:A:232:U:H5''	2.19	0.43
58:A:486:G:H2'	58:A:487:G:O4'	2.18	0.43
58:A:933:A:OP2	59:b:37:LYS:NZ	2.42	0.43
58:A:989:U:H3'	58:A:990:C:C6	2.54	0.43
58:A:1256:A:H4'	58:A:1257:U:O5'	2.18	0.43
58:A:1433:G:H2'	58:A:1434:U:H6	1.83	0.43
58:A:1527:C:H2'	58:A:1528:U:H6	1.83	0.43
27:t:140:SER:O	27:t:144:THR:HG23	2.19	0.43
29:c9:31:PRO:HD2	29:c9:34:VAL:CG2	2.48	0.43
40:AO:8:LYS:O	40:AO:12:ARG:HG3	2.18	0.43
64:C:163:ALA:O	64:C:166:LYS:HB3	2.19	0.43
65:d:18:ARG:HH21	77:G:81:ARG:HH22	1.67	0.43
35:d0:80:GLU:OE2	68:d9:54:LYS:NZ	2.32	0.43
44:w:71:PHE:CE2	75:1:2383:C:H5'	2.53	0.43
66:CX:120:LYS:HG3	66:CX:124:ASP:OD1	2.19	0.43
67:D:137:ILE:HD12	67:D:138:PRO:O	2.18	0.43
49:AQ:18:TYR:HD1	75:1:2131:A:H61	1.65	0.43
70:E:68:GLU:HB3	30:L:20:VAL:HG11	2.01	0.43
51:y:24:VAL:O	51:y:28:LEU:HD13	2.19	0.43
51:y:70:ALA:O	51:y:73:GLN:HB2	2.17	0.43
73:F:122:LYS:O	73:F:162:ILE:N	2.49	0.43
75:AR:633:C:O2'	32:DH:22:VAL:HA	2.18	0.43
75:AR:714:G:H4'	75:AR:753:C:O3'	2.19	0.43
75:AR:1027:A:H5''	75:AR:1028:U:OP1	2.19	0.43
75:AR:1706:C:H2'	75:AR:1707:A:O4'	2.18	0.43
76:DA:44:GLY:O	76:DA:45:ILE:HD13	2.17	0.43
78:h:112:SER:HB2	78:h:153:GLN:HA	2.00	0.43
57:0:161:LYS:HD3	57:0:162:THR:N	2.29	0.43
1:AS:47:C:OP1	31:CG:94:ASN:HB2	2.18	0.43
79:DB:54:THR:HG22	79:DB:57:HIS:HD2	1.81	0.43
79:DB:68:ILE:HD13	79:DB:68:ILE:HA	1.84	0.43
58:sR:190:C:H1'	58:sR:191:C:H5'	2.01	0.43
58:sR:1062:A:H5''	58:sR:1063:U:H5	1.79	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:1087:A:C2	58:sR:1142:A:H4'	2.53	0.43
58:sR:1161:C:H2'	58:sR:1162:C:O4'	2.19	0.43
58:sR:1166:A:H2'	58:sR:1167:G:O4'	2.18	0.43
58:sR:1388:A:C5	58:sR:1411:A:C6	3.07	0.43
58:sR:1597:A:P	68:d9:19:ARG:HH12	2.41	0.43
58:sR:1700:C:C6	58:sR:1702:A:H2	2.36	0.43
56:d5:60:VAL:O	56:d5:101:TYR:HB2	2.18	0.43
7:AT:62:C:O2	80:AT:203:OHX:N4	2.51	0.43
78:Rb:236:ALA:CA	78:Rb:261:LYS:HZ2	2.32	0.43
59:d6:95:ARG:HE	59:d6:95:ARG:HB2	1.73	0.43
13:CD:7:ASN:ND2	13:CD:234:LYS:O	2.51	0.43
19:CE:45:SER:OG	19:CE:181:ILE:HG12	2.18	0.43
19:CE:168:LYS:O	19:CE:319:ASN:ND2	2.45	0.43
24:K:158:PHE:N	24:K:158:PHE:CD1	2.87	0.43
64:s1:141:ALA:C	64:s1:142:PHE:CD1	2.97	0.43
25:CF:16:THR:HG22	25:CF:18:ASN:H	1.84	0.43
25:CF:271:LYS:HB2	25:CF:274:TYR:HB3	2.00	0.43
30:L:44:LYS:HE2	30:L:44:LYS:HB2	1.88	0.43
26:DG:63:THR:HA	26:DG:66:LEU:HD22	2.00	0.43
70:s3:116:ARG:HG3	70:s3:120:TYR:CD2	2.53	0.43
71:e0:30:PRO:O	71:e0:35:TYR:HB2	2.19	0.43
76:9:112:ASP:O	76:9:116:LYS:HG2	2.19	0.43
32:DH:49:ILE:HD13	32:DH:100:ILE:HD12	2.00	0.43
32:DH:90:PRO:O	32:DH:92:LYS:N	2.49	0.43
42:O:84:ILE:HG22	42:O:135:LEU:HD21	1.99	0.43
39:v:35:VAL:O	39:v:64:VAL:HA	2.19	0.43
79:AA:10:VAL:C	79:AA:83:THR:HG1	2.26	0.43
79:AA:93:LYS:HD3	79:AA:93:LYS:N	2.34	0.43
47:P:84:ARG:HG2	47:P:85:ALA:O	2.17	0.43
47:P:117:ASP:OD1	47:P:118:VAL:N	2.52	0.43
77:s5:101:GLY:HA2	77:s5:104:ASN:OD1	2.19	0.43
75:1:171:G:H2'	75:1:172:G:O4'	2.18	0.43
75:1:1686:U:O2	75:1:1688:U:H1'	2.18	0.43
75:1:1792:C:H2'	75:1:1795:U:C5	2.54	0.43
75:1:2148:U:H2'	75:1:2149:A:C4	2.54	0.43
3:CJ:56:VAL:HG23	7:AT:150:G:O2'	2.18	0.43
3:CJ:78:PHE:O	3:CJ:79:GLN:HB3	2.19	0.43
4:DJ:86:ARG:H	7:AT:36:G:P	2.41	0.43
7:4:2:A:OP2	80:1:3479:OHX:N5	2.51	0.43
8:AC:22:LYS:HZ2	75:1:983:A:H5''	1.84	0.43
11:R:116:LEU:HB3	11:R:117:LEU:HD22	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AD:40:LYS:HD2	14:AD:40:LYS:H	1.83	0.43
17:S:29:GLN:HB3	78:h:85:TRP:CZ3	2.54	0.43
17:S:87:GLU:O	17:S:87:GLU:CG	2.67	0.43
18:s8:38:ILE:HD11	18:s8:78:ILE:HG22	2.01	0.43
18:s8:138:ASN:CA	18:s8:141:ARG:HB3	2.49	0.43
19:k:57:VAL:HG13	19:k:358:TRP:HE3	1.84	0.43
19:k:168:LYS:HA	19:k:168:LYS:HD3	1.76	0.43
27:CN:64:LYS:HA	2:DC:69:TRP:CE3	2.54	0.43
31:m:67:SER:HA	31:m:72:ASP:HA	2.00	0.43
33:CO:37:GLU:HG3	33:CO:74:ARG:HG3	2.00	0.43
36:c1:55:ASP:OD2	36:c1:58:CYS:HB2	2.19	0.43
39:CP:112:ASN:HD22	75:AR:18:G:N2	2.16	0.43
42:c3:2:GLY:O	58:sR:866:G:H5''	2.19	0.43
42:c3:72:MET:HE2	42:c3:72:MET:HB2	1.86	0.43
43:o:166:ASN:OD1	43:o:181:ILE:N	2.41	0.43
4:AI:94:LYS:HA	4:AI:94:LYS:HD2	1.45	0.43
44:CQ:58:LEU:HA	44:CQ:72:HIS:CD2	2.54	0.43
10:AJ:11:LEU:HD23	10:AJ:11:LEU:HA	1.63	0.43
5:c5:111:MET:HG2	5:c5:119:PHE:CE1	2.54	0.43
9:q:138:THR:OG1	9:q:139:ASN:N	2.51	0.43
51:CS:38:ARG:HD2	75:AR:1347:U:OP2	2.19	0.43
52:p0:27:VAL:HG13	52:p0:86:PHE:CD1	2.54	0.43
11:c6:5:PRO:HB2	11:c6:96:TYR:OH	2.18	0.43
15:r:130:ASP:OD1	15:r:130:ASP:N	2.52	0.43
17:c7:28:PHE:CE2	58:sR:1389:C:H6	2.36	0.43
21:s:12:LEU:CD2	21:s:131:MET:HE2	2.49	0.43
21:s:21:ILE:HD12	21:s:37:LEU:HD11	2.00	0.43
21:s:59:ILE:C	21:s:59:ILE:HD12	2.43	0.43
58:A:332:U:OP1	18:J:31:ARG:NE	2.35	0.43
58:A:892:A:H2'	58:A:893:U:C6	2.53	0.43
58:A:951:A:H5'	42:O:100:LYS:HZ1	1.84	0.43
58:A:1329:A:H8	58:A:1329:A:O5'	2.01	0.43
58:A:1615:C:C2'	77:G:81:ARG:HG3	2.39	0.43
61:B:84:ARG:HD2	61:B:205:ARG:H	1.83	0.43
44:w:39:GLU:HG2	44:w:40:GLU:HG2	2.00	0.43
67:D:59:HIS:HB2	67:D:61:LEU:HD21	2.00	0.43
41:d1:82:VAL:HA	61:s0:52:LYS:HE3	2.00	0.43
49:AQ:2:ALA:HA	75:1:852:U:C5	2.53	0.43
73:F:161:LYS:HD3	73:F:170:THR:OG1	2.19	0.43
73:F:234:PRO:HG3	73:F:238:LEU:HD11	2.01	0.43
73:F:246:LEU:HD22	73:F:250:GLU:HB3	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:z:77:GLY:O	54:z:81:ARG:HG3	2.19	0.43
75:AR:128:G:H2'	75:AR:129:U:O4'	2.19	0.43
75:AR:198:A:N3	75:AR:218:G:O2'	2.51	0.43
75:AR:727:G:H5''	75:AR:978:G:OP1	2.19	0.43
75:AR:1184:A:H2'	75:AR:1185:C:C6	2.54	0.43
75:AR:1598:G:OP2	38:DI:31:ARG:NH2	2.47	0.43
75:AR:1674:G:H2'	75:AR:1675:G:O4'	2.18	0.43
75:AR:1685:C:H2'	75:AR:1686:U:C6	2.53	0.43
75:AR:2147:A:H2'	75:AR:2148:U:O4'	2.19	0.43
75:AR:2183:A:H5''	13:CD:7:ASN:HB2	1.99	0.43
75:AR:2238:G:N7	80:AR:3572:OHX:N3	2.67	0.43
75:AR:3088:G:H2'	75:AR:3089:C:O4'	2.19	0.43
75:AR:3255:U:H2'	75:AR:3256:G:C8	2.52	0.43
77:G:46:TRP:CH2	77:G:118:LEU:HB3	2.53	0.43
78:h:25:THR:HG21	78:h:294:TRP:O	2.19	0.43
78:h:258:THR:OG1	78:h:259:GLY:N	2.50	0.43
53:d4:86:GLU:HG3	53:d4:87:PRO:HD2	2.01	0.43
79:DB:122:HIS:CD2	79:DB:131:PHE:CD2	3.05	0.43
58:sR:763:G:H2'	58:sR:764:U:C6	2.53	0.43
58:sR:781:U:H5''	58:sR:781:U:O2	2.19	0.43
58:sR:809:A:N6	58:sR:810:G:O6	2.52	0.43
58:sR:1087:A:H2'	58:sR:1088:A:C8	2.54	0.43
58:sR:1481:C:H4'	58:sR:1482:C:OP1	2.18	0.43
58:sR:1488:G:OP2	70:s3:8:LYS:NZ	2.49	0.43
58:sR:1754:A:O2'	80:sR:2177:OHX:N1	2.52	0.43
56:d5:69:LEU:HB2	56:d5:71:ILE:HD11	1.99	0.43
13:CD:19:HIS:CD2	13:CD:19:HIS:N	2.87	0.43
13:CD:27:ALA:O	13:CD:28:LYS:HG2	2.19	0.43
61:s0:172:LEU:HD23	61:s0:176:LEU:HD13	2.00	0.43
19:CE:27:ALA:HB2	19:CE:220:VAL:HG23	2.01	0.43
19:CE:76:VAL:HG12	19:CE:325:LYS:HA	2.00	0.43
25:CF:234:ASN:OD1	25:CF:236:LEU:N	2.52	0.43
67:s2:129:ILE:HD12	67:s2:130:ILE:HD12	2.00	0.43
72:8:56:ARG:HH11	72:8:56:ARG:HG3	1.84	0.43
72:8:63:ILE:HD11	72:8:99:VAL:HG23	1.99	0.43
72:8:88:MET:HG2	72:8:120:LYS:HB2	2.00	0.43
70:s3:196:ARG:HD2	70:s3:197:THR:H	1.84	0.43
71:e0:49:LEU:HD23	71:e0:49:LEU:HA	1.55	0.43
42:O:29:SER:N	42:O:32:SER:OG	2.51	0.43
73:s4:226:PHE:C	73:s4:226:PHE:CD1	2.96	0.43
39:v:168:GLY:O	39:v:172:ARG:HG3	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:s5:48:PHE:CZ	77:s5:67:PRO:HA	2.53	0.43
75:1:186:U:OP2	80:1:3449:OHX:N2	2.51	0.43
75:1:561:C:H2'	75:1:562:C:C6	2.53	0.43
75:1:2127:U:O4'	75:1:2301:U:H5''	2.18	0.43
75:1:2761:G:N2	75:1:2800:G:O4'	2.51	0.43
75:1:3088:G:H2'	75:1:3089:C:O4'	2.19	0.43
75:1:3278:C:O2	75:1:3278:C:H2'	2.18	0.43
1:3:64:A:H3'	15:r:204:GLY:O	2.18	0.43
1:3:92:A:H4'	15:r:11:TYR:CE1	2.53	0.43
3:CJ:48:ARG:NH2	75:AR:2526:C:C2	2.86	0.43
3:CJ:153:ILE:HD13	3:CJ:166:LEU:HB3	2.01	0.43
13:j:93:LYS:NZ	75:1:2548:C:P	2.92	0.43
15:CL:7:ARG:NH1	75:AR:2828:G:OP1	2.52	0.43
17:S:32:LYS:HD3	17:S:47:ARG:HH12	1.83	0.43
19:k:64:GLY:C	75:1:3038:U:H4'	2.44	0.43
23:T:12:GLN:O	23:T:59:GLY:HA3	2.18	0.43
23:T:25:ASN:HB3	56:a:40:VAL:HG22	2.00	0.43
23:T:115:ARG:NH2	58:A:1547:A:OP1	2.52	0.43
24:s9:32:GLY:HA3	71:e0:40:TYR:CG	2.54	0.43
26:AF:97:ALA:O	26:AF:100:ILE:HG12	2.19	0.43
27:CN:59:ARG:O	75:AR:75:G:H5'	2.19	0.43
30:c0:1:MET:HE3	58:sR:1217:A:H5''	2.00	0.43
30:c0:40:LEU:HA	30:c0:43:ILE:HD12	2.01	0.43
32:AG:73:ARG:HH11	32:AG:82:ARG:CZ	2.32	0.43
35:V:48:HIS:O	35:V:48:HIS:ND1	2.52	0.43
39:CP:38:ARG:HH22	7:AT:143:U:P	2.41	0.43
45:DQ:45:ARG:HH11	45:DQ:45:ARG:CG	2.30	0.43
45:DQ:83:LEU:CD2	45:DQ:84:THR:N	2.82	0.43
46:X:52:TYR:HB3	12:I:140:VAL:HB	2.00	0.43
47:c4:46:MET:C	47:c4:47:LYS:HG2	2.44	0.43
5:c5:54:ALA:O	5:c5:58:LYS:HB2	2.18	0.43
5:c5:77:ARG:HH21	58:sR:1241:G:P	2.42	0.43
9:q:97:PHE:CE1	75:1:3024:A:H4'	2.54	0.43
9:q:112:ILE:O	9:q:125:ASN:HA	2.18	0.43
11:c6:35:PRO:HG3	29:c9:8:ASP:OD1	2.19	0.43
15:r:57:LEU:CD2	15:r:130:ASP:HA	2.49	0.43
17:c7:20:TYR:O	17:c7:24:LEU:HD12	2.19	0.43
58:A:37:U:H2'	58:A:38:C:O4'	2.19	0.43
58:A:66:U:OP1	6:H:136:LYS:NZ	2.52	0.43
58:A:260:U:H5'	18:J:41:LYS:NZ	2.33	0.43
58:A:385:A:H5''	18:J:22:ARG:HB2	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:778:G:N2	58:A:780:A:C6	2.87	0.43
58:A:1535:U:OP1	58:A:1535:U:H4'	2.19	0.43
58:A:1615:C:H2'	77:G:81:ARG:CG	2.38	0.43
23:c8:30:TYR:CD2	58:sR:1539:G:C4	3.07	0.43
27:t:100:ARG:NH1	75:1:77:A:H5'	2.34	0.43
63:CW:98:THR:CG2	63:CW:104:ARG:HG3	2.49	0.43
66:CX:102:ILE:H	66:CX:102:ILE:HG12	1.63	0.43
41:d1:36:VAL:HG22	61:s0:63:ILE:CG2	2.47	0.43
41:d1:60:ARG:HH12	61:s0:143:VAL:CG1	2.31	0.43
70:E:54:ARG:HE	70:E:57:ASP:N	2.17	0.43
70:E:79:TYR:HB3	70:E:83:THR:HB	2.00	0.43
71:f:55:ARG:HH21	71:f:58:PRO:HA	1.84	0.43
46:d2:15:ASN:OD1	46:d2:71:LYS:HA	2.19	0.43
46:d2:25:VAL:O	46:d2:62:VAL:HA	2.18	0.43
51:y:81:VAL:HA	51:y:138:LEU:O	2.18	0.43
72:CZ:27:ARG:HB3	72:CZ:29:SER:O	2.18	0.43
74:g:109:ASP:HB3	74:g:113:LYS:HG3	2.00	0.43
75:AR:651:G:C6	75:AR:652:G:C6	3.07	0.43
75:AR:1000:C:C2	75:AR:1045:C:N4	2.87	0.43
75:AR:1073:U:H1'	8:DD:50:THR:OG1	2.19	0.43
75:AR:1347:U:H4'	25:CF:305:ALA:HB2	2.00	0.43
75:AR:1611:G:H2'	75:AR:1612:A:C8	2.53	0.43
75:AR:2263:C:H6	75:AR:2263:C:H2'	1.54	0.43
77:G:120:ILE:HD11	77:G:191:ALA:HB1	2.01	0.43
78:h:214:ALA:HB2	78:h:243:LEU:HD11	1.99	0.43
78:h:222:LEU:HD13	78:h:232:TYR:CE1	2.54	0.43
78:h:281:TYR:HE1	78:h:285:ALA:O	2.02	0.43
1:AS:36:C:H4'	31:CG:155:THR:HG23	2.00	0.43
6:H:39:GLU:O	6:H:42:GLY:O	2.37	0.43
6:H:137:ARG:HH21	6:H:177:ARG:NH1	2.16	0.43
58:sR:1433:G:H22	68:d9:45:GLU:CD	2.26	0.43
60:2:17:ARG:HB3	60:2:22:HIS:CE1	2.53	0.43
12:I:18:LEU:HA	12:I:21:ALA:HB2	2.01	0.43
78:Rb:21:THR:HG22	78:Rb:36:ALA:O	2.19	0.43
78:Rb:197:SER:CB	78:Rb:217:ASP:H	2.32	0.43
78:Rb:249:ARG:NH2	78:Rb:315:VAL:HG21	2.34	0.43
59:d6:58:VAL:HG12	59:d6:59:TYR:H	1.84	0.43
18:J:122:GLY:N	18:J:157:GLU:OE2	2.48	0.43
61:s0:183:ARG:CZ	61:s0:191:ARG:HD3	2.48	0.43
19:CE:53:MET:CG	19:CE:77:THR:HG22	2.49	0.43
24:K:8:TYR:CD1	24:K:8:TYR:C	2.97	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:K:34:PHE:HD2	24:K:111:THR:HG21	1.83	0.43
24:K:131:GLN:C	24:K:133:HIS:H	2.27	0.43
20:DF:88:PRO:O	20:DF:89:LEU:HD23	2.19	0.43
67:s2:243:TYR:O	67:s2:247:ALA:N	2.50	0.43
31:CG:236:LEU:HD23	31:CG:236:LEU:HA	1.73	0.43
26:DG:93:ALA:HB1	26:DG:118:LYS:HB3	2.01	0.43
79:AA:105:SER:HA	79:AA:108:GLU:OE1	2.18	0.43
43:CI:129:LEU:HD23	43:CI:129:LEU:HA	1.76	0.43
77:s5:175:LEU:HG	77:s5:210:ALA:HB2	2.01	0.43
75:1:540:U:C5	80:1:3933:OHX:N5	2.87	0.43
75:1:767:U:HO2'	75:1:768:C:H6	1.65	0.43
75:1:1103:A:N3	75:1:1103:A:H2'	2.33	0.43
75:1:1573:G:H2'	75:1:1573:G:N3	2.34	0.43
75:1:1703:U:N3	75:1:1740:U:O2	2.52	0.43
75:1:2247:G:OP1	80:1:3631:OHX:N4	2.52	0.43
75:1:2356:A:N6	75:1:2983:C:H5	2.09	0.43
75:1:2749:G:N7	80:1:4061:OHX:N1	2.67	0.43
10:DK:81:THR:OG1	10:DK:82:ARG:N	2.52	0.43
12:s7:148:LYS:C	12:s7:149:ILE:HG13	2.44	0.43
19:k:122:TRP:CZ2	19:k:127:LYS:HG2	2.53	0.43
19:k:186:GLY:O	19:k:191:LYS:HE2	2.19	0.43
26:AF:57:TYR:CE1	75:1:1162:U:H4'	2.54	0.43
27:CN:122:LYS:HB2	27:CN:145:PHE:HZ	1.84	0.43
29:U:57:ARG:NH1	58:A:1479:A:OP1	2.52	0.43
29:U:98:GLY:O	29:U:102:ARG:NH1	2.52	0.43
36:c1:129:ARG:O	36:c1:130:PRO:C	2.62	0.43
41:W:15:ARG:NE	67:D:59:HIS:HA	2.32	0.43
43:o:86:VAL:HA	43:o:136:TYR:HB3	2.01	0.43
45:DQ:97:LYS:HB3	75:AR:2656:A:P	2.59	0.43
10:AJ:76:ARG:HD3	10:AJ:76:ARG:HA	1.73	0.43
50:Y:114:LYS:HD2	58:A:571:G:H5''	2.00	0.43
9:q:128:VAL:HG23	9:q:132:VAL:CG2	2.49	0.43
9:q:169:ASN:C	9:q:170:LYS:HD2	2.44	0.43
16:AK:28:HIS:ND1	16:AK:31:LYS:HB2	2.34	0.43
51:CS:98:LYS:HE2	51:CS:118:GLY:O	2.18	0.43
53:Z:11:LYS:NZ	58:A:775:G:C5	2.86	0.43
11:c6:40:GLU:OE2	11:c6:42:GLU:HA	2.18	0.43
15:r:121:LYS:HD2	15:r:121:LYS:HA	1.80	0.43
15:r:138:VAL:HG11	15:r:148:VAL:CG2	2.49	0.43
22:AL:27:ILE:HG22	22:AL:41:THR:HG22	1.99	0.43
17:c7:72:LYS:HD2	17:c7:72:LYS:N	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:s:34:SER:HB3	21:s:67:VAL:HG21	2.01	0.43
57:CU:81:TYR:HA	57:CU:120:SER:O	2.19	0.43
57:CU:108:GLN:OE1	75:AR:1322:U:O2'	2.29	0.43
57:CU:131:LYS:O	57:CU:134:ASP:HB2	2.19	0.43
58:A:1335:U:H2'	58:A:1336:A:H8	1.84	0.43
58:A:1680:G:H8	58:A:1680:G:OP2	2.01	0.43
23:c8:105:VAL:HG13	23:c8:106:GLU:H	1.83	0.43
34:AN:127:LEU:HD12	34:AN:128:LYS:N	2.33	0.43
61:B:53:THR:O	61:B:57:LEU:HD23	2.19	0.43
61:B:67:ILE:HD13	61:B:73:VAL:CG1	2.49	0.43
64:C:179:SER:CB	64:C:187:LYS:HZ3	2.32	0.43
65:d:40:ILE:HG13	65:d:41:VAL:N	2.34	0.43
68:e:46:LYS:HD3	68:e:46:LYS:HA	1.81	0.43
69:CY:35:LYS:HE3	69:CY:51:TRP:CZ2	2.53	0.43
51:y:83:VAL:O	51:y:103:ALA:HA	2.18	0.43
73:F:35:PRO:HB3	73:F:143:ASP:O	2.18	0.43
73:F:87:MET:HB3	73:F:87:MET:HE3	1.72	0.43
73:F:150:PRO:HB2	73:F:154:ILE:HD13	2.00	0.43
73:F:181:VAL:HA	73:F:227:VAL:HA	2.01	0.43
75:AR:1440:G:H2'	75:AR:1441:G:C8	2.54	0.43
75:AR:1729:A:H62	14:DE:47:ASN:ND2	2.17	0.43
75:AR:2107:A:H2	75:AR:3344:A:C8	2.37	0.43
75:AR:2115:G:H22	75:AR:2120:A:H1'	1.84	0.43
75:AR:2271:A:N7	75:AR:2272:G:C6	2.87	0.43
75:AR:3238:G:H2'	75:AR:3239:G:O4'	2.19	0.43
75:AR:3287:U:H2'	75:AR:3288:G:C5'	2.49	0.43
77:G:51:VAL:HG11	77:G:130:ILE:HG13	2.01	0.43
77:G:92:ARG:HG2	77:G:92:ARG:O	2.18	0.43
77:G:94:THR:HG22	77:G:114:ILE:CG1	2.45	0.43
77:G:184:PHE:HE1	77:G:185:ARG:HD2	1.84	0.43
78:h:112:SER:OG	78:h:153:GLN:HG3	2.19	0.43
79:DB:36:HIS:CD2	79:DB:74:VAL:HG11	2.54	0.43
58:sR:1529:C:OP1	77:s5:112:ARG:HD2	2.19	0.43
78:Rb:9:LEU:HB3	78:Rb:313:TRP:CG	2.53	0.43
13:CD:238:ILE:H	13:CD:238:ILE:HD12	1.83	0.43
61:s0:74:VAL:O	61:s0:121:VAL:HA	2.19	0.43
62:d7:64:CYS:HA	62:d7:72:LYS:O	2.18	0.43
14:DE:41:LEU:HA	14:DE:66:LYS:O	2.18	0.43
24:K:55:ALA:O	24:K:59:LEU:HD12	2.19	0.43
25:CF:285:ASP:OD1	25:CF:288:ARG:HB2	2.19	0.43
30:L:74:GLU:HA	30:L:77:ARG:HB3	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:s2:35:TRP:CZ3	67:s2:46:LYS:HB2	2.54	0.43
67:s2:174:ARG:HA	67:s2:195:ASP:OD2	2.19	0.43
26:DG:82:LEU:CD2	26:DG:117:ILE:HD12	2.49	0.43
70:s3:195:SER:O	70:s3:196:ARG:C	2.62	0.43
73:s4:7:LYS:O	73:s4:30:ARG:HG2	2.19	0.43
39:v:135:VAL:O	39:v:137:PRO:HD3	2.19	0.43
77:s5:222:LYS:HA	77:s5:225:ARG:HH12	1.84	0.43
75:1:1014:U:H3	75:1:1036:A:H61	1.66	0.43
75:1:2535:A:N6	75:1:2545:C:N3	2.67	0.43
75:1:2808:A:C8	75:1:2808:A:H5'	2.54	0.43
75:1:3006:A:H2'	75:1:3007:U:O4'	2.19	0.43
75:1:3182:G:H2'	75:1:3183:A:C8	2.54	0.43
1:3:62:U:O4	1:3:63:A:N6	2.51	0.42
1:3:118:A:H5''	31:m:253:PHE:HZ	1.83	0.42
3:CJ:60:ARG:NH2	7:AT:150:G:O3'	2.52	0.42
3:CJ:94:PHE:HB3	3:CJ:189:LEU:HD11	2.00	0.42
3:CJ:167:PRO:HA	3:CJ:170:CYS:HB2	2.01	0.42
4:DJ:35:LYS:NZ	7:AT:49:G:O3'	2.47	0.42
5:Q:68:PRO:O	5:Q:69:GLU:HB3	2.19	0.42
6:s6:180:THR:HG22	6:s6:183:ARG:HB2	2.00	0.42
7:4:85:G:H3'	7:4:85:G:H8	1.84	0.42
7:4:141:C:P	39:v:109:ARG:HH12	2.42	0.42
9:CK:80:THR:O	9:CK:84:LYS:N	2.50	0.42
11:R:43:ILE:H	11:R:43:ILE:HD12	1.84	0.42
12:s7:42:GLN:HE21	12:s7:42:GLN:HB3	1.60	0.42
12:s7:98:ILE:HG13	58:sR:694:U:C4	2.54	0.42
15:CL:25:ALA:O	15:CL:122:PRO:HG2	2.19	0.42
17:S:58:MET:HA	17:S:61:ILE:HD12	2.01	0.42
18:s8:187:GLU:H	18:s8:187:GLU:CD	2.21	0.42
19:k:26:ARG:HH22	75:1:3003:G:P	2.40	0.42
21:CM:99:THR:O	21:CM:154:THR:OG1	2.37	0.42
23:T:17:LEU:HD12	23:T:18:LEU:HB2	2.00	0.42
23:T:88:ARG:NH2	23:T:92:ILE:HG22	2.32	0.42
27:CN:6:ASN:O	51:CS:164:ARG:NH1	2.51	0.42
27:CN:47:ALA:O	27:CN:137:GLN:NE2	2.50	0.42
30:c0:34:GLU:N	70:s3:75:LYS:HZ3	2.17	0.42
31:m:106:ALA:O	31:m:110:LEU:HD13	2.19	0.42
35:V:24:ILE:HG23	35:V:91:ILE:CG2	2.40	0.42
35:V:69:LYS:O	68:e:44:ARG:NH1	2.52	0.42
37:n:9:TRP:HA	75:1:1353:U:O2	2.19	0.42
42:c3:18:TYR:HD1	42:c3:18:TYR:O	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:o:53:LYS:HD3	43:o:53:LYS:HA	1.82	0.42
44:CQ:171:LYS:NZ	75:AR:3180:A:OP1	2.51	0.42
48:CR:25:SER:OG	75:AR:1447:G:N7	2.40	0.42
5:c5:96:ILE:HB	5:c5:120:SER:HB2	2.01	0.42
51:CS:96:PHE:CD1	51:CS:97:PRO:O	2.72	0.42
53:Z:84:LYS:HE2	53:Z:85:PHE:CE1	2.49	0.42
15:r:177:ASP:OD1	15:r:177:ASP:N	2.49	0.42
54:CT:64:ARG:NE	75:AR:1672:U:OP1	2.34	0.42
54:CT:151:ARG:HD2	54:CT:151:ARG:HA	1.81	0.42
56:a:57:TYR:HB3	56:a:59:TYR:O	2.19	0.42
56:a:84:GLU:HB3	56:a:89:ILE:CD1	2.49	0.42
17:c7:60:ARG:NH1	58:sR:1400:A:H5'	2.33	0.42
21:s:85:LYS:HG2	21:s:89:TYR:HE1	1.84	0.42
58:A:124:A:O3'	73:F:148:ARG:HD2	2.19	0.42
58:A:707:A:H2'	58:A:708:C:H5''	2.00	0.42
58:A:912:U:H4'	58:A:913:G:H2'	2.00	0.42
27:t:69:VAL:HG11	27:t:150:PRO:HD3	2.01	0.42
27:t:93:ILE:HD13	27:t:93:ILE:HA	1.77	0.42
70:E:142:LEU:HD12	55:i:110:TRP:CZ2	2.54	0.42
54:z:6:THR:HG22	75:1:1498:A:OP1	2.19	0.42
54:z:97:ARG:NH2	75:1:1779:C:O4'	2.52	0.42
54:z:136:ARG:O	54:z:140:GLU:HB2	2.19	0.42
75:AR:1135:A:H5'	8:DD:7:HIS:O	2.19	0.42
75:AR:1380:G:OP1	25:CF:191:LYS:HG2	2.19	0.42
75:AR:1460:A:H2'	75:AR:1461:A:C8	2.54	0.42
75:AR:1878:G:OP1	80:AR:3883:OHX:N2	2.51	0.42
75:AR:1940:G:N2	75:AR:3362:A:H8	2.17	0.42
75:AR:2761:G:H1'	75:AR:2800:G:N2	2.32	0.42
75:AR:3033:A:H2'	75:AR:3034:C:H6	1.84	0.42
75:AR:3107:U:H2'	75:AR:3108:G:H8	1.82	0.42
77:G:97:LEU:HA	77:G:180:ARG:NH2	2.33	0.42
77:G:206:SER:HA	77:G:212:LYS:HZ1	1.84	0.42
58:sR:985:G:N7	80:sR:2037:OHX:N5	2.67	0.42
58:sR:1105:C:H2'	58:sR:1106:U:H6	1.83	0.42
58:sR:1475:A:H2'	58:sR:1476:C:O4'	2.19	0.42
2:DC:135:GLU:HB2	2:DC:145:VAL:HG11	2.01	0.42
12:I:46:ILE:CD1	12:I:60:ILE:HA	2.48	0.42
12:I:76:LYS:HD3	12:I:79:ARG:CZ	2.49	0.42
12:I:90:VAL:O	12:I:91:ILE:HD13	2.19	0.42
78:Rb:228:LYS:O	78:Rb:228:LYS:HG3	2.19	0.42
59:d6:68:TYR:HB2	64:s1:111:ARG:HD2	1.99	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CD:211:HIS:CD2	13:CD:219:ILE:HG23	2.54	0.42
18:J:142:LYS:O	18:J:146:ARG:HG3	2.19	0.42
61:s0:147:THR:HG21	61:s0:159:ALA:HB1	2.00	0.42
66:6:18:PRO:HA	66:6:51:ALA:HA	2.00	0.42
19:CE:5:LYS:HE3	19:CE:5:LYS:HB2	1.79	0.42
20:DF:84:ASP:O	20:DF:84:ASP:CG	2.62	0.42
31:CG:218:ARG:HG3	31:CG:222:LEU:HD12	2.01	0.42
70:s3:101:GLN:HA	70:s3:104:SER:CB	2.44	0.42
70:s3:163:PRO:HG3	70:s3:203:PRO:HG2	2.00	0.42
47:P:87:GLY:O	47:P:89:THR:N	2.52	0.42
77:s5:64:VAL:O	77:s5:65:ARG:HD2	2.19	0.42
75:1:601:U:H2'	75:1:602:A:O4'	2.19	0.42
75:1:1063:G:N7	75:1:1097:G:H2'	2.34	0.42
75:1:1595:U:OP1	75:1:1595:U:H4'	2.18	0.42
75:1:2350:C:H4'	75:1:3308:C:O2'	2.19	0.42
75:1:3060:C:H2'	75:1:3061:G:H8	1.83	0.42
1:3:3:U:H2'	1:3:4:U:H6	1.83	0.42
3:CJ:241:LYS:HG3	75:AR:2586:G:N7	2.34	0.42
4:DJ:104:GLN:NE2	4:DJ:108:GLN:OE1	2.32	0.42
15:CL:76:MET:CE	15:CL:148:VAL:HA	2.49	0.42
15:CL:187:ALA:HB3	15:CL:189:GLU:HG3	2.01	0.42
17:S:53:TYR:CD2	17:S:57:LEU:HD21	2.54	0.42
19:k:109:HIS:HD1	19:k:200:GLU:CD	2.27	0.42
27:CN:11:LYS:O	27:CN:13:HIS:ND1	2.52	0.42
28:DN:49:MET:HE2	28:DN:49:MET:HB3	1.86	0.42
31:m:44:TYR:O	60:2:33:VAL:HG11	2.19	0.42
31:m:58:LYS:HD3	31:m:93:THR:HG21	2.01	0.42
31:m:221:GLU:HG3	31:m:222:LEU:H	1.84	0.42
35:V:22:ILE:HG22	35:V:93:LEU:HB2	2.01	0.42
35:V:45:ALA:HB3	35:V:52:LYS:HZ2	1.84	0.42
38:AH:12:PRO:HG2	75:1:1488:G:H21	1.84	0.42
41:W:46:ILE:H	41:W:46:ILE:HD12	1.84	0.42
42:c3:28:LEU:HD13	42:c3:28:LEU:O	2.19	0.42
43:o:196:LYS:HE2	75:1:1101:G:OP2	2.19	0.42
52:p0:61:ARG:HG3	75:AR:1221:A:O5'	2.19	0.42
53:Z:86:GLU:OE1	53:Z:90:ARG:NH1	2.52	0.42
11:c6:12:LYS:HE3	11:c6:17:THR:HB	2.01	0.42
15:r:4:ARG:HG2	15:r:5:PRO:HD2	2.01	0.42
58:A:27:U:H2'	58:A:28:A:O4'	2.19	0.42
58:A:278:U:H4'	58:A:279:G:O5'	2.19	0.42
58:A:833:U:H5'	58:A:834:G:H5''	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:953:G:H5'	42:O:114:ARG:HD3	2.01	0.42
58:A:1056:U:H1'	58:A:1064:G:H22	1.84	0.42
58:A:1292:G:H2'	58:A:1293:U:C6	2.54	0.42
58:A:1573:A:H4'	58:A:1574:G:H5'	2.01	0.42
58:A:1773:C:H2'	58:A:1774:G:C8	2.54	0.42
27:t:48:PRO:HA	27:t:137:GLN:CB	2.49	0.42
60:CV:8:ARG:NH1	75:AR:2756:C:H1'	2.34	0.42
63:CW:98:THR:HG22	63:CW:104:ARG:HG3	2.01	0.42
64:C:191:GLU:O	64:C:191:GLU:HG2	2.19	0.42
65:d:48:VAL:HG22	77:G:163:SER:HB2	2.00	0.42
66:CX:28:ASN:HD21	66:CX:112:SER:H	1.67	0.42
66:CX:86:ARG:HH11	66:CX:86:ARG:HG2	1.84	0.42
72:CZ:113:LEU:HD22	75:AR:1522:U:H3'	2.00	0.42
75:AR:320:G:O2'	75:AR:321:C:H5'	2.19	0.42
75:AR:499:G:H2'	75:AR:500:C:C6	2.53	0.42
75:AR:1730:G:N7	14:DE:28:LYS:HG3	2.34	0.42
75:AR:2154:U:H4'	13:CD:240:ALA:HB1	2.00	0.42
75:AR:2434:U:H4'	75:AR:2435:G:O5'	2.20	0.42
75:AR:2704:A:OP2	80:AR:3751:OHX:N4	2.51	0.42
79:DB:47:GLU:HB2	79:DB:71:PHE:HB3	2.01	0.42
79:DB:121:ARG:HH11	79:DB:121:ARG:HG3	1.84	0.42
58:sR:1122:G:N2	58:sR:1125:A:OP2	2.50	0.42
58:sR:1433:G:N2	68:d9:42:CYS:SG	2.80	0.42
58:sR:1752:U:H2'	58:sR:1753:A:C8	2.54	0.42
78:Rb:187:GLN:HG2	78:Rb:188:ILE:N	2.34	0.42
78:Rb:307:ASP:OD1	78:Rb:309:VAL:HB	2.18	0.42
59:d6:51:ARG:NH1	65:d8:60:GLU:OE2	2.52	0.42
13:CD:125:ALA:HB3	13:CD:126:LEU:HD22	2.00	0.42
13:CD:130:SER:HA	13:CD:169:ILE:HG22	2.00	0.42
18:J:81:VAL:HG22	18:J:102:VAL:HG22	2.02	0.42
61:s0:80:THR:O	61:s0:83:GLN:HG3	2.19	0.42
61:s0:175:TYR:CE2	61:s0:199:PRO:HB3	2.53	0.42
61:s0:191:ARG:O	61:s0:192:THR:C	2.62	0.42
66:6:2:SER:N	66:6:56:ASP:HA	2.34	0.42
66:6:59:MET:HE1	66:6:75:PRO:HG3	2.00	0.42
66:6:71:LYS:HE2	66:6:71:LYS:HB3	1.80	0.42
66:6:86:ARG:HB2	66:6:92:PHE:CE1	2.54	0.42
66:6:120:LYS:HG2	66:6:124:ASP:OD1	2.19	0.42
19:CE:107:ALA:HA	19:CE:199:PHE:HD2	1.83	0.42
24:K:41:GLU:HG2	24:K:44:ARG:NH2	2.32	0.42
64:s1:118:GLN:HB2	64:s1:143:THR:OG1	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:s2:143:TYR:CD2	67:s2:151:PRO:HB3	2.54	0.42
31:CG:50:ARG:NH1	31:CG:147:ASP:OD2	2.42	0.42
26:DG:109:LEU:HD11	26:DG:119:VAL:HG11	2.01	0.42
70:s3:94:ARG:O	70:s3:101:GLN:NE2	2.52	0.42
70:s3:141:LYS:NZ	70:s3:179:GLN:NE2	2.66	0.42
32:DH:8:TYR:CE1	32:DH:99:ARG:HD3	2.55	0.42
73:s4:42:LEU:HB2	73:s4:109:PHE:CD2	2.55	0.42
43:CI:64:GLN:HA	43:CI:67:ARG:HD2	2.01	0.42
38:DI:56:THR:HA	38:DI:62:TYR:OH	2.19	0.42
77:s5:205:SER:C	77:s5:206:SER:HG	2.19	0.42
75:1:93:C:OP1	84:1:3578:ZWB:N	2.52	0.42
75:1:1809:A:H2'	75:1:1810:A:O4'	2.19	0.42
75:1:1940:G:N2	75:1:3362:A:C8	2.83	0.42
75:1:3134:A:OP1	80:1:3721:OHX:N1	2.52	0.42
80:1:3424:OHX:N4	80:1:4002:OHX:N1	2.67	0.42
3:CJ:185:ARG:HG3	7:AT:154:C:O2'	2.19	0.42
3:CJ:237:ILE:HD12	3:CJ:237:ILE:HA	1.86	0.42
4:DJ:96:GLU:CD	39:CP:143:ARG:HD3	2.44	0.42
6:s6:55:GLY:HA3	6:s6:63:MET:HE2	2.01	0.42
6:s6:159:ARG:HH22	58:sR:79:C:P	2.42	0.42
7:4:127:U:C2'	7:4:128:U:H5'	2.49	0.42
8:AC:36:ASP:OD1	8:AC:38:LYS:N	2.52	0.42
10:DK:45:ARG:O	10:DK:45:ARG:HD3	2.17	0.42
12:s7:117:THR:OG1	58:sR:638:U:O3'	2.37	0.42
12:s7:125:ILE:HD13	12:s7:125:ILE:HA	1.87	0.42
13:j:181:LYS:HB2	75:1:860:G:N7	2.34	0.42
17:S:100:LEU:CB	17:S:118:PRO:HG2	2.50	0.42
19:k:119:TYR:CE1	19:k:129:ALA:HB2	2.54	0.42
19:k:348:ARG:O	19:k:348:ARG:HG3	2.18	0.42
25:l:99:MET:SD	25:l:102:PRO:HA	2.59	0.42
31:m:148:ILE:HD11	31:m:153:THR:HG22	2.01	0.42
38:AH:16:ARG:NH2	38:AH:37:LYS:HB3	2.34	0.42
38:AH:104:VAL:O	38:AH:108:GLN:HB2	2.20	0.42
46:X:57:ARG:NH2	42:O:16:ILE:HB	2.32	0.42
46:X:102:VAL:HG23	46:X:127:GLY:O	2.19	0.42
5:c5:83:MET:HB3	5:c5:116:LEU:CD1	2.49	0.42
51:CS:44:PHE:CD2	51:CS:134:GLY:HA3	2.54	0.42
53:Z:64:PHE:CD1	53:Z:65:GLY:N	2.81	0.42
15:r:68:ALA:HB2	15:r:158:LYS:HB2	2.02	0.42
56:a:77:ARG:NH2	58:A:1532:U:P	2.91	0.42
17:c7:74:GLN:HG3	17:c7:77:GLU:OE2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:A:397:A:H5''	18:J:47:ARG:NH2	2.34	0.42
58:A:541:A:H2'	58:A:541:A:N3	2.34	0.42
58:A:707:A:H2	58:A:731:C:H2'	1.83	0.42
58:A:1017:U:H2'	58:A:1018:U:H6	1.84	0.42
58:A:1409:G:N2	58:A:1412:G:OP2	2.52	0.42
58:A:1791:A:OP1	59:b:8:ASN:ND2	2.52	0.42
61:B:83:GLN:HE22	61:B:100:GLY:HA2	1.85	0.42
61:B:110:TYR:CD2	67:D:64:LYS:HG2	2.54	0.42
29:c:9:73:VAL:HG23	58:sR:1499:G:P	2.59	0.42
45:AP:63:LYS:HD3	45:AP:63:LYS:HA	1.89	0.42
67:D:160:GLY:O	67:D:166:THR:HA	2.20	0.42
41:d1:36:VAL:HG11	41:d1:78:LEU:HD13	2.00	0.42
41:d1:56:SER:HG	41:d1:59:VAL:HG23	1.83	0.42
41:d1:86:SER:HB2	62:d7:11:THR:HG22	2.02	0.42
49:AQ:8:VAL:HG13	75:1:1927:G:OP1	2.19	0.42
69:CY:42:GLN:HB3	69:CY:44:LYS:HG2	2.01	0.42
55:i:57:ASN:O	55:i:61:ILE:HG12	2.19	0.42
72:CZ:68:THR:HA	72:CZ:73:MET:HE3	2.01	0.42
73:F:77:ARG:HD2	73:F:77:ARG:HA	1.62	0.42
73:F:252:ARG:HA	73:F:255:ARG:CB	2.49	0.42
74:g:95:HIS:CE1	74:g:97:LYS:H	2.37	0.42
75:AR:123:A:H5'	75:AR:124:U:OP2	2.19	0.42
75:AR:251:G:H1'	75:AR:253:A:C8	2.54	0.42
75:AR:1632:A:H2'	75:AR:1633:C:O4'	2.19	0.42
75:AR:1908:A:H2'	75:AR:1909:A:O4'	2.19	0.42
75:AR:2775:U:H2'	75:AR:2776:C:C6	2.55	0.42
75:AR:3046:A:H2'	75:AR:3047:U:O4'	2.19	0.42
75:AR:3276:G:H5'	37:CH:48:ARG:NH1	2.34	0.42
77:G:88:PRO:O	77:G:91:GLU:HB3	2.20	0.42
53:d4:20:ARG:HD3	53:d4:76:TYR:CE1	2.55	0.42
53:d4:128:LYS:HA	53:d4:131:ARG:HB3	2.01	0.42
57:0:23:LYS:HB3	57:0:25:PHE:CZ	2.54	0.42
79:DB:54:THR:HG23	79:DB:57:HIS:HD2	1.84	0.42
6:H:19:ASP:N	6:H:19:ASP:OD1	2.51	0.42
58:sR:431:C:H2'	58:sR:432:G:O4'	2.19	0.42
58:sR:514:G:O2'	58:sR:515:A:H8	2.02	0.42
58:sR:846:G:H2'	58:sR:847:A:O4'	2.19	0.42
58:sR:973:A:H2'	58:sR:974:A:H8	1.83	0.42
58:sR:1603:U:H2'	58:sR:1604:U:H6	1.84	0.42
56:d5:89:ILE:HG23	56:d5:89:ILE:HD12	1.72	0.42
63:5:36:TYR:HD2	63:5:83:TYR:CB	2.25	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:J:38:ILE:HA	18:J:60:ILE:O	2.19	0.42
18:J:64:ASN:N	18:J:180:ASP:OD1	2.47	0.42
18:J:87:ASN:OD1	18:J:89:GLU:N	2.40	0.42
24:K:146:PHE:CD1	24:K:148:VAL:HG12	2.53	0.42
64:s1:84:ILE:HG22	64:s1:86:LEU:HD13	2.00	0.42
70:s3:141:LYS:HE2	70:s3:141:LYS:HB2	1.40	0.42
70:s3:193:ALA:O	70:s3:195:SER:HB3	2.20	0.42
32:DH:90:PRO:C	32:DH:92:LYS:H	2.26	0.42
42:O:40:TYR:HA	42:O:43:LYS:HB2	2.01	0.42
73:s4:46:VAL:HG12	73:s4:51:ARG:HD3	1.99	0.42
73:s4:100:ARG:HH12	73:s4:236:ILE:CG2	2.32	0.42
73:s4:107:GLY:HA2	73:s4:189:LEU:CD2	2.49	0.42
73:s4:126:VAL:HG11	73:s4:154:ILE:CG2	2.49	0.42
77:s5:158:GLN:NE2	77:s5:225:ARG:HG2	2.35	0.42
75:1:197:G:N2	75:1:372:A:C8	2.87	0.42
75:1:551:A:H2'	75:1:551:A:OP2	2.20	0.42
75:1:873:C:H2'	75:1:875:G:O4'	2.19	0.42
75:1:1805:C:H2'	75:1:1806:A:C8	2.54	0.42
75:1:1856:C:H2'	75:1:1857:C:C6	2.55	0.42
75:1:2244:A:H2'	75:1:2245:C:C6	2.54	0.42
75:1:2416:U:H2'	75:1:2417:U:C6	2.55	0.42
3:CJ:91:PHE:HZ	3:CJ:186:LEU:CD2	2.33	0.42
6:s6:152:ASP:OD1	6:s6:154:ARG:HG3	2.19	0.42
8:AC:28:LYS:HB2	75:1:1065:A:C4	2.55	0.42
10:DK:62:ARG:HE	10:DK:94:ILE:CD1	2.32	0.42
10:DK:67:LYS:H	10:DK:67:LYS:HD2	1.84	0.42
13:j:40:TYR:HA	13:j:90:ALA:O	2.19	0.42
13:j:190:ARG:NH2	13:j:191:LEU:HD11	2.35	0.42
14:AD:92:ILE:O	14:AD:93:LEU:HD23	2.19	0.42
18:s8:114:GLU:N	18:s8:114:GLU:OE1	2.53	0.42
19:k:139:GLN:H	19:k:139:GLN:CD	2.22	0.42
20:AE:16:LEU:HD23	20:AE:16:LEU:HA	1.89	0.42
21:CM:7:ASN:HB3	21:CM:10:ARG:NE	2.34	0.42
22:DM:12:LEU:HA	22:DM:15:THR:HG22	2.01	0.42
23:T:119:ILE:O	23:T:120:ARG:HB2	2.19	0.42
32:AG:19:SER:OG	75:1:1330:A:OP2	2.38	0.42
33:CO:20:VAL:O	33:CO:66:THR:HB	2.19	0.42
35:V:63:LEU:HG	68:e:34:TYR:CZ	2.54	0.42
36:c1:98:ASN:HB3	46:d2:79:PHE:CE2	2.52	0.42
40:DP:4:LYS:NZ	58:sR:1775:U:O4	2.50	0.42
45:DQ:102:GLN:OE1	45:DQ:103:ALA:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:CR:66:SER:HB2	75:AR:1448:U:C5'	2.48	0.42
50:Y:126:LYS:HG2	50:Y:131:SER:H	1.84	0.42
5:c5:122:THR:HG21	58:sR:1455:G:OP1	2.19	0.42
9:q:92:TYR:N	9:q:92:TYR:CD1	2.87	0.42
16:AK:52:LYS:HD3	75:l:353:G:O6	2.20	0.42
51:CS:62:VAL:O	51:CS:87:VAL:HA	2.19	0.42
17:c7:103:ASP:HA	17:c7:122:ILE:H	1.84	0.42
57:CU:27:MET:HE1	57:CU:44:PHE:HB2	2.00	0.42
58:A:279:G:N7	58:A:281:G:C8	2.86	0.42
58:A:386:G:P	18:J:25:ARG:HH12	2.43	0.42
58:A:728:U:O2	58:A:728:U:H2'	2.19	0.42
58:A:890:C:H2'	58:A:891:A:C8	2.54	0.42
58:A:954:G:H2'	58:A:955:A:C8	2.55	0.42
58:A:1179:G:H2'	58:A:1180:C:C6	2.55	0.42
58:A:1614:A:N1	58:A:1615:C:N4	2.67	0.42
61:B:7:PHE:CZ	61:B:180:GLU:OE1	2.72	0.42
61:B:163:ASN:OD1	61:B:163:ASN:C	2.63	0.42
63:CW:20:SER:OG	63:CW:21:SER:N	2.52	0.42
64:C:144:ARG:HH22	64:C:147:ALA:HB2	1.84	0.42
66:CX:77:ILE:HD12	66:CX:126:TRP:CE2	2.55	0.42
68:e:49:ASP:OD1	68:e:49:ASP:N	2.52	0.42
41:d1:10:GLU:HG2	41:d1:10:GLU:O	2.19	0.42
48:x:13:LYS:HB2	48:x:13:LYS:HE3	1.63	0.42
51:y:158:HIS:H	51:y:186:VAL:CG1	2.33	0.42
72:CZ:73:MET:O	72:CZ:77:GLU:HG2	2.19	0.42
75:AR:155:G:H5''	75:AR:156:G:C8	2.54	0.42
75:AR:364:G:O3'	25:CF:84:ARG:HG2	2.20	0.42
75:AR:816:A:H5''	75:AR:920:A:H62	1.84	0.42
75:AR:848:A:C5	75:AR:849:C:H1'	2.54	0.42
75:AR:2522:G:N1	13:CD:68:LYS:HD3	2.34	0.42
75:AR:2663:G:H2'	75:AR:2664:C:O4'	2.20	0.42
75:AR:2850:G:O6	80:AR:3545:OHX:N1	2.53	0.42
75:AR:3006:A:H2'	75:AR:3007:U:O4'	2.20	0.42
75:AR:3174:A:H61	75:AR:3278:C:P	2.42	0.42
75:AR:3278:C:OP2	75:AR:3278:C:H2'	2.20	0.42
77:G:115:LYS:HA	77:G:115:LYS:HE3	2.01	0.42
78:h:16:HIS:NE2	78:h:39:ASP:OD1	2.48	0.42
78:h:101:GLN:HG2	78:h:137:LYS:C	2.45	0.42
6:H:5:ILE:CD1	6:H:111:LEU:HB2	2.41	0.42
58:sR:613:G:H4'	58:sR:614:C:OP1	2.19	0.42
58:sR:647:G:N2	58:sR:688:G:C2	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:683:C:H3'	58:sR:684:A:H5''	2.00	0.42
58:sR:1174:C:C4	58:sR:1175:U:C4	3.07	0.42
58:sR:1428:G:H8	58:sR:1428:G:H5'	1.83	0.42
58:sR:1621:U:H2'	58:sR:1622:G:O4'	2.18	0.42
58:sR:1708:U:H2'	58:sR:1709:C:C6	2.54	0.42
60:2:109:VAL:HG23	75:1:1063:G:C6	2.54	0.42
7:AT:152:G:H2'	7:AT:153:U:O4'	2.19	0.42
12:I:40:PRO:O	12:I:41:LEU:HD23	2.19	0.42
78:Rb:88:THR:HG21	78:Rb:90:ARG:NH2	2.34	0.42
66:6:13:ILE:HG23	66:6:53:SER:OG	2.18	0.42
66:6:32:ARG:HD3	66:6:32:ARG:HA	1.88	0.42
19:CE:74:GLU:OE1	19:CE:283:TYR:OH	2.35	0.42
24:K:136:VAL:HG23	24:K:137:GLY:N	2.34	0.42
64:s1:134:VAL:CG2	64:s1:219:LYS:HB3	2.46	0.42
20:DF:48:ASP:HB2	20:DF:87:ASN:HD21	1.84	0.42
70:s3:172:THR:O	70:s3:173:ARG:HD3	2.20	0.42
71:e0:59:GLY:O	71:e0:60:PRO:C	2.60	0.42
37:CH:88:SER:O	37:CH:88:SER:OG	2.35	0.42
37:CH:100:LYS:NZ	37:CH:137:ASP:OD1	2.40	0.42
79:AA:85:TYR:CD1	79:AA:85:TYR:N	2.87	0.42
43:CI:139:PRO:HA	43:CI:237:ASN:OD1	2.19	0.42
77:s5:77:TYR:CE1	77:s5:83:ARG:HG2	2.55	0.42
77:s5:134:VAL:HA	77:s5:137:ILE:HD11	2.01	0.42
75:1:581:U:O4	80:1:3480:OHX:N1	2.52	0.42
75:1:851:C:H2'	75:1:852:U:H6	1.83	0.42
75:1:1354:G:C6	75:1:1358:C:H5'	2.55	0.42
75:1:1434:G:OP1	75:1:1437:C:N4	2.51	0.42
75:1:3294:A:H2'	75:1:3295:A:O4'	2.20	0.42
75:1:3329:U:H2'	75:1:3330:A:O4'	2.19	0.42
2:AB:3:SER:O	2:AB:6:THR:HG22	2.19	0.42
2:AB:75:LEU:HD11	2:AB:138:ILE:HD11	2.00	0.42
2:AB:101:VAL:HG12	27:t:155:GLU:O	2.19	0.42
9:CK:105:GLU:CB	9:CK:110:LYS:H	2.32	0.42
10:DK:9:ILE:HG23	2:DC:129:PHE:CE1	2.55	0.42
10:DK:58:ILE:HA	10:DK:61:ILE:HB	2.02	0.42
11:R:28:LEU:HG	11:R:30:LYS:HG3	1.99	0.42
12:s7:27:LEU:O	12:s7:34:LEU:HD13	2.20	0.42
15:CL:4:ARG:NH1	15:CL:99:ILE:HG13	2.34	0.42
18:s8:184:LEU:HD22	18:s8:188:GLU:HG2	2.01	0.42
21:CM:164:LYS:HZ1	21:CM:171:VAL:N	2.17	0.42
27:CN:35:ARG:NH1	75:AR:685:G:OP1	2.51	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CO:77:ARG:NH2	75:AR:562:C:OP2	2.49	0.42
35:V:96:PRO:HG2	35:V:99:ILE:HG12	2.01	0.42
35:V:117:VAL:HG12	35:V:118:VAL:H	1.83	0.42
36:c1:79:LYS:O	36:c1:79:LYS:HD3	2.20	0.42
36:c1:111:VAL:HA	36:c1:139:VAL:CG1	2.50	0.42
37:n:69:PHE:CZ	75:1:3267:A:H2'	2.54	0.42
39:CP:35:VAL:O	39:CP:64:VAL:HA	2.19	0.42
39:CP:140:LYS:HA	39:CP:143:ARG:HB2	2.00	0.42
41:W:34:ILE:HG22	61:B:63:ILE:HD13	2.00	0.42
43:o:224:ILE:HD13	57:0:39:SER:HB2	2.00	0.42
3:p:74:THR:HG23	10:AJ:47:ILE:HG22	2.02	0.42
11:c6:32:ASN:HD22	11:c6:68:ARG:HA	1.84	0.42
54:CT:101:VAL:HG12	54:CT:104:ARG:HH22	1.82	0.42
58:A:116:U:O2	58:A:333:A:H2	2.02	0.42
58:A:330:G:H2'	58:A:331:A:C8	2.54	0.42
58:A:645:C:H2'	58:A:646:C:H6	1.82	0.42
58:A:778:G:H3'	58:A:780:A:C2	2.55	0.42
58:A:832:U:H2'	58:A:833:U:O4'	2.19	0.42
58:A:872:G:O6	80:A:1967:OHX:N3	2.53	0.42
58:A:1729:C:H2'	58:A:1730:A:O4'	2.19	0.42
29:c9:111:ILE:HG22	29:c9:111:ILE:O	2.20	0.42
29:c9:130:ARG:HB3	58:sR:1358:G:H4'	2.02	0.42
44:w:18:ARG:O	44:w:22:VAL:HG23	2.19	0.42
70:E:5:ILE:C	70:E:5:ILE:HD12	2.44	0.42
70:E:23:GLU:CD	30:L:61:TRP:HE1	2.21	0.42
73:F:18:TRP:HE3	73:F:20:LEU:HD11	1.85	0.42
75:AR:296:A:N3	75:AR:299:G:O2'	2.51	0.42
75:AR:742:G:N7	80:AR:3634:OHX:N6	2.67	0.42
75:AR:1336:U:H2'	75:AR:1337:A:H8	1.84	0.42
75:AR:1716:U:HO2'	75:AR:1717:U:P	2.43	0.42
77:G:162:VAL:HG22	77:G:166:ARG:HB3	2.01	0.42
78:h:123:ILE:HG21	78:h:169:ILE:HG21	2.00	0.42
53:d4:20:ARG:HB3	53:d4:76:TYR:HD1	1.80	0.42
53:d4:89:TYR:CG	58:sR:525:A:H4'	2.54	0.42
57:0:104:GLU:O	57:0:108:GLN:HG2	2.19	0.42
79:DB:130:PHE:HD1	79:DB:131:PHE:CE1	2.37	0.42
58:sR:256:A:H2'	58:sR:257:A:O4'	2.19	0.42
58:sR:579:A:N1	70:s3:144:ALA:HA	2.34	0.42
58:sR:990:C:H2'	58:sR:991:G:O4'	2.19	0.42
58:sR:1363:U:H3'	58:sR:1364:G:C8	2.54	0.42
60:2:126:VAL:HG23	60:2:127:GLN:H	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AT:141:C:H2'	7:AT:142:C:C6	2.54	0.42
78:Rb:176:LYS:HD3	78:Rb:196:ASN:O	2.19	0.42
78:Rb:303:ALA:O	78:Rb:311:ARG:HG2	2.19	0.42
61:s0:70:PRO:HA	61:s0:71:GLU:C	2.45	0.42
61:s0:71:GLU:O	61:s0:96:THR:HG22	2.20	0.42
61:s0:179:ARG:O	61:s0:183:ARG:HG3	2.19	0.42
19:CE:106:TRP:HB2	19:CE:133:TYR:CE2	2.54	0.42
19:CE:256:HIS:HA	19:CE:257:PRO:C	2.45	0.42
19:CE:286:GLY:HA3	19:CE:321:PHE:CZ	2.54	0.42
25:CF:154:THR:OG1	25:CF:252:GLU:HB3	2.18	0.42
30:L:38:LYS:HD2	30:L:41:TYR:CZ	2.55	0.42
31:CG:178:ASN:HA	31:CG:183:TRP:CG	2.53	0.42
42:O:93:LYS:HA	42:O:150:VAL:HG11	2.02	0.42
39:v:120:TRP:CE3	75:1:269:G:H5'	2.54	0.42
79:AA:41:ALA:O	79:AA:43:VAL:HG13	2.19	0.42
77:s5:200:ASN:HB2	77:s5:205:SER:HB3	2.02	0.42
75:1:713:U:O2	75:1:754:G:H4'	2.20	0.42
75:1:824:C:H2'	75:1:825:U:C6	2.55	0.42
75:1:1244:A:C6	75:1:1248:C:H5'	2.55	0.42
75:1:1427:U:H2'	75:1:1428:A:C8	2.55	0.42
75:1:2169:G:O6	80:1:3781:OHX:N5	2.52	0.42
75:1:2407:C:H2'	75:1:2408:U:C6	2.55	0.42
2:AB:9:ARG:NH2	75:1:1430:U:H2'	2.35	0.42
3:CJ:69:LEU:HD11	39:CP:24:ARG:HG3	2.00	0.42
5:Q:24:LYS:HD2	5:Q:24:LYS:HA	1.87	0.42
5:Q:37:ALA:O	5:Q:42:ARG:HD3	2.19	0.42
5:Q:98:ASN:HB3	5:Q:120:SER:OG	2.19	0.42
7:4:124:G:H3'	7:4:125:U:C5'	2.50	0.42
15:CL:19:LYS:HE3	15:CL:26:VAL:HG22	2.02	0.42
19:k:30:LYS:NZ	75:1:3138:U:OP2	2.53	0.42
19:k:139:GLN:CD	19:k:141:GLY:HA2	2.44	0.42
19:k:260:VAL:HG11	19:k:266:ARG:HE	1.85	0.42
20:AE:8:VAL:HG21	20:AE:10:ARG:NH1	2.34	0.42
21:CM:37:LEU:HD22	21:CM:67:VAL:HG23	2.00	0.42
24:s9:72:GLU:OE1	58:sR:761:G:H4'	2.20	0.42
25:l:47:ARG:HD3	75:1:338:A:N7	2.35	0.42
25:l:104:LYS:NZ	75:1:800:G:O6	2.40	0.42
29:U:53:TRP:C	29:U:53:TRP:CE3	2.97	0.42
29:U:82:GLY:HA2	58:A:1525:A:OP1	2.20	0.42
30:c0:30:ALA:HA	30:c0:38:LYS:HG2	2.02	0.42
31:m:202:GLY:O	31:m:206:GLN:HB2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CO:3:THR:O	33:CO:3:THR:HG23	2.20	0.42
39:CP:33:LYS:HE3	39:CP:33:LYS:HB2	1.89	0.42
41:W:30:ALA:HA	61:B:137:SER:O	2.18	0.42
41:W:62:ARG:HH12	58:A:1039:A:H5''	1.84	0.42
42:c3:98:VAL:HG13	42:c3:115:LEU:HD13	2.00	0.42
10:AJ:86:LYS:HA	10:AJ:86:LYS:HD2	1.83	0.42
48:CR:71:ALA:O	48:CR:74:LYS:HG3	2.19	0.42
48:CR:111:LYS:O	48:CR:152:GLU:HA	2.19	0.42
9:q:1:MET:HE1	57:0:139:TYR:N	2.34	0.42
16:AK:52:LYS:HE3	75:1:364:G:OP2	2.20	0.42
51:CS:52:LEU:HD23	51:CS:52:LEU:HA	1.80	0.42
53:Z:101:GLU:HG2	53:Z:102:LYS:H	1.84	0.42
11:c6:102:LYS:HD2	11:c6:102:LYS:C	2.44	0.42
54:CT:91:SER:O	54:CT:94:VAL:HG22	2.19	0.42
21:s:81:GLU:HA	21:s:84:LEU:HB2	2.02	0.42
58:A:127:G:C8	6:H:198:ALA:HB1	2.54	0.42
58:A:386:G:H3'	80:A:1964:OHX:N4	2.35	0.42
58:A:852:C:N3	58:A:853:G:C5	2.88	0.42
58:A:1165:G:C6	58:A:1166:A:C6	3.07	0.42
58:A:1451:C:H2'	58:A:1452:U:H6	1.84	0.42
58:A:1568:C:H1'	58:A:1569:A:OP2	2.18	0.42
58:A:1572:G:H2'	58:A:1572:G:N3	2.35	0.42
29:c9:21:PHE:CD1	29:c9:21:PHE:C	2.98	0.42
33:u:116:GLU:HA	33:u:119:GLN:HG3	2.01	0.42
44:w:78:ARG:HE	44:w:78:ARG:HB3	1.65	0.42
44:w:139:GLY:O	44:w:143:THR:HG23	2.19	0.42
44:w:159:LYS:O	44:w:162:VAL:HG22	2.18	0.42
45:AP:52:GLY:HA2	75:1:2422:C:O5'	2.18	0.42
45:AP:60:LYS:O	45:AP:60:LYS:HG3	2.20	0.42
70:E:40:ARG:O	70:E:42:THR:HG22	2.19	0.42
70:E:54:ARG:HA	70:E:54:ARG:HD2	1.90	0.42
70:E:150:MET:HB2	70:E:152:PHE:CE1	2.53	0.42
51:y:178:ARG:HD3	51:y:178:ARG:HA	1.88	0.42
73:F:31:PRO:HD2	73:F:38:LEU:CD1	2.50	0.42
75:AR:172:G:H5'	75:AR:173:G:OP2	2.19	0.42
75:AR:391:A:H2'	75:AR:392:G:O4'	2.19	0.42
75:AR:409:A:N6	7:AT:15:G:H1'	2.34	0.42
75:AR:889:U:OP1	80:AR:4139:OHX:N2	2.52	0.42
75:AR:1305:U:N1	19:CE:257:PRO:HG3	2.34	0.42
75:AR:1306:G:O2'	75:AR:1307:G:H5''	2.19	0.42
75:AR:1614:C:H2'	75:AR:1615:C:H6	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:2709:C:H2'	75:AR:2710:C:C6	2.54	0.42
75:AR:2943:G:H8	75:AR:2943:G:O5'	2.02	0.42
76:DA:23:PRO:HB2	7:AT:91:C:O2'	2.18	0.42
78:h:134:TRP:HE3	78:h:138:GLY:O	2.03	0.42
1:AS:55:A:H2'	1:AS:56:A:O4'	2.19	0.42
1:AS:97:A:H2'	1:AS:98:C:C6	2.54	0.42
6:H:35:GLU:HA	6:H:50:PHE:O	2.20	0.42
58:sR:151:G:N2	58:sR:164:A:C4	2.88	0.42
58:sR:158:U:O2'	58:sR:159:U:H3'	2.19	0.42
58:sR:886:U:H2'	58:sR:887:A:C8	2.55	0.42
58:sR:1142:A:H5''	59:d6:2:PRO:HB3	2.02	0.42
78:Rb:32:LEU:CD2	78:Rb:73:LEU:HD21	2.49	0.42
78:Rb:112:SER:O	78:Rb:113:VAL:HG13	2.19	0.42
78:Rb:239:GLU:HG2	78:Rb:240:VAL:N	2.35	0.42
24:K:49:LEU:O	24:K:53:ARG:HG3	2.20	0.42
24:K:62:ARG:O	24:K:69:ARG:NH1	2.53	0.42
24:K:143:ILE:HG22	24:K:145:SER:H	1.85	0.42
25:CF:135:VAL:HA	25:CF:245:GLY:O	2.19	0.42
25:CF:205:PRO:HD2	25:CF:225:VAL:HG22	2.02	0.42
72:8:107:VAL:HA	72:8:126:LEU:HA	2.01	0.42
70:s3:98:ALA:HB1	70:s3:186:VAL:HG13	2.02	0.42
76:9:11:ASP:OD1	76:9:13:ARG:N	2.52	0.42
76:9:36:SER:HB3	76:9:106:ILE:O	2.19	0.42
37:CH:68:PRO:HG2	37:CH:71:VAL:HG21	2.01	0.42
77:s5:142:PRO:O	77:s5:167:ARG:HG2	2.19	0.42
77:s5:186:ASN:OD1	77:s5:188:LYS:HB2	2.19	0.42
75:1:305:U:C5	75:1:2776:C:H1'	2.55	0.42
75:1:1299:U:H2'	75:1:1300:G:O4'	2.19	0.42
75:1:1597:C:H2'	75:1:1598:G:C8	2.52	0.42
75:1:2636:A:H5''	75:1:2637:A:H5'	2.02	0.42
1:3:77:G:N7	57:0:52:LYS:HG3	2.34	0.42
4:DJ:63:ARG:NE	7:AT:97:A:O5'	2.52	0.42
7:4:77:A:H2'	7:4:78:G:O4'	2.19	0.42
7:4:108:C:H2'	7:4:109:A:O4'	2.20	0.42
9:CK:61:GLY:O	9:CK:65:VAL:HG23	2.19	0.42
10:DK:9:ILE:HD12	10:DK:10:GLY:N	2.34	0.42
12:s7:27:LEU:HA	12:s7:29:ASN:HD21	1.85	0.42
12:s7:114:ARG:NH1	58:sR:638:U:C2	2.87	0.42
15:CL:63:GLU:HB3	75:AR:2853:A:O5'	2.19	0.42
17:S:110:VAL:HG12	17:S:114:GLY:N	2.34	0.42
19:k:194:TRP:CD1	19:k:194:TRP:C	2.97	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CM:157:GLU:O	21:CM:160:VAL:HG12	2.20	0.42
25:l:169:LEU:HD23	25:l:169:LEU:HA	1.82	0.42
26:AF:63:THR:O	26:AF:66:LEU:HB2	2.20	0.42
28:DN:5:LYS:NZ	75:AR:1493:G:N7	2.66	0.42
29:U:14:PHE:HE1	29:U:135:ILE:HB	1.85	0.42
29:U:54:PHE:CE1	29:U:104:VAL:HB	2.54	0.42
31:m:152:ARG:O	31:m:154:THR:HG23	2.18	0.42
33:CO:77:ARG:HG2	75:AR:525:C:P	2.59	0.42
41:W:17:CYS:HB2	41:W:56:SER:N	2.34	0.42
42:c3:36:GLN:HA	42:c3:39:LYS:HB3	2.01	0.42
42:c3:47:PRO:HG3	42:c3:72:MET:CE	2.49	0.42
4:AI:71:LYS:HD3	4:AI:72:GLY:H	1.84	0.42
4:AI:85:THR:HG23	4:AI:88:LEU:H	1.83	0.42
3:p:61:GLN:HA	3:p:64:ILE:CG1	2.49	0.42
9:q:132:VAL:HG12	9:q:154:VAL:HG23	2.02	0.42
52:p0:97:LYS:HE3	52:p0:97:LYS:HB3	1.83	0.42
11:c6:129:PHE:O	11:c6:137:ARG:NH2	2.52	0.42
11:c6:140:LYS:HD2	11:c6:140:LYS:HA	1.86	0.42
15:r:20:SER:O	15:r:24:ARG:HB3	2.20	0.42
15:r:188:GLY:O	15:r:216:TYR:HB2	2.20	0.42
21:s:23:VAL:O	21:s:25:GLU:N	2.42	0.42
21:s:83:GLY:HA2	21:s:86:VAL:HG23	2.01	0.42
58:A:450:U:H2'	58:A:451:A:C8	2.54	0.42
58:A:856:A:C8	12:I:64:VAL:HG21	2.55	0.42
58:A:1025:A:H2'	58:A:1027:A:O5'	2.19	0.42
58:A:1152:A:H2'	58:A:1153:G:H8	1.84	0.42
58:A:1497:U:H2'	58:A:1498:G:O4'	2.20	0.42
80:A:1933:OHX:N6	80:A:2110:OHX:N5	2.67	0.42
59:b:68:TYR:HE2	64:C:108:ASP:HA	1.84	0.42
33:u:84:LYS:NZ	75:1:560:G:OP1	2.52	0.42
33:u:109:ARG:HD3	44:w:199:TYR:CZ	2.55	0.42
48:x:92:GLN:HA	48:x:95:LEU:HB2	2.01	0.42
46:d2:77:PRO:HD2	46:d2:79:PHE:HE1	1.85	0.42
73:F:158:ASP:CG	73:F:174:LYS:HE2	2.45	0.42
74:g:89:LYS:HG2	74:g:90:LYS:H	1.83	0.42
50:d3:68:ILE:HB	58:sR:567:A:OP1	2.19	0.42
54:z:159:ALA:HA	54:z:162:ARG:HG2	2.00	0.42
75:AR:604:G:N7	80:AR:4111:OHX:N2	2.67	0.42
75:AR:962:A:N1	75:AR:2814:G:O2'	2.49	0.42
75:AR:1336:U:H2'	75:AR:1337:A:C8	2.55	0.42
75:AR:3082:C:OP2	80:AR:4192:OHX:N4	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:G:135:ASP:OD1	77:G:135:ASP:N	2.53	0.42
77:G:192:GLU:O	77:G:196:GLU:N	2.44	0.42
78:h:33:LEU:O	78:h:44:SER:HA	2.19	0.42
78:h:183:LEU:HD22	78:h:186:PHE:CE1	2.54	0.42
79:DB:68:ILE:O	79:DB:115:LYS:HE2	2.20	0.42
6:H:30:LYS:HD2	6:H:30:LYS:HA	1.83	0.42
58:sR:165:G:H2'	58:sR:166:C:H5''	2.01	0.42
58:sR:210:A:H2'	58:sR:211:U:O4'	2.19	0.42
58:sR:333:A:C6	58:sR:334:G:C6	3.08	0.42
58:sR:350:U:H5''	58:sR:352:A:H5'	2.01	0.42
58:sR:838:G:C6	58:sR:839:U:C4	3.08	0.42
58:sR:1459:C:OP2	58:sR:1459:C:H6	2.01	0.42
78:Rb:73:LEU:HD12	78:Rb:73:LEU:HA	1.81	0.42
61:s0:11:PRO:O	61:s0:15:GLN:HG2	2.20	0.42
19:CE:89:VAL:HA	19:CE:160:VAL:HA	2.01	0.42
19:CE:114:VAL:O	19:CE:117:ARG:HB3	2.19	0.42
64:s1:28:GLU:HB3	64:s1:30:PHE:HE1	1.85	0.42
64:s1:64:ARG:H	64:s1:88:VAL:HG12	1.84	0.42
67:s2:243:TYR:HB3	67:s2:246:GLU:HB2	2.01	0.42
68:d9:31:ILE:HG22	68:d9:38:ILE:O	2.19	0.42
72:8:33:ARG:HH11	72:8:33:ARG:HG3	1.84	0.42
72:8:57:LEU:HD12	72:8:61:LYS:HG2	2.00	0.42
31:CG:108:ARG:HE	31:CG:108:ARG:HB2	1.66	0.42
32:DH:12:LYS:HD3	32:DH:12:LYS:HA	1.75	0.42
42:O:55:ARG:HH21	42:O:56:ASP:CG	2.27	0.42
73:s4:100:ARG:HH12	73:s4:236:ILE:HB	1.85	0.42
73:s4:123:LEU:HD11	73:s4:235:TYR:HB2	2.01	0.42
39:v:98:LEU:HA	39:v:101:THR:CG2	2.48	0.42
39:v:174:ILE:HG21	75:1:63:A:H5''	2.02	0.42
75:1:939:U:O2'	75:1:2402:A:N1	2.44	0.42
75:1:1384:U:H2'	75:1:1385:C:C6	2.54	0.42
75:1:1483:G:C8	75:1:1485:G:C8	3.06	0.42
75:1:3350:C:O2'	75:1:3351:U:OP1	2.38	0.42
1:3:97:A:H2'	1:3:98:C:H6	1.84	0.42
2:AB:29:PRO:O	75:1:40:A:N7	2.53	0.42
2:AB:129:PHE:HE1	10:AJ:9:ILE:CG2	2.31	0.42
5:Q:54:ALA:C	5:Q:56:PHE:H	2.26	0.42
7:4:38:U:O2'	4:AI:89:ARG:NH2	2.52	0.42
9:CK:44:THR:OG1	75:AR:3186:A:N3	2.49	0.42
10:DK:20:MET:CE	27:CN:106:GLN:HA	2.50	0.42
11:R:31:VAL:N	11:R:34:SER:O	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:s7:116:ARG:HG2	58:sR:856:A:N6	2.35	0.42
13:j:190:ARG:HB3	13:j:191:LEU:HD12	2.02	0.42
14:AD:65:THR:HG22	14:AD:66:LYS:O	2.19	0.42
14:AD:92:ILE:O	14:AD:92:ILE:HD12	2.19	0.42
19:k:10:ARG:HG2	19:k:11:HIS:N	2.29	0.42
20:AE:10:ARG:HH11	20:AE:108:VAL:HG22	1.84	0.42
24:s9:143:ILE:HD13	58:sR:767:U:C5	2.51	0.42
25:l:22:LEU:HA	25:l:23:PRO:HD3	1.80	0.42
26:AF:67:SER:O	26:AF:68:PRO:C	2.62	0.42
27:CN:115:ARG:NH2	27:CN:145:PHE:O	2.50	0.42
31:m:65:ILE:HG21	31:m:72:ASP:HB3	2.00	0.42
31:m:231:ILE:HD13	31:m:231:ILE:HA	1.96	0.42
33:CO:77:ARG:HG2	75:AR:525:C:OP1	2.19	0.42
36:c1:67:ARG:NH2	36:c1:129:ARG:H	2.17	0.42
41:W:87:ARG:HA	62:c:11:THR:HG21	2.02	0.42
45:DQ:68:VAL:HG13	45:DQ:85:LEU:HB2	2.00	0.42
45:DQ:103:ALA:O	45:DQ:105:GLN:OE1	2.37	0.42
10:AJ:82:ARG:HH11	75:l:295:A:H1'	1.83	0.42
5:c5:25:LEU:HD12	5:c5:26:LEU:N	2.35	0.42
5:c5:37:ALA:HB1	5:c5:41:VAL:HG21	2.01	0.42
9:q:92:TYR:CD1	9:q:179:ILE:HG12	2.54	0.42
9:q:94:TYR:CZ	9:q:98:PRO:HA	2.55	0.42
16:AK:52:LYS:O	16:AK:56:ARG:HG3	2.20	0.42
51:CS:51:ALA:CB	51:CS:84:VAL:HG21	2.39	0.42
52:p0:27:VAL:HG12	52:p0:28:VAL:N	2.33	0.42
15:r:19:LYS:HG3	15:r:26:VAL:HB	2.00	0.42
54:CT:167:ARG:O	54:CT:171:ASP:HB2	2.20	0.42
17:c7:19:ARG:HH11	70:s3:211:PRO:HG2	1.84	0.42
21:s:91:LEU:HD12	21:s:163:PHE:CE2	2.55	0.42
58:A:753:A:H5'	73:F:221:ARG:HD2	2.02	0.42
58:A:1257:U:O2'	30:L:3:MET:N	2.46	0.42
58:A:1504:G:C6	58:A:1505:A:C6	3.07	0.42
23:c8:86:LEU:HD23	23:c8:99:HIS:HB2	2.02	0.42
60:CV:143:THR:HG23	43:CI:73:GLY:O	2.19	0.42
61:B:173:ILE:O	61:B:177:LEU:N	2.20	0.42
61:B:199:PRO:O	61:B:203:PHE:CE2	2.73	0.42
62:c:50:ALA:O	62:c:51:GLN:HG2	2.20	0.42
63:CW:53:ALA:HA	63:CW:68:THR:CG2	2.50	0.42
64:C:135:LEU:HD23	64:C:136:ARG:C	2.45	0.42
64:C:146:GLN:O	64:C:149:GLN:HB3	2.20	0.42
48:x:181:ARG:NH2	75:l:3268:A:OP1	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:F:11:ARG:HB2	73:F:12:LEU:HD12	2.01	0.42
73:F:247:SER:O	73:F:251:GLU:HB2	2.20	0.42
75:AR:947:G:H5''	26:DG:55:ILE:HB	2.00	0.42
75:AR:1606:U:O4'	38:DI:8:ARG:NH2	2.52	0.42
77:G:76:ARG:CD	77:G:76:ARG:H	2.32	0.42
78:h:194:GLY:N	78:h:223:TRP:HH2	2.17	0.42
78:h:307:ASP:CG	78:h:309:VAL:HG22	2.45	0.42
6:H:68:LEU:HB3	6:H:101:ILE:HD11	2.02	0.42
6:H:214:LYS:HD2	6:H:214:LYS:C	2.44	0.42
58:sR:1235:C:H2'	58:sR:1236:A:C8	2.50	0.42
58:sR:1320:U:OP2	61:s0:101:ARG:NH1	2.52	0.42
58:sR:1391:A:H2'	58:sR:1392:U:C6	2.55	0.42
58:sR:1512:G:H2'	58:sR:1513:G:C8	2.55	0.42
12:I:56:LYS:HD2	12:I:88:ARG:NH2	2.34	0.42
61:s0:29:VAL:HG12	61:s0:149:LEU:HD23	2.02	0.42
62:d7:36:LYS:HG3	62:d7:36:LYS:HZ3	1.30	0.42
62:d7:75:GLU:HG2	62:d7:76:GLY:H	1.83	0.42
66:6:114:ILE:HG13	66:6:132:ASN:O	2.20	0.42
64:s1:195:LYS:N	64:s1:195:LYS:HD3	2.35	0.42
25:CF:300:ARG:HB3	25:CF:301:PRO:HD2	2.02	0.42
72:8:33:ARG:HG3	72:8:33:ARG:NH1	2.34	0.42
72:8:92:LYS:HB3	72:8:110:VAL:HG13	2.02	0.42
26:DG:16:LYS:HA	26:DG:16:LYS:HD2	1.94	0.42
71:e0:14:VAL:O	71:e0:18:THR:OG1	2.35	0.42
73:s4:32:SER:OG	73:s4:81:THR:HG23	2.20	0.42
79:AA:12:VAL:HG13	79:AA:81:LEU:HB2	2.00	0.42
79:AA:88:ASP:HB3	79:AA:121:ARG:HH12	1.84	0.42
47:P:117:ASP:OD1	47:P:119:THR:N	2.43	0.42
77:s5:143:ARG:HG2	77:s5:167:ARG:HH12	1.84	0.42
75:1:709:A:H1'	75:1:2787:G:O2'	2.20	0.42
75:1:1093:A:OP1	75:1:1093:A:H4'	2.20	0.42
75:1:1230:G:H2'	75:1:1231:A:H8	1.85	0.42
75:1:1235:U:H4'	75:1:1236:G:H5'	2.00	0.42
75:1:1580:A:H1'	75:1:1581:C:C5	2.54	0.42
75:1:1638:A:N3	75:1:1709:C:H1'	2.35	0.42
75:1:1861:G:N7	80:1:4081:OHX:N3	2.68	0.42
75:1:2761:G:N1	75:1:2795:U:H3'	2.35	0.42
1:3:49:G:H4'	1:3:50:U:C5'	2.50	0.42
5:Q:97:TYR:HA	5:Q:102:PHE:CD1	2.55	0.42
6:s6:133:LEU:O	58:sR:167:U:H5'	2.20	0.42
6:s6:137:ARG:O	6:s6:141:ILE:HD12	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:4:31:G:OP1	27:t:34:SER:HB3	2.20	0.42
10:DK:4:LYS:O	10:DK:16:LYS:HG2	2.19	0.42
13:j:30:ARG:NH2	13:j:33:ASP:OD1	2.53	0.42
13:j:41:ILE:HG23	13:j:90:ALA:HB3	2.02	0.42
13:j:193:ARG:NH1	75:1:2181:C:H5''	2.35	0.42
15:CL:86:HIS:HB3	15:CL:139:ARG:CG	2.48	0.42
16:DL:10:LYS:NZ	75:AR:900:G:OP1	2.53	0.42
16:DL:28:HIS:O	16:DL:32:LYS:N	2.52	0.42
18:s8:43:ILE:HG13	18:s8:57:ALA:HA	2.01	0.42
18:s8:86:SER:HB3	58:sR:328:A:N3	2.35	0.42
19:k:259:HIS:HB3	75:1:2987:A:O2'	2.20	0.42
19:k:306:THR:HG22	19:k:317:ILE:H	1.85	0.42
22:DM:14:LEU:HD23	22:DM:14:LEU:HA	1.77	0.42
24:s9:158:PHE:HE2	24:s9:164:PHE:CD2	2.29	0.42
25:l:180:LYS:HA	75:1:1386:A:N3	2.35	0.42
26:AF:67:SER:HB2	26:AF:68:PRO:HD2	2.02	0.42
27:CN:167:PHE:CD2	2:DC:132:LYS:HB2	2.54	0.42
30:c0:29:GLN:HB2	30:c0:39:ASN:HB3	2.01	0.42
30:c0:47:GLN:O	58:sR:1219:A:O2'	2.37	0.42
31:m:41:LYS:HD3	31:m:41:LYS:HA	1.58	0.42
31:m:218:ARG:O	31:m:222:LEU:HB2	2.20	0.42
39:CP:74:PRO:HA	75:AR:2166:A:O4'	2.20	0.42
41:W:21:ASN:HB2	46:X:23:ARG:HH12	1.85	0.42
42:c3:114:ARG:HG2	58:sR:952:A:O2'	2.20	0.42
4:AI:68:GLN:HB3	76:DA:42:GLN:O	2.19	0.42
44:CQ:8:VAL:HG12	44:CQ:34:VAL:CG2	2.48	0.42
44:CQ:35:VAL:HG13	44:CQ:104:VAL:HG13	2.02	0.42
45:DQ:11:TYR:CA	45:DQ:20:HIS:HD2	2.32	0.42
3:p:54:GLU:OE1	80:1:3781:OHX:N2	2.53	0.42
3:p:130:TYR:CE1	3:p:202:GLU:HB3	2.55	0.42
3:p:143:ILE:HD11	3:p:151:VAL:HG11	2.00	0.42
49:DR:55:TRP:O	49:DR:63:THR:HA	2.19	0.42
50:Y:8:GLY:HA3	58:A:633:U:H5'	2.01	0.42
50:Y:90:ASP:OD2	71:f:14:VAL:HG22	2.20	0.42
50:Y:133:LEU:HD23	50:Y:134:ALA:N	2.34	0.42
5:c5:44:ARG:HG3	5:c5:44:ARG:HH11	1.84	0.42
5:c5:95:GLY:HA2	5:c5:103:ASN:O	2.19	0.42
51:CS:57:ILE:HG23	51:CS:147:ARG:HD3	2.02	0.42
52:p0:38:MET:HA	52:p0:41:VAL:HG13	2.02	0.42
53:Z:17:LEU:HD23	73:F:69:HIS:ND1	2.35	0.42
11:c6:42:GLU:HB3	11:c6:43:ILE:H	1.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:c6:67:VAL:HG11	11:c6:81:ILE:HD13	2.00	0.42
11:c6:93:HIS:HB3	11:c6:102:LYS:HB2	2.02	0.42
54:CT:164:LEU:HA	54:CT:167:ARG:HD3	2.02	0.42
55:sM:23:LYS:HG3	55:sM:24:GLU:N	2.34	0.42
58:A:102:U:O4	58:A:360:A:H2'	2.20	0.42
58:A:234:G:H3'	58:A:235:G:C4'	2.50	0.42
58:A:329:G:H2'	58:A:330:G:H8	1.85	0.42
58:A:775:G:H2'	58:A:776:G:C8	2.55	0.42
58:A:816:G:O6	54:z:170:ARG:NH1	2.53	0.42
58:A:1096:C:O2'	58:A:1097:U:OP2	2.30	0.42
58:A:1253:U:H4'	74:g:143:LYS:N	2.33	0.42
58:A:1546:G:H2'	58:A:1547:A:C8	2.55	0.42
58:A:1623:C:H2'	58:A:1624:C:C6	2.54	0.42
59:b:22:ARG:HH22	47:P:127:ARG:HG2	1.85	0.42
27:t:137:GLN:O	27:t:137:GLN:HG3	2.19	0.42
34:AN:126:LYS:HE3	34:AN:126:LYS:HB3	1.91	0.42
60:CV:38:ASP:HB3	60:CV:102:ARG:HH22	1.84	0.42
61:B:56:LYS:N	61:B:56:LYS:HD2	2.35	0.42
29:c9:77:ASN:HB3	29:c9:96:ALA:H	1.85	0.42
63:CW:38:ILE:HG13	63:CW:39:ASP:N	2.35	0.42
66:CX:93:LEU:HD23	66:CX:93:LEU:H	1.84	0.42
67:D:56:ILE:O	67:D:60:SER:N	2.52	0.42
68:e:33:LYS:O	68:e:36:LEU:HB2	2.19	0.42
70:E:17:PHE:CD1	70:E:17:PHE:C	2.98	0.42
51:y:8:LYS:HD2	75:1:950:G:OP1	2.20	0.42
55:i:43:ASP:OD2	55:i:46:LYS:NZ	2.51	0.42
74:g:141:CYS:HB3	74:g:144:CYS:HB2	2.01	0.42
54:z:43:LYS:NZ	75:1:1765:U:H6	2.18	0.42
75:AR:170:G:O6	75:AR:249:U:N3	2.53	0.42
75:AR:224:C:H2'	75:AR:225:C:C6	2.52	0.42
75:AR:304:G:H3'	75:AR:304:G:OP2	2.20	0.42
75:AR:306:A:C2	75:AR:2784:G:H1'	2.55	0.42
75:AR:712:G:H2'	75:AR:713:U:C6	2.54	0.42
75:AR:1404:G:H5''	26:DG:64:LYS:HG2	2.01	0.42
75:AR:1780:G:O6	80:AR:3573:OHX:N2	2.52	0.42
75:AR:2218:G:H2'	75:AR:2219:A:C8	2.55	0.42
75:AR:2751:G:C6	80:AR:3542:OHX:N1	2.88	0.42
75:AR:3096:C:H2'	75:AR:3097:C:C6	2.55	0.42
77:G:148:ARG:HD2	77:G:148:ARG:HA	1.81	0.42
78:h:36:ALA:HB2	78:h:71:CYS:SG	2.60	0.42
78:h:80:ALA:HB3	78:h:92:TRP:HB2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:0:2:ALA:HB3	57:0:32:SER:CB	2.50	0.42
6:H:137:ARG:O	6:H:141:ILE:HD12	2.19	0.42
58:sR:926:A:H2'	58:sR:927:C:C6	2.54	0.42
58:sR:1048:G:O3'	62:d7:69:GLY:HA3	2.20	0.42
58:sR:1324:G:H8	58:sR:1324:G:O5'	2.02	0.42
12:I:173:TYR:N	12:I:174:ASN:OD1	2.53	0.42
78:Rb:177:MET:HB3	78:Rb:179:LYS:NZ	2.34	0.42
63:5:41:ILE:CD1	63:5:79:LEU:HD13	2.50	0.42
8:DD:14:ARG:NH2	8:DD:18:ARG:HD3	2.34	0.42
18:J:84:HIS:CE1	18:J:86:SER:HB2	2.55	0.42
61:s0:176:LEU:O	61:s0:180:GLU:HG2	2.20	0.42
14:DE:41:LEU:HD12	14:DE:42:ILE:N	2.35	0.42
24:K:15:PRO:HD3	24:K:43:TYR:CD1	2.55	0.42
24:K:102:GLU:H	24:K:102:GLU:CD	2.21	0.42
69:7:9:SER:HB2	69:7:51:TRP:CZ3	2.55	0.42
67:s2:243:TYR:CD1	67:s2:243:TYR:N	2.88	0.42
68:d9:21:CYS:HB3	68:d9:26:SER:N	2.35	0.42
73:s4:128:LYS:HB3	73:s4:140:VAL:CG1	2.50	0.42
77:s5:200:ASN:C	77:s5:205:SER:HB3	2.45	0.42
75:1:259:C:H2'	75:1:260:C:C6	2.55	0.42
75:1:856:G:C6	75:1:857:G:N1	2.88	0.42
75:1:975:C:H2'	75:1:976:U:C6	2.53	0.42
75:1:2258:U:H2'	75:1:2259:A:O4'	2.20	0.42
75:1:3016:A:OP2	80:1:4091:OHX:N5	2.52	0.42
75:1:3131:U:H2'	75:1:3132:C:H6	1.85	0.42
1:3:79:A:OP2	80:3:221:OHX:N5	2.53	0.42
2:AB:58:MET:HE2	2:AB:58:MET:HB3	1.63	0.42
4:DJ:54:VAL:HA	4:DJ:57:VAL:HG12	2.01	0.42
12:s7:49:ILE:HG12	12:s7:175:LYS:HD2	2.02	0.42
17:S:52:GLY:HA3	58:A:1389:C:O2'	2.20	0.42
18:s8:8:ARG:NH2	58:sR:106:U:OP1	2.53	0.42
19:k:128:LYS:NZ	75:1:3151:U:OP1	2.51	0.42
22:DM:51:LEU:N	75:AR:1613:A:OP1	2.53	0.42
24:s9:66:ASP:OD1	24:s9:68:LYS:N	2.48	0.42
27:CN:49:ARG:HA	27:CN:50:PRO:HD3	1.86	0.42
30:c0:24:LYS:HA	30:c0:63:TYR:CE2	2.55	0.42
31:m:52:VAL:HG23	31:m:54:ARG:CZ	2.49	0.42
31:m:261:THR:N	31:m:264:GLN:OE1	2.52	0.42
37:n:93:VAL:HG22	37:n:96:VAL:CG1	2.49	0.42
38:AH:102:LYS:HA	38:AH:105:VAL:HG12	2.02	0.42
39:CP:60:VAL:HG21	7:AT:142:C:H4'	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DQ:45:ARG:O	45:DQ:46:LYS:C	2.61	0.42
45:DQ:89:LYS:HD2	75:AR:2653:C:P	2.60	0.42
46:X:52:TYR:CD1	46:X:52:TYR:C	2.98	0.42
47:c4:60:ALA:HB3	47:c4:100:ALA:HB3	2.02	0.42
5:c5:17:TYR:HE2	5:c5:33:PHE:HE1	1.67	0.42
5:c5:40:ARG:NH2	58:sR:1552:U:O4	2.52	0.42
11:c6:49:TYR:O	11:c6:53:LEU:HD23	2.20	0.42
11:c6:101:SER:O	11:c6:105:LEU:HD22	2.19	0.42
55:sM:33:LYS:HE2	75:AR:2667:A:H5''	2.02	0.42
21:s:15:GLU:HG2	21:s:16:LYS:N	2.34	0.42
58:A:36:C:H2'	58:A:37:U:O4'	2.20	0.42
58:A:93:A:H4'	58:A:94:U:OP2	2.20	0.42
58:A:142:G:H2'	58:A:142:G:N3	2.35	0.42
58:A:280:U:H4'	58:A:281:G:O5'	2.19	0.42
58:A:1047:G:H2'	58:A:1048:G:O4'	2.20	0.42
58:A:1114:G:N2	58:A:1115:U:O4	2.41	0.42
58:A:1160:A:H2'	58:A:1161:C:H6	1.84	0.42
58:A:1183:A:N6	58:A:1184:A:N1	2.68	0.42
58:A:1207:C:H42	58:A:1456:C:H5	1.68	0.42
58:A:1244:A:HO2'	58:A:1245:G:P	2.43	0.42
58:A:1350:U:H2'	58:A:1351:G:C8	2.55	0.42
58:A:1486:G:N1	58:A:1522:U:H5	2.17	0.42
59:b:74:CYS:O	59:b:75:VAL:C	2.63	0.42
64:C:205:PHE:O	64:C:207:LEU:HG	2.19	0.42
35:d0:61:LYS:N	35:d0:86:ILE:O	2.52	0.42
35:d0:76:SER:OG	58:sR:1193:A:H5'	2.20	0.42
66:CX:10:LYS:O	75:AR:3039:C:O2'	2.38	0.42
67:D:111:VAL:HG12	67:D:139:ILE:HD11	2.02	0.42
68:e:19:ARG:HD3	68:e:32:ARG:CD	2.46	0.42
70:E:34:TYR:HE1	70:E:36:GLY:O	2.03	0.42
70:E:136:VAL:HG13	70:E:152:PHE:HB2	2.02	0.42
50:d3:43:PHE:CE1	50:d3:49:ALA:HB3	2.55	0.42
54:z:38:ARG:NH1	75:1:1603:A:OP1	2.53	0.42
75:AR:1063:G:OP2	75:AR:1097:G:H3'	2.20	0.42
75:AR:1565:G:H2'	75:AR:1566:A:H8	1.83	0.42
75:AR:1659:U:H2'	75:AR:1660:C:C6	2.55	0.42
75:AR:1675:G:H2'	75:AR:1676:A:C8	2.55	0.42
75:AR:1733:G:H2'	75:AR:1734:G:H8	1.85	0.42
75:AR:1879:A:H4'	75:AR:1880:U:OP2	2.20	0.42
75:AR:1930:A:H5''	80:AR:3987:OHX:N2	2.34	0.42
77:G:29:ILE:O	77:G:30:PRO:C	2.62	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:h:213:SER:O	78:h:220:ILE:HA	2.20	0.42
53:d4:51:GLU:O	53:d4:53:ASP:N	2.53	0.42
57:0:92:LYS:HE3	57:0:109:ASP:OD2	2.19	0.42
58:sR:73:U:OP1	58:sR:73:U:H4'	2.20	0.42
58:sR:156:A:H2'	58:sR:157:A:O4'	2.20	0.42
58:sR:272:U:H6	58:sR:272:U:H2'	1.67	0.42
58:sR:298:C:H5''	73:s4:38:LEU:HB2	2.02	0.42
58:sR:496:G:N3	58:sR:496:G:H2'	2.35	0.42
58:sR:793:A:H3'	58:sR:794:U:H5'	2.02	0.42
58:sR:1142:A:H2'	58:sR:1143:A:O4'	2.20	0.42
78:Rb:167:VAL:O	78:Rb:183:LEU:HB2	2.20	0.42
78:Rb:210:LEU:HA	78:Rb:223:TRP:O	2.19	0.42
14:DE:100:ILE:HG13	14:DE:101:LEU:H	1.84	0.42
14:DE:100:ILE:HG13	14:DE:101:LEU:N	2.35	0.42
24:K:93:LEU:O	24:K:96:VAL:HG12	2.19	0.42
65:d8:38:ARG:HE	65:d8:40:ILE:HD12	1.85	0.42
65:d8:38:ARG:HE	65:d8:40:ILE:CD1	2.33	0.42
30:L:54:TYR:C	30:L:69:THR:HG22	2.45	0.42
31:CG:23:ARG:HA	31:CG:23:ARG:HD2	1.75	0.42
70:s3:51:ARG:HA	70:s3:89:GLU:O	2.20	0.42
71:e0:62:VAL:O	71:e0:63:GLN:HB2	2.20	0.42
42:O:63:ALA:O	42:O:65:VAL:N	2.53	0.42
39:v:13:LYS:O	39:v:16:SER:OG	2.27	0.42
75:1:718:G:O6	75:1:751:A:H1'	2.20	0.42
75:1:1724:U:H4'	75:1:1725:C:OP1	2.19	0.42
1:3:47:C:H2'	1:3:48:U:C6	2.55	0.41
3:CJ:116:VAL:HG13	3:CJ:117:ALA:N	2.35	0.41
3:CJ:221:ASN:HB2	3:CJ:222:PHE:CD1	2.55	0.41
7:4:123:G:O6	80:4:207:OHX:N6	2.53	0.41
11:R:30:LYS:NZ	58:A:1365:C:O2'	2.48	0.41
11:R:43:ILE:HD11	77:G:112:ARG:CZ	2.50	0.41
11:R:99:GLU:HB2	78:h:58:VAL:C	2.45	0.41
15:CL:116:ARG:HD2	75:AR:2644:C:O2	2.20	0.41
19:k:53:MET:HE2	19:k:77:THR:CG2	2.49	0.41
19:k:376:LYS:O	19:k:380:MET:HB2	2.20	0.41
23:T:41:ARG:NH1	23:T:41:ARG:HG3	2.31	0.41
24:s9:105:LEU:HD23	24:s9:108:ARG:HD2	2.02	0.41
35:V:95:ALA:HB1	35:V:99:ILE:HD11	2.01	0.41
37:n:162:SER:OG	75:1:3216:G:OP1	2.38	0.41
38:AH:19:LYS:HB3	38:AH:19:LYS:HE3	1.79	0.41
39:CP:134:LEU:HD12	39:CP:134:LEU:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:c3:66:ILE:HG22	42:c3:67:THR:CG2	2.50	0.41
42:c3:124:ARG:HA	42:c3:127:ARG:NH1	2.35	0.41
44:CQ:87:MET:HB3	75:AR:1175:C:H1'	2.01	0.41
47:c4:64:ALA:O	47:c4:67:VAL:HG22	2.20	0.41
49:DR:36:ARG:HD3	49:DR:46:THR:HA	2.02	0.41
9:q:87:LYS:HA	9:q:147:SER:HA	2.02	0.41
53:Z:89:TYR:HD2	53:Z:93:ARG:NH1	2.18	0.41
15:r:116:ARG:NH1	75:1:2622:C:H42	2.18	0.41
58:A:104:A:O2'	80:A:1924:OHX:N1	2.53	0.41
58:A:753:A:H4'	73:F:221:ARG:NH1	2.34	0.41
58:A:1058:U:O4	58:A:1061:A:N6	2.53	0.41
58:A:1188:G:O2'	58:A:1430:U:OP1	2.34	0.41
58:A:1487:A:H2'	58:A:1488:G:O4'	2.20	0.41
23:c8:37:GLY:O	58:sR:1566:U:H4'	2.20	0.41
29:c9:42:GLY:HA2	29:c9:84:LYS:HB2	2.02	0.41
29:c9:69:LYS:HE3	58:sR:1368:G:OP1	2.20	0.41
35:d0:87:HIS:ND1	58:sR:1383:G:OP1	2.39	0.41
45:AP:41:ARG:NH1	75:1:284:A:P	2.94	0.41
66:CX:32:ARG:HD3	66:CX:32:ARG:O	2.20	0.41
41:d1:30:ALA:HB1	61:s0:155:PHE:HE1	1.84	0.41
48:x:178:ALA:HA	48:x:181:ARG:HG2	2.02	0.41
70:E:66:ILE:O	70:E:70:THR:OG1	2.28	0.41
71:f:33:ARG:HA	24:K:37:LYS:HA	2.00	0.41
46:d2:2:THR:HG21	58:sR:967:A:O4'	2.20	0.41
46:d2:29:PRO:HB2	46:d2:58:SER:HB3	2.02	0.41
73:F:103:TYR:CE1	73:F:109:PHE:CE1	3.07	0.41
73:F:195:ILE:HD12	73:F:195:ILE:HG23	1.82	0.41
74:g:98:VAL:HG13	74:g:100:LEU:HG	2.01	0.41
50:d3:141:GLU:HG3	50:d3:142:LYS:H	1.85	0.41
54:z:8:LYS:HE2	54:z:22:VAL:HG23	2.02	0.41
54:z:139:VAL:O	54:z:143:ILE:HG23	2.19	0.41
75:AR:417:A:H2'	75:AR:418:A:C8	2.55	0.41
75:AR:536:U:H1'	75:AR:559:A:C8	2.55	0.41
75:AR:715:A:H8	2:DC:115:LYS:HG3	1.85	0.41
75:AR:1019:G:H2'	75:AR:1020:G:H5''	2.02	0.41
75:AR:1647:A:C2	75:AR:1809:A:H1'	2.55	0.41
75:AR:2094:C:H2'	75:AR:2095:G:C8	2.55	0.41
75:AR:2256:A:OP1	75:AR:2256:A:C8	2.73	0.41
75:AR:2592:G:H4'	75:AR:2594:C:C2	2.55	0.41
53:d4:127:LYS:HD2	53:d4:127:LYS:HA	1.75	0.41
1:AS:113:C:H2'	1:AS:114:U:O4'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:DB:82:PRO:HB2	14:DE:62:LEU:HD22	2.01	0.41
6:H:105:ASP:OD1	6:H:105:ASP:N	2.46	0.41
58:sR:20:G:H5'	58:sR:571:G:C8	2.55	0.41
58:sR:492:A:C2'	58:sR:493:U:H5''	2.50	0.41
58:sR:1153:G:H2'	58:sR:1154:G:O4'	2.20	0.41
58:sR:1234:A:OP2	58:sR:1245:G:O2'	2.28	0.41
60:2:18:ASP:OD1	80:2:201:OHX:N1	2.53	0.41
2:DC:9:ARG:HE	2:DC:9:ARG:HB2	1.69	0.41
2:DC:73:LEU:O	2:DC:112:ILE:HA	2.20	0.41
12:I:20:VAL:HA	12:I:23:ALA:HB3	2.02	0.41
12:I:74:GLN:O	12:I:78:THR:OG1	2.31	0.41
78:Rb:179:LYS:HA	78:Rb:179:LYS:HD3	1.82	0.41
78:Rb:197:SER:OG	78:Rb:216:LYS:N	2.51	0.41
13:CD:117:GLU:OE2	13:CD:163:ARG:NH1	2.53	0.41
61:s0:38:PHE:HD2	61:s0:49:ASN:HD22	1.67	0.41
19:CE:77:THR:HG23	19:CE:326:GLY:O	2.20	0.41
64:s1:64:ARG:H	64:s1:88:VAL:CG1	2.33	0.41
25:CF:44:LYS:HB3	25:CF:47:ARG:CZ	2.49	0.41
25:CF:257:LYS:O	25:CF:261:VAL:HG22	2.20	0.41
31:CG:261:THR:N	31:CG:264:GLN:OE1	2.53	0.41
73:s4:100:ARG:HG2	73:s4:100:ARG:NH1	2.32	0.41
73:s4:179:LYS:HD3	73:s4:179:LYS:HA	1.79	0.41
79:AA:46:ILE:HD11	79:AA:130:PHE:CD2	2.55	0.41
75:1:293:C:H2'	75:1:294:U:O4'	2.20	0.41
75:1:1210:U:H2'	75:1:1211:U:C6	2.55	0.41
75:1:1302:A:N7	75:1:2857:C:O2'	2.52	0.41
75:1:1472:U:H2'	75:1:1473:G:H8	1.84	0.41
75:1:2269:U:O2'	75:1:2271:A:N7	2.43	0.41
75:1:2653:C:O2'	75:1:2657:A:N1	2.51	0.41
75:1:2729:U:H2'	75:1:2730:G:O4'	2.20	0.41
75:1:2809:C:OP2	80:1:3602:OHX:N3	2.52	0.41
75:1:3357:U:H2'	75:1:3358:U:C6	2.55	0.41
1:3:28:C:OP1	21:s:137:ARG:NH1	2.53	0.41
3:CJ:89:GLU:HB3	3:CJ:214:LEU:HD21	2.01	0.41
3:CJ:134:TYR:CE2	3:CJ:190:VAL:HG11	2.55	0.41
4:DJ:85:THR:O	4:DJ:89:ARG:HG3	2.21	0.41
4:DJ:96:GLU:OE1	39:CP:143:ARG:HD3	2.20	0.41
11:R:128:LYS:NZ	11:R:135:ARG:HD2	2.34	0.41
12:s7:56:LYS:O	12:s7:88:ARG:HA	2.20	0.41
12:s7:118:LEU:HD11	58:sR:640:U:C4	2.55	0.41
14:AD:42:ILE:CG1	14:AD:67:VAL:HG12	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AD:45:ALA:HB3	14:AD:48:THR:HG23	2.02	0.41
17:S:49:LYS:HB3	58:A:1389:C:O3'	2.19	0.41
18:s8:78:ILE:HA	18:s8:104:ILE:HG22	2.02	0.41
19:k:294:GLY:HA2	19:k:305:ILE:HD13	2.01	0.41
24:s9:54:ARG:HG3	58:sR:1:U:O4	2.19	0.41
25:l:148:ILE:HA	25:l:149:PRO:C	2.45	0.41
27:CN:46:ILE:HG22	27:CN:47:ALA:N	2.35	0.41
29:U:52:GLY:O	29:U:53:TRP:CG	2.73	0.41
29:U:55:TYR:HA	29:U:58:ALA:HB3	2.02	0.41
29:U:99:SER:HB2	29:U:102:ARG:NH2	2.35	0.41
31:m:119:TYR:OH	31:m:134:ALA:HA	2.20	0.41
33:CO:133:LYS:HE3	33:CO:133:LYS:HB3	1.92	0.41
34:DO:93:LYS:HD3	34:DO:102:ARG:HG2	2.01	0.41
35:V:54:GLY:C	35:V:91:ILE:HD13	2.45	0.41
38:AH:92:ALA:O	38:AH:96:GLU:HB2	2.19	0.41
41:W:69:LEU:HD12	41:W:72:LEU:HB2	2.01	0.41
42:c3:20:ARG:NH2	58:sR:861:U:O3'	2.53	0.41
42:c3:139:TRP:CD2	42:c3:139:TRP:O	2.73	0.41
4:AI:49:LYS:HD3	4:AI:49:LYS:HA	1.89	0.41
4:AI:118:ILE:HG23	27:t:122:LYS:O	2.20	0.41
44:CQ:80:PHE:CD1	44:CQ:80:PHE:O	2.73	0.41
45:DQ:39:GLY:HA3	75:AR:2765:C:O3'	2.20	0.41
46:X:102:VAL:HG13	46:X:113:HIS:HB3	2.01	0.41
3:p:32:LYS:HD2	75:l:2561:A:C4	2.54	0.41
3:p:149:LYS:O	3:p:176:PRO:HG2	2.20	0.41
49:DR:38:ASP:OD1	49:DR:38:ASP:N	2.53	0.41
16:AK:4:GLY:O	16:AK:7:SER:OG	2.32	0.41
51:CS:39:ARG:NH2	25:CF:299:ILE:HD12	2.35	0.41
51:CS:39:ARG:NH1	25:CF:302:ALA:HB2	2.35	0.41
52:p0:72:ASP:OD1	52:p0:72:ASP:N	2.44	0.41
11:c6:30:LYS:HZ3	58:sR:1366:U:P	2.44	0.41
21:s:19:LEU:HB3	21:s:125:MET:HE3	2.01	0.41
21:s:51:ARG:NH2	21:s:52:TYR:HE1	2.18	0.41
58:A:112:A:O2'	58:A:113:U:H5'	2.20	0.41
58:A:365:G:O6	80:A:1994:OHX:N1	2.52	0.41
58:A:1489:U:H5'	58:A:1494:C:H1'	2.01	0.41
58:A:1587:A:H2'	58:A:1588:G:H8	1.85	0.41
58:A:1595:U:N3	58:A:1600:A:H2	2.17	0.41
59:b:62:TYR:CG	59:b:63:ALA:N	2.88	0.41
23:c8:28:ILE:O	23:c8:32:LEU:HD13	2.20	0.41
23:c8:39:GLY:H	58:sR:1566:U:H5''	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:t:16:LYS:HG2	75:1:47:C:H5''	2.02	0.41
27:t:47:ALA:HB1	27:t:49:ARG:H	1.80	0.41
60:CV:17:ARG:HD2	60:CV:17:ARG:HA	1.86	0.41
29:c9:138:GLN:H	29:c9:138:GLN:HG2	1.67	0.41
64:C:104:ASP:OD1	64:C:105:PHE:N	2.53	0.41
45:AP:60:LYS:C	45:AP:60:LYS:CD	2.89	0.41
67:D:165:VAL:HG21	67:D:210:THR:HA	2.02	0.41
70:E:222:VAL:HG13	78:h:229:LYS:HA	2.02	0.41
73:F:37:LYS:O	73:F:41:SER:HB3	2.20	0.41
50:d3:102:VAL:HA	50:d3:126:LYS:O	2.20	0.41
54:z:96:ILE:HG12	75:1:1722:U:H1'	2.02	0.41
75:AR:247:C:H2'	75:AR:248:U:O4'	2.20	0.41
75:AR:268:A:O4'	75:AR:270:U:H1'	2.20	0.41
75:AR:411:U:H2'	75:AR:412:G:C8	2.55	0.41
75:AR:428:A:H2'	75:AR:429:U:C6	2.55	0.41
75:AR:1238:C:O2'	75:AR:1239:C:O5'	2.26	0.41
75:AR:1434:G:OP1	75:AR:1437:C:N4	2.52	0.41
75:AR:1555:U:H5	75:AR:1559:A:H61	1.68	0.41
75:AR:1648:A:H2'	75:AR:1649:U:O4'	2.21	0.41
75:AR:1822:C:H2'	75:AR:1823:A:H8	1.84	0.41
75:AR:2157:G:N2	75:AR:2177:G:O2'	2.53	0.41
75:AR:2697:A:H2'	75:AR:2698:G:H8	1.81	0.41
75:AR:3375:A:H5''	75:AR:3378:C:C5	2.55	0.41
77:G:195:ALA:O	77:G:198:LEU:HD23	2.20	0.41
58:sR:759:U:OP1	86:sR:2204:HOH:O	2.22	0.41
58:sR:819:G:O2'	58:sR:821:U:OP2	2.38	0.41
58:sR:1204:A:H1'	58:sR:1554:U:O4	2.20	0.41
58:sR:1381:U:H1'	58:sR:1516:A:N6	2.35	0.41
2:DC:71:PRO:HG2	2:DC:108:GLY:O	2.20	0.41
2:DC:125:VAL:HG22	2:DC:145:VAL:HA	2.02	0.41
12:I:31:SER:CA	12:I:35:LYS:HB2	2.51	0.41
12:I:45:SER:O	12:I:46:ILE:HD13	2.20	0.41
78:Rb:19:TRP:H	78:Rb:19:TRP:CD1	2.38	0.41
63:5:25:ASN:OD1	63:5:25:ASN:N	2.51	0.41
19:CE:57:VAL:HG22	19:CE:73:VAL:HG22	2.02	0.41
69:7:20:LEU:HD23	69:7:21:PHE:N	2.35	0.41
25:CF:229:ASN:OD1	25:CF:230:VAL:N	2.53	0.41
30:L:54:TYR:CE2	30:L:75:TYR:CG	3.08	0.41
67:s2:88:LYS:NZ	67:s2:90:THR:HG22	2.35	0.41
68:d9:19:ARG:HD2	68:d9:32:ARG:NH1	2.35	0.41
31:CG:3:PHE:HB2	31:CG:6:ASP:HB2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CG:53:VAL:HG22	31:CG:62:CYS:SG	2.60	0.41
70:s3:66:ILE:HD12	70:s3:67:ASN:N	2.35	0.41
70:s3:76:ARG:O	70:s3:76:ARG:HD2	2.20	0.41
39:v:148:TYR:O	39:v:151:ILE:HG22	2.20	0.41
75:1:158:G:H2'	75:1:159:A:C8	2.55	0.41
75:1:271:C:OP1	80:1:4089:OHX:N3	2.53	0.41
75:1:718:G:H8	75:1:718:G:O5'	2.03	0.41
75:1:830:A:H2'	75:1:831:G:O4'	2.19	0.41
75:1:1230:G:H2'	75:1:1231:A:C8	2.55	0.41
75:1:1620:U:H2'	75:1:1621:A:C8	2.55	0.41
75:1:2592:G:N7	80:1:3542:OHX:N1	2.68	0.41
75:1:2633:U:H2'	75:1:2634:U:O4'	2.20	0.41
75:1:2982:A:O2'	75:1:2983:C:H5''	2.20	0.41
6:s6:92:ARG:NH1	58:sR:1674:C:OP1	2.49	0.41
6:s6:148:SER:OG	6:s6:149:LYS:N	2.53	0.41
7:4:19:C:H2'	7:4:20:U:O4'	2.20	0.41
8:AC:41:ARG:NH1	75:1:775:A:O3'	2.54	0.41
10:DK:56:ARG:O	10:DK:59:ASP:HB2	2.20	0.41
11:R:45:ARG:HH11	11:R:45:ARG:HG3	1.84	0.41
11:R:50:GLU:N	11:R:51:PRO:HD2	2.34	0.41
12:s7:18:LEU:H	12:s7:18:LEU:HD12	1.86	0.41
13:j:243:THR:HG23	75:1:2242:A:H5'	2.03	0.41
17:S:7:LYS:HG3	58:A:1316:G:H5'	2.02	0.41
19:k:99:LEU:O	75:1:3004:C:O2'	2.27	0.41
19:k:251:CYS:SG	75:1:2944:U:H1'	2.60	0.41
23:T:132:ARG:NH1	58:A:1173:C:OP1	2.50	0.41
24:s9:29:LYS:HA	71:e0:40:TYR:HE1	1.84	0.41
25:l:141:ARG:NH2	25:l:180:LYS:HG3	2.36	0.41
27:CN:126:PHE:N	27:CN:126:PHE:CD1	2.88	0.41
29:U:4:VAL:HG22	29:U:5:SER:N	2.35	0.41
29:U:115:GLU:CD	29:U:125:SER:HA	2.45	0.41
31:m:92:LEU:N	31:m:92:LEU:HD23	2.35	0.41
33:CO:123:LEU:HD23	44:CQ:193:GLN:HB2	2.02	0.41
37:n:93:VAL:O	37:n:93:VAL:HG13	2.19	0.41
38:AH:67:LYS:HB2	75:1:1821:U:N3	2.36	0.41
42:c3:66:ILE:HG22	42:c3:67:THR:HG23	2.02	0.41
42:c3:151:ASN:HA	80:c3:201:OHX:N3	2.35	0.41
4:AI:74:LYS:HG2	4:AI:75:TYR:CE1	2.55	0.41
46:X:3:ARG:H	46:X:3:ARG:HG3	1.64	0.41
9:q:87:LYS:HE2	9:q:186:PHE:O	2.20	0.41
9:q:101:VAL:HA	9:q:113:GLU:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:r:42:THR:HG22	15:r:45:GLU:OE1	2.20	0.41
54:CT:102:LEU:HD12	54:CT:138:LEU:CD1	2.45	0.41
57:CU:12:ARG:NE	57:CU:57:GLU:OE2	2.47	0.41
58:A:2:A:H1'	67:D:199:GLN:HE22	1.84	0.41
58:A:216:U:H5''	58:A:217:A:OP1	2.19	0.41
58:A:558:U:O2'	58:A:581:U:H5'	2.19	0.41
58:A:606:A:H4'	58:A:607:G:H3'	2.01	0.41
58:A:728:U:O2'	58:A:729:G:H5'	2.20	0.41
58:A:803:A:C4	12:I:104:ARG:HG3	2.55	0.41
58:A:1279:C:H2'	58:A:1280:C:O4'	2.20	0.41
58:A:1514:U:H5''	58:A:1515:A:O4'	2.20	0.41
58:A:1654:G:H2'	58:A:1745:G:H22	1.86	0.41
58:A:1655:A:N1	75:1:2291:A:O2'	2.44	0.41
58:A:1763:A:H5''	58:A:1771:U:H5''	2.01	0.41
59:b:11:ASN:O	59:b:33:ASP:HB2	2.20	0.41
59:b:68:TYR:CB	64:C:111:ARG:HB3	2.50	0.41
23:c8:30:TYR:HE1	23:c8:40:ARG:HE	1.60	0.41
61:B:38:PHE:O	61:B:39:ASN:C	2.63	0.41
29:c9:3:GLY:HA3	58:sR:1364:G:N2	2.35	0.41
29:c9:118:PRO:O	29:c9:119:LYS:HB3	2.21	0.41
41:d1:1:MET:HE1	67:s2:141:ARG:O	2.21	0.41
48:x:139:TYR:CZ	75:1:2355:G:H4'	2.55	0.41
69:CY:23:ARG:NH2	69:CY:25:ASP:OD2	2.53	0.41
46:d2:31:SER:HB3	46:d2:34:ILE:HG13	2.02	0.41
73:F:47:PHE:O	73:F:52:LEU:HB3	2.20	0.41
73:F:180:LEU:HA	73:F:194:THR:CG2	2.45	0.41
73:F:232:GLY:C	73:F:234:PRO:HD3	2.45	0.41
54:z:96:ILE:O	54:z:100:ARG:HG3	2.20	0.41
75:AR:179:C:H2'	75:AR:180:C:C6	2.56	0.41
75:AR:401:U:H4'	75:AR:403:C:C2	2.55	0.41
75:AR:409:A:H61	7:AT:15:G:C1'	2.32	0.41
75:AR:621:A:H2'	80:AR:3924:OHX:N4	2.35	0.41
75:AR:1249:G:H2'	75:AR:1250:G:C8	2.55	0.41
75:AR:1742:U:H2'	75:AR:1743:G:C8	2.56	0.41
75:AR:1801:U:H2'	75:AR:1802:C:C6	2.55	0.41
75:AR:2356:A:H61	75:AR:2983:C:H5	1.65	0.41
75:AR:2746:A:OP1	31:CG:179:ARG:NE	2.52	0.41
75:AR:2841:G:OP2	80:AR:3548:OHX:N2	2.53	0.41
75:AR:3086:A:H4'	19:CE:366:GLY:HA2	2.01	0.41
78:h:47:LEU:HA	78:h:54:PHE:O	2.20	0.41
53:d4:128:LYS:HG3	53:d4:131:ARG:HB3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:94:U:H4'	73:s4:6:LYS:HA	2.00	0.41
58:sR:392:G:H2'	58:sR:393:C:O4'	2.19	0.41
58:sR:541:A:OP1	58:sR:541:A:H8	2.03	0.41
58:sR:936:G:N7	59:d6:15:ARG:NH1	2.68	0.41
58:sR:1080:U:O2'	58:sR:1081:A:H5'	2.20	0.41
58:sR:1417:A:OP1	80:sR:2178:OHX:N1	2.53	0.41
58:sR:1586:A:H2'	58:sR:1587:A:O4'	2.20	0.41
12:I:14:THR:HG1	12:I:17:GLU:CD	2.29	0.41
12:I:56:LYS:HB2	12:I:88:ARG:NH2	2.35	0.41
12:I:86:GLN:O	12:I:87:ASP:CG	2.62	0.41
78:Rb:68:VAL:HA	78:Rb:84:SER:CA	2.48	0.41
78:Rb:81:LEU:HD11	78:Rb:91:LEU:CD1	2.48	0.41
63:5:39:ASP:C	63:5:40:HIS:HD2	2.28	0.41
13:CD:117:GLU:OE1	13:CD:163:ARG:HD3	2.19	0.41
18:J:87:ASN:HB3	18:J:90:LEU:HG	2.02	0.41
24:K:18:PRO:C	24:K:19:TYR:CD1	2.98	0.41
24:K:36:LEU:HD13	24:K:41:GLU:HB3	2.02	0.41
24:K:65:LYS:HG3	24:K:70:LEU:HD21	2.02	0.41
64:s1:138:PHE:CD1	64:s1:138:PHE:N	2.88	0.41
25:CF:136:LEU:HD23	25:CF:136:LEU:HA	1.83	0.41
25:CF:140:HIS:NE2	25:CF:246:ARG:HD2	2.35	0.41
25:CF:234:ASN:OD1	25:CF:234:ASN:C	2.63	0.41
25:CF:327:LEU:HD21	43:CI:164:SER:O	2.19	0.41
20:DF:8:VAL:HG12	20:DF:9:THR:H	1.86	0.41
30:L:17:GLN:HG2	30:L:17:GLN:H	1.71	0.41
26:DG:64:LYS:HD3	26:DG:65:PHE:CZ	2.55	0.41
70:s3:156:PHE:O	70:s3:157:LEU:HD23	2.20	0.41
79:AA:135:ARG:HH22	75:1:2557:A:H5'	1.85	0.41
77:s5:119:ASP:O	77:s5:123:VAL:HG13	2.20	0.41
75:1:137:G:H2'	75:1:138:U:C6	2.55	0.41
75:1:394:G:N2	75:1:396:A:H3'	2.35	0.41
75:1:1831:U:H2'	75:1:1832:C:H6	1.85	0.41
75:1:1857:C:C4	75:1:1858:A:C6	3.08	0.41
75:1:2294:U:O2	75:1:2296:A:H8	2.04	0.41
4:DJ:4:VAL:HB	4:DJ:50:SER:HB3	2.01	0.41
4:DJ:59:ASN:O	4:DJ:63:ARG:HB2	2.21	0.41
5:Q:18:ARG:O	5:Q:20:VAL:HG23	2.20	0.41
5:Q:87:PRO:HA	5:Q:90:ILE:CG1	2.51	0.41
6:s6:15:THR:HG21	58:sR:153:G:O5'	2.20	0.41
7:4:123:G:OP2	80:4:205:OHX:N1	2.53	0.41
9:CK:25:VAL:O	9:CK:35:THR:HA	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:R:60:PHE:HA	11:R:63:ILE:HD11	2.02	0.41
11:R:93:HIS:HA	11:R:97:VAL:CG1	2.49	0.41
12:s7:160:GLN:C	12:s7:160:GLN:OE1	2.63	0.41
15:CL:174:THR:HG23	15:CL:176:LEU:H	1.85	0.41
21:CM:90:GLN:HG2	21:CM:170:ASP:H	1.85	0.41
21:CM:139:THR:HG22	21:CM:147:THR:HA	2.02	0.41
23:T:31:ALA:O	23:T:33:THR:HG22	2.20	0.41
31:m:258:LYS:HG3	31:m:261:THR:HG22	2.01	0.41
33:CO:31:LYS:HB3	33:CO:51:ALA:HB1	2.02	0.41
34:DO:94:SER:HA	34:DO:123:PRO:HA	2.02	0.41
35:V:30:LYS:HE3	35:V:30:LYS:HB3	1.73	0.41
37:n:63:LEU:O	37:n:78:ARG:HA	2.20	0.41
42:c3:18:TYR:CG	46:d2:56:HIS:CD2	3.09	0.41
42:c3:132:VAL:O	42:c3:132:VAL:HG12	2.19	0.41
43:o:126:LEU:O	43:o:130:ILE:HG12	2.21	0.41
44:CQ:156:LEU:HD22	75:AR:3243:A:C8	2.55	0.41
46:X:107:SER:HB2	58:A:802:G:H2'	2.03	0.41
47:c4:22:SER:OG	47:c4:25:ASP:N	2.49	0.41
47:c4:36:LYS:HE3	47:c4:36:LYS:HB3	1.80	0.41
47:c4:76:ILE:HD12	47:c4:76:ILE:N	2.35	0.41
48:CR:52:LEU:HA	48:CR:52:LEU:HD23	1.69	0.41
50:Y:32:ARG:HD3	58:A:602:U:OP1	2.20	0.41
51:CS:82:VAL:HG22	51:CS:102:ALA:HB3	2.03	0.41
53:Z:21:LYS:N	53:Z:75:VAL:O	2.50	0.41
11:c6:29:ILE:H	77:s5:27:THR:HG21	1.85	0.41
15:r:141:LYS:HD3	15:r:142:ASP:N	2.32	0.41
54:CT:17:VAL:CG1	54:CT:21:LYS:HB2	2.50	0.41
55:sM:75:ASP:CG	55:sM:76:VAL:H	2.28	0.41
28:AM:44:TRP:CZ3	28:AM:45:ARG:HD3	2.55	0.41
57:CU:120:SER:C	57:CU:121:ILE:HD13	2.45	0.41
58:A:142:G:C6	6:H:177:ARG:NH1	2.85	0.41
58:A:911:U:O2'	58:A:915:A:H1'	2.19	0.41
58:A:932:U:OP2	64:C:155:TYR:OH	2.35	0.41
58:A:1061:A:C6	58:A:1062:A:C6	3.08	0.41
58:A:1546:G:H2'	58:A:1547:A:H8	1.85	0.41
60:CV:52:MET:HA	60:CV:95:HIS:CD2	2.56	0.41
62:c:2:VAL:N	62:c:5:GLN:HB2	2.34	0.41
67:D:207:LEU:HA	67:D:210:THR:HG23	2.02	0.41
41:d1:17:CYS:O	41:d1:21:ASN:N	2.49	0.41
70:E:220:PRO:HB3	78:h:194:GLY:HA3	2.03	0.41
51:y:66:ARG:NH2	51:y:143:PRO:HG3	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:F:13:ALA:O	73:F:39:ARG:NH2	2.53	0.41
73:F:193:GLY:HA2	73:F:194:THR:CG2	2.51	0.41
73:F:238:LEU:H	73:F:238:LEU:CD1	2.32	0.41
74:g:103:LEU:C	74:g:105:TYR:H	2.27	0.41
50:d3:63:GLN:CB	50:d3:64:PRO:HA	2.49	0.41
75:AR:138:U:H2'	75:AR:139:G:C8	2.55	0.41
75:AR:1093:A:H4'	75:AR:1093:A:OP1	2.20	0.41
75:AR:2202:C:H2'	75:AR:2203:U:O4'	2.19	0.41
75:AR:2255:A:HO2'	75:AR:2256:A:P	2.41	0.41
75:AR:2348:A:O2'	75:AR:2391:G:OP1	2.30	0.41
75:AR:2526:C:C2	75:AR:2527:G:C8	3.08	0.41
75:AR:2552:C:C5	14:DE:53:LYS:HE2	2.50	0.41
75:AR:2989:U:O2'	19:CE:232:ARG:NH1	2.51	0.41
75:AR:3159:C:H2'	75:AR:3160:U:C6	2.56	0.41
75:AR:3277:U:O2'	75:AR:3278:C:H5'	2.20	0.41
78:h:66:HIS:HB3	78:h:85:TRP:HB2	2.02	0.41
78:h:147:HIS:CE1	78:h:171:SER:HG	2.35	0.41
78:h:309:VAL:CG2	78:h:311:ARG:HE	2.34	0.41
53:d4:118:ILE:HG22	53:d4:125:LEU:HD13	2.00	0.41
1:AS:33:U:H2'	1:AS:34:C:O4'	2.21	0.41
6:H:203:GLU:O	6:H:207:GLU:HG3	2.20	0.41
58:sR:386:G:H2'	58:sR:387:A:C8	2.55	0.41
58:sR:413:U:H2'	58:sR:414:C:C6	2.55	0.41
58:sR:897:C:P	64:s1:23:PRO:HG3	2.60	0.41
58:sR:1742:U:H2'	58:sR:1743:U:C6	2.56	0.41
7:AT:56:G:H2'	7:AT:57:C:O4'	2.20	0.41
78:Rb:14:GLU:H	78:Rb:53:LYS:HZ3	1.67	0.41
78:Rb:85:TRP:CD1	78:Rb:109:ASP:CG	2.98	0.41
59:d6:49:ALA:C	59:d6:53:LEU:HD23	2.45	0.41
18:J:98:LYS:NZ	18:J:170:SER:O	2.53	0.41
18:J:138:ASN:OD1	18:J:138:ASN:N	2.53	0.41
61:s0:169:SER:O	61:s0:173:ILE:HD11	2.20	0.41
61:s0:177:LEU:HD23	61:s0:177:LEU:HA	1.73	0.41
62:d7:36:LYS:O	62:d7:77:THR:HG22	2.19	0.41
66:6:83:LYS:NZ	66:6:84:SER:O	2.52	0.41
19:CE:78:VAL:HG11	19:CE:305:ILE:HD12	2.03	0.41
24:K:35:GLY:HA2	24:K:123:HIS:NE2	2.36	0.41
24:K:109:LEU:HD13	24:K:141:VAL:HG11	2.02	0.41
64:s1:88:VAL:CG2	64:s1:96:LEU:HB3	2.50	0.41
25:CF:123:ALA:HA	25:CF:126:ILE:HD12	2.01	0.41
67:s2:158:THR:HG22	67:s2:169:LEU:HB2	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:s3:119:ALA:HB1	70:s3:136:VAL:HG11	2.01	0.41
73:s4:95:THR:OG1	73:s4:97:GLU:HG2	2.21	0.41
73:s4:117:GLU:O	73:s4:118:GLU:HB3	2.20	0.41
73:s4:159:THR:HG22	73:s4:227:VAL:HG23	2.02	0.41
43:CI:229:PHE:CD1	43:CI:229:PHE:C	2.98	0.41
75:1:378:A:N7	75:1:391:A:H2	2.19	0.41
75:1:384:A:H2'	75:1:385:A:O4'	2.20	0.41
75:1:508:U:H2'	75:1:509:U:C6	2.55	0.41
75:1:848:A:H8	75:1:848:A:O5'	2.03	0.41
75:1:879:U:O2	75:1:2357:A:H1'	2.20	0.41
75:1:1207:G:N7	80:1:3940:OHX:N1	2.67	0.41
75:1:1404:G:C6	75:1:1408:G:C6	3.09	0.41
75:1:2827:U:OP1	80:1:3849:OHX:N5	2.53	0.41
75:1:2862:U:H2'	75:1:2863:G:O4'	2.20	0.41
2:AB:79:TRP:C	2:AB:81:LEU:H	2.27	0.41
3:CJ:136:LEU:HB2	75:AR:147:U:OP2	2.19	0.41
3:CJ:204:ARG:NH1	3:CJ:204:ARG:HG3	2.36	0.41
5:Q:128:HIS:HE1	58:A:1180:C:O2	2.02	0.41
6:s6:32:ILE:HD11	6:s6:63:MET:HE3	2.02	0.41
6:s6:74:LYS:HA	6:s6:96:SER:HA	2.02	0.41
8:AC:18:ARG:HE	8:AC:18:ARG:HB3	1.67	0.41
9:CK:27:VAL:O	9:CK:33:THR:HA	2.20	0.41
13:j:117:GLU:OE1	13:j:121:GLY:N	2.53	0.41
15:CL:34:TYR:O	15:CL:88:ARG:HA	2.20	0.41
16:DL:21:ARG:NH1	16:DL:41:ALA:O	2.50	0.41
18:s8:114:GLU:HG3	18:s8:119:GLN:O	2.21	0.41
18:s8:190:ALA:HA	18:s8:193:LEU:CB	2.51	0.41
19:k:57:VAL:HG22	19:k:358:TRP:HB3	2.03	0.41
19:k:169:THR:HG22	19:k:171:LEU:H	1.85	0.41
21:CM:165:GLN:OE1	21:CM:166:LYS:N	2.53	0.41
23:T:30:TYR:N	23:T:32:LEU:HD21	2.35	0.41
24:s9:70:LEU:O	24:s9:74:ASN:OD1	2.38	0.41
25:l:280:ILE:HG22	51:y:104:LEU:O	2.21	0.41
26:AF:4:LEU:HG	26:AF:5:PRO:CD	2.51	0.41
27:CN:115:ARG:HA	27:CN:118:GLU:HB3	2.03	0.41
29:U:75:LYS:NZ	58:A:1497:U:H4'	2.35	0.41
30:c0:23:ALA:HB2	30:c0:66:TYR:HE2	1.86	0.41
30:c0:24:LYS:HD2	30:c0:29:GLN:OE1	2.21	0.41
31:m:109:THR:OG1	31:m:110:LEU:HD12	2.20	0.41
35:V:73:GLY:HA3	58:A:1198:G:O4'	2.20	0.41
37:n:40:LEU:HD22	37:n:54:TYR:HB2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:CQ:115:LYS:HG2	75:AR:3178:A:C2	2.56	0.41
45:DQ:41:ARG:HD2	75:AR:284:A:OP2	2.20	0.41
47:c4:122:PRO:HB2	47:c4:125:SER:H	1.84	0.41
10:AJ:34:SER:HB2	75:1:265:A:C5'	2.50	0.41
9:q:2:LYS:NZ	33:u:41:GLN:HB2	2.35	0.41
9:q:23:ARG:H	9:q:39:LYS:NZ	2.17	0.41
9:q:45:PHE:HB3	33:u:7:VAL:HG11	2.01	0.41
53:Z:37:LYS:HE2	58:A:522:U:H5''	2.03	0.41
53:Z:48:TYR:HA	58:A:782:U:O4	2.21	0.41
11:c6:66:ARG:HH22	58:sR:1351:G:H5''	1.85	0.41
11:c6:105:LEU:HA	11:c6:108:ALA:CB	2.50	0.41
15:r:166:ILE:HG21	60:2:160:ILE:HD11	2.02	0.41
15:r:192:ASP:HA	15:r:197:VAL:HG12	2.02	0.41
21:s:40:LEU:HG	21:s:79:ILE:HD13	2.01	0.41
58:A:160:C:H2'	58:A:161:U:O4'	2.20	0.41
58:A:274:G:H3'	58:A:275:C:C5	2.55	0.41
58:A:355:G:P	80:A:2110:OHX:N4	2.92	0.41
58:A:393:C:H2'	58:A:394:C:C6	2.56	0.41
58:A:553:G:OP2	58:A:554:C:O2'	2.30	0.41
58:A:766:U:H5''	58:A:768:C:OP1	2.21	0.41
58:A:812:A:N6	58:A:858:G:H2'	2.36	0.41
58:A:1718:G:H2'	58:A:1719:A:O4'	2.20	0.41
58:A:1751:C:H2'	58:A:1752:U:O4'	2.21	0.41
23:c8:61:LEU:O	23:c8:66:LEU:CD1	2.64	0.41
60:CV:51:GLY:HA3	60:CV:92:ARG:HD2	2.03	0.41
60:CV:82:ASN:OD1	60:CV:82:ASN:N	2.45	0.41
61:B:22:THR:OG1	61:B:172:LEU:CD1	2.68	0.41
62:c:51:GLN:HA	62:c:66:PRO:HB3	2.02	0.41
62:c:61:THR:HG23	62:c:62:ILE:HA	2.02	0.41
33:u:23:ILE:HG22	33:u:29:ALA:HA	2.01	0.41
64:C:198:GLU:O	64:C:202:LYS:HG2	2.21	0.41
65:d:66:LEU:HD11	77:G:149:VAL:HA	2.01	0.41
67:D:56:ILE:H	67:D:56:ILE:HG12	1.66	0.41
41:d1:87:ARG:CZ	61:s0:35:PRO:HD3	2.51	0.41
69:CY:55:PHE:CD1	69:CY:55:PHE:C	2.98	0.41
70:E:5:ILE:HD13	70:E:7:LYS:HA	2.02	0.41
70:E:74:GLN:HE22	70:E:81:PRO:HA	1.86	0.41
70:E:86:LEU:HA	70:E:86:LEU:HD13	1.72	0.41
70:E:124:ARG:HD2	70:E:124:ARG:HA	1.85	0.41
73:F:251:GLU:HG2	73:F:255:ARG:HH21	1.86	0.41
75:AR:1245:A:H5'	75:AR:1247:U:OP2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:1334:U:H1'	43:CI:208:SER:HB2	2.03	0.41
75:AR:1354:G:C8	37:CH:9:TRP:CZ3	3.08	0.41
75:AR:1357:G:H2'	75:AR:1358:C:H6	1.86	0.41
75:AR:3325:G:O3'	20:DF:103:GLY:HA2	2.20	0.41
76:DA:39:LEU:HD22	76:DA:43:TYR:HE2	1.84	0.41
77:G:195:ALA:O	77:G:199:ILE:HG23	2.21	0.41
78:h:20:VAL:HA	78:h:37:SER:CB	2.48	0.41
6:H:141:ILE:HD11	6:H:175:ILE:HD13	2.02	0.41
58:sR:68:A:HO2'	58:sR:69:G:P	2.39	0.41
58:sR:140:A:OP2	58:sR:140:A:H4'	2.19	0.41
58:sR:463:U:H2'	58:sR:464:A:C8	2.56	0.41
58:sR:1163:A:N3	58:sR:1613:U:O2'	2.34	0.41
58:sR:1649:G:H2'	58:sR:1650:U:C6	2.55	0.41
60:2:78:LYS:HE2	75:1:2728:G:O6	2.20	0.41
60:2:101:CYS:HB2	75:1:1060:U:O2	2.21	0.41
18:J:60:ILE:HG21	18:J:179:CYS:HB3	2.01	0.41
61:s0:36:TYR:HB3	61:s0:48:ILE:CD1	2.48	0.41
62:d7:36:LYS:NZ	62:d7:44:THR:H	2.19	0.41
66:6:11:PHE:CE2	66:6:88:ARG:HG3	2.56	0.41
69:7:8:PHE:CD1	69:7:46:PRO:HG3	2.55	0.41
25:CF:282:SER:OG	25:CF:283:THR:N	2.54	0.41
70:s3:8:LYS:HE2	70:s3:8:LYS:HB3	1.58	0.41
70:s3:114:ALA:O	70:s3:118:ALA:N	2.50	0.41
42:O:28:LEU:HB3	42:O:32:SER:CB	2.50	0.41
73:s4:161:LYS:C	73:s4:162:ILE:HD12	2.45	0.41
79:AA:5:LEU:HD23	79:AA:5:LEU:HA	1.85	0.41
77:s5:222:LYS:O	77:s5:222:LYS:HG3	2.19	0.41
75:1:772:U:OP1	80:1:3581:OHX:N5	2.53	0.41
75:1:830:A:OP1	80:1:3579:OHX:N1	2.53	0.41
75:1:1211:U:H2'	75:1:1212:A:C8	2.55	0.41
75:1:1281:G:H2'	75:1:1282:G:C8	2.53	0.41
75:1:2574:G:H2'	75:1:2575:G:H8	1.85	0.41
75:1:3106:A:H2'	75:1:3107:U:O4'	2.20	0.41
5:Q:68:PRO:HD2	5:Q:71:GLU:O	2.20	0.41
10:DK:66:GLU:O	10:DK:70:ARG:N	2.52	0.41
11:R:38:LEU:HG	11:R:45:ARG:NH2	2.35	0.41
18:s8:117:TYR:HE2	18:s8:150:ALA:HA	1.80	0.41
19:k:13:HIS:CD2	75:1:3011:A:C5	3.09	0.41
19:k:311:PHE:HB3	19:k:332:ARG:HH12	1.86	0.41
20:AE:39:PHE:CZ	20:AE:43:HIS:HE1	2.38	0.41
21:CM:137:ARG:NH2	1:AS:28:C:OP1	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CM:166:LYS:NZ	21:CM:167:TYR:CZ	2.88	0.41
23:T:22:VAL:HG22	23:T:23:ASP:O	2.21	0.41
23:T:33:THR:HA	23:T:38:VAL:CG2	2.50	0.41
23:T:108:LYS:HA	23:T:108:LYS:HD2	1.87	0.41
24:s9:28:LEU:C	24:s9:28:LEU:HD13	2.45	0.41
31:m:27:LYS:O	31:m:150:LEU:HD11	2.20	0.41
31:m:106:ALA:CB	31:m:169:GLY:HA3	2.49	0.41
32:AG:19:SER:OG	75:1:1330:A:P	2.78	0.41
37:n:54:TYR:CE1	37:n:63:LEU:HD22	2.56	0.41
41:W:4:ASP:N	67:D:147:ASN:O	2.54	0.41
4:AI:78:LYS:HG3	4:AI:81:ARG:NH1	2.33	0.41
47:c4:43:THR:HG23	47:c4:46:MET:HE3	2.02	0.41
3:p:105:LYS:HA	3:p:108:ARG:HB3	2.01	0.41
50:Y:112:LYS:HA	50:Y:112:LYS:HD3	1.83	0.41
5:c5:25:LEU:HD12	5:c5:26:LEU:H	1.84	0.41
53:Z:12:VAL:HG22	53:Z:23:PHE:CB	2.50	0.41
53:Z:83:LYS:HA	53:Z:91:LEU:HD21	2.02	0.41
53:Z:89:TYR:CD2	58:A:525:A:H5'	2.56	0.41
53:Z:93:ARG:HH11	53:Z:93:ARG:HG3	1.84	0.41
11:c6:52:LEU:HD12	11:c6:60:PHE:CZ	2.56	0.41
11:c6:83:GLN:O	11:c6:83:GLN:HG2	2.21	0.41
54:CT:124:TYR:CE1	75:AR:1720:U:C4	3.09	0.41
17:c7:9:VAL:HG12	17:c7:46:LEU:HD11	2.03	0.41
21:s:117:ASP:O	21:s:120:ILE:HD12	2.20	0.41
57:CU:114:HIS:CE1	75:AR:1212:A:H1'	2.56	0.41
58:A:68:A:H5'	6:H:160:ARG:NH2	2.35	0.41
58:A:78:A:N3	6:H:175:ILE:HG22	2.34	0.41
58:A:106:U:H2'	58:A:107:C:O4'	2.21	0.41
58:A:542:A:C5	58:A:544:A:H5'	2.56	0.41
58:A:621:A:N3	58:A:1107:G:H1'	2.36	0.41
58:A:886:U:O2'	47:P:121:VAL:O	2.35	0.41
58:A:954:G:H2'	58:A:955:A:H8	1.86	0.41
58:A:1330:G:H2'	58:A:1331:A:O4'	2.21	0.41
59:b:10:ARG:HD3	59:b:34:LYS:HA	2.02	0.41
23:c8:26:ILE:H	23:c8:26:ILE:HD12	1.85	0.41
60:CV:54:HIS:NE2	75:AR:2724:U:H4'	2.36	0.41
60:CV:108:ARG:O	60:CV:112:ASN:N	2.53	0.41
61:B:180:GLU:O	61:B:181:VAL:C	2.64	0.41
33:u:102:LYS:N	33:u:102:LYS:HD2	2.35	0.41
65:d:9:LEU:CB	65:d:33:LEU:HB2	2.49	0.41
66:CX:74:MET:HB2	66:CX:74:MET:HE2	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:x:26:PHE:CE1	48:x:120:ASN:HA	2.56	0.41
70:E:29:LEU:HD13	70:E:32:GLU:CG	2.50	0.41
70:E:96:LEU:HA	70:E:188:ILE:HG21	2.03	0.41
70:E:200:LYS:HD2	70:E:200:LYS:N	2.36	0.41
70:E:202:LEU:CD1	70:E:204:ASP:HB2	2.48	0.41
73:F:31:PRO:HD2	73:F:38:LEU:HD11	2.02	0.41
73:F:162:ILE:HD13	73:F:169:ILE:HG22	2.03	0.41
50:d3:14:LYS:HB3	50:d3:14:LYS:HE3	1.90	0.41
50:d3:131:SER:O	50:d3:134:ALA:N	2.53	0.41
75:AR:649:A:OP2	75:AR:2868:U:O2'	2.35	0.41
75:AR:783:A:OP1	2:DC:115:LYS:NZ	2.48	0.41
75:AR:929:A:H2'	75:AR:930:U:H6	1.85	0.41
75:AR:992:A:C2'	75:AR:993:G:H5'	2.50	0.41
75:AR:1263:A:H2'	75:AR:1263:A:N3	2.36	0.41
75:AR:1506:A:H1'	75:AR:1848:G:O6	2.21	0.41
75:AR:1573:G:H2'	75:AR:1573:G:N3	2.36	0.41
75:AR:1815:U:O2'	75:AR:1816:A:OP2	2.30	0.41
75:AR:1838:G:OP1	80:AR:3761:OHX:N2	2.54	0.41
77:G:110:ALA:HA	77:G:113:ILE:HD12	2.01	0.41
78:h:106:HIS:ND1	78:h:110:VAL:HG12	2.36	0.41
78:h:175:ASP:C	78:h:176:LYS:CG	2.93	0.41
78:h:218:GLY:O	78:h:235:SER:HA	2.21	0.41
79:DB:109:GLU:HA	79:DB:112:LYS:NZ	2.36	0.41
6:H:69:LEU:HD13	6:H:73:ILE:HG21	2.03	0.41
6:H:71:THR:OG1	6:H:72:ARG:N	2.54	0.41
6:H:142:ARG:HG2	6:H:153:VAL:HG11	2.02	0.41
58:sR:84:A:H2'	58:sR:85:A:O4'	2.21	0.41
58:sR:686:C:H2'	58:sR:687:G:O4'	2.20	0.41
58:sR:1156:C:OP1	80:sR:2065:OHX:N1	2.53	0.41
58:sR:1166:A:OP1	77:s5:100:ASN:N	2.49	0.41
7:AT:49:G:H8	7:AT:49:G:O5'	2.04	0.41
12:I:62:VAL:HG23	12:I:63:PRO:HD2	2.02	0.41
12:I:71:HIS:CD2	12:I:131:PHE:HE1	2.37	0.41
59:d6:69:ASN:OD1	59:d6:69:ASN:C	2.62	0.41
63:5:38:ILE:HD12	63:5:39:ASP:N	2.35	0.41
18:J:80:GLY:O	18:J:102:VAL:HG13	2.21	0.41
18:J:87:ASN:HB3	18:J:90:LEU:CD1	2.51	0.41
18:J:117:TYR:CA	18:J:146:ARG:HH12	2.33	0.41
19:CE:335:ILE:HG13	19:CE:336:VAL:N	2.35	0.41
25:CF:7:THR:HA	25:CF:19:ALA:HA	2.03	0.41
25:CF:198:ARG:HG2	25:CF:199:TRP:CD1	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CG:83:LEU:N	31:CG:84:PRO:HD2	2.35	0.41
31:CG:200:PHE:CE1	31:CG:241:THR:HG23	2.56	0.41
70:s3:61:GLU:HG2	70:s3:64:ARG:HE	1.86	0.41
70:s3:173:ARG:HD3	70:s3:173:ARG:HA	1.65	0.41
76:9:32:SER:O	76:9:101:PRO:HB2	2.21	0.41
42:O:88:LEU:HA	42:O:91:LEU:HD12	2.02	0.41
73:s4:99:PHE:HA	73:s4:112:HIS:O	2.21	0.41
73:s4:151:ASP:O	73:s4:154:ILE:HD12	2.20	0.41
73:s4:160:VAL:HG23	73:s4:162:ILE:CD1	2.50	0.41
77:s5:59:VAL:HG12	77:s5:60:ASP:H	1.85	0.41
77:s5:144:GLU:OE2	77:s5:159:ALA:HB1	2.21	0.41
75:1:547:G:H1'	75:1:548:G:O4'	2.20	0.41
75:1:565:U:O5'	75:1:565:U:H6	2.04	0.41
75:1:568:G:H2'	75:1:569:A:O4'	2.21	0.41
75:1:891:G:H2'	75:1:892:U:O4'	2.21	0.41
75:1:1615:C:OP1	80:1:3639:OHX:N3	2.54	0.41
75:1:1856:C:H2'	75:1:1857:C:H6	1.85	0.41
75:1:2612:U:H2'	75:1:2613:U:O4'	2.21	0.41
75:1:2663:G:H2'	75:1:2664:C:O4'	2.20	0.41
75:1:2808:A:H5'	75:1:2808:A:H8	1.85	0.41
75:1:3084:C:O2'	75:1:3332:U:OP1	2.18	0.41
75:1:3337:G:H2'	75:1:3338:C:C6	2.56	0.41
5:Q:79:HIS:CE1	58:A:1241:G:O4'	2.74	0.41
5:Q:96:ILE:HD13	5:Q:116:LEU:O	2.20	0.41
5:Q:97:TYR:CD1	5:Q:102:PHE:HD1	2.39	0.41
6:s6:3:LEU:HD22	6:s6:111:LEU:HD11	2.03	0.41
7:4:36:G:P	4:AI:85:THR:HG1	2.38	0.41
7:4:85:G:H3'	7:4:85:G:C8	2.55	0.41
7:4:131:A:H5''	72:8:93:TYR:CE2	2.55	0.41
12:s7:107:ARG:HG2	58:sR:697:C:O2	2.20	0.41
13:j:93:LYS:NZ	75:1:2548:C:OP1	2.53	0.41
13:j:204:MET:HG2	75:1:914:A:C2	2.56	0.41
19:k:41:VAL:HA	19:k:185:GLY:CA	2.49	0.41
21:CM:95:ASN:HB3	21:CM:103:GLY:O	2.21	0.41
22:DM:14:LEU:HD21	22:DM:17:ARG:HH21	1.86	0.41
23:T:110:ARG:HA	23:T:113:LEU:HB2	2.03	0.41
24:s9:128:LEU:HB3	24:s9:134:ILE:HD13	2.02	0.41
30:c0:34:GLU:CD	30:c0:35:ILE:HA	2.46	0.41
35:V:61:LYS:NZ	70:E:8:LYS:HE3	2.34	0.41
38:AH:16:ARG:CZ	38:AH:37:LYS:HD2	2.50	0.41
38:AH:55:SER:HB3	75:1:1740:U:OP1	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:CP:190:THR:O	39:CP:194:GLN:HG3	2.20	0.41
44:CQ:23:VAL:O	44:CQ:27:LEU:HG	2.20	0.41
44:CQ:34:VAL:HG12	44:CQ:103:LYS:HB2	2.01	0.41
45:DQ:14:GLY:O	45:DQ:15:LYS:HB3	2.19	0.41
48:CR:26:PHE:CG	48:CR:121:GLN:HG2	2.56	0.41
50:Y:10:ASN:HB2	58:A:633:U:P	2.61	0.41
50:Y:83:VAL:HG21	50:Y:122:PHE:CE1	2.54	0.41
11:c6:97:VAL:HG12	11:c6:98:ASP:H	1.85	0.41
15:r:76:MET:HE1	15:r:148:VAL:HG23	2.03	0.41
56:a:54:VAL:N	56:a:55:PRO:HD2	2.35	0.41
21:s:15:GLU:HG3	21:s:72:ARG:HH21	1.85	0.41
58:A:498:G:N7	58:A:499:U:N3	2.66	0.41
58:A:803:A:H1'	12:I:104:ARG:HH21	1.85	0.41
58:A:881:A:H2'	58:A:882:U:O4'	2.20	0.41
58:A:1000:C:H6	58:A:1003:A:H8	1.67	0.41
58:A:1445:G:C8	74:g:91:ILE:HD12	2.55	0.41
58:A:1535:U:H6	58:A:1535:U:H2'	1.75	0.41
58:A:1745:G:O6	80:A:1986:OHX:N3	2.54	0.41
59:b:82:ARG:HD3	59:b:82:ARG:HA	1.83	0.41
65:d:58:GLU:O	65:d:58:GLU:HG2	2.21	0.41
70:E:74:GLN:HE22	70:E:81:PRO:CA	2.33	0.41
72:CZ:73:MET:HA	72:CZ:76:VAL:HG22	2.02	0.41
73:F:66:MET:HE2	73:F:78:THR:OG1	2.21	0.41
73:F:176:ASP:O	73:F:195:ILE:HG13	2.21	0.41
54:z:14:VAL:HG11	54:z:41:ILE:HG21	2.03	0.41
75:AR:69:C:H2'	75:AR:70:A:O4'	2.21	0.41
75:AR:241:G:C6	75:AR:242:C:N4	2.89	0.41
75:AR:286:U:H2'	75:AR:287:G:C8	2.56	0.41
75:AR:608:A:O4'	25:CF:322:GLN:HG3	2.19	0.41
75:AR:1002:A:H2'	75:AR:1003:A:H8	1.86	0.41
75:AR:1597:C:H5'	75:AR:1696:A:H1'	2.03	0.41
75:AR:2144:A:C4	75:AR:2281:A:C6	3.08	0.41
75:AR:2157:G:N1	75:AR:2178:A:OP2	2.44	0.41
75:AR:2522:G:H1	13:CD:68:LYS:HD3	1.84	0.41
75:AR:2771:U:H3'	75:AR:2772:C:C5'	2.49	0.41
75:AR:2949:U:C5	75:AR:2950:G:C6	3.09	0.41
77:G:213:LYS:HA	77:G:213:LYS:HD2	1.91	0.41
53:d4:45:ALA:CA	53:d4:50:ALA:HB3	2.43	0.41
79:DB:96:VAL:HA	79:DB:100:THR:HG21	2.03	0.41
79:DB:104:PRO:O	79:DB:105:SER:C	2.63	0.41
6:H:186:ARG:O	6:H:189:HIS:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:434:G:O6	80:sR:2122:OHX:N2	2.54	0.41
58:sR:478:A:N6	58:sR:539:G:H22	2.19	0.41
58:sR:591:A:H2'	58:sR:592:A:H8	1.84	0.41
58:sR:650:U:C2'	58:sR:651:G:H5'	2.51	0.41
58:sR:841:U:H2'	58:sR:842:C:C6	2.55	0.41
58:sR:1054:U:H2'	58:sR:1055:U:H6	1.85	0.41
58:sR:1071:U:O3'	62:d7:19:HIS:HB2	2.21	0.41
58:sR:1166:A:C5'	77:s5:104:ASN:HD21	2.33	0.41
58:sR:1561:U:C4'	58:sR:1599:C:H4'	2.50	0.41
56:d5:90:LYS:O	56:d5:101:TYR:HD1	2.04	0.41
78:Rb:60:SER:C	78:Rb:61:PHE:HD1	2.28	0.41
78:Rb:170:ILE:HG13	78:Rb:202:LEU:HD21	2.03	0.41
59:d6:45:VAL:CG2	59:d6:64:LEU:HD12	2.51	0.41
61:s0:40:ALA:HB2	61:s0:46:HIS:CD2	2.56	0.41
61:s0:80:THR:OG1	61:s0:81:PHE:N	2.54	0.41
14:DE:54:SER:HA	14:DE:57:GLU:HG3	2.03	0.41
64:s1:189:ILE:HG13	64:s1:190:PRO:CD	2.39	0.41
67:s2:94:GLN:HG2	67:s2:95:ARG:N	2.35	0.41
68:d9:50:ILE:HG23	70:s3:15:GLY:HA3	2.03	0.41
31:CG:65:ILE:CD1	31:CG:74:VAL:HB	2.49	0.41
36:M:110:HIS:CD2	36:M:111:VAL:N	2.89	0.41
32:DH:38:PRO:HA	32:DH:41:ALA:HB3	2.03	0.41
38:DI:42:PRO:HB2	38:DI:51:LEU:HD21	2.02	0.41
77:s5:64:VAL:CG1	77:s5:65:ARG:HH11	2.27	0.41
75:1:573:C:H2'	75:1:574:U:C6	2.56	0.41
75:1:975:C:H2'	75:1:976:U:H6	1.84	0.41
75:1:2297:U:C2	75:1:2299:A:C6	3.08	0.41
75:1:3166:C:N4	75:1:3284:G:H1	2.18	0.41
3:CJ:122:LYS:C	3:CJ:124:ASP:H	2.29	0.41
3:CJ:166:LEU:O	3:CJ:170:CYS:N	2.53	0.41
3:CJ:248:LYS:HA	3:CJ:248:LYS:HD3	1.86	0.41
4:DJ:35:LYS:O	4:DJ:35:LYS:HG3	2.21	0.41
6:s6:43:ASP:O	6:s6:46:LYS:HB2	2.20	0.41
10:DK:5:THR:OG1	10:DK:7:ILE:HG12	2.21	0.41
11:R:13:LYS:O	11:R:16:ALA:N	2.54	0.41
15:CL:144:ASN:O	15:CL:148:VAL:HG22	2.21	0.41
18:s8:138:ASN:HA	18:s8:141:ARG:HB3	2.03	0.41
20:AE:16:LEU:O	20:AE:20:LEU:N	2.43	0.41
21:CM:32:ARG:HG2	21:CM:120:ILE:HA	2.03	0.41
23:T:109:LEU:HD12	23:T:113:LEU:HD23	2.03	0.41
27:CN:64:LYS:HE3	2:DC:69:TRP:CD1	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:CN:170:LEU:HD12	27:CN:170:LEU:N	2.35	0.41
27:CN:171:ARG:HE	27:CN:171:ARG:HA	1.86	0.41
29:U:60:SER:HB2	58:A:1480:G:OP1	2.19	0.41
29:U:88:VAL:CG2	58:A:1172:G:H21	2.33	0.41
29:U:123:ARG:HG2	29:U:124:ILE:N	2.36	0.41
32:AG:67:MET:HE2	32:AG:67:MET:HB3	1.90	0.41
33:CO:123:LEU:HB3	44:CQ:190:VAL:CG2	2.50	0.41
39:CP:99:ARG:NH1	39:CP:118:SER:OG	2.51	0.41
42:c3:74:ILE:H	42:c3:74:ILE:HD12	1.85	0.41
46:X:108:ALA:HB3	46:X:121:VAL:HG21	2.02	0.41
3:p:24:ASN:HB3	3:p:25:PRO:CD	2.51	0.41
10:AJ:48:ALA:HB1	39:v:16:SER:HB3	2.03	0.41
5:c5:29:SER:HG	5:c5:32:ASP:H	1.67	0.41
9:q:18:VAL:CG2	9:q:53:ILE:HD11	2.50	0.41
9:q:126:VAL:HG22	9:q:164:ILE:HG21	2.02	0.41
9:q:163:GLN:HE21	9:q:163:GLN:HB3	1.75	0.41
53:Z:125:LEU:HD12	53:Z:126:ALA:N	2.35	0.41
54:CT:169:ALA:HA	54:CT:172:ARG:CZ	2.50	0.41
55:sM:62:ARG:CZ	55:sM:62:ARG:HB3	2.51	0.41
17:c7:53:TYR:O	17:c7:56:HIS:N	2.54	0.41
21:s:14:ILE:HD12	21:s:76:ALA:HB3	2.03	0.41
21:s:100:GLY:O	21:s:159:THR:HG21	2.20	0.41
57:CU:146:LYS:HG2	75:AR:534:U:H1'	2.02	0.41
58:A:98:U:H1'	58:A:425:A:H1'	2.03	0.41
58:A:224:C:H2'	58:A:225:A:H8	1.84	0.41
58:A:523:G:O2'	58:A:529:A:N6	2.54	0.41
58:A:534:A:H3'	58:A:535:A:H8	1.85	0.41
58:A:1335:U:H2'	58:A:1336:A:C8	2.56	0.41
60:CV:12:ARG:HD3	60:CV:13:TYR:CZ	2.55	0.41
60:CV:85:LEU:HD23	60:CV:85:LEU:HA	1.81	0.41
33:u:36:VAL:HG11	33:u:55:ARG:NH2	2.36	0.41
64:C:128:LYS:CG	64:C:129:THR:H	2.33	0.41
65:d:12:VAL:HA	65:d:30:VAL:HG12	2.02	0.41
70:E:55:THR:OG1	70:E:56:GLN:N	2.54	0.41
70:E:158:ILE:HG22	70:E:189:MET:HE1	2.03	0.41
46:d2:68:ARG:HA	67:s2:225:LEU:HD13	2.01	0.41
51:y:120:GLU:HG2	51:y:122:ILE:HG23	2.02	0.41
51:y:184:PHE:CD1	51:y:184:PHE:N	2.89	0.41
72:CZ:95:ILE:O	72:CZ:99:VAL:HG23	2.21	0.41
73:F:120:SER:HA	73:F:164:LEU:HD11	2.01	0.41
54:z:8:LYS:HG3	54:z:22:VAL:HG21	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:1014:U:H2'	75:AR:1015:U:O4'	2.21	0.41
75:AR:1025:A:H8	75:AR:1025:A:P	2.44	0.41
75:AR:1077:U:H2'	75:AR:1078:U:C6	2.56	0.41
75:AR:1498:A:H2'	75:AR:1499:C:C6	2.55	0.41
75:AR:2209:U:O2'	75:AR:2210:G:P	2.79	0.41
75:AR:3133:C:H2'	75:AR:3134:A:O4'	2.20	0.41
75:AR:3279:A:N6	75:AR:3280:U:C4	2.88	0.41
76:DA:63:LYS:HD2	76:DA:97:ILE:HD12	2.01	0.41
77:G:29:ILE:HB	77:G:34:GLN:CD	2.46	0.41
77:G:134:VAL:HA	77:G:137:ILE:HD11	2.03	0.41
78:h:80:ALA:O	78:h:91:LEU:HA	2.21	0.41
78:h:295:SER:OG	78:h:296:ALA:N	2.52	0.41
53:d4:64:PHE:CD2	58:sR:767:U:C2	3.08	0.41
53:d4:132:ARG:HD2	53:d4:132:ARG:HA	1.82	0.41
79:DB:46:ILE:HD11	79:DB:48:ARG:C	2.46	0.41
58:sR:234:G:H2'	58:sR:235:G:O4'	2.20	0.41
58:sR:454:U:C6	73:s4:66:MET:HG3	2.55	0.41
58:sR:735:C:H2'	58:sR:736:C:C6	2.55	0.41
58:sR:1012:U:H2'	58:sR:1013:A:O4'	2.20	0.41
12:I:33:GLU:CA	12:I:35:LYS:H	2.34	0.41
12:I:96:ARG:NH1	12:I:124:LYS:HB3	2.36	0.41
78:Rb:170:ILE:HG13	78:Rb:202:LEU:CD2	2.51	0.41
59:d6:39:MET:HE2	59:d6:39:MET:HB2	1.95	0.41
61:s0:41:ARG:HB2	61:s0:42:PRO:HD2	2.02	0.41
19:CE:114:VAL:HG22	19:CE:163:HIS:CG	2.56	0.41
24:K:51:LYS:O	24:K:55:ALA:N	2.49	0.41
30:L:16:PHE:HD2	30:L:76:LEU:HG	1.86	0.41
72:8:56:ARG:HG3	72:8:56:ARG:NH1	2.36	0.41
26:DG:123:LYS:HA	26:DG:126:LEU:HD23	2.02	0.41
70:s3:58:VAL:HG23	70:s3:59:LEU:N	2.36	0.41
70:s3:162:GLN:N	70:s3:163:PRO:HD2	2.36	0.41
32:DH:52:VAL:HG21	32:DH:99:ARG:CZ	2.51	0.41
73:s4:184:THR:O	73:s4:184:THR:OG1	2.31	0.41
39:v:190:THR:HG23	39:v:193:ARG:HH22	1.86	0.41
79:AA:135:ARG:HH22	75:1:2557:A:P	2.44	0.41
43:CI:33:ARG:HG2	43:CI:33:ARG:NH1	2.27	0.41
75:1:728:G:OP1	80:1:3941:OHX:N3	2.53	0.41
75:1:1664:G:H2'	75:1:1665:C:C6	2.55	0.41
75:1:1805:C:H2'	75:1:1806:A:H8	1.86	0.41
75:1:1838:G:H4'	75:1:1839:A:N3	2.36	0.41
75:1:2103:U:H2'	75:1:2104:A:H8	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:2396:G:OP1	75:1:2397:A:H4'	2.20	0.41
75:1:2774:C:H2'	75:1:2775:U:H6	1.86	0.41
80:1:3424:OHX:N4	80:1:4002:OHX:N5	2.68	0.41
1:3:53:U:H5''	80:3:222:OHX:N6	2.36	0.41
2:AB:113:LEU:HA	2:AB:131:SER:HB3	2.03	0.41
3:CJ:63:LYS:O	3:CJ:67:ILE:HG12	2.21	0.41
3:CJ:190:VAL:HG12	3:CJ:190:VAL:O	2.20	0.41
5:Q:20:VAL:HB	5:Q:25:LEU:HD21	2.02	0.41
5:Q:104:GLN:H	5:Q:104:GLN:HG3	1.65	0.41
6:s6:172:ALA:O	58:sR:66:U:H5'	2.20	0.41
6:s6:184:LEU:HD12	6:s6:184:LEU:H	1.86	0.41
12:s7:28:GLU:HA	12:s7:34:LEU:HD12	2.02	0.41
13:j:173:GLY:N	75:1:2179:C:N3	2.53	0.41
15:CL:4:ARG:NH1	15:CL:9:TYR:OH	2.50	0.41
18:s8:48:THR:OG1	58:sR:333:A:OP2	2.34	0.41
18:s8:138:ASN:C	18:s8:141:ARG:HB3	2.45	0.41
19:k:10:ARG:NH1	19:k:10:ARG:HG3	2.35	0.41
19:k:218:ILE:HG12	19:k:276:THR:HG23	2.03	0.41
20:AE:11:GLU:OE1	20:AE:74:ARG:NE	2.54	0.41
21:CM:89:TYR:HD2	21:CM:167:TYR:O	2.03	0.41
21:CM:94:ARG:C	21:CM:96:PHE:H	2.29	0.41
23:T:49:LYS:HZ1	23:T:80:LYS:C	2.28	0.41
24:s9:2:PRO:HB2	73:s4:26:CYS:SG	2.61	0.41
24:s9:71:PHE:HD1	24:s9:71:PHE:O	2.04	0.41
24:s9:133:HIS:CD2	24:s9:162:SER:HB2	2.37	0.41
24:s9:169:PRO:O	24:s9:170:GLY:C	2.63	0.41
25:l:44:LYS:O	25:l:47:ARG:HG3	2.21	0.41
25:l:73:ARG:NH1	75:1:805:G:H1'	2.36	0.41
25:l:135:VAL:HA	25:l:245:GLY:O	2.21	0.41
25:l:143:GLU:H	25:l:143:GLU:CD	2.19	0.41
25:l:145:ILE:HD12	25:l:145:ILE:HA	1.83	0.41
26:AF:46:PHE:CE1	75:1:1145:G:H5'	2.55	0.41
27:CN:6:ASN:HB2	2:DC:48:TYR:HB3	2.03	0.41
27:CN:7:LEU:CD2	75:AR:796:U:H1'	2.51	0.41
27:CN:101:ARG:HH22	27:CN:112:ASN:ND2	2.18	0.41
29:U:3:GLY:HA3	58:A:1364:G:N2	2.36	0.41
29:U:63:ARG:O	29:U:67:MET:SD	2.78	0.41
30:c0:63:TYR:CD2	70:s3:76:ARG:HD3	2.56	0.41
31:m:253:PHE:CD2	31:m:253:PHE:O	2.74	0.41
32:AG:61:GLY:HA3	48:x:172:GLN:HE22	1.86	0.41
33:CO:21:VAL:HB	33:CO:63:VAL:CG1	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CO:128:ARG:NH1	75:AR:3214:U:OP2	2.53	0.41
37:n:51:ARG:NH1	37:n:163:PHE:HB2	2.35	0.41
39:CP:96:ARG:HH11	39:CP:96:ARG:HG2	1.84	0.41
40:DP:19:LYS:O	40:DP:22:ALA:N	2.54	0.41
41:W:64:GLU:CD	62:c:2:VAL:HG22	2.46	0.41
41:W:79:LEU:HD12	41:W:82:VAL:HG21	2.02	0.41
4:AI:115:LYS:HE2	27:t:126:PHE:HD2	1.85	0.41
44:CQ:68:ARG:NH1	75:AR:2988:C:OP1	2.50	0.41
45:DQ:102:GLN:CD	45:DQ:103:ALA:N	2.78	0.41
3:p:220:ALA:HA	3:p:224:ASP:OD2	2.21	0.41
3:p:249:ARG:HD3	3:p:249:ARG:C	2.46	0.41
10:AJ:98:ARG:O	10:AJ:98:ARG:CG	2.68	0.41
50:Y:13:ARG:HA	50:Y:16:ARG:HH21	1.86	0.41
50:Y:93:LEU:CD2	71:f:8:LEU:HD22	2.47	0.41
50:Y:136:TRP:CE3	50:Y:137:LYS:HE3	2.56	0.41
9:q:16:VAL:CG1	9:q:30:PRO:HD3	2.49	0.41
9:q:57:VAL:HG13	9:q:64:HIS:CE1	2.56	0.41
51:CS:96:PHE:HD1	51:CS:97:PRO:O	2.03	0.41
51:CS:107:THR:HG21	75:AR:676:G:H3'	2.03	0.41
54:CT:175:GLN:O	54:CT:179:GLU:HG3	2.21	0.41
21:s:33:ALA:HB2	21:s:123:PHE:CZ	2.56	0.41
58:A:235:G:OP1	58:A:235:G:H4'	2.21	0.41
58:A:370:A:H2'	58:A:371:G:O4'	2.21	0.41
58:A:385:A:H8	58:A:385:A:O5'	2.04	0.41
58:A:625:C:O2'	58:A:939:A:N3	2.47	0.41
58:A:698:U:C5	58:A:699:U:C5	3.09	0.41
58:A:702:G:C6	58:A:737:A:C6	3.08	0.41
58:A:820:U:O4	58:A:853:G:H1'	2.20	0.41
58:A:900:A:OP1	47:P:44:GLY:HA3	2.21	0.41
58:A:902:G:H8	58:A:902:G:O5'	2.04	0.41
58:A:1114:G:N2	58:A:1130:G:H2'	2.36	0.41
58:A:1339:C:H2'	58:A:1341:A:H62	1.86	0.41
58:A:1594:G:C6	58:A:1595:U:N3	2.89	0.41
58:A:1595:U:H5	58:A:1596:C:C5	2.38	0.41
58:A:1762:A:C1'	58:A:1783:C:H5'	2.51	0.41
23:c8:85:PHE:O	23:c8:85:PHE:CD1	2.74	0.41
27:t:76:THR:O	27:t:79:GLU:N	2.45	0.41
34:AN:94:SER:HA	34:AN:123:PRO:HA	2.03	0.41
61:B:183:ARG:NH2	61:B:191:ARG:O	2.53	0.41
29:c9:60:SER:OG	58:sR:1480:G:OP1	2.21	0.41
33:u:109:ARG:HA	33:u:112:LEU:HG	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:AO:6:ARG:O	40:AO:10:THR:OG1	2.29	0.41
63:CW:49:ASN:O	63:CW:51:GLY:N	2.54	0.41
64:C:179:SER:HB2	64:C:183:GLN:OE1	2.20	0.41
64:C:195:LYS:CB	64:C:198:GLU:HB3	2.51	0.41
65:d:31:GLU:OE2	65:d:33:LEU:HD23	2.20	0.41
35:d0:58:LEU:HD23	58:sR:1516:A:C8	2.56	0.41
45:AP:10:THR:O	45:AP:23:HIS:HE1	2.03	0.41
67:D:240:LEU:HD23	67:D:241:ASP:N	2.33	0.41
41:d1:82:VAL:HG12	61:s0:52:LYS:CB	2.51	0.41
48:x:131:ARG:HA	48:x:131:ARG:HD2	1.82	0.41
48:x:169:THR:OG1	48:x:172:GLN:HG3	2.20	0.41
48:x:180:LYS:HA	48:x:183:ALA:C	2.45	0.41
69:CY:33:ASN:OD1	69:CY:35:LYS:HB3	2.20	0.41
70:E:55:THR:O	70:E:59:LEU:HD12	2.21	0.41
70:E:136:VAL:CG1	70:E:152:PHE:HB2	2.51	0.41
51:y:19:PRO:HD3	51:y:53:PHE:CD1	2.56	0.41
55:i:49:LYS:HB2	75:1:1019:G:H5''	2.03	0.41
55:i:94:HIS:CD2	55:i:94:HIS:N	2.87	0.41
72:CZ:42:ARG:HD3	75:AR:15:C:OP1	2.20	0.41
73:F:139:VAL:HG13	73:F:150:PRO:HG3	2.02	0.41
73:F:252:ARG:HH22	24:K:74:ASN:HD22	1.67	0.41
54:z:23:TRP:CE3	54:z:51:VAL:HB	2.56	0.41
54:z:133:LYS:HB3	54:z:134:HIS:CD2	2.56	0.41
75:AR:238:A:OP2	80:AR:4203:OHX:N2	2.53	0.41
75:AR:268:A:N1	75:AR:295:A:H5'	2.36	0.41
75:AR:281:G:C6	75:AR:282:G:C6	3.09	0.41
75:AR:501:A:H2'	75:AR:502:U:H6	1.85	0.41
75:AR:550:A:C6	75:AR:551:A:N6	2.89	0.41
75:AR:752:C:H2'	75:AR:753:C:C6	2.56	0.41
75:AR:872:U:H2'	75:AR:873:C:C6	2.56	0.41
75:AR:921:A:OP1	75:AR:921:A:H3'	2.21	0.41
75:AR:946:U:H2'	75:AR:947:G:H8	1.85	0.41
75:AR:968:G:H2'	75:AR:969:C:C6	2.56	0.41
75:AR:979:U:C2	75:AR:980:A:C4	3.09	0.41
75:AR:1225:A:H2'	75:AR:1226:G:C8	2.56	0.41
75:AR:1252:A:H2'	75:AR:1253:U:H5'	2.02	0.41
75:AR:1490:A:H3'	75:AR:1491:A:H8	1.86	0.41
75:AR:1695:U:O2'	75:AR:1749:A:N1	2.38	0.41
75:AR:1708:C:H1'	38:DI:52:GLN:NE2	2.36	0.41
75:AR:1807:G:C6	75:AR:1808:G:N1	2.88	0.41
75:AR:2175:U:O2'	13:CD:23:ARG:HD2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:2245:C:O4'	13:CD:222:ALA:HA	2.21	0.41
75:AR:2353:G:O6	86:AR:4302:HOH:O	2.20	0.41
75:AR:2527:G:C2	75:AR:2584:G:C2	3.09	0.41
75:AR:2610:G:H2'	75:AR:2611:U:O4'	2.20	0.41
75:AR:2662:G:H2'	75:AR:2663:G:O4'	2.20	0.41
75:AR:2761:G:C4	75:AR:2795:U:C5	3.09	0.41
75:AR:2943:G:H2'	75:AR:2944:U:O4'	2.21	0.41
75:AR:2992:U:OP1	75:AR:3310:A:O2'	2.37	0.41
75:AR:3100:U:O2'	75:AR:3101:G:H5''	2.20	0.41
75:AR:3174:A:OP1	32:DH:97:SER:HB2	2.20	0.41
75:AR:3266:G:C6	75:AR:3267:A:C6	3.09	0.41
75:AR:3378:C:O2'	19:CE:312:VAL:HA	2.21	0.41
76:DA:86:THR:OG1	76:DA:88:GLU:OE1	2.38	0.41
76:DA:120:GLN:HG2	76:DA:124:GLY:HA3	2.02	0.41
77:G:54:LYS:HD2	77:G:54:LYS:HA	1.72	0.41
78:h:13:LEU:O	78:h:309:VAL:HB	2.20	0.41
78:h:33:LEU:HD12	78:h:34:LEU:H	1.85	0.41
53:d4:29:HIS:HE1	53:d4:35:VAL:HG12	1.86	0.41
57:0:25:PHE:HD1	60:2:149:GLN:HB2	1.86	0.41
57:0:171:PHE:CD1	57:0:171:PHE:C	2.99	0.41
1:AS:7:G:OP2	31:CG:22:ARG:NH1	2.54	0.41
1:AS:27:A:H2'	1:AS:28:C:C6	2.56	0.41
58:sR:176:C:H3'	58:sR:177:U:C6	2.56	0.41
58:sR:200:A:H2'	58:sR:201:G:H8	1.83	0.41
58:sR:341:A:H2'	58:sR:342:C:C6	2.56	0.41
58:sR:811:A:N3	58:sR:858:G:H1'	2.36	0.41
58:sR:1060:U:H4'	58:sR:1061:A:C5'	2.50	0.41
58:sR:1065:A:OP1	64:s1:160:HIS:HE1	2.02	0.41
58:sR:1234:A:H2'	58:sR:1235:C:C6	2.56	0.41
58:sR:1268:G:H1'	58:sR:1448:G:C5'	2.49	0.41
58:sR:1380:U:H2'	58:sR:1381:U:C6	2.55	0.41
58:sR:1392:U:H2'	58:sR:1393:C:H6	1.86	0.41
58:sR:1622:G:H2'	58:sR:1623:C:C6	2.56	0.41
58:sR:1742:U:H2'	58:sR:1743:U:H6	1.86	0.41
2:DC:112:ILE:HG22	2:DC:134:ALA:HB1	2.03	0.41
12:I:135:ILE:H	12:I:135:ILE:HG13	1.68	0.41
78:Rb:61:PHE:HB3	78:Rb:92:TRP:CH2	2.56	0.41
78:Rb:123:ILE:HD12	78:Rb:124:SER:N	2.36	0.41
78:Rb:153:GLN:NE2	78:Rb:242:SER:OG	2.47	0.41
78:Rb:192:PHE:N	78:Rb:192:PHE:CD1	2.89	0.41
63:5:38:ILE:HG13	63:5:38:ILE:H	1.75	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:DD:23:LYS:HD2	8:DD:23:LYS:HA	1.90	0.41
8:DD:23:LYS:HE3	8:DD:24:PRO:HD2	2.03	0.41
61:s0:34:GLU:N	61:s0:35:PRO:HD2	2.36	0.41
61:s0:101:ARG:HG3	61:s0:102:PHE:N	2.36	0.41
61:s0:115:PHE:CD1	61:s0:116:LYS:N	2.81	0.41
61:s0:123:VAL:HG21	61:s0:129:ASP:HB2	2.03	0.41
62:d7:19:HIS:HE1	62:d7:21:LEU:HG	1.86	0.41
66:6:13:ILE:HD11	66:6:85:TRP:CE2	2.56	0.41
19:CE:85:VAL:HA	19:CE:202:THR:HA	2.03	0.41
19:CE:188:ILE:O	19:CE:192:VAL:HG23	2.21	0.41
24:K:66:ASP:O	24:K:70:LEU:HD12	2.21	0.41
64:s1:35:PRO:HB3	64:s1:231:LEU:HD11	2.02	0.41
69:7:6:ASP:HB3	69:7:10:GLY:N	2.35	0.41
25:CF:9:HIS:O	25:CF:153:SER:N	2.50	0.41
25:CF:157:GLU:HG2	25:CF:251:THR:HG21	2.02	0.41
20:DF:85:ALA:O	20:DF:86:LYS:C	2.64	0.41
72:8:81:ILE:HA	72:8:124:VAL:O	2.19	0.41
31:CG:85:ARG:NH1	31:CG:254:LYS:HB2	2.35	0.41
31:CG:185:PHE:CD1	31:CG:185:PHE:C	2.99	0.41
26:DG:109:LEU:HD12	26:DG:119:VAL:HG21	2.03	0.41
70:s3:138:VAL:HA	70:s3:183:GLY:O	2.20	0.41
70:s3:141:LYS:HZ2	70:s3:179:GLN:NE2	2.19	0.41
76:9:31:LEU:HB3	76:9:101:PRO:HG3	2.02	0.41
37:CH:93:VAL:O	37:CH:93:VAL:HG13	2.20	0.41
37:CH:170:LYS:HB3	37:CH:172:HIS:CE1	2.54	0.41
73:s4:98:ASN:HD21	73:s4:116:ASP:HA	1.86	0.41
39:v:81:TYR:OH	75:1:908:G:H3'	2.20	0.41
39:v:114:ARG:CG	39:v:137:PRO:HG3	2.48	0.41
79:AA:124:ALA:O	79:AA:126:LYS:N	2.51	0.41
38:DI:90:ILE:O	38:DI:94:LEU:HD22	2.20	0.41
47:P:91:THR:O	47:P:92:LYS:C	2.63	0.41
77:s5:81:ARG:HD3	77:s5:82:PHE:HE1	1.86	0.41
77:s5:189:THR:HG22	77:s5:192:GLU:OE1	2.21	0.41
75:1:396:A:O2'	75:1:399:A:OP1	2.25	0.41
75:1:651:G:C6	75:1:652:G:C6	3.08	0.41
75:1:705:A:H4'	75:1:706:A:OP1	2.21	0.41
75:1:873:C:H4'	75:1:874:U:OP2	2.21	0.41
75:1:1361:U:H2'	75:1:1362:G:C8	2.56	0.41
75:1:1481:A:H2'	75:1:1858:A:H1'	2.03	0.41
75:1:1701:C:H2'	75:1:1702:U:O4'	2.21	0.41
75:1:1718:G:H2'	75:1:1719:G:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:1936:A:H2'	75:1:1937:U:O4'	2.21	0.41
75:1:2217:U:H2'	75:1:2218:G:H8	1.86	0.41
75:1:2805:G:N3	75:1:2967:A:H2	2.18	0.41
75:1:3000:A:H2'	75:1:3001:C:H6	1.86	0.41
75:1:3227:A:C2'	75:1:3228:C:H5'	2.51	0.41
3:CJ:75:ILE:HG13	39:CP:18:VAL:HG23	2.03	0.41
3:CJ:143:ILE:HD11	3:CJ:151:VAL:HG11	2.03	0.41
5:Q:37:ALA:HB1	5:Q:41:VAL:HG11	2.02	0.41
5:Q:97:TYR:OH	58:A:1211:A:N3	2.53	0.41
7:4:11:C:H1'	48:x:6:ALA:HB2	2.02	0.41
8:AC:41:ARG:NH1	75:1:776:U:OP1	2.54	0.41
10:DK:25:LYS:HB2	10:DK:28:TYR:CD2	2.50	0.41
11:R:75:VAL:HG11	58:A:1609:U:O3'	2.21	0.41
12:s7:25:VAL:HA	12:s7:28:GLU:HB2	2.02	0.41
12:s7:67:LEU:CG	12:s7:94:ALA:HB2	2.51	0.41
12:s7:76:LYS:HA	12:s7:79:ARG:CB	2.35	0.41
13:j:206:PRO:HD3	13:j:213:GLY:CA	2.51	0.41
14:AD:16:LEU:HA	14:AD:19:LYS:HZ2	1.86	0.41
17:S:53:TYR:O	17:S:57:LEU:HD22	2.20	0.41
18:s8:78:ILE:HD12	18:s8:78:ILE:N	2.35	0.41
19:k:250:ALA:HB1	75:1:2947:G:N3	2.36	0.41
19:k:281:LYS:NZ	19:k:350:ALA:HA	2.36	0.41
20:AE:82:GLU:HA	20:AE:82:GLU:OE1	2.21	0.41
23:T:23:ASP:OD1	23:T:23:ASP:C	2.64	0.41
25:l:157:GLU:HB3	25:l:211:GLU:O	2.20	0.41
29:U:62:ALA:O	29:U:65:ILE:HG22	2.21	0.41
31:m:160:PHE:HB3	31:m:180:PHE:CE1	2.56	0.41
36:c1:82:ARG:C	36:c1:111:VAL:HG12	2.45	0.41
40:DP:1:MET:CE	40:DP:5:TRP:HB2	2.51	0.41
45:DQ:12:CYS:HB2	45:DQ:23:HIS:CE1	2.55	0.41
47:c4:30:VAL:O	47:c4:39:ILE:HG13	2.21	0.41
3:p:54:GLU:HG2	3:p:57:ARG:NH1	2.36	0.41
5:c5:81:ARG:NH2	5:c5:120:SER:O	2.53	0.41
5:c5:108:ARG:H	5:c5:108:ARG:HG2	1.67	0.41
51:CS:16:ARG:HG3	75:AR:975:C:P	2.61	0.41
51:CS:180:ARG:NH2	75:AR:2790:A:OP1	2.54	0.41
11:c6:51:PRO:O	11:c6:55:VAL:HG12	2.21	0.41
11:c6:97:VAL:CG1	11:c6:98:ASP:H	2.34	0.41
15:r:15:LYS:NZ	75:1:1124:U:O3'	2.54	0.41
15:r:171:TRP:HZ3	15:r:182:LEU:HD21	1.85	0.41
22:AL:5:ILE:HG22	22:AL:7:ASP:H	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AL:26:LYS:HD3	22:AL:27:ILE:N	2.27	0.41
22:AL:62:ALA:O	22:AL:66:ILE:HG13	2.20	0.41
55:sM:68:ARG:HD2	55:sM:68:ARG:C	2.44	0.41
55:sM:75:ASP:CG	55:sM:76:VAL:N	2.79	0.41
56:a:74:SER:OG	58:A:1534:G:OP2	2.25	0.41
57:CU:36:ILE:O	57:CU:40:ARG:HG2	2.21	0.41
58:A:958:U:H2'	42:O:14:SER:OG	2.21	0.41
80:A:2086:OHX:N5	80:A:2130:OHX:N5	2.69	0.41
23:c8:61:LEU:HA	23:c8:65:GLU:OE1	2.21	0.41
23:c8:138:THR:HB	58:sR:1459:C:H2'	2.02	0.41
27:t:77:LEU:HD21	27:t:99:HIS:HA	2.03	0.41
34:AN:103:LEU:HD11	34:AN:110:CYS:HA	2.02	0.41
60:CV:96:ILE:HD13	60:CV:96:ILE:HA	1.92	0.41
61:B:64:ILE:HG22	61:B:73:VAL:HG21	2.02	0.41
44:w:3:VAL:CG1	44:w:4:GLU:N	2.84	0.41
44:w:51:LYS:NZ	44:w:144:SER:HB2	2.36	0.41
45:AP:65:THR:O	45:AP:66:LYS:HG3	2.21	0.41
67:D:40:LYS:C	67:D:42:GLY:N	2.79	0.41
68:e:39:CYS:C	68:e:41:GLN:H	2.29	0.41
54:z:97:ARG:NH2	75:1:1779:C:O5'	2.54	0.41
75:AR:716:A:C6	2:DC:117:ARG:HG3	2.56	0.41
75:AR:860:G:O5'	13:CD:181:LYS:NZ	2.53	0.41
75:AR:1063:G:H2'	75:AR:1097:G:N2	2.35	0.41
75:AR:1289:G:H2'	75:AR:1290:A:H8	1.85	0.41
75:AR:1730:G:O6	14:DE:29:SER:OG	2.28	0.41
75:AR:2250:G:N7	80:AR:3568:OHX:N3	2.69	0.41
75:AR:2726:C:O2'	75:AR:2727:A:H2'	2.20	0.41
75:AR:2885:C:O2'	75:AR:2886:U:H5'	2.20	0.41
75:AR:2887:A:H2'	75:AR:2887:A:N3	2.36	0.41
75:AR:2993:G:C6	75:AR:3142:A:C4	3.09	0.41
75:AR:3157:U:H4'	75:AR:3158:G:OP1	2.20	0.41
75:AR:3231:U:H2'	75:AR:3232:G:C8	2.55	0.41
75:AR:3343:G:H21	75:AR:3362:A:H2	1.64	0.41
77:G:61:TYR:CZ	77:G:165:LEU:HD22	2.55	0.41
78:h:103:PHE:CD2	78:h:138:GLY:HA2	2.56	0.41
78:h:225:LEU:O	78:h:228:LYS:HG3	2.21	0.41
1:AS:23:A:H2'	1:AS:24:A:C8	2.56	0.41
79:DB:80:LEU:HD23	79:DB:80:LEU:HA	1.95	0.41
79:DB:130:PHE:CD1	79:DB:131:PHE:CE1	3.09	0.41
6:H:197:ASN:OD1	6:H:197:ASN:N	2.54	0.41
58:sR:792:U:C4	58:sR:793:A:N6	2.89	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:958:U:P	62:d7:20:LYS:HZ1	2.43	0.41
58:sR:1098:U:H3'	58:sR:1099:U:H5'	2.03	0.41
58:sR:1779:U:H2'	58:sR:1781:A:OP2	2.21	0.41
56:d5:78:ILE:O	56:d5:82:HIS:HB3	2.20	0.41
60:2:39:ILE:HG21	60:2:101:CYS:SG	2.61	0.41
60:2:105:PHE:HE1	75:1:1063:G:C8	2.39	0.41
60:2:127:GLN:HG2	60:2:127:GLN:O	2.21	0.41
78:Rb:211:ILE:O	78:Rb:222:LEU:HA	2.21	0.41
13:CD:105:GLY:CA	13:CD:160:SER:HB3	2.51	0.41
61:s0:60:ALA:O	61:s0:64:ILE:HG13	2.21	0.41
19:CE:160:VAL:HG23	19:CE:162:VAL:HG13	2.03	0.41
19:CE:286:GLY:HA3	19:CE:321:PHE:CD1	2.56	0.41
64:s1:141:ALA:O	64:s1:142:PHE:HD1	2.04	0.41
25:CF:193:LYS:HB3	25:CF:193:LYS:HE3	1.80	0.41
25:CF:264:SER:OG	25:CF:267:VAL:HG12	2.20	0.41
67:s2:45:VAL:HG11	67:s2:68:ILE:HA	2.02	0.41
67:s2:174:ARG:HH11	67:s2:174:ARG:HG3	1.86	0.41
67:s2:225:LEU:HD21	67:s2:230:TRP:HD1	1.86	0.41
67:s2:249:ALA:O	67:s2:250:GLN:C	2.63	0.41
31:CG:264:GLN:H	31:CG:264:GLN:HG3	1.63	0.41
36:M:53:TYR:CG	36:M:113:PRO:HG2	2.56	0.41
39:v:49:ARG:HH12	75:1:149:U:P	2.44	0.41
39:v:93:LYS:NZ	75:1:276:U:O2	2.48	0.41
77:s5:103:ASN:N	77:s5:103:ASN:OD1	2.54	0.41
77:s5:200:ASN:O	77:s5:205:SER:HB3	2.20	0.41
75:1:16:A:H2'	75:1:17:G:O4'	2.20	0.41
75:1:701:G:H2'	75:1:702:C:C6	2.55	0.41
75:1:1047:A:H2'	75:1:1048:A:C8	2.55	0.41
75:1:1253:U:H4'	75:1:1254:C:O5'	2.21	0.41
75:1:1560:G:N1	75:1:1561:G:C5	2.89	0.41
75:1:1578:C:H5''	75:1:1579:C:OP2	2.21	0.41
75:1:1706:C:H2'	75:1:1707:A:O4'	2.21	0.41
75:1:2191:U:H2'	75:1:2192:C:O4'	2.21	0.41
75:1:3018:C:H2'	75:1:3019:U:O4'	2.21	0.41
75:1:3072:C:H2'	75:1:3073:A:O4'	2.20	0.41
2:AB:71:PRO:HG2	2:AB:108:GLY:O	2.22	0.40
3:CJ:124:ASP:N	3:CJ:124:ASP:OD1	2.54	0.40
3:CJ:178:ALA:HA	3:CJ:222:PHE:HD2	1.82	0.40
5:Q:28:MET:SD	5:Q:32:ASP:HB2	2.61	0.40
5:Q:42:ARG:NH2	58:A:1550:A:OP2	2.54	0.40
6:s6:142:ARG:O	6:s6:147:LEU:HB2	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:4:134:G:OP1	72:8:56:ARG:HG3	2.21	0.40
9:CK:13:PRO:HD2	9:CK:79:ILE:HG21	2.03	0.40
11:R:59:LYS:HA	11:R:59:LYS:HD3	1.68	0.40
12:s7:27:LEU:HA	12:s7:29:ASN:ND2	2.36	0.40
12:s7:169:PHE:HA	12:s7:172:VAL:HG12	2.03	0.40
16:DL:18:LEU:HA	16:DL:25:ARG:H	1.86	0.40
18:s8:42:ARG:HG2	18:s8:58:LEU:HB2	2.02	0.40
18:s8:152:ILE:C	18:s8:152:ILE:HD12	2.45	0.40
19:k:103:THR:HG22	19:k:104:THR:H	1.86	0.40
23:T:8:GLN:H	23:T:8:GLN:CD	2.23	0.40
24:s9:172:VAL:HG13	58:sR:512:A:OP2	2.21	0.40
25:l:3:ARG:NH2	25:l:22:LEU:HB3	2.34	0.40
26:AF:125:ARG:NH2	75:1:1392:G:H3'	2.36	0.40
29:U:33:TYR:CD1	29:U:33:TYR:C	3.00	0.40
30:c0:25:LYS:O	30:c0:25:LYS:HG2	2.20	0.40
30:c0:44:LYS:HA	30:c0:47:GLN:HB3	2.03	0.40
32:AG:73:ARG:NH2	75:1:1167:U:OP2	2.53	0.40
33:CO:36:VAL:HG21	33:CO:47:ASP:HB2	2.02	0.40
35:V:23:ARG:HD2	35:V:90:TYR:CG	2.56	0.40
36:c1:45:PRO:HD3	36:c1:60:PHE:CE2	2.57	0.40
42:c3:54:LEU:C	42:c3:60:VAL:HG22	2.46	0.40
46:X:61:ILE:HD13	46:X:61:ILE:HG21	1.80	0.40
46:X:83:ILE:HD12	46:X:83:ILE:HA	1.93	0.40
47:c4:13:VAL:HG23	47:c4:13:VAL:O	2.21	0.40
3:p:68:ARG:NH1	75:1:2514:U:OP1	2.53	0.40
3:p:147:LYS:HE2	3:p:147:LYS:HB2	1.90	0.40
48:CR:36:ILE:O	48:CR:39:TRP:HB2	2.21	0.40
49:DR:44:LYS:HB2	49:DR:46:THR:CG2	2.47	0.40
9:q:27:VAL:HG12	9:q:82:VAL:HG11	2.03	0.40
51:CS:54:LEU:HB3	51:CS:58:ASN:HB2	2.02	0.40
15:r:22:TYR:CZ	75:1:1048:A:H2'	2.56	0.40
54:CT:100:ARG:O	54:CT:104:ARG:HB2	2.20	0.40
56:a:40:VAL:HB	56:a:72:GLY:HA3	2.03	0.40
56:a:102:THR:OG1	56:a:103:ARG:N	2.53	0.40
58:A:138:A:N6	58:A:266:A:H61	2.19	0.40
58:A:155:U:H4'	6:H:59:GLN:N	2.36	0.40
58:A:279:G:OP2	58:A:279:G:C5	2.74	0.40
58:A:771:A:C4	58:A:772:G:C8	3.09	0.40
58:A:1378:U:H2'	58:A:1379:C:O4'	2.20	0.40
58:A:1731:A:H5''	58:A:1732:A:OP2	2.21	0.40
59:b:25:ASN:OD1	59:b:26:CYS:HB3	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:B:22:THR:CG2	61:B:172:LEU:HD11	2.52	0.40
63:CW:57:THR:OG1	63:CW:64:THR:OG1	2.31	0.40
65:d:18:ARG:HD2	65:d:23:GLY:O	2.21	0.40
67:D:59:HIS:NE2	67:D:238:SER:HB3	2.36	0.40
67:D:174:ARG:NH1	24:K:94:ASP:OD1	2.43	0.40
41:d1:71:ARG:HB3	41:d1:83:TRP:CE2	2.56	0.40
70:E:25:PHE:CB	70:E:34:TYR:CE2	2.98	0.40
70:E:34:TYR:CD1	70:E:35:SER:N	2.89	0.40
70:E:123:VAL:O	70:E:127:MET:HG2	2.20	0.40
73:F:87:MET:HE2	73:F:226:PHE:CZ	2.56	0.40
73:F:161:LYS:O	73:F:169:ILE:HA	2.21	0.40
73:F:187:ARG:CA	73:F:189:LEU:H	2.34	0.40
54:z:115:ILE:HD13	54:z:115:ILE:HG21	1.79	0.40
54:z:174:ALA:C	54:z:175:GLN:HG2	2.46	0.40
75:AR:172:G:H3'	75:AR:173:G:C5'	2.51	0.40
75:AR:229:G:H2'	75:AR:230:U:O4'	2.20	0.40
75:AR:394:G:N1	75:AR:397:A:OP2	2.51	0.40
75:AR:1049:C:H2'	75:AR:1050:U:C6	2.56	0.40
75:AR:1735:G:O6	80:AR:3446:OHX:N5	2.54	0.40
75:AR:2294:U:H2'	75:AR:2296:A:OP2	2.20	0.40
75:AR:2694:A:C6	75:AR:2695:A:C6	3.09	0.40
75:AR:2874:G:H22	75:AR:2979:U:H3	1.69	0.40
76:DA:36:SER:HB3	76:DA:106:ILE:O	2.21	0.40
77:G:222:LYS:C	77:G:224:ASN:N	2.79	0.40
78:h:89:LEU:HD21	78:h:113:VAL:HB	2.03	0.40
6:H:51:LYS:HB3	6:H:112:VAL:HG22	2.02	0.40
12:I:78:THR:H	12:I:78:THR:HG1	1.60	0.40
78:Rb:111:MET:HE1	78:Rb:127:ARG:CD	2.50	0.40
78:Rb:143:THR:HG22	78:Rb:145:LEU:HD21	2.02	0.40
78:Rb:213:SER:OG	78:Rb:221:MET:N	2.44	0.40
13:CD:47:GLN:NE2	13:CD:60:LYS:HD2	2.36	0.40
13:CD:108:PRO:O	13:CD:111:THR:HG23	2.20	0.40
18:J:138:ASN:HA	18:J:141:ARG:CD	2.44	0.40
61:s0:179:ARG:NE	61:s0:183:ARG:HH21	2.19	0.40
24:K:6:ARG:CZ	24:K:6:ARG:HB3	2.50	0.40
65:d8:9:LEU:O	65:d8:33:LEU:HB2	2.21	0.40
69:7:52:THR:O	69:7:56:ARG:HG3	2.22	0.40
25:CF:35:VAL:HG11	25:CF:244:LEU:CD1	2.51	0.40
25:CF:184:SER:CB	25:CF:202:ARG:HG2	2.50	0.40
20:DF:24:SER:HB2	20:DF:27:LYS:HD2	2.02	0.40
72:8:92:LYS:HG2	72:8:112:THR:HG23	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CG:217:GLU:CD	31:CG:217:GLU:N	2.78	0.40
26:DG:104:ASN:O	26:DG:108:ILE:HG12	2.21	0.40
70:s3:60:GLY:HA3	70:s3:61:GLU:OE2	2.21	0.40
43:CI:152:GLY:O	43:CI:163:LEU:HG	2.20	0.40
38:DI:5:VAL:HG22	38:DI:6:THR:H	1.85	0.40
77:s5:51:VAL:CG2	77:s5:128:ASN:ND2	2.82	0.40
75:1:38:U:H2'	75:1:39:A:O4'	2.21	0.40
75:1:112:U:O2'	75:1:113:C:OP2	2.30	0.40
75:1:314:U:H2'	75:1:315:C:C6	2.56	0.40
75:1:548:G:C5	75:1:549:U:C4	3.09	0.40
75:1:698:U:H2'	75:1:699:A:O4'	2.21	0.40
75:1:1389:G:O2'	75:1:1418:A:N1	2.50	0.40
75:1:1900:A:O2'	75:1:1906:G:N7	2.52	0.40
75:1:2217:U:H2'	75:1:2218:G:C8	2.56	0.40
75:1:2558:U:O2'	75:1:2559:U:H5'	2.22	0.40
75:1:2747:A:OP1	80:1:3425:OHX:N6	2.54	0.40
75:1:3045:G:H2'	75:1:3046:A:O4'	2.21	0.40
5:Q:83:MET:HE3	5:Q:83:MET:HB2	1.75	0.40
7:4:127:U:H2'	7:4:128:U:H5'	2.04	0.40
9:CK:181:VAL:HG22	34:DO:89:TYR:HH	1.86	0.40
10:DK:47:ILE:HD12	10:DK:47:ILE:H	1.86	0.40
12:s7:64:VAL:H	12:s7:64:VAL:HG22	1.61	0.40
12:s7:109:VAL:O	12:s7:110:GLN:HB3	2.21	0.40
15:CL:36:LEU:CG	15:CL:37:GLY:H	2.34	0.40
18:s8:104:ILE:CD1	18:s8:165:LEU:HB2	2.52	0.40
19:k:294:GLY:CA	19:k:305:ILE:HD13	2.51	0.40
20:AE:37:LYS:HG2	20:AE:49:VAL:CG1	2.49	0.40
21:CM:115:LYS:H	21:CM:115:LYS:HG2	1.40	0.40
27:CN:83:ALA:HB2	27:CN:113:VAL:HG23	2.02	0.40
31:m:211:LEU:HD23	31:m:211:LEU:HA	1.81	0.40
32:AG:26:ASN:HA	32:AG:88:ASN:OD1	2.21	0.40
33:CO:105:GLN:OE1	33:CO:109:ARG:NH2	2.54	0.40
35:V:45:ALA:HB3	35:V:52:LYS:NZ	2.36	0.40
36:c1:108:PRO:HG3	36:c1:134:THR:HB	2.03	0.40
42:c3:66:ILE:HD13	42:c3:66:ILE:HA	1.71	0.40
44:CQ:12:LYS:HD2	44:CQ:37:ARG:NH2	2.37	0.40
47:c4:50:ALA:C	47:c4:52:ARG:H	2.29	0.40
50:Y:137:LYS:H	50:Y:137:LYS:HG2	1.70	0.40
5:c5:83:MET:HE3	5:c5:84:ILE:N	2.33	0.40
9:q:162:GLN:NE2	34:AN:89:TYR:HD2	2.19	0.40
53:Z:8:ARG:HB3	58:A:780:A:C8	2.53	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:CT:40:ALA:HA	54:CT:43:LYS:HE2	2.04	0.40
54:CT:78:TYR:HA	54:CT:81:ARG:HD2	2.03	0.40
21:s:15:GLU:HB2	21:s:132:ASN:ND2	2.36	0.40
21:s:91:LEU:O	21:s:172:LEU:HG	2.20	0.40
21:s:164:LYS:NZ	21:s:171:VAL:HG11	2.37	0.40
58:A:4:C:H5'	67:D:204:THR:OG1	2.20	0.40
58:A:246:G:N2	36:M:38:ALA:O	2.54	0.40
58:A:329:G:H5'	18:J:99:ALA:HB3	2.03	0.40
58:A:531:C:OP2	80:A:2142:OHX:N4	2.55	0.40
58:A:732:G:O6	80:A:2043:OHX:N5	2.54	0.40
58:A:823:G:O6	58:A:849:C:N3	2.55	0.40
58:A:879:G:O2'	42:O:105:ASN:HB3	2.22	0.40
58:A:951:A:H1'	42:O:101:HIS:CG	2.56	0.40
58:A:984:G:H2'	58:A:985:G:O4'	2.22	0.40
58:A:1125:A:C5	58:A:1126:G:H1'	2.56	0.40
58:A:1359:C:H2'	58:A:1360:A:C8	2.56	0.40
58:A:1428:G:H8	58:A:1428:G:H5'	1.86	0.40
58:A:1460:A:OP2	55:i:68:ARG:HB2	2.21	0.40
58:A:1496:U:H4'	58:A:1519:U:O2'	2.22	0.40
58:A:1581:C:O2'	58:A:1582:U:H5'	2.21	0.40
58:A:1722:A:OP2	80:A:2085:OHX:N2	2.54	0.40
58:A:1789:G:OP1	59:b:20:PRO:HG3	2.21	0.40
60:CV:14:MET:SD	60:CV:58:GLN:HG2	2.61	0.40
61:B:25:GLY:CA	61:B:48:ILE:HD11	2.51	0.40
33:u:132:LYS:HD2	75:l:3230:G:H4'	2.03	0.40
35:d0:58:LEU:HB2	35:d0:88:LYS:HB3	2.03	0.40
70:E:115:ILE:CG2	55:i:110:TRP:HA	2.50	0.40
70:E:125:TYR:OH	55:i:134:ASP:OD2	2.33	0.40
70:E:150:MET:HE2	70:E:150:MET:HB3	2.01	0.40
70:E:164:VAL:HG12	70:E:168:ILE:HD11	2.03	0.40
71:f:33:ARG:HE	24:K:126:ARG:HG2	1.86	0.40
51:y:11:LYS:HD3	51:y:11:LYS:N	2.30	0.40
73:F:222:LEU:HA	73:F:225:VAL:HG12	2.04	0.40
74:g:111:GLU:HA	74:g:112:GLY:HA2	1.78	0.40
75:AR:190:U:O4	76:DA:103:LYS:NZ	2.45	0.40
75:AR:377:A:H1'	75:AR:392:G:N2	2.35	0.40
75:AR:429:U:O2'	32:DH:90:PRO:HB3	2.21	0.40
75:AR:771:A:H2'	75:AR:772:U:O4'	2.22	0.40
75:AR:887:G:H2'	75:AR:888:A:C8	2.57	0.40
75:AR:891:G:OP1	80:AR:3442:OHX:N2	2.54	0.40
75:AR:1450:G:OP1	80:AR:4019:OHX:N2	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:2211:U:OP1	80:AR:3697:OHX:N6	2.54	0.40
75:AR:2243:A:H3'	13:CD:244:GLY:HA2	2.03	0.40
75:AR:2315:G:H2'	75:AR:2316:G:H8	1.87	0.40
75:AR:2576:G:H2'	75:AR:2577:C:C6	2.56	0.40
75:AR:2611:U:H2'	75:AR:2612:U:C6	2.56	0.40
75:AR:2775:U:H2'	75:AR:2776:C:H6	1.86	0.40
75:AR:3060:C:H4'	75:AR:3372:A:N3	2.36	0.40
75:AR:3385:U:H2'	75:AR:3386:G:C8	2.56	0.40
77:G:43:PHE:CG	77:G:44:ASN:N	2.90	0.40
78:h:29:GLN:HE21	78:h:32:LEU:HD22	1.85	0.40
78:h:61:PHE:HB3	78:h:92:TRP:CH2	2.56	0.40
78:h:110:VAL:HA	78:h:126:SER:CB	2.45	0.40
78:h:175:ASP:O	78:h:177:MET:N	2.55	0.40
53:d4:15:ASN:ND2	73:s4:54:TYR:O	2.54	0.40
79:DB:21:LYS:HD3	79:DB:46:ILE:O	2.22	0.40
6:H:121:LEU:H	6:H:125:THR:HG22	1.85	0.40
58:sR:219:A:H3'	58:sR:831:U:O2	2.21	0.40
58:sR:427:C:O2'	58:sR:459:G:N3	2.50	0.40
58:sR:1228:G:OP2	58:sR:1228:G:H4'	2.21	0.40
56:d5:59:TYR:CZ	77:s5:120:ILE:HG13	2.57	0.40
2:DC:92:LYS:O	2:DC:93:SER:HB3	2.22	0.40
12:I:55:LYS:HD3	12:I:87:ASP:HA	2.02	0.40
12:I:126:LEU:HD12	12:I:152:VAL:HG11	2.04	0.40
59:d6:70:LYS:N	59:d6:70:LYS:HD3	2.36	0.40
61:s0:141:ILE:HG22	61:s0:142:PRO:O	2.20	0.40
19:CE:169:THR:OG1	19:CE:171:LEU:HB2	2.20	0.40
14:DE:38:LYS:HZ3	14:DE:38:LYS:HG2	1.70	0.40
64:s1:210:ILE:HD12	64:s1:210:ILE:H	1.85	0.40
69:7:50:ALA:HA	69:7:55:PHE:CE1	2.56	0.40
25:CF:62:ALA:HB3	25:CF:90:PHE:CE2	2.56	0.40
67:s2:176:SER:HB2	67:s2:195:ASP:HB3	2.03	0.40
31:CG:60:ILE:HB	31:CG:80:SER:HB3	2.03	0.40
31:CG:126:GLU:HA	31:CG:196:ARG:HG3	2.03	0.40
31:CG:221:GLU:HG3	31:CG:222:LEU:N	2.35	0.40
39:v:84:PRO:HA	39:v:87:GLN:HG3	2.03	0.40
77:s5:20:PHE:CZ	77:s5:22:PRO:HB3	2.56	0.40
77:s5:99:MET:O	77:s5:103:ASN:HB2	2.22	0.40
77:s5:208:SER:O	77:s5:212:LYS:HG3	2.21	0.40
75:1:501:A:H2'	75:1:502:U:C6	2.55	0.40
75:1:536:U:H2'	75:1:537:A:C8	2.57	0.40
75:1:564:G:H2'	75:1:565:U:C6	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:597:G:H2'	75:1:598:A:C8	2.55	0.40
75:1:977:C:H2'	75:1:978:G:O4'	2.21	0.40
75:1:1322:U:OP1	80:1:4175:OHX:N5	2.54	0.40
75:1:1760:A:C6	75:1:1766:G:C6	3.10	0.40
75:1:2419:A:H2'	75:1:2420:C:H6	1.86	0.40
75:1:3165:A:O2'	75:1:3166:C:H5'	2.21	0.40
75:1:3343:G:N2	75:1:3361:G:H2'	2.36	0.40
2:AB:69:TRP:CG	27:t:64:LYS:HD2	2.57	0.40
4:DJ:50:SER:O	4:DJ:54:VAL:HG13	2.21	0.40
4:DJ:105:ARG:NH2	75:AR:171:G:H5'	2.36	0.40
4:DJ:118:ILE:HG12	27:CN:123:ILE:HG22	2.03	0.40
6:s6:173:PRO:HA	58:sR:66:U:H5'	2.03	0.40
9:CK:8:GLN:CD	9:CK:69:ARG:HD3	2.46	0.40
9:CK:147:SER:HB2	9:CK:187:ILE:CD1	2.52	0.40
10:DK:25:LYS:HB3	75:AR:156:G:OP2	2.21	0.40
11:R:81:ILE:O	11:R:84:ALA:N	2.54	0.40
13:j:15:ILE:HD13	75:1:911:C:H5''	2.04	0.40
18:s8:6:ASP:HB2	18:s8:8:ARG:H	1.85	0.40
19:k:293:ASN:HB2	19:k:304:THR:HA	2.04	0.40
23:T:63:GLN:O	23:T:66:LEU:N	2.55	0.40
23:T:75:ASN:N	23:T:76:PRO:CD	2.85	0.40
24:s9:13:SER:O	24:s9:43:TYR:HB3	2.21	0.40
24:s9:82:ARG:O	24:s9:82:ARG:HG2	2.20	0.40
25:l:291:ASN:HA	25:l:296:GLN:HG2	2.04	0.40
26:AF:54:LYS:NZ	75:1:1162:U:OP1	2.51	0.40
27:CN:127:PRO:O	27:CN:129:ASN:N	2.52	0.40
31:m:233:ALA:O	31:m:236:LEU:HD13	2.22	0.40
34:DO:124:LYS:NZ	75:AR:2897:A:OP2	2.54	0.40
39:CP:38:ARG:HD2	39:CP:61:ILE:O	2.22	0.40
45:DQ:20:HIS:CE1	75:AR:2742:C:H1'	2.57	0.40
45:DQ:54:THR:O	45:DQ:55:LYS:HG3	2.22	0.40
46:X:30:SER:OG	46:X:59:GLY:HA3	2.22	0.40
46:X:80:ASN:OD1	58:A:747:C:H4'	2.22	0.40
3:p:30:THR:N	75:1:2562:A:N3	2.65	0.40
10:AJ:26:ILE:HG12	75:1:157:A:C8	2.56	0.40
10:AJ:91:ASN:O	10:AJ:94:ILE:HG13	2.21	0.40
5:c5:44:ARG:NE	58:sR:1555:A:H5''	2.36	0.40
5:c5:83:MET:CE	5:c5:84:ILE:H	2.30	0.40
5:c5:122:THR:HG22	5:c5:123:TYR:CD1	2.55	0.40
51:CS:177:GLY:O	51:CS:186:VAL:N	2.55	0.40
11:c6:55:VAL:CG2	11:c6:105:LEU:HD12	2.49	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AL:2:ALA:O	75:1:1699:A:H1'	2.21	0.40
54:CT:169:ALA:HA	54:CT:172:ARG:NH2	2.36	0.40
21:s:16:LYS:NZ	75:1:2684:C:OP1	2.51	0.40
21:s:21:ILE:HG23	21:s:124:GLY:O	2.21	0.40
58:A:766:U:H3'	58:A:768:C:OP2	2.21	0.40
58:A:1612:U:P	77:G:95:ASN:HD22	2.43	0.40
58:A:1765:A:C8	58:A:1768:G:N2	2.89	0.40
27:t:91:ARG:CZ	27:t:97:VAL:HB	2.52	0.40
60:CV:68:THR:OG1	75:AR:2737:C:O5'	2.38	0.40
29:c9:10:ALA:HB3	29:c9:13:ASP:OD1	2.22	0.40
40:AO:23:ARG:HE	40:AO:23:ARG:HB3	1.57	0.40
65:d:19:THR:HG21	65:d:27:GLN:NE2	2.36	0.40
69:CY:23:ARG:HG2	69:CY:24:GLY:N	2.35	0.40
46:d2:36:LYS:O	46:d2:40:VAL:HG22	2.21	0.40
51:y:151:ARG:O	51:y:162:ALA:HB3	2.21	0.40
73:F:17:HIS:ND1	73:F:17:HIS:C	2.79	0.40
73:F:104:ASP:OD1	73:F:104:ASP:N	2.53	0.40
73:F:181:VAL:HG22	73:F:194:THR:H	1.87	0.40
75:AR:345:G:OP1	75:AR:1429:G:N1	2.48	0.40
75:AR:705:A:H4'	75:AR:706:A:OP1	2.21	0.40
75:AR:1145:G:OP1	26:DG:44:ARG:HD2	2.22	0.40
75:AR:1392:G:H3'	26:DG:125:ARG:HH21	1.85	0.40
75:AR:1618:G:H4'	7:AT:129:C:C1'	2.52	0.40
75:AR:1792:C:H2'	75:AR:1795:U:C5	2.56	0.40
75:AR:1818:U:H2'	75:AR:1819:U:O4'	2.22	0.40
75:AR:2157:G:C2	13:CD:126:LEU:HD12	2.56	0.40
75:AR:2605:G:N7	80:AR:4043:OHX:N4	2.69	0.40
75:AR:2922:G:N1	75:AR:2923:U:O2	2.53	0.40
75:AR:3164:C:O2'	75:AR:3165:A:P	2.80	0.40
76:DA:69:LYS:N	76:DA:83:ASP:OD1	2.54	0.40
77:G:130:ILE:O	77:G:134:VAL:HG13	2.20	0.40
77:G:166:ARG:HG2	77:G:166:ARG:HH11	1.86	0.40
78:h:128:ASP:O	78:h:130:THR:HG23	2.20	0.40
78:h:170:ILE:HD13	78:h:202:LEU:HD23	2.03	0.40
53:d4:52:LYS:C	53:d4:54:ALA:N	2.79	0.40
53:d4:76:TYR:CD2	53:d4:82:ALA:HA	2.56	0.40
6:H:164:LYS:HB2	6:H:167:LYS:HE3	2.03	0.40
58:sR:176:C:H3'	58:sR:177:U:H6	1.86	0.40
58:sR:339:C:H2'	58:sR:340:U:C6	2.57	0.40
58:sR:1520:U:O2	80:sR:2086:OHX:N6	2.55	0.40
78:Rb:179:LYS:HG3	78:Rb:181:TRP:CZ2	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:J:141:ARG:HD3	18:J:142:LYS:NZ	2.28	0.40
66:6:40:LYS:HE2	75:1:2931:C:H5''	2.04	0.40
66:6:93:LEU:HA	69:7:20:LEU:O	2.21	0.40
14:DE:16:LEU:HB2	14:DE:98:SER:OG	2.21	0.40
64:s1:36:SER:HA	64:s1:41:ARG:NH1	2.36	0.40
25:CF:157:GLU:O	25:CF:213:ASN:HB2	2.21	0.40
25:CF:285:ASP:O	25:CF:289:ILE:HG13	2.21	0.40
67:s2:39:THR:HG23	67:s2:42:GLY:N	2.29	0.40
67:s2:82:ASN:HD21	67:s2:84:LYS:CD	2.34	0.40
72:8:82:LEU:HB3	72:8:84:PHE:CE2	2.55	0.40
39:v:110:ALA:CB	39:v:113:LEU:HD23	2.38	0.40
43:CI:233:GLU:O	43:CI:234:GLU:HG2	2.22	0.40
75:1:209:A:H4'	75:1:211:A:N7	2.36	0.40
75:1:916:G:OP1	75:1:2957:G:H5''	2.22	0.40
75:1:1302:A:N3	75:1:2887:A:H5''	2.36	0.40
75:1:2270:A:C6	75:1:2271:A:C6	3.10	0.40
75:1:2812:C:H2'	75:1:2813:A:C8	2.56	0.40
2:AB:46:ASP:OD1	2:AB:46:ASP:N	2.54	0.40
2:AB:97:GLU:HA	27:t:158:ALA:HB2	2.03	0.40
4:DJ:6:ALA:C	4:DJ:10:ARG:HE	2.30	0.40
5:Q:23:GLU:O	5:Q:24:LYS:HD3	2.22	0.40
5:Q:96:ILE:HD11	5:Q:116:LEU:HD22	2.04	0.40
6:s6:211:LEU:HD13	6:s6:211:LEU:O	2.21	0.40
7:4:3:A:H2'	7:4:4:C:O4'	2.22	0.40
7:4:41:A:H61	7:4:103:G:C2'	2.34	0.40
9:CK:7:GLU:OE2	9:CK:54:LYS:HD3	2.21	0.40
12:s7:26:GLU:O	12:s7:29:ASN:ND2	2.55	0.40
13:j:5:ILE:HG22	13:j:208:ASP:O	2.22	0.40
13:j:87:PHE:CE2	75:1:2554:A:H5'	2.50	0.40
15:CL:191:LYS:HD2	15:CL:192:ASP:H	1.86	0.40
18:s8:22:ARG:HD3	18:s8:25:ARG:NH1	2.35	0.40
20:AE:28:ARG:NH1	75:1:3056:U:O2	2.52	0.40
24:s9:121:SER:CB	24:s9:124:HIS:HB3	2.51	0.40
25:l:265:GLU:OE2	25:l:265:GLU:O	2.39	0.40
27:CN:163:GLY:HA2	2:DC:139:ARG:NH2	2.37	0.40
27:CN:170:LEU:HD12	27:CN:170:LEU:H	1.86	0.40
30:c0:3:MET:HE3	30:c0:4:PRO:O	2.22	0.40
30:c0:22:VAL:HG21	70:s3:76:ARG:CB	2.52	0.40
30:c0:29:GLN:HB3	30:c0:31:LYS:O	2.21	0.40
32:AG:71:VAL:HG13	32:AG:81:VAL:HG11	2.02	0.40
32:AG:103:TYR:CE2	37:n:44:ALA:HB2	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:V:43:LYS:CG	35:V:46:GLU:HB3	2.39	0.40
36:c1:111:VAL:HA	36:c1:139:VAL:HG12	2.04	0.40
39:CP:96:ARG:HG2	39:CP:96:ARG:NH1	2.35	0.40
42:c3:93:LYS:O	42:c3:96:VAL:HG22	2.21	0.40
43:o:110:ARG:CZ	51:y:3:ILE:HD11	2.51	0.40
44:CQ:138:LEU:HD12	44:CQ:138:LEU:HA	1.84	0.40
3:p:166:LEU:HD23	3:p:166:LEU:HA	1.91	0.40
9:q:53:ILE:HD13	33:u:7:VAL:HG21	2.03	0.40
9:q:92:TYR:CD2	9:q:99:ILE:HG13	2.56	0.40
11:c6:78:VAL:O	11:c6:81:ILE:HB	2.22	0.40
55:sM:64:LYS:H	55:sM:64:LYS:CD	2.35	0.40
17:c7:40:THR:C	17:c7:41:ILE:HD12	2.47	0.40
17:c7:49:LYS:NZ	58:sR:1390:U:OP2	2.38	0.40
21:s:15:GLU:HG2	21:s:16:LYS:HG2	2.02	0.40
21:s:30:LEU:HD11	21:s:66:ALA:N	2.36	0.40
21:s:92:ARG:O	21:s:94:ARG:O	2.39	0.40
58:A:70:C:H2'	58:A:71:A:O4'	2.21	0.40
58:A:73:U:O2'	58:A:74:U:O4'	2.38	0.40
58:A:141:U:C5	6:H:183:ARG:HD3	2.57	0.40
58:A:711:U:H5'	58:A:729:G:O6	2.21	0.40
58:A:794:U:O2'	58:A:795:U:O2	2.37	0.40
58:A:1651:A:N1	58:A:1749:A:H2	2.19	0.40
23:c8:30:TYR:CE2	58:sR:1539:G:C4	3.10	0.40
27:t:35:ARG:HD2	75:1:685:G:OP1	2.21	0.40
45:AP:17:CYS:C	45:AP:19:LYS:N	2.78	0.40
66:CX:5:GLY:HA3	66:CX:106:LYS:O	2.21	0.40
46:d2:6:VAL:CG1	46:d2:29:PRO:HD2	2.51	0.40
72:CZ:35:PRO:O	72:CZ:37:THR:HG23	2.22	0.40
75:AR:65:A:H3'	75:AR:111:C:N4	2.36	0.40
75:AR:705:A:C5	2:DC:113:LEU:HD12	2.56	0.40
75:AR:830:A:O2'	75:AR:1866:C:H2'	2.20	0.40
75:AR:966:U:H4'	2:DC:43:ILE:HG22	2.03	0.40
75:AR:1386:A:N7	25:CF:183:LYS:HD3	2.36	0.40
75:AR:2534:G:H3'	75:AR:2536:A:H62	1.87	0.40
75:AR:2812:C:H2'	75:AR:2813:A:H8	1.85	0.40
77:G:115:LYS:HE3	77:G:115:LYS:CA	2.51	0.40
77:G:144:GLU:HG2	77:G:160:VAL:O	2.22	0.40
77:G:166:ARG:O	77:G:170:GLN:HB2	2.22	0.40
77:G:170:GLN:O	77:G:174:LEU:HB2	2.22	0.40
78:h:200:ASN:ND2	78:h:241:PHE:HA	2.34	0.40
6:H:30:LYS:C	6:H:101:ILE:HG23	2.47	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:sR:471:A:N7	80:sR:2063:OHX:N2	2.70	0.40
58:sR:1114:G:O2'	58:sR:1130:G:O6	2.32	0.40
58:sR:1792:G:H5''	59:d6:3:LYS:HA	2.03	0.40
78:Rb:109:ASP:HB2	78:Rb:111:MET:CE	2.50	0.40
59:d6:38:ARG:O	59:d6:71:LEU:HB2	2.21	0.40
63:5:95:PHE:C	63:5:95:PHE:CD1	3.00	0.40
61:s0:13:ASP:O	61:s0:16:LEU:HD12	2.21	0.40
62:d7:72:LYS:NZ	62:d7:74:SER:HA	2.37	0.40
19:CE:195:ALA:O	19:CE:199:PHE:HD1	2.04	0.40
65:d8:12:VAL:HG23	65:d8:51:ASN:N	2.37	0.40
20:DF:29:ALA:HB3	20:DF:30:PRO:HD3	2.03	0.40
67:s2:180:ALA:HB1	67:s2:184:VAL:HG23	2.02	0.40
31:CG:208:MET:HG2	31:CG:223:PHE:CZ	2.57	0.40
37:CH:52:VAL:CG1	37:CH:65:ILE:HB	2.51	0.40
42:O:115:LEU:O	42:O:119:GLU:HG3	2.21	0.40
73:s4:206:ASP:C	73:s4:207:LEU:HD23	2.46	0.40
39:v:73:ARG:HD2	39:v:88:GLY:O	2.22	0.40
39:v:142:ILE:O	39:v:149:ASN:HB3	2.22	0.40
79:AA:93:LYS:HD3	79:AA:94:SER:N	2.33	0.40
43:CI:158:LYS:O	43:CI:159:GLN:C	2.63	0.40
47:P:91:THR:C	47:P:92:LYS:HG3	2.46	0.40
77:s5:144:GLU:HA	77:s5:162:VAL:HG12	2.04	0.40
75:1:397:A:H5''	75:1:398:A:H3'	2.03	0.40
75:1:979:U:H1'	75:1:980:A:C8	2.56	0.40
75:1:2298:U:O4	75:1:2923:U:H5	2.04	0.40
75:1:2432:A:OP2	80:1:3609:OHX:N1	2.55	0.40
75:1:2574:G:H2'	75:1:2575:G:C8	2.57	0.40
75:1:2667:A:H2'	75:1:2668:U:O4'	2.21	0.40
3:CJ:68:ARG:HD2	75:AR:2514:U:OP1	2.21	0.40
5:Q:120:SER:HA	55:i:57:ASN:ND2	2.28	0.40
9:CK:16:VAL:HA	9:CK:28:VAL:O	2.22	0.40
11:R:58:ASP:OD1	11:R:59:LYS:N	2.54	0.40
15:CL:81:GLY:C	15:CL:83:ASP:H	2.28	0.40
16:DL:46:SER:OG	80:AR:3973:OHX:N6	2.55	0.40
18:s8:4:SER:HB2	18:s8:24:LYS:HE2	2.02	0.40
19:k:20:LYS:HB2	75:1:2991:A:P	2.62	0.40
19:k:98:GLY:HA2	44:w:149:TYR:CE1	2.57	0.40
19:k:334:ARG:O	19:k:336:VAL:HG23	2.22	0.40
23:T:28:ILE:CD1	23:T:58:ALA:HA	2.52	0.40
27:CN:27:ASP:O	27:CN:31:LYS:HB2	2.22	0.40
38:AH:5:VAL:O	75:1:1857:C:H1'	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:AH:76:TYR:HB2	38:AH:85:VAL:HG21	2.03	0.40
43:o:229:PHE:CD1	43:o:229:PHE:C	2.99	0.40
44:CQ:157:GLU:OE1	44:CQ:160:ARG:NH2	2.53	0.40
45:DQ:11:TYR:CD1	45:DQ:11:TYR:C	3.00	0.40
50:Y:49:ALA:O	50:Y:104:LEU:HB2	2.21	0.40
50:Y:98:GLU:O	50:Y:99:ASN:HB2	2.22	0.40
50:Y:113:ALA:HB2	50:Y:121:ARG:HG2	2.03	0.40
9:q:58:HIS:CE1	33:u:12:TRP:HZ3	2.39	0.40
15:r:76:MET:CE	15:r:138:VAL:HG21	2.44	0.40
21:s:10:ARG:O	21:s:10:ARG:HG2	2.21	0.40
58:A:2:A:H1'	67:D:199:GLN:NE2	2.36	0.40
58:A:264:G:N7	80:A:2092:OHX:N5	2.69	0.40
58:A:267:U:H2'	58:A:268:C:C6	2.57	0.40
58:A:526:A:H2'	58:A:527:A:O4'	2.22	0.40
58:A:591:A:P	71:f:43:ARG:HH22	2.45	0.40
58:A:740:A:N1	58:A:741:C:C4	2.90	0.40
58:A:852:C:N4	58:A:853:G:C6	2.90	0.40
58:A:1207:C:N4	58:A:1456:C:H5	2.19	0.40
58:A:1217:A:C4	30:L:40:LEU:HD21	2.57	0.40
58:A:1433:G:H1'	68:e:41:GLN:HG3	2.04	0.40
59:b:87:ARG:HB2	59:b:92:ARG:HB3	2.03	0.40
27:t:67:ARG:H	27:t:67:ARG:HG2	1.64	0.40
60:CV:116:ARG:O	60:CV:116:ARG:HG2	2.21	0.40
63:CW:36:TYR:CD2	63:CW:40:HIS:CE1	3.10	0.40
63:CW:84:LEU:HB3	63:CW:89:LEU:HB2	2.04	0.40
65:d:49:ARG:HG3	65:d:52:ASP:OD1	2.21	0.40
35:d0:52:LYS:O	35:d0:53:LYS:C	2.64	0.40
45:AP:40:LYS:HD2	45:AP:44:ASP:OD1	2.20	0.40
48:x:23:ARG:O	48:x:86:LYS:NZ	2.50	0.40
48:x:65:SER:HB2	75:l:1447:G:OP1	2.22	0.40
69:CY:20:LEU:HD23	69:CY:20:LEU:C	2.46	0.40
70:E:53:THR:HB	70:E:90:ARG:NH1	2.36	0.40
71:f:49:LEU:CD2	71:f:54:ARG:HA	2.49	0.40
51:y:140:LEU:HD23	51:y:140:LEU:HA	1.81	0.40
55:i:63:ASP:OD1	55:i:63:ASP:O	2.40	0.40
73:F:51:ARG:NE	73:F:51:ARG:HA	2.36	0.40
73:F:185:GLY:HA3	73:F:224:ASN:ND2	2.36	0.40
54:z:21:LYS:O	54:z:53:LYS:HB3	2.22	0.40
75:AR:87:U:H2'	75:AR:88:A:C8	2.57	0.40
75:AR:559:A:H2'	75:AR:560:G:O4'	2.21	0.40
75:AR:1262:G:H5''	75:AR:1263:A:OP2	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:AR:1349:G:H2'	75:AR:1350:A:C4	2.57	0.40
75:AR:1615:C:H2'	75:AR:1616:U:C6	2.57	0.40
75:AR:2242:A:OP1	13:CD:242:ARG:NH2	2.53	0.40
76:DA:37:LYS:H	76:DA:37:LYS:CD	2.29	0.40
77:G:214:LYS:NZ	77:G:215:ASP:OD1	2.41	0.40
78:h:209:THR:OG1	78:h:210:LEU:HD22	2.21	0.40
58:sR:189:C:C4	58:sR:197:A:H2	2.40	0.40
58:sR:495:C:H5'	58:sR:496:G:OP2	2.21	0.40
58:sR:542:A:O2'	58:sR:543:C:H3'	2.21	0.40
58:sR:542:A:H1'	58:sR:543:C:OP1	2.21	0.40
58:sR:542:A:H1'	58:sR:543:C:P	2.61	0.40
58:sR:648:G:C2	58:sR:687:G:C2	3.09	0.40
58:sR:773:C:OP1	73:s4:21:ASP:HB2	2.21	0.40
58:sR:957:G:H1'	62:d7:68:GLY:O	2.20	0.40
58:sR:1114:G:O6	80:sR:2179:OHX:N3	2.54	0.40
58:sR:1338:C:H1'	58:sR:1410:A:C8	2.56	0.40
58:sR:1488:G:OP2	70:s3:8:LYS:CE	2.70	0.40
58:sR:1638:G:C2	58:sR:1639:C:H1'	2.55	0.40
56:d5:88:ILE:HD12	56:d5:104:ALA:HB2	2.04	0.40
60:2:26:HIS:CD2	60:2:29:THR:HG23	2.56	0.40
7:AT:145:U:H2'	7:AT:146:U:C6	2.56	0.40
12:I:5:GLN:OE1	12:I:5:GLN:N	2.40	0.40
12:I:49:ILE:HG13	12:I:57:ALA:O	2.21	0.40
59:d6:13:LYS:HD3	59:d6:13:LYS:HA	1.84	0.40
61:s0:168:HIS:HB3	61:s0:203:PHE:CE2	2.57	0.40
61:s0:201:LEU:O	61:s0:201:LEU:HG	2.20	0.40
66:6:90:GLY:O	69:7:16:GLY:HA2	2.22	0.40
19:CE:107:ALA:HA	19:CE:199:PHE:CD2	2.57	0.40
64:s1:35:PRO:HA	64:s1:231:LEU:CD1	2.51	0.40
20:DF:72:ARG:HG2	20:DF:96:VAL:HG21	2.02	0.40
67:s2:83:ILE:HD12	67:s2:83:ILE:O	2.20	0.40
31:CG:126:GLU:C	31:CG:196:ARG:HG3	2.46	0.40
31:CG:195:LEU:HD22	31:CG:199:ILE:HD11	2.03	0.40
37:CH:31:ARG:NH2	37:CH:81:ALA:O	2.53	0.40
73:s4:18:TRP:CH2	73:s4:31:PRO:HD3	2.46	0.40
73:s4:66:MET:HE1	73:s4:78:THR:HB	2.03	0.40
39:v:68:ARG:NH2	75:1:292:U:OP2	2.55	0.40
79:AA:61:LYS:HE3	79:AA:64:LYS:NZ	2.37	0.40
47:P:20:TYR:HA	47:P:84:ARG:O	2.22	0.40
77:s5:35:GLN:HG3	77:s5:36:ALA:N	2.36	0.40
75:1:84:U:O2'	75:1:101:G:O6	2.31	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:1:278:U:H2'	75:1:279:U:O4'	2.22	0.40
75:1:590:G:C2	75:1:610:G:H2'	2.56	0.40
75:1:1683:A:H2'	75:1:1684:U:O4'	2.21	0.40
75:1:2265:C:H2'	75:1:2266:U:O4'	2.21	0.40
75:1:2358:A:H2'	75:1:2359:C:O4'	2.21	0.40
75:1:2510:U:HO2'	75:1:2511:A:H8	1.68	0.40
75:1:2712:U:H2'	75:1:2713:U:C6	2.57	0.40
75:1:3059:G:H4'	75:1:3373:U:O2'	2.21	0.40

All (2) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CK:14:GLU:OE1	23:c8:79:TYR:OH[2_746]	2.03	0.17
11:c6:2:SER:OG	75:1:3288:G:O4'[2_656]	2.19	0.01

## 5.3 Torsion angles ⓘ

### 5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	146/149 (98%)	135 (92%)	11 (8%)	0	100	100
2	DC	146/149 (98%)	138 (94%)	8 (6%)	0	100	100
3	CJ	225/256 (88%)	217 (96%)	8 (4%)	0	100	100
3	p	231/256 (90%)	228 (99%)	3 (1%)	0	100	100
4	AI	117/120 (98%)	112 (96%)	5 (4%)	0	100	100
4	DJ	117/120 (98%)	112 (96%)	5 (4%)	0	100	100
5	Q	115/142 (81%)	106 (92%)	9 (8%)	0	100	100
5	c5	133/142 (94%)	115 (86%)	15 (11%)	3 (2%)	5	20
6	H	224/236 (95%)	215 (96%)	9 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	s6	216/236 (92%)	211 (98%)	5 (2%)	0	100	100
8	AC	52/59 (88%)	51 (98%)	1 (2%)	0	100	100
8	DD	56/59 (95%)	54 (96%)	2 (4%)	0	100	100
9	CK	189/191 (99%)	186 (98%)	3 (2%)	0	100	100
9	q	189/191 (99%)	181 (96%)	8 (4%)	0	100	100
10	AJ	97/100 (97%)	93 (96%)	4 (4%)	0	100	100
10	DK	95/100 (95%)	92 (97%)	3 (3%)	0	100	100
11	R	139/143 (97%)	132 (95%)	6 (4%)	1 (1%)	19	49
11	c6	140/143 (98%)	134 (96%)	5 (4%)	1 (1%)	19	49
12	I	182/190 (96%)	162 (89%)	18 (10%)	2 (1%)	12	37
12	s7	184/190 (97%)	173 (94%)	10 (5%)	1 (0%)	25	56
13	CD	250/254 (98%)	246 (98%)	4 (2%)	0	100	100
13	j	250/254 (98%)	249 (100%)	1 (0%)	0	100	100
14	AD	95/105 (90%)	93 (98%)	2 (2%)	0	100	100
14	DE	95/105 (90%)	94 (99%)	1 (1%)	0	100	100
15	CL	203/221 (92%)	199 (98%)	4 (2%)	0	100	100
15	r	207/221 (94%)	204 (99%)	3 (1%)	0	100	100
16	AK	85/88 (97%)	85 (100%)	0	0	100	100
16	DL	85/88 (97%)	85 (100%)	0	0	100	100
17	S	105/136 (77%)	99 (94%)	6 (6%)	0	100	100
17	c7	113/136 (83%)	109 (96%)	4 (4%)	0	100	100
18	J	184/200 (92%)	171 (93%)	13 (7%)	0	100	100
18	s8	184/200 (92%)	177 (96%)	7 (4%)	0	100	100
19	CE	384/387 (99%)	379 (99%)	5 (1%)	0	100	100
19	k	384/387 (99%)	373 (97%)	11 (3%)	0	100	100
20	AE	107/113 (95%)	104 (97%)	3 (3%)	0	100	100
20	DF	105/113 (93%)	100 (95%)	5 (5%)	0	100	100
21	CM	167/174 (96%)	161 (96%)	6 (4%)	0	100	100
21	s	167/174 (96%)	155 (93%)	12 (7%)	0	100	100
22	AL	75/78 (96%)	75 (100%)	0	0	100	100
22	DM	69/78 (88%)	67 (97%)	2 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
23	T	143/146 (98%)	129 (90%)	13 (9%)	1 (1%)	19	49
23	c8	133/146 (91%)	125 (94%)	8 (6%)	0	100	100
24	K	175/197 (89%)	167 (95%)	8 (5%)	0	100	100
24	s9	183/197 (93%)	179 (98%)	4 (2%)	0	100	100
25	CF	359/362 (99%)	351 (98%)	8 (2%)	0	100	100
25	l	359/362 (99%)	343 (96%)	16 (4%)	0	100	100
26	AF	125/130 (96%)	123 (98%)	2 (2%)	0	100	100
26	DG	125/130 (96%)	125 (100%)	0	0	100	100
27	CN	191/199 (96%)	176 (92%)	13 (7%)	2 (1%)	13	40
27	t	191/199 (96%)	182 (95%)	8 (4%)	1 (0%)	25	56
28	AM	48/51 (94%)	48 (100%)	0	0	100	100
28	DN	48/51 (94%)	48 (100%)	0	0	100	100
29	U	141/144 (98%)	132 (94%)	9 (6%)	0	100	100
29	c9	141/144 (98%)	139 (99%)	2 (1%)	0	100	100
30	L	88/105 (84%)	82 (93%)	6 (7%)	0	100	100
30	c0	70/105 (67%)	64 (91%)	6 (9%)	0	100	100
31	CG	290/297 (98%)	285 (98%)	5 (2%)	0	100	100
31	m	294/297 (99%)	280 (95%)	13 (4%)	1 (0%)	37	66
32	AG	104/107 (97%)	102 (98%)	2 (2%)	0	100	100
32	DH	104/107 (97%)	102 (98%)	2 (2%)	0	100	100
33	CO	134/138 (97%)	134 (100%)	0	0	100	100
33	u	134/138 (97%)	131 (98%)	3 (2%)	0	100	100
34	AN	50/128 (39%)	50 (100%)	0	0	100	100
34	DO	50/128 (39%)	48 (96%)	2 (4%)	0	100	100
35	V	105/121 (87%)	98 (93%)	7 (7%)	0	100	100
35	d0	70/121 (58%)	67 (96%)	3 (4%)	0	100	100
36	M	136/156 (87%)	135 (99%)	1 (1%)	0	100	100
36	c1	144/156 (92%)	138 (96%)	6 (4%)	0	100	100
37	CH	152/176 (86%)	150 (99%)	2 (1%)	0	100	100
37	n	152/176 (86%)	152 (100%)	0	0	100	100
38	AH	110/121 (91%)	108 (98%)	2 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
38	DI	110/121 (91%)	110 (100%)	0	0	100	100
39	CP	201/204 (98%)	201 (100%)	0	0	100	100
39	v	201/204 (98%)	195 (97%)	6 (3%)	0	100	100
40	AO	23/25 (92%)	23 (100%)	0	0	100	100
40	DP	23/25 (92%)	23 (100%)	0	0	100	100
41	W	85/87 (98%)	79 (93%)	6 (7%)	0	100	100
41	d1	85/87 (98%)	81 (95%)	4 (5%)	0	100	100
42	O	148/151 (98%)	144 (97%)	3 (2%)	1 (1%)	19	49
42	c3	148/151 (98%)	143 (97%)	5 (3%)	0	100	100
43	CI	220/244 (90%)	211 (96%)	9 (4%)	0	100	100
43	o	220/244 (90%)	211 (96%)	9 (4%)	0	100	100
44	CQ	195/199 (98%)	191 (98%)	3 (2%)	1 (0%)	25	56
44	w	195/199 (98%)	190 (97%)	5 (3%)	0	100	100
45	AP	103/106 (97%)	95 (92%)	6 (6%)	2 (2%)	6	24
45	DQ	103/106 (97%)	100 (97%)	2 (2%)	1 (1%)	13	40
46	X	127/130 (98%)	125 (98%)	2 (2%)	0	100	100
46	d2	127/130 (98%)	126 (99%)	1 (1%)	0	100	100
47	P	80/138 (58%)	70 (88%)	9 (11%)	1 (1%)	10	33
47	c4	126/138 (91%)	120 (95%)	5 (4%)	1 (1%)	16	45
48	CR	153/184 (83%)	152 (99%)	1 (1%)	0	100	100
48	x	180/184 (98%)	179 (99%)	1 (1%)	0	100	100
49	AQ	89/92 (97%)	87 (98%)	2 (2%)	0	100	100
49	DR	89/92 (97%)	86 (97%)	3 (3%)	0	100	100
50	Y	142/145 (98%)	131 (92%)	11 (8%)	0	100	100
50	d3	142/145 (98%)	133 (94%)	9 (6%)	0	100	100
51	CS	183/186 (98%)	181 (99%)	2 (1%)	0	100	100
51	y	183/186 (98%)	180 (98%)	3 (2%)	0	100	100
52	p0	116/311 (37%)	110 (95%)	5 (4%)	1 (1%)	14	43
53	Z	132/135 (98%)	128 (97%)	4 (3%)	0	100	100
53	d4	132/135 (98%)	119 (90%)	13 (10%)	0	100	100
54	CT	178/189 (94%)	175 (98%)	3 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
54	z	181/189 (96%)	176 (97%)	5 (3%)	0	100	100
55	i	136/273 (50%)	124 (91%)	12 (9%)	0	100	100
55	sM	61/273 (22%)	57 (93%)	4 (7%)	0	100	100
56	a	60/108 (56%)	54 (90%)	6 (10%)	0	100	100
56	d5	67/108 (62%)	66 (98%)	1 (2%)	0	100	100
57	0	170/172 (99%)	164 (96%)	6 (4%)	0	100	100
57	CU	170/172 (99%)	169 (99%)	1 (1%)	0	100	100
59	b	89/119 (75%)	79 (89%)	9 (10%)	1 (1%)	12	37
59	d6	95/119 (80%)	90 (95%)	4 (4%)	1 (1%)	12	37
60	2	157/160 (98%)	156 (99%)	1 (1%)	0	100	100
60	CV	157/160 (98%)	153 (98%)	4 (2%)	0	100	100
61	B	204/252 (81%)	188 (92%)	16 (8%)	0	100	100
61	s0	204/252 (81%)	189 (93%)	15 (7%)	0	100	100
62	c	79/82 (96%)	71 (90%)	8 (10%)	0	100	100
62	d7	79/82 (96%)	75 (95%)	4 (5%)	0	100	100
63	5	98/121 (81%)	96 (98%)	2 (2%)	0	100	100
63	CW	96/121 (79%)	92 (96%)	4 (4%)	0	100	100
64	C	114/255 (45%)	107 (94%)	7 (6%)	0	100	100
64	s1	214/255 (84%)	211 (99%)	3 (1%)	0	100	100
65	d	61/67 (91%)	58 (95%)	3 (5%)	0	100	100
65	d8	61/67 (91%)	51 (84%)	10 (16%)	0	100	100
66	6	134/137 (98%)	134 (100%)	0	0	100	100
66	CX	134/137 (98%)	134 (100%)	0	0	100	100
67	D	215/254 (85%)	202 (94%)	12 (6%)	1 (0%)	25	56
67	s2	215/254 (85%)	210 (98%)	5 (2%)	0	100	100
68	d9	47/56 (84%)	43 (92%)	4 (8%)	0	100	100
68	e	51/56 (91%)	49 (96%)	2 (4%)	0	100	100
69	7	61/155 (39%)	61 (100%)	0	0	100	100
69	CY	112/155 (72%)	109 (97%)	3 (3%)	0	100	100
70	E	221/240 (92%)	215 (97%)	6 (3%)	0	100	100
70	s3	221/240 (92%)	210 (95%)	11 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
71	e0	60/63 (95%)	57 (95%)	3 (5%)	0	100	100
71	f	58/63 (92%)	57 (98%)	1 (2%)	0	100	100
72	8	115/142 (81%)	114 (99%)	1 (1%)	0	100	100
72	CZ	115/142 (81%)	114 (99%)	1 (1%)	0	100	100
73	F	258/261 (99%)	246 (95%)	12 (5%)	0	100	100
73	s4	258/261 (99%)	252 (98%)	6 (2%)	0	100	100
74	g	69/152 (45%)	53 (77%)	16 (23%)	0	100	100
76	9	124/127 (98%)	124 (100%)	0	0	100	100
76	DA	122/127 (96%)	122 (100%)	0	0	100	100
77	G	204/225 (91%)	189 (93%)	13 (6%)	2 (1%)	13	40
77	s5	204/225 (91%)	193 (95%)	11 (5%)	0	100	100
78	Rb	316/319 (99%)	305 (96%)	10 (3%)	1 (0%)	37	66
78	h	308/319 (97%)	290 (94%)	18 (6%)	0	100	100
79	AA	133/136 (98%)	129 (97%)	3 (2%)	1 (1%)	16	45
79	DB	133/136 (98%)	126 (95%)	6 (4%)	1 (1%)	16	45
All	All	21536/24181 (89%)	20728 (96%)	779 (4%)	29 (0%)	48	77

All (29) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
31	m	234	ASP
52	p0	35	SER
11	c6	42	GLU
59	b	75	VAL
27	t	63	VAL
67	D	107	SER
77	G	121	ILE
79	DB	103	GLN
12	I	32	PRO
78	Rb	126	SER
27	CN	46	ILE
45	DQ	15	LYS
5	c5	45	PHE
5	c5	51	SER
45	AP	16	THR
42	O	30	SER
79	AA	102	GLU

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Mol	Chain	Res	Type
23	T	32	LEU
5	c5	133	ALA
45	AP	36	PHE
12	I	174	ASN
11	R	59	LYS
59	d6	59	TYR
12	s7	11	GLN
27	CN	47	ALA
47	c4	48	VAL
77	G	30	PRO
47	P	90	ARG
44	CQ	111	PRO

### 5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	AB	118/119 (99%)	112 (95%)	6 (5%)	20	51
2	DC	118/119 (99%)	116 (98%)	2 (2%)	56	83
3	CJ	182/208 (88%)	178 (98%)	4 (2%)	47	78
3	p	187/208 (90%)	183 (98%)	4 (2%)	48	78
4	AI	104/105 (99%)	100 (96%)	4 (4%)	28	63
4	DJ	104/105 (99%)	101 (97%)	3 (3%)	37	72
5	Q	97/118 (82%)	86 (89%)	11 (11%)	4	15
5	c5	103/118 (87%)	100 (97%)	3 (3%)	37	72
6	H	188/201 (94%)	179 (95%)	9 (5%)	21	54
6	s6	187/201 (93%)	184 (98%)	3 (2%)	58	84
8	AC	44/47 (94%)	43 (98%)	1 (2%)	45	77
8	DD	46/47 (98%)	46 (100%)	0	100	100
9	CK	171/171 (100%)	160 (94%)	11 (6%)	14	41
9	q	171/171 (100%)	164 (96%)	7 (4%)	26	60

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
10	AJ	81/82 (99%)	80 (99%)	1 (1%)	67	89
10	DK	79/82 (96%)	73 (92%)	6 (8%)	11	32
11	R	117/119 (98%)	111 (95%)	6 (5%)	20	51
11	c6	118/119 (99%)	109 (92%)	9 (8%)	11	32
12	I	165/170 (97%)	156 (94%)	9 (6%)	18	48
12	s7	165/170 (97%)	159 (96%)	6 (4%)	30	65
13	CD	193/196 (98%)	190 (98%)	3 (2%)	58	84
13	j	193/196 (98%)	188 (97%)	5 (3%)	41	74
14	AD	80/88 (91%)	78 (98%)	2 (2%)	42	75
14	DE	81/88 (92%)	78 (96%)	3 (4%)	29	64
15	CL	177/187 (95%)	172 (97%)	5 (3%)	38	73
15	r	177/187 (95%)	165 (93%)	12 (7%)	13	38
16	AK	70/71 (99%)	67 (96%)	3 (4%)	25	57
16	DL	70/71 (99%)	68 (97%)	2 (3%)	37	72
17	S	89/124 (72%)	79 (89%)	10 (11%)	5	16
17	c7	92/124 (74%)	86 (94%)	6 (6%)	14	40
18	J	150/161 (93%)	142 (95%)	8 (5%)	19	49
18	s8	150/161 (93%)	147 (98%)	3 (2%)	50	79
19	CE	320/323 (99%)	309 (97%)	11 (3%)	32	67
19	k	320/323 (99%)	296 (92%)	24 (8%)	11	33
20	AE	92/97 (95%)	91 (99%)	1 (1%)	70	90
20	DF	92/97 (95%)	88 (96%)	4 (4%)	25	57
21	CM	147/151 (97%)	138 (94%)	9 (6%)	15	43
21	s	147/151 (97%)	140 (95%)	7 (5%)	21	54
22	AL	68/69 (99%)	61 (90%)	7 (10%)	6	19
22	DM	66/69 (96%)	59 (89%)	7 (11%)	5	18
23	T	128/129 (99%)	118 (92%)	10 (8%)	10	31
23	c8	119/129 (92%)	111 (93%)	8 (7%)	13	39
24	K	153/166 (92%)	148 (97%)	5 (3%)	33	68
24	s9	158/166 (95%)	153 (97%)	5 (3%)	34	69
25	CF	288/289 (100%)	278 (96%)	10 (4%)	31	66

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
25	l	288/289 (100%)	276 (96%)	12 (4%)	25	59
26	AF	109/111 (98%)	106 (97%)	3 (3%)	38	73
26	DG	109/111 (98%)	105 (96%)	4 (4%)	29	64
27	CN	154/159 (97%)	148 (96%)	6 (4%)	27	62
27	t	154/159 (97%)	146 (95%)	8 (5%)	19	50
28	AM	45/46 (98%)	45 (100%)	0	100	100
28	DN	45/46 (98%)	41 (91%)	4 (9%)	8	26
29	U	115/116 (99%)	101 (88%)	14 (12%)	4	12
29	c9	115/116 (99%)	111 (96%)	4 (4%)	31	66
30	L	77/98 (79%)	71 (92%)	6 (8%)	10	31
30	c0	66/98 (67%)	63 (96%)	3 (4%)	23	56
31	CG	242/245 (99%)	230 (95%)	12 (5%)	20	52
31	m	244/245 (100%)	235 (96%)	9 (4%)	29	64
32	AG	90/91 (99%)	88 (98%)	2 (2%)	47	78
32	DH	90/91 (99%)	89 (99%)	1 (1%)	70	90
33	CO	107/109 (98%)	103 (96%)	4 (4%)	29	64
33	u	107/109 (98%)	105 (98%)	2 (2%)	52	81
34	AN	47/116 (40%)	46 (98%)	1 (2%)	48	78
34	DO	47/116 (40%)	45 (96%)	2 (4%)	25	57
35	V	100/114 (88%)	94 (94%)	6 (6%)	16	44
35	d0	68/114 (60%)	64 (94%)	4 (6%)	16	45
36	M	125/137 (91%)	120 (96%)	5 (4%)	27	61
36	c1	129/137 (94%)	123 (95%)	6 (5%)	22	55
37	CH	134/153 (88%)	130 (97%)	4 (3%)	36	71
37	n	134/153 (88%)	125 (93%)	9 (7%)	13	39
38	AH	95/103 (92%)	93 (98%)	2 (2%)	48	78
38	DI	95/103 (92%)	91 (96%)	4 (4%)	25	59
39	CP	175/176 (99%)	174 (99%)	1 (1%)	84	95
39	v	175/176 (99%)	174 (99%)	1 (1%)	84	95
40	AO	23/23 (100%)	23 (100%)	0	100	100
40	DP	23/23 (100%)	22 (96%)	1 (4%)	25	57

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
41	W	74/74 (100%)	71 (96%)	3 (4%)	26	60
41	d1	74/74 (100%)	69 (93%)	5 (7%)	13	38
42	O	127/128 (99%)	122 (96%)	5 (4%)	27	62
42	c3	127/128 (99%)	121 (95%)	6 (5%)	22	55
43	CI	186/205 (91%)	182 (98%)	4 (2%)	47	78
43	o	186/205 (91%)	183 (98%)	3 (2%)	58	84
44	CQ	160/162 (99%)	155 (97%)	5 (3%)	35	70
44	w	160/162 (99%)	156 (98%)	4 (2%)	42	75
45	AP	90/91 (99%)	87 (97%)	3 (3%)	33	68
45	DQ	90/91 (99%)	84 (93%)	6 (7%)	13	39
46	X	110/111 (99%)	106 (96%)	4 (4%)	30	65
46	d2	110/111 (99%)	108 (98%)	2 (2%)	54	82
47	P	53/105 (50%)	47 (89%)	6 (11%)	4	15
47	c4	97/105 (92%)	92 (95%)	5 (5%)	19	50
48	CR	125/146 (86%)	122 (98%)	3 (2%)	44	76
48	x	140/146 (96%)	133 (95%)	7 (5%)	20	52
49	AQ	71/72 (99%)	69 (97%)	2 (3%)	38	73
49	DR	71/72 (99%)	67 (94%)	4 (6%)	17	47
50	Y	119/120 (99%)	115 (97%)	4 (3%)	32	67
50	d3	119/120 (99%)	117 (98%)	2 (2%)	56	83
51	CS	150/151 (99%)	145 (97%)	5 (3%)	33	68
51	y	150/151 (99%)	146 (97%)	4 (3%)	40	73
52	p0	105/256 (41%)	101 (96%)	4 (4%)	28	63
53	Z	112/113 (99%)	103 (92%)	9 (8%)	10	30
53	d4	112/113 (99%)	103 (92%)	9 (8%)	10	30
54	CT	147/154 (96%)	146 (99%)	1 (1%)	81	94
54	z	149/154 (97%)	146 (98%)	3 (2%)	50	79
55	i	97/228 (42%)	87 (90%)	10 (10%)	6	19
55	sM	54/228 (24%)	51 (94%)	3 (6%)	17	47
56	a	55/89 (62%)	49 (89%)	6 (11%)	5	17
56	d5	61/89 (68%)	56 (92%)	5 (8%)	9	29

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
57	0	156/156 (100%)	150 (96%)	6 (4%)	28	63
57	CU	156/156 (100%)	142 (91%)	14 (9%)	8	25
59	b	81/100 (81%)	77 (95%)	4 (5%)	21	53
59	d6	83/100 (83%)	80 (96%)	3 (4%)	30	65
60	2	136/137 (99%)	131 (96%)	5 (4%)	29	64
60	CV	136/137 (99%)	124 (91%)	12 (9%)	8	26
61	B	164/210 (78%)	157 (96%)	7 (4%)	25	57
61	s0	165/210 (79%)	158 (96%)	7 (4%)	25	59
62	c	70/71 (99%)	62 (89%)	8 (11%)	4	15
62	d7	70/71 (99%)	67 (96%)	3 (4%)	25	57
63	5	87/107 (81%)	84 (97%)	3 (3%)	32	67
63	CW	85/107 (79%)	80 (94%)	5 (6%)	16	45
64	C	107/224 (48%)	98 (92%)	9 (8%)	9	28
64	s1	192/224 (86%)	184 (96%)	8 (4%)	25	59
65	d	56/60 (93%)	51 (91%)	5 (9%)	8	26
65	d8	56/60 (93%)	53 (95%)	3 (5%)	18	49
66	6	104/105 (99%)	100 (96%)	4 (4%)	28	63
66	CX	104/105 (99%)	101 (97%)	3 (3%)	37	72
67	D	176/205 (86%)	167 (95%)	9 (5%)	20	51
67	s2	176/205 (86%)	171 (97%)	5 (3%)	38	73
68	d9	43/49 (88%)	41 (95%)	2 (5%)	22	55
68	e	47/49 (96%)	44 (94%)	3 (6%)	14	41
69	7	55/129 (43%)	53 (96%)	2 (4%)	30	65
69	CY	58/129 (45%)	55 (95%)	3 (5%)	19	50
70	E	182/195 (93%)	173 (95%)	9 (5%)	21	53
70	s3	182/195 (93%)	173 (95%)	9 (5%)	21	53
71	e0	53/54 (98%)	50 (94%)	3 (6%)	17	47
71	f	51/54 (94%)	48 (94%)	3 (6%)	16	45
72	8	102/118 (86%)	97 (95%)	5 (5%)	21	53
72	CZ	102/118 (86%)	99 (97%)	3 (3%)	37	72
73	F	221/222 (100%)	210 (95%)	11 (5%)	20	52

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
73	s4	221/222 (100%)	215 (97%)	6 (3%)	40	73
74	g	62/135 (46%)	53 (86%)	9 (14%)	2	8
76	9	109/110 (99%)	108 (99%)	1 (1%)	75	92
76	DA	107/110 (97%)	100 (94%)	7 (6%)	14	40
77	G	173/191 (91%)	165 (95%)	8 (5%)	23	55
77	s5	173/191 (91%)	167 (96%)	6 (4%)	31	66
78	Rb	260/262 (99%)	237 (91%)	23 (9%)	8	26
78	h	252/262 (96%)	228 (90%)	24 (10%)	7	22
79	AA	115/116 (99%)	108 (94%)	7 (6%)	15	43
79	DB	115/116 (99%)	109 (95%)	6 (5%)	19	50
All	All	18216/20307 (90%)	17386 (95%)	830 (5%)	23	55

All (830) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	8	THR
2	AB	16	SER
2	AB	21	ARG
2	AB	46	ASP
2	AB	48	TYR
2	AB	131	SER
3	CJ	29	SER
3	CJ	89	GLU
3	CJ	149	LYS
3	CJ	208	GLU
4	DJ	14	LYS
4	DJ	32	LYS
4	DJ	119	LYS
5	Q	22	LEU
5	Q	25	LEU
5	Q	26	LEU
5	Q	41	VAL
5	Q	43	ARG
5	Q	47	ARG
5	Q	51	SER
5	Q	52	LYS
5	Q	56	PHE
5	Q	92	SER

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Mol	Chain	Res	Type
5	Q	116	LEU
6	s6	21	GLU
6	s6	44	GLU
6	s6	216	LEU
8	AC	25	LYS
9	CK	12	VAL
9	CK	33	THR
9	CK	71	VAL
9	CK	75	VAL
9	CK	80	THR
9	CK	82	VAL
9	CK	101	VAL
9	CK	129	ARG
9	CK	133	THR
9	CK	138	THR
9	CK	147	SER
10	DK	2	THR
10	DK	11	LEU
10	DK	26	ILE
10	DK	46	GLU
10	DK	57	LEU
10	DK	89	GLU
11	R	8	GLN
11	R	29	ILE
11	R	38	LEU
11	R	62	ASN
11	R	98	ASP
11	R	113	ASP
12	s7	10	SER
12	s7	51	VAL
12	s7	66	SER
12	s7	67	LEU
12	s7	105	THR
12	s7	168	SER
13	j	134	VAL
13	j	157	VAL
13	j	161	ASP
13	j	192	LYS
13	j	252	THR
14	AD	31	VAL
14	AD	79	THR
15	CL	26	VAL

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Mol	Chain	Res	Type
15	CL	29	SER
15	CL	91	VAL
15	CL	101	LYS
15	CL	201	SER
16	DL	7	SER
16	DL	87	SER
17	S	3	ARG
17	S	4	VAL
17	S	9	VAL
17	S	25	THR
17	S	27	ASP
17	S	49	LYS
17	S	67	ARG
17	S	82	ASP
17	S	110	VAL
17	S	112	SER
18	s8	86	SER
18	s8	141	ARG
18	s8	161	SER
19	k	2	SER
19	k	5	LYS
19	k	24	SER
19	k	29	VAL
19	k	44	THR
19	k	84	VAL
19	k	85	VAL
19	k	90	VAL
19	k	104	THR
19	k	157	VAL
19	k	168	LYS
19	k	189	SER
19	k	192	VAL
19	k	202	THR
19	k	205	VAL
19	k	207	SER
19	k	212	ASN
19	k	266	ARG
19	k	337	THR
19	k	341	SER
19	k	361	THR
19	k	363	SER
19	k	372	THR

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Mol	Chain	Res	Type
19	k	387	LEU
20	AE	84	ASP
21	CM	7	ASN
21	CM	26	SER
21	CM	28	ASP
21	CM	85	LYS
21	CM	107	ASP
21	CM	122	ILE
21	CM	151	SER
21	CM	161	SER
21	CM	164	LYS
22	DM	6	THR
22	DM	45	VAL
22	DM	53	THR
22	DM	57	ASN
22	DM	65	LEU
22	DM	72	THR
22	DM	78	LEU
23	T	20	THR
23	T	28	ILE
23	T	34	THR
23	T	48	LYS
23	T	62	THR
23	T	72	ILE
23	T	103	ASN
23	T	138	THR
23	T	140	THR
23	T	141	THR
24	s9	21	SER
24	s9	46	SER
24	s9	66	ASP
24	s9	111	THR
24	s9	152	SER
25	l	7	THR
25	l	27	SER
25	l	54	GLU
25	l	92	ASN
25	l	133	SER
25	l	232	SER
25	l	256	THR
25	l	261	VAL
25	l	267	VAL

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Mol	Chain	Res	Type
25	l	269	SER
25	l	287	THR
25	l	327	LEU
26	AF	3	SER
26	AF	4	LEU
26	AF	12	LYS
27	CN	6	ASN
27	CN	11	LYS
27	CN	46	ILE
27	CN	62	THR
27	CN	140	SER
27	CN	165	SER
28	DN	5	LYS
28	DN	6	SER
28	DN	45	ARG
28	DN	51	ILE
29	U	22	LEU
29	U	28	LEU
29	U	38	LYS
29	U	48	GLN
29	U	57	ARG
29	U	60	SER
29	U	64	HIS
29	U	71	VAL
29	U	99	SER
29	U	114	VAL
29	U	122	ARG
29	U	127	ASN
29	U	135	ILE
29	U	139	THR
30	c0	28	ASN
30	c0	38	LYS
30	c0	51	SER
31	m	50	ARG
31	m	153	THR
31	m	188	GLU
31	m	197	SER
31	m	205	SER
31	m	216	GLU
31	m	234	ASP
31	m	261	THR
31	m	278	SER

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Mol	Chain	Res	Type
32	AG	78	SER
32	AG	105	SER
33	CO	5	SER
33	CO	31	LYS
33	CO	64	VAL
33	CO	120	VAL
34	DO	79	GLU
34	DO	94	SER
35	V	15	GLN
35	V	20	ILE
35	V	34	LEU
35	V	51	VAL
35	V	52	LYS
35	V	89	ARG
36	c1	8	GLN
36	c1	31	THR
36	c1	47	THR
36	c1	60	PHE
36	c1	131	ILE
36	c1	132	SER
37	n	2	SER
37	n	12	SER
37	n	35	VAL
37	n	93	VAL
37	n	96	VAL
37	n	98	VAL
37	n	108	LYS
37	n	109	GLU
37	n	162	SER
38	AH	44	CYS
38	AH	47	CYS
39	CP	12	ARG
40	DP	24	SER
41	W	7	GLN
41	W	40	ASP
41	W	86	SER
42	c3	6	SER
42	c3	12	SER
42	c3	14	SER
42	c3	42	ARG
42	c3	97	SER
42	c3	143	SER

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Mol	Chain	Res	Type
43	o	93	ASN
43	o	180	SER
43	o	240	VAL
4	AI	20	GLN
4	AI	79	ASP
4	AI	94	LYS
4	AI	119	LYS
44	CQ	8	VAL
44	CQ	22	VAL
44	CQ	35	VAL
44	CQ	178	VAL
44	CQ	180	SER
45	DQ	12	CYS
45	DQ	16	THR
45	DQ	17	CYS
45	DQ	28	TYR
45	DQ	34	SER
45	DQ	91	PHE
46	X	2	THR
46	X	6	VAL
46	X	47	ILE
46	X	76	SER
47	c4	62	LEU
47	c4	67	VAL
47	c4	123	SER
47	c4	124	ASP
47	c4	125	SER
3	p	71	VAL
3	p	146	LYS
3	p	151	VAL
3	p	227	ASP
10	AJ	74	LYS
48	CR	32	THR
48	CR	119	VAL
48	CR	144	SER
49	DR	40	SER
49	DR	58	SER
49	DR	59	CYS
49	DR	60	CYS
50	Y	3	LYS
50	Y	40	SER
50	Y	66	SER

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Mol	Chain	Res	Type
50	Y	137	LYS
5	c5	22	LEU
5	c5	44	ARG
5	c5	100	LYS
9	q	18	VAL
9	q	19	SER
9	q	46	THR
9	q	82	VAL
9	q	107	ASP
9	q	128	VAL
9	q	138	THR
16	AK	25	ARG
16	AK	26	SER
16	AK	85	LYS
51	CS	50	LYS
51	CS	55	SER
51	CS	63	SER
51	CS	176	ARG
51	CS	181	SER
52	p0	57	THR
52	p0	64	ARG
52	p0	69	ASP
52	p0	93	LEU
53	Z	6	THR
53	Z	21	LYS
53	Z	36	SER
53	Z	69	SER
53	Z	74	LEU
53	Z	78	SER
53	Z	104	SER
53	Z	106	GLN
53	Z	124	ARG
11	c6	17	THR
11	c6	28	LEU
11	c6	36	ILE
11	c6	42	GLU
11	c6	61	SER
11	c6	63	ILE
11	c6	101	SER
11	c6	113	ASP
11	c6	115	THR
15	r	29	SER

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Mol	Chain	Res	Type
15	r	30	LYS
15	r	71	CYS
15	r	90	ARG
15	r	137	SER
15	r	143	SER
15	r	168	SER
15	r	177	ASP
15	r	185	ARG
15	r	201	SER
15	r	203	LYS
15	r	205	SER
22	AL	4	GLU
22	AL	20	VAL
22	AL	22	THR
22	AL	40	GLN
22	AL	55	VAL
22	AL	66	ILE
22	AL	78	LEU
54	CT	37	SER
55	sM	73	SER
55	sM	77	THR
55	sM	83	LYS
56	a	44	GLN
56	a	51	LEU
56	a	78	ILE
56	a	89	ILE
56	a	95	HIS
56	a	102	THR
17	c7	4	VAL
17	c7	9	VAL
17	c7	20	TYR
17	c7	47	ARG
17	c7	83	GLN
17	c7	107	SER
21	s	7	ASN
21	s	11	ASP
21	s	48	SER
21	s	71	VAL
21	s	91	LEU
21	s	107	ASP
21	s	151	SER
57	CU	32	SER

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Mol	Chain	Res	Type
57	CU	60	SER
57	CU	70	THR
57	CU	72	VAL
57	CU	89	ASN
57	CU	103	VAL
57	CU	126	VAL
57	CU	130	GLU
57	CU	135	VAL
57	CU	140	VAL
57	CU	149	LYS
57	CU	162	THR
57	CU	166	LYS
57	CU	169	SER
59	b	4	LYS
59	b	7	SER
59	b	86	VAL
59	b	91	ASP
23	c8	22	VAL
23	c8	62	THR
23	c8	68	ARG
23	c8	77	THR
23	c8	89	GLN
23	c8	107	SER
23	c8	119	ILE
23	c8	140	THR
27	t	5	LYS
27	t	7	LEU
27	t	34	SER
27	t	54	LEU
27	t	70	ARG
27	t	77	LEU
27	t	152	THR
27	t	165	SER
34	AN	81	SER
60	CV	4	SER
60	CV	18	ASP
60	CV	19	PHE
60	CV	25	VAL
60	CV	27	LEU
60	CV	28	SER
60	CV	29	THR
60	CV	36	VAL

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Mol	Chain	Res	Type
60	CV	68	THR
60	CV	124	VAL
60	CV	126	VAL
60	CV	150	THR
61	B	43	ASP
61	B	56	LYS
61	B	58	VAL
61	B	77	SER
61	B	88	LYS
61	B	92	HIS
61	B	96	THR
62	c	11	THR
62	c	18	LYS
62	c	36	LYS
62	c	40	CYS
62	c	41	LEU
62	c	48	SER
62	c	74	SER
62	c	79	PHE
29	c9	33	TYR
29	c9	36	ILE
29	c9	41	SER
29	c9	117	SER
33	u	15	VAL
33	u	91	CYS
63	CW	27	VAL
63	CW	28	PHE
63	CW	52	ASN
63	CW	57	THR
63	CW	72	SER
64	C	105	PHE
64	C	154	SER
64	C	165	ARG
64	C	169	SER
64	C	177	GLN
64	C	181	LEU
64	C	186	SER
64	C	192	VAL
64	C	215	VAL
65	d	9	LEU
65	d	26	THR
65	d	41	VAL

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Mol	Chain	Res	Type
65	d	44	VAL
65	d	49	ARG
35	d0	30	LYS
35	d0	51	VAL
35	d0	66	SER
35	d0	70	THR
44	w	117	ARG
44	w	180	SER
44	w	188	SER
44	w	190	VAL
45	AP	12	CYS
45	AP	35	LEU
45	AP	88	CYS
66	CX	2	SER
66	CX	106	LYS
66	CX	135	VAL
67	D	45	VAL
67	D	59	HIS
67	D	60	SER
67	D	147	ASN
67	D	224	PHE
67	D	226	THR
67	D	228	ASN
67	D	240	LEU
67	D	245	ASP
68	e	9	SER
68	e	10	HIS
68	e	41	GLN
41	d1	17	CYS
41	d1	18	SER
41	d1	39	VAL
41	d1	52	THR
41	d1	86	SER
48	x	14	SER
48	x	115	SER
48	x	131	ARG
48	x	141	SER
48	x	144	SER
48	x	165	VAL
48	x	180	LYS
49	AQ	71	VAL
49	AQ	81	SER

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Mol	Chain	Res	Type
69	CY	25	ASP
69	CY	64	THR
69	CY	80	ARG
70	E	4	LEU
70	E	37	VAL
70	E	42	THR
70	E	44	THR
70	E	74	GLN
70	E	157	LEU
70	E	221	SER
70	E	222	VAL
70	E	223	LYS
71	f	5	HIS
71	f	16	SER
71	f	49	LEU
46	d2	6	VAL
46	d2	42	GLN
51	y	41	ASP
51	y	111	ARG
51	y	181	SER
51	y	186	VAL
55	i	28	SER
55	i	48	ARG
55	i	57	ASN
55	i	70	ASN
55	i	83	LYS
55	i	84	LYS
55	i	91	THR
55	i	102	THR
55	i	113	ASP
55	i	117	LEU
72	CZ	38	LEU
72	CZ	59	SER
72	CZ	142	ILE
73	F	22	LYS
73	F	24	SER
73	F	41	SER
73	F	77	ARG
73	F	115	THR
73	F	130	GLN
73	F	133	LYS
73	F	148	ARG

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Mol	Chain	Res	Type
73	F	151	ASP
73	F	187	ARG
73	F	252	ARG
74	g	107	LYS
74	g	115	THR
74	g	120	GLU
74	g	125	THR
74	g	130	VAL
74	g	146	SER
74	g	147	VAL
74	g	149	LYS
74	g	150	VAL
50	d3	90	ASP
50	d3	107	PHE
54	z	127	SER
54	z	156	ASN
54	z	173	ARG
76	DA	10	SER
76	DA	25	SER
76	DA	50	ILE
76	DA	51	ARG
76	DA	62	SER
76	DA	97	ILE
76	DA	102	SER
77	G	43	PHE
77	G	48	PHE
77	G	70	VAL
77	G	102	ARG
77	G	157	ARG
77	G	163	SER
77	G	167	ARG
77	G	223	SER
78	h	21	THR
78	h	29	GLN
78	h	37	SER
78	h	43	ILE
78	h	48	THR
78	h	66	HIS
78	h	76	ASP
78	h	90	ARG
78	h	98	GLU
78	h	112	SER

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Mol	Chain	Res	Type
78	h	116	ASP
78	h	118	LYS
78	h	120	SER
78	h	126	SER
78	h	136	ILE
78	h	149	ASP
78	h	152	SER
78	h	164	ASP
78	h	203	THR
78	h	217	ASP
78	h	223	TRP
78	h	224	ASN
78	h	281	TYR
78	h	314	GLN
53	d4	9	THR
53	d4	10	ARG
53	d4	37	LYS
53	d4	44	LEU
53	d4	53	ASP
53	d4	88	THR
53	d4	104	SER
53	d4	121	THR
53	d4	128	LYS
57	0	23	LYS
57	0	24	LEU
57	0	45	LEU
57	0	51	VAL
57	0	87	THR
57	0	132	THR
79	DB	33	SER
79	DB	51	LEU
79	DB	56	LYS
79	DB	87	LEU
79	DB	98	THR
79	DB	120	GLU
6	H	43	ASP
6	H	68	LEU
6	H	75	LEU
6	H	80	ASN
6	H	96	SER
6	H	114	VAL
6	H	125	THR

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Mol	Chain	Res	Type
6	H	128	THR
6	H	194	LYS
56	d5	77	ARG
56	d5	92	ILE
56	d5	96	SER
56	d5	97	LYS
56	d5	105	THR
60	2	19	PHE
60	2	83	ARG
60	2	92	ARG
60	2	126	VAL
60	2	160	ILE
2	DC	97	GLU
2	DC	101	VAL
12	I	14	THR
12	I	30	SER
12	I	46	ILE
12	I	49	ILE
12	I	50	ASP
12	I	98	ILE
12	I	162	ILE
12	I	175	LYS
12	I	176	LEU
78	Rb	6	VAL
78	Rb	14	GLU
78	Rb	82	SER
78	Rb	98	GLU
78	Rb	104	VAL
78	Rb	108	SER
78	Rb	112	SER
78	Rb	115	ILE
78	Rb	135	THR
78	Rb	159	ASN
78	Rb	165	ASP
78	Rb	171	SER
78	Rb	200	ASN
78	Rb	203	THR
78	Rb	207	ASP
78	Rb	220	ILE
78	Rb	242	SER
78	Rb	246	SER
78	Rb	256	THR

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Mol	Chain	Res	Type
78	Rb	297	ASP
78	Rb	299	GLN
78	Rb	300	THR
78	Rb	308	ASN
59	d6	44	ILE
59	d6	52	ASP
59	d6	76	SER
63	5	29	ASP
63	5	43	VAL
63	5	89	LEU
13	CD	181	LYS
13	CD	193	ARG
13	CD	249	SER
18	J	21	PHE
18	J	45	SER
18	J	69	SER
18	J	73	SER
18	J	158	SER
18	J	161	SER
18	J	168	CYS
18	J	193	LEU
61	s0	52	LYS
61	s0	55	GLU
61	s0	58	VAL
61	s0	79	ARG
61	s0	92	HIS
61	s0	116	LYS
61	s0	156	VAL
62	d7	40	CYS
62	d7	42	ASN
62	d7	48	SER
66	6	2	SER
66	6	14	SER
66	6	125	LEU
66	6	133	SER
19	CE	39	LYS
19	CE	85	VAL
19	CE	95	THR
19	CE	104	THR
19	CE	105	VAL
19	CE	111	SER
19	CE	165	GLN

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Mol	Chain	Res	Type
19	CE	274	SER
19	CE	282	ILE
19	CE	335	ILE
19	CE	344	THR
14	DE	13	LYS
14	DE	19	LYS
14	DE	63	SER
24	K	50	SER
24	K	103	ASP
24	K	134	ILE
24	K	140	ILE
24	K	171	ARG
64	s1	36	SER
64	s1	51	SER
64	s1	126	THR
64	s1	129	THR
64	s1	158	SER
64	s1	185	THR
64	s1	204	ILE
64	s1	209	ASN
65	d8	33	LEU
65	d8	59	SER
65	d8	67	ARG
69	7	26	SER
69	7	60	LYS
25	CF	12	THR
25	CF	16	THR
25	CF	133	SER
25	CF	152	VAL
25	CF	153	SER
25	CF	227	THR
25	CF	265	GLU
25	CF	269	SER
25	CF	287	THR
25	CF	313	LEU
20	DF	6	ASP
20	DF	72	ARG
20	DF	74	ARG
20	DF	96	VAL
30	L	2	LEU
30	L	5	LYS
30	L	35	ILE

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Mol	Chain	Res	Type
30	L	40	LEU
30	L	42	VAL
30	L	51	SER
67	s2	89	GLN
67	s2	107	SER
67	s2	201	ASN
67	s2	238	SER
67	s2	248	SER
68	d9	13	ARG
68	d9	40	ARG
72	8	27	ARG
72	8	29	SER
72	8	82	LEU
72	8	87	SER
72	8	142	ILE
31	CG	13	SER
31	CG	52	VAL
31	CG	68	THR
31	CG	81	HIS
31	CG	93	THR
31	CG	115	LEU
31	CG	153	THR
31	CG	220	SER
31	CG	232	ASP
31	CG	241	THR
31	CG	242	SER
31	CG	269	SER
26	DG	31	ASN
26	DG	36	LYS
26	DG	40	SER
26	DG	51	SER
36	M	52	SER
36	M	58	CYS
36	M	63	LEU
36	M	128	CYS
36	M	141	LYS
70	s3	32	GLU
70	s3	78	LYS
70	s3	79	TYR
70	s3	90	ARG
70	s3	101	GLN
70	s3	142	LEU

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Mol	Chain	Res	Type
70	s3	158	ILE
70	s3	184	ILE
70	s3	221	SER
71	e0	28	LYS
71	e0	55	ARG
71	e0	63	GLN
76	9	57	LEU
37	CH	78	ARG
37	CH	93	VAL
37	CH	104	GLU
37	CH	152	THR
32	DH	97	SER
42	O	3	ARG
42	O	6	SER
42	O	19	SER
42	O	56	ASP
42	O	67	THR
73	s4	8	HIS
73	s4	182	TYR
73	s4	184	THR
73	s4	246	LEU
73	s4	258	GLN
73	s4	261	LEU
39	v	188	ARG
79	AA	33	SER
79	AA	35	SER
79	AA	94	SER
79	AA	98	THR
79	AA	100	THR
79	AA	105	SER
79	AA	134	LEU
43	CI	44	ILE
43	CI	93	ASN
43	CI	157	ASN
43	CI	233	GLU
38	DI	4	ARG
38	DI	17	SER
38	DI	57	LEU
38	DI	74	ARG
47	P	22	SER
47	P	30	VAL
47	P	90	ARG

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Mol	Chain	Res	Type
47	P	92	LYS
47	P	99	GLN
47	P	128	LYS
77	s5	119	ASP
77	s5	144	GLU
77	s5	157	ARG
77	s5	161	ASP
77	s5	207	THR
77	s5	223	SER

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (257) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	120	ASN
3	CJ	59	GLN
3	CJ	95	ASN
3	CJ	243	GLN
4	DJ	59	ASN
5	Q	79	HIS
6	s6	13	GLN
6	s6	22	HIS
6	s6	34	GLN
6	s6	139	ASN
6	s6	140	ASN
6	s6	190	GLN
6	s6	197	ASN
8	AC	43	HIS
9	CK	50	ASN
9	CK	58	HIS
9	CK	64	HIS
9	CK	77	ASN
9	CK	169	ASN
11	R	83	GLN
12	s7	29	ASN
12	s7	110	GLN
12	s7	170	GLN
13	j	47	GLN
13	j	132	ASN
13	j	205	ASN
13	j	216	HIS
13	j	233	GLN
14	AD	36	GLN

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Mol	Chain	Res	Type
15	CL	123	HIS
17	S	31	ASN
17	S	48	ASN
18	s8	32	GLN
18	s8	64	ASN
18	s8	103	GLN
19	k	68	HIS
19	k	121	ASN
19	k	173	GLN
19	k	211	GLN
19	k	256	HIS
19	k	345	ASN
20	AE	43	HIS
21	CM	43	GLN
21	CM	68	HIS
21	CM	132	ASN
22	DM	40	GLN
23	T	13	HIS
23	T	25	ASN
23	T	122	HIS
23	T	127	HIS
24	s9	124	HIS
24	s9	133	HIS
25	l	5	GLN
25	l	18	ASN
26	AF	78	ASN
27	CN	103	ASN
27	CN	105	ASN
27	CN	120	GLN
27	CN	129	ASN
28	DN	4	GLN
28	DN	11	GLN
28	DN	20	ASN
28	DN	32	ASN
28	DN	38	ASN
29	U	23	GLN
29	U	25	GLN
29	U	106	GLN
30	c0	29	GLN
30	c0	47	GLN
30	c0	62	GLN
31	m	274	GLN

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Mol	Chain	Res	Type
31	m	297	GLN
32	AG	106	ASN
33	CO	62	GLN
33	CO	126	GLN
35	V	44	ASN
36	c1	106	ASN
37	n	167	ASN
38	AH	18	ASN
38	AH	98	GLN
39	CP	23	GLN
39	CP	32	GLN
41	W	35	ASN
42	c3	36	GLN
42	c3	78	ASN
43	o	225	GLN
44	CQ	182	ASN
45	DQ	23	HIS
45	DQ	27	GLN
45	DQ	47	GLN
46	X	120	HIS
47	c4	80	HIS
47	c4	99	GLN
3	p	38	GLN
48	CR	101	ASN
48	CR	121	GLN
49	DR	32	GLN
50	Y	22	ASN
50	Y	27	ASN
50	Y	75	GLN
50	Y	94	ASN
5	c5	103	ASN
9	q	49	ASN
9	q	59	ASN
9	q	64	HIS
9	q	100	ASN
9	q	157	ASN
16	AK	13	ASN
16	AK	79	GLN
51	CS	45	ASN
52	p0	189	GLN
53	Z	107	GLN
11	c6	32	ASN

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Mol	Chain	Res	Type
15	r	55	ASN
15	r	73	ASN
15	r	133	GLN
15	r	162	GLN
15	r	208	ASN
15	r	209	ASN
22	AL	10	GLN
54	CT	92	GLN
54	CT	118	HIS
55	sM	29	ASN
55	sM	70	ASN
17	c7	31	ASN
17	c7	48	ASN
17	c7	74	GLN
21	s	20	ASN
21	s	39	GLN
21	s	47	GLN
21	s	68	HIS
21	s	150	ASN
28	AM	11	GLN
28	AM	50	ASN
57	CU	49	HIS
57	CU	65	ASN
57	CU	88	HIS
59	b	43	ASN
34	AN	109	ASN
60	CV	58	GLN
61	B	28	ASN
61	B	46	HIS
61	B	140	ASN
61	B	168	HIS
62	c	5	GLN
62	c	9	HIS
62	c	26	GLN
29	c9	106	GLN
33	u	41	GLN
33	u	56	GLN
63	CW	49	ASN
64	C	208	GLN
35	d0	40	ASN
67	D	108	ASN
67	D	199	GLN

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Mol	Chain	Res	Type
41	d1	21	ASN
48	x	55	GLN
48	x	101	ASN
48	x	125	GLN
48	x	133	HIS
48	x	172	GLN
49	AQ	25	GLN
69	CY	58	HIS
70	E	74	GLN
46	d2	15	ASN
55	i	57	ASN
72	CZ	80	ASN
72	CZ	85	GLN
72	CZ	111	ASN
73	F	36	HIS
73	F	216	ASN
74	g	151	ASN
76	DA	66	GLN
76	DA	98	ASN
76	DA	110	HIS
77	G	86	GLN
77	G	131	GLN
78	h	29	GLN
78	h	196	ASN
78	h	198	ASN
78	h	200	ASN
53	d4	34	ASN
53	d4	77	ASN
53	d4	106	GLN
53	d4	113	ASN
57	0	46	GLN
79	DB	57	HIS
6	H	139	ASN
6	H	210	GLN
56	d5	38	HIS
56	d5	98	GLN
60	2	16	GLN
60	2	90	ASN
12	I	29	ASN
12	I	74	GLN
12	I	122	HIS
78	Rb	200	ASN

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Mol	Chain	Res	Type
78	Rb	237	GLN
63	5	49	ASN
13	CD	8	GLN
13	CD	24	GLN
13	CD	205	ASN
13	CD	218	HIS
8	DD	19	ASN
8	DD	45	HIS
18	J	88	ASN
18	J	175	GLN
61	s0	39	ASN
61	s0	83	GLN
61	s0	131	GLN
61	s0	168	HIS
62	d7	26	GLN
62	d7	51	GLN
19	CE	184	ASN
19	CE	259	HIS
19	CE	279	ASN
64	s1	95	ASN
64	s1	160	HIS
64	s1	209	ASN
64	s1	220	GLN
69	7	32	GLN
25	CF	48	GLN
25	CF	116	ASN
25	CF	307	GLN
25	CF	322	GLN
30	L	29	GLN
67	s2	82	ASN
67	s2	189	GLN
31	CG	40	HIS
31	CG	57	ASN
36	M	16	GLN
36	M	22	ASN
36	M	37	ASN
36	M	110	HIS
36	M	138	ASN
70	s3	101	GLN
70	s3	111	ASN
71	e0	17	GLN
76	9	98	ASN

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Mol	Chain	Res	Type
37	CH	138	GLN
42	O	69	ASN
73	s4	67	GLN
73	s4	216	ASN
73	s4	259	GLN
39	v	23	GLN
39	v	95	GLN
39	v	178	HIS
39	v	181	ASN
38	DI	33	GLN
38	DI	34	HIS
38	DI	52	GLN
47	P	24	ASN
47	P	99	GLN
77	s5	63	GLN
77	s5	66	GLN
77	s5	100	ASN
77	s5	104	ASN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	3	120/121 (99%)	14 (11%)	0
1	AS	120/121 (99%)	20 (16%)	1 (0%)
58	A	1716/1800 (95%)	453 (26%)	40 (2%)
58	sR	1780/1800 (98%)	464 (26%)	0
7	4	157/158 (99%)	31 (19%)	2 (1%)
7	AT	157/158 (99%)	31 (19%)	2 (1%)
75	1	3145/3396 (92%)	641 (20%)	48 (1%)
75	AR	3131/3396 (92%)	614 (19%)	48 (1%)
All	All	10326/10950 (94%)	2268 (21%)	141 (1%)

All (2268) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	3	7	G
1	3	11	A
1	3	22	A
1	3	23	A
1	3	54	U
1	3	55	A

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Mol	Chain	Res	Type
1	3	64	A
1	3	65	G
1	3	74	C
1	3	76	A
1	3	91	G
1	3	102	A
1	3	112	G
1	3	121	U
7	4	23	U
7	4	26	U
7	4	34	U
7	4	35	C
7	4	48	A
7	4	51	G
7	4	52	A
7	4	59	A
7	4	62	C
7	4	63	G
7	4	80	A
7	4	81	U
7	4	82	U
7	4	84	C
7	4	85	G
7	4	86	U
7	4	87	G
7	4	90	U
7	4	95	G
7	4	104	A
7	4	105	A
7	4	106	C
7	4	111	A
7	4	113	U
7	4	125	U
7	4	126	A
7	4	128	U
7	4	138	A
7	4	152	G
7	4	155	A
7	4	158	U
58	A	2	A
58	A	4	C
58	A	8	U

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Mol	Chain	Res	Type
58	A	25	C
58	A	26	A
58	A	27	U
58	A	34	G
58	A	39	A
58	A	42	G
58	A	45	U
58	A	47	A
58	A	57	G
58	A	60	U
58	A	67	A
58	A	68	A
58	A	69	G
58	A	72	A
58	A	73	U
58	A	74	U
58	A	77	U
58	A	78	A
58	A	81	G
58	A	104	A
58	A	114	C
58	A	115	G
58	A	127	G
58	A	130	C
58	A	131	C
58	A	132	U
58	A	138	A
58	A	140	A
58	A	141	U
58	A	144	U
58	A	145	A
58	A	146	U
58	A	149	C
58	A	153	G
58	A	158	U
58	A	159	U
58	A	169	A
58	A	178	U
58	A	179	A
58	A	181	A
58	A	185	U
58	A	186	C

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Mol	Chain	Res	Type
58	A	188	A
58	A	190	C
58	A	191	C
58	A	192	U
58	A	193	U
58	A	195	G
58	A	197	A
58	A	200	A
58	A	215	A
58	A	219	A
58	A	226	A
58	A	227	U
58	A	229	U
58	A	233	C
58	A	235	G
58	A	236	A
58	A	246	G
58	A	249	U
58	A	250	C
58	A	260	U
58	A	261	U
58	A	265	A
58	A	266	A
58	A	271	A
58	A	272	U
58	A	274	G
58	A	275	C
58	A	276	C
58	A	277	U
58	A	278	U
58	A	279	G
58	A	280	U
58	A	281	G
58	A	284	G
58	A	288	A
58	A	290	G
58	A	292	U
58	A	297	U
58	A	299	A
58	A	302	U
58	A	303	U
58	A	308	C

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Mol	Chain	Res	Type
58	A	309	C
58	A	314	C
58	A	316	A
58	A	319	U
58	A	320	U
58	A	321	C
58	A	322	G
58	A	333	A
58	A	337	G
58	A	338	C
58	A	352	A
58	A	359	A
58	A	360	A
58	A	361	C
58	A	378	A
58	A	380	U
58	A	381	C
58	A	390	G
58	A	397	A
58	A	400	A
58	A	402	C
58	A	404	G
58	A	418	G
58	A	419	G
58	A	424	C
58	A	425	A
58	A	426	G
58	A	434	G
58	A	437	A
58	A	439	U
58	A	444	C
58	A	448	C
58	A	454	U
58	A	465	G
58	A	468	A
58	A	471	A
58	A	479	C
58	A	480	G
58	A	484	C
58	A	485	A
58	A	488	G
58	A	489	C

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Mol	Chain	Res	Type
58	A	497	G
58	A	498	G
58	A	499	U
58	A	500	C
58	A	502	U
58	A	503	G
58	A	504	U
58	A	505	A
58	A	506	A
58	A	507	U
58	A	509	G
58	A	510	G
58	A	511	A
58	A	512	A
58	A	513	U
58	A	515	A
58	A	516	G
58	A	527	A
58	A	532	U
58	A	536	C
58	A	538	A
58	A	539	G
58	A	540	G
58	A	541	A
58	A	542	A
58	A	543	C
58	A	544	A
58	A	548	G
58	A	555	A
58	A	556	A
58	A	557	G
58	A	558	U
58	A	559	C
58	A	565	C
58	A	568	G
58	A	579	A
58	A	580	A
58	A	581	U
58	A	583	C
58	A	594	A
58	A	595	G
58	A	608	U

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Mol	Chain	Res	Type
58	A	611	U
58	A	619	A
58	A	620	A
58	A	622	A
58	A	623	A
58	A	624	G
58	A	639	U
58	A	640	U
58	A	649	U
58	A	650	U
58	A	653	C
58	A	654	C
58	A	655	G
58	A	680	U
58	A	684	A
58	A	686	C
58	A	692	C
58	A	694	U
58	A	696	C
58	A	697	C
58	A	700	C
58	A	702	G
58	A	703	G
58	A	704	C
58	A	705	U
58	A	706	A
58	A	707	A
58	A	709	C
58	A	710	U
58	A	711	U
58	A	721	U
58	A	722	G
58	A	723	G
58	A	725	U
58	A	726	C
58	A	727	U
58	A	731	C
58	A	732	G
58	A	733	A
58	A	734	A
58	A	735	C
58	A	737	A

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Mol	Chain	Res	Type
58	A	738	G
58	A	741	C
58	A	742	U
58	A	743	U
58	A	745	U
58	A	754	A
58	A	755	A
58	A	756	A
58	A	765	G
58	A	766	U
58	A	774	A
58	A	775	G
58	A	777	C
58	A	778	G
58	A	779	U
58	A	781	U
58	A	782	U
58	A	783	G
58	A	784	C
58	A	789	A
58	A	790	U
58	A	793	A
58	A	794	U
58	A	812	A
58	A	814	A
58	A	815	G
58	A	816	G
58	A	818	C
58	A	820	U
58	A	821	U
58	A	822	U
58	A	823	G
58	A	824	G
58	A	830	U
58	A	831	U
58	A	833	U
58	A	834	G
58	A	846	G
58	A	856	A
58	A	862	A
58	A	863	A
58	A	864	U

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Mol	Chain	Res	Type
58	A	873	U
58	A	876	G
58	A	886	U
58	A	892	A
58	A	898	A
58	A	912	U
58	A	913	G
58	A	914	G
58	A	915	A
58	A	916	U
58	A	928	U
58	A	933	A
58	A	934	C
58	A	935	U
58	A	942	G
58	A	944	A
58	A	951	A
58	A	960	U
58	A	966	A
58	A	989	U
58	A	992	A
58	A	993	A
58	A	997	G
58	A	1002	G
58	A	1003	A
58	A	1004	U
58	A	1005	A
58	A	1026	A
58	A	1028	C
58	A	1029	U
58	A	1039	A
58	A	1040	G
58	A	1052	U
58	A	1053	G
58	A	1057	U
58	A	1058	U
58	A	1060	U
58	A	1072	C
58	A	1074	G
58	A	1082	C
58	A	1086	A
58	A	1091	A

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Mol	Chain	Res	Type
58	A	1092	A
58	A	1093	A
58	A	1096	C
58	A	1097	U
58	A	1098	U
58	A	1100	G
58	A	1101	G
58	A	1138	A
58	A	1140	G
58	A	1146	G
58	A	1150	G
58	A	1151	A
58	A	1157	A
58	A	1158	C
58	A	1160	A
58	A	1163	A
58	A	1167	G
58	A	1168	U
58	A	1185	U
58	A	1191	U
58	A	1194	A
58	A	1196	A
58	A	1199	G
58	A	1200	G
58	A	1202	A
58	A	1203	A
58	A	1207	C
58	A	1217	A
58	A	1218	G
58	A	1226	A
58	A	1227	A
58	A	1229	G
58	A	1236	A
58	A	1241	G
58	A	1244	A
58	A	1245	G
58	A	1246	C
58	A	1251	U
58	A	1257	U
58	A	1260	U
58	A	1283	U
58	A	1284	C

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Mol	Chain	Res	Type
58	A	1285	U
58	A	1286	U
58	A	1307	U
58	A	1314	U
58	A	1315	U
58	A	1319	A
58	A	1321	A
58	A	1339	C
58	A	1340	U
58	A	1341	A
58	A	1344	A
58	A	1345	A
58	A	1346	A
58	A	1349	G
58	A	1354	G
58	A	1362	U
58	A	1363	U
58	A	1364	G
58	A	1370	U
58	A	1371	A
58	A	1372	U
58	A	1378	U
58	A	1383	G
58	A	1386	G
58	A	1388	A
58	A	1390	U
58	A	1398	U
58	A	1399	C
58	A	1412	G
58	A	1413	U
58	A	1414	U
58	A	1415	U
58	A	1418	G
58	A	1427	A
58	A	1428	G
58	A	1432	U
58	A	1435	G
58	A	1445	G
58	A	1446	A
58	A	1457	C
58	A	1459	C
58	A	1460	A

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Mol	Chain	Res	Type
58	A	1461	C
58	A	1469	A
58	A	1471	A
58	A	1473	U
58	A	1474	G
58	A	1475	A
58	A	1477	G
58	A	1482	C
58	A	1484	G
58	A	1486	G
58	A	1489	U
58	A	1490	C
58	A	1491	U
58	A	1492	A
58	A	1499	G
58	A	1506	G
58	A	1515	A
58	A	1516	A
58	A	1517	U
58	A	1521	G
58	A	1523	G
58	A	1524	A
58	A	1526	A
58	A	1533	C
58	A	1535	U
58	A	1536	G
58	A	1537	C
58	A	1538	U
58	A	1540	G
58	A	1542	G
58	A	1557	U
58	A	1559	A
58	A	1565	C
58	A	1569	A
58	A	1572	G
58	A	1573	A
58	A	1574	G
58	A	1576	A
58	A	1584	G
58	A	1600	A
58	A	1601	G
58	A	1614	A

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Mol	Chain	Res	Type
58	A	1616	G
58	A	1624	C
58	A	1631	A
58	A	1641	C
58	A	1657	U
58	A	1658	G
58	A	1659	A
58	A	1663	G
58	A	1680	G
58	A	1681	A
58	A	1682	U
58	A	1683	C
58	A	1684	U
58	A	1720	G
58	A	1731	A
58	A	1750	A
58	A	1754	A
58	A	1756	A
58	A	1760	G
58	A	1762	A
58	A	1766	A
58	A	1769	U
58	A	1780	G
58	A	1782	A
58	A	1783	C
58	A	1792	G
58	A	1793	G
58	A	1794	A
58	A	1795	U
58	A	1796	C
75	AR	16	A
75	AR	26	A
75	AR	40	A
75	AR	43	A
75	AR	45	A
75	AR	49	A
75	AR	59	G
75	AR	60	A
75	AR	65	A
75	AR	66	A
75	AR	73	C
75	AR	74	G

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Mol	Chain	Res	Type
75	AR	76	G
75	AR	92	G
75	AR	93	C
75	AR	99	A
75	AR	109	A
75	AR	110	G
75	AR	111	C
75	AR	116	A
75	AR	121	A
75	AR	122	A
75	AR	133	U
75	AR	135	C
75	AR	136	G
75	AR	156	G
75	AR	157	A
75	AR	165	A
75	AR	166	C
75	AR	173	G
75	AR	179	C
75	AR	182	U
75	AR	187	A
75	AR	190	U
75	AR	191	U
75	AR	200	C
75	AR	210	U
75	AR	211	A
75	AR	218	G
75	AR	219	A
75	AR	231	G
75	AR	234	G
75	AR	240	U
75	AR	241	G
75	AR	243	G
75	AR	244	G
75	AR	245	U
75	AR	247	C
75	AR	248	U
75	AR	249	U
75	AR	250	U
75	AR	251	G
75	AR	252	U
75	AR	253	A

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Mol	Chain	Res	Type
75	AR	269	G
75	AR	286	U
75	AR	295	A
75	AR	298	U
75	AR	299	G
75	AR	305	U
75	AR	315	C
75	AR	321	C
75	AR	323	A
75	AR	329	U
75	AR	343	U
75	AR	349	A
75	AR	350	C
75	AR	351	A
75	AR	375	A
75	AR	376	G
75	AR	380	U
75	AR	395	A
75	AR	398	A
75	AR	399	A
75	AR	401	U
75	AR	402	A
75	AR	403	C
75	AR	421	G
75	AR	422	A
75	AR	436	A
75	AR	438	A
75	AR	495	G
75	AR	521	A
75	AR	535	G
75	AR	543	C
75	AR	544	C
75	AR	546	C
75	AR	550	A
75	AR	551	A
75	AR	552	G
75	AR	555	U
75	AR	557	A
75	AR	559	A
75	AR	578	A
75	AR	579	G
75	AR	592	A

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Mol	Chain	Res	Type
75	AR	600	G
75	AR	604	G
75	AR	608	A
75	AR	609	G
75	AR	611	A
75	AR	619	A
75	AR	620	U
75	AR	621	A
75	AR	622	A
75	AR	636	C
75	AR	649	A
75	AR	660	A
75	AR	677	A
75	AR	681	U
75	AR	683	U
75	AR	691	A
75	AR	698	U
75	AR	705	A
75	AR	712	G
75	AR	715	A
75	AR	716	A
75	AR	725	G
75	AR	737	G
75	AR	751	A
75	AR	760	G
75	AR	763	G
75	AR	764	U
75	AR	765	C
75	AR	766	U
75	AR	767	U
75	AR	776	U
75	AR	777	U
75	AR	781	G
75	AR	783	A
75	AR	784	A
75	AR	785	G
75	AR	786	A
75	AR	806	A
75	AR	816	A
75	AR	817	A
75	AR	822	G
75	AR	826	G

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Mol	Chain	Res	Type
75	AR	830	A
75	AR	849	C
75	AR	861	C
75	AR	874	U
75	AR	875	G
75	AR	879	U
75	AR	896	A
75	AR	907	G
75	AR	908	G
75	AR	913	A
75	AR	914	A
75	AR	916	G
75	AR	917	A
75	AR	921	A
75	AR	923	C
75	AR	924	G
75	AR	937	G
75	AR	944	C
75	AR	959	C
75	AR	960	U
75	AR	974	G
75	AR	979	U
75	AR	980	A
75	AR	981	U
75	AR	982	C
75	AR	993	G
75	AR	994	G
75	AR	1001	G
75	AR	1002	A
75	AR	1003	A
75	AR	1010	G
75	AR	1013	G
75	AR	1015	U
75	AR	1017	C
75	AR	1020	G
75	AR	1021	G
75	AR	1024	G
75	AR	1025	A
75	AR	1026	A
75	AR	1032	C
75	AR	1037	C
75	AR	1047	A

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Mol	Chain	Res	Type
75	AR	1049	C
75	AR	1064	A
75	AR	1065	A
75	AR	1072	G
75	AR	1081	U
75	AR	1082	U
75	AR	1083	G
75	AR	1093	A
75	AR	1094	U
75	AR	1095	U
75	AR	1096	U
75	AR	1097	G
75	AR	1098	A
75	AR	1103	A
75	AR	1104	G
75	AR	1117	G
75	AR	1131	G
75	AR	1140	G
75	AR	1144	U
75	AR	1153	A
75	AR	1159	A
75	AR	1160	C
75	AR	1180	A
75	AR	1181	U
75	AR	1182	A
75	AR	1186	G
75	AR	1191	U
75	AR	1192	C
75	AR	1193	A
75	AR	1196	C
75	AR	1201	C
75	AR	1202	A
75	AR	1209	G
75	AR	1220	U
75	AR	1222	G
75	AR	1235	U
75	AR	1236	G
75	AR	1237	G
75	AR	1239	C
75	AR	1241	U
75	AR	1242	G
75	AR	1243	G

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Mol	Chain	Res	Type
75	AR	1245	A
75	AR	1246	G
75	AR	1248	C
75	AR	1258	U
75	AR	1262	G
75	AR	1263	A
75	AR	1265	U
75	AR	1266	G
75	AR	1285	G
75	AR	1292	C
75	AR	1307	G
75	AR	1309	U
75	AR	1330	A
75	AR	1345	G
75	AR	1348	U
75	AR	1349	G
75	AR	1350	A
75	AR	1351	U
75	AR	1352	A
75	AR	1353	U
75	AR	1355	A
75	AR	1356	U
75	AR	1357	G
75	AR	1385	C
75	AR	1386	A
75	AR	1387	G
75	AR	1399	A
75	AR	1400	G
75	AR	1419	A
75	AR	1434	G
75	AR	1437	C
75	AR	1446	A
75	AR	1450	G
75	AR	1481	A
75	AR	1482	A
75	AR	1490	A
75	AR	1496	C
75	AR	1507	G
75	AR	1508	C
75	AR	1514	G
75	AR	1533	U
75	AR	1536	G

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Mol	Chain	Res	Type
75	AR	1549	U
75	AR	1553	U
75	AR	1554	U
75	AR	1555	U
75	AR	1556	C
75	AR	1560	G
75	AR	1562	C
75	AR	1563	C
75	AR	1565	G
75	AR	1567	U
75	AR	1575	A
75	AR	1576	G
75	AR	1577	G
75	AR	1580	A
75	AR	1581	C
75	AR	1582	C
75	AR	1583	A
75	AR	1587	A
75	AR	1589	A
75	AR	1593	A
75	AR	1605	A
75	AR	1606	U
75	AR	1620	U
75	AR	1629	U
75	AR	1630	U
75	AR	1639	C
75	AR	1641	U
75	AR	1642	A
75	AR	1643	A
75	AR	1651	U
75	AR	1657	C
75	AR	1683	A
75	AR	1687	U
75	AR	1694	U
75	AR	1716	U
75	AR	1717	U
75	AR	1724	U
75	AR	1725	C
75	AR	1741	A
75	AR	1742	U
75	AR	1750	A
75	AR	1751	G

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Mol	Chain	Res	Type
75	AR	1758	G
75	AR	1759	C
75	AR	1760	A
75	AR	1761	C
75	AR	1762	C
75	AR	1763	U
75	AR	1765	U
75	AR	1766	G
75	AR	1767	C
75	AR	1768	U
75	AR	1769	G
75	AR	1770	G
75	AR	1775	G
75	AR	1780	G
75	AR	1793	C
75	AR	1797	A
75	AR	1810	A
75	AR	1814	A
75	AR	1815	U
75	AR	1816	A
75	AR	1817	G
75	AR	1819	U
75	AR	1820	U
75	AR	1821	U
75	AR	1839	A
75	AR	1842	A
75	AR	1849	C
75	AR	1878	G
75	AR	1906	G
75	AR	1948	G
75	AR	1952	G
75	AR	1954	G
75	AR	2094	C
75	AR	2095	G
75	AR	2101	C
75	AR	2102	U
75	AR	2113	A
75	AR	2114	C
75	AR	2121	G
75	AR	2122	G
75	AR	2131	A
75	AR	2140	U

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Mol	Chain	Res	Type
75	AR	2144	A
75	AR	2158	A
75	AR	2169	G
75	AR	2170	U
75	AR	2184	U
75	AR	2187	G
75	AR	2188	A
75	AR	2192	C
75	AR	2205	U
75	AR	2206	G
75	AR	2209	U
75	AR	2210	G
75	AR	2211	U
75	AR	2221	G
75	AR	2223	A
75	AR	2225	U
75	AR	2244	A
75	AR	2252	A
75	AR	2253	G
75	AR	2254	U
75	AR	2255	A
75	AR	2256	A
75	AR	2263	C
75	AR	2264	U
75	AR	2269	U
75	AR	2270	A
75	AR	2273	G
75	AR	2276	G
75	AR	2280	A
75	AR	2281	A
75	AR	2282	U
75	AR	2283	G
75	AR	2288	G
75	AR	2294	U
75	AR	2303	A
75	AR	2307	G
75	AR	2309	A
75	AR	2310	U
75	AR	2313	A
75	AR	2314	U
75	AR	2315	G
75	AR	2334	U

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Mol	Chain	Res	Type
75	AR	2336	U
75	AR	2366	C
75	AR	2372	A
75	AR	2373	A
75	AR	2374	C
75	AR	2375	G
75	AR	2385	G
75	AR	2393	G
75	AR	2397	A
75	AR	2398	A
75	AR	2401	A
75	AR	2402	A
75	AR	2403	G
75	AR	2404	A
75	AR	2411	U
75	AR	2418	G
75	AR	2435	G
75	AR	2437	G
75	AR	2438	A
75	AR	2507	C
75	AR	2508	U
75	AR	2514	U
75	AR	2515	A
75	AR	2518	C
75	AR	2519	A
75	AR	2520	A
75	AR	2522	G
75	AR	2523	A
75	AR	2530	G
75	AR	2533	G
75	AR	2534	G
75	AR	2536	A
75	AR	2538	U
75	AR	2539	C
75	AR	2540	A
75	AR	2541	U
75	AR	2542	U
75	AR	2543	U
75	AR	2549	G
75	AR	2551	U
75	AR	2552	C
75	AR	2555	G

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Mol	Chain	Res	Type
75	AR	2559	U
75	AR	2561	A
75	AR	2562	A
75	AR	2566	C
75	AR	2568	C
75	AR	2569	A
75	AR	2570	U
75	AR	2571	U
75	AR	2572	C
75	AR	2573	G
75	AR	2577	C
75	AR	2578	U
75	AR	2582	C
75	AR	2585	G
75	AR	2587	U
75	AR	2593	A
75	AR	2595	A
75	AR	2598	G
75	AR	2606	G
75	AR	2607	G
75	AR	2614	G
75	AR	2618	G
75	AR	2637	A
75	AR	2652	U
75	AR	2656	A
75	AR	2674	A
75	AR	2677	G
75	AR	2681	U
75	AR	2689	A
75	AR	2691	A
75	AR	2694	A
75	AR	2696	A
75	AR	2700	G
75	AR	2704	A
75	AR	2714	G
75	AR	2720	G
75	AR	2728	G
75	AR	2729	U
75	AR	2737	C
75	AR	2752	U
75	AR	2753	G
75	AR	2755	C

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Mol	Chain	Res	Type
75	AR	2762	A
75	AR	2772	C
75	AR	2777	G
75	AR	2778	G
75	AR	2781	U
75	AR	2796	G
75	AR	2799	A
75	AR	2800	G
75	AR	2801	A
75	AR	2802	A
75	AR	2810	C
75	AR	2814	G
75	AR	2816	G
75	AR	2817	A
75	AR	2818	U
75	AR	2819	A
75	AR	2842	U
75	AR	2843	U
75	AR	2845	A
75	AR	2847	A
75	AR	2849	C
75	AR	2860	U
75	AR	2871	G
75	AR	2872	A
75	AR	2875	U
75	AR	2887	A
75	AR	2889	C
75	AR	2896	A
75	AR	2899	C
75	AR	2904	U
75	AR	2923	U
75	AR	2935	U
75	AR	2936	A
75	AR	2942	C
75	AR	2947	G
75	AR	2951	G
75	AR	2954	U
75	AR	2968	G
75	AR	2971	A
75	AR	2983	C
75	AR	2990	G
75	AR	2993	G

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Mol	Chain	Res	Type
75	AR	2996	U
75	AR	2997	G
75	AR	3012	A
75	AR	3013	U
75	AR	3018	C
75	AR	3030	G
75	AR	3049	A
75	AR	3055	U
75	AR	3056	U
75	AR	3059	G
75	AR	3078	U
75	AR	3079	U
75	AR	3086	A
75	AR	3087	A
75	AR	3092	C
75	AR	3122	A
75	AR	3123	A
75	AR	3127	A
75	AR	3130	A
75	AR	3131	U
75	AR	3142	A
75	AR	3143	C
75	AR	3153	U
75	AR	3155	U
75	AR	3156	U
75	AR	3157	U
75	AR	3158	G
75	AR	3163	A
75	AR	3164	C
75	AR	3165	A
75	AR	3167	A
75	AR	3172	A
75	AR	3173	G
75	AR	3174	A
75	AR	3176	G
75	AR	3179	U
75	AR	3180	A
75	AR	3181	C
75	AR	3187	A
75	AR	3195	U
75	AR	3198	U
75	AR	3199	G

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Mol	Chain	Res	Type
75	AR	3206	C
75	AR	3207	U
75	AR	3209	A
75	AR	3217	C
75	AR	3218	A
75	AR	3219	G
75	AR	3228	C
75	AR	3229	G
75	AR	3235	C
75	AR	3242	G
75	AR	3244	A
75	AR	3245	A
75	AR	3246	G
75	AR	3247	G
75	AR	3253	G
75	AR	3259	U
75	AR	3265	C
75	AR	3266	G
75	AR	3270	U
75	AR	3274	A
75	AR	3275	U
75	AR	3276	G
75	AR	3277	U
75	AR	3278	C
75	AR	3279	A
75	AR	3286	G
75	AR	3287	U
75	AR	3288	G
75	AR	3289	G
75	AR	3295	A
75	AR	3304	U
75	AR	3313	U
75	AR	3316	A
75	AR	3317	U
75	AR	3318	G
75	AR	3319	U
75	AR	3320	A
75	AR	3333	G
75	AR	3341	U
75	AR	3342	A
75	AR	3345	G
75	AR	3347	A

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Mol	Chain	Res	Type
75	AR	3351	U
75	AR	3352	U
75	AR	3353	G
75	AR	3354	U
75	AR	3355	U
75	AR	3356	G
75	AR	3358	U
75	AR	3359	A
75	AR	3369	G
75	AR	3375	A
75	AR	3378	C
75	AR	3389	U
75	AR	3390	G
75	AR	3396	U
1	AS	7	G
1	AS	17	A
1	AS	22	A
1	AS	33	U
1	AS	38	U
1	AS	41	G
1	AS	45	A
1	AS	51	A
1	AS	53	U
1	AS	54	U
1	AS	60	G
1	AS	65	G
1	AS	73	C
1	AS	74	C
1	AS	76	A
1	AS	99	G
1	AS	101	G
1	AS	102	A
1	AS	112	G
1	AS	121	U
58	sR	2	A
58	sR	17	C
58	sR	25	C
58	sR	26	A
58	sR	27	U
58	sR	34	G
58	sR	47	A
58	sR	57	G

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Mol	Chain	Res	Type
58	sR	60	U
58	sR	61	A
58	sR	68	A
58	sR	69	G
58	sR	72	A
58	sR	73	U
58	sR	75	U
58	sR	76	A
58	sR	77	U
58	sR	80	A
58	sR	95	G
58	sR	104	A
58	sR	114	C
58	sR	128	U
58	sR	132	U
58	sR	137	U
58	sR	138	A
58	sR	140	A
58	sR	141	U
58	sR	142	G
58	sR	143	G
58	sR	144	U
58	sR	145	A
58	sR	146	U
58	sR	153	G
58	sR	159	U
58	sR	166	C
58	sR	177	U
58	sR	178	U
58	sR	185	U
58	sR	188	A
58	sR	191	C
58	sR	192	U
58	sR	193	U
58	sR	194	U
58	sR	195	G
58	sR	196	G
58	sR	197	A
58	sR	199	G
58	sR	200	A
58	sR	216	U
58	sR	218	A

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Mol	Chain	Res	Type
58	sR	219	A
58	sR	220	A
58	sR	221	A
58	sR	223	U
58	sR	224	C
58	sR	227	U
58	sR	228	G
58	sR	230	C
58	sR	232	U
58	sR	233	C
58	sR	235	G
58	sR	238	U
58	sR	239	C
58	sR	240	U
58	sR	241	U
58	sR	242	U
58	sR	245	U
58	sR	249	U
58	sR	250	C
58	sR	262	U
58	sR	265	A
58	sR	266	A
58	sR	267	U
58	sR	271	A
58	sR	272	U
58	sR	273	G
58	sR	275	C
58	sR	277	U
58	sR	278	U
58	sR	280	U
58	sR	281	G
58	sR	291	G
58	sR	299	A
58	sR	301	A
58	sR	314	C
58	sR	316	A
58	sR	319	U
58	sR	320	U
58	sR	321	C
58	sR	322	G
58	sR	335	U
58	sR	337	G

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Mol	Chain	Res	Type
58	sR	338	C
58	sR	359	A
58	sR	360	A
58	sR	361	C
58	sR	380	U
58	sR	381	C
58	sR	400	A
58	sR	401	A
58	sR	402	C
58	sR	404	G
58	sR	416	A
58	sR	418	G
58	sR	421	A
58	sR	424	C
58	sR	425	A
58	sR	426	G
58	sR	434	G
58	sR	437	A
58	sR	439	U
58	sR	444	C
58	sR	445	A
58	sR	448	C
58	sR	452	A
58	sR	454	U
58	sR	455	C
58	sR	458	G
58	sR	468	A
58	sR	484	C
58	sR	486	G
58	sR	487	G
58	sR	488	G
58	sR	489	C
58	sR	490	C
58	sR	492	A
58	sR	493	U
58	sR	494	U
58	sR	495	C
58	sR	496	G
58	sR	497	G
58	sR	500	C
58	sR	501	U
58	sR	502	U

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Mol	Chain	Res	Type
58	sR	505	A
58	sR	506	A
58	sR	507	U
58	sR	508	U
58	sR	510	G
58	sR	511	A
58	sR	512	A
58	sR	513	U
58	sR	514	G
58	sR	519	C
58	sR	527	A
58	sR	534	A
58	sR	538	A
58	sR	539	G
58	sR	540	G
58	sR	541	A
58	sR	542	A
58	sR	543	C
58	sR	544	A
58	sR	548	G
58	sR	551	G
58	sR	556	A
58	sR	557	G
58	sR	558	U
58	sR	559	C
58	sR	565	C
58	sR	566	C
58	sR	568	G
58	sR	570	A
58	sR	574	G
58	sR	578	U
58	sR	579	A
58	sR	580	A
58	sR	582	U
58	sR	584	C
58	sR	594	A
58	sR	595	G
58	sR	611	U
58	sR	619	A
58	sR	620	A
58	sR	621	A
58	sR	622	A

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Mol	Chain	Res	Type
58	sR	623	A
58	sR	624	G
58	sR	630	A
58	sR	637	C
58	sR	639	U
58	sR	650	U
58	sR	651	G
58	sR	652	G
58	sR	653	C
58	sR	654	C
58	sR	658	C
58	sR	678	A
58	sR	679	U
58	sR	680	U
58	sR	681	U
58	sR	682	C
58	sR	683	C
58	sR	684	A
58	sR	685	A
58	sR	690	G
58	sR	691	C
58	sR	696	C
58	sR	705	U
58	sR	709	C
58	sR	710	U
58	sR	711	U
58	sR	715	U
58	sR	718	U
58	sR	719	U
58	sR	720	G
58	sR	721	U
58	sR	722	G
58	sR	726	C
58	sR	730	G
58	sR	739	G
58	sR	743	U
58	sR	745	U
58	sR	753	A
58	sR	754	A
58	sR	755	A
58	sR	756	A
58	sR	765	G

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Mol	Chain	Res	Type
58	sR	766	U
58	sR	774	A
58	sR	775	G
58	sR	780	A
58	sR	781	U
58	sR	782	U
58	sR	783	G
58	sR	789	A
58	sR	792	U
58	sR	793	A
58	sR	794	U
58	sR	795	U
58	sR	811	A
58	sR	812	A
58	sR	814	A
58	sR	815	G
58	sR	816	G
58	sR	821	U
58	sR	823	G
58	sR	824	G
58	sR	825	U
58	sR	826	U
58	sR	829	A
58	sR	830	U
58	sR	831	U
58	sR	832	U
58	sR	834	G
58	sR	835	U
58	sR	847	A
58	sR	850	A
58	sR	856	A
58	sR	862	A
58	sR	863	A
58	sR	873	U
58	sR	876	G
58	sR	898	A
58	sR	906	A
58	sR	908	U
58	sR	910	C
58	sR	912	U
58	sR	913	G
58	sR	914	G

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Mol	Chain	Res	Type
58	sR	916	U
58	sR	928	U
58	sR	931	C
58	sR	933	A
58	sR	935	U
58	sR	942	G
58	sR	959	U
58	sR	960	U
58	sR	961	U
58	sR	970	A
58	sR	971	A
58	sR	983	A
58	sR	992	A
58	sR	997	G
58	sR	1003	A
58	sR	1004	U
58	sR	1005	A
58	sR	1021	C
58	sR	1026	A
58	sR	1028	C
58	sR	1030	A
58	sR	1036	A
58	sR	1039	A
58	sR	1040	G
58	sR	1052	U
58	sR	1053	G
58	sR	1057	U
58	sR	1058	U
58	sR	1059	U
58	sR	1060	U
58	sR	1062	A
58	sR	1073	G
58	sR	1075	C
58	sR	1081	A
58	sR	1082	C
58	sR	1086	A
58	sR	1092	A
58	sR	1094	G
58	sR	1096	C
58	sR	1097	U
58	sR	1098	U
58	sR	1100	G

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Mol	Chain	Res	Type
58	sR	1111	G
58	sR	1137	A
58	sR	1138	A
58	sR	1139	A
58	sR	1150	G
58	sR	1155	G
58	sR	1158	C
58	sR	1159	C
58	sR	1160	A
58	sR	1161	C
58	sR	1164	G
58	sR	1167	G
58	sR	1185	U
58	sR	1186	U
58	sR	1194	A
58	sR	1196	A
58	sR	1197	C
58	sR	1199	G
58	sR	1200	G
58	sR	1202	A
58	sR	1208	A
58	sR	1217	A
58	sR	1218	G
58	sR	1219	A
58	sR	1220	C
58	sR	1225	U
58	sR	1227	A
58	sR	1228	G
58	sR	1229	G
58	sR	1230	A
58	sR	1231	U
58	sR	1241	G
58	sR	1243	G
58	sR	1244	A
58	sR	1245	G
58	sR	1246	C
58	sR	1255	G
58	sR	1256	A
58	sR	1257	U
58	sR	1258	U
58	sR	1272	U
58	sR	1286	U

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Mol	Chain	Res	Type
58	sR	1288	G
58	sR	1291	G
58	sR	1311	U
58	sR	1314	U
58	sR	1315	U
58	sR	1316	G
58	sR	1319	A
58	sR	1321	A
58	sR	1335	U
58	sR	1341	A
58	sR	1344	A
58	sR	1345	A
58	sR	1346	A
58	sR	1347	U
58	sR	1354	G
58	sR	1361	U
58	sR	1362	U
58	sR	1363	U
58	sR	1364	G
58	sR	1367	G
58	sR	1370	U
58	sR	1371	A
58	sR	1372	U
58	sR	1388	A
58	sR	1390	U
58	sR	1396	U
58	sR	1398	U
58	sR	1399	C
58	sR	1400	A
58	sR	1402	G
58	sR	1410	A
58	sR	1413	U
58	sR	1414	U
58	sR	1415	U
58	sR	1417	A
58	sR	1422	A
58	sR	1427	A
58	sR	1428	G
58	sR	1433	G
58	sR	1445	G
58	sR	1446	A
58	sR	1448	G

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Mol	Chain	Res	Type
58	sR	1458	G
58	sR	1459	C
58	sR	1460	A
58	sR	1461	C
58	sR	1466	G
58	sR	1469	A
58	sR	1471	A
58	sR	1482	C
58	sR	1489	U
58	sR	1490	C
58	sR	1491	U
58	sR	1492	A
58	sR	1506	G
58	sR	1513	G
58	sR	1514	U
58	sR	1516	A
58	sR	1520	U
58	sR	1521	G
58	sR	1523	G
58	sR	1524	A
58	sR	1535	U
58	sR	1536	G
58	sR	1537	C
58	sR	1538	U
58	sR	1540	G
58	sR	1542	G
58	sR	1554	U
58	sR	1557	U
58	sR	1559	A
58	sR	1573	A
58	sR	1574	G
58	sR	1575	G
58	sR	1582	U
58	sR	1584	G
58	sR	1590	G
58	sR	1600	A
58	sR	1601	G
58	sR	1619	C
58	sR	1621	U
58	sR	1634	C
58	sR	1638	G
58	sR	1657	U

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Mol	Chain	Res	Type
58	sR	1658	G
58	sR	1680	G
58	sR	1681	A
58	sR	1682	U
58	sR	1684	U
58	sR	1688	U
58	sR	1695	G
58	sR	1696	G
58	sR	1697	G
58	sR	1698	G
58	sR	1699	G
58	sR	1700	C
58	sR	1702	A
58	sR	1703	C
58	sR	1712	A
58	sR	1716	C
58	sR	1717	G
58	sR	1727	G
58	sR	1731	A
58	sR	1742	U
58	sR	1755	A
58	sR	1760	G
58	sR	1762	A
58	sR	1766	A
58	sR	1767	G
58	sR	1769	U
58	sR	1780	G
58	sR	1782	A
58	sR	1783	C
58	sR	1792	G
58	sR	1793	G
58	sR	1794	A
58	sR	1795	U
58	sR	1796	C
58	sR	1799	U
58	sR	1800	A
7	AT	21	C
7	AT	34	U
7	AT	35	C
7	AT	48	A
7	AT	49	G
7	AT	51	G

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Mol	Chain	Res	Type
7	AT	59	A
7	AT	62	C
7	AT	63	G
7	AT	80	A
7	AT	81	U
7	AT	82	U
7	AT	83	C
7	AT	84	C
7	AT	85	G
7	AT	86	U
7	AT	87	G
7	AT	90	U
7	AT	95	G
7	AT	97	A
7	AT	104	A
7	AT	105	A
7	AT	106	C
7	AT	111	A
7	AT	113	U
7	AT	116	G
7	AT	125	U
7	AT	127	U
7	AT	155	A
7	AT	157	U
7	AT	158	U
75	1	16	A
75	1	26	A
75	1	40	A
75	1	49	A
75	1	59	G
75	1	60	A
75	1	65	A
75	1	66	A
75	1	73	C
75	1	74	G
75	1	76	G
75	1	83	U
75	1	92	G
75	1	99	A
75	1	109	A
75	1	110	G
75	1	111	C

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Mol	Chain	Res	Type
75	1	113	C
75	1	116	A
75	1	121	A
75	1	122	A
75	1	133	U
75	1	135	C
75	1	136	G
75	1	147	U
75	1	148	G
75	1	156	G
75	1	157	A
75	1	161	G
75	1	165	A
75	1	166	C
75	1	167	U
75	1	170	G
75	1	181	U
75	1	187	A
75	1	188	U
75	1	190	U
75	1	191	U
75	1	200	C
75	1	210	U
75	1	213	A
75	1	218	G
75	1	219	A
75	1	220	G
75	1	237	G
75	1	239	G
75	1	240	U
75	1	241	G
75	1	243	G
75	1	245	U
75	1	246	U
75	1	249	U
75	1	250	U
75	1	251	G
75	1	252	U
75	1	253	A
75	1	256	G
75	1	269	G
75	1	282	G

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Mol	Chain	Res	Type
75	1	283	G
75	1	286	U
75	1	295	A
75	1	298	U
75	1	299	G
75	1	305	U
75	1	323	A
75	1	329	U
75	1	339	C
75	1	344	A
75	1	349	A
75	1	350	C
75	1	351	A
75	1	375	A
75	1	376	G
75	1	398	A
75	1	399	A
75	1	401	U
75	1	402	A
75	1	403	C
75	1	421	G
75	1	422	A
75	1	438	A
75	1	440	A
75	1	495	G
75	1	519	A
75	1	520	U
75	1	521	A
75	1	535	G
75	1	544	C
75	1	545	U
75	1	546	C
75	1	547	G
75	1	548	G
75	1	549	U
75	1	551	A
75	1	552	G
75	1	553	U
75	1	555	U
75	1	557	A
75	1	558	U
75	1	559	A

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Mol	Chain	Res	Type
75	1	578	A
75	1	579	G
75	1	591	G
75	1	592	A
75	1	600	G
75	1	604	G
75	1	609	G
75	1	611	A
75	1	620	U
75	1	621	A
75	1	636	C
75	1	637	C
75	1	638	C
75	1	649	A
75	1	660	A
75	1	661	G
75	1	677	A
75	1	681	U
75	1	705	A
75	1	712	G
75	1	715	A
75	1	716	A
75	1	719	U
75	1	749	C
75	1	763	G
75	1	764	U
75	1	765	C
75	1	766	U
75	1	767	U
75	1	776	U
75	1	777	U
75	1	778	U
75	1	780	A
75	1	781	G
75	1	785	G
75	1	800	G
75	1	806	A
75	1	817	A
75	1	830	A
75	1	837	A
75	1	849	C
75	1	861	C

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Mol	Chain	Res	Type
75	1	874	U
75	1	879	U
75	1	890	C
75	1	896	A
75	1	907	G
75	1	908	G
75	1	914	A
75	1	916	G
75	1	917	A
75	1	921	A
75	1	923	C
75	1	924	G
75	1	936	A
75	1	937	G
75	1	943	U
75	1	944	C
75	1	953	G
75	1	959	C
75	1	960	U
75	1	974	G
75	1	979	U
75	1	980	A
75	1	981	U
75	1	982	C
75	1	991	G
75	1	994	G
75	1	1000	C
75	1	1001	G
75	1	1002	A
75	1	1004	U
75	1	1006	A
75	1	1010	G
75	1	1014	U
75	1	1015	U
75	1	1017	C
75	1	1018	G
75	1	1020	G
75	1	1021	G
75	1	1024	G
75	1	1025	A
75	1	1029	G
75	1	1032	C

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Mol	Chain	Res	Type
75	1	1036	A
75	1	1041	U
75	1	1047	A
75	1	1049	C
75	1	1057	A
75	1	1064	A
75	1	1065	A
75	1	1071	U
75	1	1072	G
75	1	1081	U
75	1	1082	U
75	1	1083	G
75	1	1093	A
75	1	1094	U
75	1	1095	U
75	1	1097	G
75	1	1098	A
75	1	1103	A
75	1	1104	G
75	1	1117	G
75	1	1131	G
75	1	1143	A
75	1	1144	U
75	1	1153	A
75	1	1154	A
75	1	1159	A
75	1	1160	C
75	1	1168	U
75	1	1179	A
75	1	1180	A
75	1	1181	U
75	1	1182	A
75	1	1186	G
75	1	1190	A
75	1	1191	U
75	1	1192	C
75	1	1201	C
75	1	1206	G
75	1	1209	G
75	1	1217	A
75	1	1221	A
75	1	1222	G

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Mol	Chain	Res	Type
75	1	1226	G
75	1	1227	C
75	1	1228	C
75	1	1232	C
75	1	1236	G
75	1	1237	G
75	1	1239	C
75	1	1241	U
75	1	1243	G
75	1	1245	A
75	1	1246	G
75	1	1248	C
75	1	1249	G
75	1	1252	A
75	1	1253	U
75	1	1254	C
75	1	1258	U
75	1	1260	A
75	1	1262	G
75	1	1263	A
75	1	1264	G
75	1	1265	U
75	1	1267	U
75	1	1268	G
75	1	1269	U
75	1	1270	A
75	1	1271	A
75	1	1272	C
75	1	1273	A
75	1	1274	A
75	1	1278	A
75	1	1279	C
75	1	1285	G
75	1	1286	A
75	1	1287	A
75	1	1292	C
75	1	1303	A
75	1	1307	G
75	1	1308	A
75	1	1309	U
75	1	1313	G
75	1	1330	A

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Mol	Chain	Res	Type
75	1	1348	U
75	1	1349	G
75	1	1350	A
75	1	1352	A
75	1	1353	U
75	1	1355	A
75	1	1356	U
75	1	1357	G
75	1	1386	A
75	1	1398	U
75	1	1399	A
75	1	1400	G
75	1	1419	A
75	1	1425	U
75	1	1429	G
75	1	1434	G
75	1	1437	C
75	1	1446	A
75	1	1450	G
75	1	1455	U
75	1	1475	A
75	1	1477	A
75	1	1481	A
75	1	1482	A
75	1	1495	U
75	1	1496	C
75	1	1508	C
75	1	1535	A
75	1	1536	G
75	1	1539	A
75	1	1541	G
75	1	1555	U
75	1	1556	C
75	1	1560	G
75	1	1562	C
75	1	1563	C
75	1	1564	U
75	1	1567	U
75	1	1568	U
75	1	1569	U
75	1	1570	U
75	1	1572	U

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Mol	Chain	Res	Type
75	1	1575	A
75	1	1576	G
75	1	1578	C
75	1	1579	C
75	1	1580	A
75	1	1581	C
75	1	1582	C
75	1	1583	A
75	1	1587	A
75	1	1589	A
75	1	1593	A
75	1	1605	A
75	1	1620	U
75	1	1629	U
75	1	1630	U
75	1	1633	C
75	1	1634	G
75	1	1639	C
75	1	1642	A
75	1	1643	A
75	1	1657	C
75	1	1664	G
75	1	1677	G
75	1	1683	A
75	1	1715	A
75	1	1716	U
75	1	1717	U
75	1	1724	U
75	1	1725	C
75	1	1736	G
75	1	1742	U
75	1	1745	C
75	1	1750	A
75	1	1751	G
75	1	1760	A
75	1	1761	C
75	1	1762	C
75	1	1763	U
75	1	1764	U
75	1	1765	U
75	1	1766	G
75	1	1767	C

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Mol	Chain	Res	Type
75	1	1769	G
75	1	1770	G
75	1	1772	U
75	1	1775	G
75	1	1779	C
75	1	1780	G
75	1	1797	A
75	1	1809	A
75	1	1810	A
75	1	1811	G
75	1	1814	A
75	1	1815	U
75	1	1816	A
75	1	1819	U
75	1	1820	U
75	1	1821	U
75	1	1839	A
75	1	1842	A
75	1	1846	C
75	1	1847	A
75	1	1866	C
75	1	1869	C
75	1	1871	U
75	1	1878	G
75	1	1879	A
75	1	1880	U
75	1	1886	A
75	1	1906	G
75	1	1948	G
75	1	1951	C
75	1	1953	G
75	1	1954	G
75	1	2094	C
75	1	2097	U
75	1	2101	C
75	1	2102	U
75	1	2111	G
75	1	2113	A
75	1	2115	G
75	1	2120	A
75	1	2121	G
75	1	2122	G

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Mol	Chain	Res	Type
75	1	2131	A
75	1	2140	U
75	1	2144	A
75	1	2158	A
75	1	2169	G
75	1	2187	G
75	1	2188	A
75	1	2193	U
75	1	2205	U
75	1	2208	A
75	1	2210	G
75	1	2223	A
75	1	2228	A
75	1	2229	A
75	1	2249	G
75	1	2250	G
75	1	2255	A
75	1	2256	A
75	1	2272	G
75	1	2273	G
75	1	2281	A
75	1	2282	U
75	1	2298	U
75	1	2301	U
75	1	2307	G
75	1	2313	A
75	1	2314	U
75	1	2315	G
75	1	2319	U
75	1	2334	U
75	1	2336	U
75	1	2373	A
75	1	2374	C
75	1	2375	G
75	1	2385	G
75	1	2386	A
75	1	2388	U
75	1	2393	G
75	1	2397	A
75	1	2401	A
75	1	2402	A
75	1	2403	G

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Mol	Chain	Res	Type
75	1	2404	A
75	1	2411	U
75	1	2414	G
75	1	2418	G
75	1	2419	A
75	1	2422	C
75	1	2435	G
75	1	2441	A
75	1	2444	C
75	1	2445	A
75	1	2502	A
75	1	2503	G
75	1	2505	U
75	1	2507	C
75	1	2514	U
75	1	2515	A
75	1	2522	G
75	1	2523	A
75	1	2532	U
75	1	2533	G
75	1	2534	G
75	1	2537	U
75	1	2538	U
75	1	2539	C
75	1	2540	A
75	1	2541	U
75	1	2542	U
75	1	2543	U
75	1	2544	U
75	1	2547	A
75	1	2549	G
75	1	2552	C
75	1	2555	G
75	1	2557	A
75	1	2561	A
75	1	2569	A
75	1	2570	U
75	1	2571	U
75	1	2572	C
75	1	2573	G
75	1	2585	G
75	1	2593	A

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Mol	Chain	Res	Type
75	1	2594	C
75	1	2595	A
75	1	2606	G
75	1	2607	G
75	1	2614	G
75	1	2637	A
75	1	2638	C
75	1	2647	A
75	1	2652	U
75	1	2656	A
75	1	2672	G
75	1	2674	A
75	1	2677	G
75	1	2689	A
75	1	2690	G
75	1	2691	A
75	1	2694	A
75	1	2696	A
75	1	2706	G
75	1	2714	G
75	1	2728	G
75	1	2729	U
75	1	2752	U
75	1	2753	G
75	1	2755	C
75	1	2772	C
75	1	2773	C
75	1	2777	G
75	1	2778	G
75	1	2779	A
75	1	2780	A
75	1	2796	G
75	1	2799	A
75	1	2800	G
75	1	2801	A
75	1	2808	A
75	1	2810	C
75	1	2814	G
75	1	2815	G
75	1	2816	G
75	1	2817	A
75	1	2818	U

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Mol	Chain	Res	Type
75	1	2829	U
75	1	2834	G
75	1	2839	G
75	1	2842	U
75	1	2845	A
75	1	2849	C
75	1	2853	A
75	1	2860	U
75	1	2867	C
75	1	2871	G
75	1	2873	U
75	1	2875	U
75	1	2876	C
75	1	2886	U
75	1	2887	A
75	1	2888	U
75	1	2898	G
75	1	2899	C
75	1	2900	A
75	1	2923	U
75	1	2927	C
75	1	2935	U
75	1	2936	A
75	1	2942	C
75	1	2947	G
75	1	2954	U
75	1	2971	A
75	1	2972	G
75	1	2979	U
75	1	2983	C
75	1	2990	G
75	1	2997	G
75	1	3012	A
75	1	3028	G
75	1	3030	G
75	1	3056	U
75	1	3057	U
75	1	3058	U
75	1	3059	G
75	1	3078	U
75	1	3079	U
75	1	3080	G

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Mol	Chain	Res	Type
75	1	3086	A
75	1	3087	A
75	1	3092	C
75	1	3122	A
75	1	3128	G
75	1	3130	A
75	1	3131	U
75	1	3142	A
75	1	3143	C
75	1	3151	U
75	1	3153	U
75	1	3154	C
75	1	3155	U
75	1	3156	U
75	1	3157	U
75	1	3164	C
75	1	3165	A
75	1	3166	C
75	1	3170	A
75	1	3173	G
75	1	3174	A
75	1	3176	G
75	1	3179	U
75	1	3181	C
75	1	3187	A
75	1	3195	U
75	1	3196	U
75	1	3197	G
75	1	3207	U
75	1	3210	A
75	1	3217	C
75	1	3218	A
75	1	3219	G
75	1	3223	A
75	1	3227	A
75	1	3228	C
75	1	3229	G
75	1	3233	C
75	1	3245	A
75	1	3246	G
75	1	3247	G
75	1	3259	U

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Mol	Chain	Res	Type
75	1	3263	G
75	1	3269	U
75	1	3270	U
75	1	3273	A
75	1	3276	G
75	1	3281	U
75	1	3286	G
75	1	3287	U
75	1	3289	G
75	1	3294	A
75	1	3295	A
75	1	3303	G
75	1	3304	U
75	1	3313	U
75	1	3316	A
75	1	3317	U
75	1	3318	G
75	1	3319	U
75	1	3320	A
75	1	3341	U
75	1	3342	A
75	1	3345	G
75	1	3347	A
75	1	3348	G
75	1	3351	U
75	1	3352	U
75	1	3354	U
75	1	3355	U
75	1	3360	C
75	1	3369	G
75	1	3375	A
75	1	3376	A
75	1	3378	C
75	1	3382	U
75	1	3383	G
75	1	3389	U

All (141) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
7	4	85	G
7	4	125	U

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Mol	Chain	Res	Type
58	A	25	C
58	A	45	U
58	A	73	U
58	A	113	U
58	A	130	C
58	A	139	C
58	A	158	U
58	A	187	G
58	A	218	A
58	A	278	U
58	A	417	A
58	A	499	U
58	A	501	U
58	A	503	G
58	A	512	A
58	A	555	A
58	A	580	A
58	A	685	A
58	A	704	C
58	A	720	G
58	A	721	U
58	A	755	A
58	A	781	U
58	A	793	A
58	A	815	G
58	A	1051	G
58	A	1081	A
58	A	1139	A
58	A	1150	G
58	A	1157	A
58	A	1244	A
58	A	1250	U
58	A	1370	U
58	A	1481	C
58	A	1489	U
58	A	1568	C
58	A	1573	A
58	A	1600	A
58	A	1657	U
58	A	1761	U
75	AR	65	A
75	AR	374	A

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Mol	Chain	Res	Type
75	AR	588	G
75	AR	715	A
75	AR	873	C
75	AR	916	G
75	AR	979	U
75	AR	981	U
75	AR	993	G
75	AR	1064	A
75	AR	1094	U
75	AR	1097	G
75	AR	1238	C
75	AR	1241	U
75	AR	1284	C
75	AR	1329	U
75	AR	1348	U
75	AR	1352	A
75	AR	1355	A
75	AR	1562	C
75	AR	1605	A
75	AR	1716	U
75	AR	1792	C
75	AR	1815	U
75	AR	1820	U
75	AR	2101	C
75	AR	2112	U
75	AR	2252	A
75	AR	2255	A
75	AR	2269	U
75	AR	2400	G
75	AR	2537	U
75	AR	2541	U
75	AR	2586	G
75	AR	2728	G
75	AR	2818	U
75	AR	2859	U
75	AR	2871	G
75	AR	3055	U
75	AR	3121	U
75	AR	3157	U
75	AR	3218	A
75	AR	3228	C
75	AR	3269	U

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Mol	Chain	Res	Type
75	AR	3303	G
75	AR	3350	C
75	AR	3358	U
75	AR	3375	A
1	AS	52	G
7	AT	81	U
7	AT	85	G
75	1	65	A
75	1	239	G
75	1	282	G
75	1	588	G
75	1	594	U
75	1	763	G
75	1	873	C
75	1	916	G
75	1	981	U
75	1	993	G
75	1	1064	A
75	1	1094	U
75	1	1097	G
75	1	1103	A
75	1	1273	A
75	1	1329	U
75	1	1355	A
75	1	1556	C
75	1	1562	C
75	1	1589	A
75	1	1605	A
75	1	1716	U
75	1	1724	U
75	1	1809	A
75	1	1820	U
75	1	2101	C
75	1	2112	U
75	1	2209	U
75	1	2249	G
75	1	2418	G
75	1	2443	A
75	1	2537	U
75	1	2539	C
75	1	2541	U
75	1	2593	A

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Mol	Chain	Res	Type
75	1	2818	U
75	1	2859	U
75	1	2874	G
75	1	2875	U
75	1	3078	U
75	1	3121	U
75	1	3218	A
75	1	3228	C
75	1	3269	U
75	1	3350	C
75	1	3351	U
75	1	3353	G
75	1	3375	A

## 5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

## 5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 2454 ligands modelled in this entry, 1 is modelled with single atom and 1509 are monoatomic - leaving 944 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 2$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z  > 2$	Counts	RMSZ	$\# Z  > 2$
80	OHX	sR	2123	-	0,6,6	-	-	-		
80	OHX	AR	4049	-	0,6,6	-	-	-		
80	OHX	1	3873	-	0,6,6	-	-	-		
80	OHX	1	3605	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	4204	81	0,6,6	-	-	-		
80	OHX	AR	4017	-	0,6,6	-	-	-		
80	OHX	AR	3988	-	0,6,6	-	-	-		
80	OHX	AR	3510	-	0,6,6	-	-	-		
80	OHX	1	3488	-	0,6,6	-	-	-		
80	OHX	A	2149	-	0,6,6	-	-	-		
80	OHX	AR	3504	81	0,6,6	-	-	-		
80	OHX	A	1915	-	0,6,6	-	-	-		
80	OHX	AR	3761	-	0,6,6	-	-	-		
80	OHX	sR	2180	-	0,6,6	-	-	-		
80	OHX	A	1953	-	0,6,6	-	-	-		
80	OHX	sR	2049	-	0,6,6	-	-	-		
80	OHX	AR	3566	-	0,6,6	-	-	-		
80	OHX	1	3539	-	0,6,6	-	-	-		
80	OHX	sR	2198	-	0,6,6	-	-	-		
80	OHX	sR	2166	-	0,6,6	-	-	-		
80	OHX	1	3542	-	0,6,6	-	-	-		
80	OHX	1	3662	-	0,6,6	-	-	-		
80	OHX	AT	207	-	0,6,6	-	-	-		
80	OHX	1	4090	81	0,6,6	-	-	-		
80	OHX	AR	3479	-	0,6,6	-	-	-		
80	OHX	U	202	-	0,6,6	-	-	-		
80	OHX	1	3792	-	0,6,6	-	-	-		
80	OHX	1	3753	-	0,6,6	-	-	-		
80	OHX	d4	201	-	0,6,6	-	-	-		
80	OHX	AR	3423	-	0,6,6	-	-	-		
80	OHX	AR	3732	-	0,6,6	-	-	-		
80	OHX	1	3423	-	0,6,6	-	-	-		
80	OHX	1	3961	-	0,6,6	-	-	-		
80	OHX	1	3964	81	0,6,6	-	-	-		
80	OHX	AR	4159	81	0,6,6	-	-	-		
80	OHX	A	2017	-	0,6,6	-	-	-		
80	OHX	AR	4046	-	0,6,6	-	-	-		
80	OHX	1	3726	-	0,6,6	-	-	-		
80	OHX	1	3784	81	0,6,6	-	-	-		
80	OHX	sR	2029	-	0,6,6	-	-	-		
80	OHX	AR	4010	-	0,6,6	-	-	-		
80	OHX	A	2082	-	0,6,6	-	-	-		
80	OHX	sR	1903	-	0,6,6	-	-	-		
80	OHX	AR	3609	-	0,6,6	-	-	-		
80	OHX	4	201	81	0,6,6	-	-	-		
80	OHX	AR	3485	-	0,6,6	-	-	-		
80	OHX	AR	3785	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	1	4025	-	0,6,6	-	-	-		
80	OHX	AR	3638	-	0,6,6	-	-	-		
80	OHX	1	3850	-	0,6,6	-	-	-		
80	OHX	AR	3487	-	0,6,6	-	-	-		
80	OHX	AR	4018	-	0,6,6	-	-	-		
80	OHX	1	3545	-	0,6,6	-	-	-		
80	OHX	sR	1925	-	0,6,6	-	-	-		
80	OHX	1	3540	-	0,6,6	-	-	-		
80	OHX	A	2066	-	0,6,6	-	-	-		
80	OHX	1	3752	-	0,6,6	-	-	-		
80	OHX	AT	203	81	0,6,6	-	-	-		
80	OHX	A	2067	-	0,6,6	-	-	-		
80	OHX	AR	3642	-	0,6,6	-	-	-		
80	OHX	1	3449	-	0,6,6	-	-	-		
80	OHX	A	2103	-	0,6,6	-	-	-		
80	OHX	sR	1934	-	0,6,6	-	-	-		
80	OHX	AR	4105	-	0,6,6	-	-	-		
80	OHX	sR	2191	-	0,6,6	-	-	-		
80	OHX	AR	3727	-	0,6,6	-	-	-		
80	OHX	AR	4104	-	0,6,6	-	-	-		
80	OHX	1	3577	-	0,6,6	-	-	-		
80	OHX	3	201	-	0,6,6	-	-	-		
80	OHX	AR	3442	-	0,6,6	-	-	-		
80	OHX	A	1905	-	0,6,6	-	-	-		
80	OHX	AR	4130	-	0,6,6	-	-	-		
80	OHX	1	3640	-	0,6,6	-	-	-		
80	OHX	1	3939	-	0,6,6	-	-	-		
80	OHX	AR	3819	-	0,6,6	-	-	-		
80	OHX	1	3751	81	0,6,6	-	-	-		
80	OHX	1	3481	-	0,6,6	-	-	-		
80	OHX	A	1944	-	0,6,6	-	-	-		
80	OHX	sR	2075	-	0,6,6	-	-	-		
80	OHX	AR	3763	-	0,6,6	-	-	-		
80	OHX	1	4058	-	0,6,6	-	-	-		
80	OHX	AR	4132	-	0,6,6	-	-	-		
80	OHX	1	3999	-	0,6,6	-	-	-		
80	OHX	AR	3861	-	0,6,6	-	-	-		
80	OHX	1	3696	81	0,6,6	-	-	-		
80	OHX	AR	3663	-	0,6,6	-	-	-		
80	OHX	sR	2039	-	0,6,6	-	-	-		
80	OHX	1	3610	-	0,6,6	-	-	-		
80	OHX	sR	1977	-	0,6,6	-	-	-		
80	OHX	AR	3725	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	3759	-	0,6,6	-	-	-		
80	OHX	1	3538	-	0,6,6	-	-	-		
80	OHX	CG	302	-	0,6,6	-	-	-		
80	OHX	1	3782	-	0,6,6	-	-	-		
80	OHX	1	3901	-	0,6,6	-	-	-		
80	OHX	AR	4110	-	0,6,6	-	-	-		
80	OHX	AR	3568	-	0,6,6	-	-	-		
80	OHX	AR	3944	-	0,6,6	-	-	-		
80	OHX	A	2056	-	0,6,6	-	-	-		
80	OHX	1	3517	-	0,6,6	-	-	-		
80	OHX	AR	3731	-	0,6,6	-	-	-		
80	OHX	1	4142	81	0,6,6	-	-	-		
80	OHX	A	2037	-	0,6,6	-	-	-		
80	OHX	A	1946	-	0,6,6	-	-	-		
80	OHX	sR	1991	-	0,6,6	-	-	-		
80	OHX	1	3911	-	0,6,6	-	-	-		
80	OHX	AR	3957	-	0,6,6	-	-	-		
80	OHX	3	204	-	0,6,6	-	-	-		
80	OHX	1	3671	-	0,6,6	-	-	-		
80	OHX	1	4030	-	0,6,6	-	-	-		
80	OHX	1	4144	-	0,6,6	-	-	-		
80	OHX	AR	4045	-	0,6,6	-	-	-		
80	OHX	1	3992	-	0,6,6	-	-	-		
80	OHX	1	3639	-	0,6,6	-	-	-		
80	OHX	1	3700	-	0,6,6	-	-	-		
80	OHX	A	1904	-	0,6,6	-	-	-		
80	OHX	sR	2065	-	0,6,6	-	-	-		
80	OHX	A	1947	-	0,6,6	-	-	-		
80	OHX	A	2043	58	0,5,6	-	-	-		
80	OHX	A	2095	81	0,6,6	-	-	-		
80	OHX	1	3880	-	0,6,6	-	-	-		
80	OHX	sR	1937	-	0,6,6	-	-	-		
80	OHX	A	2053	81	0,6,6	-	-	-		
80	OHX	1	3636	-	0,6,6	-	-	-		
80	OHX	1	3451	81	0,6,6	-	-	-		
80	OHX	AR	3859	81	0,6,6	-	-	-		
80	OHX	1	3881	-	0,6,6	-	-	-		
80	OHX	1	3962	-	0,6,6	-	-	-		
80	OHX	AR	3418	-	0,6,6	-	-	-		
80	OHX	sR	1970	-	0,6,6	-	-	-		
80	OHX	1	4180	-	0,6,6	-	-	-		
80	OHX	sR	2155	-	0,6,6	-	-	-		
80	OHX	4	205	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	4200	-	0,6,6	-	-	-		
80	OHX	sR	2099	-	0,6,6	-	-	-		
80	OHX	AR	4172	-	0,6,6	-	-	-		
80	OHX	sR	1936	-	0,6,6	-	-	-		
80	OHX	AR	3571	-	0,6,6	-	-	-		
80	OHX	1	4060[A]	-	0,6,6	-	-	-		
80	OHX	AR	3444	-	0,6,6	-	-	-		
80	OHX	sR	2017	-	0,6,6	-	-	-		
80	OHX	1	4170	-	0,6,6	-	-	-		
80	OHX	AR	3542	-	0,6,6	-	-	-		
80	OHX	sR	1993	-	0,6,6	-	-	-		
80	OHX	AT	222	-	0,6,6	-	-	-		
80	OHX	1	3581	-	0,6,6	-	-	-		
80	OHX	AR	3483	-	0,6,6	-	-	-		
80	OHX	AR	3860	81	0,6,6	-	-	-		
80	OHX	AR	3828	81	0,6,6	-	-	-		
80	OHX	1	3813	-	0,6,6	-	-	-		
80	OHX	c5	201	-	0,6,6	-	-	-		
80	OHX	AT	206	-	0,6,6	-	-	-		
80	OHX	AG	201	-	0,6,6	-	-	-		
80	OHX	AR	4170	-	0,6,6	-	-	-		
80	OHX	AS	219	-	0,6,6	-	-	-		
80	OHX	r	304	-	0,6,6	-	-	-		
80	OHX	1	3871	-	0,6,6	-	-	-		
80	OHX	AR	4035	-	0,6,6	-	-	-		
80	OHX	AR	4167	-	0,6,6	-	-	-		
80	OHX	AR	3417	81	0,6,6	-	-	-		
80	OHX	1	3728	81	0,6,6	-	-	-		
80	OHX	A	2151	-	0,6,6	-	-	-		
80	OHX	1	3693	-	0,6,6	-	-	-		
80	OHX	A	2063	-	0,6,6	-	-	-		
80	OHX	1	3758	-	0,6,6	-	-	-		
80	OHX	1	3941	-	0,6,6	-	-	-		
80	OHX	sR	2133	-	0,6,6	-	-	-		
80	OHX	sR	2015	-	0,6,6	-	-	-		
80	OHX	J	301	-	0,6,6	-	-	-		
80	OHX	4	207	-	0,6,6	-	-	-		
80	OHX	AR	4197	-	0,6,6	-	-	-		
80	OHX	AK	104	-	0,6,6	-	-	-		
80	OHX	1	3876	-	0,6,6	-	-	-		
80	OHX	AR	3607	-	0,6,6	-	-	-		
80	OHX	A	2006	-	0,6,6	-	-	-		
80	OHX	sR	1957	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AT	226	-	0,6,6	-	-	-		
80	OHX	1	3786	-	0,6,6	-	-	-		
80	OHX	1	3965	-	0,6,6	-	-	-		
80	OHX	1	3851	-	0,6,6	-	-	-		
80	OHX	AR	4012	-	0,6,6	-	-	-		
80	OHX	AR	3481	81	0,6,6	-	-	-		
80	OHX	A	2085	-	0,6,6	-	-	-		
80	OHX	sR	2074	81	0,6,6	-	-	-		
80	OHX	AR	3721	-	0,6,6	-	-	-		
80	OHX	A	2111	-	0,6,6	-	-	-		
80	OHX	A	1936	-	0,6,6	-	-	-		
80	OHX	A	1966	-	0,6,6	-	-	-		
80	OHX	AR	3455	-	0,6,6	-	-	-		
80	OHX	AR	4004	-	0,6,6	-	-	-		
80	OHX	1	3484	-	0,6,6	-	-	-		
80	OHX	1	3428	-	0,6,6	-	-	-		
80	OHX	1	3450	-	0,6,6	-	-	-		
80	OHX	1	3519	-	0,6,6	-	-	-		
80	OHX	AR	3764	-	0,6,6	-	-	-		
80	OHX	1	4143	-	0,6,6	-	-	-		
80	OHX	1	3878	-	0,6,6	-	-	-		
80	OHX	A	2101	-	0,6,6	-	-	-		
80	OHX	sR	1980	-	0,6,6	-	-	-		
80	OHX	A	1945	-	0,6,6	-	-	-		
80	OHX	sR	2154	-	0,6,6	-	-	-		
80	OHX	1	4089	-	0,6,6	-	-	-		
80	OHX	A	1997	-	0,6,6	-	-	-		
80	OHX	4	208	-	0,6,6	-	-	-		
80	OHX	sR	2087	-	0,6,6	-	-	-		
80	OHX	A	2003	-	0,6,6	-	-	-		
80	OHX	1	4181	-	0,6,6	-	-	-		
80	OHX	A	2093	-	0,6,6	-	-	-		
80	OHX	AR	4165	81	0,6,6	-	-	-		
80	OHX	k	404	-	0,6,6	-	-	-		
80	OHX	AT	201	-	0,6,6	-	-	-		
80	OHX	AR	4008	-	0,6,6	-	-	-		
80	OHX	1	3512	-	0,6,6	-	-	-		
80	OHX	1	3702	-	0,6,6	-	-	-		
80	OHX	A	2139	-	0,6,6	-	-	-		
80	OHX	1	3844	-	0,6,6	-	-	-		
80	OHX	AR	4015	-	0,6,6	-	-	-		
80	OHX	A	2131	-	0,6,6	-	-	-		
80	OHX	4	202	-	0,6,6	-	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	3475	-	0,6,6	-	-	-		
80	OHX	sR	2159	-	0,6,6	-	-	-		
80	OHX	1	4029	-	0,6,6	-	-	-		
80	OHX	AR	4108	-	0,6,6	-	-	-		
80	OHX	AR	3549	-	0,6,6	-	-	-		
80	OHX	sR	2167	-	0,6,6	-	-	-		
80	OHX	3	220	81	0,6,6	-	-	-		
80	OHX	A	1923	81	0,6,6	-	-	-		
80	OHX	sR	2147	-	0,6,6	-	-	-		
80	OHX	1	3421	81	0,6,6	-	-	-		
80	OHX	sR	2170	-	0,6,6	-	-	-		
80	OHX	AR	3667[B]	-	0,6,6	-	-	-		
80	OHX	A	2142	-	0,6,6	-	-	-		
80	OHX	CV	201	-	0,6,6	-	-	-		
80	OHX	A	1927	-	0,6,6	-	-	-		
80	OHX	sR	1966	-	0,6,6	-	-	-		
80	OHX	1	3842	-	0,6,6	-	-	-		
80	OHX	T	201	-	0,6,6	-	-	-		
80	OHX	1	3480	-	0,6,6	-	-	-		
80	OHX	AR	3611	-	0,6,6	-	-	-		
80	OHX	A	2033	-	0,6,6	-	-	-		
80	OHX	sR	1912	-	0,6,6	-	-	-		
80	OHX	A	2087	-	0,6,6	-	-	-		
80	OHX	AR	3635	-	0,6,6	-	-	-		
80	OHX	1	3453	81	0,6,6	-	-	-		
80	OHX	sR	1992	-	0,6,6	-	-	-		
80	OHX	1	4031	-	0,6,6	-	-	-		
80	OHX	CG	303	-	0,6,6	-	-	-		
80	OHX	CL	302	-	0,6,6	-	-	-		
80	OHX	AR	3413	-	0,6,6	-	-	-		
80	OHX	1	3513	-	0,6,6	-	-	-		
80	OHX	1	3996	-	0,6,6	-	-	-		
80	OHX	1	4026	-	0,6,6	-	-	-		
80	OHX	A	1914	-	0,6,6	-	-	-		
80	OHX	AR	3478	-	0,6,6	-	-	-		
80	OHX	1	3543	-	0,6,6	-	-	-		
80	OHX	AR	4006	-	0,6,6	-	-	-		
80	OHX	AR	4050	-	0,6,6	-	-	-		
80	OHX	AS	228	-	0,6,6	-	-	-		
80	OHX	1	3942	81	0,6,6	-	-	-		
80	OHX	1	4081	-	0,6,6	-	-	-		
80	OHX	1	3848	-	0,6,6	-	-	-		
80	OHX	A	2016	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	Q	201	-	0,6,6	-	-	-		
80	OHX	AR	3979	-	0,6,6	-	-	-		
80	OHX	A	1984	-	0,6,6	-	-	-		
80	OHX	1	4002	80	0,6,6	-	-	-		
80	OHX	1	4146	-	0,6,6	-	-	-		
80	OHX	A	2130	80	0,6,6	-	-	-		
80	OHX	4	204	-	0,6,6	-	-	-		
80	OHX	CS	202	-	0,6,6	-	-	-		
80	OHX	AR	3446	-	0,6,6	-	-	-		
80	OHX	1	3422	81	0,6,6	-	-	-		
80	OHX	sR	2085	-	0,6,6	-	-	-		
80	OHX	AR	3987	81	0,6,6	-	-	-		
80	OHX	1	3692	-	0,6,6	-	-	-		
80	OHX	AR	3671	-	0,6,6	-	-	-		
80	OHX	1	3904	81	0,6,6	-	-	-		
80	OHX	sR	2005	-	0,6,6	-	-	-		
80	OHX	1	4061	-	0,6,6	-	-	-		
80	OHX	1	4119	-	0,6,6	-	-	-		
80	OHX	A	1933	-	0,6,6	-	-	-		
80	OHX	AR	4073	-	0,6,6	-	-	-		
80	OHX	sR	1948	-	0,6,6	-	-	-		
80	OHX	sR	2148	-	0,6,6	-	-	-		
80	OHX	A	2055	-	0,6,6	-	-	-		
80	OHX	AR	3892	-	0,6,6	-	-	-		
80	OHX	1	3575	-	0,6,6	-	-	-		
80	OHX	1	3815	-	0,6,6	-	-	-		
80	OHX	1	3724	-	0,6,6	-	-	-		
80	OHX	sR	2112	-	0,6,6	-	-	-		
80	OHX	sR	2109	-	0,6,6	-	-	-		
80	OHX	AR	4043	-	0,6,6	-	-	-		
80	OHX	AR	3452	81	0,6,6	-	-	-		
80	OHX	AR	3515	-	0,6,6	-	-	-		
80	OHX	sR	1967	-	0,6,6	-	-	-		
80	OHX	AR	3955	-	0,6,6	-	-	-		
80	OHX	AR	3580	-	0,5,6	-	-	-		
80	OHX	AR	3893	-	0,6,6	-	-	-		
80	OHX	sR	2004	-	0,6,6	-	-	-		
80	OHX	1	4176	-	0,6,6	-	-	-		
80	OHX	AR	3851	-	0,6,6	-	-	-		
80	OHX	AR	3672	81	0,6,6	-	-	-		
80	OHX	1	4059	-	0,6,6	-	-	-		
80	OHX	AR	3980	81	0,6,6	-	-	-		
80	OHX	A	2077	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	sR	2000	-	0,6,6	-	-	-		
80	OHX	sR	2037	-	0,6,6	-	-	-		
80	OHX	AR	3603	43	0,5,6	-	-	-		
80	OHX	sR	2192	-	0,6,6	-	-	-		
80	OHX	1	3725	-	0,6,6	-	-	-		
80	OHX	AR	3636	-	0,6,6	-	-	-		
80	OHX	sR	2146	-	0,6,6	-	-	-		
80	OHX	sR	2113	-	0,6,6	-	-	-		
80	OHX	AR	3547	-	0,6,6	-	-	-		
80	OHX	sR	2181	-	0,6,6	-	-	-		
80	OHX	1	3846	-	0,6,6	-	-	-		
80	OHX	1	3841	-	0,6,6	-	-	-		
80	OHX	4	232	-	0,6,6	-	-	-		
80	OHX	A	1917	-	0,6,6	-	-	-		
80	OHX	A	1926	-	0,6,6	-	-	-		
80	OHX	AR	3425	-	0,6,6	-	-	-		
80	OHX	sR	1979	-	0,6,6	-	-	-		
80	OHX	1	3701	-	0,6,6	-	-	-		
80	OHX	AR	4078	-	0,6,6	-	-	-		
80	OHX	sR	1990	-	0,6,6	-	-	-		
80	OHX	1	3660	81	0,6,6	-	-	-		
80	OHX	A	2153	-	0,6,6	-	-	-		
80	OHX	1	3574	-	0,6,6	-	-	-		
80	OHX	1	4115	-	0,6,6	-	-	-		
80	OHX	sR	1945	-	0,6,6	-	-	-		
80	OHX	1	3601	-	0,6,6	-	-	-		
80	OHX	1	3425	-	0,6,6	-	-	-		
80	OHX	A	1995	-	0,6,6	-	-	-		
80	OHX	sR	2097	-	0,6,6	-	-	-		
80	OHX	AR	3514	-	0,6,6	-	-	-		
80	OHX	1	3790	-	0,6,6	-	-	-		
80	OHX	1	3814	-	0,6,6	-	-	-		
80	OHX	sR	1933	-	0,6,6	-	-	-		
80	OHX	AR	3830	-	0,6,6	-	-	-		
80	OHX	AR	3791	-	0,6,6	-	-	-		
80	OHX	1	3821	-	0,6,6	-	-	-		
80	OHX	AR	4166	-	0,6,6	-	-	-		
80	OHX	AR	3450	-	0,6,6	-	-	-		
80	OHX	1	3551	-	0,6,6	-	-	-		
80	OHX	A	2015	-	0,6,6	-	-	-		
80	OHX	AR	3753	-	0,6,6	-	-	-		
80	OHX	AR	4203	81	0,6,6	-	-	-		
80	OHX	AR	3516	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	sR	2190	81	0,6,6	-	-	-		
80	OHX	1	4150	-	0,6,6	-	-	-		
80	OHX	1	3483	-	0,6,6	-	-	-		
80	OHX	1	3936	-	0,6,6	-	-	-		
80	OHX	1	3602	-	0,6,6	-	-	-		
80	OHX	AR	3795	-	0,6,6	-	-	-		
80	OHX	AR	3977	81	0,6,6	-	-	-		
80	OHX	AR	3923	-	0,6,6	-	-	-		
80	OHX	1	4121	81	0,6,6	-	-	-		
80	OHX	A	2094	-	0,6,6	-	-	-		
80	OHX	1	3459	-	0,6,6	-	-	-		
80	OHX	AR	4047	-	0,6,6	-	-	-		
80	OHX	AR	3911	-	0,6,6	-	-	-		
80	OHX	AR	3543	81	0,6,6	-	-	-		
80	OHX	A	2057	-	0,6,6	-	-	-		
80	OHX	A	2152	-	0,6,6	-	-	-		
80	OHX	sR	2003	-	0,6,6	-	-	-		
80	OHX	AR	3953	-	0,6,6	-	-	-		
80	OHX	1	3489	-	0,6,6	-	-	-		
80	OHX	k	403	-	0,6,6	-	-	-		
80	OHX	sR	2063	-	0,6,6	-	-	-		
80	OHX	1	3723	-	0,6,6	-	-	-		
80	OHX	1	3755	-	0,6,6	-	-	-		
80	OHX	1	3932	81	0,6,6	-	-	-		
80	OHX	A	2102	-	0,6,6	-	-	-		
80	OHX	1	4145	-	0,6,6	-	-	-		
80	OHX	AR	4107	81	0,6,6	-	-	-		
80	OHX	AR	3942	-	0,6,6	-	-	-		
80	OHX	sR	1935	-	0,6,6	-	-	-		
80	OHX	AR	4194	-	0,6,6	-	-	-		
80	OHX	1	3819	-	0,6,6	-	-	-		
80	OHX	AR	3449	-	0,6,6	-	-	-		
80	OHX	1	3822	-	0,6,6	-	-	-		
80	OHX	sR	2062	-	0,6,6	-	-	-		
80	OHX	sR	2076	-	0,6,6	-	-	-		
80	OHX	sR	2100	-	0,6,6	-	-	-		
80	OHX	AR	3578	-	0,6,6	-	-	-		
80	OHX	AR	3855	-	0,6,6	-	-	-		
80	OHX	x	208	-	0,6,6	-	-	-		
80	OHX	sR	1924	-	0,6,6	-	-	-		
80	OHX	1	3910	-	0,6,6	-	-	-		
80	OHX	AR	3883	-	0,6,6	-	-	-		
80	OHX	AR	3692	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	sR	2014	81	0,6,6	-	-	-		
80	OHX	1	3572	-	0,6,6	-	-	-		
80	OHX	AR	3411	81	0,6,6	-	-	-		
80	OHX	sR	2013	-	0,6,6	-	-	-		
80	OHX	AR	3815	-	0,6,6	-	-	-		
80	OHX	1	3991	-	0,6,6	-	-	-		
80	OHX	AR	3729	-	0,6,6	-	-	-		
80	OHX	AR	4138	-	0,6,6	-	-	-		
80	OHX	AR	3535	-	0,6,6	-	-	-		
80	OHX	1	3722	-	0,6,6	-	-	-		
80	OHX	A	2121	-	0,6,6	-	-	-		
80	OHX	AR	4019	-	0,6,6	-	-	-		
80	OHX	AR	3628	-	0,6,6	-	-	-		
80	OHX	AR	3829	-	0,6,6	-	-	-		
80	OHX	1	3694	-	0,6,6	-	-	-		
80	OHX	1	3672	-	0,6,6	-	-	-		
80	OHX	1	3791	-	0,6,6	-	-	-		
80	OHX	1	3905	-	0,6,6	-	-	-		
80	OHX	1	4111	-	0,6,6	-	-	-		
80	OHX	AR	3728	-	0,6,6	-	-	-		
80	OHX	1	4116	-	0,6,6	-	-	-		
80	OHX	sR	1905	-	0,6,6	-	-	-		
80	OHX	A	2027	-	0,6,6	-	-	-		
80	OHX	AR	3831	-	0,6,6	-	-	-		
80	OHX	AR	3415	-	0,6,6	-	-	-		
80	OHX	sR	2040	-	0,6,6	-	-	-		
80	OHX	AR	3825	-	0,6,6	-	-	-		
80	OHX	1	3670	81	0,6,6	-	-	-		
80	OHX	4	209	-	0,6,6	-	-	-		
80	OHX	AR	3517	80	0,6,6	-	-	-		
80	OHX	AR	4139	-	0,6,6	-	-	-		
80	OHX	sR	1944	-	0,6,6	-	-	-		
80	OHX	1	3993	-	0,6,6	-	-	-		
80	OHX	sR	2156	-	0,6,6	-	-	-		
80	OHX	A	2143[A]	-	0,6,6	-	-	-		
80	OHX	1	3430	-	0,6,6	-	-	-		
80	OHX	AT	205	-	0,6,6	-	-	-		
80	OHX	1	4175	-	0,6,6	-	-	-		
80	OHX	1	3698	-	0,6,6	-	-	-		
80	OHX	A	1983	-	0,6,6	-	-	-		
80	OHX	1	3938	-	0,6,6	-	-	-		
80	OHX	1	4085	-	0,6,6	-	-	-		
80	OHX	A	1975	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	A	1935	-	0,6,6	-	-	-		
80	OHX	1	3604	-	0,6,6	-	-	-		
80	OHX	A	2035	-	0,6,6	-	-	-		
80	OHX	AR	3574	-	0,6,6	-	-	-		
80	OHX	sR	1927	-	0,6,6	-	-	-		
80	OHX	1	3608	-	0,6,6	-	-	-		
80	OHX	1	3843	-	0,6,6	-	-	-		
80	OHX	AR	3511	-	0,6,6	-	-	-		
80	OHX	sR	2061	-	0,6,6	-	-	-		
80	OHX	A	2086	80	0,6,6	-	-	-		
80	OHX	sR	2188	-	0,6,6	-	-	-		
80	OHX	sR	2137	-	0,6,6	-	-	-		
80	OHX	1	3783	81	0,6,6	-	-	-		
80	OHX	1	3818	81	0,6,6	-	-	-		
80	OHX	sR	1946	-	0,6,6	-	-	-		
80	OHX	A	1967	-	0,6,6	-	-	-		
80	OHX	AR	3797	-	0,6,6	-	-	-		
80	OHX	AR	3659	-	0,6,6	-	-	-		
80	OHX	sR	1913	-	0,6,6	-	-	-		
80	OHX	1	3518	-	0,6,6	-	-	-		
80	OHX	AR	3817	81	0,6,6	-	-	-		
80	OHX	AR	3885	-	0,6,6	-	-	-		
80	OHX	AR	3422	-	0,6,6	-	-	-		
80	OHX	1	4050	-	0,6,6	-	-	-		
80	OHX	AR	3981	-	0,6,6	-	-	-		
80	OHX	A	2026	-	0,6,6	-	-	-		
80	OHX	A	2092	-	0,6,6	-	-	-		
80	OHX	CE	402	-	0,6,6	-	-	-		
80	OHX	AR	3758	81	0,6,6	-	-	-		
80	OHX	sR	2177	-	0,6,6	-	-	-		
85	SPD	1	3478	-	9,9,9	0.31	0	8,8,8	0.87	0
80	OHX	AR	4136	-	0,6,6	-	-	-		
80	OHX	1	3785	-	0,6,6	-	-	-		
80	OHX	AR	3925	-	0,6,6	-	-	-		
80	OHX	AS	225	-	0,6,6	-	-	-		
80	OHX	A	1974	-	0,6,6	-	-	-		
80	OHX	1	4084	-	0,6,6	-	-	-		
80	OHX	1	4032	-	0,6,6	-	-	-		
80	OHX	sR	1969	-	0,6,6	-	-	-		
80	OHX	c3	201	-	0,6,6	-	-	-		
80	OHX	1	3427	-	0,6,6	-	-	-		
80	OHX	AR	3537	-	0,6,6	-	-	-		
80	OHX	AR	3545	81	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	3421	-	0,6,6	-	-	-		
80	OHX	A	1963	-	0,6,6	-	-	-		
80	OHX	AR	3477	-	0,6,6	-	-	-		
80	OHX	1	3420	-	0,6,6	-	-	-		
80	OHX	AR	3863	-	0,6,6	-	-	-		
80	OHX	sR	2089	-	0,6,6	-	-	-		
80	OHX	AR	3783	-	0,6,6	-	-	-		
80	OHX	sR	2124	-	0,6,6	-	-	-		
80	OHX	1	3612	-	0,6,6	-	-	-		
80	OHX	sR	2157	-	0,6,6	-	-	-		
80	OHX	AR	3667[A]	81	0,6,6	-	-	-		
80	OHX	1	3852	-	0,6,6	-	-	-		
80	OHX	1	4056	-	0,6,6	-	-	-		
80	OHX	AT	204[B]	-	0,6,6	-	-	-		
80	OHX	AR	4066	-	0,6,6	-	-	-		
80	OHX	AR	4128	-	0,6,6	-	-	-		
80	OHX	1	3579	-	0,6,6	-	-	-		
80	OHX	1	4051	-	0,6,6	-	-	-		
80	OHX	1	3902	-	0,6,6	-	-	-		
80	OHX	1	3931	-	0,6,6	-	-	-		
80	OHX	1	3729	-	0,6,6	-	-	-		
80	OHX	AR	3879	-	0,6,6	-	-	-		
80	OHX	1	3571	-	0,6,6	-	-	-		
80	OHX	AR	3891	-	0,6,6	-	-	-		
80	OHX	AR	3798	81	0,6,6	-	-	-		
80	OHX	AR	3512	81	0,6,6	-	-	-		
80	OHX	sR	2041	-	0,6,6	-	-	-		
80	OHX	AT	202	-	0,6,6	-	-	-		
80	OHX	A	2047	-	0,6,6	-	-	-		
80	OHX	3	206	-	0,6,6	-	-	-		
80	OHX	sR	2122	-	0,6,6	-	-	-		
80	OHX	1	4060[B]	-	0,6,6	-	-	-		
80	OHX	sR	1902	-	0,6,6	-	-	-		
80	OHX	CE	401	-	0,6,6	-	-	-		
80	OHX	A	2113	-	0,6,6	-	-	-		
80	OHX	1	3457	-	0,6,6	-	-	-		
80	OHX	A	2119	-	0,6,6	-	-	-		
80	OHX	AR	4072	-	0,6,6	-	-	-		
80	OHX	AR	4039	-	0,6,6	-	-	-		
80	OHX	AS	230	-	0,6,6	-	-	-		
80	OHX	sR	1914	-	0,6,6	-	-	-		
80	OHX	1	3875	-	0,6,6	-	-	-		
80	OHX	1	4054	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	4111	-	0,6,6	-	-	-		
80	OHX	1	4173	81	0,6,6	-	-	-		
80	OHX	A	2007	-	0,6,6	-	-	-		
80	OHX	AR	3924	81	0,6,6	-	-	-		
80	OHX	AR	3984	-	0,6,6	-	-	-		
80	OHX	1	3691	-	0,6,6	-	-	-		
80	OHX	1	3669	-	0,6,6	-	-	-		
80	OHX	sR	2088	-	0,6,6	-	-	-		
80	OHX	sR	2016	-	0,6,6	-	-	-		
80	OHX	AR	4134	81	0,6,6	-	-	-		
80	OHX	sR	1955	-	0,6,6	-	-	-		
80	OHX	1	3638	-	0,6,6	-	-	-		
80	OHX	AR	3694	-	0,6,6	-	-	-		
80	OHX	AR	3956	-	0,6,6	-	-	-		
80	OHX	AR	3456	-	0,6,6	-	-	-		
80	OHX	1	3661	-	0,6,6	-	-	-		
80	OHX	3	219	-	0,6,6	-	-	-		
80	OHX	AR	3608	-	0,6,6	-	-	-		
80	OHX	AR	3950	-	0,6,6	-	-	-		
80	OHX	1	3699	-	0,6,6	-	-	-		
80	OHX	AR	4041	-	0,6,6	-	-	-		
80	OHX	1	4120	81	0,6,6	-	-	-		
80	OHX	1	3934	81	0,6,6	-	-	-		
80	OHX	1	3731	-	0,6,6	-	-	-		
80	OHX	4	226	-	0,6,6	-	-	-		
80	OHX	A	1956	-	0,6,6	-	-	-		
80	OHX	A	2045	-	0,6,6	-	-	-		
80	OHX	1	4174	-	0,6,6	-	-	-		
80	OHX	1	3419	-	0,6,6	-	-	-		
80	OHX	1	4113	-	0,6,6	-	-	-		
80	OHX	1	4021	-	0,6,6	-	-	-		
80	OHX	1	3666	-	0,6,6	-	-	-		
80	OHX	1	3460	81	0,6,6	-	-	-		
80	OHX	AR	4109	-	0,6,6	-	-	-		
80	OHX	1	4110	-	0,6,6	-	-	-		
80	OHX	A	2096	-	0,6,6	-	-	-		
80	OHX	AR	3539	-	0,6,6	-	-	-		
80	OHX	A	2052	-	0,6,6	-	-	-		
80	OHX	DD	102	-	0,6,6	-	-	-		
80	OHX	1	3906	-	0,6,6	-	-	-		
80	OHX	1	4052	-	0,6,6	-	-	-		
80	OHX	AR	3453	80	0,5,6	-	-	-		
80	OHX	AR	3546	81	0,6,6	-	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	3975	81	0,6,6	-	-	-		
80	OHX	1	3820	-	0,6,6	-	-	-		
80	OHX	A	1973	-	0,6,6	-	-	-		
80	OHX	A	2073	-	0,6,6	-	-	-		
80	OHX	sR	2050	-	0,6,6	-	-	-		
80	OHX	AR	4140	-	0,6,6	-	-	-		
80	OHX	AR	4081	-	0,5,6	-	-	-		
80	OHX	sR	2051	-	0,6,6	-	-	-		
80	OHX	1	4140	-	0,6,6	-	-	-		
80	OHX	AR	3572	-	0,6,6	-	-	-		
80	OHX	sR	1949	-	0,6,6	-	-	-		
80	OHX	AR	3548	-	0,6,6	-	-	-		
80	OHX	A	1955	81	0,6,6	-	-	-		
80	OHX	sR	1947	-	0,6,6	-	-	-		
80	OHX	AT	227	-	0,6,6	-	-	-		
80	OHX	sR	2038	-	0,6,6	-	-	-		
80	OHX	sR	1968	-	0,6,6	-	-	-		
80	OHX	1	3933	-	0,6,6	-	-	-		
80	OHX	1	4091	-	0,6,6	-	-	-		
80	OHX	1	3633	-	0,5,6	-	-	-		
80	OHX	AR	4101	-	0,6,6	-	-	-		
80	OHX	AC	101	-	0,6,6	-	-	-		
80	OHX	AR	3610	-	0,6,6	-	-	-		
80	OHX	sR	1926	-	0,6,6	-	-	-		
80	OHX	AR	3926	-	0,6,6	-	-	-		
80	OHX	sR	1958	81	0,6,6	-	-	-		
80	OHX	AR	4068	81	0,6,6	-	-	-		
80	OHX	AR	3821	-	0,6,6	-	-	-		
80	OHX	AR	3948	-	0,6,6	-	-	-		
80	OHX	sR	2111	-	0,6,6	-	-	-		
80	OHX	1	3788	-	0,6,6	-	-	-		
80	OHX	A	2123	-	0,5,6	-	-	-		
80	OHX	AS	221	-	0,6,6	-	-	-		
80	OHX	A	1925	-	0,6,6	-	-	-		
80	OHX	A	1913	-	0,6,6	-	-	-		
80	OHX	A	2140	-	0,6,6	-	-	-		
80	OHX	AR	3486	-	0,6,6	-	-	-		
84	ZWB	1	3578	-	26,28,28	0.58	1 (3%)	34,45,45	1.89	7 (20%)
80	OHX	Rb	401	-	0,6,6	-	-	-		
80	OHX	1	4024	-	0,6,6	-	-	-		
80	OHX	1	3606	-	0,6,6	-	-	-		
80	OHX	1	3789	-	0,6,6	-	-	-		
80	OHX	sR	1978	81	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	3630	-	0,6,6	-	-	-		
80	OHX	A	2036	-	0,6,6	-	-	-		
80	OHX	AR	3666	-	0,6,6	-	-	-		
80	OHX	1	3458	81	0,6,6	-	-	-		
80	OHX	AR	3661	81	0,6,6	-	-	-		
80	OHX	1	3845	-	0,6,6	-	-	-		
80	OHX	1	3990	81	0,6,6	-	-	-		
80	OHX	1	4112	-	0,6,6	-	-	-		
80	OHX	sR	2027	-	0,6,6	-	-	-		
80	OHX	1	3998	-	0,6,6	-	-	-		
80	OHX	sR	2168	-	0,6,6	-	-	-		
80	OHX	3	222	-	0,6,6	-	-	-		
80	OHX	A	2065	-	0,6,6	-	-	-		
80	OHX	AR	3604	-	0,6,6	-	-	-		
80	OHX	AR	3541	-	0,6,6	-	-	-		
80	OHX	1	3908	-	0,6,6	-	-	-		
80	OHX	AR	4161	81	0,6,6	-	-	-		
80	OHX	AR	3952	-	0,6,6	-	-	-		
80	OHX	AR	4079	-	0,6,6	-	-	-		
80	OHX	1	3550	-	0,6,6	-	-	-		
80	OHX	AR	4014	-	0,6,6	-	-	-		
80	OHX	sR	2144	-	0,6,6	-	-	-		
80	OHX	AR	3665	-	0,6,6	-	-	-		
80	OHX	AR	4080	-	0,6,6	-	-	-		
80	OHX	1	4172	-	0,6,6	-	-	-		
80	OHX	v	305	-	0,6,6	-	-	-		
80	OHX	1	3482	-	0,6,6	-	-	-		
80	OHX	sR	2028	-	0,6,6	-	-	-		
80	OHX	sR	1923	-	0,6,6	-	-	-		
80	OHX	1	3631	-	0,6,6	-	-	-		
80	OHX	AR	3847	-	0,6,6	-	-	-		
80	OHX	AR	3857	-	0,6,6	-	-	-		
80	OHX	CX	201	-	0,6,6	-	-	-		
80	OHX	AR	4099	-	0,6,6	-	-	-		
80	OHX	sR	2073	-	0,6,6	-	-	-		
80	OHX	CK	201	-	0,6,6	-	-	-		
80	OHX	AR	3703	-	0,6,6	-	-	-		
80	OHX	AR	3827	-	0,6,6	-	-	-		
80	OHX	AR	4076	-	0,6,6	-	-	-		
80	OHX	1	3603	-	0,6,6	-	-	-		
80	OHX	1	4083	-	0,6,6	-	-	-		
80	OHX	AR	3921	-	0,6,6	-	-	-		
80	OHX	1	4179	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	A	1986	-	0,6,6	-	-	-		
80	OHX	AR	3632	-	0,6,6	-	-	-		
80	OHX	h	401	-	0,6,6	-	-	-		
80	OHX	sR	2077	-	0,6,6	-	-	-		
80	OHX	sR	2135	-	0,6,6	-	-	-		
80	OHX	sR	2169	-	0,6,6	-	-	-		
80	OHX	1	3872	81	0,6,6	-	-	-		
80	OHX	1	4023	81	0,6,6	-	-	-		
80	OHX	A	1937	-	0,6,6	-	-	-		
80	OHX	1	3994	-	0,6,6	-	-	-		
80	OHX	AR	4097	-	0,6,6	-	-	-		
80	OHX	1	3971	-	0,6,6	-	-	-		
80	OHX	sR	2145	-	0,6,6	-	-	-		
80	OHX	1	3424	80	0,6,6	-	-	-		
80	OHX	A	1985	-	0,6,6	-	-	-		
80	OHX	1	3520	-	0,6,6	-	-	-		
80	OHX	1	3968	-	0,6,6	-	-	-		
80	OHX	1	3721	-	0,6,6	-	-	-		
80	OHX	AR	3913	-	0,6,6	-	-	-		
80	OHX	AR	4196	-	0,6,6	-	-	-		
80	OHX	AS	231	-	0,6,6	-	-	-		
80	OHX	1	3548	-	0,6,6	-	-	-		
80	OHX	c8	201	-	0,6,6	-	-	-		
80	OHX	A	1996	-	0,6,6	-	-	-		
80	OHX	AR	3723	-	0,6,6	-	-	-		
80	OHX	1	3812	81	0,6,6	-	-	-		
80	OHX	AR	3765	-	0,6,6	-	-	-		
80	OHX	AR	4037	-	0,6,6	-	-	-		
80	OHX	1	4055	-	0,6,6	-	-	-		
80	OHX	AR	3480	-	0,6,6	-	-	-		
80	OHX	AR	4171	81	0,6,6	-	-	-		
80	OHX	AR	3702	-	0,6,6	-	-	-		
80	OHX	A	1924	-	0,6,6	-	-	-		
80	OHX	sR	2025	-	0,6,6	-	-	-		
80	OHX	AR	3796	-	0,6,6	-	-	-		
80	OHX	A	1954	-	0,6,6	-	-	-		
80	OHX	AR	3698	-	0,6,6	-	-	-		
80	OHX	1	3582	-	0,6,6	-	-	-		
80	OHX	1	4086	-	0,6,6	-	-	-		
80	OHX	AK	103	81	0,6,6	-	-	-		
80	OHX	AR	3973	-	0,6,6	-	-	-		
80	OHX	AR	3983	-	0,6,6	-	-	-		
80	OHX	AR	3506	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	3634	-	0,6,6	-	-	-		
80	OHX	AR	4048	-	0,6,6	-	-	-		
80	OHX	1	3995	-	0,6,6	-	-	-		
80	OHX	1	3569	-	0,6,6	-	-	-		
80	OHX	1	3966	-	0,6,6	-	-	-		
80	OHX	1	4022	-	0,6,6	-	-	-		
85	SPD	AR	3890	-	9,9,9	0.34	0	8,8,8	0.88	0
80	OHX	AR	3755	-	0,6,6	-	-	-		
80	OHX	1	4114	81	0,6,6	-	-	-		
80	OHX	sR	2053	-	0,6,6	-	-	-		
80	OHX	AR	4135	-	0,6,6	-	-	-		
80	OHX	AR	3640	81	0,6,6	-	-	-		
80	OHX	2	201	-	0,6,6	-	-	-		
80	OHX	1	3963	-	0,6,6	-	-	-		
80	OHX	1	4001	81	0,6,6	-	-	-		
80	OHX	AR	3751	-	0,6,6	-	-	-		
80	OHX	1	3695	-	0,6,6	-	-	-		
80	OHX	1	4088	-	0,6,6	-	-	-		
80	OHX	1	3549	81	0,6,6	-	-	-		
80	OHX	sR	2052	-	0,6,6	-	-	-		
80	OHX	A	2133	-	0,6,6	-	-	-		
80	OHX	AR	3696	-	0,6,6	-	-	-		
80	OHX	3	203	81	0,6,6	-	-	-		
80	OHX	1	4118	-	0,6,6	-	-	-		
80	OHX	1	3479	-	0,6,6	-	-	-		
80	OHX	sR	1915	-	0,6,6	-	-	-		
80	OHX	sR	1901	-	0,6,6	-	-	-		
80	OHX	sR	2064	-	0,6,6	-	-	-		
80	OHX	1	3454	-	0,6,6	-	-	-		
80	OHX	1	3781	75	0,6,6	-	-	-		
80	OHX	1	3816	-	0,6,6	-	-	-		
80	OHX	sR	2098	-	0,6,6	-	-	-		
80	OHX	sR	1959	-	0,6,6	-	-	-		
80	OHX	1	3485	-	0,6,6	-	-	-		
80	OHX	1	4149	-	0,6,6	-	-	-		
80	OHX	AR	3895	-	0,6,6	-	-	-		
80	OHX	AR	3922	-	0,6,6	-	-	-		
80	OHX	A	1943	-	0,6,6	-	-	-		
80	OHX	A	2104	-	0,6,6	-	-	-		
80	OHX	AS	223	-	0,6,6	-	-	-		
80	OHX	1	3487	-	0,6,6	-	-	-		
80	OHX	O	201	-	0,6,6	-	-	-		
80	OHX	AR	3673	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	A	2129	-	0,6,6	-	-	-		
80	OHX	AR	4074	-	0,6,6	-	-	-		
80	OHX	1	4141	81	0,6,6	-	-	-		
80	OHX	AR	3792	-	0,6,6	-	-	-		
80	OHX	AR	3639	81	0,6,6	-	-	-		
80	OHX	AR	4103	-	0,6,6	-	-	-		
80	OHX	1	3730	-	0,6,6	-	-	-		
80	OHX	1	3611	-	0,6,6	-	-	-		
80	OHX	sR	2002	-	0,6,6	-	-	-		
80	OHX	sR	2125	-	0,6,6	-	-	-		
80	OHX	AR	3448	-	0,6,6	-	-	-		
80	OHX	AR	3700	-	0,6,6	-	-	-		
80	OHX	1	3882	-	0,6,6	-	-	-		
80	OHX	AR	3881	-	0,6,6	-	-	-		
80	OHX	1	3972	81	0,6,6	-	-	-		
80	OHX	DL	102	-	0,6,6	-	-	-		
80	OHX	AR	3704	-	0,6,6	-	-	-		
80	OHX	A	1977	-	0,6,6	-	-	-		
80	OHX	AR	4016	-	0,6,6	-	-	-		
80	OHX	1	3849	-	0,6,6	-	-	-		
80	OHX	AR	3601	-	0,6,6	-	-	-		
80	OHX	sR	2110	-	0,6,6	-	-	-		
80	OHX	AT	230	-	0,6,6	-	-	-		
80	OHX	A	1993	-	0,6,6	-	-	-		
80	OHX	A	2083	-	0,6,6	-	-	-		
80	OHX	AR	3946	-	0,6,6	-	-	-		
80	OHX	sR	2101	-	0,6,6	-	-	-		
80	OHX	A	1916	-	0,6,6	-	-	-		
80	OHX	AT	204[A]	-	0,6,6	-	-	-		
80	OHX	1	3570	-	0,6,6	-	-	-		
80	OHX	sR	2189	-	0,6,6	-	-	-		
80	OHX	1	3573	-	0,6,6	-	-	-		
80	OHX	1	3761	-	0,6,6	-	-	-		
80	OHX	1	3912	-	0,6,6	-	-	-		
80	OHX	AR	4142	81	0,6,6	-	-	-		
80	OHX	AR	4201	-	0,6,6	-	-	-		
80	OHX	A	1994	-	0,6,6	-	-	-		
80	OHX	s4	302	-	0,6,6	-	-	-		
80	OHX	1	3641	-	0,6,6	-	-	-		
80	OHX	sR	2086	-	0,6,6	-	-	-		
80	OHX	1	3490	-	0,6,6	-	-	-		
80	OHX	1	3663	-	0,6,6	-	-	-		
80	OHX	AR	3518	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	1	3668	-	0,6,6	-	-	-		
80	OHX	AR	3760	-	0,6,6	-	-	-		
80	OHX	1	3732	-	0,6,6	-	-	-		
80	OHX	AS	229	-	0,6,6	-	-	-		
80	OHX	AT	208	-	0,6,6	-	-	-		
80	OHX	AR	4190	-	0,6,6	-	-	-		
80	OHX	A	2023	-	0,6,6	-	-	-		
80	OHX	sR	1989	-	0,6,6	-	-	-		
80	OHX	AR	3799	-	0,6,6	-	-	-		
80	OHX	A	2046	-	0,6,6	-	-	-		
80	OHX	1	3632	-	0,6,6	-	-	-		
80	OHX	1	4148	-	0,6,6	-	-	-		
80	OHX	3	205	-	0,6,6	-	-	-		
80	OHX	A	1965	-	0,6,6	-	-	-		
80	OHX	AR	3734	-	0,6,6	-	-	-		
80	OHX	A	2150	-	0,6,6	-	-	-		
80	OHX	DH	202	-	0,6,6	-	-	-		
80	OHX	AR	3917	-	0,6,6	-	-	-		
80	OHX	sR	2179	-	0,6,6	-	-	-		
80	OHX	AT	228	-	0,6,6	-	-	-		
80	OHX	A	1934	-	0,6,6	-	-	-		
80	OHX	1	3546	81	0,6,6	-	-	-		
80	OHX	AR	3697	-	0,6,6	-	-	-		
80	OHX	1	3811	-	0,6,6	-	-	-		
80	OHX	A	2005	-	0,6,6	-	-	-		
80	OHX	A	2143[B]	-	0,6,6	-	-	-		
80	OHX	sR	1922	81	0,6,6	-	-	-		
80	OHX	A	2122	-	0,6,6	-	-	-		
80	OHX	AR	3473	-	0,6,6	-	-	-		
80	OHX	1	3510	-	0,6,6	-	-	-		
80	OHX	AR	3641	-	0,6,6	-	-	-		
80	OHX	AR	3576	-	0,6,6	-	-	-		
80	OHX	1	4028	-	0,6,6	-	-	-		
80	OHX	1	3759	-	0,6,6	-	-	-		
80	OHX	AR	3599	-	0,6,6	-	-	-		
80	OHX	sR	2136	-	0,6,6	-	-	-		
80	OHX	sR	1981	81	0,6,6	-	-	-		
80	OHX	AR	3419	-	0,6,6	-	-	-		
80	OHX	AR	3735	-	0,6,6	-	-	-		
80	OHX	1	4171	-	0,6,6	-	-	-		
80	OHX	A	1906	-	0,6,6	-	-	-		
80	OHX	sR	1956	-	0,6,6	-	-	-		
80	OHX	1	3609	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	1	3635	-	0,6,6	-	-	-		
80	OHX	AR	3954	-	0,6,6	-	-	-		
80	OHX	1	3515	-	0,6,6	-	-	-		
80	OHX	AR	3767	-	0,6,6	-	-	-		
80	OHX	A	2110	-	0,6,6	-	-	-		
80	OHX	1	3754	-	0,6,6	-	-	-		
80	OHX	AR	3579	-	0,6,6	-	-	-		
80	OHX	sR	2178	-	0,6,6	-	-	-		
80	OHX	sR	1904	-	0,6,6	-	-	-		
80	OHX	A	2025	-	0,6,6	-	-	-		
80	OHX	AR	3701	-	0,6,6	-	-	-		
80	OHX	AR	4198	-	0,6,6	-	-	-		
80	OHX	1	3511	-	0,6,6	-	-	-		
80	OHX	A	2013	-	0,6,6	-	-	-		
80	OHX	AR	3690	-	0,6,6	-	-	-		
80	OHX	1	3909	-	0,6,6	-	-	-		
80	OHX	AR	4192	81	0,6,6	-	-	-		
80	OHX	AR	3669	-	0,6,6	-	-	-		
80	OHX	sR	2121	-	0,6,6	-	-	-		
80	OHX	1	3514	-	0,6,6	-	-	-		
80	OHX	AR	3824	-	0,6,6	-	-	-		
80	OHX	A	2112	-	0,6,6	-	-	-		
80	OHX	s1	301	81	0,6,6	-	-	-		
80	OHX	1	3452	-	0,6,6	-	-	-		
80	OHX	sR	1988	81	0,6,6	-	-	-		
80	OHX	A	1907	-	0,6,6	-	-	-		
80	OHX	AR	3424	-	0,6,6	-	-	-		
80	OHX	1	3580	-	0,6,6	-	-	-		
80	OHX	4	206	-	0,6,6	-	-	-		
80	OHX	AR	4163	81	0,6,6	-	-	-		
80	OHX	AS	227	-	0,6,6	-	-	-		
84	ZWB	AR	3826	-	26,28,28	0.57	1 (3%)	34,45,45	1.91	7 (20%)
80	OHX	CP	303	-	0,6,6	-	-	-		
80	OHX	AR	3919	-	0,6,6	-	-	-		
80	OHX	A	1987	-	0,6,6	-	-	-		
80	OHX	A	1957	-	0,6,6	-	-	-		
80	OHX	AR	3915	81	0,6,6	-	-	-		
80	OHX	sR	2158	-	0,6,6	-	-	-		
80	OHX	AR	4173	-	0,6,6	-	-	-		
80	OHX	AR	3986	-	0,6,6	-	-	-		
80	OHX	3	221	-	0,6,6	-	-	-		
80	OHX	CL	301	-	0,6,6	-	-	-		
80	OHX	AR	3766	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	1	4082	-	0,6,6	-	-	-		
80	OHX	1	4178	-	0,6,6	-	-	-		
80	OHX	A	1903	-	0,6,6	-	-	-		
80	OHX	A	2076	-	0,6,6	-	-	-		
80	OHX	A	1964	-	0,5,6	-	-	-		
80	OHX	AR	3484	-	0,6,6	-	-	-		
80	OHX	1	3509	-	0,6,6	-	-	-		
80	OHX	1	3879	-	0,6,6	-	-	-		
80	OHX	4	203	-	0,6,6	-	-	-		
85	SPD	AR	4164	-	9,9,9	0.33	0	8,8,8	0.89	0
80	OHX	3	202	-	0,6,6	-	-	-		
80	OHX	sR	2134	-	0,6,6	-	-	-		
80	OHX	AR	3508	-	0,6,6	-	-	-		
80	OHX	1	3634	81	0,6,6	-	-	-		
85	SPD	AR	3858	-	9,9,9	0.33	0	8,8,8	1.33	1 (12%)
80	OHX	1	3756	-	0,6,6	-	-	-		
80	OHX	1	3642	81	0,6,6	-	-	-		
80	OHX	AR	3605	81	0,6,6	-	-	-		
80	OHX	AR	4141	-	0,6,6	-	-	-		
80	OHX	4	228	-	0,6,6	-	-	-		
80	OHX	A	1976	-	0,6,6	-	-	-		
80	OHX	AR	3540	-	0,6,6	-	-	-		
80	OHX	A	2132	-	0,6,6	-	-	-		
80	OHX	AR	3573	-	0,6,6	-	-	-		
80	OHX	1	3665	-	0,6,6	-	-	-		
80	OHX	sR	2176	-	0,6,6	-	-	-		
80	OHX	AR	3670	-	0,6,6	-	-	-		
80	OHX	AR	3793	-	0,6,6	-	-	-		
80	OHX	AR	3849	-	0,6,6	-	-	-		
80	OHX	sR	1916	-	0,6,6	-	-	-		
80	OHX	1	3762	-	0,6,6	-	-	-		
80	OHX	AR	3853	-	0,6,6	-	-	-		
80	OHX	w	201	-	0,6,6	-	-	-		
80	OHX	1	3664	-	0,6,6	-	-	-		
80	OHX	AR	3787	-	0,6,6	-	-	-		
80	OHX	AR	3757	-	0,6,6	-	-	-		
80	OHX	sR	2026	-	0,6,6	-	-	-		
80	OHX	AR	4077	-	0,6,6	-	-	-		
80	OHX	AR	3577	-	0,6,6	-	-	-		
80	OHX	AR	3894	-	0,6,6	-	-	-		
80	OHX	AR	4169	-	0,6,6	-	-	-		
80	OHX	sR	1938	-	0,6,6	-	-	-		
80	OHX	1	3903	-	0,6,6	-	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
80	OHX	AR	3454	-	0,6,6	-	-	-		
80	OHX	AR	4202	-	0,6,6	-	-	-		
80	OHX	A	2072	-	0,6,6	-	-	-		
80	OHX	1	4053	81	0,6,6	-	-	-		
80	OHX	1	3970	-	0,6,6	-	-	-		
80	OHX	1	4151	-	0,6,6	-	-	-		
80	OHX	A	2062	-	0,6,6	-	-	-		
80	OHX	A	2075	-	0,6,6	-	-	-		
80	OHX	A	2141	81	0,6,6	-	-	-		
80	OHX	AR	3985	-	0,6,6	-	-	-		
80	OHX	AR	3570	81	0,6,6	-	-	-		
80	OHX	A	2120	-	0,6,6	-	-	-		
80	OHX	1	3720	-	0,6,6	-	-	-		
80	OHX	1	4000	-	0,6,6	-	-	-		
80	OHX	1	3544	-	0,6,6	-	-	-		
80	OHX	AR	3887	-	0,6,6	-	-	-		
80	OHX	1	3874	-	0,6,6	-	-	-		
80	OHX	AR	3597	-	0,6,6	-	-	-		
80	OHX	AR	3889	-	0,6,6	-	-	-		
80	OHX	C	301	-	0,6,6	-	-	-		
80	OHX	AR	3856	-	0,6,6	-	-	-		
80	OHX	AR	3862	-	0,6,6	-	-	-		
80	OHX	AR	4042	-	0,6,6	-	-	-		
80	OHX	1	3935	-	0,6,6	-	-	-		
80	OHX	AR	3733	-	0,6,6	-	-	-		
80	OHX	AR	3823	-	0,6,6	-	-	-		
80	OHX	AR	4070	-	0,6,6	-	-	-		
80	OHX	AR	3789	-	0,6,6	-	-	-		
80	OHX	sR	1911	-	0,6,6	-	-	-		
80	OHX	1	3760	-	0,6,6	-	-	-		
80	OHX	1	3940	-	0,6,6	-	-	-		
80	OHX	1	3541	-	0,6,6	-	-	-		
80	OHX	1	3455	-	0,6,6	-	-	-		
80	OHX	1	3969	-	0,6,6	-	-	-		
80	OHX	AR	4112	-	0,6,6	-	-	-		
80	OHX	4	230	-	0,6,6	-	-	-		
80	OHX	1	3429	-	0,6,6	-	-	-		

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
85	SPD	AR	4164	-	-	4/7/7/7	-
85	SPD	AR	3858	-	-	3/7/7/7	-
85	SPD	1	3478	-	-	1/7/7/7	-
84	ZWB	AR	3826	-	-	1/8/60/60	0/3/3/3
85	SPD	AR	3890	-	-	3/7/7/7	-
84	ZWB	1	3578	-	-	0/8/60/60	0/3/3/3

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	1	3578	ZWB	C5-C10	2.14	1.59	1.56
84	AR	3826	ZWB	C5-C10	2.04	1.59	1.56

All (15) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	AR	3826	ZWB	C20-C1-C2	-4.99	99.99	109.44
84	1	3578	ZWB	C20-C1-C2	-4.98	100.00	109.44
84	AR	3826	ZWB	C2-C1-C10	4.77	113.18	108.81
84	1	3578	ZWB	C2-C1-C10	4.41	112.85	108.81
84	AR	3826	ZWB	C-C1-C20	-4.33	101.52	107.89
84	1	3578	ZWB	C1-C10-C5	-4.31	111.86	116.78
84	1	3578	ZWB	C-C1-C20	-4.30	101.56	107.89
84	AR	3826	ZWB	C1-C10-C5	-4.12	112.08	116.78
84	AR	3826	ZWB	C20-C1-C10	-3.53	100.89	111.53
84	AR	3826	ZWB	C-C1-C2	3.46	115.99	109.44
84	1	3578	ZWB	C20-C1-C10	-3.44	101.17	111.53
84	1	3578	ZWB	C-C1-C2	3.41	115.90	109.44
84	1	3578	ZWB	C-C1-C10	3.03	120.69	111.53
84	AR	3826	ZWB	C-C1-C10	2.96	120.48	111.53
85	AR	3858	SPD	C7-C8-C9	-2.21	106.20	114.28

There are no chirality outliers.

All (12) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
85	AR	3858	SPD	N6-C7-C8-C9
85	AR	4164	SPD	C3-C4-C5-N6
85	AR	3890	SPD	C4-C5-N6-C7
85	AR	4164	SPD	N6-C7-C8-C9
85	AR	3858	SPD	C2-C3-C4-C5

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Mol	Chain	Res	Type	Atoms
85	AR	4164	SPD	C2-C3-C4-C5
85	AR	3890	SPD	C8-C7-N6-C5
85	AR	4164	SPD	C7-C8-C9-N10
85	1	3478	SPD	C7-C8-C9-N10
85	AR	3890	SPD	C3-C4-C5-N6
84	AR	3826	ZWB	C6-C13-C14-O3
85	AR	3858	SPD	C3-C4-C5-N6

There are no ring outliers.

539 monomers are involved in 782 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	sR	2123	OHX	2	0
80	AR	4049	OHX	1	0
80	AR	4204	OHX	1	0
80	AR	4017	OHX	1	0
80	AR	3988	OHX	1	0
80	AR	3510	OHX	2	0
80	A	2149	OHX	1	0
80	AR	3504	OHX	2	0
80	A	1915	OHX	2	0
80	AR	3761	OHX	3	0
80	sR	2180	OHX	1	0
80	A	1953	OHX	1	0
80	sR	2049	OHX	1	0
80	AR	3566	OHX	1	0
80	1	3539	OHX	2	0
80	sR	2198	OHX	5	0
80	1	3542	OHX	2	0
80	U	202	OHX	1	0
80	1	3792	OHX	1	0
80	1	3753	OHX	1	0
80	AR	3423	OHX	1	0
80	1	3423	OHX	1	0
80	1	3964	OHX	1	0
80	A	2017	OHX	1	0
80	AR	4046	OHX	2	0
80	AR	4010	OHX	1	0
80	A	2082	OHX	1	0
80	AR	3609	OHX	3	0
80	AR	3485	OHX	2	0
80	AR	3785	OHX	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	AR	3487	OHX	2	0
80	1	3545	OHX	2	0
80	1	3540	OHX	1	0
80	A	2066	OHX	2	0
80	AT	203	OHX	1	0
80	AR	3642	OHX	1	0
80	1	3449	OHX	1	0
80	A	2103	OHX	1	0
80	sR	1934	OHX	2	0
80	AR	4105	OHX	1	0
80	sR	2191	OHX	2	0
80	AR	3727	OHX	1	0
80	AR	4104	OHX	2	0
80	AR	3442	OHX	3	0
80	1	3640	OHX	1	0
80	1	3939	OHX	1	0
80	AR	3819	OHX	1	0
80	1	3751	OHX	1	0
80	A	1944	OHX	5	0
80	AR	3763	OHX	1	0
80	1	4058	OHX	1	0
80	AR	4132	OHX	1	0
80	1	3999	OHX	2	0
80	AR	3861	OHX	1	0
80	1	3696	OHX	1	0
80	1	3610	OHX	2	0
80	sR	1977	OHX	1	0
80	AR	3725	OHX	2	0
80	AR	3759	OHX	1	0
80	CG	302	OHX	1	0
80	1	3901	OHX	2	0
80	AR	3568	OHX	1	0
80	AR	3944	OHX	1	0
80	A	2037	OHX	2	0
80	sR	1991	OHX	3	0
80	AR	3957	OHX	1	0
80	3	204	OHX	1	0
80	1	3992	OHX	2	0
80	1	3639	OHX	1	0
80	1	3700	OHX	1	0
80	A	1904	OHX	1	0
80	sR	2065	OHX	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	A	2043	OHX	2	0
80	1	3880	OHX	1	0
80	1	3451	OHX	1	0
80	1	4180	OHX	1	0
80	sR	2155	OHX	1	0
80	4	205	OHX	3	0
80	AR	3571	OHX	1	0
80	sR	2017	OHX	1	0
80	1	4170	OHX	1	0
80	AR	3542	OHX	3	0
80	1	3581	OHX	1	0
80	AR	3483	OHX	3	0
80	AR	3828	OHX	1	0
80	1	3813	OHX	2	0
80	c5	201	OHX	1	0
80	AT	206	OHX	1	0
80	AG	201	OHX	1	0
80	AR	4170	OHX	1	0
80	r	304	OHX	1	0
80	AR	4035	OHX	2	0
80	AR	3417	OHX	1	0
80	1	3728	OHX	1	0
80	1	3693	OHX	1	0
80	A	2063	OHX	3	0
80	1	3941	OHX	1	0
80	sR	2133	OHX	2	0
80	J	301	OHX	1	0
80	4	207	OHX	1	0
80	A	2006	OHX	2	0
80	sR	1957	OHX	1	0
80	AT	226	OHX	1	0
80	AR	4012	OHX	1	0
80	AR	3481	OHX	3	0
80	A	2085	OHX	1	0
80	A	1936	OHX	1	0
80	A	1966	OHX	1	0
80	AR	4004	OHX	1	0
80	1	3484	OHX	1	0
80	1	3428	OHX	1	0
80	1	3450	OHX	2	0
80	AR	3764	OHX	1	0
80	1	4143	OHX	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	A	2101	OHX	1	0
80	A	1945	OHX	2	0
80	sR	2154	OHX	1	0
80	1	4089	OHX	1	0
80	A	1997	OHX	1	0
80	4	208	OHX	2	0
80	A	2003	OHX	5	0
80	A	2093	OHX	1	0
80	k	404	OHX	1	0
80	AT	201	OHX	1	0
80	A	2139	OHX	1	0
80	AR	4015	OHX	1	0
80	A	2131	OHX	1	0
80	AR	3475	OHX	1	0
80	1	4029	OHX	1	0
80	3	220	OHX	1	0
80	1	3421	OHX	1	0
80	AR	3667[B]	OHX	1	0
80	A	2142	OHX	1	0
80	CV	201	OHX	1	0
80	sR	1966	OHX	3	0
80	1	3842	OHX	2	0
80	T	201	OHX	2	0
80	1	3480	OHX	1	0
80	AR	3611	OHX	1	0
80	sR	1912	OHX	1	0
80	A	2087	OHX	1	0
80	AR	3635	OHX	1	0
80	1	3453	OHX	2	0
80	1	4031	OHX	1	0
80	CG	303	OHX	1	0
80	CL	302	OHX	1	0
80	AR	3413	OHX	1	0
80	1	3513	OHX	1	0
80	A	1914	OHX	1	0
80	AR	4006	OHX	1	0
80	1	4081	OHX	1	0
80	1	3848	OHX	1	0
80	Q	201	OHX	2	0
80	A	1984	OHX	1	0
80	1	4002	OHX	3	0
80	1	4146	OHX	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	A	2130	OHX	2	0
80	4	204	OHX	1	0
80	AR	3446	OHX	2	0
80	AR	3987	OHX	1	0
80	1	3692	OHX	2	0
80	AR	3671	OHX	2	0
80	1	3904	OHX	1	0
80	sR	2005	OHX	1	0
80	1	4061	OHX	1	0
80	A	1933	OHX	3	0
80	sR	1948	OHX	1	0
80	sR	2148	OHX	2	0
80	1	3724	OHX	1	0
80	sR	2112	OHX	1	0
80	AR	4043	OHX	2	0
80	AR	3452	OHX	1	0
80	sR	1967	OHX	1	0
80	AR	3580	OHX	1	0
80	sR	2004	OHX	1	0
80	1	4176	OHX	1	0
80	AR	3851	OHX	1	0
80	AR	3672	OHX	1	0
80	AR	3980	OHX	2	0
80	A	2077	OHX	1	0
80	sR	2037	OHX	2	0
80	AR	3603	OHX	3	0
80	1	3725	OHX	1	0
80	AR	3636	OHX	2	0
80	1	3846	OHX	1	0
80	1	3841	OHX	1	0
80	4	232	OHX	1	0
80	A	1926	OHX	1	0
80	sR	1979	OHX	1	0
80	sR	1990	OHX	1	0
80	A	2153	OHX	1	0
80	1	3574	OHX	1	0
80	sR	1945	OHX	4	0
80	1	3601	OHX	2	0
80	1	3425	OHX	1	0
80	sR	2097	OHX	1	0
80	AR	3514	OHX	2	0
80	AR	3791	OHX	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	AR	3450	OHX	1	0
80	AR	3753	OHX	1	0
80	AR	4203	OHX	1	0
80	AR	3516	OHX	1	0
80	sR	2190	OHX	1	0
80	1	4150	OHX	1	0
80	1	3483	OHX	1	0
80	1	3602	OHX	2	0
80	AR	3977	OHX	1	0
80	A	2094	OHX	1	0
80	A	2057	OHX	1	0
80	sR	2003	OHX	2	0
80	AR	3953	OHX	2	0
80	k	403	OHX	2	0
80	sR	2063	OHX	3	0
80	1	3723	OHX	2	0
80	AR	4107	OHX	1	0
80	AR	4194	OHX	1	0
80	1	3819	OHX	1	0
80	AR	3449	OHX	1	0
80	1	3822	OHX	1	0
80	sR	2062	OHX	1	0
80	sR	2100	OHX	1	0
80	AR	3578	OHX	3	0
80	AR	3883	OHX	2	0
80	sR	2014	OHX	1	0
80	sR	2013	OHX	2	0
80	AR	3815	OHX	1	0
80	1	3991	OHX	1	0
80	AR	3729	OHX	1	0
80	AR	4138	OHX	1	0
80	AR	3535	OHX	1	0
80	AR	4019	OHX	2	0
80	AR	3628	OHX	1	0
80	1	3791	OHX	1	0
80	1	4111	OHX	2	0
80	AR	3728	OHX	1	0
80	1	4116	OHX	1	0
80	sR	1905	OHX	1	0
80	AR	3831	OHX	1	0
80	AR	3415	OHX	1	0
80	AR	3825	OHX	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	4	209	OHX	2	0
80	AR	4139	OHX	1	0
80	sR	1944	OHX	2	0
80	1	3993	OHX	1	0
80	sR	2156	OHX	1	0
80	A	2143[A]	OHX	2	0
80	1	3430	OHX	1	0
80	AT	205	OHX	1	0
80	1	4175	OHX	3	0
80	1	3698	OHX	1	0
80	A	1983	OHX	2	0
80	1	4085	OHX	2	0
80	A	1935	OHX	1	0
80	A	2035	OHX	1	0
80	AR	3574	OHX	1	0
80	1	3608	OHX	2	0
80	1	3843	OHX	2	0
80	AR	3511	OHX	1	0
80	sR	2061	OHX	1	0
80	A	2086	OHX	3	0
80	sR	2188	OHX	2	0
80	1	3783	OHX	1	0
80	A	1967	OHX	1	0
80	AR	3885	OHX	1	0
80	AR	3422	OHX	1	0
80	1	4050	OHX	1	0
80	AR	3981	OHX	1	0
80	A	2026	OHX	2	0
80	A	2092	OHX	2	0
80	AR	3758	OHX	1	0
80	sR	2177	OHX	1	0
85	1	3478	SPD	5	0
80	AR	4136	OHX	1	0
80	1	3785	OHX	1	0
80	A	1974	OHX	1	0
80	1	4084	OHX	1	0
80	c3	201	OHX	1	0
80	AR	3545	OHX	1	0
80	AR	3863	OHX	1	0
80	AR	3783	OHX	1	0
80	sR	2124	OHX	1	0
80	1	3612	OHX	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	sR	2157	OHX	1	0
80	1	4056	OHX	1	0
80	AR	4066	OHX	2	0
80	1	3579	OHX	1	0
80	AR	3879	OHX	1	0
80	AR	3798	OHX	1	0
80	AR	3512	OHX	1	0
80	A	2047	OHX	1	0
80	sR	2122	OHX	1	0
80	1	3457	OHX	1	0
80	A	2119	OHX	1	0
80	AR	4072	OHX	1	0
80	AR	4039	OHX	2	0
80	1	3875	OHX	1	0
80	1	4054	OHX	1	0
80	AR	4111	OHX	1	0
80	1	4173	OHX	1	0
80	AR	3924	OHX	2	0
80	AR	3984	OHX	1	0
80	1	3691	OHX	2	0
80	1	3669	OHX	2	0
80	AR	3956	OHX	4	0
80	AR	3456	OHX	1	0
80	1	3661	OHX	2	0
80	3	219	OHX	1	0
80	AR	3950	OHX	1	0
80	AR	4041	OHX	1	0
80	1	4120	OHX	1	0
80	4	226	OHX	1	0
80	A	1956	OHX	2	0
80	A	2045	OHX	1	0
80	1	4174	OHX	2	0
80	1	4113	OHX	1	0
80	1	4021	OHX	3	0
80	1	4110	OHX	1	0
80	A	2096	OHX	1	0
80	AR	3539	OHX	2	0
80	1	3906	OHX	1	0
80	AR	3453	OHX	2	0
80	1	3820	OHX	1	0
80	A	1973	OHX	2	0
80	A	2073	OHX	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	sR	2050	OHX	1	0
80	sR	2051	OHX	2	0
80	AR	3572	OHX	1	0
80	AR	3548	OHX	2	0
80	sR	1947	OHX	2	0
80	AT	227	OHX	1	0
80	sR	2038	OHX	1	0
80	1	3933	OHX	1	0
80	1	4091	OHX	1	0
80	1	3633	OHX	2	0
80	AR	4101	OHX	1	0
80	AC	101	OHX	1	0
80	AR	3610	OHX	1	0
80	sR	1926	OHX	1	0
80	AR	3926	OHX	1	0
80	sR	1958	OHX	1	0
80	AR	4068	OHX	1	0
80	1	3788	OHX	1	0
80	A	1925	OHX	2	0
80	A	1913	OHX	2	0
84	1	3578	ZWB	1	0
80	Rb	401	OHX	1	0
80	1	4024	OHX	2	0
80	1	3606	OHX	1	0
80	1	3789	OHX	2	0
80	sR	1978	OHX	1	0
80	AR	3630	OHX	1	0
80	AR	3661	OHX	1	0
80	1	3990	OHX	2	0
80	1	4112	OHX	1	0
80	1	3998	OHX	1	0
80	3	222	OHX	2	0
80	A	2065	OHX	1	0
80	AR	3604	OHX	2	0
80	AR	3541	OHX	2	0
80	1	3908	OHX	1	0
80	AR	4161	OHX	1	0
80	AR	3952	OHX	1	0
80	sR	2144	OHX	2	0
80	1	3482	OHX	1	0
80	1	3631	OHX	5	0
80	AR	4099	OHX	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	sR	2073	OHX	1	0
80	CK	201	OHX	1	0
80	AR	3703	OHX	1	0
80	1	3603	OHX	4	0
80	1	4083	OHX	6	0
80	AR	3921	OHX	2	0
80	A	1986	OHX	3	0
80	AR	3632	OHX	1	0
80	h	401	OHX	1	0
80	sR	2135	OHX	1	0
80	1	3872	OHX	2	0
80	1	4023	OHX	2	0
80	AR	4097	OHX	1	0
80	sR	2145	OHX	2	0
80	1	3424	OHX	4	0
80	1	3721	OHX	2	0
80	AR	3913	OHX	1	0
80	AR	4196	OHX	1	0
80	c8	201	OHX	1	0
80	AR	3723	OHX	1	0
80	1	3812	OHX	1	0
80	1	4055	OHX	1	0
80	A	1924	OHX	1	0
80	sR	2025	OHX	2	0
80	1	4086	OHX	1	0
80	AK	103	OHX	4	0
80	AR	3973	OHX	4	0
80	AR	3506	OHX	1	0
80	AR	3634	OHX	1	0
80	1	3995	OHX	2	0
80	1	3966	OHX	1	0
80	1	4022	OHX	1	0
80	AR	3755	OHX	2	0
80	AR	4135	OHX	4	0
80	2	201	OHX	2	0
80	1	3963	OHX	1	0
80	AR	3751	OHX	3	0
80	1	3695	OHX	3	0
80	sR	2052	OHX	2	0
80	AR	3696	OHX	2	0
80	3	203	OHX	1	0
80	1	4118	OHX	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	1	3479	OHX	2	0
80	1	3454	OHX	1	0
80	1	3781	OHX	3	0
80	1	4149	OHX	1	0
80	AR	3895	OHX	1	0
80	A	1943	OHX	1	0
80	A	2104	OHX	1	0
80	AS	223	OHX	1	0
80	1	3487	OHX	1	0
80	A	2129	OHX	1	0
80	1	4141	OHX	2	0
80	AR	3792	OHX	1	0
80	AR	3639	OHX	1	0
80	1	3611	OHX	2	0
80	sR	2002	OHX	2	0
80	sR	2125	OHX	1	0
80	1	3882	OHX	1	0
80	AR	3881	OHX	2	0
80	AR	3704	OHX	1	0
80	A	1977	OHX	1	0
80	AR	4016	OHX	1	0
80	1	3849	OHX	1	0
80	AR	3601	OHX	1	0
80	sR	2110	OHX	1	0
80	A	2083	OHX	2	0
80	AR	3946	OHX	2	0
80	1	3570	OHX	1	0
80	sR	2189	OHX	1	0
80	AR	4142	OHX	1	0
80	AR	4201	OHX	1	0
80	A	1994	OHX	3	0
80	1	3641	OHX	1	0
80	sR	2086	OHX	1	0
80	1	3663	OHX	2	0
80	1	3668	OHX	1	0
80	AT	208	OHX	1	0
80	A	2023	OHX	1	0
80	sR	1989	OHX	2	0
80	AR	3799	OHX	1	0
80	1	3632	OHX	2	0
80	1	4148	OHX	1	0
80	A	1965	OHX	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	AR	3734	OHX	1	0
80	A	2150	OHX	3	0
80	DH	202	OHX	1	0
80	AR	3917	OHX	1	0
80	sR	2179	OHX	2	0
80	AT	228	OHX	1	0
80	A	1934	OHX	1	0
80	1	3546	OHX	1	0
80	AR	3697	OHX	1	0
80	1	3811	OHX	1	0
80	A	2005	OHX	1	0
80	A	2143[B]	OHX	1	0
80	AR	3473	OHX	1	0
80	AR	3576	OHX	1	0
80	1	4028	OHX	5	0
80	AR	3599	OHX	3	0
80	sR	2136	OHX	2	0
80	AR	3419	OHX	2	0
80	1	4171	OHX	2	0
80	A	1906	OHX	1	0
80	sR	1956	OHX	1	0
80	1	3609	OHX	1	0
80	1	3635	OHX	1	0
80	AR	3954	OHX	2	0
80	A	2110	OHX	5	0
80	AR	3579	OHX	1	0
80	sR	2178	OHX	2	0
80	sR	1904	OHX	1	0
80	A	2025	OHX	2	0
80	AR	3701	OHX	1	0
80	1	3511	OHX	1	0
80	A	2013	OHX	1	0
80	AR	3690	OHX	2	0
80	1	3909	OHX	1	0
80	AR	4192	OHX	2	0
80	sR	2121	OHX	2	0
80	s1	301	OHX	2	0
80	1	3452	OHX	2	0
80	sR	1988	OHX	1	0
80	A	1907	OHX	1	0
80	1	3580	OHX	1	0
80	AR	4163	OHX	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	CP	303	OHX	1	0
80	AR	3919	OHX	1	0
80	3	221	OHX	1	0
80	1	4082	OHX	1	0
80	1	4178	OHX	2	0
80	A	1903	OHX	2	0
80	A	1964	OHX	4	0
85	AR	4164	SPD	1	0
80	3	202	OHX	1	0
80	AR	3508	OHX	1	0
85	AR	3858	SPD	3	0
80	1	3756	OHX	1	0
80	1	3642	OHX	2	0
80	4	228	OHX	2	0
80	AR	3573	OHX	2	0
80	1	3665	OHX	1	0
80	sR	2176	OHX	1	0
80	AR	3670	OHX	1	0
80	sR	1916	OHX	2	0
80	AR	3853	OHX	1	0
80	w	201	OHX	1	0
80	AR	3787	OHX	1	0
80	sR	2026	OHX	3	0
80	AR	3577	OHX	1	0
80	AR	4169	OHX	1	0
80	A	2072	OHX	2	0
80	1	4053	OHX	2	0
80	1	3970	OHX	1	0
80	1	4151	OHX	1	0
80	A	2062	OHX	1	0
80	A	2075	OHX	1	0
80	AR	3985	OHX	1	0
80	AR	3570	OHX	1	0
80	1	4000	OHX	1	0
80	1	3544	OHX	1	0
80	AR	3597	OHX	2	0
80	C	301	OHX	2	0
80	AR	3856	OHX	5	0
80	AR	4042	OHX	1	0
80	1	3935	OHX	1	0
80	AR	4070	OHX	1	0
80	sR	1911	OHX	2	0

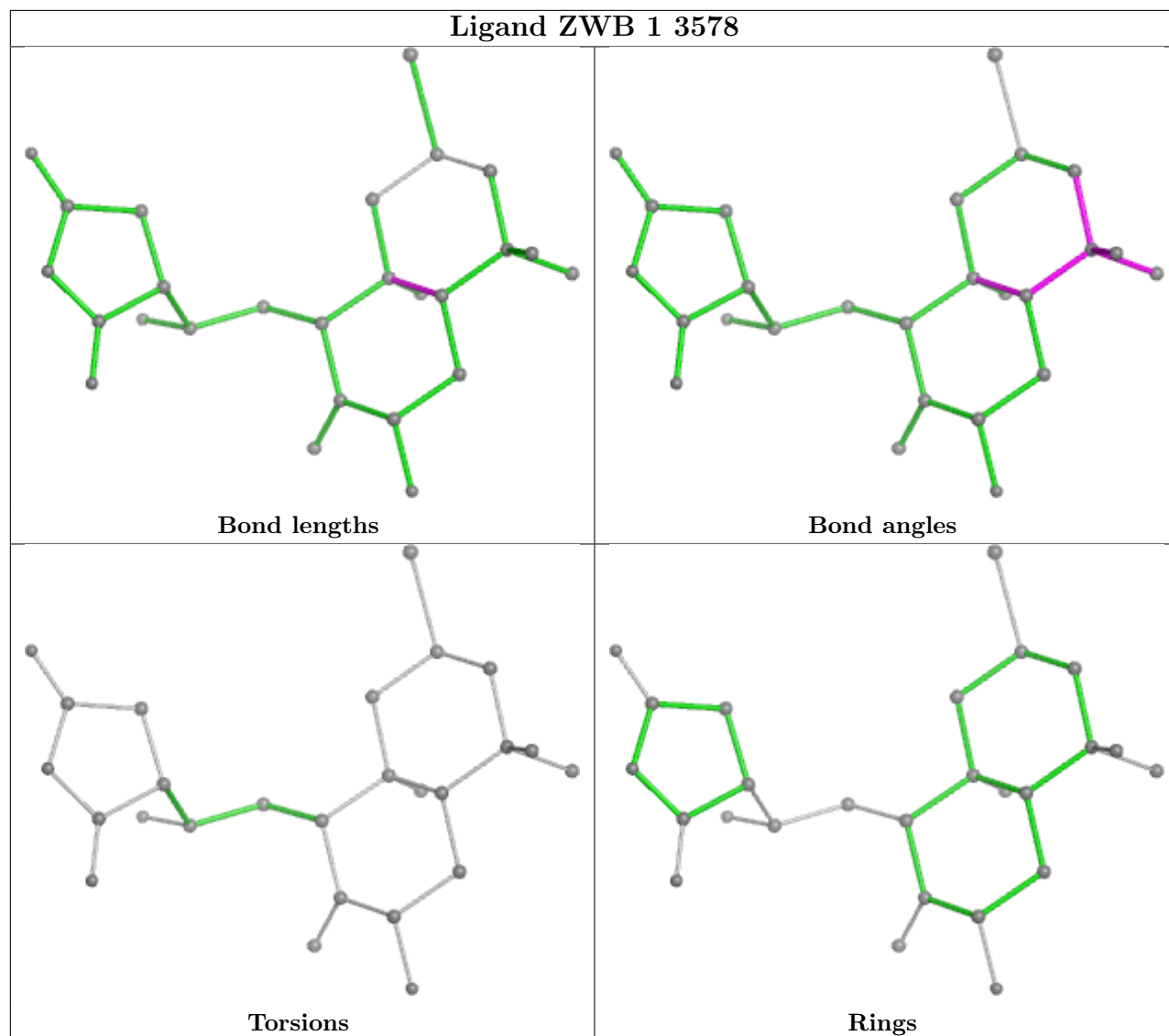
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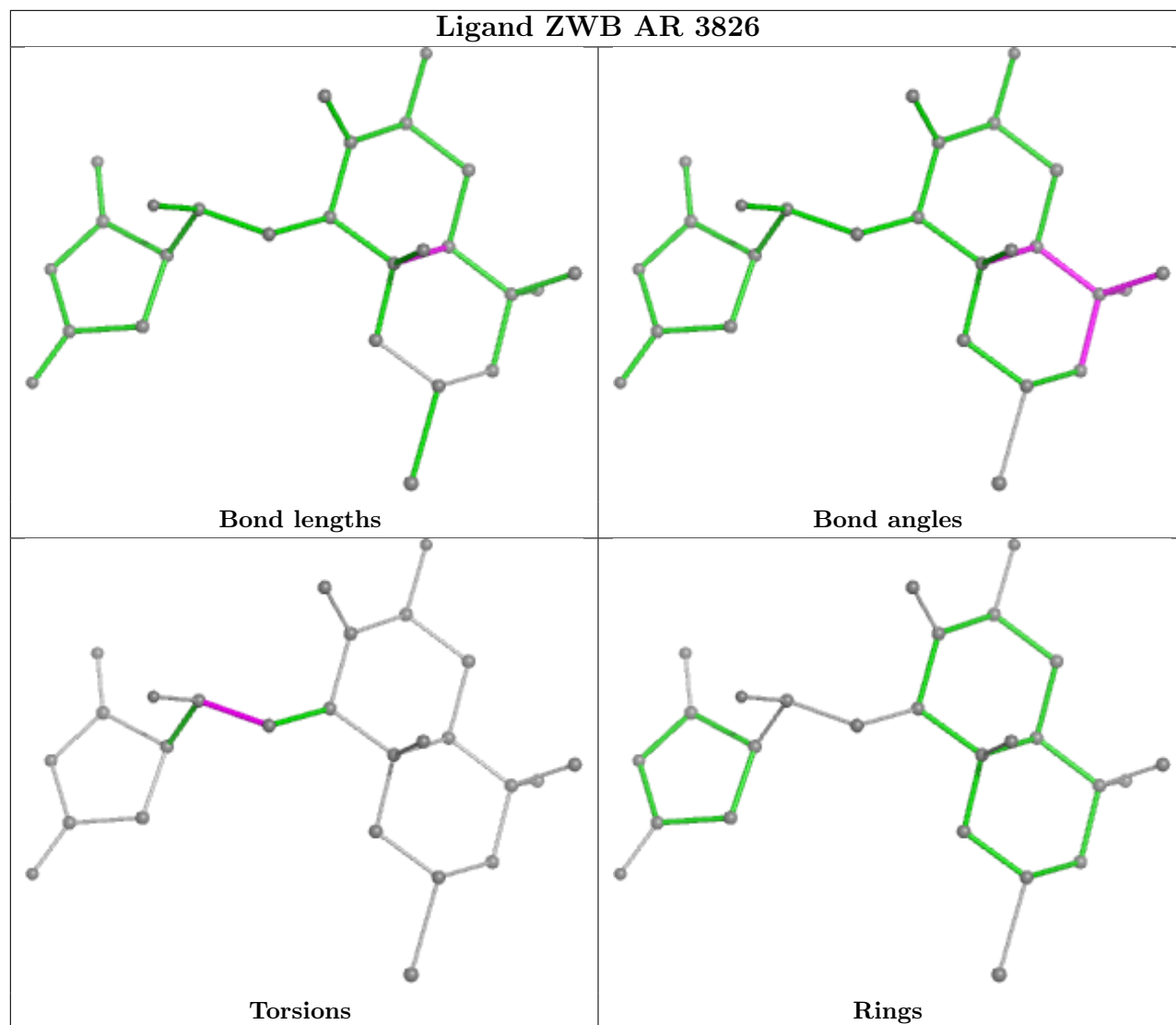
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Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	1	3760	OHX	1	0
80	1	3940	OHX	1	0
80	1	3541	OHX	1	0
80	1	3455	OHX	1	0
80	4	230	OHX	2	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.







## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 6 Fit of model and data ⓘ

### 6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ > 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	3	121/121 (100%)	0.32	7 (5%) 30 26	62, 89, 110, 152	0
1	AS	121/121 (100%)	0.03	2 (1%) 69 63	55, 75, 89, 144	0
2	AB	148/149 (99%)	0.60	11 (7%) 22 19	51, 68, 102, 119	0
2	DC	148/149 (99%)	0.66	6 (4%) 42 35	52, 72, 104, 139	0
3	CJ	227/256 (88%)	1.07	31 (13%) 8 7	79, 108, 151, 178	0
3	p	233/256 (91%)	0.88	23 (9%) 14 12	66, 95, 138, 174	0
4	AI	119/120 (99%)	0.83	13 (10%) 12 10	60, 83, 109, 123	0
4	DJ	119/120 (99%)	1.15	20 (16%) 5 4	74, 93, 122, 133	0
5	Q	117/142 (82%)	1.20	22 (18%) 4 3	84, 114, 179, 210	0
5	c5	135/142 (95%)	1.58	44 (32%) 1 1	98, 135, 180, 188	0
6	H	226/236 (95%)	1.67	73 (32%) 1 1	78, 122, 161, 191	0
6	s6	218/236 (92%)	1.04	33 (15%) 6 5	62, 100, 140, 193	0
7	4	158/158 (100%)	0.04	4 (2%) 58 52	57, 71, 131, 203	0
7	AT	158/158 (100%)	0.12	5 (3%) 50 44	60, 79, 148, 222	0
8	AC	54/59 (91%)	1.14	13 (24%) 2 2	52, 78, 116, 127	0
8	DD	58/59 (98%)	1.45	20 (34%) 1 1	55, 78, 119, 133	0
9	CK	191/191 (100%)	0.62	18 (9%) 15 13	56, 73, 114, 189	0
9	q	191/191 (100%)	1.01	30 (15%) 6 5	71, 89, 119, 176	0
10	AJ	99/100 (99%)	0.54	3 (3%) 52 47	64, 87, 129, 156	0
10	DK	97/100 (97%)	0.86	12 (12%) 9 8	81, 99, 133, 144	0
11	R	141/143 (98%)	1.53	44 (31%) 1 1	97, 127, 157, 198	0
11	c6	142/143 (99%)	1.85	60 (42%) 1 1	84, 124, 171, 206	0
12	I	184/190 (96%)	1.13	30 (16%) 5 5	89, 140, 180, 212	0
12	s7	186/190 (97%)	1.06	29 (15%) 6 5	83, 127, 189, 217	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	CD	252/254 (99%)	1.25	48 (19%) 4 3	53, 78, 107, 174	0
13	j	252/254 (99%)	1.21	51 (20%) 3 3	51, 72, 95, 137	0
14	AD	97/105 (92%)	0.64	5 (5%) 34 28	82, 102, 133, 145	0
14	DE	97/105 (92%)	0.97	15 (15%) 6 5	80, 105, 156, 170	0
15	CL	207/221 (93%)	0.69	13 (6%) 27 23	53, 73, 113, 148	0
15	r	211/221 (95%)	0.80	23 (10%) 12 10	56, 82, 127, 161	0
16	AK	87/88 (98%)	0.72	6 (6%) 24 20	53, 63, 101, 146	0
16	DL	87/88 (98%)	0.75	4 (4%) 38 32	57, 69, 111, 147	0
17	S	111/136 (81%)	1.25	24 (21%) 3 3	84, 132, 180, 201	0
17	c7	117/136 (86%)	1.10	17 (14%) 7 6	91, 123, 172, 201	0
18	J	188/200 (94%)	1.19	39 (20%) 3 3	64, 94, 139, 165	0
18	s8	188/200 (94%)	1.34	42 (22%) 3 2	67, 92, 147, 228	0
19	CE	386/387 (99%)	0.62	28 (7%) 22 19	49, 65, 93, 147	0
19	k	386/387 (99%)	0.64	27 (6%) 24 20	53, 77, 107, 149	0
20	AE	109/113 (96%)	0.90	11 (10%) 14 12	66, 87, 141, 170	0
20	DF	107/113 (94%)	0.64	8 (7%) 22 18	61, 78, 135, 193	0
21	CM	169/174 (97%)	0.55	8 (4%) 37 31	62, 86, 117, 167	0
21	s	169/174 (97%)	1.21	28 (16%) 5 5	80, 105, 135, 164	0
22	AL	77/78 (98%)	0.85	7 (9%) 16 14	83, 112, 142, 165	0
22	DM	73/78 (93%)	1.08	10 (13%) 8 7	90, 113, 136, 169	0
23	T	145/146 (99%)	1.60	49 (33%) 1 1	85, 133, 177, 203	0
23	c8	135/146 (92%)	1.34	30 (22%) 3 2	94, 120, 166, 195	0
24	K	177/197 (89%)	1.51	44 (24%) 2 2	85, 121, 158, 188	0
24	s9	185/197 (93%)	1.51	45 (24%) 2 2	69, 103, 155, 192	0
25	CF	361/362 (99%)	0.51	23 (6%) 27 22	49, 73, 103, 132	0
25	l	361/362 (99%)	0.58	25 (6%) 24 20	51, 67, 101, 128	0
26	AF	127/130 (97%)	0.50	5 (3%) 44 37	49, 61, 85, 141	0
26	DG	127/130 (97%)	0.41	3 (2%) 59 53	50, 67, 91, 146	0
27	CN	193/199 (96%)	0.95	29 (15%) 6 6	58, 87, 145, 186	0
27	t	193/199 (96%)	0.64	13 (6%) 25 21	48, 77, 130, 166	0
28	AM	50/51 (98%)	1.14	9 (18%) 4 4	56, 75, 93, 106	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
28	DN	50/51 (98%)	0.79	8 (16%) 6 5	64, 78, 99, 119	0
29	U	143/144 (99%)	1.72	52 (36%) 1 1	102, 130, 169, 187	0
29	c9	143/144 (99%)	1.01	20 (13%) 7 6	87, 113, 149, 199	0
30	L	90/105 (85%)	1.45	25 (27%) 2 2	90, 126, 172, 194	0
30	c0	72/105 (68%)	1.43	20 (27%) 2 2	117, 148, 175, 212	0
31	CG	292/297 (98%)	0.80	36 (12%) 9 8	60, 81, 125, 166	0
31	m	296/297 (99%)	1.30	67 (22%) 3 2	68, 101, 144, 161	0
32	AG	106/107 (99%)	0.69	12 (11%) 11 10	53, 64, 84, 107	0
32	DH	106/107 (99%)	0.57	6 (5%) 30 26	53, 63, 94, 123	0
33	CO	136/138 (98%)	0.57	14 (10%) 13 12	56, 71, 100, 139	0
33	u	136/138 (98%)	0.75	13 (9%) 15 13	64, 78, 110, 146	0
34	AN	52/128 (40%)	0.74	6 (11%) 11 9	67, 81, 113, 134	0
34	DO	52/128 (40%)	0.26	2 (3%) 44 38	53, 62, 87, 149	0
35	V	107/121 (88%)	2.22	51 (47%) 0 0	85, 135, 189, 200	0
35	d0	72/121 (59%)	2.01	26 (36%) 1 1	90, 122, 161, 190	0
36	M	138/156 (88%)	1.04	19 (13%) 8 7	73, 91, 123, 182	0
36	c1	146/156 (93%)	1.22	28 (19%) 4 3	67, 89, 145, 179	0
37	CH	156/176 (88%)	0.42	6 (3%) 44 38	57, 75, 112, 159	0
37	n	156/176 (88%)	0.27	4 (2%) 57 51	57, 71, 108, 146	0
38	AH	112/121 (92%)	1.40	29 (25%) 2 2	61, 87, 134, 166	0
38	DI	112/121 (92%)	1.53	36 (32%) 1 1	67, 92, 143, 191	0
39	CP	203/204 (99%)	1.09	28 (13%) 8 7	57, 77, 98, 116	0
39	v	203/204 (99%)	0.89	17 (8%) 18 16	50, 70, 85, 101	0
40	AO	25/25 (100%)	1.12	3 (12%) 10 9	68, 79, 98, 110	0
40	DP	25/25 (100%)	1.53	7 (28%) 2 2	61, 73, 95, 106	0
41	W	87/87 (100%)	0.94	13 (14%) 7 6	91, 123, 155, 186	0
41	d1	87/87 (100%)	1.08	10 (11%) 11 9	73, 108, 148, 172	0
42	O	150/151 (99%)	1.12	26 (17%) 5 4	79, 109, 142, 171	0
42	c3	150/151 (99%)	0.81	12 (8%) 20 17	74, 99, 131, 162	0
43	CI	222/244 (90%)	0.68	15 (6%) 25 21	52, 65, 112, 197	0
43	o	222/244 (90%)	0.58	13 (5%) 29 25	55, 68, 102, 169	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
44	CQ	197/199 (98%)	0.71	26 (13%) 8 7	47, 59, 96, 172	0
44	w	197/199 (98%)	0.62	16 (8%) 19 16	53, 68, 95, 139	0
45	AP	105/106 (99%)	0.47	3 (2%) 54 48	54, 75, 118, 162	0
45	DQ	105/106 (99%)	0.67	8 (7%) 21 18	56, 76, 126, 181	0
46	X	129/130 (99%)	1.09	25 (19%) 4 3	83, 105, 129, 143	0
46	d2	129/130 (99%)	0.91	14 (10%) 12 10	65, 87, 107, 130	0
47	P	88/138 (63%)	1.44	26 (29%) 1 1	80, 132, 163, 190	0
47	c4	128/138 (92%)	0.93	18 (14%) 7 6	68, 106, 146, 164	0
48	CR	155/184 (84%)	0.42	8 (5%) 34 28	52, 64, 87, 154	0
48	x	182/184 (98%)	0.44	9 (4%) 36 30	53, 67, 138, 165	0
49	AQ	91/92 (98%)	0.78	11 (12%) 10 9	61, 78, 108, 149	0
49	DR	91/92 (98%)	1.20	17 (18%) 4 3	57, 82, 111, 130	0
50	Y	144/145 (99%)	1.48	41 (28%) 1 2	73, 90, 120, 154	0
50	d3	144/145 (99%)	1.42	26 (18%) 4 4	63, 78, 113, 150	0
51	CS	185/186 (99%)	0.65	16 (8%) 18 15	57, 73, 94, 134	0
51	y	185/186 (99%)	0.69	15 (8%) 19 16	54, 68, 85, 108	0
52	p0	120/311 (38%)	1.35	27 (22%) 3 2	93, 131, 171, 202	0
53	Z	134/135 (99%)	1.47	43 (32%) 1 1	82, 121, 168, 199	0
53	d4	134/135 (99%)	1.55	47 (35%) 1 1	75, 106, 148, 184	0
54	CT	180/189 (95%)	0.79	23 (12%) 9 7	64, 86, 159, 197	0
54	z	183/189 (96%)	0.68	17 (9%) 16 14	68, 86, 150, 183	0
55	i	140/273 (51%)	1.45	37 (26%) 2 2	83, 116, 165, 182	0
55	sM	63/273 (23%)	1.15	12 (19%) 4 3	62, 131, 173, 197	0
56	a	64/108 (59%)	1.18	11 (17%) 5 4	109, 161, 200, 219	0
56	d5	69/108 (63%)	1.32	17 (24%) 2 2	116, 146, 181, 199	0
57	0	172/172 (100%)	1.05	32 (18%) 4 3	59, 76, 107, 155	0
57	CU	172/172 (100%)	0.83	21 (12%) 10 8	52, 66, 94, 124	0
58	A	1722/1800 (95%)	0.49	67 (3%) 44 37	69, 109, 207, 270	0
58	sR	1783/1800 (99%)	0.46	97 (5%) 32 28	56, 98, 220, 289	0
59	b	93/119 (78%)	2.30	47 (50%) 0 0	83, 115, 174, 207	0
59	d6	97/119 (81%)	1.31	24 (24%) 2 2	66, 90, 142, 171	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å <sup>2</sup> )	Q<0.9
60	2	159/160 (99%)	1.82	61 (38%)	1	1	57, 76, 125, 152	0
60	CV	159/160 (99%)	1.82	59 (37%)	1	1	54, 68, 129, 173	0
61	B	206/252 (81%)	1.25	37 (17%)	4	4	93, 130, 168, 195	0
61	s0	206/252 (81%)	1.05	28 (13%)	8	7	88, 115, 151, 181	0
62	c	81/82 (98%)	1.02	12 (14%)	7	6	96, 124, 167, 199	0
62	d7	81/82 (98%)	0.79	6 (7%)	22	19	77, 112, 170, 195	0
63	5	100/121 (82%)	0.92	13 (13%)	9	7	91, 122, 150, 165	0
63	CW	98/121 (80%)	1.89	33 (33%)	1	1	87, 115, 151, 178	0
64	C	116/255 (45%)	1.34	31 (26%)	2	2	93, 133, 175, 202	0
64	s1	216/255 (84%)	0.89	21 (9%)	15	12	77, 106, 143, 205	0
65	d	63/67 (94%)	1.51	14 (22%)	3	2	108, 156, 191, 196	0
65	d8	63/67 (94%)	1.47	19 (30%)	1	1	105, 145, 189, 210	0
66	6	136/137 (99%)	0.73	11 (8%)	19	16	54, 75, 105, 147	0
66	CX	136/137 (99%)	0.59	14 (10%)	13	12	50, 67, 97, 144	0
67	D	217/254 (85%)	1.24	39 (17%)	4	4	82, 109, 149, 184	0
67	s2	217/254 (85%)	1.27	49 (22%)	3	2	75, 100, 138, 162	0
68	d9	49/56 (87%)	1.42	12 (24%)	2	2	83, 107, 133, 148	0
68	e	53/56 (94%)	1.40	11 (20%)	3	3	83, 102, 131, 175	0
69	7	63/155 (40%)	0.75	6 (9%)	15	13	69, 83, 106, 136	0
69	CY	116/155 (74%)	0.80	9 (7%)	20	18	60, 90, 141, 192	0
70	E	223/240 (92%)	1.28	52 (23%)	2	2	87, 116, 162, 202	0
70	s3	223/240 (92%)	1.38	50 (22%)	3	2	91, 132, 174, 190	0
71	e0	62/63 (98%)	1.33	13 (20%)	3	3	73, 108, 158, 199	0
71	f	60/63 (95%)	1.49	17 (28%)	1	2	84, 124, 183, 198	0
72	8	117/142 (82%)	0.78	12 (10%)	13	12	63, 83, 111, 125	0
72	CZ	117/142 (82%)	1.01	17 (14%)	7	6	62, 88, 116, 134	0
73	F	260/261 (99%)	1.57	77 (29%)	1	1	84, 111, 143, 176	0
73	s4	260/261 (99%)	1.32	49 (18%)	4	3	76, 98, 130, 194	0
74	g	71/152 (46%)	1.57	23 (32%)	1	1	119, 156, 194, 214	0
75	1	3149/3396 (92%)	0.25	99 (3%)	51	46	47, 73, 190, 299	0
75	AR	3136/3396 (92%)	0.16	63 (2%)	64	58	48, 70, 165, 298	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
76	9	126/127 (99%)	0.75	14 (11%) 12 10	58, 76, 103, 140	0
76	DA	124/127 (97%)	0.66	9 (7%) 22 19	62, 80, 113, 139	0
77	G	206/225 (91%)	1.35	51 (24%) 2 2	103, 146, 182, 215	0
77	s5	206/225 (91%)	1.46	56 (27%) 2 2	88, 131, 177, 198	0
78	Rb	318/319 (99%)	1.06	46 (14%) 7 6	112, 154, 187, 229	0
78	h	310/319 (97%)	0.93	39 (12%) 9 8	98, 140, 182, 205	0
79	AA	135/136 (99%)	0.80	11 (8%) 19 16	83, 106, 138, 154	0
79	DB	135/136 (99%)	1.05	20 (14%) 7 6	90, 116, 151, 171	0
All	All	32216/35131 (91%)	0.79	3870 (12%) 10 9	47, 90, 165, 299	0

All (3870) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
60	CV	86	GLU	11.5
6	H	79	LYS	10.4
24	K	2	PRO	9.5
6	H	80	ASN	9.5
18	s8	61	GLU	9.5
73	F	25	GLY	9.4
31	m	6	ASP	9.4
24	s9	8	TYR	9.0
24	s9	7	THR	9.0
6	H	68	LEU	8.9
50	d3	27	ASN	8.9
24	s9	6	ARG	8.8
60	2	86	GLU	8.6
35	V	82	TYR	8.6
24	s9	4	ALA	8.5
11	R	132	LYS	8.4
77	s5	79	ASN	8.3
63	CW	15	PHE	8.2
6	s6	80	ASN	8.2
35	d0	83	GLU	8.2
58	sR	772	G	8.2
75	1	2205	U	8.2
73	s4	25	GLY	8.1
50	d3	21	ASN	8.1
63	CW	14	THR	8.1
24	K	5	PRO	8.0

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Mol	Chain	Res	Type	RSRZ
53	Z	70	VAL	8.0
67	D	84	LYS	7.9
6	H	77	LEU	7.9
6	H	78	THR	7.8
31	m	7	ALA	7.8
12	I	98	ILE	7.7
21	s	150	ASN	7.6
63	CW	54	VAL	7.5
57	CU	2	ALA	7.5
35	V	80	GLU	7.4
42	O	61	THR	7.4
36	c1	4	GLU	7.4
64	s1	54	LEU	7.3
73	s4	248	ILE	7.3
74	g	86	THR	7.3
50	Y	3	LYS	7.3
3	CJ	106	LYS	7.3
35	d0	64	LYS	7.3
73	F	22	LYS	7.3
4	AI	91	ALA	7.2
24	s9	3	ARG	7.2
38	AH	21	LYS	7.2
50	d3	25	ALA	7.2
28	AM	32	ASN	7.2
63	CW	55	THR	7.2
23	c8	123	ARG	7.2
73	s4	26	CYS	7.2
50	d3	24	TRP	7.1
73	s4	252	ARG	7.1
57	0	1	MET	7.0
65	d	28	VAL	7.0
57	CU	1	MET	6.9
11	c6	19	VAL	6.9
33	CO	8	LYS	6.9
72	8	50	ALA	6.9
55	i	42	ALA	6.8
30	c0	25	LYS	6.8
13	CD	253	GLN	6.8
24	s9	5	PRO	6.7
35	d0	82	TYR	6.7
6	s6	88	ARG	6.7
77	G	152	GLY	6.6

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Mol	Chain	Res	Type	RSRZ
67	D	162	CYS	6.6
35	V	31	VAL	6.6
35	d0	67	THR	6.6
35	V	67	THR	6.6
3	CJ	113	ALA	6.5
8	DD	27	TYR	6.5
18	s8	62	THR	6.5
73	s4	246	LEU	6.5
11	c6	132	LYS	6.5
15	r	114	GLY	6.5
66	6	137	VAL	6.5
75	AR	2873	U	6.5
31	m	3	PHE	6.5
72	8	45	LYS	6.5
53	d4	26	ASP	6.4
49	DR	6	LYS	6.4
35	V	84	MET	6.3
23	T	101	LEU	6.3
58	sR	38	C	6.3
35	d0	77	LYS	6.3
60	CV	85	LEU	6.3
49	DR	2	ALA	6.2
75	1	2686	A	6.2
35	V	62	VAL	6.2
59	b	29	SER	6.2
67	D	164	SER	6.2
23	c8	140	THR	6.2
13	CD	143	GLU	6.2
18	s8	100	ALA	6.2
71	f	2	ALA	6.1
6	H	149	LYS	6.1
73	s4	23	LEU	6.1
60	2	75	ILE	6.1
15	CL	207	GLU	6.1
70	s3	150	MET	6.1
3	CJ	121	SER	6.1
67	D	163	GLY	6.1
23	c8	116	LEU	6.0
41	d1	11	LEU	6.0
22	DM	69	LEU	6.0
58	sR	470	A	6.0
44	CQ	3	VAL	6.0

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Mol	Chain	Res	Type	RSRZ
77	G	106	LYS	6.0
31	m	2	ALA	6.0
31	m	8	LYS	6.0
35	d0	65	ILE	6.0
56	d5	50	ILE	6.0
30	L	27	PHE	5.9
13	j	247	ARG	5.9
13	CD	247	ARG	5.9
75	1	2685	C	5.9
15	CL	209	ASN	5.9
73	s4	39	ARG	5.9
70	E	148	LYS	5.8
58	sR	25	C	5.8
65	d	44	VAL	5.8
15	r	112	GLN	5.8
73	s4	22	LYS	5.8
38	DI	81	CYS	5.8
21	s	153	LYS	5.8
11	c6	119	ALA	5.8
44	CQ	59	ARG	5.8
44	CQ	183	ALA	5.8
55	i	89	ARG	5.8
58	sR	771	A	5.7
29	c9	92	LYS	5.7
13	j	241	ARG	5.7
5	Q	101	ALA	5.7
60	2	74	VAL	5.7
70	s3	142	LEU	5.7
38	DI	34	HIS	5.7
50	Y	48	HIS	5.7
38	DI	16	ARG	5.7
63	CW	65	VAL	5.7
30	L	40	LEU	5.7
59	b	90	GLU	5.7
11	R	141	SER	5.6
6	H	156	PHE	5.6
38	AH	61	GLN	5.6
59	b	84	VAL	5.6
77	s5	187	ILE	5.6
24	K	3	ARG	5.6
27	CN	23	LYS	5.6
59	b	86	VAL	5.6

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Mol	Chain	Res	Type	RSRZ
60	2	24	ALA	5.6
18	s8	45	SER	5.6
13	j	229	ALA	5.6
13	j	235	ALA	5.6
31	m	4	GLN	5.6
38	DI	33	GLN	5.6
49	DR	7	LYS	5.6
35	V	79	TRP	5.6
6	s6	147	LEU	5.5
53	Z	34	ASN	5.5
72	CZ	27	ARG	5.5
65	d	16	LEU	5.5
77	s5	108	LEU	5.5
21	s	151	SER	5.5
12	I	142	TYR	5.5
5	c5	105	VAL	5.5
24	s9	148	VAL	5.5
6	s6	79	LYS	5.5
73	s4	21	ASP	5.5
75	AR	1103	A	5.5
24	K	138	LYS	5.5
60	CV	73	GLY	5.5
24	K	6	ARG	5.5
73	F	23	LEU	5.5
13	j	225	ILE	5.5
54	z	2	ALA	5.5
77	G	71	ALA	5.5
74	g	87	THR	5.4
60	CV	89	LEU	5.4
11	c6	140	LYS	5.4
31	m	5	LYS	5.4
17	S	2	GLY	5.4
73	F	8	HIS	5.4
24	K	141	VAL	5.4
63	CW	66	VAL	5.4
64	s1	90	GLU	5.4
11	R	142	TYR	5.4
4	DJ	98	SER	5.4
33	CO	10	SER	5.4
29	U	114	VAL	5.3
70	s3	16	VAL	5.3
21	s	143	ARG	5.3

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Mol	Chain	Res	Type	RSRZ
11	c6	121	SER	5.3
58	sR	1199	G	5.3
75	1	2874	G	5.3
60	CV	87	LYS	5.3
78	Rb	27	ALA	5.3
60	CV	23	GLY	5.3
19	k	14	LEU	5.3
67	s2	212	LYS	5.3
70	s3	177	MET	5.2
14	AD	14	LEU	5.2
31	m	17	GLN	5.2
12	I	150	GLN	5.2
63	5	9	GLN	5.2
73	F	54	TYR	5.2
4	AI	11	THR	5.2
13	CD	252	THR	5.2
74	g	83	LYS	5.2
77	s5	106	LYS	5.2
4	AI	75	TYR	5.2
53	Z	35	VAL	5.2
11	c6	44	LEU	5.2
73	s4	14	ALA	5.2
40	DP	25	LYS	5.2
77	G	102	ARG	5.1
33	CO	9	ALA	5.1
38	AH	2	ALA	5.1
65	d8	26	THR	5.1
77	s5	75	GLY	5.1
9	q	178	GLY	5.1
73	F	56	LEU	5.1
67	D	144	TRP	5.1
77	s5	77	TYR	5.1
75	1	2687	G	5.1
24	s9	9	SER	5.1
67	s2	208	GLU	5.1
75	1	1192	C	5.1
77	G	26	ALA	5.0
63	CW	108	TYR	5.0
5	c5	119	PHE	5.0
65	d	17	GLY	5.0
18	s8	46	VAL	5.0
73	s4	12	LEU	5.0

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Mol	Chain	Res	Type	RSRZ
18	s8	40	ALA	5.0
35	V	74	GLU	5.0
52	p0	26	PHE	5.0
67	s2	86	VAL	5.0
16	DL	88	ALA	5.0
58	A	913	G	5.0
67	s2	96	THR	5.0
24	s9	48	GLN	5.0
18	J	13	ALA	5.0
73	s4	18	TRP	5.0
11	c6	142	TYR	5.0
71	f	3	LYS	5.0
4	DJ	120	ALA	4.9
23	T	28	ILE	4.9
35	V	64	LYS	4.9
31	CG	38	THR	4.9
22	DM	18	ALA	4.9
31	CG	12	TYR	4.9
9	CK	190	ASP	4.9
53	Z	135	ASP	4.9
47	c4	125	SER	4.9
60	2	87	LYS	4.9
60	2	88	ARG	4.9
35	d0	63	LEU	4.9
77	G	177	ILE	4.9
25	CF	187	LEU	4.9
31	m	31	TYR	4.9
35	V	86	ILE	4.9
60	CV	44	ALA	4.9
73	F	110	ALA	4.9
23	c8	17	LEU	4.8
50	d3	17	VAL	4.8
8	DD	25	LYS	4.8
6	H	212	LEU	4.8
8	DD	32	LEU	4.8
50	Y	33	LEU	4.8
24	K	104	PHE	4.8
53	Z	71	GLY	4.8
29	U	61	VAL	4.8
6	H	14	LYS	4.8
18	s8	53	LYS	4.8
44	CQ	66	LYS	4.8

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Mol	Chain	Res	Type	RSRZ
6	H	69	LEU	4.8
13	CD	190	ARG	4.8
75	AR	2728	G	4.8
24	s9	147	MET	4.8
60	2	60	LYS	4.8
27	CN	62	THR	4.8
3	CJ	109	LEU	4.8
58	sR	39	A	4.8
15	r	113	GLN	4.8
42	O	62	GLN	4.8
13	j	228	GLY	4.8
4	DJ	84	LYS	4.8
11	R	29	ILE	4.8
18	s8	60	ILE	4.8
29	U	58	ALA	4.8
31	m	51	LEU	4.8
67	s2	97	ARG	4.8
60	2	40	VAL	4.7
49	DR	61	LYS	4.7
29	U	64	HIS	4.7
46	X	2	THR	4.7
60	2	89	LEU	4.7
75	1	2669	G	4.7
57	CU	75	PHE	4.7
67	D	86	VAL	4.7
36	c1	32	LYS	4.7
70	s3	148	LYS	4.7
6	H	142	ARG	4.7
40	DP	10	THR	4.7
59	b	85	ARG	4.7
55	sM	66	ALA	4.7
74	g	85	TYR	4.7
18	J	21	PHE	4.7
31	CG	3	PHE	4.7
9	CK	93	VAL	4.7
21	s	148	VAL	4.7
70	E	206	VAL	4.7
72	8	51	VAL	4.7
37	CH	130	ILE	4.7
35	V	68	ARG	4.7
75	1	1025	A	4.7
67	s2	92	ALA	4.7

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Mol	Chain	Res	Type	RSRZ
31	m	20	PHE	4.7
31	m	38	THR	4.7
6	H	93	LYS	4.7
30	L	44	LYS	4.7
63	CW	56	VAL	4.7
11	R	118	ILE	4.6
18	J	179	CYS	4.6
6	H	76	LEU	4.6
31	m	16	PHE	4.6
13	j	253	GLN	4.6
24	K	134	ILE	4.6
38	AH	20	ILE	4.6
39	CP	67	ARG	4.6
64	s1	97	LEU	4.6
24	s9	146	PHE	4.6
73	F	127	LYS	4.6
19	CE	24	SER	4.6
23	T	30	TYR	4.6
61	B	128	SER	4.6
27	t	46	ILE	4.6
78	Rb	28	GLY	4.6
5	c5	109	PRO	4.6
59	d6	18	VAL	4.6
60	2	34	TYR	4.6
69	CY	83	THR	4.6
66	6	2	SER	4.6
77	s5	83	ARG	4.6
59	d6	80	HIS	4.6
24	K	4	ALA	4.6
54	CT	21	LYS	4.6
73	F	133	LYS	4.6
60	2	126	VAL	4.6
73	F	194	THR	4.6
51	y	156	GLY	4.6
55	i	41	SER	4.6
6	s6	216	LEU	4.5
74	g	88	PRO	4.5
58	A	261	U	4.5
38	DI	2	ALA	4.5
44	w	48	PHE	4.5
54	z	54	ALA	4.5
23	T	21	ASN	4.5

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Mol	Chain	Res	Type	RSRZ
60	CV	72	VAL	4.5
11	c6	85	ILE	4.5
79	AA	46	ILE	4.5
24	K	8	TYR	4.5
67	s2	89	GLN	4.5
63	5	89	LEU	4.5
9	CK	174	LYS	4.5
74	g	93	HIS	4.5
57	0	4	PHE	4.5
72	CZ	37	THR	4.5
42	O	109	LYS	4.5
58	A	320	U	4.5
58	sR	380	U	4.5
78	Rb	80	ALA	4.5
58	sR	40	A	4.5
60	CV	80	VAL	4.5
60	CV	126	VAL	4.5
71	e0	45	VAL	4.5
11	c6	117	LEU	4.5
38	DI	21	LYS	4.5
75	1	2206	G	4.5
70	s3	144	ALA	4.5
3	CJ	112	GLU	4.5
4	DJ	102	GLU	4.5
23	T	35	ILE	4.5
59	b	50	VAL	4.5
77	s5	76	ARG	4.5
13	CD	145	LYS	4.5
55	i	85	SER	4.4
13	j	202	VAL	4.4
35	d0	62	VAL	4.4
23	T	40	ARG	4.4
8	AC	25	LYS	4.4
11	c6	88	GLY	4.4
23	T	44	ASN	4.4
35	V	69	LYS	4.4
55	i	40	PRO	4.4
77	s5	80	LYS	4.4
25	l	194	TYR	4.4
60	2	84	TYR	4.4
6	H	97	VAL	4.4
57	0	128	GLU	4.4

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Mol	Chain	Res	Type	RSRZ
73	s4	9	LEU	4.4
77	G	194	LEU	4.4
24	s9	10	LYS	4.4
57	CU	74	ASN	4.4
60	2	61	THR	4.4
78	h	136	ILE	4.4
5	c5	86	VAL	4.4
44	w	59	ARG	4.4
57	0	138	GLN	4.4
61	B	23	HIS	4.4
60	CV	88	ARG	4.4
70	s3	143	ARG	4.4
5	c5	113	GLY	4.4
45	AP	106	PHE	4.4
57	0	74	ASN	4.4
44	CQ	189	ASP	4.3
44	w	52	LEU	4.3
51	y	155	MET	4.3
60	2	72	VAL	4.3
47	P	133	ARG	4.3
58	sR	763	G	4.3
27	CN	46	ILE	4.3
78	Rb	115	ILE	4.3
31	m	34	LYS	4.3
78	Rb	121	MET	4.3
47	P	132	ARG	4.3
53	Z	61	ARG	4.3
60	2	124	VAL	4.3
67	D	208	GLU	4.3
13	j	226	SER	4.3
33	u	10	SER	4.3
59	b	2	PRO	4.3
65	d	21	SER	4.3
13	j	218	HIS	4.3
78	h	313	TRP	4.3
67	s2	90	THR	4.3
59	b	35	ALA	4.3
67	D	161	LYS	4.3
23	T	29	VAL	4.3
51	y	154	GLY	4.3
11	R	140	LYS	4.3
12	I	176	LEU	4.3

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Mol	Chain	Res	Type	RSRZ
38	AH	19	LYS	4.3
64	s1	52	THR	4.3
59	b	10	ARG	4.3
72	CZ	32	PHE	4.3
59	b	19	LYS	4.3
47	c4	135	ARG	4.3
55	i	47	ALA	4.3
67	s2	166	THR	4.3
60	CV	34	TYR	4.2
13	CD	142	ASP	4.2
35	d0	84	MET	4.2
36	c1	2	SER	4.2
4	DJ	118	ILE	4.2
42	O	53	LEU	4.2
31	m	24	ARG	4.2
70	s3	117	ARG	4.2
38	AH	22	VAL	4.2
70	E	48	VAL	4.2
53	Z	67	GLY	4.2
60	2	73	GLY	4.2
38	AH	34	HIS	4.2
13	j	239	ALA	4.2
53	d4	79	VAL	4.2
3	CJ	110	THR	4.2
78	Rb	72	THR	4.2
79	DB	66	THR	4.2
4	DJ	103	LYS	4.2
13	CD	251	LYS	4.2
31	CG	8	LYS	4.2
73	s4	109	PHE	4.2
18	s8	179	CYS	4.2
38	DI	38	LEU	4.2
61	s0	162	CYS	4.2
27	CN	93	ILE	4.2
24	s9	141	VAL	4.2
50	d3	145	SER	4.2
65	d8	48	VAL	4.2
6	s6	86	PRO	4.2
6	H	91	GLU	4.2
44	CQ	100	GLU	4.2
29	U	67	MET	4.2
50	d3	110	LYS	4.2

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Mol	Chain	Res	Type	RSRZ
23	T	17	LEU	4.2
35	V	85	ARG	4.2
29	U	107	ALA	4.2
70	E	16	VAL	4.2
24	s9	2	PRO	4.1
67	s2	85	PRO	4.1
50	Y	30	LYS	4.1
67	s2	88	LYS	4.1
30	c0	64	TYR	4.1
55	sM	67	GLY	4.1
75	1	2670	G	4.1
13	CD	7	ASN	4.1
77	G	104	ASN	4.1
44	w	80	PHE	4.1
17	S	41	ILE	4.1
58	A	1193	A	4.1
23	c8	133	VAL	4.1
61	s0	189	VAL	4.1
15	r	203	LYS	4.1
43	CI	158	LYS	4.1
49	DR	3	LYS	4.1
51	y	159	LYS	4.1
21	s	96	PHE	4.1
32	AG	7	LEU	4.1
47	P	137	LEU	4.1
60	2	65	TYR	4.1
78	Rb	103	PHE	4.1
51	CS	145	ASN	4.1
59	b	8	ASN	4.1
59	b	44	ILE	4.1
31	CG	15	ARG	4.1
77	s5	74	ALA	4.1
79	AA	124	ALA	4.1
58	sR	1719	A	4.1
29	U	92	LYS	4.1
54	z	70	LYS	4.1
57	CU	166	LYS	4.1
3	p	182	GLY	4.1
14	DE	59	TYR	4.1
53	Z	132	ARG	4.1
60	CV	96	ILE	4.1
75	1	1017	C	4.1

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Mol	Chain	Res	Type	RSRZ
44	w	56	ASP	4.1
52	p0	50	VAL	4.1
66	CX	76	ALA	4.1
35	V	66	SER	4.1
43	CI	164	SER	4.1
60	2	62	GLY	4.1
31	m	64	ILE	4.1
54	z	72	GLU	4.1
61	s0	98	ILE	4.1
67	s2	83	ILE	4.1
30	L	28	ASN	4.1
25	CF	189	ALA	4.1
51	y	162	ALA	4.1
30	L	24	LYS	4.1
61	B	24	LEU	4.0
25	l	96	GLY	4.0
18	s8	21	PHE	4.0
19	k	4	ARG	4.0
41	W	34	ILE	4.0
48	x	182	ILE	4.0
58	sR	1201	G	4.0
58	sR	1718	G	4.0
11	c6	90	VAL	4.0
50	Y	27	ASN	4.0
64	C	114	VAL	4.0
70	s3	175	VAL	4.0
8	DD	59	LYS	4.0
52	p0	43	LYS	4.0
75	AR	3275	U	4.0
62	d7	24	LEU	4.0
6	H	146	GLY	4.0
13	j	13	GLY	4.0
55	i	163	THR	4.0
50	Y	47	SER	4.0
18	s8	55	TYR	4.0
64	s1	91	VAL	4.0
70	s3	8	LYS	4.0
38	DI	32	ALA	4.0
42	O	57	ALA	4.0
48	x	177	ALA	4.0
56	a	36	ALA	4.0
61	s0	19	ALA	4.0

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Mol	Chain	Res	Type	RSRZ
60	CV	77	ASN	4.0
21	s	17	LEU	4.0
11	c6	17	THR	4.0
13	CD	249	SER	4.0
47	P	92	LYS	4.0
62	c	22	LYS	4.0
30	L	63	TYR	4.0
23	c8	137	HIS	4.0
25	l	311	HIS	4.0
5	Q	104	GLN	4.0
6	H	75	LEU	4.0
53	d4	106	GLN	4.0
60	CV	31	LEU	4.0
58	sR	1554	U	4.0
31	m	148	ILE	4.0
50	Y	119	GLY	4.0
53	d4	120	GLY	4.0
77	G	40	ILE	4.0
30	L	90	THR	4.0
35	V	61	LYS	4.0
55	i	104	LYS	4.0
60	CV	78	LYS	4.0
13	j	222	ALA	4.0
23	T	31	ALA	4.0
77	s5	104	ASN	4.0
56	d5	77	ARG	4.0
18	J	109	PHE	4.0
52	p0	88	PHE	4.0
59	b	83	ILE	4.0
42	O	59	GLY	4.0
21	s	147	THR	3.9
6	H	222	GLU	3.9
23	c8	129	TRP	3.9
24	K	92	LYS	3.9
67	D	116	LYS	3.9
52	p0	87	VAL	3.9
61	s0	99	ALA	3.9
31	CG	207	TYR	3.9
60	CV	30	TYR	3.9
77	G	209	TYR	3.9
70	s3	176	LEU	3.9
6	H	186	ARG	3.9

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Mol	Chain	Res	Type	RSRZ
31	m	50	ARG	3.9
35	V	65	ILE	3.9
35	V	106	ILE	3.9
59	d6	8	ASN	3.9
63	CW	101	ASN	3.9
73	F	47	PHE	3.9
8	DD	34	GLY	3.9
16	AK	10	LYS	3.9
25	l	99	MET	3.9
73	F	60	GLU	3.9
15	r	221	ALA	3.9
44	CQ	63	ALA	3.9
58	sR	1601	G	3.9
24	K	17	ARG	3.9
56	a	50	ILE	3.9
6	H	95	LYS	3.9
13	CD	248	GLY	3.9
17	S	14	LYS	3.9
31	CG	5	LYS	3.9
42	c3	94	LYS	3.9
6	H	71	THR	3.9
41	d1	39	VAL	3.9
49	AQ	11	THR	3.9
64	C	134	VAL	3.9
67	D	90	THR	3.9
76	9	88	GLU	3.9
3	CJ	102	ALA	3.9
67	s2	118	ALA	3.9
70	E	147	ALA	3.9
49	AQ	14	TYR	3.9
73	F	27	TYR	3.9
13	j	233	GLN	3.9
24	s9	104	PHE	3.9
31	CG	4	GLN	3.9
59	b	3	LYS	3.9
52	p0	27	VAL	3.9
59	b	18	VAL	3.9
60	CV	93	VAL	3.9
73	F	111	VAL	3.9
33	CO	92	GLU	3.9
11	c6	18	ALA	3.9
12	s7	58	LEU	3.9

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Mol	Chain	Res	Type	RSRZ
56	a	75	LEU	3.9
63	CW	53	ALA	3.9
21	s	152	HIS	3.9
18	s8	77	ARG	3.9
29	U	68	ARG	3.9
59	b	20	PRO	3.9
18	s8	199	LYS	3.9
29	U	38	LYS	3.9
30	c0	27	PHE	3.9
60	2	21	LYS	3.9
60	2	120	LYS	3.9
56	a	73	GLY	3.9
13	j	176	ASP	3.8
25	CF	199	TRP	3.8
26	AF	2	ALA	3.8
27	CN	193	ALA	3.8
48	CR	2	ALA	3.8
50	Y	113	ALA	3.8
57	0	2	ALA	3.8
70	s3	151	LYS	3.8
59	b	74	CYS	3.8
50	Y	45	GLY	3.8
50	d3	40	SER	3.8
23	c8	18	LEU	3.8
24	K	111	THR	3.8
47	P	89	THR	3.8
77	s5	154	ALA	3.8
10	AJ	56	ARG	3.8
73	s4	255	ARG	3.8
56	a	71	ILE	3.8
75	1	1016	C	3.8
5	c5	104	GLN	3.8
11	c6	39	VAL	3.8
13	j	230	VAL	3.8
6	H	147	LEU	3.8
64	C	141	ALA	3.8
78	h	43	ILE	3.8
22	AL	43	PHE	3.8
51	CS	153	PHE	3.8
58	sR	1129	U	3.8
58	sR	471	A	3.8
12	s7	90	VAL	3.8

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Mol	Chain	Res	Type	RSRZ
33	u	122	VAL	3.8
46	X	74	VAL	3.8
60	CV	124	VAL	3.8
64	s1	125	VAL	3.8
24	s9	76	LEU	3.8
53	d4	18	LEU	3.8
78	Rb	32	LEU	3.8
48	x	2	ALA	3.8
55	i	168	ALA	3.8
60	CV	94	GLU	3.8
13	CD	28	LYS	3.8
18	J	199	LYS	3.8
59	d6	10	ARG	3.8
33	CO	3	THR	3.8
33	u	3	THR	3.8
36	c1	3	THR	3.8
5	c5	12	PHE	3.8
58	sR	1595	U	3.8
75	1	1555	U	3.8
36	c1	35	TYR	3.8
73	F	204	GLY	3.8
38	DI	101	VAL	3.8
53	Z	24	VAL	3.8
75	AR	2440	G	3.8
75	1	1666	G	3.8
25	l	360	LYS	3.7
17	c7	97	ASN	3.7
18	J	145	ALA	3.7
38	DI	31	ARG	3.7
55	i	158	ALA	3.7
59	b	89	ARG	3.7
70	s3	219	ALA	3.7
29	U	36	ILE	3.7
73	F	170	THR	3.7
35	V	92	ASP	3.7
58	sR	260	U	3.7
6	s6	208	TYR	3.7
24	K	95	TYR	3.7
70	s3	87	TYR	3.7
74	g	106	TYR	3.7
50	Y	7	ARG	3.7
67	s2	181	SER	3.7

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Mol	Chain	Res	Type	RSRZ
5	Q	74	ALA	3.7
75	1	1038	C	3.7
3	CJ	107	GLU	3.7
6	H	158	ILE	3.7
6	H	89	ASP	3.7
31	CG	6	ASP	3.7
13	j	232	GLY	3.7
25	CF	190	GLY	3.7
43	o	163	LEU	3.7
78	h	33	LEU	3.7
31	m	27	LYS	3.7
67	D	91	ARG	3.7
49	AQ	51	ALA	3.7
73	F	244	ILE	3.7
29	U	5	SER	3.7
55	sM	41	SER	3.7
75	1	2703	A	3.7
50	Y	21	ASN	3.7
23	T	129	TRP	3.7
24	s9	109	LEU	3.7
50	Y	103	LEU	3.7
50	d3	34	LEU	3.7
58	sR	765	G	3.7
75	AR	494	G	3.7
41	d1	87	ARG	3.7
50	d3	20	ARG	3.7
3	CJ	114	ALA	3.7
4	AI	120	ALA	3.7
15	r	2	ALA	3.7
59	b	79	ILE	3.7
64	C	156	ALA	3.7
77	s5	71	ALA	3.7
64	C	142	PHE	3.7
55	i	86	ASN	3.7
63	CW	16	THR	3.7
58	sR	1196	A	3.7
75	1	1137	C	3.7
60	2	97	LYS	3.7
33	CO	129	TYR	3.7
38	AH	16	ARG	3.7
49	DR	18	TYR	3.7
77	s5	61	TYR	3.7

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Mol	Chain	Res	Type	RSRZ
75	1	2418	G	3.7
75	1	2728	G	3.7
28	DN	51	ILE	3.7
46	d2	53	ILE	3.7
12	s7	12	ALA	3.7
30	c0	23	ALA	3.7
68	e	43	PHE	3.6
31	CG	9	SER	3.6
42	O	13	SER	3.6
63	CW	100	THR	3.6
35	d0	34	LEU	3.6
17	c7	59	LYS	3.6
38	DI	37	LYS	3.6
39	v	56	LYS	3.6
43	CI	215	GLY	3.6
56	d5	72	GLY	3.6
53	Z	26	ASP	3.6
67	s2	94	GLN	3.6
24	K	132	ARG	3.6
49	DR	80	ARG	3.6
11	R	65	ILE	3.6
11	c6	79	TYR	3.6
29	c9	66	TYR	3.6
78	h	79	TYR	3.6
12	I	59	ALA	3.6
15	CL	195	ALA	3.6
75	1	1554	U	3.6
75	1	1782	U	3.6
5	c5	102	PHE	3.6
9	CK	175	PHE	3.6
45	DQ	106	PHE	3.6
57	CU	21	GLU	3.6
3	p	194	THR	3.6
36	c1	5	LEU	3.6
36	M	91	LEU	3.6
69	CY	27	LYS	3.6
73	F	128	LYS	3.6
69	7	51	TRP	3.6
49	AQ	71	VAL	3.6
53	d4	27	VAL	3.6
11	R	66	ARG	3.6
70	s3	9	ARG	3.6

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Mol	Chain	Res	Type	RSRZ
14	DE	97	ASP	3.6
70	s3	49	ILE	3.6
5	c5	4	ALA	3.6
29	c9	55	TYR	3.6
75	1	1582	C	3.6
6	s6	156	PHE	3.6
11	R	129	PHE	3.6
59	b	80	HIS	3.6
6	H	178	LEU	3.6
50	d3	142	LYS	3.6
55	i	114	LYS	3.6
77	s5	84	LYS	3.6
13	CD	2	GLY	3.6
13	CD	14	SER	3.6
47	P	43	THR	3.6
67	D	206	THR	3.6
73	s4	24	SER	3.6
18	J	143	TRP	3.6
50	Y	10	ASN	3.6
59	b	11	ASN	3.6
67	s2	121	VAL	3.6
47	P	127	ARG	3.6
31	m	49	TYR	3.6
70	s3	205	ALA	3.6
73	F	2	ALA	3.6
74	g	105	TYR	3.6
75	1	2256	A	3.6
9	CK	118	LEU	3.6
31	m	146	LEU	3.6
52	p0	70	LEU	3.6
75	AR	3207	U	3.6
23	c8	141	THR	3.6
53	Z	6	THR	3.6
5	Q	94	VAL	3.6
13	CD	98	VAL	3.6
70	s3	85	VAL	3.6
72	CZ	26	VAL	3.6
73	F	26	CYS	3.6
50	d3	28	ASN	3.6
53	d4	113	ASN	3.6
34	DO	77	ILE	3.6
75	AR	2874	G	3.6

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Mol	Chain	Res	Type	RSRZ
73	F	79	ASP	3.6
8	AC	24	PRO	3.6
43	o	141	TYR	3.6
51	CS	158	HIS	3.6
22	DM	31	LEU	3.6
25	CF	315	LYS	3.6
31	CG	293	LEU	3.6
72	CZ	40	LEU	3.6
6	H	157	VAL	3.5
6	H	177	ARG	3.5
20	DF	13	THR	3.5
35	V	81	THR	3.5
54	z	55	VAL	3.5
5	Q	103	ASN	3.5
38	DI	18	ASN	3.5
50	Y	28	ASN	3.5
68	e	20	GLN	3.5
71	e0	2	ALA	3.5
8	DD	24	PRO	3.5
11	c6	138	PHE	3.5
4	DJ	83	LYS	3.5
8	DD	23	LYS	3.5
11	R	12	LYS	3.5
18	J	196	LEU	3.5
23	c8	15	LEU	3.5
25	CF	194	TYR	3.5
46	d2	85	ASP	3.5
60	2	78	LYS	3.5
72	CZ	36	LYS	3.5
73	F	171	ASP	3.5
74	g	94	LYS	3.5
65	d	66	LEU	3.5
44	CQ	187	GLU	3.5
75	AR	3276	G	3.5
75	1	1026	A	3.5
53	Z	25	VAL	3.5
60	2	23	GLY	3.5
67	s2	91	ARG	3.5
58	sR	766	U	3.5
60	2	158	THR	3.5
27	CN	137	GLN	3.5
50	d3	22	ASN	3.5

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Mol	Chain	Res	Type	RSRZ
31	m	150	LEU	3.5
5	Q	97	TYR	3.5
47	c4	61	MET	3.5
57	0	95	ARG	3.5
23	T	22	VAL	3.5
29	U	6	VAL	3.5
50	Y	91	GLY	3.5
60	CV	81	GLY	3.5
70	s3	181	VAL	3.5
11	c6	36	ILE	3.5
58	sR	678	A	3.5
58	sR	775	G	3.5
73	F	146	THR	3.5
75	AR	2432	A	3.5
75	AR	2598	G	3.5
77	s5	68	ILE	3.5
13	j	203	ALA	3.5
45	DQ	36	PHE	3.5
70	s3	165	ASN	3.5
73	s4	15	PRO	3.5
35	V	93	LEU	3.5
76	DA	6	LEU	3.5
26	AF	26	HIS	3.5
27	t	174	ARG	3.5
6	H	67	VAL	3.5
50	Y	44	GLY	3.5
42	O	16	ILE	3.5
73	F	169	ILE	3.5
35	d0	78	THR	3.5
1	3	14	U	3.5
40	AO	5	TRP	3.5
58	sR	1600	A	3.5
5	Q	131	ALA	3.5
12	s7	24	PHE	3.5
18	J	198	ALA	3.5
70	s3	152	PHE	3.5
11	c6	2	SER	3.5
13	CD	246	LEU	3.5
31	m	222	LEU	3.5
36	c1	63	LEU	3.5
70	E	29	LEU	3.5
78	Rb	141	LEU	3.5

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Mol	Chain	Res	Type	RSRZ
44	CQ	182	ASN	3.5
60	CV	79	MET	3.5
78	h	121	MET	3.5
2	DC	48	TYR	3.5
15	CL	10	ARG	3.5
29	c9	18	TYR	3.5
29	c9	80	TYR	3.5
55	i	43	ASP	3.4
41	d1	82	VAL	3.4
50	Y	129	GLY	3.4
53	d4	122	GLY	3.4
73	F	102	VAL	3.4
18	s8	78	ILE	3.4
24	K	10	LYS	3.4
61	B	124	THR	3.4
9	q	9	GLN	3.4
19	k	365	PHE	3.4
30	c0	45	ALA	3.4
33	CO	126	GLN	3.4
38	AH	33	GLN	3.4
39	CP	123	GLN	3.4
46	X	96	ALA	3.4
60	2	31	LEU	3.4
63	CW	106	ALA	3.4
67	D	87	GLN	3.4
70	s3	145	ALA	3.4
78	Rb	78	ALA	3.4
58	sR	762	A	3.4
13	CD	215	ASN	3.4
21	s	144	CYS	3.4
41	W	75	ASN	3.4
24	s9	186	GLU	3.4
27	CN	194	GLU	3.4
5	Q	126	VAL	3.4
35	d0	31	VAL	3.4
12	s7	123	ASP	3.4
60	2	96	ILE	3.4
78	h	211	ILE	3.4
53	d4	123	LYS	3.4
67	s2	84	LYS	3.4
65	d	26	THR	3.4
13	CD	237	LEU	3.4

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Mol	Chain	Res	Type	RSRZ
50	d3	15	LEU	3.4
57	0	143	PHE	3.4
77	s5	165	LEU	3.4
8	AC	55	ALA	3.4
42	O	17	PRO	3.4
53	Z	63	GLN	3.4
75	1	2668	U	3.4
73	s4	17	HIS	3.4
38	DI	9	ARG	3.4
47	c4	133	ARG	3.4
71	e0	16	SER	3.4
15	CL	11	TYR	3.4
74	g	84	VAL	3.4
77	G	181	GLU	3.4
34	AN	77	ILE	3.4
36	M	122	ILE	3.4
35	V	77	LYS	3.4
50	d3	39	LYS	3.4
58	sR	1777	G	3.4
58	sR	1596	C	3.4
44	CQ	67	THR	3.4
18	s8	79	ALA	3.4
27	CN	48	PRO	3.4
73	s4	187	ARG	3.4
21	s	132	ASN	3.4
36	c1	21	ASN	3.4
38	DI	17	SER	3.4
53	d4	133	ASN	3.4
5	c5	126	VAL	3.4
35	V	108	ILE	3.4
47	P	30	VAL	3.4
55	i	165	GLU	3.4
61	B	173	ILE	3.4
6	H	66	GLY	3.4
23	c8	124	GLY	3.4
73	s4	134	LYS	3.4
31	m	147	ASP	3.4
5	c5	22	LEU	3.4
25	CF	233	LEU	3.4
77	s5	82	PHE	3.4
25	l	82	THR	3.4
33	u	9	ALA	3.4

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Mol	Chain	Res	Type	RSRZ
36	c1	31	THR	3.4
38	AH	32	ALA	3.4
77	G	36	ALA	3.4
77	s5	94	THR	3.4
13	CD	250	GLN	3.4
31	m	63	GLN	3.4
58	sR	768	C	3.4
58	sR	773	C	3.4
50	d3	18	HIS	3.4
58	A	1657	U	3.4
29	U	34	VAL	3.4
46	X	27	ILE	3.4
56	a	41	ILE	3.4
60	2	76	ILE	3.4
70	E	158	ILE	3.4
72	CZ	51	VAL	3.4
6	s6	91	GLU	3.4
17	c7	96	SER	3.4
13	j	201	GLY	3.4
9	q	176	LEU	3.3
47	c4	137	LEU	3.3
58	A	72	A	3.3
31	CG	291	ALA	3.3
50	Y	42	PRO	3.3
13	CD	242	ARG	3.3
75	1	1201	C	3.3
6	H	81	VAL	3.3
12	I	91	ILE	3.3
54	z	53	LYS	3.3
60	CV	67	VAL	3.3
70	s3	106	LYS	3.3
58	sR	1774	G	3.3
75	AR	2506	U	3.3
75	1	2665	U	3.3
27	CN	136	GLU	3.3
55	sM	50	ASN	3.3
23	T	86	LEU	3.3
27	CN	54	LEU	3.3
36	c1	97	TYR	3.3
46	X	26	LEU	3.3
46	X	72	CYS	3.3
67	s2	154	LEU	3.3

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Mol	Chain	Res	Type	RSRZ
27	t	193	ALA	3.3
30	L	88	PRO	3.3
39	CP	124	ASP	3.3
79	DB	124	ALA	3.3
60	2	83	ARG	3.3
72	CZ	31	THR	3.3
79	AA	48	ARG	3.3
3	CJ	75	ILE	3.3
61	B	47	VAL	3.3
63	CW	27	VAL	3.3
1	3	15	C	3.3
39	CP	78	GLY	3.3
57	0	104	GLU	3.3
59	d6	90	GLU	3.3
69	CY	84	GLY	3.3
5	c5	80	MET	3.3
11	R	38	LEU	3.3
46	d2	26	LEU	3.3
58	sR	1285	U	3.3
71	e0	49	LEU	3.3
6	H	84	TYR	3.3
38	DI	47	CYS	3.3
67	s2	162	CYS	3.3
71	f	35	TYR	3.3
63	CW	107	PHE	3.3
68	e	52	PHE	3.3
67	D	92	ALA	3.3
54	CT	97	ARG	3.3
69	CY	47	ARG	3.3
73	s4	253	ASP	3.3
35	V	107	THR	3.3
24	K	123	HIS	3.3
29	c9	119	LYS	3.3
58	sR	1776	A	3.3
67	D	88	LYS	3.3
75	1	402	A	3.3
35	d0	24	ILE	3.3
56	d5	41	ILE	3.3
64	C	140	ILE	3.3
78	h	115	ILE	3.3
24	s9	101	VAL	3.3
70	E	164	VAL	3.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
60	CV	37	GLY	3.3
21	CM	12	LEU	3.3
23	T	54	LEU	3.3
6	H	96	SER	3.3
13	CD	16	PHE	3.3
29	U	80	TYR	3.3
50	Y	38	PHE	3.3
60	2	19	PHE	3.3
61	s0	102	PHE	3.3
18	J	106	ALA	3.3
27	CN	132	ALA	3.3
53	Z	134	ALA	3.3
42	c3	140	LYS	3.3
59	d6	3	LYS	3.3
61	s0	111	ILE	3.3
42	O	60	VAL	3.3
42	O	54	LEU	3.3
70	s3	182	LEU	3.3
77	G	108	LEU	3.3
31	m	25	GLU	3.3
52	p0	73	PHE	3.2
32	DH	90	PRO	3.2
50	Y	79	ASN	3.2
15	r	21	ARG	3.2
23	T	121	ALA	3.2
23	T	145	ARG	3.2
30	L	60	SER	3.2
39	CP	127	TYR	3.2
58	sR	1473	U	3.2
31	CG	288	ALA	3.2
42	O	15	ALA	3.2
72	8	30	ALA	3.2
6	H	167	LYS	3.2
27	t	23	LYS	3.2
58	A	321	C	3.2
58	sR	1128	C	3.2
75	AR	1201	C	3.2
75	1	2231	C	3.2
8	AC	26	THR	3.2
9	q	17	THR	3.2
24	s9	110	GLN	3.2
44	CQ	56	ASP	3.2

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Mol	Chain	Res	Type	RSRZ
53	d4	135	ASP	3.2
54	CT	58	HIS	3.2
67	D	83	ILE	3.2
70	s3	12	VAL	3.2
64	C	135	LEU	3.2
31	CG	20	PHE	3.2
68	d9	43	PHE	3.2
21	s	51	ARG	3.2
31	m	273	ARG	3.2
4	DJ	2	ALA	3.2
8	DD	22	LYS	3.2
18	s8	99	ALA	3.2
24	K	16	LYS	3.2
38	AH	76	TYR	3.2
41	d1	81	ASN	3.2
61	B	127	ARG	3.2
56	d5	97	LYS	3.2
79	DB	56	LYS	3.2
6	H	52	ILE	3.2
22	DM	56	ILE	3.2
25	CF	280	ILE	3.2
35	V	19	ILE	3.2
6	H	153	VAL	3.2
12	s7	109	VAL	3.2
48	x	166	VAL	3.2
62	d7	45	THR	3.2
65	d	48	VAL	3.2
70	E	12	VAL	3.2
71	f	45	VAL	3.2
77	G	33	VAL	3.2
62	c	33	LEU	3.2
13	j	212	GLY	3.2
13	j	214	GLY	3.2
18	s8	67	TRP	3.2
30	L	61	TRP	3.2
11	R	138	PHE	3.2
24	K	146	PHE	3.2
53	Z	58	PHE	3.2
2	AB	92	LYS	3.2
18	J	26	LYS	3.2
31	m	43	LYS	3.2
54	z	85	ARG	3.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
58	sR	1228	G	3.2
63	CW	90	ARG	3.2
75	1	1103	A	3.2
77	s5	102	ARG	3.2
64	s1	60	ALA	3.2
46	d2	61	ILE	3.2
58	A	380	U	3.2
73	F	64	ILE	3.2
18	s8	111	GLN	3.2
38	AH	81	CYS	3.2
59	b	17	HIS	3.2
62	c	26	GLN	3.2
8	DD	54	LEU	3.2
9	q	80	THR	3.2
21	CM	147	THR	3.2
24	s9	11	THR	3.2
50	Y	24	TRP	3.2
58	A	870	C	3.2
6	s6	144	PHE	3.2
30	c0	16	PHE	3.2
31	m	130	GLU	3.2
19	CE	19	ARG	3.2
31	m	258	LYS	3.2
36	M	29	LYS	3.2
50	Y	114	LYS	3.2
50	d3	144	ARG	3.2
53	d4	128	LYS	3.2
59	d6	13	LYS	3.2
3	p	184	ALA	3.2
23	c8	146	ALA	3.2
19	CE	335	ILE	3.2
24	s9	134	ILE	3.2
57	0	129	ILE	3.2
75	AR	1025	A	3.2
73	F	223	ASN	3.2
78	Rb	79	TYR	3.2
5	c5	111	MET	3.2
19	CE	263	SER	3.2
38	AH	5	VAL	3.2
38	AH	23	VAL	3.2
54	z	51	VAL	3.2
58	A	194	U	3.2

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Mol	Chain	Res	Type	RSRZ
75	1	2209	U	3.2
11	R	70	THR	3.2
77	G	207	THR	3.2
55	i	101	ASP	3.2
61	B	51	GLY	3.2
73	F	4	GLY	3.2
73	F	58	GLY	3.2
3	CJ	120	LYS	3.2
11	c6	46	PHE	3.2
36	c1	24	LYS	3.2
58	A	1591	C	3.2
58	sR	1599	C	3.2
61	s0	97	PRO	3.2
77	s5	67	PRO	3.2
23	c8	121	ALA	3.1
47	c4	50	ALA	3.1
53	d4	130	ALA	3.1
59	d6	81	ALA	3.1
76	9	97	ILE	3.1
13	j	204	MET	3.1
70	E	177	MET	3.1
17	S	97	ASN	3.1
12	s7	93	LEU	3.1
12	s7	153	LEU	3.1
12	I	90	VAL	3.1
35	V	51	VAL	3.1
38	DI	22	VAL	3.1
60	2	80	VAL	3.1
76	DA	90	VAL	3.1
77	G	59	VAL	3.1
12	s7	66	SER	3.1
74	g	146	SER	3.1
11	c6	115	THR	3.1
12	s7	78	THR	3.1
12	I	133	THR	3.1
47	c4	91	THR	3.1
73	F	203	GLY	3.1
13	CD	186	PHE	3.1
18	J	200	LYS	3.1
36	c1	141	LYS	3.1
60	CV	43	LYS	3.1
77	s5	48	PHE	3.1

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Mol	Chain	Res	Type	RSRZ
5	c5	106	GLU	3.1
57	CU	128	GLU	3.1
61	B	126	PRO	3.1
5	c5	96	ILE	3.1
34	DO	78	ILE	3.1
75	AR	2685	C	3.1
2	DC	78	LEU	3.1
5	Q	76	VAL	3.1
17	S	24	LEU	3.1
19	CE	178	LEU	3.1
29	U	71	VAL	3.1
38	AH	35	VAL	3.1
51	y	166	LEU	3.1
71	f	39	LEU	3.1
71	f	47	VAL	3.1
72	8	26	VAL	3.1
57	0	157	GLN	3.1
62	d7	26	GLN	3.1
17	c7	55	THR	3.1
47	P	131	GLY	3.1
50	Y	2	GLY	3.1
58	sR	1559	A	3.1
78	Rb	124	SER	3.1
47	P	90	ARG	3.1
61	B	162	CYS	3.1
63	CW	71	PHE	3.1
73	s4	51	ARG	3.1
78	h	10	ARG	3.1
51	CS	41	ASP	3.1
57	0	96	ASP	3.1
3	CJ	100	GLU	3.1
12	I	100	PRO	3.1
19	k	387	LEU	3.1
23	T	116	LEU	3.1
56	d5	42	LEU	3.1
70	E	86	LEU	3.1
78	h	81	LEU	3.1
11	R	39	VAL	3.1
15	r	11	TYR	3.1
60	2	57	TYR	3.1
67	s2	87	GLN	3.1
24	s9	68	LYS	3.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
44	w	60	LYS	3.1
53	Z	127	LYS	3.1
17	S	25	THR	3.1
53	Z	121	THR	3.1
73	F	34	GLY	3.1
19	k	332	ARG	3.1
55	sM	85	SER	3.1
58	A	1115	U	3.1
75	1	2207	A	3.1
25	l	102	PRO	3.1
59	b	60	PRO	3.1
2	DC	46	ASP	3.1
12	I	123	ASP	3.1
59	d6	33	ASP	3.1
23	T	73	MET	3.1
10	DK	58	ILE	3.1
27	CN	191	ALA	3.1
77	G	210	ALA	3.1
24	K	109	LEU	3.1
5	Q	15	HIS	3.1
58	A	655	G	3.1
77	s5	72	HIS	3.1
31	m	12	TYR	3.1
41	d1	12	TYR	3.1
53	d4	68	LYS	3.1
49	AQ	25	GLN	3.1
15	CL	211	ARG	3.1
31	m	127	GLY	3.1
1	3	18	C	3.1
7	AT	84	C	3.1
16	AK	74	PHE	3.1
51	CS	6	THR	3.1
52	p0	86	PHE	3.1
73	F	148	ARG	3.1
6	H	148	SER	3.1
35	V	76	SER	3.1
75	AR	1095	U	3.1
12	s7	49	ILE	3.1
13	j	240	ALA	3.1
18	J	16	ALA	3.1
58	A	1425	A	3.1
59	b	81	ALA	3.1

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Mol	Chain	Res	Type	RSRZ
60	2	42	ILE	3.1
75	1	2689	A	3.1
14	DE	41	LEU	3.0
24	K	36	LEU	3.0
3	CJ	164	VAL	3.0
52	p0	28	VAL	3.0
52	p0	190	VAL	3.0
57	0	135	VAL	3.0
68	e	6	VAL	3.0
5	c5	24	LYS	3.0
44	CQ	116	LYS	3.0
60	2	32	LYS	3.0
70	E	185	LYS	3.0
2	AB	48	TYR	3.0
28	AM	46	ARG	3.0
29	c9	112	GLY	3.0
30	L	89	GLY	3.0
39	v	143	ARG	3.0
50	d3	89	ASN	3.0
60	CV	66	ASN	3.0
73	F	205	PHE	3.0
8	DD	26	THR	3.0
24	K	161	THR	3.0
73	s4	81	THR	3.0
77	s5	73	THR	3.0
13	CD	231	SER	3.0
18	J	7	SER	3.0
24	K	145	SER	3.0
36	M	143	SER	3.0
60	CV	71	SER	3.0
8	DD	21	ILE	3.0
38	DI	20	ILE	3.0
58	A	767	U	3.0
73	F	162	ILE	3.0
9	q	161	LEU	3.0
9	q	177	ASP	3.0
69	7	54	LEU	3.0
31	CG	286	VAL	3.0
46	X	129	VAL	3.0
58	sR	770	A	3.0
72	CZ	83	VAL	3.0
2	AB	47	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
60	CV	21	LYS	3.0
12	s7	139	ARG	3.0
12	I	173	TYR	3.0
13	j	250	GLN	3.0
30	L	64	TYR	3.0
31	m	26	GLY	3.0
31	CG	31	TYR	3.0
56	d5	57	TYR	3.0
73	F	138	TYR	3.0
11	R	17	THR	3.0
18	J	72	ILE	3.0
6	H	100	ALA	3.0
8	AC	54	LEU	3.0
20	DF	97	LEU	3.0
31	CG	11	ALA	3.0
50	Y	60	GLU	3.0
70	E	96	LEU	3.0
78	h	212	ALA	3.0
1	3	1	G	3.0
58	A	1578	U	3.0
75	1	1015	U	3.0
17	S	9	VAL	3.0
27	CN	24	VAL	3.0
38	DI	84	CYS	3.0
47	P	129	LYS	3.0
58	A	1481	C	3.0
19	CE	256	HIS	3.0
58	A	1592	A	3.0
75	1	2667	A	3.0
8	DD	40	ARG	3.0
31	m	151	GLN	3.0
42	c3	62	GLN	3.0
48	CR	55	GLN	3.0
53	Z	89	TYR	3.0
53	d4	119	PHE	3.0
55	sM	77	THR	3.0
60	CV	76	ILE	3.0
78	h	72	THR	3.0
78	Rb	188	ILE	3.0
21	s	91	LEU	3.0
39	v	19	LEU	3.0
70	E	3	ALA	3.0

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Mol	Chain	Res	Type	RSRZ
76	9	2	ALA	3.0
40	AO	25	LYS	3.0
43	o	90	LYS	3.0
67	D	186	LYS	3.0
7	AT	82	U	3.0
11	c6	4	VAL	3.0
33	u	131	VAL	3.0
61	s0	58	VAL	3.0
77	s5	33	VAL	3.0
3	CJ	108	ARG	3.0
6	H	88	ARG	3.0
19	k	369	ARG	3.0
58	A	25	C	3.0
58	A	772	G	3.0
65	d8	49	ARG	3.0
77	s5	92	ARG	3.0
11	R	10	PHE	3.0
19	CE	310	GLY	3.0
53	d4	65	GLY	3.0
61	B	107	PHE	3.0
11	R	139	GLN	3.0
14	DE	23	TYR	3.0
54	CT	78	TYR	3.0
59	b	73	TYR	3.0
60	CV	65	TYR	3.0
70	E	18	TYR	3.0
5	Q	125	PRO	3.0
77	G	172	ILE	3.0
9	q	146	LEU	3.0
24	K	7	THR	3.0
11	c6	32	ASN	3.0
31	CG	7	ALA	3.0
44	CQ	191	ALA	3.0
59	b	49	ALA	3.0
61	s0	14	ALA	3.0
70	E	145	ALA	3.0
32	AG	3	GLU	3.0
17	c7	9	VAL	3.0
21	s	129	VAL	3.0
47	c4	48	VAL	3.0
53	Z	69	SER	3.0
53	d4	24	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
71	e0	62	VAL	3.0
11	c6	120	ASP	2.9
18	s8	44	HIS	2.9
18	J	195	ARG	2.9
20	AE	62	ARG	2.9
23	T	126	ARG	2.9
34	AN	106	ARG	2.9
60	2	18	ASP	2.9
5	c5	138	PHE	2.9
2	AB	30	GLY	2.9
44	CQ	69	GLY	2.9
30	L	62	GLN	2.9
58	A	768	C	2.9
1	AS	1	G	2.9
33	u	129	TYR	2.9
53	d4	30	PRO	2.9
53	d4	118	ILE	2.9
58	sR	1717	G	2.9
44	w	58	LEU	2.9
60	CV	128	LEU	2.9
75	1	2702	A	2.9
8	DD	33	LYS	2.9
52	p0	186	THR	2.9
48	CR	122	ALA	2.9
53	Z	130	ALA	2.9
55	i	164	ALA	2.9
36	c1	37	ASN	2.9
31	m	52	VAL	2.9
3	p	195	SER	2.9
47	P	125	SER	2.9
51	y	174	ARG	2.9
57	CU	32	SER	2.9
77	G	206	SER	2.9
5	Q	89	MET	2.9
42	c3	72	MET	2.9
21	s	168	ASP	2.9
57	CU	134	ASP	2.9
58	A	242	U	2.9
58	sR	758	U	2.9
30	L	59	PHE	2.9
63	5	91	ASP	2.9
10	DK	78	GLY	2.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
11	R	130	GLY	2.9
13	j	236	GLY	2.9
18	s8	39	GLY	2.9
53	d4	67	GLY	2.9
70	s3	180	GLY	2.9
33	CO	41	GLN	2.9
60	CV	75	ILE	2.9
67	D	85	PRO	2.9
15	r	200	LEU	2.9
5	c5	100	LYS	2.9
24	K	12	TYR	2.9
25	l	187	LEU	2.9
27	CN	51	LEU	2.9
39	v	148	TYR	2.9
41	W	11	LEU	2.9
69	CY	54	LEU	2.9
70	E	4	LEU	2.9
78	h	73	LEU	2.9
30	L	25	LYS	2.9
73	F	161	LYS	2.9
34	AN	107	ALA	2.9
47	P	86	THR	2.9
49	AQ	92	ALA	2.9
52	p0	106	ALA	2.9
9	q	11	GLU	2.9
16	AK	70	VAL	2.9
74	g	150	VAL	2.9
75	AR	747	A	2.9
79	DB	114	VAL	2.9
13	CD	72	ARG	2.9
18	J	18	ARG	2.9
61	s0	54	TRP	2.9
71	e0	56	MET	2.9
20	DF	76	SER	2.9
51	CS	5	HIS	2.9
50	Y	107	PHE	2.9
6	s6	89	ASP	2.9
58	A	1285	U	2.9
67	s2	75	GLY	2.9
70	E	183	GLY	2.9
70	s3	140	GLY	2.9
9	q	8	GLN	2.9

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Mol	Chain	Res	Type	RSRZ
15	CL	36	LEU	2.9
18	s8	58	LEU	2.9
18	s8	101	ILE	2.9
47	c4	62	LEU	2.9
61	B	170	ILE	2.9
18	s8	17	LYS	2.9
39	CP	204	LYS	2.9
59	b	37	LYS	2.9
77	G	84	LYS	2.9
3	p	130	TYR	2.9
68	e	14	TYR	2.9
5	c5	101	ALA	2.9
11	c6	20	ALA	2.9
15	r	219	ALA	2.9
53	d4	134	ALA	2.9
59	d6	6	ALA	2.9
27	CN	144	THR	2.9
31	m	144	VAL	2.9
54	CT	55	VAL	2.9
59	b	21	VAL	2.9
61	B	50	VAL	2.9
4	DJ	105	ARG	2.9
5	c5	83	MET	2.9
31	m	35	ARG	2.9
35	V	57	ARG	2.9
55	i	88	ARG	2.9
75	1	1866	C	2.9
75	1	2726	C	2.9
58	A	1777	G	2.9
77	G	184	PHE	2.9
18	J	136	SER	2.9
8	AC	22	LYS	2.9
11	c6	12	LYS	2.9
11	c6	95	LYS	2.9
12	s7	176	LEU	2.9
28	AM	51	ILE	2.9
37	n	145	LEU	2.9
53	Z	18	LEU	2.9
59	b	41	ILE	2.9
59	b	98	PRO	2.9
60	CV	41	ASP	2.9
61	s0	57	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
53	Z	22	GLN	2.9
18	J	147	ALA	2.9
29	U	33	TYR	2.9
38	AH	75	ALA	2.9
67	D	197	TYR	2.9
70	s3	193	ALA	2.9
6	H	180	THR	2.9
9	CK	44	THR	2.9
21	s	171	VAL	2.9
22	DM	20	VAL	2.9
23	T	38	VAL	2.9
55	i	87	THR	2.9
61	s0	86	VAL	2.9
67	s2	146	THR	2.9
78	h	312	VAL	2.9
79	DB	75	VAL	2.9
4	AI	64	GLU	2.9
11	R	40	GLU	2.9
11	c6	68	ARG	2.9
24	K	147	MET	2.9
25	l	69	ARG	2.9
64	s1	229	MET	2.9
70	E	135	GLU	2.9
71	f	37	ARG	2.9
13	CD	140	ASN	2.9
60	CV	90	ASN	2.9
23	T	55	HIS	2.8
61	B	7	PHE	2.8
62	c	32	PHE	2.8
7	AT	79	A	2.8
58	A	471	A	2.8
58	sR	1027	A	2.8
3	CJ	122	LYS	2.8
12	s7	98	ILE	2.8
18	s8	41	LYS	2.8
24	s9	50	SER	2.8
42	c3	71	ILE	2.8
44	w	66	LYS	2.8
49	DR	28	LYS	2.8
50	Y	14	LYS	2.8
62	c	62	ILE	2.8
64	s1	56	SER	2.8

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Mol	Chain	Res	Type	RSRZ
64	s1	61	LEU	2.8
72	CZ	142	ILE	2.8
73	F	12	LEU	2.8
73	F	45	ILE	2.8
73	F	246	LEU	2.8
37	CH	157	GLN	2.8
58	A	1486	G	2.8
75	1	1028	U	2.8
46	X	108	ALA	2.8
57	0	116	ALA	2.8
11	R	49	TYR	2.8
29	U	18	TYR	2.8
29	U	37	VAL	2.8
46	X	6	VAL	2.8
77	s5	149	VAL	2.8
6	s6	163	THR	2.8
12	I	105	THR	2.8
25	CF	188	ARG	2.8
70	E	27	ARG	2.8
5	c5	23	GLU	2.8
36	M	42	PHE	2.8
60	2	77	ASN	2.8
5	c5	8	LYS	2.8
11	R	127	LYS	2.8
13	j	234	LYS	2.8
46	X	19	LYS	2.8
53	Z	128	LYS	2.8
55	i	83	LYS	2.8
57	0	161	LYS	2.8
74	g	82	LYS	2.8
30	c0	46	LEU	2.8
35	V	103	ILE	2.8
49	AQ	31	ILE	2.8
52	p0	25	LEU	2.8
53	d4	66	GLY	2.8
65	d8	24	GLY	2.8
66	CX	3	GLY	2.8
68	d9	31	ILE	2.8
77	G	105	GLY	2.8
27	CN	150	PRO	2.8
7	AT	111	A	2.8
58	sR	381	C	2.8

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Mol	Chain	Res	Type	RSRZ
9	CK	177	ASP	2.8
63	CW	18	ASP	2.8
73	F	143	ASP	2.8
11	R	20	ALA	2.8
15	CL	127	ALA	2.8
28	AM	2	ALA	2.8
52	p0	107	ALA	2.8
54	CT	131	ALA	2.8
58	A	260	U	2.8
19	CE	261	MET	2.8
52	p0	38	MET	2.8
65	d8	55	VAL	2.8
6	s6	215	ARG	2.8
8	DD	29	TYR	2.8
10	DK	56	ARG	2.8
11	c6	66	ARG	2.8
39	CP	6	TYR	2.8
57	0	13	ARG	2.8
38	AH	71	THR	2.8
58	A	337	G	2.8
70	E	170	THR	2.8
73	F	91	THR	2.8
6	H	145	PHE	2.8
68	d9	8	PHE	2.8
8	AC	33	LYS	2.8
20	AE	61	LYS	2.8
53	Z	123	LYS	2.8
60	CV	60	LYS	2.8
73	F	37	LYS	2.8
5	c5	25	LEU	2.8
6	H	4	ASN	2.8
25	CF	182	LEU	2.8
29	U	22	LEU	2.8
29	U	135	ILE	2.8
44	CQ	84	LEU	2.8
60	CV	45	ASN	2.8
60	2	91	LEU	2.8
65	d8	53	ILE	2.8
76	DA	104	LEU	2.8
59	d6	14	GLY	2.8
31	CG	19	PRO	2.8
46	X	95	PRO	2.8

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Mol	Chain	Res	Type	RSRZ
23	T	2	SER	2.8
23	c8	136	GLN	2.8
46	X	39	GLN	2.8
52	p0	68	SER	2.8
58	A	771	A	2.8
61	B	40	ALA	2.8
64	s1	57	ALA	2.8
6	s6	162	VAL	2.8
55	i	154	VAL	2.8
66	6	136	VAL	2.8
10	DK	53	TYR	2.8
3	CJ	104	GLU	2.8
5	c5	50	THR	2.8
55	i	167	GLU	2.8
77	G	147	THR	2.8
2	AB	77	LYS	2.8
3	p	193	LYS	2.8
4	DJ	119	LYS	2.8
8	DD	28	LYS	2.8
9	q	2	LYS	2.8
37	n	8	LYS	2.8
17	S	109	LEU	2.8
19	k	47	LEU	2.8
5	c5	85	ILE	2.8
9	q	144	ILE	2.8
75	AR	24	G	2.8
78	h	310	ILE	2.8
6	s6	146	GLY	2.8
73	F	167	GLY	2.8
13	j	210	PRO	2.8
65	d8	47	PRO	2.8
79	DB	70	PRO	2.8
9	CK	1	MET	2.8
15	r	211	ARG	2.8
28	DN	2	ALA	2.8
29	U	83	ALA	2.8
31	m	291	ALA	2.8
35	V	95	ALA	2.8
38	DI	39	ALA	2.8
50	Y	145	SER	2.8
66	CX	14	SER	2.8
78	Rb	8	VAL	2.8

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
29	U	131	ASP	2.8
60	2	41	ASP	2.8
58	A	769	A	2.8
58	A	1356	U	2.8
58	A	1537	C	2.8
64	C	133	TYR	2.8
68	d9	34	TYR	2.8
17	S	8	THR	2.8
29	U	103	LYS	2.8
29	c9	103	LYS	2.8
42	O	9	LYS	2.8
47	P	93	THR	2.8
69	CY	60	LYS	2.8
74	g	116	LYS	2.8
78	Rb	168	THR	2.8
12	I	58	LEU	2.8
12	I	153	LEU	2.8
19	CE	161	LEU	2.8
64	C	120	LEU	2.8
13	CD	225	ILE	2.8
70	s3	115	ILE	2.8
78	Rb	131	ILE	2.8
71	f	6	GLY	2.8
7	4	25	G	2.7
75	AR	1421	G	2.7
75	1	1784	G	2.7
19	k	42	ALA	2.7
19	CE	10	ARG	2.7
28	DN	45	ARG	2.7
35	V	117	VAL	2.7
40	DP	12	ARG	2.7
44	w	3	VAL	2.7
47	c4	132	ARG	2.7
54	CT	2	ALA	2.7
59	d6	84	VAL	2.7
60	CV	113	ALA	2.7
71	f	42	ARG	2.7
71	e0	47	VAL	2.7
78	Rb	58	VAL	2.7
6	H	82	SER	2.7
11	c6	141	SER	2.7
53	Z	2	SER	2.7

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Mol	Chain	Res	Type	RSRZ
8	AC	23	LYS	2.7
13	CD	221	LYS	2.7
18	s8	37	LYS	2.7
30	c0	26	ASP	2.7
73	s4	7	LYS	2.7
3	CJ	49	TYR	2.7
11	c6	49	TYR	2.7
12	I	15	GLU	2.7
10	AJ	2	THR	2.7
24	K	14	THR	2.7
30	c0	49	LEU	2.7
36	c1	42	PHE	2.7
38	AH	6	THR	2.7
53	Z	28	LEU	2.7
58	A	173	A	2.7
58	sR	320	U	2.7
58	sR	1217	A	2.7
66	CX	17	LEU	2.7
66	6	49	LEU	2.7
75	1	1191	U	2.7
79	AA	66	THR	2.7
6	H	73	ILE	2.7
24	K	45	ILE	2.7
33	u	39	ILE	2.7
60	2	160	ILE	2.7
62	c	49	HIS	2.7
75	AR	1192	C	2.7
75	AR	1562	C	2.7
42	O	2	GLY	2.7
73	s4	29	PRO	2.7
11	R	32	ASN	2.7
78	Rb	134	TRP	2.7
11	c6	114	ARG	2.7
39	v	41	ARG	2.7
66	CX	45	ARG	2.7
78	Rb	102	ARG	2.7
2	AB	66	ALA	2.7
5	c5	34	VAL	2.7
6	H	179	VAL	2.7
17	c7	62	GLN	2.7
29	U	104	VAL	2.7
65	d	15	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
67	D	179	VAL	2.7
70	s3	80	ALA	2.7
73	F	105	VAL	2.7
77	s5	78	ALA	2.7
36	M	43	LYS	2.7
54	CT	53	LYS	2.7
65	d	45	LYS	2.7
78	Rb	137	LYS	2.7
58	sR	1720	G	2.7
11	c6	28	LEU	2.7
17	S	113	LEU	2.7
21	s	11	ASP	2.7
19	CE	145	GLU	2.7
38	DI	7	PHE	2.7
44	w	57	PHE	2.7
63	CW	79	LEU	2.7
72	CZ	38	LEU	2.7
72	CZ	108	LEU	2.7
4	DJ	101	THR	2.7
11	c6	118	ILE	2.7
13	j	243	THR	2.7
18	J	60	ILE	2.7
20	AE	69	TYR	2.7
25	l	74	ILE	2.7
41	W	53	TYR	2.7
67	D	96	THR	2.7
67	D	178	ILE	2.7
76	9	19	TYR	2.7
34	AN	108	THR	2.7
58	A	1604	U	2.7
58	sR	764	U	2.7
6	H	86	PRO	2.7
18	J	80	GLY	2.7
35	V	71	PRO	2.7
61	B	166	GLY	2.7
64	s1	53	GLY	2.7
66	6	3	GLY	2.7
66	6	43	GLY	2.7
70	s3	199	PRO	2.7
75	AR	2689	A	2.7
75	1	2208	A	2.7
78	Rb	97	GLY	2.7

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Mol	Chain	Res	Type	RSRZ
60	2	79	MET	2.7
58	sR	1772	C	2.7
75	1	1107	C	2.7
75	1	1745	C	2.7
75	1	1802	C	2.7
17	S	3	ARG	2.7
39	CP	20	ARG	2.7
54	CT	62	ARG	2.7
16	AK	88	ALA	2.7
24	K	101	VAL	2.7
35	V	56	VAL	2.7
60	CV	24	ALA	2.7
62	c	51	GLN	2.7
66	CX	6	ALA	2.7
70	E	149	ALA	2.7
72	8	47	ALA	2.7
78	h	303	ALA	2.7
6	H	2	LYS	2.7
12	I	101	LYS	2.7
19	k	66	LYS	2.7
23	T	36	LYS	2.7
27	t	68	LYS	2.7
65	d8	45	LYS	2.7
12	s7	92	PHE	2.7
24	K	93	LEU	2.7
45	AP	36	PHE	2.7
61	B	102	PHE	2.7
61	B	149	LEU	2.7
73	F	131	LEU	2.7
4	AI	8	GLU	2.7
19	k	227	GLU	2.7
24	s9	52	ILE	2.7
24	K	143	ILE	2.7
48	CR	67	ILE	2.7
56	a	53	GLU	2.7
64	s1	189	ILE	2.7
65	d8	50	GLU	2.7
70	E	184	ILE	2.7
6	H	169	TYR	2.7
21	CM	168	ASP	2.7
32	AG	40	ASP	2.7
13	j	252	THR	2.7

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Mol	Chain	Res	Type	RSRZ
39	CP	126	THR	2.7
67	D	39	THR	2.7
58	sR	1584	G	2.7
75	AR	3197	G	2.7
3	p	185	ARG	2.7
23	T	120	ARG	2.7
58	sR	1026	A	2.7
70	s3	146	ARG	2.7
75	AR	2093	A	2.7
75	AR	2404	A	2.7
3	CJ	103	ALA	2.7
3	CJ	198	ALA	2.7
5	c5	94	VAL	2.7
6	H	224	ALA	2.7
12	s7	111	LYS	2.7
13	CD	230	VAL	2.7
15	r	195	ALA	2.7
25	CF	104	LYS	2.7
29	U	50	ALA	2.7
29	U	59	ALA	2.7
35	d0	51	VAL	2.7
38	DI	36	LYS	2.7
53	Z	129	VAL	2.7
62	d7	2	VAL	2.7
63	5	74	LYS	2.7
67	s2	179	VAL	2.7
73	F	129	VAL	2.7
67	s2	201	ASN	2.7
75	1	1574	C	2.7
76	9	98	ASN	2.7
78	h	162	ALA	2.7
12	s7	108	GLN	2.7
24	K	139	GLN	2.7
18	s8	193	LEU	2.7
53	Z	125	LEU	2.7
73	F	207	LEU	2.7
18	s8	65	PHE	2.7
70	E	25	PHE	2.7
13	CD	15	ILE	2.7
44	w	79	ILE	2.7
59	d6	44	ILE	2.7
79	DB	46	ILE	2.7

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Mol	Chain	Res	Type	RSRZ
6	H	168	THR	2.7
23	T	34	THR	2.7
29	U	91	TYR	2.7
47	P	124	ASP	2.7
72	8	28	THR	2.7
78	h	12	THR	2.7
1	3	16	U	2.7
23	c8	145	ARG	2.6
58	sR	782	U	2.7
62	c	64	CYS	2.6
75	1	1014	U	2.7
12	I	148	LYS	2.6
31	CG	258	LYS	2.6
78	h	118	LYS	2.6
3	CJ	197	VAL	2.6
7	4	51	G	2.6
35	d0	79	TRP	2.6
74	g	147	VAL	2.6
75	1	1861	G	2.6
49	DR	25	GLN	2.6
6	s6	77	LEU	2.6
6	s6	184	LEU	2.6
24	s9	118	LEU	2.6
24	K	49	LEU	2.6
57	0	106	LEU	2.6
60	2	27	LEU	2.6
64	C	218	LEU	2.6
21	s	104	PHE	2.6
77	G	48	PHE	2.6
3	CJ	36	ILE	2.6
6	H	32	ILE	2.6
29	U	65	ILE	2.6
31	CG	290	ILE	2.6
35	d0	86	ILE	2.6
58	A	1192	C	2.6
15	r	207	GLU	2.6
55	i	159	GLU	2.6
19	CE	363	SER	2.6
35	d0	66	SER	2.6
55	i	45	SER	2.6
3	p	158	ASP	2.6
13	j	208	ASP	2.6

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Mol	Chain	Res	Type	RSRZ
23	T	142	GLY	2.6
29	U	66	TYR	2.6
30	c0	72	GLY	2.6
57	0	172	TYR	2.6
71	e0	35	TYR	2.6
64	s1	89	ASP	2.6
6	H	154	ARG	2.6
31	m	218	ARG	2.6
40	DP	18	ARG	2.6
23	T	56	LYS	2.6
64	s1	55	LYS	2.6
3	CJ	116	VAL	2.6
7	AT	22	U	2.6
17	c7	110	VAL	2.6
25	l	354	VAL	2.6
27	t	138	VAL	2.6
60	2	25	VAL	2.6
70	E	39	VAL	2.6
23	T	102	ALA	2.6
23	T	146	ALA	2.6
29	U	62	ALA	2.6
57	0	31	ALA	2.6
59	b	56	ALA	2.6
73	F	55	ALA	2.6
78	h	119	ALA	2.6
38	AH	57	LEU	2.6
49	AQ	22	LEU	2.6
50	Y	34	LEU	2.6
78	Rb	7	LEU	2.6
6	H	101	ILE	2.6
24	s9	47	PHE	2.6
35	V	41	ILE	2.6
43	o	220	PHE	2.6
60	CV	160	ILE	2.6
67	s2	53	ILE	2.6
73	F	195	ILE	2.6
75	AR	746	A	2.6
58	A	1605	G	2.6
3	CJ	246	MET	2.6
3	p	228	GLU	2.6
76	9	127	GLU	2.6
58	A	1426	C	2.6

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Mol	Chain	Res	Type	RSRZ
58	sR	1457	C	2.6
75	l	1556	C	2.6
9	q	88	TYR	2.6
9	q	131	GLY	2.6
11	R	115	THR	2.6
13	j	223	SER	2.6
17	S	53	TYR	2.6
19	CE	309	GLY	2.6
21	s	149	GLY	2.6
31	CG	44	TYR	2.6
35	d0	70	THR	2.6
39	v	183	THR	2.6
44	w	44	SER	2.6
72	CZ	33	ARG	2.6
73	F	78	THR	2.6
78	h	246	SER	2.6
12	I	111	LYS	2.6
29	U	89	ARG	2.6
31	CG	41	LYS	2.6
47	P	136	ARG	2.6
51	y	151	ARG	2.6
78	Rb	117	LYS	2.6
12	s7	73	VAL	2.6
17	S	88	VAL	2.6
27	t	125	VAL	2.6
60	CV	63	VAL	2.6
61	s0	50	VAL	2.6
10	DK	23	ALA	2.6
11	c6	3	ALA	2.6
11	c6	91	ALA	2.6
27	CN	135	ALA	2.6
29	c9	50	ALA	2.6
33	u	33	ALA	2.6
38	DI	82	ALA	2.6
53	Z	126	ALA	2.6
61	s0	61	ALA	2.6
63	CW	46	ALA	2.6
69	CY	118	ALA	2.6
14	DE	16	LEU	2.6
31	m	131	LEU	2.6
39	v	22	LEU	2.6
44	CQ	58	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
50	Y	9	LEU	2.6
73	F	44	LEU	2.6
75	1	2873	U	2.6
13	j	217	GLN	2.6
13	CD	77	ILE	2.6
31	m	260	PHE	2.6
43	CI	92	ILE	2.6
62	d7	79	PHE	2.6
17	S	101	ASN	2.6
61	B	21	ASN	2.6
31	m	133	GLU	2.6
58	A	770	A	2.6
29	U	90	PRO	2.6
60	CV	132	PRO	2.6
63	5	40	HIS	2.6
6	H	219	ARG	2.6
17	c7	64	GLY	2.6
19	CE	5	LYS	2.6
24	s9	132	ARG	2.6
40	DP	11	ARG	2.6
61	B	134	LYS	2.6
70	E	141	LYS	2.6
70	E	146	ARG	2.6
73	F	187	ARG	2.6
77	s5	150	GLY	2.6
79	DB	21	LYS	2.6
23	T	141	THR	2.6
11	c6	61	SER	2.6
17	c7	53	TYR	2.6
30	c0	66	TYR	2.6
31	m	30	TYR	2.6
39	v	62	TYR	2.6
53	d4	121	THR	2.6
71	f	48	THR	2.6
58	A	237	C	2.6
58	A	1596	C	2.6
58	sR	1784	C	2.6
75	AR	2594	C	2.6
75	1	1951	C	2.6
36	c1	64	VAL	2.6
38	AH	72	VAL	2.6
3	p	93	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
33	u	135	LEU	2.6
35	V	34	LEU	2.6
39	CP	113	LEU	2.6
43	CI	202	LEU	2.6
53	d4	125	LEU	2.6
55	i	117	LEU	2.6
56	d5	75	LEU	2.6
73	F	9	LEU	2.6
73	F	180	LEU	2.6
77	G	175	LEU	2.6
79	AA	51	LEU	2.6
18	s8	38	ILE	2.6
29	U	124	ILE	2.6
70	s3	158	ILE	2.6
75	1	2975	U	2.6
44	w	73	PHE	2.6
53	d4	58	PHE	2.6
60	CV	56	PHE	2.6
30	c0	28	ASN	2.6
46	d2	70	ASN	2.6
77	s5	100	ASN	2.6
12	s7	13	PRO	2.6
25	CF	185	LYS	2.6
13	j	242	ARG	2.6
42	c3	5	HIS	2.6
55	i	103	LYS	2.6
55	i	162	GLU	2.6
48	x	126	ARG	2.6
53	d4	61	ARG	2.6
57	CU	20	PRO	2.6
59	b	4	LYS	2.6
73	F	11	ARG	2.6
77	G	164	PRO	2.6
30	c0	19	GLY	2.6
58	sR	789	A	2.6
75	1	747	A	2.6
75	1	1027	A	2.6
6	H	163	THR	2.6
25	l	103	THR	2.6
36	c1	78	THR	2.6
60	CV	84	TYR	2.6
77	G	27	THR	2.6

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Mol	Chain	Res	Type	RSRZ
3	p	197	VAL	2.6
9	CK	19	SER	2.6
41	W	86	SER	2.6
57	CU	103	VAL	2.6
59	b	88	SER	2.6
62	c	2	VAL	2.6
67	D	103	VAL	2.6
24	K	128	LEU	2.6
31	CG	36	LEU	2.6
51	CS	138	LEU	2.6
51	y	138	LEU	2.6
60	2	85	LEU	2.6
60	2	125	ALA	2.5
63	CW	69	ALA	2.5
76	DA	35	LEU	2.6
78	h	78	ALA	2.5
18	s8	27	PHE	2.5
24	s9	71	PHE	2.5
50	d3	38	PHE	2.5
78	h	61	PHE	2.5
54	z	68	GLN	2.5
77	s5	46	TRP	2.5
3	p	51	LYS	2.5
12	s7	175	LYS	2.5
30	L	39	ASN	2.5
76	DA	87	LYS	2.5
5	c5	87	PRO	2.5
13	CD	6	ARG	2.5
60	CV	5	HIS	2.5
61	B	97	PRO	2.5
70	E	43	PRO	2.5
47	P	88	GLY	2.5
78	h	11	GLY	2.5
5	c5	76	VAL	2.5
19	k	235	THR	2.5
23	T	140	THR	2.5
31	m	28	THR	2.5
36	M	6	THR	2.5
36	M	7	VAL	2.5
43	CI	148	VAL	2.5
60	CV	40	VAL	2.5
70	E	85	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
77	G	138	THR	2.5
77	s5	70	VAL	2.5
24	K	118	LEU	2.5
25	l	182	LEU	2.5
70	s3	86	LEU	2.5
6	s6	192	ALA	2.5
8	DD	57	ALA	2.5
19	k	156	SER	2.5
29	U	60	SER	2.5
29	c9	11	ALA	2.5
36	c1	144	ALA	2.5
38	AH	82	ALA	2.5
41	d1	86	SER	2.5
61	B	129	ASP	2.5
70	s3	191	ASP	2.5
76	9	53	ASP	2.5
9	CK	186	PHE	2.5
11	R	60	PHE	2.5
15	r	166	ILE	2.5
35	V	20	ILE	2.5
78	Rb	123	ILE	2.5
6	H	65	GLN	2.5
15	r	220	GLN	2.5
57	CU	138	GLN	2.5
64	C	117	TRP	2.5
58	A	1467	C	2.5
3	p	181	LYS	2.5
44	CQ	60	LYS	2.5
51	y	161	LYS	2.5
58	A	142	G	2.5
58	sR	1340	U	2.5
59	b	28	LYS	2.5
74	g	90	LYS	2.5
16	DL	57	HIS	2.5
21	CM	8	PRO	2.5
57	CU	22	PRO	2.5
72	8	116	PRO	2.5
13	CD	213	GLY	2.5
24	s9	33	GLU	2.5
32	AG	46	GLY	2.5
66	CX	47	ASN	2.5
70	E	23	GLU	2.5

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Mol	Chain	Res	Type	RSRZ
5	Q	30	THR	2.5
5	c5	36	LEU	2.5
10	DK	57	LEU	2.5
31	m	153	THR	2.5
51	y	186	VAL	2.5
53	d4	35	VAL	2.5
66	6	46	LEU	2.5
78	h	34	LEU	2.5
78	Rb	167	VAL	2.5
19	k	6	TYR	2.5
30	L	41	TYR	2.5
49	AQ	69	TYR	2.5
21	s	169	ALA	2.5
45	AP	30	ALA	2.5
77	s5	26	ALA	2.5
16	DL	87	SER	2.5
17	S	38	ILE	2.5
19	k	2	SER	2.5
28	AM	27	ILE	2.5
30	L	43	ILE	2.5
54	CT	59	SER	2.5
56	d5	71	ILE	2.5
67	s2	131	ILE	2.5
67	s2	164	SER	2.5
77	s5	47	SER	2.5
1	3	17	A	2.5
23	T	128	PHE	2.5
24	K	157	ASP	2.5
29	c9	8	ASP	2.5
31	m	223	PHE	2.5
53	d4	72	PHE	2.5
56	d5	67	ASP	2.5
58	sR	41	A	2.5
59	b	33	ASP	2.5
67	s2	66	PHE	2.5
38	DI	3	GLN	2.5
52	p0	23	LYS	2.5
6	s6	142	ARG	2.5
13	CD	241	ARG	2.5
18	J	22	ARG	2.5
46	d2	117	ARG	2.5
73	F	3	ARG	2.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
6	s6	135	PRO	2.5
6	s6	173	PRO	2.5
17	S	86	PRO	2.5
17	c7	35	CYS	2.5
17	c7	65	PRO	2.5
52	p0	198	PRO	2.5
58	sR	718	U	2.5
75	AR	25	U	2.5
75	AR	2996	U	2.5
75	1	217	U	2.5
23	c8	55	HIS	2.5
13	CD	13	GLY	2.5
29	c9	32	GLY	2.5
58	sR	1159	C	2.5
50	Y	89	ASN	2.5
63	CW	44	GLU	2.5
74	g	127	GLY	2.5
12	I	99	LEU	2.5
25	l	179	LEU	2.5
47	c4	28	VAL	2.5
70	E	202	LEU	2.5
70	s3	123	VAL	2.5
75	AR	1493	G	2.5
78	Rb	9	LEU	2.5
15	r	102	MET	2.5
25	l	310	THR	2.5
44	CQ	62	THR	2.5
57	0	162	THR	2.5
67	D	117	THR	2.5
19	k	135	ALA	2.5
28	DN	3	ALA	2.5
30	L	66	TYR	2.5
63	5	12	ALA	2.5
73	s4	28	ALA	2.5
78	h	253	ALA	2.5
78	Rb	119	ALA	2.5
29	U	100	ILE	2.5
31	m	231	ILE	2.5
55	i	161	ILE	2.5
63	CW	28	PHE	2.5
79	DB	92	PHE	2.5
3	p	66	SER	2.5

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Mol	Chain	Res	Type	RSRZ
4	DJ	115	LYS	2.5
11	c6	15	SER	2.5
39	v	145	ASP	2.5
56	d5	70	LYS	2.5
64	C	109	LYS	2.5
30	c0	17	GLN	2.5
58	sR	579	A	2.5
58	sR	757	A	2.5
75	1	1865	A	2.5
47	c4	52	ARG	2.5
59	b	92	ARG	2.5
77	s5	81	ARG	2.5
73	s4	43	PRO	2.5
5	c5	117	GLY	2.5
60	CV	46	GLY	2.5
75	AR	748	U	2.5
75	1	1694	U	2.5
75	1	3079	U	2.5
77	G	151	GLY	2.5
12	I	154	LEU	2.5
67	D	41	LEU	2.5
78	Rb	252	LEU	2.5
11	R	19	VAL	2.5
11	R	69	VAL	2.5
11	c6	78	VAL	2.5
23	c8	22	VAL	2.5
53	Z	5	VAL	2.5
76	9	8	VAL	2.5
77	G	24	VAL	2.5
78	Rb	104	VAL	2.5
75	AR	893	C	2.5
13	j	17	THR	2.5
15	CL	126	ALA	2.5
21	s	155	THR	2.5
35	V	45	ALA	2.5
6	H	61	PHE	2.5
19	k	123	TYR	2.5
47	P	23	PHE	2.5
70	E	87	TYR	2.5
71	f	40	TYR	2.5
4	DJ	107	LYS	2.4
6	H	74	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
14	DE	32	LYS	2.4
25	CF	186	LYS	2.4
29	c9	84	LYS	2.4
30	c0	24	LYS	2.4
32	AG	92	LYS	2.4
54	CT	19	LYS	2.4
58	sR	1594	G	2.4
67	s2	64	LYS	2.4
68	d9	54	LYS	2.4
76	9	14	LYS	2.4
16	DL	26	SER	2.4
6	H	190	GLN	2.4
32	AG	48	ARG	2.4
60	CV	116	ARG	2.4
14	DE	49	PRO	2.4
58	A	217	A	2.4
58	A	1151	A	2.4
19	CE	245	GLY	2.4
53	Z	65	GLY	2.4
11	R	28	LEU	2.4
14	AD	104	LEU	2.4
24	s9	59	LEU	2.4
24	s9	93	LEU	2.4
35	d0	93	LEU	2.4
53	d4	51	GLU	2.4
54	z	89	LEU	2.4
56	a	83	LEU	2.4
60	2	94	GLU	2.4
60	2	118	GLU	2.4
31	m	159	VAL	2.4
54	CT	51	VAL	2.4
75	1	2996	U	2.4
6	s6	175	ILE	2.4
11	R	18	ALA	2.4
11	c6	24	ALA	2.4
11	c6	80	ALA	2.4
14	DE	10	ILE	2.4
43	CI	36	ALA	2.4
45	DQ	81	ALA	2.4
66	CX	13	ILE	2.4
67	s2	115	ILE	2.4
5	c5	9	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
23	c8	108	LYS	2.4
31	m	261	THR	2.4
36	c1	96	LYS	2.4
37	CH	150	LYS	2.4
53	d4	11	LYS	2.4
54	CT	56	THR	2.4
60	2	56	PHE	2.4
67	s2	98	PHE	2.4
68	d9	52	PHE	2.4
63	5	78	TYR	2.4
75	1	2664	C	2.4
27	CN	174	ARG	2.4
4	DJ	99	GLN	2.4
5	c5	136	SER	2.4
18	s8	20	GLN	2.4
18	J	149	SER	2.4
24	K	15	PRO	2.4
27	t	98	ASP	2.4
33	u	4	ASP	2.4
73	F	24	SER	2.4
55	i	54	PRO	2.4
58	sR	1412	G	2.4
75	1	2973	G	2.4
78	Rb	30	PRO	2.4
5	c5	129	GLY	2.4
8	AC	7	HIS	2.4
20	AE	73	LEU	2.4
23	c8	61	LEU	2.4
25	CF	311	HIS	2.4
64	C	217	LEU	2.4
65	d8	16	LEU	2.4
66	6	69	LEU	2.4
73	s4	186	GLY	2.4
77	s5	105	GLY	2.4
5	c5	93	VAL	2.4
19	k	114	VAL	2.4
35	V	83	GLU	2.4
53	Z	100	VAL	2.4
60	CV	33	VAL	2.4
64	C	103	MET	2.4
64	C	215	VAL	2.4
65	d8	15	VAL	2.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
70	E	38	GLU	2.4
73	F	208	VAL	2.4
73	s4	140	VAL	2.4
79	DB	24	VAL	2.4
75	AR	1419	A	2.4
75	1	1200	A	2.4
9	q	10	ILE	2.4
46	X	110	ILE	2.4
58	sR	558	U	2.4
58	sR	1060	U	2.4
60	2	140	ILE	2.4
61	s0	173	ILE	2.4
69	7	63	ILE	2.4
75	AR	2723	U	2.4
11	R	95	LYS	2.4
23	c8	80	LYS	2.4
27	CN	6	ASN	2.4
39	CP	5	LYS	2.4
39	v	204	LYS	2.4
59	d6	35	ALA	2.4
64	C	194	ASN	2.4
70	E	165	ASN	2.4
70	s3	147	ALA	2.4
13	j	16	PHE	2.4
19	k	379	PHE	2.4
23	T	33	THR	2.4
31	m	18	THR	2.4
4	DJ	70	TYR	2.4
6	H	48	TYR	2.4
18	J	8	ARG	2.4
59	b	22	ARG	2.4
64	C	152	ARG	2.4
73	s4	256	ARG	2.4
1	AS	10	C	2.4
75	1	1693	C	2.4
39	v	138	GLN	2.4
17	S	96	SER	2.4
3	CJ	169	LEU	2.4
6	s6	178	LEU	2.4
12	I	34	LEU	2.4
27	CN	52	ASP	2.4
53	d4	38	ASP	2.4

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Mol	Chain	Res	Type	RSRZ
62	c	74	SER	2.4
67	s2	200	SER	2.4
70	E	139	SER	2.4
27	t	51	LEU	2.4
4	DJ	3	GLY	2.4
12	I	122	HIS	2.4
18	J	112	TRP	2.4
64	C	110	LEU	2.4
3	p	164	VAL	2.4
11	R	31	VAL	2.4
24	s9	122	VAL	2.4
31	CG	217	GLU	2.4
35	V	100	VAL	2.4
44	CQ	23	VAL	2.4
53	d4	75	VAL	2.4
59	d6	21	VAL	2.4
11	R	43	ILE	2.4
14	DE	100	ILE	2.4
18	J	37	LYS	2.4
22	DM	27	ILE	2.4
42	O	37	ILE	2.4
58	A	175	G	2.4
58	A	1199	G	2.4
67	D	119	LYS	2.4
67	s2	178	ILE	2.4
75	AR	2216	G	2.4
75	1	2937	G	2.4
68	d9	33	LYS	2.4
77	G	90	ILE	2.4
79	DB	69	LYS	2.4
12	I	171	ALA	2.4
18	s8	57	ALA	2.4
27	CN	47	ALA	2.4
41	W	54	ALA	2.4
49	DR	51	ALA	2.4
38	AH	7	PHE	2.4
58	sR	769	A	2.4
59	b	77	CYS	2.4
13	j	215	ASN	2.4
75	AR	2509	U	2.4
24	s9	111	THR	2.4
70	E	46	THR	2.4

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Mol	Chain	Res	Type	RSRZ
72	8	37	THR	2.4
4	DJ	75	TYR	2.4
19	CE	270	ARG	2.4
24	K	171	ARG	2.4
32	AG	8	TYR	2.4
50	Y	29	TYR	2.4
59	b	82	ARG	2.4
59	d6	15	ARG	2.4
61	s0	110	TYR	2.4
63	CW	103	TYR	2.4
66	6	32	ARG	2.4
68	d9	14	TYR	2.4
31	m	32	GLN	2.4
38	AH	98	GLN	2.4
13	CD	180	LEU	2.4
29	U	76	LEU	2.4
30	c0	15	LEU	2.4
32	AG	102	LEU	2.4
38	AH	30	LEU	2.4
67	D	154	LEU	2.4
70	s3	11	LEU	2.4
26	DG	26	HIS	2.4
58	sR	1602	C	2.4
61	s0	92	HIS	2.4
75	AR	1016	C	2.4
75	1	2666	C	2.4
6	H	36	VAL	2.4
14	DE	89	VAL	2.4
20	AE	67	VAL	2.4
38	DI	35	VAL	2.4
70	E	138	VAL	2.4
20	AE	68	GLU	2.4
23	c8	60	GLU	2.4
12	s7	60	ILE	2.4
13	j	221	LYS	2.4
19	k	25	ILE	2.4
37	n	5	LYS	2.4
41	d1	42	GLU	2.4
42	c3	83	GLU	2.4
27	CN	95	ILE	2.4
39	CP	61	ILE	2.4
50	Y	137	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
59	d6	12	LYS	2.4
63	CW	13	LYS	2.4
63	CW	38	ILE	2.4
71	e0	15	LYS	2.4
77	G	188	LYS	2.4
77	s5	190	ILE	2.4
79	DB	111	LYS	2.4
73	s4	63	ALA	2.4
77	s5	43	PHE	2.4
6	H	31	ARG	2.4
17	S	67	ARG	2.4
17	S	106	THR	2.4
18	J	120	THR	2.4
23	c8	34	THR	2.4
23	c8	134	ARG	2.4
24	s9	79	ARG	2.4
28	DN	46	ARG	2.4
31	m	15	ARG	2.4
33	u	66	THR	2.4
38	DI	40	THR	2.4
58	A	1370	U	2.4
61	s0	6	THR	2.4
67	s2	198	THR	2.4
68	d9	40	ARG	2.4
70	E	190	ARG	2.4
70	s3	124	ARG	2.4
71	e0	37	ARG	2.4
75	AR	1561	G	2.4
75	1	1475	A	2.4
75	1	1878	G	2.4
77	G	100	ASN	2.4
58	sR	506	A	2.4
8	AC	29	TYR	2.3
15	CL	133	GLN	2.3
31	m	36	LEU	2.3
61	B	172	LEU	2.3
61	s0	182	LEU	2.3
73	F	35	PRO	2.3
38	DI	61	GLN	2.3
77	G	198	LEU	2.3
78	h	32	LEU	2.3
47	c4	46	MET	2.3

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Mol	Chain	Res	Type	RSRZ
4	AI	3	GLY	2.3
18	J	9	HIS	2.3
47	P	87	GLY	2.3
67	s2	93	GLY	2.3
71	e0	12	GLY	2.3
13	j	14	SER	2.3
18	s8	112	TRP	2.3
21	s	166	LYS	2.3
29	U	84	LYS	2.3
31	m	29	ASP	2.3
35	d0	53	LYS	2.3
37	CH	156	LYS	2.3
47	P	117	ASP	2.3
55	sM	78	ASP	2.3
55	i	166	LYS	2.3
57	CU	161	LYS	2.3
57	0	5	LYS	2.3
61	B	189	VAL	2.3
63	CW	17	VAL	2.3
73	s4	133	LYS	2.3
78	h	114	ASP	2.3
2	DC	148	ILE	2.3
9	q	179	ILE	2.3
21	s	14	ILE	2.3
23	c8	92	ILE	2.3
30	c0	71	GLU	2.3
49	DR	30	GLU	2.3
51	CS	148	GLU	2.3
61	B	98	ILE	2.3
70	s3	23	GLU	2.3
77	G	137	ILE	2.3
75	1	2230	C	2.3
13	j	182	ALA	2.3
28	AM	3	ALA	2.3
31	m	11	ALA	2.3
32	AG	83	ALA	2.3
36	c1	146	ALA	2.3
53	Z	64	PHE	2.3
70	E	201	ALA	2.3
78	h	27	ALA	2.3
78	Rb	54	PHE	2.3
39	v	50	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
59	d6	82	ARG	2.3
60	CV	83	ARG	2.3
61	B	79	ARG	2.3
70	E	124	ARG	2.3
29	U	39	THR	2.3
33	CO	66	THR	2.3
36	M	37	ASN	2.3
44	CQ	184	THR	2.3
61	s0	164	ASN	2.3
78	Rb	74	THR	2.3
75	AR	329	U	2.3
75	AR	2505	U	2.3
75	1	2203	U	2.3
5	Q	75	PRO	2.3
9	q	191	LEU	2.3
10	DK	11	LEU	2.3
12	s7	16	LEU	2.3
13	j	34	TYR	2.3
23	T	131	LEU	2.3
24	s9	36	LEU	2.3
29	U	79	LEU	2.3
34	AN	89	TYR	2.3
38	DI	57	LEU	2.3
41	W	55	LEU	2.3
49	DR	86	LEU	2.3
54	CT	10	LEU	2.3
56	d5	59	TYR	2.3
57	0	14	LEU	2.3
58	A	506	A	2.3
59	d6	98	PRO	2.3
64	s1	217	LEU	2.3
67	D	225	LEU	2.3
67	s2	197	TYR	2.3
70	s3	113	LEU	2.3
75	1	2887	A	2.3
11	c6	83	GLN	2.3
29	U	129	GLN	2.3
58	sR	651	G	2.3
5	Q	48	GLY	2.3
10	AJ	30	LYS	2.3
11	R	74	HIS	2.3
20	DF	38	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
22	AL	30	LYS	2.3
23	T	127	HIS	2.3
38	DI	19	LYS	2.3
40	AO	14	LYS	2.3
46	X	60	LYS	2.3
50	Y	18	HIS	2.3
51	CS	11	LYS	2.3
55	sM	74	LYS	2.3
56	d5	73	GLY	2.3
59	d6	17	HIS	2.3
60	2	81	GLY	2.3
60	2	110	LYS	2.3
61	B	32	HIS	2.3
11	c6	7	VAL	2.3
24	s9	96	VAL	2.3
42	O	65	VAL	2.3
72	CZ	76	VAL	2.3
78	h	156	VAL	2.3
9	q	79	ILE	2.3
13	j	44	ILE	2.3
13	CD	238	ILE	2.3
24	s9	156	ILE	2.3
25	l	106	TRP	2.3
49	DR	83	ILE	2.3
68	e	38	ILE	2.3
14	DE	20	SER	2.3
18	J	4	SER	2.3
19	CE	227	GLU	2.3
33	CO	107	GLU	2.3
42	O	110	ASP	2.3
48	CR	66	SER	2.3
51	CS	7	SER	2.3
66	CX	2	SER	2.3
17	c7	90	ALA	2.3
31	CG	260	PHE	2.3
53	Z	60	PHE	2.3
67	D	215	PHE	2.3
76	9	20	PHE	2.3
35	d0	23	ARG	2.3
39	CP	114	ARG	2.3
49	AQ	24	ARG	2.3
72	8	27	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
73	F	145	ARG	2.3
77	G	76	ARG	2.3
17	S	6	THR	2.3
22	DM	15	THR	2.3
3	p	142	LEU	2.3
6	s6	121	LEU	2.3
41	W	69	LEU	2.3
50	d3	10	ASN	2.3
53	Z	133	ASN	2.3
53	d4	34	ASN	2.3
61	B	176	LEU	2.3
64	s1	228	LEU	2.3
65	d8	66	LEU	2.3
51	CS	157	PRO	2.3
66	6	50	PRO	2.3
11	R	79	TYR	2.3
18	s8	117	TYR	2.3
63	CW	33	TYR	2.3
75	AR	2597	U	2.3
15	r	162	GLN	2.3
18	s8	26	LYS	2.3
25	l	144	LYS	2.3
27	CN	178	LYS	2.3
28	AM	25	GLN	2.3
31	CG	34	LYS	2.3
39	CP	176	LYS	2.3
63	CW	70	LYS	2.3
72	CZ	45	LYS	2.3
73	s4	168	LYS	2.3
6	s6	55	GLY	2.3
29	U	32	GLY	2.3
35	V	87	HIS	2.3
56	a	62	VAL	2.3
58	A	474	A	2.3
73	F	156	VAL	2.3
75	1	746	A	2.3
79	DB	53	VAL	2.3
10	DK	93	ILE	2.3
11	c6	65	ILE	2.3
57	CU	123	ILE	2.3
63	5	11	ILE	2.3
64	C	161	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
63	CW	92	TRP	2.3
14	DE	70	PHE	2.3
17	S	18	GLU	2.3
9	CK	22	SER	2.3
13	CD	239	ALA	2.3
15	r	218	ALA	2.3
17	S	108	ASP	2.3
20	DF	39	PHE	2.3
20	DF	58	ALA	2.3
23	T	83	ALA	2.3
29	U	8	ASP	2.3
29	U	35	ASP	2.3
46	d2	50	PHE	2.3
57	0	130	GLU	2.3
58	A	568	G	2.3
58	sR	1200	G	2.3
79	DB	118	PHE	2.3
32	DH	91	ALA	2.3
41	d1	56	SER	2.3
47	P	100	ALA	2.3
55	i	90	ALA	2.3
70	s3	3	ALA	2.3
73	s4	247	SER	2.3
27	CN	49	ARG	2.3
27	CN	104	ARG	2.3
35	d0	85	ARG	2.3
68	e	56	ARG	2.3
33	u	65	LEU	2.3
39	v	10	LEU	2.3
52	p0	185	LEU	2.3
78	h	13	LEU	2.3
39	v	167	THR	2.3
47	P	119	THR	2.3
67	s2	52	THR	2.3
70	s3	26	THR	2.3
12	I	4	PRO	2.3
75	AR	1582	C	2.3
13	j	92	LYS	2.3
13	CD	155	LYS	2.3
22	AL	44	LYS	2.3
24	K	142	ASN	2.3
3	p	80	TYR	2.3

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Mol	Chain	Res	Type	RSRZ
4	AI	70	TYR	2.3
9	q	3	TYR	2.3
31	m	62	CYS	2.3
64	C	151	LYS	2.3
72	CZ	39	LYS	2.3
49	DR	14	TYR	2.3
60	2	30	TYR	2.3
23	c8	74	GLN	2.3
50	d3	63	GLN	2.3
9	CK	43	VAL	2.3
11	c6	71	GLY	2.3
18	J	152	ILE	2.3
30	c0	20	VAL	2.3
35	d0	87	HIS	2.3
38	DI	104	VAL	2.3
44	CQ	11	GLY	2.3
31	m	69	ILE	2.3
51	CS	84	VAL	2.3
59	b	24	VAL	2.3
59	b	36	ILE	2.3
59	b	75	VAL	2.3
60	CV	42	ILE	2.3
70	E	115	ILE	2.3
73	s4	169	ILE	2.3
77	s5	29	ILE	2.3
12	I	92	PHE	2.3
19	CE	42	ALA	2.3
29	U	115	GLU	2.3
58	sR	1782	A	2.3
60	CV	19	PHE	2.3
75	1	1879	A	2.3
29	U	137	ALA	2.3
42	O	111	ALA	2.3
48	x	128	ARG	2.3
60	CV	111	ALA	2.3
61	s0	101	ARG	2.3
68	d9	12	ARG	2.3
69	7	47	ARG	2.3
76	9	18	ALA	2.3
79	AA	15	ARG	2.3
3	p	255	SER	2.3
11	c6	98	ASP	2.3

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Mol	Chain	Res	Type	RSRZ
23	T	112	ASP	2.3
61	B	190	ASP	2.3
64	s1	51	SER	2.3
73	F	21	ASP	2.3
23	T	18	LEU	2.3
35	V	26	LEU	2.3
46	d2	38	LEU	2.3
58	A	1351	G	2.3
58	sR	1114	G	2.3
64	C	207	LEU	2.3
70	s3	59	LEU	2.3
73	F	20	LEU	2.3
73	F	38	LEU	2.3
75	AR	2429	G	2.3
77	G	93	LEU	2.3
77	G	97	LEU	2.3
13	j	199	THR	2.3
13	CD	31	THR	2.3
18	s8	95	THR	2.3
18	J	17	LYS	2.3
23	T	100	THR	2.3
26	AF	5	PRO	2.3
29	U	46	PRO	2.3
29	c9	2	PRO	2.3
35	V	110	PRO	2.3
35	d0	29	THR	2.3
36	M	44	THR	2.3
37	CH	170	LYS	2.3
43	o	158	LYS	2.3
67	D	166	THR	2.3
77	s5	30	PRO	2.3
5	Q	82	ASN	2.2
6	H	140	ASN	2.2
10	DK	63	ASN	2.2
28	AM	43	ASN	2.2
55	sM	57	ASN	2.2
61	B	28	ASN	2.2
6	H	162	VAL	2.2
11	c6	11	GLY	2.2
11	c6	63	ILE	2.2
13	CD	99	GLY	2.2
19	CE	272	TYR	2.2

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Mol	Chain	Res	Type	RSRZ
18	s8	183	ILE	2.2
19	k	12	GLY	2.2
19	k	328	ILE	2.2
26	AF	37	GLY	2.2
31	CG	125	VAL	2.2
32	DH	59	VAL	2.2
36	M	90	TYR	2.2
31	CG	148	ILE	2.2
43	CI	104	GLN	2.2
50	d3	91	GLY	2.2
53	d4	73	GLY	2.2
56	d5	62	VAL	2.2
57	0	19	VAL	2.2
58	sR	1	U	2.2
59	b	72	HIS	2.2
59	d6	9	GLY	2.2
67	D	137	ILE	2.2
68	e	31	ILE	2.2
71	f	52	GLY	2.2
58	A	174	U	2.2
73	s4	147	ILE	2.2
75	1	1581	C	2.2
75	1	2319	U	2.2
23	c8	128	PHE	2.2
44	CQ	64	PHE	2.2
53	Z	23	PHE	2.2
78	h	263	PHE	2.2
8	DD	14	ARG	2.2
11	R	119	ALA	2.2
14	DE	52	ARG	2.2
15	CL	212	GLU	2.2
19	CE	106	TRP	2.2
24	s9	57	ARG	2.2
25	l	309	ARG	2.2
38	AH	4	ARG	2.2
40	DP	17	ARG	2.2
48	x	161	ALA	2.2
53	Z	4	ALA	2.2
54	CT	9	ARG	2.2
62	c	50	ALA	2.2
73	s4	59	ARG	2.2
75	1	784	A	2.2

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Mol	Chain	Res	Type	RSRZ
75	1	2971	A	2.2
2	AB	46	ASP	2.2
4	AI	88	LEU	2.2
17	c7	100	LEU	2.2
31	m	227	LEU	2.2
46	X	5	SER	2.2
50	Y	41	SER	2.2
67	D	135	SER	2.2
76	DA	109	LEU	2.2
3	CJ	105	LYS	2.2
5	Q	72	LYS	2.2
36	M	46	LYS	2.2
60	CV	120	LYS	2.2
69	CY	124	LYS	2.2
79	DB	55	LYS	2.2
55	sM	52	PRO	2.2
11	c6	70	THR	2.2
30	L	67	THR	2.2
3	p	79	GLN	2.2
4	DJ	72	GLY	2.2
11	R	7	VAL	2.2
20	AE	36	ILE	2.2
23	T	26	ILE	2.2
24	s9	83	VAL	2.2
32	AG	49	ILE	2.2
13	j	216	HIS	2.2
21	s	167	TYR	2.2
35	V	73	GLY	2.2
38	DI	14	ASN	2.2
53	d4	5	VAL	2.2
53	d4	129	VAL	2.2
56	d5	60	VAL	2.2
54	z	78	TYR	2.2
58	A	574	G	2.2
58	sR	761	G	2.2
60	2	82	ASN	2.2
61	B	171	GLY	2.2
66	CX	28	ASN	2.2
67	s2	82	ASN	2.2
67	s2	103	VAL	2.2
70	s3	136	VAL	2.2
74	g	108	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
75	AR	2305	G	2.2
75	1	3044	G	2.2
77	s5	23	VAL	2.2
77	s5	220	VAL	2.2
73	s4	27	TYR	2.2
79	DB	127	ASN	2.2
5	Q	56	PHE	2.2
7	4	23	U	2.2
58	sR	261	U	2.2
1	3	39	C	2.2
9	q	166	ARG	2.2
10	DK	36	ARG	2.2
17	S	11	ARG	2.2
23	T	143	ARG	2.2
25	CF	198	ARG	2.2
27	t	73	ARG	2.2
41	W	62	ARG	2.2
65	d8	32	PHE	2.2
58	sR	1481	C	2.2
58	sR	1686	C	2.2
75	1	3360	C	2.2
6	H	122	GLU	2.2
8	DD	2	ALA	2.2
21	CM	169	ALA	2.2
22	DM	2	ALA	2.2
25	l	24	ALA	2.2
47	c4	60	ALA	2.2
49	DR	92	ALA	2.2
54	CT	72	GLU	2.2
61	B	132	ALA	2.2
64	C	163	ALA	2.2
77	s5	182	ALA	2.2
78	h	80	ALA	2.2
13	j	150	LEU	2.2
13	j	180	LEU	2.2
18	J	96	LEU	2.2
20	DF	4	LEU	2.2
43	CI	105	LEU	2.2
45	DQ	104	LEU	2.2
70	E	72	LEU	2.2
3	p	231	LYS	2.2
15	r	191	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
21	CM	170	ASP	2.2
39	CP	72	LYS	2.2
53	Z	3	ASP	2.2
53	d4	83	LYS	2.2
55	i	157	ASP	2.2
60	2	50	LYS	2.2
67	s2	78	ASP	2.2
67	s2	119	LYS	2.2
70	s3	141	LYS	2.2
8	DD	31	SER	2.2
13	j	106	SER	2.2
48	CR	20	SER	2.2
51	y	146	SER	2.2
55	i	28	SER	2.2
57	CU	159	SER	2.2
57	CU	164	SER	2.2
60	2	138	SER	2.2
78	Rb	166	SER	2.2
13	CD	141	PRO	2.2
73	F	152	PRO	2.2
79	AA	70	PRO	2.2
6	s6	78	THR	2.2
35	V	60	THR	2.2
78	Rb	12	THR	2.2
5	c5	90	ILE	2.2
17	c7	69	ILE	2.2
18	J	63	GLY	2.2
32	DH	22	VAL	2.2
36	M	123	VAL	2.2
42	O	50	ILE	2.2
50	Y	87	VAL	2.2
50	d3	45	GLY	2.2
54	CT	94	VAL	2.2
64	C	121	ILE	2.2
65	d8	13	ILE	2.2
73	F	227	VAL	2.2
73	s4	90	ILE	2.2
76	DA	50	ILE	2.2
45	DQ	95	GLY	2.2
46	X	73	GLY	2.2
78	h	167	VAL	2.2
78	Rb	133	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
3	p	192	GLN	2.2
11	R	21	HIS	2.2
12	s7	150	GLN	2.2
5	c5	97	TYR	2.2
31	m	119	TYR	2.2
35	V	90	TYR	2.2
39	CP	30	TYR	2.2
43	o	237	ASN	2.2
46	d2	52	TYR	2.2
61	s0	109	ASN	2.2
65	d	43	ASN	2.2
11	c6	60	PHE	2.2
31	m	145	PHE	2.2
36	c1	129	ARG	2.2
42	c3	113	PHE	2.2
42	O	114	ARG	2.2
44	w	78	ARG	2.2
53	d4	124	ARG	2.2
61	s0	185	ARG	2.2
64	s1	223	PHE	2.2
3	CJ	196	ALA	2.2
7	4	24	G	2.2
19	k	261	MET	2.2
21	s	131	MET	2.2
29	U	96	ALA	2.2
51	y	42	ALA	2.2
58	A	143	G	2.2
58	sR	95	G	2.2
58	sR	677	G	2.2
58	sR	1413	U	2.2
58	sR	1771	U	2.2
58	sR	1775	U	2.2
75	AR	1028	U	2.2
75	AR	3195	U	2.2
75	1	1029	G	2.2
75	1	1233	G	2.2
75	1	1564	U	2.2
75	1	1785	U	2.2
75	1	2690	G	2.2
78	h	284	ALA	2.2
12	s7	27	LEU	2.2
14	AD	41	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
14	AD	51	LEU	2.2
61	B	146	LEU	2.2
66	CX	69	LEU	2.2
76	9	76	LEU	2.2
11	c6	87	LYS	2.2
12	I	151	LYS	2.2
55	i	84	LYS	2.2
55	i	121	LYS	2.2
73	s4	106	LYS	2.2
75	1	2257	C	2.2
77	s5	188	LYS	2.2
23	c8	91	ASP	2.2
43	o	210	PRO	2.2
46	d2	95	PRO	2.2
51	CS	4	ASP	2.2
73	s4	31	PRO	2.2
77	s5	28	PRO	2.2
38	AH	73	SER	2.2
3	CJ	160	ILE	2.2
6	s6	158	ILE	2.2
18	s8	197	THR	2.2
22	DM	25	VAL	2.2
23	T	92	ILE	2.2
35	V	70	THR	2.2
36	c1	142	VAL	2.2
46	X	33	VAL	2.2
46	X	62	VAL	2.2
46	d2	86	ILE	2.2
47	c4	93	THR	2.2
52	p0	59	VAL	2.2
54	CT	93	VAL	2.2
58	sR	1227	A	2.2
60	2	143	THR	2.2
61	s0	67	ILE	2.2
65	d8	44	VAL	2.2
70	E	217	ILE	2.2
75	1	2705	A	2.2
31	CG	91	GLY	2.2
53	d4	59	GLY	2.2
77	G	153	GLY	2.2
78	Rb	138	GLY	2.2
18	J	44	HIS	2.2

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Mol	Chain	Res	Type	RSRZ
39	CP	139	HIS	2.2
51	y	158	HIS	2.2
4	AI	114	ARG	2.2
5	Q	119	PHE	2.2
12	s7	131	PHE	2.2
13	CD	79	ASN	2.2
19	CE	369	ARG	2.2
26	AF	17	PHE	2.2
39	CP	73	ARG	2.2
42	O	26	PHE	2.2
43	o	201	PHE	2.2
43	CI	223	PHE	2.2
44	CQ	80	PHE	2.2
46	X	37	PHE	2.2
49	AQ	37	TYR	2.2
50	Y	32	ARG	2.2
57	CU	4	PHE	2.2
61	s0	113	ARG	2.2
63	5	15	PHE	2.2
5	c5	89	MET	2.2
30	L	1	MET	2.2
46	d2	41	MET	2.2
77	G	99	MET	2.2
2	DC	149	ALA	2.2
11	c6	86	ALA	2.2
27	CN	166	ALA	2.2
72	8	41	ALA	2.2
73	F	14	ALA	2.2
79	DB	63	ALA	2.2
4	DJ	69	LEU	2.2
9	q	165	CYS	2.2
9	CK	47	LYS	2.2
14	DE	34	LEU	2.2
15	r	56	GLU	2.2
24	s9	24	LEU	2.2
27	t	194	GLU	2.2
36	c1	36	LYS	2.2
40	DP	7	LYS	2.2
44	CQ	156	LEU	2.2
51	CS	159	LYS	2.2
57	0	148	LEU	2.2
58	A	73	U	2.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
58	sR	1286	U	2.2
58	sR	1561	U	2.2
59	b	70	LYS	2.2
77	G	107	LYS	2.2
77	s5	217	LEU	2.2
78	h	91	LEU	2.2
78	h	117	LYS	2.2
78	Rb	34	LEU	2.2
78	Rb	46	LYS	2.2
11	c6	41	PRO	2.2
38	DI	59	PRO	2.2
47	P	94	PRO	2.2
75	1	1780	G	2.2
58	A	402	C	2.2
58	sR	1537	C	2.2
58	sR	1783	C	2.2
67	D	78	ASP	2.2
6	s6	217	SER	2.2
12	s7	31	SER	2.2
23	T	69	ILE	2.2
35	d0	91	ILE	2.2
36	c1	49	ILE	2.2
46	X	14	ILE	2.2
46	X	76	SER	2.2
63	CW	67	SER	2.2
79	DB	68	ILE	2.2
11	c6	69	VAL	2.2
60	CV	74	VAL	2.2
78	Rb	154	VAL	2.2
8	DD	50	THR	2.1
21	s	159	THR	2.1
39	v	126	THR	2.1
46	X	123	GLY	2.1
52	p0	85	GLY	2.1
60	2	145	GLY	2.1
61	s0	186	GLY	2.1
73	s4	107	GLY	2.1
77	s5	21	THR	2.1
73	F	17	HIS	2.1
4	DJ	108	GLN	2.1
9	CK	91	ARG	2.1
9	CK	168	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
9	q	45	PHE	2.1
9	q	168	ARG	2.1
11	c6	10	PHE	2.1
18	s8	109	PHE	2.1
22	AL	11	PHE	2.1
24	s9	149	ARG	2.1
29	c9	86	ARG	2.1
35	V	16	GLN	2.1
36	c1	115	PHE	2.1
38	DI	8	ARG	2.1
43	o	159	GLN	2.1
58	A	475	A	2.1
58	sR	673	A	2.1
58	sR	774	A	2.1
58	sR	1597	A	2.1
62	d7	17	ARG	2.1
75	AR	2215	A	2.1
75	1	3375	A	2.1
77	G	185	ARG	2.1
79	AA	65	ARG	2.1
43	o	136	TYR	2.1
21	CM	7	ASN	2.1
2	AB	75	LEU	2.1
6	H	204	ALA	2.1
8	AC	9	ALA	2.1
20	AE	55	LEU	2.1
23	T	3	LEU	2.1
26	DG	128	LEU	2.1
29	c9	62	ALA	2.1
31	m	92	LEU	2.1
34	AN	121	LEU	2.1
53	Z	33	ALA	2.1
54	z	131	ALA	2.1
56	d5	80	LEU	2.1
67	s2	124	ALA	2.1
70	E	187	LYS	2.1
70	s3	88	ALA	2.1
71	f	53	LYS	2.1
71	e0	20	LYS	2.1
73	s4	245	LYS	2.1
79	AA	69	LYS	2.1
3	CJ	161	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
35	d0	80	GLU	2.1
73	F	40	GLU	2.1
58	A	766	U	2.1
75	AR	2269	U	2.1
3	CJ	99	PRO	2.1
26	DG	5	PRO	2.1
39	CP	154	PRO	2.1
61	B	104	PRO	2.1
77	s5	129	PRO	2.1
11	c6	29	ILE	2.1
11	c6	81	ILE	2.1
19	CE	25	ILE	2.1
30	c0	35	ILE	2.1
73	F	154	ILE	2.1
2	AB	76	ASP	2.1
6	s6	151	ASP	2.1
9	q	93	VAL	2.1
24	s9	172	VAL	2.1
41	W	32	VAL	2.1
52	p0	30	VAL	2.1
57	0	72	VAL	2.1
65	d	30	VAL	2.1
71	f	50	VAL	2.1
74	g	98	VAL	2.1
79	AA	62	VAL	2.1
2	DC	23	GLY	2.1
8	AC	50	THR	2.1
9	q	91	ARG	2.1
16	AK	69	HIS	2.1
18	s8	116	HIS	2.1
21	s	99	THR	2.1
24	s9	61	THR	2.1
39	CP	80	THR	2.1
50	d3	108	GLY	2.1
51	CS	156	GLY	2.1
42	c3	104	ARG	2.1
46	d2	23	ARG	2.1
47	c4	103	ARG	2.1
58	A	569	C	2.1
58	A	1523	G	2.1
58	sR	1111	G	2.1
58	sR	1534	G	2.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
60	CV	139	ARG	2.1
64	C	119	THR	2.1
67	s2	117	THR	2.1
75	AR	341	G	2.1
75	AR	2276	G	2.1
77	G	92	ARG	2.1
12	I	183	PHE	2.1
19	k	370	PHE	2.1
60	CV	16	GLN	2.1
79	DB	101	PHE	2.1
4	AI	84	LYS	2.1
11	R	106	LYS	2.1
15	CL	206	LEU	2.1
21	s	13	LYS	2.1
19	k	22	ALA	2.1
27	t	77	LEU	2.1
28	DN	37	TYR	2.1
29	U	78	LYS	2.1
33	u	8	LYS	2.1
36	c1	29	LYS	2.1
42	c3	27	LYS	2.1
33	CO	86	ALA	2.1
39	v	166	ALA	2.1
42	c3	149	LEU	2.1
47	c4	58	TYR	2.1
53	Z	117	LYS	2.1
53	d4	21	LYS	2.1
54	z	21	LYS	2.1
57	0	23	LYS	2.1
53	d4	4	ALA	2.1
58	A	470	A	2.1
58	sR	1337	A	2.1
61	B	99	ALA	2.1
63	CW	12	ALA	2.1
63	5	36	TYR	2.1
64	C	166	LYS	2.1
64	C	181	LEU	2.1
64	C	184	LEU	2.1
64	C	188	LEU	2.1
68	d9	16	LYS	2.1
70	E	157	LEU	2.1
71	f	49	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
74	g	103	LEU	2.1
74	g	110	ALA	2.1
75	AR	2591	A	2.1
75	1	2926	A	2.1
75	1	3359	A	2.1
28	DN	32	ASN	2.1
28	DN	43	ASN	2.1
77	G	122	ASN	2.1
77	s5	44	ASN	2.1
9	CK	189	GLU	2.1
29	U	126	GLU	2.1
41	W	64	GLU	2.1
67	s2	55	GLU	2.1
68	e	4	GLU	2.1
38	DI	44	CYS	2.1
35	V	55	PRO	2.1
60	CV	53	PRO	2.1
73	F	15	PRO	2.1
75	AR	2433	U	2.1
75	1	1122	U	2.1
18	s8	43	ILE	2.1
61	s0	63	ILE	2.1
17	S	66	VAL	2.1
23	T	46	VAL	2.1
30	L	22	VAL	2.1
56	a	60	VAL	2.1
57	0	79	VAL	2.1
77	s5	53	VAL	2.1
77	s5	123	VAL	2.1
11	R	143	ARG	2.1
20	DF	47	ASP	2.1
23	T	39	GLY	2.1
23	T	130	GLY	2.1
25	l	79	GLY	2.1
25	CF	348	GLY	2.1
29	U	133	ASP	2.1
31	CG	214	ASP	2.1
32	AG	79	GLY	2.1
38	DI	53	GLY	2.1
48	x	82	ARG	2.1
10	DK	79	SER	2.1
11	R	46	PHE	2.1

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Mol	Chain	Res	Type	RSRZ
23	c8	13	HIS	2.1
24	K	130	THR	2.1
33	CO	118	PHE	2.1
36	M	60	PHE	2.1
36	M	115	PHE	2.1
46	d2	56	HIS	2.1
47	P	27	PHE	2.1
53	d4	9	THR	2.1
53	d4	69	SER	2.1
53	d4	104	SER	2.1
62	c	19	HIS	2.1
70	E	24	PHE	2.1
73	F	141	THR	2.1
74	g	115	THR	2.1
78	Rb	245	PHE	2.1
4	AI	76	GLN	2.1
11	R	13	LYS	2.1
31	CG	289	LYS	2.1
33	CO	27	GLN	2.1
35	V	30	LYS	2.1
42	c3	49	GLN	2.1
57	CU	131	LYS	2.1
66	CX	7	GLN	2.1
73	F	130	GLN	2.1
9	q	52	LEU	2.1
65	d	9	LEU	2.1
72	8	82	LEU	2.1
78	Rb	47	LEU	2.1
3	p	199	ALA	2.1
5	c5	74	ALA	2.1
5	c5	131	ALA	2.1
13	CD	56	ALA	2.1
18	J	115	ALA	2.1
42	O	146	ALA	2.1
43	o	27	ALA	2.1
43	CI	23	ALA	2.1
50	Y	67	ALA	2.1
56	d5	99	ALA	2.1
64	C	139	ALA	2.1
75	AR	765	C	2.1
75	1	1781	C	2.1
75	1	2204	C	2.1

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Mol	Chain	Res	Type	RSRZ
77	G	85	ALA	2.1
78	h	257	ALA	2.1
23	c8	30	TYR	2.1
39	CP	81	TYR	2.1
42	O	90	TYR	2.1
43	CI	133	TYR	2.1
75	AR	1483	G	2.1
75	AR	1811	G	2.1
75	1	1586	G	2.1
75	1	2276	G	2.1
6	s6	150	GLU	2.1
44	w	42	ASN	2.1
45	DQ	96	GLU	2.1
52	p0	98	ASN	2.1
59	d6	11	ASN	2.1
66	6	4	ASN	2.1
73	s4	157	ASN	2.1
58	sR	620	A	2.1
75	AR	2686	A	2.1
75	AR	2727	A	2.1
29	c9	31	PRO	2.1
31	m	19	PRO	2.1
47	P	120	PRO	2.1
71	f	30	PRO	2.1
30	L	11	ILE	2.1
64	C	204	ILE	2.1
67	D	115	ILE	2.1
77	G	120	ILE	2.1
58	A	959	U	2.1
75	AR	3157	U	2.1
19	CE	229	VAL	2.1
24	K	148	VAL	2.1
60	2	147	VAL	2.1
67	s2	101	VAL	2.1
9	q	90	MET	2.1
11	R	27	GLY	2.1
24	K	79	ARG	2.1
38	DI	58	ARG	2.1
38	DI	80	ARG	2.1
46	X	127	GLY	2.1
54	CT	83	GLY	2.1
55	i	160	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
60	2	116	ARG	2.1
66	CX	90	GLY	2.1
67	s2	95	ARG	2.1
68	e	44	ARG	2.1
77	s5	151	GLY	2.1
5	Q	102	PHE	2.1
11	c6	13	LYS	2.1
11	c6	26	LYS	2.1
11	c6	74	HIS	2.1
12	I	24	PHE	2.1
12	I	55	LYS	2.1
18	s8	75	LYS	2.1
36	c1	60	PHE	2.1
57	0	3	HIS	2.1
57	0	75	PHE	2.1
59	b	93	LYS	2.1
59	d6	34	LYS	2.1
69	7	29	PHE	2.1
24	s9	58	ASP	2.1
70	E	7	LYS	2.1
76	DA	116	LYS	2.1
12	s7	154	LEU	2.1
16	AK	17	THR	2.1
23	T	45	LEU	2.1
25	CF	349	THR	2.1
29	U	139	THR	2.1
48	CR	22	LEU	2.1
51	CS	88	THR	2.1
54	CT	6	THR	2.1
69	7	39	LEU	2.1
70	E	6	SER	2.1
70	E	69	LEU	2.1
74	g	117	LEU	2.1
77	G	38	THR	2.1
77	s5	193	THR	2.1
28	AM	6	SER	2.1
44	w	89	SER	2.1
51	y	167	SER	2.1
76	9	10	SER	2.1
13	CD	154	ALA	2.1
53	d4	50	ALA	2.1
70	E	30	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
77	s5	155	ALA	2.1
6	H	208	TYR	2.1
25	l	330	TYR	2.1
36	M	97	TYR	2.1
52	p0	18	TYR	2.1
25	l	117	GLU	2.1
78	h	14	GLU	2.1
13	CD	194	ASN	2.1
20	AE	56	ASN	2.1
25	l	328	ASN	2.1
32	DH	106	ASN	2.1
43	CI	93	ASN	2.1
48	x	120	ASN	2.1
67	D	82	ASN	2.1
78	Rb	17	ASN	2.1
55	sM	40	PRO	2.1
61	B	207	PRO	2.1
77	G	28	PRO	2.1
36	c1	54	ILE	2.1
42	O	11	ILE	2.1
47	P	19	ILE	2.1
50	Y	68	ILE	2.1
53	Z	13	ILE	2.1
77	G	89	ILE	2.1
79	AA	68	ILE	2.1
31	m	95	TRP	2.1
42	O	25	TRP	2.1
75	1	1259	A	2.1
75	1	2522	G	2.1
6	H	41	VAL	2.1
10	DK	72	VAL	2.1
13	j	4	VAL	2.1
25	l	248	VAL	2.1
32	DH	52	VAL	2.1
45	DQ	2	VAL	2.1
61	B	181	VAL	2.1
64	s1	48	VAL	2.1
66	CX	79	VAL	2.1
73	F	76	VAL	2.1
79	DB	10	VAL	2.1
2	AB	117	ARG	2.1
13	CD	42	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
13	CD	147	ARG	2.1
19	k	10	ARG	2.1
29	c9	68	ARG	2.1
39	v	24	ARG	2.1
41	W	22	ARG	2.1
43	CI	232	ARG	2.1
47	c4	18	ARG	2.1
49	DR	17	ARG	2.1
50	Y	121	ARG	2.1
58	A	1795	U	2.1
60	2	20	ARG	2.1
75	AR	1555	U	2.1
75	1	1095	U	2.1
4	AI	72	GLY	2.1
6	H	194	LYS	2.1
11	R	26	LYS	2.1
11	R	128	LYS	2.1
17	c7	98	GLY	2.1
18	s8	50	GLY	2.1
31	m	91	GLY	2.1
36	M	141	LYS	2.1
39	CP	14	LYS	2.1
50	Y	70	LYS	2.1
54	CT	133	LYS	2.1
55	i	115	LYS	2.1
64	s1	178	GLY	2.1
67	D	93	GLY	2.1
73	s4	128	LYS	2.1
3	CJ	34	PHE	2.1
3	CJ	82	LEU	2.0
13	j	246	LEU	2.0
30	L	46	LEU	2.0
31	CG	40	HIS	2.1
53	Z	72	PHE	2.1
38	AH	51	LEU	2.0
43	CI	103	LEU	2.0
57	CU	3	HIS	2.1
70	E	218	LEU	2.0
5	Q	124	THR	2.0
5	c5	30	THR	2.0
6	s6	65	GLN	2.0
6	H	152	ASP	2.0

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Mol	Chain	Res	Type	RSRZ
9	CK	138	THR	2.0
14	DE	30	THR	2.0
17	c7	105	GLN	2.0
22	AL	22	THR	2.0
24	K	48	GLN	2.0
25	CF	82	THR	2.0
32	AG	72	THR	2.0
36	c1	61	THR	2.0
50	Y	63	GLN	2.0
57	0	16	THR	2.0
64	C	107	THR	2.0
68	d9	20	GLN	2.0
70	s3	170	THR	2.0
19	k	250	ALA	2.0
36	M	38	ALA	2.0
41	d1	37	ALA	2.0
65	d8	21	SER	2.0
69	CY	26	SER	2.0
77	G	154	ALA	2.0
30	c0	63	TYR	2.0
52	p0	11	TYR	2.0
6	H	150	GLU	2.0
18	J	28	GLU	2.0
31	CG	189	GLU	2.0
67	D	79	GLU	2.0
12	I	49	ILE	2.0
23	c8	82	PRO	2.0
39	CP	90	ASN	2.0
46	X	103	ILE	2.0
53	d4	13	ILE	2.0
54	CT	130	ASN	2.0
57	CU	33	ASN	2.0
63	5	38	ILE	2.0
65	d	51	ASN	2.0
65	d8	43	ASN	2.0
2	AB	34	MET	2.0
6	s6	157	VAL	2.0
6	H	94	ARG	2.0
9	q	132	VAL	2.0
19	CE	146	ARG	2.0
19	CE	264	VAL	2.0
31	m	152	ARG	2.0

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Mol	Chain	Res	Type	RSRZ
31	m	286	VAL	2.0
39	CP	115	VAL	2.0
58	A	1599	C	2.0
58	sR	1096	C	2.0
53	Z	90	ARG	2.0
60	CV	141	VAL	2.0
60	2	33	VAL	2.0
70	E	76	ARG	2.0
70	s3	91	VAL	2.0
75	AR	3278	C	2.0
76	DA	28	ARG	2.0
78	Rb	311	ARG	2.0
15	r	40	LYS	2.0
20	AE	27	LYS	2.0
21	CM	153	LYS	2.0
27	CN	5	LYS	2.0
27	t	5	LYS	2.0
33	CO	25	LYS	2.0
35	V	101	LYS	2.0
50	d3	126	LYS	2.0
54	z	19	LYS	2.0
55	i	46	LYS	2.0
63	5	10	LYS	2.0
77	s5	41	LYS	2.0
3	p	82	LEU	2.0
12	s7	77	LEU	2.0
13	j	237	LEU	2.0
14	AD	62	LEU	2.0
22	DM	65	LEU	2.0
22	AL	31	LEU	2.0
25	CF	11	LEU	2.0
25	CF	179	LEU	2.0
27	CN	26	PHE	2.0
36	M	120	GLY	2.0
58	A	1217	A	2.0
53	d4	28	LEU	2.0
54	z	132	PHE	2.0
59	b	9	GLY	2.0
67	s2	202	GLY	2.0
75	1	1667	A	2.0
29	U	108	LEU	2.0
31	CG	277	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
44	CQ	27	LEU	2.0
58	sR	719	U	2.0
58	A	834	G	2.0
58	A	1114	G	2.0
58	sR	1150	G	2.0
60	2	98	HIS	2.0
73	F	164	LEU	2.0
73	s4	42	LEU	2.0
75	AR	3262	U	2.0
77	s5	25	LEU	2.0
78	Rb	265	LEU	2.0
75	AR	437	G	2.0
75	1	1743	G	2.0
9	q	138	THR	2.0
11	c6	94	GLN	2.0
13	j	224	THR	2.0
22	AL	6	THR	2.0
25	l	60	THR	2.0
31	CG	18	THR	2.0
15	r	130	ASP	2.0
25	CF	130	ALA	2.0
25	CF	212	ASP	2.0
29	c9	83	ALA	2.0
31	m	212	ALA	2.0
39	CP	57	GLN	2.0
49	DR	11	THR	2.0
42	O	7	ALA	2.0
60	CV	18	ASP	2.0
15	CL	205	SER	2.0
18	J	12	SER	2.0
37	CH	2	SER	2.0
39	CP	125	SER	2.0
43	o	113	SER	2.0
43	o	164	SER	2.0
55	sM	55	SER	2.0
73	s4	237	SER	2.0
78	Rb	120	SER	2.0
5	Q	17	TYR	2.0
6	H	225	GLU	2.0
9	CK	3	TYR	2.0
19	CE	6	TYR	2.0
19	CE	123	TYR	2.0

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Mol	Chain	Res	Type	RSRZ
12	s7	181	ILE	2.0
18	J	43	ILE	2.0
19	k	181	ILE	2.0
19	CE	144	ILE	2.0
38	AH	59	PRO	2.0
39	CP	133	ILE	2.0
48	CR	123	PRO	2.0
50	d3	143	PRO	2.0
52	p0	71	PRO	2.0
56	a	78	ILE	2.0
57	0	20	PRO	2.0
72	CZ	67	ILE	2.0
73	s4	150	PRO	2.0
73	s4	251	GLU	2.0
77	G	121	ILE	2.0
78	Rb	170	ILE	2.0
5	c5	103	ASN	2.0
39	CP	195	ASN	2.0
54	z	47	ASN	2.0
9	q	184	LYS	2.0
17	c7	95	ARG	2.0
18	J	74	LYS	2.0
23	T	70	VAL	2.0
24	K	96	VAL	2.0
25	CF	191	LYS	2.0
27	CN	57	VAL	2.0
29	c9	61	VAL	2.0
38	AH	67	LYS	2.0
41	W	82	VAL	2.0
54	z	57	VAL	2.0
59	b	51	ARG	2.0
59	d6	4	LYS	2.0
60	2	55	LYS	2.0
63	5	94	ARG	2.0
65	d8	22	ARG	2.0
70	s3	138	VAL	2.0
71	f	36	LYS	2.0
71	e0	28	LYS	2.0
73	F	126	VAL	2.0
76	9	13	ARG	2.0
67	s2	144	TRP	2.0
5	c5	91	GLY	2.0

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Mol	Chain	Res	Type	RSRZ
5	c5	116	LEU	2.0
6	s6	145	PHE	2.0
8	AC	20	GLY	2.0
15	r	217	PHE	2.0
20	AE	89	LEU	2.0
30	L	72	GLY	2.0
35	V	50	LEU	2.0
35	V	63	LEU	2.0
37	n	101	PHE	2.0
44	CQ	99	LEU	2.0
45	DQ	72	LEU	2.0
46	X	11	LEU	2.0
54	CT	164	LEU	2.0
63	CW	76	LEU	2.0
65	d8	54	LEU	2.0
67	D	240	LEU	2.0
73	F	226	PHE	2.0
6	H	83	CYS	2.0
13	CD	19	HIS	2.0
58	sR	1192	C	2.0
68	e	24	CYS	2.0
75	AR	3206	C	2.0

## 6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

## 6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95<sup>th</sup> percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	A	1930	1/1	0.22	0.29	113,113,113,113	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	1	4135	1/1	0.28	0.25	126,126,126,126	0
81	MG	d5	201	1/1	0.35	0.16	109,109,109,109	0
81	MG	A	2098	1/1	0.41	0.24	113,113,113,113	0
81	MG	A	2124	1/1	0.45	0.24	104,104,104,104	0
81	MG	sR	2008	1/1	0.45	0.21	107,107,107,107	0
80	OHX	1	4143	7/7	0.49	0.17	257,269,297,380	0
81	MG	A	2040	1/1	0.50	0.23	116,116,116,116	0
81	MG	sR	1998	1/1	0.52	0.21	97,97,97,97	0
81	MG	A	1941	1/1	0.52	0.27	103,103,103,103	0
81	MG	A	1970	1/1	0.53	0.30	110,110,110,110	0
81	MG	sR	1942	1/1	0.53	0.39	112,112,112,112	0
81	MG	AR	3656	1/1	0.54	0.31	87,87,87,87	0
81	MG	1	3750	1/1	0.55	0.27	95,95,95,95	0
81	MG	1	3746	1/1	0.56	0.35	93,93,93,93	0
81	MG	A	2138	1/1	0.56	0.21	121,121,121,121	0
81	MG	1	3505	1/1	0.56	0.34	94,94,94,94	0
81	MG	1	3685	1/1	0.57	0.28	99,99,99,99	0
81	MG	1	3637	1/1	0.58	0.17	105,105,105,105	0
81	MG	AS	209	1/1	0.58	0.33	91,91,91,91	0
81	MG	AR	3715	1/1	0.58	0.15	119,119,119,119	0
81	MG	AR	4053	1/1	0.58	0.32	84,84,84,84	0
81	MG	1	3532	1/1	0.58	0.28	88,88,88,88	0
81	MG	AR	3499	1/1	0.59	0.19	86,86,86,86	0
81	MG	1	3500	1/1	0.60	0.41	94,94,94,94	0
80	OHX	1	3518	7/7	0.60	0.15	262,273,286,356	0
81	MG	1	4136	1/1	0.60	0.28	87,87,87,87	0
81	MG	AS	224	1/1	0.61	0.18	123,123,123,123	0
81	MG	AR	3645	1/1	0.61	0.24	61,61,61,61	0
81	MG	1	3521	1/1	0.62	0.30	72,72,72,72	0
81	MG	3	217	1/1	0.62	0.15	105,105,105,105	0
81	MG	1	3536	1/1	0.62	0.31	94,94,94,94	0
81	MG	1	3616	1/1	0.62	0.29	102,102,102,102	0
81	MG	6	202	1/1	0.62	0.17	98,98,98,98	0
81	MG	1	4137	1/1	0.62	0.18	85,85,85,85	0
81	MG	A	2127	1/1	0.63	0.24	97,97,97,97	0
81	MG	sR	2103	1/1	0.64	0.22	76,76,76,76	0
81	MG	CP	302	1/1	0.64	0.29	87,87,87,87	0
81	MG	A	1990	1/1	0.64	0.15	95,95,95,95	0
81	MG	AR	3637	1/1	0.64	0.19	112,112,112,112	0
81	MG	sR	1987	1/1	0.65	0.30	82,82,82,82	0
81	MG	A	1909	1/1	0.65	0.31	97,97,97,97	0
81	MG	1	3864	1/1	0.65	0.28	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	1	3899	1/1	0.65	0.23	79,79,79,79	0
81	MG	s	300	1/1	0.65	0.18	87,87,87,87	0
81	MG	sR	2080	1/1	0.65	0.42	83,83,83,83	0
81	MG	AR	3470	1/1	0.65	0.21	106,106,106,106	0
81	MG	A	2059	1/1	0.66	0.26	93,93,93,93	0
81	MG	A	2009	1/1	0.66	0.37	99,99,99,99	0
81	MG	AR	3801	1/1	0.66	0.23	94,94,94,94	0
81	MG	AR	3905	1/1	0.66	0.56	98,98,98,98	0
80	OHX	AR	3641	7/7	0.66	0.16	170,200,225,277	0
81	MG	sR	1972	1/1	0.67	0.34	94,94,94,94	0
81	MG	sR	2092	1/1	0.67	0.14	89,89,89,89	0
80	OHX	A	1904	7/7	0.67	0.17	215,216,231,306	0
81	MG	sR	2160	1/1	0.67	0.26	68,68,68,68	0
81	MG	sR	2164	1/1	0.67	0.18	93,93,93,93	0
81	MG	1	3959	1/1	0.67	0.31	84,84,84,84	0
81	MG	A	2091	1/1	0.67	0.34	89,89,89,89	0
81	MG	A	1921	1/1	0.67	0.19	85,85,85,85	0
81	MG	1	3656	1/1	0.67	0.18	89,89,89,89	0
81	MG	1	3476	1/1	0.68	0.25	91,91,91,91	0
81	MG	A	2147	1/1	0.68	0.21	94,94,94,94	0
81	MG	A	2088	1/1	0.68	0.19	93,93,93,93	0
81	MG	1	3778	1/1	0.68	0.32	79,79,79,79	0
81	MG	sR	1976	1/1	0.68	0.29	88,88,88,88	0
81	MG	sR	2130	1/1	0.68	0.32	89,89,89,89	0
81	MG	AR	4102	1/1	0.68	0.38	69,69,69,69	0
80	OHX	sR	1933	7/7	0.68	0.20	225,235,253,327	0
81	MG	A	2021	1/1	0.68	0.43	102,102,102,102	0
81	MG	sR	2059	1/1	0.68	0.42	94,94,94,94	0
81	MG	1	3748	1/1	0.69	0.34	89,89,89,89	0
80	OHX	sR	1927	7/7	0.69	0.16	222,228,250,308	0
81	MG	A	2136	1/1	0.69	0.23	78,78,78,78	0
81	MG	1	3837	1/1	0.69	0.20	80,80,80,80	0
81	MG	sR	2105	1/1	0.69	0.16	97,97,97,97	0
81	MG	1	3623	1/1	0.69	0.26	91,91,91,91	0
81	MG	AR	3708	1/1	0.69	0.23	72,72,72,72	0
81	MG	d3	202	1/1	0.69	0.37	85,85,85,85	0
81	MG	1	3507	1/1	0.69	0.39	82,82,82,82	0
81	MG	AR	4162	1/1	0.69	0.27	75,75,75,75	0
81	MG	AR	3494	1/1	0.70	0.40	79,79,79,79	0
81	MG	AR	3809	1/1	0.70	0.30	106,106,106,106	0
81	MG	sR	2058	1/1	0.70	0.25	102,102,102,102	0
81	MG	AR	3838	1/1	0.70	0.22	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	3839	1/1	0.70	0.24	87,87,87,87	0
81	MG	AR	3880	1/1	0.70	0.36	78,78,78,78	0
80	OHX	sR	2170	7/7	0.71	0.17	214,222,251,318	0
81	MG	sR	1985	1/1	0.71	0.23	80,80,80,80	0
80	OHX	AR	3863	7/7	0.71	0.14	200,215,244,305	0
81	MG	AR	4129	1/1	0.71	0.56	81,81,81,81	0
80	OHX	1	3569	7/7	0.71	0.16	212,236,241,313	0
80	OHX	1	3845	7/7	0.71	0.25	202,207,214,323	0
80	OHX	AR	3895	7/7	0.71	0.13	214,216,236,300	0
81	MG	1	4105	1/1	0.71	0.35	85,85,85,85	0
81	MG	x	205	1/1	0.71	0.38	98,98,98,98	0
81	MG	sR	2082	1/1	0.71	0.40	79,79,79,79	0
81	MG	A	2020	1/1	0.71	0.32	94,94,94,94	0
81	MG	AR	3989	1/1	0.72	0.20	65,65,65,65	0
81	MG	sR	1965	1/1	0.72	0.29	74,74,74,74	0
81	MG	AO	101	1/1	0.72	0.20	85,85,85,85	0
81	MG	A	2128	1/1	0.72	0.20	129,129,129,129	0
80	OHX	A	1914	7/7	0.72	0.14	177,179,201,225	7
81	MG	1	3955	1/1	0.72	0.45	102,102,102,102	0
81	MG	AR	3414	1/1	0.72	0.32	95,95,95,95	0
81	MG	1	3678	1/1	0.72	0.36	110,110,110,110	0
80	OHX	AR	3767	7/7	0.72	0.14	189,206,233,294	0
81	MG	sR	2116	1/1	0.72	0.20	74,74,74,74	0
80	OHX	sR	1966	7/7	0.72	0.20	172,176,184,216	7
80	OHX	sR	2124	7/7	0.73	0.17	175,181,203,270	0
81	MG	A	1951	1/1	0.73	0.15	116,116,116,116	0
81	MG	sR	2033	1/1	0.73	0.37	92,92,92,92	0
81	MG	AR	3651	1/1	0.73	0.37	103,103,103,103	0
81	MG	AR	3845	1/1	0.73	0.31	86,86,86,86	0
81	MG	AR	3852	1/1	0.73	0.39	97,97,97,97	0
81	MG	AR	3866	1/1	0.73	0.37	76,76,76,76	0
81	MG	AR	3439	1/1	0.73	0.29	83,83,83,83	0
81	MG	A	2157	1/1	0.73	0.17	76,76,76,76	0
80	OHX	AR	3831	7/7	0.73	0.18	215,227,240,312	0
80	OHX	AR	3673	7/7	0.73	0.16	239,246,272,358	0
81	MG	sR	1986	1/1	0.73	0.32	88,88,88,88	0
81	MG	1	3630	1/1	0.73	0.35	88,88,88,88	0
81	MG	sR	2153	1/1	0.73	0.17	76,76,76,76	0
81	MG	AR	4098	1/1	0.73	0.36	92,92,92,92	0
81	MG	AS	215	1/1	0.74	0.36	88,88,88,88	0
81	MG	1	3439	1/1	0.74	0.30	83,83,83,83	0
80	OHX	sR	1905	7/7	0.74	0.16	242,246,272,341	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	1	3747	1/1	0.74	0.19	103,103,103,103	0
81	MG	1	3498	1/1	0.74	0.39	82,82,82,82	0
81	MG	sR	1939	1/1	0.74	0.31	72,72,72,72	0
81	MG	AR	3459	1/1	0.74	0.27	92,92,92,92	0
80	OHX	A	2023	7/7	0.74	0.17	218,230,246,307	0
81	MG	AR	4032	1/1	0.74	0.16	99,99,99,99	0
80	OHX	1	4058	7/7	0.74	0.15	190,199,220,296	0
81	MG	AR	4065	1/1	0.74	0.21	78,78,78,78	0
80	OHX	sR	2192	7/7	0.74	0.16	235,273,279,339	0
80	OHX	sR	2101	7/7	0.74	0.15	206,221,231,301	0
81	MG	1	4106	1/1	0.74	0.37	81,81,81,81	0
81	MG	4	233	1/1	0.74	0.32	81,81,81,81	0
81	MG	z	201	1/1	0.74	0.13	119,119,119,119	0
81	MG	U	201	1/1	0.74	0.29	79,79,79,79	0
81	MG	AR	4158	1/1	0.75	0.35	83,83,83,83	0
81	MG	sR	2007	1/1	0.75	0.32	102,102,102,102	0
81	MG	AR	3873	1/1	0.75	0.19	88,88,88,88	0
81	MG	1	3684	1/1	0.75	0.15	66,66,66,66	0
81	MG	AT	216	1/1	0.75	0.14	86,86,86,86	0
81	MG	sR	2009	1/1	0.75	0.19	74,74,74,74	0
81	MG	1	3416	1/1	0.75	0.26	97,97,97,97	0
81	MG	A	1931	1/1	0.75	0.28	73,73,73,73	0
80	OHX	AR	4081	6/7	0.75	0.16	201,217,232,296	0
81	MG	1	3776	1/1	0.75	0.29	77,77,77,77	0
81	MG	AR	3971	1/1	0.75	0.20	94,94,94,94	0
81	MG	A	2106	1/1	0.75	0.35	89,89,89,89	0
80	OHX	AS	230	7/7	0.75	0.18	176,192,209,257	0
80	OHX	A	2033	7/7	0.75	0.13	176,188,212,275	0
81	MG	A	1981	1/1	0.75	0.39	92,92,92,92	0
80	OHX	1	4181	7/7	0.75	0.21	161,174,184,296	0
81	MG	1	3977	1/1	0.75	0.26	92,92,92,92	0
81	MG	1	3985	1/1	0.75	0.16	85,85,85,85	0
81	MG	A	2089	1/1	0.75	0.17	109,109,109,109	0
81	MG	AR	4113	1/1	0.75	0.35	87,87,87,87	0
81	MG	sR	2139	1/1	0.75	0.35	72,72,72,72	0
81	MG	1	3628	1/1	0.75	0.33	85,85,85,85	0
81	MG	AR	3674	1/1	0.75	0.31	83,83,83,83	0
81	MG	sR	2152	1/1	0.76	0.43	87,87,87,87	0
80	OHX	AR	3734	7/7	0.76	0.18	113,140,173,236	0
81	MG	AR	3960	1/1	0.76	0.22	85,85,85,85	0
81	MG	A	1942	1/1	0.76	0.35	89,89,89,89	0
81	MG	sR	2196	1/1	0.76	0.18	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	1	3715	1/1	0.76	0.30	86,86,86,86	0
80	OHX	AR	3735	7/7	0.76	0.12	238,247,281,344	0
80	OHX	AR	4019	7/7	0.76	0.20	210,226,253,331	0
81	MG	AR	3685	1/1	0.76	0.20	81,81,81,81	0
81	MG	c6	201	1/1	0.76	0.24	95,95,95,95	0
80	OHX	sR	2089	7/7	0.76	0.12	210,212,227,294	0
81	MG	A	2125	1/1	0.76	0.25	87,87,87,87	0
81	MG	A	1902	1/1	0.76	0.34	77,77,77,77	0
81	MG	AR	3810	1/1	0.76	0.24	78,78,78,78	0
80	OHX	A	2140	7/7	0.76	0.18	162,163,183,248	0
81	MG	1	3915	1/1	0.76	0.22	76,76,76,76	0
80	OHX	AR	3827	7/7	0.76	0.22	232,240,254,319	0
81	MG	AR	4207	1/1	0.76	0.20	62,62,62,62	0
81	MG	AR	3840	1/1	0.76	0.24	77,77,77,77	0
80	OHX	sR	2159	7/7	0.76	0.15	188,213,233,278	0
81	MG	AR	3567	1/1	0.76	0.24	86,86,86,86	0
81	MG	1	3619	1/1	0.76	0.14	74,74,74,74	0
81	MG	AR	3593	1/1	0.76	0.23	98,98,98,98	0
81	MG	AR	3621	1/1	0.76	0.30	70,70,70,70	0
80	OHX	AR	3728	7/7	0.76	0.22	155,163,186,221	7
81	MG	AR	3660	1/1	0.77	0.18	75,75,75,75	0
81	MG	AR	3495	1/1	0.77	0.35	75,75,75,75	0
81	MG	AR	4060	1/1	0.77	0.37	94,94,94,94	0
80	OHX	A	2057	7/7	0.77	0.13	208,234,250,290	0
81	MG	1	3534	1/1	0.77	0.36	85,85,85,85	0
81	MG	1	3829	1/1	0.77	0.34	69,69,69,69	0
81	MG	1	3831	1/1	0.77	0.27	94,94,94,94	0
81	MG	CK	203	1/1	0.77	0.15	142,142,142,142	0
81	MG	1	3839	1/1	0.77	0.33	82,82,82,82	0
81	MG	c7	201	1/1	0.77	0.29	97,97,97,97	0
81	MG	AR	3434	1/1	0.77	0.42	75,75,75,75	0
81	MG	1	3900	1/1	0.77	0.54	93,93,93,93	0
81	MG	c8	202	1/1	0.77	0.44	90,90,90,90	0
81	MG	A	2042	1/1	0.77	0.29	83,83,83,83	0
81	MG	CG	305	1/1	0.77	0.17	77,77,77,77	0
81	MG	1	3409	1/1	0.77	0.19	79,79,79,79	0
81	MG	1	3984	1/1	0.77	0.14	102,102,102,102	0
81	MG	CX	202	1/1	0.77	0.22	72,72,72,72	0
81	MG	1	4041	1/1	0.77	0.42	81,81,81,81	0
81	MG	sR	2106	1/1	0.77	0.44	113,113,113,113	0
81	MG	1	3440	1/1	0.77	0.30	95,95,95,95	0
80	OHX	sR	1937	7/7	0.77	0.17	191,204,230,288	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	4031	1/1	0.77	0.36	58,58,58,58	0
81	MG	sR	2131	1/1	0.77	0.35	83,83,83,83	0
81	MG	3	212	1/1	0.78	0.24	74,74,74,74	0
81	MG	1	3508	1/1	0.78	0.38	60,60,60,60	0
81	MG	AR	3778	1/1	0.78	0.21	97,97,97,97	0
81	MG	A	1952	1/1	0.78	0.34	69,69,69,69	0
81	MG	AR	3598	1/1	0.78	0.26	92,92,92,92	0
81	MG	sR	2055	1/1	0.78	0.27	99,99,99,99	0
81	MG	sR	2197	1/1	0.78	0.32	56,56,56,56	0
81	MG	1	3865	1/1	0.78	0.38	76,76,76,76	0
81	MG	1	3892	1/1	0.78	0.18	85,85,85,85	0
81	MG	A	2079	1/1	0.78	0.28	96,96,96,96	0
81	MG	AR	3834	1/1	0.78	0.21	81,81,81,81	0
80	OHX	AR	3635	7/7	0.78	0.15	172,175,196,268	0
80	OHX	sR	2111	7/7	0.78	0.17	178,189,207,268	0
80	OHX	1	3702	7/7	0.78	0.14	224,242,255,311	0
81	MG	sR	1975	1/1	0.78	0.36	67,67,67,67	0
80	OHX	AR	3894	7/7	0.78	0.21	150,166,180,262	0
81	MG	sR	1984	1/1	0.78	0.20	79,79,79,79	0
81	MG	1	4003	1/1	0.78	0.18	76,76,76,76	0
81	MG	1	3468	1/1	0.78	0.23	80,80,80,80	0
81	MG	1	3474	1/1	0.78	0.16	76,76,76,76	0
80	OHX	sR	1938	7/7	0.78	0.10	261,268,281,330	0
81	MG	1	4109	1/1	0.78	0.44	73,73,73,73	0
81	MG	1	4134	1/1	0.78	0.29	80,80,80,80	0
80	OHX	A	1974	7/7	0.78	0.13	216,218,236,290	0
80	OHX	A	1997	7/7	0.78	0.14	187,196,217,293	0
81	MG	AR	3561	1/1	0.78	0.23	85,85,85,85	0
81	MG	1	3645	1/1	0.79	0.29	78,78,78,78	0
81	MG	AR	3898	1/1	0.79	0.22	83,83,83,83	0
80	OHX	AR	3511	7/7	0.79	0.19	181,183,201,235	7
81	MG	sR	2175	1/1	0.79	0.26	81,81,81,81	0
81	MG	sR	2184	1/1	0.79	0.21	103,103,103,103	0
81	MG	sR	2195	1/1	0.79	0.27	89,89,89,89	0
81	MG	AR	3433	1/1	0.79	0.48	89,89,89,89	0
81	MG	A	1928	1/1	0.79	0.35	68,68,68,68	0
80	OHX	1	4151	7/7	0.79	0.13	173,184,192,261	0
81	MG	AR	3990	1/1	0.79	0.40	66,66,66,66	0
81	MG	AR	3440	1/1	0.79	0.24	75,75,75,75	0
81	MG	AR	3443	1/1	0.79	0.27	112,112,112,112	0
81	MG	1	3823	1/1	0.79	0.29	78,78,78,78	0
81	MG	AR	3713	1/1	0.79	0.13	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	AR	3824	7/7	0.79	0.11	216,218,220,251	7
81	MG	AR	4061	1/1	0.79	0.22	72,72,72,72	0
81	MG	CR	203	1/1	0.79	0.27	85,85,85,85	0
81	MG	AR	4071	1/1	0.79	0.31	67,67,67,67	0
81	MG	A	2144	1/1	0.79	0.36	72,72,72,72	0
81	MG	1	3866	1/1	0.79	0.24	77,77,77,77	0
81	MG	1	3870	1/1	0.79	0.35	76,76,76,76	0
81	MG	A	2145	1/1	0.79	0.38	76,76,76,76	0
80	OHX	AR	3518	7/7	0.79	0.12	183,196,218,286	0
81	MG	AR	3533	1/1	0.79	0.29	84,84,84,84	0
81	MG	1	3914	1/1	0.79	0.28	65,65,65,65	0
81	MG	1	3503	1/1	0.79	0.29	66,66,66,66	0
81	MG	1	3922	1/1	0.79	0.19	63,63,63,63	0
81	MG	1	3924	1/1	0.79	0.16	73,73,73,73	0
81	MG	AR	4153	1/1	0.79	0.23	62,62,62,62	0
81	MG	sR	2090	1/1	0.79	0.35	67,67,67,67	0
81	MG	AR	3534	1/1	0.79	0.18	52,52,52,52	0
81	MG	3	215	1/1	0.79	0.33	95,95,95,95	0
80	OHX	AR	3926	7/7	0.79	0.14	217,223,230,307	0
81	MG	AS	208	1/1	0.79	0.18	81,81,81,81	0
81	MG	1	4015	1/1	0.79	0.28	64,64,64,64	0
81	MG	A	1960	1/1	0.79	0.20	92,92,92,92	0
81	MG	1	4100	1/1	0.79	0.14	88,88,88,88	0
81	MG	1	3584	1/1	0.79	0.44	73,73,73,73	0
81	MG	sR	2129	1/1	0.79	0.13	98,98,98,98	0
81	MG	AB	206	1/1	0.79	0.30	83,83,83,83	0
80	OHX	AR	3540	7/7	0.79	0.12	205,216,234,305	0
81	MG	A	1912	1/1	0.79	0.12	101,101,101,101	0
81	MG	A	2008	1/1	0.79	0.40	63,63,63,63	0
81	MG	sR	1954	1/1	0.79	0.31	122,122,122,122	0
81	MG	1	4157	1/1	0.79	0.28	80,80,80,80	0
80	OHX	A	1944	7/7	0.80	0.12	239,242,255,328	0
81	MG	AR	4133	1/1	0.80	0.28	83,83,83,83	0
81	MG	AR	4144	1/1	0.80	0.34	63,63,63,63	0
81	MG	AR	4148	1/1	0.80	0.45	62,62,62,62	0
81	MG	AR	3726	1/1	0.80	0.45	88,88,88,88	0
81	MG	1	3659	1/1	0.80	0.32	79,79,79,79	0
81	MG	A	1972	1/1	0.80	0.48	84,84,84,84	0
80	OHX	AR	3799	7/7	0.80	0.15	193,208,227,291	0
81	MG	AR	4183	1/1	0.80	0.19	83,83,83,83	0
81	MG	AR	3803	1/1	0.80	0.53	63,63,63,63	0
81	MG	1	3736	1/1	0.80	0.23	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	3451	1/1	0.80	0.19	123,123,123,123	0
80	OHX	3	206	7/7	0.80	0.14	196,206,213,260	0
80	OHX	sR	1977	7/7	0.80	0.27	139,143,157,176	7
81	MG	AR	3489	1/1	0.80	0.22	70,70,70,70	0
81	MG	sR	2187	1/1	0.80	0.17	101,101,101,101	0
81	MG	sR	1918	1/1	0.80	0.35	69,69,69,69	0
80	OHX	1	3512	7/7	0.80	0.18	160,162,181,213	7
81	MG	1	3824	1/1	0.80	0.23	65,65,65,65	0
81	MG	A	2010	1/1	0.80	0.26	85,85,85,85	0
81	MG	A	2012	1/1	0.80	0.12	98,98,98,98	0
81	MG	1	3835	1/1	0.80	0.27	69,69,69,69	0
81	MG	AT	214	1/1	0.80	0.12	87,87,87,87	0
81	MG	3	213	1/1	0.80	0.15	76,76,76,76	0
81	MG	1	3847	1/1	0.80	0.17	59,59,59,59	0
80	OHX	sR	2077	7/7	0.80	0.10	228,251,270,316	0
81	MG	AR	3552	1/1	0.80	0.16	120,120,120,120	0
81	MG	AR	3558	1/1	0.80	0.33	78,78,78,78	0
81	MG	A	2148	1/1	0.80	0.24	91,91,91,91	0
80	OHX	sR	1916	7/7	0.80	0.12	224,234,257,333	0
80	OHX	1	3582	7/7	0.80	0.15	202,210,232,310	0
81	MG	t	201	1/1	0.80	0.20	94,94,94,94	0
81	MG	1	3913	1/1	0.80	0.28	69,69,69,69	0
81	MG	AR	3614	1/1	0.80	0.33	79,79,79,79	0
80	OHX	4	206	7/7	0.80	0.23	138,147,159,193	7
80	OHX	AR	3666	7/7	0.80	0.14	181,183,219,268	0
81	MG	1	3499	1/1	0.80	0.21	69,69,69,69	0
81	MG	1	3927	1/1	0.80	0.37	65,65,65,65	0
81	MG	A	2081	1/1	0.80	0.13	76,76,76,76	0
81	MG	AR	4036	1/1	0.80	0.21	105,105,105,105	0
81	MG	sR	2034	1/1	0.80	0.28	75,75,75,75	0
81	MG	sR	2035	1/1	0.80	0.16	81,81,81,81	0
80	OHX	1	3851	7/7	0.80	0.16	199,205,233,265	0
81	MG	AH	201	1/1	0.80	0.15	86,86,86,86	0
81	MG	1	3530	1/1	0.80	0.36	77,77,77,77	0
81	MG	AR	3402	1/1	0.80	0.25	80,80,80,80	0
81	MG	1	4046	1/1	0.80	0.45	67,67,67,67	0
81	MG	1	4073	1/1	0.80	0.54	80,80,80,80	0
81	MG	1	3533	1/1	0.80	0.15	74,74,74,74	0
81	MG	sR	2071	1/1	0.80	0.29	84,84,84,84	0
81	MG	AR	3412	1/1	0.80	0.33	73,73,73,73	0
81	MG	1	3556	1/1	0.80	0.24	88,88,88,88	0
81	MG	1	4128	1/1	0.80	0.32	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	3676	1/1	0.80	0.22	74,74,74,74	0
81	MG	1	3585	1/1	0.80	0.19	62,62,62,62	0
80	OHX	1	3963	7/7	0.80	0.14	187,199,227,299	0
81	MG	A	2097	1/1	0.80	0.34	70,70,70,70	0
80	OHX	1	4001	7/7	0.80	0.14	200,223,247,306	0
82	ZN	d7	101	1/1	0.80	0.10	274,274,274,274	0
81	MG	4	217	1/1	0.81	0.19	77,77,77,77	0
81	MG	A	1908	1/1	0.81	0.28	83,83,83,83	0
81	MG	4	218	1/1	0.81	0.33	74,74,74,74	0
81	MG	A	1911	1/1	0.81	0.33	102,102,102,102	0
81	MG	4	222	1/1	0.81	0.33	76,76,76,76	0
81	MG	4	224	1/1	0.81	0.12	65,65,65,65	0
81	MG	AR	3875	1/1	0.81	0.31	64,64,64,64	0
80	OHX	1	3514	7/7	0.81	0.28	134,139,161,194	7
80	OHX	sR	1949	7/7	0.81	0.15	191,201,223,268	0
81	MG	AR	3903	1/1	0.81	0.32	87,87,87,87	0
81	MG	A	2029	1/1	0.81	0.22	103,103,103,103	0
80	OHX	1	3875	7/7	0.81	0.33	150,168,178,208	7
81	MG	sR	2142	1/1	0.81	0.16	65,65,65,65	0
81	MG	sR	2149	1/1	0.81	0.19	82,82,82,82	0
81	MG	AR	3462	1/1	0.81	0.34	59,59,59,59	0
81	MG	AR	3677	1/1	0.81	0.35	48,48,48,48	0
81	MG	CO	201	1/1	0.81	0.33	73,73,73,73	0
81	MG	AR	4022	1/1	0.81	0.25	76,76,76,76	0
81	MG	AR	4029	1/1	0.81	0.27	83,83,83,83	0
81	MG	AR	3688	1/1	0.81	0.20	96,96,96,96	0
81	MG	AR	3707	1/1	0.81	0.39	91,91,91,91	0
81	MG	A	2054	1/1	0.81	0.15	116,116,116,116	0
80	OHX	1	3882	7/7	0.81	0.17	183,192,218,268	0
81	MG	AR	4059	1/1	0.81	0.40	75,75,75,75	0
81	MG	A	2078	1/1	0.81	0.41	84,84,84,84	0
81	MG	1	4006	1/1	0.81	0.36	56,56,56,56	0
81	MG	1	3676	1/1	0.81	0.34	79,79,79,79	0
80	OHX	1	3912	7/7	0.81	0.13	195,201,237,279	0
81	MG	1	4043	1/1	0.81	0.22	84,84,84,84	0
81	MG	AR	3769	1/1	0.81	0.22	80,80,80,80	0
81	MG	1	4065	1/1	0.81	0.32	74,74,74,74	0
80	OHX	sR	2176	7/7	0.81	0.11	257,265,281,360	0
81	MG	1	4095	1/1	0.81	0.17	63,63,63,63	0
81	MG	AR	4084	1/1	0.81	0.41	78,78,78,78	0
81	MG	1	3716	1/1	0.81	0.21	71,71,71,71	0
81	MG	A	1958	1/1	0.81	0.24	95,95,95,95	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	1	3415	1/1	0.81	0.31	76,76,76,76	0
80	OHX	AR	3956	7/7	0.81	0.13	179,186,190,274	0
81	MG	sR	2054	1/1	0.81	0.19	101,101,101,101	0
81	MG	x	207	1/1	0.81	0.46	96,96,96,96	0
81	MG	1	3463	1/1	0.81	0.37	81,81,81,81	0
80	OHX	AR	3760	7/7	0.81	0.12	180,200,222,280	0
81	MG	4	212	1/1	0.81	0.24	82,82,82,82	0
81	MG	1	4167	1/1	0.81	0.15	85,85,85,85	0
81	MG	AR	3583	1/1	0.81	0.28	56,56,56,56	0
81	MG	1	3805	1/1	0.82	0.23	84,84,84,84	0
80	OHX	AR	3546	7/7	0.82	0.15	168,175,206,269	0
80	OHX	AR	3604	7/7	0.82	0.12	202,209,233,275	0
80	OHX	sR	1925	7/7	0.82	0.13	201,214,232,308	0
81	MG	AR	3846	1/1	0.82	0.29	93,93,93,93	0
81	MG	s9	201	1/1	0.82	0.37	85,85,85,85	0
81	MG	1	3836	1/1	0.82	0.16	68,68,68,68	0
80	OHX	J	301	7/7	0.82	0.11	227,232,255,310	0
81	MG	sR	2068	1/1	0.82	0.23	92,92,92,92	0
81	MG	AR	3868	1/1	0.82	0.33	61,61,61,61	0
81	MG	1	3853	1/1	0.82	0.35	66,66,66,66	0
80	OHX	AR	3988	7/7	0.82	0.15	215,228,247,291	0
81	MG	AR	3522	1/1	0.82	0.26	50,50,50,50	0
80	OHX	AR	3704	7/7	0.82	0.12	183,203,221,271	0
80	OHX	1	3933	7/7	0.82	0.15	224,234,238,262	0
81	MG	sR	2095	1/1	0.82	0.17	94,94,94,94	0
81	MG	AR	3536	1/1	0.82	0.32	81,81,81,81	0
81	MG	AR	4186	1/1	0.82	0.24	68,68,68,68	0
81	MG	AR	3904	1/1	0.82	0.40	77,77,77,77	0
81	MG	DA	201	1/1	0.82	0.20	75,75,75,75	0
81	MG	A	1940	1/1	0.82	0.21	85,85,85,85	0
81	MG	1	3916	1/1	0.82	0.34	72,72,72,72	0
81	MG	AR	3914	1/1	0.82	0.37	74,74,74,74	0
81	MG	AS	214	1/1	0.82	0.29	84,84,84,84	0
81	MG	1	3926	1/1	0.82	0.14	74,74,74,74	0
81	MG	AR	3918	1/1	0.82	0.20	89,89,89,89	0
81	MG	sR	2140	1/1	0.82	0.23	80,80,80,80	0
81	MG	1	3618	1/1	0.82	0.29	60,60,60,60	0
81	MG	CP	304	1/1	0.82	0.20	66,66,66,66	0
81	MG	AR	3967	1/1	0.82	0.29	84,84,84,84	0
81	MG	AR	3968	1/1	0.82	0.31	100,100,100,100	0
80	OHX	4	202	7/7	0.82	0.13	195,206,247,301	0
81	MG	1	4004	1/1	0.82	0.44	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	sR	1950	1/1	0.82	0.27	76,76,76,76	0
81	MG	AR	3974	1/1	0.82	0.19	67,67,67,67	0
81	MG	1	3651	1/1	0.82	0.16	63,63,63,63	0
81	MG	sR	1964	1/1	0.82	0.19	84,84,84,84	0
81	MG	AR	3563	1/1	0.82	0.21	73,73,73,73	0
81	MG	A	2039	1/1	0.82	0.32	84,84,84,84	0
81	MG	AR	3771	1/1	0.82	0.28	66,66,66,66	0
81	MG	AR	3777	1/1	0.82	0.36	85,85,85,85	0
81	MG	A	1949	1/1	0.82	0.21	69,69,69,69	0
80	OHX	AR	4202	7/7	0.82	0.15	179,181,224,272	0
80	OHX	1	4032	7/7	0.82	0.15	199,216,249,292	0
81	MG	AR	3807	1/1	0.82	0.21	75,75,75,75	0
81	MG	1	3745	1/1	0.82	0.13	69,69,69,69	0
80	OHX	1	4055	7/7	0.82	0.16	149,165,178,258	0
80	OHX	A	2095	7/7	0.82	0.14	224,232,239,300	0
81	MG	AR	3629	1/1	0.82	0.18	67,67,67,67	0
81	MG	AR	3837	1/1	0.82	0.35	58,58,58,58	0
81	MG	1	3768	1/1	0.82	0.41	66,66,66,66	0
81	MG	sR	2030	1/1	0.82	0.26	83,83,83,83	0
81	MG	A	1968	1/1	0.82	0.23	72,72,72,72	0
81	MG	AR	3521	1/1	0.83	0.15	59,59,59,59	0
80	OHX	A	2073	7/7	0.83	0.16	159,176,199,269	0
81	MG	AR	3531	1/1	0.83	0.39	95,95,95,95	0
81	MG	sR	2078	1/1	0.83	0.25	97,97,97,97	0
81	MG	1	3833	1/1	0.83	0.41	74,74,74,74	0
81	MG	1	3834	1/1	0.83	0.21	77,77,77,77	0
81	MG	d2	201	1/1	0.83	0.22	70,70,70,70	0
81	MG	A	2099	1/1	0.83	0.19	82,82,82,82	0
80	OHX	sR	2154	7/7	0.83	0.15	169,180,192,259	0
80	OHX	1	3942	7/7	0.83	0.12	172,181,218,278	0
81	MG	AR	3556	1/1	0.83	0.36	62,62,62,62	0
81	MG	m	301	1/1	0.83	0.25	84,84,84,84	0
81	MG	1	3855	1/1	0.83	0.21	71,71,71,71	0
81	MG	1	3860	1/1	0.83	0.11	90,90,90,90	0
81	MG	AR	3772	1/1	0.83	0.23	63,63,63,63	0
81	MG	AS	222	1/1	0.83	0.27	72,72,72,72	0
81	MG	AR	3559	1/1	0.83	0.15	58,58,58,58	0
81	MG	sR	1907	1/1	0.83	0.43	84,84,84,84	0
81	MG	1	3885	1/1	0.83	0.47	85,85,85,85	0
81	MG	A	2030	1/1	0.83	0.17	85,85,85,85	0
81	MG	AR	3779	1/1	0.83	0.13	78,78,78,78	0
81	MG	AR	3781	1/1	0.83	0.44	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	1	3560	1/1	0.83	0.20	82,82,82,82	0
81	MG	AR	3996	1/1	0.83	0.14	69,69,69,69	0
81	MG	sR	1953	1/1	0.83	0.21	85,85,85,85	0
81	MG	A	2032	1/1	0.83	0.27	72,72,72,72	0
81	MG	AR	4024	1/1	0.83	0.37	87,87,87,87	0
80	OHX	3	220	7/7	0.83	0.13	207,211,226,304	0
80	OHX	AR	3543	7/7	0.83	0.18	139,149,171,247	0
81	MG	AR	3584	1/1	0.83	0.23	75,75,75,75	0
81	MG	1	3950	1/1	0.83	0.34	78,78,78,78	0
80	OHX	AR	3798	7/7	0.83	0.13	178,182,211,279	0
81	MG	A	1929	1/1	0.83	0.32	79,79,79,79	0
81	MG	A	1978	1/1	0.83	0.21	77,77,77,77	0
80	OHX	AR	4142	7/7	0.83	0.22	222,228,247,349	0
81	MG	1	3652	1/1	0.83	0.31	73,73,73,73	0
81	MG	1	3653	1/1	0.83	0.20	95,95,95,95	0
80	OHX	AT	227	7/7	0.83	0.15	169,171,190,250	0
81	MG	AR	3467	1/1	0.83	0.20	58,58,58,58	0
81	MG	1	4014	1/1	0.83	0.19	83,83,83,83	0
81	MG	A	1991	1/1	0.83	0.17	78,78,78,78	0
81	MG	AT	211	1/1	0.83	0.23	75,75,75,75	0
81	MG	A	2002	1/1	0.83	0.15	84,84,84,84	0
81	MG	AR	3491	1/1	0.83	0.14	58,58,58,58	0
81	MG	1	3703	1/1	0.83	0.27	54,54,54,54	0
80	OHX	sR	1955	7/7	0.83	0.16	149,157,166,190	7
81	MG	CE	405	1/1	0.83	0.42	83,83,83,83	0
81	MG	1	3719	1/1	0.83	0.40	86,86,86,86	0
81	MG	sR	2032	1/1	0.83	0.14	84,84,84,84	0
80	OHX	1	3484	7/7	0.83	0.13	145,162,170,200	7
80	OHX	1	3488	7/7	0.83	0.16	139,141,155,224	0
81	MG	AR	3874	1/1	0.83	0.33	70,70,70,70	0
81	MG	1	3418	1/1	0.83	0.21	66,66,66,66	0
81	MG	1	3431	1/1	0.83	0.20	65,65,65,65	0
81	MG	AR	3507	1/1	0.83	0.22	77,77,77,77	0
81	MG	AR	3876	1/1	0.83	0.39	95,95,95,95	0
81	MG	1	3446	1/1	0.83	0.21	75,75,75,75	0
81	MG	AR	3877	1/1	0.83	0.26	71,71,71,71	0
81	MG	1	3809	1/1	0.83	0.34	78,78,78,78	0
81	MG	1	3772	1/1	0.84	0.40	66,66,66,66	0
80	OHX	1	3813	7/7	0.84	0.11	230,237,258,309	0
80	OHX	AR	4204	7/7	0.84	0.14	163,167,190,240	0
81	MG	AR	3691	1/1	0.84	0.44	84,84,84,84	0
80	OHX	d4	201	7/7	0.84	0.12	213,222,228,282	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	1	3464	1/1	0.84	0.26	74,74,74,74	0
81	MG	4	216	1/1	0.84	0.32	73,73,73,73	0
81	MG	1	3826	1/1	0.84	0.36	51,51,51,51	0
81	MG	AR	4184	1/1	0.84	0.23	76,76,76,76	0
81	MG	1	3830	1/1	0.84	0.21	83,83,83,83	0
80	OHX	AT	208	7/7	0.84	0.13	169,188,210,283	0
81	MG	1	3494	1/1	0.84	0.28	56,56,56,56	0
80	OHX	1	3881	7/7	0.84	0.11	201,206,231,275	0
81	MG	AR	4210	1/1	0.84	0.36	77,77,77,77	0
81	MG	AR	4211	1/1	0.84	0.38	63,63,63,63	0
80	OHX	sR	1970	7/7	0.84	0.12	201,211,225,274	0
81	MG	AR	3739	1/1	0.84	0.21	59,59,59,59	0
81	MG	AR	3941	1/1	0.84	0.20	51,51,51,51	0
81	MG	sR	2104	1/1	0.84	0.21	93,93,93,93	0
81	MG	AR	3744	1/1	0.84	0.14	70,70,70,70	0
81	MG	1	3857	1/1	0.84	0.28	65,65,65,65	0
81	MG	1	3524	1/1	0.84	0.16	77,77,77,77	0
81	MG	AR	3748	1/1	0.84	0.12	69,69,69,69	0
81	MG	4	223	1/1	0.84	0.21	81,81,81,81	0
80	OHX	A	1986	7/7	0.84	0.14	107,135,150,218	0
80	OHX	1	3452	7/7	0.84	0.12	131,140,161,233	0
80	OHX	4	204	7/7	0.84	0.17	193,207,215,289	0
81	MG	1	3888	1/1	0.84	0.43	67,67,67,67	0
81	MG	sR	1929	1/1	0.84	0.50	65,65,65,65	0
81	MG	sR	1932	1/1	0.84	0.28	75,75,75,75	0
81	MG	1	3561	1/1	0.84	0.26	71,71,71,71	0
81	MG	s8	301	1/1	0.84	0.34	93,93,93,93	0
81	MG	A	2080	1/1	0.84	0.18	91,91,91,91	0
81	MG	1	3599	1/1	0.84	0.26	71,71,71,71	0
81	MG	sR	2151	1/1	0.84	0.10	93,93,93,93	0
80	OHX	AR	3987	7/7	0.84	0.14	186,199,227,276	0
80	OHX	A	2150	7/7	0.84	0.13	180,190,203,226	7
80	OHX	x	208	7/7	0.84	0.10	182,201,222,292	0
81	MG	sR	2161	1/1	0.84	0.35	67,67,67,67	0
81	MG	AR	3582	1/1	0.84	0.36	66,66,66,66	0
81	MG	AR	3426	1/1	0.84	0.12	65,65,65,65	0
81	MG	1	3958	1/1	0.84	0.13	104,104,104,104	0
81	MG	1	3644	1/1	0.84	0.28	59,59,59,59	0
81	MG	AR	4034	1/1	0.84	0.11	113,113,113,113	0
81	MG	1	3648	1/1	0.84	0.39	54,54,54,54	0
80	OHX	AR	4080	7/7	0.84	0.14	192,196,222,273	0
81	MG	sR	2194	1/1	0.84	0.19	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	1	3550	7/7	0.84	0.14	179,208,240,281	0
81	MG	1	3654	1/1	0.84	0.30	77,77,77,77	0
80	OHX	1	4115	7/7	0.84	0.24	152,154,179,203	7
80	OHX	AR	3892	7/7	0.84	0.18	93,110,149,204	0
80	OHX	1	4145	7/7	0.84	0.11	205,215,222,287	0
81	MG	1	4042	1/1	0.84	0.26	95,95,95,95	0
81	MG	1	3677	1/1	0.84	0.26	72,72,72,72	0
81	MG	A	2107	1/1	0.84	0.16	111,111,111,111	0
81	MG	1	4048	1/1	0.84	0.25	57,57,57,57	0
80	OHX	A	2087	7/7	0.84	0.12	198,209,235,266	0
81	MG	sR	2006	1/1	0.84	0.37	73,73,73,73	0
81	MG	1	4074	1/1	0.84	0.26	74,74,74,74	0
81	MG	1	4077	1/1	0.84	0.20	73,73,73,73	0
81	MG	1	4080	1/1	0.84	0.41	73,73,73,73	0
81	MG	AT	221	1/1	0.84	0.39	81,81,81,81	0
81	MG	6	201	1/1	0.84	0.33	65,65,65,65	0
80	OHX	1	3612	7/7	0.84	0.10	186,196,209,291	0
81	MG	CE	404	1/1	0.84	0.37	59,59,59,59	0
81	MG	1	3733	1/1	0.84	0.23	59,59,59,59	0
81	MG	3	208	1/1	0.84	0.18	71,71,71,71	0
81	MG	1	4131	1/1	0.84	0.13	54,54,54,54	0
81	MG	1	3744	1/1	0.84	0.14	69,69,69,69	0
81	MG	A	1901	1/1	0.84	0.26	108,108,108,108	0
81	MG	AR	3476	1/1	0.84	0.19	64,64,64,64	0
80	OHX	1	3672	7/7	0.84	0.12	191,214,232,274	0
81	MG	AR	4131	1/1	0.84	0.31	60,60,60,60	0
81	MG	1	4162	1/1	0.84	0.21	70,70,70,70	0
80	OHX	AR	3610	7/7	0.84	0.14	159,169,180,243	0
82	ZN	c	101	1/1	0.84	0.13	244,244,244,244	0
80	OHX	1	3792	7/7	0.84	0.14	173,178,201,251	0
85	SPD	AR	3890	10/10	0.84	0.25	61,72,87,96	0
81	MG	AR	4208	1/1	0.85	0.23	84,84,84,84	0
80	OHX	sR	2017	7/7	0.85	0.12	169,178,200,263	0
81	MG	AR	3747	1/1	0.85	0.22	79,79,79,79	0
81	MG	3	218	1/1	0.85	0.21	89,89,89,89	0
81	MG	AR	3945	1/1	0.85	0.31	60,60,60,60	0
81	MG	A	1992	1/1	0.85	0.14	80,80,80,80	0
80	OHX	O	201	7/7	0.85	0.11	213,228,247,281	0
81	MG	A	2118	1/1	0.85	0.28	64,64,64,64	0
80	OHX	sR	2065	7/7	0.85	0.12	175,178,202,252	0
81	MG	AR	3590	1/1	0.85	0.22	82,82,82,82	0
81	MG	1	3562	1/1	0.85	0.35	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	3976	1/1	0.85	0.26	65,65,65,65	0
81	MG	AR	3591	1/1	0.85	0.32	62,62,62,62	0
81	MG	1	3586	1/1	0.85	0.17	73,73,73,73	0
81	MG	1	3587	1/1	0.85	0.31	50,50,50,50	0
81	MG	sR	1920	1/1	0.85	0.16	84,84,84,84	0
81	MG	A	1910	1/1	0.85	0.12	77,77,77,77	0
81	MG	sR	1930	1/1	0.85	0.29	90,90,90,90	0
81	MG	AR	3788	1/1	0.85	0.25	75,75,75,75	0
81	MG	AR	4011	1/1	0.85	0.22	99,99,99,99	0
81	MG	AR	3800	1/1	0.85	0.28	60,60,60,60	0
80	OHX	AR	3425	7/7	0.85	0.12	171,186,220,270	0
81	MG	1	3918	1/1	0.85	0.28	66,66,66,66	0
81	MG	sR	1951	1/1	0.85	0.33	66,66,66,66	0
81	MG	sR	2193	1/1	0.85	0.16	82,82,82,82	0
80	OHX	AR	4073	7/7	0.85	0.13	163,169,201,268	0
81	MG	AR	3616	1/1	0.85	0.37	50,50,50,50	0
80	OHX	1	3490	7/7	0.85	0.15	172,190,206,246	0
81	MG	1	3954	1/1	0.85	0.17	82,82,82,82	0
81	MG	AR	3623	1/1	0.85	0.22	62,62,62,62	0
81	MG	AR	3813	1/1	0.85	0.18	70,70,70,70	0
80	OHX	AR	3454	7/7	0.85	0.15	181,184,209,223	0
81	MG	1	3960	1/1	0.85	0.11	91,91,91,91	0
80	OHX	AR	3573	7/7	0.85	0.13	190,203,218,286	0
81	MG	1	3980	1/1	0.85	0.26	73,73,73,73	0
81	MG	AT	215	1/1	0.85	0.23	76,76,76,76	0
80	OHX	c3	201	7/7	0.85	0.12	203,229,241,268	0
80	OHX	A	2036	7/7	0.85	0.14	216,231,246,295	0
80	OHX	AR	3954	7/7	0.85	0.16	135,153,172,233	0
80	OHX	AG	201	7/7	0.85	0.14	138,158,173,242	0
80	OHX	1	4085	7/7	0.85	0.13	149,156,168,251	0
80	OHX	AR	3640	7/7	0.85	0.12	174,177,203,255	0
81	MG	1	4018	1/1	0.85	0.25	71,71,71,71	0
81	MG	AR	3864	1/1	0.85	0.15	82,82,82,82	0
80	OHX	1	4118	7/7	0.85	0.14	143,162,188,246	0
81	MG	AR	4114	1/1	0.85	0.23	68,68,68,68	0
81	MG	sR	2018	1/1	0.85	0.22	65,65,65,65	0
81	MG	AR	4115	1/1	0.85	0.40	77,77,77,77	0
81	MG	AR	4124	1/1	0.85	0.23	69,69,69,69	0
81	MG	A	2064	1/1	0.85	0.09	89,89,89,89	0
80	OHX	sR	2181	7/7	0.85	0.15	193,205,243,305	0
80	OHX	1	3693	7/7	0.85	0.15	169,178,185,253	0
81	MG	1	3447	1/1	0.85	0.40	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	1	4094	1/1	0.85	0.41	84,84,84,84	0
80	OHX	sR	2191	7/7	0.85	0.12	229,234,260,325	0
81	MG	1	4097	1/1	0.85	0.15	54,54,54,54	0
81	MG	1	3766	1/1	0.85	0.31	77,77,77,77	0
81	MG	AR	4146	1/1	0.85	0.33	56,56,56,56	0
80	OHX	1	3723	7/7	0.85	0.10	174,177,201,271	0
80	OHX	AS	231	7/7	0.85	0.11	182,211,228,262	0
81	MG	AR	4156	1/1	0.85	0.27	58,58,58,58	0
81	MG	1	3797	1/1	0.85	0.17	51,51,51,51	0
81	MG	1	3477	1/1	0.85	0.34	72,72,72,72	0
80	OHX	AR	3862	7/7	0.85	0.13	167,182,202,255	0
81	MG	AR	4160	1/1	0.85	0.17	85,85,85,85	0
81	MG	AR	3896	1/1	0.85	0.34	65,65,65,65	0
81	MG	AR	4182	1/1	0.85	0.38	82,82,82,82	0
81	MG	AR	3719	1/1	0.85	0.16	66,66,66,66	0
81	MG	1	4166	1/1	0.85	0.31	81,81,81,81	0
81	MG	1	3504	1/1	0.85	0.20	67,67,67,67	0
81	MG	1	4168	1/1	0.85	0.34	51,51,51,51	0
81	MG	AR	3720	1/1	0.85	0.26	59,59,59,59	0
80	OHX	sR	2004	7/7	0.85	0.12	178,191,214,280	0
80	OHX	1	3849	7/7	0.85	0.14	174,179,202,249	0
80	OHX	sR	2088	7/7	0.86	0.13	176,184,195,263	0
80	OHX	AR	3729	7/7	0.86	0.14	138,142,174,227	0
81	MG	CK	202	1/1	0.86	0.40	85,85,85,85	0
80	OHX	1	3910	7/7	0.86	0.12	157,174,186,248	0
81	MG	A	1979	1/1	0.86	0.20	70,70,70,70	0
80	OHX	AR	3423	7/7	0.86	0.12	177,192,201,274	0
81	MG	AR	3595	1/1	0.86	0.14	76,76,76,76	0
81	MG	A	1988	1/1	0.86	0.29	72,72,72,72	0
80	OHX	1	3510	7/7	0.86	0.13	154,162,199,234	0
80	OHX	A	2017	7/7	0.86	0.10	215,223,240,266	0
80	OHX	A	2046	7/7	0.86	0.15	185,196,209,252	0
81	MG	A	2000	1/1	0.86	0.19	88,88,88,88	0
81	MG	AT	220	1/1	0.86	0.36	79,79,79,79	0
81	MG	AR	3625	1/1	0.86	0.21	81,81,81,81	0
81	MG	x	201	1/1	0.86	0.26	58,58,58,58	0
81	MG	1	3800	1/1	0.86	0.41	76,76,76,76	0
80	OHX	sR	2125	7/7	0.86	0.13	150,154,192,259	0
81	MG	1	3806	1/1	0.86	0.21	76,76,76,76	0
81	MG	x	206	1/1	0.86	0.50	60,60,60,60	0
81	MG	AR	3910	1/1	0.86	0.12	61,61,61,61	0
81	MG	s2	301	1/1	0.86	0.37	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	1	4030	7/7	0.86	0.15	131,140,186,229	0
81	MG	1	3406	1/1	0.86	0.24	76,76,76,76	0
81	MG	AR	3654	1/1	0.86	0.18	74,74,74,74	0
80	OHX	A	1957	7/7	0.86	0.15	179,186,188,239	0
80	OHX	1	3551	7/7	0.86	0.13	166,179,213,259	0
81	MG	AR	3947	1/1	0.86	0.12	82,82,82,82	0
81	MG	o	302	1/1	0.86	0.25	71,71,71,71	0
81	MG	1	3433	1/1	0.86	0.22	48,48,48,48	0
81	MG	A	2018	1/1	0.86	0.37	74,74,74,74	0
80	OHX	AR	3792	7/7	0.86	0.19	164,170,187,215	7
81	MG	CS	201	1/1	0.86	0.28	94,94,94,94	0
81	MG	A	2022	1/1	0.86	0.21	70,70,70,70	0
80	OHX	1	3581	7/7	0.86	0.13	184,188,206,246	0
81	MG	AR	3693	1/1	0.86	0.33	71,71,71,71	0
81	MG	1	3858	1/1	0.86	0.18	71,71,71,71	0
81	MG	c6	202	1/1	0.86	0.15	97,97,97,97	0
81	MG	1	3862	1/1	0.86	0.24	63,63,63,63	0
81	MG	1	3471	1/1	0.86	0.17	75,75,75,75	0
80	OHX	AR	4109	7/7	0.86	0.11	178,203,217,245	0
81	MG	1	3475	1/1	0.86	0.36	115,115,115,115	0
81	MG	AR	3999	1/1	0.86	0.28	72,72,72,72	0
81	MG	sR	1994	1/1	0.86	0.23	97,97,97,97	0
81	MG	sR	1995	1/1	0.86	0.12	67,67,67,67	0
81	MG	AR	4009	1/1	0.86	0.21	79,79,79,79	0
81	MG	1	3897	1/1	0.86	0.19	79,79,79,79	0
80	OHX	AR	3797	7/7	0.86	0.11	160,178,200,242	0
80	OHX	1	4120	7/7	0.86	0.15	191,197,213,283	0
80	OHX	1	3633	6/7	0.86	0.17	141,162,179,219	0
80	OHX	1	3665	7/7	0.86	0.15	173,175,196,260	0
80	OHX	AR	4166	7/7	0.86	0.13	171,181,206,264	0
80	OHX	AR	3924	7/7	0.86	0.11	208,220,237,300	0
81	MG	1	3917	1/1	0.86	0.23	66,66,66,66	0
81	MG	AR	3469	1/1	0.86	0.20	68,68,68,68	0
81	MG	1	3920	1/1	0.86	0.10	68,68,68,68	0
81	MG	AR	3746	1/1	0.86	0.23	70,70,70,70	0
81	MG	A	2068	1/1	0.86	0.25	87,87,87,87	0
81	MG	1	3529	1/1	0.86	0.18	77,77,77,77	0
81	MG	3	207	1/1	0.86	0.18	76,76,76,76	0
81	MG	1	3929	1/1	0.86	0.40	65,65,65,65	0
81	MG	sR	2043	1/1	0.86	0.20	81,81,81,81	0
81	MG	1	3951	1/1	0.86	0.17	66,66,66,66	0
81	MG	sR	2044	1/1	0.86	0.21	97,97,97,97	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	3750	1/1	0.86	0.10	70,70,70,70	0
81	MG	1	3535	1/1	0.86	0.22	85,85,85,85	0
81	MG	AR	3752	1/1	0.86	0.23	74,74,74,74	0
80	OHX	1	3695	7/7	0.86	0.15	139,142,145,180	7
81	MG	1	3557	1/1	0.86	0.33	50,50,50,50	0
81	MG	A	1918	1/1	0.86	0.14	76,76,76,76	0
81	MG	sR	2067	1/1	0.86	0.21	66,66,66,66	0
80	OHX	AR	3925	7/7	0.86	0.11	185,192,232,284	0
81	MG	AR	4091	1/1	0.86	0.12	75,75,75,75	0
81	MG	AR	3776	1/1	0.86	0.43	81,81,81,81	0
81	MG	AR	4100	1/1	0.86	0.30	71,71,71,71	0
81	MG	A	1922	1/1	0.86	0.17	85,85,85,85	0
81	MG	1	3593	1/1	0.86	0.12	74,74,74,74	0
81	MG	AR	3498	1/1	0.86	0.15	77,77,77,77	0
80	OHX	AR	3697	7/7	0.86	0.10	213,216,235,298	0
81	MG	A	2090	1/1	0.86	0.37	67,67,67,67	0
80	OHX	1	3725	7/7	0.86	0.13	135,138,164,231	0
80	OHX	1	3755	7/7	0.86	0.19	140,143,159,186	7
81	MG	1	4047	1/1	0.86	0.41	89,89,89,89	0
81	MG	1	3624	1/1	0.86	0.31	83,83,83,83	0
80	OHX	1	3758	7/7	0.86	0.15	143,152,164,218	0
81	MG	1	4067	1/1	0.86	0.29	60,60,60,60	0
80	OHX	A	2063	7/7	0.86	0.12	190,197,220,285	0
81	MG	sR	2114	1/1	0.86	0.25	76,76,76,76	0
81	MG	1	3643	1/1	0.86	0.31	52,52,52,52	0
81	MG	CJ	301	1/1	0.86	0.22	81,81,81,81	0
81	MG	sR	2126	1/1	0.86	0.22	78,78,78,78	0
80	OHX	sR	2064	7/7	0.86	0.12	190,210,221,265	0
81	MG	1	3649	1/1	0.86	0.34	69,69,69,69	0
81	MG	A	2115	1/1	0.86	0.23	75,75,75,75	0
80	OHX	1	3821	7/7	0.86	0.11	174,182,217,274	0
81	MG	AR	3814	1/1	0.86	0.16	66,66,66,66	0
81	MG	AR	3816	1/1	0.86	0.80	68,68,68,68	0
81	MG	1	4127	1/1	0.86	0.22	73,73,73,73	0
80	OHX	3	222	7/7	0.86	0.15	159,162,178,196	7
81	MG	1	3658	1/1	0.86	0.11	80,80,80,80	0
80	OHX	1	3422	7/7	0.86	0.18	155,161,180,251	0
81	MG	AR	4179	1/1	0.86	0.36	58,58,58,58	0
80	OHX	AR	3957	7/7	0.86	0.11	183,195,228,289	0
80	OHX	1	3454	7/7	0.86	0.16	129,135,148,177	7
81	MG	1	3683	1/1	0.86	0.19	64,64,64,64	0
81	MG	AR	3564	1/1	0.86	0.37	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	A	2134	1/1	0.86	0.26	78,78,78,78	0
81	MG	AR	4188	1/1	0.86	0.25	66,66,66,66	0
81	MG	1	3710	1/1	0.86	0.13	74,74,74,74	0
81	MG	AR	4206	1/1	0.86	0.11	112,112,112,112	0
81	MG	sR	2182	1/1	0.86	0.18	72,72,72,72	0
81	MG	1	3717	1/1	0.86	0.12	72,72,72,72	0
85	SPD	AR	4164	10/10	0.86	0.18	49,58,67,75	0
81	MG	1	3567	1/1	0.87	0.12	87,87,87,87	0
81	MG	AR	3773	1/1	0.87	0.29	46,46,46,46	0
81	MG	CM	201	1/1	0.87	0.18	84,84,84,84	0
80	OHX	A	1976	7/7	0.87	0.15	145,170,176,208	0
81	MG	1	3863	1/1	0.87	0.34	84,84,84,84	0
81	MG	l	403	1/1	0.87	0.13	73,73,73,73	0
81	MG	AF	202	1/1	0.87	0.27	62,62,62,62	0
81	MG	1	3594	1/1	0.87	0.25	69,69,69,69	0
81	MG	AR	4003	1/1	0.87	0.23	72,72,72,72	0
81	MG	1	3883	1/1	0.87	0.26	68,68,68,68	0
81	MG	1	3613	1/1	0.87	0.42	75,75,75,75	0
81	MG	1	3614	1/1	0.87	0.25	74,74,74,74	0
81	MG	1	3890	1/1	0.87	0.22	63,63,63,63	0
81	MG	A	2069	1/1	0.87	0.17	80,80,80,80	0
81	MG	AR	3784	1/1	0.87	0.23	81,81,81,81	0
81	MG	AR	4020	1/1	0.87	0.26	60,60,60,60	0
80	OHX	AR	4050	7/7	0.87	0.10	189,201,214,253	0
80	OHX	4	209	7/7	0.87	0.14	175,184,210,270	0
81	MG	AR	3407	1/1	0.87	0.42	85,85,85,85	0
80	OHX	A	2077	7/7	0.87	0.10	248,253,272,312	0
80	OHX	sR	2148	7/7	0.87	0.10	198,217,226,295	0
80	OHX	A	1987	7/7	0.87	0.13	190,193,214,258	0
81	MG	A	1961	1/1	0.87	0.45	91,91,91,91	0
81	MG	sR	1971	1/1	0.87	0.24	67,67,67,67	0
80	OHX	AR	3703	7/7	0.87	0.14	180,186,219,267	0
81	MG	AR	4056	1/1	0.87	0.53	65,65,65,65	0
81	MG	3	209	1/1	0.87	0.32	64,64,64,64	0
81	MG	DQ	503	1/1	0.87	0.34	64,64,64,64	0
81	MG	AR	3627	1/1	0.87	0.13	88,88,88,88	0
81	MG	CR	202	1/1	0.87	0.30	66,66,66,66	0
80	OHX	AR	4110	7/7	0.87	0.10	174,201,216,255	0
81	MG	Y	201	1/1	0.87	0.25	69,69,69,69	0
81	MG	AR	4085	1/1	0.87	0.42	50,50,50,50	0
81	MG	AK	105	1/1	0.87	0.29	49,49,49,49	0
81	MG	sR	1999	1/1	0.87	0.34	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	3842	1/1	0.87	0.35	82,82,82,82	0
81	MG	1	3973	1/1	0.87	0.14	59,59,59,59	0
81	MG	1	3680	1/1	0.87	0.18	61,61,61,61	0
81	MG	A	2109	1/1	0.87	0.27	50,50,50,50	0
80	OHX	AR	4112	7/7	0.87	0.14	163,170,210,239	0
81	MG	A	2116	1/1	0.87	0.17	68,68,68,68	0
80	OHX	CK	201	7/7	0.87	0.10	195,207,220,285	0
80	OHX	AR	4165	7/7	0.87	0.13	133,141,166,216	0
81	MG	sM	301	1/1	0.87	0.12	61,61,61,61	0
81	MG	AR	4127	1/1	0.87	0.16	71,71,71,71	0
81	MG	AR	3871	1/1	0.87	0.15	73,73,73,73	0
81	MG	AR	3492	1/1	0.87	0.42	59,59,59,59	0
81	MG	1	4033	1/1	0.87	0.19	57,57,57,57	0
81	MG	1	4038	1/1	0.87	0.11	41,41,41,41	0
81	MG	A	2126	1/1	0.87	0.28	74,74,74,74	0
80	OHX	AR	3485	7/7	0.87	0.14	136,153,182,234	0
81	MG	1	3466	1/1	0.87	0.23	55,55,55,55	0
81	MG	sR	2045	1/1	0.87	0.14	65,65,65,65	0
81	MG	AR	3496	1/1	0.87	0.21	70,70,70,70	0
80	OHX	A	1934	7/7	0.87	0.10	211,226,241,304	0
81	MG	1	4063	1/1	0.87	0.18	87,87,87,87	0
80	OHX	AR	3828	7/7	0.87	0.15	150,161,166,246	0
80	OHX	1	3663	7/7	0.87	0.16	117,135,166,229	0
81	MG	AR	3509	1/1	0.87	0.15	62,62,62,62	0
80	OHX	AR	3514	7/7	0.87	0.11	141,144,167,259	0
80	OHX	1	3972	7/7	0.87	0.12	183,191,206,271	0
81	MG	AR	3526	1/1	0.87	0.20	62,62,62,62	0
81	MG	AR	4181	1/1	0.87	0.40	73,73,73,73	0
81	MG	1	3796	1/1	0.87	0.24	79,79,79,79	0
80	OHX	1	3671	7/7	0.87	0.11	179,185,208,263	0
81	MG	1	3799	1/1	0.87	0.35	73,73,73,73	0
80	OHX	AR	3860	7/7	0.87	0.15	170,173,186,280	0
80	OHX	s4	302	7/7	0.87	0.12	180,191,211,261	0
81	MG	1	3506	1/1	0.87	0.11	61,61,61,61	0
81	MG	AR	3927	1/1	0.87	0.12	63,63,63,63	0
81	MG	AR	3929	1/1	0.87	0.18	63,63,63,63	0
80	OHX	AR	3516	7/7	0.87	0.11	175,194,219,246	0
80	OHX	1	3430	7/7	0.87	0.14	173,179,195,254	0
80	OHX	sR	1904	7/7	0.87	0.11	161,172,210,257	0
80	OHX	AR	4016	7/7	0.87	0.15	138,153,172,208	0
81	MG	AR	3964	1/1	0.87	0.24	62,62,62,62	0
81	MG	1	4139	1/1	0.87	0.35	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	3756	1/1	0.87	0.16	72,72,72,72	0
81	MG	AS	207	1/1	0.87	0.17	81,81,81,81	0
81	MG	DL	104	1/1	0.87	0.31	59,59,59,59	0
81	MG	e	102	1/1	0.87	0.14	92,92,92,92	0
81	MG	AS	212	1/1	0.87	0.28	85,85,85,85	0
81	MG	AR	3972	1/1	0.87	0.19	64,64,64,64	0
80	OHX	1	3731	7/7	0.87	0.13	154,156,198,247	0
81	MG	AS	216	1/1	0.87	0.17	77,77,77,77	0
81	MG	AS	220	1/1	0.87	0.24	71,71,71,71	0
81	MG	1	3763	1/1	0.88	0.26	65,65,65,65	0
81	MG	DG	201	1/1	0.88	0.22	60,60,60,60	0
81	MG	DH	201	1/1	0.88	0.13	69,69,69,69	0
81	MG	v	304	1/1	0.88	0.27	66,66,66,66	0
81	MG	1	3774	1/1	0.88	0.11	93,93,93,93	0
81	MG	1	3402	1/1	0.88	0.28	70,70,70,70	0
81	MG	1	3404	1/1	0.88	0.45	68,68,68,68	0
81	MG	1	3779	1/1	0.88	0.32	67,67,67,67	0
81	MG	1	3795	1/1	0.88	0.21	84,84,84,84	0
81	MG	1	3405	1/1	0.88	0.30	48,48,48,48	0
80	OHX	A	1993	7/7	0.88	0.14	153,175,184,239	0
81	MG	1	3798	1/1	0.88	0.33	48,48,48,48	0
81	MG	sR	1952	1/1	0.88	0.09	83,83,83,83	0
80	OHX	1	3935	7/7	0.88	0.14	160,162,191,277	0
81	MG	1	3802	1/1	0.88	0.21	73,73,73,73	0
80	OHX	A	2111	7/7	0.88	0.10	209,217,223,286	0
81	MG	AR	4000	1/1	0.88	0.20	90,90,90,90	0
81	MG	A	2117	1/1	0.88	0.14	78,78,78,78	0
80	OHX	A	2113	7/7	0.88	0.13	180,185,203,250	0
81	MG	1	3436	1/1	0.88	0.29	67,67,67,67	0
81	MG	AR	3505	1/1	0.88	0.14	60,60,60,60	0
81	MG	AR	3754	1/1	0.88	0.10	76,76,76,76	0
81	MG	l	404	1/1	0.88	0.42	57,57,57,57	0
80	OHX	1	3543	7/7	0.88	0.17	146,148,153,194	7
80	OHX	1	3995	7/7	0.88	0.10	169,174,186,272	0
80	OHX	A	1996	7/7	0.88	0.13	165,177,183,240	0
81	MG	AR	3523	1/1	0.88	0.37	53,53,53,53	0
81	MG	AR	3525	1/1	0.88	0.42	54,54,54,54	0
81	MG	A	1980	1/1	0.88	0.23	90,90,90,90	0
81	MG	sR	1997	1/1	0.88	0.24	91,91,91,91	0
80	OHX	1	4029	7/7	0.88	0.12	140,144,175,222	0
81	MG	A	2135	1/1	0.88	0.38	101,101,101,101	0
80	OHX	sR	2113	7/7	0.88	0.10	207,224,232,283	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	A	1989	1/1	0.88	0.15	83,83,83,83	0
81	MG	AR	3786	1/1	0.88	0.35	73,73,73,73	0
81	MG	AR	4063	1/1	0.88	0.18	85,85,85,85	0
80	OHX	A	2053	7/7	0.88	0.12	193,197,222,254	0
81	MG	1	3502	1/1	0.88	0.29	68,68,68,68	0
81	MG	AR	4069	1/1	0.88	0.24	47,47,47,47	0
80	OHX	AR	4045	7/7	0.88	0.12	132,142,170,237	0
81	MG	AR	4075	1/1	0.88	0.08	95,95,95,95	0
81	MG	CP	305	1/1	0.88	0.20	80,80,80,80	0
80	OHX	sR	2147	7/7	0.88	0.11	134,151,167,228	0
81	MG	A	2155	1/1	0.88	0.26	74,74,74,74	0
81	MG	1	3887	1/1	0.88	0.32	68,68,68,68	0
80	OHX	c8	201	7/7	0.88	0.10	173,180,201,233	0
80	OHX	4	208	7/7	0.88	0.13	162,166,189,252	0
80	OHX	AR	4079	7/7	0.88	0.12	143,163,186,235	0
81	MG	AR	3581	1/1	0.88	0.22	58,58,58,58	0
81	MG	c9	201	1/1	0.88	0.12	88,88,88,88	0
81	MG	AR	3820	1/1	0.88	0.18	57,57,57,57	0
80	OHX	AR	3733	7/7	0.88	0.14	139,152,166,249	0
81	MG	AK	101	1/1	0.88	0.38	65,65,65,65	0
81	MG	D	301	1/1	0.88	0.28	78,78,78,78	0
80	OHX	AR	3422	7/7	0.88	0.14	155,163,170,249	0
80	OHX	A	2006	7/7	0.88	0.13	176,192,209,255	0
81	MG	1	3559	1/1	0.88	0.12	61,61,61,61	0
80	OHX	AR	3607	7/7	0.88	0.14	130,135,164,229	0
81	MG	AR	3596	1/1	0.88	0.16	76,76,76,76	0
81	MG	sR	2091	1/1	0.88	0.28	58,58,58,58	0
80	OHX	1	4175	7/7	0.88	0.11	192,200,214,286	0
81	MG	1	3583	1/1	0.88	0.35	64,64,64,64	0
81	MG	1	3928	1/1	0.88	0.23	62,62,62,62	0
81	MG	AR	4151	1/1	0.88	0.23	83,83,83,83	0
81	MG	1	3945	1/1	0.88	0.17	83,83,83,83	0
81	MG	AR	3602	1/1	0.88	0.18	86,86,86,86	0
80	OHX	AR	3424	7/7	0.88	0.12	136,154,167,225	0
80	OHX	sR	2198	7/7	0.88	0.16	139,151,160,170	7
81	MG	1	3592	1/1	0.88	0.13	90,90,90,90	0
80	OHX	sR	1959	7/7	0.88	0.13	171,175,197,249	0
80	OHX	AT	222	7/7	0.88	0.14	166,172,187,260	0
81	MG	AR	4174	1/1	0.88	0.27	67,67,67,67	0
81	MG	AR	3872	1/1	0.88	0.28	57,57,57,57	0
80	OHX	AR	4134	7/7	0.88	0.14	132,136,153,222	0
80	OHX	1	3753	7/7	0.88	0.15	137,142,170,240	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	3	214	1/1	0.88	0.19	70,70,70,70	0
81	MG	sR	2138	1/1	0.88	0.20	71,71,71,71	0
81	MG	1	3986	1/1	0.88	0.25	78,78,78,78	0
81	MG	AR	3631	1/1	0.88	0.19	66,66,66,66	0
80	OHX	sR	1968	7/7	0.88	0.14	160,169,183,218	0
80	OHX	CG	303	7/7	0.88	0.11	208,218,242,283	0
81	MG	AR	4191	1/1	0.88	0.19	80,80,80,80	0
81	MG	AR	3428	1/1	0.88	0.27	76,76,76,76	0
81	MG	AR	3652	1/1	0.88	0.30	72,72,72,72	0
81	MG	AR	3430	1/1	0.88	0.21	44,44,44,44	0
80	OHX	1	3762	7/7	0.88	0.11	168,177,198,260	0
81	MG	AR	3657	1/1	0.88	0.21	56,56,56,56	0
80	OHX	AR	4140	7/7	0.88	0.11	170,173,179,252	0
81	MG	sR	2165	1/1	0.88	0.28	91,91,91,91	0
81	MG	sR	2174	1/1	0.88	0.28	72,72,72,72	0
81	MG	AS	206	1/1	0.88	0.19	73,73,73,73	0
81	MG	AR	3438	1/1	0.88	0.28	76,76,76,76	0
80	OHX	A	1937	7/7	0.88	0.11	225,231,251,288	0
81	MG	1	4064	1/1	0.88	0.26	67,67,67,67	0
81	MG	sR	2186	1/1	0.88	0.39	64,64,64,64	0
80	OHX	AR	3796	7/7	0.88	0.12	142,146,160,212	0
81	MG	1	4070	1/1	0.88	0.30	68,68,68,68	0
81	MG	1	4071	1/1	0.88	0.36	58,58,58,58	0
80	OHX	CL	302	7/7	0.88	0.13	136,146,177,221	0
80	OHX	sR	2029	7/7	0.88	0.11	188,208,239,282	0
81	MG	1	4075	1/1	0.88	0.47	79,79,79,79	0
80	OHX	sR	2041	7/7	0.88	0.12	157,178,205,250	0
81	MG	AR	3460	1/1	0.88	0.21	63,63,63,63	0
81	MG	1	4092	1/1	0.88	0.25	64,64,64,64	0
81	MG	1	3681	1/1	0.88	0.34	82,82,82,82	0
81	MG	AR	3949	1/1	0.88	0.16	74,74,74,74	0
81	MG	AR	3695	1/1	0.88	0.14	68,68,68,68	0
81	MG	AR	3961	1/1	0.88	0.30	46,46,46,46	0
81	MG	1	3686	1/1	0.88	0.14	78,78,78,78	0
81	MG	1	3687	1/1	0.88	0.27	88,88,88,88	0
81	MG	1	4107	1/1	0.88	0.25	74,74,74,74	0
81	MG	AS	226	1/1	0.88	0.31	77,77,77,77	0
81	MG	1	4122	1/1	0.88	0.34	55,55,55,55	0
80	OHX	1	3852	7/7	0.88	0.12	162,170,188,224	0
81	MG	1	3713	1/1	0.88	0.15	100,100,100,100	0
81	MG	1	3714	1/1	0.88	0.18	83,83,83,83	0
81	MG	1	4132	1/1	0.88	0.45	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	3966	1/1	0.88	0.26	64,64,64,64	0
81	MG	A	1938	1/1	0.88	0.26	67,67,67,67	0
80	OHX	AR	4169	7/7	0.88	0.14	123,135,144,225	0
81	MG	DC	202	1/1	0.88	0.12	65,65,65,65	0
81	MG	DD	101	1/1	0.88	0.23	58,58,58,58	0
81	MG	1	4152	1/1	0.88	0.21	79,79,79,79	0
80	OHX	AR	4173	7/7	0.88	0.18	155,167,182,240	0
81	MG	1	4159	1/1	0.88	0.14	65,65,65,65	0
81	MG	1	3737	1/1	0.88	0.27	46,46,46,46	0
81	MG	1	3740	1/1	0.88	0.11	83,83,83,83	0
80	OHX	1	3489	7/7	0.88	0.15	141,152,186,212	0
81	MG	6	203	1/1	0.88	0.35	85,85,85,85	0
81	MG	1	4169	1/1	0.88	0.39	71,71,71,71	0
80	OHX	1	3903	7/7	0.88	0.09	210,220,238,288	0
81	MG	sR	1941	1/1	0.88	0.12	66,66,66,66	0
80	OHX	sR	2076	7/7	0.88	0.13	161,166,198,249	0
80	OHX	A	1927	7/7	0.88	0.10	168,191,201,252	0
81	MG	1	3461	1/1	0.89	0.17	56,56,56,56	0
81	MG	d3	201	1/1	0.89	0.32	75,75,75,75	0
81	MG	AR	3832	1/1	0.89	0.17	80,80,80,80	0
81	MG	AR	4089	1/1	0.89	0.11	67,67,67,67	0
81	MG	1	3467	1/1	0.89	0.20	41,41,41,41	0
80	OHX	A	2075	7/7	0.89	0.13	136,149,173,223	0
81	MG	A	2050	1/1	0.89	0.13	91,91,91,91	0
80	OHX	sR	2100	7/7	0.89	0.10	164,185,201,263	0
81	MG	AR	3405	1/1	0.89	0.15	59,59,59,59	0
81	MG	sR	2042	1/1	0.89	0.18	66,66,66,66	0
81	MG	AR	3406	1/1	0.89	0.13	56,56,56,56	0
81	MG	AR	3841	1/1	0.89	0.33	68,68,68,68	0
81	MG	1	3496	1/1	0.89	0.19	60,60,60,60	0
81	MG	4	211	1/1	0.89	0.31	57,57,57,57	0
81	MG	AR	4119	1/1	0.89	0.22	70,70,70,70	0
81	MG	AR	4121	1/1	0.89	0.28	76,76,76,76	0
80	OHX	sR	1914	7/7	0.89	0.12	152,158,179,225	0
81	MG	4	213	1/1	0.89	0.31	69,69,69,69	0
80	OHX	AR	4078	7/7	0.89	0.10	136,150,160,217	0
81	MG	A	2070	1/1	0.89	0.16	83,83,83,83	0
81	MG	sR	2069	1/1	0.89	0.15	77,77,77,77	0
81	MG	AR	3429	1/1	0.89	0.31	78,78,78,78	0
80	OHX	sR	1922	7/7	0.89	0.18	117,120,138,164	7
81	MG	AR	3870	1/1	0.89	0.26	48,48,48,48	0
81	MG	sR	2081	1/1	0.89	0.21	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	3431	1/1	0.89	0.47	64,64,64,64	0
80	OHX	A	1964	6/7	0.89	0.16	175,178,192,284	0
80	OHX	A	2083	7/7	0.89	0.10	242,249,260,308	0
80	OHX	CS	202	7/7	0.89	0.12	161,163,173,247	0
81	MG	A	2084	1/1	0.89	0.09	95,95,95,95	0
80	OHX	1	3545	7/7	0.89	0.13	179,182,189,247	0
81	MG	A	1939	1/1	0.89	0.30	68,68,68,68	0
80	OHX	1	3940	7/7	0.89	0.10	166,192,206,267	0
81	MG	AR	3884	1/1	0.89	0.23	54,54,54,54	0
80	OHX	AR	4108	7/7	0.89	0.12	166,176,189,257	0
81	MG	AR	3897	1/1	0.89	0.23	55,55,55,55	0
80	OHX	AR	3548	7/7	0.89	0.09	145,161,180,246	0
81	MG	sR	2127	1/1	0.89	0.30	77,77,77,77	0
81	MG	1	3566	1/1	0.89	0.19	52,52,52,52	0
81	MG	AR	3461	1/1	0.89	0.29	56,56,56,56	0
81	MG	AR	4185	1/1	0.89	0.09	93,93,93,93	0
80	OHX	1	3965	7/7	0.89	0.10	202,219,236,285	0
81	MG	AR	3681	1/1	0.89	0.10	75,75,75,75	0
81	MG	AR	3466	1/1	0.89	0.07	93,93,93,93	0
80	OHX	AR	3549	7/7	0.89	0.10	172,185,212,276	0
80	OHX	1	3990	7/7	0.89	0.17	145,148,159,253	0
81	MG	sR	2143	1/1	0.89	0.17	76,76,76,76	0
80	OHX	AR	4111	7/7	0.89	0.09	202,210,243,278	0
81	MG	1	3598	1/1	0.89	0.11	71,71,71,71	0
81	MG	1	3944	1/1	0.89	0.15	62,62,62,62	0
81	MG	AR	3474	1/1	0.89	0.28	114,114,114,114	0
81	MG	1	3949	1/1	0.89	0.29	44,44,44,44	0
81	MG	AR	3938	1/1	0.89	0.25	73,73,73,73	0
81	MG	AR	3939	1/1	0.89	0.21	69,69,69,69	0
81	MG	AS	205	1/1	0.89	0.35	48,48,48,48	0
81	MG	A	1959	1/1	0.89	0.23	80,80,80,80	0
80	OHX	U	202	7/7	0.89	0.10	210,217,220,301	0
80	OHX	AR	3579	7/7	0.89	0.10	171,192,217,259	0
81	MG	sR	2172	1/1	0.89	0.14	59,59,59,59	0
80	OHX	A	2096	7/7	0.89	0.11	178,194,217,268	0
80	OHX	AR	3453	6/7	0.89	0.10	165,175,190,253	0
81	MG	AS	213	1/1	0.89	0.23	75,75,75,75	0
80	OHX	A	1984	7/7	0.89	0.22	143,146,154,164	7
81	MG	sR	2185	1/1	0.89	0.25	78,78,78,78	0
81	MG	AR	3724	1/1	0.89	0.24	63,63,63,63	0
81	MG	1	3987	1/1	0.89	0.22	71,71,71,71	0
80	OHX	AT	205	7/7	0.89	0.12	153,169,190,245	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	3737	1/1	0.89	0.24	70,70,70,70	0
80	OHX	sR	2000	7/7	0.89	0.17	144,159,169,189	7
81	MG	1	4008	1/1	0.89	0.15	47,47,47,47	0
81	MG	1	4010	1/1	0.89	0.24	51,51,51,51	0
81	MG	AR	3970	1/1	0.89	0.17	62,62,62,62	0
80	OHX	AR	3480	7/7	0.89	0.30	131,137,142,174	7
81	MG	sR	1906	1/1	0.89	0.23	66,66,66,66	0
80	OHX	sR	2016	7/7	0.89	0.11	139,161,187,255	0
81	MG	1	4034	1/1	0.89	0.20	43,43,43,43	0
81	MG	1	4037	1/1	0.89	0.30	69,69,69,69	0
81	MG	sR	1910	1/1	0.89	0.26	64,64,64,64	0
81	MG	1	4040	1/1	0.89	0.17	61,61,61,61	0
81	MG	AT	213	1/1	0.89	0.20	73,73,73,73	0
80	OHX	Q	201	7/7	0.89	0.09	210,216,221,251	7
80	OHX	CE	402	7/7	0.89	0.09	168,186,204,243	0
81	MG	1	4044	1/1	0.89	0.11	55,55,55,55	0
81	MG	DQ	502	1/1	0.89	0.23	70,70,70,70	0
81	MG	AT	219	1/1	0.89	0.18	69,69,69,69	0
80	OHX	sR	2028	7/7	0.89	0.11	193,200,234,275	0
80	OHX	AR	3487	7/7	0.89	0.09	200,205,227,282	0
81	MG	A	1999	1/1	0.89	0.22	93,93,93,93	0
80	OHX	AR	3642	7/7	0.89	0.10	168,176,211,258	0
81	MG	AR	4001	1/1	0.89	0.12	71,71,71,71	0
81	MG	AR	3528	1/1	0.89	0.17	76,76,76,76	0
81	MG	AR	4007	1/1	0.89	0.14	51,51,51,51	0
81	MG	1	3708	1/1	0.89	0.37	71,71,71,71	0
80	OHX	AR	4017	7/7	0.89	0.09	191,218,227,261	0
81	MG	1	3711	1/1	0.89	0.22	63,63,63,63	0
80	OHX	1	3424	7/7	0.89	0.16	146,155,175,180	7
81	MG	CE	406	1/1	0.89	0.16	86,86,86,86	0
81	MG	A	2156	1/1	0.89	0.24	93,93,93,93	0
81	MG	sR	1962	1/1	0.89	0.40	82,82,82,82	0
80	OHX	1	3761	7/7	0.89	0.10	157,190,202,238	0
81	MG	1	3718	1/1	0.89	0.22	95,95,95,95	0
80	OHX	1	3429	7/7	0.89	0.10	162,171,198,243	0
81	MG	s4	303	1/1	0.89	0.28	81,81,81,81	0
81	MG	v	303	1/1	0.89	0.37	73,73,73,73	0
81	MG	A	2011	1/1	0.89	0.10	91,91,91,91	0
81	MG	1	3401	1/1	0.89	0.15	63,63,63,63	0
81	MG	t	202	1/1	0.89	0.17	62,62,62,62	0
81	MG	1	4123	1/1	0.89	0.35	77,77,77,77	0
80	OHX	A	2123	6/7	0.89	0.10	234,247,247,263	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
80	OHX	3	204	7/7	0.89	0.11	166,172,184,236	0
81	MG	r	302	1/1	0.89	0.16	66,66,66,66	0
81	MG	1	3407	1/1	0.89	0.25	48,48,48,48	0
80	OHX	AR	4049	7/7	0.89	0.12	156,174,185,253	0
81	MG	1	3410	1/1	0.89	0.12	71,71,71,71	0
81	MG	1	3412	1/1	0.89	0.19	87,87,87,87	0
81	MG	1	3413	1/1	0.89	0.29	74,74,74,74	0
80	OHX	1	3460	7/7	0.89	0.12	171,175,198,250	0
81	MG	1	3773	1/1	0.89	0.25	111,111,111,111	0
81	MG	3	216	1/1	0.89	0.08	99,99,99,99	0
80	OHX	A	2027	7/7	0.89	0.14	152,166,190,219	0
80	OHX	1	3485	7/7	0.89	0.14	46,91,115,206	0
81	MG	AB	201	1/1	0.89	0.24	56,56,56,56	0
81	MG	1	3434	1/1	0.89	0.19	59,59,59,59	0
81	MG	1	3435	1/1	0.89	0.29	63,63,63,63	0
81	MG	AR	4064	1/1	0.89	0.23	65,65,65,65	0
81	MG	AR	3811	1/1	0.89	0.36	67,67,67,67	0
81	MG	AR	3587	1/1	0.89	0.35	51,51,51,51	0
85	SPD	AR	3858	10/10	0.89	0.26	69,73,85,92	0
81	MG	AR	3588	1/1	0.89	0.19	57,57,57,57	0
81	MG	AB	204	1/1	0.89	0.35	63,63,63,63	0
81	MG	AR	4040	1/1	0.90	0.18	78,78,78,78	0
81	MG	AR	4052	1/1	0.90	0.33	59,59,59,59	0
80	OHX	AR	3985	7/7	0.90	0.11	161,171,187,252	0
80	OHX	1	4178	7/7	0.90	0.14	103,122,139,192	0
80	OHX	AR	3986	7/7	0.90	0.10	152,159,186,229	0
81	MG	1	3589	1/1	0.90	0.35	53,53,53,53	0
80	OHX	AR	3766	7/7	0.90	0.13	153,156,169,250	0
80	OHX	A	2043	6/7	0.90	0.08	266,274,275,333	0
81	MG	AR	3500	1/1	0.90	0.21	78,78,78,78	0
81	MG	AR	3501	1/1	0.90	0.16	72,72,72,72	0
81	MG	AR	3850	1/1	0.90	0.30	72,72,72,72	0
81	MG	AT	218	1/1	0.90	0.34	74,74,74,74	0
80	OHX	sR	1936	7/7	0.90	0.11	142,150,161,231	0
80	OHX	CG	302	7/7	0.90	0.10	196,201,223,255	0
80	OHX	AR	4139	7/7	0.90	0.14	137,151,161,215	0
81	MG	AT	225	1/1	0.90	0.18	52,52,52,52	0
81	MG	AR	3686	1/1	0.90	0.14	72,72,72,72	0
81	MG	d6	201	1/1	0.90	0.35	72,72,72,72	0
81	MG	1	3625	1/1	0.90	0.10	62,62,62,62	0
81	MG	CD	303	1/1	0.90	0.31	66,66,66,66	0
80	OHX	1	3909	7/7	0.90	0.08	177,204,233,266	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	AR	3700	7/7	0.90	0.11	148,155,174,217	0
80	OHX	A	1913	7/7	0.90	0.11	168,189,202,242	0
81	MG	AR	4092	1/1	0.90	0.19	64,64,64,64	0
80	OHX	AR	3893	7/7	0.90	0.11	167,178,190,237	0
81	MG	1	3925	1/1	0.90	0.17	53,53,53,53	0
80	OHX	A	2104	7/7	0.90	0.10	188,201,220,252	0
81	MG	AR	3527	1/1	0.90	0.20	98,98,98,98	0
80	OHX	1	3427	7/7	0.90	0.14	126,137,149,195	0
81	MG	sR	2001	1/1	0.90	0.14	88,88,88,88	0
80	OHX	1	3941	7/7	0.90	0.11	144,151,173,213	0
81	MG	AR	3716	1/1	0.90	0.24	62,62,62,62	0
81	MG	1	3948	1/1	0.90	0.35	53,53,53,53	0
81	MG	AR	3717	1/1	0.90	0.11	65,65,65,65	0
81	MG	AR	3886	1/1	0.90	0.14	100,100,100,100	0
81	MG	AR	4122	1/1	0.90	0.31	91,91,91,91	0
81	MG	1	3673	1/1	0.90	0.12	67,67,67,67	0
81	MG	1	3674	1/1	0.90	0.12	112,112,112,112	0
81	MG	AR	3532	1/1	0.90	0.14	48,48,48,48	0
81	MG	AR	4125	1/1	0.90	0.16	62,62,62,62	0
80	OHX	AR	4046	7/7	0.90	0.11	123,138,171,210	0
81	MG	AR	3408	1/1	0.90	0.24	67,67,67,67	0
81	MG	1	3975	1/1	0.90	0.32	69,69,69,69	0
81	MG	AR	3900	1/1	0.90	0.36	51,51,51,51	0
80	OHX	AR	3639	7/7	0.90	0.12	130,143,168,218	0
80	OHX	sR	2137	7/7	0.90	0.11	158,165,183,262	0
81	MG	AR	3738	1/1	0.90	0.17	82,82,82,82	0
81	MG	r	303	1/1	0.90	0.28	62,62,62,62	0
81	MG	AR	3912	1/1	0.90	0.21	69,69,69,69	0
81	MG	AR	3742	1/1	0.90	0.28	69,69,69,69	0
81	MG	1	3704	1/1	0.90	0.27	62,62,62,62	0
81	MG	1	4005	1/1	0.90	0.18	60,60,60,60	0
81	MG	AR	3743	1/1	0.90	0.30	79,79,79,79	0
81	MG	1	3709	1/1	0.90	0.35	60,60,60,60	0
81	MG	AR	3427	1/1	0.90	0.22	51,51,51,51	0
81	MG	sR	2066	1/1	0.90	0.25	73,73,73,73	0
81	MG	1	3712	1/1	0.90	0.17	50,50,50,50	0
81	MG	1	4017	1/1	0.90	0.12	82,82,82,82	0
80	OHX	k	403	7/7	0.90	0.11	131,142,163,209	0
81	MG	1	4019	1/1	0.90	0.30	63,63,63,63	0
81	MG	1	4020	1/1	0.90	0.26	81,81,81,81	0
81	MG	AR	3932	1/1	0.90	0.29	54,54,54,54	0
80	OHX	1	3459	7/7	0.90	0.10	142,151,174,244	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	A	1947	7/7	0.90	0.09	173,200,215,262	0
80	OHX	1	3729	7/7	0.90	0.11	173,176,206,241	0
81	MG	AR	3943	1/1	0.90	0.12	80,80,80,80	0
81	MG	1	3444	1/1	0.90	0.33	67,67,67,67	0
81	MG	AR	3432	1/1	0.90	0.26	46,46,46,46	0
80	OHX	1	3730	7/7	0.90	0.10	150,168,190,220	0
81	MG	4	221	1/1	0.90	0.17	68,68,68,68	0
81	MG	1	4045	1/1	0.90	0.17	101,101,101,101	0
81	MG	AR	3768	1/1	0.90	0.35	41,41,41,41	0
81	MG	AR	3437	1/1	0.90	0.16	69,69,69,69	0
81	MG	AR	4189	1/1	0.90	0.23	66,66,66,66	0
81	MG	1	4049	1/1	0.90	0.22	89,89,89,89	0
80	OHX	sR	1981	7/7	0.90	0.11	186,189,205,266	0
81	MG	AR	4199	1/1	0.90	0.08	109,109,109,109	0
81	MG	AR	4205	1/1	0.90	0.10	56,56,56,56	0
80	OHX	1	4031	7/7	0.90	0.09	234,250,262,293	0
81	MG	sR	2107	1/1	0.90	0.09	70,70,70,70	0
80	OHX	A	2122	7/7	0.90	0.13	174,186,206,230	0
80	OHX	AR	3953	7/7	0.90	0.10	145,150,180,240	0
81	MG	1	3492	1/1	0.90	0.15	69,69,69,69	0
80	OHX	A	1954	7/7	0.90	0.13	171,183,198,261	0
81	MG	A	1919	1/1	0.90	0.30	52,52,52,52	0
80	OHX	AR	3955	7/7	0.90	0.12	161,162,194,236	0
81	MG	CL	303	1/1	0.90	0.27	51,51,51,51	0
80	OHX	AR	4104	7/7	0.90	0.13	118,128,149,173	7
81	MG	1	3793	1/1	0.90	0.10	82,82,82,82	0
81	MG	AR	3464	1/1	0.90	0.18	66,66,66,66	0
80	OHX	A	2093	7/7	0.90	0.09	209,212,231,289	0
81	MG	AR	3995	1/1	0.90	0.22	69,69,69,69	0
81	MG	sR	2141	1/1	0.90	0.14	105,105,105,105	0
80	OHX	AR	3856	7/7	0.90	0.36	120,122,129,152	7
81	MG	AR	3617	1/1	0.90	0.22	49,49,49,49	0
81	MG	1	3801	1/1	0.90	0.22	70,70,70,70	0
81	MG	AR	3802	1/1	0.90	0.19	52,52,52,52	0
81	MG	1	4124	1/1	0.90	0.33	49,49,49,49	0
81	MG	AR	3468	1/1	0.90	0.14	72,72,72,72	0
81	MG	AR	3622	1/1	0.90	0.19	60,60,60,60	0
81	MG	1	3808	1/1	0.90	0.17	69,69,69,69	0
80	OHX	1	4121	7/7	0.90	0.14	146,159,178,239	0
81	MG	AR	3624	1/1	0.90	0.42	93,93,93,93	0
81	MG	A	2041	1/1	0.90	0.15	94,94,94,94	0
81	MG	sR	2163	1/1	0.90	0.06	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	4013	1/1	0.90	0.17	90,90,90,90	0
80	OHX	1	3820	7/7	0.90	0.10	235,244,261,292	0
80	OHX	sR	2053	7/7	0.90	0.09	226,229,236,264	0
81	MG	1	3552	1/1	0.90	0.28	60,60,60,60	0
81	MG	1	3554	1/1	0.90	0.21	72,72,72,72	0
81	MG	1	4160	1/1	0.90	0.16	68,68,68,68	0
81	MG	AR	3488	1/1	0.90	0.15	54,54,54,54	0
81	MG	1	4165	1/1	0.90	0.23	69,69,69,69	0
81	MG	A	2051	1/1	0.90	0.13	96,96,96,96	0
81	MG	1	3558	1/1	0.90	0.17	62,62,62,62	0
81	MG	AR	4030	1/1	0.90	0.09	85,85,85,85	0
80	OHX	1	3519	7/7	0.90	0.11	153,157,183,227	0
81	MG	AR	3646	1/1	0.90	0.34	58,58,58,58	0
81	MG	1	3854	1/1	0.90	0.23	66,66,66,66	0
81	MG	AR	3836	1/1	0.90	0.17	71,71,71,71	0
80	OHX	1	4173	7/7	0.90	0.15	130,143,169,232	0
81	MG	AR	4038	1/1	0.90	0.26	67,67,67,67	0
80	OHX	1	3670	7/7	0.91	0.14	160,165,180,237	0
81	MG	1	3838	1/1	0.91	0.12	142,142,142,142	0
80	OHX	AR	3980	7/7	0.91	0.14	147,156,173,249	0
80	OHX	1	3905	7/7	0.91	0.13	143,155,180,241	0
80	OHX	sR	1944	7/7	0.91	0.22	113,128,136,140	7
81	MG	DO	202	1/1	0.91	0.14	73,73,73,73	0
80	OHX	sR	1948	7/7	0.91	0.10	162,168,175,256	0
81	MG	1	3537	1/1	0.91	0.17	56,56,56,56	0
80	OHX	1	3911	7/7	0.91	0.12	138,160,183,214	0
81	MG	3	210	1/1	0.91	0.18	62,62,62,62	0
81	MG	A	1969	1/1	0.91	0.12	84,84,84,84	0
80	OHX	AR	4141	7/7	0.91	0.10	185,195,203,248	0
81	MG	AR	3991	1/1	0.91	0.38	57,57,57,57	0
81	MG	A	1971	1/1	0.91	0.18	72,72,72,72	0
80	OHX	sR	1903	7/7	0.91	0.10	155,166,186,239	0
81	MG	AR	3592	1/1	0.91	0.46	83,83,83,83	0
80	OHX	1	3720	7/7	0.91	0.10	169,172,198,240	0
81	MG	1	3564	1/1	0.91	0.19	50,50,50,50	0
80	OHX	AR	3829	7/7	0.91	0.13	142,152,181,252	0
81	MG	sR	2173	1/1	0.91	0.22	58,58,58,58	0
81	MG	1	3889	1/1	0.91	0.35	55,55,55,55	0
81	MG	AS	217	1/1	0.91	0.29	74,74,74,74	0
81	MG	AR	4002	1/1	0.91	0.25	62,62,62,62	0
81	MG	c4	201	1/1	0.91	0.10	66,66,66,66	0
81	MG	sR	2183	1/1	0.91	0.21	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
80	OHX	A	2045	7/7	0.91	0.11	156,178,181,226	0
81	MG	1	3588	1/1	0.91	0.27	66,66,66,66	0
81	MG	AR	3457	1/1	0.91	0.24	61,61,61,61	0
81	MG	AR	3613	1/1	0.91	0.29	48,48,48,48	0
81	MG	A	1982	1/1	0.91	0.11	104,104,104,104	0
81	MG	sR	1909	1/1	0.91	0.21	60,60,60,60	0
80	OHX	CL	301	7/7	0.91	0.12	118,126,152,189	0
81	MG	AR	4021	1/1	0.91	0.17	69,69,69,69	0
81	MG	1	3921	1/1	0.91	0.18	56,56,56,56	0
81	MG	1	3600	1/1	0.91	0.07	45,45,45,45	0
80	OHX	sR	2099	7/7	0.91	0.14	137,142,161,207	0
81	MG	sR	1921	1/1	0.91	0.32	58,58,58,58	0
81	MG	1	3615	1/1	0.91	0.22	75,75,75,75	0
81	MG	AR	3806	1/1	0.91	0.10	58,58,58,58	0
81	MG	AT	209	1/1	0.91	0.18	65,65,65,65	0
81	MG	AT	210	1/1	0.91	0.23	60,60,60,60	0
81	MG	AR	4027	1/1	0.91	0.34	70,70,70,70	0
81	MG	AR	4028	1/1	0.91	0.14	60,60,60,60	0
81	MG	1	3946	1/1	0.91	0.15	56,56,56,56	0
81	MG	AR	3620	1/1	0.91	0.16	61,61,61,61	0
80	OHX	sR	1969	7/7	0.91	0.10	172,185,214,257	0
81	MG	AR	3463	1/1	0.91	0.30	47,47,47,47	0
80	OHX	1	3970	7/7	0.91	0.13	124,131,150,200	0
81	MG	1	3953	1/1	0.91	0.29	65,65,65,65	0
81	MG	AR	3465	1/1	0.91	0.29	103,103,103,103	0
81	MG	AB	205	1/1	0.91	0.15	65,65,65,65	0
80	OHX	sR	1915	7/7	0.91	0.14	146,150,175,209	0
81	MG	AB	207	1/1	0.91	0.18	60,60,60,60	0
81	MG	sR	1960	1/1	0.91	0.40	63,63,63,63	0
81	MG	DC	203	1/1	0.91	0.16	49,49,49,49	0
81	MG	sR	1961	1/1	0.91	0.14	66,66,66,66	0
81	MG	CD	301	1/1	0.91	0.42	75,75,75,75	0
81	MG	1	3979	1/1	0.91	0.39	44,44,44,44	0
80	OHX	AR	3825	7/7	0.91	0.13	111,135,158,197	0
81	MG	1	3655	1/1	0.91	0.18	64,64,64,64	0
81	MG	A	2137	1/1	0.91	0.19	74,74,74,74	0
81	MG	AR	3643	1/1	0.91	0.30	57,57,57,57	0
81	MG	4	210	1/1	0.91	0.46	75,75,75,75	0
80	OHX	AR	4015	7/7	0.91	0.11	151,164,187,234	0
80	OHX	sR	1988	7/7	0.91	0.14	138,142,157,191	7
81	MG	1	3675	1/1	0.91	0.16	70,70,70,70	0
80	OHX	1	4025	7/7	0.91	0.10	172,179,191,254	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	3490	1/1	0.91	0.16	60,60,60,60	0
81	MG	CU	201	1/1	0.91	0.27	62,62,62,62	0
80	OHX	1	3548	7/7	0.91	0.12	152,160,181,224	0
81	MG	AR	3658	1/1	0.91	0.17	56,56,56,56	0
81	MG	A	2019	1/1	0.91	0.11	82,82,82,82	0
81	MG	AR	3662	1/1	0.91	0.16	50,50,50,50	0
81	MG	AR	3664	1/1	0.91	0.21	66,66,66,66	0
81	MG	AR	4086	1/1	0.91	0.32	73,73,73,73	0
81	MG	CI	301	1/1	0.91	0.14	72,72,72,72	0
81	MG	DI	201	1/1	0.91	0.27	57,57,57,57	0
81	MG	1	4036	1/1	0.91	0.34	43,43,43,43	0
80	OHX	1	3785	7/7	0.91	0.20	136,140,154,173	7
80	OHX	1	3789	7/7	0.91	0.12	124,147,169,207	0
80	OHX	1	3549	7/7	0.91	0.13	102,110,135,199	0
81	MG	AR	4095	1/1	0.91	0.11	72,72,72,72	0
81	MG	AR	3680	1/1	0.91	0.09	66,66,66,66	0
80	OHX	sR	1993	7/7	0.91	0.13	215,228,243,327	0
81	MG	sR	2011	1/1	0.91	0.32	76,76,76,76	0
81	MG	AR	3682	1/1	0.91	0.21	82,82,82,82	0
81	MG	sR	2021	1/1	0.91	0.18	122,122,122,122	0
81	MG	sR	2023	1/1	0.91	0.10	91,91,91,91	0
80	OHX	1	3815	7/7	0.91	0.12	135,144,167,215	0
80	OHX	1	4081	7/7	0.91	0.15	119,122,127,195	0
81	MG	AR	3687	1/1	0.91	0.12	65,65,65,65	0
81	MG	AR	3503	1/1	0.91	0.28	107,107,107,107	0
81	MG	1	3432	1/1	0.91	0.11	68,68,68,68	0
81	MG	AR	3689	1/1	0.91	0.11	86,86,86,86	0
81	MG	1	4068	1/1	0.91	0.23	57,57,57,57	0
81	MG	4	227	1/1	0.91	0.40	66,66,66,66	0
80	OHX	AR	4197	7/7	0.91	0.20	106,120,126,143	7
80	OHX	1	4113	7/7	0.91	0.14	142,155,169,228	0
81	MG	AR	3699	1/1	0.91	0.14	63,63,63,63	0
81	MG	AR	3705	1/1	0.91	0.19	55,55,55,55	0
81	MG	1	3443	1/1	0.91	0.13	66,66,66,66	0
81	MG	1	4078	1/1	0.91	0.33	51,51,51,51	0
81	MG	1	3749	1/1	0.91	0.38	75,75,75,75	0
81	MG	AR	3519	1/1	0.91	0.28	63,63,63,63	0
81	MG	1	4093	1/1	0.91	0.38	70,70,70,70	0
81	MG	AR	3520	1/1	0.91	0.27	66,66,66,66	0
80	OHX	sR	1926	7/7	0.91	0.12	159,169,176,241	0
81	MG	x	202	1/1	0.91	0.40	67,67,67,67	0
81	MG	1	4098	1/1	0.91	0.33	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	3909	1/1	0.91	0.27	85,85,85,85	0
81	MG	AR	4150	1/1	0.91	0.18	66,66,66,66	0
81	MG	A	2049	1/1	0.91	0.35	62,62,62,62	0
81	MG	AR	4152	1/1	0.91	0.37	66,66,66,66	0
81	MG	1	3777	1/1	0.91	0.10	92,92,92,92	0
81	MG	j	302	1/1	0.91	0.19	57,57,57,57	0
81	MG	1	3469	1/1	0.91	0.23	77,77,77,77	0
81	MG	AR	3718	1/1	0.91	0.14	84,84,84,84	0
81	MG	1	4126	1/1	0.91	0.24	43,43,43,43	0
80	OHX	A	1917	7/7	0.91	0.10	177,189,214,249	0
80	OHX	AR	4203	7/7	0.91	0.10	209,210,222,262	0
81	MG	AR	3722	1/1	0.91	0.27	63,63,63,63	0
81	MG	A	2058	1/1	0.91	0.23	58,58,58,58	0
81	MG	AR	4177	1/1	0.91	0.24	60,60,60,60	0
81	MG	1	3493	1/1	0.91	0.35	77,77,77,77	0
81	MG	AR	4178	1/1	0.91	0.21	58,58,58,58	0
81	MG	AR	3935	1/1	0.91	0.34	76,76,76,76	0
80	OHX	1	3850	7/7	0.91	0.12	139,161,183,231	0
81	MG	A	1932	1/1	0.91	0.35	67,67,67,67	0
81	MG	AR	3401	1/1	0.91	0.24	88,88,88,88	0
80	OHX	A	1967	7/7	0.91	0.10	163,181,187,223	0
81	MG	AR	3740	1/1	0.91	0.51	48,48,48,48	0
81	MG	sR	2115	1/1	0.91	0.40	61,61,61,61	0
81	MG	CM	202	1/1	0.91	0.16	72,72,72,72	0
81	MG	1	3827	1/1	0.91	0.21	55,55,55,55	0
81	MG	sR	2118	1/1	0.91	0.24	68,68,68,68	0
80	OHX	sR	2169	7/7	0.91	0.07	205,209,212,266	0
81	MG	A	2074	1/1	0.91	0.09	111,111,111,111	0
81	MG	1	4177	1/1	0.91	0.11	103,103,103,103	0
81	MG	1	3832	1/1	0.91	0.19	68,68,68,68	0
80	OHX	AR	4018	7/7	0.91	0.13	114,126,146,224	0
81	MG	AR	3962	1/1	0.91	0.25	52,52,52,52	0
81	MG	1	3528	1/1	0.91	0.22	66,66,66,66	0
80	OHX	1	3457	7/7	0.91	0.12	147,170,174,216	0
80	OHX	A	2120	7/7	0.92	0.12	118,122,140,208	0
80	OHX	sR	1989	7/7	0.92	0.11	138,144,148,221	0
80	OHX	AT	203	7/7	0.92	0.10	141,147,166,224	0
80	OHX	AR	3830	7/7	0.92	0.10	143,150,164,242	0
80	OHX	1	3635	7/7	0.92	0.22	88,92,106,122	7
81	MG	AR	3471	1/1	0.92	0.14	74,74,74,74	0
81	MG	AR	3882	1/1	0.92	0.26	60,60,60,60	0
81	MG	AR	4147	1/1	0.92	0.23	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	AR	3472	1/1	0.92	0.22	65,65,65,65	0
80	OHX	1	3642	7/7	0.92	0.11	135,154,167,235	0
81	MG	sR	2094	1/1	0.92	0.27	79,79,79,79	0
80	OHX	AR	3450	7/7	0.92	0.11	127,143,169,204	0
81	MG	1	3840	1/1	0.92	0.16	60,60,60,60	0
80	OHX	1	3971	7/7	0.92	0.12	169,172,179,201	0
81	MG	4	225	1/1	0.92	0.19	65,65,65,65	0
81	MG	AR	4155	1/1	0.92	0.18	60,60,60,60	0
81	MG	AR	3684	1/1	0.92	0.39	62,62,62,62	0
81	MG	AR	4157	1/1	0.92	0.08	139,139,139,139	0
81	MG	1	3522	1/1	0.92	0.18	65,65,65,65	0
81	MG	1	3859	1/1	0.92	0.20	79,79,79,79	0
81	MG	AR	3902	1/1	0.92	0.22	52,52,52,52	0
81	MG	1	3861	1/1	0.92	0.15	91,91,91,91	0
80	OHX	AR	3727	7/7	0.92	0.14	105,119,127,182	0
80	OHX	h	401	7/7	0.92	0.09	221,231,237,274	0
81	MG	sR	2117	1/1	0.92	0.14	78,78,78,78	0
80	OHX	Rb	401	7/7	0.92	0.09	219,223,240,280	0
81	MG	AR	3907	1/1	0.92	0.18	64,64,64,64	0
81	MG	1	3867	1/1	0.92	0.12	77,77,77,77	0
81	MG	AR	3493	1/1	0.92	0.31	69,69,69,69	0
81	MG	sR	2128	1/1	0.92	0.20	72,72,72,72	0
80	OHX	AR	3859	7/7	0.92	0.12	137,145,163,219	0
81	MG	A	1962	1/1	0.92	0.31	71,71,71,71	0
80	OHX	1	4002	7/7	0.92	0.14	130,136,159,170	7
80	OHX	3	203	7/7	0.92	0.11	158,163,193,220	0
81	MG	DL	101	1/1	0.92	0.31	71,71,71,71	0
80	OHX	AR	3861	7/7	0.92	0.11	135,154,157,235	0
81	MG	1	3895	1/1	0.92	0.12	64,64,64,64	0
81	MG	AR	3706	1/1	0.92	0.21	45,45,45,45	0
81	MG	1	3898	1/1	0.92	0.14	73,73,73,73	0
81	MG	AR	4187	1/1	0.92	0.17	91,91,91,91	0
81	MG	AR	3933	1/1	0.92	0.22	59,59,59,59	0
80	OHX	1	3699	7/7	0.92	0.11	122,136,171,212	0
81	MG	AR	3502	1/1	0.92	0.15	86,86,86,86	0
81	MG	1	3563	1/1	0.92	0.28	74,74,74,74	0
80	OHX	AR	4047	7/7	0.92	0.10	129,151,187,210	0
80	OHX	3	219	7/7	0.92	0.13	136,156,167,215	0
81	MG	A	2146	1/1	0.92	0.23	74,74,74,74	0
80	OHX	1	4053	7/7	0.92	0.13	103,113,141,179	0
81	MG	sR	2162	1/1	0.92	0.18	61,61,61,61	0
80	OHX	sR	2063	7/7	0.92	0.10	147,151,168,245	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	A	2154	1/1	0.92	0.31	69,69,69,69	0
81	MG	AR	3958	1/1	0.92	0.24	63,63,63,63	0
80	OHX	v	305	7/7	0.92	0.11	123,136,162,204	0
81	MG	DA	202	1/1	0.92	0.14	66,66,66,66	0
81	MG	1	3591	1/1	0.92	0.33	61,61,61,61	0
81	MG	d4	202	1/1	0.92	0.22	72,72,72,72	0
81	MG	AS	202	1/1	0.92	0.23	54,54,54,54	0
81	MG	AS	203	1/1	0.92	0.24	81,81,81,81	0
81	MG	1	3597	1/1	0.92	0.40	81,81,81,81	0
80	OHX	1	4059	7/7	0.92	0.10	154,163,171,221	0
80	OHX	1	4060[A]	7/7	0.92	0.18	117,131,137,173	7
80	OHX	1	4060[B]	7/7	0.92	0.18	116,123,133,170	7
80	OHX	1	4061	7/7	0.92	0.08	166,192,215,267	0
80	OHX	AR	3731	7/7	0.92	0.11	152,152,175,207	0
80	OHX	AR	3887	7/7	0.92	0.12	100,127,146,175	0
81	MG	AR	3969	1/1	0.92	0.19	81,81,81,81	0
81	MG	AR	3530	1/1	0.92	0.12	73,73,73,73	0
80	OHX	1	4091	7/7	0.92	0.11	153,161,180,229	0
81	MG	w	202	1/1	0.92	0.39	83,83,83,83	0
81	MG	A	2001	1/1	0.92	0.13	90,90,90,90	0
80	OHX	AR	4074	7/7	0.92	0.12	111,144,157,205	0
80	OHX	AR	3891	7/7	0.92	0.11	141,154,188,215	0
81	MG	1	3629	1/1	0.92	0.15	60,60,60,60	0
81	MG	o	301	1/1	0.92	0.14	63,63,63,63	0
81	MG	AT	212	1/1	0.92	0.28	60,60,60,60	0
81	MG	AR	3555	1/1	0.92	0.36	54,54,54,54	0
80	OHX	AR	3580	6/7	0.92	0.10	206,216,236,303	0
81	MG	AR	3557	1/1	0.92	0.26	70,70,70,70	0
81	MG	1	3989	1/1	0.92	0.28	61,61,61,61	0
81	MG	1	3646	1/1	0.92	0.14	62,62,62,62	0
81	MG	1	3647	1/1	0.92	0.25	50,50,50,50	0
81	MG	CQ	201	1/1	0.92	0.20	82,82,82,82	0
80	OHX	1	4119	7/7	0.92	0.11	133,142,161,213	0
81	MG	AR	3560	1/1	0.92	0.38	86,86,86,86	0
80	OHX	A	2132	7/7	0.92	0.14	110,121,146,208	0
81	MG	x	209	1/1	0.92	0.40	57,57,57,57	0
81	MG	AT	223	1/1	0.92	0.27	63,63,63,63	0
80	OHX	1	3759	7/7	0.92	0.10	139,155,184,228	0
81	MG	AR	3774	1/1	0.92	0.10	55,55,55,55	0
81	MG	1	3657	1/1	0.92	0.12	69,69,69,69	0
81	MG	AR	3565	1/1	0.92	0.17	71,71,71,71	0
81	MG	CR	201	1/1	0.92	0.18	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	d6	203	1/1	0.92	0.28	78,78,78,78	0
80	OHX	A	2133	7/7	0.92	0.10	145,154,180,243	0
81	MG	CD	302	1/1	0.92	0.30	55,55,55,55	0
80	OHX	AR	3609	7/7	0.92	0.10	141,152,180,244	0
81	MG	AR	3780	1/1	0.92	0.13	71,71,71,71	0
81	MG	AR	4023	1/1	0.92	0.12	54,54,54,54	0
81	MG	A	2028	1/1	0.92	0.14	68,68,68,68	0
81	MG	AR	4025	1/1	0.92	0.22	45,45,45,45	0
81	MG	1	3682	1/1	0.92	0.34	71,71,71,71	0
80	OHX	1	4146	7/7	0.92	0.13	118,139,147,189	0
81	MG	AR	3586	1/1	0.92	0.15	70,70,70,70	0
80	OHX	1	3783	7/7	0.92	0.07	180,188,204,270	0
80	OHX	AR	3923	7/7	0.92	0.13	140,155,159,210	0
81	MG	A	2038	1/1	0.92	0.25	63,63,63,63	0
81	MG	1	3688	1/1	0.92	0.14	75,75,75,75	0
80	OHX	AR	3764	7/7	0.92	0.10	152,160,190,250	0
81	MG	AR	4033	1/1	0.92	0.09	58,58,58,58	0
81	MG	DH	203	1/1	0.92	0.09	63,63,63,63	0
81	MG	AR	3409	1/1	0.92	0.25	49,49,49,49	0
81	MG	v	301	1/1	0.92	0.18	64,64,64,64	0
81	MG	sR	1973	1/1	0.92	0.34	56,56,56,56	0
81	MG	AR	3410	1/1	0.92	0.28	68,68,68,68	0
80	OHX	sR	2112	7/7	0.92	0.10	161,169,189,235	0
81	MG	sR	1983	1/1	0.92	0.12	97,97,97,97	0
80	OHX	AR	3765	7/7	0.92	0.13	109,132,164,208	0
80	OHX	A	1966	7/7	0.92	0.09	209,220,243,268	0
81	MG	1	3403	1/1	0.92	0.23	48,48,48,48	0
80	OHX	AR	3611	7/7	0.92	0.10	187,196,211,256	0
81	MG	AR	4055	1/1	0.92	0.34	68,68,68,68	0
81	MG	AR	3812	1/1	0.92	0.21	72,72,72,72	0
81	MG	AR	4057	1/1	0.92	0.11	56,56,56,56	0
81	MG	1	4096	1/1	0.92	0.23	51,51,51,51	0
81	MG	1	3408	1/1	0.92	0.08	75,75,75,75	0
81	MG	AR	3606	1/1	0.92	0.09	97,97,97,97	0
81	MG	1	4099	1/1	0.92	0.11	60,60,60,60	0
81	MG	1	3743	1/1	0.92	0.25	63,63,63,63	0
81	MG	1	4102	1/1	0.92	0.13	59,59,59,59	0
80	OHX	4	201	7/7	0.92	0.10	125,134,161,219	0
80	OHX	A	2102	7/7	0.92	0.09	228,236,250,314	0
80	OHX	A	2103	7/7	0.92	0.12	125,137,163,193	0
81	MG	AR	3822	1/1	0.92	0.14	70,70,70,70	0
80	OHX	AR	3418	7/7	0.92	0.17	118,122,137,145	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	CU	202	1/1	0.92	0.28	56,56,56,56	0
81	MG	1	3426	1/1	0.92	0.10	109,109,109,109	0
81	MG	A	2061	1/1	0.92	0.13	85,85,85,85	0
80	OHX	1	3517	7/7	0.92	0.12	152,161,174,218	0
80	OHX	sR	2157	7/7	0.92	0.12	162,166,177,216	0
81	MG	1	4129	1/1	0.92	0.20	55,55,55,55	0
81	MG	1	4130	1/1	0.92	0.14	65,65,65,65	0
81	MG	sR	2020	1/1	0.92	0.20	75,75,75,75	0
80	OHX	1	3873	7/7	0.92	0.09	210,223,246,283	0
80	OHX	sR	2158	7/7	0.92	0.10	157,160,193,219	0
81	MG	1	3437	1/1	0.92	0.18	46,46,46,46	0
80	OHX	1	3880	7/7	0.92	0.10	168,178,197,228	0
80	OHX	1	3541	7/7	0.92	0.12	163,167,197,255	0
81	MG	1	4138	1/1	0.92	0.25	43,43,43,43	0
81	MG	1	3441	1/1	0.92	0.38	62,62,62,62	0
81	MG	AR	3844	1/1	0.92	0.16	68,68,68,68	0
81	MG	1	4153	1/1	0.92	0.17	53,53,53,53	0
81	MG	1	4154	1/1	0.92	0.25	40,40,40,40	0
81	MG	AB	202	1/1	0.92	0.14	69,69,69,69	0
81	MG	1	3445	1/1	0.92	0.09	79,79,79,79	0
80	OHX	A	1946	7/7	0.92	0.09	189,198,203,233	0
81	MG	AR	3848	1/1	0.92	0.14	56,56,56,56	0
81	MG	1	4164	1/1	0.92	0.24	70,70,70,70	0
80	OHX	AR	3542	7/7	0.92	0.09	125,132,169,227	0
81	MG	1	3462	1/1	0.92	0.23	60,60,60,60	0
81	MG	AR	3644	1/1	0.92	0.23	68,68,68,68	0
80	OHX	c5	201	7/7	0.92	0.07	202,217,230,262	0
80	OHX	AR	3545	7/7	0.92	0.11	112,119,146,211	0
81	MG	AR	4118	1/1	0.92	0.21	55,55,55,55	0
81	MG	1	4182	1/1	0.92	0.30	68,68,68,68	0
80	OHX	sR	2179	7/7	0.92	0.10	122,134,149,215	0
80	OHX	AR	4171	7/7	0.92	0.12	136,157,174,215	0
81	MG	sR	2060	1/1	0.92	0.18	93,93,93,93	0
80	OHX	3	205	7/7	0.92	0.11	174,178,180,221	0
80	OHX	1	3579	7/7	0.92	0.13	149,153,181,221	0
80	OHX	sR	2123	7/7	0.93	0.11	147,148,164,231	0
80	OHX	AR	3919	7/7	0.93	0.10	131,135,169,196	0
81	MG	1	3565	1/1	0.93	0.10	99,99,99,99	0
80	OHX	1	3843	7/7	0.93	0.10	128,136,161,232	0
81	MG	A	2060	1/1	0.93	0.17	69,69,69,69	0
81	MG	1	3568	1/1	0.93	0.22	68,68,68,68	0
80	OHX	AR	3922	7/7	0.93	0.08	180,186,195,225	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	sM	302	1/1	0.93	0.10	61,61,61,61	0
80	OHX	sR	2136	7/7	0.93	0.10	166,172,183,239	0
81	MG	AR	3441	1/1	0.93	0.13	85,85,85,85	0
81	MG	sR	1940	1/1	0.93	0.27	77,77,77,77	0
80	OHX	AR	4107	7/7	0.93	0.11	128,131,147,207	0
80	OHX	sR	2146	7/7	0.93	0.10	107,129,155,208	0
81	MG	AR	3833	1/1	0.93	0.25	75,75,75,75	0
80	OHX	AR	3638	7/7	0.93	0.12	101,114,134,170	0
80	OHX	AR	3539	7/7	0.93	0.16	109,117,138,190	0
80	OHX	A	1973	7/7	0.93	0.10	144,152,162,242	0
80	OHX	1	3520	7/7	0.93	0.14	87,93,117,171	0
80	OHX	sR	2156	7/7	0.93	0.13	149,166,177,191	0
81	MG	1	3894	1/1	0.93	0.14	59,59,59,59	0
80	OHX	AR	3795	7/7	0.93	0.10	146,154,176,219	0
80	OHX	A	1994	7/7	0.93	0.17	123,137,148,152	7
80	OHX	A	2076	7/7	0.93	0.11	170,176,187,217	0
81	MG	AR	3648	1/1	0.93	0.32	59,59,59,59	0
80	OHX	sR	2168	7/7	0.93	0.11	127,135,148,208	0
80	OHX	AR	4138	7/7	0.93	0.09	131,133,161,222	0
81	MG	A	1920	1/1	0.93	0.18	68,68,68,68	0
80	OHX	A	1956	7/7	0.93	0.11	152,156,191,221	0
81	MG	1	3620	1/1	0.93	0.29	54,54,54,54	0
81	MG	1	3621	1/1	0.93	0.34	76,76,76,76	0
81	MG	1	3622	1/1	0.93	0.12	71,71,71,71	0
81	MG	AR	4082	1/1	0.93	0.11	62,62,62,62	0
81	MG	AR	4083	1/1	0.93	0.32	43,43,43,43	0
80	OHX	AR	3669	7/7	0.93	0.14	117,130,141,171	0
81	MG	1	3923	1/1	0.93	0.19	97,97,97,97	0
81	MG	A	2100	1/1	0.93	0.34	67,67,67,67	0
81	MG	CE	403	1/1	0.93	0.25	48,48,48,48	0
80	OHX	AR	3672	7/7	0.93	0.09	146,161,179,238	0
80	OHX	A	1926	7/7	0.93	0.11	133,156,165,203	0
81	MG	AR	3869	1/1	0.93	0.28	61,61,61,61	0
80	OHX	1	3939	7/7	0.93	0.08	182,196,224,254	0
81	MG	1	3943	1/1	0.93	0.21	64,64,64,64	0
81	MG	A	2114	1/1	0.93	0.15	64,64,64,64	0
81	MG	AR	4096	1/1	0.93	0.09	97,97,97,97	0
81	MG	9	201	1/1	0.93	0.16	67,67,67,67	0
80	OHX	sR	1980	7/7	0.93	0.12	169,174,187,224	0
81	MG	4	215	1/1	0.93	0.29	56,56,56,56	0
81	MG	1	3650	1/1	0.93	0.28	65,65,65,65	0
81	MG	s4	301	1/1	0.93	0.38	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	3678	1/1	0.93	0.40	58,58,58,58	0
80	OHX	1	3605	7/7	0.93	0.24	88,95,111,121	7
81	MG	v	302	1/1	0.93	0.10	75,75,75,75	0
81	MG	1	3956	1/1	0.93	0.19	66,66,66,66	0
80	OHX	AR	3981	7/7	0.93	0.14	111,118,134,189	0
80	OHX	AR	3984	7/7	0.93	0.11	114,124,142,175	0
81	MG	AR	3683	1/1	0.93	0.10	77,77,77,77	0
81	MG	4	219	1/1	0.93	0.12	58,58,58,58	0
81	MG	1	3974	1/1	0.93	0.20	69,69,69,69	0
81	MG	AR	4120	1/1	0.93	0.28	81,81,81,81	0
80	OHX	AT	201	7/7	0.93	0.10	155,164,197,212	0
80	OHX	1	3969	7/7	0.93	0.10	149,164,184,202	0
81	MG	A	1950	1/1	0.93	0.14	76,76,76,76	0
81	MG	1	3981	1/1	0.93	0.16	54,54,54,54	0
81	MG	1	3982	1/1	0.93	0.18	72,72,72,72	0
80	OHX	1	3639	7/7	0.93	0.11	141,154,162,204	0
81	MG	AR	4126	1/1	0.93	0.13	71,71,71,71	0
80	OHX	1	3640	7/7	0.93	0.09	176,184,204,244	0
81	MG	1	3679	1/1	0.93	0.32	74,74,74,74	0
81	MG	1	3988	1/1	0.93	0.25	61,61,61,61	0
80	OHX	AR	3452	7/7	0.93	0.12	119,131,142,199	0
80	OHX	AR	4170	7/7	0.93	0.12	121,152,169,213	0
81	MG	4	229	1/1	0.93	0.26	50,50,50,50	0
81	MG	1	3411	1/1	0.93	0.12	60,60,60,60	0
81	MG	4	231	1/1	0.93	0.17	86,86,86,86	0
80	OHX	A	2130	7/7	0.93	0.10	160,166,182,222	0
80	OHX	AR	3702	7/7	0.93	0.12	152,161,185,239	0
80	OHX	sR	2005	7/7	0.93	0.11	171,179,188,245	0
81	MG	sR	2057	1/1	0.93	0.18	85,85,85,85	0
81	MG	AR	4149	1/1	0.93	0.33	51,51,51,51	0
80	OHX	A	1906	7/7	0.93	0.11	131,135,145,210	0
81	MG	1	3705	1/1	0.93	0.26	60,60,60,60	0
81	MG	AR	3711	1/1	0.93	0.11	91,91,91,91	0
80	OHX	AR	4201	7/7	0.93	0.11	137,146,159,214	0
81	MG	AR	3714	1/1	0.93	0.18	58,58,58,58	0
80	OHX	sR	2027	7/7	0.93	0.10	184,190,202,212	0
80	OHX	AR	3577	7/7	0.93	0.10	123,132,150,203	0
80	OHX	AR	3578	7/7	0.93	0.11	120,143,151,223	0
80	OHX	DH	202	7/7	0.93	0.13	122,128,147,185	0
80	OHX	AR	3857	7/7	0.93	0.10	127,131,167,189	0
80	OHX	A	2007	7/7	0.93	0.08	161,182,192,238	0
81	MG	AR	3529	1/1	0.93	0.05	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	sR	2083	1/1	0.93	0.11	61,61,61,61	0
81	MG	AR	4175	1/1	0.93	0.16	69,69,69,69	0
81	MG	l	401	1/1	0.93	0.22	94,94,94,94	0
81	MG	1	3734	1/1	0.93	0.15	69,69,69,69	0
80	OHX	A	2047	7/7	0.93	0.08	192,193,212,249	0
81	MG	sR	2093	1/1	0.93	0.14	83,83,83,83	0
81	MG	1	3738	1/1	0.93	0.29	44,44,44,44	0
81	MG	1	3739	1/1	0.93	0.44	55,55,55,55	0
80	OHX	AR	3601	7/7	0.93	0.13	69,104,126,155	0
81	MG	1	3741	1/1	0.93	0.25	69,69,69,69	0
80	OHX	AR	3732	7/7	0.93	0.09	131,135,172,218	0
80	OHX	1	3732	7/7	0.93	0.14	156,162,177,226	0
80	OHX	AR	3486	7/7	0.93	0.10	153,162,171,228	0
81	MG	AR	3959	1/1	0.93	0.15	68,68,68,68	0
81	MG	AR	3741	1/1	0.93	0.29	55,55,55,55	0
80	OHX	AR	4048	7/7	0.93	0.08	160,177,199,246	0
80	OHX	A	2016	7/7	0.93	0.11	163,166,176,232	0
81	MG	x	204	1/1	0.93	0.30	68,68,68,68	0
81	MG	AR	3965	1/1	0.93	0.21	70,70,70,70	0
81	MG	1	3765	1/1	0.93	0.30	43,43,43,43	0
80	OHX	AR	3889	7/7	0.93	0.10	127,143,167,199	0
81	MG	1	3767	1/1	0.93	0.27	53,53,53,53	0
81	MG	AR	4193	1/1	0.93	0.23	73,73,73,73	0
81	MG	1	3770	1/1	0.93	0.20	61,61,61,61	0
81	MG	1	3771	1/1	0.93	0.14	67,67,67,67	0
80	OHX	1	3760	7/7	0.93	0.11	127,150,169,207	0
80	OHX	3	202	7/7	0.93	0.12	128,142,156,189	0
80	OHX	A	1924	7/7	0.93	0.12	174,176,196,234	0
81	MG	1	4101	1/1	0.93	0.37	72,72,72,72	0
81	MG	1	3775	1/1	0.93	0.19	72,72,72,72	0
81	MG	1	4103	1/1	0.93	0.44	61,61,61,61	0
81	MG	DP	101	1/1	0.93	0.12	62,62,62,62	0
81	MG	AR	3562	1/1	0.93	0.19	74,74,74,74	0
81	MG	AR	4209	1/1	0.93	0.32	51,51,51,51	0
81	MG	1	4108	1/1	0.93	0.31	43,43,43,43	0
80	OHX	AR	4077	7/7	0.93	0.08	152,175,198,246	0
81	MG	1	3780	1/1	0.93	0.17	57,57,57,57	0
80	OHX	AR	3761	7/7	0.93	0.12	125,128,143,216	0
80	OHX	1	3480	7/7	0.93	0.10	143,146,174,204	0
81	MG	1	4125	1/1	0.93	0.25	69,69,69,69	0
81	MG	CQ	202	1/1	0.93	0.25	73,73,73,73	0
81	MG	AR	3569	1/1	0.93	0.09	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
81	MG	CQ	203	1/1	0.93	0.19	86,86,86,86	0
81	MG	AR	3994	1/1	0.93	0.28	61,61,61,61	0
81	MG	AR	3403	1/1	0.93	0.23	62,62,62,62	0
80	OHX	1	3790	7/7	0.93	0.10	176,182,205,237	0
80	OHX	1	3791	7/7	0.93	0.08	157,161,191,236	0
81	MG	1	3523	1/1	0.93	0.23	65,65,65,65	0
80	OHX	1	4150	7/7	0.93	0.09	136,150,180,212	0
81	MG	1	3526	1/1	0.93	0.27	48,48,48,48	0
81	MG	1	3527	1/1	0.93	0.27	64,64,64,64	0
81	MG	1	3810	1/1	0.93	0.24	58,58,58,58	0
80	OHX	A	2067	7/7	0.93	0.12	146,157,180,206	0
81	MG	AS	211	1/1	0.93	0.18	47,47,47,47	0
80	OHX	1	4171	7/7	0.93	0.12	123,134,153,188	0
81	MG	AR	3589	1/1	0.93	0.14	50,50,50,50	0
81	MG	1	3828	1/1	0.93	0.35	51,51,51,51	0
80	OHX	AR	3421	7/7	0.93	0.11	107,122,155,195	0
81	MG	sR	2171	1/1	0.93	0.17	69,69,69,69	0
81	MG	CR	204	1/1	0.93	0.33	71,71,71,71	0
81	MG	1	4163	1/1	0.93	0.18	58,58,58,58	0
81	MG	CR	205	1/1	0.93	0.08	68,68,68,68	0
80	OHX	1	3487	7/7	0.93	0.12	140,145,149,222	0
81	MG	AS	218	1/1	0.93	0.33	55,55,55,55	0
81	MG	1	3553	1/1	0.93	0.37	62,62,62,62	0
80	OHX	1	4176	7/7	0.93	0.13	99,118,130,175	0
81	MG	1	3555	1/1	0.93	0.23	58,58,58,58	0
81	MG	A	2048	1/1	0.93	0.18	83,83,83,83	0
80	OHX	1	3819	7/7	0.93	0.12	125,140,158,211	0
81	MG	AR	3804	1/1	0.93	0.29	57,57,57,57	0
81	MG	AR	3805	1/1	0.93	0.29	52,52,52,52	0
83	K	AR	3447	1/1	0.93	0.21	76,76,76,76	0
80	OHX	1	4179	7/7	0.93	0.12	108,114,124,169	0
81	MG	sR	1908	1/1	0.93	0.24	69,69,69,69	0
80	OHX	1	4180	7/7	0.93	0.09	156,162,185,239	0
80	OHX	AR	3759	7/7	0.94	0.10	156,158,169,197	0
80	OHX	A	2112	7/7	0.94	0.09	149,167,178,201	0
81	MG	AB	203	1/1	0.94	0.15	71,71,71,71	0
80	OHX	1	3604	7/7	0.94	0.13	103,113,131,145	0
80	OHX	sR	2015	7/7	0.94	0.08	202,206,209,237	0
81	MG	AR	4143	1/1	0.94	0.16	55,55,55,55	0
81	MG	AR	3930	1/1	0.94	0.31	47,47,47,47	0
80	OHX	1	3610	7/7	0.94	0.09	148,153,176,213	0
80	OHX	AT	202	7/7	0.94	0.10	117,125,151,182	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	AR	3517	7/7	0.94	0.10	177,194,212,283	0
81	MG	1	3919	1/1	0.94	0.30	40,40,40,40	0
81	MG	AR	3936	1/1	0.94	0.35	62,62,62,62	0
80	OHX	AR	3636	7/7	0.94	0.12	79,101,108,183	0
80	OHX	1	3638	7/7	0.94	0.12	99,119,132,175	0
81	MG	sR	2046	1/1	0.94	0.21	60,60,60,60	0
80	OHX	AT	207	7/7	0.94	0.08	172,180,206,238	0
80	OHX	AS	227	7/7	0.94	0.12	113,120,125,158	0
81	MG	AR	4154	1/1	0.94	0.16	65,65,65,65	0
80	OHX	AS	229	7/7	0.94	0.11	127,148,155,190	0
80	OHX	A	1995	7/7	0.94	0.10	103,120,137,174	0
80	OHX	sR	2040	7/7	0.94	0.10	160,164,190,217	0
80	OHX	1	3669	7/7	0.94	0.11	133,155,168,215	0
80	OHX	A	2026	7/7	0.94	0.10	139,142,146,216	0
80	OHX	A	2055	7/7	0.94	0.12	122,143,165,180	0
80	OHX	sR	2062	7/7	0.94	0.13	68,117,130,148	0
81	MG	1	3947	1/1	0.94	0.28	48,48,48,48	0
81	MG	AR	3770	1/1	0.94	0.23	53,53,53,53	0
81	MG	AR	4176	1/1	0.94	0.15	61,61,61,61	0
81	MG	sR	2079	1/1	0.94	0.19	45,45,45,45	0
80	OHX	1	4000	7/7	0.94	0.08	179,187,199,227	0
81	MG	1	3952	1/1	0.94	0.16	59,59,59,59	0
81	MG	AR	3594	1/1	0.94	0.08	63,63,63,63	0
80	OHX	AR	3921	7/7	0.94	0.12	155,156,167,198	0
80	OHX	A	2056	7/7	0.94	0.11	154,159,170,192	0
81	MG	AR	3445	1/1	0.94	0.23	49,49,49,49	0
80	OHX	sR	1913	7/7	0.94	0.11	127,132,151,189	0
81	MG	1	3690	1/1	0.94	0.11	67,67,67,67	0
80	OHX	1	3701	7/7	0.94	0.07	187,193,207,228	0
80	OHX	sR	2075	7/7	0.94	0.10	138,147,165,200	0
80	OHX	AR	3793	7/7	0.94	0.13	79,91,117,136	0
80	OHX	A	2094	7/7	0.94	0.11	88,125,150,189	0
81	MG	A	1948	1/1	0.94	0.07	72,72,72,72	0
81	MG	AR	3619	1/1	0.94	0.27	57,57,57,57	0
80	OHX	1	4051	7/7	0.94	0.10	107,132,167,182	0
81	MG	AR	3790	1/1	0.94	0.23	62,62,62,62	0
80	OHX	sR	2087	7/7	0.94	0.12	143,156,175,225	0
81	MG	1	3983	1/1	0.94	0.17	63,63,63,63	0
81	MG	1	3465	1/1	0.94	0.30	53,53,53,53	0
80	OHX	1	3728	7/7	0.94	0.12	102,117,132,189	0
80	OHX	AR	3449	7/7	0.94	0.13	120,123,144,212	0
81	MG	AR	3997	1/1	0.94	0.16	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	3998	1/1	0.94	0.18	71,71,71,71	0
80	OHX	1	3428	7/7	0.94	0.10	164,174,189,214	0
81	MG	sR	2119	1/1	0.94	0.19	67,67,67,67	0
80	OHX	A	1907	7/7	0.94	0.11	149,160,175,208	0
80	OHX	AR	3671	7/7	0.94	0.12	90,105,113,203	0
80	OHX	1	3450	7/7	0.94	0.10	125,129,165,190	0
80	OHX	1	4062	1/7	0.94	0.13	218,218,218,218	0
81	MG	AR	4005	1/1	0.94	0.14	86,86,86,86	0
81	MG	1	4012	1/1	0.94	0.42	71,71,71,71	0
81	MG	1	4013	1/1	0.94	0.09	80,80,80,80	0
81	MG	AR	3808	1/1	0.94	0.27	58,58,58,58	0
80	OHX	AR	3547	7/7	0.94	0.12	157,159,167,227	0
81	MG	1	3742	1/1	0.94	0.10	79,79,79,79	0
81	MG	AS	204	1/1	0.94	0.22	57,57,57,57	0
80	OHX	AR	3823	7/7	0.94	0.11	84,99,126,196	0
80	OHX	1	4090	7/7	0.94	0.11	150,160,178,221	0
81	MG	1	3501	1/1	0.94	0.16	70,70,70,70	0
81	MG	AF	201	1/1	0.94	0.10	60,60,60,60	0
80	OHX	A	1985	7/7	0.94	0.12	127,134,151,181	0
81	MG	AR	3647	1/1	0.94	0.09	71,71,71,71	0
81	MG	AF	203	1/1	0.94	0.16	70,70,70,70	0
81	MG	1	4039	1/1	0.94	0.19	46,46,46,46	0
81	MG	AR	3818	1/1	0.94	0.26	43,43,43,43	0
81	MG	1	3764	1/1	0.94	0.21	58,58,58,58	0
81	MG	AF	204	1/1	0.94	0.20	79,79,79,79	0
80	OHX	AR	3694	7/7	0.94	0.15	96,108,131,157	0
81	MG	AR	3653	1/1	0.94	0.11	88,88,88,88	0
80	OHX	AR	3979	7/7	0.94	0.13	121,135,145,174	0
81	MG	1	3769	1/1	0.94	0.21	47,47,47,47	0
81	MG	AR	3655	1/1	0.94	0.12	65,65,65,65	0
81	MG	AR	3835	1/1	0.94	0.18	69,69,69,69	0
80	OHX	A	1955	7/7	0.94	0.14	112,126,144,152	0
80	OHX	1	3482	7/7	0.94	0.13	116,123,156,195	0
80	OHX	AR	3572	7/7	0.94	0.13	91,99,128,162	0
81	MG	CP	301	1/1	0.94	0.10	76,76,76,76	0
81	MG	1	4066	1/1	0.94	0.17	56,56,56,56	0
80	OHX	sR	1947	7/7	0.94	0.09	131,154,166,205	0
81	MG	1	3531	1/1	0.94	0.26	62,62,62,62	0
80	OHX	AR	3983	7/7	0.94	0.11	106,120,136,190	0
81	MG	A	1998	1/1	0.94	0.15	60,60,60,60	0
81	MG	1	4072	1/1	0.94	0.15	75,75,75,75	0
81	MG	AR	3843	1/1	0.94	0.15	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	AR	4054	1/1	0.94	0.11	64,64,64,64	0
81	MG	1	3794	1/1	0.94	0.21	52,52,52,52	0
81	MG	sR	1917	1/1	0.94	0.13	62,62,62,62	0
81	MG	AR	3675	1/1	0.94	0.23	39,39,39,39	0
81	MG	1	4079	1/1	0.94	0.08	47,47,47,47	0
81	MG	1	3547	1/1	0.94	0.07	87,87,87,87	0
80	OHX	A	2142	7/7	0.94	0.10	138,150,175,193	0
80	OHX	AR	3456	7/7	0.94	0.08	190,195,211,232	0
81	MG	sR	1928	1/1	0.94	0.17	67,67,67,67	0
81	MG	AR	4058	1/1	0.94	0.23	56,56,56,56	0
80	OHX	1	4148	7/7	0.94	0.10	132,137,161,196	0
80	OHX	sR	1958	7/7	0.94	0.11	122,136,154,203	0
80	OHX	A	2143[A]	7/7	0.94	0.17	119,137,140,142	7
81	MG	AR	4062	1/1	0.94	0.12	73,73,73,73	0
80	OHX	1	3816	7/7	0.94	0.12	95,116,135,160	0
80	OHX	AR	3484	7/7	0.94	0.11	164,167,180,198	0
81	MG	sR	1943	1/1	0.94	0.26	73,73,73,73	0
81	MG	AR	3867	1/1	0.94	0.28	49,49,49,49	0
80	OHX	sR	1967	7/7	0.94	0.15	94,103,133,150	0
80	OHX	A	2143[B]	7/7	0.94	0.17	131,138,141,151	7
80	OHX	1	3822	7/7	0.94	0.10	131,140,146,225	0
81	MG	AT	217	1/1	0.94	0.10	61,61,61,61	0
81	MG	AR	3524	1/1	0.94	0.30	63,63,63,63	0
80	OHX	AR	4012	7/7	0.94	0.09	113,130,148,184	0
81	MG	x	203	1/1	0.94	0.36	101,101,101,101	0
80	OHX	A	1936	7/7	0.94	0.11	153,169,179,237	0
81	MG	sR	1963	1/1	0.94	0.08	75,75,75,75	0
81	MG	AT	224	1/1	0.94	0.35	61,61,61,61	0
80	OHX	A	2153	7/7	0.94	0.09	157,162,178,201	0
81	MG	DC	201	1/1	0.94	0.14	70,70,70,70	0
81	MG	1	3590	1/1	0.94	0.10	66,66,66,66	0
81	MG	AR	4087	1/1	0.94	0.19	49,49,49,49	0
80	OHX	AR	4172	7/7	0.94	0.10	141,145,164,201	0
81	MG	AR	4090	1/1	0.94	0.18	61,61,61,61	0
80	OHX	AR	3605	7/7	0.94	0.12	88,97,123,169	0
81	MG	1	3595	1/1	0.94	0.09	64,64,64,64	0
81	MG	1	3596	1/1	0.94	0.17	73,73,73,73	0
81	MG	sR	1974	1/1	0.94	0.10	92,92,92,92	0
80	OHX	AR	3510	7/7	0.94	0.11	72,108,131,162	0
80	OHX	AR	4200	7/7	0.94	0.10	139,157,172,209	0
81	MG	1	4147	1/1	0.94	0.08	98,98,98,98	0
80	OHX	sR	2180	7/7	0.94	0.10	155,172,193,230	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	1	3879	7/7	0.94	0.09	112,118,142,184	0
81	MG	AR	3888	1/1	0.94	0.11	93,93,93,93	0
81	MG	1	4155	1/1	0.94	0.21	61,61,61,61	0
81	MG	d3	203	1/1	0.94	0.32	63,63,63,63	0
81	MG	AR	3712	1/1	0.94	0.09	66,66,66,66	0
81	MG	AR	3538	1/1	0.94	0.18	64,64,64,64	0
81	MG	1	4161	1/1	0.94	0.20	72,72,72,72	0
80	OHX	A	1925	7/7	0.94	0.14	82,111,145,146	0
81	MG	AR	4116	1/1	0.94	0.20	63,63,63,63	0
81	MG	1	3868	1/1	0.94	0.10	39,39,39,39	0
81	MG	CF	402	1/1	0.94	0.17	77,77,77,77	0
81	MG	AR	4117	1/1	0.94	0.26	65,65,65,65	0
81	MG	1	3884	1/1	0.94	0.32	68,68,68,68	0
81	MG	AR	3553	1/1	0.94	0.30	52,52,52,52	0
81	MG	AR	3554	1/1	0.94	0.33	63,63,63,63	0
80	OHX	sR	2189	7/7	0.94	0.10	98,135,145,180	0
81	MG	1	3626	1/1	0.94	0.07	77,77,77,77	0
80	OHX	sR	2190	7/7	0.94	0.11	127,137,166,203	0
82	ZN	AP	501	1/1	0.94	0.07	114,114,114,114	0
80	OHX	1	3574	7/7	0.94	0.20	97,110,128,141	7
81	MG	1	3893	1/1	0.94	0.25	67,67,67,67	0
81	MG	AR	3404	1/1	0.94	0.10	57,57,57,57	0
80	OHX	A	1953	7/7	0.94	0.11	154,164,173,207	0
81	MG	1	3896	1/1	0.94	0.28	90,90,90,90	0
85	SPD	1	3478	10/10	0.94	0.14	44,49,53,54	0
81	MG	CF	401	1/1	0.95	0.15	64,64,64,64	0
80	OHX	AR	3576	7/7	0.95	0.11	124,127,144,210	0
80	OHX	1	3784	7/7	0.95	0.11	100,111,132,157	0
81	MG	CG	301	1/1	0.95	0.27	46,46,46,46	0
81	MG	CG	304	1/1	0.95	0.16	63,63,63,63	0
80	OHX	AR	3455	7/7	0.95	0.09	141,148,158,216	0
80	OHX	1	3786	7/7	0.95	0.12	103,123,135,174	0
80	OHX	1	3455	7/7	0.95	0.12	111,117,142,196	0
80	OHX	A	2086	7/7	0.95	0.11	129,131,136,159	0
80	OHX	1	3458	7/7	0.95	0.08	155,164,172,220	0
81	MG	sR	1996	1/1	0.95	0.18	63,63,63,63	0
81	MG	AR	4094	1/1	0.95	0.19	67,67,67,67	0
81	MG	A	2108	1/1	0.95	0.27	68,68,68,68	0
80	OHX	AR	3885	7/7	0.95	0.11	99,108,123,151	0
80	OHX	sR	1902	7/7	0.95	0.11	144,156,161,182	0
80	OHX	A	1916	7/7	0.95	0.11	109,121,160,170	0
81	MG	AR	3878	1/1	0.95	0.22	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	A	2003	7/7	0.95	0.09	127,142,160,202	0
80	OHX	A	2005	7/7	0.95	0.09	136,148,165,187	0
80	OHX	sR	1911	7/7	0.95	0.20	113,116,125,149	7
80	OHX	A	1983	7/7	0.95	0.10	158,167,170,231	0
80	OHX	AR	4076	7/7	0.95	0.11	91,96,127,164	0
80	OHX	A	2052	7/7	0.95	0.12	100,114,130,149	0
80	OHX	1	3844	7/7	0.95	0.13	111,129,153,164	0
80	OHX	AR	3508	7/7	0.95	0.12	92,116,124,175	0
81	MG	sR	2031	1/1	0.95	0.22	65,65,65,65	0
81	MG	AR	3899	1/1	0.95	0.44	59,59,59,59	0
80	OHX	4	203	7/7	0.95	0.09	124,132,160,193	0
80	OHX	sR	1924	7/7	0.95	0.11	141,146,160,213	0
80	OHX	1	3513	7/7	0.95	0.11	75,101,127,143	0
80	OHX	sR	2135	7/7	0.95	0.09	133,135,160,195	0
80	OHX	w	201	7/7	0.95	0.12	104,115,138,165	0
81	MG	1	3957	1/1	0.95	0.18	61,61,61,61	0
81	MG	AR	3906	1/1	0.95	0.22	72,72,72,72	0
81	MG	1	3417	1/1	0.95	0.33	63,63,63,63	0
80	OHX	AR	3512	7/7	0.95	0.10	98,127,134,173	0
81	MG	AR	3908	1/1	0.95	0.26	68,68,68,68	0
81	MG	sR	2047	1/1	0.95	0.14	77,77,77,77	0
81	MG	sR	2048	1/1	0.95	0.06	91,91,91,91	0
81	MG	AR	3709	1/1	0.95	0.17	48,48,48,48	0
81	MG	AR	3710	1/1	0.95	0.25	45,45,45,45	0
81	MG	AR	4145	1/1	0.95	0.26	46,46,46,46	0
81	MG	1	3706	1/1	0.95	0.13	45,45,45,45	0
81	MG	1	3707	1/1	0.95	0.30	52,52,52,52	0
80	OHX	1	3878	7/7	0.95	0.10	102,133,154,178	0
80	OHX	sR	2145	7/7	0.95	0.10	113,122,139,180	0
81	MG	1	3438	1/1	0.95	0.20	77,77,77,77	0
81	MG	AR	3916	1/1	0.95	0.32	65,65,65,65	0
80	OHX	AR	4099	7/7	0.95	0.17	75,99,113,118	0
80	OHX	AR	4103	7/7	0.95	0.10	103,109,149,159	0
81	MG	AR	3928	1/1	0.95	0.33	63,63,63,63	0
80	OHX	AR	3630	7/7	0.95	0.12	85,114,132,156	0
80	OHX	AR	3634	7/7	0.95	0.11	101,114,139,168	0
81	MG	AR	3931	1/1	0.95	0.23	43,43,43,43	0
80	OHX	A	1943	7/7	0.95	0.09	123,131,151,208	0
80	OHX	AR	3413	7/7	0.95	0.15	39,85,106,131	0
81	MG	1	4009	1/1	0.95	0.09	55,55,55,55	0
81	MG	AR	3934	1/1	0.95	0.14	84,84,84,84	0
81	MG	1	4011	1/1	0.95	0.32	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	sR	1946	7/7	0.95	0.10	100,106,127,176	0
81	MG	1	3735	1/1	0.95	0.13	47,47,47,47	0
80	OHX	AR	3417	7/7	0.95	0.12	96,114,131,164	0
81	MG	AR	3937	1/1	0.95	0.15	70,70,70,70	0
80	OHX	AR	3952	7/7	0.95	0.10	100,111,121,201	0
80	OHX	4	230	7/7	0.95	0.09	117,120,152,169	0
81	MG	AR	3940	1/1	0.95	0.45	74,74,74,74	0
80	OHX	1	3575	7/7	0.95	0.11	106,111,128,183	0
81	MG	AR	3550	1/1	0.95	0.24	70,70,70,70	0
81	MG	1	3472	1/1	0.95	0.11	73,73,73,73	0
80	OHX	AR	3419	7/7	0.95	0.10	117,126,138,176	0
80	OHX	1	3580	7/7	0.95	0.10	116,130,136,179	0
80	OHX	AR	4135	7/7	0.95	0.12	115,123,139,193	0
80	OHX	AR	4136	7/7	0.95	0.12	94,108,125,166	0
81	MG	1	3486	1/1	0.95	0.07	78,78,78,78	0
80	OHX	1	3961	7/7	0.95	0.11	121,140,154,183	0
80	OHX	A	1965	7/7	0.95	0.12	132,146,151,177	0
80	OHX	A	2025	7/7	0.95	0.11	115,129,142,184	0
81	MG	1	3495	1/1	0.95	0.34	57,57,57,57	0
80	OHX	1	3966	7/7	0.95	0.11	95,108,138,148	0
81	MG	1	3497	1/1	0.95	0.34	55,55,55,55	0
80	OHX	1	3608	7/7	0.95	0.12	117,122,137,191	0
80	OHX	1	3609	7/7	0.95	0.10	112,134,150,179	0
80	OHX	AR	3665	7/7	0.95	0.11	97,112,130,159	0
80	OHX	1	3611	7/7	0.95	0.09	203,208,224,231	0
80	OHX	A	2066	7/7	0.95	0.10	196,204,217,231	0
81	MG	k	401	1/1	0.95	0.17	66,66,66,66	0
80	OHX	1	3991	7/7	0.95	0.11	132,137,151,170	0
80	OHX	AR	3667[A]	7/7	0.95	0.21	81,94,103,118	7
80	OHX	1	3998	7/7	0.95	0.09	162,176,186,200	0
80	OHX	AR	4161	7/7	0.95	0.12	72,99,124,129	0
81	MG	l	402	1/1	0.95	0.11	55,55,55,55	0
81	MG	1	3516	1/1	0.95	0.07	98,98,98,98	0
81	MG	AR	3978	1/1	0.95	0.21	71,71,71,71	0
80	OHX	AR	3667[B]	7/7	0.95	0.21	95,101,111,173	7
80	OHX	DL	102	7/7	0.95	0.10	106,115,136,171	0
81	MG	AR	3775	1/1	0.95	0.17	48,48,48,48	0
81	MG	AR	3993	1/1	0.95	0.14	52,52,52,52	0
81	MG	sR	2150	1/1	0.95	0.24	53,53,53,53	0
80	OHX	AR	4167	7/7	0.95	0.11	67,98,146,173	0
80	OHX	1	4028	7/7	0.95	0.09	170,184,191,217	0
80	OHX	AR	3670	7/7	0.95	0.10	95,117,134,183	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	AT	204[A]	7/7	0.95	0.16	105,108,134,149	7
80	OHX	AT	204[B]	7/7	0.95	0.16	105,111,120,152	7
80	OHX	1	3666	7/7	0.95	0.13	93,114,131,159	0
81	MG	1	3803	1/1	0.95	0.30	79,79,79,79	0
80	OHX	1	3668	7/7	0.95	0.13	90,115,123,153	0
81	MG	AS	210	1/1	0.95	0.23	68,68,68,68	0
80	OHX	sR	1992	7/7	0.95	0.12	115,129,150,192	0
81	MG	AR	3420	1/1	0.95	0.07	122,122,122,122	0
80	OHX	4	205	7/7	0.95	0.07	166,179,192,227	0
81	MG	AR	3794	1/1	0.95	0.14	96,96,96,96	0
81	MG	1	4104	1/1	0.95	0.10	59,59,59,59	0
80	OHX	1	4056	7/7	0.95	0.12	100,108,121,160	0
81	MG	AR	3600	1/1	0.95	0.25	41,41,41,41	0
81	MG	A	2031	1/1	0.95	0.13	80,80,80,80	0
80	OHX	k	404	7/7	0.95	0.10	118,130,170,181	0
81	MG	AR	3612	1/1	0.95	0.26	60,60,60,60	0
80	OHX	sR	2003	7/7	0.95	0.11	112,133,151,171	0
80	OHX	A	2035	7/7	0.95	0.09	123,133,150,188	0
81	MG	AR	3615	1/1	0.95	0.14	48,48,48,48	0
80	OHX	AT	230	7/7	0.95	0.11	117,123,146,176	0
80	OHX	1	3696	7/7	0.95	0.13	85,100,124,140	0
81	MG	AR	4026	1/1	0.95	0.06	57,57,57,57	0
81	MG	AR	3618	1/1	0.95	0.08	61,61,61,61	0
80	OHX	A	1915	7/7	0.95	0.13	130,150,162,162	0
81	MG	AR	3435	1/1	0.95	0.41	73,73,73,73	0
81	MG	A	2044	1/1	0.95	0.08	120,120,120,120	0
81	MG	sR	1919	1/1	0.95	0.11	90,90,90,90	0
81	MG	1	4133	1/1	0.95	0.15	52,52,52,52	0
80	OHX	1	3700	7/7	0.95	0.09	123,131,142,189	0
80	OHX	sR	2014	7/7	0.95	0.11	128,143,149,171	0
80	OHX	1	4086	7/7	0.95	0.11	93,106,141,160	0
80	OHX	CE	401	7/7	0.95	0.11	103,110,127,169	0
81	MG	1	3856	1/1	0.95	0.15	64,64,64,64	0
81	MG	AR	3626	1/1	0.95	0.07	115,115,115,115	0
81	MG	sR	1931	1/1	0.95	0.32	62,62,62,62	0
80	OHX	AR	4196	7/7	0.95	0.12	121,125,137,190	0
80	OHX	1	4111	7/7	0.95	0.09	98,127,155,193	0
81	MG	AR	4044	1/1	0.95	0.07	100,100,100,100	0
80	OHX	A	2037	7/7	0.95	0.15	81,119,135,141	0
80	OHX	AR	4198	7/7	0.95	0.09	100,113,141,183	0
81	MG	AR	3458	1/1	0.95	0.20	54,54,54,54	0
80	OHX	1	4116	7/7	0.95	0.10	111,120,144,193	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	AR	4014	7/7	0.95	0.09	156,171,186,194	0
81	MG	AT	231	1/1	0.95	0.08	109,109,109,109	0
80	OHX	AR	3853	7/7	0.95	0.10	105,126,143,189	0
80	OHX	AR	3698	7/7	0.95	0.10	157,164,174,193	0
80	OHX	A	2139	7/7	0.95	0.13	100,116,133,148	0
81	MG	AR	3649	1/1	0.95	0.08	63,63,63,63	0
80	OHX	AR	3701	7/7	0.95	0.08	148,161,180,217	0
80	OHX	1	3423	7/7	0.95	0.12	90,106,135,159	0
80	OHX	sR	2051	7/7	0.95	0.11	111,123,134,177	0
80	OHX	AR	3574	7/7	0.95	0.11	88,109,132,170	0
80	OHX	1	4149	7/7	0.95	0.11	107,120,141,165	0
80	OHX	AR	4043	7/7	0.95	0.10	92,107,110,169	0
80	OHX	AS	221	7/7	0.95	0.12	114,117,134,137	0
81	MG	AR	3854	1/1	0.95	0.13	63,63,63,63	0
83	K	AR	3416	1/1	0.95	0.23	68,68,68,68	0
80	OHX	AS	223	7/7	0.95	0.12	76,104,124,162	0
83	K	AR	4195	1/1	0.95	0.10	82,82,82,82	0
83	K	1	3448	1/1	0.95	0.23	76,76,76,76	0
81	MG	AR	3865	1/1	0.95	0.13	75,75,75,75	0
80	OHX	AS	225	7/7	0.95	0.10	107,131,133,203	0
81	MG	sR	1982	1/1	0.95	0.23	68,68,68,68	0
81	MG	1	3627	1/1	0.95	0.08	71,71,71,71	0
81	MG	sR	2010	1/1	0.96	0.15	80,80,80,80	0
81	MG	AT	229	1/1	0.96	0.12	121,121,121,121	0
81	MG	AR	3992	1/1	0.96	0.28	43,43,43,43	0
81	MG	1	3976	1/1	0.96	0.45	60,60,60,60	0
80	OHX	AR	3758	7/7	0.96	0.10	82,106,127,153	0
81	MG	sR	2019	1/1	0.96	0.25	60,60,60,60	0
80	OHX	4	232	7/7	0.96	0.08	135,145,170,204	0
80	OHX	CP	303	7/7	0.96	0.09	132,143,161,209	0
81	MG	sR	2022	1/1	0.96	0.11	87,87,87,87	0
80	OHX	sR	1990	7/7	0.96	0.10	99,122,138,155	0
81	MG	AR	3497	1/1	0.96	0.10	56,56,56,56	0
80	OHX	4	207	7/7	0.96	0.08	145,159,177,218	0
80	OHX	AR	4004	7/7	0.96	0.22	65,84,108,119	0
81	MG	4	220	1/1	0.96	0.11	74,74,74,74	0
80	OHX	AR	4008	7/7	0.96	0.11	92,114,119,141	0
80	OHX	1	3483	7/7	0.96	0.14	97,112,127,155	0
80	OHX	sR	2002	7/7	0.96	0.10	97,101,116,169	0
80	OHX	AR	3763	7/7	0.96	0.08	124,128,159,189	0
80	OHX	1	3999	7/7	0.96	0.07	135,146,169,203	0
80	OHX	sR	2167	7/7	0.96	0.12	69,114,119,149	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	1	4007	1/1	0.96	0.15	47,47,47,47	0
81	MG	s1	302	1/1	0.96	0.10	90,90,90,90	0
80	OHX	AR	3603	6/7	0.96	0.10	96,98,120,185	0
80	OHX	sR	1912	7/7	0.96	0.12	59,107,123,157	0
80	OHX	1	4023	7/7	0.96	0.15	72,84,100,114	0
80	OHX	AR	3444	7/7	0.96	0.12	52,75,103,126	0
80	OHX	1	4026	7/7	0.96	0.10	109,128,151,174	0
81	MG	sR	2056	1/1	0.96	0.13	85,85,85,85	0
80	OHX	A	1975	7/7	0.96	0.09	126,149,155,179	0
81	MG	1	4016	1/1	0.96	0.09	83,83,83,83	0
80	OHX	1	3754	7/7	0.96	0.11	94,108,123,138	0
80	OHX	1	3511	7/7	0.96	0.12	80,94,109,127	0
80	OHX	4	228	7/7	0.96	0.09	93,100,130,149	0
80	OHX	AR	3789	7/7	0.96	0.10	101,108,144,162	0
81	MG	s8	302	1/1	0.96	0.31	65,65,65,65	0
80	OHX	AR	3692	7/7	0.96	0.12	102,120,131,137	0
81	MG	1	3804	1/1	0.96	0.07	70,70,70,70	0
81	MG	k	402	1/1	0.96	0.10	77,77,77,77	0
81	MG	sR	2070	1/1	0.96	0.11	100,100,100,100	0
80	OHX	sR	1923	7/7	0.96	0.10	101,113,127,171	0
81	MG	sR	2072	1/1	0.96	0.13	59,59,59,59	0
80	OHX	1	4054	7/7	0.96	0.13	72,110,116,138	0
80	OHX	A	1977	7/7	0.96	0.09	130,139,157,216	0
81	MG	AS	201	1/1	0.96	0.23	53,53,53,53	0
81	MG	1	3825	1/1	0.96	0.15	51,51,51,51	0
80	OHX	sR	2037	7/7	0.96	0.22	65,85,104,123	0
80	OHX	AR	3917	7/7	0.96	0.10	92,97,117,145	0
80	OHX	AR	3696	7/7	0.96	0.10	106,113,120,184	0
81	MG	sR	2084	1/1	0.96	0.07	90,90,90,90	0
80	OHX	A	2152	7/7	0.96	0.10	121,131,137,189	0
81	MG	1	4057	1/1	0.96	0.06	99,99,99,99	0
80	OHX	1	3788	7/7	0.96	0.08	114,118,156,186	0
81	MG	AR	4051	1/1	0.96	0.08	53,53,53,53	0
80	OHX	sR	2052	7/7	0.96	0.08	121,138,149,195	0
80	OHX	1	3546	7/7	0.96	0.11	101,127,144,161	0
80	OHX	T	201	7/7	0.96	0.12	113,126,148,149	0
81	MG	sR	2102	1/1	0.96	0.17	50,50,50,50	0
81	MG	1	4069	1/1	0.96	0.23	49,49,49,49	0
81	MG	1	3414	1/1	0.96	0.09	68,68,68,68	0
80	OHX	1	4083	7/7	0.96	0.10	105,114,119,181	0
80	OHX	1	4084	7/7	0.96	0.10	114,124,150,152	0
80	OHX	sR	1934	7/7	0.96	0.12	116,129,146,148	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	sR	1935	7/7	0.96	0.09	109,115,130,172	0
80	OHX	1	4089	7/7	0.96	0.09	124,132,153,180	0
81	MG	1	4076	1/1	0.96	0.23	79,79,79,79	0
80	OHX	r	304	7/7	0.96	0.10	92,104,129,149	0
80	OHX	AT	206	7/7	0.96	0.07	163,175,184,209	0
80	OHX	1	3818	7/7	0.96	0.10	129,146,160,198	0
80	OHX	1	3572	7/7	0.96	0.10	90,104,129,157	0
81	MG	AR	3901	1/1	0.96	0.20	47,47,47,47	0
80	OHX	AR	3632	7/7	0.96	0.14	80,116,138,143	0
81	MG	sR	2120	1/1	0.96	0.07	92,92,92,92	0
81	MG	AR	4067	1/1	0.96	0.12	97,97,97,97	0
80	OHX	AR	4192	7/7	0.96	0.14	88,97,109,121	0
80	OHX	AR	3821	7/7	0.96	0.10	90,90,105,138	0
80	OHX	1	3841	7/7	0.96	0.12	99,106,127,173	0
81	MG	A	2034	1/1	0.96	0.05	102,102,102,102	0
80	OHX	C	301	7/7	0.96	0.12	107,126,136,139	0
81	MG	sR	2132	1/1	0.96	0.11	129,129,129,129	0
81	MG	AR	3585	1/1	0.96	0.14	50,50,50,50	0
80	OHX	AT	228	7/7	0.96	0.11	91,107,141,169	0
81	MG	AR	3745	1/1	0.96	0.21	60,60,60,60	0
81	MG	1	3667	1/1	0.96	0.08	85,85,85,85	0
80	OHX	1	4141	7/7	0.96	0.11	115,123,139,169	0
81	MG	1	3886	1/1	0.96	0.21	46,46,46,46	0
80	OHX	sR	2086	7/7	0.96	0.11	122,129,151,158	0
80	OHX	1	3846	7/7	0.96	0.12	99,104,121,152	0
81	MG	AR	3749	1/1	0.96	0.19	66,66,66,66	0
80	OHX	1	3603	7/7	0.96	0.09	147,152,163,195	0
81	MG	1	3891	1/1	0.96	0.10	61,61,61,61	0
81	MG	AR	4093	1/1	0.96	0.12	75,75,75,75	0
80	OHX	AR	3950	7/7	0.96	0.08	168,177,188,199	0
80	OHX	A	2015	7/7	0.96	0.07	148,166,185,218	0
81	MG	1	3470	1/1	0.96	0.26	60,60,60,60	0
80	OHX	AR	3481	7/7	0.96	0.11	125,130,149,173	0
80	OHX	1	3871	7/7	0.96	0.11	79,108,126,141	0
81	MG	CR	206	1/1	0.96	0.08	64,64,64,64	0
80	OHX	sR	2098	7/7	0.96	0.09	116,124,148,170	0
81	MG	AR	4106	1/1	0.96	0.06	49,49,49,49	0
80	OHX	1	3874	7/7	0.96	0.13	99,105,116,147	0
80	OHX	A	1963	7/7	0.96	0.08	145,174,179,188	0
81	MG	1	3689	1/1	0.96	0.19	55,55,55,55	0
81	MG	1	3491	1/1	0.96	0.14	47,47,47,47	0
80	OHX	1	3876	7/7	0.96	0.11	109,116,128,155	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	sR	1957	7/7	0.96	0.08	154,157,166,196	0
80	OHX	A	2121	7/7	0.96	0.17	56,89,118,125	0
80	OHX	sR	2109	7/7	0.96	0.13	90,115,126,133	0
80	OHX	sR	2110	7/7	0.96	0.13	103,110,120,143	0
81	MG	A	2071	1/1	0.96	0.12	76,76,76,76	0
80	OHX	1	3636	7/7	0.96	0.12	93,109,125,136	0
81	MG	1	4156	1/1	0.96	0.32	41,41,41,41	0
80	OHX	A	2085	7/7	0.96	0.08	134,139,151,191	0
81	MG	AR	4123	1/1	0.96	0.09	71,71,71,71	0
80	OHX	1	3420	7/7	0.96	0.11	115,127,150,186	0
80	OHX	1	3906	7/7	0.96	0.10	97,110,131,151	0
81	MG	3	211	1/1	0.96	0.30	58,58,58,58	0
80	OHX	1	3908	7/7	0.96	0.10	141,149,159,183	0
81	MG	1	3930	1/1	0.96	0.08	81,81,81,81	0
80	OHX	A	1903	7/7	0.96	0.10	129,132,148,180	0
80	OHX	1	3641	7/7	0.96	0.10	97,104,114,175	0
80	OHX	A	1923	7/7	0.96	0.10	89,118,130,171	0
80	OHX	sR	2122	7/7	0.96	0.10	102,106,116,158	0
80	OHX	1	3931	7/7	0.96	0.15	60,97,110,134	0
80	OHX	AR	3663	7/7	0.96	0.10	97,103,114,150	0
80	OHX	1	3934	7/7	0.96	0.15	81,95,113,128	0
80	OHX	A	2092	7/7	0.96	0.14	105,123,128,132	0
81	MG	A	2105	1/1	0.96	0.36	68,68,68,68	0
80	OHX	1	3936	7/7	0.96	0.10	132,139,143,175	0
80	OHX	1	3938	7/7	0.96	0.10	103,115,141,172	0
80	OHX	3	201	7/7	0.96	0.11	81,111,128,140	0
80	OHX	sR	2134	7/7	0.96	0.11	114,127,138,161	0
80	OHX	AR	3753	7/7	0.96	0.14	29,67,91,113	0
84	ZWB	AR	3826	26/26	0.96	0.09	53,61,67,86	0
84	ZWB	1	3578	26/26	0.96	0.11	55,63,70,79	0
80	OHX	1	3451	7/7	0.96	0.11	62,80,119,122	0
80	OHX	sR	1978	7/7	0.96	0.13	85,101,119,155	0
80	OHX	1	3962	7/7	0.96	0.12	70,90,110,123	0
80	OHX	AS	228	7/7	0.96	0.11	106,127,137,164	0
81	MG	1	3978	1/1	0.97	0.23	60,60,60,60	0
80	OHX	AR	3479	7/7	0.97	0.08	127,134,144,164	0
80	OHX	A	2062	7/7	0.97	0.18	64,93,103,123	0
81	MG	sR	2012	1/1	0.97	0.11	48,48,48,48	0
81	MG	AR	3951	1/1	0.97	0.04	89,89,89,89	0
81	MG	AR	3762	1/1	0.97	0.06	113,113,113,113	0
80	OHX	1	3968	7/7	0.97	0.07	134,136,164,174	0
80	OHX	1	3421	7/7	0.97	0.14	62,84,89,108	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
80	OHX	AR	3851	7/7	0.97	0.10	77,102,124,138	0
80	OHX	1	3694	7/7	0.97	0.10	109,116,126,145	0
81	MG	AR	3963	1/1	0.97	0.24	47,47,47,47	0
80	OHX	sR	2097	7/7	0.97	0.16	73,88,100,123	0
81	MG	1	3997	1/1	0.97	0.05	100,100,100,100	0
80	OHX	AK	104	7/7	0.97	0.08	93,113,133,167	0
80	OHX	1	3698	7/7	0.97	0.09	82,98,108,151	0
80	OHX	1	3992	7/7	0.97	0.13	44,86,99,111	0
80	OHX	1	3993	7/7	0.97	0.08	87,101,149,162	0
81	MG	j	301	1/1	0.97	0.05	44,44,44,44	0
80	OHX	1	3994	7/7	0.97	0.11	103,120,135,142	0
80	OHX	1	3425	7/7	0.97	0.08	118,132,140,156	0
81	MG	1	3787	1/1	0.97	0.06	63,63,63,63	0
81	MG	A	2004	1/1	0.97	0.06	91,91,91,91	0
81	MG	1	3576	1/1	0.97	0.10	102,102,102,102	0
80	OHX	1	3996	7/7	0.97	0.09	95,102,128,153	0
80	OHX	AR	3855	7/7	0.97	0.08	123,132,144,163	0
80	OHX	AR	3568	7/7	0.97	0.10	87,90,111,130	0
81	MG	AR	4180	1/1	0.97	0.26	59,59,59,59	0
80	OHX	AR	3661	7/7	0.97	0.12	87,88,109,124	0
80	OHX	sR	1945	7/7	0.97	0.10	98,98,120,167	0
80	OHX	AR	3570	7/7	0.97	0.16	77,94,111,131	0
80	OHX	1	4022	7/7	0.97	0.12	66,69,120,129	0
81	MG	1	4027	1/1	0.97	0.05	82,82,82,82	0
80	OHX	1	3724	7/7	0.97	0.10	72,105,125,139	0
80	OHX	AR	3757	7/7	0.97	0.10	86,104,130,143	0
81	MG	1	4035	1/1	0.97	0.06	58,58,58,58	0
80	OHX	1	3726	7/7	0.97	0.09	69,99,135,160	0
80	OHX	AR	4163	7/7	0.97	0.09	88,119,134,153	0
80	OHX	1	3453	7/7	0.97	0.12	106,117,124,133	0
80	OHX	AR	4006	7/7	0.97	0.12	87,100,116,122	0
80	OHX	sR	2121	7/7	0.97	0.15	82,83,93,113	0
81	MG	CI	302	1/1	0.97	0.09	63,63,63,63	0
80	OHX	AR	3483	7/7	0.97	0.08	139,144,152,184	0
81	MG	AR	3436	1/1	0.97	0.06	78,78,78,78	0
80	OHX	1	3751	7/7	0.97	0.13	76,86,97,120	0
80	OHX	sR	1956	7/7	0.97	0.10	91,106,116,132	0
80	OHX	A	2082	7/7	0.97	0.13	102,111,126,134	0
80	OHX	A	2151	7/7	0.97	0.11	85,98,125,129	0
81	MG	1	3617	1/1	0.97	0.18	43,43,43,43	0
80	OHX	1	3479	7/7	0.97	0.17	73,86,98,113	0
80	OHX	A	2065	7/7	0.97	0.08	127,130,140,186	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
80	OHX	A	2129	7/7	0.97	0.11	110,118,139,143	0
80	OHX	AR	3506	7/7	0.97	0.10	76,83,100,127	0
81	MG	AR	3633	1/1	0.97	0.23	71,71,71,71	0
80	OHX	3	221	7/7	0.97	0.09	98,106,136,161	0
80	OHX	sR	2144	7/7	0.97	0.10	103,105,125,127	0
80	OHX	A	1905	7/7	0.97	0.10	117,119,125,147	0
80	OHX	AR	4194	7/7	0.97	0.10	84,96,123,142	0
80	OHX	1	4082	7/7	0.97	0.12	90,102,125,126	0
80	OHX	AR	4039	7/7	0.97	0.09	95,108,131,146	0
80	OHX	AR	4041	7/7	0.97	0.10	87,108,125,164	0
80	OHX	1	3509	7/7	0.97	0.12	59,77,89,100	0
80	OHX	AR	4042	7/7	0.97	0.09	93,106,116,129	0
80	OHX	sR	2155	7/7	0.97	0.12	93,103,118,128	0
80	OHX	AR	3446	7/7	0.97	0.09	100,112,131,144	0
80	OHX	1	3811	7/7	0.97	0.12	78,97,116,126	0
80	OHX	AR	3785	7/7	0.97	0.13	82,93,103,122	0
80	OHX	1	3814	7/7	0.97	0.12	94,96,120,134	0
80	OHX	1	4114	7/7	0.97	0.10	94,99,128,128	0
80	OHX	AR	3448	7/7	0.97	0.09	128,148,162,182	0
80	OHX	1	3515	7/7	0.97	0.08	126,138,147,181	0
80	OHX	AR	3913	7/7	0.97	0.11	68,81,103,117	0
80	OHX	sR	2166	7/7	0.97	0.12	95,104,115,118	7
81	MG	AR	3668	1/1	0.97	0.12	84,84,84,84	0
81	MG	1	3442	1/1	0.97	0.29	57,57,57,57	0
80	OHX	sR	1991	7/7	0.97	0.07	162,164,173,196	0
81	MG	1	3869	1/1	0.97	0.16	44,44,44,44	0
80	OHX	AR	3915	7/7	0.97	0.10	72,87,119,136	0
80	OHX	AR	3791	7/7	0.97	0.12	76,84,113,122	0
80	OHX	1	3542	7/7	0.97	0.12	81,88,111,123	0
80	OHX	A	2072	7/7	0.97	0.12	79,81,115,117	0
81	MG	1	3456	1/1	0.97	0.04	81,81,81,81	0
81	MG	AR	3679	1/1	0.97	0.30	47,47,47,47	0
81	MG	r	301	1/1	0.97	0.12	59,59,59,59	0
80	OHX	1	3544	7/7	0.97	0.10	97,112,128,146	0
80	OHX	AR	4068	7/7	0.97	0.14	61,71,97,121	0
80	OHX	sR	2177	7/7	0.97	0.11	94,101,103,124	0
80	OHX	1	3848	7/7	0.97	0.09	113,121,140,159	0
80	OHX	sR	2178	7/7	0.97	0.09	124,136,151,185	0
80	OHX	1	4170	7/7	0.97	0.25	80,83,96,109	0
80	OHX	AR	4070	7/7	0.97	0.12	78,81,110,131	0
80	OHX	1	4172	7/7	0.97	0.12	85,93,119,120	0
80	OHX	AR	4072	7/7	0.97	0.08	97,112,133,161	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	AR	3515	7/7	0.97	0.09	104,119,137,165	0
81	MG	1	3473	1/1	0.97	0.04	64,64,64,64	0
80	OHX	CX	201	7/7	0.97	0.10	90,92,115,137	0
80	OHX	1	3872	7/7	0.97	0.14	65,75,105,126	0
80	OHX	AK	103	7/7	0.97	0.10	90,101,127,136	0
80	OHX	1	3573	7/7	0.97	0.13	48,81,107,128	0
80	OHX	AR	3411	7/7	0.97	0.13	69,77,87,117	0
81	MG	AR	4088	1/1	0.97	0.05	65,65,65,65	0
80	OHX	A	1935	7/7	0.97	0.13	113,118,135,136	0
80	OHX	sR	2025	7/7	0.97	0.20	81,89,116,116	0
80	OHX	2	201	7/7	0.97	0.16	77,91,115,125	0
80	OHX	sR	1901	7/7	0.97	0.10	89,95,104,124	0
80	OHX	AR	3415	7/7	0.97	0.09	95,106,124,131	0
80	OHX	AR	3946	7/7	0.97	0.14	57,81,99,113	0
80	OHX	1	3902	7/7	0.97	0.15	81,91,102,118	0
80	OHX	AR	3948	7/7	0.97	0.09	91,96,126,150	0
80	OHX	1	3904	7/7	0.97	0.09	105,111,126,140	0
80	OHX	sR	2039	7/7	0.97	0.10	174,179,184,190	0
80	OHX	1	3606	7/7	0.97	0.10	124,125,135,152	0
81	MG	1	4158	1/1	0.97	0.35	47,47,47,47	0
80	OHX	AR	3819	7/7	0.97	0.12	86,91,105,127	0
80	OHX	AR	4101	7/7	0.97	0.10	85,89,102,121	0
81	MG	1	3937	1/1	0.97	0.12	91,91,91,91	0
80	OHX	sR	2050	7/7	0.97	0.10	100,111,143,156	0
80	OHX	AR	3541	7/7	0.97	0.10	92,111,137,163	0
80	OHX	A	2119	7/7	0.97	0.13	96,119,128,138	0
81	MG	1	3727	1/1	0.97	0.08	85,85,85,85	0
81	MG	AR	3551	1/1	0.97	0.36	53,53,53,53	0
81	MG	AR	3736	1/1	0.97	0.04	46,46,46,46	0
80	OHX	AR	4105	7/7	0.97	0.08	119,138,143,170	0
80	OHX	sR	2061	7/7	0.97	0.13	48,71,122,122	0
80	OHX	AR	3723	7/7	0.97	0.10	97,107,122,146	0
80	OHX	AR	3725	7/7	0.97	0.10	83,100,119,133	0
81	MG	1	3525	1/1	0.97	0.16	62,62,62,62	0
80	OHX	AR	3475	7/7	0.97	0.10	59,73,121,127	0
80	OHX	AR	3477	7/7	0.97	0.10	108,122,134,157	0
80	OHX	sR	2074	7/7	0.97	0.10	63,94,116,141	0
80	OHX	s1	301	7/7	0.97	0.11	79,101,111,122	0
81	MG	4	214	1/1	0.97	0.22	50,50,50,50	0
80	OHX	AR	3977	7/7	0.97	0.10	58,82,102,127	0
80	OHX	AR	3478	7/7	0.97	0.11	88,96,106,127	0
80	OHX	AR	4130	7/7	0.97	0.10	90,104,115,129	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
80	OHX	sR	2085	7/7	0.97	0.15	53,94,119,123	0
80	OHX	AR	4132	7/7	0.97	0.11	91,95,117,130	0
80	OHX	1	3964	7/7	0.97	0.10	82,98,107,124	0
81	MG	1	3757	1/1	0.97	0.08	90,90,90,90	0
81	MG	sR	2108	1/1	0.98	0.07	105,105,105,105	0
80	OHX	1	3692	7/7	0.98	0.09	55,73,99,101	0
80	OHX	CV	201	7/7	0.98	0.13	61,70,85,106	0
81	MG	1	3877	1/1	0.98	0.04	59,59,59,59	0
80	OHX	AR	3817	7/7	0.98	0.11	80,82,94,115	0
80	OHX	1	4142	7/7	0.98	0.10	63,71,106,114	0
80	OHX	AR	4128	7/7	0.98	0.11	65,87,92,98	0
80	OHX	1	4144	7/7	0.98	0.09	92,123,128,150	0
80	OHX	AR	3608	7/7	0.98	0.09	99,116,127,136	0
80	OHX	AR	3566	7/7	0.98	0.10	63,65,81,100	0
80	OHX	A	1933	7/7	0.98	0.08	117,129,137,163	0
81	MG	AR	3982	1/1	0.98	0.04	79,79,79,79	0
80	OHX	AR	3751	7/7	0.98	0.15	76,80,91,105	0
81	MG	AR	4137	1/1	0.98	0.11	86,86,86,86	0
80	OHX	AT	226	7/7	0.98	0.12	61,74,87,97	0
80	OHX	A	2013	7/7	0.98	0.15	71,86,98,104	0
80	OHX	1	3932	7/7	0.98	0.10	81,94,121,122	0
81	MG	AR	3544	1/1	0.98	0.04	54,54,54,54	0
80	OHX	AR	4037	7/7	0.98	0.09	69,85,120,120	0
80	OHX	1	3721	7/7	0.98	0.14	64,73,92,124	0
80	OHX	1	3722	7/7	0.98	0.13	70,72,94,115	0
80	OHX	1	4174	7/7	0.98	0.10	94,113,124,137	0
80	OHX	AR	3755	7/7	0.98	0.10	78,83,100,114	0
80	OHX	1	3538	7/7	0.98	0.10	86,99,120,125	0
80	OHX	1	3539	7/7	0.98	0.16	75,79,103,110	0
80	OHX	1	3540	7/7	0.98	0.13	62,86,91,92	0
80	OHX	AR	3628	7/7	0.98	0.16	72,84,96,126	0
80	OHX	DD	102	7/7	0.98	0.10	55,68,98,102	0
80	OHX	AR	3690	7/7	0.98	0.13	69,79,99,125	0
80	OHX	AR	3571	7/7	0.98	0.13	57,73,96,96	0
80	OHX	sR	2013	7/7	0.98	0.15	71,79,89,94	0
81	MG	1	4087	1/1	0.98	0.04	97,97,97,97	0
80	OHX	sR	2133	7/7	0.98	0.11	72,83,103,115	0
80	OHX	1	3752	7/7	0.98	0.12	64,79,94,107	0
80	OHX	AR	3942	7/7	0.98	0.16	69,73,85,90	0
80	OHX	AR	3944	7/7	0.98	0.11	87,106,125,126	0
80	OHX	A	2101	7/7	0.98	0.10	89,95,114,146	0
80	OHX	1	3756	7/7	0.98	0.10	108,114,126,130	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
80	OHX	AR	3847	7/7	0.98	0.14	62,71,73,102	0
80	OHX	AR	3849	7/7	0.98	0.09	78,79,87,114	0
80	OHX	1	3570	7/7	0.98	0.12	68,70,95,98	0
80	OHX	1	3571	7/7	0.98	0.11	84,89,97,98	0
80	OHX	sR	2026	7/7	0.98	0.08	166,167,179,180	0
80	OHX	1	3782	7/7	0.98	0.13	86,95,106,115	0
80	OHX	AR	3535	7/7	0.98	0.10	70,75,86,107	0
81	MG	AR	3730	1/1	0.98	0.04	48,48,48,48	0
80	OHX	AR	4066	7/7	0.98	0.12	69,75,86,112	0
80	OHX	AR	3537	7/7	0.98	0.08	37,55,97,119	0
80	OHX	1	3577	7/7	0.98	0.09	106,114,127,130	0
80	OHX	A	2149	7/7	0.98	0.07	138,139,144,160	0
81	MG	1	4117	1/1	0.98	0.07	85,85,85,85	0
80	OHX	sR	2038	7/7	0.98	0.07	91,97,110,132	0
80	OHX	A	1945	7/7	0.98	0.10	121,123,137,140	0
81	MG	sR	2024	1/1	0.98	0.18	89,89,89,89	0
80	OHX	AR	4190	7/7	0.98	0.13	57,71,106,109	0
80	OHX	1	4021	7/7	0.98	0.09	66,95,105,110	0
80	OHX	1	3602	7/7	0.98	0.11	62,76,97,121	0
80	OHX	AR	3504	7/7	0.98	0.11	68,76,93,104	0
80	OHX	1	4024	7/7	0.98	0.08	93,101,118,128	0
80	OHX	1	3812	7/7	0.98	0.10	69,78,100,107	0
81	MG	sR	2036	1/1	0.98	0.08	85,85,85,85	0
80	OHX	sR	2049	7/7	0.98	0.11	58,87,100,111	0
80	OHX	AR	3473	7/7	0.98	0.14	62,73,92,118	0
80	OHX	1	3449	7/7	0.98	0.13	62,69,102,109	0
80	OHX	AR	3975	7/7	0.98	0.13	77,89,102,120	0
81	MG	1	3807	1/1	0.98	0.08	87,87,87,87	0
80	OHX	AR	3783	7/7	0.98	0.15	50,69,87,104	0
80	OHX	AR	3442	7/7	0.98	0.14	44,72,109,119	0
80	OHX	1	4050	7/7	0.98	0.11	71,83,98,100	0
80	OHX	AR	3787	7/7	0.98	0.10	107,108,135,137	0
80	OHX	1	4052	7/7	0.98	0.12	85,96,102,113	0
80	OHX	AR	3597	7/7	0.98	0.10	77,86,90,91	0
80	OHX	1	3631	7/7	0.98	0.15	56,78,96,128	0
80	OHX	1	3632	7/7	0.98	0.15	56,77,108,119	0
80	OHX	1	3842	7/7	0.98	0.11	61,93,100,112	0
80	OHX	AR	3881	7/7	0.98	0.11	62,72,95,101	0
80	OHX	1	3634	7/7	0.98	0.09	70,82,126,128	0
80	OHX	AR	4097	7/7	0.98	0.11	61,78,98,107	0
80	OHX	AR	3883	7/7	0.98	0.08	78,89,107,124	0
80	OHX	sR	2073	7/7	0.98	0.14	69,79,93,118	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
80	OHX	AR	3721	7/7	0.98	0.11	62,79,93,107	0
80	OHX	sR	2188	7/7	0.98	0.09	87,104,115,125	0
80	OHX	AR	3659	7/7	0.98	0.13	48,76,88,113	0
81	MG	AR	3782	1/1	0.98	0.08	66,66,66,66	0
80	OHX	1	3481	7/7	0.98	0.11	91,97,113,132	0
80	OHX	1	3661	7/7	0.98	0.12	66,69,85,106	0
80	OHX	1	3662	7/7	0.98	0.12	73,77,102,112	0
80	OHX	AS	219	7/7	0.98	0.12	72,95,102,124	0
80	OHX	1	4088	7/7	0.98	0.10	98,101,120,146	0
80	OHX	1	3664	7/7	0.98	0.10	82,95,112,128	0
82	ZN	b	201	1/1	0.98	0.03	96,96,96,96	0
81	MG	AR	3650	1/1	0.98	0.19	47,47,47,47	0
80	OHX	AR	3599	7/7	0.98	0.09	93,99,114,131	0
82	ZN	e	101	1/1	0.98	0.04	92,92,92,92	0
82	ZN	g	501	1/1	0.98	0.05	140,140,140,140	0
80	OHX	AC	101	7/7	0.98	0.12	53,88,102,106	0
80	OHX	4	226	7/7	0.98	0.11	62,72,92,98	0
81	MG	1	3697	1/1	0.98	0.05	76,76,76,76	0
80	OHX	1	4112	7/7	0.98	0.10	69,95,122,129	0
80	OHX	A	2110	7/7	0.98	0.10	107,112,122,141	0
81	MG	AR	3513	1/1	0.98	0.04	42,42,42,42	0
80	OHX	A	2141	7/7	0.98	0.10	79,100,125,134	0
80	OHX	AR	4010	7/7	0.98	0.14	72,79,90,116	0
80	OHX	sR	1979	7/7	0.98	0.07	147,149,160,166	0
80	OHX	1	3901	7/7	0.98	0.13	72,81,97,120	0
80	OHX	1	3691	7/7	0.98	0.15	59,74,85,120	0
81	MG	A	2024	1/1	0.99	0.04	79,79,79,79	0
80	OHX	AR	4159	7/7	0.99	0.09	68,74,99,102	0
80	OHX	AR	3815	7/7	0.99	0.20	63,74,77,106	0
80	OHX	1	3660	7/7	0.99	0.11	81,85,98,103	0
81	MG	AR	3575	1/1	0.99	0.04	62,62,62,62	0
81	MG	1	3967	1/1	0.99	0.07	39,39,39,39	0
82	ZN	DL	103	1/1	0.99	0.03	67,67,67,67	0
82	ZN	DO	201	1/1	0.99	0.03	59,59,59,59	0
82	ZN	DQ	501	1/1	0.99	0.04	120,120,120,120	0
82	ZN	DR	501	1/1	0.99	0.04	94,94,94,94	0
80	OHX	1	3419	7/7	0.99	0.13	62,81,87,99	0
82	ZN	AN	500	1/1	0.99	0.03	68,68,68,68	0
81	MG	AR	4168	1/1	0.99	0.04	42,42,42,42	0
80	OHX	AR	4035	7/7	0.99	0.11	78,79,84,102	0
80	OHX	AR	3911	7/7	0.99	0.14	66,82,90,121	0
82	ZN	AQ	501	1/1	0.99	0.03	88,88,88,88	0

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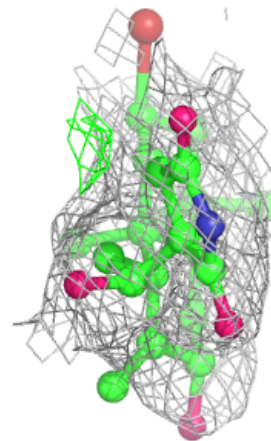
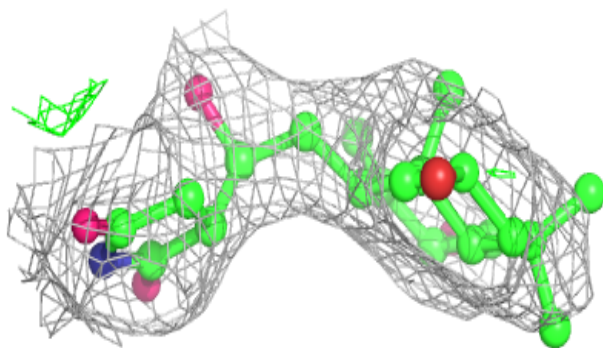
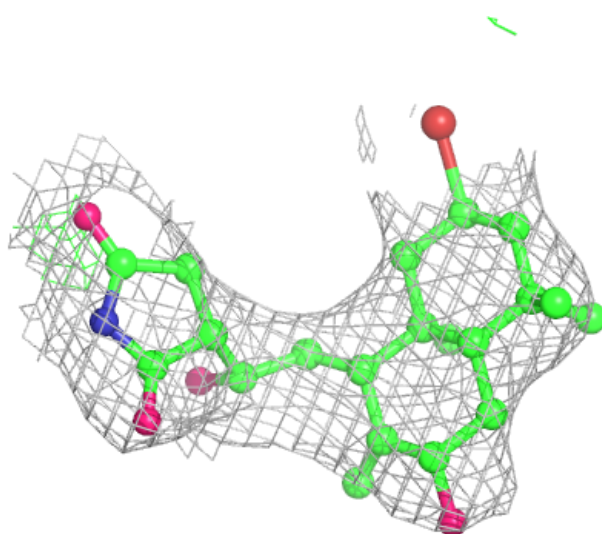
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
81	MG	1	3907	1/1	0.99	0.09	76,76,76,76	0
82	ZN	d6	202	1/1	0.99	0.02	76,76,76,76	0
80	OHX	A	2131	7/7	0.99	0.10	84,99,111,113	0
82	ZN	d9	101	1/1	0.99	0.05	105,105,105,105	0
81	MG	sR	2096	1/1	0.99	0.09	96,96,96,96	0
80	OHX	AR	3973	7/7	0.99	0.10	75,87,90,110	0
81	MG	1	3817	1/1	0.99	0.08	53,53,53,53	0
81	MG	A	2014	1/1	0.99	0.03	60,60,60,60	0
80	OHX	1	3781	7/7	0.99	0.09	100,102,116,126	0
81	MG	1	3607	1/1	0.99	0.08	61,61,61,61	0
80	OHX	1	4140	7/7	0.99	0.12	72,76,84,100	0
80	OHX	1	3601	7/7	0.99	0.12	74,83,93,99	0
80	OHX	1	4110	7/7	0.99	0.14	66,68,80,89	0
80	OHX	AR	3879	7/7	0.99	0.10	54,63,84,91	0
82	ZN	AK	102	1/1	1.00	0.02	57,57,57,57	0
81	MG	AR	3920	1/1	1.00	0.03	50,50,50,50	0
81	MG	AR	3482	1/1	1.00	0.02	50,50,50,50	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

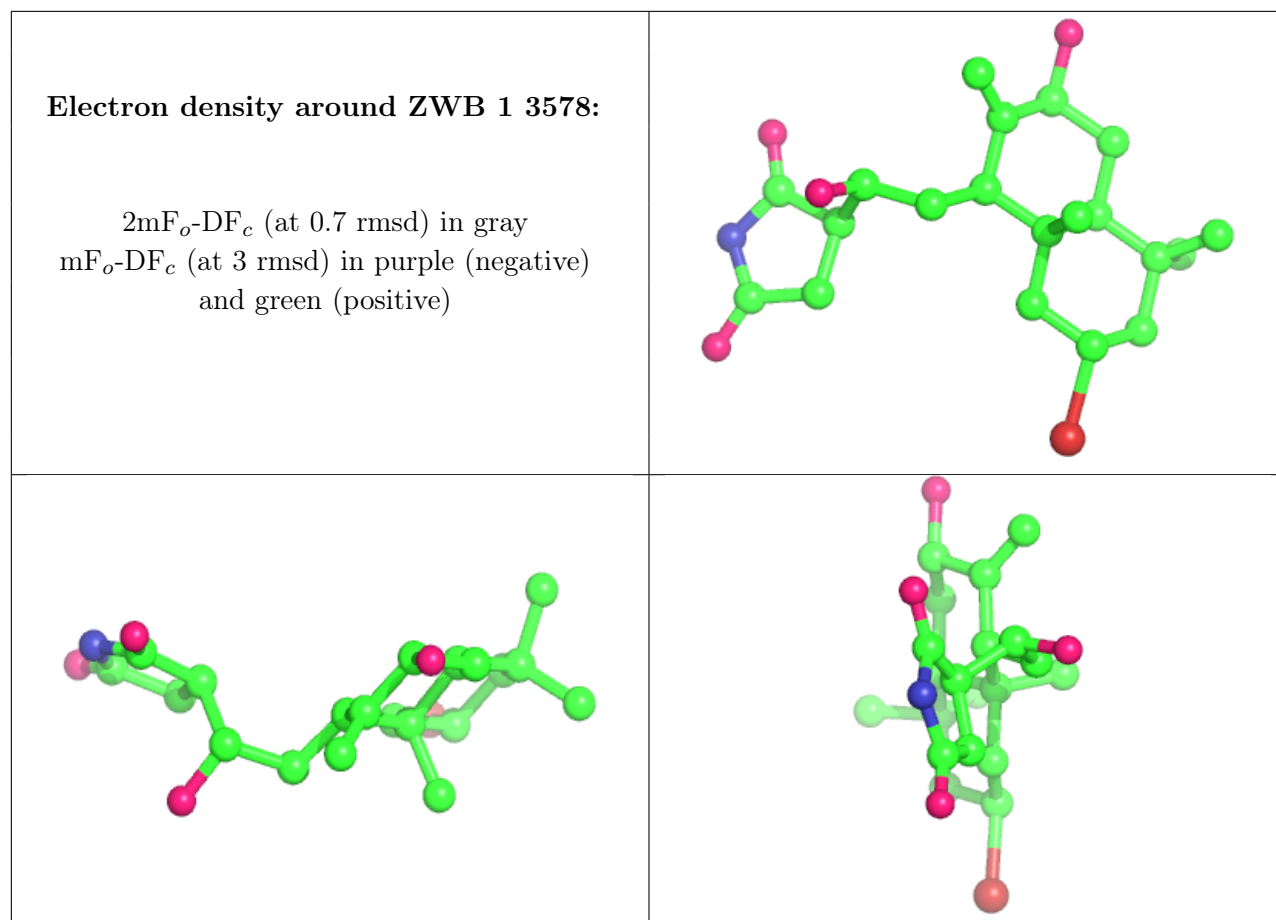


**Electron density around ZWB AR 3826:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)







## 6.5 Other polymers [i](#)

There are no such residues in this entry.