



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 6, 2026 – 04:03 PM UTC

PDB ID : 9D0I / pdb_00009d0i
Title : Crystal structure of the wild-type *Thermus thermophilus* 70S ribosome in complex with Se-cresomycin, mRNA, deacylated A-site tRNA^{phe}, aminoacylated P-site fMet-tRNA^{met}, and deacylated E-site tRNA^{phe} at 2.45Å resolution
Authors : Aleksandrova, E.V.; Wu, K.J.Y.; Robinson, P.J.; Benedetto, A.E.; Yu, M.; Tresco, B.I.C.; See, D.N.Y.; Jiang, T.; Ramkissoo, A.; Dunand, C.F.; Svetlov, M.S.; Lee, J.; Myers, A.G.; Polikanov, Y.S.
Deposited on : 2024-08-07
Resolution : 2.45 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

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>.

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

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)

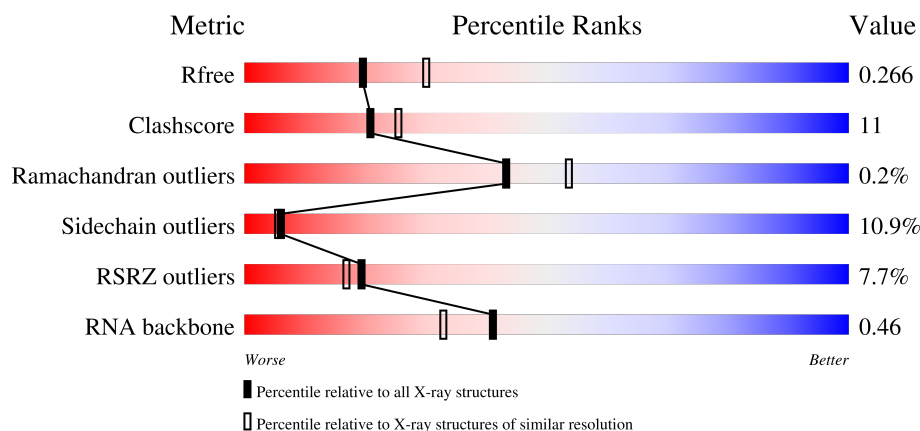
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.45 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}	180053	1190 (2.46-2.46)
Clashscore	190562	1229 (2.46-2.46)
Ramachandran outliers	187476	1218 (2.46-2.46)
Sidechain outliers	187428	1218 (2.46-2.46)
RSRZ outliers	180081	1190 (2.46-2.46)
RNA backbone	3983	1023 (2.72-2.20)




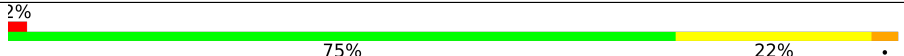
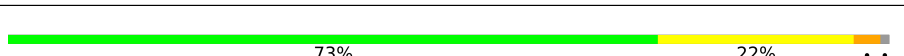
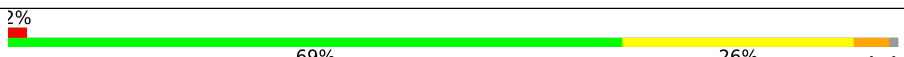
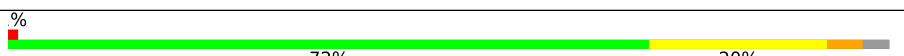
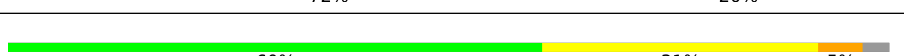
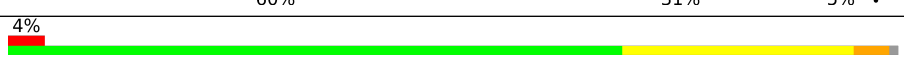

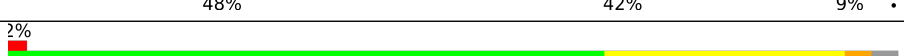

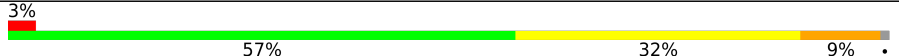
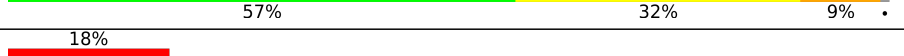
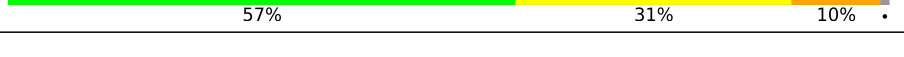




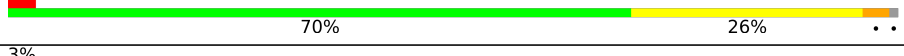

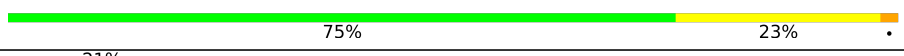



The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. 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	1A	2915	<div> <div>3%</div> <div>65%</div> <div>26%</div> <div>7%</div> <div>.</div> </div>
1	2A	2915	<div> <div>3%</div> <div>53%</div> <div>34%</div> <div>9%</div> <div>.</div> </div>

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Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
 Validation Pipeline (wwPDB-VP) : 2.49

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Mol	Chain	Length	Quality of chain
2	1B	121	
2	2B	121	
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	

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Mol	Chain	Length	Quality of chain
14	2S	112	
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	

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Mol	Chain	Length	Quality of chain
27	15	60	
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	

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Mol	Chain	Length	Quality of chain
39	2h	138	
40	1i	128	
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	

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Mol	Chain	Length	Quality of chain
52	1u	27	
52	2u	27	
53	1v	24	
53	2v	24	
54	1w	76	
54	1y	76	
54	2w	76	
54	2y	76	
55	1x	77	
55	2x	77	

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
56	MG	1a	1641	-	-	-	X
56	MG	1a	1711	-	-	-	X
56	MG	1a	1713	-	-	-	X
56	MG	1n	101	-	-	-	X
56	MG	2A	3446	-	-	-	X
56	MG	2a	3008	-	-	-	X
56	MG	2a	3111	-	-	-	X

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 300078 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 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1A	2871	Total	C	N	O	P	0	0	0
			61852	27531	11572	19878	2871			
1	2A	2800	Total	C	N	O	P	0	0	0
			60322	26848	11284	19390	2800			

- Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1B	120	Total	C	N	O	P	0	0	0
			2577	1146	476	835	120			
2	2B	120	Total	C	N	O	P	0	0	0
			2575	1146	476	833	120			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	1D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	1E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			
4	2E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	1F	203	Total	C	N	O	S	0	0	1
			1584	1009	298	275	2			
5	2F	203	Total	C	N	O	S	0	0	1
			1580	1007	297	274	2			

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1423	913	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1428	913	258	253	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	1H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			
7	2H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	146	Total	C	N	O	S	0	0	0
			1097	701	191	204	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1064	681	186	196	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	1N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			
9	2N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	1P	149	Total	C	N	O	S	0	0	0
			1135	706	230	196	3			
11	2P	149	Total	C	N	O	S	0	0	0
			1135	706	230	196	3			

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	1Q	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			
12	2Q	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	1R	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			
13	2R	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total	C	N	O	0	0	0
			873	550	174	149			
14	2S	110	Total	C	N	O	0	0	0
			870	549	173	148			

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	1T	131	Total	C	N	O	S	0	0	0
			1091	680	225	185	1			
15	2T	131	Total	C	N	O	S	0	0	0
			1083	675	224	183	1			

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	1U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
16	2U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	1V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			
17	2V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	1W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			
18	2W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	1X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			
19	2X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	1Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	154	Total	C	N	O	S	0	0	0
			1240	795	222	220	3			
21	2Z	160	Total	C	N	O	S	0	0	0
			1271	814	228	227	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			
22	20	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			
23	21	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	13	59	Total	C	N	O	0	0	0
			469	298	90	81			
25	23	59	Total	C	N	O	0	0	0
			464	296	90	78			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			552	349	99	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			532	339	97	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	16	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
28	26	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	17	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
29	27	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	18	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			
30	28	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 31 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	19	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
31	29	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 32 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1503	Total	C	N	O	P	0	0	0
			32327	14396	5990	10438	1503			

- Molecule 33 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1846	1179	331	331	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

- Molecule 34 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1548	973	301	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

- Molecule 35 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1655	1038	326	284	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1674	1050	333	284	7			

- Molecule 36 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1e	148	Total	C	N	O	S	0	0	0
			1129	714	213	198	4			
36	2e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			

- Molecule 37 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			810	514	144	149	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

- Molecule 38 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1231	766	243	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			

- Molecule 39 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

- Molecule 40 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			983	623	193	167			
40	2i	127	Total	C	N	O	0	0	0
			978	619	190	169			

- Molecule 41 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			709	440	138	131			
41	2j	96	Total	C	N	O	0	0	0
			714	445	138	131			

- Molecule 42 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			829	516	155	155	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	2k	114	Total	C	N	O	S	0	0	0
			833	519	156	155	3			

- Molecule 43 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	1l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			
43	2l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			

- Molecule 44 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	123	Total	C	N	O	S	0	0	0
			958	592	198	166	2			
44	2m	122	Total	C	N	O	S	0	0	0
			950	586	197	165	2			

- Molecule 45 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	1n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
45	2n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 46 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	1o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			
46	2o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			

- Molecule 47 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	1p	82	Total	C	N	O	S	0	0	0
			681	433	134	113	1			
47	2p	82	Total	C	N	O	S	0	0	0
			677	430	133	113	1			

- Molecule 48 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	1q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
48	2q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 49 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	1r	68	Total	C	N	O		0	0	0
			555	355	108	92				
49	2r	68	Total	C	N	O		0	0	0
			555	355	108	92				

- Molecule 50 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			652	417	120	113	2			
50	2s	83	Total	C	N	O	S	0	0	0
			646	412	119	113	2			

- Molecule 51 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			728	446	156	124	2			
51	2t	96	Total	C	N	O	S	0	0	0
			727	446	155	124	2			

- Molecule 52 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	1u	23	Total	C	N	O		0	0	0
			199	122	48	29				
52	2u	23	Total	C	N	O		0	0	0
			199	122	48	29				

- Molecule 53 is a RNA chain called MF-mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			
53	2v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			

- Molecule 54 is a RNA chain called A-site and E-site Deacylated tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	71	Total	C	N	O	P	S	0	0	0
			1530	685	274	498	71	2			
54	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
54	2w	69	Total	C	N	O	P	S	0	0	0
			1482	662	267	482	69	2			
54	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 55 is a RNA chain called P-site Aminoacylated fMet-tRNAmet.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	76	Total	C	N	O	P	S	0	0	0
			1635	731	296	530	76	2			
55	2x	76	Total	C	N	O	P	S	0	0	0
			1635	731	296	530	76	2			

- Molecule 56 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1103	Total	Mg	0	0
			1103	1103		
56	1B	37	Total	Mg	0	0
			37	37		
56	1D	12	Total	Mg	0	0
			12	12		
56	1E	17	Total	Mg	0	0
			17	17		
56	1F	13	Total	Mg	0	0
			13	13		
56	1G	5	Total	Mg	0	0
			5	5		
56	1I	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1N	5	Total 5	Mg 5	0	0
56	1O	6	Total 6	Mg 6	0	0
56	1P	6	Total 6	Mg 6	0	0
56	1Q	6	Total 6	Mg 6	0	0
56	1R	4	Total 4	Mg 4	0	0
56	1S	3	Total 3	Mg 3	0	0
56	1T	2	Total 2	Mg 2	0	0
56	1U	12	Total 12	Mg 12	0	0
56	1V	7	Total 7	Mg 7	0	0
56	1W	7	Total 7	Mg 7	0	0
56	1X	7	Total 7	Mg 7	0	0
56	1Y	3	Total 3	Mg 3	0	0
56	1Z	3	Total 3	Mg 3	0	0
56	10	8	Total 8	Mg 8	0	0
56	11	5	Total 5	Mg 5	0	0
56	12	2	Total 2	Mg 2	0	0
56	13	4	Total 4	Mg 4	0	0
56	15	7	Total 7	Mg 7	0	0
56	16	2	Total 2	Mg 2	0	0
56	17	4	Total 4	Mg 4	0	0
56	18	7	Total 7	Mg 7	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	19	1	Total 1	Mg 1	0	0
56	1a	215	Total 215	Mg 215	0	0
56	1b	1	Total 1	Mg 1	0	0
56	1d	1	Total 1	Mg 1	0	0
56	1e	2	Total 2	Mg 2	0	0
56	1f	2	Total 2	Mg 2	0	0
56	1l	2	Total 2	Mg 2	0	0
56	1m	1	Total 1	Mg 1	0	0
56	1n	2	Total 2	Mg 2	0	0
56	1s	1	Total 1	Mg 1	0	0
56	1t	1	Total 1	Mg 1	0	0
56	1v	1	Total 1	Mg 1	0	0
56	1w	8	Total 8	Mg 8	0	0
56	1x	14	Total 14	Mg 14	0	0
56	1y	1	Total 1	Mg 1	0	0
56	2A	885	Total 885	Mg 885	0	0
56	2B	20	Total 20	Mg 20	0	0
56	2D	7	Total 7	Mg 7	0	0
56	2E	10	Total 10	Mg 10	0	0
56	2F	5	Total 5	Mg 5	0	0
56	2G	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2N	1	Total 1	Mg 1	0	0
56	2O	1	Total 1	Mg 1	0	0
56	2P	2	Total 2	Mg 2	0	0
56	2Q	4	Total 4	Mg 4	0	0
56	2R	2	Total 2	Mg 2	0	0
56	2T	3	Total 3	Mg 3	0	0
56	2U	1	Total 1	Mg 1	0	0
56	2V	2	Total 2	Mg 2	0	0
56	2W	1	Total 1	Mg 1	0	0
56	2X	1	Total 1	Mg 1	0	0
56	2Y	1	Total 1	Mg 1	0	0
56	2Z	1	Total 1	Mg 1	0	0
56	20	4	Total 4	Mg 4	0	0
56	21	2	Total 2	Mg 2	0	0
56	23	1	Total 1	Mg 1	0	0
56	25	4	Total 4	Mg 4	0	0
56	26	1	Total 1	Mg 1	0	0
56	27	2	Total 2	Mg 2	0	0
56	28	3	Total 3	Mg 3	0	0
56	29	1	Total 1	Mg 1	0	0
56	2a	241	Total 241	Mg 241	0	0

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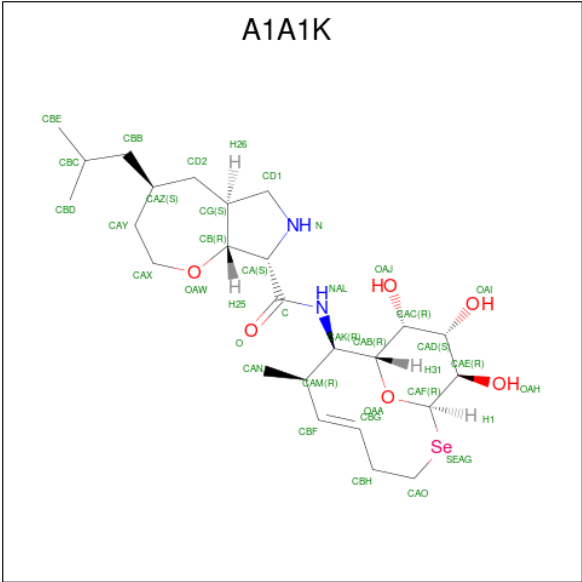
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2d	2	Total 2	Mg 2	0	0
56	2e	1	Total 1	Mg 1	0	0
56	2f	1	Total 1	Mg 1	0	0
56	2g	1	Total 1	Mg 1	0	0
56	2j	1	Total 1	Mg 1	0	0
56	2l	4	Total 4	Mg 4	0	0
56	2p	1	Total 1	Mg 1	0	0
56	2q	2	Total 2	Mg 2	0	0
56	2r	2	Total 2	Mg 2	0	0
56	2t	1	Total 1	Mg 1	0	0
56	2v	2	Total 2	Mg 2	0	0
56	2w	7	Total 7	Mg 7	0	0
56	2x	5	Total 5	Mg 5	0	0
56	2y	7	Total 7	Mg 7	0	0

- Molecule 57 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	1A	1	Total 1	K 1	0	0
57	2x	1	Total 1	K 1	0	0

- Molecule 58 is (4S,5aS,8S,8aR)-4-(2-methylpropyl)-N-[(1R,5Z,7R,8R,9R,10R,11S,12R)-10,11,12-trihydroxy-7-methyl-13-oxa-2-selenabicyclo[7.3.1]tridec-5-en-8-yl]octahydro-2H-oxepino[2,3-c]pyrrole-8-carboxamide (non-preferred name) (CCD ID: A1A1K) (formula: C₂₅H₄₂N₂O₆Se).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
58	1A	1	Total	C	N	O	Se	0	0
			34	25	2	6	1		
58	2A	1	Total	C	N	O	Se	0	0
			34	25	2	6	1		

- Molecule 59 is ZINC ION (CCD ID: ZN) (formula: Zn).

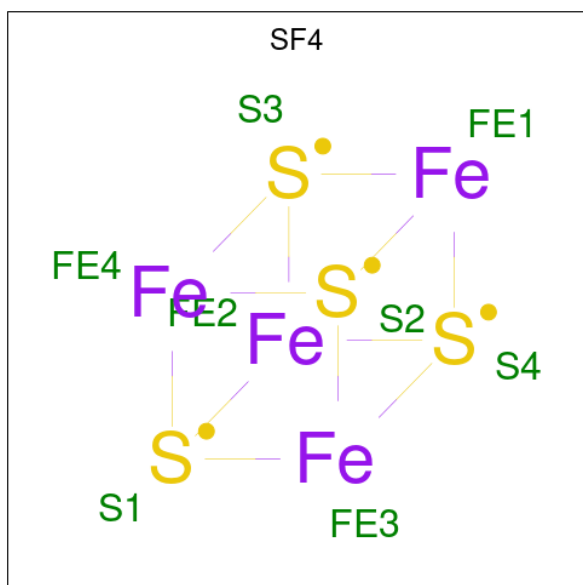
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	1Y	1	Total	Zn	0	0
			1	1		
59	14	1	Total	Zn	0	0
			1	1		
59	15	1	Total	Zn	0	0
			1	1		
59	16	1	Total	Zn	0	0
			1	1		
59	19	1	Total	Zn	0	0
			1	1		
59	1n	1	Total	Zn	0	0
			1	1		
59	2Y	1	Total	Zn	0	0
			1	1		
59	24	1	Total	Zn	0	0
			1	1		
59	25	1	Total	Zn	0	0
			1	1		
59	26	1	Total	Zn	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	29	1	Total	Zn	0	0
			1	1		
59	2n	1	Total	Zn	0	0
			1	1		

- Molecule 60 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
60	1d	1	Total	Fe	S	0	0
			8	4	4		
60	2d	1	Total	Fe	S	0	0
			8	4	4		

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1A	2018	Total	O	0	0
			2018	2018		
61	1B	62	Total	O	0	0
			62	62		
61	1D	26	Total	O	0	0
			26	26		
61	1E	27	Total	O	0	0
			27	27		
61	1F	17	Total	O	0	0
			17	17		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1G	3	Total 3	O 3	0	0
61	1H	2	Total 2	O 2	0	0
61	1I	1	Total 1	O 1	0	0
61	1N	6	Total 6	O 6	0	0
61	1O	7	Total 7	O 7	0	0
61	1P	23	Total 23	O 23	0	0
61	1Q	7	Total 7	O 7	0	0
61	1R	13	Total 13	O 13	0	0
61	1S	5	Total 5	O 5	0	0
61	1T	8	Total 8	O 8	0	0
61	1U	15	Total 15	O 15	0	0
61	1V	7	Total 7	O 7	0	0
61	1W	8	Total 8	O 8	0	0
61	1X	5	Total 5	O 5	0	0
61	1Y	2	Total 2	O 2	0	0
61	1Z	1	Total 1	O 1	0	0
61	10	12	Total 12	O 12	0	0
61	11	12	Total 12	O 12	0	0
61	12	4	Total 4	O 4	0	0
61	13	4	Total 4	O 4	0	0
61	15	5	Total 5	O 5	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	16	3	Total 3	O 3	0	0
61	17	7	Total 7	O 7	0	0
61	18	11	Total 11	O 11	0	0
61	1a	378	Total 378	O 378	0	0
61	1b	1	Total 1	O 1	0	0
61	1e	1	Total 1	O 1	0	0
61	1f	1	Total 1	O 1	0	0
61	1i	1	Total 1	O 1	0	0
61	1l	8	Total 8	O 8	0	0
61	1o	1	Total 1	O 1	0	0
61	1p	1	Total 1	O 1	0	0
61	1q	2	Total 2	O 2	0	0
61	1u	1	Total 1	O 1	0	0
61	1v	4	Total 4	O 4	0	0
61	1w	10	Total 10	O 10	0	0
61	1x	16	Total 16	O 16	0	0
61	1y	2	Total 2	O 2	0	0
61	2A	1160	Total 1160	O 1160	0	0
61	2B	23	Total 23	O 23	0	0
61	2D	22	Total 22	O 22	0	0
61	2E	12	Total 12	O 12	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	2F	13	Total 13	O 13	0	0
61	2I	3	Total 3	O 3	0	0
61	2O	3	Total 3	O 3	0	0
61	2P	15	Total 15	O 15	0	0
61	2Q	1	Total 1	O 1	0	0
61	2R	4	Total 4	O 4	0	0
61	2T	5	Total 5	O 5	0	0
61	2U	4	Total 4	O 4	0	0
61	2W	3	Total 3	O 3	0	0
61	2X	2	Total 2	O 2	0	0
61	2Z	1	Total 1	O 1	0	0
61	20	6	Total 6	O 6	0	0
61	21	13	Total 13	O 13	0	0
61	23	1	Total 1	O 1	0	0
61	25	1	Total 1	O 1	0	0
61	26	1	Total 1	O 1	0	0
61	27	5	Total 5	O 5	0	0
61	28	3	Total 3	O 3	0	0
61	29	1	Total 1	O 1	0	0
61	2a	264	Total 264	O 264	0	0
61	2d	2	Total 2	O 2	0	0

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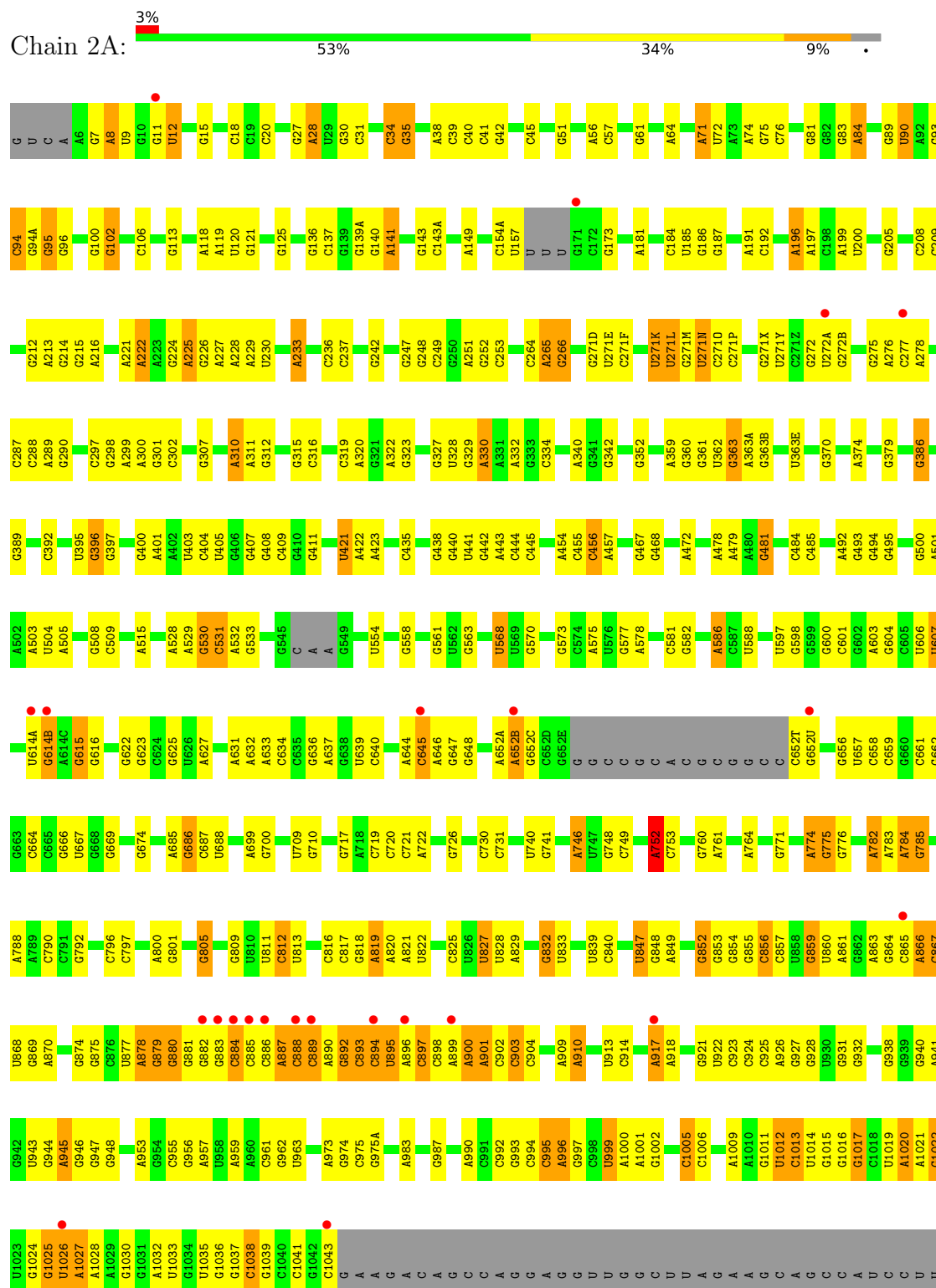
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	2e	2	Total	O	0	0
			2	2		
61	2j	3	Total	O	0	0
			3	3		
61	2l	6	Total	O	0	0
			6	6		
61	2p	1	Total	O	0	0
			1	1		
61	2q	1	Total	O	0	0
			1	1		
61	2r	1	Total	O	0	0
			1	1		
61	2t	3	Total	O	0	0
			3	3		
61	2v	2	Total	O	0	0
			2	2		
61	2w	1	Total	O	0	0
			1	1		
61	2x	7	Total	O	0	0
			7	7		
61	2y	6	Total	O	0	0
			6	6		

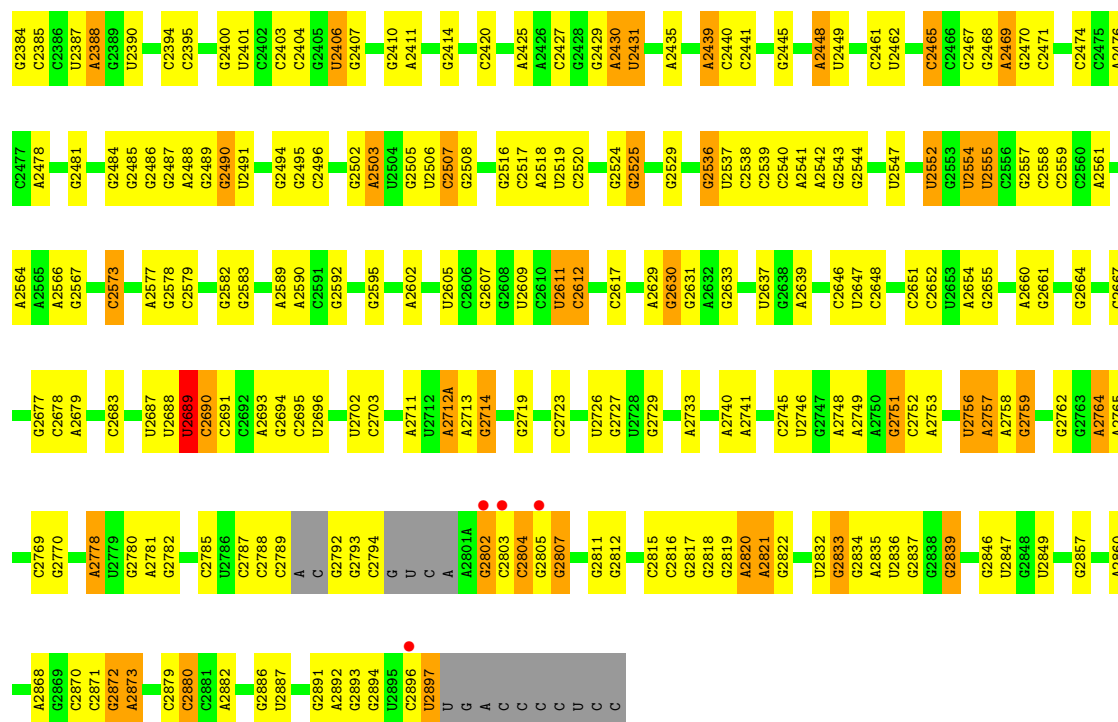
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G2732	C2592	C2441	A2328	A2136	A2135	C2055	G1930	C1800	G1442	C1297	U1142
A2734	G2603	A2448	G2330	G2207	C2137	G2056	G1930	A1802	A1545	C1297	U1142A
G2735	G2605	G2454	G2334	A2208	C2138	A2059	A1937	C1683	C1556	U1300	A1143
A2740	U2605	G2461	A2335	U2218	C2139	A2060	A1938	C1684	C1557	A1301	G1144
A2741	U2606	U2462	A2336	G2222	C2140	G2061	U1939	C1881	A1558	A1302	A1155
U2746	C2610	C2463	G2337	A2225	U2144	A2062	C1942	U1693	G1450	G1303	C1161
A2749	C2612	C2464	C2347	G2228	C2145	C2065	U1955	G1814	A1566	C1315	
A2750	C2612	C2467	C2350	U2233	G2146	C2066	U1956	G1815	A1569	G164	
G2751	U2615	G2468	G2351	G2234	G2147	G2069	C1957	G1816	U1578	G1328	G1164
U2756	C2617	A2469	A2352	G2234	U2148	G2072	U1963	A1829	G1581	G1332	G1170
A2757	C2617	A2476	C2359	G2238	C2145	G2080	U1963	G1701	A1342		G1171
G2765	A2629	C2477	A2360	G2239	G2152	G2153	C1985	G1702	A1352		G1173
G2766	G2630	A2478	G2361	U2243	G2154	U2089	A1986	G1703	C1352		A1174
	G2631		U2244	U2244	G2155		C1967	U1709	A1353		U1175
			G2365	A2273	G2156	G2093	A1970	C1710	A1354		G1176
C2771	C2635		A2366	A2274	G2157		A1971	C1589	G1355		C1178
C2772		A2488	A2366	A2274	G2158		A1971	G1712	A1477		C1179
A2778	C2646	U2647	G2372	G2277	A2158	U2096	A1972	C1712	G1591		G1358
U2779	C2648	C2499	G2379	A2268	G2159	U2097		U1713	G1592		A1383
G2780	U2649	U2649	G2379	A2269	G2160	U2098	G1984	C1852	G1593		G1184
A2781	U2650	A2503	G2383	A2273	G2161	G2100	A1985	G1721	C1493		G1187
	A2654	U2504	G2384	A2274	G2162	G2101	A1986	U1739	A1494		U1188
C2787		A2654	G2385	A2274	G2163	G2101	G1987	G1740	G1365		A1189
C2788			G2385	A2277	C2164	U2102		A1741	G1500		
C2789	G2661	U2512	A2388	G2277	G2165	G2106	U1991		C1501		C1201
G2791	A2662	G2513		U2167	U2166	C2107	G1992	G1746	C1506		G1229
C2791		U2514	G2400	G2280	G2168	C2108	U1993	G1756	A1609		
G2792	C2667	C2515		C2283	A2169	U2109	G1997		A1507		G1243
G2793	C2668	G2516	C2404	A2283	A2170	G2110	G1998	A1762	C1509		
G2794	C2668	C2517	G2405	A2286	A2171	C2111	C1999	G1763	A1509B		G1248
G	C2683	U2518	U2406	A2287	U2172	G2112	C1879	G1764	G1385		
U	U2684	A2518	G2407	A2287	A2173	U2113	A2013		A1395		A1253
U	G2685		G2407	U2291	C2174	A2114	A2014	A1773	U1512		
A			U2408	U2291		G2115		C1774	C1513		G1256
A2801A	U2688	A2530	G2409	C2292	C2177	G2116	A2019		A1637		
G2802	C2690	A2531	G2410	C2292	C2178	A2117	A2020	U1778	G1515		G1266
G2803			C2417	A2305	C2179	U2118	C2021	U1779	C1640		U1267
G2804	G2550	C2551	C2417	C2305	U2180	A2119	U2022	A1641	U1518		A1268
G2805	C2701	C2552	A2422	G2307	G2181	G2120	G2023	C1781	G1519		A1269
G2807	U2702	U2552	U2423	G2308	C2182	G2121	A2030	G1782	G1642		G1270
U2808	C2703	U2553	G2423	G2308	C2183	U2122	A2031	A1783	G1524		G1271
A2809		U2554	A2424	C2313	G2184	G2123	A2031	C1908	G1525		A1418
G2810	C2710	A2566	A2425	C2313	G2184	G2124	G2032	A1784			U1272
U2810	U2711	G2567	A2426	G2314	G2187	U2125	A2033	A1785	C1532		U1273
G2811	A2712	A2568	A2427	G2315	C2188	A2126	A2033	A1786	G1421		A1274
	A2712A	C2568	G2428	G2316	U2189	A2127	C2039		U		A1275
C2816	A2713		G2429	C2316	G2190	C2127	U2040	A1791	A		A1276
G2817	G2714	C2573	A2430	G2319	G2191	C2128	U2041	U1915	C		G1277
			U2431	G2319	C2190	U2129	A2042	U1917	A		A1278
A2820	A2721	G2578	U2431	G2321	G2192	U2130	A2042	A1918	G1537		G1429
A2821	G2722		A2435	G2321	G2193	C2131	C2043	U1796			C1430
					G2194	U2132	A2051	C1797	U1540		U1431
					C2195	C2132	A2051	U1798	C1432		U1292



- Molecule 1: 23S Ribosomal RNA

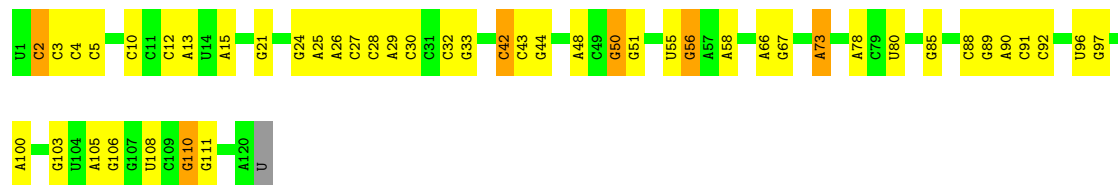






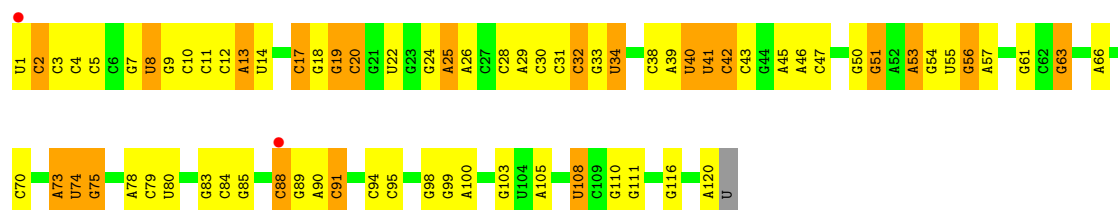
• Molecule 2: 5S Ribosomal RNA

Chain 1B: 60% 34% 5% •



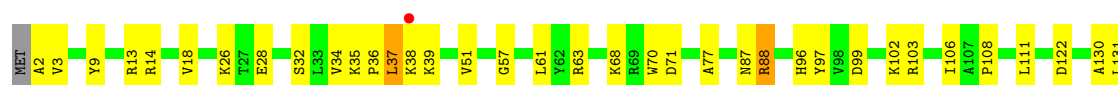
• Molecule 2: 5S Ribosomal RNA

Chain 2B: 39% 42% 18% •



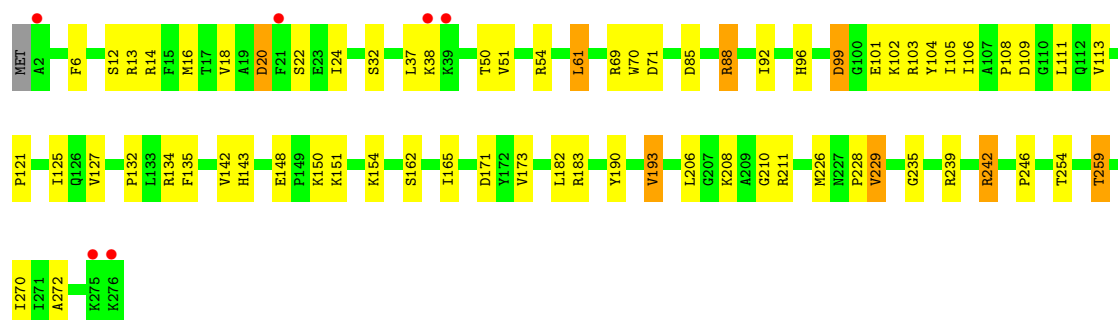
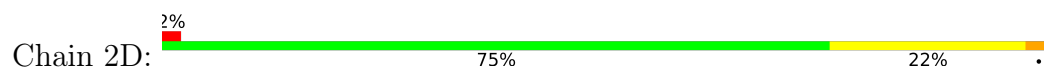
• Molecule 3: 50S ribosomal protein L2

Chain 1D: 78% 20% •

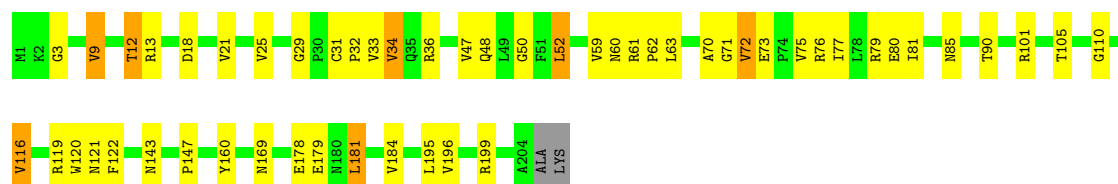




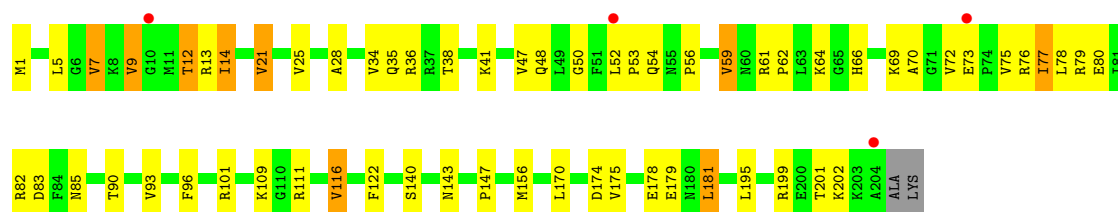
• Molecule 3: 50S ribosomal protein L2



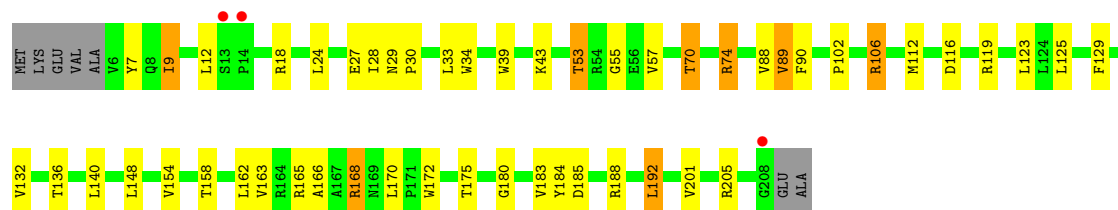
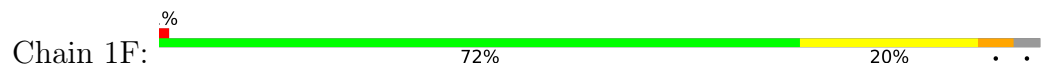
• Molecule 4: 50S ribosomal protein L3



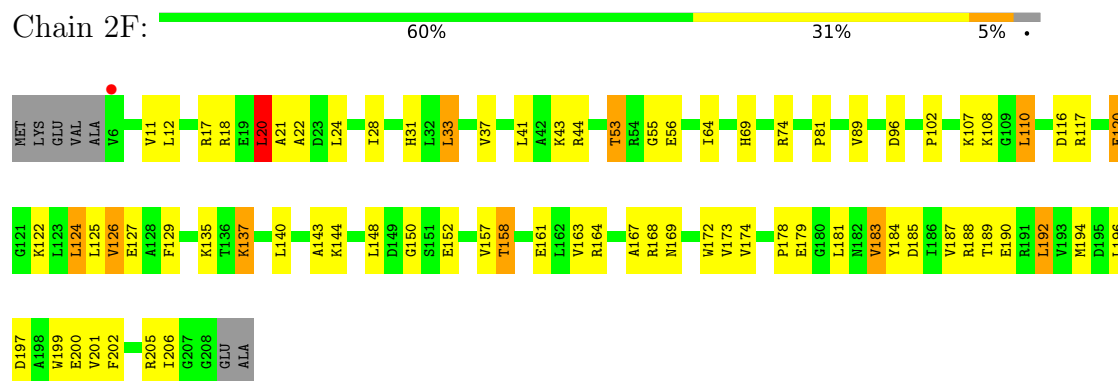
• Molecule 4: 50S ribosomal protein L3



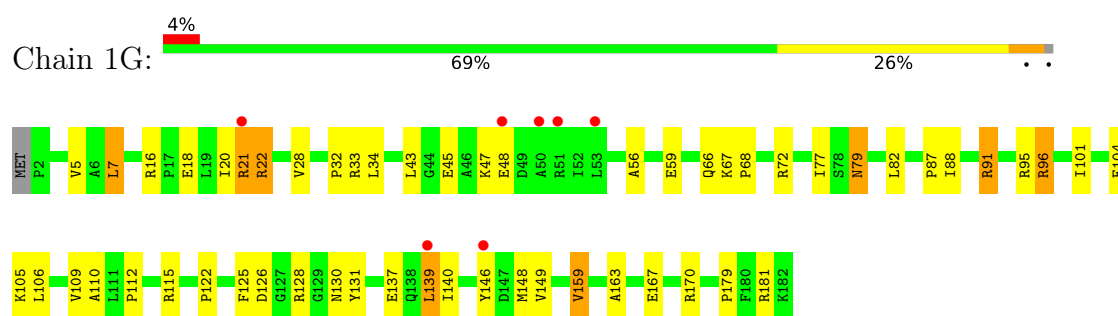
• Molecule 5: 50S ribosomal protein L4



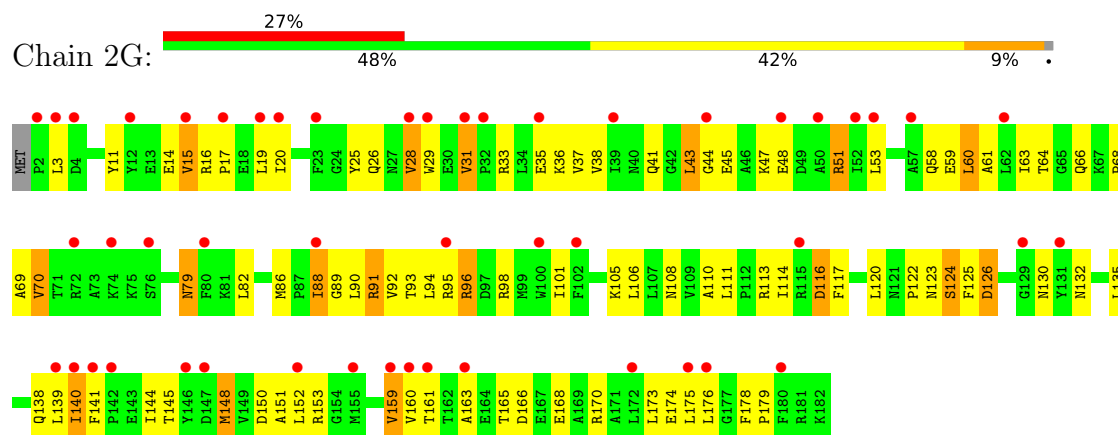
- Molecule 5: 50S ribosomal protein L4



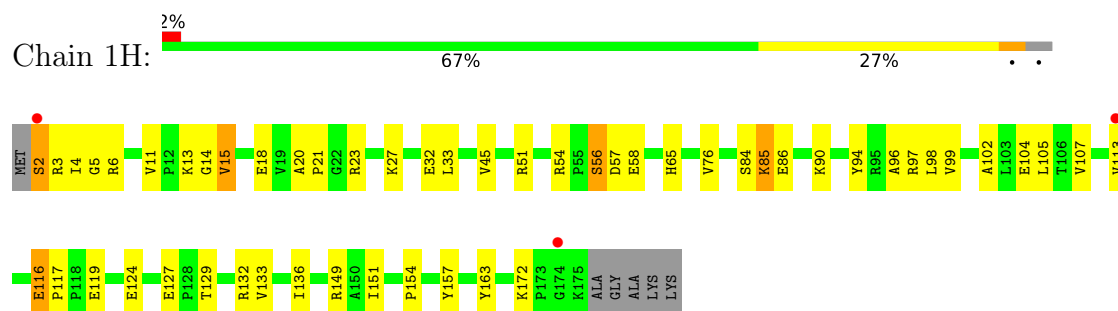
- Molecule 6: 50S ribosomal protein L5



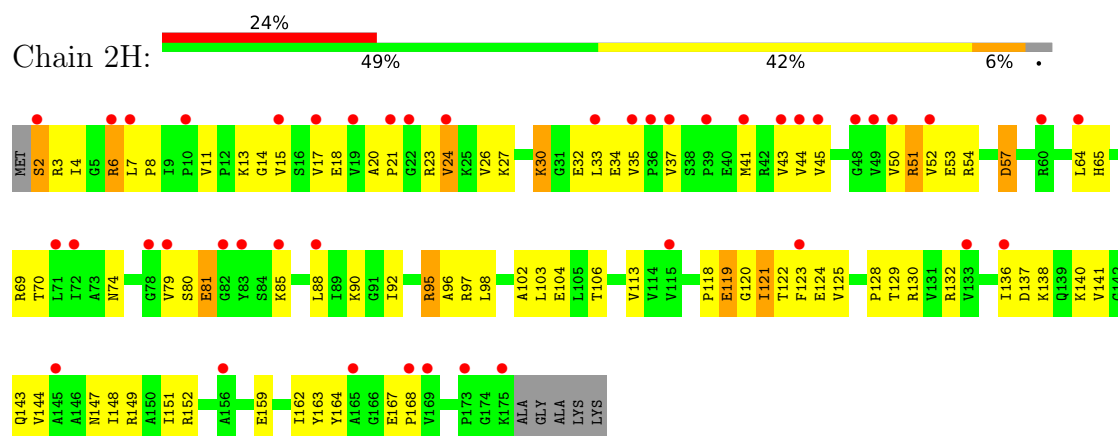
- Molecule 6: 50S ribosomal protein L5



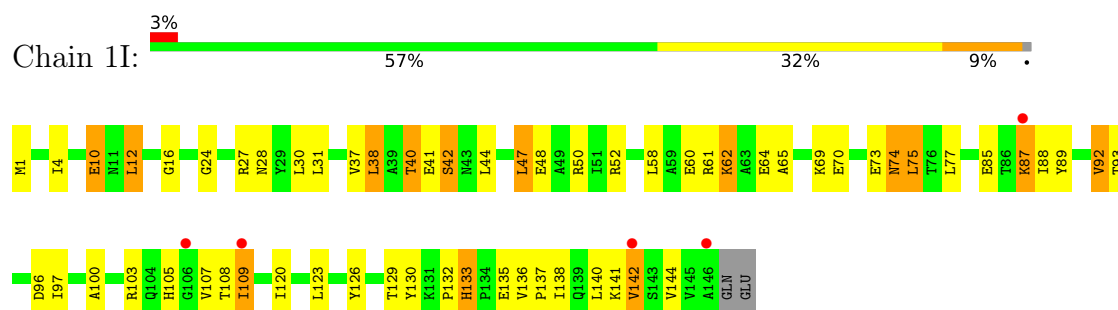
- Molecule 7: 50S ribosomal protein L6



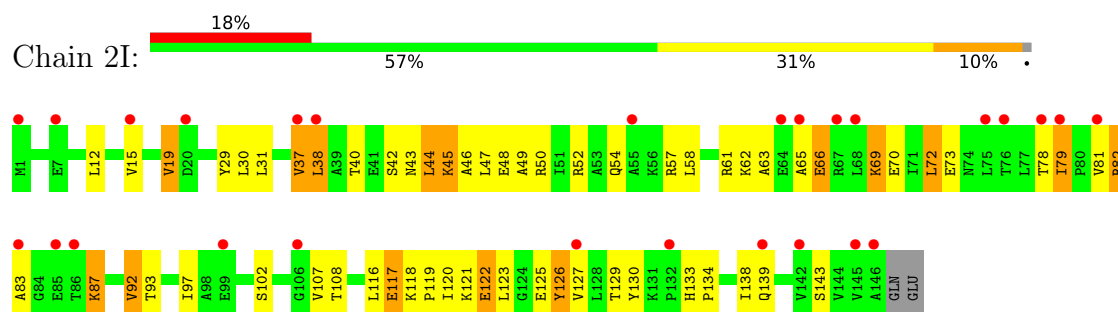
- Molecule 7: 50S ribosomal protein L6



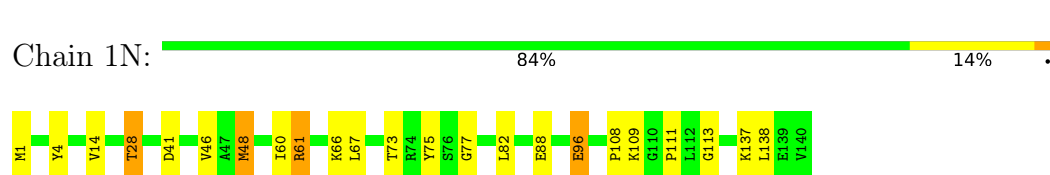
- Molecule 8: 50S ribosomal protein L9



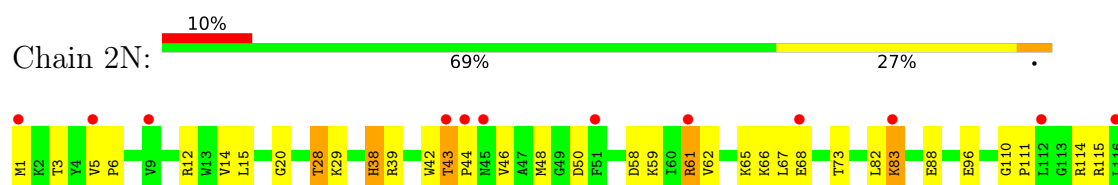
- Molecule 8: 50S ribosomal protein L9



- Molecule 9: 50S ribosomal protein L13



- Molecule 9: 50S ribosomal protein L13





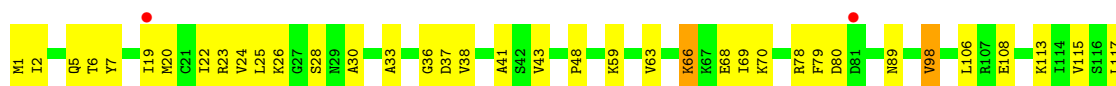
- Molecule 10: 50S ribosomal protein L14

Chain 1O: 81% 18% .



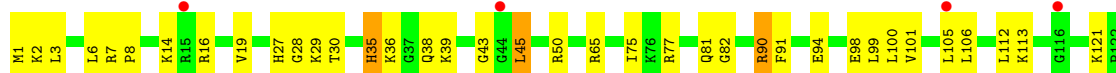
- Molecule 10: 50S ribosomal protein L14

Chain 2O: 2% 68% 30% .



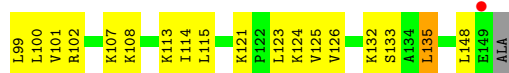
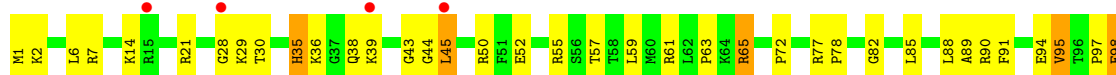
- Molecule 11: 50S ribosomal protein L15

Chain 1P: 3% 70% 26% ..



- Molecule 11: 50S ribosomal protein L15

Chain 2P: 3% 63% 33% ..

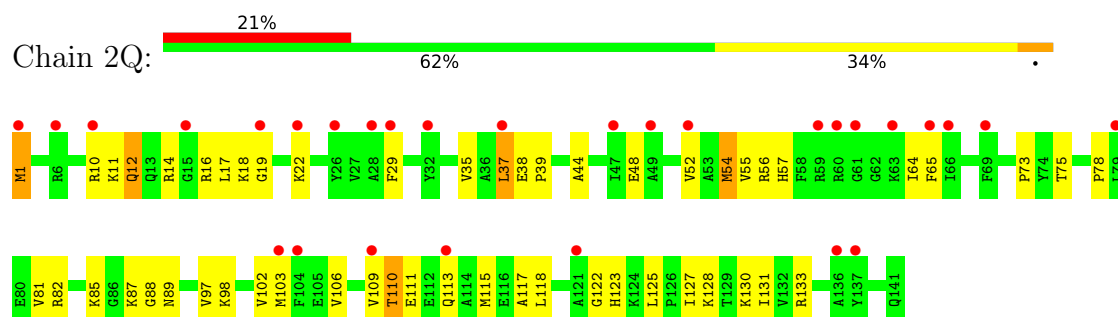


- Molecule 12: 50S ribosomal protein L16

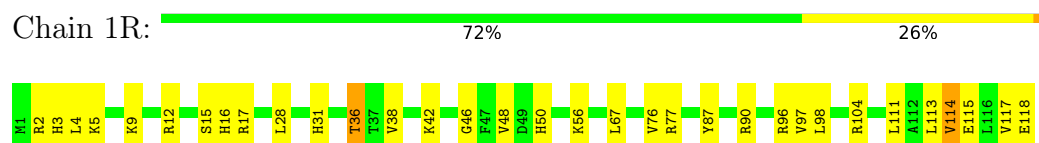
Chain 1Q: 75% 23% .



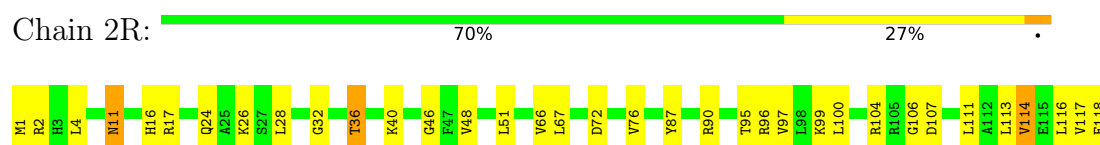
- Molecule 12: 50S ribosomal protein L16



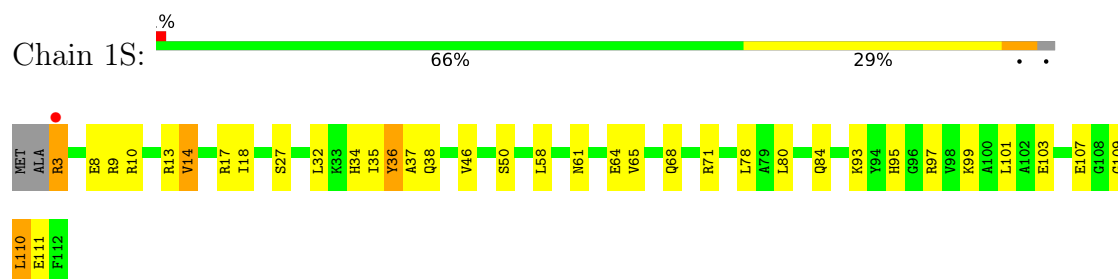
- Molecule 13: 50S ribosomal protein L17



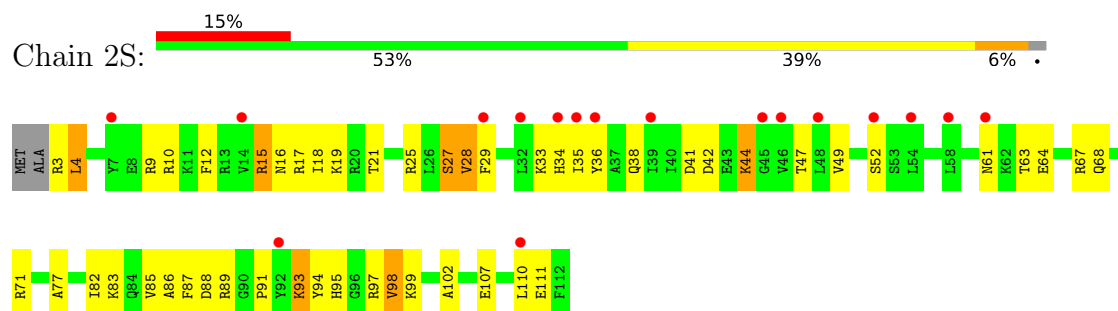
- Molecule 13: 50S ribosomal protein L17



- Molecule 14: 50S ribosomal protein L18

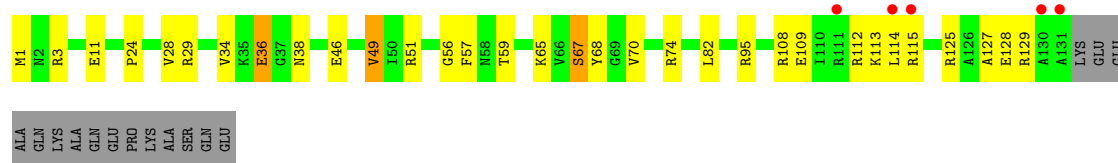


- Molecule 14: 50S ribosomal protein L18

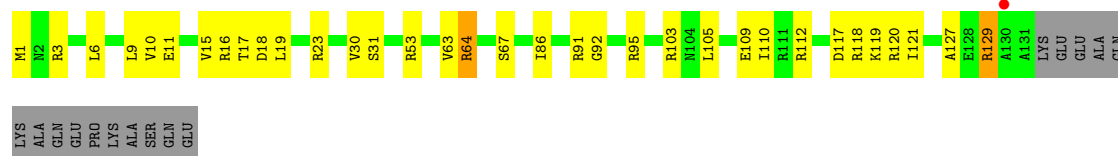


- Molecule 15: 50S ribosomal protein L19

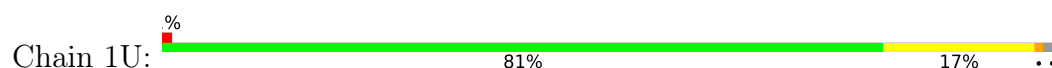




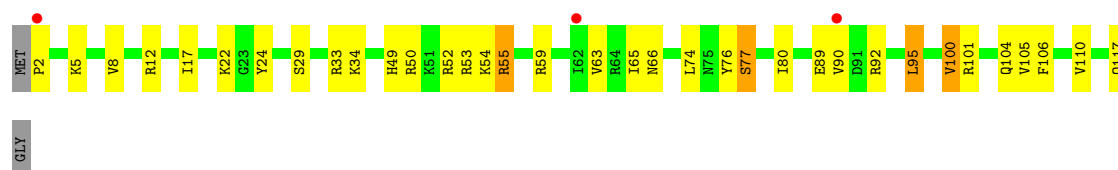
- Molecule 15: 50S ribosomal protein L19



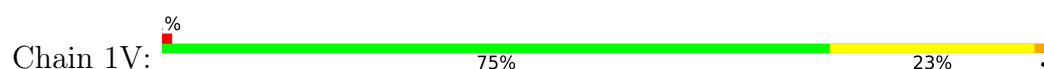
- Molecule 16: 50S ribosomal protein L20



- Molecule 16: 50S ribosomal protein L20



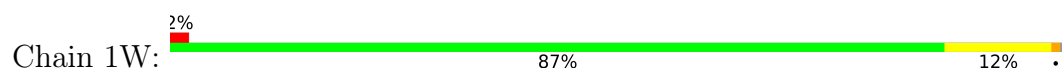
- Molecule 17: 50S ribosomal protein L21



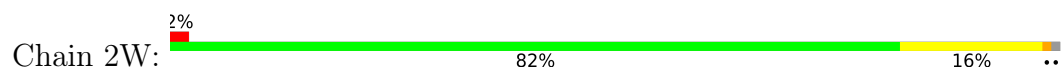
- Molecule 17: 50S ribosomal protein L21



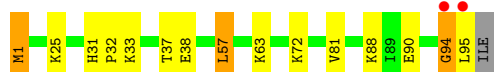
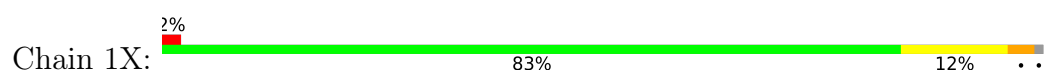
- Molecule 18: 50S ribosomal protein L22



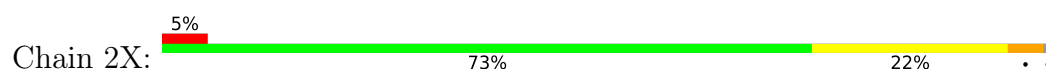
- Molecule 18: 50S ribosomal protein L22



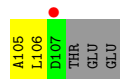
- Molecule 19: 50S ribosomal protein L23



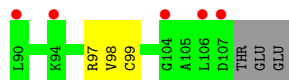
- Molecule 19: 50S ribosomal protein L23



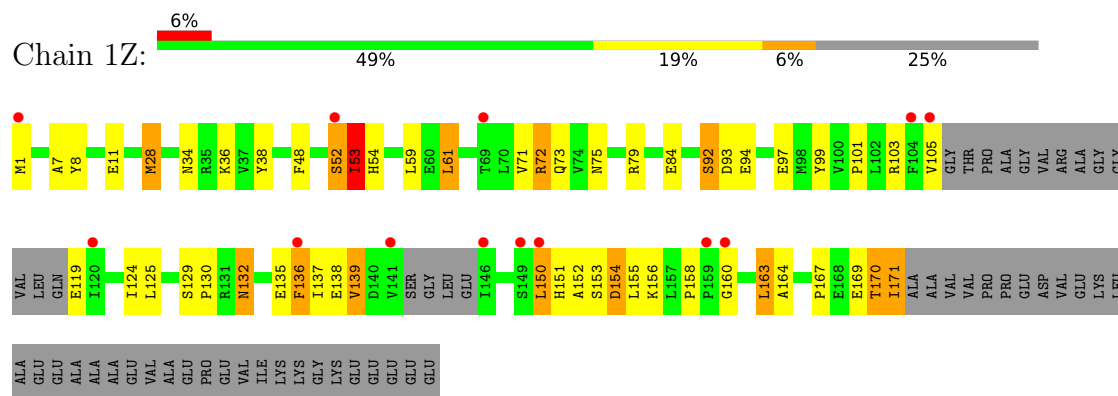
- Molecule 20: 50S ribosomal protein L24



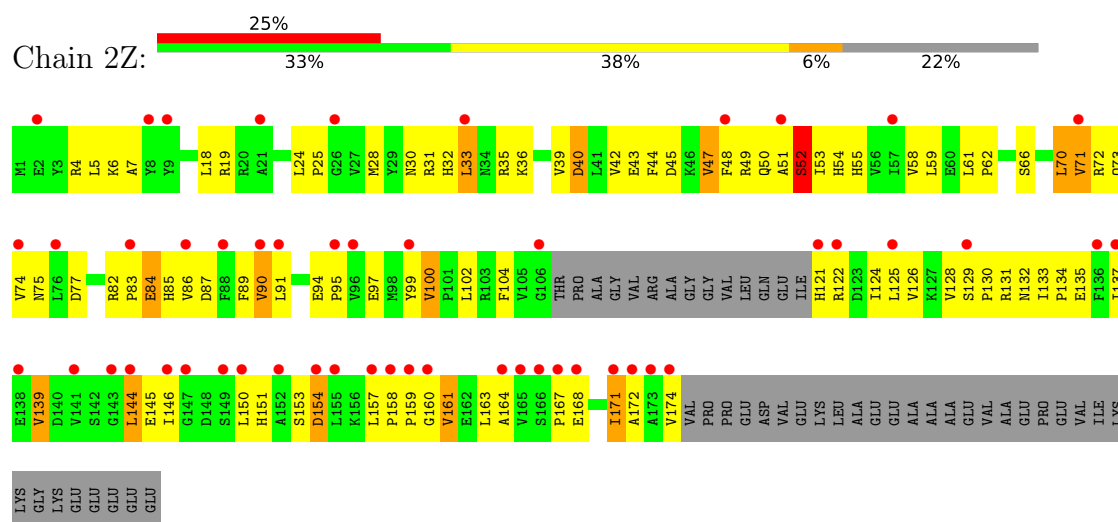
- Molecule 20: 50S ribosomal protein L24



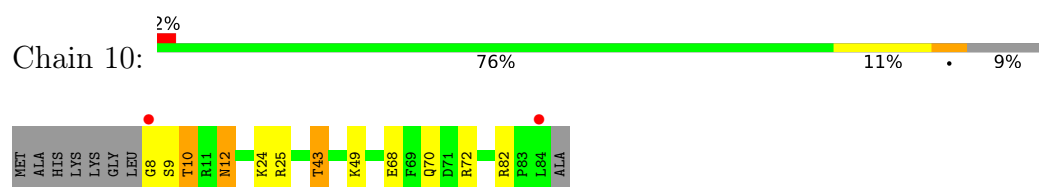
- Molecule 21: 50S ribosomal protein L25



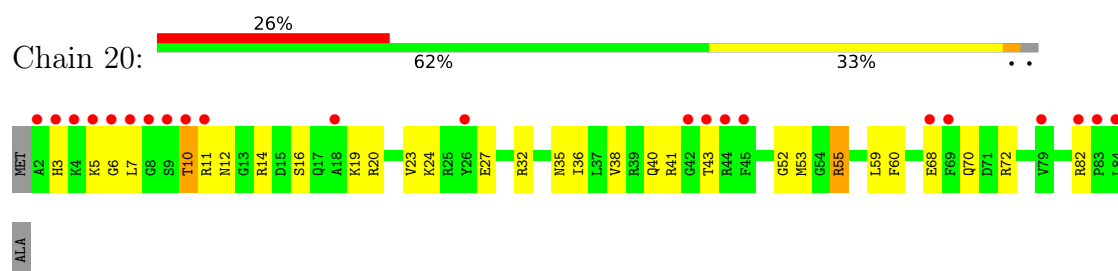
- Molecule 21: 50S ribosomal protein L25



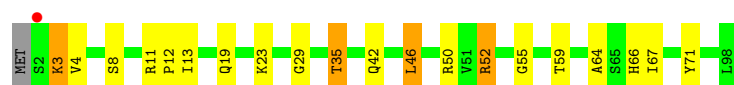
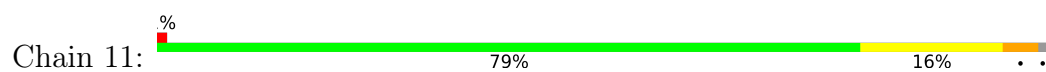
- Molecule 22: 50S ribosomal protein L27



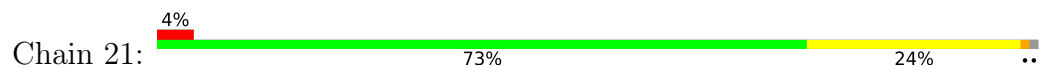
- Molecule 22: 50S ribosomal protein L27



- Molecule 23: 50S ribosomal protein L28



- Molecule 23: 50S ribosomal protein L28



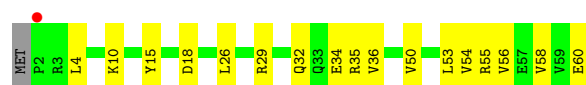
- Molecule 24: 50S ribosomal protein L29



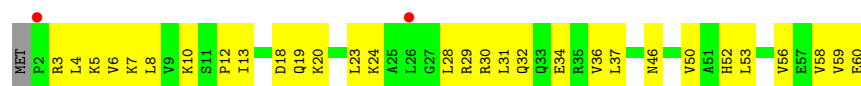
- Molecule 24: 50S ribosomal protein L29



- Molecule 25: 50S ribosomal protein L30



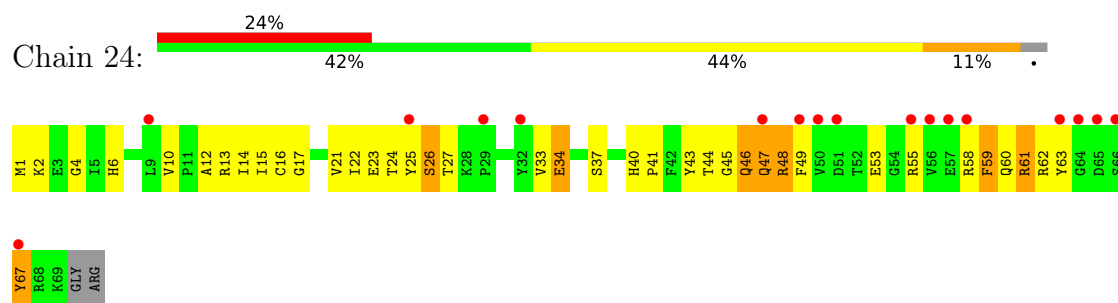
- Molecule 25: 50S ribosomal protein L30



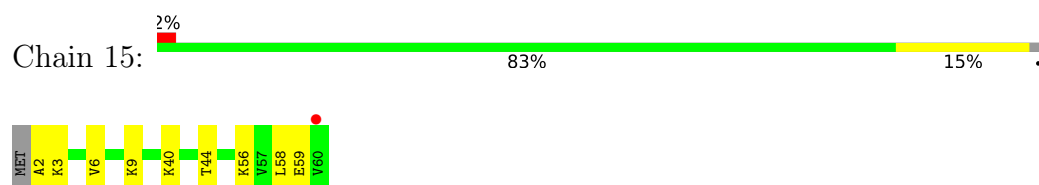
- Molecule 26: 50S ribosomal protein L31



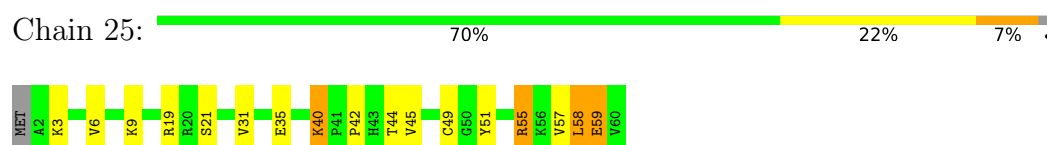
• Molecule 26: 50S ribosomal protein L31



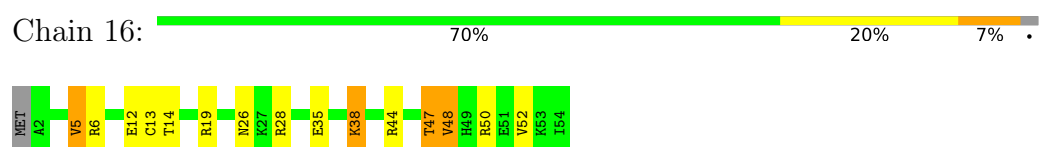
• Molecule 27: 50S ribosomal protein L32



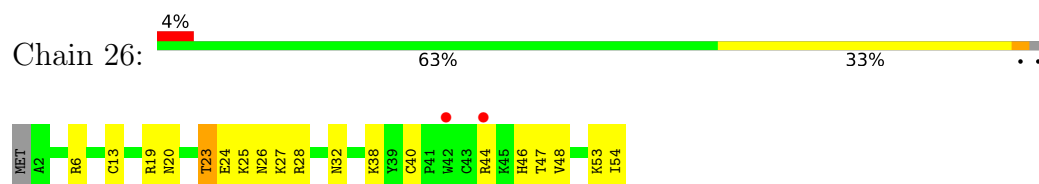
• Molecule 27: 50S ribosomal protein L32



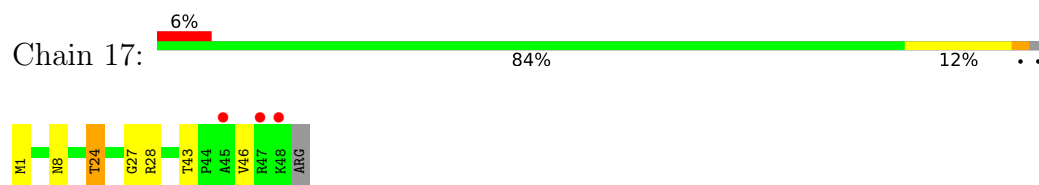
• Molecule 28: 50S ribosomal protein L33



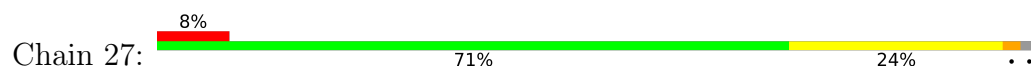
• Molecule 28: 50S ribosomal protein L33



• Molecule 29: 50S ribosomal protein L34



• Molecule 29: 50S ribosomal protein L34





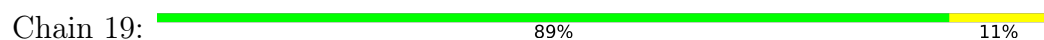
- Molecule 30: 50S ribosomal protein L35



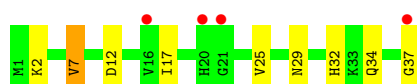
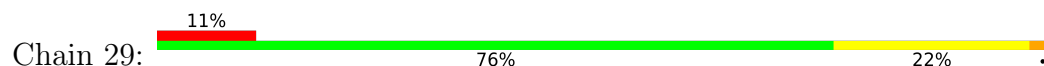
- Molecule 30: 50S ribosomal protein L35



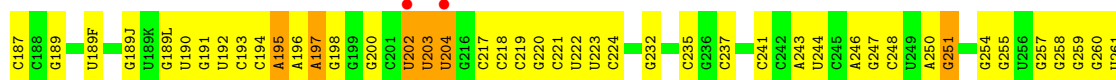
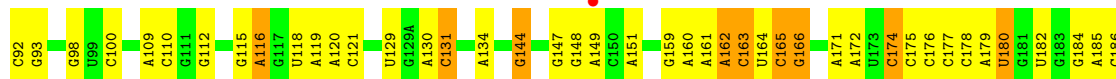
- Molecule 31: 50S ribosomal protein L36

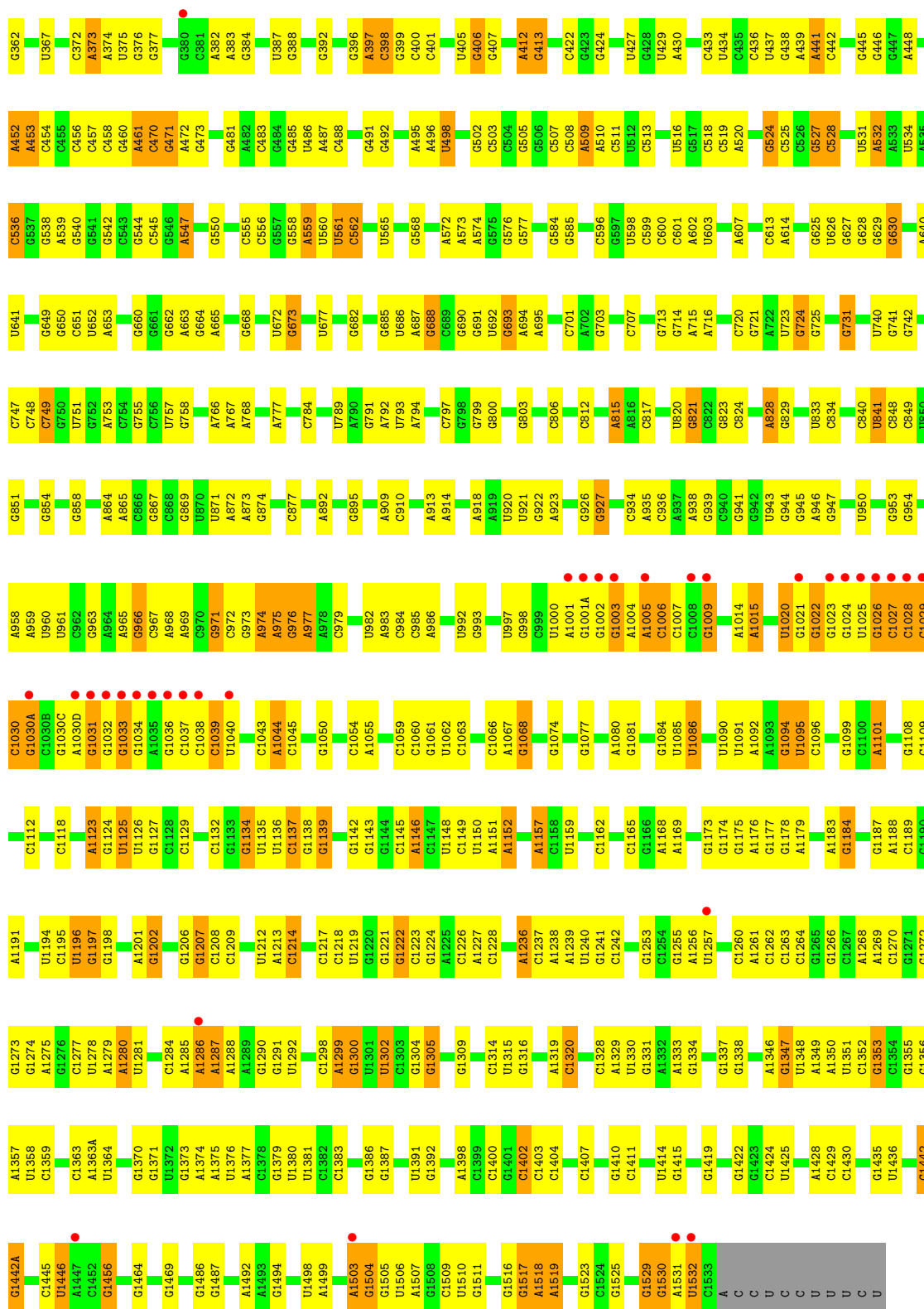


- Molecule 31: 50S ribosomal protein L36

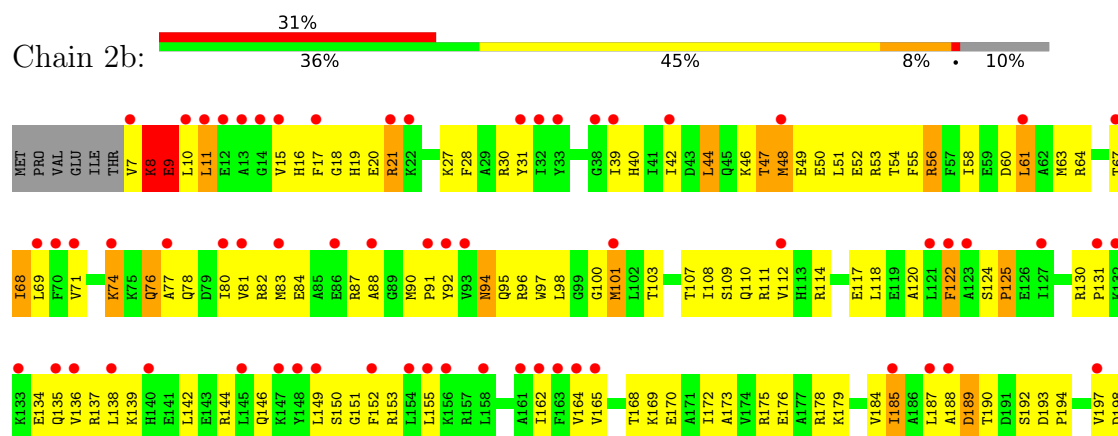


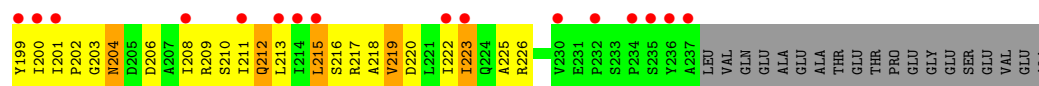
- Molecule 32: 16S Ribosomal RNA



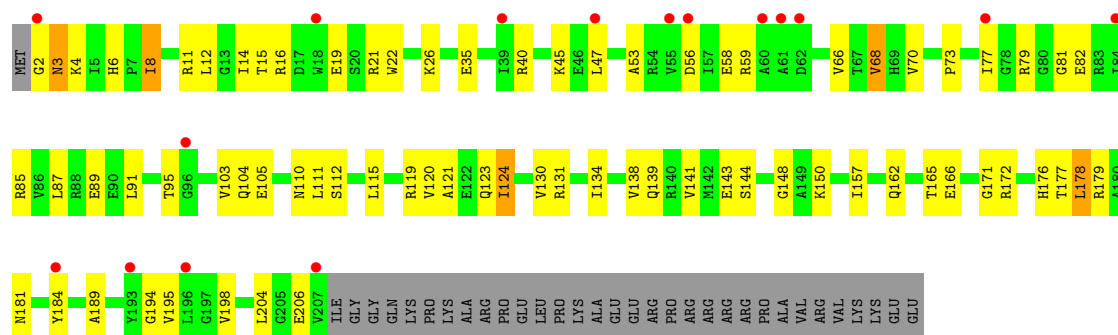




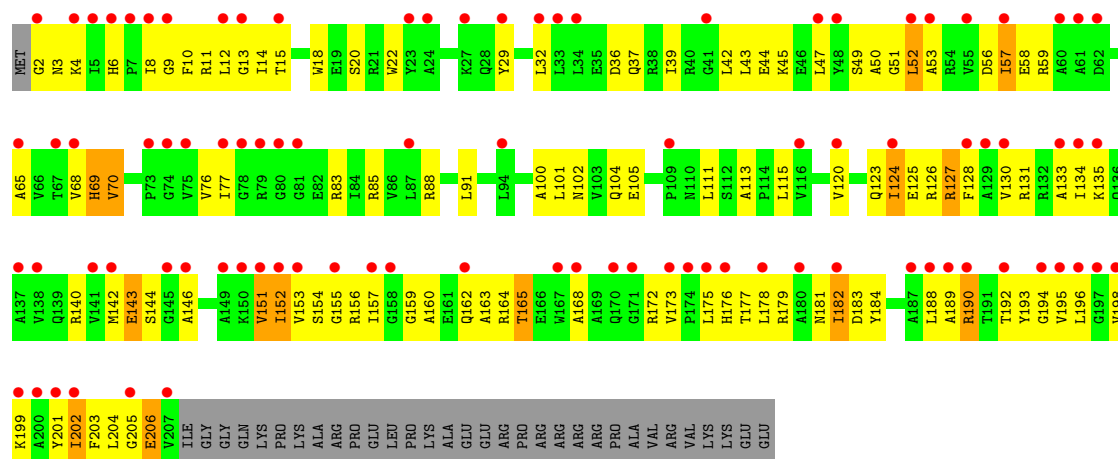




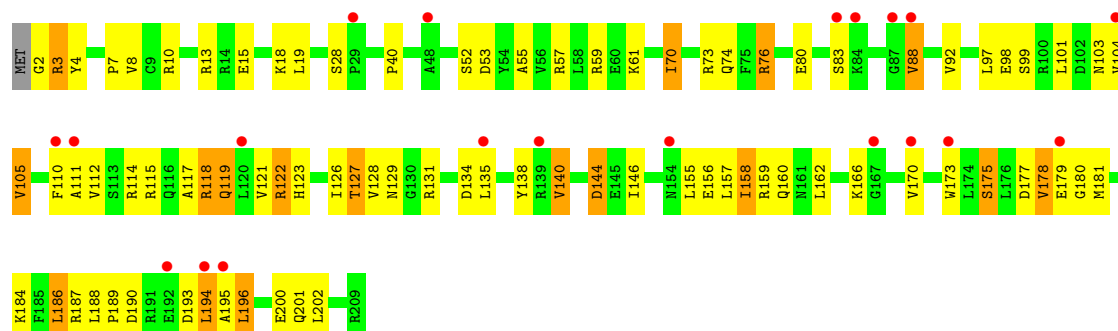
• Molecule 34: 30S ribosomal protein S3



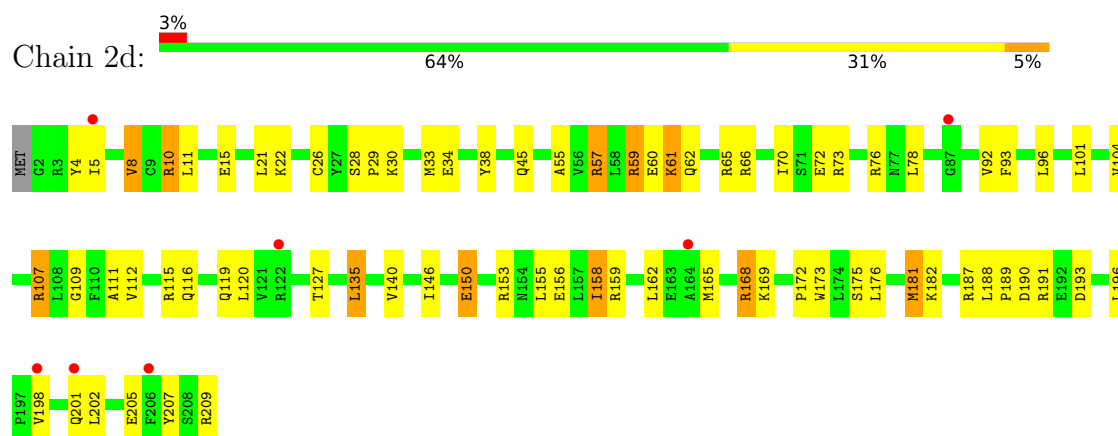
• Molecule 34: 30S ribosomal protein S3



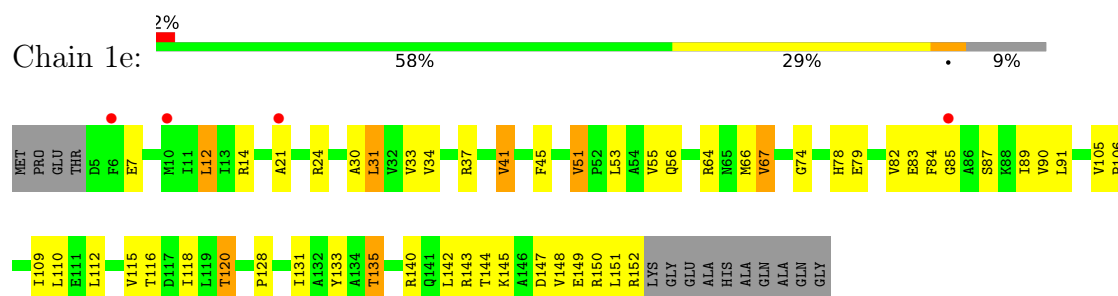
• Molecule 35: 30S ribosomal protein S4



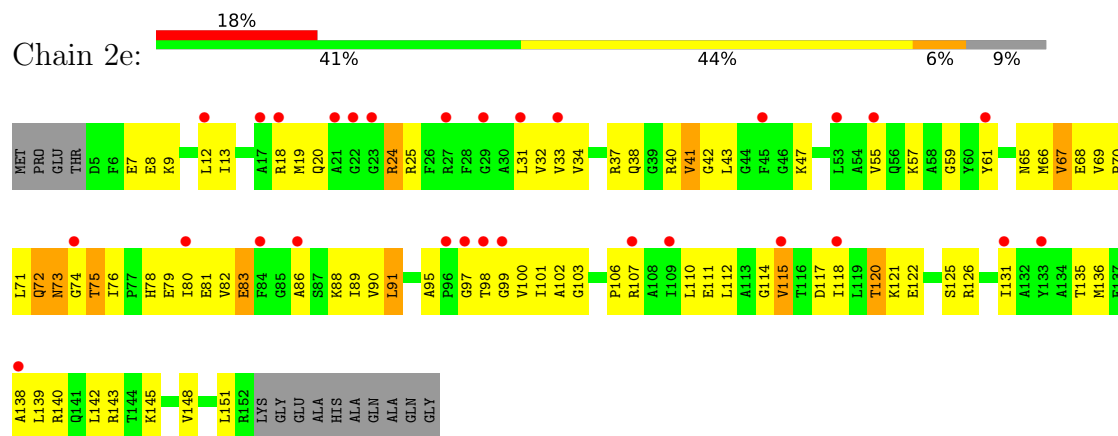
- Molecule 35: 30S ribosomal protein S4



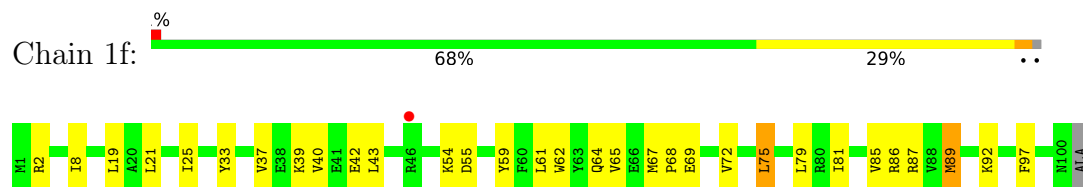
- Molecule 36: 30S ribosomal protein S5



- Molecule 36: 30S ribosomal protein S5

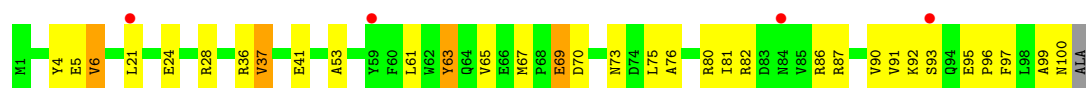


- Molecule 37: 30S ribosomal protein S6

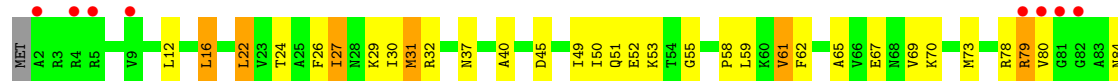


- Molecule 37: 30S ribosomal protein S6





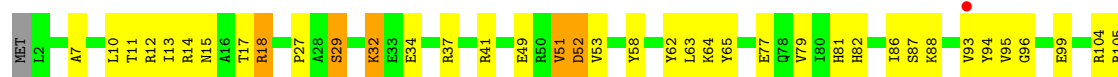
- Molecule 38: 30S ribosomal protein S7



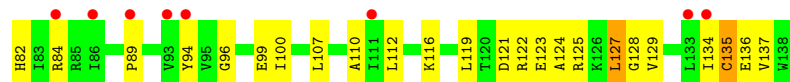
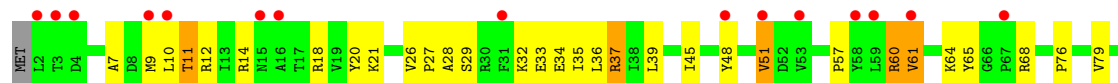
- Molecule 38: 30S ribosomal protein S7



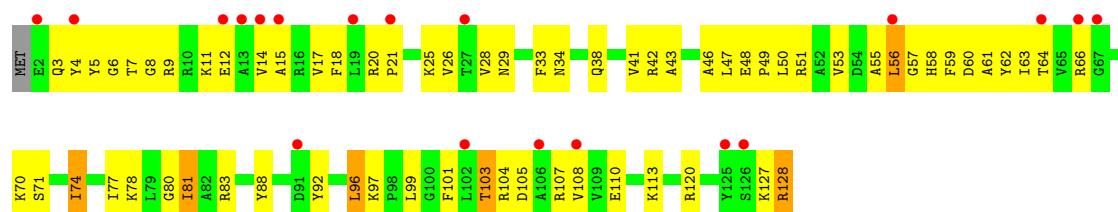
- Molecule 39: 30S ribosomal protein S8



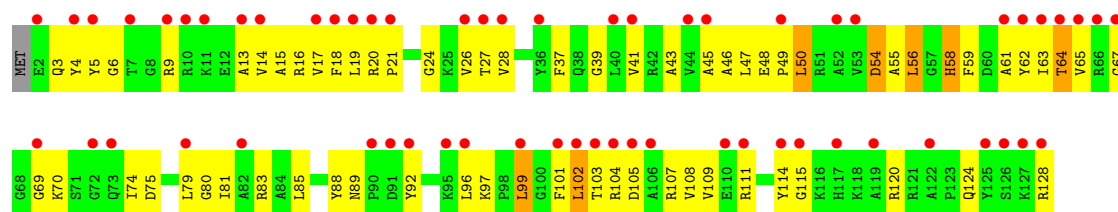
- Molecule 39: 30S ribosomal protein S8



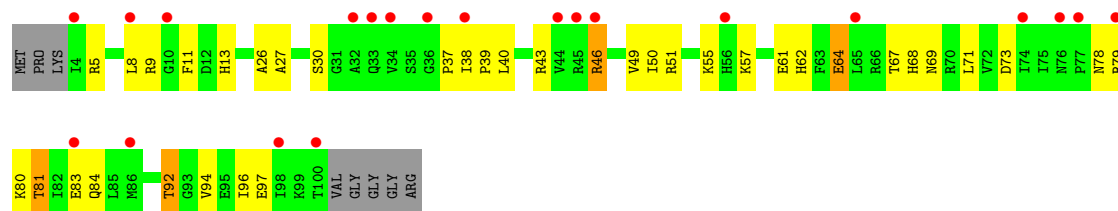
- Molecule 40: 30S ribosomal protein S9



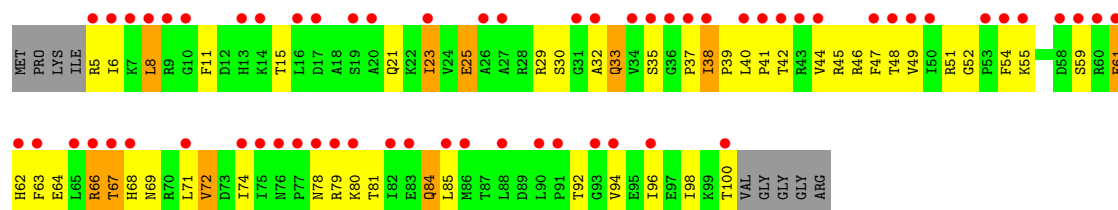
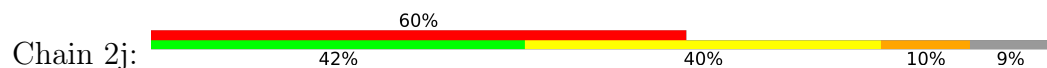
- Molecule 40: 30S ribosomal protein S9



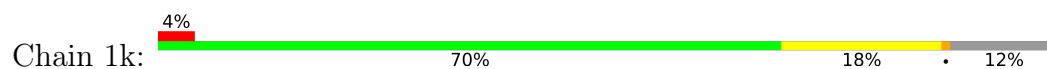
- Molecule 41: 30S ribosomal protein S10

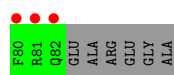


- Molecule 41: 30S ribosomal protein S10

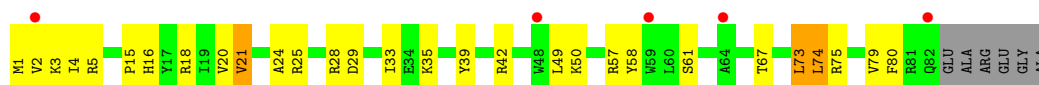


- Molecule 42: 30S ribosomal protein S11

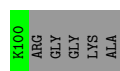
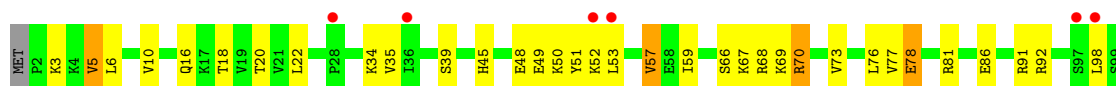




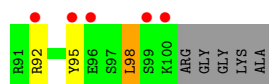
- Molecule 47: 30S ribosomal protein S16



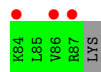
- Molecule 48: 30S ribosomal protein S17



- Molecule 48: 30S ribosomal protein S17

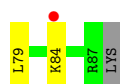


- Molecule 49: 30S ribosomal protein S18

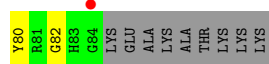


- Molecule 49: 30S ribosomal protein S18

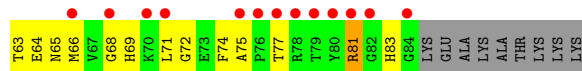
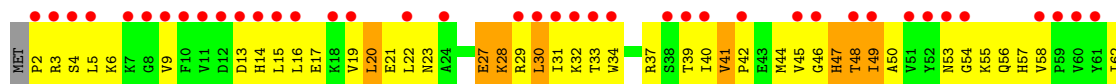




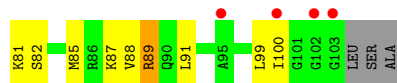
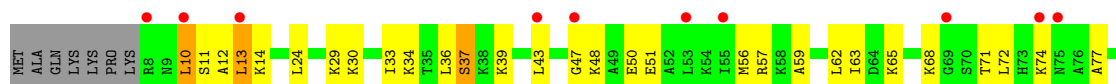
- Molecule 50: 30S ribosomal protein S19



- Molecule 50: 30S ribosomal protein S19



- Molecule 51: 30S ribosomal protein S20



- Molecule 51: 30S ribosomal protein S20

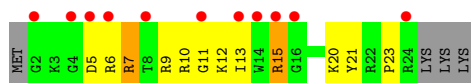


- Molecule 52: 30S ribosomal protein Thx

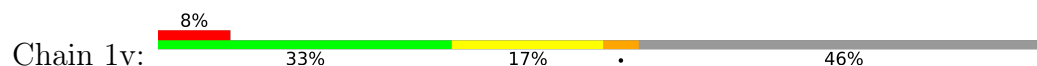




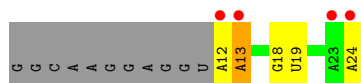
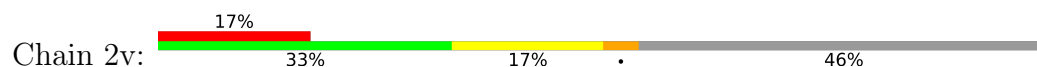
- Molecule 52: 30S ribosomal protein Thx



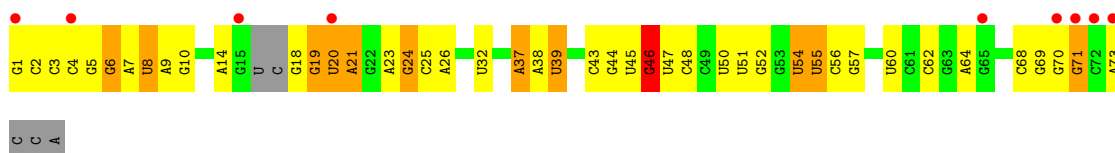
- Molecule 53: MF-mRNA



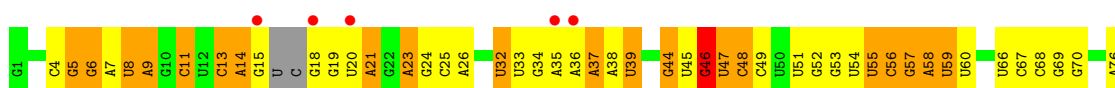
- Molecule 53: MF-mRNA



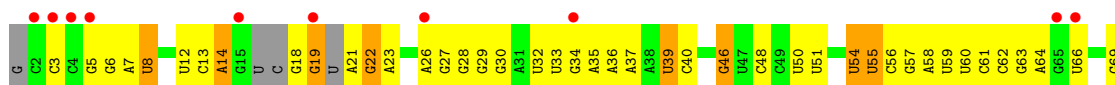
- Molecule 54: A-site and E-site Deacylated tRNAphe

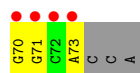


- Molecule 54: A-site and E-site Deacylated tRNAphe

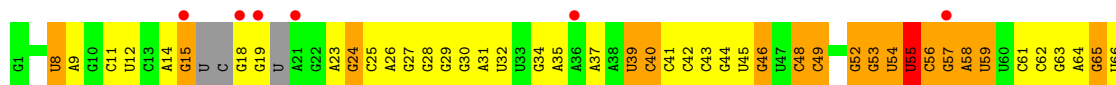


- Molecule 54: A-site and E-site Deacylated tRNAphe

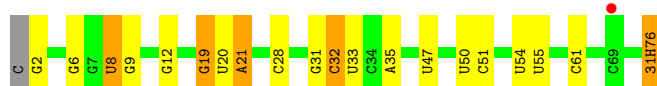
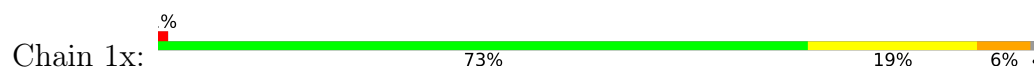




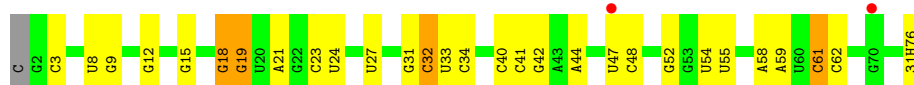
- Molecule 54: A-site and E-site Deacylated tRNA^{phe}



- Molecule 55: P-site Aminoacylated fMet-tRNA^{met}



- Molecule 55: P-site Aminoacylated fMet-tRNA^{met}



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.79Å 449.98Å 627.07Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	123.69 – 2.45 123.69 – 2.45	Depositor EDS
% Data completeness (in resolution range)	99.7 (123.69-2.45) 99.7 (123.69-2.45)	Depositor EDS
R_{merge}	0.17	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.24 (at 2.45Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.217 , 0.265 0.219 , 0.266	Depositor DCC
R_{free} test set	107260 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å ²)	56.0	Xtriage
Anisotropy	0.177	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 53.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.42$, $\langle L^2 \rangle = 0.25$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	300078	wwPDB-VP
Average B, all atoms (Å ²)	63.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.56% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical 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: M2G, OMG, 0TD, 5MU, K, A1A1K, ZN, UR3, OMC, OMU, MIA, 5MC, MG, SF4, 2MG, 4SU, 4OC, 31H, MA6, G7M, 2MA, PSU

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	1A	0.56	0/69011	0.74	15/107720 (0.0%)
1	2A	0.41	0/67295	0.62	6/105042 (0.0%)
2	1B	0.45	0/2882	0.70	0/4494
2	2B	0.40	0/2879	0.59	0/4487
3	1D	0.53	0/2186	0.73	0/2944
3	2D	0.42	0/2186	0.67	0/2944
4	1E	0.53	0/1592	0.75	0/2149
4	2E	0.38	0/1592	0.64	0/2149
5	1F	0.54	0/1619	0.79	2/2193 (0.1%)
5	2F	0.39	0/1615	0.64	0/2188
6	1G	0.41	0/1448	0.62	0/1957
6	2G	0.38	0/1453	0.59	0/1963
7	1H	0.41	0/1356	0.60	0/1834
7	2H	0.37	0/1356	0.51	0/1834
8	1I	0.38	0/1112	0.63	0/1514
8	2I	0.37	0/1079	0.63	0/1475
9	1N	0.52	0/1144	0.72	0/1543
9	2N	0.37	0/1144	0.59	0/1543
10	1O	0.51	0/943	0.70	0/1269
10	2O	0.40	0/943	0.59	0/1269
11	1P	0.56	0/1152	0.80	0/1533
11	2P	0.40	0/1152	0.64	0/1533
12	1Q	0.57	0/1143	0.73	0/1527
12	2Q	0.38	0/1143	0.60	0/1527
13	1R	0.58	0/982	0.77	1/1312 (0.1%)
13	2R	0.39	0/982	0.61	0/1312
14	1S	0.44	0/883	0.71	0/1176
14	2S	0.42	0/880	0.63	0/1172
15	1T	0.48	0/1105	0.69	0/1477
15	2T	0.38	0/1097	0.62	0/1468
16	1U	0.58	0/977	0.78	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.39	0/977	0.58	0/1301
17	1V	0.54	0/782	0.74	0/1049
17	2V	0.34	0/782	0.58	0/1049
18	1W	0.58	0/897	0.72	0/1205
18	2W	0.42	0/897	0.60	0/1205
19	1X	0.53	0/764	0.78	2/1025 (0.2%)
19	2X	0.38	0/764	0.67	2/1025 (0.2%)
20	1Y	0.44	0/819	0.75	0/1095
20	2Y	0.38	0/819	0.62	0/1095
21	1Z	0.44	0/1267	0.68	1/1717 (0.1%)
21	2Z	0.40	0/1299	0.61	0/1763
22	10	0.58	0/616	0.83	2/821 (0.2%)
22	20	0.42	0/662	0.60	0/881
23	11	0.49	0/762	0.70	0/1014
23	21	0.44	0/762	0.67	0/1014
24	12	0.50	0/590	0.62	0/781
24	22	0.34	0/590	0.52	0/781
25	13	0.56	0/474	0.68	0/635
25	23	0.35	0/469	0.62	0/630
26	14	0.45	0/565	0.82	0/761
26	24	0.44	0/545	0.64	0/737
27	15	0.59	0/469	0.77	0/635
27	25	0.42	0/469	0.54	0/635
28	16	0.54	0/460	0.72	0/613
28	26	0.40	0/456	0.59	0/608
29	17	0.63	0/426	0.82	0/561
29	27	0.50	0/426	0.69	0/561
30	18	0.53	0/525	0.73	0/691
30	28	0.38	0/525	0.60	0/691
31	19	0.55	0/310	0.72	0/407
31	29	0.34	0/310	0.62	0/407
32	1a	0.38	1/35795 (0.0%)	0.59	1/55864 (0.0%)
32	2a	0.38	0/35886	0.57	3/56005 (0.0%)
33	1b	0.39	0/1881	0.68	0/2542
33	2b	0.44	0/1860	0.68	2/2518 (0.1%)
34	1c	0.36	0/1572	0.57	0/2126
34	2c	0.43	0/1566	0.63	0/2119
35	1d	0.33	0/1685	0.60	0/2262
35	2d	0.36	0/1704	0.58	0/2284
36	1e	0.35	0/1145	0.57	0/1543
36	2e	0.41	0/1149	0.61	0/1548
37	1f	0.36	0/823	0.54	0/1115
37	2f	0.36	0/829	0.53	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.33	0/1250	0.53	0/1679
38	2g	0.35	0/1254	0.52	0/1683
39	1h	0.33	0/1108	0.56	0/1494
39	2h	0.33	0/1108	0.59	0/1494
40	1i	0.33	0/1002	0.62	0/1346
40	2i	0.40	0/997	0.63	0/1343
41	1j	0.38	0/722	0.56	0/982
41	2j	0.44	0/727	0.62	0/988
42	1k	0.37	0/844	0.60	0/1145
42	2k	0.34	0/848	0.51	0/1149
43	1l	0.41	0/937	0.66	0/1260
43	2l	0.36	0/937	0.62	2/1260 (0.2%)
44	1m	0.38	0/969	0.61	0/1302
44	2m	0.41	0/961	0.60	0/1291
45	1n	0.34	0/501	0.64	0/664
45	2n	0.45	0/501	0.66	0/664
46	1o	0.39	0/739	0.55	0/985
46	2o	0.34	0/739	0.54	0/985
47	1p	0.36	0/697	0.64	0/939
47	2p	0.37	0/693	0.63	0/935
48	1q	0.39	0/836	0.60	0/1117
48	2q	0.36	0/836	0.55	0/1117
49	1r	0.38	0/560	0.61	0/746
49	2r	0.34	0/560	0.58	0/746
50	1s	0.36	0/667	0.65	0/900
50	2s	0.47	0/661	0.80	2/893 (0.2%)
51	1t	0.35	0/730	0.62	0/965
51	2t	0.38	0/729	0.60	0/965
52	1u	0.32	0/203	0.57	0/266
52	2u	0.40	0/203	0.58	0/266
53	1v	0.41	0/310	0.52	0/480
53	2v	0.43	0/310	0.54	0/480
54	1w	0.51	2/1537 (0.1%)	0.55	0/2390
54	1y	0.46	2/1606 (0.1%)	0.56	0/2497
54	2w	0.55	2/1487 (0.1%)	0.59	0/2311
54	2y	0.47	2/1583 (0.1%)	0.53	0/2459
55	1x	0.46	1/1700 (0.1%)	0.64	0/2650
55	2x	0.40	1/1700 (0.1%)	0.58	0/2650
All	All	0.45	11/316456 (0.0%)	0.65	41/473777 (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
4	1E	0	1
4	2E	0	1
5	2F	0	1
6	1G	0	1
6	2G	0	1
11	1P	0	3
11	2P	0	3
21	1Z	0	1
21	2Z	0	1
23	11	0	1
26	14	0	1
33	1b	0	1
33	2b	0	2
38	2g	0	1
44	1m	0	1
44	2m	0	1
All	All	0	21

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	46	G7M	O3'-P	5.94	1.62	1.56
54	1y	8	4SU	O3'-P	5.68	1.61	1.56
54	1w	46	G7M	O3'-P	5.47	1.61	1.56
54	1y	46	G7M	O3'-P	5.39	1.61	1.56
54	1w	8	4SU	O3'-P	5.35	1.61	1.56
55	2x	8	4SU	O3'-P	5.29	1.61	1.56
54	2y	8	4SU	O3'-P	5.24	1.61	1.56
54	2w	46	G7M	O3'-P	5.20	1.61	1.56
54	2w	8	4SU	O3'-P	5.14	1.61	1.56
55	1x	8	4SU	O3'-P	5.08	1.61	1.56
32	1a	1498	UR3	O3'-P	5.00	1.61	1.56

All (41) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1992	G	C2'-C3'-O3'	11.11	126.17	109.50
1	1A	2689	U	P-O3'-C3'	8.45	132.87	120.20
1	1A	2689	U	C2'-C3'-O3'	8.23	121.85	109.50
1	2A	1992	G	C2'-C3'-O3'	8.13	121.70	109.50
22	10	12	ASN	CA-C-N	-7.59	106.54	121.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	10	12	ASN	C-N-CA	-7.59	106.54	121.41
1	1A	1992	G	P-O3'-C3'	7.23	131.04	120.20
5	1F	89	VAL	CA-C-N	-6.80	111.09	123.34
5	1F	89	VAL	C-N-CA	-6.80	111.09	123.34
1	2A	2689	U	P-O3'-C3'	6.39	129.78	120.20
19	2X	94	GLY	CA-C-N	6.05	132.60	121.70
19	2X	94	GLY	C-N-CA	6.05	132.60	121.70
33	2b	9	GLU	CA-C-N	5.91	132.83	121.54
33	2b	9	GLU	C-N-CA	5.91	132.83	121.54
1	1A	443	A	O3'-P-O5'	-5.90	95.15	104.00
1	1A	512	G	O4'-C1'-N9	5.79	116.88	108.20
32	1a	266	G	C2'-C3'-O3'	5.75	118.13	109.50
32	2a	1272	G	N1-C2-N2	-5.73	99.01	116.20
21	1Z	53	ILE	N-CA-C	5.71	121.23	109.34
1	1A	548	A	P-O3'-C3'	5.70	128.75	120.20
1	2A	752	A	C4'-C3'-O3'	5.69	117.94	109.40
1	1A	996	A	O5'-P-OP1	-5.65	91.06	108.00
50	2s	28	LYS	CA-C-N	5.56	131.70	121.70
50	2s	28	LYS	C-N-CA	5.56	131.70	121.70
1	1A	226	G	O4'-C1'-N9	5.49	116.44	108.20
1	1A	575	A	OP1-P-O3'	-5.43	91.71	108.00
1	2A	752	A	C2'-C3'-O3'	5.38	117.58	109.50
1	1A	428	A	C5'-C4'-C3'	-5.37	107.95	116.00
19	1X	94	GLY	CA-C-N	5.26	131.18	121.70
19	1X	94	GLY	C-N-CA	5.26	131.18	121.70
1	2A	2689	U	C2'-C3'-O3'	5.15	117.22	109.50
32	2a	1442	G	P-O3'-C3'	5.14	125.87	119.70
32	2a	1272	G	N3-C2-N2	5.13	135.28	119.90
1	1A	2629	A	C2'-C3'-O3'	5.12	117.18	109.50
43	2l	104	VAL	CA-C-N	5.12	131.32	121.54
43	2l	104	VAL	C-N-CA	5.12	131.32	121.54
13	1R	104	ARG	CB-CG-CD	-5.12	99.53	111.30
1	1A	2629	A	P-O3'-C3'	5.11	127.86	120.20
1	1A	195	A	P-O3'-C3'	5.05	127.78	120.20
1	1A	2689	U	C4'-C3'-O3'	5.03	116.94	109.40
1	2A	1653	G	C2'-C3'-O3'	5.02	117.03	109.50

There are no chirality outliers.

All (21) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
23	11	3	LYS	Peptide

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Mol	Chain	Res	Type	Group
26	14	61	ARG	Peptide
4	1E	70	ALA	Peptide
6	1G	95	ARG	Peptide
11	1P	28	GLY	Peptide
11	1P	35	HIS	Peptide
11	1P	43	GLY	Peptide
21	1Z	136	PHE	Peptide
33	1b	126	GLU	Peptide
44	1m	105	THR	Peptide
4	2E	70	ALA	Peptide
5	2F	20	LEU	Peptide
6	2G	95	ARG	Peptide
11	2P	28	GLY	Peptide
11	2P	35	HIS	Peptide
11	2P	43	GLY	Peptide
21	2Z	52	SER	Peptide
33	2b	122	PHE	Peptide
33	2b	8	LYS	Peptide
38	2g	79	ARG	Peptide
44	2m	66	LEU	Peptide

5.2 Too-close contacts

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	1A	61852	0	31195	633	0
1	2A	60322	0	30428	886	0
2	1B	2577	0	1305	31	0
2	2B	2575	0	1303	68	0
3	1D	2136	0	2218	38	0
3	2D	2136	0	2218	46	0
4	1E	1559	0	1618	36	0
4	2E	1559	0	1618	45	0
5	1F	1584	0	1625	31	0
5	2F	1580	0	1619	51	0
6	1G	1423	0	1436	34	0
6	2G	1428	0	1438	79	0
7	1H	1330	0	1407	29	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	2H	1330	0	1407	50	0
8	1I	1097	0	1140	41	0
8	2I	1064	0	1082	41	0
9	1N	1117	0	1184	14	0
9	2N	1117	0	1184	28	0
10	1O	933	0	996	17	0
10	2O	933	0	996	27	0
11	1P	1135	0	1212	36	0
11	2P	1135	0	1212	49	0
12	1Q	1122	0	1179	25	0
12	2Q	1122	0	1179	37	0
13	1R	968	0	1033	22	0
13	2R	968	0	1033	28	0
14	1S	873	0	927	25	0
14	2S	870	0	923	46	0
15	1T	1091	0	1151	22	0
15	2T	1083	0	1136	24	0
16	1U	959	0	1019	13	0
16	2U	959	0	1019	23	0
17	1V	771	0	830	17	0
17	2V	771	0	830	17	0
18	1W	886	0	940	9	0
18	2W	886	0	940	10	0
19	1X	750	0	814	14	0
19	2X	750	0	814	15	0
20	1Y	806	0	881	22	0
20	2Y	806	0	881	22	0
21	1Z	1240	0	1240	46	0
21	2Z	1271	0	1273	75	0
22	10	608	0	622	11	0
22	20	653	0	674	29	0
23	11	755	0	826	18	0
23	21	755	0	826	19	0
24	12	588	0	643	15	0
24	22	588	0	643	12	0
25	13	469	0	518	8	0
25	23	464	0	514	26	0
26	14	552	0	533	32	0
26	24	532	0	503	37	0
27	15	455	0	465	5	0
27	25	455	0	465	11	0
28	16	453	0	473	8	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
28	26	449	0	469	11	0
29	17	418	0	467	5	0
29	27	418	0	467	9	0
30	18	517	0	582	12	0
30	28	517	0	582	16	0
31	19	307	0	335	1	0
31	29	307	0	335	6	0
32	1a	32246	0	16294	514	0
32	2a	32327	0	16338	742	0
33	1b	1846	0	1867	93	0
33	2b	1825	0	1828	124	0
34	1c	1548	0	1535	45	0
34	2c	1542	0	1517	84	0
35	1d	1655	0	1672	60	0
35	2d	1674	0	1714	60	0
36	1e	1129	0	1185	33	0
36	2e	1133	0	1191	64	0
37	1f	810	0	804	16	0
37	2f	816	0	808	29	0
38	1g	1231	0	1238	36	0
38	2g	1235	0	1249	51	0
39	1h	1088	0	1126	31	0
39	2h	1088	0	1126	39	0
40	1i	983	0	986	48	0
40	2i	978	0	966	61	0
41	1j	709	0	650	35	0
41	2j	714	0	672	47	0
42	1k	829	0	825	13	0
42	2k	833	0	836	25	0
43	1l	932	0	981	20	0
43	2l	932	0	981	31	0
44	1m	958	0	1002	30	0
44	2m	950	0	988	69	0
45	1n	492	0	529	22	0
45	2n	492	0	529	30	0
46	1o	728	0	760	17	0
46	2o	728	0	760	24	0
47	1p	681	0	697	32	0
47	2p	677	0	686	22	0
48	1q	823	0	891	22	0
48	2q	823	0	891	24	0
49	1r	555	0	618	16	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
49	2r	555	0	618	24	0
50	1s	652	0	662	26	0
50	2s	646	0	644	50	0
51	1t	728	0	798	30	0
51	2t	727	0	796	18	0
52	1u	199	0	208	6	0
52	2u	199	0	208	10	0
53	1v	277	0	140	4	0
53	2v	277	0	140	9	0
54	1w	1530	0	785	28	0
54	1y	1585	0	803	29	0
54	2w	1482	0	754	25	0
54	2y	1565	0	794	42	0
55	1x	1635	0	838	11	0
55	2x	1635	0	839	17	0
56	10	8	0	0	0	0
56	11	5	0	0	0	0
56	12	2	0	0	0	0
56	13	4	0	0	0	0
56	15	7	0	0	0	0
56	16	2	0	0	0	0
56	17	4	0	0	0	0
56	18	7	0	0	0	0
56	19	1	0	0	0	0
56	1A	1103	0	0	0	0
56	1B	37	0	0	0	0
56	1D	12	0	0	0	0
56	1E	17	0	0	0	0
56	1F	13	0	0	0	0
56	1G	5	0	0	0	0
56	1I	1	0	0	0	0
56	1N	5	0	0	0	0
56	1O	6	0	0	0	0
56	1P	6	0	0	0	0
56	1Q	6	0	0	0	0
56	1R	4	0	0	0	0
56	1S	3	0	0	0	0
56	1T	2	0	0	0	0
56	1U	12	0	0	0	0
56	1V	7	0	0	0	0
56	1W	7	0	0	0	0
56	1X	7	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	1Y	3	0	0	0	0
56	1Z	3	0	0	0	0
56	1a	215	0	0	0	0
56	1b	1	0	0	0	0
56	1d	1	0	0	0	0
56	1e	2	0	0	0	0
56	1f	2	0	0	0	0
56	1l	2	0	0	0	0
56	1m	1	0	0	0	0
56	1n	2	0	0	0	0
56	1s	1	0	0	0	0
56	1t	1	0	0	0	0
56	1v	1	0	0	0	0
56	1w	8	0	0	0	0
56	1x	14	0	0	0	0
56	1y	1	0	0	0	0
56	20	4	0	0	0	0
56	21	2	0	0	0	0
56	23	1	0	0	0	0
56	25	4	0	0	0	0
56	26	1	0	0	0	0
56	27	2	0	0	0	0
56	28	3	0	0	0	0
56	29	1	0	0	0	0
56	2A	885	0	0	0	0
56	2B	20	0	0	0	0
56	2D	7	0	0	0	0
56	2E	10	0	0	0	0
56	2F	5	0	0	0	0
56	2G	1	0	0	0	0
56	2N	1	0	0	0	0
56	2O	1	0	0	0	0
56	2P	2	0	0	0	0
56	2Q	4	0	0	0	0
56	2R	2	0	0	0	0
56	2T	3	0	0	0	0
56	2U	1	0	0	0	0
56	2V	2	0	0	0	0
56	2W	1	0	0	0	0
56	2X	1	0	0	0	0
56	2Y	1	0	0	0	0
56	2Z	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	2a	241	0	0	0	0
56	2d	2	0	0	0	0
56	2e	1	0	0	0	0
56	2f	1	0	0	0	0
56	2g	1	0	0	0	0
56	2j	1	0	0	0	0
56	2l	4	0	0	0	0
56	2p	1	0	0	0	0
56	2q	2	0	0	0	0
56	2r	2	0	0	0	0
56	2t	1	0	0	0	0
56	2v	2	0	0	0	0
56	2w	7	0	0	0	0
56	2x	5	0	0	0	0
56	2y	7	0	0	0	0
57	1A	1	0	0	0	0
57	2x	1	0	0	0	0
58	1A	34	0	0	1	0
58	2A	34	0	0	1	0
59	14	1	0	0	0	0
59	15	1	0	0	0	0
59	16	1	0	0	0	0
59	19	1	0	0	0	0
59	1Y	1	0	0	0	0
59	1n	1	0	0	0	0
59	24	1	0	0	0	0
59	25	1	0	0	0	0
59	26	1	0	0	0	0
59	29	1	0	0	0	0
59	2Y	1	0	0	0	0
59	2n	1	0	0	0	0
60	1d	8	0	0	1	0
60	2d	8	0	0	1	0
61	10	12	0	0	2	0
61	11	12	0	0	0	0
61	12	4	0	0	1	0
61	13	4	0	0	0	0
61	15	5	0	0	0	0
61	16	3	0	0	0	0
61	17	7	0	0	0	0
61	18	11	0	0	1	0
61	1A	2018	0	0	79	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	1B	62	0	0	2	0
61	1D	26	0	0	0	0
61	1E	27	0	0	2	0
61	1F	17	0	0	0	0
61	1G	3	0	0	1	0
61	1H	2	0	0	0	0
61	1I	1	0	0	0	0
61	1N	6	0	0	1	0
61	1O	7	0	0	1	0
61	1P	23	0	0	1	0
61	1Q	7	0	0	0	0
61	1R	13	0	0	5	0
61	1S	5	0	0	0	0
61	1T	8	0	0	0	0
61	1U	15	0	0	0	0
61	1V	7	0	0	1	0
61	1W	8	0	0	2	0
61	1X	5	0	0	0	0
61	1Y	2	0	0	1	0
61	1Z	1	0	0	0	0
61	1a	378	0	0	29	0
61	1b	1	0	0	0	0
61	1e	1	0	0	0	0
61	1f	1	0	0	0	0
61	1i	1	0	0	0	0
61	1l	8	0	0	1	0
61	1o	1	0	0	0	0
61	1p	1	0	0	0	0
61	1q	2	0	0	0	0
61	1u	1	0	0	1	0
61	1v	4	0	0	0	0
61	1w	10	0	0	1	0
61	1x	16	0	0	0	0
61	1y	2	0	0	0	0
61	20	6	0	0	0	0
61	21	13	0	0	0	0
61	23	1	0	0	1	0
61	25	1	0	0	0	0
61	26	1	0	0	1	0
61	27	5	0	0	0	0
61	28	3	0	0	0	0
61	29	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	2A	1160	0	0	82	0
61	2B	23	0	0	0	0
61	2D	22	0	0	0	0
61	2E	12	0	0	0	0
61	2F	13	0	0	1	0
61	2I	3	0	0	1	0
61	2O	3	0	0	0	0
61	2P	15	0	0	2	0
61	2Q	1	0	0	0	0
61	2R	4	0	0	0	0
61	2T	5	0	0	0	0
61	2U	4	0	0	0	0
61	2W	3	0	0	0	0
61	2X	2	0	0	0	0
61	2Z	1	0	0	0	0
61	2a	264	0	0	26	0
61	2d	2	0	0	0	0
61	2e	2	0	0	0	0
61	2j	3	0	0	2	0
61	2l	6	0	0	1	0
61	2p	1	0	0	0	0
61	2q	1	0	0	0	0
61	2r	1	0	0	0	0
61	2t	3	0	0	0	0
61	2v	2	0	0	0	0
61	2w	1	0	0	0	0
61	2x	7	0	0	0	0
61	2y	6	0	0	0	0
All	All	300078	0	196592	5320	0

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 11.

All (5320) 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)
1:1A:1082:U:H3	1:1A:1086:A:N6	1.30	1.28
1:1A:1054:A:N6	1:1A:1105:U:H3	1.52	1.06
1:1A:2499:C:OP1	61:1A:4203:HOH:O	1.75	1.04
1:2A:2714:G:OP2	61:2A:3901:HOH:O	1.78	1.02
1:1A:1082:U:O4	1:1A:1086:A:N1	1.93	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:22:U:H3	2:2B:61:G:H1	1.09	0.98
1:2A:1204:A:H2	1:2A:1241:A:H62	1.11	0.98
32:2a:1151:A:HO2'	32:2a:1152:A:H8	1.11	0.97
1:2A:2807:G:N1	1:2A:2893:G:O6	1.98	0.97
1:1A:1055:G:H1	1:1A:1104:C:H42	1.11	0.96
1:2A:2711:A:OP2	61:2A:3901:HOH:O	1.83	0.96
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.45	0.95
29:17:24:THR:HG22	29:17:27:GLY:H	1.32	0.95
1:2A:2138:C:H42	1:2A:2153:G:H1	0.98	0.94
1:1A:1058:G:H1	1:1A:1080:C:N4	1.64	0.94
1:2A:783:A:OP2	61:2A:3902:HOH:O	1.86	0.93
1:1A:1058:G:H1	1:1A:1080:C:H42	0.94	0.93
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.04	0.92
1:2A:2137:C:H42	1:2A:2154:G:H1	1.18	0.91
1:1A:1669:A:OP2	61:1A:4204:HOH:O	1.88	0.91
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.06	0.91
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.53	0.91
1:2A:2138:C:N4	1:2A:2153:G:H1	1.67	0.90
32:2a:1310:G:H5'	44:2m:77:ASN:HD21	1.37	0.89
54:2w:18:G:O2'	54:2w:57:G:N2	2.05	0.89
47:2p:15:PRO:HD2	47:2p:42:ARG:HD2	1.53	0.89
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.05	0.89
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.55	0.88
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.55	0.88
1:1A:2427:C:OP1	61:1A:4205:HOH:O	1.90	0.88
32:1a:1314:C:OP2	50:1s:4:SER:OG	1.90	0.88
54:2y:18:G:H22	54:2y:55:PSU:HN3	1.15	0.88
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.07	0.88
1:1A:2099:U:H3	1:1A:2190:G:H1	1.16	0.87
1:2A:948:G:OP1	61:2A:3903:HOH:O	1.91	0.87
8:2I:66:GLU:HA	8:2I:69:LYS:HB3	1.54	0.87
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.05	0.87
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.56	0.87
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.07	0.87
1:1A:1058:G:N2	1:1A:1080:C:N3	2.22	0.87
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.41	0.86
1:1A:1253:A:OP1	61:1A:4206:HOH:O	1.93	0.86
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.09	0.86
26:14:58:ARG:HE	50:1s:68:GLY:HA3	1.40	0.86
32:1a:812:C:N3	61:1a:1907:HOH:O	2.07	0.86
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.58	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2712(A):A:OP2	61:2A:3901:HOH:O	1.93	0.86
1:1A:1054:A:N6	1:1A:1105:U:N3	2.17	0.86
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.08	0.86
54:1w:26:A:H61	54:1w:44:G:H1	1.22	0.86
32:2a:953:G:H5'	32:2a:965:A:H61	1.41	0.86
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.58	0.86
1:1A:2100:G:H1	1:1A:2189:U:H3	1.19	0.85
32:1a:165:C:H2'	32:1a:166:G:H8	1.38	0.85
1:1A:1065:U:O2	1:1A:1073:A:N6	2.09	0.85
1:2A:2143:C:H42	1:2A:2148:G:H1	1.23	0.85
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	1.58	0.85
11:1P:91:PHE:O	11:1P:121:LYS:NZ	2.08	0.85
32:1a:1025:U:O2	32:1a:1036:G:O6	1.95	0.85
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.09	0.85
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.56	0.84
1:2A:2430:A:OP2	61:2A:3904:HOH:O	1.93	0.84
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.57	0.84
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.57	0.84
32:2a:8:A:H5'	36:2e:101:ILE:HG22	1.58	0.84
1:2A:1938:A:OP2	61:2A:3905:HOH:O	1.95	0.84
32:1a:1030:C:N4	32:1a:1030(A):G:N3	2.26	0.84
32:1a:1505:G:OP2	61:1a:1903:HOH:O	1.94	0.84
32:2a:1025:U:H3	32:2a:1036:G:H1	1.25	0.84
1:2A:962:G:OP1	61:2A:3903:HOH:O	1.95	0.84
32:2a:1347:G:H22	32:2a:1373:G:H2'	1.43	0.84
52:1u:5:ASP:OD1	61:1u:101:HOH:O	1.96	0.84
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.21	0.84
40:2i:3:GLN:HE21	40:2i:20:ARG:HE	1.24	0.83
1:1A:11:G:H2'	1:1A:12:U:H5''	1.60	0.83
1:2A:2759:G:OP2	61:2A:3906:HOH:O	1.96	0.83
1:1A:884:C:H42	1:1A:892:G:H1	1.24	0.83
1:1A:1865:G:OP1	61:1A:4207:HOH:O	1.94	0.83
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.44	0.83
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.61	0.83
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.59	0.82
1:2A:854:G:O6	61:2A:3908:HOH:O	1.97	0.82
13:2R:97:VAL:HG22	13:2R:114:VAL:HG13	1.61	0.82
15:1T:65:LYS:HE2	15:1T:67:SER:HB2	1.60	0.82
20:1Y:34:LYS:NZ	61:1Y:301:HOH:O	2.12	0.82
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.11	0.82
32:2a:944:G:OP1	61:2a:3302:HOH:O	1.97	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1417:G:O6	61:2a:3303:HOH:O	1.98	0.82
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.12	0.82
48:1q:18:THR:OG1	48:1q:69:LYS:NZ	2.13	0.82
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.58	0.82
32:1a:1086:U:H3	32:1a:1099:G:H22	1.25	0.82
32:1a:405:U:O4	35:1d:2:GLY:N	2.12	0.81
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	1.61	0.81
1:1A:1494:A:OP1	61:1A:4208:HOH:O	1.97	0.81
32:1a:1027:C:C2	32:1a:1034:G:N2	2.48	0.81
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.60	0.81
32:2a:148:G:H2'	32:2a:149:A:H8	1.46	0.81
1:2A:1025:G:O2'	61:2A:3907:HOH:O	1.97	0.81
36:2e:43:LEU:HD22	36:2e:136:MET:HG3	1.63	0.81
32:2a:1347:G:N2	32:2a:1373:G:H2'	1.96	0.81
1:2A:1647:G:OP1	61:2A:3909:HOH:O	1.98	0.81
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.13	0.81
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.17	0.80
1:1A:2306:C:O2	61:1A:4209:HOH:O	1.98	0.80
32:1a:693:G:OP2	61:1a:1905:HOH:O	2.00	0.80
32:1a:892:A:OP2	61:1a:1904:HOH:O	1.99	0.80
1:1A:826:U:OP1	61:1A:4205:HOH:O	2.00	0.80
6:1G:66:GLN:HG3	26:14:1:MET:HE1	1.64	0.80
32:1a:544:G:OP1	35:1d:59:ARG:NH2	2.12	0.80
1:1A:1970:A:OP1	61:1A:4210:HOH:O	1.99	0.80
36:1e:89:ILE:HG12	36:1e:135:THR:HG23	1.64	0.80
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.16	0.79
33:1b:20:GLU:HG2	33:1b:23:ARG:HH11	1.46	0.79
1:1A:1055:G:H1	1:1A:1104:C:N4	1.79	0.79
39:1h:121:ASP:OD2	39:1h:125:ARG:NH2	2.14	0.79
7:2H:113:VAL:HG11	7:2H:151:ILE:HD13	1.65	0.79
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.00	0.79
33:1b:12:GLU:HB2	33:1b:213:LEU:HD21	1.63	0.79
1:1A:1670:C:OP2	61:1A:4204:HOH:O	2.01	0.79
1:2A:2308:G:O6	1:2A:2311:A:N6	2.13	0.79
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	1.65	0.79
1:2A:500:G:H22	1:2A:503:A:H5'	1.48	0.79
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	1.65	0.79
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.15	0.79
11:1P:90:ARG:HG2	11:1P:90:ARG:HH11	1.48	0.79
1:1A:1039:G:H1	1:1A:1116:C:H42	1.29	0.78
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.15	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:1n:12:ARG:HB3	45:1n:12:ARG:HH11	1.48	0.78
32:2a:1055:A:N7	32:2a:1200:C:N4	2.32	0.78
42:2k:85:ARG:HA	42:2k:112:THR:HG22	1.65	0.78
32:2a:975:A:H4'	32:2a:976:G:H5''	1.62	0.78
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.16	0.78
1:2A:570:G:O6	61:2A:3910:HOH:O	2.01	0.78
21:2Z:53:ILE:HA	21:2Z:71:VAL:HG23	1.65	0.78
32:2a:596:C:OP2	61:2a:3304:HOH:O	2.00	0.78
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.62	0.78
1:1A:739:G:OP1	61:1A:4212:HOH:O	2.01	0.78
8:2I:38:LEU:H	8:2I:38:LEU:HD12	1.48	0.78
32:2a:1375:A:H4'	38:2g:29:LYS:HE2	1.66	0.78
1:2A:880:G:N2	1:2A:898:C:O2	2.17	0.78
1:2A:1830:C:OP2	61:2A:3911:HOH:O	2.02	0.78
33:2b:52:GLU:HG2	33:2b:56:ARG:HH12	1.49	0.78
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.64	0.78
34:2c:162:GLN:NE2	53:2v:24:A:O2'	2.17	0.78
8:2I:40:THR:O	8:2I:44:LEU:HB2	1.84	0.78
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.65	0.78
29:27:24:THR:HG22	29:27:27:GLY:H	1.49	0.78
32:2a:1108:G:O6	61:2a:3305:HOH:O	2.01	0.78
35:1d:166:LYS:NZ	35:1d:179:GLU:OE2	2.17	0.78
1:2A:1124:C:OP1	61:2A:3912:HOH:O	2.02	0.78
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.17	0.78
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	1.65	0.78
1:2A:2379:G:HO2'	14:2S:17:ARG:HH12	1.31	0.77
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.82	0.77
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.19	0.77
48:2q:95:TYR:HA	48:2q:98:LEU:HD22	1.65	0.77
32:2a:1145:C:H4'	32:2a:1146:A:H5'	1.65	0.77
1:2A:955:C:OP1	12:2Q:87:LYS:NZ	2.17	0.77
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.67	0.77
39:2h:64:LYS:HG2	39:2h:79:VAL:HG21	1.65	0.77
41:2j:61:GLU:OE2	45:2n:58:LYS:NZ	2.17	0.77
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.48	0.77
1:1A:2243:U:OP1	61:1A:4213:HOH:O	2.01	0.77
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.02	0.77
32:2a:434:U:H2'	32:2a:435:C:H6	1.49	0.77
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.50	0.77
1:2A:2589:A:OP1	61:2A:3902:HOH:O	2.02	0.77
32:2a:866:C:O2'	32:2a:919:A:OP1	2.03	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:35:HIS:O	61:2P:301:HOH:O	2.02	0.77
1:2A:878:A:H61	1:2A:899:A:H1'	1.50	0.77
1:2A:2131:G:OP2	1:2A:2131:G:N2	2.17	0.77
32:1a:79:G:O6	32:1a:90:U:O2	2.03	0.77
1:2A:883:G:N1	1:2A:894:C:O2	2.15	0.77
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	1.66	0.77
32:2a:673:G:H2'	32:2a:674:G:C8	2.19	0.76
4:1E:119:ARG:HD2	4:1E:160:TYR:HB2	1.67	0.76
18:1W:92:ARG:NH1	61:1W:301:HOH:O	2.15	0.76
1:2A:297:C:OP2	61:2A:3914:HOH:O	2.03	0.76
2:2B:75:G:H22	21:2Z:73:GLN:HE21	1.31	0.76
32:1a:1030(A):G:O2'	32:1a:1031:G:N2	2.15	0.76
1:2A:2131:G:H4'	1:2A:2132:U:H3'	1.67	0.76
32:2a:771:G:N7	61:2a:3317:HOH:O	2.17	0.76
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.65	0.76
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.65	0.76
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.20	0.76
1:2A:2151:G:H2'	1:2A:2152:G:H8	1.49	0.76
1:1A:2448:A:OP1	61:1A:4203:HOH:O	2.03	0.76
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.68	0.76
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.18	0.76
1:2A:1689:A:H62	1:2A:1698:A:H2	1.32	0.76
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.19	0.76
32:2a:1274:G:N2	32:2a:1275:A:N7	2.32	0.76
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.01	0.76
8:2I:37:VAL:HG12	8:2I:38:LEU:HD12	1.68	0.76
44:1m:3:ARG:HG2	44:1m:8:GLU:HA	1.67	0.76
1:2A:921:G:O6	61:2A:3915:HOH:O	2.04	0.76
2:2B:7:G:H21	14:2S:38:GLN:NE2	1.82	0.76
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.68	0.76
1:2A:106:C:H1'	20:2Y:1:MET:HE2	1.68	0.75
8:2I:57:ARG:HA	8:2I:61:ARG:HH21	1.49	0.75
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.19	0.75
1:2A:963:U:OP2	61:2A:3903:HOH:O	2.04	0.75
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.20	0.75
45:2n:26:ARG:HD3	45:2n:43:CYS:HB3	1.68	0.75
1:2A:370:G:N7	61:2A:3945:HOH:O	2.19	0.75
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.20	0.75
1:2A:775:G:O3'	61:2A:3913:HOH:O	2.03	0.75
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.15	0.75
32:2a:437:U:H5'	35:2d:155:LEU:HD21	1.67	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:34:G:H2'	54:2y:35:A:H8	1.51	0.75
1:1A:2552:OMU:OP2	61:1A:4215:HOH:O	2.04	0.75
32:1a:975:A:H4'	32:1a:976:G:H5''	1.67	0.75
1:1A:2140:C:N3	1:1A:2151:G:O6	2.20	0.75
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.19	0.75
1:1A:1602:U:O4	61:1A:4214:HOH:O	2.03	0.75
1:1A:1025:G:O2'	61:1A:4211:HOH:O	2.00	0.74
32:1a:664:G:H22	32:1a:741:G:H1	1.32	0.74
1:2A:1294:U:O2'	13:2R:26:LYS:NZ	2.19	0.74
32:2a:396:G:O2'	32:2a:398:C:OP1	2.03	0.74
39:2h:51:VAL:HG11	39:2h:60:ARG:HH12	1.50	0.74
8:1I:40:THR:O	8:1I:44:LEU:HB2	1.86	0.74
32:1a:1530:G:OP1	61:1a:1906:HOH:O	2.04	0.74
32:2a:9:G:H2'	32:2a:10:A:C8	2.22	0.74
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.69	0.74
43:2l:117:ARG:HB3	43:2l:122:THR:HB	1.68	0.74
44:2m:80:ARG:HH22	50:2s:69:HIS:HE1	1.34	0.74
2:1B:21:G:N7	61:1B:3702:HOH:O	2.19	0.74
18:1W:4:LYS:HD3	18:1W:6:ILE:HD11	1.67	0.74
33:1b:42:ILE:HD12	33:1b:203:GLY:HA2	1.68	0.74
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.68	0.74
1:1A:279:C:H42	1:1A:361:G:H1	1.36	0.74
32:1a:1348:U:H4'	40:1i:120:ARG:HD2	1.70	0.74
1:2A:2042:A:OP1	61:2A:3918:HOH:O	2.05	0.74
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.51	0.74
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.23	0.74
48:1q:57:VAL:HG12	48:1q:76:LEU:HA	1.70	0.74
1:2A:1021:A:H62	1:2A:1141:U:H3	1.34	0.74
8:2I:72:LEU:HD11	8:2I:107:VAL:HG11	1.70	0.74
34:2c:179:ARG:NH1	34:2c:206:GLU:OE1	2.20	0.74
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.50	0.74
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.68	0.74
11:2P:126:VAL:HG12	11:2P:148:LEU:HD22	1.67	0.74
32:2a:1147:C:O2	40:2i:16:ARG:NH1	2.21	0.74
33:2b:98:LEU:HB2	33:2b:101:MET:HE3	1.70	0.74
32:2a:662:G:H2'	32:2a:663:A:C8	2.23	0.74
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.70	0.74
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.68	0.74
1:2A:2677:G:N3	61:2A:3952:HOH:O	2.21	0.74
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.69	0.74
1:1A:1332:G:OP1	61:1A:4216:HOH:O	2.05	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2579:C:OP1	61:2A:3917:HOH:O	2.05	0.74
1:2A:1604:C:OP1	61:2A:3919:HOH:O	2.06	0.73
1:1A:387:U:O4	61:1A:4217:HOH:O	2.05	0.73
1:1A:2337:G:OP1	61:1A:4221:HOH:O	2.06	0.73
26:14:56:VAL:HB	26:14:60:GLN:HG3	1.70	0.73
1:2A:852:G:H2'	1:2A:853:G:H8	1.53	0.73
32:2a:662:G:O2'	32:2a:836:G:OP1	2.05	0.73
44:2m:45:VAL:HA	44:2m:48:LEU:HD12	1.68	0.73
1:1A:1014:U:OP2	61:1A:4218:HOH:O	2.06	0.73
61:1A:4209:HOH:O	6:1G:45:GLU:OE2	2.05	0.73
12:1Q:37:LEU:HD21	12:1Q:130:LYS:HE2	1.71	0.73
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.22	0.73
18:2W:4:LYS:HD3	18:2W:6:ILE:HD11	1.69	0.73
1:1A:1053:C:H42	1:1A:1106:G:H1	1.35	0.73
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.20	0.73
1:1A:2136:C:N3	1:1A:2155:G:N2	2.36	0.73
1:2A:1253:A:OP1	61:2A:3920:HOH:O	2.06	0.73
46:2o:87:ILE:HG22	46:2o:88:ARG:H	1.54	0.73
1:1A:847:U:OP2	61:1A:4220:HOH:O	2.06	0.73
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.21	0.73
36:2e:100:VAL:O	36:2e:107:ARG:NH1	2.17	0.73
1:1A:2447:G:OP2	61:1A:4219:HOH:O	2.06	0.73
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.17	0.73
7:2H:18:GLU:OE2	7:2H:27:LYS:NZ	2.21	0.73
44:2m:84:ILE:HG22	50:2s:74:PHE:HE1	1.53	0.73
1:2A:2143:C:N4	1:2A:2148:G:H1	1.87	0.73
1:1A:2136:C:N4	1:1A:2155:G:N1	2.36	0.73
46:1o:82:ILE:HD12	46:1o:88:ARG:HG3	1.70	0.73
5:2F:116:ASP:OD2	11:2P:1:MET:N	2.22	0.73
28:16:13:CYS:SG	28:16:47:THR:HG21	2.29	0.72
32:1a:78:G:O6	32:1a:92:C:N4	2.21	0.72
6:1G:21:ARG:O	6:1G:21:ARG:NH1	2.22	0.72
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.07	0.72
34:2c:52:LEU:HD12	34:2c:53:ALA:H	1.55	0.72
35:2d:150:GLU:H	35:2d:150:GLU:CD	1.93	0.72
1:1A:123:G:OP2	61:1A:4222:HOH:O	2.07	0.72
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.25	0.72
40:1i:21:PRO:HA	40:1i:59:PHE:HA	1.71	0.72
32:1a:1337:G:N7	61:1a:1925:HOH:O	2.22	0.72
32:2a:157:G:H1	32:2a:164:U:H3	1.35	0.72
1:2A:568:U:O4	61:2A:3916:HOH:O	2.04	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2137:C:N4	1:2A:2154:G:H1	1.88	0.72
7:2H:33:LEU:HD21	7:2H:136:ILE:HG13	1.72	0.72
32:2a:984:C:H2'	32:2a:985:C:H6	1.53	0.72
33:2b:92:TYR:N	33:2b:151:GLY:O	2.21	0.72
15:1T:24:PRO:HA	15:1T:49:VAL:HG22	1.72	0.72
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.54	0.72
32:2a:473:G:H2'	32:2a:474:G:H8	1.54	0.72
1:2A:1607:C:N4	1:2A:1622:G:OP2	2.21	0.72
32:2a:1090:U:N3	32:2a:1095:U:O4	2.19	0.72
36:2e:8:GLU:HB3	36:2e:34:VAL:HG12	1.71	0.72
54:2y:18:G:N2	54:2y:55:PSU:HN3	1.88	0.72
36:1e:41:VAL:HG23	36:1e:67:VAL:HG13	1.72	0.72
37:2f:100:ASN:HD21	49:2r:23:LYS:HE3	1.54	0.72
33:1b:24:TRP:HZ3	33:1b:29:ALA:HB2	1.54	0.72
2:2B:14:U:OP2	2:2B:70:C:O2'	2.06	0.71
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.22	0.71
32:1a:1198:G:OP1	61:1a:1908:HOH:O	2.07	0.71
32:2a:9:G:H2'	32:2a:10:A:H8	1.53	0.71
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.70	0.71
1:1A:630:G:OP1	30:18:47:LYS:NZ	2.22	0.71
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.07	0.71
32:1a:973:G:OP1	41:1j:57:LYS:NZ	2.21	0.71
41:2j:47:PHE:N	41:2j:63:PHE:O	2.22	0.71
2:1B:58:A:OP2	61:1B:3701:HOH:O	2.08	0.71
32:1a:79:G:O6	32:1a:90:U:C2	2.43	0.71
1:2A:822:U:OP2	61:2A:3924:HOH:O	2.08	0.71
1:2A:2314:C:H2'	1:2A:2315:G:H8	1.55	0.71
11:2P:99:LEU:HD12	11:2P:102:ARG:HH21	1.55	0.71
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.54	0.71
2:1B:103:G:H21	21:1Z:73:GLN:HE22	1.38	0.71
32:1a:36:C:OP1	43:1l:123:LYS:NZ	2.22	0.71
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.24	0.71
1:2A:1670:C:OP1	61:2A:3922:HOH:O	2.08	0.71
1:2A:2431:U:OP1	61:2A:3921:HOH:O	2.08	0.71
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.23	0.71
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.23	0.71
32:2a:148:G:H2'	32:2a:149:A:C8	2.26	0.71
1:1A:1647:G:OP1	61:1A:4224:HOH:O	2.08	0.71
1:1A:887:A:H2	1:1A:889:C:H3'	1.54	0.71
50:2s:17:GLU:HA	50:2s:20:LEU:HG	1.73	0.71
1:1A:2350:C:OP2	61:1A:4223:HOH:O	2.07	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:324:G:N7	61:1a:1927:HOH:O	2.24	0.70
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	1.71	0.70
1:2A:2135:A:N1	1:2A:2156:G:O2'	2.23	0.70
41:2j:38:ILE:HG13	41:2j:71:LEU:HB3	1.72	0.70
1:1A:1041:C:H42	1:1A:1114:G:H1	1.39	0.70
1:1A:1271:G:OP2	61:1A:4224:HOH:O	2.09	0.70
1:2A:2218:U:O2	23:21:52:ARG:NH1	2.23	0.70
1:2A:2318:G:H21	14:2S:3:ARG:HD3	1.57	0.70
14:2S:33:LYS:HB3	14:2S:34:HIS:CD2	2.26	0.70
32:2a:1125:U:H6	32:2a:1126:U:HO2'	1.39	0.70
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.73	0.70
12:1Q:10:ARG:HH11	12:1Q:11:LYS:HE2	1.57	0.70
54:1y:8:4SU:H4'	54:1y:48:C:H4'	1.72	0.70
43:2l:86:ARG:NH1	61:2l:301:HOH:O	2.24	0.70
32:2a:53:A:OP2	61:2a:3306:HOH:O	2.09	0.70
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.74	0.70
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.72	0.70
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.25	0.70
32:1a:1355:G:OP1	61:1a:1909:HOH:O	2.08	0.70
1:2A:938:G:OP2	30:28:52:LYS:NZ	2.24	0.70
1:2A:1973:G:OP1	61:2A:3923:HOH:O	2.08	0.70
32:2a:664:G:H22	32:2a:741:G:H1	1.39	0.70
32:2a:1330:U:H4'	44:2m:23:TYR:CZ	2.27	0.70
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.72	0.70
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.72	0.70
54:2y:34:G:H2'	54:2y:35:A:C8	2.27	0.70
32:1a:184:G:H2'	32:1a:185:A:H8	1.56	0.70
1:1A:1779:U:OP2	61:1A:4226:HOH:O	2.10	0.70
20:2Y:28:LYS:NZ	20:2Y:40:GLU:OE2	2.24	0.70
21:2Z:47:VAL:O	21:2Z:50:GLN:NE2	2.24	0.70
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.91	0.70
48:2q:81:ARG:HB3	48:2q:84:LEU:HD12	1.73	0.70
32:1a:574:A:OP2	61:1a:1911:HOH:O	2.10	0.70
34:1c:19:GLU:O	34:1c:40:ARG:NH2	2.25	0.70
2:2B:20:C:N4	2:2B:63:G:O6	2.19	0.70
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.23	0.69
1:2A:1011:G:OP2	16:2U:66:ASN:ND2	2.25	0.69
6:2G:69:ALA:HB3	6:2G:91:ARG:HH21	1.55	0.69
32:2a:1216:G:H5''	45:2n:5:ALA:HB2	1.73	0.69
54:2y:18:G:N2	54:2y:55:PSU:N3	2.34	0.69
1:2A:9:U:OP1	9:2N:115:ARG:NH2	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:752:A:H3'	29:27:1:MET:HE1	1.72	0.69
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.73	0.69
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.25	0.69
1:2A:2785:C:OP1	4:2E:41:LYS:NZ	2.21	0.69
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.27	0.69
34:2c:182:ILE:HG22	34:2c:203:PHE:HA	1.73	0.69
32:2a:266:G:H5''	32:2a:268:C:H41	1.58	0.69
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.24	0.69
54:1w:9:A:O2'	54:1w:10:G:N7	2.25	0.69
54:1w:26:A:N6	54:1w:44:G:H1	1.89	0.69
1:2A:1271:G:OP2	61:2A:3909:HOH:O	2.09	0.69
14:2S:33:LYS:HB3	14:2S:34:HIS:HD2	1.57	0.69
1:1A:1062:G:H1	1:1A:1077:A:H61	1.38	0.69
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.24	0.69
1:1A:1811:G:N7	61:1A:4257:HOH:O	2.25	0.69
32:1a:660:G:N7	61:1a:1930:HOH:O	2.26	0.69
9:2N:67:LEU:HB3	9:2N:88:GLU:HG3	1.75	0.69
32:2a:408:A:N7	61:2a:3325:HOH:O	2.24	0.69
1:2A:1434:A:H61	1:2A:1558:A:H62	1.40	0.69
1:2A:1493:C:N4	1:2A:2206:G:O2'	2.26	0.69
1:2A:2118:U:OP1	1:2A:2148:G:H4'	1.93	0.69
1:2A:2143:C:N3	1:2A:2148:G:N2	2.37	0.69
32:2a:504:C:OP1	61:2a:3307:HOH:O	2.09	0.69
1:1A:2821:A:OP2	61:1R:301:HOH:O	2.10	0.69
32:1a:79:G:C6	32:1a:90:U:O2	2.45	0.69
1:2A:1851:U:OP1	61:2A:3925:HOH:O	2.09	0.69
1:1A:1418:G:OP2	61:1A:4225:HOH:O	2.10	0.69
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.07	0.69
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.28	0.69
1:2A:2142:C:N4	1:2A:2148:G:O6	2.26	0.69
5:2F:137:LYS:HA	5:2F:140:LEU:HD12	1.74	0.69
4:1E:29:GLY:HA3	61:1E:402:HOH:O	1.93	0.68
32:1a:869:G:OP2	61:1a:1910:HOH:O	2.09	0.68
1:2A:1568:G:N7	61:2A:3965:HOH:O	2.25	0.68
32:2a:770:C:OP1	61:2a:3310:HOH:O	2.11	0.68
1:1A:2154:G:C2	1:1A:2155:G:H1'	2.28	0.68
1:2A:1183:G:H5''	25:23:30:ARG:NH2	2.09	0.68
1:2A:2524:G:N7	61:2A:3970:HOH:O	2.26	0.68
32:2a:662:G:H2'	32:2a:663:A:H8	1.55	0.68
4:2E:14:ILE:HG13	4:2E:21:VAL:HG13	1.75	0.68
21:2Z:121:HIS:N	21:2Z:171:ILE:O	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.26	0.68
32:1a:1196:U:H3	34:1c:162:GLN:HE22	1.40	0.68
1:2A:332:A:O2'	1:2A:334:C:OP2	2.11	0.68
1:2A:1812:A:OP2	61:2A:3926:HOH:O	2.11	0.68
1:2A:2238:G:H5''	61:2A:4102:HOH:O	1.93	0.68
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.23	0.68
9:1N:67:LEU:O	9:1N:88:GLU:HG3	1.94	0.68
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.25	0.68
21:2Z:39:VAL:HG21	21:2Z:44:PHE:HD1	1.58	0.68
32:2a:1271:G:N2	32:2a:1272:G:N7	2.42	0.68
1:1A:1452:A:OP2	61:1A:4232:HOH:O	2.12	0.68
36:1e:142:LEU:O	36:1e:143:ARG:NH1	2.23	0.68
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.41	0.68
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.75	0.68
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.74	0.68
24:22:38:GLN:NE2	24:22:43:GLN:O	2.26	0.68
1:2A:2448:A:OP1	61:2A:3910:HOH:O	2.12	0.68
33:2b:48:MET:HA	33:2b:51:LEU:HB2	1.75	0.68
1:1A:762:U:OP1	61:1A:4227:HOH:O	2.10	0.68
26:24:44:THR:O	26:24:46:GLN:N	2.25	0.68
51:2t:50:GLU:O	51:2t:100:ILE:HD11	1.94	0.68
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.09	0.68
21:1Z:151:HIS:HA	21:1Z:171:ILE:HG23	1.76	0.68
42:1k:34:ASP:HB3	42:1k:40:ILE:HD11	1.76	0.68
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.74	0.68
32:2a:1030(A):G:N2	32:2a:1030(D):A:OP2	2.26	0.68
1:1A:2409:G:H1'	61:1A:4332:HOH:O	1.94	0.67
27:15:40:LYS:NZ	27:15:44:THR:O	2.27	0.67
54:1y:56:C:H2'	54:1y:57:G:O4'	1.94	0.67
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.26	0.67
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.29	0.67
40:2i:9:ARG:HG2	40:2i:14:VAL:HG12	1.77	0.67
1:1A:2428:G:OP1	61:1A:4205:HOH:O	2.12	0.67
11:1P:29:LYS:HG3	11:1P:30:THR:H	1.58	0.67
40:1i:110:GLU:OE2	40:1i:113:LYS:NZ	2.25	0.67
32:2a:117:G:OP2	61:2a:3309:HOH:O	2.11	0.67
1:1A:2136:C:N3	1:1A:2155:G:C2	2.62	0.67
1:1A:2550:G:OP1	61:1A:4204:HOH:O	2.11	0.67
7:1H:86:GLU:OE2	7:1H:132:ARG:NH2	2.26	0.67
1:2A:1648:C:OP1	61:2A:3909:HOH:O	2.12	0.67
22:10:9:SER:O	61:10:201:HOH:O	2.12	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1019:U:H2'	1:2A:1020:A:H8	1.60	0.67
32:2a:434:U:H2'	32:2a:435:C:C6	2.28	0.67
32:2a:533:A:OP1	61:2a:3308:HOH:O	2.10	0.67
1:1A:731:C:OP1	61:1A:4231:HOH:O	2.12	0.67
1:1A:1082:U:N3	1:1A:1086:A:N6	2.08	0.67
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.59	0.67
32:1a:486:U:H2'	32:1a:487:A:H8	1.59	0.67
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.30	0.67
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	1.77	0.67
32:1a:148:G:H2'	32:1a:149:A:H8	1.60	0.67
6:2G:38:VAL:HA	6:2G:93:THR:HA	1.75	0.67
32:2a:1508:G:O6	32:2a:1527:C:N4	2.17	0.67
40:2i:4:TYR:O	40:2i:19:LEU:N	2.28	0.67
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.59	0.67
1:1A:2602:A:OP1	61:1A:4229:HOH:O	2.12	0.67
32:1a:1029:C:H41	32:1a:1030(A):G:H21	1.41	0.67
32:2a:1316:G:H22	32:2a:1319:A:H5'	1.59	0.67
35:2d:15:GLU:OE2	35:2d:66:ARG:NH1	2.28	0.67
1:1A:880:G:H2'	1:1A:881:G:H8	1.59	0.67
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.77	0.67
1:2A:625:G:O6	11:2P:107:LYS:NZ	2.27	0.67
1:2A:888:C:OP1	44:2m:93:ARG:NH1	2.28	0.67
12:2Q:35:VAL:HG22	12:2Q:102:VAL:HG22	1.77	0.67
43:2l:69:TYR:HE2	43:2l:71:PRO:HA	1.59	0.67
1:1A:1077:A:H2'	1:1A:1078:U:H4'	1.77	0.67
1:1A:2168:G:N1	1:1A:2171:A:N7	2.43	0.67
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.59	0.67
26:24:16:CYS:SG	26:24:17:GLY:N	2.68	0.67
32:2a:1053:G:H4'	32:2a:1054:C:H3'	1.75	0.67
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.75	0.67
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.28	0.67
34:1c:179:ARG:HD2	34:1c:206:GLU:HB3	1.77	0.67
49:1r:52:PRO:HB2	49:1r:54:ARG:HG2	1.76	0.67
1:2A:2314:C:H5'	6:2G:38:VAL:HG21	1.75	0.67
1:2A:2879:C:OP2	61:2A:3927:HOH:O	2.12	0.67
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	1.95	0.67
32:2a:64:G:H4'	32:2a:65:U:H3'	1.77	0.67
32:2a:222:U:H2'	32:2a:223:U:C6	2.29	0.67
32:2a:903:G:OP1	61:2a:3311:HOH:O	2.12	0.67
1:1A:1045:A:OP1	1:1A:1045:A:H4'	1.93	0.66
54:1y:13:C:H2'	54:1y:14:A:H5''	1.75	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:821:A:N1	61:2A:3980:HOH:O	2.28	0.66
11:2P:95:VAL:HG12	11:2P:100:LEU:HD21	1.78	0.66
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.29	0.66
34:2c:100:ALA:O	34:2c:102:ASN:ND2	2.28	0.66
35:2d:153:ARG:HG2	35:2d:181:MET:HE2	1.76	0.66
34:1c:35:GLU:CD	34:1c:59:ARG:HH22	2.03	0.66
1:2A:973:A:OP2	61:2A:3916:HOH:O	2.12	0.66
26:24:46:GLN:C	26:24:48:ARG:H	2.03	0.66
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.60	0.66
32:1a:1125:U:H4'	41:1j:5:ARG:HH22	1.61	0.66
1:2A:1803:A:O2'	3:2D:259:THR:HG21	1.95	0.66
32:2a:1315:U:O2'	32:2a:1360:A:N3	2.23	0.66
1:1A:363(A):A:H2'	1:1A:363(B):G:C8	2.30	0.66
35:1d:98:GLU:HG3	35:1d:189:PRO:HG2	1.77	0.66
1:2A:81:G:N7	61:2A:3976:HOH:O	2.28	0.66
1:2A:2022:U:O2'	1:2A:2617:C:H5'	1.95	0.66
1:1A:272(G):C:H42	1:1A:363(C):G:H1	1.43	0.66
1:1A:2277:G:OP2	22:10:10:THR:HG21	1.94	0.66
1:2A:2817:G:OP1	13:2R:99:LYS:NZ	2.27	0.66
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.61	0.66
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.25	0.66
1:1A:1580:A:OP2	1:1A:1580:A:H8	1.79	0.66
1:1A:2126:A:N3	1:1A:2127:G:H1'	2.10	0.66
13:1R:50:HIS:ND1	61:1R:302:HOH:O	2.29	0.66
32:1a:1036:G:H5''	32:1a:1037:C:C5	2.30	0.66
32:2a:48:C:OP1	61:2a:3312:HOH:O	2.13	0.66
32:2a:1119:C:H2'	32:2a:1120:G:H8	1.60	0.66
32:2a:1190:G:H5'	34:2c:176:HIS:HE1	1.60	0.66
33:2b:9:GLU:O	33:2b:11:LEU:N	2.29	0.66
38:2g:69:VAL:HG21	38:2g:104:LEU:HD21	1.78	0.66
15:1T:112:ARG:HG3	15:1T:115:ARG:NH2	2.11	0.66
21:1Z:153:SER:HA	21:1Z:167:PRO:HB3	1.77	0.66
1:2A:113:G:OP1	61:2A:3930:HOH:O	2.14	0.66
1:2A:2342:C:O2'	1:2A:2374:C:OP1	2.13	0.66
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.13	0.66
48:2q:7:THR:HG23	48:2q:58:GLU:HG3	1.78	0.66
4:1E:110:GLY:O	61:1R:301:HOH:O	2.13	0.66
32:1a:682:G:O6	61:1a:1912:HOH:O	2.11	0.66
1:2A:667:U:O2	30:28:2:PRO:HD2	1.96	0.66
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.10	0.66
39:2h:51:VAL:HG11	39:2h:60:ARG:NH1	2.11	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:51:VAL:HG21	39:2h:60:ARG:HB2	1.78	0.66
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.08	0.66
32:1a:864:A:OP1	61:1a:1915:HOH:O	2.14	0.66
32:1a:953:G:H5'	32:1a:965:A:H61	1.61	0.66
1:2A:900:A:H2'	1:2A:901:A:H8	1.61	0.66
1:2A:994:C:OP2	16:2U:54:LYS:NZ	2.28	0.66
1:2A:2751:G:H5'	7:2H:2:SER:HA	1.77	0.66
33:2b:118:LEU:HD12	33:2b:122:PHE:HB2	1.78	0.66
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.78	0.65
44:1m:67:GLU:HG3	44:1m:71:ARG:NH2	2.11	0.65
1:2A:1352:U:OP2	61:2A:3929:HOH:O	2.14	0.65
1:2A:2138:C:N3	1:2A:2153:G:N2	2.39	0.65
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.31	0.65
1:1A:9:U:H3	1:1A:2629:A:H2	1.44	0.65
1:2A:271(K):U:H4'	1:2A:271(L):U:OP1	1.95	0.65
6:2G:15:VAL:HB	6:2G:175:LEU:HB3	1.78	0.65
32:2a:1051:C:H2'	32:2a:1052:U:H6	1.61	0.65
32:2a:1373:G:H5''	38:2g:36:LYS:HE3	1.78	0.65
35:1d:175:SER:HB3	35:1d:186:LEU:HD21	1.79	0.65
40:1i:20:ARG:O	40:1i:60:ASP:N	2.23	0.65
32:2a:21:G:O2'	32:2a:914:A:N6	2.28	0.65
36:2e:102:ALA:HB1	36:2e:106:PRO:HG2	1.77	0.65
1:1A:1800:C:OP1	3:1D:260:ARG:NH2	2.29	0.65
32:1a:865:A:H2	32:1a:918:A:H4'	1.61	0.65
25:23:13:ILE:O	61:23:201:HOH:O	2.15	0.65
33:2b:188:ALA:HB1	33:2b:192:SER:HB2	1.78	0.65
1:1A:918:A:N3	2:1B:80:U:O2'	2.30	0.65
1:1A:2228:G:OP1	3:1D:261:LYS:NZ	2.29	0.65
32:2a:1030(A):G:N2	32:2a:1030(C):G:H3'	2.12	0.65
32:2a:1239:A:H62	32:2a:1299:A:N6	1.94	0.65
45:2n:9:LYS:HG2	45:2n:12:ARG:HH12	1.61	0.65
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.78	0.65
32:1a:1353:G:OP1	52:1u:10:ARG:NH1	2.30	0.65
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.78	0.65
1:2A:500:G:N1	1:2A:503:A:OP2	2.29	0.65
21:2Z:104:PHE:HA	21:2Z:139:VAL:HG23	1.79	0.65
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.31	0.65
3:1D:2:ALA:N	3:1D:200:ASP:OD2	2.30	0.65
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.26	0.65
14:2S:35:ILE:HG13	14:2S:97:ARG:HH21	1.61	0.65
26:24:60:GLN:O	26:24:62:ARG:NH1	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:297:G:N2	32:2a:300:A:OP2	2.30	0.65
32:2a:441:A:H3'	32:2a:442:C:C6	2.31	0.65
32:1a:1302:U:OP2	44:1m:21:TYR:OH	2.12	0.65
32:1a:1356:G:H2'	32:1a:1357:A:H8	1.61	0.65
1:2A:2782:G:OP2	61:2A:3928:HOH:O	2.14	0.65
4:2E:1:MET:HE3	4:2E:199:ARG:HD2	1.78	0.65
32:2a:1029:C:C4	32:2a:1032:G:N1	2.65	0.65
32:2a:1194:U:H2'	32:2a:1195:C:H6	1.60	0.65
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.78	0.65
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.77	0.65
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.79	0.65
54:1y:26:A:H61	54:1y:44:G:H1	1.45	0.65
36:1e:78:HIS:HD2	39:1h:104:ARG:HD2	1.61	0.65
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.32	0.65
31:29:29:ASN:HD22	31:29:32:HIS:CE1	2.15	0.65
33:2b:178:ARG:HH22	39:2h:68:ARG:HH22	1.45	0.65
1:2A:2125:G:N1	1:2A:2172:U:OP1	2.29	0.64
1:2A:2611:U:H6	1:2A:2611:U:H5'	1.62	0.64
5:2F:168:ARG:NH2	61:2F:401:HOH:O	2.29	0.64
36:2e:42:GLY:HA2	36:2e:65:ASN:O	1.98	0.64
33:1b:118:LEU:HB3	33:1b:142:LEU:HD12	1.79	0.64
1:2A:1024:G:OP2	61:2A:3907:HOH:O	2.15	0.64
1:2A:1959:G:N7	61:2A:3982:HOH:O	2.29	0.64
26:24:53:GLU:HG2	26:24:55:ARG:H	1.62	0.64
32:2a:17:U:H2'	32:2a:18:C:C6	2.32	0.64
40:2i:97:LYS:HA	40:2i:102:LEU:HG	1.79	0.64
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.61	0.64
32:1a:405:U:OP2	35:1d:3:ARG:NH1	2.30	0.64
5:2F:18:ARG:NH1	5:2F:127:GLU:OE2	2.30	0.64
32:2a:565:U:OP2	32:2a:566:G:O2'	2.14	0.64
32:2a:1051:C:H2'	32:2a:1052:U:C6	2.32	0.64
1:1A:438:G:OP2	61:1A:4233:HOH:O	2.14	0.64
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.31	0.64
33:1b:178:ARG:NH1	33:1b:196:LEU:O	2.30	0.64
1:2A:1278:A:OP1	13:2R:36:THR:HG23	1.98	0.64
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	1.80	0.64
34:2c:91:LEU:HD11	34:2c:101:LEU:HD12	1.78	0.64
44:2m:13:LYS:HA	44:2m:44:ARG:NH1	2.12	0.64
49:2r:31:LEU:HD23	49:2r:31:LEU:H	1.62	0.64
1:1A:882:G:H4'	54:1w:19:G:O6	1.97	0.64
32:1a:184:G:H2'	32:1a:185:A:C8	2.33	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:277:C:P	48:1q:68:ARG:HH12	2.20	0.64
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.78	0.64
2:2B:46:A:H2'	2:2B:47:C:C6	2.33	0.64
2:2B:54:G:H21	6:2G:29:TRP:HE1	1.44	0.64
34:2c:123:GLN:HA	34:2c:126:ARG:HD2	1.79	0.64
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.80	0.64
34:1c:87:LEU:O	34:1c:91:LEU:HB2	1.98	0.64
1:2A:827:U:OP1	61:2A:3904:HOH:O	2.15	0.64
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.80	0.64
32:2a:982:U:O2	32:2a:1222:G:N1	2.21	0.64
1:1A:952:G:OP1	12:1Q:16:ARG:NH2	2.31	0.64
33:1b:54:THR:HG23	33:1b:199:TYR:HB3	1.79	0.64
33:1b:122:PHE:HE2	33:1b:139:LYS:HB2	1.62	0.64
1:2A:1478:G:O2'	1:2A:1558:A:N1	2.30	0.64
2:2B:3:C:H2'	2:2B:4:C:C6	2.33	0.64
32:2a:954:G:H2'	32:2a:955:U:C6	2.33	0.64
34:2c:47:LEU:HG	34:2c:50:ALA:HB3	1.80	0.64
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.77	0.64
1:2A:2292:C:OP1	14:2S:17:ARG:NH2	2.30	0.64
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	1.78	0.64
21:2Z:28:MET:HE1	21:2Z:61:LEU:HD21	1.80	0.64
32:2a:548:G:OP1	61:2a:3314:HOH:O	2.15	0.64
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.62	0.64
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.66	0.64
34:2c:6:HIS:HB3	45:2n:49:HIS:ND1	2.12	0.64
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.31	0.64
1:1A:2124:G:H1	1:1A:2174:C:H42	1.44	0.64
1:2A:987:G:O2'	1:2A:1000:A:N3	2.29	0.64
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.63	0.64
1:2A:2478:A:OP2	31:29:2:LYS:NZ	2.31	0.64
32:2a:176:C:H2'	32:2a:177:C:H6	1.62	0.64
34:2c:20:SER:OG	34:2c:36:ASP:OD2	2.14	0.64
44:2m:3:ARG:HB3	44:2m:9:ILE:H	1.62	0.64
1:1A:2791:C:H2'	1:1A:2792:G:H8	1.63	0.64
8:1I:31:LEU:HD21	8:1I:38:LEU:HD22	1.80	0.64
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.33	0.64
32:2a:187:C:O2'	51:2t:89:ARG:NH2	2.31	0.64
32:2a:572:A:OP1	61:2a:3313:HOH:O	2.15	0.64
4:2E:5:LEU:HD11	4:2E:79:ARG:HB2	1.80	0.63
8:2I:29:TYR:HD2	8:2I:30:LEU:HD23	1.62	0.63
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:951:G:N7	44:2m:102:ARG:NH2	2.45	0.63
40:2i:17:VAL:HG11	40:2i:81:ILE:HG13	1.79	0.63
1:1A:1187:G:H5'	17:1V:81:TYR:CE1	2.32	0.63
21:1Z:132:ASN:OD1	21:1Z:132:ASN:N	2.31	0.63
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.80	0.63
54:1w:5:G:H2'	54:1w:6:G:H8	1.63	0.63
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.79	0.63
33:2b:97:TRP:HE1	33:2b:172:ILE:HG22	1.62	0.63
34:2c:88:ARG:HA	34:2c:91:LEU:HG	1.81	0.63
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	1.97	0.63
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.13	0.63
32:2a:864:A:H5'	36:2e:86:ALA:HB2	1.80	0.63
1:1A:1058:G:N1	1:1A:1080:C:N4	2.27	0.63
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.80	0.63
1:2A:307:G:N1	1:2A:310:A:OP2	2.30	0.63
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.31	0.63
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.79	0.63
32:2a:1271:G:C2	32:2a:1272:G:N7	2.66	0.63
40:2i:28:VAL:HG13	40:2i:63:ILE:HB	1.81	0.63
1:1A:84:A:H5'	20:1Y:8:LYS:HG2	1.81	0.63
39:1h:7:ALA:HA	39:1h:10:LEU:HD12	1.80	0.63
54:1w:18:G:O2'	54:1w:57:G:N2	2.24	0.63
1:2A:2394:C:N3	54:2y:76:A:O2'	2.29	0.63
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.33	0.63
4:1E:77:ILE:HD13	4:1E:195:LEU:HD13	1.80	0.63
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.81	0.63
11:1P:29:LYS:HG3	11:1P:30:THR:N	2.13	0.63
2:2B:75:G:N2	21:2Z:87:ASP:OD1	2.30	0.63
32:2a:727:G:OP1	32:2a:742:G:N2	2.27	0.63
32:2a:1401:G:OP1	53:2v:18:G:O2'	2.17	0.63
34:2c:32:LEU:HD23	34:2c:59:ARG:HD3	1.81	0.63
47:2p:15:PRO:O	47:2p:16:HIS:ND1	2.31	0.63
48:2q:40:LYS:HD3	48:2q:42:TYR:CZ	2.34	0.63
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.32	0.63
32:1a:625:G:H2'	32:1a:626:U:H6	1.64	0.63
32:1a:1499:A:OP2	61:1a:1903:HOH:O	2.15	0.63
1:2A:1569:A:H5'	3:2D:61:LEU:HD11	1.79	0.63
1:2A:1582:C:H2'	1:2A:1583:A:H8	1.64	0.63
17:2V:40:LEU:HB2	17:2V:46:VAL:HB	1.80	0.63
32:2a:278:G:OP2	48:2q:41:LYS:NZ	2.23	0.63
32:2a:1291:G:H4'	40:2i:39:GLY:HA3	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:9:GLY:N	45:2n:49:HIS:O	2.32	0.63
1:1A:278:A:H2'	1:1A:279:C:C6	2.34	0.63
1:1A:878:A:N6	1:1A:899:A:O2'	2.31	0.63
35:1d:15:GLU:OE2	35:1d:59:ARG:NH1	2.32	0.63
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.82	0.63
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.23	0.63
9:2N:15:LEU:HD23	9:2N:137:LYS:HG2	1.81	0.63
32:2a:1268:A:H2'	32:2a:1269:A:C8	2.34	0.63
33:1b:44:LEU:HA	33:1b:47:THR:OG1	1.98	0.62
36:1e:33:VAL:HG21	36:1e:109:ILE:HA	1.80	0.62
14:2S:35:ILE:HD11	14:2S:97:ARG:HE	1.64	0.62
32:2a:815:A:N7	32:2a:1509:C:O2'	2.30	0.62
32:1a:165:C:H2'	32:1a:166:G:C8	2.27	0.62
32:1a:1239:A:H62	32:1a:1299:A:N6	1.97	0.62
33:1b:154:LEU:HD12	33:1b:154:LEU:H	1.64	0.62
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.33	0.62
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.32	0.62
51:1t:57:ARG:HH22	51:1t:100:ILE:HD12	1.64	0.62
13:2R:32:GLY:HA2	13:2R:116:LEU:HD12	1.81	0.62
32:2a:646:U:H2'	32:2a:647:C:C6	2.33	0.62
32:2a:1457:G:OP1	51:2t:39:LYS:NZ	2.27	0.62
33:2b:97:TRP:CH2	33:2b:101:MET:HB2	2.33	0.62
33:2b:149:LEU:HD22	33:2b:152:PHE:CD2	2.34	0.62
40:2i:3:GLN:HE21	40:2i:20:ARG:NE	1.95	0.62
44:2m:94:ARG:NH2	50:2s:81:ARG:HA	2.13	0.62
1:1A:226:G:H21	1:1A:228:A:H62	1.46	0.62
32:1a:1028:C:H2'	32:1a:1029:C:O4'	1.99	0.62
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.80	0.62
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.79	0.62
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.33	0.62
32:2a:966:M2G:HM22	55:2x:34:C:H5'	1.82	0.62
44:2m:92:HIS:HA	44:2m:110:ARG:NH2	2.13	0.62
1:1A:898:C:N4	1:1A:899:A:H62	1.96	0.62
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.28	0.62
1:1A:1607:C:O2	61:1A:4230:HOH:O	2.12	0.62
15:1T:127:ALA:C	15:1T:129:ARG:H	2.08	0.62
33:1b:52:GLU:OE2	33:1b:56:ARG:NH2	2.32	0.62
1:2A:2099:U:H3	1:2A:2190:G:H1	1.46	0.62
11:2P:114:ILE:HG13	11:2P:125:VAL:HG11	1.79	0.62
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.33	0.62
33:2b:218:ALA:O	33:2b:222:ILE:HG23	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:28:VAL:HG22	40:2i:63:ILE:HD12	1.81	0.62
1:1A:2140:C:O2	1:1A:2151:G:N1	2.32	0.62
51:1t:33:ILE:O	51:1t:37:SER:OG	2.14	0.62
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.28	0.62
1:2A:805:G:OP1	61:2A:3933:HOH:O	2.16	0.62
1:2A:1693:U:O2'	3:2D:14:ARG:NH2	2.32	0.62
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.80	0.62
32:1a:1033:G:H2'	32:1a:1034:G:H8	1.65	0.62
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.47	0.62
1:2A:242:G:C8	30:28:5:LYS:HG2	2.34	0.62
48:2q:67:LYS:HA	48:2q:70:ARG:HH12	1.63	0.62
38:1g:27:ILE:HD11	38:1g:40:ALA:HA	1.81	0.62
1:2A:2320:A:H1'	1:2A:2321:G:C2	2.35	0.62
7:2H:3:ARG:HG2	7:2H:6:ARG:HB2	1.82	0.62
22:20:10:THR:HG22	22:20:12:ASN:HB2	1.81	0.62
54:2y:26:A:N1	54:2y:44:G:C6	2.68	0.62
23:11:4:VAL:N	23:11:46:LEU:HD11	2.15	0.62
3:2D:20:ASP:OD1	3:2D:20:ASP:N	2.27	0.62
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.80	0.62
33:2b:178:ARG:HH22	39:2h:68:ARG:HH12	1.47	0.62
40:2i:85:LEU:HB3	40:2i:92:TYR:HD2	1.65	0.62
16:1U:97:ASP:OD1	16:1U:101:ARG:NH1	2.32	0.62
32:1a:560:U:O2'	32:1a:561:U:OP2	2.16	0.62
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.35	0.62
1:2A:854:G:H2'	1:2A:855:G:H8	1.65	0.62
12:1Q:32:TYR:OH	12:1Q:111:GLU:OE2	2.17	0.62
32:1a:412:A:H4'	32:1a:413:G:H5'	1.82	0.62
33:1b:84:GLU:O	33:1b:219:VAL:HG21	1.99	0.62
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.45	0.62
32:2a:56:U:H2'	32:2a:57:G:C8	2.35	0.62
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.34	0.62
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.80	0.62
42:2k:86:GLY:H	42:2k:112:THR:HG22	1.64	0.62
50:2s:53:ASN:HD21	50:2s:56:GLN:HB2	1.64	0.62
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.14	0.61
1:2A:900:A:O2'	1:2A:901:A:OP1	2.18	0.61
1:2A:1582:C:H2'	1:2A:1583:A:C8	2.35	0.61
19:2X:88:LYS:NZ	19:2X:90:GLU:OE1	2.33	0.61
32:2a:328:C:H4'	32:2a:329:A:H5'	1.81	0.61
32:2a:1122:U:N3	32:2a:1123:A:N7	2.48	0.61
44:2m:25:ILE:HG13	44:2m:66:LEU:HD21	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1023:U:OP2	61:1A:4211:HOH:O	2.16	0.61
1:1A:1096:A:N6	1:1A:1097:U:O2	2.32	0.61
1:1A:1991:U:H2'	1:1A:1992:G:H5''	1.82	0.61
2:1B:73:A:N1	21:1Z:34:ASN:ND2	2.47	0.61
41:1j:9:ARG:NH2	41:1j:97:GLU:OE2	2.33	0.61
1:2A:397:G:N7	61:2A:3990:HOH:O	2.31	0.61
1:2A:993:G:OP1	16:2U:50:ARG:NH2	2.33	0.61
2:2B:24:G:H4'	2:2B:25:A:C8	2.34	0.61
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.82	0.61
6:1G:79:ASN:OD1	6:1G:79:ASN:N	2.31	0.61
32:1a:1152:A:OP1	41:1j:68:HIS:ND1	2.33	0.61
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.83	0.61
32:2a:194:C:H2'	32:2a:195:A:H5''	1.82	0.61
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.35	0.61
35:2d:59:ARG:NH1	35:2d:59:ARG:HA	2.15	0.61
40:2i:18:PHE:HD2	40:2i:62:TYR:HD2	1.48	0.61
1:1A:271(K):U:O2	8:1I:50:ARG:NE	2.33	0.61
1:1A:1342:A:OP2	61:1A:4214:HOH:O	2.16	0.61
32:1a:456:C:H2'	32:1a:457:C:H6	1.63	0.61
4:2E:50:GLY:HA3	4:2E:75:VAL:HG21	1.83	0.61
32:2a:909:A:N3	32:2a:1413:A:O2'	2.27	0.61
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.31	0.61
45:2n:48:ALA:HB2	45:2n:53:LEU:HD12	1.83	0.61
54:2w:39:PSU:H2'	54:2w:40:C:H6	1.63	0.61
55:2x:40:C:H2'	55:2x:41:C:H6	1.66	0.61
7:1H:113:VAL:HG11	7:1H:151:ILE:HD13	1.82	0.61
24:12:41:ILE:HG13	24:12:43:GLN:HG3	1.82	0.61
1:2A:287:C:H2'	1:2A:288:C:H6	1.65	0.61
1:2A:2592:G:OP1	61:2A:3931:HOH:O	2.15	0.61
8:2I:48:GLU:HG3	8:2I:52:ARG:HH12	1.64	0.61
22:20:32:ARG:H	22:20:35:ASN:ND2	1.99	0.61
32:2a:671:G:H2'	32:2a:672:U:O4'	2.00	0.61
32:2a:735:C:H2'	32:2a:736:C:H6	1.63	0.61
33:2b:15:VAL:HG12	33:2b:209:ARG:HB3	1.81	0.61
33:2b:88:ALA:HB1	33:2b:222:ILE:HD11	1.83	0.61
35:2d:196:LEU:O	35:2d:198:VAL:N	2.31	0.61
38:2g:115:ARG:HH11	38:2g:118:VAL:HG21	1.65	0.61
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.35	0.61
38:2g:80:VAL:HB	38:2g:85:TYR:HE2	1.65	0.61
50:2s:53:ASN:OD1	50:2s:55:LYS:N	2.21	0.61
1:1A:2336:A:H61	22:10:43:THR:CG2	2.13	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.83	0.61
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.16	0.61
47:2p:58:TYR:O	47:2p:61:SER:OG	2.11	0.61
51:1t:36:LEU:HD12	51:1t:62:LEU:HD12	1.83	0.61
2:2B:31:C:H4'	6:2G:29:TRP:CZ2	2.34	0.61
23:21:64:ALA:HA	23:21:67:ILE:HG13	1.82	0.61
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.29	0.61
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.33	0.61
1:2A:882:G:H1	1:2A:894:C:H42	1.49	0.61
1:2A:925:C:H2'	1:2A:926:A:H8	1.63	0.61
1:2A:2166:G:O6	1:2A:2171:A:N6	2.34	0.61
32:2a:1292:U:H2'	32:2a:1293:G:H8	1.66	0.61
33:2b:178:ARG:NH2	39:2h:68:ARG:HH22	1.99	0.61
32:1a:60:A:H4'	32:1a:61:G:H5'	1.82	0.61
32:1a:486:U:H2'	32:1a:487:A:C8	2.36	0.61
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	1.83	0.61
54:1y:8:4SU:O2'	54:1y:21:A:N1	2.33	0.61
1:2A:2320:A:H1'	1:2A:2321:G:N2	2.16	0.61
32:2a:737:A:H2'	32:2a:738:C:H6	1.66	0.61
1:1A:1371:G:O6	61:1A:4234:HOH:O	2.16	0.60
32:1a:376:G:H4'	47:1p:5:ARG:HH21	1.66	0.60
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.36	0.60
1:2A:1242:A:N1	11:2P:2:LYS:NZ	2.49	0.60
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.65	0.60
11:2P:89:ALA:HA	11:2P:121:LYS:HD3	1.81	0.60
1:1A:2121:G:H1	1:1A:2177:C:H42	1.46	0.60
1:1A:2366:A:OP1	61:1A:4236:HOH:O	2.16	0.60
17:1V:38:LEU:HD23	17:1V:50:PRO:O	2.00	0.60
21:1Z:151:HIS:HB3	21:1Z:169:GLU:O	2.01	0.60
1:2A:34:C:O2'	1:2A:35:G:OP1	2.15	0.60
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.64	0.60
23:21:82:LEU:HA	23:21:85:LEU:HD13	1.83	0.60
27:25:40:LYS:NZ	27:25:44:THR:O	2.33	0.60
32:2a:1060:C:C5	34:2c:2:GLY:HA3	2.36	0.60
54:2y:26:A:N1	54:2y:44:G:O6	2.34	0.60
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.09	0.60
11:1P:98:GLU:O	11:1P:101:VAL:HG12	2.01	0.60
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.34	0.60
1:2A:2138:C:H2'	1:2A:2139:C:O4'	2.02	0.60
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.42	0.60
32:2a:588:G:OP2	61:2a:3315:HOH:O	2.17	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1144:G:H21	32:2a:1146:A:H62	1.49	0.60
34:2c:131:ARG:HE	34:2c:135:LYS:HZ1	1.48	0.60
1:1A:363:G:H2'	1:1A:363(A):A:H8	1.66	0.60
40:1i:53:VAL:O	40:1i:55:ALA:N	2.35	0.60
1:2A:307:G:H21	1:2A:330:A:H62	1.48	0.60
1:2A:832:G:H5'	11:2P:45:LEU:HD11	1.83	0.60
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.36	0.60
4:2E:79:ARG:HG2	4:2E:79:ARG:HH11	1.66	0.60
27:25:57:VAL:HG12	27:25:58:LEU:HD13	1.84	0.60
1:1A:1971:A:OP1	61:1A:4210:HOH:O	2.16	0.60
6:1G:77:ILE:HD12	6:1G:82:LEU:HD23	1.83	0.60
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.16	0.60
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.83	0.60
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.18	0.60
32:2a:523:A:H61	43:2l:92:OTD:CG	2.14	0.60
38:2g:72:ARG:HH22	38:2g:138:LYS:NZ	1.99	0.60
1:1A:1506:C:H2'	1:1A:1507:A:C8	2.35	0.60
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.35	0.60
4:1E:34:VAL:HG22	4:1E:48:GLN:HE21	1.65	0.60
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.84	0.60
36:2e:68:GLU:HG2	36:2e:70:PRO:HD3	1.83	0.60
36:2e:140:ARG:O	36:2e:143:ARG:NH1	2.31	0.60
5:1F:9:ILE:HG12	5:1F:123:LEU:HD23	1.83	0.60
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.66	0.60
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.19	0.60
1:2A:2151:G:H2'	1:2A:2152:G:C8	2.35	0.60
2:2B:43:C:O4'	6:2G:66:GLN:NE2	2.35	0.60
22:20:68:GLU:HB2	22:20:82:ARG:HH21	1.67	0.60
33:2b:109:SER:HA	33:2b:112:VAL:HG23	1.83	0.60
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.67	0.60
1:1A:2791:C:H2'	1:1A:2792:G:C8	2.36	0.60
32:1a:757:U:H2'	32:1a:758:G:O4'	2.01	0.60
32:1a:1033:G:C4	32:1a:1034:G:C8	2.90	0.60
37:1f:89:MET:HE1	49:1r:72:ARG:HB3	1.83	0.60
46:1o:41:GLU:OE2	46:1o:44:LYS:NZ	2.32	0.60
1:2A:801:G:O6	5:2F:53:THR:OG1	2.19	0.60
1:2A:1651:G:OP1	13:2R:40:LYS:NZ	2.35	0.60
5:2F:143:ALA:HB1	5:2F:148:LEU:HB2	1.83	0.60
8:2I:48:GLU:HG3	8:2I:52:ARG:NH1	2.17	0.60
32:2a:1002:G:C6	32:2a:1003:G:H8	2.20	0.60
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.36	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:528:A:O2'	1:1A:529:A:H5'	2.00	0.60
1:1A:752:A:H3'	29:17:1:MET:HE1	1.84	0.60
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.02	0.60
32:1a:17:U:H2'	32:1a:18:C:C6	2.37	0.60
32:1a:966:M2G:HM11	40:1i:127:LYS:HE2	1.83	0.60
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	1.82	0.60
1:2A:892:G:H3'	1:2A:893:C:H5''	1.83	0.60
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.66	0.60
25:23:6:VAL:HG13	25:23:56:VAL:HG22	1.82	0.60
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.35	0.60
32:2a:913:A:OP1	43:2l:46:LYS:NZ	2.35	0.60
32:2a:1272:G:N2	32:2a:1273:G:C8	2.69	0.60
1:1A:2661:G:H2'	1:1A:2662:A:C8	2.36	0.60
34:1c:139:GLN:O	34:1c:143:GLU:HG3	2.02	0.60
38:1g:27:ILE:HA	38:1g:30:ILE:HD12	1.83	0.60
1:2A:2837:G:N7	61:2A:3994:HOH:O	2.32	0.60
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.17	0.60
32:1a:56:U:H2'	32:1a:57:G:C8	2.36	0.59
33:1b:21:ARG:H	33:1b:39:ILE:HG13	1.67	0.59
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.31	0.59
1:2A:2131:G:C8	1:2A:2133:G:C2	2.90	0.59
32:2a:428:G:OP2	35:2d:10:ARG:NH1	2.35	0.59
47:2p:21:VAL:HG23	47:2p:33:ILE:HB	1.82	0.59
50:2s:19:VAL:O	50:2s:23:ASN:ND2	2.35	0.59
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.16	0.59
1:1A:2517:C:OP1	61:1A:4237:HOH:O	2.17	0.59
1:1A:2746:U:OP1	7:1H:85:LYS:NZ	2.35	0.59
32:1a:382:A:H2'	32:1a:383:A:H8	1.67	0.59
42:1k:15:ALA:HA	42:1k:76:GLY:O	2.02	0.59
50:1s:48:THR:HG22	50:1s:61:TYR:HD1	1.66	0.59
1:2A:881:G:C2	1:2A:882:G:H1'	2.36	0.59
1:2A:1653:G:O6	13:2R:11:ASN:ND2	2.35	0.59
2:2B:11:C:H3'	2:2B:12:C:C6	2.37	0.59
7:2H:6:ARG:HH11	7:2H:6:ARG:HG3	1.67	0.59
32:2a:1316:G:H5''	45:2n:17:LYS:HE2	1.84	0.59
33:2b:74:LYS:NZ	33:2b:206:ASP:OD1	2.35	0.59
50:2s:13:ASP:HA	50:2s:16:LEU:HB2	1.83	0.59
50:2s:32:LYS:HD2	50:2s:34:TRP:HZ3	1.67	0.59
1:1A:668:G:OP2	61:1A:4235:HOH:O	2.16	0.59
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.35	0.59
32:1a:662:G:H2'	32:1a:663:A:C8	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:131:ARG:HH11	34:1c:166:GLU:HG3	1.67	0.59
41:1j:64:GLU:HG2	45:1n:59:ALA:HB2	1.84	0.59
7:2H:11:VAL:HG21	7:2H:50:VAL:HG23	1.84	0.59
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.37	0.59
32:2a:1072:G:H2'	32:2a:1073:U:C6	2.38	0.59
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.31	0.59
1:1A:570:G:O6	61:1A:4203:HOH:O	2.15	0.59
3:1D:39:LYS:NZ	3:1D:57:GLY:O	2.35	0.59
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.37	0.59
26:24:34:GLU:CB	44:2m:57:ARG:HH21	2.15	0.59
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.67	0.59
32:2a:922:G:N3	32:2a:1398:A:H2	2.00	0.59
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.37	0.59
32:2a:1261:A:H5'	32:2a:1284:C:OP1	2.02	0.59
37:2f:6:VAL:HG13	37:2f:90:VAL:HG22	1.83	0.59
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.37	0.59
43:2l:70:ILE:HD13	43:2l:77:LEU:HD12	1.84	0.59
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.38	0.59
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.84	0.59
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.21	0.59
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.37	0.59
7:2H:41:MET:HE3	7:2H:64:LEU:HB2	1.84	0.59
33:2b:54:THR:HG23	33:2b:199:TYR:HB3	1.83	0.59
35:2d:165:MET:HE2	35:2d:168:ARG:CZ	2.33	0.59
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.38	0.59
37:2f:95:GLU:O	49:2r:32:ARG:NH1	2.35	0.59
40:2i:28:VAL:HA	40:2i:63:ILE:O	2.03	0.59
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	2.02	0.59
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.67	0.59
32:1a:1108:G:O6	61:1a:1914:HOH:O	2.14	0.59
33:1b:100:GLY:O	33:1b:104:ASN:N	2.25	0.59
36:1e:51:VAL:O	36:1e:55:VAL:HG23	2.02	0.59
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.31	0.59
21:2Z:53:ILE:HG22	21:2Z:71:VAL:O	2.02	0.59
32:2a:1126:U:H3	41:2j:40:LEU:HD11	1.65	0.59
1:1A:1053:C:N4	1:1A:1106:G:H1	2.00	0.59
32:1a:1309:G:OP2	44:1m:99:ARG:NH2	2.36	0.59
34:1c:11:ARG:NH2	34:1c:177:THR:O	2.32	0.59
40:1i:55:ALA:HA	40:1i:58:HIS:CD2	2.38	0.59
42:1k:104:GLN:O	42:1k:104:GLN:HG3	2.03	0.59
45:1n:9:LYS:HG2	45:1n:12:ARG:NH1	2.18	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:56:PRO:HA	4:2E:59:VAL:HG23	1.83	0.59
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.18	0.59
33:2b:185:ILE:HB	33:2b:199:TYR:HB2	1.85	0.59
34:2c:20:SER:HB3	34:2c:22:TRP:HE1	1.68	0.59
8:1I:48:GLU:HB3	8:1I:52:ARG:NH1	2.18	0.59
21:1Z:75:ASN:O	21:1Z:84:GLU:HG2	2.03	0.59
21:1Z:132:ASN:HD22	21:1Z:160:GLY:HA3	1.68	0.59
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.31	0.59
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.85	0.59
4:2E:178:GLU:OE1	4:2E:178:GLU:N	2.28	0.59
32:2a:67:C:H2'	32:2a:68:G:C8	2.37	0.59
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.85	0.59
32:1a:69:G:H2'	32:1a:70:G:C8	2.38	0.59
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.66	0.59
1:2A:30:G:H2'	1:2A:31:C:C6	2.38	0.59
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.38	0.59
34:2c:36:ASP:HA	34:2c:39:ILE:HD12	1.85	0.59
39:2h:34:GLU:OE1	39:2h:37:ARG:NH1	2.36	0.59
44:2m:24:GLY:HA3	44:2m:66:LEU:HD23	1.84	0.59
33:1b:82:ARG:HD2	33:1b:92:TYR:OH	2.02	0.59
34:1c:130:VAL:HG21	34:1c:157:ILE:HG23	1.83	0.59
39:1h:112:LEU:HA	39:1h:134:ILE:HG12	1.84	0.59
1:2A:994:C:H3'	16:2U:54:LYS:HE3	1.84	0.59
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.83	0.59
6:2G:44:GLY:N	6:2G:88:ILE:O	2.29	0.59
22:20:11:ARG:O	22:20:14:ARG:NH2	2.36	0.59
32:2a:664:G:N2	32:2a:741:G:H1	2.01	0.59
32:2a:1016:A:HO2'	32:2a:1217:C:HO2'	1.47	0.59
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.03	0.59
33:2b:87:ARG:NH2	33:2b:220:ASP:OD1	2.29	0.59
36:2e:139:LEU:HA	36:2e:142:LEU:HD12	1.84	0.59
37:2f:69:GLU:CD	37:2f:69:GLU:H	2.10	0.59
41:2j:15:THR:HB	41:2j:94:VAL:HG22	1.84	0.59
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.02	0.59
50:2s:41:VAL:HG23	50:2s:42:PRO:HD2	1.85	0.59
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.38	0.58
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.85	0.58
7:1H:33:LEU:HD21	7:1H:136:ILE:HG13	1.84	0.58
32:1a:1183:A:O2'	32:1a:1184:G:OP1	2.20	0.58
1:2A:1671:U:OP2	61:2A:3922:HOH:O	2.17	0.58
21:2Z:157:LEU:HD21	21:2Z:163:LEU:HB2	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.85	0.58
32:2a:377:G:OP1	47:2p:3:LYS:HE2	2.03	0.58
32:2a:1026:G:O6	32:2a:1036:G:N2	2.36	0.58
32:2a:1318:A:O2'	50:2s:37:ARG:HB2	2.03	0.58
33:2b:16:HIS:HB2	33:2b:204:ASN:HD22	1.67	0.58
38:2g:23:VAL:HG13	38:2g:43:PHE:CE2	2.38	0.58
38:2g:115:ARG:HG2	38:2g:118:VAL:HG23	1.83	0.58
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.02	0.58
1:1A:588:U:H2'	1:1A:589:C:C6	2.38	0.58
1:1A:1058:G:N2	1:1A:1081:U:O2	2.36	0.58
1:1A:1095:A:H62	1:1A:1097:U:H3	1.51	0.58
22:10:8:GLY:HA2	55:1x:2:G:H5'	1.84	0.58
32:1a:110:C:O2'	47:1p:25:ARG:O	2.20	0.58
32:1a:1224:G:OP1	61:1a:1916:HOH:O	2.16	0.58
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.67	0.58
39:1h:81:HIS:N	39:1h:138:TRP:O	2.35	0.58
1:2A:1203:G:O6	61:2A:3932:HOH:O	2.16	0.58
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.38	0.58
1:2A:2317:C:N4	1:2A:2318:G:O6	2.35	0.58
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.38	0.58
6:2G:43:LEU:HD12	6:2G:45:GLU:HG3	1.83	0.58
32:2a:553:A:H2'	32:2a:554:C:C6	2.37	0.58
32:2a:1182:G:H4'	32:2a:1183:A:H5''	1.85	0.58
32:2a:1206:G:O2'	34:2c:193:TYR:HA	2.03	0.58
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.38	0.58
6:1G:126:ASP:HB2	6:1G:130:ASN:H	1.68	0.58
12:1Q:16:ARG:HG3	12:1Q:17:LEU:H	1.68	0.58
32:1a:1329:A:N7	52:1u:7:ARG:NH2	2.50	0.58
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.03	0.58
1:2A:20:C:OP1	16:2U:22:LYS:NZ	2.26	0.58
1:2A:2819:G:N7	61:2A:3998:HOH:O	2.32	0.58
6:2G:63:ILE:HD12	6:2G:141:PHE:HB2	1.85	0.58
27:25:45:VAL:HG11	27:25:58:LEU:HD22	1.85	0.58
32:2a:1264:C:N4	32:2a:1265:G:O6	2.36	0.58
39:2h:7:ALA:HA	39:2h:10:LEU:HD12	1.84	0.58
40:2i:58:HIS:H	40:2i:58:HIS:CD2	2.19	0.58
50:2s:22:LEU:HD22	50:2s:31:ILE:HD11	1.85	0.58
1:1A:2080:G:OP1	23:11:35:THR:HG21	2.04	0.58
33:1b:174:VAL:O	33:1b:178:ARG:HG2	2.03	0.58
28:26:23:THR:OG1	28:26:24:GLU:N	2.33	0.58
32:2a:984:C:H2'	32:2a:985:C:C6	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1251:A:N1	32:2a:1354:C:O2'	2.33	0.58
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.85	0.58
45:2n:57:ARG:HG2	45:2n:58:LYS:H	1.68	0.58
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.68	0.58
26:14:55:ARG:H	26:14:56:VAL:HA	1.69	0.58
32:1a:67:C:H2'	32:1a:68:G:C8	2.38	0.58
1:2A:2262:U:OP2	22:20:16:SER:OG	2.13	0.58
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.04	0.58
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.39	0.58
32:2a:1092:A:H5''	38:2g:4:ARG:NH1	2.19	0.58
32:2a:1194:U:H2'	32:2a:1195:C:C6	2.38	0.58
1:1A:1816:G:O6	3:1D:35:LYS:NZ	2.31	0.58
1:1A:2101:G:H2'	1:1A:2102:U:C6	2.38	0.58
1:2A:83:G:H1	1:2A:102:G:HO2'	1.50	0.58
26:24:46:GLN:HE21	26:24:48:ARG:HH11	1.51	0.58
35:2d:22:LYS:HB2	35:2d:26:CYS:SG	2.44	0.58
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.84	0.58
40:1i:3:GLN:HE21	40:1i:20:ARG:NH2	2.00	0.58
1:2A:89:G:H3'	1:2A:90:U:H5''	1.85	0.58
1:2A:666:G:H1'	30:28:4:MET:HE3	1.86	0.58
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.18	0.58
7:2H:121:ILE:HD12	7:2H:144:VAL:HG21	1.85	0.58
14:2S:71:ARG:NH1	14:2S:107:GLU:OE1	2.36	0.58
18:2W:1:MET:HE2	18:2W:62:HIS:HB3	1.85	0.58
32:2a:1227:A:OP2	44:2m:111:LYS:HD3	2.03	0.58
34:2c:53:ALA:HB2	34:2c:115:LEU:HD11	1.85	0.58
44:2m:80:ARG:O	44:2m:84:ILE:HG12	2.03	0.58
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.33	0.58
54:2y:62:C:H2'	54:2y:63:G:H8	1.68	0.58
3:1D:37:LEU:HD13	3:1D:87:ASN:ND2	2.18	0.58
32:1a:456:C:H2'	32:1a:457:C:C6	2.38	0.58
1:2A:1169:G:N2	1:2A:1181:C:N3	2.51	0.58
32:2a:834:C:H2'	32:2a:835:U:H6	1.69	0.58
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.84	0.58
40:2i:99:LEU:HB3	40:2i:101:PHE:CD2	2.38	0.58
1:1A:882:G:H1	1:1A:894:C:H42	1.52	0.58
21:1Z:132:ASN:ND2	21:1Z:160:GLY:HA3	2.18	0.58
26:14:63:TYR:HD1	26:14:63:TYR:H	1.50	0.58
32:1a:262:A:H2'	32:1a:263:A:C8	2.38	0.58
32:1a:672:U:O2'	32:1a:673:G:O5'	2.20	0.58
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1442:G:O2'	32:1a:1442(A):G:H5'	2.03	0.58
33:1b:235:SER:O	33:1b:235:SER:OG	2.20	0.58
6:2G:79:ASN:OD1	6:2G:79:ASN:N	2.37	0.58
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.03	0.58
32:2a:441:A:H3'	32:2a:442:C:H6	1.69	0.58
36:2e:78:HIS:CD2	36:2e:142:LEU:HD23	2.39	0.58
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.04	0.58
1:1A:2111:C:N4	1:1A:2144:U:O2'	2.37	0.58
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.39	0.58
6:1G:125:PHE:O	61:1G:301:HOH:O	2.17	0.58
16:1U:104:GLN:NE2	16:1U:105:VAL:HG23	2.19	0.58
21:1Z:53:ILE:HG22	21:1Z:71:VAL:HG12	1.85	0.58
32:1a:452:A:H4'	47:1p:72:ARG:CZ	2.34	0.58
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.86	0.58
4:2E:9:VAL:HG22	4:2E:25:VAL:HB	1.86	0.58
4:2E:179:GLU:HG3	15:2T:9:LEU:HD21	1.85	0.58
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.12	0.58
33:2b:31:TYR:HE2	33:2b:200:ILE:HG21	1.68	0.58
12:1Q:51:ARG:HD3	12:1Q:66:ILE:HD11	1.86	0.57
32:1a:250:A:H4'	32:1a:251:G:O5'	2.03	0.57
47:1p:20:VAL:HG21	47:1p:32:TYR:CD2	2.38	0.57
1:2A:2144:U:O2'	1:2A:2147:G:O6	2.10	0.57
25:23:7:LYS:HG3	25:23:34:GLU:HG3	1.86	0.57
1:1A:1359:A:N6	1:1A:1372:U:H3	2.02	0.57
2:1B:66:A:H61	2:1B:108:U:H2'	1.69	0.57
26:14:63:TYR:HD1	26:14:63:TYR:N	2.02	0.57
33:1b:20:GLU:HG2	33:1b:23:ARG:NH1	2.19	0.57
1:2A:400:G:N7	61:2A:4000:HOH:O	2.32	0.57
1:2A:1847:A:H3'	1:2A:1848:A:H5'	1.86	0.57
1:2A:2324:C:H5''	1:2A:2325:G:H5'	1.86	0.57
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.04	0.57
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.03	0.57
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.86	0.57
32:2a:10:A:OP2	36:2e:126:ARG:HD2	2.05	0.57
33:2b:27:LYS:HB2	33:2b:194:PRO:HD2	1.85	0.57
55:2x:23:C:H2'	55:2x:24:U:C6	2.39	0.57
26:14:63:TYR:N	26:14:63:TYR:CD1	2.71	0.57
35:1d:187:ARG:NH1	35:1d:188:LEU:O	2.37	0.57
1:2A:2637:U:H5''	4:2E:82:ARG:NH1	2.19	0.57
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.29	0.57
11:2P:91:PHE:O	11:2P:121:LYS:NZ	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:878:A:H61	1:1A:899:A:C2'	2.17	0.57
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.04	0.57
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.05	0.57
30:18:42:ARG:HD2	61:18:202:HOH:O	2.04	0.57
34:1c:8:ILE:HD12	34:1c:16:ARG:HG3	1.85	0.57
51:1t:10:LEU:HD12	51:1t:11:SER:H	1.70	0.57
1:2A:764:A:H5''	3:2D:210:GLY:HA2	1.85	0.57
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.20	0.57
8:2I:73:GLU:HA	61:2I:201:HOH:O	2.04	0.57
11:2P:85:LEU:HA	11:2P:88:LEU:HD12	1.86	0.57
32:2a:544:G:OP1	35:2d:62:GLN:NE2	2.35	0.57
32:2a:673:G:H5''	37:2f:87:ARG:NH1	2.19	0.57
32:2a:921:U:O2	36:2e:19:MET:HB2	2.03	0.57
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.03	0.57
1:1A:2503:2MA:H8	58:1A:4105:A1A1K:O	2.05	0.57
10:1O:20:MET:HE3	10:1O:44:LYS:HE3	1.86	0.57
32:1a:520:A:O2'	43:1l:73:GLU:OE2	2.15	0.57
1:2A:796:C:H2'	1:2A:797:C:C6	2.39	0.57
1:2A:2356:C:OP1	22:20:24:LYS:NZ	2.35	0.57
21:2Z:77:ASP:N	21:2Z:82:ARG:O	2.37	0.57
32:2a:1125:U:OP1	41:2j:35:SER:OG	2.23	0.57
37:2f:24:GLU:O	37:2f:28:ARG:N	2.32	0.57
1:1A:1054:A:N1	1:1A:1105:U:O2	2.37	0.57
1:1A:2140:C:N3	1:1A:2151:G:C6	2.73	0.57
32:1a:1086:U:H3	32:1a:1099:G:N2	2.00	0.57
32:1a:1346:A:N1	32:1a:1374:A:H5''	2.19	0.57
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.40	0.57
1:2A:422:A:OP2	61:2A:3934:HOH:O	2.17	0.57
1:2A:652(A):A:H3'	1:2A:652(B):A:H5''	1.84	0.57
1:2A:1125:G:H5'	31:29:37:GLY:HA2	1.86	0.57
1:2A:1340:U:OP1	19:2X:16:LYS:NZ	2.33	0.57
3:2D:132:PRO:HD3	3:2D:190:TYR:CZ	2.40	0.57
9:2N:38:HIS:CE1	9:2N:39:ARG:HG3	2.39	0.57
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.19	0.57
43:2l:88:GLY:O	43:2l:99:HIS:HD2	1.87	0.57
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.37	0.57
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.40	0.57
1:1A:2313:C:H4'	6:1G:91:ARG:HG3	1.87	0.57
32:1a:271:C:H2'	32:1a:272:C:H6	1.70	0.57
50:1s:49:ILE:HG13	50:1s:62:ILE:HD11	1.86	0.57
1:2A:646:A:H2'	1:2A:647:G:O4'	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:5:LYS:NZ	25:23:34:GLU:OE2	2.35	0.57
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.20	0.57
32:2a:1112:C:N3	34:2c:178:LEU:HD12	2.20	0.57
44:2m:78:ILE:HG23	44:2m:92:HIS:CE1	2.40	0.57
1:1A:1721:G:H1'	1:1A:1741:A:H61	1.70	0.57
10:1O:104:ARG:NE	15:1T:36:GLU:OE2	2.27	0.57
32:1a:186:C:H2'	32:1a:187:C:C6	2.40	0.57
1:2A:2064:C:H2'	1:2A:2065:C:C6	2.40	0.57
7:2H:54:ARG:NH2	7:2H:57:ASP:OD2	2.37	0.57
26:24:13:ARG:HH11	26:24:13:ARG:HB2	1.70	0.57
32:2a:447:G:O6	32:2a:485:G:O2'	2.20	0.57
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.86	0.57
32:2a:951:G:N3	32:2a:970:C:O2'	2.31	0.57
33:2b:15:VAL:HG21	33:2b:213:LEU:HD13	1.86	0.57
32:1a:1279:A:H4'	32:1a:1281:U:H5	1.69	0.57
39:1h:11:THR:HG22	39:1h:15:ASN:HD21	1.70	0.57
45:1n:12:ARG:HH11	45:1n:12:ARG:CB	2.18	0.57
1:2A:1591:G:H2'	1:2A:1592:C:H6	1.70	0.57
6:2G:11:TYR:HA	6:2G:15:VAL:HG22	1.87	0.57
32:2a:1317:C:N4	45:2n:19:ARG:HH21	2.02	0.57
32:2a:1360:A:OP2	45:2n:35:ARG:NH2	2.38	0.57
33:2b:76:GLN:HB2	33:2b:208:ILE:HD11	1.87	0.57
41:2j:78:ASN:O	41:2j:80:LYS:N	2.37	0.57
1:1A:271(R):G:O6	61:1A:4228:HOH:O	2.12	0.57
1:1A:1183:G:O2'	25:13:29:ARG:NH1	2.37	0.57
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.19	0.57
1:2A:11:G:C2'	1:2A:12:U:H5'	2.35	0.57
1:2A:34:C:H2'	1:2A:35:G:H5'	1.85	0.57
1:2A:1452:A:OP2	61:2A:3936:HOH:O	2.18	0.57
1:2A:2832:U:OP2	61:2A:3935:HOH:O	2.17	0.57
6:2G:123:ASN:O	6:2G:125:PHE:N	2.37	0.57
11:2P:29:LYS:HG3	11:2P:30:THR:N	2.20	0.57
34:2c:125:GLU:O	34:2c:190:ARG:NH2	2.38	0.57
39:2h:20:TYR:CE1	39:2h:76:PRO:HG2	2.40	0.57
1:1A:2804:C:H2'	1:1A:2805:G:O4'	2.05	0.56
35:1d:156:GLU:O	35:1d:160:GLN:HG3	2.05	0.56
36:1e:148:VAL:O	36:1e:152:ARG:HG3	2.04	0.56
47:1p:19:ILE:N	47:1p:37:GLY:O	2.37	0.56
54:1w:71:G:H2'	54:1w:71:G:N3	2.20	0.56
1:2A:2299:G:N1	1:2A:2318:G:N7	2.53	0.56
32:2a:203:U:H2'	32:2a:203:U:OP2	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:65:ARG:NH1	35:2d:70:ILE:O	2.37	0.56
49:2r:53:ARG:HA	49:2r:56:THR:OG1	2.05	0.56
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.22	0.56
32:1a:148:G:H2'	32:1a:149:A:C8	2.40	0.56
32:1a:532:A:N6	32:1a:1206:G:O2'	2.38	0.56
32:1a:1009:G:O6	32:1a:1020:U:O2	2.23	0.56
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.87	0.56
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.85	0.56
32:2a:685:G:C2	32:2a:686:U:C4	2.93	0.56
32:2a:1101:A:C8	33:2b:172:ILE:HD13	2.40	0.56
32:2a:1122:U:C2	32:2a:1123:A:C8	2.93	0.56
34:2c:125:GLU:HB2	34:2c:190:ARG:HH21	1.69	0.56
35:2d:104:VAL:HG21	35:2d:140:VAL:HG21	1.86	0.56
1:1A:84:A:H5''	20:1Y:8:LYS:HE3	1.88	0.56
1:1A:671:C:N4	61:1A:4322:HOH:O	2.38	0.56
1:1A:2361:A:OP1	30:18:27:THR:OG1	2.12	0.56
4:1E:9:VAL:HG22	4:1E:25:VAL:HB	1.87	0.56
32:1a:271:C:H2'	32:1a:272:C:C6	2.40	0.56
32:1a:1095:U:P	32:1a:1108:G:H1	2.28	0.56
32:1a:1414:U:H3	32:1a:1486:G:H1	1.52	0.56
40:1i:43:ALA:HA	40:1i:74:ILE:HD13	1.86	0.56
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.37	0.56
48:1q:45:HIS:O	48:1q:73:VAL:HG23	2.05	0.56
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.87	0.56
1:2A:247:G:H4'	1:2A:386:G:C5	2.40	0.56
1:2A:403:U:H4'	1:2A:404:C:H5'	1.87	0.56
1:2A:586:A:N1	1:2A:809:G:O2'	2.29	0.56
1:2A:2258:C:O2'	1:2A:2427:C:OP2	2.23	0.56
2:2B:17:C:H2'	2:2B:18:G:O4'	2.06	0.56
8:2I:43:ASN:HA	8:2I:46:ALA:HB3	1.88	0.56
10:2O:7:TYR:HE2	10:2O:20:MET:HE3	1.69	0.56
14:2S:94:TYR:CE2	14:2S:99:LYS:HG3	2.40	0.56
19:2X:1:MET:HE1	24:22:26:ARG:HH21	1.69	0.56
23:21:83:GLU:OE2	23:21:83:GLU:N	2.32	0.56
32:2a:473:G:H2'	32:2a:474:G:C8	2.38	0.56
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	1.86	0.56
50:2s:64:GLU:OE2	50:2s:65:ASN:ND2	2.38	0.56
54:2w:22:G:H2'	54:2w:23:A:H8	1.70	0.56
54:2y:55:PSU:HN1	54:2y:57:G:H5'	1.69	0.56
32:1a:625:G:H2'	32:1a:626:U:C6	2.39	0.56
39:1h:49:GLU:HG2	39:1h:62:TYR:HE2	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:287:C:H2'	1:2A:288:C:C6	2.41	0.56
1:2A:884:C:H3'	1:2A:885:C:C6	2.40	0.56
1:2A:1364:G:P	23:21:3:LYS:HG3	2.46	0.56
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.05	0.56
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.39	0.56
5:2F:33:LEU:HB3	11:2P:6:LEU:HD21	1.86	0.56
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.87	0.56
26:24:46:GLN:O	26:24:48:ARG:N	2.38	0.56
32:2a:390:C:O3'	47:2p:28:ARG:NH2	2.39	0.56
32:2a:448:A:P	32:2a:485:G:H22	2.28	0.56
32:2a:1049:U:C5	32:2a:1201:A:H5'	2.40	0.56
32:2a:1084:G:H5'	32:2a:1102:A:OP2	2.05	0.56
48:2q:27:PHE:CE1	48:2q:36:ILE:HD11	2.41	0.56
50:2s:64:GLU:CD	50:2s:64:GLU:H	2.13	0.56
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.04	0.56
1:1A:2101:G:H1	1:1A:2188:C:H42	1.54	0.56
38:1g:58:PRO:O	38:1g:61:VAL:N	2.38	0.56
44:1m:50:GLU:HA	44:1m:53:VAL:HG22	1.86	0.56
47:1p:43:LYS:HA	47:1p:48:TRP:CD1	2.41	0.56
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.87	0.56
1:2A:889:C:O2'	1:2A:890:A:OP2	2.20	0.56
1:2A:1783:A:O2'	1:2A:2607:G:O2'	2.23	0.56
1:2A:2857:G:N2	1:2A:2860:A:OP2	2.38	0.56
15:2T:18:ASP:OD1	15:2T:18:ASP:N	2.31	0.56
21:2Z:44:PHE:O	21:2Z:48:PHE:N	2.36	0.56
23:21:3:LYS:O	23:21:12:PRO:HD3	2.06	0.56
25:23:52:HIS:CD2	25:23:53:LEU:HG	2.40	0.56
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.39	0.56
32:2a:1221:G:O3'	50:2s:77:THR:OG1	2.23	0.56
34:2c:134:ILE:HG23	34:2c:151:VAL:HG13	1.86	0.56
38:2g:113:GLU:CG	38:2g:119:ARG:HG2	2.35	0.56
54:2y:67:C:H2'	54:2y:68:C:C6	2.41	0.56
6:1G:179:PRO:HB2	26:14:42:PHE:HE2	1.71	0.56
32:1a:161:A:N1	32:1a:347:G:O2'	2.39	0.56
32:1a:1059:C:O3'	45:1n:45:ARG:NH2	2.38	0.56
51:1t:43:LEU:O	51:1t:47:GLY:N	2.25	0.56
54:1y:9:A:H8	54:1y:11:C:H41	1.53	0.56
1:2A:863:A:H2'	1:2A:864:G:C8	2.41	0.56
1:2A:1886:C:H2'	1:2A:1887:C:H6	1.70	0.56
1:1A:226:G:N2	1:1A:228:A:H62	2.03	0.56
1:1A:1864:U:OP1	1:1A:2410:G:O2'	2.23	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2126:A:H4'	1:1A:2127:G:OP1	2.04	0.56
33:1b:155:LEU:HD21	33:1b:159:PRO:HD3	1.88	0.56
1:2A:1243:G:O2'	11:2P:7:ARG:NH2	2.38	0.56
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.41	0.56
1:2A:2319:G:H22	14:2S:3:ARG:HD2	1.70	0.56
1:2A:2357:U:OP1	22:20:20:ARG:NE	2.31	0.56
32:2a:1240:U:N3	38:2g:30:ILE:O	2.33	0.56
33:2b:80:ILE:HD13	33:2b:211:ILE:HG22	1.87	0.56
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	1.88	0.56
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.70	0.56
39:2h:33:GLU:O	39:2h:36:LEU:N	2.38	0.56
55:2x:61:C:H2'	55:2x:62:C:H6	1.70	0.56
1:1A:602:G:O2'	1:1A:655:A:N6	2.39	0.56
1:1A:2771:C:H2'	1:1A:2772:C:H6	1.70	0.56
11:1P:38:GLN:HG2	11:1P:45:LEU:H	1.70	0.56
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.87	0.56
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.88	0.56
48:1q:78:GLU:HG2	48:1q:81:ARG:HG2	1.87	0.56
1:2A:236:C:H2'	1:2A:237:C:C6	2.41	0.56
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.22	0.56
26:24:58:ARG:HD2	50:2s:68:GLY:H	1.71	0.56
32:2a:719:C:H42	49:2r:71:LYS:HE2	1.69	0.56
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.87	0.56
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.78	0.56
26:14:55:ARG:N	26:14:56:VAL:HA	2.20	0.56
32:1a:690:G:C6	32:1a:691:G:C6	2.94	0.56
33:1b:12:GLU:O	33:1b:15:VAL:HG22	2.06	0.56
1:2A:839:U:H2'	1:2A:840:C:C6	2.41	0.56
1:2A:2595:G:N7	61:2A:4001:HOH:O	2.32	0.56
13:2R:72:ASP:O	13:2R:76:VAL:HG23	2.06	0.56
32:2a:372:C:O2	61:2a:3316:HOH:O	2.17	0.56
32:2a:458:C:H2'	32:2a:460:G:O4'	2.06	0.56
32:2a:612:C:O2	32:2a:629:G:N2	2.39	0.56
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.40	0.56
32:2a:1328:C:O2'	44:2m:29:ARG:NE	2.38	0.56
34:2c:188:LEU:HG	34:2c:189:ALA:H	1.71	0.56
40:2i:37:PHE:HB3	40:2i:43:ALA:HB2	1.88	0.56
42:2k:98:LEU:O	42:2k:101:SER:OG	2.22	0.56
54:2w:29:G:H2'	54:2w:30:G:H8	1.71	0.56
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.41	0.56
32:1a:1202:G:H1'	45:1n:29:ARG:HD2	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1011:G:OP1	16:2U:77:SER:OG	2.21	0.56
1:2A:1219:G:H1	1:2A:1230:C:H42	1.53	0.56
1:2A:2065:C:H2'	1:2A:2066:C:H6	1.71	0.56
1:2A:2135:A:C8	1:2A:2136:C:H5	2.24	0.56
1:2A:2494:G:OP1	22:20:3:HIS:N	2.38	0.56
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.69	0.56
21:2Z:72:ARG:HH22	21:2Z:97:GLU:HB2	1.71	0.56
21:2Z:150:LEU:H	21:2Z:171:ILE:HD11	1.70	0.56
37:2f:61:LEU:HB3	37:2f:63:TYR:HE2	1.71	0.56
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.88	0.56
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.39	0.56
1:1A:880:G:H2'	1:1A:881:G:C8	2.42	0.55
32:1a:1032:G:H2'	32:1a:1033:G:O4'	2.06	0.55
38:1g:91:VAL:HB	38:1g:96:GLN:HE21	1.70	0.55
1:2A:1502:C:H2'	1:2A:1503:U:H6	1.71	0.55
1:2A:2577:A:H5''	1:2A:2578:G:H5'	1.88	0.55
1:2A:2781:A:H5''	1:2A:2782:G:H5'	1.88	0.55
1:2A:2896:C:H2'	1:2A:2897:U:C6	2.42	0.55
2:2B:43:C:H5''	26:24:1:MET:HG2	1.88	0.55
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.87	0.55
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.40	0.55
33:2b:16:HIS:HB3	33:2b:210:SER:CB	2.32	0.55
40:2i:6:GLY:HA3	40:2i:80:GLY:O	2.06	0.55
54:2y:67:C:H2'	54:2y:68:C:H6	1.71	0.55
1:1A:305:U:H2'	1:1A:306:U:C6	2.41	0.55
1:1A:1062:G:O5'	1:1A:1070:A:O2'	2.23	0.55
1:1A:1155:A:OP1	16:1U:55:ARG:HD2	2.06	0.55
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.06	0.55
8:1I:38:LEU:H	8:1I:38:LEU:CD2	2.19	0.55
54:1y:67:C:H2'	54:1y:68:C:C6	2.40	0.55
1:2A:2439:A:H5'	1:2A:2439:A:C8	2.41	0.55
2:2B:75:G:H22	21:2Z:73:GLN:NE2	2.01	0.55
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.89	0.55
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.35	0.55
17:2V:62:LEU:HD12	17:2V:93:GLU:HG2	1.88	0.55
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.21	0.55
39:2h:11:THR:HG23	39:2h:14:ARG:NH1	2.22	0.55
51:2t:56:MET:HG3	51:2t:88:VAL:HG21	1.88	0.55
54:2y:42:C:H2'	54:2y:43:C:H6	1.69	0.55
1:1A:1075:C:C2'	1:1A:1076:C:H5'	2.36	0.55
1:1A:1176:G:H1'	1:1A:1177:A:H5''	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1800:C:OP2	3:1D:183:ARG:NH2	2.39	0.55
1:1A:1843:C:H5'	3:1D:253:GLN:OE1	2.05	0.55
1:1A:2751:G:C5	7:1H:2:SER:N	2.74	0.55
33:1b:185:ILE:HG22	33:1b:199:TYR:HD2	1.71	0.55
40:1i:3:GLN:HE21	40:1i:20:ARG:CZ	2.20	0.55
40:1i:55:ALA:HA	40:1i:58:HIS:HD2	1.72	0.55
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.41	0.55
1:2A:2136:C:N4	1:2A:2155:G:H1	2.05	0.55
1:2A:2651:C:H2'	1:2A:2652:C:H6	1.71	0.55
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.37	0.55
4:2E:35:GLN:OE1	4:2E:66:HIS:HE1	1.89	0.55
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.87	0.55
32:2a:130:A:O2'	32:2a:131:C:O5'	2.23	0.55
32:2a:737:A:H2'	32:2a:738:C:C6	2.41	0.55
32:2a:1190:G:O2'	34:2c:3:ASN:HB2	2.06	0.55
32:2a:1502:A:C8	32:2a:1505:G:N2	2.73	0.55
47:2p:74:LEU:O	47:2p:79:VAL:HG23	2.06	0.55
1:1A:548:A:H1'	1:1A:549:G:OP1	2.07	0.55
7:1H:56:SER:OG	7:1H:57:ASP:N	2.38	0.55
24:12:55:ARG:NH2	61:12:202:HOH:O	2.38	0.55
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.21	0.55
32:1a:1112:C:H1'	34:1c:179:ARG:NH1	2.21	0.55
1:2A:93:G:H2'	1:2A:94:C:C6	2.42	0.55
1:2A:2849:U:OP2	15:2T:95:ARG:NH1	2.40	0.55
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.40	0.55
16:2U:89:GLU:H	17:2V:38:LEU:HD21	1.71	0.55
32:2a:1263:C:N3	32:2a:1272:G:O6	2.39	0.55
40:2i:92:TYR:HB3	40:2i:96:LEU:HD12	1.87	0.55
54:2y:65:G:H2'	54:2y:66:U:C6	2.41	0.55
1:1A:1300:U:H4'	1:1A:1301:A:H5''	1.89	0.55
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.41	0.55
15:1T:1:MET:HE2	15:1T:3:ARG:HG3	1.87	0.55
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.06	0.55
46:1o:17:ARG:HH11	46:1o:17:ARG:HG3	1.72	0.55
1:2A:639:U:H2'	1:2A:640:C:C6	2.42	0.55
1:2A:893:C:H2'	1:2A:894:C:C5	2.42	0.55
1:2A:2127:G:C6	1:2A:2161:C:N4	2.74	0.55
1:2A:2137:C:N3	1:2A:2154:G:N2	2.50	0.55
10:2O:36:GLY:HA2	10:2O:106:LEU:HD23	1.88	0.55
14:2S:28:VAL:HG11	14:2S:98:VAL:HG13	1.88	0.55
32:2a:1328:C:O2'	44:2m:29:ARG:NH2	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1176:G:H21	1:1A:1178:C:P	2.28	0.55
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.07	0.55
32:1a:339:C:H2'	32:1a:340:U:C6	2.42	0.55
34:1c:104:GLN:HG2	34:1c:105:GLU:H	1.71	0.55
1:2A:2695:C:H2'	1:2A:2696:U:C6	2.42	0.55
3:2D:127:VAL:HA	3:2D:193:VAL:HG12	1.88	0.55
6:2G:61:ALA:HA	6:2G:66:GLN:O	2.06	0.55
32:2a:1445:C:O2'	32:2a:1447:A:N6	2.39	0.55
32:2a:1508:G:N1	32:2a:1527:C:N3	2.41	0.55
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.05	0.55
48:2q:4:LYS:HE2	48:2q:6:LEU:HD21	1.88	0.55
54:2w:29:G:H2'	54:2w:30:G:C8	2.41	0.55
2:1B:88:C:H2'	2:1B:89:G:O4'	2.07	0.55
18:1W:2:GLU:OE2	18:1W:72:LYS:NZ	2.30	0.55
32:1a:45:U:H2'	32:1a:46:G:C8	2.41	0.55
34:1c:91:LEU:O	34:1c:95:THR:N	2.32	0.55
1:2A:2136:C:O2'	1:2A:2137:C:O5'	2.25	0.55
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.41	0.55
37:2f:97:PHE:HE2	49:2r:62:GLU:HG2	1.72	0.55
1:1A:1508:A:O2'	1:1A:1509:C:H5''	2.06	0.55
4:1E:34:VAL:HG22	4:1E:48:GLN:NE2	2.22	0.55
32:1a:345:C:H5'	32:1a:346:G:C4	2.42	0.55
38:1g:51:GLN:O	38:1g:55:GLY:HA2	2.07	0.55
1:2A:558:G:OP1	9:2N:111:PRO:HD2	2.07	0.55
1:2A:2318:G:H21	14:2S:3:ARG:CD	2.19	0.55
6:2G:59:GLU:O	6:2G:63:ILE:HG12	2.06	0.55
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.42	0.55
41:2j:42:THR:HB	41:2j:68:HIS:HA	1.88	0.55
5:1F:123:LEU:HD13	5:1F:192:LEU:HD13	1.89	0.55
24:12:16:LEU:HB3	24:12:20:GLU:HB2	1.89	0.55
32:1a:159:G:O2'	32:1a:161:A:N7	2.33	0.55
33:1b:37:ASN:C	33:1b:39:ILE:H	2.15	0.55
43:1l:82:VAL:O	43:1l:106:ASP:HB2	2.06	0.55
50:1s:27:GLU:OE1	50:1s:27:GLU:N	2.35	0.55
1:2A:956:G:H2'	1:2A:957:A:H2'	1.88	0.55
7:2H:8:PRO:HB3	7:2H:51:ARG:HB3	1.87	0.55
32:2a:748:C:H4'	32:2a:749:C:O5'	2.07	0.55
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.71	0.55
33:2b:31:TYR:CE2	33:2b:200:ILE:HG21	2.42	0.55
39:2h:21:LYS:O	39:2h:65:TYR:OH	2.16	0.55
41:2j:44:VAL:HG13	41:2j:66:ARG:HB3	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:49:ILE:HG12	50:2s:50:ALA:N	2.20	0.55
1:1A:839:U:H2'	1:1A:840:C:C6	2.41	0.55
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.41	0.55
1:2A:322:A:H5'	1:2A:340:A:H1'	1.89	0.55
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.42	0.55
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.21	0.55
7:2H:7:LEU:HD23	7:2H:69:ARG:NH2	2.21	0.55
32:2a:20:U:H2'	32:2a:21:G:O4'	2.07	0.55
32:2a:21:G:H2'	32:2a:22:G:C8	2.42	0.55
32:2a:1442:G:O2'	32:2a:1442(A):G:H5'	2.06	0.55
35:2d:60:GLU:HG3	35:2d:202:LEU:HD12	1.88	0.55
35:2d:61:LYS:NZ	35:2d:72:GLU:OE1	2.40	0.55
54:2w:28:G:H2'	54:2w:29:G:O4'	2.07	0.55
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.07	0.54
1:1A:2756:U:H1'	1:1A:2757:A:H5''	1.89	0.54
9:2N:20:GLY:HA2	9:2N:61:ARG:HE	1.72	0.54
20:2Y:60:PHE:O	20:2Y:61:ILE:HD13	2.07	0.54
25:23:7:LYS:NZ	25:23:32:GLN:O	2.38	0.54
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.42	0.54
38:2g:59:LEU:O	38:2g:63:LYS:HB2	2.06	0.54
1:1A:1045:A:H1'	1:1A:1047:G:N3	2.23	0.54
1:1A:1087:G:H2'	1:1A:1089:G:H8	1.72	0.54
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.21	0.54
1:1A:2136:C:N4	1:1A:2155:G:H1	2.06	0.54
2:1B:92:C:OP1	21:1Z:79:ARG:NH1	2.40	0.54
18:1W:92:ARG:NH2	61:1W:302:HOH:O	2.38	0.54
32:1a:179:A:H2'	32:1a:180:U:C6	2.41	0.54
32:1a:300:A:H1'	32:1a:565:U:O2	2.07	0.54
39:1h:124:ALA:O	39:1h:128:GLY:N	2.40	0.54
1:2A:236:C:H2'	1:2A:237:C:H6	1.72	0.54
1:2A:2136:C:N3	1:2A:2155:G:N2	2.54	0.54
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.42	0.54
4:2E:7:VAL:HG11	15:2T:1:MET:HE1	1.88	0.54
8:2I:12:LEU:HD22	8:2I:19:VAL:HG21	1.89	0.54
12:2Q:54:MET:HB2	12:2Q:64:ILE:HD13	1.89	0.54
32:2a:728:A:H2'	32:2a:729:A:C8	2.42	0.54
32:2a:1095:U:H2'	32:2a:1096:C:C6	2.41	0.54
33:2b:78:GLN:HE22	33:2b:95:GLN:HE22	1.55	0.54
35:2d:111:ALA:HB2	35:2d:120:LEU:HD12	1.89	0.54
1:1A:1039:G:H1	1:1A:1116:C:N4	2.04	0.54
4:1E:9:VAL:HB	15:1T:3:ARG:HG2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	1.90	0.54
21:1Z:152:ALA:HB1	21:1Z:163:LEU:HD11	1.88	0.54
31:19:17:ILE:HD13	31:19:26:ILE:HD13	1.90	0.54
32:1a:865:A:C2	32:1a:918:A:H4'	2.41	0.54
32:1a:972:C:OP2	41:1j:57:LYS:NZ	2.32	0.54
32:2a:12:U:H4'	32:2a:526:C:O2'	2.06	0.54
32:2a:553:A:H2'	32:2a:554:C:H6	1.72	0.54
42:2k:43:SER:HA	42:2k:47:VAL:HG21	1.88	0.54
42:2k:54:ARG:NH1	54:2y:39:PSU:O2'	2.39	0.54
1:1A:1359:A:N1	1:1A:1372:U:C4	2.75	0.54
1:1A:2612:C:OP2	27:15:2:ALA:N	2.40	0.54
32:1a:176:C:H2'	32:1a:177:C:C6	2.42	0.54
32:1a:1179:A:H4'	40:1i:103:THR:HA	1.89	0.54
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.42	0.54
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.43	0.54
54:1y:48:C:C2	54:1y:59:U:H1'	2.41	0.54
1:2A:1591:G:H2'	1:2A:1592:C:C6	2.43	0.54
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.42	0.54
1:2A:2059:A:O2'	5:2F:69:HIS:HD2	1.89	0.54
6:2G:35:GLU:HB3	6:2G:160:VAL:HG23	1.90	0.54
31:29:7:VAL:HG12	31:29:34:GLN:HB3	1.88	0.54
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.22	0.54
33:2b:60:ASP:O	33:2b:64:ARG:HG2	2.07	0.54
44:2m:57:ARG:O	44:2m:61:GLU:HB2	2.08	0.54
50:2s:28:LYS:NZ	50:2s:46:GLY:O	2.41	0.54
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.88	0.54
21:1Z:136:PHE:O	21:1Z:137:ILE:HG13	2.07	0.54
32:1a:57:G:H2'	32:1a:58:C:C6	2.43	0.54
32:1a:1068:G:H8	32:1a:1068:G:OP2	1.90	0.54
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.72	0.54
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.43	0.54
1:2A:2340:G:H2'	1:2A:2341:G:H8	1.72	0.54
12:2Q:57:HIS:HD2	12:2Q:117:ALA:HB2	1.73	0.54
32:2a:202:U:H3'	32:2a:203:U:C5	2.43	0.54
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.43	0.54
33:2b:16:HIS:CB	33:2b:204:ASN:HB3	2.37	0.54
35:2d:187:ARG:NH1	35:2d:190:ASP:OD1	2.41	0.54
44:2m:40:ASN:OD1	44:2m:41:PRO:HD2	2.07	0.54
50:2s:53:ASN:OD1	50:2s:54:GLY:N	2.40	0.54
54:2w:22:G:H2'	54:2w:23:A:C8	2.42	0.54
32:1a:974:A:H8	32:1a:974:A:OP1	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.43	0.54
32:1a:1239:A:H62	32:1a:1299:A:H62	1.54	0.54
1:2A:894:C:O2'	1:2A:895:U:H5''	2.08	0.54
1:2A:931:G:O2'	25:23:24:LYS:HD3	2.07	0.54
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.72	0.54
32:2a:1017:G:H8	32:2a:1017:G:OP2	1.90	0.54
55:2x:15:G:H2'	55:2x:59:A:N1	2.21	0.54
54:2y:40:C:H2'	54:2y:41:C:H6	1.72	0.54
1:1A:2142:C:N3	1:1A:2149:G:O6	2.41	0.54
10:1O:73:ASP:HB2	15:1T:82:LEU:HD13	1.89	0.54
21:1Z:156:LYS:HG2	21:1Z:158:PRO:HD3	1.90	0.54
32:1a:382:A:H2'	32:1a:383:A:C8	2.42	0.54
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.42	0.54
36:1e:131:ILE:O	36:1e:135:THR:OG1	2.26	0.54
54:1w:56:C:H2'	54:1w:57:G:O4'	2.08	0.54
54:1y:51:U:H2'	54:1y:52:G:C8	2.42	0.54
1:2A:995:C:O2	9:2N:3:THR:OG1	2.20	0.54
1:2A:1783:A:HO2'	1:2A:2607:G:HO2'	1.56	0.54
21:2Z:144:LEU:HD23	21:2Z:174:VAL:HG22	1.89	0.54
32:2a:402:G:N7	61:2a:3330:HOH:O	2.32	0.54
32:2a:989:C:HO2'	32:2a:1016:A:H2	1.56	0.54
32:2a:1521:G:N3	61:2a:3331:HOH:O	2.33	0.54
33:2b:21:ARG:HA	33:2b:39:ILE:HA	1.90	0.54
55:2x:23:C:H2'	55:2x:24:U:H6	1.73	0.54
54:2y:9:A:H5'	54:2y:46:G7M:N3	2.23	0.54
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.43	0.54
1:1A:1119:C:N4	61:1A:4330:HOH:O	2.41	0.54
1:1A:2615:U:H2'	1:1A:2616:C:H6	1.73	0.54
6:1G:167:GLU:OE1	6:1G:167:GLU:N	2.39	0.54
32:1a:235:C:H5''	48:1q:70:ARG:HG3	1.89	0.54
32:1a:472:A:OP1	47:1p:75:ARG:NH2	2.39	0.54
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.06	0.54
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.08	0.54
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.07	0.54
32:2a:953:G:H5'	32:2a:965:A:N6	2.17	0.54
39:2h:36:LEU:HD22	39:2h:61:VAL:HG11	1.89	0.54
1:1A:1762:A:H2'	61:1A:5974:HOH:O	2.06	0.54
1:1A:2135:A:O2'	1:1A:2136:C:O5'	2.23	0.54
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.37	0.54
33:1b:21:ARG:HA	33:1b:39:ILE:HA	1.89	0.54
34:1c:124:ILE:HG22	34:1c:130:VAL:HG22	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:1k:79:SER:HA	42:1k:104:GLN:HB3	1.88	0.54
1:2A:1155:A:H5''	16:2U:55:ARG:NE	2.22	0.54
1:2A:1496:A:N3	1:2A:1577:C:O2'	2.33	0.54
6:2G:114:ILE:HB	6:2G:117:PHE:HD1	1.73	0.54
26:24:44:THR:C	26:24:46:GLN:H	2.14	0.54
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.90	0.54
32:2a:920:U:H2'	32:2a:921:U:H6	1.73	0.54
32:2a:1150:U:H4'	41:2j:41:PRO:HG3	1.90	0.54
33:2b:84:GLU:HB3	33:2b:219:VAL:HG11	1.89	0.54
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.08	0.54
1:1A:1584:C:O2'	1:1A:1586:A:H5'	2.08	0.54
1:1A:2794:C:H42	1:1A:2802:G:H22	1.54	0.54
2:1B:103:G:N2	21:1Z:73:GLN:HE22	2.03	0.54
4:1E:178:GLU:OE1	4:1E:178:GLU:N	2.36	0.54
32:1a:193:C:H2'	32:1a:194:C:C6	2.43	0.54
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.39	0.54
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.72	0.54
44:1m:3:ARG:HG3	44:1m:4:ILE:N	2.23	0.54
1:2A:2811:G:N2	1:2A:2891:G:H1'	2.23	0.54
2:2B:2:C:H2'	2:2B:3:C:C6	2.43	0.54
2:2B:11:C:OP2	2:2B:12:C:N4	2.33	0.54
12:2Q:75:THR:HG21	12:2Q:87:LYS:HE3	1.90	0.54
21:2Z:146:ILE:HG12	21:2Z:174:VAL:HG23	1.90	0.54
26:24:46:GLN:HG2	26:24:48:ARG:H	1.72	0.54
32:2a:1233:G:H2'	32:2a:1234:C:C6	2.43	0.54
32:2a:1388:C:H2'	32:2a:1389:C:C6	2.43	0.54
35:2d:112:VAL:HG22	35:2d:116:GLN:NE2	2.23	0.54
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.08	0.54
32:1a:202:U:H3'	32:1a:203:U:C5	2.43	0.53
46:1o:84:LYS:C	46:1o:84:LYS:HD3	2.33	0.53
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.56	0.53
1:2A:1378:A:O2'	1:2A:1380:G:N7	2.36	0.53
2:2B:57:A:N3	6:2G:29:TRP:HB3	2.23	0.53
6:2G:37:VAL:HG22	6:2G:159:VAL:HB	1.89	0.53
6:2G:116:ASP:OD2	44:2m:68:GLY:HA3	2.08	0.53
17:2V:60:GLU:HB2	17:2V:97:LYS:HE2	1.90	0.53
32:2a:173:U:H5''	32:2a:197:A:O4'	2.07	0.53
32:2a:1026:G:H5'	32:2a:1027:C:O5'	2.08	0.53
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.23	0.53
32:2a:1318:A:OP1	50:2s:3:ARG:NH2	2.30	0.53
33:2b:175:ARG:HH12	33:2b:179:LYS:HD2	1.71	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:9:A:H4'	54:2y:46:G7M:H5'	1.89	0.53
1:1A:1094:U:H1'	1:1A:1097:U:C4	2.43	0.53
5:1F:29:ASN:H	5:1F:112:MET:HE3	1.73	0.53
32:1a:176:C:H2'	32:1a:177:C:H6	1.73	0.53
32:1a:258:G:H2'	32:1a:259:G:H8	1.72	0.53
1:2A:879:G:H3'	1:2A:880:G:C8	2.43	0.53
1:2A:1853:A:N1	1:2A:2087:G:H1'	2.23	0.53
4:2E:52:LEU:O	4:2E:76:ARG:N	2.38	0.53
10:2O:2:ILE:HB	10:2O:33:ALA:HB3	1.90	0.53
41:2j:74:ILE:HG22	61:2j:302:HOH:O	2.08	0.53
1:1A:2114:A:H2	1:1A:2168:G:H1'	1.73	0.53
20:1Y:92:ASN:ND2	20:1Y:94:LYS:HG3	2.24	0.53
54:1w:5:G:H2'	54:1w:6:G:C8	2.42	0.53
1:2A:1009:A:O4'	16:2U:59:ARG:HD2	2.09	0.53
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.41	0.53
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.44	0.53
2:2B:75:G:H1	21:2Z:73:GLN:NE2	2.06	0.53
34:2c:113:ALA:HB2	34:2c:202:ILE:HG13	1.90	0.53
35:2d:8:VAL:HG22	35:2d:21:LEU:HD13	1.89	0.53
38:2g:152:ALA:O	38:2g:155:ARG:HD3	2.08	0.53
1:1A:1229:G:N7	61:1A:4294:HOH:O	2.34	0.53
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	1.90	0.53
1:1A:2515:C:O2'	1:1A:2516:G:H5'	2.08	0.53
24:12:1:MET:HE3	24:12:5:GLU:HB3	1.89	0.53
32:1a:262:A:C6	32:1a:263:A:C6	2.96	0.53
32:1a:339:C:H2'	32:1a:340:U:H6	1.73	0.53
32:1a:1370:G:C2	32:1a:1371:G:C8	2.96	0.53
49:1r:40:LEU:HD13	49:1r:79:LEU:HD11	1.90	0.53
1:2A:2383:G:O2'	1:2A:2384:G:H5'	2.09	0.53
1:2A:2805:G:H2'	1:2A:2807:G:H8	1.68	0.53
2:2B:11:C:H3'	2:2B:12:C:H6	1.73	0.53
15:2T:105:LEU:HB2	15:2T:110:ILE:HG13	1.91	0.53
21:2Z:75:ASN:O	21:2Z:84:GLU:HG3	2.09	0.53
26:24:34:GLU:HB2	44:2m:57:ARG:HH21	1.73	0.53
32:2a:653:A:H5''	32:2a:653:A:N3	2.24	0.53
32:2a:1080:A:H5''	32:2a:1081:G:OP2	2.08	0.53
32:2a:1081:G:H5'	36:2e:18:ARG:HB3	1.90	0.53
32:2a:1161:C:H2'	32:2a:1162:C:H6	1.74	0.53
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.23	0.53
35:2d:112:VAL:H	35:2d:116:GLN:NE2	2.05	0.53
40:2i:3:GLN:NE2	40:2i:20:ARG:HE	2.02	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:18:G:O6	54:2y:56:C:N4	2.41	0.53
1:1A:198:C:H5'	1:1A:2244:U:OP1	2.08	0.53
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.44	0.53
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.43	0.53
8:1I:75:LEU:O	8:1I:141:LYS:NZ	2.34	0.53
32:1a:376:G:OP2	47:1p:67:THR:HG21	2.09	0.53
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.35	0.53
32:1a:1036:G:H5''	32:1a:1037:C:H5	1.72	0.53
54:1y:26:A:N6	54:1y:44:G:H1	2.05	0.53
1:2A:890:A:H2'	1:2A:892:G:H8	1.73	0.53
1:2A:1589:C:H2'	1:2A:1590:U:C6	2.44	0.53
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.08	0.53
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.38	0.53
15:2T:127:ALA:C	15:2T:129:ARG:H	2.16	0.53
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NE	2.42	0.53
30:28:32:LEU:O	30:28:36:LYS:HE3	2.08	0.53
32:2a:406:G:H21	35:2d:119:GLN:HE22	1.56	0.53
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.44	0.53
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.24	0.53
32:2a:1356:G:N2	32:2a:1367:C:C2	2.76	0.53
1:1A:184:C:H2'	1:1A:185:U:C6	2.43	0.53
1:1A:2206:G:H3'	1:1A:2207:G:N7	2.24	0.53
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.44	0.53
47:1p:49:LEU:HD13	47:1p:50:LYS:N	2.24	0.53
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.40	0.53
7:2H:96:ALA:N	7:2H:128:PRO:O	2.42	0.53
21:2Z:31:ARG:NH1	21:2Z:94:GLU:HG2	2.22	0.53
32:2a:936:C:H2'	32:2a:937:A:O4'	2.09	0.53
32:2a:1257:U:O4	45:2n:17:LYS:NZ	2.42	0.53
33:2b:55:PHE:HD1	33:2b:58:ILE:HD11	1.74	0.53
36:2e:41:VAL:HG12	36:2e:69:VAL:HG21	1.90	0.53
37:2f:91:VAL:HG11	49:2r:72:ARG:NH1	2.23	0.53
44:2m:34:LEU:O	44:2m:38:GLY:N	2.42	0.53
1:1A:616:G:OP2	5:1F:106:ARG:NH2	2.39	0.53
1:1A:1173:G:H22	1:1A:1177:A:P	2.32	0.53
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.44	0.53
1:1A:2134:A:N3	1:1A:2159:G:O2'	2.39	0.53
1:1A:2136:C:C2	1:1A:2155:G:N2	2.76	0.53
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.44	0.53
23:11:19:GLN:HB2	23:11:35:THR:HG22	1.91	0.53
32:1a:202:U:H3'	32:1a:203:U:C6	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1525:G:P	42:1k:120:ARG:HH22	2.31	0.53
46:1o:84:LYS:HD3	46:1o:84:LYS:O	2.09	0.53
1:2A:921:G:C6	1:2A:922:U:C4	2.96	0.53
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.43	0.53
7:2H:90:LYS:HD2	7:2H:159:GLU:HG2	1.91	0.53
11:2P:99:LEU:HD12	11:2P:102:ARG:NH2	2.23	0.53
32:2a:255:G:C6	32:2a:256:U:C4	2.97	0.53
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.43	0.53
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.08	0.53
6:1G:122:PRO:HB3	6:1G:170:ARG:HH12	1.73	0.53
10:1O:63:VAL:HG12	10:1O:106:LEU:HD11	1.91	0.53
1:2A:597:U:H2'	1:2A:598:G:C8	2.44	0.53
1:2A:2833:G:H4'	1:2A:2834:G:OP2	2.08	0.53
17:2V:29:PRO:HA	17:2V:61:VAL:HG22	1.91	0.53
32:2a:1519:MA6:H102	32:2a:1520:G:O2'	2.09	0.53
34:2c:29:TYR:HE1	41:2j:11:PHE:HE2	1.55	0.53
44:2m:52:GLU:HG2	44:2m:55:ARG:NH2	2.24	0.53
1:1A:2129:C:H1'	1:1A:2160:G:H22	1.73	0.53
22:10:10:THR:HG22	22:10:12:ASN:H	1.73	0.53
22:10:24:LYS:O	22:10:25:ARG:NH1	2.39	0.53
30:18:28:GLY:O	30:18:36:LYS:NZ	2.42	0.53
32:1a:224:C:OP1	51:1t:74:LYS:NZ	2.41	0.53
1:2A:903:C:H2'	1:2A:904:C:C6	2.44	0.53
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.44	0.53
1:2A:2356:C:O3'	22:20:20:ARG:HD3	2.09	0.53
11:2P:55:ARG:HA	61:2P:302:HOH:O	2.08	0.53
22:20:70:GLN:NE2	22:20:72:ARG:HD2	2.24	0.53
32:2a:1273:G:H3'	32:2a:1274:G:C8	2.43	0.53
40:2i:70:LYS:O	40:2i:74:ILE:HG13	2.09	0.53
1:1A:922:U:H2'	1:1A:923:C:C6	2.44	0.53
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.91	0.53
8:1I:62:LYS:HA	8:1I:133:HIS:HE1	1.73	0.53
8:1I:109:ILE:HD12	8:1I:130:TYR:CE2	2.44	0.53
12:1Q:16:ARG:HG2	12:1Q:18:LYS:HG3	1.91	0.53
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.42	0.53
32:1a:1025:U:O2	32:1a:1036:G:C6	2.61	0.53
32:1a:1095:U:OP1	32:1a:1108:G:N2	2.39	0.53
33:1b:8:LYS:O	33:1b:217:ARG:NH2	2.42	0.53
44:1m:3:ARG:HG3	44:1m:4:ILE:H	1.74	0.53
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.24	0.53
1:2A:2803:C:H2'	1:2A:2804:C:C6	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:43:LEU:C	6:2G:45:GLU:H	2.15	0.53
21:2Z:4:ARG:NH2	21:2Z:66:SER:OG	2.42	0.53
21:2Z:40:ASP:OD2	21:2Z:43:GLU:N	2.18	0.53
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.09	0.53
33:2b:134:GLU:O	33:2b:138:LEU:HG	2.09	0.53
38:2g:15:ASP:OD2	38:2g:44:TYR:OH	2.19	0.53
40:2i:15:ALA:HB2	40:2i:65:VAL:HG23	1.91	0.53
1:1A:818:G:O6	61:1A:4238:HOH:O	2.18	0.52
1:1A:1006:C:C2	1:1A:1138:G:N2	2.77	0.52
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.43	0.52
35:1d:114:ARG:HA	35:1d:117:ALA:HB3	1.90	0.52
1:2A:1159:U:O2'	1:2A:1160:G:H5'	2.09	0.52
1:2A:1545:A:H2'	1:2A:1546:C:O4'	2.09	0.52
1:2A:2207:G:H3'	1:2A:2208:A:H5''	1.91	0.52
21:2Z:31:ARG:HB2	21:2Z:32:HIS:CD2	2.45	0.52
28:26:44:ARG:HG2	28:26:44:ARG:HH11	1.73	0.52
32:2a:1305:G:H22	32:2a:1331:G:H1'	1.73	0.52
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.09	0.52
44:2m:73:GLU:O	44:2m:77:ASN:HB2	2.08	0.52
54:2y:55:PSU:HN1	54:2y:57:G:C5'	2.22	0.52
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.09	0.52
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	1.92	0.52
36:1e:84:PHE:CE2	36:1e:133:TYR:HD2	2.26	0.52
1:2A:829:A:N7	1:2A:2248:C:H5'	2.23	0.52
1:2A:1022:G:N7	9:2N:66:LYS:HE2	2.24	0.52
1:2A:1506:C:H2'	1:2A:1507:A:H5'	1.91	0.52
1:2A:2224:G:OP2	61:2A:3941:HOH:O	2.19	0.52
1:2A:2802:G:H2'	1:2A:2803:C:O4'	2.08	0.52
2:2B:39:A:O2'	2:2B:40:U:H5'	2.09	0.52
18:2W:64:MET:HE2	18:2W:109:GLU:HG3	1.90	0.52
32:2a:1104:G:H4'	33:2b:111:ARG:NH2	2.23	0.52
32:2a:1427:U:H2'	32:2a:1428:A:H8	1.73	0.52
35:2d:92:VAL:O	35:2d:96:LEU:HG	2.10	0.52
36:2e:12:LEU:HB3	36:2e:31:LEU:HB2	1.89	0.52
41:2j:52:GLY:O	45:2n:41:ARG:NH1	2.35	0.52
43:2l:6:THR:HG23	43:2l:9:GLN:OE1	2.10	0.52
21:1Z:54:HIS:HB3	21:1Z:101:PRO:HD3	1.91	0.52
32:1a:547:A:OP2	35:1d:2:GLY:HA2	2.09	0.52
34:1c:79:ARG:O	34:1c:82:GLU:HG2	2.09	0.52
49:1r:58:LEU:HD22	49:1r:62:GLU:HB3	1.91	0.52
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:31:C:H4'	6:2G:29:TRP:HZ2	1.75	0.52
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.38	0.52
7:2H:119:GLU:HG2	7:2H:120:GLY:N	2.22	0.52
32:2a:620:C:C2	35:2d:135:LEU:HG	2.44	0.52
32:2a:1053:G:N7	32:2a:1200:C:H5'	2.25	0.52
42:2k:86:GLY:H	42:2k:112:THR:CG2	2.23	0.52
44:2m:79:LYS:HG2	44:2m:83:ASP:OD2	2.09	0.52
48:2q:41:LYS:HZ2	48:2q:92:ARG:HH21	1.56	0.52
54:2y:62:C:H2'	54:2y:63:G:C8	2.45	0.52
1:1A:2635:C:O2'	4:1E:80:GLU:OE2	2.21	0.52
11:1P:138:LEU:HD23	11:1P:145:PRO:HB3	1.90	0.52
32:1a:222:U:H2'	32:1a:223:U:C6	2.45	0.52
32:1a:341:C:H2'	32:1a:342:C:C6	2.44	0.52
35:1d:52:SER:H	35:1d:55:ALA:HB3	1.74	0.52
40:1i:92:TYR:O	40:1i:96:LEU:HB2	2.10	0.52
41:1j:11:PHE:CE1	41:1j:67:THR:HG22	2.45	0.52
51:1t:71:THR:O	51:1t:72:LEU:HD23	2.09	0.52
1:2A:1449:A:HO2'	1:2A:1529:G:H21	1.52	0.52
1:2A:2191:G:H2'	1:2A:2192:G:O4'	2.09	0.52
12:2Q:109:VAL:HG21	12:2Q:113:GLN:NE2	2.24	0.52
33:2b:124:SER:HB3	33:2b:125:PRO:HD3	1.92	0.52
1:1A:1069:A:O4'	1:1A:1096:A:O2'	2.27	0.52
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.42	0.52
14:1S:84:GLN:HA	14:1S:111:GLU:HB2	1.90	0.52
32:1a:332:G:OP2	51:1t:10:LEU:HD23	2.09	0.52
47:1p:22:THR:HA	47:1p:33:ILE:HD12	1.90	0.52
1:2A:892:G:H3'	1:2A:893:C:C5'	2.40	0.52
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.75	0.52
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.10	0.52
1:2A:2315:G:H2'	1:2A:2316:C:H6	1.74	0.52
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.24	0.52
1:2A:2400:G:H2'	1:2A:2401:U:H6	1.74	0.52
2:2B:19:G:H2'	2:2B:20:C:O4'	2.10	0.52
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.44	0.52
32:2a:1379:G:O6	38:2g:2:ALA:HB3	2.08	0.52
32:2a:1469:G:H2'	32:2a:1470:G:C8	2.44	0.52
34:2c:123:GLN:O	34:2c:128:PHE:HB2	2.09	0.52
41:2j:40:LEU:HB2	41:2j:69:ASN:HB3	1.92	0.52
43:2l:57:LYS:HG2	43:2l:67:THR:HG22	1.92	0.52
1:1A:1721:G:H1'	1:1A:1741:A:N6	2.25	0.52
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:121:LYS:HB3	11:1P:123:LEU:HD13	1.92	0.52
11:1P:126:VAL:HG12	11:1P:148:LEU:CD2	2.39	0.52
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.74	0.52
32:1a:189:G:C6	32:1a:189(L):G:N1	2.78	0.52
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.45	0.52
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.31	0.52
33:1b:112:VAL:HG12	33:1b:149:LEU:HD13	1.90	0.52
35:1d:196:LEU:HD12	35:1d:196:LEU:H	1.74	0.52
6:2G:82:LEU:HA	6:2G:86:MET:SD	2.50	0.52
21:2Z:150:LEU:C	21:2Z:171:ILE:HG12	2.35	0.52
22:20:6:GLY:O	22:20:7:LEU:HD23	2.10	0.52
32:2a:79:G:H1	32:2a:90:U:H3	1.58	0.52
32:2a:114:U:O2'	32:2a:115:G:H5'	2.10	0.52
32:2a:707:C:H2'	32:2a:708:C:C6	2.44	0.52
32:2a:1064:G:O6	32:2a:1191:A:N6	2.42	0.52
34:2c:39:ILE:HG22	34:2c:43:LEU:HD11	1.92	0.52
36:2e:83:GLU:HA	36:2e:88:LYS:HA	1.91	0.52
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.09	0.52
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.43	0.52
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.08	0.52
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.91	0.52
40:1i:77:ILE:O	40:1i:81:ILE:HG22	2.09	0.52
51:1t:63:ILE:HD12	51:1t:81:LYS:HG2	1.92	0.52
1:2A:811:U:H2'	11:2P:21:ARG:HA	1.92	0.52
8:2I:29:TYR:CD2	8:2I:30:LEU:HD23	2.44	0.52
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.10	0.52
15:2T:92:GLY:O	15:2T:120:ARG:NH2	2.43	0.52
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.27	0.52
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.10	0.52
6:1G:72:ARG:NH1	6:1G:87:PRO:HG3	2.25	0.52
32:1a:458:C:H2'	32:1a:460:G:O4'	2.08	0.52
32:1a:1080:A:H5'	36:1e:14:ARG:HH21	1.73	0.52
32:1a:1191:A:H5''	34:1c:4:LYS:NZ	2.25	0.52
36:1e:147:ASP:OD1	36:1e:150:ARG:NH2	2.42	0.52
1:2A:709:U:H2'	1:2A:710:G:C8	2.44	0.52
1:2A:898:C:H2'	1:2A:899:A:H5'	1.90	0.52
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.25	0.52
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.25	0.52
1:2A:2275:C:H6	1:2A:2275:C:H5'	1.75	0.52
14:2S:15:ARG:HB3	14:2S:19:LYS:NZ	2.25	0.52
32:2a:70:G:H2'	32:2a:71:C:C6	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:986:A:H1'	50:2s:55:LYS:HA	1.91	0.52
32:2a:1033:G:H2'	32:2a:1034:G:H8	1.75	0.52
32:2a:1070:U:OP1	36:2e:18:ARG:NH2	2.43	0.52
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.39	0.52
40:2i:9:ARG:CG	40:2i:14:VAL:HG12	2.40	0.52
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.74	0.52
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.42	0.52
1:1A:2171:A:HO2'	1:1A:2172:U:H6	1.58	0.52
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.25	0.52
2:1B:42:C:OP2	26:14:2:LYS:NZ	2.39	0.52
7:1H:84:SER:OG	7:1H:132:ARG:NH1	2.42	0.52
10:1O:36:GLY:O	61:1O:301:HOH:O	2.19	0.52
44:1m:70:LEU:O	44:1m:74:VAL:HG23	2.10	0.52
45:1n:23:ARG:NH1	45:1n:30:ALA:HB2	2.24	0.52
1:2A:1374:G:H2'	1:2A:1375:C:C6	2.45	0.52
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.45	0.52
6:2G:11:TYR:HB2	6:2G:176:LEU:HD21	1.91	0.52
14:2S:3:ARG:NH1	14:2S:4:LEU:H	2.07	0.52
14:2S:85:VAL:HG12	14:2S:86:ALA:H	1.75	0.52
19:2X:28:PHE:CE1	19:2X:92:LEU:HD11	2.44	0.52
21:2Z:25:PRO:HD2	21:2Z:84:GLU:O	2.09	0.52
1:1A:1173:G:N1	1:1A:1176:G:OP2	2.43	0.52
6:1G:67:LYS:HE3	6:1G:68:PRO:O	2.10	0.52
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.40	0.52
49:1r:43:PHE:C	49:1r:51:LEU:HD12	2.35	0.52
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.24	0.52
12:2Q:118:LEU:HD12	12:2Q:131:ILE:HG23	1.92	0.52
26:24:15:ILE:HD12	26:24:21:VAL:HG22	1.92	0.52
32:2a:501:C:OP1	43:2l:124:LYS:HD2	2.09	0.52
32:2a:920:U:H2'	32:2a:921:U:C6	2.44	0.52
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.45	0.52
34:2c:134:ILE:HG22	34:2c:168:ALA:HB3	1.92	0.52
2:1B:28:C:OP1	14:1S:36:TYR:OH	2.24	0.51
8:1I:100:ALA:HA	8:1I:103:ARG:HH11	1.75	0.51
15:2T:91:ARG:HB2	15:2T:121:ILE:HG13	1.91	0.51
32:2a:155:C:H2'	32:2a:156:G:O4'	2.10	0.51
32:2a:932:C:H2'	32:2a:933:G:H8	1.75	0.51
32:2a:1016:A:N6	32:2a:1017:G:C2	2.78	0.51
32:2a:1144:G:N2	32:2a:1146:A:H62	2.07	0.51
33:2b:76:GLN:OE1	33:2b:206:ASP:HA	2.10	0.51
36:2e:75:THR:HA	36:2e:115:VAL:HG12	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:29:SER:OG	39:2h:32:LYS:HD3	2.10	0.51
39:2h:35:ILE:O	39:2h:39:LEU:HD12	2.10	0.51
1:1A:1359:A:H61	1:1A:1372:U:H3	1.57	0.51
1:1A:2155:G:H5''	1:1A:2156:G:C8	2.44	0.51
5:1F:172:TRP:CD1	5:1F:172:TRP:H	2.27	0.51
24:12:10:LEU:O	24:12:14:ARG:HG3	2.10	0.51
32:1a:1288:A:N3	32:1a:1352:C:O2'	2.38	0.51
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.93	0.51
47:1p:19:ILE:HG22	47:1p:36:ILE:HG13	1.91	0.51
51:1t:56:MET:HE3	51:1t:85:MET:HG2	1.92	0.51
1:2A:265:A:C8	1:2A:266:G:H1'	2.45	0.51
1:2A:271(O):C:H2'	1:2A:271(P):C:C6	2.46	0.51
1:2A:479:A:N3	1:2A:481:G:H5''	2.24	0.51
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.45	0.51
1:2A:2287:A:C8	1:2A:2289:G:C8	2.98	0.51
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.45	0.51
32:2a:779:C:H2'	32:2a:780:A:O4'	2.11	0.51
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.45	0.51
44:2m:65:LYS:HE3	44:2m:70:LEU:HD23	1.92	0.51
44:2m:84:ILE:HG22	50:2s:74:PHE:CE1	2.41	0.51
54:2w:12:U:H3'	54:2w:13:C:H5''	1.91	0.51
1:1A:879:G:H8	1:1A:879:G:O5'	1.93	0.51
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.44	0.51
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.43	0.51
1:1A:2121:G:H2'	1:1A:2122:U:C6	2.46	0.51
1:1A:2194:G:H2'	1:1A:2195:C:O4'	2.10	0.51
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.45	0.51
13:1R:98:LEU:HB2	13:1R:113:LEU:HD11	1.91	0.51
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.46	0.51
36:1e:85:GLY:O	36:1e:87:SER:N	2.44	0.51
1:2A:839:U:H2'	1:2A:840:C:H6	1.75	0.51
1:2A:1455:G:OP2	61:2A:3946:HOH:O	2.19	0.51
1:2A:2651:C:H2'	1:2A:2652:C:C6	2.45	0.51
9:2N:110:GLY:O	9:2N:114:ARG:HG3	2.10	0.51
32:2a:15:G:H2'	32:2a:16:A:C8	2.46	0.51
32:2a:1388:C:H2'	32:2a:1389:C:H6	1.76	0.51
34:2c:8:ILE:C	34:2c:10:PHE:H	2.18	0.51
38:2g:38:LEU:O	38:2g:42:ILE:HG13	2.10	0.51
38:2g:54:THR:O	38:2g:56:GLN:N	2.40	0.51
44:2m:70:LEU:O	44:2m:73:GLU:N	2.42	0.51
54:2w:33:U:N3	54:2w:36:A:OP2	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:58:A:H4'	54:2w:59:U:OP1	2.09	0.51
1:1A:1055:G:N2	1:1A:1104:C:N3	2.48	0.51
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.44	0.51
8:1I:65:ALA:HB1	8:1I:136:VAL:HG11	1.93	0.51
28:16:14:THR:HG21	28:16:48:VAL:HG13	1.92	0.51
32:1a:4:U:O4	39:1h:105:ARG:HD3	2.10	0.51
32:1a:159:G:N2	32:1a:162:A:OP2	2.43	0.51
32:1a:685:G:O2'	32:1a:686:U:H5'	2.10	0.51
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.27	0.51
36:1e:106:PRO:O	36:1e:110:LEU:HG	2.10	0.51
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.44	0.51
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.45	0.51
1:2A:880:G:C2	1:2A:881:G:C8	2.98	0.51
1:2A:2136:C:N4	1:2A:2155:G:N1	2.58	0.51
1:2A:2143:C:H2'	1:2A:2144:U:O4'	2.11	0.51
11:2P:82:GLY:HA3	11:2P:115:LEU:HD11	1.91	0.51
32:2a:202:U:H3'	32:2a:203:U:C6	2.45	0.51
49:2r:65:ILE:O	49:2r:69:THR:HG23	2.10	0.51
51:2t:67:ALA:HA	51:2t:72:LEU:O	2.10	0.51
54:2y:14:A:O2'	54:2y:15:G:OP1	2.22	0.51
32:1a:165:C:O2'	32:1a:166:G:H5'	2.11	0.51
32:1a:946:A:H2'	32:1a:947:G:C8	2.46	0.51
39:1h:29:SER:OG	39:1h:32:LYS:HD3	2.10	0.51
1:2A:847:U:H5'	1:2A:848:G:OP2	2.11	0.51
1:2A:2161:C:H2'	1:2A:2162:G:O4'	2.10	0.51
5:2F:164:ARG:O	5:2F:168:ARG:HG3	2.11	0.51
6:2G:124:SER:O	6:2G:124:SER:OG	2.28	0.51
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH1	2.25	0.51
21:2Z:73:GLN:O	21:2Z:87:ASP:N	2.41	0.51
21:2Z:154:ASP:N	21:2Z:154:ASP:OD1	2.44	0.51
32:2a:56:U:H2'	32:2a:57:G:H8	1.75	0.51
32:2a:142:G:H2'	32:2a:143:A:C8	2.45	0.51
32:2a:598:U:H4'	39:2h:94:TYR:CG	2.46	0.51
32:2a:997:U:H3	32:2a:1044:A:H61	1.56	0.51
32:2a:1032:G:H2'	32:2a:1033:G:C8	2.45	0.51
33:2b:17:PHE:HA	33:2b:44:LEU:HD11	1.92	0.51
33:2b:178:ARG:HH22	39:2h:68:ARG:NH2	2.09	0.51
34:2c:151:VAL:HG23	34:2c:199:LYS:O	2.11	0.51
52:2u:15:ARG:HG2	52:2u:15:ARG:HH11	1.76	0.51
1:1A:106:C:H1'	20:1Y:1:MET:HE2	1.91	0.51
1:1A:1512:U:O2'	1:1A:1513:C:H5'	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.46	0.51
1:1A:2803:C:H2'	1:1A:2804:C:C6	2.45	0.51
1:1A:2853:C:H2'	1:1A:2854:G:C8	2.46	0.51
2:1B:92:C:H5''	21:1Z:79:ARG:NH1	2.26	0.51
2:1B:103:G:H21	21:1Z:73:GLN:NE2	2.05	0.51
15:1T:108:ARG:HG3	15:1T:109:GLU:N	2.26	0.51
23:11:64:ALA:HA	23:11:67:ILE:HG13	1.93	0.51
33:1b:48:MET:HA	33:1b:51:LEU:HD12	1.93	0.51
37:1f:8:ILE:HB	37:1f:61:LEU:HB2	1.92	0.51
39:1h:86:ILE:HD12	39:1h:133:LEU:HD22	1.92	0.51
41:1j:46:ARG:HB2	41:1j:46:ARG:HH11	1.75	0.51
1:2A:359:A:H2'	1:2A:360:G:O4'	2.09	0.51
7:2H:144:VAL:O	7:2H:148:ILE:HG13	2.10	0.51
32:2a:109:A:C6	32:2a:326:G:C6	2.99	0.51
32:2a:554:C:O2'	61:2a:3318:HOH:O	2.19	0.51
32:2a:1071:C:H2'	32:2a:1072:G:H8	1.76	0.51
32:2a:1314:C:N4	50:2s:2:PRO:O	2.39	0.51
34:2c:69:HIS:HA	34:2c:104:GLN:HB3	1.93	0.51
35:2d:57:ARG:NH1	35:2d:205:GLU:HB3	2.26	0.51
35:2d:112:VAL:HG22	35:2d:116:GLN:HE22	1.75	0.51
44:2m:101:GLN:OE1	44:2m:101:GLN:N	2.44	0.51
1:1A:1069:A:H4'	1:1A:1070:A:H5''	1.93	0.51
32:1a:69:G:H2'	32:1a:70:G:H8	1.76	0.51
32:1a:920:U:H2'	32:1a:921:U:C6	2.46	0.51
32:1a:1025:U:C2	32:1a:1036:G:O6	2.64	0.51
32:1a:1109:C:OP2	34:1c:176:HIS:ND1	2.44	0.51
45:1n:48:ALA:HB2	45:1n:53:LEU:HD12	1.92	0.51
1:2A:71:A:N7	19:2X:31:HIS:HE1	2.09	0.51
1:2A:407:G:H2'	1:2A:408:G:C8	2.46	0.51
1:2A:1851:U:H2'	1:2A:1852:C:O4'	2.11	0.51
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.45	0.51
1:2A:2547:U:O2	10:2O:23:ARG:NH2	2.44	0.51
2:2B:3:C:H2'	2:2B:4:C:H6	1.74	0.51
6:2G:3:LEU:HD22	26:24:25:TYR:CE1	2.45	0.51
13:2R:100:LEU:HD21	13:2R:113:LEU:HD23	1.91	0.51
32:2a:862:C:H1'	32:2a:874:G:H5''	1.92	0.51
32:2a:1227:A:C8	50:2s:83:HIS:HB3	2.46	0.51
32:2a:1237:C:HO2'	32:2a:1300:G:H1	1.56	0.51
39:2h:116:LYS:HD3	39:2h:127:LEU:HD22	1.91	0.51
43:2l:35:GLY:HA3	43:2l:60:LEU:HD23	1.93	0.51
1:1A:171:G:O2'	1:1A:172:C:H5'	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1062:G:P	1:1A:1070:A:H1'	2.51	0.51
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.11	0.51
3:1D:146:GLU:HG2	3:1D:152:GLY:C	2.36	0.51
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.93	0.51
32:1a:815:A:N7	32:1a:1509:C:O2'	2.43	0.51
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.11	0.51
54:1y:36:A:H2'	54:1y:37:MIA:O4'	2.11	0.51
1:2A:328:U:H4'	20:2Y:68:HIS:CD2	2.46	0.51
1:2A:1005:C:H2'	1:2A:1006:C:C6	2.46	0.51
4:2E:12:THR:HG22	4:2E:13:ARG:H	1.74	0.51
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.25	0.51
32:2a:834:C:H2'	32:2a:835:U:C6	2.46	0.51
32:2a:1077:G:N2	32:2a:1080:A:OP2	2.40	0.51
32:2a:1206:G:C6	32:2a:1207:2MG:C5	2.99	0.51
54:2w:34:G:H2'	54:2w:35:A:C8	2.46	0.51
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.11	0.51
1:1A:1673:U:OP1	61:1A:4215:HOH:O	2.19	0.51
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.24	0.51
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.11	0.51
1:1A:2168:G:N1	1:1A:2171:A:C8	2.79	0.51
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.46	0.51
4:1E:179:GLU:HB2	4:1E:181:LEU:HD22	1.93	0.51
32:1a:1136:U:H5''	32:1a:1137:C:C2	2.46	0.51
1:2A:2131:G:N7	1:2A:2133:G:N2	2.59	0.51
1:2A:2749:A:OP1	7:2H:3:ARG:NH1	2.44	0.51
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.10	0.51
32:2a:1121:U:O2'	32:2a:1122:U:H5'	2.11	0.51
32:2a:1277:C:HO2'	32:2a:1279:A:H8	1.55	0.51
47:2p:42:ARG:HG2	47:2p:42:ARG:HH11	1.76	0.51
1:1A:2336:A:H61	22:10:43:THR:HG21	1.76	0.51
1:1A:2701:C:H2'	1:1A:2702:U:H2'	1.93	0.51
9:1N:73:THR:HB	9:1N:82:LEU:HD11	1.93	0.51
33:1b:139:LYS:O	33:1b:143:GLU:HG3	2.11	0.51
34:1c:59:ARG:O	41:1j:92:THR:HG22	2.11	0.51
40:1i:17:VAL:HA	40:1i:63:ILE:HG23	1.92	0.51
1:2A:1226:A:OP1	17:2V:84:LYS:HE2	2.11	0.51
1:2A:2128:C:H2'	1:2A:2129:C:O4'	2.11	0.51
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.45	0.51
7:2H:3:ARG:NH2	7:2H:65:HIS:HB3	2.26	0.51
32:2a:130:A:H5'	48:2q:63:ARG:HE	1.75	0.51
32:2a:1272:G:N2	32:2a:1273:G:C5	2.79	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.92	0.51
33:2b:92:TYR:CZ	33:2b:151:GLY:HA3	2.46	0.51
39:2h:12:ARG:NH1	39:2h:27:PRO:HD3	2.26	0.51
40:2i:17:VAL:HG21	40:2i:80:GLY:C	2.36	0.51
44:2m:5:ALA:HB3	44:2m:22:ILE:HD13	1.93	0.51
1:1A:247:G:H4'	1:1A:386:G:C5	2.46	0.50
1:1A:558:G:OP1	9:1N:111:PRO:HD2	2.10	0.50
1:1A:1364:G:OP2	23:11:3:LYS:HG3	2.11	0.50
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.47	0.50
2:1B:33:G:C2	2:1B:50:G:C2	2.98	0.50
3:1D:18:VAL:HG12	3:1D:211:ARG:NH2	2.26	0.50
7:1H:98:LEU:HD23	7:1H:102:ALA:O	2.11	0.50
21:1Z:138:GLU:H	21:1Z:156:LYS:NZ	2.09	0.50
32:1a:677:U:H3	32:1a:713:G:H22	1.58	0.50
32:1a:864:A:H2'	32:1a:865:A:C8	2.45	0.50
32:1a:1273:G:C2	32:1a:1274:G:H1'	2.46	0.50
33:1b:163:PHE:HA	33:1b:185:ILE:HG12	1.93	0.50
54:1y:23:A:H2'	54:1y:24:G:C8	2.45	0.50
1:2A:1359:A:C2	1:2A:1372:U:O4	2.64	0.50
1:2A:1374:G:H2'	1:2A:1375:C:H6	1.76	0.50
1:2A:1376:C:O2'	1:2A:1377:G:H5'	2.11	0.50
10:2O:2:ILE:HD12	10:2O:6:THR:HG21	1.92	0.50
32:2a:818:G:O2'	32:2a:819:A:H5'	2.12	0.50
32:2a:1208:C:H2'	32:2a:1209:C:H6	1.75	0.50
32:2a:1266:G:N2	32:2a:1268:A:H3'	2.26	0.50
32:2a:1321:C:H4'	44:2m:87:TYR:CE2	2.46	0.50
38:2g:46:ALA:HB1	38:2g:121:ALA:HB2	1.92	0.50
51:2t:43:LEU:HD13	51:2t:51:GLU:HG2	1.92	0.50
1:1A:1918:A:N6	61:1A:4371:HOH:O	2.43	0.50
1:1A:2352:A:N6	1:1A:2365:G:O2'	2.44	0.50
5:1F:148:LEU:HD22	5:1F:154:VAL:HG21	1.93	0.50
26:14:16:CYS:HA	26:14:33:VAL:O	2.10	0.50
32:1a:79:G:N2	32:1a:90:U:O2'	2.44	0.50
32:1a:1221:G:OP1	32:1a:1320:C:N4	2.40	0.50
55:1x:8:4SU:O2	55:1x:21:A:H2	1.94	0.50
54:1y:48:C:OP2	54:1y:48:C:H6	1.94	0.50
1:2A:749:C:OP2	61:2A:3948:HOH:O	2.19	0.50
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.34	0.50
6:2G:16:ARG:O	6:2G:20:ILE:HG13	2.11	0.50
7:2H:17:VAL:HG11	7:2H:50:VAL:HG21	1.93	0.50
7:2H:24:VAL:O	7:2H:34:GLU:HA	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:128:VAL:HG22	21:2Z:129:SER:O	2.12	0.50
21:2Z:151:HIS:HB3	21:2Z:168:GLU:HA	1.92	0.50
32:2a:542:G:OP1	35:2d:10:ARG:NH2	2.35	0.50
39:2h:14:ARG:O	39:2h:18:ARG:HG3	2.12	0.50
1:1A:1268:A:C2	1:1A:2013:A:C4	3.00	0.50
1:1A:1364:G:P	23:11:3:LYS:HG3	2.52	0.50
1:1A:2059:A:OP2	61:1A:4240:HOH:O	2.19	0.50
1:1A:2106:G:H1	1:1A:2183:C:H42	1.59	0.50
8:1I:38:LEU:HD23	8:1I:38:LEU:N	2.25	0.50
18:1W:1:MET:HE3	18:1W:2:GLU:H	1.75	0.50
32:1a:438:G:N1	32:1a:495:A:OP2	2.42	0.50
32:1a:692:U:O2'	32:1a:694:A:N7	2.35	0.50
32:1a:963:G:H5'	61:1a:2108:HOH:O	2.11	0.50
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.46	0.50
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.45	0.50
7:2H:124:GLU:OE2	7:2H:132:ARG:HD2	2.12	0.50
32:2a:814:A:H2'	32:2a:816:A:H5'	1.93	0.50
32:2a:1155:G:H2'	32:2a:1156:G:C8	2.47	0.50
1:1A:2319:G:H22	14:1S:3:ARG:HD3	1.77	0.50
4:1E:195:LEU:HG	4:1E:196:VAL:N	2.27	0.50
7:1H:116:GLU:HG3	7:1H:117:PRO:HD2	1.93	0.50
8:1I:93:THR:O	8:1I:97:ILE:HG13	2.11	0.50
29:17:24:THR:O	29:17:28:ARG:HG3	2.11	0.50
30:18:62:LEU:HB3	30:18:65:GLU:HG2	1.92	0.50
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.12	0.50
1:2A:2294:C:OP2	14:2S:89:ARG:NH2	2.28	0.50
1:2A:2469:A:O3'	12:2Q:56:ARG:NH1	2.45	0.50
6:2G:41:GLN:O	6:2G:43:LEU:N	2.45	0.50
30:28:26:LYS:HB2	30:28:44:LYS:O	2.11	0.50
32:2a:659:U:H2'	32:2a:660:G:H8	1.76	0.50
32:2a:1125:U:H6	32:2a:1126:U:O2'	1.94	0.50
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.47	0.50
36:2e:57:LYS:HG2	36:2e:61:TYR:CE2	2.43	0.50
46:2o:87:ILE:HG22	46:2o:88:ARG:N	2.24	0.50
1:1A:894:C:H2'	1:1A:895:U:O4'	2.12	0.50
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.10	0.50
4:1E:121:ASN:ND2	61:1E:404:HOH:O	2.45	0.50
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.46	0.50
32:1a:171:A:H2'	32:1a:172:A:C8	2.46	0.50
32:1a:193:C:H2'	32:1a:194:C:H6	1.76	0.50
32:1a:1206:G:O4'	34:1c:194:GLY:HA2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.37	0.50
54:1w:4:C:H2'	54:1w:5:G:C8	2.46	0.50
54:1y:51:U:H2'	54:1y:52:G:H8	1.76	0.50
1:2A:2390:U:P	30:28:35:GLN:HE22	2.35	0.50
2:2B:24:G:N7	2:2B:56:G:H2'	2.26	0.50
2:2B:55:U:H1'	6:2G:29:TRP:CD1	2.47	0.50
12:2Q:10:ARG:HH11	12:2Q:11:LYS:HE2	1.77	0.50
20:2Y:40:GLU:O	20:2Y:42:VAL:HG23	2.12	0.50
25:23:8:LEU:HD23	25:23:30:ARG:O	2.12	0.50
32:2a:1317:C:N3	50:2s:37:ARG:NH2	2.58	0.50
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.47	0.50
1:1A:1060:U:H3	1:1A:1088:A:H8	1.58	0.50
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.47	0.50
3:1D:147:LEU:HD13	3:1D:155:LEU:HD21	1.93	0.50
16:1U:81:HIS:CE1	16:1U:85:LYS:HD2	2.46	0.50
32:1a:789:U:O2'	32:1a:791:G:N7	2.41	0.50
32:1a:971:G:N1	32:1a:1363(A):A:OP2	2.42	0.50
46:1o:15:PHE:CZ	46:1o:84:LYS:HD2	2.47	0.50
1:2A:271(L):U:H5''	8:2I:50:ARG:HH11	1.77	0.50
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.46	0.50
2:2B:46:A:H2'	2:2B:47:C:H6	1.76	0.50
8:2I:79:ILE:N	8:2I:143:SER:O	2.29	0.50
32:2a:524:G:H2'	32:2a:525:C:C6	2.47	0.50
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.12	0.50
1:1A:143:G:H1'	19:1X:37:THR:HG21	1.94	0.50
1:1A:1999:C:H4'	1:1A:2723:C:O2	2.10	0.50
1:1A:2615:U:H2'	1:1A:2616:C:C6	2.46	0.50
6:1G:16:ARG:O	6:1G:20:ILE:HG13	2.12	0.50
32:1a:116:A:OP1	61:1a:1921:HOH:O	2.20	0.50
32:1a:151:A:N6	32:1a:171:A:C6	2.80	0.50
32:1a:200:G:H1	32:1a:217:C:H42	1.58	0.50
32:1a:584:G:H5'	48:1q:91:ARG:NH2	2.27	0.50
40:1i:17:VAL:HG21	40:1i:81:ILE:HB	1.92	0.50
44:1m:19:LEU:HD21	44:1m:56:LEU:HD21	1.92	0.50
54:1w:1:G:OP3	61:1w:201:HOH:O	2.19	0.50
54:1w:51:U:H2'	54:1w:52:G:C8	2.47	0.50
1:2A:30:G:H2'	1:2A:31:C:H6	1.76	0.50
1:2A:84:A:H5''	20:2Y:8:LYS:NZ	2.26	0.50
1:2A:1411:C:H2'	1:2A:1412:A:H8	1.76	0.50
1:2A:2558:C:H2'	1:2A:2559:C:O4'	2.12	0.50
1:2A:2872:G:O2'	1:2A:2873:A:H5'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:53:A:H8	2:2B:53:A:O5'	1.95	0.50
20:2Y:6:HIS:H	20:2Y:6:HIS:CD2	2.30	0.50
22:20:52:GLY:O	22:20:59:LEU:HA	2.12	0.50
25:23:8:LEU:HB2	25:23:28:LEU:HD22	1.94	0.50
32:2a:707:C:H2'	32:2a:708:C:H6	1.77	0.50
32:2a:1057:G:H2'	32:2a:1058:G:O4'	2.12	0.50
32:2a:1101:A:H8	33:2b:172:ILE:HD13	1.77	0.50
38:2g:68:ASN:ND2	38:2g:128:ALA:HA	2.21	0.50
38:2g:108:ALA:HA	38:2g:111:ARG:HD2	1.93	0.50
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.26	0.50
1:1A:2143:C:H2'	1:1A:2144:U:O4'	2.12	0.50
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.36	0.50
32:1a:352:C:O2'	32:1a:354:G:OP1	2.28	0.50
32:1a:1027:C:C4	32:1a:1034:G:N1	2.80	0.50
32:1a:1347:G:H5''	40:1i:107:ARG:HB3	1.93	0.50
39:1h:87:SER:HB2	39:1h:93:VAL:HB	1.94	0.50
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.75	0.50
1:2A:315:G:H2'	1:2A:316:C:C6	2.47	0.50
1:2A:848:G:H2'	1:2A:849:A:C8	2.46	0.50
2:2B:11:C:O5'	2:2B:12:C:H5	1.95	0.50
6:2G:68:PRO:HB2	6:2G:90:LEU:HB3	1.93	0.50
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	1.94	0.50
28:26:13:CYS:SG	28:26:47:THR:HG21	2.51	0.50
32:2a:176:C:H2'	32:2a:177:C:C6	2.44	0.50
32:2a:547:A:OP1	61:2a:3319:HOH:O	2.19	0.50
32:2a:828:A:N6	32:2a:858:G:O2'	2.41	0.50
32:2a:1381:U:H1'	38:2g:79:ARG:HD3	1.94	0.50
35:2d:176:LEU:HD12	35:2d:182:LYS:O	2.11	0.50
36:2e:72:GLN:C	36:2e:73:ASN:HD22	2.19	0.50
38:2g:44:TYR:O	38:2g:47:CYS:HB2	2.12	0.50
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.12	0.50
12:1Q:17:LEU:HD21	12:1Q:96:VAL:HG13	1.94	0.50
23:11:8:SER:HB3	23:11:66:HIS:CD2	2.47	0.50
32:1a:651:C:O2'	32:1a:652:U:H5'	2.12	0.50
34:1c:162:GLN:NE2	53:1v:24:A:O3'	2.44	0.50
35:1d:184:LYS:O	35:1d:186:LEU:HD22	2.12	0.50
1:2A:96:G:H4'	24:22:48:HIS:CD2	2.47	0.50
1:2A:1012:U:C5	9:2N:28:THR:HG21	2.47	0.50
1:2A:1171:G:H8	1:2A:1171:G:O5'	1.95	0.50
1:2A:1300:U:H4'	1:2A:1301:A:H5''	1.94	0.50
1:2A:2052:G:H4'	4:2E:143:ASN:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2484:G:C2	1:2A:2485:G:C8	3.00	0.50
32:2a:70:G:H2'	32:2a:71:C:H6	1.76	0.50
32:2a:201:C:H5'	32:2a:202:U:OP2	2.12	0.50
32:2a:551:U:H2'	32:2a:552:U:C6	2.46	0.50
32:2a:952:U:H2'	32:2a:953:G:C8	2.47	0.50
33:2b:27:LYS:O	33:2b:194:PRO:HG2	2.12	0.50
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.12	0.50
1:1A:154(A):C:O5'	1:1A:154(A):C:H6	1.95	0.49
1:1A:639:U:H2'	1:1A:640:C:C6	2.47	0.49
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.47	0.49
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.76	0.49
13:1R:56:LYS:NZ	13:1R:90:ARG:O	2.45	0.49
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.12	0.49
32:1a:452:A:O2'	32:1a:453:A:OP2	2.29	0.49
44:1m:40:ASN:O	44:1m:43:THR:OG1	2.30	0.49
1:2A:35:G:H1'	1:2A:454:A:C4	2.47	0.49
1:2A:212:G:H2'	1:2A:213:A:O4'	2.12	0.49
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.93	0.49
1:2A:2112:G:C2	1:2A:2113:U:H1'	2.47	0.49
1:2A:2820:A:OP2	13:2R:2:ARG:NH2	2.45	0.49
14:2S:19:LYS:C	14:2S:21:THR:H	2.20	0.49
32:2a:449:C:O2	47:2p:42:ARG:NH1	2.45	0.49
32:2a:528:C:H5'	32:2a:529:G:OP2	2.12	0.49
41:2j:25:GLU:OE2	41:2j:29:ARG:NE	2.44	0.49
42:2k:85:ARG:HG2	42:2k:111:ASP:O	2.12	0.49
1:1A:34:C:H5''	1:1A:35:G:OP2	2.12	0.49
1:1A:2181:G:O2'	1:1A:2182:G:OP1	2.28	0.49
3:1D:96:HIS:CD2	3:1D:102:LYS:HD3	2.47	0.49
4:1E:52:LEU:O	4:1E:76:ARG:N	2.45	0.49
7:1H:97:ARG:NE	7:1H:104:GLU:OE1	2.44	0.49
32:1a:7:G:H5'	32:1a:298:A:O4'	2.10	0.49
32:1a:78:G:C6	32:1a:91:C:N4	2.80	0.49
32:1a:945:G:OP1	61:1a:1920:HOH:O	2.19	0.49
32:1a:1298:C:C5	38:1g:114:ARG:HD3	2.48	0.49
32:1a:1347:G:O2'	32:1a:1373:G:O6	2.27	0.49
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.10	0.49
54:1y:4:C:H2'	54:1y:5:G:O4'	2.13	0.49
32:2a:988:G:C1'	32:2a:1014:A:H61	2.23	0.49
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.47	0.49
36:2e:102:ALA:HB2	36:2e:120:THR:HG21	1.95	0.49
37:2f:100:ASN:HB2	49:2r:27:GLY:O	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:2x:58:A:H4'	55:2x:59:A:OP1	2.12	0.49
1:1A:1094:U:H1'	1:1A:1097:U:C5	2.48	0.49
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.77	0.49
30:18:32:LEU:O	30:18:36:LYS:HE3	2.13	0.49
32:1a:1175:G:H2'	32:1a:1176:A:C8	2.47	0.49
1:2A:441:U:H2'	1:2A:442:G:C8	2.47	0.49
1:2A:764:A:H5''	3:2D:210:GLY:CA	2.41	0.49
1:2A:2184:G:H2'	1:2A:2185:C:C6	2.47	0.49
2:2B:98:G:H3'	2:2B:99:G:H8	1.77	0.49
10:2O:98:VAL:HG13	10:2O:117:LEU:HB3	1.94	0.49
19:2X:12:VAL:HG22	19:2X:29:TRP:CE2	2.46	0.49
32:2a:1356:G:N2	32:2a:1367:C:O2	2.45	0.49
34:2c:183:ASP:O	34:2c:201:TYR:HA	2.12	0.49
35:2d:172:PRO:HB2	35:2d:187:ARG:NH2	2.27	0.49
46:2o:7:GLU:OE1	46:2o:38:ARG:NH2	2.37	0.49
46:2o:32:LEU:O	46:2o:36:ILE:HG13	2.11	0.49
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.46	0.49
8:1I:77:LEU:HD21	8:1I:100:ALA:HB3	1.93	0.49
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.47	0.49
33:1b:84:GLU:OE1	33:1b:216:SER:HA	2.11	0.49
42:1k:48:ILE:CD1	42:1k:63:LEU:HB2	2.42	0.49
50:1s:63:THR:HG23	50:1s:66:MET:HE3	1.93	0.49
54:1y:38:A:H2'	54:1y:39:PSU:O4'	2.13	0.49
1:2A:379:G:N2	23:21:42:GLN:OE1	2.35	0.49
1:2A:1171:G:H22	1:2A:1178:C:N4	2.10	0.49
1:2A:1355:G:O6	61:2A:3943:HOH:O	2.19	0.49
1:2A:2819:G:H2'	1:2A:2821:A:N7	2.27	0.49
32:2a:543:C:O2'	32:2a:544:G:H5'	2.12	0.49
32:2a:558:G:OP1	61:2a:3320:HOH:O	2.19	0.49
32:2a:1085:U:H3'	32:2a:1086:U:H6	1.76	0.49
33:2b:16:HIS:HB2	33:2b:204:ASN:ND2	2.27	0.49
35:2d:172:PRO:HD2	35:2d:173:TRP:CZ3	2.48	0.49
39:2h:119:LEU:HB3	39:2h:123:GLU:HB2	1.93	0.49
3:1D:145:VAL:HG12	3:1D:146:GLU:O	2.13	0.49
6:1G:18:GLU:OE2	6:1G:22:ARG:HD2	2.13	0.49
11:1P:2:LYS:HG2	11:1P:3:LEU:N	2.28	0.49
12:1Q:84:GLY:O	12:1Q:85:LYS:HB2	2.12	0.49
32:1a:1330:U:H2'	32:1a:1331:G:H5'	1.95	0.49
34:1c:148:GLY:HA3	34:1c:172:ARG:H	1.76	0.49
37:1f:2:ARG:HD2	37:1f:69:GLU:HB3	1.95	0.49
1:2A:445:C:OP1	16:2U:2:PRO:HA	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:644:A:H4'	1:2A:645:C:C4	2.47	0.49
1:2A:1000:A:C4	1:2A:1155:A:C6	3.00	0.49
1:2A:1006:C:C2	1:2A:1138:G:N2	2.81	0.49
1:2A:2611:U:H3'	1:2A:2611:U:OP2	2.12	0.49
11:2P:90:ARG:HD2	11:2P:91:PHE:CZ	2.47	0.49
32:2a:859:A:H2'	32:2a:860:A:O4'	2.13	0.49
32:2a:1068:G:N7	32:2a:1094:G:C8	2.81	0.49
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.47	0.49
33:2b:40:HIS:HB3	33:2b:190:THR:HG21	1.95	0.49
33:2b:178:ARG:HH22	39:2h:68:ARG:NH1	2.10	0.49
33:2b:219:VAL:CA	33:2b:222:ILE:HG12	2.38	0.49
38:2g:111:ARG:NH1	38:2g:113:GLU:OE2	2.45	0.49
1:1A:2124:G:H1	1:1A:2174:C:N4	2.07	0.49
11:1P:35:HIS:O	61:1P:301:HOH:O	2.19	0.49
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.11	0.49
32:1a:975:A:H5'	32:1a:975:A:H8	1.78	0.49
33:1b:163:PHE:CD1	33:1b:185:ILE:HG13	2.48	0.49
42:1k:33:THR:HA	42:1k:39:PRO:HA	1.94	0.49
49:1r:25:THR:O	49:1r:26:LEU:HG	2.12	0.49
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.48	0.49
1:2A:600:G:O3'	5:2F:108:LYS:HE3	2.13	0.49
4:2E:9:VAL:HB	15:2T:3:ARG:HG2	1.94	0.49
6:2G:173:LEU:O	6:2G:178:PHE:N	2.46	0.49
32:2a:994:A:O2'	32:2a:995:C:H5'	2.11	0.49
32:2a:1411:C:H2'	32:2a:1412:C:H6	1.78	0.49
33:2b:98:LEU:O	33:2b:101:MET:HG3	2.13	0.49
34:2c:56:ASP:O	34:2c:57:ILE:HD12	2.13	0.49
40:2i:108:VAL:HG22	40:2i:109:VAL:H	1.78	0.49
1:1A:444:C:H5''	61:1A:4740:HOH:O	2.13	0.49
3:1D:26:LYS:HE2	3:1D:28:GLU:O	2.11	0.49
4:1E:50:GLY:HA3	4:1E:75:VAL:HG21	1.95	0.49
33:1b:133:LYS:HZ2	33:1b:137:ARG:HE	1.61	0.49
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	1.94	0.49
36:1e:41:VAL:O	36:1e:66:MET:HA	2.12	0.49
36:1e:145:LYS:O	36:1e:149:GLU:HG2	2.12	0.49
44:1m:23:TYR:CE2	44:1m:71:ARG:HG3	2.48	0.49
1:2A:818:G:OP2	61:2A:3942:HOH:O	2.19	0.49
1:2A:1184:G:H5'	25:23:29:ARG:NH1	2.28	0.49
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.94	0.49
7:2H:95:ARG:HD3	7:2H:106:THR:HB	1.95	0.49
8:2I:65:ALA:O	8:2I:69:LYS:N	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:29:LYS:HE2	24:22:57:ILE:HG21	1.93	0.49
25:23:59:VAL:HG12	25:23:60:GLU:N	2.27	0.49
28:26:53:LYS:NZ	61:26:201:HOH:O	2.45	0.49
32:2a:269:C:H2'	32:2a:270:A:C8	2.47	0.49
32:2a:344:A:OP2	32:2a:345:C:N4	2.37	0.49
40:2i:79:LEU:HG	40:2i:83:ARG:HD2	1.94	0.49
43:2l:40:VAL:HG21	43:2l:78:GLN:HA	1.95	0.49
44:2m:82:MET:HE3	44:2m:93:ARG:HB3	1.94	0.49
1:1A:264:C:O2'	1:1A:265:A:H2'	2.12	0.49
1:1A:655:A:H8	1:1A:656:G:C1'	2.25	0.49
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.48	0.49
1:1A:2307:G:H4'	1:1A:2308:G:O5'	2.12	0.49
32:1a:441:A:H8	32:1a:441:A:OP2	1.96	0.49
32:1a:977:A:H1'	32:1a:982:U:O4	2.13	0.49
1:2A:652(T):C:H2'	1:2A:652(U):G:H8	1.75	0.49
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.42	0.49
6:2G:122:PRO:O	6:2G:125:PHE:HD2	1.95	0.49
9:2N:42:TRP:HA	9:2N:48:MET:SD	2.53	0.49
19:2X:26:TYR:CE2	19:2X:89:ILE:HG13	2.48	0.49
32:2a:410:G:OP1	35:2d:30:LYS:NZ	2.32	0.49
32:2a:948:C:OP2	44:2m:106:ASN:HB2	2.13	0.49
32:2a:1517:G:H2'	32:2a:1518:MA6:H8	1.95	0.49
33:2b:107:THR:O	33:2b:110:GLN:HB3	2.12	0.49
34:2c:120:VAL:HG13	34:2c:133:ALA:HB1	1.94	0.49
40:2i:105:ASP:HB2	40:2i:107:ARG:HG3	1.95	0.49
44:2m:29:ARG:HD3	44:2m:64:TRP:CE2	2.48	0.49
50:2s:33:THR:HG22	50:2s:50:ALA:O	2.11	0.49
1:1A:249:C:O2	30:18:12:LYS:NZ	2.35	0.49
1:1A:363:G:H2'	1:1A:363(A):A:C8	2.46	0.49
1:1A:861:A:C2	1:1A:917:A:C4	3.01	0.49
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.47	0.49
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.58	0.49
32:1a:130:A:O2'	32:1a:131:C:O5'	2.25	0.49
32:1a:527:G7M:HN72	43:1l:92:0TD:H3	1.94	0.49
32:1a:943:U:H2'	32:1a:944:G:H5'	1.93	0.49
32:1a:1175:G:H2'	32:1a:1176:A:H8	1.78	0.49
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.81	0.49
37:1f:33:TYR:CD2	37:1f:75:LEU:HD23	2.47	0.49
41:1j:38:ILE:HG12	41:1j:71:LEU:O	2.13	0.49
51:1t:65:LYS:O	51:1t:68:LYS:HB3	2.13	0.49
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:53:PRO:HA	4:2E:75:VAL:HA	1.94	0.49
5:2F:110:LEU:HD21	5:2F:181:LEU:HD23	1.94	0.49
6:2G:44:GLY:HA2	6:2G:88:ILE:HG22	1.94	0.49
10:2O:22:ILE:HG23	10:2O:41:ALA:HA	1.95	0.49
13:2R:104:ARG:HD2	13:2R:107:ASP:OD1	2.13	0.49
20:2Y:12:THR:OG1	20:2Y:26:LYS:HD3	2.12	0.49
26:24:46:GLN:C	26:24:48:ARG:N	2.66	0.49
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.48	0.49
32:2a:279:A:OP2	48:2q:95:TYR:OH	2.19	0.49
32:2a:376:G:H5''	47:2p:5:ARG:HB2	1.95	0.49
32:2a:1004:A:N3	32:2a:1038:C:C2	2.81	0.49
32:2a:1055:A:H62	32:2a:1200:C:N4	2.11	0.49
32:2a:1273:G:H5'	32:2a:1274:G:OP2	2.13	0.49
34:2c:111:LEU:CD2	34:2c:146:ALA:HB2	2.43	0.49
34:2c:125:GLU:HB2	34:2c:190:ARG:HE	1.77	0.49
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	1.95	0.49
43:2l:34:ARG:O	43:2l:61:THR:HG23	2.13	0.49
44:2m:3:ARG:NH2	44:2m:11:ARG:HG3	2.28	0.49
45:2n:32:SER:O	45:2n:40:CYS:HA	2.13	0.49
54:2w:58:A:H1'	54:2w:60:U:OP2	2.12	0.49
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.13	0.49
1:1A:721:C:H2'	1:1A:722:A:C8	2.48	0.49
1:1A:1371:G:H2'	1:1A:1372:U:H5	1.78	0.49
1:1A:2131:G:H5''	1:1A:2132:U:H3'	1.95	0.49
1:1A:2160:G:C6	1:1A:2161:C:N4	2.81	0.49
2:1B:32:C:C2	2:1B:51:G:N2	2.81	0.49
49:1r:37:VAL:CG2	49:1r:78:LEU:HB3	2.43	0.49
51:1t:29:LYS:O	51:1t:33:ILE:HG13	2.12	0.49
1:2A:271(O):C:H4'	8:2I:49:ALA:HB1	1.93	0.49
1:2A:1035:U:O4	61:2A:3947:HOH:O	2.19	0.49
1:2A:1203:G:OP2	1:2A:1204:A:O2'	2.26	0.49
1:2A:1294:U:HO2'	13:2R:26:LYS:HZ2	1.51	0.49
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.48	0.49
4:2E:79:ARG:HG2	4:2E:79:ARG:NH1	2.27	0.49
5:2F:20:LEU:HA	5:2F:20:LEU:HD23	1.66	0.49
6:2G:20:ILE:HA	6:2G:25:TYR:HD2	1.77	0.49
33:2b:63:MET:HG3	33:2b:225:ALA:HB1	1.95	0.49
33:2b:185:ILE:CB	33:2b:199:TYR:HB2	2.42	0.49
42:2k:110:ASP:OD2	42:2k:112:THR:HG23	2.12	0.49
54:2y:23:A:H2'	54:2y:24:G:O4'	2.13	0.49
1:1A:2801(A):A:N3	1:1A:2895:U:H1'	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:34:TRP:HA	11:1P:6:LEU:HD13	1.94	0.48
32:1a:161:A:H2'	32:1a:162:A:C8	2.47	0.48
32:1a:664:G:P	49:1r:64:ARG:HH21	2.37	0.48
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.41	0.48
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.38	0.48
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.48	0.48
1:2A:1713:U:H2'	1:2A:1714:G:H8	1.78	0.48
1:2A:2298:A:N6	1:2A:2318:G:C8	2.81	0.48
1:2A:2590:A:N3	61:2A:4008:HOH:O	2.35	0.48
29:27:24:THR:O	29:27:28:ARG:HG3	2.13	0.48
32:2a:977:A:H2	32:2a:1224:G:C6	2.31	0.48
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.48	0.48
32:2a:1255:G:O3'	32:2a:1258:G:H1'	2.13	0.48
33:2b:222:ILE:HG13	33:2b:223:ILE:N	2.28	0.48
37:2f:97:PHE:CD2	49:2r:65:ILE:HD12	2.48	0.48
1:1A:284:U:H2'	1:1A:285:C:C6	2.48	0.48
1:1A:1783:A:H5'	1:1A:2608:G:H4'	1.95	0.48
35:1d:117:ALA:O	35:1d:121:VAL:HG23	2.13	0.48
2:2B:74:U:H3'	2:2B:75:G:H5''	1.95	0.48
14:2S:83:LYS:HB2	14:2S:111:GLU:OE1	2.13	0.48
17:2V:1:MET:HE2	17:2V:43:GLU:H	1.78	0.48
32:2a:536:C:O5'	32:2a:536:C:H6	1.97	0.48
33:2b:192:SER:O	33:2b:194:PRO:HD3	2.13	0.48
34:2c:51:GLY:O	34:2c:70:VAL:HG12	2.13	0.48
37:2f:5:GLU:N	37:2f:91:VAL:O	2.41	0.48
1:1A:654:A:OP2	61:1A:4241:HOH:O	2.20	0.48
1:1A:709:U:H2'	1:1A:710:G:C8	2.47	0.48
1:1A:1121:C:N4	61:1A:4251:HOH:O	2.46	0.48
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.46	0.48
26:14:63:TYR:N	26:14:64:GLY:HA2	2.28	0.48
32:1a:1095:U:H2'	32:1a:1096:C:C6	2.49	0.48
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.13	0.48
54:1y:67:C:H2'	54:1y:68:C:H6	1.78	0.48
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.47	0.48
1:2A:2060:A:N3	61:2A:4010:HOH:O	2.35	0.48
1:2A:2180:U:H2'	1:2A:2181:G:O4'	2.12	0.48
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	1.94	0.48
12:2Q:38:GLU:HB2	12:2Q:127:ILE:HG22	1.94	0.48
32:2a:932:C:H2'	32:2a:933:G:C8	2.47	0.48
32:2a:986:A:H2'	32:2a:987:G:O4'	2.13	0.48
33:2b:82:ARG:HB2	33:2b:92:TYR:CZ	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2n:12:ARG:HB3	45:2n:12:ARG:HH11	1.77	0.48
50:2s:32:LYS:HA	50:2s:50:ALA:HB3	1.95	0.48
52:2u:20:LYS:O	52:2u:23:PRO:HD3	2.13	0.48
1:1A:2151:G:C6	1:1A:2152:G:C6	3.01	0.48
1:1A:2417:C:OP1	11:1P:65:ARG:NH2	2.45	0.48
22:10:10:THR:HA	61:10:209:HOH:O	2.13	0.48
32:1a:1263:C:H2'	32:1a:1264:C:C6	2.48	0.48
35:1d:128:VAL:O	35:1d:131:ARG:N	2.47	0.48
37:1f:21:LEU:O	37:1f:25:ILE:HG13	2.13	0.48
1:2A:531:C:OP1	1:2A:561:G:N1	2.38	0.48
1:2A:1184:G:H5'	25:23:29:ARG:HH11	1.78	0.48
1:2A:2525:G:N2	1:2A:2539:C:C2	2.81	0.48
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.47	0.48
21:2Z:157:LEU:HB3	21:2Z:161:VAL:HG13	1.93	0.48
32:2a:429:U:H1'	32:2a:430:A:H5''	1.94	0.48
32:2a:586:C:O2'	32:2a:878:G:H4'	2.13	0.48
32:2a:833:U:H2'	32:2a:834:C:C6	2.48	0.48
32:2a:943:U:H1'	40:2i:124:GLN:HE22	1.79	0.48
32:2a:1180:A:H5'	40:2i:103:THR:HG23	1.96	0.48
33:2b:78:GLN:NE2	33:2b:95:GLN:HE22	2.11	0.48
33:2b:223:ILE:HA	33:2b:226:ARG:HG2	1.96	0.48
36:2e:90:VAL:HG12	36:2e:121:LYS:O	2.13	0.48
42:2k:48:ILE:O	42:2k:50:TYR:N	2.37	0.48
18:1W:65:LEU:HD12	18:1W:68:ARG:NH1	2.28	0.48
32:1a:958:A:C6	32:1a:959:A:N1	2.82	0.48
1:2A:196:A:N3	1:2A:196:A:H2'	2.29	0.48
1:2A:994:C:O2'	1:2A:996:A:OP1	2.29	0.48
1:2A:1359:A:C2	1:2A:1360:A:C8	3.01	0.48
1:2A:2127:G:N1	1:2A:2161:C:C4	2.81	0.48
1:2A:2319:G:N2	14:2S:3:ARG:HA	2.29	0.48
2:2B:75:G:N3	21:2Z:85:HIS:CE1	2.82	0.48
5:2F:120:GLU:OE2	5:2F:122:LYS:HG3	2.13	0.48
6:2G:108:ASN:O	26:24:37:SER:N	2.46	0.48
6:2G:170:ARG:NH1	6:2G:174:GLU:OE2	2.47	0.48
8:2I:38:LEU:HB2	8:2I:40:THR:HG23	1.95	0.48
12:2Q:48:GLU:O	12:2Q:52:VAL:HG23	2.13	0.48
32:2a:1016:A:N6	32:2a:1017:G:N3	2.62	0.48
41:2j:8:LEU:HD23	41:2j:8:LEU:H	1.78	0.48
50:2s:63:THR:HG22	50:2s:66:MET:HG2	1.95	0.48
1:1A:784:A:O4'	3:1D:227:ASN:ND2	2.47	0.48
1:1A:1027:A:C2	1:1A:2488:A:H5'	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:60:GLU:OE2	8:1I:64:GLU:HB2	2.13	0.48
13:1R:2:ARG:HD2	61:1R:309:HOH:O	2.13	0.48
32:1a:112:G:OP1	47:1p:27:LYS:HD3	2.14	0.48
32:1a:848:C:H2'	32:1a:849:C:C6	2.48	0.48
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.13	0.48
33:1b:48:MET:HG2	33:1b:51:LEU:HD12	1.96	0.48
35:1d:144:ASP:N	35:1d:144:ASP:OD1	2.47	0.48
35:1d:194:LEU:HD13	35:1d:195:ALA:H	1.79	0.48
40:1i:56:LEU:HG	40:1i:57:GLY:N	2.28	0.48
44:1m:20:THR:C	44:1m:22:ILE:H	2.21	0.48
44:1m:67:GLU:HG3	44:1m:71:ARG:HH22	1.78	0.48
51:1t:10:LEU:HB3	51:1t:12:ALA:N	2.22	0.48
1:2A:658:C:H2'	1:2A:659:C:C6	2.48	0.48
1:2A:1037:G:H2'	1:2A:1038:C:O4'	2.14	0.48
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.31	0.48
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.46	0.48
21:2Z:7:ALA:O	21:2Z:62:PRO:HD3	2.13	0.48
32:2a:335:C:H2'	32:2a:336:C:C6	2.49	0.48
32:2a:1403:C:C2	32:2a:1404:5MC:HM52	2.49	0.48
35:2d:107:ARG:HH11	35:2d:173:TRP:HZ2	1.62	0.48
35:2d:155:LEU:HD23	35:2d:156:GLU:H	1.79	0.48
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.48	0.48
10:1O:24:VAL:HG13	10:1O:33:ALA:HB2	1.95	0.48
26:14:16:CYS:SG	26:14:17:GLY:N	2.85	0.48
32:1a:453:A:C6	32:1a:454:C:C4	3.01	0.48
32:1a:923:A:H5''	36:1e:21:ALA:HB2	1.96	0.48
33:1b:29:ALA:HA	33:1b:32:ILE:HG13	1.94	0.48
50:1s:52:TYR:HA	50:1s:56:GLN:O	2.12	0.48
1:2A:636:G:OP1	11:2P:132:LYS:NZ	2.44	0.48
1:2A:817:C:C2	1:2A:818:G:C8	3.01	0.48
7:2H:3:ARG:NH1	7:2H:4:ILE:H	2.10	0.48
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.13	0.48
16:2U:76:TYR:CZ	16:2U:80:ILE:HG13	2.48	0.48
21:2Z:100:VAL:HG21	21:2Z:134:PRO:HG2	1.95	0.48
21:2Z:129:SER:OG	21:2Z:130:PRO:HD2	2.14	0.48
32:2a:719:C:N4	49:2r:71:LYS:HE2	2.28	0.48
32:2a:946:A:H2'	32:2a:947:G:C8	2.49	0.48
33:2b:169:LYS:O	33:2b:169:LYS:HD3	2.13	0.48
38:2g:18:TYR:CG	38:2g:59:LEU:HD13	2.49	0.48
1:1A:185:U:H2'	1:1A:186:G:H8	1.79	0.48
1:1A:1075:C:H2'	1:1A:1076:C:H5'	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1359:A:C2	1:1A:1372:U:O4	2.67	0.48
1:1A:2136:C:N4	1:1A:2155:G:C6	2.80	0.48
1:1A:2206:G:H5''	1:1A:2207:G:C5	2.48	0.48
3:1D:169:GLU:OE2	3:1D:184:LYS:NZ	2.31	0.48
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.14	0.48
32:1a:1350:A:C2	32:1a:1351:U:C2	3.02	0.48
32:1a:1386:G:H2'	32:1a:1387:G:H8	1.78	0.48
34:1c:124:ILE:CG2	34:1c:130:VAL:HG22	2.44	0.48
35:1d:18:LYS:HG2	60:1d:302:SF4:S1	2.53	0.48
41:1j:61:GLU:OE1	45:1n:45:ARG:HD2	2.14	0.48
43:1l:57:LYS:HG3	43:1l:67:THR:HG22	1.96	0.48
1:2A:1193:G:OP1	11:2P:14:LYS:NZ	2.32	0.48
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.49	0.48
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.49	0.48
2:2B:73:A:C4	2:2B:105:A:C2	3.01	0.48
6:2G:101:ILE:HD13	26:24:25:TYR:HB2	1.95	0.48
21:2Z:53:ILE:HG13	21:2Z:54:HIS:N	2.28	0.48
21:2Z:73:GLN:HB3	21:2Z:87:ASP:CG	2.38	0.48
21:2Z:145:GLU:HG3	21:2Z:146:ILE:N	2.29	0.48
22:20:10:THR:CG2	22:20:12:ASN:HB2	2.44	0.48
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.28	0.48
32:2a:834:C:C2	32:2a:853:G:C2	3.01	0.48
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.46	0.48
39:2h:7:ALA:O	39:2h:11:THR:OG1	2.31	0.48
1:1A:898:C:H41	1:1A:899:A:H62	1.62	0.48
1:1A:1005:C:H5''	61:1A:4287:HOH:O	2.13	0.48
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.49	0.48
1:1A:1427:A:H4'	1:1A:1428:C:O4'	2.14	0.48
14:1S:93:LYS:HG2	14:1S:95:HIS:HB2	1.94	0.48
32:1a:1005:A:H5''	32:1a:1006:C:C5	2.48	0.48
51:1t:99:LEU:HA	51:1t:100:ILE:O	2.14	0.48
1:2A:27:G:O2'	1:2A:28:A:OP2	2.30	0.48
1:2A:854:G:H2'	1:2A:855:G:C8	2.48	0.48
1:2A:1027:A:C6	1:2A:1126:A:C4	3.01	0.48
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.29	0.48
1:2A:2278:A:OP2	22:20:12:ASN:ND2	2.47	0.48
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.49	0.48
11:2P:98:GLU:O	11:2P:101:VAL:HG12	2.14	0.48
14:2S:68:GLN:HA	14:2S:71:ARG:HD3	1.95	0.48
32:2a:1261:A:H5''	32:2a:1262:C:OP2	2.14	0.48
32:2a:1367:C:O2'	41:2j:62:HIS:HE1	1.97	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:33:VAL:HG13	36:2e:112:LEU:HD22	1.94	0.48
46:2o:69:TYR:CE1	46:2o:73:GLU:HG3	2.49	0.48
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.28	0.48
4:1E:18:ASP:HB3	15:1T:82:LEU:HD21	1.95	0.48
8:1I:47:LEU:HD23	8:1I:47:LEU:HA	1.72	0.48
17:1V:98:GLU:CD	17:1V:100:ARG:HH11	2.22	0.48
32:1a:232:G:H1'	32:1a:262:A:N1	2.29	0.48
32:1a:872:A:C8	32:1a:874:G:C8	3.02	0.48
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.49	0.48
6:2G:126:ASP:HB2	6:2G:130:ASN:O	2.14	0.48
8:2I:93:THR:HG22	8:2I:119:PRO:HB3	1.95	0.48
27:25:31:VAL:HG22	27:25:42:PRO:HD3	1.96	0.48
32:2a:189(D):C:H2'	32:2a:189(E):U:O4'	2.13	0.48
32:2a:1033:G:H2'	32:2a:1034:G:C8	2.48	0.48
32:2a:1094:G:O2'	32:2a:1108:G:N2	2.47	0.48
34:2c:20:SER:HB3	34:2c:22:TRP:NE1	2.28	0.48
37:2f:96:PRO:HB3	49:2r:30:ASP:CG	2.38	0.48
40:2i:49:PRO:HG3	40:2i:101:PHE:HD1	1.78	0.48
45:2n:24:CYS:HB2	45:2n:40:CYS:HB3	1.96	0.48
1:1A:253:C:OP2	30:18:5:LYS:NZ	2.29	0.47
1:1A:674:G:O2'	5:1F:74:ARG:HD3	2.14	0.47
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.14	0.47
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.28	0.47
1:1A:2334:G:H4'	1:1A:2335:A:OP2	2.14	0.47
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.49	0.47
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.13	0.47
18:1W:7:ALA:HB2	18:1W:50:VAL:HG22	1.96	0.47
23:11:3:LYS:O	23:11:12:PRO:HD3	2.14	0.47
26:14:43:TYR:C	26:14:45:GLY:H	2.22	0.47
33:1b:21:ARG:HG3	33:1b:21:ARG:O	2.13	0.47
39:1h:14:ARG:O	39:1h:18:ARG:HG3	2.14	0.47
43:1l:34:ARG:NH1	61:1l:301:HOH:O	2.44	0.47
1:2A:568:U:H5'	1:2A:945:A:N1	2.29	0.47
1:2A:999:U:O2'	1:2A:1000:A:H5'	2.14	0.47
1:2A:2723:C:OP2	4:2E:109:LYS:NZ	2.47	0.47
12:2Q:109:VAL:HG22	12:2Q:110:THR:H	1.79	0.47
14:2S:12:PHE:O	14:2S:16:ASN:ND2	2.47	0.47
14:2S:64:GLU:O	14:2S:68:GLN:HG2	2.14	0.47
32:2a:109:A:H2'	32:2a:326:G:N2	2.29	0.47
32:2a:254:G:OP1	48:2q:66:SER:OG	2.32	0.47
32:2a:542:G:P	35:2d:10:ARG:HH22	2.37	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1107:C:C4	32:2a:1108:G:C8	3.02	0.47
32:2a:1225:A:OP1	44:2m:103:THR:N	2.44	0.47
46:2o:9:GLN:O	46:2o:13:GLN:HG3	2.14	0.47
1:1A:361:G:C6	1:1A:362:U:O4	2.68	0.47
1:1A:886:C:N3	1:1A:887:A:C8	2.82	0.47
1:1A:897:C:H4'	54:1w:55:PSU:O3'	2.14	0.47
1:1A:1041:C:N4	1:1A:1114:G:H1	2.11	0.47
1:1A:1702:G:N7	61:1A:4300:HOH:O	2.35	0.47
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.33	0.47
1:1A:2714:G:OP2	61:1A:4239:HOH:O	2.19	0.47
2:1B:43:C:H5''	26:14:1:MET:CE	2.44	0.47
10:1O:26:LYS:HE2	10:1O:37:ASP:OD2	2.14	0.47
12:1Q:12:GLN:NE2	12:1Q:72:LYS:HG3	2.29	0.47
32:1a:185:A:O2'	32:1a:186:C:H5'	2.14	0.47
32:1a:560:U:H5	61:1a:1993:HOH:O	1.97	0.47
32:1a:1149:C:H2'	32:1a:1150:U:H6	1.77	0.47
38:1g:78:ARG:O	38:1g:84:ASN:HA	2.14	0.47
1:2A:869:G:C2	1:2A:909:A:C2	3.02	0.47
61:2A:4280:HOH:O	11:2P:44:GLY:HA2	2.13	0.47
2:2B:83:G:H1	2:2B:94:C:H42	1.62	0.47
2:2B:94:C:H2'	2:2B:95:C:C6	2.49	0.47
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	1.96	0.47
10:2O:7:TYR:HE2	10:2O:20:MET:CE	2.27	0.47
10:2O:48:PRO:CB	32:2a:1422:G:H5''	2.40	0.47
32:2a:114:U:C2'	32:2a:115:G:H5'	2.44	0.47
32:2a:828:A:H5''	32:2a:859:A:C2	2.50	0.47
32:2a:1176:A:H2'	32:2a:1177:G:O4'	2.14	0.47
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.96	0.47
55:2x:27:U:O2	55:2x:44:A:H2	1.97	0.47
1:1A:1079:C:H2'	1:1A:1080:C:O4'	2.14	0.47
1:1A:1155:A:P	16:1U:55:ARG:HD2	2.54	0.47
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.13	0.47
9:1N:109:LYS:HE2	61:1N:302:HOH:O	2.14	0.47
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.14	0.47
38:1g:78:ARG:HG3	38:1g:156:TRP:HZ3	1.79	0.47
40:1i:6:GLY:O	40:1i:17:VAL:HG12	2.15	0.47
1:2A:1021:A:H3'	1:2A:1021:A:C8	2.49	0.47
5:2F:137:LYS:H	5:2F:137:LYS:HG2	1.36	0.47
17:2V:98:GLU:OE1	17:2V:100:ARG:NH1	2.47	0.47
21:2Z:130:PRO:O	21:2Z:133:ILE:HG13	2.13	0.47
26:24:41:PRO:HB3	26:24:49:PHE:CD1	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1086:U:H3	32:2a:1099:G:H22	1.61	0.47
32:2a:1129:C:H1'	32:2a:1146:A:H61	1.79	0.47
32:2a:1289:A:H2'	32:2a:1290:G:H5'	1.96	0.47
33:2b:100:GLY:HA2	33:2b:103:THR:OG1	2.14	0.47
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.79	0.47
34:2c:124:ILE:HG21	34:2c:130:VAL:HG13	1.96	0.47
37:2f:99:ALA:HB1	49:2r:23:LYS:NZ	2.29	0.47
39:2h:124:ALA:O	39:2h:128:GLY:N	2.46	0.47
41:2j:5:ARG:N	61:2j:302:HOH:O	2.46	0.47
41:2j:45:ARG:HG2	41:2j:47:PHE:CZ	2.49	0.47
41:2j:78:ASN:O	41:2j:81:THR:N	2.46	0.47
1:1A:278:A:OP2	1:1A:278:A:H8	1.97	0.47
1:1A:662:G:H5'	11:1P:14:LYS:O	2.14	0.47
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.49	0.47
1:1A:1395:A:OP1	61:1A:4242:HOH:O	2.20	0.47
1:1A:2141:G:C6	1:1A:2142:C:C2	3.03	0.47
4:1E:101:ARG:HD2	4:1E:169:ASN:OD1	2.14	0.47
32:1a:502:G:H2'	32:1a:503:C:O4'	2.14	0.47
32:1a:1015:A:N3	32:1a:1218:C:O2'	2.42	0.47
32:1a:1036:G:H3'	32:1a:1037:C:C6	2.50	0.47
32:1a:1349:A:C2	32:1a:1374:A:C4	3.03	0.47
38:1g:78:ARG:HG2	38:1g:79:ARG:HG3	1.94	0.47
54:1y:68:C:C2	54:1y:69:G:C8	3.03	0.47
1:2A:455:C:H3'	1:2A:456:C:H5''	1.96	0.47
1:2A:656:G:H2'	1:2A:657:U:O4'	2.14	0.47
1:2A:774:A:H2'	1:2A:774:A:N3	2.29	0.47
1:2A:2655:G:O2'	1:2A:2664:G:O6	2.28	0.47
2:2B:66:A:N6	2:2B:108:U:H3'	2.30	0.47
16:2U:106:PHE:O	16:2U:110:VAL:HG23	2.14	0.47
21:2Z:128:VAL:HG21	21:2Z:132:ASN:O	2.14	0.47
32:2a:15:G:H2'	32:2a:16:A:H8	1.79	0.47
32:2a:607:A:H2'	32:2a:608:A:O4'	2.14	0.47
32:2a:693:G:H2'	32:2a:694:A:C8	2.49	0.47
32:2a:979:C:H2'	32:2a:980:C:O4'	2.14	0.47
38:2g:89:MET:SD	38:2g:155:ARG:HB2	2.54	0.47
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.97	0.47
44:2m:80:ARG:O	44:2m:84:ILE:N	2.46	0.47
1:1A:484:C:H2'	1:1A:485:C:C6	2.50	0.47
1:1A:700:G:O2'	1:1A:1632:A:N3	2.45	0.47
1:1A:882:G:H4'	54:1w:19:G:C6	2.48	0.47
1:1A:996:A:H4'	16:1U:91:ASP:OD2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2801(A):A:H1'	1:1A:2895:U:H1'	1.97	0.47
14:1S:99:LYS:O	14:1S:103:GLU:HG3	2.14	0.47
1:2A:11:G:O5'	1:2A:11:G:H8	1.97	0.47
1:2A:30:G:C5	1:2A:31:C:C4	3.03	0.47
1:2A:41:C:H2'	1:2A:42:G:H8	1.78	0.47
1:2A:94(A):G:H2'	1:2A:95:G:O4'	2.15	0.47
1:2A:1021:A:H3'	1:2A:1021:A:H8	1.78	0.47
1:2A:1219:G:H1	1:2A:1230:C:N4	2.13	0.47
1:2A:1371:G:H2'	1:2A:1372:U:H5	1.79	0.47
1:2A:1504:C:H2'	1:2A:1505:C:H6	1.80	0.47
1:2A:2561:A:H4'	10:2O:22:ILE:HD11	1.97	0.47
13:2R:87:TYR:OH	13:2R:117:VAL:O	2.28	0.47
20:2Y:29:GLU:HB3	20:2Y:38:ILE:HD12	1.96	0.47
32:2a:1128:C:O2'	32:2a:1129:C:OP1	2.30	0.47
1:1A:904:C:O2'	21:1Z:169:GLU:OE2	2.32	0.47
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.49	0.47
1:1A:2096:U:H3	1:1A:2193:G:H1	1.63	0.47
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.49	0.47
13:1R:96:ARG:HG2	13:1R:115:GLU:HG2	1.97	0.47
17:1V:82:ARG:NH1	61:1V:301:HOH:O	2.19	0.47
29:17:8:ASN:OD1	29:17:8:ASN:C	2.57	0.47
32:1a:584:G:H5'	48:1q:91:ARG:HH22	1.80	0.47
32:1a:751:U:H4'	46:1o:24:SER:HB3	1.95	0.47
38:1g:67:GLU:HA	38:1g:70:LYS:HD2	1.97	0.47
40:1i:17:VAL:HG11	40:1i:81:ILE:N	2.30	0.47
1:2A:222:A:H3'	1:2A:421:U:H5'	1.95	0.47
3:2D:12:SER:HB3	3:2D:208:LYS:HB3	1.96	0.47
5:2F:20:LEU:HD12	5:2F:125:LEU:HD13	1.97	0.47
6:2G:144:ILE:HG23	6:2G:148:MET:HE2	1.97	0.47
6:2G:148:MET:HB2	6:2G:148:MET:HE3	1.62	0.47
7:2H:26:VAL:O	7:2H:32:GLU:HA	2.14	0.47
26:24:59:PHE:HE2	50:2s:64:GLU:HB2	1.79	0.47
32:2a:598:U:O4	61:2a:3304:HOH:O	2.11	0.47
32:2a:828:A:H2'	32:2a:829:G:O4'	2.14	0.47
32:2a:840:C:H4'	32:2a:841:U:OP1	2.13	0.47
32:2a:977:A:O3'	32:2a:980:C:N4	2.48	0.47
32:2a:1049:U:H1'	32:2a:1201:A:N7	2.29	0.47
32:2a:1069:C:O2'	32:2a:1192:C:O2	2.30	0.47
32:2a:1087:G:N2	32:2a:1099:G:H1'	2.30	0.47
32:2a:1151:A:H5''	41:2j:42:THR:HG23	1.97	0.47
32:2a:1292:U:H2'	32:2a:1293:G:C8	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1359:C:O2'	32:2a:1361:G:N7	2.47	0.47
33:2b:219:VAL:O	33:2b:223:ILE:HG12	2.15	0.47
48:2q:48:GLU:OE1	48:2q:50:LYS:HE3	2.15	0.47
51:2t:10:LEU:HD23	51:2t:12:ALA:HB2	1.95	0.47
55:2x:18:G:O2'	55:2x:19:G:H5'	2.14	0.47
54:2y:61:C:H2'	54:2y:62:C:C6	2.49	0.47
1:1A:55:G:O2'	1:1A:127:A:N1	2.35	0.47
1:1A:864:G:O2'	1:1A:865:C:H5'	2.15	0.47
1:1A:1448:G:H4'	1:1A:1542:A:OP1	2.15	0.47
1:1A:2222:G:OP2	61:1A:4244:HOH:O	2.20	0.47
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.50	0.47
1:1A:2464:C:H1'	61:1A:5536:HOH:O	2.15	0.47
23:11:11:ARG:HG3	23:11:12:PRO:HD2	1.96	0.47
32:1a:362:G:OP2	61:1a:1923:HOH:O	2.20	0.47
32:1a:848:C:H2'	32:1a:849:C:H6	1.79	0.47
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.32	0.47
32:1a:1060:C:P	45:1n:45:ARG:HH22	2.37	0.47
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.62	0.47
33:1b:83:MET:HG3	33:1b:234:PRO:HG3	1.95	0.47
33:1b:93:VAL:HG11	33:1b:97:TRP:CD1	2.50	0.47
33:1b:178:ARG:HE	33:1b:178:ARG:HB3	1.58	0.47
40:1i:49:PRO:HG2	40:1i:81:ILE:HG23	1.95	0.47
43:1l:33:ARG:HB3	43:1l:60:LEU:HD22	1.97	0.47
46:1o:8:LYS:O	46:1o:12:ILE:HG13	2.15	0.47
1:2A:275:G:H2'	1:2A:276:A:O4'	2.15	0.47
1:2A:860:U:C2	1:2A:2268:A:C8	3.02	0.47
1:2A:861:A:N3	2:2B:79:C:O2'	2.48	0.47
1:2A:922:U:H2'	1:2A:923:C:C6	2.50	0.47
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.15	0.47
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.14	0.47
1:2A:1913:A:H4'	1:2A:1914:C:C5'	2.44	0.47
1:2A:2125:G:H1'	1:2A:2173:A:H61	1.80	0.47
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.29	0.47
1:2A:2387:U:H1'	22:20:41:ARG:HE	1.80	0.47
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.14	0.47
4:2E:9:VAL:HG13	4:2E:25:VAL:O	2.14	0.47
4:2E:143:ASN:HB2	4:2E:147:PRO:HD2	1.97	0.47
5:2F:125:LEU:HB3	5:2F:196:LEU:HD21	1.96	0.47
5:2F:197:ASP:O	5:2F:200:GLU:HB3	2.15	0.47
7:2H:3:ARG:HH21	7:2H:65:HIS:HB3	1.79	0.47
12:2Q:110:THR:HB	12:2Q:113:GLN:H	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:46:ASN:O	25:23:50:VAL:HG22	2.14	0.47
30:28:55:ALA:O	30:28:59:LYS:HG3	2.14	0.47
32:2a:417:C:H2'	32:2a:418:C:H6	1.80	0.47
32:2a:587:G:N2	32:2a:754:C:OP2	2.43	0.47
32:2a:973:G:N3	41:2j:54:PHE:HE1	2.12	0.47
32:2a:1070:U:H2'	32:2a:1071:C:H6	1.79	0.47
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.30	0.47
32:2a:1191:A:H5''	32:2a:1192:C:OP2	2.15	0.47
33:2b:184:VAL:O	33:2b:198:ASP:N	2.44	0.47
34:2c:47:LEU:HD11	34:2c:76:VAL:HA	1.97	0.47
34:2c:85:ARG:HB3	34:2c:85:ARG:CZ	2.45	0.47
36:2e:24:ARG:NH1	53:2v:24:A:OP2	2.48	0.47
37:2f:53:ALA:HB3	37:2f:86:ARG:CZ	2.44	0.47
37:2f:76:ALA:HB1	37:2f:80:ARG:HH22	1.80	0.47
39:2h:28:ALA:CB	39:2h:57:PRO:HB2	2.45	0.47
1:1A:185:U:H2'	1:1A:186:G:C8	2.50	0.47
1:1A:375:C:H2'	1:1A:376:C:C6	2.50	0.47
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.29	0.47
13:1R:31:HIS:HD2	61:1R:313:HOH:O	1.97	0.47
28:16:35:GLU:OE2	28:16:50:ARG:NH1	2.45	0.47
32:1a:241:C:C2	32:1a:286:G:C2	3.03	0.47
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.15	0.47
32:1a:1503:A:C2	53:1v:12:A:H2	2.32	0.47
34:1c:120:VAL:O	34:1c:124:ILE:HG12	2.14	0.47
44:1m:14:ARG:NH2	44:1m:41:PRO:O	2.48	0.47
48:1q:10:VAL:HA	48:1q:20:THR:O	2.15	0.47
51:1t:30:LYS:O	51:1t:34:LYS:HG3	2.15	0.47
1:2A:581:C:H2'	1:2A:582:G:C8	2.50	0.47
1:2A:816:C:H2'	1:2A:817:C:H6	1.80	0.47
3:2D:121:PRO:HB3	3:2D:135:PHE:CE2	2.49	0.47
8:2I:38:LEU:HB2	8:2I:40:THR:CG2	2.45	0.47
32:2a:1287:A:N6	32:2a:1371:G:O4'	2.42	0.47
32:2a:1381:U:O2'	38:2g:79:ARG:HD3	2.14	0.47
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	1.95	0.47
42:2k:44:SER:OG	42:2k:47:VAL:HG23	2.14	0.47
42:2k:82:VAL:HB	42:2k:108:ILE:HD13	1.96	0.47
44:2m:43:THR:OG1	44:2m:48:LEU:HD21	2.15	0.47
51:2t:72:LEU:HD12	51:2t:72:LEU:HA	1.78	0.47
54:2y:8:4SU:H6	54:2y:8:4SU:O5'	2.14	0.47
24:12:7:ARG:O	24:12:11:GLU:HG3	2.15	0.47
32:1a:203:U:OP2	32:1a:203:U:H6	1.98	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:278:G:OP2	48:1q:92:ARG:NH2	2.47	0.47
32:1a:373:A:O2'	32:1a:374:A:H5'	2.14	0.47
32:1a:649:G:H2'	32:1a:650:G:H8	1.80	0.47
32:1a:731:G:H5'	32:1a:766:A:H4'	1.97	0.47
54:1y:66:U:C4	54:1y:67:C:C4	3.03	0.47
1:2A:1359:A:N1	1:2A:1372:U:C4	2.82	0.47
1:2A:2080:G:N2	1:2A:2241:A:C4	2.83	0.47
2:2B:103:G:H21	21:2Z:73:GLN:NE2	2.13	0.47
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.49	0.47
21:2Z:72:ARG:NH1	21:2Z:97:GLU:O	2.32	0.47
32:2a:1064:G:C6	32:2a:1191:A:N6	2.79	0.47
32:2a:1272:G:N2	32:2a:1273:G:N7	2.61	0.47
33:2b:80:ILE:HD11	33:2b:212:GLN:HE21	1.80	0.47
1:1A:2461:C:H2'	1:1A:2462:U:C6	2.50	0.47
7:1H:154:PRO:HB3	7:1H:163:TYR:CE1	2.50	0.47
8:1I:126:TYR:HB2	8:1I:142:VAL:HG23	1.96	0.47
14:1S:61:ASN:O	14:1S:65:VAL:HG23	2.14	0.47
24:12:24:LEU:O	24:12:28:LYS:HG3	2.15	0.47
32:1a:626:U:N3	32:1a:627:G:N7	2.62	0.47
32:1a:1004:A:H5''	32:1a:1025:U:C5	2.50	0.47
32:1a:1162:C:O5'	32:1a:1162:C:H6	1.97	0.47
38:1g:115:ARG:HB2	38:1g:118:VAL:HG23	1.98	0.47
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	1.96	0.47
41:1j:30:SER:HB3	41:1j:81:THR:HG23	1.97	0.47
41:1j:50:ILE:HB	45:1n:41:ARG:HD2	1.96	0.47
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.80	0.47
50:1s:20:LEU:HA	50:1s:23:ASN:HD22	1.80	0.47
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.15	0.47
1:2A:864:G:N2	1:2A:913:U:C2	2.83	0.47
1:2A:892:G:N2	1:2A:894:C:OP2	2.47	0.47
1:2A:2815:C:H2'	1:2A:2816:C:C6	2.50	0.47
3:2D:70:TRP:CE2	3:2D:150:LYS:HD3	2.50	0.47
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.23	0.47
32:2a:587:G:N1	32:2a:754:C:OP2	2.47	0.47
32:2a:1013:G:O2'	32:2a:1015:A:N7	2.35	0.47
32:2a:1371:G:O3'	40:2i:69:GLY:HA3	2.15	0.47
33:2b:81:VAL:HB	33:2b:94:ASN:HD21	1.80	0.47
35:2d:109:GLY:HA3	35:2d:165:MET:HE3	1.97	0.47
36:2e:78:HIS:HD2	36:2e:142:LEU:HD23	1.79	0.47
38:2g:38:LEU:O	38:2g:38:LEU:HD12	2.14	0.47
43:2l:38:THR:O	43:2l:79:GLU:HG3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:48:C:H2'	54:2y:59:U:H1'	1.98	0.47
1:1A:548:A:H61	17:1V:19:LYS:H	1.64	0.46
1:1A:897:C:C4	1:1A:898:C:N4	2.82	0.46
1:1A:1161:C:O2'	17:1V:8:GLY:HA2	2.15	0.46
1:1A:1328:G:O2'	1:1A:1329:U:H2'	2.16	0.46
12:1Q:7:MET:HE3	12:1Q:7:MET:HB3	1.66	0.46
13:1R:38:VAL:HG12	13:1R:42:LYS:HE3	1.97	0.46
26:14:61:ARG:NH2	50:1s:41:VAL:HG12	2.30	0.46
32:1a:507:C:OP2	32:1a:508:C:O2'	2.25	0.46
32:1a:1054:C:C4	32:1a:1196:U:H5	2.33	0.46
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.15	0.46
32:1a:1221:G:C2'	32:1a:1222:G:H5'	2.45	0.46
33:1b:15:VAL:HG21	33:1b:213:LEU:HD23	1.97	0.46
33:1b:61:LEU:HD11	33:1b:160:ASP:HB2	1.96	0.46
42:1k:48:ILE:HD13	42:1k:63:LEU:HB2	1.96	0.46
45:1n:15:LYS:HB3	45:1n:16:PHE:CD2	2.50	0.46
47:1p:49:LEU:O	47:1p:50:LYS:HE2	2.15	0.46
1:2A:856:C:N4	61:2A:3915:HOH:O	2.47	0.46
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.14	0.46
2:2B:33:G:C2	2:2B:50:G:C2	3.03	0.46
6:2G:36:LYS:HG2	6:2G:160:VAL:HG22	1.97	0.46
8:2I:117:GLU:OE1	8:2I:118:LYS:N	2.35	0.46
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.97	0.46
32:2a:37:U:O2'	32:2a:500:G:H4'	2.15	0.46
32:2a:316:G:OP2	32:2a:351:G:O2'	2.31	0.46
32:2a:559:A:OP1	36:2e:126:ARG:NH2	2.48	0.46
32:2a:742:G:P	46:2o:35:ARG:HH22	2.37	0.46
32:2a:922:G:C6	32:2a:923:A:C6	3.02	0.46
43:2l:117:ARG:NE	43:2l:123:LYS:O	2.42	0.46
46:2o:55:GLY:O	46:2o:59:MET:HG3	2.15	0.46
1:1A:1080:C:H5'	1:1A:1081:U:OP2	2.16	0.46
1:1A:1591:G:C6	1:1A:1592:C:C4	3.04	0.46
1:1A:2611:U:C4	27:15:3:LYS:HG2	2.50	0.46
34:1c:148:GLY:HA2	34:1c:171:GLY:HA3	1.96	0.46
53:1v:20:U:H2'	53:1v:21:C:C6	2.50	0.46
1:2A:855:G:H2'	1:2A:856:C:C6	2.49	0.46
1:2A:1013:C:H2'	1:2A:1014:U:H6	1.79	0.46
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.77	0.46
1:2A:1902:C:H5'	3:2D:246:PRO:HD3	1.97	0.46
1:2A:2062:A:OP1	61:2A:3949:HOH:O	2.21	0.46
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:129:PHE:CD2	5:2F:163:VAL:HG21	2.50	0.46
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	1.97	0.46
13:2R:11:ASN:HD22	13:2R:11:ASN:N	2.13	0.46
15:2T:16:ARG:HB3	15:2T:18:ASP:OD1	2.16	0.46
32:2a:19:C:H5''	36:2e:86:ALA:HB1	1.97	0.46
32:2a:814:A:N7	32:2a:816:A:C4	2.83	0.46
32:2a:1006:C:H2'	32:2a:1007:C:C6	2.50	0.46
32:2a:1217:C:O2'	32:2a:1218:C:H5'	2.16	0.46
32:2a:1240:U:OP2	38:2g:115:ARG:HA	2.14	0.46
32:2a:1353:G:OP1	52:2u:10:ARG:NH1	2.48	0.46
32:2a:1479:C:H2'	32:2a:1480:G:H8	1.80	0.46
32:2a:1528:U:O3'	32:2a:1529:G:H3'	2.15	0.46
33:2b:211:ILE:O	33:2b:215:LEU:HB2	2.14	0.46
34:2c:42:LEU:O	34:2c:43:LEU:HD23	2.15	0.46
2:1B:24:G:N7	2:1B:56:G:H2'	2.30	0.46
2:1B:43:C:H5''	26:14:1:MET:HE2	1.96	0.46
8:1I:10:GLU:H	8:1I:10:GLU:HG3	1.52	0.46
8:1I:69:LYS:HE2	8:1I:73:GLU:OE2	2.14	0.46
17:1V:20:LEU:HD12	17:1V:20:LEU:HA	1.66	0.46
19:1X:1:MET:HE1	24:12:26:ARG:HH21	1.80	0.46
32:1a:92:C:H2'	32:1a:93:G:C8	2.50	0.46
32:1a:1003:G:C4	32:1a:1004:A:H2	2.33	0.46
32:1a:1176:A:H2'	32:1a:1177:G:C8	2.51	0.46
32:1a:1391:U:O2'	32:1a:1532:U:OP1	2.23	0.46
35:1d:101:LEU:O	35:1d:104:VAL:HG12	2.15	0.46
43:1l:24:VAL:HG21	43:1l:27:LEU:HD12	1.96	0.46
49:1r:66:LEU:O	49:1r:69:THR:OG1	2.22	0.46
54:1w:51:U:H2'	54:1w:52:G:H8	1.79	0.46
1:2A:40:C:H2'	1:2A:41:C:C6	2.51	0.46
1:2A:407:G:H2'	1:2A:408:G:H8	1.81	0.46
1:2A:2461:C:H2'	1:2A:2462:U:H6	1.81	0.46
1:2A:2503:2MA:H8	58:2A:3886:A1A1K:O	2.15	0.46
7:2H:143:GLN:NE2	7:2H:147:ASN:OD1	2.48	0.46
12:2Q:81:VAL:HG12	22:20:5:LYS:HD3	1.97	0.46
13:2R:16:HIS:O	13:2R:16:HIS:HD2	1.98	0.46
32:2a:539:A:H2'	32:2a:540:G:C8	2.51	0.46
32:2a:649:G:H2'	32:2a:650:G:O4'	2.14	0.46
32:2a:999:C:C4	32:2a:1000:U:C4	3.02	0.46
32:2a:1054:C:C5	54:2w:34:G:H1'	2.50	0.46
32:2a:1375:A:C6	32:2a:1376:U:C4	3.03	0.46
32:2a:1400:5MC:H5'	53:2v:18:G:C6	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:6:ILE:HD13	41:2j:98:ILE:HG12	1.97	0.46
41:2j:30:SER:OG	41:2j:84:GLN:OE1	2.29	0.46
43:2l:69:TYR:CE2	43:2l:71:PRO:HA	2.45	0.46
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.15	0.46
1:1A:1405:U:H2'	1:1A:1406:U:H6	1.79	0.46
61:1A:4949:HOH:O	5:1F:70:THR:HG23	2.15	0.46
8:1I:37:VAL:HG13	8:1I:38:LEU:HD23	1.97	0.46
32:1a:748:C:O5'	32:1a:748:C:H6	1.98	0.46
32:1a:1118:C:OP1	40:1i:9:ARG:NH1	2.47	0.46
33:1b:80:ILE:HD12	33:1b:212:GLN:HA	1.97	0.46
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.48	0.46
34:1c:82:GLU:OE2	34:1c:85:ARG:NH1	2.48	0.46
38:1g:78:ARG:HG3	38:1g:156:TRP:CZ3	2.50	0.46
1:2A:719:C:H2'	1:2A:720:C:C6	2.51	0.46
1:2A:2303:G:O2'	6:2G:132:ASN:ND2	2.43	0.46
1:2A:2371:G:O2'	28:26:46:HIS:ND1	2.40	0.46
6:2G:38:VAL:HG12	6:2G:93:THR:HB	1.97	0.46
6:2G:51:ARG:H	6:2G:51:ARG:HD2	1.80	0.46
24:22:65:ASN:OD1	24:22:69:ARG:NH1	2.47	0.46
32:2a:976:G:C8	32:2a:1358:U:C2	3.03	0.46
32:2a:993:G:N3	32:2a:993:G:H2'	2.30	0.46
32:2a:1072:G:C6	32:2a:1073:U:C4	3.04	0.46
32:2a:1253:G:H2'	32:2a:1254:C:C6	2.51	0.46
33:2b:47:THR:O	33:2b:51:LEU:N	2.48	0.46
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	1.96	0.46
48:2q:56:VAL:O	48:2q:77:VAL:HB	2.15	0.46
50:2s:39:THR:HG22	50:2s:40:ILE:O	2.16	0.46
1:1A:1173:G:N2	1:1A:1177:A:OP2	2.41	0.46
4:1E:36:ARG:NH1	4:1E:85:ASN:OD1	2.49	0.46
5:1F:7:TYR:CD2	5:1F:24:LEU:HB2	2.51	0.46
7:1H:6:ARG:HH22	7:1H:54:ARG:NH2	2.13	0.46
13:1R:2:ARG:HG2	13:1R:5:LYS:HB2	1.98	0.46
14:1S:27:SER:O	14:1S:37:ALA:HA	2.16	0.46
26:14:58:ARG:O	26:14:61:ARG:HB3	2.16	0.46
32:1a:1044:A:C5	32:1a:1045:C:H1'	2.50	0.46
34:1c:121:ALA:HB1	34:1c:189:ALA:HB2	1.97	0.46
35:1d:114:ARG:O	35:1d:118:ARG:N	2.47	0.46
40:1i:18:PHE:HB2	40:1i:62:TYR:O	2.16	0.46
54:1y:55:PSU:O5'	54:1y:55:PSU:H6	1.99	0.46
1:2A:125:G:H1'	29:27:48:LYS:HD3	1.96	0.46
1:2A:900:A:C4	1:2A:901:A:C8	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2331:G:O2'	22:20:43:THR:HG22	2.16	0.46
1:2A:2400:G:H2'	1:2A:2401:U:C6	2.51	0.46
6:2G:150:ASP:OD1	6:2G:150:ASP:N	2.40	0.46
8:2I:122:GLU:O	8:2I:126:TYR:OH	2.34	0.46
21:2Z:102:LEU:HB2	21:2Z:104:PHE:CE2	2.50	0.46
32:2a:45:U:H2'	32:2a:46:G:C8	2.49	0.46
32:2a:340:U:H2'	32:2a:341:C:C6	2.51	0.46
32:2a:757:U:OP1	32:2a:822:C:O2'	2.29	0.46
32:2a:1076:C:OP1	33:2b:179:LYS:NZ	2.49	0.46
32:2a:1239:A:H62	32:2a:1299:A:H62	1.61	0.46
35:2d:155:LEU:HD23	35:2d:156:GLU:N	2.31	0.46
35:2d:201:GLN:HE21	36:2e:99:GLY:HA2	1.80	0.46
46:2o:11:VAL:HG21	46:2o:34:LEU:HD22	1.96	0.46
1:1A:452:G:C4	1:1A:458:G:C6	3.04	0.46
1:1A:1697:G:OP2	1:1A:1698:A:O2'	2.32	0.46
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.15	0.46
1:1A:2121:G:H1	1:1A:2177:C:N4	2.12	0.46
1:1A:2422:A:O4'	54:1y:76:A:N6	2.48	0.46
2:1B:2:C:H2'	2:1B:3:C:C6	2.50	0.46
5:1F:28:ILE:O	5:1F:30:PRO:HD3	2.16	0.46
8:1I:24:GLY:O	8:1I:28:ASN:HB2	2.16	0.46
24:12:23:LYS:O	24:12:27:GLU:HG3	2.16	0.46
28:16:5:VAL:HG11	28:16:28:ARG:HH21	1.80	0.46
32:1a:935:A:O2'	32:1a:1383:C:N3	2.49	0.46
41:1j:40:LEU:HD12	41:1j:69:ASN:HB3	1.98	0.46
1:2A:271(K):U:C2	8:2I:50:ARG:HD3	2.51	0.46
1:2A:2156:G:H2'	1:2A:2157:G:C6	2.50	0.46
1:2A:2334:G:H5'	14:2S:9:ARG:HG2	1.97	0.46
1:2A:2360:A:H2'	1:2A:2361:A:O4'	2.16	0.46
1:2A:2365:G:OP1	22:20:55:ARG:N	2.44	0.46
1:2A:2740:A:C6	1:2A:2764:A:C8	3.03	0.46
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.48	0.46
5:2F:53:THR:HG22	5:2F:56:GLU:HG3	1.98	0.46
6:2G:33:ARG:O	6:2G:161:THR:HG23	2.16	0.46
6:2G:43:LEU:C	6:2G:45:GLU:N	2.73	0.46
7:2H:97:ARG:NE	7:2H:104:GLU:OE1	2.48	0.46
32:2a:867:G:OP2	32:2a:867:G:H8	1.98	0.46
32:2a:1263:C:C4	32:2a:1272:G:O6	2.68	0.46
50:2s:17:GLU:HA	50:2s:20:LEU:CG	2.44	0.46
1:1A:2336:A:H61	22:10:43:THR:HG22	1.80	0.46
2:1B:66:A:N6	2:1B:108:U:H2'	2.29	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:38:GLN:O	11:1P:39:LYS:CB	2.64	0.46
14:1S:110:LEU:HD12	14:1S:110:LEU:HA	1.81	0.46
15:1T:56:GLY:O	15:1T:59:THR:HG22	2.16	0.46
32:1a:841:U:OP2	32:1a:841:U:H6	1.97	0.46
32:1a:1398:A:O2'	61:1a:1922:HOH:O	2.20	0.46
34:1c:73:PRO:O	34:1c:77:ILE:HG12	2.15	0.46
38:1g:97:GLN:O	38:1g:101:LEU:HG	2.16	0.46
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.81	0.46
48:1q:22:LEU:HD11	48:1q:39:SER:HB2	1.98	0.46
50:1s:18:LYS:O	50:1s:22:LEU:HG	2.15	0.46
1:2A:141:A:C8	1:2A:1408:C:O2'	2.68	0.46
1:2A:2171:A:H1'	1:2A:2172:U:C6	2.51	0.46
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.81	0.46
4:2E:181:LEU:HD12	4:2E:181:LEU:HA	1.70	0.46
8:2I:45:LYS:O	8:2I:49:ALA:N	2.40	0.46
8:2I:133:HIS:CD2	8:2I:134:PRO:HD2	2.50	0.46
14:2S:10:ARG:HG2	14:2S:91:PRO:HA	1.97	0.46
32:2a:270:A:H2'	32:2a:271:C:C6	2.50	0.46
32:2a:416:G:C5	32:2a:417:C:C4	3.03	0.46
32:2a:417:C:H2'	32:2a:418:C:C6	2.51	0.46
32:2a:600:C:O2'	32:2a:601:C:H5'	2.16	0.46
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.51	0.46
32:2a:1235:U:O2'	32:2a:1305:G:O5'	2.34	0.46
32:2a:1309:G:OP1	44:2m:88:ARG:NH2	2.47	0.46
36:2e:43:LEU:HB2	36:2e:136:MET:SD	2.56	0.46
54:2y:30:G:H2'	54:2y:31:A:H8	1.80	0.46
1:1A:2280:G:O2'	1:1A:2388:A:N1	2.40	0.46
1:1A:2319:G:H1	14:1S:3:ARG:HA	1.81	0.46
6:1G:126:ASP:HB2	6:1G:130:ASN:O	2.15	0.46
32:1a:129:U:H5'	48:1q:3:LYS:NZ	2.31	0.46
35:1d:158:ILE:HD12	35:1d:159:ARG:N	2.31	0.46
38:1g:144:MET:HE2	38:1g:144:MET:HB3	1.72	0.46
39:1h:64:LYS:HG2	39:1h:79:VAL:HG21	1.97	0.46
40:1i:70:LYS:O	40:1i:74:ILE:HG13	2.16	0.46
44:1m:121:LYS:HE3	55:1x:28:C:OP1	2.15	0.46
9:2N:38:HIS:ND1	9:2N:39:ARG:HG3	2.31	0.46
10:2O:59:LYS:NZ	10:2O:89:ASN:OD1	2.49	0.46
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.98	0.46
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	1.96	0.46
32:2a:141:A:H1'	32:2a:182:U:O2	2.16	0.46
32:2a:358:U:H2'	32:2a:359:U:C6	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:991:U:O2'	32:2a:1212:U:N3	2.46	0.46
32:2a:1057:G:C4	32:2a:1204:A:C2	3.03	0.46
32:2a:1135:U:H3'	32:2a:1137:C:N4	2.31	0.46
32:2a:1404:5MC:O2	32:2a:1519:MA6:O2'	2.30	0.46
32:2a:1503:A:C2	53:2v:13:A:C5	3.03	0.46
35:2d:59:ARG:HA	35:2d:59:ARG:HH11	1.80	0.46
37:2f:4:TYR:CE1	37:2f:92:LYS:HG3	2.51	0.46
37:2f:67:MET:HE1	37:2f:75:LEU:HD22	1.96	0.46
41:2j:8:LEU:HB3	41:2j:96:ILE:HD13	1.98	0.46
51:2t:9:ASN:O	51:2t:10:LEU:HB2	2.15	0.46
1:1A:1022:G:N7	9:1N:66:LYS:HE2	2.31	0.46
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.14	0.46
1:1A:2352:A:C4	1:1A:2366:A:C2	3.04	0.46
7:1H:157:TYR:CE1	7:1H:172:LYS:HG3	2.51	0.46
11:1P:39:LYS:HG3	11:1P:45:LEU:HD22	1.97	0.46
14:1S:35:ILE:HD13	14:1S:101:LEU:HD12	1.98	0.46
15:1T:127:ALA:C	15:1T:129:ARG:N	2.70	0.46
32:1a:175:C:H2'	32:1a:176:C:C6	2.51	0.46
32:1a:748:C:H4'	32:1a:749:C:O5'	2.16	0.46
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.32	0.46
32:1a:1263:C:H2'	32:1a:1264:C:H6	1.81	0.46
44:1m:122:LYS:HG3	44:1m:123:ALA:H	1.80	0.46
50:1s:27:GLU:HG2	50:1s:28:LYS:HG2	1.98	0.46
54:1w:18:G:N2	54:1w:57:G:H2'	2.30	0.46
1:2A:374:A:C2	1:2A:401:A:C4	3.04	0.46
1:2A:800:A:H8	1:2A:800:A:OP1	1.99	0.46
1:2A:867:C:C5	1:2A:868:U:H5	2.34	0.46
1:2A:1027:A:N6	1:2A:1126:A:C4	2.84	0.46
1:2A:2274:A:C5	1:2A:2276:G:C8	3.04	0.46
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.50	0.46
2:2B:42:C:C4	2:2B:43:C:C4	3.04	0.46
6:2G:60:LEU:O	6:2G:60:LEU:HD23	2.16	0.46
21:2Z:5:LEU:O	21:2Z:59:LEU:HA	2.16	0.46
21:2Z:102:LEU:HG	21:2Z:122:ARG:O	2.16	0.46
22:20:23:VAL:HG22	22:20:38:VAL:HG22	1.98	0.46
32:2a:1265:G:C4	32:2a:1271:G:N2	2.84	0.46
32:2a:1350:A:C2	32:2a:1351:U:C2	3.04	0.46
40:2i:3:GLN:NE2	40:2i:20:ARG:HH21	2.13	0.46
41:2j:11:PHE:CE1	41:2j:67:THR:HG22	2.51	0.46
44:2m:13:LYS:O	44:2m:45:VAL:HG23	2.16	0.46
54:2w:54:5MU:H2'	54:2w:55:PSU:O4'	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:278:A:O2'	1:1A:279:C:OP1	2.26	0.46
8:1I:135:GLU:C	8:1I:137:PRO:HD3	2.41	0.46
17:1V:50:PRO:HG2	17:1V:51:VAL:HG23	1.97	0.46
32:1a:1424:C:H2'	32:1a:1425:U:O4'	2.16	0.46
35:1d:146:ILE:H	35:1d:146:ILE:HD12	1.81	0.46
35:1d:190:ASP:O	35:1d:193:ASP:HB2	2.16	0.46
37:1f:8:ILE:HD11	37:1f:79:LEU:HD13	1.97	0.46
39:1h:95:VAL:HB	39:1h:99:GLU:HB2	1.98	0.46
41:1j:62:HIS:HB3	45:1n:59:ALA:HB3	1.97	0.46
42:1k:82:VAL:HG12	42:1k:108:ILE:HG23	1.98	0.46
1:2A:782:A:C2	3:2D:226:MET:HG2	2.51	0.46
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.50	0.46
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.32	0.46
1:2A:1952:A:C2	10:2O:22:ILE:HD12	2.51	0.46
5:2F:11:VAL:HG22	5:2F:125:LEU:HB2	1.98	0.46
8:2I:62:LYS:HG3	8:2I:63:ALA:N	2.31	0.46
32:2a:222:U:H2'	32:2a:223:U:H6	1.75	0.46
32:2a:432:A:H3'	32:2a:433:C:H6	1.79	0.46
32:2a:1184:G:H2'	32:2a:1185:G:H8	1.81	0.46
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.16	0.46
33:2b:149:LEU:HD22	33:2b:152:PHE:HD2	1.81	0.46
34:2c:13:GLY:N	34:2c:18:TRP:HZ3	2.14	0.46
43:2l:83:VAL:HG13	43:2l:100:ILE:HG23	1.98	0.46
1:1A:185:U:H4'	1:1A:218:A:H4'	1.98	0.45
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.16	0.45
1:1A:2319:G:H22	14:1S:3:ARG:CD	2.29	0.45
7:1H:96:ALA:HB2	7:1H:105:LEU:HD23	1.97	0.45
19:1X:88:LYS:HE3	19:1X:88:LYS:HB3	1.65	0.45
32:1a:44:G:O6	61:1a:1919:HOH:O	2.19	0.45
32:1a:299:G:O6	61:1a:1913:HOH:O	2.12	0.45
32:1a:343:U:O2'	32:1a:344:A:H2'	2.15	0.45
32:1a:1014:A:H4'	50:1s:14:HIS:NE2	2.31	0.45
33:1b:156:LYS:HA	33:1b:156:LYS:HD2	1.72	0.45
33:1b:196:LEU:HD12	33:1b:196:LEU:HA	1.83	0.45
54:1y:58:A:O2'	54:1y:60:U:OP2	2.25	0.45
1:2A:455:C:N3	1:2A:472:A:H2'	2.31	0.45
1:2A:1178:C:H2'	1:2A:1179:C:C6	2.51	0.45
1:2A:1877:A:OP2	1:2A:1877:A:H8	1.98	0.45
1:2A:2815:C:H2'	1:2A:2816:C:H6	1.80	0.45
4:2E:50:GLY:HA2	4:2E:77:ILE:O	2.16	0.45
9:2N:58:ASP:OD1	9:2N:58:ASP:N	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:97:VAL:HG11	12:2Q:103:MET:HE3	1.97	0.45
16:2U:24:TYR:HB2	16:2U:29:SER:HB3	1.99	0.45
31:29:12:ASP:OD1	31:29:12:ASP:N	2.47	0.45
32:2a:652:U:O2'	32:2a:653:A:O5'	2.34	0.45
32:2a:680:C:C2	32:2a:711:G:N2	2.84	0.45
32:2a:975:A:N1	41:2j:48:THR:HB	2.31	0.45
32:2a:1057:G:H5''	34:2c:154:SER:OG	2.16	0.45
32:2a:1070:U:H2'	32:2a:1071:C:C6	2.51	0.45
34:2c:173:VAL:O	34:2c:175:LEU:HD12	2.16	0.45
36:2e:81:GLU:HG2	36:2e:90:VAL:HG23	1.98	0.45
44:2m:14:ARG:HG2	44:2m:42:ALA:HA	1.98	0.45
1:1A:69:C:O2	1:1A:73:A:O2'	2.32	0.45
1:1A:579:G:H2'	1:1A:580:C:C6	2.52	0.45
1:1A:817:C:H4'	1:1A:932:G:C5	2.51	0.45
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.50	0.45
1:1A:2408:U:H2'	1:1A:2409:G:C8	2.51	0.45
1:1A:2469:A:O3'	12:1Q:56:ARG:NH1	2.49	0.45
32:1a:160:A:H2'	32:1a:161:A:O4'	2.16	0.45
32:1a:258:G:H2'	32:1a:259:G:C8	2.50	0.45
32:1a:405:U:O2'	32:1a:498:U:H5'	2.16	0.45
32:1a:472:A:P	47:1p:75:ARG:HH22	2.39	0.45
32:1a:1375:A:C6	32:1a:1376:U:N3	2.84	0.45
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.17	0.45
33:1b:101:MET:HG3	33:1b:108:ILE:HD12	1.97	0.45
34:1c:119:ARG:O	34:1c:123:GLN:HG3	2.15	0.45
36:1e:83:GLU:HA	36:1e:87:SER:O	2.16	0.45
41:1j:38:ILE:HD11	41:1j:71:LEU:HB3	1.98	0.45
41:1j:81:THR:HA	41:1j:84:GLN:HB3	1.97	0.45
54:1w:18:G:H4'	54:1w:60:U:C5	2.51	0.45
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.50	0.45
1:2A:300:A:N3	1:2A:319:C:H1'	2.31	0.45
1:2A:863:A:H2'	1:2A:864:G:H8	1.80	0.45
1:2A:1630:G:H2'	1:2A:1631:C:C6	2.51	0.45
1:2A:1916:A:H2'	1:2A:1917:PSU:O4'	2.17	0.45
1:2A:2273:A:O2'	1:2A:2274:A:H5'	2.15	0.45
11:2P:45:LEU:HD12	11:2P:45:LEU:HA	1.62	0.45
12:2Q:85:LYS:HE2	22:20:7:LEU:HD12	1.99	0.45
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.57	0.45
25:23:10:LYS:HB3	25:23:53:LEU:HA	1.99	0.45
26:24:67:TYR:HD2	50:2s:9:VAL:HB	1.81	0.45
32:2a:391:G:C6	32:2a:392:G:C5	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:953:G:C5	32:2a:954:G:C8	3.04	0.45
32:2a:1056:U:O5'	34:2c:163:ALA:HB2	2.16	0.45
1:1A:324:A:H2'	1:1A:325:G:O4'	2.17	0.45
1:1A:2467:C:H4'	12:1Q:123:HIS:CD2	2.51	0.45
11:1P:19:VAL:HG12	11:1P:27:HIS:HB3	1.97	0.45
21:1Z:137:ILE:HG23	21:1Z:156:LYS:HE2	1.97	0.45
32:1a:438:G:H4'	35:1d:123:HIS:ND1	2.31	0.45
32:1a:1173:G:C4	32:1a:1174:G:C8	3.04	0.45
33:1b:19:HIS:HA	33:1b:39:ILE:HG23	1.98	0.45
36:1e:151:LEU:HD11	39:1h:77:GLU:HG2	1.99	0.45
37:1f:79:LEU:O	37:1f:85:VAL:HG11	2.16	0.45
47:1p:53:VAL:HG13	47:1p:79:VAL:HG13	1.98	0.45
49:1r:73:ALA:HB3	49:1r:79:LEU:HD12	1.98	0.45
54:1y:32:PSU:N3	54:1y:33:U:H5	2.15	0.45
1:2A:38:A:H2'	1:2A:39:C:C6	2.51	0.45
1:2A:84:A:OP2	20:2Y:8:LYS:NZ	2.36	0.45
1:2A:289:A:H2'	1:2A:290:G:O4'	2.16	0.45
1:2A:1001:A:H2'	1:2A:1002:G:O4'	2.16	0.45
1:2A:1021:A:N6	1:2A:1141:U:H3	2.10	0.45
1:2A:1237:A:OP1	61:2A:3951:HOH:O	2.21	0.45
1:2A:1886:C:H2'	1:2A:1887:C:C6	2.50	0.45
1:2A:2104:G:C2	1:2A:2186:G:C2	3.04	0.45
1:2A:2524:G:O6	61:2A:3938:HOH:O	2.18	0.45
5:2F:24:LEU:HD11	5:2F:199:TRP:HH2	1.80	0.45
8:2I:69:LYS:HA	8:2I:138:ILE:HD13	1.98	0.45
8:2I:87:LYS:HE2	8:2I:87:LYS:HB2	1.73	0.45
10:2O:26:LYS:HE2	10:2O:37:ASP:OD2	2.15	0.45
11:2P:101:VAL:HG21	11:2P:108:LYS:HG3	1.98	0.45
26:24:24:THR:OG1	26:24:25:TYR:N	2.49	0.45
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.52	0.45
32:2a:1264:C:H42	32:2a:1271:G:H1	1.63	0.45
33:2b:16:HIS:CG	33:2b:17:PHE:H	2.34	0.45
33:2b:187:LEU:HA	33:2b:201:ILE:O	2.17	0.45
36:2e:7:GLU:OE1	36:2e:37:ARG:NH2	2.47	0.45
41:2j:44:VAL:HG22	41:2j:66:ARG:HB3	1.98	0.45
48:2q:29:HIS:CD2	48:2q:30:PRO:HD2	2.51	0.45
52:2u:12:LYS:HE2	52:2u:21:TYR:HB2	1.98	0.45
1:1A:1030:G:OP2	12:1Q:128:LYS:NZ	2.49	0.45
1:1A:1603:A:OP1	61:1A:4242:HOH:O	2.21	0.45
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.51	0.45
1:1A:2712:U:H2'	1:1A:2714:G:H5''	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:60:ILE:HG13	9:1N:61:ARG:H	1.81	0.45
13:1R:118:GLU:H	13:1R:118:GLU:CD	2.24	0.45
32:1a:310:G:OP2	47:1p:27:LYS:HE2	2.17	0.45
32:1a:707:C:OP1	42:1k:85:ARG:NH1	2.49	0.45
32:1a:920:U:H2'	32:1a:921:U:H6	1.81	0.45
32:1a:1129:C:O2'	32:1a:1139:G:N7	2.44	0.45
33:1b:33:TYR:CB	33:1b:43:ASP:HB2	2.32	0.45
33:1b:214:ILE:O	33:1b:218:ALA:HB2	2.16	0.45
35:1d:70:ILE:HD11	35:1d:74:GLN:HB3	1.99	0.45
38:1g:93:PRO:HA	38:1g:96:GLN:HG3	1.98	0.45
51:1t:13:LEU:HD12	51:1t:14:LYS:N	2.31	0.45
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.16	0.45
1:2A:2309:A:H8	1:2A:2309:A:O5'	1.99	0.45
1:2A:2746:U:O3'	7:2H:138:LYS:HD3	2.16	0.45
32:2a:598:U:H2'	32:2a:599:C:H6	1.81	0.45
32:2a:983:A:H3'	32:2a:983:A:N3	2.30	0.45
32:2a:1054:C:C4	54:2w:34:G:H1'	2.51	0.45
32:2a:1065:U:H3	32:2a:1109:C:C5'	2.29	0.45
32:2a:1258:G:O2'	32:2a:1259:C:H5'	2.16	0.45
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.30	0.45
33:2b:8:LYS:HG2	33:2b:9:GLU:H	1.80	0.45
36:2e:71:LEU:HD22	36:2e:115:VAL:HG13	1.99	0.45
36:2e:95:ALA:O	36:2e:97:GLY:N	2.50	0.45
1:1A:84:A:OP2	20:1Y:8:LYS:NZ	2.36	0.45
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.81	0.45
1:1A:414:C:H2'	1:1A:415:A:C8	2.52	0.45
1:1A:548:A:N6	17:1V:19:LYS:H	2.13	0.45
1:1A:2794:C:N4	1:1A:2802:G:H22	2.14	0.45
10:1O:108:GLU:H	10:1O:108:GLU:HG3	1.55	0.45
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.98	0.45
17:1V:81:TYR:C	17:1V:82:ARG:HD2	2.41	0.45
32:1a:243:A:C2	32:1a:246:A:C8	3.05	0.45
32:1a:481:G:O2'	32:1a:483:C:N4	2.48	0.45
32:1a:909:A:H2'	32:1a:910:C:O4'	2.16	0.45
33:1b:10:LEU:HA	33:1b:48:MET:HE1	1.98	0.45
33:1b:16:HIS:CD2	33:1b:17:PHE:N	2.85	0.45
33:1b:59:GLU:HG3	33:1b:225:ALA:HB2	1.98	0.45
38:1g:106:GLN:O	38:1g:110:GLN:HG2	2.17	0.45
43:1l:42:THR:HA	43:1l:53:ARG:O	2.17	0.45
48:1q:50:LYS:HD2	48:1q:51:TYR:CE2	2.52	0.45
1:2A:622:G:H2'	1:2A:623:G:H8	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1178:C:H2'	1:2A:1179:C:H6	1.82	0.45
1:2A:2103:C:H2'	1:2A:2104:G:C8	2.51	0.45
1:2A:2340:G:H2'	1:2A:2341:G:C8	2.50	0.45
1:2A:2678:C:H2'	1:2A:2679:A:O4'	2.17	0.45
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.16	0.45
5:2F:202:PHE:O	5:2F:206:ILE:HG12	2.17	0.45
7:2H:51:ARG:NH2	7:2H:53:GLU:OE2	2.45	0.45
21:2Z:52:SER:CB	21:2Z:54:HIS:H	2.30	0.45
29:27:9:ARG:CZ	29:27:47:ARG:HG3	2.47	0.45
32:2a:102:G:C5	32:2a:103:C:C5	3.05	0.45
32:2a:445:G:H2'	32:2a:446:G:C8	2.52	0.45
32:2a:730:G:C5	32:2a:731:G:H1'	2.52	0.45
32:2a:757:U:H2'	32:2a:758:G:O4'	2.16	0.45
32:2a:1469:G:H2'	32:2a:1470:G:H8	1.82	0.45
34:2c:111:LEU:HD11	34:2c:144:SER:O	2.16	0.45
38:2g:26:PHE:CZ	38:2g:30:ILE:HD11	2.51	0.45
1:1A:361:G:N1	1:1A:362:U:O4	2.49	0.45
1:1A:910:A:N1	1:1A:2277:G:H1'	2.32	0.45
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.15	0.45
1:1A:1297:C:OP1	1:1A:2710:C:H4'	2.16	0.45
1:1A:1315:C:OP2	61:1A:4216:HOH:O	2.21	0.45
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.47	0.45
1:1A:1858:G:OP2	1:1A:1858:G:H8	1.99	0.45
10:1O:1:MET:HE3	10:1O:32:TYR:CE2	2.51	0.45
32:1a:194:C:C2'	32:1a:195:A:H5''	2.47	0.45
32:1a:626:U:C2	32:1a:627:G:C8	3.05	0.45
32:1a:922:G:H2'	32:1a:923:A:C8	2.51	0.45
32:1a:1207:2MG:C6	32:1a:1208:C:C4	3.05	0.45
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.51	0.45
33:1b:13:ALA:HB2	33:1b:44:LEU:HD13	1.98	0.45
1:2A:200:U:O2	1:2A:386:G:N2	2.49	0.45
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.98	0.45
1:2A:812:C:H2'	1:2A:813:U:H6	1.82	0.45
1:2A:910:A:N1	1:2A:2277:G:H1'	2.31	0.45
1:2A:918:A:N3	2:2B:80:U:O2'	2.41	0.45
1:2A:1005:C:C2	1:2A:1143:A:C6	3.05	0.45
1:2A:2127:G:C2	1:2A:2161:C:N3	2.84	0.45
1:2A:2507:C:H5''	1:2A:2573:C:N4	2.32	0.45
2:2B:43:C:OP1	26:24:6:HIS:NE2	2.49	0.45
9:2N:15:LEU:N	9:2N:136:GLU:O	2.43	0.45
21:2Z:45:ASP:O	21:2Z:49:ARG:HG3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:67:ILE:N	23:21:68:PRO:HD2	2.32	0.45
25:23:18:ASP:OD1	25:23:19:GLN:N	2.50	0.45
28:26:38:LYS:HB3	28:26:38:LYS:HE3	1.65	0.45
32:2a:34:C:H2'	32:2a:35:G:H8	1.80	0.45
33:2b:187:LEU:HD23	33:2b:188:ALA:N	2.32	0.45
35:2d:172:PRO:HB2	35:2d:187:ARG:HH21	1.81	0.45
38:2g:26:PHE:O	38:2g:30:ILE:HD12	2.17	0.45
39:2h:82:HIS:CD2	39:2h:82:HIS:C	2.95	0.45
40:2i:13:ALA:HA	40:2i:67:GLY:O	2.17	0.45
51:2t:43:LEU:CD1	51:2t:51:GLU:HG2	2.47	0.45
1:1A:2156:G:H2'	1:1A:2157:G:C6	2.51	0.45
1:1A:2439:A:H5'	1:1A:2439:A:C8	2.52	0.45
1:1A:2581:G:N3	1:1A:2581:G:H2'	2.31	0.45
7:1H:3:ARG:NH1	7:1H:5:GLY:H	2.14	0.45
10:1O:76:ALA:O	15:1T:74:ARG:NH1	2.50	0.45
32:1a:309:G:O2'	32:1a:607:A:N1	2.50	0.45
32:1a:1003:G:H2'	32:1a:1004:A:N3	2.31	0.45
32:1a:1189:C:OP1	41:1j:51:ARG:NH2	2.36	0.45
32:1a:1428:A:H2'	32:1a:1429:C:O4'	2.17	0.45
33:1b:185:ILE:HG22	33:1b:199:TYR:CD2	2.52	0.45
39:1h:12:ARG:NH1	39:1h:27:PRO:HD3	2.32	0.45
54:1w:18:G:H4'	54:1w:60:U:C6	2.52	0.45
54:1w:37:MIA:H2'	54:1w:38:A:O4'	2.17	0.45
1:2A:438:G:H2'	1:2A:440:G:C8	2.52	0.45
1:2A:699:A:H2'	1:2A:700:G:O4'	2.16	0.45
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.32	0.45
1:2A:1740:G:H2'	1:2A:1740:G:N3	2.30	0.45
1:2A:2171:A:N3	1:2A:2172:U:N3	2.65	0.45
3:2D:96:HIS:CD2	3:2D:102:LYS:HG2	2.52	0.45
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.97	0.45
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.82	0.45
32:2a:587:G:OP1	39:2h:89:PRO:HB3	2.17	0.45
32:2a:868:C:H2'	32:2a:869:G:O4'	2.16	0.45
36:2e:82:VAL:HB	36:2e:138:ALA:HB2	1.98	0.45
1:1A:121:G:H4'	1:1A:149:A:H5'	1.98	0.45
1:1A:749:C:H4'	1:1A:1271:G:N3	2.32	0.45
1:1A:1047:G:O2'	1:1A:1048:A:H8	1.99	0.45
1:1A:2734:A:H2'	1:1A:2735:G:O4'	2.17	0.45
7:1H:11:VAL:HG13	7:1H:15:VAL:HG22	1.97	0.45
8:1I:27:ARG:HD3	23:11:71:TYR:CE2	2.52	0.45
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:104:ARG:CZ	15:1T:34:VAL:HG11	2.47	0.45
11:1P:45:LEU:HA	11:1P:45:LEU:HD12	1.65	0.45
19:1X:1:MET:HE3	19:1X:1:MET:HB2	1.94	0.45
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.70	0.45
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.52	0.45
26:14:59:PHE:O	26:14:62:ARG:HD3	2.17	0.45
32:1a:392:G:OP1	47:1p:8:ARG:NH2	2.50	0.45
32:1a:812:C:O2	61:1a:1918:HOH:O	2.18	0.45
32:1a:938:A:C6	32:1a:939:G:C5	3.05	0.45
32:1a:1157:A:H61	32:1a:1178:G:H21	1.65	0.45
39:1h:13:ILE:O	39:1h:17:THR:HG23	2.17	0.45
1:2A:832:G:C5'	11:2P:45:LEU:HD11	2.46	0.45
1:2A:861:A:C2	1:2A:917:A:C4	3.04	0.45
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.52	0.45
1:2A:2356:C:H2'	1:2A:2357:U:O4'	2.16	0.45
5:2F:117:ARG:O	5:2F:120:GLU:HG3	2.17	0.45
15:2T:19:LEU:HD22	15:2T:86:ILE:HD12	1.99	0.45
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.17	0.45
23:21:2:SER:HB3	23:21:46:LEU:HD12	1.99	0.45
28:26:25:LYS:HE3	28:26:27:LYS:HA	1.98	0.45
32:2a:1269:A:N1	32:2a:1312:G:O2'	2.30	0.45
34:2c:47:LEU:HD22	34:2c:68:VAL:HG11	1.99	0.45
36:2e:32:VAL:HG11	36:2e:59:GLY:HA2	1.98	0.45
44:2m:19:LEU:HD21	44:2m:56:LEU:HD21	1.99	0.45
44:2m:28:ALA:C	44:2m:30:ALA:H	2.24	0.45
47:2p:49:LEU:HD12	47:2p:50:LYS:N	2.32	0.45
51:2t:90:GLN:O	51:2t:93:GLU:HG3	2.16	0.45
54:2w:39:PSU:H2'	54:2w:40:C:C6	2.46	0.45
1:1A:284:U:H2'	1:1A:285:C:H6	1.80	0.45
1:1A:857:C:N4	1:1A:858:U:O4	2.50	0.45
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.16	0.45
2:1B:44:G:C2	2:1B:48:A:C2	3.05	0.45
3:1D:34:VAL:HG12	3:1D:63:ARG:HG3	1.97	0.45
4:1E:143:ASN:HD22	4:1E:147:PRO:CD	2.30	0.45
30:18:33:ASN:HA	30:18:36:LYS:HE3	1.99	0.45
32:1a:177:C:O2'	32:1a:178:C:H5'	2.17	0.45
32:1a:640:A:C5	32:1a:641:U:C4	3.04	0.45
32:1a:1001(A):G:H2'	32:1a:1002:G:O4'	2.17	0.45
32:1a:1026:G:C8	32:1a:1027:C:O2	2.69	0.45
33:1b:78:GLN:HA	33:1b:78:GLN:HE21	1.82	0.45
38:1g:90:GLU:CD	38:1g:90:GLU:H	2.25	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:1s:36:ARG:HB3	50:1s:72:GLY:HA3	1.99	0.45
54:1y:46:G7M:H3'	54:1y:47:U:H5''	1.99	0.45
1:2A:186:G:H2'	1:2A:187:G:H8	1.82	0.45
1:2A:302:C:OP2	20:2Y:73:ARG:NH1	2.48	0.45
1:2A:530:G:O4'	1:2A:530:G:N3	2.50	0.45
1:2A:1032:A:H2	1:2A:1122:G:H22	1.65	0.45
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.16	0.45
1:2A:1158:C:H4'	25:23:32:GLN:HB2	1.99	0.45
1:2A:2207:G:H2'	1:2A:2208:A:C2	2.52	0.45
1:2A:2404:C:N4	1:2A:2414:G:C6	2.84	0.45
1:2A:2745:C:H2'	1:2A:2746:U:O4'	2.17	0.45
1:2A:2839:G:H5'	13:2R:46:GLY:CA	2.43	0.45
6:2G:111:LEU:HD21	6:2G:120:LEU:HD11	1.99	0.45
20:2Y:3:VAL:HB	20:2Y:32:PRO:HB3	1.98	0.45
32:2a:863:U:H2'	32:2a:865:A:OP2	2.16	0.45
32:2a:1003:G:H2'	32:2a:1004:A:O4'	2.16	0.45
32:2a:1132:C:H2'	32:2a:1133:G:H8	1.82	0.45
32:2a:1323:G:H4'	32:2a:1363:C:N3	2.31	0.45
33:2b:19:HIS:HB2	33:2b:204:ASN:HB2	1.99	0.45
33:2b:27:LYS:HD3	33:2b:193:ASP:OD1	2.17	0.45
36:2e:67:VAL:O	36:2e:69:VAL:HG23	2.17	0.45
36:2e:76:ILE:HD12	36:2e:78:HIS:O	2.17	0.45
43:2l:77:LEU:HD21	43:2l:107:ALA:HB2	1.99	0.45
44:2m:15:VAL:O	44:2m:19:LEU:HG	2.17	0.45
44:2m:72:ALA:O	44:2m:75:ALA:HB3	2.17	0.45
44:2m:84:ILE:HG22	44:2m:84:ILE:O	2.17	0.45
45:2n:45:ARG:O	45:2n:49:HIS:HD2	1.99	0.45
54:2w:8:4SU:S4	54:2w:13:C:O2'	2.69	0.45
54:2y:64:A:H2'	54:2y:65:G:H5'	1.99	0.45
1:1A:1429:G:O2'	1:1A:1430:C:H5'	2.17	0.45
1:1A:2273:A:H2'	1:1A:2274:A:C8	2.52	0.45
1:1A:2871:C:N3	61:1A:4303:HOH:O	2.36	0.45
5:1F:89:VAL:HG12	5:1F:90:PHE:CD2	2.52	0.45
6:1G:7:LEU:HD12	6:1G:104:GLU:N	2.31	0.45
6:1G:179:PRO:HB2	26:14:42:PHE:CE2	2.52	0.45
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.52	0.45
32:1a:292:G:N7	32:1a:293:G:H1'	2.32	0.45
32:1a:396:G:O2'	32:1a:398:C:OP1	2.26	0.45
32:1a:399:G:H2'	32:1a:400:C:C6	2.52	0.45
32:1a:448:A:C4	32:1a:487:A:C2	3.04	0.45
32:1a:668:G:O2'	46:1o:46:HIS:HB3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:828:A:H2'	32:1a:829:G:O4'	2.17	0.45
32:1a:973:G:H3'	32:1a:974:A:H5''	1.99	0.45
32:1a:1228:C:OP1	44:1m:115:LYS:NZ	2.42	0.45
32:1a:1239:A:C4	32:1a:1298:C:N4	2.85	0.45
38:1g:69:VAL:O	38:1g:69:VAL:HG12	2.17	0.45
51:1t:77:ALA:O	51:1t:81:LYS:HG3	2.17	0.45
1:2A:271(N):U:OP1	1:2A:271(N):U:H2'	2.16	0.45
1:2A:363:G:H2'	1:2A:363(A):A:H8	1.81	0.45
1:2A:614(B):G:H2'	5:2F:44:ARG:HH11	1.81	0.45
1:2A:674:G:O2'	5:2F:74:ARG:HD3	2.17	0.45
1:2A:927:G:H2'	1:2A:928:G:O4'	2.16	0.45
1:2A:2508:G:O3'	1:2A:2555:U:H5'	2.17	0.45
4:2E:54:GLN:NE2	4:2E:76:ARG:HG2	2.32	0.45
16:2U:104:GLN:NE2	16:2U:105:VAL:HG23	2.32	0.45
25:23:4:LEU:HD22	25:23:56:VAL:HG11	1.98	0.45
28:26:40:CYS:O	28:26:44:ARG:N	2.47	0.45
32:2a:1267:C:H5''	32:2a:1268:A:OP2	2.17	0.45
33:2b:28:PHE:CD1	33:2b:194:PRO:HG3	2.52	0.45
33:2b:55:PHE:CD1	33:2b:58:ILE:HD11	2.52	0.45
35:2d:158:ILE:HG22	35:2d:162:LEU:CD1	2.47	0.45
51:2t:87:LYS:O	51:2t:91:LEU:HG	2.17	0.45
1:1A:281:G:O2'	1:1A:359:A:N6	2.44	0.44
1:1A:606:U:H4'	1:1A:658:C:H4'	1.99	0.44
1:1A:642:G:N2	1:1A:645:C:OP2	2.44	0.44
1:1A:1500:G:H2'	1:1A:1501:C:H6	1.82	0.44
1:1A:1509(A):A:H3'	1:1A:1509(B):A:H8	1.82	0.44
9:1N:41:ASP:O	9:1N:48:MET:HE1	2.17	0.44
32:1a:1268:A:H2'	32:1a:1269:A:C8	2.51	0.44
33:1b:172:ILE:H	33:1b:172:ILE:HG13	1.46	0.44
33:1b:201:ILE:HG21	33:1b:214:ILE:HG21	1.99	0.44
35:1d:122:ARG:HD3	35:1d:134:ASP:O	2.17	0.44
1:2A:93:G:H2'	1:2A:94:C:H6	1.82	0.44
1:2A:191:A:H2'	1:2A:192:C:C6	2.52	0.44
1:2A:224:G:C2	1:2A:225:A:C4	3.04	0.44
1:2A:1038:C:H42	1:2A:1117:G:H1	1.63	0.44
1:2A:1229:G:C2	1:2A:1230:C:C2	3.05	0.44
1:2A:1490:A:O2'	3:2D:99:ASP:OD1	2.34	0.44
1:2A:1805:U:O2	3:2D:50:THR:HB	2.17	0.44
1:2A:2846:G:H2'	1:2A:2847:U:O4'	2.17	0.44
2:2B:2:C:H2'	2:2B:3:C:H6	1.82	0.44
2:2B:13:A:O2'	2:2B:14:U:H3'	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:92:ILE:HD12	3:2D:104:TYR:CD1	2.51	0.44
7:2H:118:PRO:HD2	7:2H:121:ILE:HB	1.98	0.44
9:2N:28:THR:HG22	9:2N:29:LYS:N	2.32	0.44
16:2U:100:VAL:HG12	16:2U:101:ARG:HG3	1.97	0.44
21:2Z:131:ARG:H	21:2Z:131:ARG:HD2	1.81	0.44
26:24:14:ILE:HB	26:24:22:ILE:HD13	1.99	0.44
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.14	0.44
32:2a:198:G:C4	32:2a:199:G:C8	3.06	0.44
32:2a:728:A:N7	46:2o:54:ARG:HD3	2.32	0.44
32:2a:755:G:OP2	46:2o:65:ARG:HD2	2.17	0.44
32:2a:980:C:H3'	32:2a:981:U:C6	2.53	0.44
32:2a:1266:G:H22	32:2a:1268:A:H3'	1.82	0.44
32:2a:1305:G:C2	32:2a:1331:G:N3	2.85	0.44
32:2a:1390:U:H2'	32:2a:1391:U:C6	2.52	0.44
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.53	0.44
36:2e:148:VAL:HG21	39:2h:107:LEU:HD23	1.99	0.44
38:2g:120:ILE:O	38:2g:124:LEU:HB2	2.17	0.44
42:2k:27:ASN:ND2	42:2k:55:LYS:HE3	2.32	0.44
54:2y:40:C:H2'	54:2y:41:C:C6	2.51	0.44
1:1A:1628:G:H2'	1:1A:1629:U:C6	2.53	0.44
1:1A:2359:C:H2'	1:1A:2360:A:O4'	2.18	0.44
2:1B:55:U:H2'	2:1B:56:G:O4'	2.17	0.44
22:10:68:GLU:OE1	22:10:82:ARG:HD3	2.18	0.44
23:11:50:ARG:HG2	23:11:59:THR:CG2	2.39	0.44
26:14:35:VAL:HG22	26:14:36:CYS:N	2.32	0.44
32:1a:341:C:H2'	32:1a:342:C:H6	1.83	0.44
32:1a:983:A:H5'	32:1a:984:C:OP2	2.17	0.44
32:1a:1523:G:OP1	42:1k:123:LYS:NZ	2.35	0.44
33:1b:219:VAL:HA	33:1b:222:ILE:HG13	1.99	0.44
1:2A:322:A:C5	1:2A:340:A:C2	3.05	0.44
1:2A:492:A:H2'	1:2A:493:G:O4'	2.18	0.44
1:2A:719:C:H2'	1:2A:720:C:H6	1.82	0.44
1:2A:1448:G:H4'	1:2A:1542:A:OP1	2.17	0.44
1:2A:1786:A:C4	1:2A:1938:A:C6	3.05	0.44
1:2A:1910:G:H2'	1:2A:1911:PSU:H6	1.80	0.44
1:2A:2695:C:H2'	1:2A:2696:U:H6	1.82	0.44
11:2P:77:ARG:HB2	11:2P:78:PRO:HD2	1.98	0.44
26:24:48:ARG:HD2	26:24:48:ARG:HA	1.55	0.44
32:2a:664:G:OP1	49:2r:64:ARG:NE	2.33	0.44
32:2a:1071:C:C2	32:2a:1072:G:C8	3.05	0.44
32:2a:1183:A:O2'	32:2a:1185:G:OP2	2.36	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1346:A:N6	38:2g:10:ARG:HH12	2.16	0.44
34:2c:39:ILE:O	34:2c:43:LEU:HG	2.17	0.44
34:2c:159:GLY:HA2	34:2c:193:TYR:CZ	2.52	0.44
37:2f:36:ARG:CZ	37:2f:36:ARG:HB3	2.47	0.44
52:2u:15:ARG:HG2	52:2u:15:ARG:NH1	2.30	0.44
1:1A:9:U:N3	1:1A:2629:A:H2	2.11	0.44
1:1A:1013:C:OP2	61:1A:4218:HOH:O	2.21	0.44
1:1A:1092:C:C2'	1:1A:1093:G:H5'	2.47	0.44
1:1A:1170:G:H8	1:1A:1170:G:H5''	1.83	0.44
1:1A:1178:C:H2'	1:1A:1179:C:H6	1.83	0.44
1:1A:1274:A:N3	1:1A:1297:C:H1'	2.33	0.44
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	1.98	0.44
8:1I:30:LEU:HD23	8:1I:30:LEU:HA	1.76	0.44
9:1N:61:ARG:HD3	9:1N:61:ARG:HA	1.76	0.44
13:1R:9:LYS:O	13:1R:17:ARG:HD3	2.18	0.44
23:11:23:LYS:HB3	23:11:29:GLY:HA3	1.98	0.44
24:12:3:LEU:HA	24:12:3:LEU:HD23	1.67	0.44
26:14:40:HIS:O	26:14:43:TYR:N	2.47	0.44
32:1a:472:A:H2'	32:1a:473:G:O4'	2.18	0.44
32:1a:1027:C:N1	32:1a:1034:G:N2	2.65	0.44
32:1a:1092:A:N3	32:1a:1183:A:N6	2.66	0.44
32:1a:1503:A:N3	53:1v:13:A:N6	2.65	0.44
33:1b:170:GLU:O	33:1b:174:VAL:HG23	2.17	0.44
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.52	0.44
1:2A:272:G:H4'	1:2A:272(A):U:C5'	2.47	0.44
1:2A:330:A:H2	1:2A:1210:A:H2'	1.82	0.44
1:2A:855:G:O2'	22:20:27:GLU:OE2	2.34	0.44
1:2A:866:A:C6	1:2A:914:C:C5	3.05	0.44
1:2A:1344:G:O2'	1:2A:1385:G:H2'	2.17	0.44
1:2A:1598:C:H2'	1:2A:1599:C:H6	1.82	0.44
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.17	0.44
1:2A:2150:U:N3	1:2A:2151:G:N7	2.65	0.44
4:2E:101:ARG:HA	4:2E:170:LEU:O	2.17	0.44
6:2G:138:GLN:HB3	6:2G:153:ARG:O	2.16	0.44
7:2H:123:PHE:O	7:2H:124:GLU:HG3	2.18	0.44
9:2N:43:THR:HG22	9:2N:44:PRO:HD2	1.99	0.44
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE2	1.99	0.44
12:2Q:113:GLN:HE21	12:2Q:113:GLN:HB3	1.61	0.44
20:2Y:15:VAL:O	20:2Y:21:LYS:HA	2.18	0.44
23:21:52:ARG:HD3	23:21:56:GLN:O	2.17	0.44
26:24:2:LYS:O	26:24:4:GLY:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:24:22:ILE:O	26:24:24:THR:HG22	2.17	0.44
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.52	0.44
32:2a:1381:U:O2	32:2a:1381:U:H2'	2.16	0.44
36:2e:76:ILE:HB	36:2e:142:LEU:HD22	1.99	0.44
40:2i:54:ASP:O	40:2i:56:LEU:HD12	2.17	0.44
40:2i:79:LEU:HD22	40:2i:104:ARG:HB2	1.99	0.44
45:2n:57:ARG:CG	45:2n:58:LYS:H	2.31	0.44
50:2s:53:ASN:ND2	50:2s:56:GLN:HB2	2.31	0.44
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.52	0.44
1:1A:1510:G:H2'	1:1A:1511:C:C6	2.52	0.44
1:1A:1678:G:H5''	1:1A:1678:G:N3	2.33	0.44
1:1A:2811:G:N2	1:1A:2891:G:H1'	2.32	0.44
12:1Q:17:LEU:HD23	12:1Q:17:LEU:HA	1.74	0.44
19:1X:88:LYS:NZ	19:1X:90:GLU:OE1	2.46	0.44
26:14:68:ARG:HD3	26:14:69:LYS:N	2.32	0.44
32:1a:663:A:O3'	49:1r:64:ARG:NH2	2.47	0.44
32:1a:892:A:O2'	32:1a:1415:G:H4'	2.18	0.44
32:1a:1085:U:C2	32:1a:1094:G:O6	2.71	0.44
32:1a:1134:G:N3	32:1a:1134:G:H2'	2.32	0.44
35:1d:53:ASP:O	35:1d:57:ARG:HG3	2.18	0.44
35:1d:105:VAL:HG13	35:1d:110:PHE:HB2	1.98	0.44
36:1e:105:VAL:HG21	36:1e:128:PRO:HB3	1.98	0.44
37:1f:97:PHE:O	49:1r:31:LEU:HD23	2.16	0.44
45:1n:2:ALA:O	45:1n:6:LEU:HD12	2.18	0.44
1:2A:221:A:O4'	1:2A:233:A:H1'	2.17	0.44
1:2A:320:A:H4'	1:2A:322:A:N7	2.33	0.44
1:2A:467:G:OP1	29:27:33:ARG:HD2	2.18	0.44
1:2A:1342:A:O2'	1:2A:1344:G:OP2	2.26	0.44
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.52	0.44
1:2A:1427:A:H4'	1:2A:1428:C:O5'	2.16	0.44
1:2A:2496:C:OP2	12:2Q:82:ARG:HD3	2.17	0.44
1:2A:2820:A:P	13:2R:2:ARG:HH22	2.40	0.44
5:2F:12:LEU:HG	5:2F:124:LEU:HD11	2.00	0.44
7:2H:6:ARG:HH22	7:2H:54:ARG:HH22	1.65	0.44
14:2S:3:ARG:HD2	14:2S:3:ARG:HA	1.80	0.44
19:2X:31:HIS:CD2	19:2X:33:LYS:H	2.35	0.44
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.82	0.44
21:2Z:70:LEU:HA	21:2Z:70:LEU:HD12	1.65	0.44
32:2a:93:G:O2'	32:2a:96:U:H5'	2.17	0.44
32:2a:300:A:H1'	32:2a:565:U:O2	2.18	0.44
32:2a:1023:G:C4	32:2a:1024:G:C8	3.05	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1040:U:C2	32:2a:1041:A:C8	3.05	0.44
35:2d:155:LEU:O	35:2d:159:ARG:HG3	2.18	0.44
38:2g:125:MET:O	38:2g:129:GLU:HG3	2.17	0.44
40:2i:102:LEU:HD13	40:2i:103:THR:OG1	2.17	0.44
42:2k:104:GLN:HG2	42:2k:106:LYS:HG2	2.00	0.44
48:2q:29:HIS:CG	48:2q:30:PRO:HD2	2.53	0.44
54:2w:19:G:N2	54:2w:57:G:H1'	2.32	0.44
1:1A:748:G:C8	18:1W:89:ALA:HB1	2.51	0.44
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.53	0.44
1:1A:2019:A:N7	27:15:9:LYS:HE2	2.33	0.44
61:1A:4265:HOH:O	16:1U:13:LYS:HG2	2.18	0.44
32:1a:437:U:H5''	35:1d:155:LEU:HD21	1.99	0.44
32:1a:1050:G:H2'	32:1a:1050:G:N3	2.32	0.44
32:1a:1095:U:OP2	61:1a:1914:HOH:O	2.20	0.44
32:1a:1445:C:H2'	32:1a:1446:U:O4'	2.16	0.44
34:1c:53:ALA:HB2	34:1c:115:LEU:HD21	1.99	0.44
37:1f:19:LEU:HD11	37:1f:59:TYR:CZ	2.53	0.44
45:1n:58:LYS:HE3	45:1n:58:LYS:HB3	1.85	0.44
54:1y:6:G:O6	54:1y:7:A:N6	2.51	0.44
54:1y:9:A:H8	54:1y:11:C:N4	2.14	0.44
1:2A:76:C:O3'	24:22:59:ARG:HG3	2.17	0.44
1:2A:900:A:C2'	1:2A:901:A:H8	2.29	0.44
1:2A:940:G:N3	1:2A:1191:G:H4'	2.33	0.44
1:2A:1016:G:C2	1:2A:1017:G:C8	3.05	0.44
1:2A:2130:U:H2'	1:2A:2158:A:H61	1.82	0.44
1:2A:2133:G:HO2'	1:2A:2157:G:N2	2.15	0.44
9:2N:38:HIS:NE2	9:2N:50:ASP:OD2	2.48	0.44
26:24:13:ARG:HA	26:24:22:ILE:O	2.18	0.44
32:2a:540:G:C4	32:2a:541:G:C8	3.06	0.44
32:2a:952:U:H2'	32:2a:953:G:H8	1.81	0.44
32:2a:1064:G:OP1	32:2a:1386:G:H4'	2.18	0.44
32:2a:1092:A:H5''	38:2g:4:ARG:HH12	1.83	0.44
33:2b:77:ALA:HB2	33:2b:211:ILE:HD13	1.98	0.44
36:2e:71:LEU:C	36:2e:72:GLN:HE21	2.26	0.44
40:2i:24:GLY:HA2	40:2i:59:PHE:O	2.18	0.44
51:2t:30:LYS:O	51:2t:34:LYS:HG3	2.17	0.44
1:1A:518:G:H2'	1:1A:519:U:C6	2.53	0.44
1:1A:570:G:H2'	1:1A:2030:A:N7	2.33	0.44
1:1A:717:G:H2'	1:1A:718:A:O4'	2.17	0.44
1:1A:882:G:H1	1:1A:894:C:N4	2.15	0.44
1:1A:1064:C:H1'	1:1A:1076:C:H5	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1359:A:N1	1:1A:1372:U:O4	2.51	0.44
1:1A:1669:A:H5''	1:1A:2550:G:OP1	2.17	0.44
1:1A:2429:G:OP1	61:1A:4205:HOH:O	2.20	0.44
1:1A:2788:C:P	4:1E:61:ARG:HH21	2.41	0.44
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.99	0.44
8:1I:16:GLY:O	8:1I:47:LEU:HD11	2.18	0.44
10:1O:120:GLU:HB2	15:1T:68:TYR:CE2	2.52	0.44
11:1P:91:PHE:CD1	11:1P:99:LEU:HD21	2.52	0.44
13:1R:28:LEU:HD23	13:1R:48:VAL:HG21	1.98	0.44
17:1V:43:GLU:OE1	17:1V:43:GLU:N	2.46	0.44
25:13:26:LEU:O	25:13:35:ARG:NE	2.46	0.44
28:16:38:LYS:HE3	28:16:38:LYS:HB3	1.45	0.44
32:1a:172:A:N6	32:1a:174:C:O2	2.51	0.44
32:1a:461:A:C6	32:1a:471:G:C2	3.06	0.44
32:1a:509:A:C8	32:1a:509:A:H3'	2.53	0.44
32:1a:629:G:H2'	32:1a:630:G:O4'	2.18	0.44
32:1a:867:G:O2'	32:1a:873:A:N1	2.37	0.44
32:1a:986:A:H1'	50:1s:54:GLY:O	2.18	0.44
33:1b:21:ARG:N	33:1b:39:ILE:HG13	2.31	0.44
51:1t:10:LEU:HA	51:1t:10:LEU:HD13	1.71	0.44
54:1w:24:G:H5'	54:1w:25:C:OP2	2.18	0.44
1:2A:631:A:H2'	1:2A:632:A:O4'	2.17	0.44
1:2A:686:G:N2	1:2A:788:A:H61	2.15	0.44
1:2A:783:A:O2'	1:2A:785:G:OP1	2.28	0.44
1:2A:820:A:N3	1:2A:943:U:H4'	2.33	0.44
1:2A:869:G:C4	1:2A:870:A:C8	3.05	0.44
1:2A:996:A:C2	1:2A:997:G:C8	3.06	0.44
1:2A:1115:G:H2'	1:2A:1116:C:O4'	2.18	0.44
1:2A:1188:U:C4'	17:2V:79:VAL:HG22	2.46	0.44
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.16	0.44
1:2A:1864:U:OP1	1:2A:2410:G:O2'	2.30	0.44
1:2A:2469:A:H5''	1:2A:2470:G:OP2	2.17	0.44
5:2F:33:LEU:HD13	5:2F:33:LEU:HA	1.77	0.44
5:2F:108:LYS:HE2	5:2F:108:LYS:HB2	1.86	0.44
6:2G:11:TYR:O	6:2G:16:ARG:HG2	2.18	0.44
11:2P:52:GLU:OE1	11:2P:55:ARG:NE	2.44	0.44
32:2a:341:C:O5'	32:2a:341:C:H6	2.01	0.44
32:2a:841:U:C4	32:2a:848:C:H1'	2.53	0.44
32:2a:1115:C:O2'	32:2a:1116:C:H5'	2.17	0.44
32:2a:1277:C:HO2'	32:2a:1279:A:H1'	1.82	0.44
32:2a:1368:G:OP1	40:2i:111:ARG:NH2	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1479:C:C2	32:2a:1480:G:C8	3.06	0.44
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.52	0.44
36:2e:71:LEU:HD13	36:2e:114:GLY:O	2.16	0.44
41:2j:32:ALA:HB1	41:2j:33:GLN:HA	2.00	0.44
44:2m:25:ILE:HG13	44:2m:66:LEU:CD2	2.48	0.44
46:2o:48:LYS:HA	46:2o:48:LYS:HD3	1.61	0.44
54:2y:52:G:H5'	54:2y:53:G:OP2	2.18	0.44
1:1A:1108:U:H2'	1:1A:1109:C:O4'	2.18	0.44
1:1A:1698:A:C8	1:1A:1700:A:O4'	2.71	0.44
1:1A:2150:U:H2'	1:1A:2151:G:C8	2.53	0.44
4:1E:181:LEU:HD12	4:1E:181:LEU:HA	1.73	0.44
14:1S:34:HIS:O	14:1S:97:ARG:NH2	2.51	0.44
32:1a:109:A:C6	32:1a:326:G:C6	3.06	0.44
32:1a:197:A:C5	32:1a:221:C:H4'	2.53	0.44
32:1a:430:A:OP2	35:1d:8:VAL:HG12	2.18	0.44
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.18	0.44
32:1a:1187:G:H2'	32:1a:1188:A:C8	2.53	0.44
33:1b:193:ASP:OD2	33:1b:196:LEU:HD22	2.17	0.44
34:1c:15:THR:HG21	34:1c:181:ASN:HA	2.00	0.44
41:1j:26:ALA:HB1	41:1j:84:GLN:OE1	2.18	0.44
47:1p:15:PRO:HD2	47:1p:42:ARG:NE	2.33	0.44
55:1x:19:G:H4'	55:1x:20:U:OP2	2.16	0.44
1:2A:852:G:C5	1:2A:853:G:N7	2.86	0.44
1:2A:900:A:H2'	1:2A:901:A:C8	2.45	0.44
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.51	0.44
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.53	0.44
1:2A:2882:A:H5'	13:2R:96:ARG:HB2	1.99	0.44
32:2a:7:G:H5'	32:2a:298:A:O4'	2.17	0.44
32:2a:34:C:H2'	32:2a:35:G:C8	2.53	0.44
32:2a:725:G:O2'	32:2a:726:C:H5'	2.18	0.44
32:2a:890:G:O2'	32:2a:906:G:O6	2.25	0.44
32:2a:1039:C:N4	32:2a:1040:U:C2	2.86	0.44
32:2a:1261:A:H3'	32:2a:1262:C:C6	2.52	0.44
32:2a:1307:U:O5'	32:2a:1307:U:H6	2.00	0.44
32:2a:1365:G:C5	32:2a:1366:C:C5	3.05	0.44
32:2a:1515:C:H2'	32:2a:1516:G:H8	1.83	0.44
33:2b:50:GLU:HB3	33:2b:200:ILE:O	2.18	0.44
33:2b:142:LEU:HD21	33:2b:146:GLN:NE2	2.33	0.44
34:2c:181:ASN:HB3	34:2c:205:GLY:O	2.17	0.44
35:2d:28:SER:HB2	35:2d:29:PRO:HD2	1.99	0.44
36:2e:103:GLY:O	36:2e:106:PRO:HD2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:6:ARG:H	38:2g:6:ARG:HG3	1.53	0.44
38:2g:131:LYS:HB3	38:2g:131:LYS:HE2	1.76	0.44
44:2m:40:ASN:HB3	44:2m:43:THR:HG23	2.00	0.44
44:2m:92:HIS:HA	44:2m:110:ARG:HH21	1.78	0.44
46:2o:21:ASP:OD2	46:2o:24:SER:OG	2.32	0.44
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.83	0.44
1:1A:321:G:N3	5:1F:165:ARG:HD2	2.33	0.44
1:1A:582:G:H2'	1:1A:583:G:C8	2.53	0.44
1:1A:2032:G:OP2	1:1A:2454:G:O2'	2.30	0.44
1:1A:2630:G:H2'	1:1A:2631:G:C8	2.53	0.44
1:1A:2855:C:H2'	1:1A:2856:C:H6	1.83	0.44
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.33	0.44
15:1T:29:ARG:HG3	15:1T:46:GLU:HB2	2.00	0.44
15:1T:108:ARG:NH2	15:1T:112:ARG:HD3	2.32	0.44
26:14:18:CYS:SG	26:14:20:ASN:HB2	2.57	0.44
32:1a:741:G:H2'	32:1a:742:G:O4'	2.18	0.44
32:1a:941:G:O2'	32:1a:1350:A:H4'	2.18	0.44
32:1a:1142:G:H2'	32:1a:1143:G:O4'	2.18	0.44
32:1a:1209:C:O2'	32:1a:1214:C:N4	2.46	0.44
33:1b:54:THR:HG23	33:1b:199:TYR:CB	2.46	0.44
37:1f:62:TRP:CD1	49:1r:35:ARG:HE	2.36	0.44
38:1g:31:MET:HE3	38:1g:31:MET:HB3	1.88	0.44
1:2A:879:G:H3'	1:2A:880:G:H8	1.83	0.44
1:2A:902:C:H2'	1:2A:903:C:C6	2.53	0.44
1:2A:1858:G:O6	61:2A:3944:HOH:O	2.19	0.44
1:2A:2410:G:C4	1:2A:2411:A:C8	3.06	0.44
2:2B:51:G:OP2	14:2S:61:ASN:HA	2.18	0.44
3:2D:6:PHE:HE2	3:2D:18:VAL:HG13	1.83	0.44
6:2G:89:GLY:O	6:2G:90:LEU:HD23	2.16	0.44
15:2T:6:LEU:O	15:2T:9:LEU:HB3	2.17	0.44
18:2W:71:VAL:HA	18:2W:107:LEU:HD23	1.98	0.44
32:2a:407:G:H5''	35:2d:115:ARG:HB3	2.00	0.44
32:2a:629:G:H2'	32:2a:630:G:O4'	2.18	0.44
32:2a:1206:G:C4	32:2a:1207:2MG:C8	3.06	0.44
32:2a:1314:C:OP1	50:2s:6:LYS:NZ	2.34	0.44
32:2a:1350:A:C6	32:2a:1351:U:C4	3.06	0.44
32:2a:1468:A:H2'	32:2a:1469:G:O4'	2.18	0.44
32:2a:1490:C:C2	32:2a:1491:G:C8	3.06	0.44
33:2b:170:GLU:HB3	33:2b:173:ALA:HB3	2.00	0.44
36:2e:34:VAL:O	36:2e:42:GLY:N	2.46	0.44
37:2f:37:VAL:HA	37:2f:65:VAL:HG12	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:89:MET:HE3	38:2g:89:MET:HB3	1.89	0.44
40:2i:4:TYR:CE1	40:2i:88:TYR:HA	2.53	0.44
45:2n:12:ARG:HH11	45:2n:12:ARG:CG	2.30	0.44
50:2s:30:LEU:HD23	50:2s:31:ILE:N	2.33	0.44
1:1A:2820:A:C5	13:1R:4:LEU:HD11	2.53	0.44
1:1A:2839:G:N2	1:1A:2880:C:C2	2.86	0.44
61:1A:4678:HOH:O	3:1D:14:ARG:HD2	2.18	0.44
5:1F:136:THR:HA	5:1F:166:ALA:O	2.18	0.44
15:1T:127:ALA:O	15:1T:129:ARG:N	2.51	0.44
17:1V:1:MET:HE2	17:1V:43:GLU:H	1.83	0.44
26:14:47:GLN:NE2	26:14:49:PHE:HE1	2.15	0.44
32:1a:1004:A:H5''	32:1a:1025:U:H5	1.81	0.44
33:1b:19:HIS:HA	33:1b:39:ILE:CG2	2.47	0.44
48:1q:76:LEU:HD12	48:1q:77:VAL:H	1.83	0.44
50:1s:31:ILE:O	50:1s:50:ALA:N	2.48	0.44
1:2A:468:G:N7	29:27:39:ARG:NH2	2.64	0.44
1:2A:879:G:C6	1:2A:880:G:C2	3.06	0.44
1:2A:1464:C:C2	1:2A:1465:G:C8	3.06	0.44
1:2A:1693:U:H4'	1:2A:1694:C:OP2	2.18	0.44
1:2A:2251:OMG:HM23	1:2A:2251:OMG:H1'	1.78	0.44
1:2A:2689:U:P	1:2A:2719:G:H22	2.41	0.44
4:2E:143:ASN:HD22	4:2E:147:PRO:HD3	1.83	0.44
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.51	0.44
32:2a:1060:C:H2'	32:2a:1061:G:H8	1.82	0.44
32:2a:1318:A:H5''	50:2s:3:ARG:NH2	2.33	0.44
33:2b:46:LYS:HA	33:2b:49:GLU:HB3	2.00	0.44
47:2p:5:ARG:HH21	47:2p:28:ARG:HA	1.83	0.44
1:1A:412:A:H8	1:1A:412:A:O5'	2.01	0.43
1:1A:536:A:H2'	1:1A:537:C:C6	2.52	0.43
1:1A:1035:U:H2'	1:1A:1036:G:C8	2.53	0.43
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.01	0.43
1:1A:1858:G:N2	1:1A:1883:G:H2'	2.33	0.43
5:1F:170:LEU:HD13	5:1F:172:TRP:CZ2	2.53	0.43
6:1G:56:ALA:HA	6:1G:59:GLU:HG2	2.00	0.43
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.69	0.43
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.16	0.43
32:1a:69:G:C2	32:1a:70:G:C5	3.06	0.43
32:1a:79:G:N2	32:1a:90:U:HO2'	2.16	0.43
32:1a:854:G:H3'	32:1a:871:U:O4	2.18	0.43
32:1a:1014:A:H4'	50:1s:14:HIS:CE1	2.52	0.43
32:1a:1518:MA6:O5'	32:1a:1518:MA6:H8	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:16:HIS:HB2	33:1b:204:ASN:HB2	2.00	0.43
37:1f:42:GLU:OE2	37:1f:59:TYR:OH	2.26	0.43
1:2A:657:U:H2'	1:2A:658:C:C6	2.53	0.43
1:2A:864:G:C6	1:2A:865:C:N4	2.86	0.43
1:2A:1856:G:C2'	1:2A:1857:G:H5'	2.47	0.43
1:2A:2820:A:C5	13:2R:4:LEU:HD11	2.51	0.43
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.83	0.43
5:2F:184:TYR:O	5:2F:188:ARG:HG3	2.18	0.43
12:2Q:17:LEU:HD13	12:2Q:39:PRO:HB2	1.99	0.43
14:2S:41:ASP:OD1	14:2S:44:LYS:HB2	2.18	0.43
20:2Y:86:ARG:HB2	20:2Y:98:VAL:HG23	2.00	0.43
24:22:9:GLN:HE22	24:22:56:GLN:HG2	1.83	0.43
32:2a:659:U:C2	32:2a:660:G:C8	3.05	0.43
32:2a:1060:C:H4'	41:2j:51:ARG:HB3	2.00	0.43
32:2a:1192:C:OP2	34:2c:4:LYS:NZ	2.51	0.43
32:2a:1221:G:H4'	50:2s:53:ASN:O	2.18	0.43
33:2b:95:GLN:NE2	33:2b:95:GLN:HA	2.31	0.43
34:2c:42:LEU:HA	34:2c:45:LYS:NZ	2.33	0.43
50:2s:27:GLU:H	50:2s:27:GLU:HG2	1.49	0.43
52:2u:9:ARG:O	52:2u:13:ILE:HG13	2.18	0.43
54:2w:26:A:H2'	54:2w:27:G:O4'	2.18	0.43
1:1A:647:G:H2'	1:1A:648:G:O4'	2.17	0.43
1:1A:2439:A:N6	55:1x:76:31H:OP1	2.51	0.43
1:1A:2779:U:H5'	1:1A:2781:A:O4'	2.18	0.43
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.82	0.43
26:14:54:GLY:N	26:14:55:ARG:HA	2.33	0.43
28:16:12:GLU:OE1	28:16:52:VAL:HG11	2.19	0.43
32:1a:1060:C:C5	34:1c:2:GLY:HA3	2.53	0.43
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.99	0.43
33:1b:105:PHE:C	33:1b:107:THR:H	2.26	0.43
34:1c:79:ARG:C	34:1c:81:GLY:H	2.26	0.43
35:1d:188:LEU:O	35:1d:188:LEU:HD12	2.18	0.43
47:1p:14:ASN:N	47:1p:15:PRO:HD3	2.33	0.43
1:2A:71:A:H3'	1:2A:71:A:OP2	2.18	0.43
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.51	0.43
1:2A:2111:C:N4	1:2A:2144:U:O2'	2.42	0.43
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	1.99	0.43
8:2I:87:LYS:O	8:2I:87:LYS:HG3	2.18	0.43
8:2I:129:THR:HA	8:2I:138:ILE:O	2.18	0.43
10:2O:98:VAL:HG22	10:2O:118:ALA:HA	1.98	0.43
21:2Z:91:LEU:HD22	21:2Z:91:LEU:H	1.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:95:PRO:HA	21:2Z:129:SER:HA	1.99	0.43
32:2a:88:A:H5''	32:2a:89:C:C6	2.53	0.43
32:2a:158:G:H2'	32:2a:159:G:O4'	2.18	0.43
32:2a:1061:G:H5''	41:2j:59:SER:HB3	2.00	0.43
34:2c:18:TRP:NE1	45:2n:53:LEU:O	2.52	0.43
34:2c:193:TYR:HE1	34:2c:196:LEU:HD11	1.83	0.43
36:2e:89:ILE:HG12	36:2e:135:THR:HG22	2.00	0.43
39:2h:96:GLY:H	39:2h:99:GLU:CD	2.25	0.43
1:1A:620:G:H2'	1:1A:620:G:N3	2.33	0.43
1:1A:819:A:C4	1:1A:1189:A:C2	3.06	0.43
1:1A:1721:G:H8	1:1A:1721:G:O5'	2.01	0.43
5:1F:184:TYR:O	5:1F:188:ARG:HG3	2.18	0.43
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.66	0.43
17:1V:2:PHE:CE2	17:1V:41:GLY:HA3	2.53	0.43
25:13:18:ASP:OD1	25:13:18:ASP:N	2.51	0.43
32:1a:119:A:H4'	32:1a:120:A:C8	2.53	0.43
32:1a:453:A:C5	32:1a:454:C:C4	3.06	0.43
32:1a:1004:A:H61	32:1a:1037:C:H42	1.66	0.43
33:1b:24:TRP:CZ3	33:1b:29:ALA:HB2	2.42	0.43
34:1c:22:TRP:CE2	45:1n:54:PRO:HG2	2.52	0.43
39:1h:11:THR:HG22	39:1h:15:ASN:ND2	2.31	0.43
47:1p:4:ILE:HG13	47:1p:64:ALA:HB1	1.99	0.43
1:2A:395:U:O2'	1:2A:396:G:N7	2.40	0.43
1:2A:515:A:H1'	1:2A:581:C:H1'	2.00	0.43
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.53	0.43
1:2A:1473:G:C6	1:2A:1474:C:C4	3.05	0.43
1:2A:2171:A:C4	1:2A:2172:U:C4	3.06	0.43
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.53	0.43
9:2N:131:GLN:H	9:2N:131:GLN:HG2	1.62	0.43
25:23:24:LYS:HE3	25:23:24:LYS:HB2	1.68	0.43
25:23:59:VAL:HG12	25:23:60:GLU:H	1.82	0.43
32:2a:107:G:H2'	32:2a:108:G:O4'	2.18	0.43
32:2a:678:U:H2'	32:2a:679:C:C6	2.53	0.43
32:2a:1212:U:H5''	32:2a:1213:A:O5'	2.18	0.43
33:2b:131:PRO:O	33:2b:135:GLN:HG3	2.18	0.43
43:2l:69:TYR:CD1	43:2l:90:VAL:HG21	2.53	0.43
1:1A:321:G:O4'	5:1F:165:ARG:HG2	2.18	0.43
1:1A:657:U:H2'	1:1A:658:C:C6	2.53	0.43
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.18	0.43
19:1X:31:HIS:CD2	19:1X:32:PRO:HD2	2.53	0.43
21:1Z:28:MET:O	21:1Z:34:ASN:HA	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:293:G:C6	32:1a:294:U:C4	3.06	0.43
32:1a:299:G:C6	32:1a:300:A:C6	3.05	0.43
32:1a:600:C:H2'	32:1a:601:C:C6	2.54	0.43
32:1a:601:C:H2'	32:1a:602:A:C8	2.53	0.43
32:1a:688:G:H5'	42:1k:46:GLY:C	2.43	0.43
32:1a:1162:C:N3	32:1a:1175:G:C2	2.87	0.43
51:1t:99:LEU:HA	51:1t:100:ILE:C	2.44	0.43
54:1w:44:G:O5'	54:1w:44:G:H8	2.02	0.43
1:2A:478:A:N1	1:2A:500:G:H4'	2.33	0.43
1:2A:924:C:H2'	1:2A:925:C:C6	2.53	0.43
1:2A:1589:C:H2'	1:2A:1590:U:H6	1.82	0.43
1:2A:1912:A:C8	1:2A:1918:A:C2	3.07	0.43
1:2A:2125:G:H1'	1:2A:2173:A:N6	2.33	0.43
2:2B:25:A:H2'	2:2B:26:A:C8	2.53	0.43
4:2E:59:VAL:O	4:2E:64:LYS:HE3	2.18	0.43
7:2H:80:SER:OG	7:2H:81:GLU:N	2.50	0.43
14:2S:77:ALA:HB1	14:2S:82:ILE:HB	2.01	0.43
21:2Z:30:ASN:HB2	21:2Z:89:PHE:HE1	1.84	0.43
22:20:38:VAL:HG12	22:20:40:GLN:HG2	2.01	0.43
25:23:12:PRO:HB2	25:23:20:LYS:HG2	2.00	0.43
26:24:13:ARG:HD3	26:24:23:GLU:HG2	2.00	0.43
26:24:61:ARG:HD2	26:24:61:ARG:HA	1.74	0.43
32:2a:102:G:H21	32:2a:151:A:H2	1.67	0.43
32:2a:259:G:H2'	32:2a:260:G:O4'	2.18	0.43
32:2a:445:G:H2'	32:2a:446:G:H8	1.83	0.43
32:2a:627:G:H2'	32:2a:628:G:H8	1.83	0.43
32:2a:853:G:C2	32:2a:854:G:C8	3.07	0.43
32:2a:1037:C:H2'	32:2a:1038:C:C6	2.53	0.43
32:2a:1141:C:C2	32:2a:1142:G:C8	3.06	0.43
32:2a:1157:A:C8	32:2a:1181:G:C6	3.06	0.43
32:2a:1168:A:C6	32:2a:1169:A:C6	3.06	0.43
32:2a:1264:C:C4	32:2a:1272:G:O6	2.71	0.43
32:2a:1505:G:H4'	32:2a:1506:U:H5''	2.01	0.43
35:2d:78:LEU:HB3	35:2d:93:PHE:HE1	1.83	0.43
1:1A:1094:U:H2'	1:1A:1095:A:H8	1.83	0.43
1:1A:1957:C:H2'	1:1A:1958:C:C6	2.54	0.43
1:1A:2187:G:C6	1:1A:2188:C:C4	3.06	0.43
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.52	0.43
5:1F:106:ARG:H	5:1F:106:ARG:HG2	1.34	0.43
6:1G:146:TYR:O	6:1G:149:VAL:HG12	2.18	0.43
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.66	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:101:VAL:HG23	11:1P:106:LEU:O	2.18	0.43
32:1a:406:G:H21	35:1d:119:GLN:HE22	1.65	0.43
32:1a:927:G:OP2	32:1a:927:G:H4'	2.18	0.43
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.53	0.43
41:1j:78:ASN:O	41:1j:80:LYS:N	2.51	0.43
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.80	0.43
49:1r:37:VAL:HG23	49:1r:78:LEU:HB3	2.00	0.43
1:2A:184:C:H2'	1:2A:185:U:C6	2.54	0.43
1:2A:887:A:H4'	1:2A:888:C:C5	2.53	0.43
1:2A:1445(A):C:H2'	1:2A:1446:C:C6	2.54	0.43
1:2A:1477:A:C2	1:2A:1515:G:C2	3.06	0.43
1:2A:2025:C:H2'	1:2A:2026:C:C6	2.54	0.43
1:2A:2127:G:N1	1:2A:2161:C:N4	2.66	0.43
1:2A:2307:G:H8	1:2A:2307:G:OP1	2.01	0.43
1:2A:2792:G:C6	1:2A:2805:G:C6	3.06	0.43
1:2A:2818:G:OP1	1:2A:2837:G:O2'	2.26	0.43
3:2D:85:ASP:OD2	3:2D:88:ARG:HD2	2.19	0.43
5:2F:152:GLU:HG2	5:2F:190:GLU:OE2	2.18	0.43
6:2G:111:LEU:HA	6:2G:114:ILE:HD12	2.00	0.43
27:25:59:GLU:O	27:25:59:GLU:HG3	2.19	0.43
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.52	0.43
32:2a:582:U:C2	32:2a:760:G:C6	3.07	0.43
32:2a:1059:C:O3'	45:2n:45:ARG:NH2	2.51	0.43
32:2a:1216:G:H5''	45:2n:5:ALA:CB	2.44	0.43
32:2a:1245:A:H2'	32:2a:1246:C:C6	2.53	0.43
32:2a:1275:A:H2'	32:2a:1276:G:O4'	2.18	0.43
32:2a:1319:A:H61	32:2a:1361:G:H21	1.66	0.43
38:2g:151:TYR:CZ	42:2k:54:ARG:HD3	2.53	0.43
46:2o:71:GLN:HB2	46:2o:78:TYR:CD1	2.53	0.43
48:2q:78:GLU:HG2	48:2q:81:ARG:HG2	2.00	0.43
1:1A:1054:A:N6	1:1A:1105:U:C4	2.87	0.43
3:1D:130:ALA:C	3:1D:131:LEU:HD12	2.43	0.43
5:1F:102:PRO:O	5:1F:106:ARG:HG2	2.18	0.43
16:1U:76:TYR:CZ	16:1U:80:ILE:HG13	2.53	0.43
21:1Z:48:PHE:CE1	21:1Z:71:VAL:HG11	2.53	0.43
32:1a:715:A:H2'	32:1a:716:A:C8	2.54	0.43
32:1a:829:G:C6	32:1a:858:G:N2	2.87	0.43
32:1a:1410:G:H2'	32:1a:1411:C:H6	1.83	0.43
34:1c:47:LEU:HD13	34:1c:68:VAL:HG11	2.01	0.43
35:1d:13:ARG:NH2	35:1d:40:PRO:HA	2.33	0.43
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:1n:24:CYS:SG	45:1n:40:CYS:N	2.85	0.43
1:2A:72:U:OP2	24:22:29:LYS:NZ	2.45	0.43
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.83	0.43
1:2A:1946:U:C2	1:2A:1947:C:C5	3.07	0.43
1:2A:2127:G:N2	1:2A:2161:C:C2	2.86	0.43
1:2A:2156:G:H2'	1:2A:2157:G:C5	2.53	0.43
1:2A:2299:G:C2	1:2A:2300:G:C8	3.07	0.43
2:2B:90:A:C5	2:2B:91:C:H1'	2.53	0.43
9:2N:73:THR:HA	9:2N:83:LYS:O	2.18	0.43
10:2O:19:ILE:HG22	10:2O:43:VAL:HA	2.01	0.43
32:2a:448:A:OP2	32:2a:485:G:N2	2.35	0.43
32:2a:841:U:H6	32:2a:841:U:P	2.41	0.43
32:2a:1279:A:O2'	32:2a:1281:U:OP2	2.28	0.43
32:2a:1291:G:C6	32:2a:1292:U:C4	3.07	0.43
34:2c:29:TYR:HE1	41:2j:11:PHE:CE2	2.34	0.43
34:2c:164:ARG:HG2	34:2c:165:THR:H	1.84	0.43
34:2c:184:TYR:CD1	34:2c:201:TYR:CE1	3.06	0.43
38:2g:115:ARG:HH11	38:2g:118:VAL:CG2	2.31	0.43
41:2j:46:ARG:HA	41:2j:64:GLU:HA	2.00	0.43
44:2m:84:ILE:C	44:2m:86:CYS:H	2.26	0.43
47:2p:42:ARG:HG2	47:2p:42:ARG:NH1	2.33	0.43
51:2t:24:LEU:HD23	51:2t:24:LEU:HA	1.78	0.43
55:2x:31:G:C8	55:2x:32:5MC:HM53	2.53	0.43
1:1A:1020:A:N1	1:1A:1141:U:O2'	2.49	0.43
1:1A:1069:A:H2'	1:1A:1073:A:C8	2.54	0.43
12:1Q:31:ASP:OD1	12:1Q:134:ARG:NH1	2.47	0.43
32:1a:767:A:H2'	32:1a:768:A:O4'	2.19	0.43
32:1a:1134:G:C6	32:1a:1135:U:C2	3.07	0.43
32:1a:1284:C:H3'	32:1a:1285:A:C8	2.53	0.43
38:1g:52:GLU:H	38:1g:52:GLU:HG3	1.61	0.43
38:1g:138:LYS:HE2	38:1g:142:GLU:CD	2.44	0.43
39:1h:94:TYR:CE1	39:1h:132:GLU:HB2	2.53	0.43
40:1i:47:LEU:C	40:1i:49:PRO:HD2	2.44	0.43
44:1m:49:THR:HG23	44:1m:52:GLU:OE1	2.19	0.43
55:1x:31:G:C8	55:1x:32:5MC:HM53	2.54	0.43
1:2A:271(P):C:O3'	8:2I:42:SER:OG	2.31	0.43
1:2A:945:A:C4	1:2A:2448:A:C2	3.06	0.43
1:2A:1430:C:H2'	1:2A:1431:U:C6	2.53	0.43
1:2A:1946:U:H2'	1:2A:1947:C:H6	1.83	0.43
1:2A:2298:A:C2	1:2A:2299:G:H1'	2.54	0.43
1:2A:2470:G:O2'	1:2A:2471:C:H5'	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2679:A:C2	1:2A:2729:G:C2	3.07	0.43
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.52	0.43
6:2G:96:ARG:H	6:2G:96:ARG:HG3	1.51	0.43
7:2H:121:ILE:HD11	7:2H:140:LYS:HB3	2.00	0.43
10:2O:26:LYS:O	10:2O:30:ALA:HB2	2.18	0.43
12:2Q:55:VAL:HG23	12:2Q:64:ILE:HD12	2.00	0.43
32:2a:131:C:H2'	32:2a:132:C:C6	2.54	0.43
32:2a:933:G:N2	32:2a:935:A:O4'	2.52	0.43
32:2a:1146:A:H2'	32:2a:1147:C:O4'	2.18	0.43
32:2a:1313:U:P	50:2s:5:LEU:HD12	2.59	0.43
32:2a:1313:U:H2'	32:2a:1314:C:H6	1.83	0.43
34:2c:18:TRP:NE1	45:2n:55:GLY:H	2.15	0.43
39:2h:9:MET:SD	39:2h:32:LYS:HG2	2.59	0.43
55:2x:27:U:O2	55:2x:44:A:C2	2.71	0.43
1:1A:191:A:H2'	1:1A:192:C:C6	2.53	0.43
1:1A:288:C:H2'	1:1A:289:A:H8	1.83	0.43
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.27	0.43
1:1A:2206:G:OP2	1:1A:2206:G:H4'	2.18	0.43
1:1A:2667:C:H2'	1:1A:2668:G:O4'	2.19	0.43
3:1D:71:ASP:HB3	3:1D:103:ARG:HH12	1.84	0.43
12:1Q:39:PRO:HA	12:1Q:97:VAL:O	2.19	0.43
30:18:11:LYS:HG3	30:18:11:LYS:O	2.18	0.43
32:1a:35:G:O2'	43:1l:118:SER:O	2.26	0.43
32:1a:336:C:O2'	32:1a:337:C:H5'	2.18	0.43
32:1a:433:C:H2'	32:1a:434:U:H6	1.84	0.43
35:1d:88:VAL:O	35:1d:92:VAL:HG23	2.18	0.43
54:1w:20:U:OP2	54:1w:20:U:H4'	2.16	0.43
1:2A:1038:C:N4	1:2A:1117:G:H1	2.16	0.43
1:2A:2353:G:H5''	22:20:32:ARG:HH11	1.84	0.43
2:2B:47:C:O2'	14:2S:93:LYS:HD2	2.19	0.43
4:2E:69:LYS:O	4:2E:69:LYS:HG2	2.18	0.43
4:2E:82:ARG:HG3	4:2E:83:ASP:N	2.33	0.43
4:2E:96:PHE:O	4:2E:175:VAL:HG21	2.19	0.43
9:2N:5:VAL:HA	9:2N:6:PRO:HD3	1.92	0.43
11:2P:94:GLU:HG3	11:2P:124:LYS:HD3	2.01	0.43
21:2Z:102:LEU:HD13	21:2Z:139:VAL:HG11	2.01	0.43
32:2a:473:G:C2	32:2a:474:G:C5	3.07	0.43
32:2a:854:G:C2	32:2a:855:G:C8	3.06	0.43
32:2a:882:C:O2'	32:2a:883:C:H5'	2.19	0.43
38:2g:69:VAL:HG11	38:2g:134:ALA:HB1	1.99	0.43
44:2m:13:LYS:O	44:2m:45:VAL:N	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2n:27:CYS:SG	45:2n:29:ARG:HB2	2.58	0.43
1:1A:662:G:H5''	11:1P:16:ARG:HG3	2.00	0.43
1:1A:878:A:C6	1:1A:900:A:C5	3.07	0.43
1:1A:1142(A):A:C4	1:1A:1144:G:N7	2.86	0.43
1:1A:1800:C:OP1	3:1D:264:LYS:NZ	2.36	0.43
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.54	0.43
1:1A:2845:G:O2'	1:1A:2846:G:H5'	2.19	0.43
10:1O:48:PRO:CB	32:1a:1422:G:H5''	2.41	0.43
11:1P:1:MET:HE3	11:1P:1:MET:HB2	1.66	0.43
19:1X:1:MET:HE1	24:12:26:ARG:NH2	2.34	0.43
26:14:28:LYS:HA	26:14:29:PRO:HD3	1.90	0.43
32:1a:260:G:H2'	32:1a:261:U:C6	2.53	0.43
32:1a:598:U:H2'	32:1a:599:C:C6	2.54	0.43
32:1a:1004:A:N6	32:1a:1037:C:H42	2.16	0.43
32:1a:1330:U:C2'	32:1a:1331:G:H5'	2.48	0.43
33:1b:132:LYS:O	33:1b:136:VAL:HG13	2.19	0.43
35:1d:103:ASN:OD1	35:1d:114:ARG:NE	2.38	0.43
35:1d:118:ARG:O	35:1d:121:VAL:N	2.52	0.43
35:1d:173:TRP:HE1	35:1d:193:ASP:HB3	1.84	0.43
1:2A:251:A:C5	1:2A:252:G:H1'	2.53	0.43
1:2A:606:U:H4'	1:2A:658:C:H4'	2.00	0.43
1:2A:855:G:C6	1:2A:856:C:C4	3.07	0.43
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.19	0.43
1:2A:1848:A:C4	1:2A:1849:G:C8	3.07	0.43
1:2A:2116:G:N1	1:2A:2162:G:OP1	2.51	0.43
1:2A:2125:G:H21	1:2A:2174:C:N4	2.17	0.43
2:2B:43:C:C4	2:2B:45:A:N6	2.87	0.43
3:2D:101:GLU:OE2	3:2D:103:ARG:NE	2.49	0.43
6:2G:63:ILE:HD12	6:2G:141:PHE:CB	2.47	0.43
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	2.00	0.43
11:2P:6:LEU:HD23	11:2P:6:LEU:HA	1.81	0.43
18:2W:1:MET:HE2	18:2W:62:HIS:CG	2.54	0.43
20:2Y:43:ASN:ND2	20:2Y:65:ALA:O	2.51	0.43
32:2a:980:C:H3'	32:2a:981:U:H6	1.84	0.43
32:2a:1020:U:H2'	32:2a:1021:G:H8	1.83	0.43
32:2a:1153:C:C4	32:2a:1154:G:N7	2.87	0.43
32:2a:1362:C:H2'	32:2a:1363:C:H5''	2.01	0.43
33:2b:114:ARG:HA	33:2b:117:GLU:CB	2.48	0.43
33:2b:185:ILE:CG2	33:2b:199:TYR:HB2	2.48	0.43
35:2d:156:GLU:CD	35:2d:159:ARG:HH21	2.27	0.43
35:2d:173:TRP:CG	35:2d:189:PRO:HB3	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:135:THR:O	36:2e:138:ALA:N	2.52	0.43
42:2k:102:GLY:C	42:2k:103:LEU:HD12	2.44	0.43
44:2m:84:ILE:O	44:2m:86:CYS:N	2.52	0.43
45:2n:57:ARG:HG2	45:2n:58:LYS:N	2.32	0.43
1:1A:865:C:H4'	1:1A:866:A:N7	2.34	0.43
1:1A:910:A:C5	12:1Q:13:GLN:HG3	2.54	0.43
1:1A:1062:G:H1	1:1A:1077:A:N6	2.11	0.43
1:1A:1500:G:H2'	1:1A:1501:C:C6	2.53	0.43
1:1A:1814:G:C4'	3:1D:51:VAL:HG21	2.49	0.43
6:1G:47:LYS:HG3	6:1G:48:GLU:H	1.84	0.43
13:1R:12:ARG:HB3	13:1R:16:HIS:HB3	2.01	0.43
20:1Y:54:LYS:O	20:1Y:55:TYR:CD2	2.72	0.43
21:1Z:125:LEU:HD23	21:1Z:164:ALA:O	2.19	0.43
32:1a:254:G:OP1	48:1q:67:LYS:O	2.36	0.43
32:1a:627:G:O2'	32:1a:628:G:H5'	2.18	0.43
32:1a:872:A:C4	32:1a:874:G:N7	2.87	0.43
32:1a:1152:A:H5'	41:1j:13:HIS:ND1	2.34	0.43
32:1a:1429:C:H2'	32:1a:1430:C:H6	1.83	0.43
42:1k:50:TYR:HH	42:1k:59:TYR:HD2	1.67	0.43
47:1p:9:PHE:N	47:1p:16:HIS:O	2.52	0.43
1:2A:746:A:H2'	1:2A:2612:C:H5''	2.01	0.43
1:2A:947:G:H2'	1:2A:948:G:C8	2.53	0.43
1:2A:1314:C:H6	1:2A:1314:C:H5'	1.84	0.43
1:2A:2540:C:H2'	1:2A:2541:A:O4'	2.19	0.43
6:2G:151:ALA:HB3	6:2G:153:ARG:NH1	2.34	0.43
7:2H:137:ASP:HB3	7:2H:140:LYS:HB2	2.01	0.43
12:2Q:12:GLN:NE2	12:2Q:73:PRO:HD2	2.34	0.43
12:2Q:29:PHE:HB3	12:2Q:65:PHE:CE1	2.54	0.43
16:2U:59:ARG:O	16:2U:63:VAL:HG23	2.19	0.43
17:2V:81:TYR:C	17:2V:82:ARG:HD2	2.43	0.43
18:2W:92:ARG:HG2	18:2W:93:ALA:N	2.34	0.43
32:2a:256:U:H2'	32:2a:257:G:C8	2.54	0.43
32:2a:621:A:OP2	61:2a:3321:HOH:O	2.21	0.43
32:2a:659:U:H2'	32:2a:660:G:C8	2.53	0.43
32:2a:735:C:H2'	32:2a:736:C:C6	2.47	0.43
32:2a:767:A:H2'	32:2a:768:A:O4'	2.19	0.43
32:2a:957:U:H2'	32:2a:958:A:H5''	2.01	0.43
32:2a:964:A:N3	32:2a:969:A:O2'	2.40	0.43
40:2i:45:ALA:O	40:2i:48:GLU:HB2	2.19	0.43
41:2j:6:ILE:HB	41:2j:72:VAL:HB	2.00	0.43
46:2o:4:THR:OG1	46:2o:7:GLU:HG3	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2y:57:G:N3	54:2y:57:G:H2'	2.33	0.43
1:1A:1465:G:O2'	1:1A:1545:A:N1	2.48	0.42
1:1A:1712:C:H2'	1:1A:1713:U:O4'	2.19	0.42
1:1A:2379:G:O2'	14:1S:17:ARG:NH2	2.52	0.42
1:1A:2512:C:H2'	1:1A:2513:G:O4'	2.19	0.42
7:1H:56:SER:OG	7:1H:58:GLU:HG2	2.19	0.42
8:1I:132:PRO:HD2	8:1I:136:VAL:O	2.19	0.42
11:1P:90:ARG:HG2	11:1P:90:ARG:NH1	2.24	0.42
12:1Q:1:MET:HE2	12:1Q:1:MET:HB2	1.88	0.42
15:1T:113:LYS:O	15:1T:114:LEU:HD23	2.19	0.42
20:1Y:98:VAL:HG12	20:1Y:105:ALA:HA	2.01	0.42
32:1a:1005:A:H5''	32:1a:1006:C:H5	1.83	0.42
32:1a:1187:G:H2'	32:1a:1188:A:H8	1.84	0.42
34:1c:178:LEU:HD12	34:1c:178:LEU:HA	1.67	0.42
48:1q:50:LYS:HD2	48:1q:51:TYR:CZ	2.54	0.42
50:1s:11:VAL:HG12	50:1s:13:ASP:H	1.84	0.42
54:1y:18:G:C2	54:1y:58:A:C5	3.07	0.42
1:2A:615:G:O2'	5:2F:205:ARG:NH2	2.52	0.42
1:2A:760:G:H2'	1:2A:761:A:O4'	2.18	0.42
1:2A:1019:U:H2'	1:2A:1020:A:C8	2.47	0.42
1:2A:1171:G:H22	1:2A:1178:C:H42	1.67	0.42
1:2A:1270:C:H5''	1:2A:1271:G:O5'	2.19	0.42
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.55	0.42
1:2A:2303:G:O2'	6:2G:132:ASN:HB2	2.19	0.42
2:2B:74:U:C3'	2:2B:75:G:H5''	2.49	0.42
3:2D:134:ARG:HG3	3:2D:135:PHE:CD1	2.54	0.42
8:2I:120:ILE:HD13	8:2I:120:ILE:HA	1.83	0.42
11:2P:114:ILE:HG13	11:2P:125:VAL:CG1	2.47	0.42
12:2Q:11:LYS:NZ	12:2Q:88:GLY:O	2.50	0.42
13:2R:51:LEU:HD22	13:2R:66:VAL:HG13	2.01	0.42
14:2S:34:HIS:C	14:2S:35:ILE:HG13	2.44	0.42
16:2U:90:VAL:O	16:2U:95:LEU:HD13	2.18	0.42
21:2Z:31:ARG:HD2	21:2Z:94:GLU:OE2	2.19	0.42
32:2a:1292:U:C2	32:2a:1293:G:C8	3.07	0.42
35:2d:101:LEU:O	35:2d:104:VAL:HG22	2.19	0.42
36:2e:69:VAL:HG12	36:2e:71:LEU:HD21	2.01	0.42
36:2e:80:ILE:HG22	36:2e:91:LEU:HB2	2.00	0.42
38:2g:132:GLY:O	38:2g:136:LYS:HG2	2.19	0.42
39:2h:33:GLU:HG2	39:2h:48:TYR:CE1	2.54	0.42
47:2p:75:ARG:HB2	47:2p:80:PHE:CE2	2.54	0.42
54:2y:49:C:N3	54:2y:65:G:N2	2.57	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:228:A:H8	1:1A:229:A:H5'	1.85	0.42
1:1A:251:A:C5	1:1A:252:G:H1'	2.54	0.42
1:1A:919:G:N2	1:1A:2269:A:OP2	2.51	0.42
1:1A:1092:C:H2'	1:1A:1093:G:H5'	2.01	0.42
1:1A:1817:G:C6	1:1A:1818:U:C4	3.07	0.42
1:1A:2149:G:C6	1:1A:2150:U:C2	3.07	0.42
1:1A:2855:C:H2'	1:1A:2856:C:C6	2.53	0.42
5:1F:34:TRP:CH2	11:1P:8:PRO:HB3	2.54	0.42
21:1Z:150:LEU:O	21:1Z:171:ILE:HG12	2.19	0.42
32:1a:257:G:C6	32:1a:258:G:C5	3.07	0.42
32:1a:461:A:O2'	32:1a:470:C:H5'	2.19	0.42
32:1a:692:U:H5'	32:1a:797:C:H5'	2.00	0.42
32:1a:1333:A:H2'	32:1a:1334:G:O4'	2.19	0.42
33:1b:166:ASP:O	33:1b:170:GLU:N	2.52	0.42
35:1d:126:ILE:HG22	35:1d:127:THR:N	2.33	0.42
36:1e:30:ALA:O	36:1e:45:PHE:HD1	2.02	0.42
37:1f:97:PHE:HB3	49:1r:32:ARG:HG3	2.01	0.42
40:1i:105:ASP:HB2	40:1i:107:ARG:HG3	2.00	0.42
44:1m:91:ARG:NE	44:1m:97:PRO:O	2.47	0.42
48:1q:66:SER:OG	48:1q:69:LYS:HB2	2.20	0.42
54:1w:19:G:H4'	54:1w:20:U:OP1	2.19	0.42
1:2A:740:U:H2'	1:2A:741:G:C8	2.54	0.42
1:2A:1475:G:C2	1:2A:1517:G:C2	3.08	0.42
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.83	0.42
1:2A:2274:A:C6	1:2A:2276:G:C8	3.07	0.42
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.17	0.42
6:2G:59:GLU:HB2	6:2G:144:ILE:HD11	2.01	0.42
10:2O:25:LEU:HB2	10:2O:38:VAL:O	2.19	0.42
16:2U:8:VAL:O	16:2U:12:ARG:HG3	2.20	0.42
32:2a:80:G:N2	32:2a:90:U:H1'	2.34	0.42
32:2a:1166:G:C2	32:2a:1171:G:C6	3.07	0.42
32:2a:1207:2MG:C6	32:2a:1208:C:C4	3.07	0.42
32:2a:1247:U:H1'	32:2a:1291:G:N2	2.33	0.42
32:2a:1261:A:H3'	32:2a:1262:C:H6	1.84	0.42
33:2b:112:VAL:HG22	33:2b:149:LEU:HD13	2.01	0.42
34:2c:11:ARG:NH2	34:2c:177:THR:O	2.52	0.42
36:2e:131:ILE:O	36:2e:135:THR:HG23	2.19	0.42
44:2m:50:GLU:O	44:2m:54:VAL:HG22	2.19	0.42
47:2p:39:TYR:CD2	47:2p:73:LEU:HD21	2.53	0.42
49:2r:56:THR:OG1	49:2r:63:GLN:NE2	2.52	0.42
54:2y:18:G:N2	54:2y:58:A:C4	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:884:C:C5	1:1A:885:C:H1'	2.54	0.42
3:1D:68:LYS:C	3:1D:70:TRP:H	2.28	0.42
8:1I:48:GLU:OE1	8:1I:52:ARG:NH1	2.53	0.42
8:1I:105:HIS:O	8:1I:107:VAL:HG23	2.19	0.42
11:1P:90:ARG:HD2	11:1P:91:PHE:CZ	2.54	0.42
14:1S:58:LEU:HD23	14:1S:58:LEU:HA	1.83	0.42
32:1a:90:U:H5''	32:1a:91:C:OP1	2.19	0.42
32:1a:740:U:O2'	32:1a:741:G:H5'	2.19	0.42
32:1a:953:G:H2'	32:1a:954:G:O4'	2.19	0.42
32:1a:1319:A:OP1	50:1s:3:ARG:HD2	2.18	0.42
32:1a:1328:C:OP1	52:1u:21:TYR:OH	2.34	0.42
36:1e:7:GLU:O	36:1e:34:VAL:HA	2.19	0.42
38:1g:16:LEU:HD23	40:1i:42:ARG:HA	2.01	0.42
38:1g:95:ARG:O	38:1g:99:LEU:HG	2.19	0.42
44:1m:66:LEU:O	44:1m:70:LEU:N	2.47	0.42
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	2.02	0.42
46:1o:74:ASP:HB3	46:1o:77:ARG:HB2	2.01	0.42
1:2A:139(A):G:O2'	1:2A:140:G:H5'	2.19	0.42
1:2A:598:G:O2'	5:2F:31:HIS:NE2	2.43	0.42
1:2A:955:C:OP2	12:2Q:14:ARG:HG3	2.18	0.42
1:2A:1910:G:C6	1:2A:1921:G:C6	3.08	0.42
1:2A:2420:C:H5'	28:26:54:ILE:HD11	2.01	0.42
19:2X:94:GLY:N	19:2X:95:LEU:HB2	2.33	0.42
21:2Z:125:LEU:HD23	21:2Z:164:ALA:HB3	2.01	0.42
25:23:7:LYS:CG	25:23:34:GLU:HG3	2.48	0.42
26:24:45:GLY:C	26:24:47:GLN:H	2.25	0.42
32:2a:406:G:C8	32:2a:495:A:C2	3.07	0.42
32:2a:718:G:H5'	42:2k:117:ASN:CG	2.45	0.42
32:2a:1105:A:N3	32:2a:1106:G:C8	2.87	0.42
32:2a:1173:G:H2'	32:2a:1174:G:H8	1.84	0.42
32:2a:1236:A:O2'	32:2a:1304:G:H4'	2.19	0.42
32:2a:1256:A:H61	32:2a:1278:U:C2'	2.33	0.42
32:2a:1273:G:N7	32:2a:1274:G:C5	2.87	0.42
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.34	0.42
33:2b:197:VAL:HG23	33:2b:200:ILE:HG13	2.01	0.42
40:2i:26:VAL:HG22	40:2i:61:ALA:HB3	2.00	0.42
42:2k:81:ASP:OD1	42:2k:106:LYS:HB2	2.19	0.42
43:2l:53:ARG:HD2	43:2l:93:LEU:HD11	2.01	0.42
1:1A:271(Q):G:OP1	8:1I:42:SER:HB2	2.18	0.42
1:1A:271(V):G:O6	61:1A:4243:HOH:O	2.20	0.42
1:1A:1358:G:N2	1:1A:1372:U:C5	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2629:A:HO2'	1:1A:2630:G:P	2.37	0.42
3:1D:9:TYR:CE1	3:1D:13:ARG:HG3	2.55	0.42
4:1E:119:ARG:HG2	4:1E:120:TRP:CD1	2.55	0.42
6:1G:126:ASP:OD2	6:1G:130:ASN:ND2	2.35	0.42
20:1Y:5:MET:HB2	20:1Y:5:MET:HE2	1.70	0.42
20:1Y:20:TYR:CE2	20:1Y:43:ASN:HA	2.54	0.42
29:17:24:THR:CG2	29:17:27:GLY:H	2.16	0.42
32:1a:1001(A):G:C2	32:1a:1002:G:H1'	2.54	0.42
37:1f:86:ARG:O	37:1f:87:ARG:HG2	2.20	0.42
44:1m:86:CYS:O	44:1m:89:GLY:N	2.52	0.42
51:1t:89:ARG:H	51:1t:89:ARG:HG2	1.56	0.42
1:2A:18:C:O2'	1:2A:554:U:OP1	2.35	0.42
1:2A:136:G:O2'	1:2A:137:C:H5'	2.20	0.42
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.58	0.42
1:2A:253:C:O2'	61:2A:3955:HOH:O	2.21	0.42
1:2A:600:G:H2'	1:2A:601:C:C6	2.53	0.42
1:2A:1527:G:H2'	1:2A:1542:A:N1	2.34	0.42
1:2A:2114:A:N6	1:2A:2115:G:H21	2.18	0.42
1:2A:2135:A:N7	1:2A:2136:C:H5	2.17	0.42
3:2D:206:LEU:HD22	3:2D:211:ARG:HG2	2.01	0.42
7:2H:164:TYR:O	7:2H:167:GLU:HB2	2.19	0.42
12:2Q:54:MET:HB2	12:2Q:64:ILE:CD1	2.48	0.42
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HB2	2.54	0.42
25:23:4:LEU:O	25:23:36:VAL:HA	2.20	0.42
32:2a:451:A:C6	32:2a:481:G:C5	3.07	0.42
32:2a:620:C:H2'	32:2a:621:A:O4'	2.19	0.42
32:2a:972:C:O2'	41:2j:55:LYS:O	2.30	0.42
32:2a:1052:U:N3	32:2a:1200:C:N3	2.67	0.42
32:2a:1252:A:H2'	32:2a:1253:G:O4'	2.19	0.42
35:2d:11:LEU:O	35:2d:15:GLU:HG2	2.20	0.42
37:2f:100:ASN:ND2	49:2r:23:LYS:HE3	2.29	0.42
41:2j:23:ILE:HD13	41:2j:23:ILE:HA	1.76	0.42
42:2k:39:PRO:O	42:2k:40:ILE:HD13	2.19	0.42
43:2l:70:ILE:HG12	43:2l:100:ILE:HD12	2.02	0.42
48:2q:58:GLU:OE2	48:2q:75:ARG:NH2	2.52	0.42
55:2x:23:C:C2	55:2x:24:U:C5	3.07	0.42
1:1A:363(A):A:C2	1:1A:363(B):G:C5	3.07	0.42
1:1A:796:C:H2'	1:1A:797:C:C6	2.53	0.42
2:1B:26:A:H2'	2:1B:27:C:O4'	2.20	0.42
2:1B:96:U:H2'	2:1B:97:G:C8	2.54	0.42
21:1Z:7:ALA:HB2	21:1Z:59:LEU:HD22	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:54:HIS:HD2	21:1Z:99:TYR:O	2.03	0.42
32:1a:219:C:H2'	32:1a:220:G:O4'	2.20	0.42
32:1a:1298:C:H4'	32:1a:1299:A:C4	2.55	0.42
33:1b:21:ARG:CA	33:1b:39:ILE:HA	2.48	0.42
33:1b:24:TRP:CD1	33:1b:24:TRP:H	2.38	0.42
34:1c:134:ILE:O	34:1c:138:VAL:HG23	2.18	0.42
35:1d:76:ARG:O	35:1d:80:GLU:HG2	2.20	0.42
36:1e:90:VAL:O	36:1e:120:THR:HA	2.18	0.42
37:1f:67:MET:HB2	37:1f:68:PRO:HD2	2.01	0.42
40:1i:8:GLY:O	40:1i:15:ALA:N	2.53	0.42
40:1i:46:ALA:HA	40:1i:78:LYS:HB2	2.00	0.42
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.34	0.42
51:1t:56:MET:SD	51:1t:88:VAL:HG21	2.59	0.42
1:2A:121:G:H4'	1:2A:149:A:H5'	2.01	0.42
1:2A:1157:G:C2	1:2A:1158:C:C2	3.07	0.42
1:2A:1463:C:H2'	1:2A:1464:C:C6	2.54	0.42
1:2A:2070:G:H2'	1:2A:2071:A:O4'	2.18	0.42
1:2A:2536:G:C5	1:2A:2537:U:C5	3.07	0.42
2:2B:41:U:H5	6:2G:70:VAL:H	1.66	0.42
12:2Q:19:GLY:O	12:2Q:98:LYS:HE3	2.19	0.42
20:2Y:46:LYS:HD3	20:2Y:60:PHE:CD1	2.55	0.42
22:20:53:MET:HG3	22:20:59:LEU:CD2	2.50	0.42
32:2a:61:G:C5	32:2a:107:G:C2	3.07	0.42
32:2a:302:G:N3	32:2a:556:C:H4'	2.34	0.42
32:2a:422:C:H5'	32:2a:423:G:C5	2.54	0.42
32:2a:422:C:O4'	32:2a:423:G:N1	2.53	0.42
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.29	0.42
32:2a:685:G:N2	32:2a:686:U:C4	2.87	0.42
32:2a:1103:C:H2'	32:2a:1104:G:O4'	2.20	0.42
32:2a:1112:C:N4	34:2c:178:LEU:HD12	2.35	0.42
32:2a:1222:G:C6	32:2a:1223:C:C4	3.08	0.42
32:2a:1330:U:O4	32:2a:1331:G:C6	2.73	0.42
33:2b:15:VAL:CG2	33:2b:213:LEU:HD13	2.49	0.42
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.36	0.42
43:2l:8:ASN:O	43:2l:12:ARG:HG3	2.19	0.42
47:2p:15:PRO:C	47:2p:16:HIS:HD1	2.27	0.42
48:2q:22:LEU:HD13	48:2q:41:LYS:HG2	2.01	0.42
54:2y:49:C:H42	54:2y:65:G:H1	1.66	0.42
1:1A:831:G:H8	1:1A:831:G:O5'	2.01	0.42
1:1A:1063:G:C5	1:1A:1064:C:N4	2.87	0.42
1:1A:1094:U:H2'	1:1A:1095:A:C8	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:119:ARG:HG2	4:1E:120:TRP:NE1	2.35	0.42
32:1a:144:G:C2	32:1a:179:A:N3	2.88	0.42
32:1a:558:G:H5''	32:1a:559:A:OP2	2.20	0.42
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.54	0.42
32:1a:1291:G:C6	32:1a:1292:U:C4	3.07	0.42
35:1d:99:SER:HB3	35:1d:140:VAL:O	2.20	0.42
36:1e:85:GLY:C	36:1e:87:SER:H	2.28	0.42
37:1f:39:LYS:HE3	37:1f:39:LYS:HB3	1.81	0.42
43:1l:117:ARG:HB3	43:1l:122:THR:HB	2.02	0.42
44:1m:66:LEU:O	44:1m:69:GLU:N	2.52	0.42
1:2A:95:G:N2	1:2A:96:G:H1'	2.35	0.42
1:2A:721:C:H2'	1:2A:722:A:C8	2.55	0.42
1:2A:1263:U:C4	1:2A:1264:G:C6	3.07	0.42
1:2A:1908:C:O2	55:2x:12:G:H4'	2.20	0.42
1:2A:2129:C:N3	1:2A:2159:G:N2	2.68	0.42
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.51	0.42
2:2B:7:G:H5'	14:2S:29:PHE:CE2	2.54	0.42
3:2D:69:ARG:HD2	3:2D:105:ILE:HG21	2.01	0.42
4:2E:48:GLN:HA	4:2E:80:GLU:HA	2.01	0.42
4:2E:174:ASP:OD1	4:2E:175:VAL:N	2.51	0.42
5:2F:192:LEU:HD13	5:2F:194:MET:HE2	2.02	0.42
7:2H:11:VAL:CG2	7:2H:50:VAL:HG23	2.48	0.42
7:2H:90:LYS:HE3	7:2H:163:TYR:CD2	2.54	0.42
12:2Q:122:GLY:HA2	12:2Q:125:LEU:HD12	2.00	0.42
14:2S:87:PHE:CE1	14:2S:102:ALA:HB2	2.53	0.42
21:2Z:44:PHE:CE1	21:2Z:86:VAL:HG21	2.54	0.42
32:2a:69:G:C2	32:2a:70:G:N7	2.88	0.42
32:2a:570:G:H1'	32:2a:820:U:C4	2.54	0.42
32:2a:948:C:H2'	32:2a:949:A:H8	1.84	0.42
32:2a:1014:A:H4'	50:2s:14:HIS:CE1	2.55	0.42
32:2a:1338:G:C6	32:2a:1339:A:C6	3.08	0.42
33:2b:21:ARG:CB	33:2b:39:ILE:HG13	2.49	0.42
33:2b:187:LEU:HD21	33:2b:203:GLY:C	2.44	0.42
34:2c:194:GLY:O	34:2c:196:LEU:HD12	2.19	0.42
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	2.00	0.42
41:2j:42:THR:CB	41:2j:68:HIS:HA	2.49	0.42
42:2k:48:ILE:H	42:2k:48:ILE:HD12	1.83	0.42
1:1A:601:C:O2'	1:1A:605:C:H5''	2.19	0.42
1:1A:1837:C:OP1	32:1a:784:C:H4'	2.19	0.42
1:1A:1986:A:O2'	1:1A:1987:G:H5'	2.19	0.42
1:1A:2118:U:O4	1:1A:2149:G:H1'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1D:35:LYS:HB2	3:1D:36:PRO:HD2	2.01	0.42
6:1G:137:GLU:CD	6:1G:139:LEU:HD11	2.45	0.42
8:1I:87:LYS:HE3	8:1I:87:LYS:O	2.19	0.42
21:1Z:150:LEU:HD12	21:1Z:154:ASP:OD1	2.18	0.42
27:15:56:LYS:HE3	27:15:58:LEU:O	2.18	0.42
32:1a:160:A:H1'	32:1a:344:A:C5	2.54	0.42
32:1a:204:U:P	32:1a:204:U:H3'	2.60	0.42
32:1a:713:G:H2'	32:1a:714:G:C8	2.55	0.42
33:1b:105:PHE:C	33:1b:107:THR:N	2.78	0.42
35:1d:138:TYR:HE2	35:1d:140:VAL:HA	1.85	0.42
41:1j:80:LYS:O	41:1j:84:GLN:HB2	2.19	0.42
1:2A:731:C:H5''	61:2A:4329:HOH:O	2.18	0.42
1:2A:1035:U:H2'	1:2A:1036:G:C8	2.54	0.42
1:2A:1204:A:N1	1:2A:1241:A:N7	2.67	0.42
1:2A:1364:G:C8	23:21:3:LYS:HD2	2.54	0.42
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	2.01	0.42
1:2A:2141:G:H2'	1:2A:2142:C:O4'	2.18	0.42
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.55	0.42
2:2B:42:C:O2	6:2G:92:VAL:HA	2.20	0.42
2:2B:78:A:C2	2:2B:100:A:C4	3.08	0.42
3:2D:16:MET:HE3	3:2D:16:MET:HB2	1.86	0.42
11:2P:59:LEU:HD11	30:28:10:ALA:HA	2.02	0.42
24:22:4:SER:HA	24:22:7:ARG:NH1	2.33	0.42
25:23:3:ARG:HE	25:23:36:VAL:CG1	2.32	0.42
27:25:55:ARG:HG3	27:25:55:ARG:NH1	2.35	0.42
32:2a:298:A:H2'	32:2a:299:G:O4'	2.20	0.42
32:2a:406:G:H21	35:2d:119:GLN:NE2	2.16	0.42
32:2a:406:G:N2	32:2a:437:U:O2	2.53	0.42
32:2a:504:C:H6	32:2a:504:C:O5'	2.03	0.42
32:2a:646:U:H2'	32:2a:647:C:H6	1.83	0.42
32:2a:841:U:C5	32:2a:848:C:H1'	2.55	0.42
32:2a:977:A:C2	32:2a:1224:G:C5	3.07	0.42
32:2a:989:C:H1'	32:2a:1016:A:H2	1.85	0.42
32:2a:1005:A:H1'	32:2a:1025:U:N3	2.35	0.42
32:2a:1095:U:H2'	32:2a:1096:C:H6	1.85	0.42
32:2a:1112:C:C4	34:2c:178:LEU:HD12	2.54	0.42
32:2a:1353:G:C2	32:2a:1370:G:C2	3.08	0.42
32:2a:1396:A:O4'	32:2a:1398:A:H1'	2.20	0.42
32:2a:1457:G:H5''	51:2t:35:THR:HG21	2.02	0.42
39:2h:100:ILE:HD11	39:2h:129:VAL:O	2.20	0.42
42:2k:43:SER:HB3	42:2k:68:ALA:HB2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:2v:12:A:N3	53:2v:12:A:H2'	2.34	0.42
1:1A:94:C:H2'	1:1A:94(A):G:O4'	2.20	0.42
1:1A:655:A:H8	1:1A:656:G:O4'	2.03	0.42
1:1A:1059:G:OP2	1:1A:1060:U:H3'	2.18	0.42
1:1A:1865:G:H5''	61:1A:4207:HOH:O	2.18	0.42
1:1A:1876:A:H2'	1:1A:1877:A:C8	2.55	0.42
1:1A:2072:G:N2	61:1A:4490:HOH:O	2.52	0.42
1:1A:2130:U:H2'	1:1A:2158:A:N1	2.35	0.42
32:1a:189:G:C4	32:1a:189(L):G:N2	2.87	0.42
32:1a:217:C:H2'	32:1a:218:C:C6	2.54	0.42
32:1a:538:G:OP2	43:1l:115:LYS:HD2	2.19	0.42
32:1a:1136:U:O5'	32:1a:1136:U:H6	2.03	0.42
32:1a:1151:A:O4'	41:1j:39:PRO:HB2	2.20	0.42
32:1a:1240:U:OP1	38:1g:119:ARG:NH2	2.50	0.42
33:1b:12:GLU:HB2	33:1b:213:LEU:CD2	2.44	0.42
33:1b:19:HIS:CE1	33:1b:189:ASP:OD2	2.73	0.42
38:1g:73:MET:HE3	38:1g:73:MET:HB3	1.80	0.42
40:1i:14:VAL:HG22	40:1i:66:ARG:O	2.19	0.42
47:1p:72:ARG:HG3	47:1p:73:LEU:HD23	2.01	0.42
1:2A:1190:G:O2'	1:2A:1191:G:H5'	2.20	0.42
1:2A:1782:C:H1'	1:2A:2609:U:H5''	2.02	0.42
1:2A:2206:G:H3'	1:2A:2207:G:N7	2.34	0.42
2:2B:83:G:H1	2:2B:94:C:N4	2.17	0.42
4:2E:48:GLN:HE21	4:2E:78:LEU:HD12	1.85	0.42
7:2H:30:LYS:HG2	7:2H:79:VAL:O	2.20	0.42
7:2H:98:LEU:HD23	7:2H:102:ALA:O	2.20	0.42
7:2H:167:GLU:HA	7:2H:168:PRO:HD3	1.89	0.42
8:2I:83:ALA:HB2	8:2I:123:LEU:HD21	2.02	0.42
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	2.02	0.42
9:2N:20:GLY:N	9:2N:59:LYS:O	2.45	0.42
10:2O:113:LYS:HA	10:2O:113:LYS:HD2	1.61	0.42
11:2P:39:LYS:HB2	11:2P:45:LEU:HD22	2.00	0.42
12:2Q:1:MET:HB3	12:2Q:44:ALA:HB1	2.02	0.42
13:2R:100:LEU:HA	13:2R:100:LEU:HD23	1.74	0.42
22:20:19:LYS:HA	22:20:19:LYS:HD3	1.88	0.42
30:28:60:LEU:HD23	30:28:60:LEU:HA	1.88	0.42
32:2a:50:A:H4'	32:2a:52:G:OP1	2.19	0.42
32:2a:833:U:C2	32:2a:834:C:C5	3.08	0.42
32:2a:1014:A:H1'	50:2s:34:TRP:HB2	2.02	0.42
32:2a:1123:A:H1'	41:2j:37:PRO:O	2.20	0.42
32:2a:1133:G:H2'	32:2a:1134:G:H8	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1319:A:N6	32:2a:1361:G:H21	2.17	0.42
33:2b:88:ALA:CB	33:2b:222:ILE:HD11	2.48	0.42
33:2b:185:ILE:HG22	33:2b:199:TYR:CD2	2.55	0.42
33:2b:185:ILE:HG22	33:2b:199:TYR:HB2	2.01	0.42
45:2n:17:LYS:HB2	45:2n:17:LYS:HE3	1.91	0.42
1:1A:1047:G:H5''	1:1A:1047:G:H8	1.84	0.42
1:1A:1524:G:H2'	1:1A:1525:G:O4'	2.20	0.42
1:1A:2180:U:H2'	1:1A:2181:G:O4'	2.19	0.42
2:1B:29:A:C2	2:1B:30:C:C2	3.07	0.42
4:1E:79:ARG:HA	4:1E:79:ARG:HD3	1.70	0.42
6:1G:34:LEU:HD23	6:1G:34:LEU:HA	1.76	0.42
6:1G:66:GLN:HG3	26:14:1:MET:CE	2.43	0.42
32:1a:255:G:H1'	48:1q:16:GLN:OE1	2.20	0.42
32:1a:524:G:H2'	32:1a:525:C:C6	2.55	0.42
32:1a:1061:G:C4	32:1a:1197:G:N2	2.88	0.42
32:1a:1118:C:P	40:1i:104:ARG:HH11	2.43	0.42
47:1p:72:ARG:O	47:1p:75:ARG:HB3	2.20	0.42
1:2A:9:U:N3	1:2A:2629:A:C2	2.88	0.42
1:2A:392:C:H5''	1:2A:409:C:H5''	2.02	0.42
1:2A:687:C:H2'	1:2A:688:U:O4'	2.20	0.42
1:2A:819:A:C4	1:2A:1189:A:C2	3.08	0.42
1:2A:820:A:C2	1:2A:943:U:H4'	2.54	0.42
1:2A:884:C:H3'	1:2A:885:C:H6	1.81	0.42
1:2A:1017:G:O6	1:2A:1146:C:N4	2.52	0.42
1:2A:1183:G:H5''	25:23:30:ARG:HH21	1.83	0.42
1:2A:1324:G:C2	1:2A:1331:A:C2	3.08	0.42
1:2A:1520:G:H3'	1:2A:1523:U:H6	1.84	0.42
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	2.01	0.42
32:2a:189(A):C:O2'	32:2a:189(B):C:H5'	2.19	0.42
32:2a:416:G:H2'	32:2a:417:C:C6	2.54	0.42
32:2a:499:A:H4'	32:2a:500:G:OP1	2.19	0.42
32:2a:1263:C:O2	32:2a:1273:G:C2	2.72	0.42
44:2m:49:THR:OG1	44:2m:52:GLU:HG3	2.20	0.42
44:2m:50:GLU:O	44:2m:53:VAL:HG22	2.20	0.42
46:2o:87:ILE:CG2	46:2o:88:ARG:H	2.28	0.42
1:1A:614(C):A:C4	5:1F:180:GLY:HA2	2.55	0.42
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.53	0.42
1:1A:2404:C:O3'	11:1P:77:ARG:NH2	2.53	0.42
2:1B:4:C:H2'	2:1B:5:C:O4'	2.20	0.42
3:1D:205:VAL:O	3:1D:206:LEU:C	2.63	0.42
4:1E:116:VAL:HG13	4:1E:122:PHE:CB	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:90:LYS:HE3	7:1H:163:TYR:CD2	2.54	0.42
14:1S:68:GLN:NE2	14:1S:71:ARG:HE	2.18	0.42
25:13:50:VAL:HB	25:13:53:LEU:HD12	2.02	0.42
32:1a:714:G:H2'	32:1a:715:A:C8	2.54	0.42
32:1a:720:C:H2'	32:1a:721:G:C8	2.55	0.42
32:1a:1359:C:O5'	32:1a:1359:C:H6	2.02	0.42
33:1b:47:THR:HA	33:1b:202:PRO:HG2	2.01	0.42
35:1d:111:ALA:HB3	35:1d:117:ALA:HB2	2.01	0.42
40:1i:33:PHE:HD2	40:1i:34:ASN:ND2	2.18	0.42
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	2.01	0.42
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	2.02	0.42
1:2A:226:G:O2'	1:2A:227:A:N7	2.52	0.42
1:2A:1533:G:C2	1:2A:1537:G:C6	3.07	0.42
1:2A:1667:G:O2'	1:2A:1991:U:O4	2.30	0.42
1:2A:2050:C:H1'	4:2E:156:MET:HE2	2.02	0.42
1:2A:2365:G:H4'	22:20:60:PHE:CZ	2.55	0.42
4:2E:111:ARG:HA	13:2R:1:MET:SD	2.60	0.42
8:2I:69:LYS:HE3	8:2I:73:GLU:OE1	2.20	0.42
26:24:12:ALA:CB	26:24:26:SER:HB3	2.50	0.42
32:2a:359:U:H2'	32:2a:360:A:C8	2.54	0.42
32:2a:934:C:O2'	32:2a:1344:C:OP2	2.32	0.42
32:2a:1084:G:OP1	32:2a:1086:U:C2	2.73	0.42
32:2a:1122:U:C4	32:2a:1123:A:N7	2.88	0.42
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.53	0.42
33:2b:27:LYS:C	33:2b:194:PRO:HG2	2.44	0.42
33:2b:88:ALA:HB2	33:2b:219:VAL:CG2	2.50	0.42
33:2b:212:GLN:O	33:2b:216:SER:N	2.42	0.42
35:2d:33:MET:HB2	60:2d:303:SF4:S2	2.60	0.42
35:2d:191:ARG:HD2	35:2d:191:ARG:HA	1.73	0.42
39:2h:110:ALA:HB3	39:2h:121:ASP:HB3	2.01	0.42
1:1A:1174:A:H1'	1:1A:1175:U:O5'	2.20	0.41
1:1A:1359:A:N3	1:1A:1359:A:H5'	2.35	0.41
1:1A:1477:A:C2	1:1A:1515:G:C2	3.08	0.41
1:1A:2251:OMG:HM23	1:1A:2251:OMG:H1'	1.89	0.41
1:1A:2874:C:OP1	61:1A:4247:HOH:O	2.22	0.41
5:1F:125:LEU:HD23	5:1F:125:LEU:HA	1.90	0.41
10:1O:16:ALA:HB2	10:1O:52:VAL:HG21	2.02	0.41
12:1Q:20:ALA:HB2	21:1Z:79:ARG:HG3	2.02	0.41
14:1S:71:ARG:HH11	14:1S:107:GLU:CD	2.28	0.41
21:1Z:124:ILE:HD11	21:1Z:152:ALA:HB2	2.02	0.41
32:1a:243:A:H4'	32:1a:244:U:H5''	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:376:G:O3'	47:1p:5:ARG:NE	2.53	0.41
32:1a:584:G:H2'	32:1a:585:G:C8	2.55	0.41
32:1a:613:C:H2'	32:1a:614:A:C8	2.55	0.41
32:1a:1316:G:N1	32:1a:1319:A:OP2	2.49	0.41
46:1o:87:ILE:O	46:1o:88:ARG:HB2	2.20	0.41
1:2A:208:C:H2'	1:2A:209:C:C6	2.55	0.41
1:2A:867:C:C4	1:2A:868:U:C5	3.08	0.41
1:2A:1412:A:C2	1:2A:1413:G:C4	3.08	0.41
1:2A:1717:G:C4	1:2A:1718:G:C8	3.08	0.41
1:2A:1721:G:H2'	1:2A:1740:G:O6	2.19	0.41
1:2A:2110:G:H3'	1:2A:2111:C:C5'	2.50	0.41
1:2A:2181:G:C6	1:2A:2182:G:N7	2.88	0.41
2:2B:9:G:OP1	14:2S:25:ARG:NH2	2.53	0.41
2:2B:38:C:C1'	14:2S:95:HIS:HE2	2.33	0.41
15:2T:23:ARG:HD3	15:2T:120:ARG:NH1	2.35	0.41
32:2a:189(L):G:H2'	32:2a:190:U:H6	1.84	0.41
32:2a:994:A:N7	32:2a:1216:G:H4'	2.35	0.41
32:2a:1103:C:C2	32:2a:1104:G:C8	3.08	0.41
32:2a:1176:A:C4	32:2a:1177:G:C8	3.08	0.41
32:2a:1241:G:H2'	32:2a:1242:C:C6	2.55	0.41
32:2a:1333:A:H2'	32:2a:1334:G:O4'	2.20	0.41
33:2b:52:GLU:O	33:2b:56:ARG:HB3	2.19	0.41
34:2c:12:LEU:HB3	34:2c:18:TRP:CH2	2.56	0.41
36:2e:24:ARG:O	36:2e:25:ARG:HG3	2.20	0.41
36:2e:74:GLY:O	36:2e:115:VAL:HA	2.20	0.41
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.53	0.41
37:2f:86:ARG:O	37:2f:87:ARG:HG2	2.19	0.41
38:2g:137:LYS:O	38:2g:141:VAL:HG23	2.20	0.41
39:2h:11:THR:HG23	39:2h:14:ARG:HH12	1.83	0.41
44:2m:84:ILE:C	44:2m:86:CYS:N	2.78	0.41
50:2s:72:GLY:HA2	50:2s:75:ALA:HB3	2.01	0.41
1:1A:139(A):G:O2'	1:1A:140:G:H5'	2.20	0.41
1:1A:452:G:C2	1:1A:458:G:C5	3.09	0.41
1:1A:534:U:H2'	1:1A:535:C:C6	2.55	0.41
1:1A:593:G:C6	1:1A:594:U:C4	3.08	0.41
1:1A:883:G:H21	1:1A:893:C:H42	1.68	0.41
1:1A:1171:G:C5	1:1A:1173:G:C8	3.08	0.41
1:1A:1275:A:N3	1:1A:1276:A:H1'	2.35	0.41
1:1A:2052:G:H4'	4:1E:143:ASN:O	2.21	0.41
1:1A:2740:A:H2'	1:1A:2741:A:C8	2.55	0.41
1:1A:2749:A:OP1	7:1H:3:ARG:NH1	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:110:G:H2'	2:1B:111:G:H8	1.86	0.41
14:1S:3:ARG:HA	14:1S:3:ARG:HD3	1.56	0.41
14:1S:80:LEU:HD23	14:1S:80:LEU:HA	1.81	0.41
21:1Z:137:ILE:HA	21:1Z:156:LYS:HZ1	1.85	0.41
26:14:14:ILE:HA	26:14:31:ILE:O	2.19	0.41
32:1a:179:A:H2'	32:1a:180:U:H6	1.86	0.41
32:1a:539:A:H2'	32:1a:540:G:C8	2.54	0.41
32:1a:724:G:C2	32:1a:725:G:C8	3.08	0.41
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.85	0.41
32:1a:1084:G:C5	32:1a:1085:U:C4	3.08	0.41
32:1a:1217:C:OP1	45:1n:9:LYS:HE3	2.19	0.41
35:1d:4:TYR:OH	35:1d:7:PRO:O	2.37	0.41
40:1i:28:VAL:HA	40:1i:63:ILE:O	2.20	0.41
1:2A:7:G:H2'	1:2A:8:A:O4'	2.20	0.41
1:2A:495:G:N3	18:2W:61:ASN:ND2	2.68	0.41
1:2A:644:A:H4'	1:2A:645:C:N4	2.35	0.41
1:2A:992:C:OP1	17:2V:74:LYS:NZ	2.46	0.41
1:2A:1628:G:H2'	1:2A:1629:U:C6	2.55	0.41
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.55	0.41
1:2A:2114:A:H62	1:2A:2115:G:H21	1.66	0.41
1:2A:2470:G:C2	1:2A:2471:C:C6	3.08	0.41
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.55	0.41
2:2B:88:C:H2'	2:2B:89:G:O4'	2.20	0.41
5:2F:37:VAL:O	5:2F:41:LEU:HG	2.19	0.41
8:2I:50:ARG:O	8:2I:54:GLN:HB2	2.20	0.41
11:2P:1:MET:HB2	11:2P:1:MET:HE3	1.77	0.41
12:2Q:75:THR:HA	12:2Q:89:ASN:O	2.20	0.41
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.20	0.41
15:2T:64:ARG:NH1	15:2T:103:ARG:HA	2.35	0.41
21:2Z:82:ARG:HA	21:2Z:83:PRO:HD3	1.91	0.41
32:2a:137:C:H2'	32:2a:138:G:H8	1.85	0.41
32:2a:160:A:H1'	32:2a:344:A:C5	2.55	0.41
32:2a:545:C:O2'	32:2a:549:C:OP1	2.32	0.41
32:2a:1090:U:H2'	32:2a:1091:U:C6	2.55	0.41
32:2a:1305:G:O2'	32:2a:1331:G:N2	2.53	0.41
32:2a:1321:C:OP2	32:2a:1322:C:O2'	2.36	0.41
33:2b:30:ARG:HG3	33:2b:31:TYR:CD1	2.55	0.41
34:2c:83:ARG:C	34:2c:85:ARG:N	2.78	0.41
39:2h:135:CYS:SG	39:2h:136:GLU:N	2.91	0.41
41:2j:33:GLN:HE21	41:2j:33:GLN:HB2	1.63	0.41
43:2l:43:VAL:HG23	43:2l:55:VAL:HG21	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:56:LEU:HD12	44:2m:56:LEU:HA	1.94	0.41
50:2s:47:HIS:O	50:2s:48:THR:HG23	2.20	0.41
54:2y:18:G:N1	54:2y:55:PSU:C4	2.87	0.41
1:1A:2190:G:H2'	1:1A:2191:G:O4'	2.21	0.41
8:1I:70:GLU:O	8:1I:74:ASN:HB2	2.21	0.41
12:1Q:10:ARG:NH1	12:1Q:90:VAL:H	2.19	0.41
20:1Y:20:TYR:HB3	20:1Y:23:ARG:HG3	2.02	0.41
24:12:53:LEU:HD23	24:12:53:LEU:HA	1.80	0.41
25:13:4:LEU:O	25:13:36:VAL:HA	2.19	0.41
32:1a:820:U:H4'	32:1a:821:G:OP2	2.20	0.41
32:1a:1286:A:H2'	32:1a:1287:A:H4'	2.03	0.41
32:1a:1516:G:H2'	32:1a:1518:MA6:OP2	2.20	0.41
38:1g:22:LEU:HG	38:1g:62:PHE:HE2	1.85	0.41
51:1t:62:LEU:HD23	51:1t:62:LEU:HA	1.66	0.41
55:1x:50:U:H2'	55:1x:51:C:C6	2.55	0.41
1:2A:878:A:N1	1:2A:879:G:C8	2.88	0.41
1:2A:975(A):G:C2	1:2A:990:A:C8	3.08	0.41
1:2A:1364:G:N7	23:21:3:LYS:HD2	2.35	0.41
1:2A:1778:U:OP1	61:2A:3954:HOH:O	2.21	0.41
1:2A:2280:G:O2'	1:2A:2388:A:N1	2.44	0.41
1:2A:2465:C:O2	1:2A:2486:G:C2	2.73	0.41
1:2A:2468:G:C2	1:2A:2481:G:N3	2.88	0.41
1:2A:2660:A:C6	1:2A:2661:G:C6	3.09	0.41
1:2A:2821:A:H2'	1:2A:2822:G:C8	2.56	0.41
4:2E:101:ARG:HB2	4:2E:201:THR:HG21	2.02	0.41
5:2F:158:THR:O	5:2F:164:ARG:HD3	2.20	0.41
6:2G:28:VAL:O	6:2G:31:VAL:N	2.36	0.41
6:2G:126:ASP:OD2	6:2G:130:ASN:ND2	2.53	0.41
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	2.02	0.41
13:2R:28:LEU:HD23	13:2R:48:VAL:HG21	2.02	0.41
21:2Z:126:VAL:HB	21:2Z:161:VAL:HG23	2.01	0.41
24:22:21:LEU:O	24:22:25:VAL:HG23	2.20	0.41
29:27:26:GLY:O	29:27:30:VAL:HG23	2.21	0.41
32:2a:6:G:N2	36:2e:98:THR:HG23	2.35	0.41
32:2a:501:C:H2'	32:2a:502:G:C8	2.55	0.41
32:2a:667:G:N2	32:2a:740:U:H1'	2.36	0.41
32:2a:833:U:H2'	32:2a:834:C:H6	1.83	0.41
32:2a:1078:U:H2'	32:2a:1079:G:C8	2.55	0.41
32:2a:1097:C:O4'	32:2a:1170:A:O2'	2.35	0.41
34:2c:155:GLY:O	34:2c:157:ILE:N	2.49	0.41
37:2f:41:GLU:OE1	49:2r:35:ARG:NH2	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:3:GLN:HE21	40:2i:20:ARG:HH21	1.68	0.41
52:2u:9:ARG:NE	52:2u:13:ILE:HD11	2.36	0.41
54:2y:11:C:H2'	54:2y:12:U:H6	1.86	0.41
54:2y:28:G:C2	54:2y:29:G:C8	3.07	0.41
1:1A:118:A:C8	1:1A:119:A:C8	3.08	0.41
1:1A:322:A:H5'	1:1A:340:A:H1'	2.01	0.41
1:1A:1095:A:H2'	1:1A:1096:A:H5''	2.02	0.41
1:1A:1184:G:H5'	25:13:29:ARG:NH1	2.36	0.41
1:1A:1396:U:H6	1:1A:1396:U:H2'	1.73	0.41
1:1A:2238:G:N3	1:1A:2238:G:H2'	2.34	0.41
17:1V:29:PRO:HA	17:1V:61:VAL:HG22	2.02	0.41
21:1Z:7:ALA:HB3	21:1Z:61:LEU:HD12	2.02	0.41
21:1Z:93:ASP:OD1	21:1Z:94:GLU:N	2.53	0.41
23:11:13:ILE:HD11	23:11:42:GLN:OE1	2.19	0.41
26:14:59:PHE:CD2	50:1s:64:GLU:HB3	2.55	0.41
32:1a:519:C:H2'	32:1a:520:A:C8	2.54	0.41
32:1a:562:C:H1'	43:1l:15:ARG:HB3	2.02	0.41
32:1a:975:A:H4'	32:1a:976:G:C5'	2.46	0.41
32:1a:1187:G:N3	45:1n:60:SER:OG	2.52	0.41
32:1a:1261:A:H3'	32:1a:1262:C:C6	2.55	0.41
33:1b:86:GLU:C	33:1b:89:GLY:H	2.28	0.41
36:1e:89:ILE:HG21	36:1e:135:THR:HA	2.02	0.41
1:2A:859:G:N2	1:2A:917:A:OP2	2.52	0.41
1:2A:883:G:C2	1:2A:894:C:O2	2.73	0.41
1:2A:897:C:H5'	54:2w:56:C:OP1	2.20	0.41
1:2A:1178:C:C2	1:2A:1179:C:C5	3.08	0.41
1:2A:1669:A:C8	10:2O:5:GLN:HG3	2.56	0.41
1:2A:1945:G:C6	1:2A:1946:U:C4	3.08	0.41
1:2A:2582:G:C2	1:2A:2583:G:C8	3.08	0.41
1:2A:2637:U:H5''	4:2E:82:ARG:HH12	1.84	0.41
3:2D:228:PRO:HD3	3:2D:235:GLY:CA	2.51	0.41
5:2F:178:PRO:HG2	5:2F:179:GLU:OE2	2.20	0.41
32:2a:64:G:C4'	32:2a:65:U:H3'	2.48	0.41
32:2a:358:U:H2'	32:2a:359:U:H6	1.82	0.41
32:2a:521:G:H4'	43:2l:73:GLU:HG2	2.02	0.41
32:2a:1030:C:N4	32:2a:1030(A):G:C5	2.89	0.41
32:2a:1348:U:H4'	40:2i:120:ARG:HD2	2.01	0.41
33:2b:61:LEU:HD11	33:2b:68:ILE:HG13	2.02	0.41
34:2c:127:ARG:HH22	34:2c:192:THR:CG2	2.32	0.41
34:2c:181:ASN:O	34:2c:204:LEU:HB2	2.21	0.41
36:2e:110:LEU:O	36:2e:115:VAL:HG23	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:33:GLN:O	41:2j:74:ILE:HD12	2.21	0.41
43:2l:37:CYS:HB2	43:2l:81:SER:H	1.84	0.41
43:2l:92:0TD:O	43:2l:93:LEU:HD23	2.20	0.41
50:2s:17:GLU:HG2	50:2s:21:GLU:HG3	2.02	0.41
53:2v:19:U:O5'	53:2v:19:U:H6	2.03	0.41
1:1A:864:G:H2'	1:1A:865:C:C6	2.55	0.41
1:1A:1076:C:H4'	1:1A:1077:A:OP1	2.20	0.41
6:1G:32:PRO:HB3	6:1G:163:ALA:HB2	2.01	0.41
8:1I:58:LEU:O	8:1I:61:ARG:N	2.53	0.41
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	2.02	0.41
21:1Z:1:MET:N	21:1Z:135:GLU:OE2	2.53	0.41
21:1Z:151:HIS:ND1	21:1Z:170:THR:HA	2.35	0.41
26:14:53:GLU:H	26:14:53:GLU:HG3	1.47	0.41
32:1a:401:C:P	35:1d:73:ARG:HH21	2.44	0.41
32:1a:445:G:H2'	32:1a:446:G:O4'	2.20	0.41
32:1a:747:C:H3'	32:1a:748:C:C5	2.56	0.41
32:1a:1266:G:N2	32:1a:1270:C:N3	2.69	0.41
33:1b:114:ARG:NH1	33:1b:117:GLU:OE1	2.51	0.41
36:1e:7:GLU:OE2	36:1e:37:ARG:NH2	2.53	0.41
38:1g:49:ILE:HG22	38:1g:53:LYS:HD2	2.03	0.41
39:1h:81:HIS:HB2	39:1h:138:TRP:CD1	2.55	0.41
40:1i:4:TYR:CD1	40:1i:88:TYR:HB2	2.55	0.41
54:1w:21:A:C5	54:1w:46:G7M:C6	3.03	0.41
54:1w:54:5MU:O5'	54:1w:54:5MU:H6	2.03	0.41
1:2A:56:A:H2'	1:2A:57:C:O4'	2.20	0.41
1:2A:64:A:O3'	19:2X:71:GLY:HA3	2.20	0.41
1:2A:84:A:H5''	20:2Y:8:LYS:HZ2	1.86	0.41
1:2A:639:U:H2'	1:2A:640:C:H6	1.84	0.41
1:2A:661:C:H2'	1:2A:662:G:C8	2.55	0.41
1:2A:878:A:N6	1:2A:899:A:H1'	2.28	0.41
1:2A:925:C:H2'	1:2A:926:A:C8	2.51	0.41
1:2A:1341:U:O2	19:2X:80:ILE:HD13	2.20	0.41
1:2A:1866:C:H2'	1:2A:1876:A:O4'	2.20	0.41
1:2A:1913:A:H4'	1:2A:1914:C:H5''	2.02	0.41
1:2A:2111:C:N3	1:2A:2145:C:O2'	2.48	0.41
1:2A:2494:G:C6	1:2A:2495:G:C5	3.08	0.41
1:2A:2633:G:H5''	1:2A:2812:G:H5'	2.03	0.41
1:2A:2886:G:H2'	1:2A:2887:U:H6	1.85	0.41
2:2B:33:G:C2'	2:2B:34:U:H5'	2.51	0.41
6:2G:124:SER:OG	6:2G:132:ASN:O	2.38	0.41
9:2N:46:VAL:HG23	9:2N:48:MET:HE3	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:24:GLY:O	19:2X:83:VAL:HG22	2.20	0.41
27:25:35:GLU:HG2	27:25:51:TYR:CG	2.55	0.41
30:28:34:TRP:CG	30:28:35:GLN:N	2.89	0.41
32:2a:7:G:O2'	36:2e:120:THR:O	2.36	0.41
32:2a:942:G:C2	32:2a:1342:C:C2	3.09	0.41
32:2a:1178:G:H2'	32:2a:1180:A:OP2	2.21	0.41
36:2e:99:GLY:O	36:2e:117:ASP:HA	2.21	0.41
38:2g:101:LEU:O	38:2g:105:VAL:HG23	2.21	0.41
41:2j:25:GLU:O	41:2j:29:ARG:HG2	2.20	0.41
41:2j:49:VAL:CG1	41:2j:61:GLU:HB3	2.51	0.41
43:2l:110:VAL:HG23	43:2l:120:TYR:HB3	2.02	0.41
44:2m:97:PRO:HA	44:2m:110:ARG:HD3	2.01	0.41
48:2q:54:GLY:O	48:2q:81:ARG:N	2.41	0.41
49:2r:35:ARG:O	49:2r:37:VAL:N	2.53	0.41
53:2v:12:A:H5''	53:2v:13:A:OP1	2.20	0.41
1:1A:271(M):G:O2'	1:1A:271(N):U:H5''	2.21	0.41
1:1A:620:G:N3	1:1A:620:G:H5'	2.35	0.41
1:1A:876:C:H2'	1:1A:877:U:O4'	2.20	0.41
1:1A:947:G:H2'	1:1A:948:G:C8	2.56	0.41
1:1A:1540:U:C2'	1:1A:1541:G:H5'	2.50	0.41
1:1A:1878:G:H2'	1:1A:1879:C:C6	2.55	0.41
1:1A:2040:C:H2'	1:1A:2041:U:O4'	2.21	0.41
1:1A:2088:G:C6	1:1A:2089:U:C4	3.09	0.41
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.35	0.41
1:1A:2808:U:O2'	1:1A:2809:A:H5'	2.21	0.41
3:1D:108:PRO:HD2	3:1D:111:LEU:HD22	2.01	0.41
6:1G:109:VAL:C	6:1G:112:PRO:HD2	2.45	0.41
7:1H:94:TYR:CE1	7:1H:107:VAL:C	2.99	0.41
14:1S:78:LEU:HD21	14:1S:109:GLY:O	2.21	0.41
17:1V:71:LEU:HD23	17:1V:71:LEU:HA	1.90	0.41
32:1a:487:A:H2'	32:1a:488:C:O4'	2.21	0.41
32:1a:922:G:C6	32:1a:923:A:C6	3.08	0.41
36:1e:12:LEU:HB3	36:1e:31:LEU:HB2	2.03	0.41
39:1h:53:VAL:HB	39:1h:58:TYR:CD2	2.56	0.41
39:1h:96:GLY:H	39:1h:99:GLU:CD	2.28	0.41
45:1n:15:LYS:HB3	45:1n:16:PHE:CE2	2.56	0.41
1:2A:41:C:H2'	1:2A:42:G:C8	2.55	0.41
1:2A:1494:A:C6	1:2A:1495:A:C6	3.09	0.41
1:2A:2019:A:O4'	16:2U:34:LYS:HE2	2.21	0.41
1:2A:2314:C:C5'	6:2G:38:VAL:HG21	2.45	0.41
3:2D:13:ARG:HA	3:2D:13:ARG:HD3	1.82	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:91:ARG:HD2	6:2G:93:THR:HG23	2.02	0.41
6:2G:113:ARG:NH2	6:2G:139:LEU:O	2.54	0.41
7:2H:98:LEU:HG	7:2H:125:VAL:HG23	2.03	0.41
32:2a:200:G:H2'	32:2a:201:C:O4'	2.21	0.41
32:2a:683:G:H2'	32:2a:684:A:O4'	2.20	0.41
32:2a:684:A:C6	32:2a:685:G:C6	3.09	0.41
32:2a:1157:A:H5'	32:2a:1158:C:C6	2.55	0.41
36:2e:135:THR:O	36:2e:136:MET:C	2.64	0.41
50:2s:33:THR:H	50:2s:57:HIS:CE1	2.38	0.41
54:2y:18:G:H1'	54:2y:57:G:O6	2.20	0.41
1:1A:2531:A:H5'	7:1H:157:TYR:CE1	2.56	0.41
1:1A:2881:C:H2'	1:1A:2882:A:O4'	2.21	0.41
15:1T:11:GLU:HG2	15:1T:57:PHE:CD2	2.55	0.41
19:1X:57:LEU:N	19:1X:57:LEU:HD23	2.35	0.41
21:1Z:92:SER:OG	21:1Z:93:ASP:N	2.52	0.41
32:1a:221:C:H2'	32:1a:222:U:H6	1.85	0.41
32:1a:376:G:P	47:1p:67:THR:HG21	2.61	0.41
32:1a:520:A:N1	32:1a:536:C:H1'	2.36	0.41
32:1a:555:C:H2'	32:1a:556:C:C6	2.55	0.41
32:1a:823:G:H2'	32:1a:824:C:O4'	2.20	0.41
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.56	0.41
32:1a:1090:U:H2'	32:1a:1091:U:H6	1.86	0.41
32:1a:1226:C:O2'	44:1m:103:THR:O	2.33	0.41
32:1a:1486:G:O6	61:1a:1917:HOH:O	2.17	0.41
33:1b:8:LYS:HE2	33:1b:8:LYS:HB2	1.93	0.41
43:1l:54:LYS:HD2	43:1l:54:LYS:N	2.36	0.41
43:1l:90:VAL:O	43:1l:92:OTD:N	2.53	0.41
44:1m:84:ILE:HD12	50:1s:74:PHE:CZ	2.55	0.41
47:1p:48:TRP:CE3	47:1p:49:LEU:HB2	2.56	0.41
1:2A:423:A:OP1	61:2A:3956:HOH:O	2.22	0.41
1:2A:647:G:H2'	1:2A:648:G:O4'	2.21	0.41
1:2A:1252:G:N3	16:2U:33:ARG:HG2	2.35	0.41
1:2A:1999:C:H5''	1:2A:2723:C:O2'	2.21	0.41
1:2A:2059:A:C8	1:2A:2503:2MA:HM22	2.55	0.41
1:2A:2255:G:O2'	55:2x:3:C:H5'	2.20	0.41
2:2B:32:C:H2'	2:2B:33:G:O4'	2.20	0.41
5:2F:53:THR:HG22	5:2F:56:GLU:CG	2.50	0.41
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	2.02	0.41
7:2H:149:ARG:HA	7:2H:162:ILE:HG21	2.03	0.41
20:2Y:8:LYS:HE3	20:2Y:8:LYS:HB3	1.65	0.41
21:2Z:144:LEU:HG	21:2Z:145:GLU:H	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:451:A:C5	32:2a:481:G:C6	3.09	0.41
32:2a:982:U:H6	32:2a:982:U:OP1	2.03	0.41
32:2a:983:A:H2	32:2a:984:C:C6	2.38	0.41
32:2a:1297:C:OP1	44:2m:44:ARG:NH1	2.53	0.41
32:2a:1367:C:H5''	40:2i:114:TYR:HA	2.03	0.41
34:2c:162:GLN:OE1	34:2c:162:GLN:HA	2.21	0.41
35:2d:4:TYR:O	35:2d:115:ARG:NH1	2.45	0.41
38:2g:32:ARG:HB3	38:2g:32:ARG:CZ	2.50	0.41
40:2i:17:VAL:HG21	40:2i:81:ILE:N	2.35	0.41
46:2o:82:ILE:HD12	46:2o:88:ARG:HG3	2.02	0.41
51:2t:98:PRO:O	51:2t:99:LEU:HB2	2.21	0.41
54:2w:60:U:O2	54:2w:60:U:H2'	2.20	0.41
54:2y:24:G:C6	54:2y:25:C:C4	3.08	0.41
1:1A:143:G:H1'	19:1X:37:THR:CG2	2.50	0.41
1:1A:1431:U:H2'	1:1A:1432:C:C6	2.55	0.41
1:1A:1540:U:O2'	1:1A:1541:G:H5'	2.20	0.41
1:1A:1556:C:H2'	1:1A:1557:C:C6	2.56	0.41
1:1A:2156:G:OP2	1:1A:2156:G:H8	2.04	0.41
1:1A:2816:C:O2'	1:1A:2817:G:H5'	2.21	0.41
2:1B:110:G:H2'	2:1B:111:G:C8	2.56	0.41
4:1E:33:VAL:HG13	4:1E:47:VAL:HG23	2.03	0.41
7:1H:3:ARG:HG3	7:1H:4:ILE:N	2.36	0.41
8:1I:93:THR:OG1	8:1I:96:ASP:N	2.36	0.41
13:1R:67:LEU:HG	13:1R:76:VAL:HG21	2.03	0.41
13:1R:87:TYR:OH	13:1R:117:VAL:O	2.28	0.41
32:1a:118:U:H3'	32:1a:288:A:H61	1.85	0.41
32:1a:190:U:C5	32:1a:191:G:N7	2.88	0.41
32:1a:198:G:C6	32:1a:220:G:C2	3.09	0.41
32:1a:528:C:H41	43:1l:49:ASN:CG	2.28	0.41
32:1a:972:C:O2'	41:1j:55:LYS:O	2.35	0.41
32:1a:975:A:O2'	45:1n:32:SER:OG	2.21	0.41
32:1a:1136:U:H5''	32:1a:1137:C:C4	2.56	0.41
32:1a:1194:U:H2'	32:1a:1195:C:C6	2.55	0.41
32:1a:1236:A:H4'	32:1a:1304:G:H4'	2.01	0.41
33:1b:63:MET:HE3	33:1b:63:MET:HB2	1.88	0.41
38:1g:29:LYS:HD2	38:1g:29:LYS:HA	1.82	0.41
38:1g:65:ALA:O	38:1g:69:VAL:HG23	2.21	0.41
40:1i:99:LEU:HB3	40:1i:101:PHE:CE1	2.56	0.41
52:1u:12:LYS:HB3	52:1u:17:THR:O	2.21	0.41
1:2A:597:U:H2'	1:2A:598:G:H8	1.84	0.41
1:2A:866:A:N6	1:2A:914:C:C5	2.89	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1012:U:H5	9:2N:28:THR:HG21	1.86	0.41
1:2A:1160:G:C6	1:2A:1161:C:N3	2.89	0.41
1:2A:1425:G:C6	1:2A:1426:G:C6	3.08	0.41
1:2A:1510:G:O5'	1:2A:1510:G:H8	2.04	0.41
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.20	0.41
1:2A:1877:A:H5'	1:2A:1878:G:OP2	2.21	0.41
1:2A:1899:G:O2'	1:2A:1900:A:OP2	2.31	0.41
1:2A:2516:G:C6	1:2A:2517:C:C4	3.09	0.41
1:2A:2752:C:H2'	1:2A:2753:A:O4'	2.21	0.41
5:2F:81:PRO:HB3	5:2F:89:VAL:HG23	2.03	0.41
6:2G:179:PRO:HG3	26:24:43:TYR:CZ	2.55	0.41
7:2H:7:LEU:HD23	7:2H:69:ARG:CZ	2.51	0.41
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	2.03	0.41
11:2P:121:LYS:HB3	11:2P:121:LYS:HE2	1.85	0.41
12:2Q:16:ARG:HG3	12:2Q:17:LEU:H	1.86	0.41
21:2Z:52:SER:HB3	21:2Z:54:HIS:H	1.86	0.41
21:2Z:131:ARG:H	21:2Z:131:ARG:CD	2.34	0.41
22:20:6:GLY:C	22:20:7:LEU:HD23	2.45	0.41
30:28:33:ASN:HA	30:28:36:LYS:HD2	2.02	0.41
32:2a:1002:G:N2	32:2a:1039:C:N4	2.69	0.41
32:2a:1052:U:O4	32:2a:1200:C:O2'	2.35	0.41
32:2a:1097:C:C2	32:2a:1098:C:C6	3.08	0.41
32:2a:1151:A:O4'	41:2j:39:PRO:HB2	2.20	0.41
36:2e:80:ILE:HG21	36:2e:138:ALA:HB1	2.03	0.41
40:2i:55:ALA:HA	40:2i:58:HIS:CD2	2.55	0.41
48:2q:41:LYS:NZ	48:2q:92:ARG:HH21	2.17	0.41
49:2r:43:PHE:O	49:2r:51:LEU:HD12	2.21	0.41
54:2w:8:4SU:S4	54:2w:14:A:N7	2.94	0.41
1:1A:12:U:O2	1:1A:12:U:H2'	2.20	0.41
1:1A:1047:G:O2'	1:1A:1048:A:O5'	2.37	0.41
1:1A:1665:A:H2'	1:1A:1666:G:O4'	2.21	0.41
1:1A:1773:A:H2'	1:1A:1774:C:O4'	2.21	0.41
1:1A:2820:A:P	13:1R:2:ARG:HH22	2.43	0.41
3:1D:206:LEU:O	3:1D:211:ARG:HD3	2.21	0.41
4:1E:60:ASN:OD1	4:1E:63:LEU:HG	2.21	0.41
5:1F:165:ARG:HA	5:1F:168:ARG:HD2	2.03	0.41
7:1H:84:SER:HA	7:1H:133:VAL:O	2.21	0.41
8:1I:88:ILE:HG22	8:1I:89:TYR:N	2.36	0.41
11:1P:94:GLU:OE1	11:1P:124:LYS:HD3	2.20	0.41
11:1P:100:LEU:HD12	11:1P:112:LEU:HD22	2.03	0.41
24:12:2:LYS:O	24:12:6:VAL:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:163:C:H2'	32:1a:164:U:C6	2.56	0.41
32:1a:192:U:H2'	32:1a:193:C:C6	2.56	0.41
32:1a:195:A:C5	32:1a:196:A:N1	2.89	0.41
32:1a:397:A:H3'	32:1a:397:A:N3	2.35	0.41
32:1a:433:C:H2'	32:1a:434:U:C6	2.56	0.41
32:1a:491:G:H2'	32:1a:492:G:O4'	2.20	0.41
32:1a:601:C:H2'	32:1a:602:A:H8	1.86	0.41
32:1a:602:A:C6	32:1a:603:U:C4	3.09	0.41
32:1a:977:A:O2'	32:1a:979:C:OP2	2.39	0.41
32:1a:985:C:H2'	32:1a:986:A:C8	2.56	0.41
32:1a:1435:G:H2'	32:1a:1436:U:H6	1.81	0.41
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	2.03	0.41
33:1b:125:PRO:HD2	33:1b:126:GLU:H	1.86	0.41
33:1b:150:SER:OG	33:1b:151:GLY:N	2.53	0.41
34:1c:12:LEU:HD23	34:1c:12:LEU:HA	1.87	0.41
35:1d:97:LEU:HD23	35:1d:97:LEU:HA	1.94	0.41
35:1d:175:SER:HB3	35:1d:186:LEU:CD2	2.47	0.41
36:1e:74:GLY:O	36:1e:115:VAL:HA	2.21	0.41
38:1g:45:ASP:O	38:1g:49:ILE:HG13	2.20	0.41
38:1g:104:LEU:HD13	38:1g:104:LEU:HA	1.92	0.41
39:1h:14:ARG:HD3	39:1h:18:ARG:NH2	2.36	0.41
40:1i:11:LYS:O	40:1i:12:GLU:HB2	2.21	0.41
40:1i:17:VAL:HG11	40:1i:80:GLY:C	2.46	0.41
40:1i:29:ASN:OD1	40:1i:64:THR:HA	2.20	0.41
41:1j:49:VAL:HG12	41:1j:61:GLU:O	2.21	0.41
47:1p:5:ARG:HD3	47:1p:22:THR:CG2	2.50	0.41
47:1p:38:TYR:CZ	47:1p:50:LYS:HB2	2.56	0.41
48:1q:48:GLU:O	48:1q:49:GLU:C	2.64	0.41
54:1y:24:G:H2'	54:1y:25:C:O4'	2.21	0.41
1:2A:881:G:N2	1:2A:882:G:H1'	2.35	0.41
1:2A:1161:C:H2'	1:2A:1162:G:C8	2.55	0.41
1:2A:1235:G:C2	1:2A:1236:G:N2	2.89	0.41
1:2A:1288:U:C2	1:2A:1327:C:O2	2.74	0.41
1:2A:1721:G:C2	1:2A:1739:U:OP2	2.74	0.41
1:2A:2029:G:H2'	1:2A:2031:A:OP1	2.20	0.41
1:2A:2097:C:H2'	1:2A:2098:U:O4'	2.20	0.41
1:2A:2106:G:C6	1:2A:2184:G:C6	3.09	0.41
1:2A:2150:U:C2'	1:2A:2151:G:H5'	2.51	0.41
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.68	0.41
1:2A:2365:G:P	22:20:55:ARG:HG2	2.61	0.41
1:2A:2519:U:C4	1:2A:2542:A:C5	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2564:A:OP1	1:2A:2648:C:H4'	2.21	0.41
1:2A:2756:U:H1'	1:2A:2757:A:H5''	2.02	0.41
4:2E:1:MET:HB3	4:2E:83:ASP:O	2.21	0.41
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.84	0.41
8:2I:69:LYS:HG3	8:2I:70:GLU:N	2.36	0.41
8:2I:93:THR:O	8:2I:97:ILE:HG13	2.21	0.41
11:2P:63:PRO:HD3	30:28:27:THR:HG22	2.03	0.41
13:2R:118:GLU:CD	13:2R:118:GLU:H	2.29	0.41
21:2Z:24:LEU:HD12	21:2Z:25:PRO:CD	2.51	0.41
21:2Z:153:SER:HB3	21:2Z:167:PRO:HA	2.03	0.41
32:2a:281:G:O3'	32:2a:282:A:H8	2.04	0.41
32:2a:288:A:H2'	32:2a:289:G:H4'	2.02	0.41
32:2a:321:A:O2'	32:2a:322:C:H5'	2.21	0.41
32:2a:423:G:N3	32:2a:423:G:H3'	2.36	0.41
32:2a:512:U:H2'	32:2a:513:C:C6	2.55	0.41
32:2a:857:C:H2'	32:2a:858:G:O4'	2.20	0.41
32:2a:918:A:H2'	32:2a:919:A:O4'	2.21	0.41
32:2a:1041:A:H2'	32:2a:1042:G:O4'	2.20	0.41
32:2a:1122:U:H2'	32:2a:1123:A:H8	1.86	0.41
32:2a:1456:G:OP1	32:2a:1456:G:H8	2.04	0.41
32:2a:1503:A:H2	53:2v:13:A:C5	2.39	0.41
33:2b:47:THR:HG23	33:2b:202:PRO:HG2	2.02	0.41
33:2b:165:VAL:HG23	33:2b:187:LEU:HB3	2.02	0.41
34:2c:152:ILE:HD11	34:2c:199:LYS:NZ	2.36	0.41
36:2e:79:GLU:OE1	36:2e:79:GLU:N	2.53	0.41
37:2f:61:LEU:HD13	37:2f:63:TYR:OH	2.21	0.41
37:2f:82:ARG:HE	37:2f:82:ARG:HB3	1.40	0.41
38:2g:18:TYR:CD1	38:2g:59:LEU:HD13	2.56	0.41
40:2i:99:LEU:HD13	40:2i:99:LEU:HA	1.87	0.41
42:2k:38:ASN:HD22	42:2k:38:ASN:N	2.19	0.41
44:2m:29:ARG:HB3	44:2m:64:TRP:CZ3	2.56	0.41
45:2n:52:GLN:O	45:2n:53:LEU:HD23	2.21	0.41
49:2r:37:VAL:HG22	49:2r:79:LEU:HD23	2.03	0.41
54:2w:21:A:O2'	54:2w:22:G:OP1	2.38	0.41
1:1A:279:C:N4	1:1A:361:G:H1	2.10	0.41
1:1A:593:G:N2	1:1A:665:C:C2	2.89	0.41
1:1A:862:G:H2'	1:1A:863:A:O4'	2.21	0.41
1:1A:1094:U:N3	1:1A:1097:U:OP2	2.53	0.41
1:1A:1919:A:O2'	32:1a:1517:G:N3	2.48	0.41
1:1A:2065:C:H2'	1:1A:2066:C:C6	2.56	0.41
1:1A:2124:G:H2'	1:1A:2125:G:O4'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2134:A:O2'	1:1A:2135:A:OP1	2.36	0.41
1:1A:2136:C:C4	1:1A:2155:G:N1	2.89	0.41
6:1G:96:ARG:H	6:1G:96:ARG:HG3	1.47	0.41
13:1R:16:HIS:HD2	13:1R:16:HIS:O	2.04	0.41
14:1S:32:LEU:HD23	14:1S:32:LEU:HA	1.78	0.41
20:1Y:79:CYS:SG	20:1Y:81:LYS:HG3	2.61	0.41
21:1Z:153:SER:CA	21:1Z:167:PRO:HB3	2.49	0.41
23:11:23:LYS:HD2	23:11:29:GLY:CA	2.51	0.41
24:12:31:GLU:HG2	24:12:53:LEU:HD11	2.03	0.41
25:13:32:GLN:HA	25:13:32:GLN:NE2	2.35	0.41
34:1c:111:LEU:HD21	34:1c:144:SER:O	2.21	0.41
1:2A:143:G:H2'	1:2A:143(A):C:C6	2.56	0.41
1:2A:484:C:H2'	1:2A:485:C:C6	2.56	0.41
1:2A:839:U:H1'	1:2A:1191:G:H1'	2.03	0.41
1:2A:1379:A:H8	1:2A:1379:A:O5'	2.04	0.41
1:2A:1826:G:H4'	3:2D:242:ARG:CZ	2.51	0.41
1:2A:2066:C:H5''	61:2A:4398:HOH:O	2.21	0.41
1:2A:2489:G:O2'	1:2A:2490:G:H5'	2.21	0.41
5:2F:183:VAL:O	5:2F:187:VAL:HG23	2.20	0.41
6:2G:111:LEU:CD2	6:2G:120:LEU:HD11	2.51	0.41
7:2H:70:THR:HG22	7:2H:74:ASN:HD21	1.86	0.41
11:2P:94:GLU:HG2	11:2P:95:VAL:N	2.36	0.41
23:21:94:LEU:HA	23:21:97:LEU:HD12	2.03	0.41
25:23:3:ARG:HE	25:23:36:VAL:HG11	1.85	0.41
26:24:40:HIS:CD2	26:24:41:PRO:HD2	2.56	0.41
32:2a:403:C:O2'	32:2a:404:U:H5'	2.21	0.41
32:2a:544:G:C6	32:2a:545:C:C4	3.09	0.41
32:2a:1133:G:C4	32:2a:1134:G:C8	3.09	0.41
32:2a:1251:A:O2'	32:2a:1369:C:O2'	2.36	0.41
32:2a:1343:G:C6	32:2a:1344:C:C4	3.08	0.41
33:2b:20:GLU:HG3	33:2b:189:ASP:HB2	2.02	0.41
34:2c:156:ARG:NE	34:2c:160:ALA:O	2.51	0.41
43:2l:84:LEU:HB2	43:2l:105:TYR:CE2	2.56	0.41
54:2w:50:U:H2'	54:2w:51:U:C6	2.56	0.41
54:2y:74:C:H2'	54:2y:75:C:C6	2.56	0.41
1:1A:654:A:H2	1:1A:655:A:C2	2.39	0.40
1:1A:1063:G:C6	1:1A:1064:C:N4	2.89	0.40
1:1A:1173:G:H2'	1:1A:1173:G:OP2	2.21	0.40
1:1A:1636:C:H2'	1:1A:1637:A:C8	2.56	0.40
1:1A:2591:C:H2'	1:1A:2592:G:H8	1.84	0.40
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.29	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2848:G:H3'	15:1T:95:ARG:O	2.22	0.40
2:1B:78:A:C2	2:1B:100:A:C4	3.08	0.40
2:1B:90:A:N7	2:1B:91:C:H1'	2.37	0.40
4:1E:32:PRO:HB2	4:1E:72:VAL:HG11	2.04	0.40
5:1F:39:TRP:O	5:1F:43:LYS:HD3	2.21	0.40
9:1N:108:PRO:O	9:1N:113:GLY:HA3	2.21	0.40
20:1Y:88:LYS:O	20:1Y:95:LYS:HA	2.20	0.40
23:11:52:ARG:HD3	23:11:55:GLY:C	2.46	0.40
32:1a:701:C:O2	32:1a:703:G:N1	2.55	0.40
32:1a:1084:G:C6	32:1a:1085:U:O4	2.75	0.40
32:1a:1292:U:H5'	40:1i:38:GLN:OE1	2.21	0.40
33:1b:112:VAL:O	33:1b:115:LEU:HB3	2.21	0.40
40:1i:5:TYR:HB2	40:1i:18:PHE:CE1	2.57	0.40
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.21	0.40
1:2A:271(K):U:O2	8:2I:50:ARG:HD3	2.21	0.40
1:2A:645:C:H5''	1:2A:646:A:OP2	2.21	0.40
1:2A:869:G:C6	1:2A:870:A:N7	2.89	0.40
2:2B:1:U:O2'	2:2B:2:C:O5'	2.34	0.40
2:2B:7:G:H2'	2:2B:8:U:O4'	2.21	0.40
2:2B:10:C:O2'	2:2B:11:C:H5'	2.20	0.40
2:2B:29:A:H2'	2:2B:30:C:C6	2.56	0.40
7:2H:35:VAL:O	7:2H:37:VAL:HG23	2.22	0.40
10:2O:66:LYS:HG2	10:2O:79:PHE:O	2.20	0.40
15:2T:119:LYS:HB2	32:2a:1442(A):G:N2	2.36	0.40
17:2V:2:PHE:CZ	17:2V:41:GLY:HA3	2.56	0.40
17:2V:2:PHE:CE2	17:2V:41:GLY:HA3	2.56	0.40
18:2W:5:ALA:C	18:2W:6:ILE:HG13	2.46	0.40
29:27:1:MET:HE2	29:27:1:MET:HB3	1.94	0.40
32:2a:1016:A:O2'	32:2a:1217:C:O2'	2.22	0.40
32:2a:1060:C:H5	34:2c:2:GLY:HA3	1.83	0.40
32:2a:1296:C:H5''	44:2m:44:ARG:NH2	2.36	0.40
33:2b:74:LYS:O	33:2b:78:GLN:HG2	2.20	0.40
33:2b:103:THR:HG23	33:2b:176:GLU:HB3	2.03	0.40
33:2b:139:LYS:HE3	33:2b:139:LYS:HB3	1.86	0.40
34:2c:65:ALA:HA	34:2c:100:ALA:HB3	2.03	0.40
36:2e:70:PRO:O	36:2e:71:LEU:HD23	2.21	0.40
36:2e:139:LEU:HA	36:2e:139:LEU:HD23	1.86	0.40
39:2h:20:TYR:CD1	39:2h:65:TYR:CD1	3.10	0.40
41:2j:81:THR:O	41:2j:84:GLN:N	2.42	0.40
54:2w:63:G:C6	54:2w:64:A:C6	3.09	0.40
1:1A:187:G:OP2	61:1A:4245:HOH:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:466:A:N3	1:1A:683:C:H1'	2.36	0.40
1:1A:715:G:C2	46:1o:56:LEU:HD21	2.56	0.40
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.55	0.40
32:1a:189:G:C6	32:1a:189(L):G:C6	3.10	0.40
32:1a:1004:A:H5'	32:1a:1024:G:H1	1.86	0.40
32:1a:1134:G:H5'	32:1a:1135:U:OP2	2.20	0.40
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.56	0.40
32:1a:1379:G:C4	32:1a:1380:U:C5	3.09	0.40
33:1b:18:GLY:CA	33:1b:42:ILE:HG13	2.42	0.40
34:1c:124:ILE:HG12	34:1c:124:ILE:H	1.68	0.40
35:1d:128:VAL:HG12	35:1d:129:ASN:ND2	2.37	0.40
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.50	0.40
41:1j:81:THR:C	41:1j:83:GLU:N	2.78	0.40
47:1p:39:TYR:HB2	47:1p:49:LEU:CD2	2.51	0.40
1:2A:272:G:H4'	1:2A:272(A):U:H5''	2.03	0.40
1:2A:577:G:C6	1:2A:578:A:C6	3.10	0.40
1:2A:1026:U:OP1	61:2A:3907:HOH:O	2.22	0.40
1:2A:1198:U:H2'	1:2A:1199:U:C6	2.57	0.40
1:2A:1509(B):A:H2'	1:2A:1510:G:C8	2.56	0.40
1:2A:1636:C:H2'	1:2A:1637:A:C8	2.57	0.40
1:2A:1839:G:N7	1:2A:1927:A:H1'	2.36	0.40
2:2B:28:C:C4	2:2B:29:A:N7	2.89	0.40
6:2G:14:GLU:C	6:2G:17:PRO:HD2	2.46	0.40
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.36	0.40
6:2G:110:ALA:HA	6:2G:140:ILE:O	2.21	0.40
11:2P:57:THR:O	11:2P:61:ARG:HG3	2.22	0.40
11:2P:135:LEU:HD23	11:2P:135:LEU:HA	1.86	0.40
14:2S:25:ARG:HD3	14:2S:42:ASP:OD2	2.21	0.40
21:2Z:158:PRO:HA	21:2Z:159:PRO:HD3	1.90	0.40
32:2a:17:U:O2'	32:2a:1079:G:N3	2.52	0.40
32:2a:25:C:H5'	32:2a:524:G:H1'	2.03	0.40
32:2a:328:C:H4'	32:2a:329:A:C5'	2.51	0.40
32:2a:509:A:H5''	35:2d:55:ALA:HB2	2.04	0.40
32:2a:583:A:H2'	32:2a:584:G:O4'	2.21	0.40
32:2a:683:G:C4	32:2a:684:A:C8	3.10	0.40
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.87	0.40
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.21	0.40
32:2a:1170:A:H5''	32:2a:1171:G:OP2	2.21	0.40
32:2a:1178:G:O2'	32:2a:1180:A:N7	2.44	0.40
32:2a:1277:C:O2'	32:2a:1279:A:H8	2.03	0.40
33:2b:48:MET:HA	33:2b:51:LEU:HD12	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:140:ARG:O	34:2c:143:GLU:N	2.50	0.40
39:2h:122:ARG:HG3	39:2h:125:ARG:HH21	1.86	0.40
46:2o:87:ILE:O	46:2o:88:ARG:HB2	2.21	0.40
48:2q:5:VAL:HA	48:2q:59:ILE:O	2.21	0.40
50:2s:40:ILE:HG23	50:2s:44:MET:SD	2.61	0.40
55:2x:41:C:C2	55:2x:42:G:C8	3.09	0.40
54:2y:66:U:H2'	54:2y:67:C:O4'	2.21	0.40
1:1A:1453:U:OP1	13:1R:77:ARG:NH1	2.43	0.40
1:1A:2127:G:C6	1:1A:2162:G:C6	3.10	0.40
1:1A:2321:G:N3	1:1A:2321:G:H2'	2.35	0.40
1:1A:2721:A:H5''	61:1A:4269:HOH:O	2.20	0.40
1:1A:2723:C:OP1	13:1R:3:HIS:ND1	2.54	0.40
3:1D:77:ALA:HB2	3:1D:97:TYR:CD1	2.57	0.40
7:1H:27:LYS:HG2	7:1H:32:GLU:HB3	2.02	0.40
16:1U:76:TYR:CE2	16:1U:80:ILE:HG13	2.57	0.40
22:10:70:GLN:HE21	22:10:72:ARG:HG2	1.86	0.40
32:1a:195:A:H1'	32:1a:222:U:O2'	2.21	0.40
32:1a:1123:A:O2'	41:1j:37:PRO:O	2.38	0.40
33:1b:133:LYS:HE3	33:1b:133:LYS:HB3	1.86	0.40
33:1b:155:LEU:HD11	33:1b:159:PRO:HG3	2.02	0.40
35:1d:178:VAL:C	35:1d:180:GLY:H	2.28	0.40
39:1h:17:THR:HG22	39:1h:63:LEU:HD13	2.02	0.40
44:1m:2:ALA:N	44:1m:8:GLU:OE1	2.54	0.40
51:1t:50:GLU:HG3	51:1t:100:ILE:HG23	2.03	0.40
51:1t:59:ALA:O	51:1t:63:ILE:HG13	2.22	0.40
54:1w:26:A:N1	54:1w:44:G:N2	2.63	0.40
54:1y:7:A:C6	54:1y:49:C:C4	3.09	0.40
1:2A:298:G:H5''	1:2A:299:A:OP1	2.22	0.40
1:2A:323:G:O2'	1:2A:1205:U:N3	2.44	0.40
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.21	0.40
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.48	0.40
1:2A:1856:G:H2'	1:2A:1857:G:H5'	2.03	0.40
1:2A:2166:G:H5'	1:2A:2167:U:OP2	2.20	0.40
1:2A:2169:A:H1'	54:2y:56:C:C6	2.56	0.40
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.57	0.40
21:2Z:97:GLU:HB3	21:2Z:125:LEU:HD11	2.04	0.40
21:2Z:159:PRO:HA	21:2Z:160:GLY:HA2	1.78	0.40
21:2Z:171:ILE:HG13	21:2Z:172:ALA:H	1.86	0.40
32:2a:320:C:O2'	32:2a:1435:G:H1'	2.21	0.40
32:2a:615:C:H2'	32:2a:616:G:O4'	2.21	0.40
32:2a:693:G:C6	32:2a:694:A:C6	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:818:G:N2	32:2a:873:A:OP1	2.50	0.40
32:2a:895:G:N7	61:2a:3337:HOH:O	2.37	0.40
32:2a:1121:U:C2'	32:2a:1122:U:H5'	2.51	0.40
32:2a:1206:G:C5	32:2a:1207:2MG:N7	2.89	0.40
33:2b:53:ARG:HA	33:2b:56:ARG:HH11	1.86	0.40
33:2b:149:LEU:HA	33:2b:152:PHE:HB3	2.04	0.40
40:2i:5:TYR:CD1	40:2i:18:PHE:CE1	3.09	0.40
40:2i:49:PRO:HG3	40:2i:101:PHE:CD1	2.54	0.40
40:2i:108:VAL:HG22	40:2i:109:VAL:N	2.36	0.40
1:1A:75:G:H4'	24:12:55:ARG:NH1	2.37	0.40
1:1A:228:A:C8	1:1A:229:A:H5'	2.57	0.40
1:1A:1908:C:O2	55:1x:12:G:H4'	2.21	0.40
8:1I:130:TYR:O	8:1I:138:ILE:N	2.54	0.40
11:1P:81:GLN:NE2	11:1P:105:LEU:O	2.54	0.40
19:1X:63:LYS:HZ3	19:1X:63:LYS:HG3	1.58	0.40
20:1Y:26:LYS:HA	20:1Y:26:LYS:HD3	1.82	0.40
21:1Z:103:ARG:O	21:1Z:138:GLU:HA	2.21	0.40
23:11:52:ARG:HE	23:11:52:ARG:HB2	1.66	0.40
30:18:62:LEU:HB3	30:18:65:GLU:CG	2.52	0.40
32:1a:187:C:H5'	51:1t:82:SER:HA	2.04	0.40
32:1a:799:G:C2'	32:1a:800:G:H5'	2.52	0.40
32:1a:833:U:H2'	32:1a:834:C:H6	1.87	0.40
32:1a:1055:A:C5	32:1a:1206:G:C2	3.10	0.40
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.57	0.40
32:1a:1168:A:H2'	32:1a:1169:A:C8	2.56	0.40
34:1c:181:ASN:ND2	34:1c:204:LEU:HB2	2.37	0.40
38:1g:104:LEU:HD12	38:1g:123:GLU:HG3	2.03	0.40
48:1q:5:VAL:O	48:1q:6:LEU:HD23	2.22	0.40
1:2A:11:G:H2'	1:2A:12:U:H5'	2.03	0.40
1:2A:271(X):G:C2	1:2A:271(Y):U:O4	2.74	0.40
1:2A:361:G:O2'	1:2A:362:U:H5'	2.22	0.40
1:2A:1000:A:C5	1:2A:1155:A:C5	3.09	0.40
1:2A:1169:G:N2	1:2A:1181:C:C4	2.90	0.40
1:2A:1268:A:H2'	1:2A:1269:A:O4'	2.21	0.40
1:2A:1510:G:H2'	1:2A:1511:C:C6	2.56	0.40
1:2A:1638:C:H2'	1:2A:1639:U:O4'	2.21	0.40
1:2A:1647:G:H3'	1:2A:1647:G:P	2.61	0.40
1:2A:1762:A:N1	61:2A:4020:HOH:O	2.37	0.40
1:2A:1824:G:N3	3:2D:254:THR:OG1	2.54	0.40
1:2A:1937:A:H1'	1:2A:1939:5MU:H71	2.02	0.40
1:2A:1988:C:H2'	1:2A:1989:G:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2314:C:H2'	1:2A:2315:G:C8	2.43	0.40
1:2A:2322:A:H2'	1:2A:2323:G:O4'	2.20	0.40
1:2A:2365:G:O6	30:28:39:LYS:HE3	2.21	0.40
1:2A:2525:G:C2	1:2A:2539:C:C2	3.09	0.40
7:2H:27:LYS:HG2	7:2H:32:GLU:HB3	2.03	0.40
8:2I:81:VAL:HG12	8:2I:82:ARG:N	2.36	0.40
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	2.02	0.40
21:2Z:150:LEU:O	21:2Z:171:ILE:HG12	2.22	0.40
22:20:70:GLN:HE21	22:20:72:ARG:HD2	1.86	0.40
26:24:46:GLN:NE2	26:24:48:ARG:HD3	2.36	0.40
32:2a:432:A:C8	32:2a:433:C:C5	3.09	0.40
32:2a:546:G:OP1	35:2d:73:ARG:HG2	2.21	0.40
32:2a:741:G:H2'	32:2a:742:G:O4'	2.22	0.40
32:2a:938:A:C5	32:2a:939:G:C8	3.09	0.40
32:2a:1061:G:C5	32:2a:1062:U:C5	3.10	0.40
32:2a:1129:C:H2'	32:2a:1139:G:N7	2.36	0.40
32:2a:1183:A:OP2	61:2a:3322:HOH:O	2.22	0.40
32:2a:1328:C:OP1	52:2u:21:TYR:OH	2.33	0.40
32:2a:1360:A:H8	32:2a:1360:A:OP1	2.03	0.40
35:2d:196:LEU:HA	35:2d:196:LEU:HD23	1.63	0.40
47:2p:1:MET:O	47:2p:24:ALA:N	2.48	0.40
47:2p:75:ARG:HB2	47:2p:80:PHE:HE2	1.86	0.40
55:2x:40:C:O2'	55:2x:41:C:H5'	2.20	0.40
1:1A:614:U:H5'	1:1A:614(C):A:N6	2.36	0.40
1:1A:747:U:O2	1:1A:2014:A:H1'	2.22	0.40
1:1A:886:C:H3'	1:1A:887:A:C5'	2.51	0.40
1:1A:1072:C:H5''	1:1A:1073:A:OP1	2.21	0.40
1:1A:1445:A:H4'	1:1A:1445(A):C:OP2	2.22	0.40
1:1A:1683:C:H2'	1:1A:1684:C:C6	2.57	0.40
4:1E:31:CYS:HA	4:1E:32:PRO:HD2	1.93	0.40
6:1G:101:ILE:HG22	6:1G:105:LYS:HE2	2.04	0.40
12:1Q:6:ARG:C	12:1Q:7:MET:HG2	2.44	0.40
14:1S:61:ASN:HB3	14:1S:64:GLU:HB2	2.03	0.40
25:13:10:LYS:NZ	25:13:15:TYR:OH	2.52	0.40
32:1a:198:G:C6	32:1a:220:G:N3	2.90	0.40
32:1a:317:G:C6	32:1a:318:G:C5	3.09	0.40
32:1a:374:A:C6	32:1a:375:U:C4	3.09	0.40
32:1a:377:G:C2	32:1a:387:U:O2	2.74	0.40
32:1a:803:G:OP1	61:1a:1924:HOH:O	2.22	0.40
32:1a:1020:U:O2	32:1a:1020:U:H2'	2.22	0.40
34:1c:110:ASN:O	34:1c:141:VAL:HG22	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:76:ARG:NE	35:1d:80:GLU:OE2	2.47	0.40
35:1d:173:TRP:HB3	35:1d:187:ARG:HG3	2.04	0.40
36:1e:33:VAL:HG13	36:1e:112:LEU:HD22	2.03	0.40
38:1g:37:ASN:OD1	40:1i:41:VAL:HG12	2.21	0.40
39:1h:65:TYR:HA	39:1h:79:VAL:HG23	2.02	0.40
54:1w:43:C:H2'	54:1w:44:G:C8	2.57	0.40
1:2A:1839:G:C8	1:2A:1927:A:H1'	2.57	0.40
1:2A:1971:A:H2	3:2D:239:ARG:O	2.04	0.40
1:2A:2121:G:H1	1:2A:2177:C:H42	1.68	0.40
1:2A:2121:G:H2'	1:2A:2122:U:O4'	2.21	0.40
1:2A:2639:A:C2	1:2A:2778:A:C8	3.09	0.40
5:2F:126:VAL:O	5:2F:196:LEU:HG	2.21	0.40
9:2N:12:ARG:NH2	9:2N:50:ASP:OD2	2.52	0.40
9:2N:73:THR:HB	9:2N:82:LEU:HD11	2.04	0.40
12:2Q:18:LYS:HE2	12:2Q:18:LYS:HB2	1.97	0.40
15:2T:105:LEU:CB	15:2T:110:ILE:HG13	2.50	0.40
15:2T:109:GLU:HG2	15:2T:112:ARG:NH2	2.37	0.40
21:2Z:36:LYS:HB2	21:2Z:36:LYS:HE3	1.90	0.40
32:2a:195:A:N3	32:2a:222:U:O2'	2.52	0.40
32:2a:1205:U:H1'	34:2c:195:VAL:HG12	2.03	0.40
32:2a:1313:U:H2'	32:2a:1314:C:C6	2.57	0.40
32:2a:1367:C:OP1	40:2i:115:GLY:N	2.54	0.40
33:2b:76:GLN:HE21	33:2b:76:GLN:HB3	1.63	0.40
36:2e:40:ARG:NH1	36:2e:68:GLU:HA	2.36	0.40
46:2o:39:LEU:HB3	46:2o:56:LEU:HD12	2.04	0.40
50:2s:28:LYS:HD3	50:2s:28:LYS:HA	1.73	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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	
3	1D	273/276 (99%)	260 (95%)	13 (5%)	0	100	100
3	2D	273/276 (99%)	258 (94%)	15 (6%)	0	100	100
4	1E	202/206 (98%)	193 (96%)	7 (4%)	2 (1%)	12	14
4	2E	202/206 (98%)	190 (94%)	12 (6%)	0	100	100
5	1F	201/210 (96%)	194 (96%)	7 (4%)	0	100	100
5	2F	201/210 (96%)	184 (92%)	17 (8%)	0	100	100
6	1G	179/182 (98%)	165 (92%)	13 (7%)	1 (1%)	21	27
6	2G	179/182 (98%)	154 (86%)	24 (13%)	1 (1%)	21	27
7	1H	172/180 (96%)	163 (95%)	9 (5%)	0	100	100
7	2H	172/180 (96%)	160 (93%)	12 (7%)	0	100	100
8	1I	144/148 (97%)	123 (85%)	21 (15%)	0	100	100
8	2I	144/148 (97%)	123 (85%)	21 (15%)	0	100	100
9	1N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
9	2N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
10	1O	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
10	2O	120/122 (98%)	110 (92%)	10 (8%)	0	100	100
11	1P	147/150 (98%)	133 (90%)	13 (9%)	1 (1%)	18	24
11	2P	147/150 (98%)	130 (88%)	16 (11%)	1 (1%)	18	24
12	1Q	139/141 (99%)	132 (95%)	7 (5%)	0	100	100
12	2Q	139/141 (99%)	125 (90%)	14 (10%)	0	100	100
13	1R	116/118 (98%)	112 (97%)	4 (3%)	0	100	100
13	2R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
14	1S	108/112 (96%)	104 (96%)	4 (4%)	0	100	100
14	2S	108/112 (96%)	91 (84%)	17 (16%)	0	100	100
15	1T	129/146 (88%)	120 (93%)	9 (7%)	0	100	100
15	2T	129/146 (88%)	125 (97%)	4 (3%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	109 (96%)	5 (4%)	0	100	100
17	1V	99/101 (98%)	97 (98%)	2 (2%)	0	100	100
17	2V	99/101 (98%)	89 (90%)	9 (9%)	1 (1%)	12	14
18	1W	110/113 (97%)	110 (100%)	0	0	100	100
18	2W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	1X	93/96 (97%)	89 (96%)	4 (4%)	0	100	100
19	2X	93/96 (97%)	88 (95%)	5 (5%)	0	100	100
20	1Y	105/110 (96%)	99 (94%)	6 (6%)	0	100	100
20	2Y	105/110 (96%)	97 (92%)	7 (7%)	1 (1%)	12	14
21	1Z	148/206 (72%)	129 (87%)	17 (12%)	2 (1%)	9	8
21	2Z	156/206 (76%)	128 (82%)	26 (17%)	2 (1%)	9	9
22	10	75/85 (88%)	72 (96%)	3 (4%)	0	100	100
22	20	81/85 (95%)	75 (93%)	6 (7%)	0	100	100
23	11	95/98 (97%)	91 (96%)	4 (4%)	0	100	100
23	21	95/98 (97%)	93 (98%)	2 (2%)	0	100	100
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
24	22	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
25	13	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
26	14	67/71 (94%)	47 (70%)	20 (30%)	0	100	100
26	24	67/71 (94%)	47 (70%)	19 (28%)	1 (2%)	8	7
27	15	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
27	25	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
28	16	51/54 (94%)	50 (98%)	1 (2%)	0	100	100
28	26	51/54 (94%)	48 (94%)	3 (6%)	0	100	100
29	17	46/49 (94%)	46 (100%)	0	0	100	100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	59 (95%)	3 (5%)	0	100	100
31	19	35/37 (95%)	35 (100%)	0	0	100	100
31	29	35/37 (95%)	33 (94%)	2 (6%)	0	100	100
33	1b	229/256 (90%)	186 (81%)	41 (18%)	2 (1%)	14	17
33	2b	229/256 (90%)	181 (79%)	44 (19%)	4 (2%)	7	6
34	1c	204/239 (85%)	188 (92%)	16 (8%)	0	100	100
34	2c	204/239 (85%)	160 (78%)	44 (22%)	0	100	100
35	1d	206/209 (99%)	188 (91%)	18 (9%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
35	2d	206/209 (99%)	190 (92%)	16 (8%)	0	100	100
36	1e	146/162 (90%)	133 (91%)	13 (9%)	0	100	100
36	2e	146/162 (90%)	124 (85%)	22 (15%)	0	100	100
37	1f	98/101 (97%)	94 (96%)	4 (4%)	0	100	100
37	2f	98/101 (97%)	93 (95%)	5 (5%)	0	100	100
38	1g	153/156 (98%)	144 (94%)	9 (6%)	0	100	100
38	2g	153/156 (98%)	135 (88%)	17 (11%)	1 (1%)	18	24
39	1h	135/138 (98%)	125 (93%)	10 (7%)	0	100	100
39	2h	135/138 (98%)	119 (88%)	16 (12%)	0	100	100
40	1i	125/128 (98%)	104 (83%)	21 (17%)	0	100	100
40	2i	125/128 (98%)	103 (82%)	22 (18%)	0	100	100
41	1j	95/105 (90%)	78 (82%)	16 (17%)	1 (1%)	11	12
41	2j	94/105 (90%)	78 (83%)	15 (16%)	1 (1%)	11	12
42	1k	112/129 (87%)	101 (90%)	11 (10%)	0	100	100
42	2k	112/129 (87%)	102 (91%)	10 (9%)	0	100	100
43	1l	119/132 (90%)	111 (93%)	6 (5%)	2 (2%)	7	6
43	2l	119/132 (90%)	108 (91%)	11 (9%)	0	100	100
44	1m	121/126 (96%)	103 (85%)	18 (15%)	0	100	100
44	2m	120/126 (95%)	99 (82%)	21 (18%)	0	100	100
45	1n	58/61 (95%)	50 (86%)	7 (12%)	1 (2%)	7	6
45	2n	58/61 (95%)	47 (81%)	9 (16%)	2 (3%)	3	1
46	1o	86/89 (97%)	80 (93%)	6 (7%)	0	100	100
46	2o	86/89 (97%)	80 (93%)	6 (7%)	0	100	100
47	1p	80/88 (91%)	71 (89%)	9 (11%)	0	100	100
47	2p	80/88 (91%)	74 (92%)	6 (8%)	0	100	100
48	1q	97/105 (92%)	87 (90%)	10 (10%)	0	100	100
48	2q	97/105 (92%)	91 (94%)	6 (6%)	0	100	100
49	1r	66/88 (75%)	57 (86%)	9 (14%)	0	100	100
49	2r	66/88 (75%)	60 (91%)	6 (9%)	0	100	100
50	1s	81/93 (87%)	70 (86%)	11 (14%)	0	100	100
50	2s	81/93 (87%)	64 (79%)	17 (21%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
51	1t	94/106 (89%)	81 (86%)	13 (14%)	0	100	100
51	2t	94/106 (89%)	82 (87%)	12 (13%)	0	100	100
52	1u	21/27 (78%)	17 (81%)	4 (19%)	0	100	100
52	2u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
All	All	11364/12128 (94%)	10319 (91%)	1018 (9%)	27 (0%)	43	54

All (27) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	1P	36	LYS
21	1Z	53	ILE
21	2Z	52	SER
33	2b	10	LEU
6	1G	96	ARG
41	1j	79	ARG
43	1l	91	LYS
45	1n	14	PRO
11	2P	36	LYS
21	2Z	51	ALA
26	24	47	GLN
41	2j	79	ARG
45	2n	14	PRO
33	2b	21	ARG
33	1b	125	PRO
6	2G	96	ARG
33	2b	9	GLU
21	1Z	52	SER
4	1E	52	LEU
43	1l	106	ASP
33	2b	74	LYS
4	1E	71	GLY
33	1b	124	SER
38	2g	55	GLY
45	2n	13	THR
17	2V	79	VAL
20	2Y	55	TYR

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	
3	1D	215/218 (99%)	198 (92%)	17 (8%)	11	14
3	2D	215/218 (99%)	193 (90%)	22 (10%)	7	6
4	1E	164/166 (99%)	153 (93%)	11 (7%)	15	20
4	2E	164/166 (99%)	146 (89%)	18 (11%)	6	5
5	1F	160/166 (96%)	139 (87%)	21 (13%)	4	3
5	2F	159/166 (96%)	135 (85%)	24 (15%)	3	2
6	1G	143/156 (92%)	128 (90%)	15 (10%)	6	6
6	2G	143/156 (92%)	117 (82%)	26 (18%)	2	1
7	1H	144/148 (97%)	128 (89%)	16 (11%)	6	5
7	2H	144/148 (97%)	119 (83%)	25 (17%)	2	1
8	1I	113/124 (91%)	91 (80%)	22 (20%)	1	0
8	2I	105/124 (85%)	78 (74%)	27 (26%)	0	0
9	1N	118/119 (99%)	110 (93%)	8 (7%)	14	20
9	2N	118/119 (99%)	104 (88%)	14 (12%)	5	4
10	1O	100/100 (100%)	97 (97%)	3 (3%)	36	51
10	2O	100/100 (100%)	93 (93%)	7 (7%)	14	18
11	1P	115/116 (99%)	109 (95%)	6 (5%)	21	30
11	2P	115/116 (99%)	108 (94%)	7 (6%)	17	24
12	1Q	111/111 (100%)	105 (95%)	6 (5%)	20	29
12	2Q	111/111 (100%)	104 (94%)	7 (6%)	16	23
13	1R	101/101 (100%)	97 (96%)	4 (4%)	28	41
13	2R	101/101 (100%)	94 (93%)	7 (7%)	14	19
14	1S	86/88 (98%)	77 (90%)	9 (10%)	6	6
14	2S	85/88 (97%)	72 (85%)	13 (15%)	3	2
15	1T	115/127 (91%)	106 (92%)	9 (8%)	11	14
15	2T	113/127 (89%)	107 (95%)	6 (5%)	20	30

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
16	1U	93/94 (99%)	86 (92%)	7 (8%)	12	16
16	2U	93/94 (99%)	84 (90%)	9 (10%)	8	8
17	1V	80/82 (98%)	73 (91%)	7 (9%)	9	10
17	2V	80/82 (98%)	74 (92%)	6 (8%)	12	16
18	1W	90/92 (98%)	87 (97%)	3 (3%)	33	48
18	2W	90/92 (98%)	84 (93%)	6 (7%)	15	20
19	1X	77/78 (99%)	72 (94%)	5 (6%)	15	21
19	2X	77/78 (99%)	70 (91%)	7 (9%)	9	10
20	1Y	85/91 (93%)	74 (87%)	11 (13%)	4	3
20	2Y	85/91 (93%)	72 (85%)	13 (15%)	3	2
21	1Z	135/179 (75%)	121 (90%)	14 (10%)	7	6
21	2Z	137/179 (76%)	118 (86%)	19 (14%)	3	2
22	10	61/67 (91%)	58 (95%)	3 (5%)	22	33
22	20	65/67 (97%)	62 (95%)	3 (5%)	24	36
23	11	80/83 (96%)	77 (96%)	3 (4%)	29	43
23	21	80/83 (96%)	76 (95%)	4 (5%)	22	32
24	12	65/67 (97%)	63 (97%)	2 (3%)	35	50
24	22	65/67 (97%)	58 (89%)	7 (11%)	6	6
25	13	51/52 (98%)	45 (88%)	6 (12%)	5	4
25	23	50/52 (96%)	46 (92%)	4 (8%)	11	13
26	14	59/63 (94%)	52 (88%)	7 (12%)	5	4
26	24	53/63 (84%)	42 (79%)	11 (21%)	1	0
27	15	50/52 (96%)	48 (96%)	2 (4%)	28	41
27	25	50/52 (96%)	44 (88%)	6 (12%)	5	4
28	16	51/52 (98%)	45 (88%)	6 (12%)	5	4
28	26	50/52 (96%)	44 (88%)	6 (12%)	5	4
29	17	41/42 (98%)	38 (93%)	3 (7%)	13	17
29	27	41/42 (98%)	38 (93%)	3 (7%)	13	17
30	18	54/55 (98%)	51 (94%)	3 (6%)	19	27
30	28	54/55 (98%)	50 (93%)	4 (7%)	13	16
31	19	34/34 (100%)	32 (94%)	2 (6%)	18	26

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	29	34/34 (100%)	32 (94%)	2 (6%)	18	26
33	1b	192/220 (87%)	167 (87%)	25 (13%)	4	3
33	2b	187/220 (85%)	153 (82%)	34 (18%)	2	1
34	1c	142/188 (76%)	121 (85%)	21 (15%)	3	2
34	2c	140/188 (74%)	117 (84%)	23 (16%)	2	1
35	1d	169/181 (93%)	139 (82%)	30 (18%)	2	1
35	2d	173/181 (96%)	153 (88%)	20 (12%)	5	4
36	1e	113/123 (92%)	97 (86%)	16 (14%)	3	2
36	2e	114/123 (93%)	93 (82%)	21 (18%)	1	0
37	1f	84/90 (93%)	74 (88%)	10 (12%)	5	4
37	2f	85/90 (94%)	79 (93%)	6 (7%)	13	18
38	1g	119/127 (94%)	100 (84%)	19 (16%)	2	1
38	2g	120/127 (94%)	106 (88%)	14 (12%)	5	4
39	1h	114/119 (96%)	106 (93%)	8 (7%)	14	18
39	2h	114/119 (96%)	101 (89%)	13 (11%)	5	5
40	1i	90/99 (91%)	79 (88%)	11 (12%)	5	4
40	2i	89/99 (90%)	77 (86%)	12 (14%)	4	3
41	1j	66/92 (72%)	61 (92%)	5 (8%)	12	15
41	2j	69/92 (75%)	56 (81%)	13 (19%)	1	0
42	1k	82/99 (83%)	75 (92%)	7 (8%)	10	11
42	2k	83/99 (84%)	76 (92%)	7 (8%)	10	12
43	1l	96/108 (89%)	88 (92%)	8 (8%)	10	12
43	2l	96/108 (89%)	89 (93%)	7 (7%)	13	17
44	1m	93/101 (92%)	78 (84%)	15 (16%)	2	1
44	2m	92/101 (91%)	81 (88%)	11 (12%)	5	4
45	1n	49/50 (98%)	42 (86%)	7 (14%)	3	2
45	2n	49/50 (98%)	39 (80%)	10 (20%)	1	0
46	1o	78/80 (98%)	71 (91%)	7 (9%)	9	10
46	2o	78/80 (98%)	72 (92%)	6 (8%)	12	15
47	1p	69/74 (93%)	61 (88%)	8 (12%)	5	4
47	2p	68/74 (92%)	60 (88%)	8 (12%)	5	4

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
48	1q	94/97 (97%)	83 (88%)	11 (12%)	5	4
48	2q	94/97 (97%)	82 (87%)	12 (13%)	4	3
49	1r	59/77 (77%)	52 (88%)	7 (12%)	5	4
49	2r	59/77 (77%)	53 (90%)	6 (10%)	7	6
50	1s	69/80 (86%)	61 (88%)	8 (12%)	5	4
50	2s	67/80 (84%)	54 (81%)	13 (19%)	1	0
51	1t	70/82 (85%)	64 (91%)	6 (9%)	10	11
51	2t	70/82 (85%)	65 (93%)	5 (7%)	13	18
52	1u	18/22 (82%)	18 (100%)	0	100	100
52	2u	18/22 (82%)	15 (83%)	3 (17%)	2	1
All	All	9299/10064 (92%)	8282 (89%)	1017 (11%)	6	5

All (1017) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	32	SER
3	1D	37	LEU
3	1D	38	LYS
3	1D	61	LEU
3	1D	88	ARG
3	1D	99	ASP
3	1D	106	ILE
3	1D	122	ASP
3	1D	142	VAL
3	1D	173	VAL
3	1D	183	ARG
3	1D	211	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
4	1E	9	VAL
4	1E	12	THR
4	1E	21	VAL
4	1E	34	VAL
4	1E	59	VAL
4	1E	72	VAL

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Mol	Chain	Res	Type
4	1E	73	GLU
4	1E	90	THR
4	1E	116	VAL
4	1E	181	LEU
4	1E	184	VAL
5	1F	9	ILE
5	1F	12	LEU
5	1F	18	ARG
5	1F	27	GLU
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	70	THR
5	1F	74	ARG
5	1F	88	VAL
5	1F	106	ARG
5	1F	132	VAL
5	1F	140	LEU
5	1F	158	THR
5	1F	162	LEU
5	1F	168	ARG
5	1F	175	THR
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
5	1F	205	ARG
6	1G	5	VAL
6	1G	7	LEU
6	1G	21	ARG
6	1G	22	ARG
6	1G	28	VAL
6	1G	33	ARG
6	1G	43	LEU
6	1G	79	ASN
6	1G	91	ARG
6	1G	115	ARG
6	1G	139	LEU
6	1G	140	ILE
6	1G	148	MET
6	1G	159	VAL
6	1G	181	ARG
7	1H	2	SER

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Mol	Chain	Res	Type
7	1H	15	VAL
7	1H	18	GLU
7	1H	23	ARG
7	1H	45	VAL
7	1H	51	ARG
7	1H	56	SER
7	1H	76	VAL
7	1H	85	LYS
7	1H	99	VAL
7	1H	116	GLU
7	1H	119	GLU
7	1H	124	GLU
7	1H	127	GLU
7	1H	129	THR
7	1H	149	ARG
8	1I	1	MET
8	1I	4	ILE
8	1I	10	GLU
8	1I	12	LEU
8	1I	38	LEU
8	1I	40	THR
8	1I	41	GLU
8	1I	42	SER
8	1I	47	LEU
8	1I	62	LYS
8	1I	74	ASN
8	1I	75	LEU
8	1I	85	GLU
8	1I	87	LYS
8	1I	92	VAL
8	1I	108	THR
8	1I	109	ILE
8	1I	123	LEU
8	1I	129	THR
8	1I	133	HIS
8	1I	140	LEU
8	1I	142	VAL
9	1N	1	MET
9	1N	14	VAL
9	1N	28	THR
9	1N	48	MET
9	1N	61	ARG

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Mol	Chain	Res	Type
9	1N	96	GLU
9	1N	137	LYS
9	1N	138	LEU
10	1O	28	SER
10	1O	98	VAL
10	1O	108	GLU
11	1P	45	LEU
11	1P	75	ILE
11	1P	90	ARG
11	1P	126	VAL
11	1P	133	SER
11	1P	148	LEU
12	1Q	7	MET
12	1Q	8	LYS
12	1Q	16	ARG
12	1Q	56	ARG
12	1Q	109	VAL
12	1Q	133	ARG
13	1R	15	SER
13	1R	36	THR
13	1R	111	LEU
13	1R	114	VAL
14	1S	3	ARG
14	1S	8	GLU
14	1S	13	ARG
14	1S	14	VAL
14	1S	36	TYR
14	1S	38	GLN
14	1S	46	VAL
14	1S	50	SER
14	1S	110	LEU
15	1T	28	VAL
15	1T	36	GLU
15	1T	38	ASN
15	1T	49	VAL
15	1T	51	ARG
15	1T	67	SER
15	1T	70	VAL
15	1T	125	ARG
15	1T	128	GLU
16	1U	8	VAL
16	1U	9	VAL

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Mol	Chain	Res	Type
16	1U	17	ILE
16	1U	31	SER
16	1U	74	LEU
16	1U	95	LEU
16	1U	100	VAL
17	1V	10	LYS
17	1V	32	THR
17	1V	56	SER
17	1V	61	VAL
17	1V	79	VAL
17	1V	85	LYS
17	1V	100	ARG
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
19	1X	1	MET
19	1X	38	GLU
19	1X	57	LEU
19	1X	72	LYS
19	1X	81	VAL
20	1Y	1	MET
20	1Y	2	ARG
20	1Y	31	LEU
20	1Y	55	TYR
20	1Y	61	ILE
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	75	ILE
20	1Y	91	GLU
20	1Y	99	CYS
20	1Y	106	LEU
21	1Z	28	MET
21	1Z	61	LEU
21	1Z	72	ARG
21	1Z	92	SER
21	1Z	119	GLU
21	1Z	129	SER
21	1Z	132	ASN
21	1Z	139	VAL
21	1Z	150	LEU
21	1Z	154	ASP
21	1Z	155	LEU

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Mol	Chain	Res	Type
21	1Z	163	LEU
21	1Z	170	THR
21	1Z	171	ILE
22	10	10	THR
22	10	43	THR
22	10	49	LYS
23	11	35	THR
23	11	46	LEU
23	11	52	ARG
24	12	1	MET
24	12	19	VAL
25	13	34	GLU
25	13	54	VAL
25	13	55	ARG
25	13	56	VAL
25	13	58	VAL
25	13	60	GLU
26	14	5	ILE
26	14	15	ILE
26	14	49	PHE
26	14	53	GLU
26	14	62	ARG
26	14	63	TYR
26	14	69	LYS
27	15	6	VAL
27	15	59	GLU
28	16	5	VAL
28	16	19	ARG
28	16	38	LYS
28	16	44	ARG
28	16	47	THR
28	16	48	VAL
29	17	24	THR
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	23	VAL
30	18	58	ILE
31	19	4	ARG
31	19	28	GLU
33	1b	11	LEU
33	1b	21	ARG

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Mol	Chain	Res	Type
33	1b	39	ILE
33	1b	42	ILE
33	1b	44	LEU
33	1b	54	THR
33	1b	71	VAL
33	1b	73	THR
33	1b	78	GLN
33	1b	80	ILE
33	1b	83	MET
33	1b	101	MET
33	1b	107	THR
33	1b	108	ILE
33	1b	128	GLU
33	1b	138	LEU
33	1b	156	LYS
33	1b	160	ASP
33	1b	172	ILE
33	1b	185	ILE
33	1b	196	LEU
33	1b	208	ILE
33	1b	215	LEU
33	1b	219	VAL
33	1b	236	TYR
34	1c	3	ASN
34	1c	8	ILE
34	1c	14	ILE
34	1c	21	ARG
34	1c	26	LYS
34	1c	45	LYS
34	1c	56	ASP
34	1c	58	GLU
34	1c	66	VAL
34	1c	68	VAL
34	1c	70	VAL
34	1c	89	GLU
34	1c	103	VAL
34	1c	112	SER
34	1c	124	ILE
34	1c	150	LYS
34	1c	165	THR
34	1c	178	LEU
34	1c	184	TYR

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Mol	Chain	Res	Type
34	1c	195	VAL
34	1c	198	VAL
35	1d	3	ARG
35	1d	19	LEU
35	1d	28	SER
35	1d	70	ILE
35	1d	76	ARG
35	1d	83	SER
35	1d	88	VAL
35	1d	105	VAL
35	1d	112	VAL
35	1d	118	ARG
35	1d	119	GLN
35	1d	122	ARG
35	1d	127	THR
35	1d	135	LEU
35	1d	140	VAL
35	1d	144	ASP
35	1d	157	LEU
35	1d	158	ILE
35	1d	162	LEU
35	1d	170	VAL
35	1d	175	SER
35	1d	177	ASP
35	1d	178	VAL
35	1d	181	MET
35	1d	186	LEU
35	1d	194	LEU
35	1d	196	LEU
35	1d	200	GLU
35	1d	201	GLN
35	1d	202	LEU
36	1e	12	LEU
36	1e	24	ARG
36	1e	31	LEU
36	1e	41	VAL
36	1e	51	VAL
36	1e	53	LEU
36	1e	56	GLN
36	1e	64	ARG
36	1e	67	VAL
36	1e	79	GLU

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Mol	Chain	Res	Type
36	1e	82	VAL
36	1e	91	LEU
36	1e	116	THR
36	1e	120	THR
36	1e	135	THR
36	1e	140	ARG
37	1f	40	VAL
37	1f	43	LEU
37	1f	54	LYS
37	1f	55	ASP
37	1f	64	GLN
37	1f	72	VAL
37	1f	75	LEU
37	1f	81	ILE
37	1f	89	MET
37	1f	92	LYS
38	1g	12	LEU
38	1g	16	LEU
38	1g	22	LEU
38	1g	24	THR
38	1g	27	ILE
38	1g	31	MET
38	1g	32	ARG
38	1g	50	ILE
38	1g	59	LEU
38	1g	61	VAL
38	1g	79	ARG
38	1g	80	VAL
38	1g	92	SER
38	1g	94	ARG
38	1g	104	LEU
38	1g	113	GLU
38	1g	120	ILE
38	1g	131	LYS
38	1g	138	LYS
39	1h	18	ARG
39	1h	29	SER
39	1h	32	LYS
39	1h	51	VAL
39	1h	52	ASP
39	1h	82	HIS
39	1h	127	LEU

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Mol	Chain	Res	Type
39	1h	133	LEU
40	1i	7	THR
40	1i	25	LYS
40	1i	56	LEU
40	1i	74	ILE
40	1i	81	ILE
40	1i	83	ARG
40	1i	96	LEU
40	1i	97	LYS
40	1i	103	THR
40	1i	108	VAL
40	1i	128	ARG
41	1j	46	ARG
41	1j	64	GLU
41	1j	81	THR
41	1j	92	THR
41	1j	94	VAL
42	1k	25	TYR
42	1k	31	THR
42	1k	51	LYS
42	1k	82	VAL
42	1k	87	THR
42	1k	114	VAL
42	1k	117	ASN
43	1l	11	VAL
43	1l	39	VAL
43	1l	40	VAL
43	1l	58	VAL
43	1l	62	SER
43	1l	70	ILE
43	1l	83	VAL
43	1l	91	LYS
44	1m	3	ARG
44	1m	4	ILE
44	1m	14	ARG
44	1m	15	VAL
44	1m	17	VAL
44	1m	19	LEU
44	1m	32	GLU
44	1m	43	THR
44	1m	49	THR
44	1m	67	GLU

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Mol	Chain	Res	Type
44	1m	70	LEU
44	1m	78	ILE
44	1m	94	ARG
44	1m	102	ARG
44	1m	106	ASN
45	1n	3	ARG
45	1n	12	ARG
45	1n	13	THR
45	1n	18	VAL
45	1n	32	SER
45	1n	33	VAL
45	1n	41	ARG
46	1o	7	GLU
46	1o	39	LEU
46	1o	40	SER
46	1o	47	LYS
46	1o	83	GLU
46	1o	84	LYS
46	1o	87	ILE
47	1p	11	SER
47	1p	20	VAL
47	1p	21	VAL
47	1p	43	LYS
47	1p	45	THR
47	1p	50	LYS
47	1p	62	VAL
47	1p	75	ARG
48	1q	5	VAL
48	1q	34	LYS
48	1q	35	VAL
48	1q	52	LYS
48	1q	53	LEU
48	1q	57	VAL
48	1q	59	ILE
48	1q	70	ARG
48	1q	78	GLU
48	1q	86	GLU
48	1q	98	LEU
49	1r	26	LEU
49	1r	28	GLU
49	1r	35	ARG
49	1r	37	VAL

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Mol	Chain	Res	Type
49	1r	42	ARG
49	1r	61	LYS
49	1r	63	GLN
50	1s	6	LYS
50	1s	7	LYS
50	1s	12	ASP
50	1s	18	LYS
50	1s	37	ARG
50	1s	56	GLN
50	1s	66	MET
50	1s	79	THR
51	1t	10	LEU
51	1t	13	LEU
51	1t	24	LEU
51	1t	37	SER
51	1t	51	GLU
51	1t	89	ARG
3	2D	20	ASP
3	2D	22	SER
3	2D	24	ILE
3	2D	32	SER
3	2D	37	LEU
3	2D	38	LYS
3	2D	61	LEU
3	2D	88	ARG
3	2D	99	ASP
3	2D	106	ILE
3	2D	109	ASP
3	2D	113	VAL
3	2D	142	VAL
3	2D	162	SER
3	2D	165	ILE
3	2D	171	ASP
3	2D	173	VAL
3	2D	193	VAL
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	270	ILE
4	2E	7	VAL
4	2E	9	VAL
4	2E	12	THR

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Mol	Chain	Res	Type
4	2E	14	ILE
4	2E	21	VAL
4	2E	34	VAL
4	2E	38	THR
4	2E	47	VAL
4	2E	59	VAL
4	2E	72	VAL
4	2E	73	GLU
4	2E	77	ILE
4	2E	90	THR
4	2E	116	VAL
4	2E	140	SER
4	2E	181	LEU
4	2E	195	LEU
4	2E	202	LYS
5	2F	17	ARG
5	2F	20	LEU
5	2F	28	ILE
5	2F	33	LEU
5	2F	43	LYS
5	2F	53	THR
5	2F	64	ILE
5	2F	96	ASP
5	2F	107	LYS
5	2F	110	LEU
5	2F	120	GLU
5	2F	124	LEU
5	2F	126	VAL
5	2F	135	LYS
5	2F	137	LYS
5	2F	144	LYS
5	2F	157	VAL
5	2F	158	THR
5	2F	161	GLU
5	2F	174	VAL
5	2F	183	VAL
5	2F	189	THR
5	2F	192	LEU
5	2F	201	VAL
6	2G	15	VAL
6	2G	19	LEU
6	2G	26	GLN

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Mol	Chain	Res	Type
6	2G	28	VAL
6	2G	31	VAL
6	2G	43	LEU
6	2G	51	ARG
6	2G	53	LEU
6	2G	58	GLN
6	2G	60	LEU
6	2G	70	VAL
6	2G	79	ASN
6	2G	88	ILE
6	2G	91	ARG
6	2G	98	ARG
6	2G	116	ASP
6	2G	124	SER
6	2G	126	ASP
6	2G	135	LEU
6	2G	140	ILE
6	2G	145	THR
6	2G	148	MET
6	2G	152	LEU
6	2G	159	VAL
6	2G	165	THR
6	2G	168	GLU
7	2H	2	SER
7	2H	6	ARG
7	2H	15	VAL
7	2H	23	ARG
7	2H	24	VAL
7	2H	30	LYS
7	2H	43	VAL
7	2H	44	VAL
7	2H	45	VAL
7	2H	51	ARG
7	2H	52	VAL
7	2H	57	ASP
7	2H	81	GLU
7	2H	85	LYS
7	2H	88	LEU
7	2H	92	ILE
7	2H	95	ARG
7	2H	103	LEU
7	2H	119	GLU

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Mol	Chain	Res	Type
7	2H	121	ILE
7	2H	122	THR
7	2H	129	THR
7	2H	130	ARG
7	2H	141	VAL
7	2H	152	ARG
8	2I	15	VAL
8	2I	19	VAL
8	2I	31	LEU
8	2I	37	VAL
8	2I	38	LEU
8	2I	44	LEU
8	2I	45	LYS
8	2I	47	LEU
8	2I	58	LEU
8	2I	66	GLU
8	2I	69	LYS
8	2I	72	LEU
8	2I	78	THR
8	2I	79	ILE
8	2I	82	ARG
8	2I	87	LYS
8	2I	92	VAL
8	2I	102	SER
8	2I	108	THR
8	2I	116	LEU
8	2I	117	GLU
8	2I	121	LYS
8	2I	122	GLU
8	2I	125	GLU
8	2I	126	TYR
8	2I	127	VAL
8	2I	139	GLN
9	2N	1	MET
9	2N	14	VAL
9	2N	28	THR
9	2N	38	HIS
9	2N	43	THR
9	2N	61	ARG
9	2N	62	VAL
9	2N	65	LYS
9	2N	68	GLU

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Mol	Chain	Res	Type
9	2N	83	LYS
9	2N	120	LEU
9	2N	121	LYS
9	2N	131	GLN
9	2N	138	LEU
10	2O	1	MET
10	2O	28	SER
10	2O	63	VAL
10	2O	66	LYS
10	2O	69	ILE
10	2O	98	VAL
10	2O	108	GLU
11	2P	45	LEU
11	2P	65	ARG
11	2P	95	VAL
11	2P	98	GLU
11	2P	123	LEU
11	2P	133	SER
11	2P	135	LEU
12	2Q	1	MET
12	2Q	12	GLN
12	2Q	22	LYS
12	2Q	37	LEU
12	2Q	54	MET
12	2Q	106	VAL
12	2Q	110	THR
13	2R	11	ASN
13	2R	24	GLN
13	2R	36	THR
13	2R	67	LEU
13	2R	95	THR
13	2R	111	LEU
13	2R	114	VAL
14	2S	4	LEU
14	2S	15	ARG
14	2S	18	ILE
14	2S	27	SER
14	2S	28	VAL
14	2S	36	TYR
14	2S	44	LYS
14	2S	49	VAL
14	2S	52	SER

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Mol	Chain	Res	Type
14	2S	63	THR
14	2S	93	LYS
14	2S	98	VAL
14	2S	110	LEU
15	2T	17	THR
15	2T	31	SER
15	2T	63	VAL
15	2T	64	ARG
15	2T	67	SER
15	2T	129	ARG
16	2U	5	LYS
16	2U	17	ILE
16	2U	55	ARG
16	2U	65	ILE
16	2U	74	LEU
16	2U	77	SER
16	2U	95	LEU
16	2U	100	VAL
16	2U	117	GLN
17	2V	1	MET
17	2V	38	LEU
17	2V	57	VAL
17	2V	61	VAL
17	2V	79	VAL
17	2V	85	LYS
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	35	ILE
18	2W	60	ASN
18	2W	90	ARG
19	2X	37	THR
19	2X	38	GLU
19	2X	49	VAL
19	2X	81	VAL
19	2X	83	VAL
19	2X	88	LYS
19	2X	92	LEU
20	2Y	5	MET
20	2Y	7	VAL
20	2Y	11	ASP
20	2Y	14	LEU

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Mol	Chain	Res	Type
20	2Y	21	LYS
20	2Y	30	VAL
20	2Y	40	GLU
20	2Y	47	LYS
20	2Y	66	PRO
20	2Y	72	VAL
20	2Y	87	LYS
20	2Y	88	LYS
20	2Y	99	CYS
21	2Z	6	LYS
21	2Z	18	LEU
21	2Z	33	LEU
21	2Z	35	ARG
21	2Z	40	ASP
21	2Z	42	VAL
21	2Z	47	VAL
21	2Z	70	LEU
21	2Z	71	VAL
21	2Z	74	VAL
21	2Z	84	GLU
21	2Z	90	VAL
21	2Z	100	VAL
21	2Z	137	ILE
21	2Z	139	VAL
21	2Z	144	LEU
21	2Z	154	ASP
21	2Z	161	VAL
21	2Z	171	ILE
22	20	10	THR
22	20	36	ILE
22	20	55	ARG
23	21	40	ARG
23	21	78	LYS
23	21	82	LEU
23	21	90	ILE
24	22	19	VAL
24	22	30	ARG
24	22	44	LEU
24	22	53	LEU
24	22	59	ARG
24	22	63	VAL
24	22	70	GLN

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Mol	Chain	Res	Type
25	23	23	LEU
25	23	31	LEU
25	23	37	LEU
25	23	58	VAL
26	24	10	VAL
26	24	26	SER
26	24	27	THR
26	24	33	VAL
26	24	34	GLU
26	24	46	GLN
26	24	48	ARG
26	24	59	PHE
26	24	61	ARG
26	24	63	TYR
26	24	67	TYR
27	25	6	VAL
27	25	21	SER
27	25	40	LYS
27	25	55	ARG
27	25	58	LEU
27	25	59	GLU
28	26	19	ARG
28	26	20	ASN
28	26	23	THR
28	26	28	ARG
28	26	32	ASN
28	26	48	VAL
29	27	24	THR
29	27	41	ARG
29	27	43	THR
30	28	14	VAL
30	28	23	VAL
30	28	29	LYS
30	28	37	SER
31	29	7	VAL
31	29	17	ILE
33	2b	7	VAL
33	2b	8	LYS
33	2b	9	GLU
33	2b	11	LEU
33	2b	44	LEU
33	2b	47	THR

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Mol	Chain	Res	Type
33	2b	48	MET
33	2b	56	ARG
33	2b	61	LEU
33	2b	67	THR
33	2b	68	ILE
33	2b	71	VAL
33	2b	76	GLN
33	2b	83	MET
33	2b	90	MET
33	2b	94	ASN
33	2b	101	MET
33	2b	108	ILE
33	2b	125	PRO
33	2b	130	ARG
33	2b	136	VAL
33	2b	137	ARG
33	2b	144	ARG
33	2b	150	SER
33	2b	153	ARG
33	2b	164	VAL
33	2b	168	THR
33	2b	185	ILE
33	2b	189	ASP
33	2b	204	ASN
33	2b	212	GLN
33	2b	215	LEU
33	2b	219	VAL
33	2b	223	ILE
34	2c	14	ILE
34	2c	15	THR
34	2c	49	SER
34	2c	52	LEU
34	2c	57	ILE
34	2c	69	HIS
34	2c	70	VAL
34	2c	77	ILE
34	2c	105	GLU
34	2c	124	ILE
34	2c	127	ARG
34	2c	142	MET
34	2c	143	GLU
34	2c	151	VAL

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Mol	Chain	Res	Type
34	2c	152	ILE
34	2c	153	VAL
34	2c	165	THR
34	2c	172	ARG
34	2c	182	ILE
34	2c	190	ARG
34	2c	198	VAL
34	2c	202	ILE
34	2c	206	GLU
35	2d	5	ILE
35	2d	8	VAL
35	2d	10	ARG
35	2d	34	GLU
35	2d	45	GLN
35	2d	57	ARG
35	2d	59	ARG
35	2d	61	LYS
35	2d	76	ARG
35	2d	107	ARG
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	158	ILE
35	2d	168	ARG
35	2d	169	LYS
35	2d	175	SER
35	2d	181	MET
35	2d	188	LEU
35	2d	193	ASP
36	2e	9	LYS
36	2e	13	ILE
36	2e	24	ARG
36	2e	38	GLN
36	2e	41	VAL
36	2e	47	LYS
36	2e	55	VAL
36	2e	66	MET
36	2e	67	VAL
36	2e	72	GLN
36	2e	73	ASN
36	2e	75	THR
36	2e	83	GLU

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Mol	Chain	Res	Type
36	2e	91	LEU
36	2e	111	GLU
36	2e	115	VAL
36	2e	118	ILE
36	2e	120	THR
36	2e	125	SER
36	2e	145	LYS
36	2e	151	LEU
37	2f	6	VAL
37	2f	21	LEU
37	2f	37	VAL
37	2f	63	TYR
37	2f	69	GLU
37	2f	93	SER
38	2g	6	ARG
38	2g	9	VAL
38	2g	15	ASP
38	2g	24	THR
38	2g	30	ILE
38	2g	38	LEU
38	2g	52	GLU
38	2g	78	ARG
38	2g	79	ARG
38	2g	115	ARG
38	2g	136	LYS
38	2g	139	GLU
38	2g	146	GLU
38	2g	155	ARG
39	2h	11	THR
39	2h	26	VAL
39	2h	37	ARG
39	2h	45	ILE
39	2h	51	VAL
39	2h	60	ARG
39	2h	61	VAL
39	2h	84	ARG
39	2h	112	LEU
39	2h	127	LEU
39	2h	134	ILE
39	2h	135	CYS
39	2h	137	VAL
40	2i	27	THR

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Mol	Chain	Res	Type
40	2i	41	VAL
40	2i	47	LEU
40	2i	50	LEU
40	2i	54	ASP
40	2i	56	LEU
40	2i	58	HIS
40	2i	64	THR
40	2i	75	ASP
40	2i	89	ASN
40	2i	99	LEU
40	2i	102	LEU
41	2j	8	LEU
41	2j	21	GLN
41	2j	23	ILE
41	2j	25	GLU
41	2j	33	GLN
41	2j	38	ILE
41	2j	61	GLU
41	2j	66	ARG
41	2j	67	THR
41	2j	72	VAL
41	2j	84	GLN
41	2j	85	LEU
41	2j	100	THR
42	2k	14	VAL
42	2k	41	THR
42	2k	48	ILE
42	2k	53	SER
42	2k	82	VAL
42	2k	107	SER
42	2k	123	LYS
43	2l	11	VAL
43	2l	39	VAL
43	2l	57	LYS
43	2l	58	VAL
43	2l	62	SER
43	2l	78	GLN
43	2l	116	SER
44	2m	4	ILE
44	2m	15	VAL
44	2m	53	VAL
44	2m	54	VAL

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Mol	Chain	Res	Type
44	2m	70	LEU
44	2m	81	LEU
44	2m	86	CYS
44	2m	103	THR
44	2m	106	ASN
44	2m	108	ARG
44	2m	117	VAL
45	2n	3	ARG
45	2n	12	ARG
45	2n	13	THR
45	2n	18	VAL
45	2n	22	THR
45	2n	32	SER
45	2n	33	VAL
45	2n	50	LYS
45	2n	56	VAL
45	2n	58	LYS
46	2o	3	ILE
46	2o	38	ARG
46	2o	39	LEU
46	2o	54	ARG
46	2o	56	LEU
46	2o	88	ARG
47	2p	2	VAL
47	2p	4	ILE
47	2p	20	VAL
47	2p	21	VAL
47	2p	57	ARG
47	2p	67	THR
47	2p	73	LEU
47	2p	74	LEU
48	2q	5	VAL
48	2q	7	THR
48	2q	19	VAL
48	2q	36	ILE
48	2q	41	LYS
48	2q	53	LEU
48	2q	63	ARG
48	2q	76	LEU
48	2q	78	GLU
48	2q	83	ASP
48	2q	86	GLU

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Mol	Chain	Res	Type
48	2q	98	LEU
49	2r	25	THR
49	2r	26	LEU
49	2r	31	LEU
49	2r	37	VAL
49	2r	47	THR
49	2r	84	LYS
50	2s	4	SER
50	2s	15	LEU
50	2s	20	LEU
50	2s	27	GLU
50	2s	30	LEU
50	2s	41	VAL
50	2s	45	VAL
50	2s	47	HIS
50	2s	48	THR
50	2s	49	ILE
50	2s	58	VAL
50	2s	71	LEU
50	2s	81	ARG
51	2t	15	ARG
51	2t	45	GLN
51	2t	46	GLU
51	2t	70	SER
51	2t	93	GLU
52	2u	6	ARG
52	2u	7	ARG
52	2u	15	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (149) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	126	GLN
4	1E	48	GLN
4	1E	143	ASN
5	1F	8	GLN
5	1F	133	ASN
5	1F	203	GLN
6	1G	26	GLN
6	1G	40	ASN
8	1I	133	HIS

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Mol	Chain	Res	Type
9	1N	8	GLN
9	1N	94	HIS
9	1N	131	GLN
12	1Q	12	GLN
12	1Q	123	HIS
13	1R	71	GLN
13	1R	91	GLN
14	1S	68	GLN
15	1T	58	ASN
15	1T	84	GLN
15	1T	90	GLN
16	1U	81	HIS
16	1U	94	ASN
16	1U	117	GLN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	92	ASN
21	1Z	54	HIS
21	1Z	73	GLN
21	1Z	151	HIS
25	13	32	GLN
26	14	47	GLN
28	16	20	ASN
33	1b	78	GLN
33	1b	140	HIS
34	1c	6	HIS
34	1c	37	GLN
34	1c	108	ASN
34	1c	118	GLN
34	1c	162	GLN
34	1c	170	GLN
34	1c	181	ASN
35	1d	116	GLN
36	1e	38	GLN
36	1e	78	HIS
37	1f	57	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	68	ASN

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Mol	Chain	Res	Type
38	1g	96	GLN
38	1g	110	GLN
40	1i	3	GLN
40	1i	31	GLN
40	1i	34	ASN
40	1i	58	HIS
40	1i	124	GLN
43	1l	99	HIS
44	1m	12	ASN
44	1m	77	ASN
46	1o	46	HIS
46	1o	50	HIS
46	1o	62	GLN
49	1r	63	GLN
50	1s	23	ASN
50	1s	57	HIS
50	1s	83	HIS
51	1t	90	GLN
3	2D	87	ASN
4	2E	48	GLN
4	2E	121	ASN
4	2E	169	ASN
5	2F	69	HIS
5	2F	75	HIS
5	2F	160	ASN
6	2G	40	ASN
7	2H	74	ASN
7	2H	111	HIS
7	2H	143	GLN
8	2I	133	HIS
9	2N	8	GLN
9	2N	131	GLN
10	2O	5	GLN
12	2Q	12	GLN
12	2Q	113	GLN
13	2R	11	ASN
13	2R	61	HIS
14	2S	38	GLN
14	2S	68	GLN
14	2S	84	GLN
16	2U	72	HIS
16	2U	94	ASN

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Mol	Chain	Res	Type
16	2U	117	GLN
19	2X	31	HIS
20	2Y	6	HIS
21	2Z	30	ASN
21	2Z	32	HIS
21	2Z	55	HIS
21	2Z	73	GLN
21	2Z	121	HIS
24	22	9	GLN
26	24	20	ASN
26	24	46	GLN
28	26	20	ASN
30	28	35	GLN
31	29	29	ASN
33	2b	40	HIS
33	2b	45	GLN
33	2b	95	GLN
33	2b	135	GLN
33	2b	146	GLN
33	2b	212	GLN
34	2c	102	ASN
34	2c	162	GLN
35	2d	42	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	201	GLN
36	2e	72	GLN
36	2e	73	ASN
36	2e	141	GLN
37	2f	73	ASN
37	2f	100	ASN
38	2g	28	ASN
38	2g	37	ASN
38	2g	68	ASN
40	2i	3	GLN
40	2i	31	GLN
40	2i	58	HIS
40	2i	73	GLN
40	2i	117	HIS
41	2j	33	GLN

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Mol	Chain	Res	Type
42	2k	22	HIS
42	2k	38	ASN
42	2k	117	ASN
43	2l	99	HIS
44	2m	77	ASN
46	2o	62	GLN
46	2o	71	GLN
49	2r	63	GLN
50	2s	57	HIS
50	2s	65	ASN
50	2s	69	HIS
51	2t	75	ASN
51	2t	90	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	439 (15%)	40 (1%)
1	2A	2791/2915 (95%)	499 (17%)	39 (1%)
2	1B	119/121 (98%)	14 (11%)	0
2	2B	118/121 (97%)	29 (24%)	0
32	1a	1497/1521 (98%)	239 (15%)	0
32	2a	1501/1521 (98%)	313 (20%)	0
53	1v	12/24 (50%)	1 (8%)	0
53	2v	12/24 (50%)	1 (8%)	0
54	1w	69/76 (90%)	23 (33%)	0
54	1y	72/76 (94%)	24 (33%)	0
54	2w	66/76 (86%)	16 (24%)	0
54	2y	70/76 (92%)	20 (28%)	0
55	1x	74/77 (96%)	6 (8%)	0
55	2x	74/77 (96%)	8 (10%)	0
All	All	9339/9620 (97%)	1632 (17%)	79 (0%)

All (1632) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	13	A
1	1A	34	C
1	1A	36	G
1	1A	45	C

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Mol	Chain	Res	Type
1	1A	63	U
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	95	G
1	1A	119	A
1	1A	120	U
1	1A	154(A)	C
1	1A	181	A
1	1A	196	A
1	1A	197	A
1	1A	205	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	271(A)	A
1	1A	271(C)	C
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(B)	G
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	352	G
1	1A	357	A
1	1A	363	G
1	1A	363(B)	G
1	1A	380	U
1	1A	386	G
1	1A	396	G

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Mol	Chain	Res	Type
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(D)	C
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	670	A
1	1A	685	A
1	1A	686	G
1	1A	717	G
1	1A	730	C

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Mol	Chain	Res	Type
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	765	G
1	1A	774	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	789	A
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	836	G
1	1A	855	G
1	1A	859	G
1	1A	866	A
1	1A	879	G
1	1A	880	G
1	1A	882	G
1	1A	883	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	890	A
1	1A	894	C
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	900	A
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G

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Mol	Chain	Res	Type
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1033	U
1	1A	1038	C
1	1A	1041	C
1	1A	1044	G
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A
1	1A	1055	G
1	1A	1058	G
1	1A	1063	G
1	1A	1068	G
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1082	U
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1091	G
1	1A	1093	G
1	1A	1094	U

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Mol	Chain	Res	Type
1	1A	1096	A
1	1A	1098	A
1	1A	1101	U
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1120	G
1	1A	1129	A
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1137	G
1	1A	1142(A)	A
1	1A	1143	A
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1229	G
1	1A	1248	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1289	C
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1396	U

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Mol	Chain	Res	Type
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1461	G
1	1A	1467	C
1	1A	1473	G
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1518	U
1	1A	1540	U
1	1A	1542	A
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1580	A
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1610	A
1	1A	1640	C
1	1A	1648	C
1	1A	1654	A
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1746	G
1	1A	1756	G
1	1A	1763	G

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Mol	Chain	Res	Type
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1816	G
1	1A	1817	G
1	1A	1829	A
1	1A	1839	G
1	1A	1847	A
1	1A	1858	G
1	1A	1861	G
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1919	A
1	1A	1927	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1984	G
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2039	C

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Mol	Chain	Res	Type
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A
1	1A	2069	G
1	1A	2093	G
1	1A	2098	U
1	1A	2101	G
1	1A	2102	U
1	1A	2108	C
1	1A	2110	G
1	1A	2112	G
1	1A	2113	U
1	1A	2114	A
1	1A	2116	G
1	1A	2118	U
1	1A	2121	G
1	1A	2122	U
1	1A	2126	A
1	1A	2127	G
1	1A	2129	C
1	1A	2130	U
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2140	C
1	1A	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2161	C

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Mol	Chain	Res	Type
1	1A	2165	G
1	1A	2166	G
1	1A	2168	G
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
1	1A	2177	C
1	1A	2178	C
1	1A	2181	G
1	1A	2182	G
1	1A	2183	C
1	1A	2184	G
1	1A	2189	U
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2280	G
1	1A	2283	C
1	1A	2286	A
1	1A	2287	A
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2321	G
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2361	A
1	1A	2372	G
1	1A	2379	G
1	1A	2383	G
1	1A	2385	C

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Mol	Chain	Res	Type
1	1A	2400	G
1	1A	2406	U
1	1A	2407	G
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2440	C
1	1A	2441	C
1	1A	2448	A
1	1A	2476	A
1	1A	2478	A
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2689	U
1	1A	2690	C
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2757	A
1	1A	2765	A
1	1A	2766	G

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Mol	Chain	Res	Type
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G
1	1A	2794	C
1	1A	2802	G
1	1A	2803	C
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2839	G
1	1A	2872	G
1	1A	2892	A
1	1A	2894	G
2	1B	2	C
2	1B	10	C
2	1B	12	C
2	1B	13	A
2	1B	15	A
2	1B	25	A
2	1B	42	C
2	1B	50	G
2	1B	56	G
2	1B	67	G
2	1B	73	A
2	1B	85	G
2	1B	106	G
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	22	G
32	1a	31	G
32	1a	32	A
32	1a	33	A
32	1a	39	G
32	1a	48	C
32	1a	51	A
32	1a	52	G
32	1a	61	G
32	1a	77	G
32	1a	79	G
32	1a	91	C

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Mol	Chain	Res	Type
32	1a	98	G
32	1a	100	C
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	147	G
32	1a	162	A
32	1a	163	C
32	1a	165	C
32	1a	166	G
32	1a	174	C
32	1a	180	U
32	1a	182	U
32	1a	189(F)	U
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	237	C
32	1a	247	G
32	1a	248	C
32	1a	251	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	345	C
32	1a	348	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	388	G

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Mol	Chain	Res	Type
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	424	G
32	1a	427	U
32	1a	429	U
32	1a	436	C
32	1a	439	A
32	1a	441	A
32	1a	442	C
32	1a	452	A
32	1a	453	A
32	1a	461	A
32	1a	470	C
32	1a	471	G
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	513	C
32	1a	518	C
32	1a	524	G
32	1a	528	C
32	1a	531	U
32	1a	532	A
32	1a	534	U
32	1a	536	C
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	562	C
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	576	G

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Mol	Chain	Res	Type
32	1a	577	G
32	1a	596	C
32	1a	630	G
32	1a	653	A
32	1a	665	A
32	1a	673	G
32	1a	687	A
32	1a	688	G
32	1a	693	G
32	1a	695	A
32	1a	723	U
32	1a	724	G
32	1a	731	G
32	1a	749	C
32	1a	753	A
32	1a	755	G
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	806	C
32	1a	815	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	895	G
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	936	C
32	1a	950	U
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A

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Mol	Chain	Res	Type
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	998	G
32	1a	1000	U
32	1a	1001	A
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1009	G
32	1a	1015	A
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1033	G
32	1a	1039	C
32	1a	1043	C
32	1a	1044	A
32	1a	1068	G
32	1a	1081	G
32	1a	1086	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1124	G
32	1a	1125	U
32	1a	1127	G
32	1a	1132	C
32	1a	1134	G
32	1a	1137	C

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Mol	Chain	Res	Type
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1157	A
32	1a	1159	U
32	1a	1165	C
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1212	U
32	1a	1213	A
32	1a	1214	C
32	1a	1222	G
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1260	C
32	1a	1272	G
32	1a	1275	A
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1290	G
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1320	C
32	1a	1338	G
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1364	U
32	1a	1419	G
32	1a	1442	G

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Mol	Chain	Res	Type
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1456	G
32	1a	1464	G
32	1a	1469	G
32	1a	1487	G
32	1a	1492	A
32	1a	1494	G
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
32	1a	1532	U
53	1v	13	A
54	1w	2	C
54	1w	3	C
54	1w	6	G
54	1w	7	A
54	1w	8	4SU
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	50	U
54	1w	62	C
54	1w	64	A
54	1w	68	C
54	1w	69	G
54	1w	70	G
54	1w	71	G
54	1w	73	A
55	1x	6	G
55	1x	9	G
55	1x	19	G

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Mol	Chain	Res	Type
55	1x	21	A
55	1x	47	U
55	1x	61	C
54	1y	5	G
54	1y	6	G
54	1y	9	A
54	1y	11	C
54	1y	13	C
54	1y	14	A
54	1y	15	G
54	1y	19	G
54	1y	20	U
54	1y	21	A
54	1y	23	A
54	1y	34	G
54	1y	35	A
54	1y	44	G
54	1y	45	U
54	1y	46	G7M
54	1y	47	U
54	1y	48	C
54	1y	53	G
54	1y	56	C
54	1y	57	G
54	1y	58	A
54	1y	59	U
54	1y	70	G
1	2A	8	A
1	2A	12	U
1	2A	15	G
1	2A	28	A
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	51	G
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	90	U
1	2A	94	C

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Mol	Chain	Res	Type
1	2A	95	G
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	141	A
1	2A	154(A)	C
1	2A	157	U
1	2A	173	G
1	2A	181	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	264	C
1	2A	265	A
1	2A	266	G
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	310	A
1	2A	311	A
1	2A	312	G
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	342	G

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Mol	Chain	Res	Type
1	2A	352	G
1	2A	363	G
1	2A	363(B)	G
1	2A	363(E)	U
1	2A	386	G
1	2A	389	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	421	U
1	2A	435	C
1	2A	443	A
1	2A	444	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	501	A
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	588	U
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(A)	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	633	A

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Mol	Chain	Res	Type
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	664	C
1	2A	669	G
1	2A	686	G
1	2A	717	G
1	2A	726	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	771	G
1	2A	774	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	825	C
1	2A	827	U
1	2A	828	U
1	2A	832	G
1	2A	833	U
1	2A	847	U
1	2A	852	G
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	867	C
1	2A	874	G
1	2A	875	G
1	2A	877	U
1	2A	878	A
1	2A	879	G
1	2A	880	G

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Mol	Chain	Res	Type
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	892	G
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	897	C
1	2A	900	A
1	2A	901	A
1	2A	903	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	941	A
1	2A	944	G
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	995	C
1	2A	996	A
1	2A	999	U
1	2A	1005	C
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1020	A
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G

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Mol	Chain	Res	Type
1	2A	1041	C
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1117	G
1	2A	1128	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1142(A)	A
1	2A	1144	G
1	2A	1171	G
1	2A	1195	G
1	2A	1206	G
1	2A	1210	A
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1237	A
1	2A	1252	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1284	A
1	2A	1300	U
1	2A	1301	A
1	2A	1308	A
1	2A	1314	C
1	2A	1338	G
1	2A	1345	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G

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Mol	Chain	Res	Type
1	2A	1413	G
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1426	G
1	2A	1427	A
1	2A	1428	C
1	2A	1435	G
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1455	G
1	2A	1460	A
1	2A	1461	G
1	2A	1463	C
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1496	A
1	2A	1497	U
1	2A	1506	C
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1532	C
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1559	G
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1608	A

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Mol	Chain	Res	Type
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1647	G
1	2A	1648	C
1	2A	1654	A
1	2A	1674	G
1	2A	1693	U
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1746	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1811	G
1	2A	1812	A
1	2A	1816	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1857	G
1	2A	1860	G
1	2A	1877	A
1	2A	1878	G
1	2A	1900	A
1	2A	1906	G
1	2A	1914	C

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Mol	Chain	Res	Type
1	2A	1929	G
1	2A	1930	G
1	2A	1931	U
1	2A	1936	A
1	2A	1938	A
1	2A	1939	5MU
1	2A	1941	C
1	2A	1955	U
1	2A	1960	A
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2069	G
1	2A	2093	G
1	2A	2099	U
1	2A	2109	U
1	2A	2111	C
1	2A	2112	G
1	2A	2113	U
1	2A	2116	G
1	2A	2117	A
1	2A	2120	G
1	2A	2122	U
1	2A	2126	A
1	2A	2127	G
1	2A	2128	C
1	2A	2129	C

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Mol	Chain	Res	Type
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2140	C
1	2A	2142	C
1	2A	2145	C
1	2A	2146	C
1	2A	2148	G
1	2A	2150	U
1	2A	2151	G
1	2A	2153	G
1	2A	2154	G
1	2A	2156	G
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2161	C
1	2A	2164	C
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2172	U
1	2A	2174	C
1	2A	2178	C
1	2A	2183	C
1	2A	2185	C
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2235	G
1	2A	2238	G
1	2A	2239	G

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Mol	Chain	Res	Type
1	2A	2258	C
1	2A	2259	G
1	2A	2262	U
1	2A	2267	A
1	2A	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2303	G
1	2A	2305	A
1	2A	2308	G
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2334	G
1	2A	2335	A
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2376	A
1	2A	2377	A
1	2A	2383	G
1	2A	2385	C
1	2A	2388	A
1	2A	2395	C
1	2A	2403	C
1	2A	2406	U
1	2A	2407	G
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2431	U
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2449	U

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Mol	Chain	Res	Type
1	2A	2465	C
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2487	G
1	2A	2490	G
1	2A	2491	U
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2507	C
1	2A	2518	A
1	2A	2520	C
1	2A	2525	G
1	2A	2529	G
1	2A	2536	G
1	2A	2554	U
1	2A	2555	U
1	2A	2557	G
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2602	A
1	2A	2611	U
1	2A	2612	C
1	2A	2630	G
1	2A	2654	A
1	2A	2667	C
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2741	A
1	2A	2751	G
1	2A	2757	A
1	2A	2759	G

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Mol	Chain	Res	Type
1	2A	2762	G
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A
1	2A	2780	G
1	2A	2789	C
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2804	C
1	2A	2807	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2839	G
1	2A	2872	G
1	2A	2873	A
1	2A	2880	C
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	5	C
2	2B	8	U
2	2B	13	A
2	2B	17	C
2	2B	19	G
2	2B	20	C
2	2B	25	A
2	2B	32	C
2	2B	34	U
2	2B	40	U
2	2B	41	U
2	2B	42	C
2	2B	51	G
2	2B	53	A
2	2B	56	G
2	2B	63	G
2	2B	73	A
2	2B	74	U
2	2B	75	G

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Mol	Chain	Res	Type
2	2B	84	C
2	2B	85	G
2	2B	88	C
2	2B	91	C
2	2B	108	U
2	2B	110	G
2	2B	111	G
2	2B	116	G
2	2B	120	A
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	52	G
32	2a	66	G
32	2a	73	G
32	2a	80	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	112	G
32	2a	115	G
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	142	G
32	2a	144	G
32	2a	159	G
32	2a	163	C
32	2a	182	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	217	C
32	2a	247	G

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Mol	Chain	Res	Type
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	269	C
32	2a	281	G
32	2a	289	G
32	2a	301	G
32	2a	318	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	339	C
32	2a	349	A
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	411	A
32	2a	412	A
32	2a	413	G
32	2a	415	A
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	470	C
32	2a	471	G
32	2a	485	G
32	2a	496	A
32	2a	498	U

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Mol	Chain	Res	Type
32	2a	499	A
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	517	G
32	2a	518	C
32	2a	521	G
32	2a	527	G7M
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	560	U
32	2a	561	U
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	574	A
32	2a	576	G
32	2a	577	G
32	2a	581	G
32	2a	595	G
32	2a	596	C
32	2a	597	G
32	2a	607	A
32	2a	613	C
32	2a	614	A
32	2a	619	U
32	2a	630	G
32	2a	653	A
32	2a	657	G
32	2a	665	A
32	2a	666	G
32	2a	673	G
32	2a	687	A
32	2a	688	G
32	2a	693	G
32	2a	695	A
32	2a	705	U
32	2a	720	C

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Mol	Chain	Res	Type
32	2a	721	G
32	2a	723	U
32	2a	731	G
32	2a	749	C
32	2a	755	G
32	2a	777	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	805	C
32	2a	807	A
32	2a	816	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	833	U
32	2a	834	C
32	2a	840	C
32	2a	841	U
32	2a	853	G
32	2a	855	G
32	2a	859	A
32	2a	870	U
32	2a	874	G
32	2a	885	G
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	934	C
32	2a	935	A
32	2a	942	G
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	963	G
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	974	A
32	2a	975	A

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Mol	Chain	Res	Type
32	2a	976	G
32	2a	977	A
32	2a	978	A
32	2a	984	C
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	995	C
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1001	A
32	2a	1003	G
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1017	G
32	2a	1020	U
32	2a	1021	G
32	2a	1022	G
32	2a	1023	G
32	2a	1024	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1029	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1033	G
32	2a	1035	A
32	2a	1036	G
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1043	C
32	2a	1044	A
32	2a	1046	A
32	2a	1050	G
32	2a	1053	G

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Mol	Chain	Res	Type
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1078	U
32	2a	1079	G
32	2a	1080	A
32	2a	1081	G
32	2a	1085	U
32	2a	1086	U
32	2a	1087	G
32	2a	1089	G
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1105	A
32	2a	1109	C
32	2a	1115	C
32	2a	1116	C
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1133	G
32	2a	1135	U
32	2a	1136	U
32	2a	1137	C
32	2a	1139	G
32	2a	1140	C
32	2a	1141	C
32	2a	1146	A
32	2a	1152	A
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1160	G
32	2a	1171	G
32	2a	1172	C
32	2a	1173	G
32	2a	1182	G

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Mol	Chain	Res	Type
32	2a	1184	G
32	2a	1189	C
32	2a	1191	A
32	2a	1193	G
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1210	C
32	2a	1211	U
32	2a	1213	A
32	2a	1214	C
32	2a	1218	C
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1261	A
32	2a	1264	C
32	2a	1267	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1276	G
32	2a	1279	A
32	2a	1280	A
32	2a	1287	A
32	2a	1290	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1323	G
32	2a	1324	A
32	2a	1338	G
32	2a	1346	A
32	2a	1347	G
32	2a	1358	U
32	2a	1359	C
32	2a	1363	C

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Mol	Chain	Res	Type
32	2a	1368	G
32	2a	1370	G
32	2a	1378	C
32	2a	1381	U
32	2a	1398	A
32	2a	1402	4OC
32	2a	1404	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1487	G
32	2a	1492	A
32	2a	1497	G
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1519	MA6
32	2a	1520	G
32	2a	1523	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
54	2w	3	C
54	2w	5	G
54	2w	6	G
54	2w	7	A
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	46	G7M
54	2w	48	C
54	2w	61	C
54	2w	62	C
54	2w	66	U
54	2w	69	G

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Mol	Chain	Res	Type
54	2w	70	G
54	2w	71	G
54	2w	73	A
55	2x	9	G
55	2x	18	G
55	2x	19	G
55	2x	21	A
55	2x	47	U
55	2x	48	C
55	2x	52	G
55	2x	61	C
54	2y	15	G
54	2y	19	G
54	2y	24	G
54	2y	27	G
54	2y	40	C
54	2y	45	U
54	2y	48	C
54	2y	49	C
54	2y	52	G
54	2y	53	G
54	2y	54	5MU
54	2y	55	PSU
54	2y	56	C
54	2y	57	G
54	2y	58	A
54	2y	59	U
54	2y	65	G
54	2y	69	G
54	2y	70	G
54	2y	73	A

All (79) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	199	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	669	G

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Mol	Chain	Res	Type
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	827	U
1	1A	974	G
1	1A	1047	G
1	1A	1067	A
1	1A	1128	A
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1176	G
1	1A	1379	A
1	1A	1420	U
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1762	A
1	1A	1992	G
1	1A	2126	A
1	1A	2134	A
1	1A	2181	G
1	1A	2183	C
1	1A	2238	G
1	1A	2250	G
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A
1	1A	2611	U
1	1A	2629	A
1	1A	2689	U
1	1A	2756	U
1	2A	34	C
1	2A	196	A
1	2A	199	A
1	2A	228	A
1	2A	249	C
1	2A	266	G
1	2A	271(K)	U
1	2A	271(M)	G
1	2A	277	C

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Mol	Chain	Res	Type
1	2A	310	A
1	2A	528	A
1	2A	685	A
1	2A	746	A
1	2A	752	A
1	2A	774	A
1	2A	805	G
1	2A	827	U
1	2A	856	C
1	2A	900	A
1	2A	974	G
1	2A	1026	U
1	2A	1210	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1939	5MU
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2335	A
1	2A	2406	U
1	2A	2439	A
1	2A	2448	A
1	2A	2689	U
1	2A	2756	U

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

86 non-standard protein/DNA/RNA residues are modelled in this entry.

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
55	5MU	2x	54	55	19,22,23	1.45	5 (26%)	27,32,35	2.25	7 (25%)
1	PSU	2A	1917	1	18,21,22	1.35	2 (11%)	21,30,33	1.96	3 (14%)
54	4SU	1y	8	54	18,21,22	1.60	4 (22%)	25,30,33	1.68	5 (20%)
1	OMG	1A	2251	55,1,56	23,26,27	1.34	3 (13%)	32,38,41	1.89	6 (18%)
1	PSU	1A	1917	1	18,21,22	1.38	3 (16%)	21,30,33	2.14	4 (19%)
54	PSU	2y	39	54	18,21,22	1.30	2 (11%)	21,30,33	1.84	4 (19%)
54	MIA	1w	37	54	28,31,32	2.25	8 (28%)	38,44,47	3.00	12 (31%)
54	PSU	1w	55	54	18,21,22	1.45	2 (11%)	21,30,33	1.99	4 (19%)
1	5MU	2A	1939	1,56	19,22,23	1.52	4 (21%)	27,32,35	2.57	6 (22%)
54	5MU	2y	54	54	19,22,23	1.59	5 (26%)	27,32,35	2.09	9 (33%)
55	31H	2x	76	55,56	31,34,35	1.42	4 (12%)	35,47,50	2.10	11 (31%)
32	4OC	2a	1402	32,56	20,23,24	0.80	1 (5%)	25,32,35	1.06	2 (8%)
54	G7M	1w	46	54	23,26,27	1.58	4 (17%)	34,39,42	1.54	5 (14%)
54	PSU	1y	39	54	18,21,22	1.44	2 (11%)	21,30,33	1.87	4 (19%)
54	PSU	2w	39	54	18,21,22	1.37	2 (11%)	21,30,33	2.03	4 (19%)
54	G7M	2w	46	54	23,26,27	1.39	5 (21%)	34,39,42	1.62	7 (20%)
1	PSU	2A	2605	1	18,21,22	1.27	3 (16%)	21,30,33	2.21	5 (23%)
32	MA6	1a	1518	32	23,26,27	0.40	0	33,38,41	2.06	9 (27%)
1	OMU	2A	2552	1,56	19,22,23	1.18	3 (15%)	25,31,34	1.66	5 (20%)
32	4OC	1a	1402	32	20,23,24	0.84	1 (5%)	25,32,35	1.10	2 (8%)
54	4SU	2w	8	54	18,21,22	1.52	3 (16%)	25,30,33	2.24	5 (20%)
32	PSU	2a	516	32	18,21,22	1.30	1 (5%)	21,30,33	1.88	4 (19%)
32	UR3	1a	1498	32	19,22,23	1.16	2 (10%)	26,32,35	1.76	5 (19%)
54	PSU	1y	32	54	18,21,22	1.37	3 (16%)	21,30,33	1.81	3 (14%)
54	4SU	1w	8	54	18,21,22	1.70	5 (27%)	25,30,33	1.95	5 (20%)
1	5MU	1A	1915	1	19,22,23	1.47	4 (21%)	27,32,35	2.12	8 (29%)
54	5MU	1y	54	54	19,22,23	1.55	5 (26%)	27,32,35	1.80	7 (25%)
32	5MC	2a	1407	32	19,22,23	1.43	3 (15%)	26,32,35	1.36	3 (11%)
32	PSU	1a	516	32,56	18,21,22	1.42	3 (16%)	21,30,33	1.85	6 (28%)
1	PSU	2A	1911	1	18,21,22	1.35	2 (11%)	21,30,33	1.91	4 (19%)
32	5MC	1a	967	32	19,22,23	1.85	2 (10%)	26,32,35	1.13	2 (7%)
1	5MU	2A	1915	1	19,22,23	1.48	3 (15%)	27,32,35	2.05	5 (18%)
1	5MC	2A	1962	1,56	19,22,23	1.72	3 (15%)	26,32,35	1.25	4 (15%)
1	PSU	1A	1911	1	18,21,22	1.44	3 (16%)	21,30,33	1.99	3 (14%)
54	G7M	1y	46	54	23,26,27	1.51	3 (13%)	34,39,42	1.65	4 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	5MC	2a	967	32	19,22,23	1.68	2 (10%)	26,32,35	1.21	2 (7%)
32	M2G	2a	966	32	24,27,28	1.28	4 (16%)	33,40,43	1.91	7 (21%)
43	0TD	2l	92	43	8,9,10	4.69	1 (12%)	6,11,13	4.41	2 (33%)
1	OMC	2A	1920	1	19,22,23	0.72	0	25,31,34	0.88	1 (4%)
54	MIA	2w	37	54	24,27,32	2.16	7 (29%)	32,39,47	2.78	11 (34%)
1	2MA	1A	2503	1,56	22,25,26	1.44	4 (18%)	32,37,40	2.12	7 (21%)
55	4SU	1x	8	55	18,21,22	2.26	5 (27%)	25,30,33	2.40	8 (32%)
54	5MU	1w	54	54	19,22,23	1.32	4 (21%)	27,32,35	2.26	6 (22%)
55	5MU	1x	54	55,56	19,22,23	1.44	5 (26%)	27,32,35	2.27	6 (22%)
32	M2G	1a	966	32	24,27,28	1.30	4 (16%)	33,40,43	1.87	5 (15%)
54	G7M	2y	46	54	23,26,27	1.61	3 (13%)	34,39,42	1.86	4 (11%)
32	5MC	1a	1407	32	19,22,23	1.50	2 (10%)	26,32,35	1.25	3 (11%)
43	0TD	1l	92	43	8,9,10	4.23	3 (37%)	6,11,13	6.30	2 (33%)
1	OMC	1A	1920	1	19,22,23	0.82	0	25,31,34	0.92	0
32	G7M	2a	527	32,56	23,26,27	1.50	4 (17%)	34,39,42	1.65	4 (11%)
54	PSU	2y	55	54	18,21,22	1.38	2 (11%)	21,30,33	2.03	5 (23%)
32	MA6	2a	1519	32	23,26,27	0.45	0	33,38,41	2.15	10 (30%)
1	2MA	2A	2503	1,56	22,25,26	1.50	6 (27%)	32,37,40	2.52	8 (25%)
55	PSU	2x	55	55	18,21,22	1.43	2 (11%)	21,30,33	2.15	5 (23%)
32	2MG	1a	1207	32	23,26,27	1.21	2 (8%)	33,38,41	2.30	10 (30%)
55	5MC	2x	32	55	19,22,23	1.63	2 (10%)	26,32,35	1.43	4 (15%)
54	PSU	1y	55	54	18,21,22	1.44	1 (5%)	21,30,33	2.08	4 (19%)
54	PSU	1w	39	54	18,21,22	1.28	2 (11%)	21,30,33	2.23	4 (19%)
1	PSU	1A	2605	1,56	18,21,22	1.66	3 (16%)	21,30,33	2.24	5 (23%)
1	5MC	1A	1962	1,56	19,22,23	1.53	2 (10%)	26,32,35	1.28	4 (15%)
1	5MC	1A	1942	1	19,22,23	1.43	3 (15%)	26,32,35	1.31	4 (15%)
1	OMU	1A	2552	1,56	19,22,23	1.11	2 (10%)	25,31,34	2.29	5 (20%)
54	5MU	2w	54	54	19,22,23	1.27	3 (15%)	27,32,35	1.76	6 (22%)
54	PSU	2w	32	54	18,21,22	1.38	3 (16%)	21,30,33	1.98	4 (19%)
54	MIA	2y	37	54	21,24,32	1.72	3 (14%)	30,35,47	1.96	8 (26%)
32	G7M	1a	527	32,56	23,26,27	1.54	4 (17%)	34,39,42	1.66	5 (14%)
54	PSU	2w	55	54,56	18,21,22	1.51	3 (16%)	21,30,33	1.99	4 (19%)
32	2MG	2a	1207	32	23,26,27	1.26	3 (13%)	33,38,41	2.11	7 (21%)
1	5MC	2A	1942	1	19,22,23	1.55	3 (15%)	26,32,35	1.21	3 (11%)
54	MIA	1y	37	54	21,24,32	1.71	3 (14%)	30,35,47	1.90	9 (30%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	5MC	2a	1404	32	19,22,23	1.79	3 (15%)	26,32,35	1.36	4 (15%)
32	5MC	2a	1400	32	19,22,23	1.72	3 (15%)	26,32,35	1.36	3 (11%)
32	5MC	1a	1400	32	19,22,23	1.50	3 (15%)	26,32,35	1.36	4 (15%)
54	PSU	2y	32	54	18,21,22	1.40	1 (5%)	21,30,33	1.98	3 (14%)
54	4SU	2y	8	54	18,21,22	1.64	5 (27%)	25,30,33	2.35	6 (24%)
55	4SU	2x	8	55	18,21,22	2.03	5 (27%)	25,30,33	1.60	8 (32%)
32	MA6	1a	1519	32	23,26,27	0.48	0	33,38,41	1.95	9 (27%)
1	OMG	2A	2251	55,1,56	23,26,27	1.27	3 (13%)	32,38,41	1.97	8 (25%)
32	5MC	1a	1404	32	19,22,23	1.84	3 (15%)	26,32,35	1.32	4 (15%)
55	31H	1x	76	55,56	31,34,35	1.36	4 (12%)	35,47,50	2.43	12 (34%)
55	5MC	1x	32	55	19,22,23	1.54	3 (15%)	26,32,35	1.48	3 (11%)
32	MA6	2a	1518	32	23,26,27	0.48	0	33,38,41	2.01	9 (27%)
55	PSU	1x	55	55	18,21,22	1.31	1 (5%)	21,30,33	1.87	4 (19%)
1	5MU	1A	1939	1,56	19,22,23	1.49	4 (21%)	27,32,35	2.62	6 (22%)
32	UR3	2a	1498	32,56	19,22,23	1.05	2 (10%)	26,32,35	1.96	3 (11%)
54	PSU	1w	32	54	18,21,22	1.34	2 (11%)	21,30,33	1.89	3 (14%)

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
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
54	4SU	1y	8	54	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	55,1,56	-	0/9/27/28	0/3/3/3
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
54	PSU	2y	39	54	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	3/15/33/34	0/3/3/3
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	1,56	-	1/7/25/26	0/2/2/2
54	5MU	2y	54	54	-	3/7/25/26	0/2/2/2
55	31H	2x	76	55,56	-	4/22/40/41	0/3/3/3
32	4OC	2a	1402	32,56	-	3/9/29/30	0/2/2/2
54	G7M	1w	46	54	-	1/7/25/26	0/3/3/3
54	PSU	1y	39	54	-	0/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	G7M	2w	46	54	-	3/7/25/26	0/3/3/3
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3
1	OMU	2A	2552	1,56	-	0/9/27/28	0/2/2/2
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
54	PSU	1y	32	54	-	0/7/25/26	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	1/7/25/26	0/2/2/2
54	5MU	1y	54	54	-	1/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32,56	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	1/7/25/26	0/2/2/2
1	5MC	2A	1962	1,56	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
54	G7M	1y	46	54	-	1/7/25/26	0/3/3/3
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
43	0TD	2l	92	43	-	2/7/12/14	-
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
54	MIA	2w	37	54	-	2/11/29/34	0/3/3/3
1	2MA	1A	2503	1,56	-	0/7/25/26	0/3/3/3
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
55	5MU	1x	54	55,56	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
54	G7M	2y	46	54	-	2/7/25/26	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	5/7/12/14	-
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
32	G7M	2a	527	32,56	-	3/7/25/26	0/3/3/3
54	PSU	2y	55	54	-	6/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	2/11/29/30	0/3/3/3
1	2MA	2A	2503	1,56	-	1/7/25/26	0/3/3/3
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	2/9/27/28	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
54	PSU	1y	55	54	-	2/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	1,56	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1,56	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	1,56	-	0/9/27/28	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
54	MIA	2y	37	54	-	0/7/25/34	0/3/3/3
32	G7M	1a	527	32,56	-	2/7/25/26	0/3/3/3
54	PSU	2w	55	54,56	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	2/9/27/28	0/3/3/3
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
54	MIA	1y	37	54	-	0/7/25/34	0/3/3/3
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
54	PSU	2y	32	54	-	0/7/25/26	0/2/2/2
54	4SU	2y	8	54	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/11/29/30	0/3/3/3
1	OMG	2A	2251	55,1,56	-	0/9/27/28	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
55	31H	1x	76	55,56	-	4/22/40/41	0/3/3/3
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	1,56	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32,56	-	0/7/25/26	0/2/2/2
54	PSU	1w	32	54	-	0/7/25/26	0/2/2/2

All (250) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.90	1.69	1.82
43	1l	92	0TD	CB-SB	-10.73	1.71	1.82
32	1a	967	5MC	C5-C4	6.86	1.49	1.44
32	1a	1404	5MC	C5-C4	6.81	1.49	1.44
54	1w	37	MIA	C13-C14	6.77	1.52	1.32
32	2a	1404	5MC	C5-C4	6.39	1.49	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	967	5MC	C5-C4	6.24	1.48	1.44
32	2a	1400	5MC	C5-C4	6.20	1.48	1.44
1	2A	1962	5MC	C5-C4	6.17	1.48	1.44
54	2w	37	MIA	C5-C4	5.85	1.49	1.39
54	2y	37	MIA	C5-C4	5.72	1.49	1.39
54	2w	37	MIA	C2-S10	-5.67	1.71	1.75
55	1x	8	4SU	C4-N3	-5.59	1.31	1.37
54	1w	37	MIA	C5-C4	5.59	1.49	1.39
54	1y	37	MIA	C5-C4	5.53	1.48	1.39
55	2x	32	5MC	C5-C4	5.41	1.48	1.44
1	2A	1942	5MC	C5-C4	5.28	1.48	1.44
32	1a	1407	5MC	C5-C4	5.28	1.48	1.44
55	2x	8	4SU	C4-N3	-5.16	1.32	1.37
1	1A	1962	5MC	C5-C4	5.02	1.47	1.44
55	1x	8	4SU	C2-N3	-5.02	1.29	1.38
55	1x	32	5MC	C5-C4	4.97	1.47	1.44
54	2w	55	PSU	C6-C5	4.94	1.40	1.35
32	1a	1400	5MC	C5-C4	4.84	1.47	1.44
54	1w	8	4SU	C4-S4	-4.81	1.60	1.68
54	1w	37	MIA	C2-S10	-4.76	1.71	1.75
55	2x	76	31H	C5-N7	-4.71	1.30	1.39
54	2y	46	G7M	C5-N7	-4.67	1.33	1.39
54	2y	8	4SU	C4-S4	-4.67	1.60	1.68
32	1a	527	G7M	C5-N7	-4.67	1.33	1.39
1	1A	1942	5MC	C5-C4	4.62	1.47	1.44
54	1y	55	PSU	C6-C5	4.60	1.40	1.35
32	2a	1407	5MC	C5-C4	4.59	1.47	1.44
54	2y	32	PSU	C6-C5	4.59	1.40	1.35
54	1w	55	PSU	C6-C5	4.55	1.40	1.35
54	1y	39	PSU	C6-C5	4.49	1.40	1.35
54	1w	46	G7M	C5-N7	-4.46	1.34	1.39
54	2w	39	PSU	C6-C5	4.38	1.40	1.35
1	1A	2503	2MA	C5-C4	4.37	1.46	1.39
54	1y	32	PSU	C6-C5	4.30	1.40	1.35
1	2A	2503	2MA	C5-C4	4.23	1.46	1.39
55	2x	55	PSU	C6-C5	4.21	1.39	1.35
55	2x	8	4SU	C2-N3	-4.21	1.30	1.38
54	2y	54	5MU	C2-N1	4.19	1.45	1.38
54	1y	46	G7M	C5-N7	-4.09	1.34	1.39
54	2w	8	4SU	C4-S4	-4.06	1.61	1.68
32	1a	516	PSU	C6-C5	4.05	1.39	1.35
1	2A	1917	PSU	C6-C5	3.98	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1917	PSU	C6-C5	3.82	1.39	1.35
54	2w	32	PSU	C6-C5	3.82	1.39	1.35
54	1y	8	4SU	C4-S4	-3.82	1.62	1.68
32	2a	516	PSU	C6-C5	3.75	1.39	1.35
54	1y	46	G7M	C5-C4	3.72	1.47	1.38
32	2a	527	G7M	C5-N7	-3.70	1.34	1.39
54	1w	32	PSU	C6-C5	3.68	1.39	1.35
55	1x	8	4SU	C4-S4	-3.68	1.62	1.68
54	2y	55	PSU	C6-C5	3.66	1.39	1.35
54	2y	46	G7M	C5-C4	3.62	1.47	1.38
54	2y	39	PSU	C6-C5	3.61	1.39	1.35
55	1x	76	31H	C5-C4	-3.59	1.32	1.39
54	1w	46	G7M	C5-C4	3.58	1.47	1.38
1	2A	1939	5MU	C6-C5	3.58	1.40	1.34
55	1x	76	31H	C3'-N3'	3.55	1.51	1.45
32	2a	1404	5MC	C6-C5	3.54	1.40	1.34
55	2x	8	4SU	C4-S4	-3.52	1.62	1.68
1	2A	1911	PSU	C6-C5	3.51	1.39	1.35
32	2a	1207	2MG	C5-C4	3.48	1.48	1.38
54	2w	37	MIA	C5-C6	3.43	1.50	1.41
1	1A	2605	PSU	C4-N3	-3.43	1.32	1.38
32	2a	527	G7M	C5-C4	3.40	1.46	1.38
55	1x	55	PSU	C6-C5	3.40	1.39	1.35
54	2w	46	G7M	C5-C4	3.39	1.46	1.38
32	1a	527	G7M	C5-C4	3.39	1.46	1.38
54	1w	39	PSU	C6-C5	3.38	1.39	1.35
55	2x	76	31H	C3'-N3'	3.33	1.51	1.45
55	2x	32	5MC	C6-C5	3.31	1.40	1.34
1	1A	1911	PSU	C6-C5	3.30	1.38	1.35
1	1A	1939	5MU	C2-N3	-3.29	1.32	1.38
1	2A	2605	PSU	C6-C5	3.23	1.38	1.35
1	2A	2251	OMG	C5-C4	3.21	1.47	1.38
1	1A	2605	PSU	C2-N1	-3.18	1.32	1.36
32	1a	967	5MC	C6-C5	3.18	1.39	1.34
55	1x	32	5MC	C6-C5	3.18	1.39	1.34
1	1A	1939	5MU	C6-C5	3.16	1.39	1.34
54	1y	37	MIA	C5-C6	3.16	1.49	1.41
1	1A	1962	5MC	C6-N1	-3.15	1.32	1.38
55	1x	8	4SU	C5-C4	-3.15	1.38	1.42
1	1A	2251	OMG	C6-N1	-3.15	1.33	1.38
54	2w	46	G7M	C5-N7	-3.14	1.35	1.39
54	1w	37	MIA	C5-C6	3.14	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	1207	2MG	C5-C4	3.13	1.47	1.38
54	2w	37	MIA	C2-N3	3.12	1.38	1.34
54	2y	37	MIA	C5-C6	3.11	1.49	1.41
1	1A	1939	5MU	C6-N1	-3.10	1.32	1.38
1	1A	2251	OMG	C5-C4	3.08	1.47	1.38
1	1A	1915	5MU	C2-N1	3.07	1.43	1.38
55	1x	76	31H	C5-N7	-3.07	1.33	1.39
32	2a	966	M2G	C5-C4	3.07	1.47	1.38
1	2A	1915	5MU	C2-N1	3.06	1.43	1.38
54	1y	8	4SU	C4-N3	-3.05	1.34	1.37
1	1A	2605	PSU	C2-N3	-3.03	1.32	1.37
1	1A	1942	5MC	C6-C5	2.98	1.39	1.34
1	2A	1915	5MU	C6-C5	2.97	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.97	1.33	1.38
1	2A	1939	5MU	C2-N3	-2.96	1.32	1.38
54	2y	54	5MU	C6-C5	2.95	1.39	1.34
43	1l	92	0TD	CB-CA	2.94	1.55	1.54
55	1x	54	5MU	C4-N3	-2.94	1.33	1.38
1	1A	1911	PSU	C4-N3	-2.92	1.33	1.38
1	1A	1915	5MU	C6-C5	2.92	1.39	1.34
54	1y	54	5MU	C6-C5	2.92	1.39	1.34
55	1x	54	5MU	C6-C5	2.90	1.39	1.34
43	1l	92	0TD	CB-CG	2.89	1.56	1.52
1	2A	1942	5MC	C6-C5	2.89	1.39	1.34
1	2A	1915	5MU	C4-C5	2.88	1.49	1.44
55	2x	54	5MU	C2-N1	2.86	1.42	1.38
32	1a	966	M2G	C5-C4	2.86	1.46	1.38
32	1a	966	M2G	C6-N1	-2.86	1.33	1.38
1	1A	2503	2MA	C5-C6	2.86	1.48	1.41
55	2x	76	31H	C5-C6	-2.84	1.33	1.41
54	1y	54	5MU	C4-C5	2.84	1.49	1.44
1	1A	2251	OMG	C5-N7	-2.82	1.33	1.39
55	2x	54	5MU	C6-C5	2.80	1.39	1.34
32	2a	1407	5MC	C6-C5	2.78	1.39	1.34
32	1a	1400	5MC	C6-C5	2.76	1.39	1.34
54	2w	8	4SU	C2-N1	2.75	1.42	1.38
54	1y	54	5MU	C2-N1	2.75	1.42	1.38
54	2y	8	4SU	C2-N1	2.73	1.42	1.38
54	1w	54	5MU	C2-N1	2.73	1.42	1.38
54	1w	37	MIA	C2-N3	2.70	1.38	1.34
32	1a	1498	UR3	C2-N1	2.70	1.42	1.38
54	1y	37	MIA	C8-N7	2.70	1.36	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	527	G7M	C6-N1	-2.69	1.33	1.38
54	1w	54	5MU	C6-C5	2.68	1.39	1.34
54	1w	8	4SU	C2-N1	2.68	1.42	1.38
54	2y	37	MIA	C8-N7	2.65	1.36	1.31
54	1w	37	MIA	C4-N3	2.65	1.37	1.34
55	1x	76	31H	C5-C6	-2.63	1.33	1.41
1	1A	1915	5MU	C4-N3	-2.61	1.34	1.38
32	1a	1407	5MC	C6-C5	2.60	1.38	1.34
32	2a	1400	5MC	C6-C5	2.59	1.38	1.34
55	2x	54	5MU	C4-N3	-2.57	1.34	1.38
32	1a	966	M2G	C2-N2	2.57	1.39	1.35
32	2a	967	5MC	C6-C5	2.56	1.38	1.34
54	2y	54	5MU	C4-C5	2.54	1.49	1.44
32	1a	527	G7M	C6-N1	-2.53	1.34	1.38
54	2w	37	MIA	C4-N3	2.53	1.37	1.34
54	1w	46	G7M	C4-N9	-2.52	1.31	1.38
32	2a	1498	UR3	C2-N1	2.52	1.42	1.38
54	1y	54	5MU	C4-N3	-2.51	1.34	1.38
1	2A	1962	5MC	C6-C5	2.51	1.38	1.34
1	1A	1942	5MC	C6-N1	-2.50	1.33	1.38
1	2A	2251	OMG	C6-N1	-2.49	1.34	1.38
54	1y	8	4SU	C6-C5	2.48	1.40	1.35
32	2a	527	G7M	C5-C6	2.47	1.50	1.43
55	2x	55	PSU	C4-N3	-2.47	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.47	1.33	1.38
32	1a	1404	5MC	C6-C5	2.46	1.38	1.34
54	1w	55	PSU	C4-N3	-2.44	1.34	1.38
1	1A	2552	OMU	C2-N3	-2.43	1.33	1.38
54	2w	54	5MU	C6-C5	2.43	1.38	1.34
32	1a	516	PSU	C4-N3	-2.43	1.34	1.38
54	1w	37	MIA	C8-N7	2.42	1.36	1.31
1	1A	1915	5MU	C4-C5	2.42	1.48	1.44
32	2a	1407	5MC	C6-N1	-2.39	1.33	1.38
55	2x	8	4SU	C6-C5	2.37	1.40	1.35
54	1y	39	PSU	C4-N3	-2.37	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.37	1.34	1.38
32	1a	1498	UR3	C5-C4	-2.37	1.38	1.43
1	2A	1911	PSU	C4-N3	-2.36	1.34	1.38
55	1x	32	5MC	C6-N1	-2.36	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.35	1.34	1.38
1	1A	1939	5MU	C4-N3	-2.35	1.34	1.38
55	2x	8	4SU	C5-C4	-2.35	1.39	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	1400	5MC	C6-N1	-2.35	1.34	1.38
55	1x	54	5MU	C2-N1	2.33	1.42	1.38
54	2y	39	PSU	C4-N3	-2.33	1.34	1.38
54	1w	39	PSU	C4-N3	-2.33	1.34	1.38
54	2w	46	G7M	C4-N9	-2.32	1.32	1.38
1	2A	2503	2MA	C5-N7	-2.32	1.34	1.39
54	2y	55	PSU	C4-N3	-2.31	1.34	1.38
32	2a	966	M2G	C2-N2	2.30	1.39	1.35
32	2a	1207	2MG	C6-N1	-2.30	1.34	1.38
55	2x	54	5MU	C4-C5	2.30	1.48	1.44
54	2w	37	MIA	C8-N7	2.28	1.36	1.31
54	2w	32	PSU	C4-N3	-2.28	1.34	1.38
1	1A	1917	PSU	C4-N3	-2.27	1.34	1.38
1	2A	2605	PSU	C4-N3	-2.26	1.34	1.38
54	2w	32	PSU	C4-C5	2.26	1.50	1.44
54	2y	54	5MU	O2-C2	2.25	1.27	1.23
54	1w	32	PSU	C4-N3	-2.25	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.25	1.34	1.38
32	1a	1207	2MG	C6-N1	-2.25	1.34	1.38
54	2w	46	G7M	C5-C6	2.24	1.49	1.43
1	1A	1911	PSU	O4'-C1'	-2.24	1.40	1.43
32	2a	966	M2G	C6-N1	-2.24	1.34	1.38
55	1x	8	4SU	C6-C5	2.24	1.40	1.35
1	1A	2552	OMU	C5-C4	-2.23	1.38	1.43
54	1w	8	4SU	C6-C5	2.23	1.40	1.35
1	2A	2251	OMG	C5-N7	-2.22	1.34	1.39
1	2A	2503	2MA	C5-C6	2.22	1.47	1.41
54	2w	55	PSU	C4-N3	-2.22	1.34	1.38
55	2x	76	31H	C5-C4	-2.22	1.35	1.39
55	1x	54	5MU	C4-C5	2.21	1.48	1.44
32	2a	1498	UR3	C6-C5	2.21	1.40	1.35
54	2w	54	5MU	C4-N3	-2.21	1.34	1.38
1	2A	2552	OMU	C6-C5	2.20	1.40	1.35
32	2a	1207	2MG	C2-N3	2.20	1.36	1.32
54	1y	54	5MU	C6-N1	-2.20	1.34	1.38
1	2A	2503	2MA	C4-N9	-2.19	1.33	1.37
1	2A	2552	OMU	C2-N3	-2.19	1.34	1.38
54	1w	8	4SU	C5-C4	-2.18	1.39	1.42
32	1a	966	M2G	C5-N7	-2.17	1.34	1.39
32	2a	1404	5MC	C6-N1	-2.16	1.34	1.38
54	1w	8	4SU	C4-N3	-2.14	1.35	1.37
1	1A	1917	PSU	C2-N3	-2.14	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	8	4SU	C5-C4	-2.14	1.39	1.42
32	1a	516	PSU	C2-N3	-2.13	1.34	1.37
1	2A	1939	5MU	C4-C5	2.13	1.48	1.44
1	1A	2503	2MA	C4-N9	-2.13	1.33	1.37
32	2a	1400	5MC	C6-N1	-2.12	1.34	1.38
55	1x	54	5MU	C6-N1	-2.12	1.34	1.38
32	2a	966	M2G	C5-N7	-2.11	1.34	1.39
1	2A	2503	2MA	C6-N1	-2.11	1.32	1.35
1	2A	2552	OMU	C4-N3	-2.10	1.35	1.38
54	2y	46	G7M	C2-N3	2.09	1.38	1.33
54	1y	46	G7M	C5-C6	2.08	1.49	1.43
54	2w	54	5MU	C2-N3	-2.08	1.34	1.38
55	2x	54	5MU	C6-N1	-2.08	1.34	1.38
1	1A	2503	2MA	C8-N7	2.07	1.35	1.31
32	1a	527	G7M	C4-N9	-2.06	1.32	1.38
54	1y	32	PSU	C4-N3	-2.05	1.35	1.38
54	1y	8	4SU	C2-N1	2.05	1.41	1.38
54	2w	55	PSU	C4-C5	2.05	1.50	1.44
54	2y	8	4SU	C6-C5	2.05	1.39	1.35
54	2y	54	5MU	C4-N3	-2.04	1.35	1.38
32	1a	1402	4OC	C6-N1	-2.04	1.33	1.38
54	2w	46	G7M	C8-N7	2.04	1.36	1.33
54	2y	8	4SU	C4-N3	-2.04	1.35	1.37
54	2w	8	4SU	C4-N3	-2.04	1.35	1.37
54	1w	54	5MU	C4-N3	-2.03	1.35	1.38
54	1y	32	PSU	C4-C5	2.02	1.49	1.44
54	2w	39	PSU	C4-C5	2.02	1.49	1.44
1	2A	2503	2MA	C8-N9	-2.02	1.34	1.37
1	2A	2605	PSU	C2-N3	-2.02	1.34	1.37
54	1w	54	5MU	C4-C5	2.02	1.48	1.44
54	1w	37	MIA	C5-N7	-2.01	1.35	1.39
54	2w	37	MIA	C5-N7	-2.01	1.35	1.39
54	1w	46	G7M	C6-N1	-2.01	1.35	1.38
32	2a	1402	4OC	C6-C5	2.00	1.39	1.35

All (453) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	1l	92	0TD	CSB-SB-CB	-15.08	75.26	102.36
43	2l	92	0TD	CSB-SB-CB	-10.39	83.69	102.36
54	1w	37	MIA	C12-C13-C14	-9.66	109.68	127.01
54	2w	37	MIA	C5-C4-N3	-9.63	117.03	127.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1w	37	MIA	C5-C4-N3	-9.17	117.52	127.18
1	2A	2503	2MA	C5-C4-N3	-8.29	118.44	127.18
54	2w	37	MIA	N3-C4-N9	8.09	137.26	126.99
1	2A	2503	2MA	N3-C4-N9	7.96	137.09	126.99
32	2a	1498	UR3	C4-N3-C2	-7.94	118.19	124.58
54	1w	37	MIA	N3-C4-N9	7.30	136.25	126.99
1	1A	2605	PSU	N1-C2-N3	7.29	122.86	115.17
1	1A	2503	2MA	C5-C4-N3	-7.25	119.54	127.18
55	2x	55	PSU	N1-C2-N3	6.95	122.50	115.17
54	2w	8	4SU	C4-N3-C2	-6.80	120.80	127.31
32	1a	1207	2MG	C2-N3-C4	6.72	120.41	112.00
1	2A	1939	5MU	C5-C4-N3	6.71	121.16	115.32
54	2y	8	4SU	C4-N3-C2	-6.70	120.89	127.31
54	1w	39	PSU	N1-C2-N3	6.60	122.14	115.17
54	1y	55	PSU	N1-C2-N3	6.55	122.08	115.17
1	1A	1939	5MU	C4-N3-C2	-6.44	118.89	127.34
32	2a	1207	2MG	C2-N3-C4	6.39	120.00	112.00
1	2A	1939	5MU	C4-N3-C2	-6.32	119.06	127.34
1	1A	1917	PSU	N1-C2-N3	6.28	121.79	115.17
1	1A	1911	PSU	N1-C2-N3	6.27	121.78	115.17
54	2y	46	G7M	N9-C4-N3	6.26	138.46	125.95
55	1x	8	4SU	O2-C2-N1	6.22	130.90	122.80
54	2y	32	PSU	N1-C2-N3	6.22	121.73	115.17
32	1a	1498	UR3	C4-N3-C2	-6.21	119.58	124.58
1	2A	1917	PSU	N1-C2-N3	6.21	121.72	115.17
1	2A	2605	PSU	N1-C2-N3	6.15	121.65	115.17
54	2w	32	PSU	N1-C2-N3	6.13	121.63	115.17
32	1a	966	M2G	C5-C4-N3	-6.04	118.78	128.39
32	2a	966	M2G	C5-C4-N3	-6.03	118.80	128.39
1	1A	1939	5MU	C5-C4-N3	6.01	120.55	115.32
54	1w	55	PSU	N1-C2-N3	6.00	121.50	115.17
32	2a	1207	2MG	C5-C4-N3	-5.99	118.85	128.39
1	1A	2552	OMU	O2-C2-N1	-5.96	115.04	122.80
54	1w	54	5MU	O4-C4-C5	-5.94	118.12	124.92
54	1w	32	PSU	N1-C2-N3	5.94	121.44	115.17
54	2w	55	PSU	N1-C2-N3	5.83	121.32	115.17
1	2A	1939	5MU	N3-C2-N1	5.82	122.47	114.89
54	2y	55	PSU	N1-C2-N3	5.81	121.30	115.17
1	2A	2251	OMG	C5-C4-N3	-5.78	119.19	128.39
1	1A	2503	2MA	N3-C4-N9	5.78	134.32	126.99
54	2w	39	PSU	N1-C2-N3	5.77	121.26	115.17
32	1a	1207	2MG	C5-C4-N3	-5.75	119.24	128.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	76	31H	N1-C2-N3	-5.69	119.97	128.58
55	2x	54	5MU	N3-C2-N1	5.68	122.28	114.89
1	1A	2251	OMG	C5-C4-N3	-5.64	119.41	128.39
54	1y	39	PSU	N1-C2-N3	5.62	121.09	115.17
54	2y	39	PSU	N1-C2-N3	5.62	121.09	115.17
32	2a	516	PSU	N1-C2-N3	5.58	121.05	115.17
54	2y	8	4SU	C5-C4-N3	5.57	119.93	114.75
1	1A	1939	5MU	O4-C4-C5	-5.56	118.56	124.92
55	1x	54	5MU	C4-N3-C2	-5.56	120.06	127.34
55	1x	76	31H	O4'-C1'-N9	-5.55	97.44	108.09
54	2y	46	G7M	C5-C4-N3	-5.53	117.69	128.15
55	1x	55	PSU	N1-C2-N3	5.53	121.00	115.17
55	1x	76	31H	C5-C4-N3	-5.52	119.12	126.72
55	2x	54	5MU	C4-N3-C2	-5.49	120.14	127.34
1	1A	1939	5MU	C5-C6-N1	-5.46	117.38	123.31
55	1x	54	5MU	N3-C2-N1	5.45	121.99	114.89
1	1A	2552	OMU	C4-N3-C2	-5.42	119.88	126.61
32	1a	527	G7M	N9-C4-N3	5.37	136.69	125.95
54	1w	8	4SU	C5-C4-N3	5.36	119.74	114.75
1	2A	1911	PSU	N1-C2-N3	5.33	120.79	115.17
32	1a	516	PSU	N1-C2-N3	5.31	120.77	115.17
54	1w	8	4SU	C4-N3-C2	-5.31	122.22	127.31
55	2x	76	31H	N1-C2-N3	-5.31	120.55	128.58
1	1A	1939	5MU	N3-C2-N1	5.31	121.80	114.89
54	1y	46	G7M	N9-C4-N3	5.31	136.56	125.95
55	1x	8	4SU	C4-N3-C2	5.28	132.38	127.31
54	1w	54	5MU	C4-N3-C2	-5.28	120.41	127.34
32	2a	527	G7M	N9-C4-N3	5.28	136.51	125.95
1	1A	1915	5MU	N3-C2-N1	5.28	121.76	114.89
32	2a	527	G7M	C5-C4-N3	-5.26	118.20	128.15
54	1w	54	5MU	N3-C2-N1	5.24	121.71	114.89
32	2a	1519	MA6	N1-C2-N3	-5.22	120.68	128.58
54	1y	37	MIA	C5-C4-N3	-5.22	119.53	126.72
54	2y	37	MIA	C5-C4-N3	-5.19	119.57	126.72
32	2a	1518	MA6	N1-C2-N3	-5.18	120.74	128.58
54	2w	8	4SU	C5-C4-N3	5.12	119.52	114.75
54	1y	32	PSU	N1-C2-N3	5.11	120.56	115.17
32	1a	527	G7M	C5-C4-N3	-5.06	118.60	128.15
1	2A	2605	PSU	C4-N3-C2	-4.94	119.57	126.37
1	1A	1915	5MU	C4-N3-C2	-4.91	120.90	127.34
1	2A	1915	5MU	C4-N3-C2	-4.88	120.94	127.34
1	2A	1939	5MU	C5-C6-N1	-4.88	118.02	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1519	MA6	C5-C4-N3	-4.82	120.08	126.72
54	2y	54	5MU	C5-C4-N3	4.82	119.51	115.32
1	2A	2251	OMG	N9-C4-N3	4.82	135.59	125.95
1	1A	2251	OMG	C2-N3-C4	4.80	120.58	112.30
54	2y	46	G7M	C2-N3-C4	4.80	120.57	112.30
54	1y	8	4SU	C4-N3-C2	-4.79	122.72	127.31
54	1w	46	G7M	N9-C4-N3	4.76	135.48	125.95
1	2A	1915	5MU	C5-C4-N3	4.72	119.43	115.32
54	1w	39	PSU	O2-C2-N1	-4.71	117.94	122.79
1	1A	2552	OMU	N3-C2-N1	4.70	121.01	114.89
54	1y	46	G7M	C5-C4-N3	-4.69	119.28	128.15
55	1x	76	31H	CA-N-CN	-4.66	115.65	122.82
54	1w	54	5MU	C5-C4-N3	4.63	119.35	115.32
55	2x	76	31H	C5-C4-N3	-4.62	120.36	126.72
55	1x	32	5MC	C5-C6-N1	-4.58	118.33	123.31
54	2y	55	PSU	O2-C2-N1	-4.58	118.06	122.79
1	2A	1915	5MU	O4-C4-C5	-4.58	119.68	124.92
54	2w	39	PSU	C4-N3-C2	-4.58	120.07	126.37
54	2w	37	MIA	C12-N6-C6	-4.55	118.63	122.85
1	2A	1939	5MU	O4-C4-C5	-4.54	119.72	124.92
54	2y	8	4SU	C5-C4-S4	-4.54	119.12	124.31
55	1x	8	4SU	C6-C5-C4	-4.52	116.04	119.95
1	2A	2251	OMG	C2-N3-C4	4.50	120.05	112.30
55	1x	54	5MU	C5-C4-N3	4.50	119.23	115.32
54	2w	8	4SU	N3-C2-N1	4.50	120.75	114.89
54	2y	37	MIA	N3-C4-N9	4.48	134.79	127.17
32	1a	966	M2G	C2-N3-C4	4.46	120.76	112.51
1	1A	1917	PSU	C4-N3-C2	-4.44	120.25	126.37
55	1x	54	5MU	C5-C6-N1	-4.44	118.50	123.31
54	2y	8	4SU	N3-C2-N1	4.42	120.64	114.89
32	1a	1518	MA6	N1-C2-N3	-4.41	121.90	128.58
32	2a	527	G7M	C2-N3-C4	4.41	119.89	112.30
1	1A	2605	PSU	C4-N3-C2	-4.40	120.31	126.37
55	2x	54	5MU	C5-C4-N3	4.40	119.14	115.32
32	1a	1519	MA6	C5-C4-N3	-4.39	120.67	126.72
32	2a	966	M2G	N9-C4-N3	4.38	134.71	125.95
54	1w	39	PSU	C4-N3-C2	-4.37	120.34	126.37
54	1y	46	G7M	C2-N3-C4	4.37	119.82	112.30
32	2a	1518	MA6	C5-C4-N3	-4.34	120.74	126.72
55	2x	55	PSU	C4-N3-C2	-4.34	120.40	126.37
54	2y	54	5MU	C4-N3-C2	-4.31	121.69	127.34
54	1y	8	4SU	N3-C2-N1	4.31	120.50	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2y	54	5MU	O4-C4-C5	-4.29	120.01	124.92
32	1a	1519	MA6	N1-C2-N3	-4.28	122.11	128.58
32	1a	966	M2G	N9-C4-N3	4.28	134.50	125.95
54	1y	55	PSU	O2-C2-N1	-4.26	118.39	122.79
32	2a	1404	5MC	C5-C6-N1	-4.25	118.70	123.31
54	2w	54	5MU	O4-C4-C5	-4.23	120.07	124.92
54	2w	46	G7M	C2-N3-C4	4.22	119.57	112.30
1	2A	1915	5MU	N3-C2-N1	4.22	120.39	114.89
32	1a	1518	MA6	C4-C5-N7	-4.21	105.77	110.58
1	1A	1915	5MU	C5-C4-N3	4.19	118.97	115.32
32	2a	1207	2MG	N9-C4-N3	4.18	134.31	125.95
32	1a	527	G7M	C2-N3-C4	4.18	119.49	112.30
55	2x	54	5MU	O4-C4-C5	-4.17	120.14	124.92
32	2a	966	M2G	C2-N3-C4	4.17	120.22	112.51
1	1A	1915	5MU	O4-C4-C5	-4.14	120.18	124.92
1	1A	1911	PSU	O2-C2-N1	-4.14	118.52	122.79
32	1a	1518	MA6	C5-N7-C8	4.13	109.95	103.45
54	1w	37	MIA	C15-C14-C13	-4.13	110.28	122.66
1	1A	2552	OMU	O4-C4-C5	-4.11	118.08	125.16
32	1a	1207	2MG	C6-C5-N7	4.11	137.77	130.29
32	2a	1518	MA6	C2-N1-C6	4.09	121.83	111.83
32	1a	1518	MA6	C5-C4-N3	-4.09	121.09	126.72
32	2a	1519	MA6	C4-C5-N7	-4.07	105.93	110.58
55	1x	54	5MU	O4-C4-C5	-4.05	120.29	124.92
32	2a	1519	MA6	C2-N1-C6	4.04	121.70	111.83
32	1a	1407	5MC	C5-C6-N1	-4.03	118.94	123.31
1	2A	2503	2MA	C4-N9-C8	4.02	109.96	105.74
1	1A	1917	PSU	O2-C2-N1	-3.97	118.69	122.79
54	1w	46	G7M	C5-C4-N3	-3.97	120.65	128.15
54	1y	54	5MU	C4-N3-C2	-3.96	122.15	127.34
54	1y	37	MIA	N3-C4-N9	3.95	133.89	127.17
1	1A	1942	5MC	C5-C6-N1	-3.95	119.03	123.31
55	2x	76	31H	O4'-C1'-N9	-3.92	100.56	108.09
32	2a	967	5MC	C5-C6-N1	-3.92	119.06	123.31
54	2w	46	G7M	C5-C4-N3	-3.92	120.74	128.15
54	2w	32	PSU	C4-N3-C2	-3.92	120.97	126.37
1	1A	2251	OMG	N9-C4-N3	3.90	133.76	125.95
54	2w	32	PSU	O2-C2-N1	-3.88	118.78	122.79
54	1w	37	MIA	C16-C14-C13	-3.86	111.06	122.66
54	2w	54	5MU	C5-C4-N3	3.86	118.68	115.32
1	2A	2552	OMU	N3-C2-N1	3.86	119.91	114.89
32	1a	1404	5MC	C5-C4-N3	-3.85	117.81	121.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	516	PSU	C4-N3-C2	-3.82	121.11	126.37
54	1y	54	5MU	N3-C2-N1	3.82	119.86	114.89
55	2x	32	5MC	C5-C6-N1	-3.81	119.17	123.31
32	2a	1519	MA6	C5-N7-C8	3.81	109.44	103.45
1	2A	1911	PSU	C4-N3-C2	-3.80	121.14	126.37
32	1a	1518	MA6	C2-N1-C6	3.80	121.11	111.83
55	2x	76	31H	N9-C8-N7	-3.79	108.56	113.94
54	2w	46	G7M	N9-C4-N3	3.77	133.50	125.95
1	2A	2552	OMU	C4-N3-C2	-3.76	121.94	126.61
32	2a	516	PSU	C4-N3-C2	-3.75	121.20	126.37
54	2w	8	4SU	C5-C4-S4	-3.75	120.02	124.31
1	2A	1917	PSU	C4-N3-C2	-3.75	121.21	126.37
32	2a	1519	MA6	C2-N3-C4	3.73	120.95	111.83
54	2y	39	PSU	C4-N3-C2	-3.73	121.23	126.37
54	1w	37	MIA	C2-N3-C4	3.72	122.05	112.29
32	2a	516	PSU	O2-C2-N1	-3.72	118.95	122.79
54	2y	54	5MU	N3-C2-N1	3.71	119.72	114.89
54	1y	54	5MU	C5-C4-N3	3.71	118.55	115.32
32	1a	1519	MA6	C4-C5-N7	-3.70	106.35	110.58
55	2x	8	4SU	O2-C2-N1	3.69	127.60	122.80
54	2y	55	PSU	C4-N3-C2	-3.69	121.29	126.37
1	1A	2552	OMU	C5-C4-N3	3.68	119.96	114.80
54	2y	32	PSU	C4-N3-C2	-3.68	121.30	126.37
32	1a	1400	5MC	C5-C6-N1	-3.68	119.32	123.31
54	1y	37	MIA	C4-C5-N7	-3.66	106.40	110.58
55	1x	55	PSU	C4-N3-C2	-3.66	121.33	126.37
54	1w	55	PSU	C4-N3-C2	-3.65	121.34	126.37
32	2a	1407	5MC	C5-C4-N3	-3.64	118.02	121.75
54	2w	55	PSU	O2-C2-N1	-3.64	119.04	122.79
32	1a	1519	MA6	C2-N1-C6	3.63	120.70	111.83
1	1A	2251	OMG	C6-C5-N7	3.63	136.89	130.29
32	2a	1518	MA6	C4-C5-N7	-3.62	106.45	110.58
55	2x	76	31H	C5-N7-C8	3.61	109.13	103.45
32	1a	1519	MA6	C5-N7-C8	3.61	109.12	103.45
32	2a	1400	5MC	C5-C6-N1	-3.61	119.39	123.31
32	1a	1518	MA6	N9-C8-N7	-3.61	108.82	113.94
54	1y	32	PSU	C4-N3-C2	-3.59	121.43	126.37
55	1x	8	4SU	O2-C2-N3	-3.59	114.88	121.49
32	1a	1207	2MG	C4-C5-N7	-3.58	105.00	110.67
54	1w	32	PSU	C4-N3-C2	-3.58	121.44	126.37
1	2A	1917	PSU	O2-C2-N1	-3.56	119.12	122.79
54	2y	32	PSU	O2-C2-N1	-3.56	119.12	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	55	PSU	C4-N3-C2	-3.55	121.48	126.37
1	2A	1911	PSU	C6-C5-C4	-3.55	115.78	118.17
32	1a	1207	2MG	N2-C2-N3	-3.54	116.00	120.51
32	2a	1518	MA6	C2-N3-C4	3.54	120.48	111.83
54	1y	39	PSU	C4-N3-C2	-3.54	121.50	126.37
32	1a	967	5MC	C5-C6-N1	-3.52	119.49	123.31
54	2w	37	MIA	C2-N3-C4	3.51	121.48	112.29
55	1x	76	31H	C2-N3-C4	3.49	120.36	111.83
54	1w	32	PSU	O2-C2-N1	-3.49	119.19	122.79
32	1a	1207	2MG	N9-C4-N3	3.49	132.92	125.95
32	2a	1498	UR3	C5-C4-N3	3.49	119.63	115.04
32	2a	1207	2MG	C6-C5-N7	3.48	136.63	130.29
1	2A	1942	5MC	C5-C6-N1	-3.48	119.54	123.31
1	2A	2552	OMU	O2-C2-N1	-3.47	118.28	122.80
54	1w	8	4SU	C5-C4-S4	-3.47	120.34	124.31
55	1x	32	5MC	C5-C4-N3	-3.47	118.20	121.75
1	1A	1942	5MC	C5-C4-N3	-3.46	118.21	121.75
1	1A	1911	PSU	C4-N3-C2	-3.46	121.61	126.37
54	1y	55	PSU	C4-N3-C2	-3.46	121.61	126.37
54	1y	37	MIA	C2-N3-C4	3.42	120.18	111.83
54	2y	37	MIA	N3-C2-N1	-3.41	123.42	128.58
54	1w	46	G7M	C2-N3-C4	3.41	118.17	112.30
54	1y	8	4SU	C5-C4-N3	3.41	117.92	114.75
55	1x	8	4SU	S4-C4-N3	-3.41	116.64	120.20
1	2A	1962	5MC	C5-C4-N3	-3.41	118.26	121.75
54	1y	37	MIA	N3-C2-N1	-3.40	123.44	128.58
55	2x	76	31H	C2-N3-C4	3.40	120.12	111.83
54	1y	54	5MU	C5-C6-N1	-3.38	119.64	123.31
1	1A	1962	5MC	C5-C4-N3	-3.37	118.30	121.75
32	2a	1407	5MC	C5-C6-N1	-3.37	119.66	123.31
32	1a	966	M2G	C6-C5-N7	3.36	136.41	130.29
54	2y	37	MIA	C2-N3-C4	3.34	119.98	111.83
54	1w	8	4SU	N3-C2-N1	3.34	119.23	114.89
32	1a	1207	2MG	N1-C2-N2	3.34	119.97	116.56
55	1x	76	31H	N9-C8-N7	-3.33	109.21	113.94
1	2A	1915	5MU	C5-C6-N1	-3.31	119.72	123.31
54	1w	37	MIA	C4-C5-N7	-3.30	106.81	110.58
1	2A	1942	5MC	C5-C4-N3	-3.29	118.38	121.75
55	2x	54	5MU	C5-C6-N1	-3.28	119.75	123.31
1	2A	2503	2MA	N6-C6-N1	3.28	121.45	117.03
54	2w	54	5MU	N3-C2-N1	3.27	119.15	114.89
54	2w	54	5MU	C4-N3-C2	-3.27	123.06	127.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1518	MA6	C5-N7-C8	3.26	108.57	103.45
54	2y	54	5MU	C1'-N1-C2	3.25	123.43	117.59
32	1a	1404	5MC	C5-C6-N1	-3.25	119.79	123.31
54	2w	37	MIA	C4-C5-N7	-3.22	106.89	110.58
55	1x	54	5MU	O2-C2-N1	-3.22	118.60	122.80
54	2y	37	MIA	C4-C5-N7	-3.22	106.90	110.58
1	1A	2503	2MA	N6-C6-N1	3.21	121.36	117.03
1	2A	2552	OMU	C5-C4-N3	3.20	119.29	114.80
32	1a	1519	MA6	C2-N3-C4	3.20	119.65	111.83
32	2a	966	M2G	C6-C5-N7	3.20	136.11	130.29
55	1x	76	31H	OCN-CN-N	-3.20	117.06	125.32
55	1x	76	31H	C6-C5-C4	3.19	121.54	117.18
1	2A	2605	PSU	O2-C2-N1	-3.19	119.50	122.79
54	1y	32	PSU	O2-C2-N1	-3.18	119.51	122.79
55	1x	76	31H	C5-C4-N9	3.16	109.25	105.81
1	2A	2251	OMG	C6-C5-N7	3.16	136.03	130.29
55	1x	55	PSU	O2-C2-N1	-3.14	119.55	122.79
54	1w	37	MIA	C6-C5-N7	3.14	135.85	132.43
32	1a	1518	MA6	C2-N3-C4	3.14	119.50	111.83
54	2y	54	5MU	C1'-N1-C6	-3.13	115.99	121.15
32	2a	1519	MA6	N9-C8-N7	-3.13	109.50	113.94
32	1a	1402	4OC	C6-C5-C4	3.13	120.77	117.00
55	1x	8	4SU	C5-C4-S4	3.11	127.86	124.31
54	1y	39	PSU	C6-C5-C4	-3.09	116.09	118.17
32	2a	1407	5MC	O2-C2-N3	-3.09	117.46	122.33
55	1x	8	4SU	C1'-N1-C2	3.08	123.13	117.59
1	1A	2605	PSU	O2-C2-N1	-3.08	119.61	122.79
55	2x	32	5MC	O2-C2-N3	-3.08	117.47	122.33
54	2y	39	PSU	O2-C2-N1	-3.08	119.61	122.79
32	2a	1400	5MC	O2-C2-N3	-3.06	117.50	122.33
32	1a	1498	UR3	C6-N1-C2	-3.06	119.30	121.80
54	2y	37	MIA	C4-N9-C8	3.06	108.95	105.74
1	2A	1962	5MC	C5-C6-N1	-3.04	120.02	123.31
54	1w	37	MIA	C2-N1-C6	3.02	123.28	117.54
32	1a	1519	MA6	N9-C8-N7	-3.02	109.65	113.94
32	2a	1404	5MC	O2-C2-N3	-2.99	117.61	122.33
54	1y	54	5MU	O4-C4-C5	-2.99	121.50	124.92
54	2w	54	5MU	C5M-C5-C4	2.98	121.97	118.78
54	1w	37	MIA	N3-C2-N1	-2.98	121.57	127.00
32	1a	1498	UR3	C1'-N1-C2	2.97	121.90	117.04
32	2a	1207	2MG	C4-C5-N7	-2.96	105.97	110.67
32	1a	1400	5MC	C5-C4-N3	-2.95	118.73	121.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	2x	8	4SU	S4-C4-N3	-2.95	117.12	120.20
32	1a	1407	5MC	C5-C4-N3	-2.94	118.74	121.75
54	2w	39	PSU	C6-C5-C4	-2.94	116.19	118.17
54	1w	55	PSU	O2-C2-N1	-2.91	119.79	122.79
1	2A	2605	PSU	C5-C6-N1	-2.91	118.11	122.14
1	1A	2503	2MA	C4-C5-N7	-2.90	107.27	110.58
32	2a	1402	4OC	CM4-N4-C4	-2.90	116.79	122.45
32	1a	1498	UR3	C5-C4-N3	2.88	118.83	115.04
32	2a	966	M2G	C4-C5-N7	-2.87	106.12	110.67
1	2A	1911	PSU	O2-C2-N1	-2.82	119.88	122.79
55	2x	8	4SU	O2-C2-N3	-2.82	116.29	121.49
55	1x	76	31H	C5-N7-C8	2.82	107.88	103.45
1	1A	2503	2MA	C4-N9-C8	2.81	108.69	105.74
55	2x	76	31H	N3-C4-N9	2.81	131.94	127.17
54	2w	37	MIA	C1'-N9-C8	-2.79	120.89	127.09
54	2w	55	PSU	C6-C5-C4	-2.79	116.29	118.17
55	2x	8	4SU	C6-C5-C4	-2.77	117.55	119.95
55	2x	55	PSU	O2-C2-N3	-2.76	116.95	121.86
1	1A	2251	OMG	C4-C5-N7	-2.74	106.33	110.67
1	1A	1939	5MU	O2-C2-N1	-2.72	119.26	122.80
32	2a	1519	MA6	N3-C4-N9	2.72	131.79	127.17
54	2y	8	4SU	O2-C2-N1	-2.72	119.26	122.80
54	2w	46	G7M	O6-C6-C5	-2.71	121.95	128.01
1	1A	1962	5MC	C1'-N1-C6	-2.71	116.68	121.15
1	1A	1962	5MC	CM5-C5-C6	-2.71	119.18	122.85
55	2x	76	31H	C4'-O4'-C1'	-2.70	103.50	109.47
32	1a	967	5MC	C5-C4-N3	-2.69	119.00	121.75
32	1a	966	M2G	C4-C5-N7	-2.69	106.41	110.67
1	2A	2503	2MA	C4-C5-N7	-2.67	107.53	110.58
32	1a	1404	5MC	CM5-C5-C6	-2.65	119.26	122.85
54	2y	55	PSU	C6-C5-C4	-2.65	116.39	118.17
54	2y	54	5MU	C5-C6-N1	-2.64	120.45	123.31
1	2A	2251	OMG	O6-C6-C5	-2.63	119.58	126.53
54	1w	54	5MU	C5-C6-N1	-2.62	120.46	123.31
55	1x	76	31H	N3-C4-N9	2.61	131.61	127.17
55	2x	32	5MC	C5-C4-N3	-2.60	119.09	121.75
1	1A	1915	5MU	O2-C2-N1	-2.59	119.42	122.80
55	1x	8	4SU	C6-N1-C2	-2.58	117.85	121.00
32	2a	1404	5MC	C5-C4-N3	-2.58	119.11	121.75
54	1w	46	G7M	O6-C6-C5	-2.56	122.29	128.01
54	2y	54	5MU	O2-C2-N3	-2.55	116.78	121.49
54	2y	46	G7M	O6-C6-C5	-2.54	122.34	128.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2y	37	MIA	C2-N1-C6	2.51	122.86	118.73
32	1a	1519	MA6	N3-C4-N9	2.51	131.44	127.17
54	1w	54	5MU	O2-C2-N1	-2.51	119.53	122.80
55	2x	55	PSU	C5-C6-N1	-2.51	118.66	122.14
54	1y	46	G7M	O6-C6-C5	-2.50	122.42	128.01
1	1A	2605	PSU	C5-C6-N1	-2.50	118.67	122.14
1	2A	1939	5MU	O2-C2-N1	-2.50	119.54	122.80
43	1l	92	0TD	OD2-CG-CB	2.50	118.54	113.15
32	2a	1518	MA6	N9-C8-N7	-2.49	110.40	113.94
32	2a	1402	4OC	C6-C5-C4	2.49	120.00	117.00
54	1w	39	PSU	C5-C6-N1	-2.48	118.70	122.14
55	1x	76	31H	C4-C5-N7	-2.47	107.75	110.58
54	2w	46	G7M	N2-C2-N1	2.47	121.98	116.76
32	1a	1407	5MC	CM5-C5-C6	-2.47	119.51	122.85
32	1a	527	G7M	O6-C6-C5	-2.47	122.51	128.01
54	1y	37	MIA	C5-N7-C8	2.46	107.32	103.45
32	1a	1400	5MC	O2-C2-N3	-2.44	118.48	122.33
32	1a	1207	2MG	CM2-N2-C2	-2.44	118.41	123.65
1	1A	2605	PSU	O2-C2-N3	-2.44	117.53	121.86
54	1w	46	G7M	C8-N7-C5	-2.44	104.74	107.78
32	2a	1519	MA6	C4-C5-C6	2.43	118.42	115.91
54	2y	37	MIA	C5-N7-C8	2.43	107.27	103.45
55	2x	8	4SU	C1'-N1-C2	2.43	121.95	117.59
54	2w	37	MIA	C5-N7-C8	2.43	107.27	103.45
1	2A	2605	PSU	O4-C4-C5	-2.43	117.98	124.01
1	1A	1915	5MU	C5-C6-N1	-2.42	120.68	123.31
54	1y	54	5MU	C5M-C5-C4	2.41	121.35	118.78
55	2x	76	31H	OCN-CN-N	-2.40	119.11	125.32
55	1x	32	5MC	N4-C4-N3	2.39	122.83	118.51
32	1a	1207	2MG	C8-N7-C5	2.38	108.50	104.26
54	2w	46	G7M	N2-C2-N3	-2.38	115.03	119.67
1	2A	2503	2MA	C5-N7-C8	2.37	107.18	103.45
32	1a	1519	MA6	C4-C5-C6	2.37	118.36	115.91
32	2a	1400	5MC	C5-C4-N3	-2.36	119.34	121.75
54	1w	37	MIA	C5-N7-C8	2.35	107.14	103.45
1	1A	1917	PSU	C5-C6-N1	-2.35	118.88	122.14
32	1a	1498	UR3	C3U-N3-C2	2.33	121.39	117.33
54	1y	37	MIA	C6-C5-N7	2.33	136.58	132.09
32	2a	1498	UR3	C3U-N3-C4	2.31	121.07	117.87
32	2a	1518	MA6	N3-C4-N9	2.30	131.08	127.17
54	2y	8	4SU	C6-N1-C2	-2.30	118.20	121.00
55	2x	8	4SU	C4-N3-C2	2.29	129.51	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	39	PSU	O2-C2-N1	-2.29	120.43	122.79
55	2x	76	31H	C4-C5-N7	-2.28	107.97	110.58
1	2A	1962	5MC	CM5-C5-C6	-2.28	119.77	122.85
1	2A	1920	OMC	C2'-C1'-N1	-2.27	109.94	114.24
32	2a	1404	5MC	N1-C2-N3	2.26	122.72	118.80
32	1a	516	PSU	C5-C6-N1	-2.25	119.02	122.14
54	1y	37	MIA	C2-N1-C6	2.25	122.42	118.73
32	1a	516	PSU	C6-C5-C4	-2.25	116.66	118.17
54	1y	55	PSU	C6-N1-C2	-2.24	120.61	122.69
54	1y	37	MIA	C4-N9-C8	2.24	108.09	105.74
32	1a	1404	5MC	O2-C2-N3	-2.24	118.80	122.33
32	1a	1518	MA6	N3-C4-N9	2.23	130.96	127.17
32	1a	1400	5MC	N4-C4-N3	2.22	122.53	118.51
32	2a	1207	2MG	C2-N1-C6	-2.22	121.87	124.55
1	2A	2251	OMG	C5-C6-N1	2.22	118.90	113.25
54	2w	37	MIA	C2-N1-C6	2.21	121.73	117.54
1	1A	1915	5MU	C5M-C5-C4	2.20	121.13	118.78
54	2w	8	4SU	O2-C2-N1	-2.20	119.93	122.80
32	2a	967	5MC	C5-C4-N3	-2.20	119.50	121.75
32	2a	516	PSU	O4'-C1'-C2'	2.19	108.18	105.15
1	2A	1942	5MC	N4-C4-N3	2.19	122.47	118.51
55	2x	8	4SU	C5-C4-S4	2.18	126.80	124.31
1	2A	2503	2MA	N9-C8-N7	-2.18	110.84	113.94
55	2x	55	PSU	O2-C2-N1	-2.18	120.54	122.79
54	2w	37	MIA	C4-C5-C6	2.17	118.58	116.78
32	2a	1518	MA6	C5-C4-N9	2.17	108.18	105.81
1	1A	1915	5MU	C6-N1-C2	-2.16	119.15	121.30
1	1A	2251	OMG	C8-N7-C5	2.16	108.11	104.26
1	1A	1962	5MC	C5-C6-N1	-2.16	120.97	123.31
1	2A	2251	OMG	C4-C5-N7	-2.16	107.25	110.67
1	2A	2552	OMU	O4-C4-C5	-2.15	121.45	125.16
54	2w	46	G7M	C1'-N9-C4	-2.15	120.13	126.49
54	2y	55	PSU	O4'-C1'-C2'	2.15	108.12	105.15
32	2a	527	G7M	C5-C6-N1	2.15	116.28	111.84
43	2l	92	0TD	OD2-CG-CB	2.14	117.78	113.15
1	1A	2503	2MA	C6-C5-N7	2.13	136.21	132.09
32	2a	1519	MA6	C5-C4-N9	2.13	108.13	105.81
54	1y	8	4SU	O2-C2-N1	-2.13	120.03	122.80
32	1a	1207	2MG	C2-N1-C6	-2.12	121.98	124.55
32	1a	516	PSU	O4'-C1'-C2'	2.12	108.09	105.15
55	2x	54	5MU	O2-C2-N3	-2.12	117.58	121.49
54	2y	54	5MU	C5M-C5-C4	2.12	121.04	118.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	2503	2MA	C2-N1-C6	2.12	121.36	118.10
32	1a	527	G7M	C5-C6-N1	2.11	116.21	111.84
54	1w	37	MIA	S10-C2-N3	2.11	123.32	116.04
32	2a	966	M2G	CM2-N2-CM1	2.11	122.60	115.87
54	1y	39	PSU	O2-C2-N3	-2.11	118.12	121.86
1	1A	1942	5MC	CM5-C5-C6	-2.10	120.01	122.85
32	2a	966	M2G	O6-C6-C5	-2.09	121.01	126.53
32	1a	1518	MA6	C4-C5-C6	2.09	118.07	115.91
55	2x	76	31H	CA-N-CN	-2.09	119.61	122.82
54	2y	39	PSU	C5-C6-N1	-2.08	119.25	122.14
54	1y	54	5MU	C1'-N1-C6	-2.07	117.74	121.15
54	2w	37	MIA	N3-C2-N1	-2.07	123.23	127.00
54	1w	55	PSU	C6-C5-C4	-2.06	116.78	118.17
32	1a	516	PSU	O2-C2-N3	-2.06	118.21	121.86
32	2a	1207	2MG	C8-N7-C5	2.05	107.92	104.26
55	2x	54	5MU	O2-C2-N1	-2.04	120.14	122.80
55	2x	8	4SU	C6-N1-C2	-2.04	118.51	121.00
32	1a	1402	4OC	O2-C2-N3	-2.04	119.11	122.33
1	1A	2503	2MA	C5-N7-C8	2.04	106.65	103.45
54	2w	37	MIA	C4-N9-C1'	2.03	131.38	126.63
54	2w	54	5MU	C1'-N1-C2	2.03	121.24	117.59
1	2A	1962	5MC	N4-C4-N3	2.03	122.18	118.51
55	1x	55	PSU	O4-C4-C5	-2.02	118.98	124.01
54	2w	32	PSU	O4'-C1'-C2'	2.02	107.95	105.15
54	1y	8	4SU	C6-N1-C2	-2.02	118.54	121.00
54	1w	8	4SU	C1'-N1-C2	2.01	121.20	117.59
55	2x	32	5MC	C1'-N1-C6	-2.01	117.84	121.15
1	2A	2251	OMG	C8-N9-C4	2.01	109.79	106.03
1	1A	1942	5MC	N1-C2-N3	2.00	122.28	118.80

There are no chirality outliers.

All (64) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1207	2MG	N1-C2-N2-CM2
32	1a	1207	2MG	N3-C2-N2-CM2
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	O-C-CA-CB
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB
54	1w	37	MIA	N1-C2-S10-C11
54	1w	37	MIA	N3-C2-S10-C11

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Mol	Chain	Res	Type	Atoms
54	1w	37	MIA	C12-C13-C14-C16
55	1x	76	31H	CB-CA-N-CN
54	1y	46	G7M	C4'-C5'-O5'-P
32	2a	1207	2MG	N1-C2-N2-CM2
32	2a	1207	2MG	N3-C2-N2-CM2
32	2a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	2y	54	5MU	C3'-C4'-C5'-O5'
54	2y	54	5MU	O4'-C4'-C5'-O5'
54	2y	55	PSU	C2'-C1'-C5-C4
54	2y	55	PSU	C2'-C1'-C5-C6
54	2y	55	PSU	O4'-C1'-C5-C6
55	1x	76	31H	C3'-C4'-C5'-O5'
55	2x	76	31H	C3'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
54	2y	55	PSU	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
55	1x	76	31H	C4'-C5'-O5'-P
32	1a	527	G7M	C3'-C4'-C5'-O5'
55	2x	76	31H	C4'-C5'-O5'-P
54	2y	46	G7M	O4'-C1'-N9-C4
32	2a	527	G7M	O4'-C4'-C5'-O5'
54	2y	55	PSU	O4'-C4'-C5'-O5'
54	1y	54	5MU	O4'-C4'-C5'-O5'
1	2A	1915	5MU	O4'-C4'-C5'-O5'
1	1A	1915	5MU	O4'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
54	2w	46	G7M	C3'-C4'-C5'-O5'
32	2a	1404	5MC	O4'-C4'-C5'-O5'
54	2w	46	G7M	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
54	1w	46	G7M	C4'-C5'-O5'-P
54	1y	55	PSU	O4'-C1'-C5-C4
54	2y	55	PSU	O4'-C1'-C5-C4
55	2x	76	31H	CB-CG-SD-CE
32	1a	1519	MA6	C4'-C5'-O5'-P
32	1a	527	G7M	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
54	2w	46	G7M	C4'-C5'-O5'-P
54	2y	46	G7M	O4'-C1'-N9-C8
54	2w	37	MIA	N3-C2-S10-C11
32	1a	1400	5MC	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD2
54	2w	37	MIA	N1-C2-S10-C11
32	2a	527	G7M	C4'-C5'-O5'-P
1	2A	1939	5MU	O4'-C4'-C5'-O5'
54	1y	55	PSU	O4'-C1'-C5-C6
1	2A	2503	2MA	O4'-C4'-C5'-O5'
43	2l	92	0TD	CG-CB-SB-CSB
1	1A	1920	OMC	C2'-C1'-N1-C2
32	2a	1402	4OC	C2'-C1'-N1-C2
54	2y	54	5MU	C2'-C1'-N1-C2

There are no ring outliers.

48 monomers are involved in 67 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	2A	1917	PSU	1	0
54	1y	8	4SU	2	0
1	1A	2251	OMG	1	0
54	2y	39	PSU	1	0
54	1w	37	MIA	1	0
54	1w	55	PSU	1	0
1	2A	1939	5MU	1	0
54	1w	46	G7M	1	0
54	1y	39	PSU	1	0
54	2w	39	PSU	2	0
32	1a	1518	MA6	3	0
1	2A	2552	OMU	1	0
32	1a	1402	4OC	1	0
54	2w	8	4SU	2	0
54	1y	32	PSU	1	0
1	2A	1911	PSU	1	0
54	1y	46	G7M	1	0
32	2a	967	5MC	1	0
32	2a	966	M2G	1	0
43	2l	92	0TD	2	0
1	1A	2503	2MA	1	0
55	1x	8	4SU	2	0
54	1w	54	5MU	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	1a	966	M2G	1	0
54	2y	46	G7M	2	0
43	1l	92	0TD	2	0
54	2y	55	PSU	6	0
32	2a	1519	MA6	4	0
1	2A	2503	2MA	2	0
32	1a	1207	2MG	1	0
55	2x	32	5MC	1	0
54	1y	55	PSU	1	0
54	1w	39	PSU	1	0
1	1A	2552	OMU	1	0
54	2w	54	5MU	1	0
32	1a	527	G7M	1	0
54	2w	55	PSU	1	0
32	2a	1207	2MG	4	0
54	1y	37	MIA	1	0
32	2a	1404	5MC	2	0
32	2a	1400	5MC	1	0
54	2y	8	4SU	1	0
32	1a	1519	MA6	1	0
1	2A	2251	OMG	1	0
55	1x	76	31H	1	0
55	1x	32	5MC	1	0
32	2a	1518	MA6	4	0
1	1A	1939	5MU	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2813 ligands modelled in this entry, 2809 are monoatomic - leaving 4 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
58	A1A1K	2A	3886	-	31,37,37	1.45	4 (12%)	28,53,53	0.93	1 (3%)
60	SF4	1d	302	35	0,12,12	-	-	-		
60	SF4	2d	303	35	0,12,12	-	-	-		
58	A1A1K	1A	4105	56	31,37,37	1.76	7 (22%)	28,53,53	1.11	3 (10%)

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
58	A1A1K	2A	3886	-	-	3/26/71/71	0/3/4/4
60	SF4	1d	302	35	-	-	0/6/5/5
60	SF4	2d	303	35	-	-	0/6/5/5
58	A1A1K	1A	4105	56	-	2/26/71/71	0/3/4/4

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	1A	4105	A1A1K	CAM-CBF	-5.10	1.39	1.51
58	2A	3886	A1A1K	CAM-CBF	-4.82	1.39	1.51
58	2A	3886	A1A1K	OAW-CB	3.04	1.45	1.42
58	1A	4105	A1A1K	CAB-CAK	3.01	1.57	1.53
58	1A	4105	A1A1K	OAW-CB	2.77	1.45	1.42
58	1A	4105	A1A1K	CBB-CAZ	2.60	1.57	1.53
58	1A	4105	A1A1K	CD2-CG	2.43	1.58	1.53
58	2A	3886	A1A1K	CD2-CAZ	-2.35	1.51	1.53
58	2A	3886	A1A1K	OAW-CAX	2.26	1.46	1.43
58	1A	4105	A1A1K	CAC-CAB	-2.13	1.46	1.52
58	1A	4105	A1A1K	CAK-NAL	2.05	1.49	1.45

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
58	1A	4105	A1A1K	CBC-CBB-CAZ	-3.13	110.61	116.68
58	2A	3886	A1A1K	CD2-CAZ-CAY	-2.31	110.33	113.78
58	1A	4105	A1A1K	CD2-CAZ-CAY	-2.31	110.34	113.78
58	1A	4105	A1A1K	CB-CA-C	2.14	114.68	110.46

There are no chirality outliers.

All (5) torsion outliers are listed below:

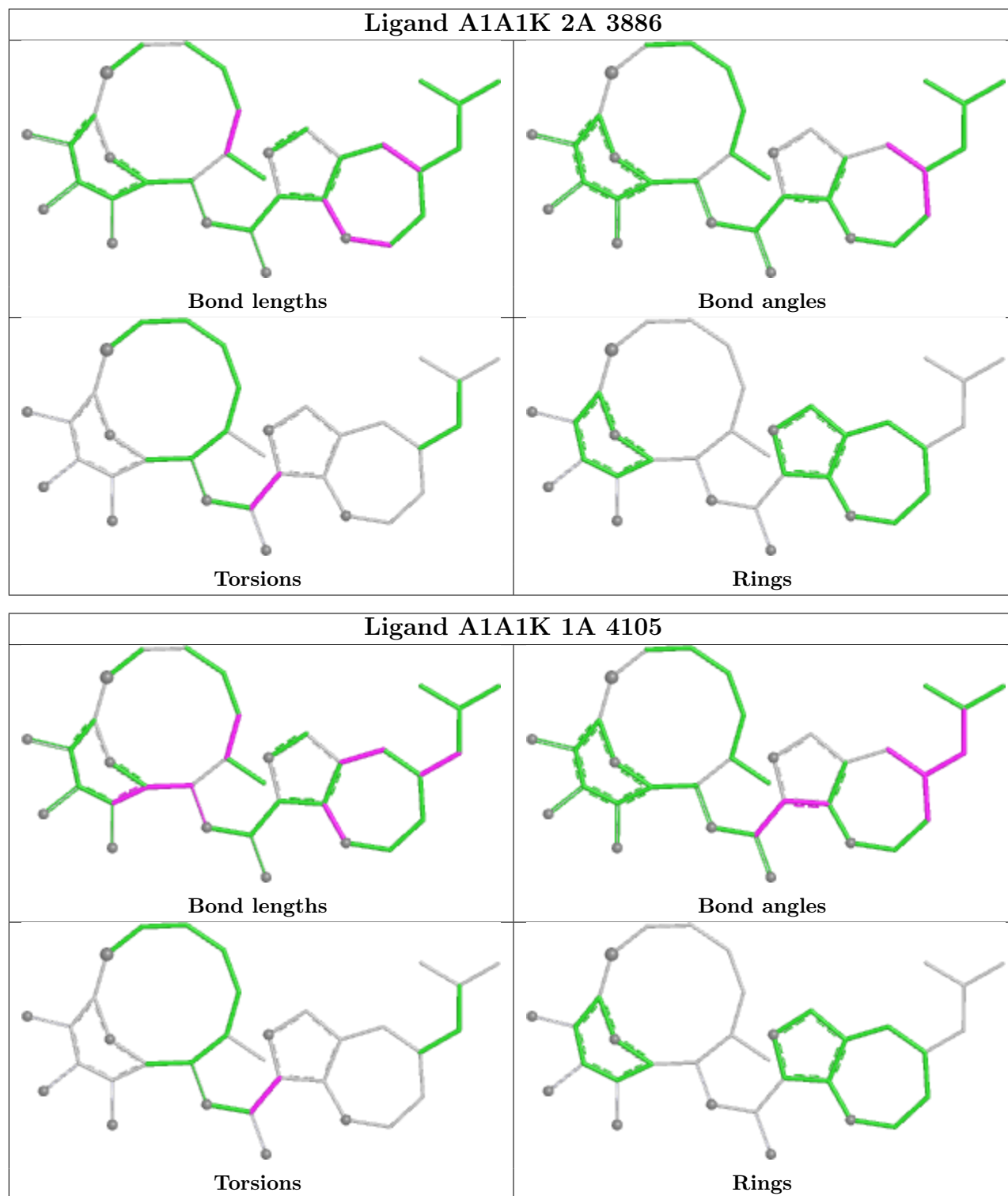
Mol	Chain	Res	Type	Atoms
58	2A	3886	A1A1K	O-C-CA-CB
58	2A	3886	A1A1K	NAL-C-CA-CB
58	1A	4105	A1A1K	O-C-CA-CB
58	1A	4105	A1A1K	NAL-C-CA-CB
58	2A	3886	A1A1K	O-C-CA-N

There are no ring outliers.

4 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
58	2A	3886	A1A1K	1	0
60	1d	302	SF4	1	0
60	2d	303	SF4	1	0
58	1A	4105	A1A1K	1	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 ⓘ

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, 95th 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 ²)	Q<0.9
1	1A	2860/2915 (98%)	-0.61	77 (2%) 56 57	24, 41, 91, 106	0
1	2A	2789/2915 (95%)	-0.07	85 (3%) 52 53	37, 62, 92, 103	0
2	1B	120/121 (99%)	-0.43	0 100 100	34, 54, 67, 86	0
2	2B	120/121 (99%)	0.67	2 (1%) 69 71	65, 82, 87, 97	0
3	1D	275/276 (99%)	-0.12	3 (1%) 78 79	25, 42, 55, 79	0
3	2D	275/276 (99%)	0.38	6 (2%) 62 64	38, 55, 67, 82	0
4	1E	204/206 (99%)	-0.14	0 100 100	23, 43, 62, 79	0
4	2E	204/206 (99%)	0.54	4 (1%) 65 66	41, 63, 75, 87	0
5	1F	203/210 (96%)	0.02	3 (1%) 72 74	22, 46, 72, 84	0
5	2F	203/210 (96%)	0.54	1 (0%) 87 88	40, 71, 81, 85	0
6	1G	181/182 (99%)	0.52	7 (3%) 43 43	45, 62, 73, 85	0
6	2G	181/182 (99%)	1.53	49 (27%) 1 1	72, 81, 86, 92	0
7	1H	174/180 (96%)	0.35	3 (1%) 69 71	41, 58, 69, 76	0
7	2H	174/180 (96%)	1.43	44 (25%) 1 1	72, 83, 90, 95	0
8	1I	146/148 (98%)	0.81	5 (3%) 48 48	48, 74, 80, 85	0
8	2I	146/148 (98%)	1.33	27 (18%) 3 2	59, 78, 86, 94	0
9	1N	140/140 (100%)	-0.07	0 100 100	32, 43, 62, 74	0
9	2N	140/140 (100%)	1.01	14 (10%) 12 10	51, 68, 80, 87	0
10	1O	122/122 (100%)	0.14	0 100 100	35, 45, 61, 67	0
10	2O	122/122 (100%)	0.56	2 (1%) 70 73	52, 63, 74, 76	0
11	1P	149/150 (99%)	0.19	4 (2%) 56 57	26, 49, 69, 75	0
11	2P	149/150 (99%)	0.75	5 (3%) 48 48	45, 71, 83, 91	0
12	1Q	141/141 (100%)	-0.05	0 100 100	33, 46, 62, 74	0
12	2Q	141/141 (100%)	1.31	29 (20%) 2 2	57, 70, 80, 87	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	-0.25	0 100 100	30, 38, 50, 58	0
13	2R	118/118 (100%)	0.19	0 100 100	45, 55, 66, 73	0
14	1S	110/112 (98%)	0.21	1 (0%) 81 82	43, 54, 64, 70	0
14	2S	110/112 (98%)	1.30	17 (15%) 5 3	67, 76, 83, 87	0
15	1T	131/146 (89%)	0.14	5 (3%) 44 44	37, 48, 69, 75	0
15	2T	131/146 (89%)	0.72	1 (0%) 82 83	56, 65, 76, 79	0
16	1U	116/118 (98%)	-0.38	1 (0%) 81 82	25, 35, 51, 66	0
16	2U	116/118 (98%)	0.62	3 (2%) 57 58	51, 65, 79, 84	0
17	1V	101/101 (100%)	-0.25	1 (0%) 79 80	26, 43, 59, 71	0
17	2V	101/101 (100%)	0.74	0 100 100	47, 74, 80, 86	0
18	1W	112/113 (99%)	-0.23	2 (1%) 67 69	26, 36, 55, 78	0
18	2W	112/113 (99%)	0.42	2 (1%) 67 69	43, 56, 70, 91	0
19	1X	95/96 (98%)	0.01	2 (2%) 63 65	31, 42, 63, 81	0
19	2X	95/96 (98%)	0.78	5 (5%) 32 30	49, 63, 78, 87	0
20	1Y	107/110 (97%)	0.40	2 (1%) 66 67	41, 53, 70, 80	0
20	2Y	107/110 (97%)	1.25	14 (13%) 7 6	60, 75, 84, 90	0
21	1Z	154/206 (74%)	0.86	13 (8%) 17 15	46, 66, 84, 88	0
21	2Z	160/206 (77%)	1.76	51 (31%) 1 1	73, 83, 91, 94	0
22	10	77/85 (90%)	0.17	2 (2%) 57 58	31, 42, 57, 66	0
22	20	83/85 (97%)	1.49	22 (26%) 1 1	54, 69, 77, 90	0
23	11	97/98 (98%)	0.24	1 (1%) 79 80	34, 48, 71, 75	0
23	21	97/98 (98%)	0.66	4 (4%) 41 41	45, 59, 77, 83	0
24	12	70/72 (97%)	0.11	1 (1%) 73 75	39, 52, 64, 74	0
24	22	70/72 (97%)	0.90	5 (7%) 22 19	61, 74, 81, 83	0
25	13	59/60 (98%)	-0.17	1 (1%) 69 71	29, 40, 62, 74	0
25	23	59/60 (98%)	0.73	2 (3%) 48 48	58, 68, 77, 86	0
26	14	69/71 (97%)	0.77	3 (4%) 40 39	56, 74, 86, 88	0
26	24	69/71 (97%)	1.55	17 (24%) 2 1	80, 86, 90, 93	0
27	15	59/60 (98%)	-0.19	1 (1%) 69 71	26, 36, 52, 64	0
27	25	59/60 (98%)	0.28	0 100 100	40, 55, 69, 79	0
28	16	53/54 (98%)	-0.06	0 100 100	36, 45, 59, 69	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.74	2 (3%) 44 44	54, 65, 73, 74	0
29	17	48/49 (97%)	-0.21	3 (6%) 26 23	25, 32, 60, 67	0
29	27	48/49 (97%)	0.28	4 (8%) 17 15	36, 45, 65, 74	0
30	18	64/65 (98%)	-0.17	0 100 100	31, 39, 46, 58	0
30	28	64/65 (98%)	0.77	2 (3%) 51 52	51, 61, 66, 70	0
31	19	37/37 (100%)	0.03	0 100 100	35, 44, 61, 64	0
31	29	37/37 (100%)	1.19	4 (10%) 11 9	62, 71, 79, 83	0
32	1a	1488/1521 (97%)	0.16	38 (2%) 57 58	40, 71, 92, 106	0
32	2a	1491/1521 (98%)	0.66	139 (9%) 14 12	53, 79, 95, 106	0
33	1b	231/256 (90%)	1.14	39 (16%) 4 3	70, 79, 88, 94	0
33	2b	231/256 (90%)	1.70	79 (34%) 1 1	76, 85, 89, 91	0
34	1c	206/239 (86%)	0.98	16 (7%) 19 16	66, 76, 83, 85	0
34	2c	206/239 (86%)	1.94	92 (44%) 0 0	73, 85, 89, 94	0
35	1d	208/209 (99%)	1.09	20 (9%) 13 11	59, 74, 82, 89	0
35	2d	208/209 (99%)	0.83	7 (3%) 48 48	62, 72, 78, 83	0
36	1e	148/162 (91%)	0.72	4 (2%) 56 57	58, 68, 77, 81	0
36	2e	148/162 (91%)	1.38	29 (19%) 3 2	68, 79, 85, 87	0
37	1f	100/101 (99%)	0.65	1 (1%) 79 80	60, 70, 77, 80	0
37	2f	100/101 (99%)	0.80	4 (4%) 42 41	65, 74, 80, 84	0
38	1g	155/156 (99%)	0.70	12 (7%) 19 17	64, 73, 83, 85	0
38	2g	155/156 (99%)	1.24	25 (16%) 4 3	71, 80, 86, 90	0
39	1h	137/138 (99%)	0.64	2 (1%) 72 74	56, 70, 76, 82	0
39	2h	137/138 (99%)	1.33	23 (16%) 4 3	72, 79, 84, 87	0
40	1i	127/128 (99%)	1.27	19 (14%) 5 4	62, 79, 83, 86	0
40	2i	127/128 (99%)	2.01	60 (47%) 0 0	72, 84, 89, 90	0
41	1j	97/105 (92%)	1.46	21 (21%) 2 2	65, 80, 87, 89	0
41	2j	96/105 (91%)	2.38	63 (65%) 0 0	78, 86, 91, 92	0
42	1k	114/129 (88%)	0.79	5 (4%) 39 38	51, 69, 78, 80	0
42	2k	114/129 (88%)	1.09	17 (14%) 5 4	60, 76, 82, 84	0
43	1l	121/132 (91%)	0.58	4 (3%) 49 50	52, 63, 71, 77	0
43	2l	121/132 (91%)	1.12	15 (12%) 8 7	63, 73, 80, 84	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	123/126 (97%)	0.92	9 (7%) 21 18	61, 72, 80, 88	0
44	2m	122/126 (96%)	2.08	51 (41%) 0 0	76, 83, 88, 91	0
45	1n	60/61 (98%)	1.27	4 (6%) 24 21	67, 72, 78, 80	0
45	2n	60/61 (98%)	3.15	50 (83%) 0 0	80, 86, 89, 91	0
46	1o	88/89 (98%)	0.71	4 (4%) 38 37	55, 68, 77, 82	0
46	2o	88/89 (98%)	0.99	6 (6%) 23 21	65, 76, 82, 86	0
47	1p	82/88 (93%)	1.21	12 (14%) 6 4	62, 74, 79, 84	0
47	2p	82/88 (93%)	1.08	5 (6%) 27 24	62, 71, 78, 82	0
48	1q	99/105 (94%)	1.02	6 (6%) 27 24	58, 69, 77, 80	0
48	2q	99/105 (94%)	0.89	7 (7%) 22 19	64, 76, 83, 88	0
49	1r	68/88 (77%)	0.71	5 (7%) 20 18	62, 70, 77, 79	0
49	2r	68/88 (77%)	0.83	3 (4%) 39 38	65, 74, 80, 84	0
50	1s	83/93 (89%)	0.80	4 (4%) 35 34	66, 75, 83, 86	0
50	2s	83/93 (89%)	2.34	53 (63%) 0 0	79, 86, 91, 95	0
51	1t	96/106 (90%)	1.15	14 (14%) 6 4	63, 73, 81, 83	0
51	2t	96/106 (90%)	0.99	13 (13%) 7 5	64, 72, 81, 84	0
52	1u	23/27 (85%)	1.35	3 (13%) 7 6	67, 70, 75, 76	0
52	2u	23/27 (85%)	2.12	11 (47%) 0 0	78, 82, 86, 87	0
53	1v	13/24 (54%)	0.72	2 (15%) 5 3	50, 72, 84, 93	0
53	2v	13/24 (54%)	1.69	4 (30%) 1 1	75, 86, 93, 100	0
54	1w	64/76 (84%)	1.22	9 (14%) 6 5	73, 92, 100, 105	0
54	1y	67/76 (88%)	0.97	5 (7%) 20 17	43, 91, 98, 100	0
54	2w	62/76 (81%)	1.57	14 (22%) 2 1	86, 97, 102, 105	0
54	2y	66/76 (86%)	1.07	6 (9%) 15 12	60, 96, 99, 103	0
55	1x	71/77 (92%)	0.16	1 (1%) 73 75	32, 64, 84, 91	0
55	2x	71/77 (92%)	0.51	2 (2%) 55 56	53, 82, 89, 99	0
All	All	20861/21748 (95%)	0.42	1601 (7%) 19 17	22, 68, 89, 106	0

All (1601) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
44	2m	123	ALA	9.9
44	2m	124	PRO	9.6

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Mol	Chain	Res	Type	RSRZ
44	1m	124	PRO	7.6
45	2n	2	ALA	7.2
44	2m	102	ARG	6.9
21	1Z	141	VAL	6.6
44	1m	123	ALA	6.6
45	1n	2	ALA	6.4
44	1m	2	ALA	6.3
44	1m	122	LYS	6.2
45	2n	25	VAL	6.1
33	2b	237	ALA	6.0
44	1m	121	LYS	6.0
32	2a	1033	G	5.6
45	2n	34	TYR	5.5
45	2n	39	LEU	5.5
21	1Z	146	ILE	5.4
41	2j	65	LEU	5.4
44	2m	122	LYS	5.4
23	2l	2	SER	5.4
21	2Z	173	ALA	5.2
33	2b	236	TYR	5.1
45	2n	14	PRO	5.1
1	2A	2125	G	5.0
21	2Z	146	ILE	4.8
21	2Z	141	VAL	4.8
44	2m	6	GLY	4.7
50	2s	2	PRO	4.7
45	2n	13	THR	4.7
45	2n	37	PHE	4.7
1	2A	2155	G	4.6
45	2n	16	PHE	4.6
54	1w	73	A	4.6
51	1t	103	GLY	4.6
40	2i	126	SER	4.6
41	2j	32	ALA	4.6
38	1g	80	VAL	4.5
41	2j	47	PHE	4.5
35	1d	167	GLY	4.5
50	2s	13	ASP	4.5
41	2j	10	GLY	4.5
40	2i	102	LEU	4.5
50	1s	84	GLY	4.4
19	2X	92	LEU	4.4

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Mol	Chain	Res	Type	RSRZ
45	2n	33	VAL	4.4
52	1u	24	ARG	4.4
38	2g	81	GLY	4.3
34	2c	8	ILE	4.3
32	2a	1036	G	4.3
26	24	49	PHE	4.3
44	2m	121	LYS	4.3
21	2Z	174	VAL	4.3
33	2b	71	VAL	4.3
21	2Z	172	ALA	4.3
22	20	7	LEU	4.3
40	2i	14	VAL	4.3
45	2n	21	TYR	4.3
32	2a	1034	G	4.3
5	1F	208	GLY	4.3
38	2g	80	VAL	4.3
1	1A	1081	U	4.2
33	2b	161	ALA	4.2
32	2a	1116	C	4.2
41	2j	63	PHE	4.2
32	2a	1002	G	4.2
45	2n	7	ILE	4.1
41	2j	49	VAL	4.1
32	2a	1219	U	4.1
34	2c	124	ILE	4.1
1	1A	1094	U	4.1
22	20	2	ALA	4.1
29	27	45	ALA	4.1
34	2c	158	GLY	4.1
40	2i	36	TYR	4.1
1	1A	1096	A	4.1
52	2u	14	TRP	4.1
36	2e	22	GLY	4.1
40	2i	11	LYS	4.1
54	2w	73	A	4.1
7	1H	2	SER	4.0
22	20	5	LYS	4.0
12	2Q	22	LYS	4.0
32	1a	1027	C	4.0
34	2c	171	GLY	4.0
41	1j	4	ILE	4.0
50	2s	79	THR	4.0

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Mol	Chain	Res	Type	RSRZ
45	2n	18	VAL	4.0
33	2b	152	PHE	4.0
32	2a	1224	G	4.0
1	2A	2174	C	4.0
32	2a	1030(B)	C	4.0
50	2s	14	HIS	4.0
26	24	56	VAL	4.0
52	2u	2	GLY	3.9
32	2a	1149	C	3.9
21	2Z	164	ALA	3.9
34	2c	189	ALA	3.9
11	2P	15	ARG	3.9
45	2n	61	TRP	3.9
45	2n	30	ALA	3.9
45	2n	6	LEU	3.9
21	1Z	150	LEU	3.9
32	1a	1532	U	3.8
12	2Q	104	PHE	3.8
32	2a	1030	C	3.8
40	1i	106	ALA	3.8
34	2c	2	GLY	3.8
21	2Z	150	LEU	3.8
7	2H	2	SER	3.8
1	1A	1087	G	3.8
6	2G	74	LYS	3.8
32	2a	1001(A)	G	3.8
38	2g	5	ARG	3.8
4	2E	204	ALA	3.8
34	2c	128	PHE	3.8
45	2n	15	LYS	3.8
50	2s	52	TYR	3.8
45	2n	38	GLY	3.8
1	2A	1536	C	3.8
1	2A	2154	G	3.8
26	24	51	ASP	3.8
40	2i	99	LEU	3.8
50	2s	9	VAL	3.8
3	1D	276	LYS	3.8
44	2m	104	ARG	3.8
32	2a	1035	A	3.8
12	2Q	15	GLY	3.8
38	1g	85	TYR	3.8

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Mol	Chain	Res	Type	RSRZ
38	2g	154	TYR	3.8
50	2s	71	LEU	3.8
1	1A	2159	G	3.8
45	2n	3	ARG	3.7
21	2Z	147	GLY	3.7
34	2c	182	ILE	3.7
29	17	48	LYS	3.7
44	2m	100	GLY	3.7
40	2i	96	LEU	3.7
40	2i	105	ASP	3.7
50	2s	12	ASP	3.7
45	2n	59	ALA	3.7
40	1i	2	GLU	3.7
19	1X	95	LEU	3.7
34	2c	188	LEU	3.7
1	1A	1078	U	3.7
32	2a	1150	U	3.7
45	2n	4	LYS	3.7
50	2s	80	TYR	3.7
7	2H	19	VAL	3.7
1	2A	2146	C	3.7
34	1c	2	GLY	3.7
1	1A	1058	G	3.7
1	1A	2115	G	3.7
32	2a	1030(A)	G	3.7
41	2j	37	PRO	3.7
48	2q	96	GLU	3.6
47	1p	82	GLN	3.6
41	2j	91	PRO	3.6
32	1a	1001(A)	G	3.6
16	2U	90	VAL	3.6
1	2A	2138	C	3.6
21	2Z	144	LEU	3.6
32	2a	1038	C	3.6
54	2w	4	C	3.6
40	2i	10	ARG	3.6
32	1a	1025	U	3.6
1	2A	883	G	3.6
32	2a	1220	G	3.6
45	2n	22	THR	3.6
50	2s	4	SER	3.6
38	1g	81	GLY	3.6

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Mol	Chain	Res	Type	RSRZ
52	2u	11	GLY	3.6
33	2b	165	VAL	3.6
54	2w	71	G	3.6
32	1a	1035	A	3.6
40	2i	9	ARG	3.6
45	2n	20	ALA	3.6
47	2p	82	GLN	3.6
18	2W	112	GLY	3.6
33	2b	11	LEU	3.6
41	2j	36	GLY	3.6
52	2u	16	GLY	3.6
34	2c	157	ILE	3.6
45	2n	36	PHE	3.6
1	1A	1064	C	3.5
45	2n	40	CYS	3.5
3	2D	38	LYS	3.5
29	27	48	LYS	3.5
40	2i	41	VAL	3.5
32	1a	1003	G	3.5
40	2i	67	GLY	3.5
20	2Y	89	PHE	3.5
21	2Z	121	HIS	3.5
26	24	32	TYR	3.5
33	1b	11	LEU	3.5
1	1A	1056	G	3.5
1	2A	2126	A	3.5
1	2A	2133	G	3.5
33	2b	122	PHE	3.5
1	1A	885	C	3.5
32	2a	1114	C	3.5
54	2w	3	C	3.5
6	2G	28	VAL	3.5
43	1l	18	VAL	3.5
45	2n	53	LEU	3.5
1	2A	2134	A	3.5
1	2A	2173	A	3.5
22	20	3	HIS	3.5
32	1a	1036	G	3.5
6	2G	48	GLU	3.5
41	2j	34	VAL	3.5
48	1q	98	LEU	3.5
32	2a	965	A	3.4

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Mol	Chain	Res	Type	RSRZ
45	2n	31	ARG	3.4
54	2w	15	G	3.4
6	2G	159	VAL	3.4
8	2I	75	LEU	3.4
22	20	84	LEU	3.4
1	2A	2128	C	3.4
15	1T	131	ALA	3.4
21	2Z	149	SER	3.4
33	1b	237	ALA	3.4
21	2Z	171	ILE	3.4
41	2j	74	ILE	3.4
12	2Q	60	ARG	3.4
52	2u	15	ARG	3.4
38	2g	84	ASN	3.4
50	2s	51	VAL	3.4
41	2j	71	LEU	3.4
21	2Z	95	PRO	3.4
33	2b	123	ALA	3.4
34	2c	149	ALA	3.4
45	2n	10	ALA	3.4
49	1r	86	VAL	3.4
14	2S	58	LEU	3.4
41	2j	88	LEU	3.4
31	29	21	GLY	3.4
15	1T	130	ALA	3.4
44	2m	5	ALA	3.4
54	1w	1	G	3.4
23	11	2	SER	3.4
41	2j	78	ASN	3.4
1	2A	652(B)	A	3.4
41	2j	40	LEU	3.4
41	2j	44	VAL	3.4
23	21	28	GLY	3.4
34	2c	145	GLY	3.4
6	2G	20	ILE	3.4
41	2j	38	ILE	3.4
44	2m	72	ALA	3.4
50	2s	38	SER	3.4
32	2a	973	G	3.3
32	2a	1202	G	3.3
45	2n	17	LYS	3.3
31	29	37	GLY	3.3

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Mol	Chain	Res	Type	RSRZ
45	2n	55	GLY	3.3
12	2Q	66	ILE	3.3
41	2j	27	ALA	3.3
6	2G	146	TYR	3.3
20	2Y	55	TYR	3.3
26	24	65	ASP	3.3
1	1A	1100	C	3.3
8	2I	68	LEU	3.3
26	24	9	LEU	3.3
33	2b	187	LEU	3.3
50	2s	76	PRO	3.3
34	2c	195	VAL	3.3
33	2b	80	ILE	3.3
34	2c	5	ILE	3.3
44	2m	22	ILE	3.3
1	1A	1057	A	3.3
21	1Z	1	MET	3.3
32	1a	1531	A	3.3
32	2a	974	A	3.3
33	1b	22	LYS	3.3
33	2b	163	PHE	3.3
50	2s	32	LYS	3.3
50	2s	61	TYR	3.3
19	2X	95	LEU	3.3
33	1b	10	LEU	3.3
41	1j	77	PRO	3.3
26	14	56	VAL	3.3
33	1b	7	VAL	3.3
33	2b	67	THR	3.3
34	2c	137	ALA	3.3
53	2v	12	A	3.3
44	2m	87	TYR	3.3
34	1c	47	LEU	3.3
34	2c	52	LEU	3.3
41	2j	41	PRO	3.3
9	2N	5	VAL	3.3
32	1a	1026	G	3.3
32	2a	976	G	3.3
32	2a	1117	G	3.3
34	2c	207	VAL	3.3
35	1d	104	VAL	3.3
36	2e	23	GLY	3.3

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Mol	Chain	Res	Type	RSRZ
41	2j	31	GLY	3.3
40	2i	91	ASP	3.2
1	1A	1065	U	3.2
1	1A	2113	U	3.2
32	1a	1257	U	3.2
32	2a	1040	U	3.2
35	1d	120	LEU	3.2
50	2s	11	VAL	3.2
22	20	6	GLY	3.2
7	2H	136	ILE	3.2
33	2b	200	ILE	3.2
54	1w	71	G	3.2
29	27	47	ARG	3.2
40	2i	114	TYR	3.2
44	2m	19	LEU	3.2
33	1b	229	VAL	3.2
33	1b	230	VAL	3.2
34	2c	116	VAL	3.2
44	1m	120	LYS	3.2
41	2j	93	GLY	3.2
32	2a	993	G	3.2
39	2h	4	ASP	3.2
1	1A	1095	A	3.2
7	2H	39	PRO	3.2
33	2b	234	PRO	3.2
50	2s	53	ASN	3.2
3	2D	275	LYS	3.2
20	2Y	5	MET	3.2
44	2m	68	GLY	3.2
50	2s	68	GLY	3.2
34	2c	190	ARG	3.2
40	1i	66	ARG	3.2
42	2k	126	ARG	3.2
12	2Q	65	PHE	3.2
32	2a	1039	C	3.2
1	1A	2112	G	3.2
39	2h	2	LEU	3.2
42	2k	124	LYS	3.2
50	2s	15	LEU	3.2
33	2b	230	VAL	3.2
44	2m	98	VAL	3.2
40	2i	82	ALA	3.1

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Mol	Chain	Res	Type	RSRZ
45	2n	29	ARG	3.1
34	2c	167	TRP	3.1
50	2s	10	PHE	3.1
6	1G	48	GLU	3.1
44	2m	67	GLU	3.1
1	2A	2116	G	3.1
32	2a	630	G	3.1
1	1A	2119	A	3.1
1	2A	2169	A	3.1
32	1a	1447	A	3.1
32	2a	1004	A	3.1
34	2c	9	GLY	3.1
34	2c	78	GLY	3.1
34	2c	151	VAL	3.1
44	2m	23	TYR	3.1
44	2m	60	VAL	3.1
8	2I	86	THR	3.1
34	2c	192	THR	3.1
41	2j	59	SER	3.1
33	1b	38	GLY	3.1
1	2A	882	G	3.1
1	1A	2117	A	3.1
1	2A	896	A	3.1
34	2c	187	ALA	3.1
21	2Z	155	LEU	3.1
14	2S	45	GLY	3.1
32	2a	962	C	3.1
32	2a	1115	C	3.1
38	1g	79	ARG	3.1
40	2i	66	ARG	3.1
50	2s	8	GLY	3.1
6	2G	160	VAL	3.1
50	1s	9	VAL	3.1
34	2c	152	ILE	3.1
41	2j	14	LYS	3.1
53	2v	24	A	3.1
52	1u	23	PRO	3.1
45	2n	44	LEU	3.1
50	1s	13	ASP	3.1
22	20	9	SER	3.1
38	2g	82	GLY	3.1
9	2N	83	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
22	20	43	THR	3.0
23	21	81	LYS	3.0
34	2c	4	LYS	3.0
42	1k	25	TYR	3.0
44	2m	42	ALA	3.0
32	2a	1003	G	3.0
34	2c	175	LEU	3.0
44	2m	90	LEU	3.0
45	2n	47	LEU	3.0
33	1b	214	ILE	3.0
33	2b	185	ILE	3.0
47	2p	2	VAL	3.0
1	2A	2136	C	3.0
1	2A	2803	C	3.0
34	2c	180	ALA	3.0
43	1l	64	TYR	3.0
1	2A	2113	U	3.0
40	2i	79	LEU	3.0
22	20	69	PHE	3.0
1	1A	1059	G	3.0
1	2A	614(B)	G	3.0
1	2A	2127	G	3.0
1	2A	2802	G	3.0
32	1a	1023	G	3.0
22	10	8	GLY	3.0
7	2H	17	VAL	3.0
34	1c	207	VAL	3.0
48	2q	65	ILE	3.0
50	2s	40	ILE	3.0
9	2N	1	MET	3.0
20	2Y	1	MET	3.0
51	1t	95	ALA	3.0
32	2a	979	C	3.0
32	2a	980	C	3.0
32	2a	1018	C	3.0
32	2a	1223	C	3.0
9	2N	112	LEU	3.0
49	2r	66	LEU	3.0
1	1A	2114	A	3.0
32	1a	204	U	3.0
1	2A	2156	G	3.0
7	2H	35	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
7	2H	133	VAL	3.0
44	2m	7	VAL	3.0
36	2e	17	ALA	3.0
21	2Z	159	PRO	3.0
33	1b	125	PRO	3.0
26	14	63	TYR	3.0
33	2b	21	ARG	3.0
1	1A	888	C	3.0
1	1A	2145	C	3.0
32	2a	1019	C	3.0
33	2b	121	LEU	3.0
50	2s	5	LEU	3.0
32	2a	1196	U	3.0
32	2a	1030(D)	A	3.0
32	2a	1357	A	3.0
32	2a	1503	A	3.0
53	1v	13	A	3.0
6	2G	52	ILE	2.9
1	2A	652(U)	G	2.9
1	2A	2112	G	2.9
1	2A	2157	G	2.9
7	2H	41	MET	2.9
33	2b	112	VAL	2.9
33	2b	214	ILE	2.9
40	2i	28	VAL	2.9
44	2m	78	ILE	2.9
54	2w	5	G	2.9
38	2g	2	ALA	2.9
26	24	29	PRO	2.9
33	1b	131	PRO	2.9
42	2k	25	TYR	2.9
1	2A	885	C	2.9
32	2a	1037	C	2.9
35	1d	110	PHE	2.9
33	2b	83	MET	2.9
33	2b	201	ILE	2.9
34	2c	198	VAL	2.9
41	2j	68	HIS	2.9
9	2N	44	PRO	2.9
25	23	2	PRO	2.9
32	2a	1032	G	2.9
45	2n	12	ARG	2.9

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Mol	Chain	Res	Type	RSRZ
46	2o	75	PRO	2.9
6	2G	3	LEU	2.9
34	2c	12	LEU	2.9
33	1b	17	PHE	2.9
40	2i	18	PHE	2.9
6	2G	129	GLY	2.9
18	1W	112	GLY	2.9
51	2t	103	GLY	2.9
8	2I	85	GLU	2.9
21	2Z	168	GLU	2.9
14	2S	35	ILE	2.9
33	1b	39	ILE	2.9
36	2e	33	VAL	2.9
41	2j	62	HIS	2.9
9	2N	43	THR	2.9
38	2g	79	ARG	2.9
41	2j	5	ARG	2.9
52	2u	24	ARG	2.9
6	2G	50	ALA	2.9
34	2c	73	PRO	2.9
6	2G	53	LEU	2.9
40	1i	102	LEU	2.9
51	1t	13	LEU	2.9
41	2j	54	PHE	2.9
1	1A	1080	C	2.9
34	2c	6	HIS	2.9
32	2a	977	A	2.9
43	2l	43	VAL	2.9
33	2b	91	PRO	2.9
34	2c	15	THR	2.9
50	2s	33	THR	2.9
50	2s	77	THR	2.9
41	2j	90	LEU	2.9
1	2A	2166	G	2.9
21	2Z	88	PHE	2.9
32	1a	1034	G	2.9
32	2a	1356	G	2.9
54	2w	34	G	2.9
33	2b	208	ILE	2.8
47	1p	5	ARG	2.8
22	20	4	LYS	2.8
33	2b	93	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
33	2b	136	VAL	2.8
1	2A	2139	C	2.8
32	2a	999	C	2.8
32	2a	1320	C	2.8
54	2w	72	C	2.8
32	2a	1016	A	2.8
39	2h	67	PRO	2.8
41	2j	42	THR	2.8
41	2j	77	PRO	2.8
44	2m	28	ALA	2.8
50	2s	24	ALA	2.8
33	2b	154	LEU	2.8
34	2c	87	LEU	2.8
35	2d	206	PHE	2.8
40	2i	5	TYR	2.8
3	1D	275	LYS	2.8
21	1Z	149	SER	2.8
32	2a	1053	G	2.8
33	1b	200	ILE	2.8
34	2c	176	HIS	2.8
44	2m	4	ILE	2.8
32	2a	1532	U	2.8
43	2l	18	VAL	2.8
34	2c	7	PRO	2.8
40	2i	119	ALA	2.8
1	1A	2158	A	2.8
32	1a	1001	A	2.8
32	1a	1286	A	2.8
32	2a	1001	A	2.8
34	2c	196	LEU	2.8
34	2c	23	TYR	2.8
34	2c	74	GLY	2.8
34	1c	39	ILE	2.8
35	2d	5	ILE	2.8
41	1j	74	ILE	2.8
41	2j	76	ASN	2.8
1	2A	2147	G	2.8
7	2H	36	PRO	2.8
7	2H	43	VAL	2.8
21	1Z	159	PRO	2.8
27	15	60	VAL	2.8
34	2c	174	PRO	2.8

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Mol	Chain	Res	Type	RSRZ
54	1w	65	G	2.8
34	2c	24	ALA	2.8
34	2c	168	ALA	2.8
36	2e	138	ALA	2.8
41	1j	100	THR	2.8
1	1A	2146	C	2.8
1	2A	2111	C	2.8
32	1a	1503	A	2.8
32	2a	978	A	2.8
33	1b	9	GLU	2.8
41	2j	7	LYS	2.8
21	2Z	106	GLY	2.8
20	2Y	44	ILE	2.8
33	2b	39	ILE	2.8
21	2Z	166	SER	2.8
42	2k	117	ASN	2.8
34	2c	68	VAL	2.8
46	1o	19	PRO	2.8
6	2G	163	ALA	2.8
29	17	45	ALA	2.8
32	2a	1190	G	2.8
12	2Q	63	LYS	2.8
45	2n	58	LYS	2.8
42	2k	13	GLN	2.8
21	2Z	136	PHE	2.8
20	2Y	61	ILE	2.7
50	2s	34	TRP	2.7
33	2b	148	TYR	2.7
21	2Z	129	SER	2.7
33	1b	15	VAL	2.7
39	2h	53	VAL	2.7
6	1G	50	ALA	2.7
34	2c	129	ALA	2.7
20	1Y	1	MET	2.7
24	22	1	MET	2.7
32	2a	982	U	2.7
41	1j	86	MET	2.7
54	1y	20	U	2.7
38	2g	32	ARG	2.7
40	2i	128	ARG	2.7
1	2A	2115	G	2.7
32	2a	1131	G	2.7

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Mol	Chain	Res	Type	RSRZ
32	2a	1222	G	2.7
1	2A	899	A	2.7
32	2a	1260	C	2.7
12	2Q	61	GLY	2.7
34	2c	13	GLY	2.7
50	2s	31	ILE	2.7
7	2H	21	PRO	2.7
19	2X	69	TYR	2.7
39	2h	94	TYR	2.7
40	2i	17	VAL	2.7
40	2i	62	TYR	2.7
22	10	84	LEU	2.7
8	2I	76	THR	2.7
35	1d	195	ALA	2.7
35	2d	164	ALA	2.7
44	2m	103	THR	2.7
47	2p	64	ALA	2.7
50	2s	75	ALA	2.7
35	2d	122	ARG	2.7
32	1a	1024	G	2.7
32	1a	1030(A)	G	2.7
1	1A	2138	C	2.7
1	2A	2137	C	2.7
6	2G	102	PHE	2.7
33	1b	18	GLY	2.7
38	1g	82	GLY	2.7
46	1o	89	GLY	2.7
21	2Z	137	ILE	2.7
14	2S	61	ASN	2.7
33	2b	7	VAL	2.7
6	2G	12	TYR	2.7
45	2n	32	SER	2.7
36	1e	10	MET	2.7
41	1j	8	LEU	2.7
8	1I	146	ALA	2.7
12	2Q	6	ARG	2.7
21	2Z	21	ALA	2.7
38	2g	76	ARG	2.7
40	1i	15	ALA	2.7
42	2k	89	ALA	2.7
49	1r	87	ARG	2.7
41	2j	83	GLU	2.7

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Mol	Chain	Res	Type	RSRZ
44	2m	101	GLN	2.7
1	1A	1097	U	2.7
26	24	64	GLY	2.7
34	2c	80	GLY	2.7
33	2b	127	ILE	2.7
38	2g	26	PHE	2.7
38	2g	93	PRO	2.7
39	2h	86	ILE	2.7
43	2l	32	PHE	2.7
21	2Z	158	PRO	2.7
1	1A	1068	G	2.7
1	1A	2190	G	2.7
1	1A	34	C	2.7
1	2A	2170	A	2.7
32	2a	983	A	2.7
32	2a	994	A	2.7
43	2l	28	LYS	2.7
45	2n	9	LYS	2.7
9	2N	9	VAL	2.7
9	2N	61	ARG	2.7
21	1Z	105	VAL	2.7
25	23	26	LEU	2.7
26	24	50	VAL	2.7
38	2g	16	LEU	2.7
40	2i	19	LEU	2.7
49	1r	78	LEU	2.7
7	2H	83	TYR	2.7
34	2c	201	TYR	2.7
38	2g	151	TYR	2.7
34	2c	200	ALA	2.7
40	2i	7	THR	2.7
40	2i	13	ALA	2.7
41	2j	26	ALA	2.7
51	2t	97	ALA	2.7
1	1A	1066	U	2.7
52	2u	5	ASP	2.6
36	1e	85	GLY	2.6
6	2G	141	PHE	2.6
14	2S	29	PHE	2.6
41	2j	55	LYS	2.6
51	1t	74	LYS	2.6
38	1g	5	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
1	1A	1088	A	2.6
32	2a	1250	A	2.6
33	2b	149	LEU	2.6
34	2c	55	VAL	2.6
34	2c	178	LEU	2.6
46	1o	57	LEU	2.6
51	1t	10	LEU	2.6
1	1A	1063	G	2.6
26	24	66	SER	2.6
32	1a	1038	C	2.6
54	1w	72	C	2.6
7	2H	145	ALA	2.6
14	2S	92	TYR	2.6
40	1i	13	ALA	2.6
43	2l	105	TYR	2.6
44	2m	64	TRP	2.6
1	2A	2167	U	2.6
8	2I	20	ASP	2.6
34	2c	41	GLY	2.6
34	2c	62	ASP	2.6
55	2x	47	U	2.6
21	2Z	143	GLY	2.6
34	2c	155	GLY	2.6
51	2t	96	GLY	2.6
7	2H	52	VAL	2.6
33	2b	12	GLU	2.6
35	1d	179	GLU	2.6
39	1h	93	VAL	2.6
1	1A	1069	A	2.6
32	1a	1030(D)	A	2.6
32	2a	1225	A	2.6
1	2A	2145	C	2.6
6	2G	161	THR	2.6
32	2a	1054	C	2.6
41	1j	32	ALA	2.6
41	2j	100	THR	2.6
1	2A	2123	G	2.6
32	1a	1002	G	2.6
32	2a	1031	G	2.6
39	2h	58	TYR	2.6
54	2w	70	G	2.6
54	2y	19	G	2.6

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Mol	Chain	Res	Type	RSRZ
7	1H	174	GLY	2.6
22	20	8	GLY	2.6
34	2c	194	GLY	2.6
50	2s	54	GLY	2.6
33	2b	223	ILE	2.6
38	1g	4	ARG	2.6
38	2g	4	ARG	2.6
41	2j	96	ILE	2.6
26	14	59	PHE	2.6
7	2H	64	LEU	2.6
50	2s	30	LEU	2.6
38	2g	83	ALA	2.6
44	1m	118	ALA	2.6
32	2a	1110	A	2.6
53	1v	12	A	2.6
53	2v	13	A	2.6
1	1A	1092	C	2.6
32	1a	1008	C	2.6
32	2a	1362	C	2.6
34	2c	29	TYR	2.6
38	2g	85	TYR	2.6
54	2w	2	C	2.6
1	1A	1176	G	2.6
1	2A	1533	G	2.6
32	1a	1033	G	2.6
38	2g	156	TRP	2.6
6	1G	51	ARG	2.6
19	1X	94	GLY	2.6
36	2e	99	GLY	2.6
40	2i	72	GLY	2.6
42	1k	36	ASP	2.6
51	1t	8	ARG	2.6
51	1t	102	GLY	2.6
6	2G	23	PHE	2.6
32	2a	1257	U	2.6
6	2G	15	VAL	2.6
14	2S	46	VAL	2.6
31	29	16	VAL	2.6
39	2h	61	VAL	2.6
41	1j	33	GLN	2.6
41	2j	94	VAL	2.6
40	1i	126	SER	2.6

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Mol	Chain	Res	Type	RSRZ
32	2a	1531	A	2.6
54	2y	36	A	2.6
33	1b	33	TYR	2.6
40	2i	92	TYR	2.6
29	17	47	ARG	2.5
41	2j	79	ARG	2.5
6	2G	142	PRO	2.5
12	2Q	103	MET	2.5
21	2Z	160	GLY	2.5
41	2j	58	ASP	2.5
34	2c	77	ILE	2.5
39	2h	134	ILE	2.5
41	2j	75	ILE	2.5
54	1w	70	G	2.5
40	2i	2	GLU	2.5
7	2H	71	LEU	2.5
32	2a	997	U	2.5
32	2a	1020	U	2.5
44	2m	34	LEU	2.5
51	2t	10	LEU	2.5
21	2Z	152	ALA	2.5
33	2b	147	LYS	2.5
34	2c	60	ALA	2.5
42	2k	23	ALA	2.5
44	2m	118	ALA	2.5
1	1A	2170	A	2.5
32	1a	1005	A	2.5
36	2e	133	TYR	2.5
42	2k	75	TYR	2.5
33	2b	48	MET	2.5
47	1p	1	MET	2.5
7	2H	22	GLY	2.5
21	2Z	167	PRO	2.5
32	2a	1249	C	2.5
32	2a	1359	C	2.5
36	2e	29	GLY	2.5
8	2I	79	ILE	2.5
33	1b	41	ILE	2.5
1	1A	1093	G	2.5
6	1G	139	LEU	2.5
21	2Z	157	LEU	2.5
32	2a	1316	G	2.5

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Mol	Chain	Res	Type	RSRZ
36	2e	31	LEU	2.5
40	1i	56	LEU	2.5
7	2H	79	VAL	2.5
12	2Q	109	VAL	2.5
33	1b	40	HIS	2.5
40	2i	117	HIS	2.5
50	2s	18	LYS	2.5
34	2c	53	ALA	2.5
34	2c	146	ALA	2.5
40	2i	45	ALA	2.5
21	1Z	69	THR	2.5
41	2j	48	THR	2.5
11	1P	15	ARG	2.5
12	2Q	10	ARG	2.5
52	2u	6	ARG	2.5
6	2G	17	PRO	2.5
33	2b	31	TYR	2.5
42	2k	50	TYR	2.5
1	1A	1077	A	2.5
32	2a	1044	A	2.5
52	2u	4	GLY	2.5
34	1c	62	ASP	2.5
34	2c	134	ILE	2.5
38	2g	42	ILE	2.5
41	2j	50	ILE	2.5
1	1A	2111	C	2.5
1	1A	2164	C	2.5
32	1a	1029	C	2.5
7	2H	123	PHE	2.5
33	2b	17	PHE	2.5
50	2s	22	LEU	2.5
1	1A	1060	U	2.5
14	2S	14	VAL	2.5
34	2c	138	VAL	2.5
34	2c	141	VAL	2.5
1	1A	2152	G	2.5
1	2A	2165	G	2.5
12	2Q	59	ARG	2.5
12	2Q	121	ALA	2.5
6	2G	44	GLY	2.5
8	2I	106	GLY	2.5
19	2X	94	GLY	2.5

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Mol	Chain	Res	Type	RSRZ
21	2Z	2	GLU	2.5
34	2c	205	GLY	2.5
51	2t	101	GLY	2.5
33	1b	127	ILE	2.5
41	2j	17	ASP	2.5
12	2Q	29	PHE	2.5
21	1Z	104	PHE	2.5
34	2c	170	GLN	2.5
40	2i	101	PHE	2.5
41	2j	13	HIS	2.5
7	2H	15	VAL	2.5
21	2Z	165	VAL	2.5
33	2b	81	VAL	2.5
2	2B	1	U	2.5
12	2Q	28	ALA	2.5
36	2e	21	ALA	2.5
40	2i	122	ALA	2.5
43	2l	56	ALA	2.5
1	1A	1091	G	2.5
32	2a	953	G	2.5
32	2a	1184	G	2.5
6	2G	2	PRO	2.4
50	2s	82	GLY	2.4
20	2Y	107	ASP	2.4
21	2Z	99	TYR	2.4
33	1b	31	TYR	2.4
36	2e	118	ILE	2.4
39	2h	48	TYR	2.4
41	2j	82	ILE	2.4
42	1k	51	LYS	2.4
44	2m	21	TYR	2.4
45	2n	42	ILE	2.4
47	1p	39	TYR	2.4
33	2b	158	LEU	2.4
34	2c	33	LEU	2.4
35	1d	135	LEU	2.4
39	2h	59	LEU	2.4
41	2j	85	LEU	2.4
44	2m	70	LEU	2.4
50	2s	16	LEU	2.4
51	2t	99	LEU	2.4
31	29	20	HIS	2.4

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Mol	Chain	Res	Type	RSRZ
32	2a	1248	A	2.4
36	2e	84	PHE	2.4
34	2c	79	ARG	2.4
50	2s	29	ARG	2.4
1	1A	2794	C	2.4
1	2A	1043	C	2.4
21	2Z	71	VAL	2.4
21	2Z	74	VAL	2.4
32	1a	1028	C	2.4
32	2a	1119	C	2.4
35	1d	170	VAL	2.4
1	1A	1026	U	2.4
1	1A	2150	U	2.4
40	2i	61	ALA	2.4
45	2n	54	PRO	2.4
45	2n	8	GLU	2.4
1	1A	1071	G	2.4
1	2A	2319	G	2.4
8	1I	106	GLY	2.4
11	2P	28	GLY	2.4
32	2a	1042	G	2.4
33	2b	133	LYS	2.4
33	2b	156	LYS	2.4
40	1i	67	GLY	2.4
45	2n	28	GLY	2.4
54	2y	18	G	2.4
54	2y	57	G	2.4
6	2G	39	ILE	2.4
6	2G	19	LEU	2.4
33	1b	236	TYR	2.4
33	2b	155	LEU	2.4
38	1g	154	TYR	2.4
50	1s	5	LEU	2.4
45	2n	49	HIS	2.4
3	2D	21	PHE	2.4
7	2H	60	ARG	2.4
1	1A	1086	A	2.4
32	2a	949	A	2.4
33	2b	15	VAL	2.4
40	2i	53	VAL	2.4
44	2m	106	ASN	2.4
46	2o	60	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
50	2s	19	VAL	2.4
50	2s	45	VAL	2.4
8	2I	55	ALA	2.4
8	2I	146	ALA	2.4
36	2e	86	ALA	2.4
40	2i	52	ALA	2.4
43	2l	26	ALA	2.4
54	1w	4	C	2.4
32	2a	1148	U	2.4
40	1i	64	THR	2.4
50	2s	48	THR	2.4
8	2I	99	GLU	2.4
33	2b	86	GLU	2.4
35	1d	29	PRO	2.4
11	1P	116	GLY	2.4
43	2l	63	GLY	2.4
52	2u	13	ILE	2.4
1	1A	1099	G	2.4
1	1A	2151	G	2.4
21	2Z	76	LEU	2.4
24	22	9	GLN	2.4
32	1a	1031	G	2.4
35	1d	194	LEU	2.4
44	2m	96	LEU	2.4
48	1q	53	LEU	2.4
26	24	55	ARG	2.4
41	1j	46	ARG	2.4
41	2j	9	ARG	2.4
41	2j	66	ARG	2.4
50	2s	78	ARG	2.4
43	2l	64	TYR	2.4
22	20	79	VAL	2.4
40	2i	44	VAL	2.4
1	1A	548	A	2.4
8	2I	83	ALA	2.4
38	1g	156	TRP	2.4
44	2m	75	ALA	2.4
47	2p	59	TRP	2.4
1	2A	886	C	2.4
1	2A	888	C	2.4
7	2H	10	PRO	2.4
1	2A	2130	U	2.4

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Mol	Chain	Res	Type	RSRZ
1	2A	2175	C	2.4
1	2A	2896	C	2.4
6	2G	32	PRO	2.4
24	22	11	GLU	2.4
51	2t	74	LYS	2.4
6	2G	76	SER	2.4
32	1a	1037	C	2.4
32	2a	1006	C	2.4
17	1V	101	GLY	2.4
6	2G	88	ILE	2.4
38	2g	27	ILE	2.4
40	2i	63	ILE	2.4
41	1j	38	ILE	2.4
6	2G	172	LEU	2.4
15	1T	115	ARG	2.4
33	2b	145	LEU	2.4
33	2b	213	LEU	2.4
34	2c	32	LEU	2.4
40	2i	73	GLN	2.4
1	1A	1089	G	2.4
14	2S	7	TYR	2.4
26	24	63	TYR	2.4
32	2a	1182	G	2.4
47	1p	80	PHE	2.4
8	1I	142	VAL	2.4
33	1b	165	VAL	2.4
34	2c	120	VAL	2.4
38	2g	9	VAL	2.4
42	2k	14	VAL	2.4
44	2m	117	VAL	2.4
20	2Y	94	LYS	2.4
1	1A	1098	A	2.4
32	2a	975	A	2.4
32	2a	1251	A	2.4
32	2a	1286	A	2.4
33	1b	123	ALA	2.4
33	2b	88	ALA	2.4
34	1c	61	ALA	2.4
41	1j	83	GLU	2.4
43	2l	50	SER	2.3
1	2A	1026	U	2.3
32	2a	981	U	2.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1358	U	2.3
1	2A	2129	C	2.3
41	1j	36	GLY	2.3
22	20	44	ARG	2.3
20	2Y	90	LEU	2.3
33	2b	42	ILE	2.3
44	2m	88	ARG	2.3
45	2n	41	ARG	2.3
37	2f	21	LEU	2.3
40	1i	19	LEU	2.3
50	2s	49	ILE	2.3
51	1t	100	ILE	2.3
33	1b	19	HIS	2.3
50	2s	66	MET	2.3
6	1G	146	TYR	2.3
12	2Q	137	TYR	2.3
36	2e	61	TYR	2.3
48	2q	95	TYR	2.3
7	2H	175	LYS	2.3
40	1i	14	VAL	2.3
44	1m	27	LYS	2.3
1	2A	2153	G	2.3
1	2A	2160	G	2.3
1	2A	2318	G	2.3
54	1y	15	G	2.3
54	2y	15	G	2.3
4	2E	73	GLU	2.3
6	2G	35	GLU	2.3
15	2T	130	ALA	2.3
21	2Z	51	ALA	2.3
22	20	68	GLU	2.3
8	2I	78	THR	2.3
52	2u	8	THR	2.3
1	1A	899	A	2.3
1	1A	1070	A	2.3
32	2a	1363(A)	A	2.3
35	1d	83	SER	2.3
7	2H	78	GLY	2.3
40	2i	111	ARG	2.3
46	2o	89	GLY	2.3
52	1u	9	ARG	2.3
7	2H	33	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
12	2Q	37	LEU	2.3
21	1Z	120	ILE	2.3
23	21	46	LEU	2.3
34	1c	196	LEU	2.3
34	2c	34	LEU	2.3
32	1a	63	C	2.3
8	2I	1	MET	2.3
12	2Q	1	MET	2.3
6	2G	80	PHE	2.3
41	2j	80	LYS	2.3
46	2o	10	LYS	2.3
8	2I	15	VAL	2.3
14	2S	36	TYR	2.3
21	2Z	86	VAL	2.3
26	24	25	TYR	2.3
33	2b	92	TYR	2.3
34	2c	48	TYR	2.3
34	2c	153	VAL	2.3
40	2i	125	TYR	2.3
33	1b	134	GLU	2.3
20	2Y	53	PRO	2.3
33	1b	34	ALA	2.3
41	2j	53	PRO	2.3
1	1A	2160	G	2.3
1	2A	2168	G	2.3
8	2I	67	ARG	2.3
32	1a	380	G	2.3
32	2a	998	G	2.3
32	2a	1048	G	2.3
40	1i	27	THR	2.3
41	1j	45	ARG	2.3
50	2s	3	ARG	2.3
1	1A	1103	A	2.3
1	2A	2119	A	2.3
43	1l	63	GLY	2.3
47	2p	48	TRP	2.3
8	2I	139	GLN	2.3
33	2b	140	HIS	2.3
35	2d	201	GLN	2.3
33	2b	138	LEU	2.3
33	2b	222	ILE	2.3
6	2G	147	ASP	2.3

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Mol	Chain	Res	Type	RSRZ
33	2b	101	MET	2.3
39	2h	9	MET	2.3
40	1i	91	ASP	2.3
1	1A	1052	C	2.3
1	1A	1079	C	2.3
1	2A	884	C	2.3
32	2a	1218	C	2.3
21	2Z	48	PHE	2.3
9	2N	140	VAL	2.3
38	2g	75	VAL	2.3
40	1i	12	GLU	2.3
40	2i	110	GLU	2.3
22	20	26	TYR	2.3
40	2i	4	TYR	2.3
41	1j	34	VAL	2.3
3	2D	2	ALA	2.3
12	2Q	49	ALA	2.3
25	13	2	PRO	2.3
33	1b	234	PRO	2.3
33	2b	131	PRO	2.3
51	2t	98	PRO	2.3
7	2H	6	ARG	2.3
26	24	58	ARG	2.3
40	2i	20	ARG	2.3
47	1p	81	ARG	2.3
50	2s	81	ARG	2.3
51	2t	8	ARG	2.3
40	2i	103	THR	2.3
36	2e	74	GLY	2.3
1	1A	879	G	2.3
1	1A	2141	G	2.3
1	2A	2124	G	2.3
6	2G	152	LEU	2.3
6	2G	175	LEU	2.3
1	2A	2117	A	2.3
8	1I	109	ILE	2.3
28	26	42	TRP	2.3
32	2a	963	G	2.3
41	2j	19	SER	2.3
33	2b	211	ILE	2.3
39	2h	10	LEU	2.3
41	1j	98	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
43	2l	84	LEU	2.3
51	1t	55	ILE	2.3
54	1y	18	G	2.3
33	1b	133	LYS	2.3
32	2a	1126	U	2.3
32	2a	1205	U	2.3
54	2w	66	U	2.3
11	2P	149	GLU	2.3
5	2F	6	VAL	2.3
7	2H	45	VAL	2.3
36	2e	115	VAL	2.3
14	1S	3	ARG	2.3
45	2n	19	ARG	2.3
38	1g	2	ALA	2.2
40	2i	106	ALA	2.2
16	1U	117	GLN	2.2
19	2X	67	GLY	2.2
34	1c	96	GLY	2.2
34	2c	162	GLN	2.2
40	2i	115	GLY	2.2
4	2E	52	LEU	2.2
9	2N	116	LEU	2.2
14	2S	110	LEU	2.2
15	1T	114	LEU	2.2
24	22	8	LYS	2.2
33	1b	42	ILE	2.2
34	2c	202	ILE	2.2
45	2n	60	SER	2.2
47	1p	3	LYS	2.2
49	2r	84	LYS	2.2
51	1t	43	LEU	2.2
32	1a	149	A	2.2
1	2A	2131	G	2.2
32	2a	1058	G	2.2
8	2I	64	GLU	2.2
9	2N	51	PHE	2.2
1	1A	1075	C	2.2
1	2A	645	C	2.2
1	2A	2164	C	2.2
8	2I	37	VAL	2.2
15	1T	111	ARG	2.2
24	12	69	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
33	2b	197	VAL	2.2
33	2b	232	PRO	2.2
36	2e	18	ARG	2.2
38	2g	21	VAL	2.2
40	2i	26	VAL	2.2
40	2i	90	PRO	2.2
45	2n	57	ARG	2.2
41	2j	20	ALA	2.2
12	2Q	26	TYR	2.2
21	2Z	8	TYR	2.2
26	24	47	GLN	2.2
36	2e	98	THR	2.2
3	1D	38	LYS	2.2
4	2E	10	GLY	2.2
7	2H	82	GLY	2.2
21	2Z	26	GLY	2.2
34	2c	27	LYS	2.2
35	2d	87	GLY	2.2
40	2i	95	LYS	2.2
43	2l	29	GLY	2.2
50	2s	46	GLY	2.2
6	2G	62	LEU	2.2
6	2G	176	LEU	2.2
11	1P	105	LEU	2.2
14	2S	54	LEU	2.2
21	2Z	33	LEU	2.2
21	2Z	125	LEU	2.2
33	2b	10	LEU	2.2
36	2e	12	LEU	2.2
40	2i	40	LEU	2.2
41	2j	8	LEU	2.2
10	2O	19	ILE	2.2
14	2S	39	ILE	2.2
36	2e	80	ILE	2.2
10	2O	81	ASP	2.2
1	2A	2135	A	2.2
54	1y	35	A	2.2
54	2y	21	A	2.2
32	2a	991	U	2.2
1	1A	880	G	2.2
6	2G	95	ARG	2.2
33	1b	130	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
21	1Z	136	PHE	2.2
6	2G	31	VAL	2.2
8	2I	132	PRO	2.2
39	2h	93	VAL	2.2
42	2k	105	VAL	2.2
47	1p	41	PRO	2.2
50	2s	59	PRO	2.2
1	1A	2136	C	2.2
1	2A	277	C	2.2
7	2H	165	ALA	2.2
8	2I	65	ALA	2.2
12	2Q	136	ALA	2.2
32	2a	990	C	2.2
32	2a	995	C	2.2
32	2a	1066	C	2.2
41	1j	76	ASN	2.2
45	2n	5	ALA	2.2
9	2N	118	LYS	2.2
34	2c	199	LYS	2.2
40	1i	125	TYR	2.2
45	1n	4	LYS	2.2
41	2j	86	MET	2.2
50	2s	39	THR	2.2
8	2I	38	LEU	2.2
35	1d	87	GLY	2.2
42	2k	86	GLY	2.2
16	2U	62	ILE	2.2
41	2j	23	ILE	2.2
45	1n	7	ILE	2.2
46	2o	3	ILE	2.2
21	1Z	52	SER	2.2
44	2m	58	GLU	2.2
6	2G	29	TRP	2.2
6	2G	100	TRP	2.2
6	2G	115	ARG	2.2
18	2W	92	ARG	2.2
22	20	82	ARG	2.2
47	1p	59	TRP	2.2
1	1A	2189	U	2.2
1	2A	272(A)	U	2.2
1	2A	1113	U	2.2
1	2A	2114	A	2.2

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Mol	Chain	Res	Type	RSRZ
5	1F	14	PRO	2.2
32	1a	65	U	2.2
32	1a	1040	U	2.2
54	1w	20	U	2.2
54	1y	36	A	2.2
54	2w	26	A	2.2
36	2e	45	PHE	2.2
40	2i	49	PRO	2.2
48	1q	28	PRO	2.2
7	2H	37	VAL	2.2
7	2H	44	VAL	2.2
7	2H	50	VAL	2.2
7	2H	169	VAL	2.2
34	2c	173	VAL	2.2
35	1d	88	VAL	2.2
36	2e	55	VAL	2.2
39	2h	51	VAL	2.2
40	1i	108	VAL	2.2
41	1j	44	VAL	2.2
1	2A	2805	G	2.2
32	1a	1009	G	2.2
32	1a	1021	G	2.2
32	2a	1216	G	2.2
32	2a	1253	G	2.2
54	2w	65	G	2.2
7	2H	156	ALA	2.2
34	2c	133	ALA	2.2
39	2h	16	ALA	2.2
6	2G	155	MET	2.2
39	2h	3	THR	2.2
6	2G	139	LEU	2.2
12	2Q	19	GLY	2.2
42	1k	75	TYR	2.2
51	1t	69	GLY	2.2
33	1b	172	ILE	2.2
35	1d	192	GLU	2.2
6	1G	21	ARG	2.2
40	2i	104	ARG	2.2
41	2j	43	ARG	2.2
43	2l	19	ARG	2.2
45	1n	3	ARG	2.2
33	1b	24	TRP	2.2

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Mol	Chain	Res	Type	RSRZ
35	1d	173	TRP	2.2
44	2m	41	PRO	2.2
1	1A	2135	A	2.1
1	2A	1847	A	2.1
1	2A	2172	U	2.2
12	2Q	52	VAL	2.1
21	2Z	90	VAL	2.1
32	2a	1000	U	2.2
32	2a	1015	A	2.1
32	2a	1315	U	2.2
40	2i	127	LYS	2.2
43	1l	126	LYS	2.2
48	1q	52	LYS	2.2
47	1p	2	VAL	2.1
49	1r	20	ALA	2.1
1	2A	11	G	2.1
1	2A	1171	G	2.1
1	2A	2321	G	2.1
7	2H	7	LEU	2.1
11	1P	44	GLY	2.1
11	2P	45	LEU	2.1
20	2Y	106	LEU	2.1
32	2a	1023	G	2.1
32	2a	1370	G	2.1
33	1b	187	LEU	2.1
33	2b	61	LEU	2.1
34	2c	47	LEU	2.1
34	2c	81	GLY	2.1
36	2e	53	LEU	2.1
36	2e	97	GLY	2.1
39	2h	133	LEU	2.1
41	2j	67	THR	2.1
44	2m	37	THR	2.1
44	2m	38	GLY	2.1
34	1c	193	TYR	2.1
34	2c	57	ILE	2.1
41	2j	6	ILE	2.1
42	2k	29	ILE	2.1
1	1A	2137	C	2.1
1	2A	2163	C	2.1
2	2B	88	C	2.1
22	20	11	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
34	1c	56	ASP	2.1
37	2f	93	SER	2.1
38	2g	115	ARG	2.1
41	2j	60	ARG	2.1
48	1q	97	SER	2.1
51	2t	83	ARG	2.1
7	2H	173	PRO	2.1
35	1d	84	LYS	2.1
36	2e	96	PRO	2.1
44	2m	46	LYS	2.1
6	2G	180	PHE	2.1
22	20	45	PHE	2.1
33	2b	70	PHE	2.1
35	2d	198	VAL	2.1
38	1g	9	VAL	2.1
50	2s	58	VAL	2.1
22	20	18	ALA	2.1
32	2a	1447	A	2.1
44	2m	76	ALA	2.1
7	2H	88	LEU	2.1
12	2Q	79	LEU	2.1
20	2Y	104	GLY	2.1
41	1j	65	LEU	2.1
44	2m	20	THR	2.1
44	2m	81	LEU	2.1
45	2n	51	GLY	2.1
7	2H	72	ILE	2.1
39	2h	111	ILE	2.1
42	2k	48	ILE	2.1
48	1q	36	ILE	2.1
48	2q	90	ILE	2.1
1	1A	2793	G	2.1
1	2A	171	G	2.1
1	2A	2149	G	2.1
1	2A	2159	G	2.1
9	2N	68	GLU	2.1
35	1d	139	ARG	2.1
36	2e	27	ARG	2.1
40	1i	4	TYR	2.1
41	2j	61	GLU	2.1
44	2m	3	ARG	2.1
32	2a	951	G	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	1009	G	2.1
32	2a	1017	G	2.1
32	2a	1024	G	2.1
32	2a	1030(C)	G	2.1
32	2a	1061	G	2.1
32	2a	1064	G	2.1
32	2a	1094	G	2.1
54	1w	15	G	2.1
54	2w	19	G	2.1
1	2A	865	C	2.1
1	2A	889	C	2.1
1	2A	894	C	2.1
14	2S	52	SER	2.1
32	2a	1028	C	2.1
32	2a	1029	C	2.1
32	2a	1363	C	2.1
33	2b	132	LYS	2.1
34	2c	150	LYS	2.1
39	2h	89	PRO	2.1
50	2s	42	PRO	2.1
12	2Q	69	PHE	2.1
36	1e	6	PHE	2.1
41	1j	56	HIS	2.1
7	2H	24	VAL	2.1
7	2H	115	VAL	2.1
24	22	63	VAL	2.1
29	27	46	VAL	2.1
34	2c	130	VAL	2.1
50	2s	60	VAL	2.1
32	2a	950	U	2.1
33	1b	120	ALA	2.1
33	2b	13	ALA	2.1
33	2b	188	ALA	2.1
34	2c	61	ALA	2.1
35	1d	48	ALA	2.1
51	2t	94	ALA	2.1
37	2f	84	ASN	2.1
38	2g	109	ASN	2.1
39	2h	15	ASN	2.1
51	1t	75	ASN	2.1
1	1A	2790	A	2.1
6	1G	53	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	969	A	2.1
21	1Z	160	GLY	2.1
21	2Z	91	LEU	2.1
41	2j	16	LEU	2.1
46	2o	31	LEU	2.1
53	2v	23	A	2.1
34	2c	67	THR	2.1
34	2c	197	GLY	2.1
40	2i	27	THR	2.1
50	2s	84	GLY	2.1
28	26	44	ARG	2.1
6	2G	140	ILE	2.1
8	2I	7	GLU	2.1
26	24	57	GLU	2.1
36	2e	131	ILE	2.1
39	1h	134	ILE	2.1
44	2m	9	ILE	2.1
33	2b	33	TYR	2.1
8	1I	87	LYS	2.1
11	2P	39	LYS	2.1
20	2Y	54	LYS	2.1
21	2Z	154	ASP	2.1
33	2b	22	LYS	2.1
44	2m	120	LYS	2.1
45	2n	11	LYS	2.1
48	2q	100	LYS	2.1
49	1r	84	LYS	2.1
41	2j	35	SER	2.1
48	2q	99	SER	2.1
32	1a	1032	G	2.1
32	2a	1026	G	2.1
55	2x	70	G	2.1
32	2a	1045	C	2.1
33	1b	232	PRO	2.1
40	1i	21	PRO	2.1
14	2S	34	HIS	2.1
12	2Q	113	GLN	2.1
42	1k	13	GLN	2.1
7	2H	49	VAL	2.1
8	2I	81	VAL	2.1
8	2I	127	VAL	2.1
21	2Z	96	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
49	2r	37	VAL	2.1
33	1b	186	ALA	2.1
34	1c	60	ALA	2.1
1	2A	614(A)	U	2.1
1	2A	2132	U	2.1
14	2S	32	LEU	2.1
21	2Z	122	ARG	2.1
32	2a	961	U	2.1
32	2a	1062	U	2.1
33	2b	69	LEU	2.1
34	2c	94	LEU	2.1
7	2H	48	GLY	2.1
22	20	42	GLY	2.1
33	2b	14	GLY	2.1
36	2e	107	ARG	2.1
41	1j	79	ARG	2.1
43	2l	41	ARG	2.1
48	2q	92	ARG	2.1
51	1t	47	GLY	2.1
21	2Z	138	GLU	2.1
22	20	10	THR	2.1
1	2A	2158	A	2.1
30	28	16	ILE	2.1
32	2a	1092	A	2.1
3	2D	39	LYS	2.1
43	2l	54	LYS	2.1
50	2s	70	LYS	2.1
6	2G	131	TYR	2.1
12	2Q	32	TYR	2.1
33	2b	199	TYR	2.1
34	1c	184	TYR	2.1
47	1p	68	ASP	2.1
33	2b	235	SER	2.1
1	1A	886	C	2.1
1	1A	2110	G	2.0
32	2a	1027	C	2.1
32	2a	1060	C	2.1
32	2a	1127	G	2.0
32	2a	1317	C	2.1
33	2b	135	GLN	2.0
33	2b	164	VAL	2.0
34	1c	55	VAL	2.0

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Mol	Chain	Res	Type	RSRZ
39	2h	31	PHE	2.0
6	2G	57	ALA	2.0
6	2G	72	ARG	2.0
33	2b	77	ALA	2.0
35	1d	111	ALA	2.0
36	1e	21	ALA	2.0
44	2m	71	ARG	2.0
45	2n	23	ARG	2.0
9	2N	45	ASN	2.0
33	2b	215	LEU	2.0
35	1d	154	ASN	2.0
30	28	34	TRP	2.0
32	1a	202	U	2.0
32	2a	1052	U	2.0
33	1b	97	TRP	2.0
33	2b	38	GLY	2.0
41	1j	10	GLY	2.0
34	1c	77	ILE	2.0
34	2c	135	LYS	2.0
36	2e	109	ILE	2.0
40	2i	64	THR	2.0
47	1p	48	TRP	2.0
3	2D	276	LYS	2.0
7	2H	85	LYS	2.0
12	2Q	47	ILE	2.0
33	2b	74	LYS	2.0
50	2s	7	LYS	2.0
1	1A	1073	A	2.0
1	2A	917	A	2.0
32	2a	996	A	2.0
32	2a	1014	A	2.0
32	2a	1151	A	2.0
32	2a	1236	A	2.0
6	2G	4	ASP	2.0
5	1F	13	SER	2.0
7	2H	168	PRO	2.0
26	24	67	TYR	2.0
34	2c	109	PRO	2.0
37	2f	59	TYR	2.0
40	2i	21	PRO	2.0
34	2c	142	MET	2.0
38	1g	153	HIS	2.0

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Mol	Chain	Res	Type	RSRZ
44	2m	92	HIS	2.0
45	2n	27	CYS	2.0
1	1A	889	C	2.0
7	1H	113	VAL	2.0
8	2I	142	VAL	2.0
8	2I	145	VAL	2.0
32	2a	1007	C	2.0
32	2a	1113	C	2.0
34	2c	75	VAL	2.0
37	1f	46	ARG	2.0
39	2h	84	ARG	2.0
40	2i	65	VAL	2.0
42	2k	125	PHE	2.0
44	2m	15	VAL	2.0
46	1o	88	ARG	2.0
55	1x	69	C	2.0
1	2A	2162	G	2.0
32	2a	971	G	2.0
14	2S	48	LEU	2.0
20	2Y	31	LEU	2.0
34	2c	65	ALA	2.0
42	2k	103	LEU	2.0
44	1m	5	ALA	2.0
44	2m	18	ALA	2.0
51	1t	53	LEU	2.0
51	2t	24	LEU	2.0
40	2i	69	GLY	2.0
42	2k	90	GLY	2.0
21	2Z	57	ILE	2.0
33	2b	32	ILE	2.0
33	2b	162	ILE	2.0
34	1c	84	ILE	2.0
1	1A	12	U	2.0
1	1A	614(A)	U	2.0
34	1c	18	TRP	2.0
16	2U	2	PRO	2.0
20	1Y	107	ASP	2.0
21	2Z	83	PRO	2.0
22	20	83	PRO	2.0
32	2a	1130	A	2.0
32	2a	1287	A	2.0
32	2a	1324	A	2.0

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Mol	Chain	Res	Type	RSRZ
18	1W	111	HIS	2.0
21	2Z	9	TYR	2.0
51	2t	73	HIS	2.0

6.2 Non-standard residues in protein, DNA, RNA chains [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, 95th 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 ²)	Q<0.9
54	PSU	2y	55	20/21	0.51	0.17	93,99,111,111	0
54	G7M	2w	46	24/25	0.53	0.14	79,96,103,111	0
54	G7M	1w	46	24/25	0.53	0.16	77,91,102,115	0
54	G7M	1y	46	24/25	0.57	0.17	88,96,103,115	0
54	G7M	2y	46	24/25	0.62	0.17	92,94,99,121	0
54	5MU	2y	54	21/22	0.64	0.16	90,98,103,120	0
54	4SU	2y	8	20/21	0.68	0.15	93,97,104,110	0
54	PSU	2w	55	20/21	0.69	0.15	86,94,99,102	0
54	PSU	2y	32	20/21	0.70	0.14	82,91,98,105	0
54	5MU	2w	54	21/22	0.72	0.14	78,87,93,95	0
54	PSU	1y	55	20/21	0.72	0.14	89,95,102,107	0
54	MIA	2y	37	22/30	0.72	0.14	81,93,103,114	0
54	4SU	1y	8	20/21	0.73	0.14	90,96,99,108	0
54	5MU	1y	54	21/22	0.73	0.14	85,90,96,110	0
54	4SU	2w	8	20/21	0.75	0.12	90,97,105,113	0
54	4SU	1w	8	20/21	0.77	0.12	86,92,103,105	0
54	PSU	1w	55	20/21	0.81	0.11	82,90,97,97	0
54	PSU	1y	39	20/21	0.82	0.11	84,86,98,98	0
32	2MG	2a	1207	24/25	0.82	0.14	85,90,95,106	0
54	PSU	1y	32	20/21	0.83	0.13	83,88,93,93	0
54	PSU	2y	39	20/21	0.84	0.11	83,87,98,104	0
54	MIA	1y	37	22/30	0.84	0.12	82,86,92,101	0
55	4SU	2x	8	20/21	0.85	0.12	81,86,90,90	0
55	PSU	2x	55	20/21	0.86	0.11	75,81,86,87	0
54	PSU	2w	32	20/21	0.86	0.14	81,90,95,102	0
54	MIA	2w	37	25/30	0.86	0.16	77,88,93,107	0
54	MIA	1w	37	29/30	0.86	0.17	64,73,76,98	0
54	PSU	2w	39	20/21	0.87	0.11	83,90,94,95	0
32	PSU	2a	516	20/21	0.88	0.12	76,82,87,88	0
1	5MU	2A	1915	21/22	0.88	0.11	76,80,84,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
54	PSU	1w	32	20/21	0.89	0.13	73,78,84,85	0
32	G7M	2a	527	24/25	0.89	0.13	65,73,80,84	0
32	M2G	2a	966	25/26	0.89	0.18	67,74,87,91	0
55	5MC	2x	32	21/22	0.89	0.14	72,78,82,82	0
55	5MU	2x	54	21/22	0.90	0.11	74,83,88,91	0
32	5MC	2a	1404	21/22	0.90	0.13	59,65,70,73	0
1	PSU	2A	1911	20/21	0.90	0.10	67,70,76,79	0
1	PSU	2A	1917	20/21	0.91	0.09	66,74,79,81	0
54	5MU	1w	54	21/22	0.91	0.09	70,81,85,87	0
32	4OC	2a	1402	22/23	0.92	0.13	58,70,74,80	0
55	PSU	1x	55	20/21	0.92	0.10	60,68,74,78	0
43	0TD	2l	92	10/11	0.92	0.11	69,74,79,90	0
1	OMC	2A	1920	21/22	0.92	0.12	61,70,74,76	0
32	5MC	2a	967	21/22	0.92	0.14	72,77,85,88	0
54	PSU	1w	39	20/21	0.92	0.11	73,78,86,88	0
32	5MC	2a	1400	21/22	0.92	0.15	69,75,80,88	0
32	MA6	2a	1518	24/25	0.93	0.13	53,74,78,81	0
43	0TD	1l	92	10/11	0.93	0.10	57,60,65,78	0
32	2MG	1a	1207	24/25	0.93	0.10	71,75,78,81	0
32	UR3	2a	1498	21/22	0.93	0.13	63,65,70,73	0
32	PSU	1a	516	20/21	0.94	0.09	64,70,73,74	0
1	5MU	1A	1915	21/22	0.94	0.10	57,62,68,70	0
32	5MC	2a	1407	21/22	0.94	0.12	59,64,72,77	0
55	5MU	1x	54	21/22	0.94	0.10	66,72,76,80	0
32	5MC	1a	967	21/22	0.95	0.10	58,63,68,69	0
1	5MC	2A	1942	21/22	0.95	0.10	58,64,67,68	0
1	5MC	2A	1962	21/22	0.95	0.10	44,57,65,67	0
32	G7M	1a	527	24/25	0.95	0.09	51,54,59,60	0
32	MA6	2a	1519	24/25	0.95	0.13	58,71,75,77	0
55	5MC	1x	32	21/22	0.95	0.12	54,61,66,75	0
1	5MC	1A	1942	21/22	0.96	0.08	37,43,49,55	0
55	4SU	1x	8	20/21	0.96	0.08	58,66,71,71	0
32	5MC	1a	1400	21/22	0.96	0.11	51,57,60,63	0
32	MA6	1a	1519	24/25	0.96	0.11	45,50,56,62	0
32	M2G	1a	966	25/26	0.96	0.11	56,62,68,69	0
1	PSU	1A	1917	20/21	0.96	0.07	52,57,61,63	0
55	31H	2x	76	32/33	0.96	0.10	44,49,61,62	0
1	OMU	2A	2552	21/22	0.97	0.08	42,50,56,61	0
32	5MC	1a	1407	21/22	0.97	0.09	42,45,50,51	0
32	MA6	1a	1518	24/25	0.97	0.09	39,49,54,54	0
1	OMC	1A	1920	21/22	0.97	0.07	41,49,53,56	0
1	PSU	1A	1911	20/21	0.97	0.08	43,53,57,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
1	PSU	1A	2605	20/21	0.97	0.06	25,30,34,37	0
1	5MU	2A	1939	21/22	0.97	0.08	38,45,50,52	0
32	4OC	1a	1402	22/23	0.97	0.10	46,50,59,59	0
32	5MC	1a	1404	21/22	0.97	0.09	44,50,53,55	0
1	OMG	2A	2251	24/25	0.97	0.08	45,48,54,61	0
1	2MA	2A	2503	23/24	0.97	0.09	39,42,46,47	0
55	31H	1x	76	32/33	0.98	0.07	25,31,37,44	10
1	5MU	1A	1939	21/22	0.98	0.05	27,33,37,39	0
1	PSU	2A	2605	20/21	0.98	0.06	36,43,48,50	0
1	5MC	1A	1962	21/22	0.98	0.07	35,42,47,53	0
1	OMU	1A	2552	21/22	0.98	0.06	29,34,38,41	0
32	UR3	1a	1498	21/22	0.99	0.07	43,48,51,52	0
1	2MA	1A	2503	23/24	0.99	0.05	21,26,29,31	0
1	OMG	1A	2251	24/25	0.99	0.04	28,31,34,37	0

6.3 Carbohydrates [i](#)

There are no oligosaccharides 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, 95th 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(\AA^2)	Q<0.9
56	MG	2y	104	1/1	0.43	0.26	95,95,95,95	0
56	MG	2A	3665	1/1	0.52	0.24	87,87,87,87	0
56	MG	2a	3107	1/1	0.55	0.33	80,80,80,80	0
56	MG	2a	3225	1/1	0.57	0.22	84,84,84,84	0
56	MG	1B	3630	1/1	0.57	0.24	81,81,81,81	0
56	MG	2a	3208	1/1	0.60	0.30	80,80,80,80	0
56	MG	2A	3312	1/1	0.60	0.39	80,80,80,80	0
56	MG	2A	3321	1/1	0.60	0.37	89,89,89,89	0
56	MG	2A	3494	1/1	0.62	0.20	77,77,77,77	0
56	MG	2A	3446	1/1	0.63	0.40	91,91,91,91	0
56	MG	2A	3679	1/1	0.63	0.26	81,81,81,81	0
56	MG	2A	3415	1/1	0.64	0.26	84,84,84,84	0
56	MG	1A	3535	1/1	0.64	0.27	67,67,67,67	0
56	MG	2A	3223	1/1	0.64	0.34	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	3476	1/1	0.65	0.26	83,83,83,83	0
56	MG	2A	3319	1/1	0.65	0.31	86,86,86,86	0
56	MG	2w	107	1/1	0.66	0.22	84,84,84,84	0
56	MG	2A	3359	1/1	0.66	0.36	83,83,83,83	0
56	MG	20	104	1/1	0.67	0.20	76,76,76,76	0
56	MG	2A	3712	1/1	0.67	0.17	87,87,87,87	0
56	MG	2A	3773	1/1	0.67	0.26	74,74,74,74	0
56	MG	2a	3057	1/1	0.68	0.28	86,86,86,86	0
56	MG	2A	3396	1/1	0.68	0.23	81,81,81,81	0
56	MG	1a	1718	1/1	0.68	0.17	71,71,71,71	0
56	MG	1A	3741	1/1	0.68	0.19	71,71,71,71	0
56	MG	1a	1641	1/1	0.68	0.41	85,85,85,85	0
56	MG	2A	3542	1/1	0.68	0.24	72,72,72,72	0
56	MG	2y	105	1/1	0.68	0.30	99,99,99,99	0
56	MG	2A	3816	1/1	0.69	0.17	70,70,70,70	0
56	MG	2A	3698	1/1	0.69	0.23	65,65,65,65	0
56	MG	1A	4011	1/1	0.69	0.15	76,76,76,76	0
56	MG	1A	3845	1/1	0.69	0.26	74,74,74,74	0
56	MG	2a	3148	1/1	0.69	0.36	84,84,84,84	0
56	MG	2A	3346	1/1	0.70	0.30	90,90,90,90	0
56	MG	2G	201	1/1	0.70	0.27	83,83,83,83	0
56	MG	2A	3708	1/1	0.70	0.26	80,80,80,80	0
56	MG	2j	201	1/1	0.70	0.14	77,77,77,77	0
56	MG	2A	3258	1/1	0.70	0.26	83,83,83,83	0
56	MG	1A	3100	1/1	0.70	0.15	79,79,79,79	0
56	MG	2a	3111	1/1	0.70	0.41	84,84,84,84	0
56	MG	2A	3269	1/1	0.71	0.13	83,83,83,83	0
56	MG	1A	3797	1/1	0.71	0.22	81,81,81,81	0
56	MG	2A	3352	1/1	0.71	0.17	82,82,82,82	0
56	MG	1A	3898	1/1	0.71	0.22	49,49,49,49	0
56	MG	2a	3212	1/1	0.72	0.21	76,76,76,76	0
56	MG	2a	3068	1/1	0.72	0.17	85,85,85,85	0
56	MG	2A	3758	1/1	0.72	0.19	73,73,73,73	0
56	MG	2q	202	1/1	0.72	0.16	86,86,86,86	0
56	MG	2w	105	1/1	0.72	0.15	91,91,91,91	0
56	MG	2A	3091	1/1	0.72	0.29	88,88,88,88	0
56	MG	1a	1743	1/1	0.72	0.27	83,83,83,83	0
56	MG	2a	3063	1/1	0.72	0.36	84,84,84,84	0
56	MG	2A	3343	1/1	0.73	0.16	82,82,82,82	0
56	MG	2A	3300	1/1	0.73	0.27	68,68,68,68	0
56	MG	2A	3694	1/1	0.73	0.22	76,76,76,76	0
56	MG	2a	3007	1/1	0.73	0.22	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2a	3028	1/1	0.73	0.27	85,85,85,85	0
56	MG	2A	3347	1/1	0.73	0.33	88,88,88,88	0
56	MG	2A	3349	1/1	0.73	0.12	92,92,92,92	0
56	MG	2A	3175	1/1	0.73	0.22	77,77,77,77	0
56	MG	2A	3500	1/1	0.73	0.31	86,86,86,86	0
56	MG	2A	3356	1/1	0.73	0.28	78,78,78,78	0
56	MG	2A	3293	1/1	0.74	0.17	79,79,79,79	0
56	MG	1A	3860	1/1	0.74	0.18	77,77,77,77	0
56	MG	2a	3135	1/1	0.74	0.29	91,91,91,91	0
56	MG	1A	3479	1/1	0.74	0.19	78,78,78,78	0
56	MG	1A	3568	1/1	0.74	0.18	71,71,71,71	0
56	MG	1A	4092	1/1	0.74	0.22	86,86,86,86	0
56	MG	2A	3097	1/1	0.74	0.21	80,80,80,80	0
56	MG	1A	4098	1/1	0.74	0.30	78,78,78,78	0
56	MG	2A	3655	1/1	0.74	0.17	75,75,75,75	0
56	MG	2w	102	1/1	0.74	0.17	98,98,98,98	0
56	MG	1A	3707	1/1	0.74	0.21	71,71,71,71	0
56	MG	1U	212	1/1	0.74	0.39	55,55,55,55	0
56	MG	1l	104	1/1	0.74	0.20	84,84,84,84	0
56	MG	2A	3275	1/1	0.74	0.20	78,78,78,78	0
56	MG	2A	3345	1/1	0.75	0.26	84,84,84,84	0
56	MG	1a	1698	1/1	0.75	0.28	79,79,79,79	0
56	MG	2a	3125	1/1	0.75	0.29	85,85,85,85	0
56	MG	2A	3472	1/1	0.75	0.19	85,85,85,85	0
56	MG	2A	3110	1/1	0.75	0.12	81,81,81,81	0
56	MG	2A	3810	1/1	0.75	0.18	71,71,71,71	0
56	MG	1a	1711	1/1	0.75	0.40	78,78,78,78	0
56	MG	2A	3859	1/1	0.75	0.23	81,81,81,81	0
56	MG	1A	4094	1/1	0.75	0.18	65,65,65,65	0
56	MG	2A	3625	1/1	0.75	0.21	64,64,64,64	0
56	MG	2A	3249	1/1	0.75	0.22	82,82,82,82	0
56	MG	1A	3689	1/1	0.75	0.24	69,69,69,69	0
56	MG	2A	3378	1/1	0.75	0.22	79,79,79,79	0
56	MG	2A	3395	1/1	0.75	0.31	78,78,78,78	0
56	MG	1A	3755	1/1	0.75	0.14	64,64,64,64	0
56	MG	2y	107	1/1	0.75	0.25	96,96,96,96	0
56	MG	1A	3529	1/1	0.76	0.14	80,80,80,80	0
56	MG	2A	3325	1/1	0.76	0.17	71,71,71,71	0
56	MG	2a	3106	1/1	0.76	0.26	80,80,80,80	0
56	MG	2A	3408	1/1	0.76	0.15	78,78,78,78	0
56	MG	2A	3331	1/1	0.76	0.29	77,77,77,77	0
56	MG	2a	3112	1/1	0.76	0.17	93,93,93,93	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1O	206	1/1	0.76	0.32	70,70,70,70	0
56	MG	1a	1739	1/1	0.76	0.20	88,88,88,88	0
56	MG	1A	4041	1/1	0.76	0.10	61,61,61,61	0
56	MG	1a	1791	1/1	0.76	0.11	81,81,81,81	0
56	MG	1a	1812	1/1	0.76	0.21	80,80,80,80	0
56	MG	2B	220	1/1	0.76	0.24	80,80,80,80	0
56	MG	2A	3606	1/1	0.76	0.16	82,82,82,82	0
56	MG	1A	3249	1/1	0.76	0.23	79,79,79,79	0
56	MG	25	104	1/1	0.76	0.24	82,82,82,82	0
56	MG	1A	3815	1/1	0.76	0.25	69,69,69,69	0
56	MG	2a	3008	1/1	0.76	0.47	84,84,84,84	0
56	MG	2A	3101	1/1	0.76	0.31	81,81,81,81	0
56	MG	2a	3042	1/1	0.76	0.23	86,86,86,86	0
56	MG	1A	3999	1/1	0.76	0.15	75,75,75,75	0
56	MG	2a	3197	1/1	0.77	0.26	84,84,84,84	0
56	MG	2A	3115	1/1	0.77	0.25	71,71,71,71	0
56	MG	1w	104	1/1	0.77	0.15	84,84,84,84	0
56	MG	1x	101	1/1	0.77	0.14	69,69,69,69	0
56	MG	2a	3231	1/1	0.77	0.29	79,79,79,79	0
56	MG	2A	3229	1/1	0.77	0.22	65,65,65,65	0
56	MG	1A	4080	1/1	0.77	0.23	66,66,66,66	0
56	MG	1a	1780	1/1	0.77	0.12	77,77,77,77	0
56	MG	2a	3122	1/1	0.77	0.25	82,82,82,82	0
56	MG	1A	4035	1/1	0.77	0.21	60,60,60,60	0
56	MG	2a	3053	1/1	0.77	0.17	87,87,87,87	0
56	MG	2a	3142	1/1	0.77	0.27	74,74,74,74	0
56	MG	1A	4099	1/1	0.77	0.17	62,62,62,62	0
56	MG	2a	3082	1/1	0.78	0.30	78,78,78,78	0
56	MG	1a	1713	1/1	0.78	0.52	82,82,82,82	0
56	MG	2A	3031	1/1	0.78	0.17	61,61,61,61	0
56	MG	1D	311	1/1	0.78	0.29	72,72,72,72	0
56	MG	2A	3815	1/1	0.78	0.13	84,84,84,84	0
56	MG	1A	4024	1/1	0.78	0.12	69,69,69,69	0
56	MG	2A	3280	1/1	0.78	0.22	76,76,76,76	0
56	MG	2A	3885	1/1	0.78	0.34	88,88,88,88	0
56	MG	2B	208	1/1	0.78	0.15	76,76,76,76	0
56	MG	2A	3290	1/1	0.78	0.25	86,86,86,86	0
56	MG	1A	3208	1/1	0.78	0.22	81,81,81,81	0
56	MG	2Z	301	1/1	0.78	0.14	86,86,86,86	0
56	MG	1A	4036	1/1	0.78	0.14	53,53,53,53	0
56	MG	1A	3531	1/1	0.78	0.14	69,69,69,69	0
56	MG	2A	3670	1/1	0.78	0.17	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1B	3622	1/1	0.78	0.23	63,63,63,63	0
56	MG	2A	3689	1/1	0.78	0.15	65,65,65,65	0
56	MG	2A	3196	1/1	0.78	0.15	81,81,81,81	0
56	MG	1n	101	1/1	0.78	0.46	74,74,74,74	0
56	MG	2a	3055	1/1	0.78	0.19	79,79,79,79	0
56	MG	1A	3263	1/1	0.78	0.15	59,59,59,59	0
56	MG	2A	3417	1/1	0.78	0.19	78,78,78,78	0
56	MG	2A	3728	1/1	0.78	0.18	71,71,71,71	0
56	MG	2A	3094	1/1	0.79	0.26	52,52,52,52	0
56	MG	2a	3177	1/1	0.79	0.18	79,79,79,79	0
56	MG	2a	3196	1/1	0.79	0.27	82,82,82,82	0
56	MG	1A	3293	1/1	0.79	0.17	54,54,54,54	0
56	MG	2A	3358	1/1	0.79	0.21	75,75,75,75	0
56	MG	1a	1722	1/1	0.79	0.18	74,74,74,74	0
56	MG	2a	3217	1/1	0.79	0.35	67,67,67,67	0
56	MG	2A	3360	1/1	0.79	0.17	72,72,72,72	0
56	MG	2A	3375	1/1	0.79	0.17	80,80,80,80	0
56	MG	2A	3506	1/1	0.79	0.19	65,65,65,65	0
56	MG	2A	3103	1/1	0.79	0.23	64,64,64,64	0
56	MG	2v	101	1/1	0.79	0.31	85,85,85,85	0
56	MG	2A	3591	1/1	0.79	0.20	79,79,79,79	0
56	MG	1x	107	1/1	0.79	0.28	77,77,77,77	0
56	MG	2A	3610	1/1	0.79	0.22	69,69,69,69	0
56	MG	1A	3693	1/1	0.79	0.15	71,71,71,71	0
56	MG	2a	3041	1/1	0.79	0.38	72,72,72,72	0
56	MG	1A	4044	1/1	0.79	0.17	52,52,52,52	0
56	MG	2a	3084	1/1	0.80	0.30	80,80,80,80	0
56	MG	2A	3116	1/1	0.80	0.38	80,80,80,80	0
56	MG	2A	3322	1/1	0.80	0.25	75,75,75,75	0
56	MG	2a	3109	1/1	0.80	0.20	73,73,73,73	0
56	MG	2A	3126	1/1	0.80	0.11	71,71,71,71	0
56	MG	1A	3753	1/1	0.80	0.28	69,69,69,69	0
56	MG	2A	3338	1/1	0.80	0.35	75,75,75,75	0
56	MG	2a	3124	1/1	0.80	0.41	81,81,81,81	0
56	MG	2A	3873	1/1	0.80	0.20	76,76,76,76	0
56	MG	1A	3344	1/1	0.80	0.28	68,68,68,68	0
56	MG	2A	3203	1/1	0.80	0.29	82,82,82,82	0
56	MG	2B	214	1/1	0.80	0.19	70,70,70,70	0
56	MG	1A	3396	1/1	0.80	0.21	79,79,79,79	0
56	MG	1x	108	1/1	0.80	0.36	82,82,82,82	0
56	MG	2A	3231	1/1	0.80	0.31	68,68,68,68	0
56	MG	2A	3023	1/1	0.80	0.26	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3399	1/1	0.80	0.25	81,81,81,81	0
56	MG	2A	3063	1/1	0.80	0.18	62,62,62,62	0
56	MG	1A	3466	1/1	0.80	0.17	70,70,70,70	0
56	MG	1A	3162	1/1	0.80	0.25	70,70,70,70	0
56	MG	1a	1749	1/1	0.80	0.29	74,74,74,74	0
56	MG	2p	101	1/1	0.80	0.27	81,81,81,81	0
56	MG	1A	3477	1/1	0.80	0.25	72,72,72,72	0
56	MG	2a	3044	1/1	0.80	0.33	76,76,76,76	0
56	MG	2v	102	1/1	0.80	0.32	80,80,80,80	0
56	MG	15	106	1/1	0.80	0.26	47,47,47,47	0
56	MG	1A	3343	1/1	0.80	0.17	64,64,64,64	0
56	MG	2A	3315	1/1	0.80	0.22	54,54,54,54	0
56	MG	2A	3410	1/1	0.80	0.14	71,71,71,71	0
56	MG	1A	3528	1/1	0.80	0.16	80,80,80,80	0
56	MG	2A	3767	1/1	0.80	0.16	58,58,58,58	0
56	MG	2A	3263	1/1	0.81	0.26	77,77,77,77	0
56	MG	2a	3009	1/1	0.81	0.32	78,78,78,78	0
56	MG	2a	3011	1/1	0.81	0.38	77,77,77,77	0
56	MG	2a	3141	1/1	0.81	0.30	81,81,81,81	0
56	MG	2A	3083	1/1	0.81	0.22	68,68,68,68	0
56	MG	2a	3036	1/1	0.81	0.38	83,83,83,83	0
56	MG	1A	3557	1/1	0.81	0.12	75,75,75,75	0
56	MG	1A	3883	1/1	0.81	0.24	58,58,58,58	0
56	MG	1A	3742	1/1	0.81	0.14	59,59,59,59	0
56	MG	2A	3478	1/1	0.81	0.30	73,73,73,73	0
56	MG	2A	3881	1/1	0.81	0.10	64,64,64,64	0
56	MG	1a	1638	1/1	0.81	0.24	71,71,71,71	0
56	MG	2a	3222	1/1	0.81	0.11	78,78,78,78	0
56	MG	1A	3968	1/1	0.81	0.14	69,69,69,69	0
56	MG	2a	3227	1/1	0.81	0.11	79,79,79,79	0
56	MG	2B	211	1/1	0.81	0.25	81,81,81,81	0
56	MG	2g	201	1/1	0.81	0.20	80,80,80,80	0
56	MG	2a	3069	1/1	0.81	0.30	78,78,78,78	0
56	MG	2a	3075	1/1	0.81	0.20	74,74,74,74	0
56	MG	2A	3386	1/1	0.81	0.21	79,79,79,79	0
56	MG	2A	3704	1/1	0.81	0.14	78,78,78,78	0
56	MG	2A	3525	1/1	0.81	0.28	70,70,70,70	0
56	MG	2A	3533	1/1	0.81	0.26	76,76,76,76	0
56	MG	1A	3975	1/1	0.81	0.27	74,74,74,74	0
56	MG	21	101	1/1	0.81	0.26	89,89,89,89	0
56	MG	1A	3823	1/1	0.81	0.23	62,62,62,62	0
56	MG	1A	3791	1/1	0.81	0.10	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2a	3123	1/1	0.81	0.29	77,77,77,77	0
56	MG	2A	3394	1/1	0.82	0.25	77,77,77,77	0
56	MG	1a	1669	1/1	0.82	0.25	72,72,72,72	0
56	MG	1A	3526	1/1	0.82	0.16	66,66,66,66	0
56	MG	2A	3402	1/1	0.82	0.31	66,66,66,66	0
56	MG	1A	3809	1/1	0.82	0.14	55,55,55,55	0
56	MG	2a	3002	1/1	0.82	0.20	73,73,73,73	0
56	MG	1A	3671	1/1	0.82	0.11	46,46,46,46	0
56	MG	1a	1714	1/1	0.82	0.36	78,78,78,78	0
56	MG	2A	3061	1/1	0.82	0.21	63,63,63,63	0
56	MG	2a	3181	1/1	0.82	0.11	84,84,84,84	0
56	MG	2A	3432	1/1	0.82	0.27	74,74,74,74	0
56	MG	1A	3385	1/1	0.82	0.12	77,77,77,77	0
56	MG	2a	3034	1/1	0.82	0.16	87,87,87,87	0
56	MG	2A	3719	1/1	0.82	0.21	72,72,72,72	0
56	MG	1A	4058	1/1	0.82	0.25	69,69,69,69	0
56	MG	2a	3218	1/1	0.82	0.30	75,75,75,75	0
56	MG	2A	3736	1/1	0.82	0.15	62,62,62,62	0
56	MG	1A	3546	1/1	0.82	0.28	67,67,67,67	0
56	MG	2a	3226	1/1	0.82	0.13	79,79,79,79	0
56	MG	2A	3485	1/1	0.82	0.18	75,75,75,75	0
56	MG	1A	4086	1/1	0.82	0.25	59,59,59,59	0
56	MG	2A	3271	1/1	0.82	0.32	88,88,88,88	0
56	MG	2A	3502	1/1	0.82	0.12	64,64,64,64	0
56	MG	1Z	301	1/1	0.82	0.12	72,72,72,72	0
56	MG	1A	4090	1/1	0.82	0.21	69,69,69,69	0
56	MG	1A	3854	1/1	0.82	0.21	73,73,73,73	0
56	MG	2A	3879	1/1	0.82	0.22	68,68,68,68	0
56	MG	1a	1615	1/1	0.82	0.14	73,73,73,73	0
56	MG	2A	3590	1/1	0.82	0.20	72,72,72,72	0
56	MG	2A	3294	1/1	0.82	0.29	73,73,73,73	0
56	MG	1e	201	1/1	0.82	0.16	84,84,84,84	0
56	MG	1A	4093	1/1	0.82	0.18	78,78,78,78	0
56	MG	1A	3501	1/1	0.82	0.14	76,76,76,76	0
56	MG	1A	3936	1/1	0.83	0.13	53,53,53,53	0
56	MG	2A	3268	1/1	0.83	0.23	70,70,70,70	0
56	MG	1A	3966	1/1	0.83	0.11	55,55,55,55	0
56	MG	2A	3828	1/1	0.83	0.14	63,63,63,63	0
56	MG	2a	3088	1/1	0.83	0.22	82,82,82,82	0
56	MG	1a	1764	1/1	0.83	0.16	81,81,81,81	0
56	MG	2A	3870	1/1	0.83	0.17	71,71,71,71	0
56	MG	1A	3594	1/1	0.83	0.15	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3596	1/1	0.83	0.25	71,71,71,71	0
56	MG	2A	3374	1/1	0.83	0.27	65,65,65,65	0
56	MG	1A	3308	1/1	0.83	0.28	60,60,60,60	0
56	MG	2A	3376	1/1	0.83	0.17	78,78,78,78	0
56	MG	1a	1639	1/1	0.83	0.19	64,64,64,64	0
56	MG	1A	3398	1/1	0.83	0.24	69,69,69,69	0
56	MG	2B	217	1/1	0.83	0.12	77,77,77,77	0
56	MG	1s	101	1/1	0.83	0.17	77,77,77,77	0
56	MG	2A	3661	1/1	0.83	0.27	71,71,71,71	0
56	MG	2A	3304	1/1	0.83	0.21	88,88,88,88	0
56	MG	1A	3348	1/1	0.83	0.19	64,64,64,64	0
56	MG	2A	3676	1/1	0.83	0.15	67,67,67,67	0
56	MG	1w	107	1/1	0.83	0.15	85,85,85,85	0
56	MG	2A	3181	1/1	0.83	0.22	74,74,74,74	0
56	MG	2a	3203	1/1	0.83	0.13	80,80,80,80	0
56	MG	1A	3488	1/1	0.83	0.16	77,77,77,77	0
56	MG	1A	3433	1/1	0.83	0.31	80,80,80,80	0
56	MG	2A	3702	1/1	0.83	0.12	80,80,80,80	0
56	MG	2A	3211	1/1	0.83	0.17	76,76,76,76	0
56	MG	2a	3012	1/1	0.83	0.26	75,75,75,75	0
56	MG	2a	3015	1/1	0.83	0.38	80,80,80,80	0
56	MG	2a	3020	1/1	0.83	0.26	77,77,77,77	0
56	MG	2a	3023	1/1	0.83	0.24	87,87,87,87	0
56	MG	2a	3024	1/1	0.83	0.19	74,74,74,74	0
56	MG	1A	3509	1/1	0.83	0.20	78,78,78,78	0
56	MG	2A	3710	1/1	0.83	0.17	75,75,75,75	0
56	MG	1A	3068	1/1	0.83	0.15	52,52,52,52	0
56	MG	2A	3717	1/1	0.83	0.23	67,67,67,67	0
56	MG	2A	3449	1/1	0.83	0.32	70,70,70,70	0
56	MG	2a	3043	1/1	0.83	0.23	77,77,77,77	0
56	MG	1O	201	1/1	0.83	0.14	72,72,72,72	0
56	MG	2A	3475	1/1	0.83	0.26	76,76,76,76	0
56	MG	2A	3742	1/1	0.83	0.20	73,73,73,73	0
56	MG	2y	103	1/1	0.83	0.15	90,90,90,90	0
56	MG	2A	3237	1/1	0.83	0.27	72,72,72,72	0
56	MG	1A	3570	1/1	0.83	0.28	61,61,61,61	0
56	MG	1A	4074	1/1	0.83	0.10	52,52,52,52	0
56	MG	2A	3254	1/1	0.84	0.20	71,71,71,71	0
56	MG	2A	3687	1/1	0.84	0.17	71,71,71,71	0
56	MG	1A	3602	1/1	0.84	0.25	63,63,63,63	0
56	MG	1a	1679	1/1	0.84	0.17	81,81,81,81	0
56	MG	1x	111	1/1	0.84	0.21	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1y	101	1/1	0.84	0.11	91,91,91,91	0
56	MG	2a	3048	1/1	0.84	0.29	80,80,80,80	0
56	MG	2A	3008	1/1	0.84	0.24	73,73,73,73	0
56	MG	1a	1683	1/1	0.84	0.19	78,78,78,78	0
56	MG	1A	3603	1/1	0.84	0.28	58,58,58,58	0
56	MG	2A	3406	1/1	0.84	0.17	76,76,76,76	0
56	MG	2A	3407	1/1	0.84	0.13	82,82,82,82	0
56	MG	1a	1710	1/1	0.84	0.16	72,72,72,72	0
56	MG	1A	4006	1/1	0.84	0.20	33,33,33,33	0
56	MG	2A	3412	1/1	0.84	0.24	73,73,73,73	0
56	MG	2A	3740	1/1	0.84	0.14	75,75,75,75	0
56	MG	1A	3299	1/1	0.84	0.34	68,68,68,68	0
56	MG	1A	3545	1/1	0.84	0.29	62,62,62,62	0
56	MG	2A	3761	1/1	0.84	0.16	40,40,40,40	0
56	MG	2A	3426	1/1	0.84	0.23	65,65,65,65	0
56	MG	1B	3631	1/1	0.84	0.11	73,73,73,73	0
56	MG	2A	3306	1/1	0.84	0.44	66,66,66,66	0
56	MG	2a	3118	1/1	0.84	0.16	76,76,76,76	0
56	MG	2A	3811	1/1	0.84	0.13	75,75,75,75	0
56	MG	2A	3813	1/1	0.84	0.14	73,73,73,73	0
56	MG	2A	3310	1/1	0.84	0.22	69,69,69,69	0
56	MG	1A	3353	1/1	0.84	0.20	70,70,70,70	0
56	MG	2a	3129	1/1	0.84	0.24	78,78,78,78	0
56	MG	2A	3098	1/1	0.84	0.22	75,75,75,75	0
56	MG	1A	3360	1/1	0.84	0.15	71,71,71,71	0
56	MG	2A	3861	1/1	0.84	0.11	56,56,56,56	0
56	MG	1A	3846	1/1	0.84	0.14	55,55,55,55	0
56	MG	1A	3716	1/1	0.84	0.13	46,46,46,46	0
56	MG	2A	3497	1/1	0.84	0.44	81,81,81,81	0
56	MG	2A	3111	1/1	0.84	0.19	71,71,71,71	0
56	MG	2A	3327	1/1	0.84	0.17	71,71,71,71	0
56	MG	2a	3200	1/1	0.84	0.24	82,82,82,82	0
56	MG	1W	207	1/1	0.84	0.22	38,38,38,38	0
56	MG	1A	3730	1/1	0.84	0.13	67,67,67,67	0
56	MG	2a	3209	1/1	0.84	0.21	80,80,80,80	0
56	MG	1Z	302	1/1	0.84	0.14	77,77,77,77	0
56	MG	1a	1800	1/1	0.84	0.14	73,73,73,73	0
56	MG	1A	3732	1/1	0.84	0.24	71,71,71,71	0
56	MG	1A	3473	1/1	0.84	0.15	60,60,60,60	0
56	MG	2A	3601	1/1	0.84	0.22	92,92,92,92	0
56	MG	1f	202	1/1	0.84	0.28	74,74,74,74	0
56	MG	1a	1601	1/1	0.84	0.18	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2a	3228	1/1	0.84	0.40	78,78,78,78	0
56	MG	2A	3613	1/1	0.84	0.16	69,69,69,69	0
56	MG	2A	3614	1/1	0.84	0.27	63,63,63,63	0
56	MG	2A	3616	1/1	0.84	0.20	71,71,71,71	0
56	MG	2A	3617	1/1	0.84	0.14	66,66,66,66	0
56	MG	1A	3914	1/1	0.84	0.10	47,47,47,47	0
56	MG	2r	101	1/1	0.84	0.12	77,77,77,77	0
56	MG	1A	3254	1/1	0.84	0.14	69,69,69,69	0
56	MG	1w	106	1/1	0.84	0.10	72,72,72,72	0
56	MG	1A	3231	1/1	0.84	0.16	69,69,69,69	0
56	MG	2a	3016	1/1	0.84	0.21	73,73,73,73	0
56	MG	2A	3364	1/1	0.84	0.60	85,85,85,85	0
56	MG	2y	102	1/1	0.84	0.13	94,94,94,94	0
56	MG	2A	3671	1/1	0.84	0.13	77,77,77,77	0
56	MG	2A	3672	1/1	0.84	0.12	76,76,76,76	0
56	MG	1A	3137	1/1	0.84	0.21	57,57,57,57	0
56	MG	2a	3032	1/1	0.84	0.39	79,79,79,79	0
56	MG	1A	3264	1/1	0.85	0.13	64,64,64,64	0
56	MG	1A	3332	1/1	0.85	0.26	61,61,61,61	0
56	MG	2A	3609	1/1	0.85	0.24	69,69,69,69	0
56	MG	2A	3844	1/1	0.85	0.13	46,46,46,46	0
56	MG	2A	3851	1/1	0.85	0.12	67,67,67,67	0
56	MG	2a	3099	1/1	0.85	0.28	73,73,73,73	0
56	MG	1a	1633	1/1	0.85	0.25	81,81,81,81	0
56	MG	2A	3132	1/1	0.85	0.13	60,60,60,60	0
56	MG	2A	3866	1/1	0.85	0.14	68,68,68,68	0
56	MG	1A	3911	1/1	0.85	0.20	46,46,46,46	0
56	MG	2A	3177	1/1	0.85	0.15	66,66,66,66	0
56	MG	2a	3113	1/1	0.85	0.27	77,77,77,77	0
56	MG	2a	3114	1/1	0.85	0.36	83,83,83,83	0
56	MG	1A	3337	1/1	0.85	0.13	63,63,63,63	0
56	MG	2a	3119	1/1	0.85	0.23	72,72,72,72	0
56	MG	2A	3880	1/1	0.85	0.18	60,60,60,60	0
56	MG	2A	3191	1/1	0.85	0.18	72,72,72,72	0
56	MG	2A	3006	1/1	0.85	0.30	65,65,65,65	0
56	MG	1A	3054	1/1	0.85	0.16	51,51,51,51	0
56	MG	2A	3206	1/1	0.85	0.33	74,74,74,74	0
56	MG	2a	3133	1/1	0.85	0.27	75,75,75,75	0
56	MG	2B	213	1/1	0.85	0.23	71,71,71,71	0
56	MG	2a	3136	1/1	0.85	0.29	65,65,65,65	0
56	MG	2A	3207	1/1	0.85	0.14	69,69,69,69	0
56	MG	1S	201	1/1	0.85	0.36	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3215	1/1	0.85	0.16	69,69,69,69	0
56	MG	2A	3419	1/1	0.85	0.23	69,69,69,69	0
56	MG	2A	3218	1/1	0.85	0.29	75,75,75,75	0
56	MG	2a	3194	1/1	0.85	0.19	79,79,79,79	0
56	MG	1a	1672	1/1	0.85	0.14	63,63,63,63	0
56	MG	2A	3439	1/1	0.85	0.33	60,60,60,60	0
56	MG	2A	3691	1/1	0.85	0.12	73,73,73,73	0
56	MG	28	103	1/1	0.85	0.30	65,65,65,65	0
56	MG	2A	3339	1/1	0.85	0.27	63,63,63,63	0
56	MG	2A	3342	1/1	0.85	0.14	82,82,82,82	0
56	MG	2A	3456	1/1	0.85	0.23	58,58,58,58	0
56	MG	2a	3216	1/1	0.85	0.21	76,76,76,76	0
56	MG	2A	3458	1/1	0.85	0.28	71,71,71,71	0
56	MG	1A	3092	1/1	0.85	0.20	68,68,68,68	0
56	MG	2A	3709	1/1	0.85	0.12	68,68,68,68	0
56	MG	2a	3223	1/1	0.85	0.19	84,84,84,84	0
56	MG	1a	1802	1/1	0.85	0.10	81,81,81,81	0
56	MG	1a	1682	1/1	0.85	0.29	75,75,75,75	0
56	MG	2A	3716	1/1	0.85	0.19	76,76,76,76	0
56	MG	2A	3483	1/1	0.85	0.21	76,76,76,76	0
56	MG	2A	3238	1/1	0.85	0.14	64,64,64,64	0
56	MG	2A	3727	1/1	0.85	0.19	68,68,68,68	0
56	MG	2A	3348	1/1	0.85	0.15	90,90,90,90	0
56	MG	2l	204	1/1	0.85	0.17	84,84,84,84	0
56	MG	2A	3734	1/1	0.85	0.15	79,79,79,79	0
56	MG	1A	3850	1/1	0.85	0.10	67,67,67,67	0
56	MG	1a	1694	1/1	0.85	0.26	63,63,63,63	0
56	MG	1Y	201	1/1	0.85	0.25	63,63,63,63	0
56	MG	1A	3542	1/1	0.85	0.28	57,57,57,57	0
56	MG	2w	101	1/1	0.85	0.26	82,82,82,82	0
56	MG	1w	101	1/1	0.85	0.20	70,70,70,70	0
56	MG	2w	104	1/1	0.85	0.14	76,76,76,76	0
56	MG	1B	3611	1/1	0.85	0.16	63,63,63,63	0
56	MG	1A	3474	1/1	0.85	0.12	61,61,61,61	0
56	MG	2A	3807	1/1	0.85	0.09	61,61,61,61	0
56	MG	2A	3547	1/1	0.85	0.16	59,59,59,59	0
56	MG	2a	3062	1/1	0.85	0.39	74,74,74,74	0
56	MG	1B	3629	1/1	0.85	0.15	69,69,69,69	0
56	MG	2A	3113	1/1	0.85	0.12	67,67,67,67	0
56	MG	2A	3751	1/1	0.86	0.18	68,68,68,68	0
56	MG	1a	1671	1/1	0.86	0.11	62,62,62,62	0
56	MG	2a	3058	1/1	0.86	0.20	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1w	105	1/1	0.86	0.15	73,73,73,73	0
56	MG	1A	3475	1/1	0.86	0.18	76,76,76,76	0
56	MG	1A	3098	1/1	0.86	0.21	74,74,74,74	0
56	MG	2A	3786	1/1	0.86	0.18	61,61,61,61	0
56	MG	2A	3806	1/1	0.86	0.13	61,61,61,61	0
56	MG	1A	4031	1/1	0.86	0.12	68,68,68,68	0
56	MG	1A	3039	1/1	0.86	0.24	67,67,67,67	0
56	MG	1A	3867	1/1	0.86	0.10	50,50,50,50	0
56	MG	1a	1695	1/1	0.86	0.30	64,64,64,64	0
56	MG	2a	3101	1/1	0.86	0.46	79,79,79,79	0
56	MG	2A	3350	1/1	0.86	0.19	76,76,76,76	0
56	MG	1A	4039	1/1	0.86	0.36	65,65,65,65	0
56	MG	1a	1701	1/1	0.86	0.21	73,73,73,73	0
56	MG	1a	1703	1/1	0.86	0.40	76,76,76,76	0
56	MG	2A	3568	1/1	0.86	0.17	54,54,54,54	0
56	MG	1A	3874	1/1	0.86	0.20	58,58,58,58	0
56	MG	1A	3413	1/1	0.86	0.19	66,66,66,66	0
56	MG	1A	4057	1/1	0.86	0.14	63,63,63,63	0
56	MG	2A	3367	1/1	0.86	0.15	70,70,70,70	0
56	MG	2A	3371	1/1	0.86	0.13	69,69,69,69	0
56	MG	2A	3875	1/1	0.86	0.16	71,71,71,71	0
56	MG	2A	3876	1/1	0.86	0.22	67,67,67,67	0
56	MG	1A	3424	1/1	0.86	0.25	69,69,69,69	0
56	MG	2A	3064	1/1	0.86	0.18	81,81,81,81	0
56	MG	1A	3907	1/1	0.86	0.10	61,61,61,61	0
56	MG	1A	3807	1/1	0.86	0.09	59,59,59,59	0
56	MG	2B	206	1/1	0.86	0.20	70,70,70,70	0
56	MG	2A	3379	1/1	0.86	0.10	80,80,80,80	0
56	MG	2A	3385	1/1	0.86	0.26	70,70,70,70	0
56	MG	2a	3143	1/1	0.86	0.37	62,62,62,62	0
56	MG	2A	3092	1/1	0.86	0.19	70,70,70,70	0
56	MG	2A	3392	1/1	0.86	0.14	73,73,73,73	0
56	MG	2A	3274	1/1	0.86	0.20	84,84,84,84	0
56	MG	2a	3189	1/1	0.86	0.23	72,72,72,72	0
56	MG	1A	3368	1/1	0.86	0.37	51,51,51,51	0
56	MG	2D	306	1/1	0.86	0.39	59,59,59,59	0
56	MG	2D	307	1/1	0.86	0.16	71,71,71,71	0
56	MG	13	103	1/1	0.86	0.16	59,59,59,59	0
56	MG	2Q	202	1/1	0.86	0.21	65,65,65,65	0
56	MG	1A	3460	1/1	0.86	0.20	64,64,64,64	0
56	MG	2A	3403	1/1	0.86	0.26	73,73,73,73	0
56	MG	2A	3405	1/1	0.86	0.18	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2a	3214	1/1	0.86	0.33	63,63,63,63	0
56	MG	1a	1755	1/1	0.86	0.15	81,81,81,81	0
56	MG	26	101	1/1	0.86	0.32	73,73,73,73	0
56	MG	2A	3688	1/1	0.86	0.20	74,74,74,74	0
56	MG	2a	3221	1/1	0.86	0.14	76,76,76,76	0
56	MG	2A	3102	1/1	0.86	0.28	80,80,80,80	0
56	MG	2a	3006	1/1	0.86	0.31	78,78,78,78	0
56	MG	2A	3297	1/1	0.86	0.18	69,69,69,69	0
56	MG	1a	1763	1/1	0.86	0.19	73,73,73,73	0
56	MG	1A	3375	1/1	0.86	0.20	61,61,61,61	0
56	MG	2A	3413	1/1	0.86	0.11	59,59,59,59	0
56	MG	2a	3229	1/1	0.86	0.15	71,71,71,71	0
56	MG	1A	3839	1/1	0.86	0.16	66,66,66,66	0
56	MG	2A	3706	1/1	0.86	0.15	60,60,60,60	0
56	MG	1A	3974	1/1	0.86	0.20	55,55,55,55	0
56	MG	2a	3019	1/1	0.86	0.15	83,83,83,83	0
56	MG	1A	3844	1/1	0.86	0.19	66,66,66,66	0
56	MG	1A	3987	1/1	0.86	0.12	71,71,71,71	0
56	MG	2A	3318	1/1	0.86	0.27	71,71,71,71	0
56	MG	2a	3027	1/1	0.86	0.15	75,75,75,75	0
56	MG	1A	3326	1/1	0.86	0.19	60,60,60,60	0
56	MG	2A	3440	1/1	0.86	0.40	78,78,78,78	0
56	MG	1a	1656	1/1	0.86	0.25	68,68,68,68	0
56	MG	2a	3035	1/1	0.86	0.13	89,89,89,89	0
56	MG	1a	1658	1/1	0.86	0.20	69,69,69,69	0
56	MG	2w	106	1/1	0.86	0.09	82,82,82,82	0
56	MG	1a	1661	1/1	0.86	0.27	82,82,82,82	0
56	MG	2A	3178	1/1	0.86	0.23	76,76,76,76	0
56	MG	1a	1667	1/1	0.86	0.32	70,70,70,70	0
56	MG	1A	3262	1/1	0.86	0.23	76,76,76,76	0
56	MG	2A	3476	1/1	0.86	0.20	74,74,74,74	0
56	MG	2A	3746	1/1	0.86	0.15	61,61,61,61	0
56	MG	2a	3031	1/1	0.87	0.23	71,71,71,71	0
56	MG	1a	1647	1/1	0.87	0.17	69,69,69,69	0
56	MG	2A	3404	1/1	0.87	0.12	72,72,72,72	0
56	MG	2A	3088	1/1	0.87	0.15	57,57,57,57	0
56	MG	1A	3412	1/1	0.87	0.16	59,59,59,59	0
56	MG	2A	3277	1/1	0.87	0.20	75,75,75,75	0
56	MG	2A	3278	1/1	0.87	0.22	68,68,68,68	0
56	MG	1A	3717	1/1	0.87	0.16	67,67,67,67	0
56	MG	2A	3411	1/1	0.87	0.08	79,79,79,79	0
56	MG	1A	3255	1/1	0.87	0.13	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3547	1/1	0.87	0.34	55,55,55,55	0
56	MG	1a	1668	1/1	0.87	0.38	74,74,74,74	0
56	MG	2A	3732	1/1	0.87	0.11	76,76,76,76	0
56	MG	1A	3737	1/1	0.87	0.15	60,60,60,60	0
56	MG	1a	1810	1/1	0.87	0.30	59,59,59,59	0
56	MG	1A	3414	1/1	0.87	0.13	56,56,56,56	0
56	MG	1a	1813	1/1	0.87	0.22	67,67,67,67	0
56	MG	2A	3437	1/1	0.87	0.21	68,68,68,68	0
56	MG	1A	3364	1/1	0.87	0.16	64,64,64,64	0
56	MG	2A	3311	1/1	0.87	0.15	77,77,77,77	0
56	MG	2a	3083	1/1	0.87	0.34	68,68,68,68	0
56	MG	1A	4046	1/1	0.87	0.12	49,49,49,49	0
56	MG	2a	3085	1/1	0.87	0.16	75,75,75,75	0
56	MG	2A	3313	1/1	0.87	0.25	74,74,74,74	0
56	MG	2a	3092	1/1	0.87	0.21	78,78,78,78	0
56	MG	2A	3314	1/1	0.87	0.46	62,62,62,62	0
56	MG	1A	3747	1/1	0.87	0.10	52,52,52,52	0
56	MG	2a	3105	1/1	0.87	0.15	70,70,70,70	0
56	MG	2A	3461	1/1	0.87	0.26	76,76,76,76	0
56	MG	2A	3469	1/1	0.87	0.13	70,70,70,70	0
56	MG	1A	3087	1/1	0.87	0.13	39,39,39,39	0
56	MG	2a	3110	1/1	0.87	0.25	93,93,93,93	0
56	MG	2A	3119	1/1	0.87	0.30	72,72,72,72	0
56	MG	1t	201	1/1	0.87	0.29	66,66,66,66	0
56	MG	1a	1690	1/1	0.87	0.22	57,57,57,57	0
56	MG	2A	3137	1/1	0.87	0.21	66,66,66,66	0
56	MG	2A	3818	1/1	0.87	0.11	82,82,82,82	0
56	MG	2A	3146	1/1	0.87	0.16	76,76,76,76	0
56	MG	2A	3492	1/1	0.87	0.23	62,62,62,62	0
56	MG	2A	3164	1/1	0.87	0.28	80,80,80,80	0
56	MG	2A	3852	1/1	0.87	0.11	71,71,71,71	0
56	MG	2A	3334	1/1	0.87	0.14	67,67,67,67	0
56	MG	2A	3499	1/1	0.87	0.13	73,73,73,73	0
56	MG	1A	3435	1/1	0.87	0.13	54,54,54,54	0
56	MG	1A	3338	1/1	0.87	0.18	58,58,58,58	0
56	MG	2A	3872	1/1	0.87	0.08	69,69,69,69	0
56	MG	2A	3503	1/1	0.87	0.13	64,64,64,64	0
56	MG	1a	1697	1/1	0.87	0.37	73,73,73,73	0
56	MG	2A	3508	1/1	0.87	0.31	70,70,70,70	0
56	MG	2a	3146	1/1	0.87	0.38	72,72,72,72	0
56	MG	2A	3520	1/1	0.87	0.25	60,60,60,60	0
56	MG	2a	3150	1/1	0.87	0.12	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2a	3151	1/1	0.87	0.19	65,65,65,65	0
56	MG	1A	3252	1/1	0.87	0.27	48,48,48,48	0
56	MG	1A	3467	1/1	0.87	0.32	71,71,71,71	0
56	MG	1x	106	1/1	0.87	0.23	67,67,67,67	0
56	MG	2B	201	1/1	0.87	0.23	76,76,76,76	0
56	MG	2A	3545	1/1	0.87	0.26	66,66,66,66	0
56	MG	2A	3201	1/1	0.87	0.15	58,58,58,58	0
56	MG	1A	3647	1/1	0.87	0.18	62,62,62,62	0
56	MG	2A	3585	1/1	0.87	0.13	53,53,53,53	0
56	MG	2a	3205	1/1	0.87	0.17	66,66,66,66	0
56	MG	15	107	1/1	0.87	0.15	65,65,65,65	0
56	MG	1x	110	1/1	0.87	0.19	70,70,70,70	0
56	MG	1A	3651	1/1	0.87	0.12	79,79,79,79	0
56	MG	1x	113	1/1	0.87	0.31	66,66,66,66	0
56	MG	2A	3216	1/1	0.87	0.46	80,80,80,80	0
56	MG	2F	305	1/1	0.87	0.10	76,76,76,76	0
56	MG	2A	3217	1/1	0.87	0.22	81,81,81,81	0
56	MG	1A	3324	1/1	0.87	0.28	63,63,63,63	0
56	MG	2R	201	1/1	0.87	0.21	70,70,70,70	0
56	MG	2V	201	1/1	0.87	0.29	51,51,51,51	0
56	MG	2A	3220	1/1	0.87	0.19	56,56,56,56	0
56	MG	1a	1625	1/1	0.87	0.33	71,71,71,71	0
56	MG	1a	1631	1/1	0.87	0.40	73,73,73,73	0
56	MG	1A	3829	1/1	0.87	0.16	42,42,42,42	0
56	MG	2A	3630	1/1	0.87	0.18	75,75,75,75	0
56	MG	2A	3233	1/1	0.87	0.17	60,60,60,60	0
56	MG	2a	3238	1/1	0.87	0.14	83,83,83,83	0
56	MG	1A	3180	1/1	0.87	0.29	63,63,63,63	0
56	MG	2a	3003	1/1	0.87	0.14	85,85,85,85	0
56	MG	2A	3377	1/1	0.87	0.17	55,55,55,55	0
56	MG	2A	3036	1/1	0.87	0.29	58,58,58,58	0
56	MG	2A	3044	1/1	0.87	0.11	53,53,53,53	0
56	MG	2A	3382	1/1	0.87	0.25	73,73,73,73	0
56	MG	2A	3252	1/1	0.87	0.37	74,74,74,74	0
56	MG	2A	3052	1/1	0.87	0.11	62,62,62,62	0
56	MG	2a	3014	1/1	0.87	0.31	70,70,70,70	0
56	MG	2A	3387	1/1	0.87	0.25	55,55,55,55	0
56	MG	2A	3054	1/1	0.87	0.21	69,69,69,69	0
56	MG	1A	3539	1/1	0.87	0.17	66,66,66,66	0
56	MG	2A	3266	1/1	0.87	0.11	60,60,60,60	0
56	MG	1A	3328	1/1	0.87	0.12	50,50,50,50	0
56	MG	2x	105	1/1	0.87	0.17	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2y	101	1/1	0.87	0.10	77,77,77,77	0
56	MG	2A	3397	1/1	0.87	0.15	69,69,69,69	0
56	MG	2a	3025	1/1	0.87	0.28	72,72,72,72	0
56	MG	2a	3026	1/1	0.87	0.13	82,82,82,82	0
56	MG	2A	3700	1/1	0.87	0.18	74,74,74,74	0
56	MG	1a	1754	1/1	0.87	0.18	81,81,81,81	0
56	MG	2A	3772	1/1	0.88	0.15	74,74,74,74	0
56	MG	2a	3054	1/1	0.88	0.23	86,86,86,86	0
56	MG	1A	3927	1/1	0.88	0.15	70,70,70,70	0
56	MG	2A	3782	1/1	0.88	0.11	79,79,79,79	0
56	MG	1A	3513	1/1	0.88	0.26	68,68,68,68	0
56	MG	2a	3060	1/1	0.88	0.17	78,78,78,78	0
56	MG	1A	3816	1/1	0.88	0.13	41,41,41,41	0
56	MG	2A	3059	1/1	0.88	0.34	77,77,77,77	0
56	MG	2a	3065	1/1	0.88	0.20	75,75,75,75	0
56	MG	2a	3066	1/1	0.88	0.17	87,87,87,87	0
56	MG	2a	3067	1/1	0.88	0.23	69,69,69,69	0
56	MG	1A	3569	1/1	0.88	0.20	63,63,63,63	0
56	MG	1a	1636	1/1	0.88	0.25	79,79,79,79	0
56	MG	1A	4095	1/1	0.88	0.12	72,72,72,72	0
56	MG	1A	3373	1/1	0.88	0.12	57,57,57,57	0
56	MG	1A	3731	1/1	0.88	0.14	52,52,52,52	0
56	MG	2A	3509	1/1	0.88	0.15	69,69,69,69	0
56	MG	2A	3825	1/1	0.88	0.10	79,79,79,79	0
56	MG	2A	3518	1/1	0.88	0.10	59,59,59,59	0
56	MG	2a	3090	1/1	0.88	0.23	69,69,69,69	0
56	MG	2A	3363	1/1	0.88	0.13	69,69,69,69	0
56	MG	2A	3521	1/1	0.88	0.32	79,79,79,79	0
56	MG	2A	3248	1/1	0.88	0.12	71,71,71,71	0
56	MG	2a	3103	1/1	0.88	0.21	81,81,81,81	0
56	MG	2a	3104	1/1	0.88	0.34	76,76,76,76	0
56	MG	2A	3090	1/1	0.88	0.16	56,56,56,56	0
56	MG	2A	3535	1/1	0.88	0.09	63,63,63,63	0
56	MG	1a	1775	1/1	0.88	0.09	88,88,88,88	0
56	MG	2A	3373	1/1	0.88	0.32	59,59,59,59	0
56	MG	1A	3374	1/1	0.88	0.34	66,66,66,66	0
56	MG	1a	1649	1/1	0.88	0.25	74,74,74,74	0
56	MG	2A	3571	1/1	0.88	0.18	56,56,56,56	0
56	MG	2A	3581	1/1	0.88	0.26	65,65,65,65	0
56	MG	1a	1654	1/1	0.88	0.18	70,70,70,70	0
56	MG	1B	3618	1/1	0.88	0.08	47,47,47,47	0
56	MG	1A	3417	1/1	0.88	0.23	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3884	1/1	0.88	0.18	68,68,68,68	0
56	MG	1B	3623	1/1	0.88	0.15	59,59,59,59	0
56	MG	1B	3626	1/1	0.88	0.18	62,62,62,62	0
56	MG	2B	203	1/1	0.88	0.26	81,81,81,81	0
56	MG	2B	204	1/1	0.88	0.20	81,81,81,81	0
56	MG	1A	4004	1/1	0.88	0.11	39,39,39,39	0
56	MG	1A	3187	1/1	0.88	0.12	52,52,52,52	0
56	MG	2B	209	1/1	0.88	0.23	74,74,74,74	0
56	MG	2a	3137	1/1	0.88	0.29	71,71,71,71	0
56	MG	2a	3140	1/1	0.88	0.31	67,67,67,67	0
56	MG	1l	202	1/1	0.88	0.13	73,73,73,73	0
56	MG	2A	3388	1/1	0.88	0.34	68,68,68,68	0
56	MG	1A	3333	1/1	0.88	0.11	52,52,52,52	0
56	MG	1B	3635	1/1	0.88	0.14	72,72,72,72	0
56	MG	2a	3147	1/1	0.88	0.11	63,63,63,63	0
56	MG	2A	3283	1/1	0.88	0.20	75,75,75,75	0
56	MG	2A	3288	1/1	0.88	0.16	66,66,66,66	0
56	MG	2A	3635	1/1	0.88	0.16	67,67,67,67	0
56	MG	2a	3162	1/1	0.88	0.13	83,83,83,83	0
56	MG	2a	3166	1/1	0.88	0.10	78,78,78,78	0
56	MG	2a	3174	1/1	0.88	0.09	86,86,86,86	0
56	MG	2F	301	1/1	0.88	0.10	50,50,50,50	0
56	MG	2a	3180	1/1	0.88	0.10	72,72,72,72	0
56	MG	1a	1674	1/1	0.88	0.23	82,82,82,82	0
56	MG	2A	3399	1/1	0.88	0.31	68,68,68,68	0
56	MG	1A	3334	1/1	0.88	0.24	69,69,69,69	0
56	MG	2A	3128	1/1	0.88	0.17	59,59,59,59	0
56	MG	2A	3296	1/1	0.88	0.43	78,78,78,78	0
56	MG	2V	202	1/1	0.88	0.11	71,71,71,71	0
56	MG	1A	3855	1/1	0.88	0.16	59,59,59,59	0
56	MG	2A	3673	1/1	0.88	0.18	76,76,76,76	0
56	MG	2a	3206	1/1	0.88	0.15	69,69,69,69	0
56	MG	2a	3207	1/1	0.88	0.16	68,68,68,68	0
56	MG	2A	3133	1/1	0.88	0.08	76,76,76,76	0
56	MG	1A	3482	1/1	0.88	0.17	63,63,63,63	0
56	MG	2a	3211	1/1	0.88	0.16	75,75,75,75	0
56	MG	1a	1686	1/1	0.88	0.27	81,81,81,81	0
56	MG	2A	3157	1/1	0.88	0.30	64,64,64,64	0
56	MG	2A	3159	1/1	0.88	0.20	65,65,65,65	0
56	MG	1A	3865	1/1	0.88	0.12	63,63,63,63	0
56	MG	2a	3005	1/1	0.88	0.33	77,77,77,77	0
56	MG	2a	3219	1/1	0.88	0.19	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3168	1/1	0.88	0.23	67,67,67,67	0
56	MG	1a	1691	1/1	0.88	0.29	60,60,60,60	0
56	MG	1A	3657	1/1	0.88	0.11	69,69,69,69	0
56	MG	2A	3317	1/1	0.88	0.12	80,80,80,80	0
56	MG	2A	3421	1/1	0.88	0.22	55,55,55,55	0
56	MG	2A	3425	1/1	0.88	0.23	49,49,49,49	0
56	MG	2a	3013	1/1	0.88	0.25	72,72,72,72	0
56	MG	1A	3871	1/1	0.88	0.21	62,62,62,62	0
56	MG	2A	3431	1/1	0.88	0.16	56,56,56,56	0
56	MG	2a	3235	1/1	0.88	0.27	68,68,68,68	0
56	MG	2a	3236	1/1	0.88	0.21	72,72,72,72	0
56	MG	2a	3237	1/1	0.88	0.32	69,69,69,69	0
56	MG	2A	3180	1/1	0.88	0.18	54,54,54,54	0
56	MG	2a	3017	1/1	0.88	0.30	77,77,77,77	0
56	MG	1A	3760	1/1	0.88	0.16	44,44,44,44	0
56	MG	2l	202	1/1	0.88	0.24	79,79,79,79	0
56	MG	2A	3189	1/1	0.88	0.19	68,68,68,68	0
56	MG	1A	3764	1/1	0.88	0.23	58,58,58,58	0
56	MG	2A	3443	1/1	0.88	0.44	67,67,67,67	0
56	MG	2A	3193	1/1	0.88	0.23	73,73,73,73	0
56	MG	2t	201	1/1	0.88	0.21	62,62,62,62	0
56	MG	2A	3329	1/1	0.88	0.15	67,67,67,67	0
56	MG	2A	3731	1/1	0.88	0.13	64,64,64,64	0
56	MG	1A	3133	1/1	0.88	0.17	58,58,58,58	0
56	MG	2a	3030	1/1	0.88	0.15	75,75,75,75	0
56	MG	2A	3333	1/1	0.88	0.12	69,69,69,69	0
56	MG	1A	3495	1/1	0.88	0.16	60,60,60,60	0
56	MG	2A	3739	1/1	0.88	0.12	62,62,62,62	0
56	MG	2A	3337	1/1	0.88	0.14	79,79,79,79	0
56	MG	1a	1709	1/1	0.88	0.23	65,65,65,65	0
56	MG	1A	3908	1/1	0.88	0.13	70,70,70,70	0
56	MG	1A	3079	1/1	0.88	0.13	60,60,60,60	0
56	MG	1A	3303	1/1	0.88	0.17	48,48,48,48	0
56	MG	1A	4088	1/1	0.88	0.17	61,61,61,61	0
56	MG	1a	1602	1/1	0.88	0.20	65,65,65,65	0
56	MG	2y	106	1/1	0.88	0.36	79,79,79,79	0
56	MG	2a	3049	1/1	0.88	0.24	72,72,72,72	0
56	MG	2A	3279	1/1	0.89	0.42	75,75,75,75	0
56	MG	2A	3744	1/1	0.89	0.12	76,76,76,76	0
56	MG	1A	3315	1/1	0.89	0.08	51,51,51,51	0
56	MG	2A	3055	1/1	0.89	0.29	73,73,73,73	0
56	MG	2A	3752	1/1	0.89	0.16	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3057	1/1	0.89	0.14	72,72,72,72	0
56	MG	1B	3625	1/1	0.89	0.11	60,60,60,60	0
56	MG	2A	3060	1/1	0.89	0.16	63,63,63,63	0
56	MG	1A	3514	1/1	0.89	0.14	62,62,62,62	0
56	MG	2a	3071	1/1	0.89	0.12	76,76,76,76	0
56	MG	2A	3444	1/1	0.89	0.31	68,68,68,68	0
56	MG	2A	3781	1/1	0.89	0.16	72,72,72,72	0
56	MG	1A	3523	1/1	0.89	0.20	54,54,54,54	0
56	MG	1A	3150	1/1	0.89	0.13	51,51,51,51	0
56	MG	2A	3789	1/1	0.89	0.08	79,79,79,79	0
56	MG	2a	3087	1/1	0.89	0.21	65,65,65,65	0
56	MG	2A	3065	1/1	0.89	0.11	78,78,78,78	0
56	MG	2A	3302	1/1	0.89	0.34	76,76,76,76	0
56	MG	2a	3091	1/1	0.89	0.16	72,72,72,72	0
56	MG	1A	3024	1/1	0.89	0.16	58,58,58,58	0
56	MG	2A	3468	1/1	0.89	0.21	70,70,70,70	0
56	MG	1A	3440	1/1	0.89	0.27	59,59,59,59	0
56	MG	2A	3307	1/1	0.89	0.22	70,70,70,70	0
56	MG	1A	3454	1/1	0.89	0.11	60,60,60,60	0
56	MG	1a	1705	1/1	0.89	0.11	57,57,57,57	0
56	MG	2A	3819	1/1	0.89	0.12	62,62,62,62	0
56	MG	1a	1708	1/1	0.89	0.34	74,74,74,74	0
56	MG	1E	317	1/1	0.89	0.07	41,41,41,41	0
56	MG	2A	3831	1/1	0.89	0.10	58,58,58,58	0
56	MG	2A	3838	1/1	0.89	0.09	74,74,74,74	0
56	MG	1G	204	1/1	0.89	0.10	60,60,60,60	0
56	MG	2A	3486	1/1	0.89	0.14	64,64,64,64	0
56	MG	2A	3489	1/1	0.89	0.17	77,77,77,77	0
56	MG	2a	3116	1/1	0.89	0.17	71,71,71,71	0
56	MG	1A	3455	1/1	0.89	0.11	60,60,60,60	0
56	MG	1A	3457	1/1	0.89	0.15	71,71,71,71	0
56	MG	1A	3458	1/1	0.89	0.17	55,55,55,55	0
56	MG	1U	203	1/1	0.89	0.15	38,38,38,38	0
56	MG	1A	3251	1/1	0.89	0.08	58,58,58,58	0
56	MG	1a	1723	1/1	0.89	0.31	63,63,63,63	0
56	MG	2A	3324	1/1	0.89	0.35	75,75,75,75	0
56	MG	1a	1736	1/1	0.89	0.10	72,72,72,72	0
56	MG	1A	3330	1/1	0.89	0.13	59,59,59,59	0
56	MG	1A	3083	1/1	0.89	0.23	44,44,44,44	0
56	MG	1Y	202	1/1	0.89	0.12	74,74,74,74	0
56	MG	2a	3139	1/1	0.89	0.31	69,69,69,69	0
56	MG	1a	1753	1/1	0.89	0.08	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3787	1/1	0.89	0.11	46,46,46,46	0
56	MG	1A	3026	1/1	0.89	0.18	64,64,64,64	0
56	MG	1a	1759	1/1	0.89	0.30	71,71,71,71	0
56	MG	1a	1760	1/1	0.89	0.13	73,73,73,73	0
56	MG	1A	3559	1/1	0.89	0.17	63,63,63,63	0
56	MG	1A	4012	1/1	0.89	0.15	57,57,57,57	0
56	MG	1a	1766	1/1	0.89	0.13	73,73,73,73	0
56	MG	1A	3300	1/1	0.89	0.19	54,54,54,54	0
56	MG	1a	1776	1/1	0.89	0.11	77,77,77,77	0
56	MG	2a	3165	1/1	0.89	0.10	88,88,88,88	0
56	MG	1a	1779	1/1	0.89	0.10	72,72,72,72	0
56	MG	2a	3171	1/1	0.89	0.10	74,74,74,74	0
56	MG	1A	3027	1/1	0.89	0.17	74,74,74,74	0
56	MG	2B	218	1/1	0.89	0.15	71,71,71,71	0
56	MG	2A	3586	1/1	0.89	0.17	56,56,56,56	0
56	MG	1a	1784	1/1	0.89	0.11	66,66,66,66	0
56	MG	2a	3182	1/1	0.89	0.13	83,83,83,83	0
56	MG	17	104	1/1	0.89	0.14	59,59,59,59	0
56	MG	2A	3599	1/1	0.89	0.15	68,68,68,68	0
56	MG	2A	3354	1/1	0.89	0.24	69,69,69,69	0
56	MG	2A	3602	1/1	0.89	0.10	65,65,65,65	0
56	MG	2a	3199	1/1	0.89	0.28	71,71,71,71	0
56	MG	1A	3259	1/1	0.89	0.20	53,53,53,53	0
56	MG	2A	3182	1/1	0.89	0.22	67,67,67,67	0
56	MG	2T	201	1/1	0.89	0.13	65,65,65,65	0
56	MG	2A	3184	1/1	0.89	0.28	75,75,75,75	0
56	MG	1A	3576	1/1	0.89	0.15	55,55,55,55	0
56	MG	1A	3820	1/1	0.89	0.10	70,70,70,70	0
56	MG	1A	3587	1/1	0.89	0.12	52,52,52,52	0
56	MG	2A	3195	1/1	0.89	0.29	73,73,73,73	0
56	MG	1A	3408	1/1	0.89	0.22	64,64,64,64	0
56	MG	2A	3198	1/1	0.89	0.11	61,61,61,61	0
56	MG	1b	301	1/1	0.89	0.17	78,78,78,78	0
56	MG	2A	3645	1/1	0.89	0.18	52,52,52,52	0
56	MG	1A	3309	1/1	0.89	0.17	66,66,66,66	0
56	MG	1A	4055	1/1	0.89	0.09	55,55,55,55	0
56	MG	1A	3311	1/1	0.89	0.38	71,71,71,71	0
56	MG	1A	3486	1/1	0.89	0.22	54,54,54,54	0
56	MG	1n	102	1/1	0.89	0.21	68,68,68,68	0
56	MG	2A	3381	1/1	0.89	0.26	65,65,65,65	0
56	MG	1a	1640	1/1	0.89	0.23	74,74,74,74	0
56	MG	1A	4063	1/1	0.89	0.13	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	3313	1/1	0.89	0.25	63,63,63,63	0
56	MG	2A	3682	1/1	0.89	0.14	63,63,63,63	0
56	MG	1A	3650	1/1	0.89	0.16	61,61,61,61	0
56	MG	2A	3221	1/1	0.89	0.17	63,63,63,63	0
56	MG	1a	1650	1/1	0.89	0.35	76,76,76,76	0
56	MG	1A	3314	1/1	0.89	0.29	63,63,63,63	0
56	MG	1A	3420	1/1	0.89	0.10	49,49,49,49	0
56	MG	1A	3670	1/1	0.89	0.13	64,64,64,64	0
56	MG	1A	3506	1/1	0.89	0.21	50,50,50,50	0
56	MG	2A	3701	1/1	0.89	0.19	62,62,62,62	0
56	MG	1a	1662	1/1	0.89	0.14	67,67,67,67	0
56	MG	2A	3242	1/1	0.89	0.16	53,53,53,53	0
56	MG	1A	3507	1/1	0.89	0.11	67,67,67,67	0
56	MG	1A	3869	1/1	0.89	0.09	58,58,58,58	0
56	MG	1A	3421	1/1	0.89	0.25	72,72,72,72	0
56	MG	1A	3872	1/1	0.89	0.16	74,74,74,74	0
56	MG	2A	3711	1/1	0.89	0.11	85,85,85,85	0
56	MG	1A	3700	1/1	0.89	0.12	73,73,73,73	0
56	MG	2A	3005	1/1	0.89	0.27	67,67,67,67	0
56	MG	2w	103	1/1	0.89	0.24	86,86,86,86	0
56	MG	1B	3602	1/1	0.89	0.25	57,57,57,57	0
56	MG	2A	3267	1/1	0.89	0.37	69,69,69,69	0
56	MG	1A	3875	1/1	0.89	0.10	53,53,53,53	0
56	MG	1a	1681	1/1	0.89	0.18	79,79,79,79	0
56	MG	2x	102	1/1	0.89	0.20	74,74,74,74	0
56	MG	2a	3045	1/1	0.89	0.28	71,71,71,71	0
56	MG	2A	3028	1/1	0.89	0.37	61,61,61,61	0
56	MG	1A	3510	1/1	0.89	0.11	65,65,65,65	0
56	MG	2a	3051	1/1	0.89	0.17	82,82,82,82	0
56	MG	1B	3621	1/1	0.89	0.09	57,57,57,57	0
56	MG	1a	1685	1/1	0.89	0.16	62,62,62,62	0
56	MG	2A	3422	1/1	0.89	0.18	54,54,54,54	0
56	MG	1A	3890	1/1	0.89	0.13	38,38,38,38	0
57	K	2x	101	1/1	0.89	0.19	83,83,83,83	0
56	MG	2A	3270	1/1	0.90	0.26	67,67,67,67	0
56	MG	1A	3358	1/1	0.90	0.16	58,58,58,58	0
56	MG	2a	3046	1/1	0.90	0.26	71,71,71,71	0
56	MG	1A	3608	1/1	0.90	0.13	56,56,56,56	0
56	MG	1A	4059	1/1	0.90	0.07	19,19,19,19	0
56	MG	2A	3276	1/1	0.90	0.11	68,68,68,68	0
56	MG	1a	1724	1/1	0.90	0.23	66,66,66,66	0
56	MG	2A	3067	1/1	0.90	0.27	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3420	1/1	0.90	0.30	57,57,57,57	0
56	MG	1A	3624	1/1	0.90	0.08	13,13,13,13	0
56	MG	1a	1737	1/1	0.90	0.18	63,63,63,63	0
56	MG	2a	3059	1/1	0.90	0.15	88,88,88,88	0
56	MG	2A	3423	1/1	0.90	0.28	66,66,66,66	0
56	MG	2A	3282	1/1	0.90	0.12	63,63,63,63	0
56	MG	18	107	1/1	0.90	0.11	68,68,68,68	0
56	MG	2a	3064	1/1	0.90	0.08	68,68,68,68	0
56	MG	2A	3429	1/1	0.90	0.35	63,63,63,63	0
56	MG	2A	3430	1/1	0.90	0.20	44,44,44,44	0
56	MG	1A	4066	1/1	0.90	0.06	26,26,26,26	0
56	MG	1A	4069	1/1	0.90	0.10	61,61,61,61	0
56	MG	2A	3748	1/1	0.90	0.10	65,65,65,65	0
56	MG	1a	1603	1/1	0.90	0.15	70,70,70,70	0
56	MG	2a	3074	1/1	0.90	0.24	76,76,76,76	0
56	MG	2A	3095	1/1	0.90	0.19	49,49,49,49	0
56	MG	1a	1614	1/1	0.90	0.23	72,72,72,72	0
56	MG	1A	3359	1/1	0.90	0.09	61,61,61,61	0
56	MG	2A	3762	1/1	0.90	0.15	69,69,69,69	0
56	MG	2A	3298	1/1	0.90	0.37	71,71,71,71	0
56	MG	1a	1616	1/1	0.90	0.17	68,68,68,68	0
56	MG	1a	1617	1/1	0.90	0.15	63,63,63,63	0
56	MG	2A	3779	1/1	0.90	0.13	42,42,42,42	0
56	MG	1a	1624	1/1	0.90	0.09	60,60,60,60	0
56	MG	2A	3457	1/1	0.90	0.28	63,63,63,63	0
56	MG	2a	3097	1/1	0.90	0.27	66,66,66,66	0
56	MG	2a	3098	1/1	0.90	0.19	83,83,83,83	0
56	MG	1A	3156	1/1	0.90	0.11	52,52,52,52	0
56	MG	1a	1628	1/1	0.90	0.27	62,62,62,62	0
56	MG	2A	3462	1/1	0.90	0.26	56,56,56,56	0
56	MG	2A	3464	1/1	0.90	0.21	61,61,61,61	0
56	MG	2A	3808	1/1	0.90	0.11	52,52,52,52	0
56	MG	2A	3308	1/1	0.90	0.13	68,68,68,68	0
56	MG	1a	1769	1/1	0.90	0.10	69,69,69,69	0
56	MG	1a	1630	1/1	0.90	0.32	73,73,73,73	0
56	MG	1A	3244	1/1	0.90	0.23	70,70,70,70	0
56	MG	1A	3011	1/1	0.90	0.14	51,51,51,51	0
56	MG	1A	3799	1/1	0.90	0.13	63,63,63,63	0
56	MG	1A	3061	1/1	0.90	0.11	52,52,52,52	0
56	MG	1A	3269	1/1	0.90	0.13	51,51,51,51	0
56	MG	1A	3916	1/1	0.90	0.12	58,58,58,58	0
56	MG	1A	3923	1/1	0.90	0.11	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2A	3140	1/1	0.90	0.09	68,68,68,68	0
56	MG	2A	3493	1/1	0.90	0.16	68,68,68,68	0
56	MG	2A	3850	1/1	0.90	0.13	81,81,81,81	0
56	MG	1A	3289	1/1	0.90	0.18	57,57,57,57	0
56	MG	2A	3323	1/1	0.90	0.16	65,65,65,65	0
56	MG	2A	3854	1/1	0.90	0.10	68,68,68,68	0
56	MG	2a	3131	1/1	0.90	0.16	72,72,72,72	0
56	MG	2a	3132	1/1	0.90	0.19	63,63,63,63	0
56	MG	2A	3858	1/1	0.90	0.15	45,45,45,45	0
56	MG	1a	1811	1/1	0.90	0.34	80,80,80,80	0
56	MG	1A	3930	1/1	0.90	0.10	59,59,59,59	0
56	MG	1A	3932	1/1	0.90	0.09	37,37,37,37	0
56	MG	2A	3167	1/1	0.90	0.31	70,70,70,70	0
56	MG	2A	3330	1/1	0.90	0.10	66,66,66,66	0
56	MG	1a	1815	1/1	0.90	0.09	58,58,58,58	0
56	MG	2A	3172	1/1	0.90	0.18	73,73,73,73	0
56	MG	2A	3511	1/1	0.90	0.13	57,57,57,57	0
56	MG	2a	3144	1/1	0.90	0.14	66,66,66,66	0
56	MG	2A	3878	1/1	0.90	0.10	77,77,77,77	0
56	MG	2A	3513	1/1	0.90	0.12	63,63,63,63	0
56	MG	2A	3516	1/1	0.90	0.10	73,73,73,73	0
56	MG	1A	3493	1/1	0.90	0.17	55,55,55,55	0
56	MG	2A	3335	1/1	0.90	0.19	64,64,64,64	0
56	MG	2a	3159	1/1	0.90	0.11	81,81,81,81	0
56	MG	1B	3615	1/1	0.90	0.10	56,56,56,56	0
56	MG	1a	1657	1/1	0.90	0.27	77,77,77,77	0
56	MG	2B	202	1/1	0.90	0.11	66,66,66,66	0
56	MG	2a	3167	1/1	0.90	0.18	70,70,70,70	0
56	MG	1A	3951	1/1	0.90	0.11	61,61,61,61	0
56	MG	1A	3376	1/1	0.90	0.23	63,63,63,63	0
56	MG	1A	3497	1/1	0.90	0.19	63,63,63,63	0
56	MG	1a	1666	1/1	0.90	0.17	68,68,68,68	0
56	MG	1A	3381	1/1	0.90	0.29	66,66,66,66	0
56	MG	1v	101	1/1	0.90	0.26	78,78,78,78	0
56	MG	2a	3188	1/1	0.90	0.15	65,65,65,65	0
56	MG	2B	212	1/1	0.90	0.23	75,75,75,75	0
56	MG	2a	3192	1/1	0.90	0.26	76,76,76,76	0
56	MG	1A	3838	1/1	0.90	0.20	61,61,61,61	0
56	MG	2A	3575	1/1	0.90	0.12	70,70,70,70	0
56	MG	2A	3194	1/1	0.90	0.22	79,79,79,79	0
56	MG	2A	3582	1/1	0.90	0.19	81,81,81,81	0
56	MG	1A	3978	1/1	0.90	0.13	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3984	1/1	0.90	0.15	73,73,73,73	0
56	MG	1A	3340	1/1	0.90	0.12	61,61,61,61	0
56	MG	2E	305	1/1	0.90	0.18	69,69,69,69	0
56	MG	1A	3992	1/1	0.90	0.09	40,40,40,40	0
56	MG	2A	3594	1/1	0.90	0.26	68,68,68,68	0
56	MG	1A	3843	1/1	0.90	0.09	53,53,53,53	0
56	MG	2A	3204	1/1	0.90	0.24	63,63,63,63	0
56	MG	1B	3636	1/1	0.90	0.14	62,62,62,62	0
56	MG	2A	3603	1/1	0.90	0.22	62,62,62,62	0
56	MG	2T	202	1/1	0.90	0.19	66,66,66,66	0
56	MG	1A	4000	1/1	0.90	0.11	59,59,59,59	0
56	MG	1E	303	1/1	0.90	0.27	56,56,56,56	0
56	MG	2A	3365	1/1	0.90	0.16	70,70,70,70	0
56	MG	2A	3612	1/1	0.90	0.18	74,74,74,74	0
56	MG	2A	3214	1/1	0.90	0.10	61,61,61,61	0
56	MG	2A	3369	1/1	0.90	0.17	65,65,65,65	0
56	MG	1A	3718	1/1	0.90	0.11	53,53,53,53	0
56	MG	1A	3721	1/1	0.90	0.20	64,64,64,64	0
56	MG	29	101	1/1	0.90	0.23	73,73,73,73	0
56	MG	2A	3624	1/1	0.90	0.11	40,40,40,40	0
56	MG	1A	3393	1/1	0.90	0.11	58,58,58,58	0
56	MG	1A	3149	1/1	0.90	0.12	43,43,43,43	0
56	MG	1A	3852	1/1	0.90	0.18	61,61,61,61	0
56	MG	2A	3636	1/1	0.90	0.20	60,60,60,60	0
56	MG	1S	203	1/1	0.90	0.12	76,76,76,76	0
56	MG	1T	201	1/1	0.90	0.20	70,70,70,70	0
56	MG	2a	3239	1/1	0.90	0.23	65,65,65,65	0
56	MG	2d	302	1/1	0.90	0.16	70,70,70,70	0
56	MG	2a	3010	1/1	0.90	0.17	68,68,68,68	0
56	MG	2A	3657	1/1	0.90	0.08	64,64,64,64	0
56	MG	2A	3018	1/1	0.90	0.11	57,57,57,57	0
56	MG	2A	3230	1/1	0.90	0.15	59,59,59,59	0
56	MG	1A	3294	1/1	0.90	0.14	58,58,58,58	0
56	MG	1A	3733	1/1	0.90	0.17	70,70,70,70	0
56	MG	2A	3029	1/1	0.90	0.14	71,71,71,71	0
56	MG	1V	202	1/1	0.90	0.25	53,53,53,53	0
56	MG	2a	3018	1/1	0.90	0.21	74,74,74,74	0
56	MG	2A	3674	1/1	0.90	0.11	63,63,63,63	0
56	MG	2A	3241	1/1	0.90	0.14	62,62,62,62	0
56	MG	1A	3856	1/1	0.90	0.10	59,59,59,59	0
56	MG	2A	3393	1/1	0.90	0.24	78,78,78,78	0
56	MG	2A	3039	1/1	0.90	0.23	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3195	1/1	0.90	0.28	64,64,64,64	0
56	MG	2A	3045	1/1	0.90	0.21	75,75,75,75	0
56	MG	2A	3051	1/1	0.90	0.18	74,74,74,74	0
56	MG	2A	3257	1/1	0.90	0.14	79,79,79,79	0
56	MG	2x	104	1/1	0.90	0.25	77,77,77,77	0
56	MG	2A	3401	1/1	0.90	0.12	77,77,77,77	0
56	MG	1A	3020	1/1	0.90	0.15	51,51,51,51	0
56	MG	2A	3262	1/1	0.90	0.12	68,68,68,68	0
56	MG	1A	3356	1/1	0.90	0.17	66,66,66,66	0
56	MG	1A	3745	1/1	0.90	0.08	60,60,60,60	0
56	MG	2a	3039	1/1	0.90	0.30	68,68,68,68	0
56	MG	10	107	1/1	0.90	0.15	68,68,68,68	0
56	MG	1A	3525	1/1	0.90	0.19	61,61,61,61	0
56	MG	1a	1715	1/1	0.90	0.10	59,59,59,59	0
56	MG	2a	3033	1/1	0.91	0.11	85,85,85,85	0
56	MG	1a	1696	1/1	0.91	0.38	69,69,69,69	0
56	MG	2A	3695	1/1	0.91	0.22	62,62,62,62	0
56	MG	2A	3696	1/1	0.91	0.20	74,74,74,74	0
56	MG	2a	3037	1/1	0.91	0.23	65,65,65,65	0
56	MG	2A	3697	1/1	0.91	0.20	74,74,74,74	0
56	MG	1O	204	1/1	0.91	0.16	65,65,65,65	0
56	MG	2A	3259	1/1	0.91	0.13	77,77,77,77	0
56	MG	2A	3261	1/1	0.91	0.17	51,51,51,51	0
56	MG	1O	205	1/1	0.91	0.13	71,71,71,71	0
56	MG	1A	3431	1/1	0.91	0.21	58,58,58,58	0
56	MG	1a	1702	1/1	0.91	0.21	69,69,69,69	0
56	MG	2A	3707	1/1	0.91	0.11	54,54,54,54	0
56	MG	1A	3841	1/1	0.91	0.14	43,43,43,43	0
56	MG	1a	1704	1/1	0.91	0.23	63,63,63,63	0
56	MG	1S	202	1/1	0.91	0.17	60,60,60,60	0
56	MG	1a	1706	1/1	0.91	0.10	66,66,66,66	0
56	MG	1A	4009	1/1	0.91	0.09	74,74,74,74	0
56	MG	1A	3295	1/1	0.91	0.13	70,70,70,70	0
56	MG	1T	202	1/1	0.91	0.14	57,57,57,57	0
56	MG	2A	3718	1/1	0.91	0.38	80,80,80,80	0
56	MG	1A	3366	1/1	0.91	0.10	51,51,51,51	0
56	MG	2a	3061	1/1	0.91	0.13	70,70,70,70	0
56	MG	1A	4018	1/1	0.91	0.07	50,50,50,50	0
56	MG	1A	3518	1/1	0.91	0.13	58,58,58,58	0
56	MG	2A	3730	1/1	0.91	0.13	54,54,54,54	0
56	MG	2A	3089	1/1	0.91	0.14	61,61,61,61	0
56	MG	1A	4027	1/1	0.91	0.14	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3686	1/1	0.91	0.15	49,49,49,49	0
56	MG	1A	3296	1/1	0.91	0.12	62,62,62,62	0
56	MG	2A	3284	1/1	0.91	0.10	62,62,62,62	0
56	MG	2A	3433	1/1	0.91	0.41	71,71,71,71	0
56	MG	2A	3286	1/1	0.91	0.12	72,72,72,72	0
56	MG	2A	3438	1/1	0.91	0.24	75,75,75,75	0
56	MG	2a	3080	1/1	0.91	0.33	70,70,70,70	0
56	MG	1A	3045	1/1	0.91	0.07	34,34,34,34	0
56	MG	1A	3194	1/1	0.91	0.25	34,34,34,34	0
56	MG	1A	3302	1/1	0.91	0.17	41,41,41,41	0
56	MG	1A	3711	1/1	0.91	0.15	52,52,52,52	0
56	MG	2a	3086	1/1	0.91	0.12	68,68,68,68	0
56	MG	2A	3754	1/1	0.91	0.10	68,68,68,68	0
56	MG	2A	3295	1/1	0.91	0.10	69,69,69,69	0
56	MG	2A	3447	1/1	0.91	0.17	55,55,55,55	0
56	MG	2A	3448	1/1	0.91	0.26	57,57,57,57	0
56	MG	2A	3765	1/1	0.91	0.11	51,51,51,51	0
56	MG	2a	3096	1/1	0.91	0.19	67,67,67,67	0
56	MG	1A	3859	1/1	0.91	0.18	50,50,50,50	0
56	MG	2A	3770	1/1	0.91	0.13	67,67,67,67	0
56	MG	2A	3451	1/1	0.91	0.17	58,58,58,58	0
56	MG	2A	3455	1/1	0.91	0.17	68,68,68,68	0
56	MG	1a	1740	1/1	0.91	0.14	57,57,57,57	0
56	MG	1A	4048	1/1	0.91	0.10	51,51,51,51	0
56	MG	2A	3299	1/1	0.91	0.24	77,77,77,77	0
56	MG	2A	3783	1/1	0.91	0.14	79,79,79,79	0
56	MG	2A	3108	1/1	0.91	0.32	56,56,56,56	0
56	MG	2A	3301	1/1	0.91	0.35	73,73,73,73	0
56	MG	2A	3800	1/1	0.91	0.11	80,80,80,80	0
56	MG	1A	3335	1/1	0.91	0.39	68,68,68,68	0
56	MG	16	101	1/1	0.91	0.15	49,49,49,49	0
56	MG	1A	3258	1/1	0.91	0.09	41,41,41,41	0
56	MG	1A	3465	1/1	0.91	0.13	58,58,58,58	0
56	MG	1A	3141	1/1	0.91	0.11	51,51,51,51	0
56	MG	2A	3812	1/1	0.91	0.13	77,77,77,77	0
56	MG	1A	3725	1/1	0.91	0.09	48,48,48,48	0
56	MG	2a	3121	1/1	0.91	0.18	79,79,79,79	0
56	MG	2A	3477	1/1	0.91	0.10	69,69,69,69	0
56	MG	1A	3388	1/1	0.91	0.23	66,66,66,66	0
56	MG	2A	3127	1/1	0.91	0.08	77,77,77,77	0
56	MG	1a	1604	1/1	0.91	0.14	67,67,67,67	0
56	MG	1A	3543	1/1	0.91	0.17	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2a	3130	1/1	0.91	0.16	65,65,65,65	0
56	MG	2A	3487	1/1	0.91	0.27	65,65,65,65	0
56	MG	1A	3469	1/1	0.91	0.15	73,73,73,73	0
56	MG	2A	3834	1/1	0.91	0.14	62,62,62,62	0
56	MG	2A	3134	1/1	0.91	0.12	52,52,52,52	0
56	MG	2A	3843	1/1	0.91	0.15	59,59,59,59	0
56	MG	1a	1772	1/1	0.91	0.11	79,79,79,79	0
56	MG	1A	3876	1/1	0.91	0.16	43,43,43,43	0
56	MG	2A	3142	1/1	0.91	0.28	68,68,68,68	0
56	MG	1A	4081	1/1	0.91	0.09	58,58,58,58	0
56	MG	2A	3148	1/1	0.91	0.30	67,67,67,67	0
56	MG	2A	3149	1/1	0.91	0.20	45,45,45,45	0
56	MG	2A	3154	1/1	0.91	0.14	69,69,69,69	0
56	MG	2a	3145	1/1	0.91	0.19	71,71,71,71	0
56	MG	2A	3860	1/1	0.91	0.07	43,43,43,43	0
56	MG	1a	1622	1/1	0.91	0.35	73,73,73,73	0
56	MG	1A	3339	1/1	0.91	0.12	56,56,56,56	0
56	MG	2a	3149	1/1	0.91	0.12	83,83,83,83	0
56	MG	1A	3395	1/1	0.91	0.33	43,43,43,43	0
56	MG	2A	3871	1/1	0.91	0.15	73,73,73,73	0
56	MG	2a	3156	1/1	0.91	0.07	82,82,82,82	0
56	MG	2a	3158	1/1	0.91	0.09	83,83,83,83	0
56	MG	1a	1785	1/1	0.91	0.13	56,56,56,56	0
56	MG	1a	1627	1/1	0.91	0.20	65,65,65,65	0
56	MG	1A	3146	1/1	0.91	0.26	46,46,46,46	0
56	MG	1a	1629	1/1	0.91	0.09	61,61,61,61	0
56	MG	1A	3558	1/1	0.91	0.13	71,71,71,71	0
56	MG	1A	3214	1/1	0.91	0.11	62,62,62,62	0
56	MG	1A	3099	1/1	0.91	0.11	44,44,44,44	0
56	MG	2A	3530	1/1	0.91	0.13	61,61,61,61	0
56	MG	2A	3340	1/1	0.91	0.20	63,63,63,63	0
56	MG	1A	3400	1/1	0.91	0.25	39,39,39,39	0
56	MG	1A	3073	1/1	0.91	0.33	65,65,65,65	0
56	MG	2A	3183	1/1	0.91	0.10	56,56,56,56	0
56	MG	2A	3546	1/1	0.91	0.21	60,60,60,60	0
56	MG	1A	3483	1/1	0.91	0.14	53,53,53,53	0
56	MG	2A	3565	1/1	0.91	0.11	75,75,75,75	0
56	MG	2A	3187	1/1	0.91	0.25	67,67,67,67	0
56	MG	1d	301	1/1	0.91	0.36	66,66,66,66	0
56	MG	1B	3601	1/1	0.91	0.16	55,55,55,55	0
56	MG	1A	3410	1/1	0.91	0.15	57,57,57,57	0
56	MG	2a	3202	1/1	0.91	0.22	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1a	1644	1/1	0.91	0.15	73,73,73,73	0
56	MG	2a	3204	1/1	0.91	0.18	72,72,72,72	0
56	MG	2A	3584	1/1	0.91	0.17	70,70,70,70	0
56	MG	2B	215	1/1	0.91	0.17	73,73,73,73	0
56	MG	1A	3593	1/1	0.91	0.28	50,50,50,50	0
56	MG	1B	3612	1/1	0.91	0.32	66,66,66,66	0
56	MG	2A	3357	1/1	0.91	0.11	68,68,68,68	0
56	MG	1B	3614	1/1	0.91	0.11	59,59,59,59	0
56	MG	2A	3199	1/1	0.91	0.22	67,67,67,67	0
56	MG	2a	3213	1/1	0.91	0.12	72,72,72,72	0
56	MG	2A	3597	1/1	0.91	0.16	71,71,71,71	0
56	MG	2a	3215	1/1	0.91	0.08	71,71,71,71	0
56	MG	2E	307	1/1	0.91	0.16	74,74,74,74	0
56	MG	2E	308	1/1	0.91	0.13	68,68,68,68	0
56	MG	1A	3411	1/1	0.91	0.18	53,53,53,53	0
56	MG	1A	3106	1/1	0.91	0.39	42,42,42,42	0
56	MG	2a	3220	1/1	0.91	0.20	75,75,75,75	0
56	MG	1A	3601	1/1	0.91	0.20	70,70,70,70	0
56	MG	1A	3954	1/1	0.91	0.07	57,57,57,57	0
56	MG	2A	3366	1/1	0.91	0.18	67,67,67,67	0
56	MG	2a	3224	1/1	0.91	0.11	74,74,74,74	0
56	MG	1A	3956	1/1	0.91	0.09	61,61,61,61	0
56	MG	2A	3210	1/1	0.91	0.14	53,53,53,53	0
56	MG	1A	3963	1/1	0.91	0.10	55,55,55,55	0
56	MG	2A	3213	1/1	0.91	0.13	69,69,69,69	0
56	MG	1a	1665	1/1	0.91	0.07	74,74,74,74	0
56	MG	1A	3354	1/1	0.91	0.11	61,61,61,61	0
56	MG	1A	3317	1/1	0.91	0.25	59,59,59,59	0
56	MG	1A	3121	1/1	0.91	0.18	53,53,53,53	0
56	MG	1A	3618	1/1	0.91	0.15	46,46,46,46	0
56	MG	27	101	1/1	0.91	0.19	60,60,60,60	0
56	MG	27	102	1/1	0.91	0.12	57,57,57,57	0
56	MG	2a	3240	1/1	0.91	0.14	75,75,75,75	0
56	MG	2A	3626	1/1	0.91	0.10	56,56,56,56	0
56	MG	1A	3062	1/1	0.91	0.25	59,59,59,59	0
56	MG	2A	3631	1/1	0.91	0.15	58,58,58,58	0
56	MG	2A	3632	1/1	0.91	0.20	77,77,77,77	0
56	MG	1A	3980	1/1	0.91	0.13	74,74,74,74	0
56	MG	1A	3821	1/1	0.91	0.18	60,60,60,60	0
56	MG	2A	3642	1/1	0.91	0.10	61,61,61,61	0
56	MG	2A	3384	1/1	0.91	0.39	75,75,75,75	0
56	MG	2r	102	1/1	0.91	0.08	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3225	1/1	0.91	0.15	65,65,65,65	0
56	MG	1a	1678	1/1	0.91	0.14	55,55,55,55	0
56	MG	1D	312	1/1	0.91	0.15	38,38,38,38	0
56	MG	2A	3662	1/1	0.91	0.23	71,71,71,71	0
56	MG	2A	3664	1/1	0.91	0.08	70,70,70,70	0
56	MG	1A	3626	1/1	0.91	0.14	40,40,40,40	0
56	MG	2A	3667	1/1	0.91	0.14	64,64,64,64	0
56	MG	2A	3389	1/1	0.91	0.12	71,71,71,71	0
56	MG	2A	3390	1/1	0.91	0.16	65,65,65,65	0
56	MG	1E	311	1/1	0.91	0.11	61,61,61,61	0
56	MG	1E	314	1/1	0.91	0.09	69,69,69,69	0
56	MG	1a	1684	1/1	0.91	0.24	80,80,80,80	0
56	MG	2A	3239	1/1	0.91	0.26	65,65,65,65	0
56	MG	1A	3327	1/1	0.91	0.30	62,62,62,62	0
56	MG	1F	311	1/1	0.91	0.14	49,49,49,49	0
56	MG	2A	3683	1/1	0.91	0.14	63,63,63,63	0
56	MG	1F	313	1/1	0.91	0.14	60,60,60,60	0
56	MG	1A	3834	1/1	0.91	0.13	47,47,47,47	0
56	MG	1N	201	1/1	0.91	0.24	57,57,57,57	0
56	MG	1A	3361	1/1	0.91	0.12	55,55,55,55	0
56	MG	2A	3693	1/1	0.91	0.14	70,70,70,70	0
56	MG	1A	3511	1/1	0.92	0.09	54,54,54,54	0
56	MG	2A	3656	1/1	0.92	0.12	57,57,57,57	0
56	MG	10	108	1/1	0.92	0.08	53,53,53,53	0
56	MG	1A	4028	1/1	0.92	0.08	54,54,54,54	0
56	MG	2A	3370	1/1	0.92	0.16	74,74,74,74	0
56	MG	1A	4029	1/1	0.92	0.07	55,55,55,55	0
56	MG	1A	3443	1/1	0.92	0.08	74,74,74,74	0
56	MG	1A	3260	1/1	0.92	0.10	72,72,72,72	0
56	MG	2a	3021	1/1	0.92	0.16	89,89,89,89	0
56	MG	2a	3022	1/1	0.92	0.19	68,68,68,68	0
56	MG	2A	3668	1/1	0.92	0.10	63,63,63,63	0
56	MG	1A	3665	1/1	0.92	0.11	38,38,38,38	0
56	MG	2A	3186	1/1	0.92	0.12	54,54,54,54	0
56	MG	1A	3049	1/1	0.92	0.17	54,54,54,54	0
56	MG	1A	3519	1/1	0.92	0.12	63,63,63,63	0
56	MG	19	101	1/1	0.92	0.19	59,59,59,59	0
56	MG	2a	3029	1/1	0.92	0.14	65,65,65,65	0
56	MG	2A	3192	1/1	0.92	0.19	67,67,67,67	0
56	MG	2A	3677	1/1	0.92	0.09	64,64,64,64	0
56	MG	1A	3521	1/1	0.92	0.27	46,46,46,46	0
56	MG	1A	4045	1/1	0.92	0.07	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1a	1799	1/1	0.92	0.08	77,77,77,77	0
56	MG	2A	3684	1/1	0.92	0.14	71,71,71,71	0
56	MG	2A	3686	1/1	0.92	0.10	56,56,56,56	0
56	MG	1A	3391	1/1	0.92	0.26	32,32,32,32	0
56	MG	1A	3342	1/1	0.92	0.23	53,53,53,53	0
56	MG	1a	1607	1/1	0.92	0.32	77,77,77,77	0
56	MG	2A	3690	1/1	0.92	0.16	84,84,84,84	0
56	MG	2A	3200	1/1	0.92	0.18	70,70,70,70	0
56	MG	1A	3101	1/1	0.92	0.09	39,39,39,39	0
56	MG	2A	3202	1/1	0.92	0.39	73,73,73,73	0
56	MG	1A	3703	1/1	0.92	0.09	46,46,46,46	0
56	MG	2a	3047	1/1	0.92	0.14	67,67,67,67	0
56	MG	1A	3461	1/1	0.92	0.09	56,56,56,56	0
56	MG	1A	3163	1/1	0.92	0.19	45,45,45,45	0
56	MG	1A	3713	1/1	0.92	0.11	42,42,42,42	0
56	MG	2A	3699	1/1	0.92	0.12	59,59,59,59	0
56	MG	2A	3208	1/1	0.92	0.15	67,67,67,67	0
56	MG	2A	3209	1/1	0.92	0.09	58,58,58,58	0
56	MG	1a	1623	1/1	0.92	0.25	67,67,67,67	0
56	MG	1A	4064	1/1	0.92	0.15	41,41,41,41	0
56	MG	1A	3868	1/1	0.92	0.13	51,51,51,51	0
56	MG	1A	3715	1/1	0.92	0.10	40,40,40,40	0
56	MG	1A	3267	1/1	0.92	0.19	66,66,66,66	0
56	MG	1A	3268	1/1	0.92	0.32	56,56,56,56	0
56	MG	1A	3232	1/1	0.92	0.07	53,53,53,53	0
56	MG	1A	4082	1/1	0.92	0.07	29,29,29,29	0
56	MG	1a	1632	1/1	0.92	0.21	65,65,65,65	0
56	MG	1A	3719	1/1	0.92	0.19	63,63,63,63	0
56	MG	1w	103	1/1	0.92	0.10	80,80,80,80	0
56	MG	2A	3224	1/1	0.92	0.32	70,70,70,70	0
56	MG	1A	3541	1/1	0.92	0.19	50,50,50,50	0
56	MG	2A	3725	1/1	0.92	0.11	60,60,60,60	0
56	MG	2A	3726	1/1	0.92	0.12	51,51,51,51	0
56	MG	2A	3228	1/1	0.92	0.29	51,51,51,51	0
56	MG	1A	3404	1/1	0.92	0.11	51,51,51,51	0
56	MG	1A	3884	1/1	0.92	0.16	34,34,34,34	0
56	MG	1A	3886	1/1	0.92	0.09	61,61,61,61	0
56	MG	1A	3728	1/1	0.92	0.10	40,40,40,40	0
56	MG	2A	3234	1/1	0.92	0.19	54,54,54,54	0
56	MG	1x	102	1/1	0.92	0.31	70,70,70,70	0
56	MG	1x	103	1/1	0.92	0.17	57,57,57,57	0
56	MG	1x	104	1/1	0.92	0.23	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3240	1/1	0.92	0.07	85,85,85,85	0
56	MG	2A	3743	1/1	0.92	0.11	57,57,57,57	0
56	MG	1a	1643	1/1	0.92	0.16	69,69,69,69	0
56	MG	2a	3093	1/1	0.92	0.19	68,68,68,68	0
56	MG	2a	3095	1/1	0.92	0.16	76,76,76,76	0
56	MG	1A	3891	1/1	0.92	0.07	26,26,26,26	0
56	MG	1A	3892	1/1	0.92	0.11	32,32,32,32	0
56	MG	2A	3750	1/1	0.92	0.14	65,65,65,65	0
56	MG	2A	3434	1/1	0.92	0.35	70,70,70,70	0
56	MG	2a	3100	1/1	0.92	0.27	55,55,55,55	0
56	MG	1A	3893	1/1	0.92	0.09	33,33,33,33	0
56	MG	1A	4103	1/1	0.92	0.31	62,62,62,62	0
56	MG	2A	3757	1/1	0.92	0.10	75,75,75,75	0
56	MG	2A	3253	1/1	0.92	0.29	62,62,62,62	0
56	MG	2A	3759	1/1	0.92	0.12	77,77,77,77	0
56	MG	1A	3894	1/1	0.92	0.09	54,54,54,54	0
56	MG	1A	3323	1/1	0.92	0.12	55,55,55,55	0
56	MG	1B	3609	1/1	0.92	0.10	48,48,48,48	0
56	MG	2A	3766	1/1	0.92	0.20	52,52,52,52	0
56	MG	1A	3901	1/1	0.92	0.12	27,27,27,27	0
56	MG	1A	3544	1/1	0.92	0.23	50,50,50,50	0
56	MG	2A	3014	1/1	0.92	0.08	50,50,50,50	0
56	MG	2A	3016	1/1	0.92	0.10	75,75,75,75	0
56	MG	2A	3265	1/1	0.92	0.17	68,68,68,68	0
56	MG	2A	3017	1/1	0.92	0.25	59,59,59,59	0
56	MG	1B	3613	1/1	0.92	0.29	75,75,75,75	0
56	MG	1A	3409	1/1	0.92	0.14	52,52,52,52	0
56	MG	2A	3024	1/1	0.92	0.19	65,65,65,65	0
56	MG	2A	3460	1/1	0.92	0.26	70,70,70,70	0
56	MG	2A	3795	1/1	0.92	0.09	80,80,80,80	0
56	MG	2a	3126	1/1	0.92	0.19	70,70,70,70	0
56	MG	1A	3287	1/1	0.92	0.11	49,49,49,49	0
56	MG	1A	3912	1/1	0.92	0.18	31,31,31,31	0
56	MG	2A	3463	1/1	0.92	0.27	61,61,61,61	0
56	MG	1A	3325	1/1	0.92	0.12	59,59,59,59	0
56	MG	2A	3809	1/1	0.92	0.13	57,57,57,57	0
56	MG	1A	3556	1/1	0.92	0.10	63,63,63,63	0
56	MG	2A	3038	1/1	0.92	0.09	34,34,34,34	0
56	MG	1A	3478	1/1	0.92	0.12	62,62,62,62	0
56	MG	2a	3138	1/1	0.92	0.37	75,75,75,75	0
56	MG	2A	3043	1/1	0.92	0.17	80,80,80,80	0
56	MG	1A	3925	1/1	0.92	0.15	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1a	1673	1/1	0.92	0.17	60,60,60,60	0
56	MG	1A	3288	1/1	0.92	0.17	56,56,56,56	0
56	MG	1a	1677	1/1	0.92	0.32	61,61,61,61	0
56	MG	2A	3820	1/1	0.92	0.09	58,58,58,58	0
56	MG	1A	3480	1/1	0.92	0.12	51,51,51,51	0
56	MG	1A	3565	1/1	0.92	0.14	44,44,44,44	0
56	MG	1A	3481	1/1	0.92	0.16	65,65,65,65	0
56	MG	2A	3488	1/1	0.92	0.15	64,64,64,64	0
56	MG	1B	3633	1/1	0.92	0.08	46,46,46,46	0
56	MG	2A	3841	1/1	0.92	0.11	52,52,52,52	0
56	MG	1B	3634	1/1	0.92	0.09	68,68,68,68	0
56	MG	2a	3152	1/1	0.92	0.09	84,84,84,84	0
56	MG	1A	3942	1/1	0.92	0.07	35,35,35,35	0
56	MG	2a	3157	1/1	0.92	0.08	72,72,72,72	0
56	MG	1A	3758	1/1	0.92	0.10	53,53,53,53	0
56	MG	1D	305	1/1	0.92	0.10	48,48,48,48	0
56	MG	2a	3160	1/1	0.92	0.13	69,69,69,69	0
56	MG	1a	1688	1/1	0.92	0.09	66,66,66,66	0
56	MG	2a	3163	1/1	0.92	0.06	93,93,93,93	0
56	MG	1A	3167	1/1	0.92	0.20	61,61,61,61	0
56	MG	2A	3068	1/1	0.92	0.19	67,67,67,67	0
56	MG	2A	3069	1/1	0.92	0.11	53,53,53,53	0
56	MG	2A	3074	1/1	0.92	0.11	61,61,61,61	0
56	MG	2A	3075	1/1	0.92	0.22	78,78,78,78	0
56	MG	1A	3363	1/1	0.92	0.13	62,62,62,62	0
56	MG	1A	3962	1/1	0.92	0.09	57,57,57,57	0
56	MG	1E	308	1/1	0.92	0.26	66,66,66,66	0
56	MG	2A	3514	1/1	0.92	0.16	64,64,64,64	0
56	MG	1A	3765	1/1	0.92	0.12	52,52,52,52	0
56	MG	1A	3775	1/1	0.92	0.10	48,48,48,48	0
56	MG	2A	3519	1/1	0.92	0.14	44,44,44,44	0
56	MG	2a	3193	1/1	0.92	0.15	64,64,64,64	0
56	MG	1A	3485	1/1	0.92	0.21	53,53,53,53	0
56	MG	1a	1699	1/1	0.92	0.26	68,68,68,68	0
56	MG	2A	3523	1/1	0.92	0.14	56,56,56,56	0
56	MG	2a	3198	1/1	0.92	0.13	71,71,71,71	0
56	MG	1A	3970	1/1	0.92	0.10	50,50,50,50	0
56	MG	2A	3883	1/1	0.92	0.13	60,60,60,60	0
56	MG	2A	3096	1/1	0.92	0.10	41,41,41,41	0
56	MG	1A	3973	1/1	0.92	0.09	53,53,53,53	0
56	MG	2A	3316	1/1	0.92	0.21	73,73,73,73	0
56	MG	1A	3247	1/1	0.92	0.29	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3170	1/1	0.92	0.10	56,56,56,56	0
56	MG	1N	202	1/1	0.92	0.12	54,54,54,54	0
56	MG	1A	3976	1/1	0.92	0.10	60,60,60,60	0
56	MG	2A	3564	1/1	0.92	0.13	52,52,52,52	0
56	MG	1O	203	1/1	0.92	0.23	64,64,64,64	0
56	MG	2B	210	1/1	0.92	0.15	75,75,75,75	0
56	MG	1A	3490	1/1	0.92	0.12	57,57,57,57	0
56	MG	1A	3006	1/1	0.92	0.16	62,62,62,62	0
56	MG	2A	3573	1/1	0.92	0.10	64,64,64,64	0
56	MG	1A	3598	1/1	0.92	0.22	56,56,56,56	0
56	MG	2A	3326	1/1	0.92	0.12	57,57,57,57	0
56	MG	2B	216	1/1	0.92	0.15	76,76,76,76	0
56	MG	1P	206	1/1	0.92	0.22	46,46,46,46	0
56	MG	1A	3181	1/1	0.92	0.21	61,61,61,61	0
56	MG	2B	219	1/1	0.92	0.23	83,83,83,83	0
56	MG	2A	3118	1/1	0.92	0.15	56,56,56,56	0
56	MG	2D	305	1/1	0.92	0.34	48,48,48,48	0
56	MG	1A	3182	1/1	0.92	0.12	56,56,56,56	0
56	MG	2A	3332	1/1	0.92	0.16	60,60,60,60	0
56	MG	2E	303	1/1	0.92	0.34	69,69,69,69	0
56	MG	2A	3125	1/1	0.92	0.23	67,67,67,67	0
56	MG	1A	3996	1/1	0.92	0.07	37,37,37,37	0
56	MG	2A	3595	1/1	0.92	0.12	58,58,58,58	0
56	MG	2a	3230	1/1	0.92	0.11	60,60,60,60	0
56	MG	1A	3119	1/1	0.92	0.37	48,48,48,48	0
56	MG	1A	3502	1/1	0.92	0.35	52,52,52,52	0
56	MG	2A	3129	1/1	0.92	0.15	71,71,71,71	0
56	MG	2P	202	1/1	0.92	0.16	63,63,63,63	0
56	MG	2A	3130	1/1	0.92	0.13	57,57,57,57	0
56	MG	2Q	204	1/1	0.92	0.13	58,58,58,58	0
56	MG	1A	3434	1/1	0.92	0.10	69,69,69,69	0
56	MG	2d	301	1/1	0.92	0.34	66,66,66,66	0
56	MG	2R	202	1/1	0.92	0.10	56,56,56,56	0
56	MG	1a	1730	1/1	0.92	0.09	73,73,73,73	0
56	MG	2A	3608	1/1	0.92	0.13	60,60,60,60	0
56	MG	2U	201	1/1	0.92	0.17	62,62,62,62	0
56	MG	1U	204	1/1	0.92	0.11	47,47,47,47	0
56	MG	1A	3825	1/1	0.92	0.07	54,54,54,54	0
56	MG	2X	101	1/1	0.92	0.10	65,65,65,65	0
56	MG	2Y	201	1/1	0.92	0.18	61,61,61,61	0
56	MG	1A	3046	1/1	0.92	0.08	42,42,42,42	0
56	MG	1W	206	1/1	0.92	0.15	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	4010	1/1	0.92	0.08	81,81,81,81	0
56	MG	2I	102	1/1	0.92	0.36	57,57,57,57	0
56	MG	1a	1745	1/1	0.92	0.12	72,72,72,72	0
56	MG	1a	1748	1/1	0.92	0.09	66,66,66,66	0
56	MG	2A	3619	1/1	0.92	0.12	55,55,55,55	0
56	MG	2A	3620	1/1	0.92	0.12	71,71,71,71	0
56	MG	2A	3152	1/1	0.92	0.11	57,57,57,57	0
56	MG	2A	3153	1/1	0.92	0.27	63,63,63,63	0
56	MG	2a	3001	1/1	0.92	0.10	69,69,69,69	0
56	MG	1X	107	1/1	0.92	0.10	64,64,64,64	0
56	MG	1A	3833	1/1	0.92	0.08	47,47,47,47	0
56	MG	2a	3004	1/1	0.92	0.21	59,59,59,59	0
56	MG	1A	3439	1/1	0.92	0.09	50,50,50,50	0
56	MG	1A	3646	1/1	0.92	0.10	46,46,46,46	0
56	MG	1A	3128	1/1	0.92	0.07	76,76,76,76	0
56	MG	10	103	1/1	0.92	0.15	55,55,55,55	0
56	MG	1a	1761	1/1	0.92	0.17	63,63,63,63	0
56	MG	1a	1762	1/1	0.92	0.08	65,65,65,65	0
56	MG	2A	3651	1/1	0.92	0.17	49,49,49,49	0
57	K	1A	3571	1/1	0.92	0.28	75,75,75,75	0
56	MG	2A	3652	1/1	0.92	0.11	53,53,53,53	0
56	MG	2A	3491	1/1	0.93	0.22	63,63,63,63	0
56	MG	1A	4102	1/1	0.93	0.15	56,56,56,56	0
56	MG	1A	3619	1/1	0.93	0.09	41,41,41,41	0
56	MG	2A	3774	1/1	0.93	0.15	60,60,60,60	0
56	MG	1a	1782	1/1	0.93	0.10	68,68,68,68	0
56	MG	1A	3620	1/1	0.93	0.10	54,54,54,54	0
56	MG	1A	3122	1/1	0.93	0.18	41,41,41,41	0
56	MG	1a	1626	1/1	0.93	0.15	70,70,70,70	0
56	MG	2A	3501	1/1	0.93	0.27	63,63,63,63	0
56	MG	1B	3607	1/1	0.93	0.14	69,69,69,69	0
56	MG	2A	3794	1/1	0.93	0.09	55,55,55,55	0
56	MG	2A	3144	1/1	0.93	0.16	51,51,51,51	0
56	MG	2A	3796	1/1	0.93	0.11	71,71,71,71	0
56	MG	2A	3504	1/1	0.93	0.12	48,48,48,48	0
56	MG	2A	3803	1/1	0.93	0.15	72,72,72,72	0
56	MG	2A	3145	1/1	0.93	0.20	59,59,59,59	0
56	MG	1B	3608	1/1	0.93	0.26	72,72,72,72	0
56	MG	1A	3808	1/1	0.93	0.08	49,49,49,49	0
56	MG	1a	1806	1/1	0.93	0.09	75,75,75,75	0
56	MG	1A	3298	1/1	0.93	0.24	54,54,54,54	0
56	MG	1A	3627	1/1	0.93	0.12	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3960	1/1	0.93	0.10	53,53,53,53	0
56	MG	2A	3517	1/1	0.93	0.10	53,53,53,53	0
56	MG	2A	3155	1/1	0.93	0.10	56,56,56,56	0
56	MG	1A	3633	1/1	0.93	0.13	55,55,55,55	0
56	MG	1A	3817	1/1	0.93	0.07	35,35,35,35	0
56	MG	1A	3029	1/1	0.93	0.15	37,37,37,37	0
56	MG	1A	3129	1/1	0.93	0.11	48,48,48,48	0
56	MG	1A	3025	1/1	0.93	0.15	36,36,36,36	0
56	MG	2A	3169	1/1	0.93	0.13	46,46,46,46	0
56	MG	2A	3336	1/1	0.93	0.08	54,54,54,54	0
56	MG	2A	3832	1/1	0.93	0.11	48,48,48,48	0
56	MG	1A	3972	1/1	0.93	0.10	46,46,46,46	0
56	MG	1B	3624	1/1	0.93	0.15	60,60,60,60	0
56	MG	1A	3824	1/1	0.93	0.35	43,43,43,43	0
56	MG	2A	3842	1/1	0.93	0.10	78,78,78,78	0
56	MG	1A	3135	1/1	0.93	0.25	36,36,36,36	0
56	MG	1B	3627	1/1	0.93	0.08	47,47,47,47	0
56	MG	2A	3548	1/1	0.93	0.25	56,56,56,56	0
56	MG	1A	3826	1/1	0.93	0.07	42,42,42,42	0
56	MG	2A	3344	1/1	0.93	0.29	73,73,73,73	0
56	MG	1A	3257	1/1	0.93	0.09	41,41,41,41	0
56	MG	1A	3832	1/1	0.93	0.07	40,40,40,40	0
56	MG	1A	3202	1/1	0.93	0.07	48,48,48,48	0
56	MG	1A	3345	1/1	0.93	0.16	53,53,53,53	0
56	MG	2A	3578	1/1	0.93	0.10	40,40,40,40	0
56	MG	2A	3865	1/1	0.93	0.09	40,40,40,40	0
56	MG	2a	3120	1/1	0.93	0.16	72,72,72,72	0
56	MG	1A	3346	1/1	0.93	0.27	37,37,37,37	0
56	MG	1A	3673	1/1	0.93	0.10	34,34,34,34	0
56	MG	1D	302	1/1	0.93	0.17	48,48,48,48	0
56	MG	1A	3840	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3355	1/1	0.93	0.10	74,74,74,74	0
56	MG	1A	3998	1/1	0.93	0.08	47,47,47,47	0
56	MG	2a	3128	1/1	0.93	0.16	67,67,67,67	0
56	MG	1A	3205	1/1	0.93	0.23	64,64,64,64	0
56	MG	2A	3593	1/1	0.93	0.11	67,67,67,67	0
56	MG	1A	3351	1/1	0.93	0.24	39,39,39,39	0
56	MG	1x	105	1/1	0.93	0.18	57,57,57,57	0
56	MG	1E	305	1/1	0.93	0.21	38,38,38,38	0
56	MG	2A	3361	1/1	0.93	0.14	72,72,72,72	0
56	MG	1A	4003	1/1	0.93	0.13	53,53,53,53	0
56	MG	1A	3352	1/1	0.93	0.28	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	3696	1/1	0.93	0.06	37,37,37,37	0
56	MG	1A	3207	1/1	0.93	0.11	61,61,61,61	0
56	MG	1x	112	1/1	0.93	0.11	72,72,72,72	0
56	MG	1F	304	1/1	0.93	0.13	45,45,45,45	0
56	MG	2B	205	1/1	0.93	0.11	58,58,58,58	0
56	MG	2A	3205	1/1	0.93	0.36	72,72,72,72	0
56	MG	1A	3166	1/1	0.93	0.14	46,46,46,46	0
56	MG	2A	3372	1/1	0.93	0.10	63,63,63,63	0
56	MG	2A	3001	1/1	0.93	0.46	69,69,69,69	0
56	MG	2A	3003	1/1	0.93	0.24	66,66,66,66	0
56	MG	2A	3004	1/1	0.93	0.33	63,63,63,63	0
56	MG	2A	3618	1/1	0.93	0.08	65,65,65,65	0
56	MG	1A	3058	1/1	0.93	0.08	44,44,44,44	0
56	MG	1A	3217	1/1	0.93	0.08	49,49,49,49	0
56	MG	2A	3622	1/1	0.93	0.10	74,74,74,74	0
56	MG	2A	3007	1/1	0.93	0.16	57,57,57,57	0
56	MG	1A	3549	1/1	0.93	0.26	58,58,58,58	0
56	MG	2A	3380	1/1	0.93	0.26	71,71,71,71	0
56	MG	1A	3550	1/1	0.93	0.32	52,52,52,52	0
56	MG	1A	4025	1/1	0.93	0.10	58,58,58,58	0
56	MG	1A	3552	1/1	0.93	0.22	65,65,65,65	0
56	MG	1a	1687	1/1	0.93	0.25	69,69,69,69	0
56	MG	2A	3020	1/1	0.93	0.12	60,60,60,60	0
56	MG	1A	3554	1/1	0.93	0.37	73,73,73,73	0
56	MG	2A	3222	1/1	0.93	0.14	63,63,63,63	0
56	MG	1A	3864	1/1	0.93	0.07	34,34,34,34	0
56	MG	2a	3172	1/1	0.93	0.07	80,80,80,80	0
56	MG	1A	3415	1/1	0.93	0.10	52,52,52,52	0
56	MG	2a	3175	1/1	0.93	0.16	58,58,58,58	0
56	MG	2a	3176	1/1	0.93	0.07	90,90,90,90	0
56	MG	2F	304	1/1	0.93	0.20	59,59,59,59	0
56	MG	1A	3416	1/1	0.93	0.19	45,45,45,45	0
56	MG	2A	3227	1/1	0.93	0.17	74,74,74,74	0
56	MG	1Q	206	1/1	0.93	0.08	42,42,42,42	0
56	MG	2a	3186	1/1	0.93	0.22	61,61,61,61	0
56	MG	1R	201	1/1	0.93	0.10	49,49,49,49	0
56	MG	1A	3720	1/1	0.93	0.08	67,67,67,67	0
56	MG	1A	3319	1/1	0.93	0.24	35,35,35,35	0
56	MG	1A	3218	1/1	0.93	0.13	40,40,40,40	0
56	MG	2A	3400	1/1	0.93	0.11	74,74,74,74	0
56	MG	2a	3195	1/1	0.93	0.14	58,58,58,58	0
56	MG	1A	3224	1/1	0.93	0.12	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2A	3235	1/1	0.93	0.23	49,49,49,49	0
56	MG	1A	3422	1/1	0.93	0.15	54,54,54,54	0
56	MG	2A	3046	1/1	0.93	0.12	63,63,63,63	0
56	MG	2A	3048	1/1	0.93	0.17	55,55,55,55	0
56	MG	1A	3168	1/1	0.93	0.10	52,52,52,52	0
56	MG	1A	3426	1/1	0.93	0.12	53,53,53,53	0
56	MG	1A	4053	1/1	0.93	0.08	51,51,51,51	0
56	MG	2A	3409	1/1	0.93	0.17	76,76,76,76	0
56	MG	2A	3245	1/1	0.93	0.20	72,72,72,72	0
56	MG	25	101	1/1	0.93	0.20	55,55,55,55	0
56	MG	1A	3276	1/1	0.93	0.26	42,42,42,42	0
56	MG	1a	1707	1/1	0.93	0.10	65,65,65,65	0
56	MG	1V	206	1/1	0.93	0.13	67,67,67,67	0
56	MG	1V	207	1/1	0.93	0.11	56,56,56,56	0
56	MG	1W	201	1/1	0.93	0.31	62,62,62,62	0
56	MG	2A	3256	1/1	0.93	0.07	66,66,66,66	0
56	MG	1W	202	1/1	0.93	0.13	47,47,47,47	0
56	MG	1A	3734	1/1	0.93	0.13	50,50,50,50	0
56	MG	1A	3579	1/1	0.93	0.23	47,47,47,47	0
56	MG	2A	3260	1/1	0.93	0.19	61,61,61,61	0
56	MG	2A	3424	1/1	0.93	0.33	58,58,58,58	0
56	MG	2A	3066	1/1	0.93	0.23	66,66,66,66	0
56	MG	1A	3582	1/1	0.93	0.10	48,48,48,48	0
56	MG	2A	3427	1/1	0.93	0.37	59,59,59,59	0
56	MG	1a	1716	1/1	0.93	0.35	58,58,58,58	0
56	MG	1a	1717	1/1	0.93	0.26	54,54,54,54	0
56	MG	1A	3585	1/1	0.93	0.12	68,68,68,68	0
56	MG	1A	3743	1/1	0.93	0.08	63,63,63,63	0
56	MG	2A	3080	1/1	0.93	0.08	57,57,57,57	0
56	MG	2A	3082	1/1	0.93	0.10	60,60,60,60	0
56	MG	1A	3169	1/1	0.93	0.17	44,44,44,44	0
56	MG	2A	3085	1/1	0.93	0.15	64,64,64,64	0
56	MG	2A	3086	1/1	0.93	0.11	52,52,52,52	0
56	MG	2a	3233	1/1	0.93	0.20	74,74,74,74	0
56	MG	1A	4068	1/1	0.93	0.07	41,41,41,41	0
56	MG	2A	3441	1/1	0.93	0.29	68,68,68,68	0
56	MG	1A	3233	1/1	0.93	0.32	55,55,55,55	0
56	MG	1A	4071	1/1	0.93	0.10	51,51,51,51	0
56	MG	1A	3371	1/1	0.93	0.12	54,54,54,54	0
56	MG	1A	4075	1/1	0.93	0.09	27,27,27,27	0
56	MG	11	105	1/1	0.93	0.11	63,63,63,63	0
56	MG	12	101	1/1	0.93	0.09	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3450	1/1	0.93	0.14	84,84,84,84	0
56	MG	1A	3048	1/1	0.93	0.06	25,25,25,25	0
56	MG	1A	3331	1/1	0.93	0.14	61,61,61,61	0
56	MG	1A	3245	1/1	0.93	0.11	63,63,63,63	0
56	MG	1A	4083	1/1	0.93	0.11	46,46,46,46	0
56	MG	2q	201	1/1	0.93	0.14	85,85,85,85	0
56	MG	1A	4085	1/1	0.93	0.14	57,57,57,57	0
56	MG	2A	3291	1/1	0.93	0.09	67,67,67,67	0
56	MG	18	105	1/1	0.93	0.11	47,47,47,47	0
56	MG	1A	3763	1/1	0.93	0.17	67,67,67,67	0
56	MG	1A	3448	1/1	0.93	0.12	43,43,43,43	0
56	MG	1A	3453	1/1	0.93	0.15	40,40,40,40	0
56	MG	2A	3465	1/1	0.93	0.12	44,44,44,44	0
56	MG	2A	3466	1/1	0.93	0.12	63,63,63,63	0
56	MG	1A	4091	1/1	0.93	0.13	45,45,45,45	0
56	MG	2A	3114	1/1	0.93	0.19	72,72,72,72	0
56	MG	1A	3246	1/1	0.93	0.19	67,67,67,67	0
56	MG	2A	3474	1/1	0.93	0.25	66,66,66,66	0
56	MG	1A	3778	1/1	0.93	0.07	20,20,20,20	0
56	MG	1A	3616	1/1	0.93	0.09	54,54,54,54	0
56	MG	2x	103	1/1	0.93	0.11	63,63,63,63	0
56	MG	1a	1767	1/1	0.93	0.19	62,62,62,62	0
56	MG	2A	3123	1/1	0.93	0.26	69,69,69,69	0
56	MG	1A	3082	1/1	0.93	0.19	50,50,50,50	0
56	MG	1a	1770	1/1	0.93	0.09	76,76,76,76	0
56	MG	2a	3052	1/1	0.93	0.18	74,74,74,74	0
56	MG	1A	4096	1/1	0.93	0.08	54,54,54,54	0
56	MG	2A	3309	1/1	0.93	0.19	68,68,68,68	0
56	MG	1A	3929	1/1	0.93	0.11	42,42,42,42	0
56	MG	2a	3056	1/1	0.93	0.26	68,68,68,68	0
56	MG	1A	3795	1/1	0.93	0.06	44,44,44,44	0
56	MG	2A	3769	1/1	0.93	0.21	73,73,73,73	0
56	MG	1A	3588	1/1	0.94	0.08	39,39,39,39	0
56	MG	1A	3241	1/1	0.94	0.17	45,45,45,45	0
56	MG	1A	3931	1/1	0.94	0.09	60,60,60,60	0
56	MG	2A	3669	1/1	0.94	0.17	69,69,69,69	0
56	MG	1A	3050	1/1	0.94	0.14	31,31,31,31	0
56	MG	1A	3935	1/1	0.94	0.07	44,44,44,44	0
56	MG	1A	3595	1/1	0.94	0.10	39,39,39,39	0
56	MG	1A	3767	1/1	0.94	0.09	54,54,54,54	0
56	MG	1a	1659	1/1	0.94	0.11	57,57,57,57	0
56	MG	1a	1660	1/1	0.94	0.25	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3492	1/1	0.94	0.12	55,55,55,55	0
56	MG	2A	3398	1/1	0.94	0.14	50,50,50,50	0
56	MG	1A	3052	1/1	0.94	0.09	45,45,45,45	0
56	MG	1a	1663	1/1	0.94	0.21	70,70,70,70	0
56	MG	1A	3783	1/1	0.94	0.09	57,57,57,57	0
56	MG	2A	3685	1/1	0.94	0.21	45,45,45,45	0
56	MG	1A	3957	1/1	0.94	0.10	47,47,47,47	0
56	MG	1A	3600	1/1	0.94	0.32	63,63,63,63	0
56	MG	1A	3961	1/1	0.94	0.13	62,62,62,62	0
56	MG	1A	3126	1/1	0.94	0.13	49,49,49,49	0
56	MG	1a	1670	1/1	0.94	0.21	70,70,70,70	0
56	MG	2A	3226	1/1	0.94	0.12	65,65,65,65	0
56	MG	1A	3419	1/1	0.94	0.09	63,63,63,63	0
56	MG	1A	3053	1/1	0.94	0.06	56,56,56,56	0
56	MG	1A	3605	1/1	0.94	0.07	41,41,41,41	0
56	MG	1A	3803	1/1	0.94	0.11	30,30,30,30	0
56	MG	1A	3035	1/1	0.94	0.06	51,51,51,51	0
56	MG	2A	3232	1/1	0.94	0.11	42,42,42,42	0
56	MG	1A	3609	1/1	0.94	0.10	48,48,48,48	0
56	MG	2A	3033	1/1	0.94	0.17	58,58,58,58	0
56	MG	2A	3035	1/1	0.94	0.08	43,43,43,43	0
56	MG	1A	3312	1/1	0.94	0.32	64,64,64,64	0
56	MG	1A	3810	1/1	0.94	0.06	26,26,26,26	0
56	MG	2A	3705	1/1	0.94	0.07	68,68,68,68	0
56	MG	1A	3132	1/1	0.94	0.10	40,40,40,40	0
56	MG	2A	3041	1/1	0.94	0.21	61,61,61,61	0
56	MG	2A	3042	1/1	0.94	0.26	62,62,62,62	0
56	MG	1A	3977	1/1	0.94	0.11	57,57,57,57	0
56	MG	2A	3243	1/1	0.94	0.15	69,69,69,69	0
56	MG	1A	3093	1/1	0.94	0.12	58,58,58,58	0
56	MG	2A	3428	1/1	0.94	0.40	65,65,65,65	0
56	MG	2A	3246	1/1	0.94	0.17	66,66,66,66	0
56	MG	1A	3427	1/1	0.94	0.12	61,61,61,61	0
56	MG	1A	3430	1/1	0.94	0.11	59,59,59,59	0
56	MG	2A	3250	1/1	0.94	0.26	64,64,64,64	0
56	MG	2A	3722	1/1	0.94	0.10	38,38,38,38	0
56	MG	2A	3047	1/1	0.94	0.21	61,61,61,61	0
56	MG	1A	3985	1/1	0.94	0.09	70,70,70,70	0
56	MG	2A	3435	1/1	0.94	0.33	68,68,68,68	0
56	MG	1A	3183	1/1	0.94	0.15	73,73,73,73	0
56	MG	2A	3255	1/1	0.94	0.28	73,73,73,73	0
56	MG	1E	316	1/1	0.94	0.14	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3989	1/1	0.94	0.11	67,67,67,67	0
56	MG	1a	1693	1/1	0.94	0.35	60,60,60,60	0
56	MG	1F	301	1/1	0.94	0.12	43,43,43,43	0
56	MG	1A	3990	1/1	0.94	0.12	47,47,47,47	0
56	MG	1A	3362	1/1	0.94	0.14	62,62,62,62	0
56	MG	2A	3741	1/1	0.94	0.19	61,61,61,61	0
56	MG	1F	312	1/1	0.94	0.12	61,61,61,61	0
56	MG	2a	3078	1/1	0.94	0.21	65,65,65,65	0
56	MG	2A	3062	1/1	0.94	0.07	54,54,54,54	0
56	MG	2a	3081	1/1	0.94	0.28	75,75,75,75	0
56	MG	2A	3264	1/1	0.94	0.15	65,65,65,65	0
56	MG	2A	3745	1/1	0.94	0.15	65,65,65,65	0
56	MG	1A	3515	1/1	0.94	0.13	35,35,35,35	0
56	MG	1G	201	1/1	0.94	0.09	42,42,42,42	0
56	MG	2A	3749	1/1	0.94	0.08	51,51,51,51	0
56	MG	2A	3453	1/1	0.94	0.23	56,56,56,56	0
56	MG	1G	202	1/1	0.94	0.23	67,67,67,67	0
56	MG	2a	3089	1/1	0.94	0.18	75,75,75,75	0
56	MG	1G	203	1/1	0.94	0.05	75,75,75,75	0
56	MG	1A	3997	1/1	0.94	0.12	65,65,65,65	0
56	MG	2A	3755	1/1	0.94	0.10	63,63,63,63	0
56	MG	1I	201	1/1	0.94	0.10	65,65,65,65	0
56	MG	1A	3637	1/1	0.94	0.07	38,38,38,38	0
56	MG	2A	3273	1/1	0.94	0.22	75,75,75,75	0
56	MG	2A	3760	1/1	0.94	0.19	70,70,70,70	0
56	MG	1A	3516	1/1	0.94	0.07	56,56,56,56	0
56	MG	1A	3316	1/1	0.94	0.21	62,62,62,62	0
56	MG	2A	3763	1/1	0.94	0.08	60,60,60,60	0
56	MG	1A	3830	1/1	0.94	0.06	32,32,32,32	0
56	MG	2a	3102	1/1	0.94	0.10	69,69,69,69	0
56	MG	1A	3185	1/1	0.94	0.10	58,58,58,58	0
56	MG	1A	4005	1/1	0.94	0.07	20,20,20,20	0
56	MG	1A	3134	1/1	0.94	0.26	34,34,34,34	0
56	MG	1A	3655	1/1	0.94	0.07	35,35,35,35	0
56	MG	1Q	205	1/1	0.94	0.12	50,50,50,50	0
56	MG	1A	3367	1/1	0.94	0.15	59,59,59,59	0
56	MG	1A	3663	1/1	0.94	0.10	57,57,57,57	0
56	MG	1A	3441	1/1	0.94	0.22	55,55,55,55	0
56	MG	2A	3287	1/1	0.94	0.09	52,52,52,52	0
56	MG	1A	4014	1/1	0.94	0.06	30,30,30,30	0
56	MG	1A	3668	1/1	0.94	0.06	28,28,28,28	0
56	MG	1A	4019	1/1	0.94	0.07	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3189	1/1	0.94	0.13	35,35,35,35	0
56	MG	1a	1726	1/1	0.94	0.19	71,71,71,71	0
56	MG	1A	3527	1/1	0.94	0.19	44,44,44,44	0
56	MG	1a	1731	1/1	0.94	0.06	48,48,48,48	0
56	MG	2A	3797	1/1	0.94	0.08	41,41,41,41	0
56	MG	2A	3799	1/1	0.94	0.12	75,75,75,75	0
56	MG	1A	3094	1/1	0.94	0.18	43,43,43,43	0
56	MG	1U	205	1/1	0.94	0.29	49,49,49,49	0
56	MG	2A	3105	1/1	0.94	0.14	71,71,71,71	0
56	MG	2a	3127	1/1	0.94	0.26	67,67,67,67	0
56	MG	2A	3106	1/1	0.94	0.22	78,78,78,78	0
56	MG	2A	3495	1/1	0.94	0.10	40,40,40,40	0
56	MG	2A	3496	1/1	0.94	0.06	62,62,62,62	0
56	MG	1A	3004	1/1	0.94	0.06	28,28,28,28	0
56	MG	1A	3848	1/1	0.94	0.19	55,55,55,55	0
56	MG	2A	3303	1/1	0.94	0.13	79,79,79,79	0
56	MG	2a	3134	1/1	0.94	0.22	62,62,62,62	0
56	MG	1A	3196	1/1	0.94	0.07	46,46,46,46	0
56	MG	2A	3814	1/1	0.94	0.10	63,63,63,63	0
56	MG	1a	1744	1/1	0.94	0.15	71,71,71,71	0
56	MG	1A	4032	1/1	0.94	0.08	53,53,53,53	0
56	MG	1a	1747	1/1	0.94	0.09	59,59,59,59	0
56	MG	2A	3505	1/1	0.94	0.20	47,47,47,47	0
56	MG	1A	3691	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3821	1/1	0.94	0.11	65,65,65,65	0
56	MG	2A	3117	1/1	0.94	0.28	62,62,62,62	0
56	MG	2A	3826	1/1	0.94	0.12	49,49,49,49	0
56	MG	1A	3198	1/1	0.94	0.07	43,43,43,43	0
56	MG	1A	3537	1/1	0.94	0.27	41,41,41,41	0
56	MG	1A	4040	1/1	0.94	0.09	53,53,53,53	0
56	MG	2A	3124	1/1	0.94	0.20	67,67,67,67	0
56	MG	2A	3515	1/1	0.94	0.07	57,57,57,57	0
56	MG	1A	3040	1/1	0.94	0.09	38,38,38,38	0
56	MG	1a	1757	1/1	0.94	0.08	56,56,56,56	0
56	MG	1A	3378	1/1	0.94	0.08	50,50,50,50	0
56	MG	2a	3153	1/1	0.94	0.06	64,64,64,64	0
56	MG	2a	3154	1/1	0.94	0.08	96,96,96,96	0
56	MG	1A	3379	1/1	0.94	0.10	38,38,38,38	0
56	MG	2A	3848	1/1	0.94	0.10	57,57,57,57	0
56	MG	1A	3861	1/1	0.94	0.09	69,69,69,69	0
56	MG	2A	3320	1/1	0.94	0.17	76,76,76,76	0
56	MG	2A	3522	1/1	0.94	0.09	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	3329	1/1	0.94	0.11	47,47,47,47	0
56	MG	2A	3855	1/1	0.94	0.06	27,27,27,27	0
56	MG	2A	3856	1/1	0.94	0.10	73,73,73,73	0
56	MG	2A	3524	1/1	0.94	0.10	28,28,28,28	0
56	MG	1A	4050	1/1	0.94	0.12	34,34,34,34	0
56	MG	2A	3529	1/1	0.94	0.14	53,53,53,53	0
56	MG	10	104	1/1	0.94	0.15	50,50,50,50	0
56	MG	2a	3173	1/1	0.94	0.07	67,67,67,67	0
56	MG	2A	3863	1/1	0.94	0.16	56,56,56,56	0
56	MG	2A	3531	1/1	0.94	0.11	59,59,59,59	0
56	MG	2A	3532	1/1	0.94	0.10	53,53,53,53	0
56	MG	2A	3868	1/1	0.94	0.17	56,56,56,56	0
56	MG	1A	3463	1/1	0.94	0.17	68,68,68,68	0
56	MG	1A	3142	1/1	0.94	0.15	46,46,46,46	0
56	MG	2A	3541	1/1	0.94	0.16	68,68,68,68	0
56	MG	1A	3017	1/1	0.94	0.11	63,63,63,63	0
56	MG	2A	3874	1/1	0.94	0.09	62,62,62,62	0
56	MG	2A	3141	1/1	0.94	0.17	45,45,45,45	0
56	MG	2a	3190	1/1	0.94	0.22	78,78,78,78	0
56	MG	2a	3191	1/1	0.94	0.10	61,61,61,61	0
56	MG	1A	3018	1/1	0.94	0.10	36,36,36,36	0
56	MG	1a	1771	1/1	0.94	0.08	63,63,63,63	0
56	MG	1A	3870	1/1	0.94	0.08	49,49,49,49	0
56	MG	2A	3553	1/1	0.94	0.08	38,38,38,38	0
56	MG	2A	3557	1/1	0.94	0.09	48,48,48,48	0
56	MG	2A	3558	1/1	0.94	0.13	55,55,55,55	0
56	MG	2A	3561	1/1	0.94	0.09	51,51,51,51	0
56	MG	1A	4060	1/1	0.94	0.11	69,69,69,69	0
56	MG	2A	3147	1/1	0.94	0.17	63,63,63,63	0
56	MG	2a	3201	1/1	0.94	0.11	69,69,69,69	0
56	MG	1A	4061	1/1	0.94	0.16	59,59,59,59	0
56	MG	1A	4062	1/1	0.94	0.12	39,39,39,39	0
56	MG	1A	3468	1/1	0.94	0.14	43,43,43,43	0
56	MG	1A	3272	1/1	0.94	0.11	34,34,34,34	0
56	MG	1A	3873	1/1	0.94	0.06	26,26,26,26	0
56	MG	2A	3580	1/1	0.94	0.08	48,48,48,48	0
56	MG	18	106	1/1	0.94	0.14	52,52,52,52	0
56	MG	2A	3156	1/1	0.94	0.12	71,71,71,71	0
56	MG	2A	3341	1/1	0.94	0.08	53,53,53,53	0
56	MG	1A	4067	1/1	0.94	0.10	54,54,54,54	0
56	MG	2A	3158	1/1	0.94	0.16	45,45,45,45	0
56	MG	1A	3472	1/1	0.94	0.10	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3160	1/1	0.94	0.14	66,66,66,66	0
56	MG	2A	3161	1/1	0.94	0.10	62,62,62,62	0
56	MG	1A	3213	1/1	0.94	0.13	56,56,56,56	0
56	MG	2A	3165	1/1	0.94	0.13	63,63,63,63	0
56	MG	2A	3596	1/1	0.94	0.19	64,64,64,64	0
56	MG	1A	3723	1/1	0.94	0.14	63,63,63,63	0
56	MG	2D	303	1/1	0.94	0.17	55,55,55,55	0
56	MG	1A	3877	1/1	0.94	0.10	33,33,33,33	0
56	MG	2A	3600	1/1	0.94	0.10	74,74,74,74	0
56	MG	1A	3001	1/1	0.94	0.13	48,48,48,48	0
56	MG	2E	301	1/1	0.94	0.25	64,64,64,64	0
56	MG	2E	302	1/1	0.94	0.09	57,57,57,57	0
56	MG	2A	3353	1/1	0.94	0.15	63,63,63,63	0
56	MG	1a	1606	1/1	0.94	0.11	61,61,61,61	0
56	MG	2A	3173	1/1	0.94	0.20	75,75,75,75	0
56	MG	2A	3174	1/1	0.94	0.22	68,68,68,68	0
56	MG	1A	3336	1/1	0.94	0.21	58,58,58,58	0
56	MG	2a	3232	1/1	0.94	0.17	73,73,73,73	0
56	MG	2F	302	1/1	0.94	0.12	65,65,65,65	0
56	MG	2A	3176	1/1	0.94	0.21	59,59,59,59	0
56	MG	2A	3611	1/1	0.94	0.07	45,45,45,45	0
56	MG	1a	1613	1/1	0.94	0.07	73,73,73,73	0
56	MG	2N	201	1/1	0.94	0.09	70,70,70,70	0
56	MG	2P	201	1/1	0.94	0.08	67,67,67,67	0
56	MG	1A	3152	1/1	0.94	0.17	47,47,47,47	0
56	MG	1A	3889	1/1	0.94	0.07	44,44,44,44	0
56	MG	2A	3615	1/1	0.94	0.12	62,62,62,62	0
56	MG	2A	3362	1/1	0.94	0.20	74,74,74,74	0
56	MG	1A	3153	1/1	0.94	0.11	44,44,44,44	0
56	MG	1A	3562	1/1	0.94	0.14	52,52,52,52	0
56	MG	1A	3403	1/1	0.94	0.11	46,46,46,46	0
56	MG	1A	3292	1/1	0.94	0.06	38,38,38,38	0
56	MG	1A	3219	1/1	0.94	0.13	49,49,49,49	0
56	MG	2A	3368	1/1	0.94	0.11	60,60,60,60	0
56	MG	1A	3896	1/1	0.94	0.07	40,40,40,40	0
56	MG	2A	3188	1/1	0.94	0.08	55,55,55,55	0
56	MG	2A	3629	1/1	0.94	0.07	48,48,48,48	0
56	MG	20	102	1/1	0.94	0.08	67,67,67,67	0
56	MG	20	103	1/1	0.94	0.14	69,69,69,69	0
56	MG	1A	3110	1/1	0.94	0.14	37,37,37,37	0
56	MG	1A	3572	1/1	0.94	0.09	59,59,59,59	0
56	MG	1A	3906	1/1	0.94	0.07	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3111	1/1	0.94	0.11	40,40,40,40	0
56	MG	1A	3744	1/1	0.94	0.14	52,52,52,52	0
56	MG	2A	3638	1/1	0.94	0.10	60,60,60,60	0
56	MG	2A	3640	1/1	0.94	0.12	69,69,69,69	0
56	MG	1A	3118	1/1	0.94	0.07	43,43,43,43	0
56	MG	1A	3022	1/1	0.94	0.11	45,45,45,45	0
56	MG	1A	4101	1/1	0.94	0.08	57,57,57,57	0
56	MG	1A	3748	1/1	0.94	0.08	59,59,59,59	0
56	MG	2A	3654	1/1	0.94	0.09	50,50,50,50	0
56	MG	1A	3750	1/1	0.94	0.09	35,35,35,35	0
56	MG	1A	3919	1/1	0.94	0.26	40,40,40,40	0
56	MG	1A	3584	1/1	0.94	0.25	38,38,38,38	0
56	MG	2A	3659	1/1	0.94	0.17	49,49,49,49	0
56	MG	1A	3924	1/1	0.94	0.18	42,42,42,42	0
56	MG	1A	3234	1/1	0.94	0.07	64,64,64,64	0
56	MG	2A	3663	1/1	0.94	0.21	58,58,58,58	0
56	MG	1A	3487	1/1	0.94	0.21	47,47,47,47	0
56	MG	1A	3081	1/1	0.95	0.16	43,43,43,43	0
56	MG	1A	3250	1/1	0.95	0.09	46,46,46,46	0
56	MG	2A	3025	1/1	0.95	0.10	66,66,66,66	0
56	MG	2A	3026	1/1	0.95	0.12	53,53,53,53	0
56	MG	1B	3616	1/1	0.95	0.08	60,60,60,60	0
56	MG	1A	3958	1/1	0.95	0.06	63,63,63,63	0
56	MG	2A	3030	1/1	0.95	0.17	51,51,51,51	0
56	MG	1A	3109	1/1	0.95	0.14	35,35,35,35	0
56	MG	1A	3805	1/1	0.95	0.07	45,45,45,45	0
56	MG	2A	3436	1/1	0.95	0.16	59,59,59,59	0
56	MG	1A	3305	1/1	0.95	0.25	63,63,63,63	0
56	MG	1A	3617	1/1	0.95	0.07	31,31,31,31	0
56	MG	1A	3355	1/1	0.95	0.16	56,56,56,56	0
56	MG	1A	3967	1/1	0.95	0.05	28,28,28,28	0
56	MG	2A	3040	1/1	0.95	0.09	57,57,57,57	0
56	MG	1A	3508	1/1	0.95	0.16	66,66,66,66	0
56	MG	1A	3814	1/1	0.95	0.28	34,34,34,34	0
56	MG	2a	3038	1/1	0.95	0.29	62,62,62,62	0
56	MG	1A	3425	1/1	0.95	0.09	48,48,48,48	0
56	MG	2a	3040	1/1	0.95	0.16	80,80,80,80	0
56	MG	1A	3307	1/1	0.95	0.07	51,51,51,51	0
56	MG	1B	3632	1/1	0.95	0.08	59,59,59,59	0
56	MG	1A	3211	1/1	0.95	0.37	44,44,44,44	0
56	MG	1A	3818	1/1	0.95	0.09	44,44,44,44	0
56	MG	1A	3819	1/1	0.95	0.08	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3452	1/1	0.95	0.08	45,45,45,45	0
56	MG	1A	3253	1/1	0.95	0.11	39,39,39,39	0
56	MG	1A	3310	1/1	0.95	0.06	56,56,56,56	0
56	MG	2A	3053	1/1	0.95	0.16	71,71,71,71	0
56	MG	1A	3822	1/1	0.95	0.07	32,32,32,32	0
56	MG	1A	3981	1/1	0.95	0.13	51,51,51,51	0
56	MG	2A	3459	1/1	0.95	0.29	61,61,61,61	0
56	MG	1A	3982	1/1	0.95	0.10	42,42,42,42	0
56	MG	2A	3058	1/1	0.95	0.28	68,68,68,68	0
56	MG	1A	3983	1/1	0.95	0.06	70,70,70,70	0
56	MG	1A	3059	1/1	0.95	0.24	60,60,60,60	0
56	MG	1A	3097	1/1	0.95	0.08	49,49,49,49	0
56	MG	1A	3986	1/1	0.95	0.07	71,71,71,71	0
56	MG	1E	312	1/1	0.95	0.05	24,24,24,24	0
56	MG	2A	3272	1/1	0.95	0.09	57,57,57,57	0
56	MG	1A	3256	1/1	0.95	0.18	41,41,41,41	0
56	MG	2A	3470	1/1	0.95	0.17	57,57,57,57	0
56	MG	1A	3436	1/1	0.95	0.10	49,49,49,49	0
56	MG	1A	3215	1/1	0.95	0.25	43,43,43,43	0
56	MG	2A	3753	1/1	0.95	0.06	80,80,80,80	0
56	MG	1a	1692	1/1	0.95	0.39	72,72,72,72	0
56	MG	1A	3991	1/1	0.95	0.09	29,29,29,29	0
56	MG	1A	3654	1/1	0.95	0.07	30,30,30,30	0
56	MG	2A	3073	1/1	0.95	0.07	62,62,62,62	0
56	MG	2a	3073	1/1	0.95	0.52	83,83,83,83	0
56	MG	2A	3480	1/1	0.95	0.09	62,62,62,62	0
56	MG	1F	309	1/1	0.95	0.06	45,45,45,45	0
56	MG	2a	3077	1/1	0.95	0.22	66,66,66,66	0
56	MG	2A	3281	1/1	0.95	0.06	62,62,62,62	0
56	MG	1A	3831	1/1	0.95	0.07	41,41,41,41	0
56	MG	2A	3077	1/1	0.95	0.14	54,54,54,54	0
56	MG	2A	3764	1/1	0.95	0.09	44,44,44,44	0
56	MG	2A	3079	1/1	0.95	0.11	37,37,37,37	0
56	MG	1A	3365	1/1	0.95	0.14	54,54,54,54	0
56	MG	1A	3216	1/1	0.95	0.22	48,48,48,48	0
56	MG	1A	3662	1/1	0.95	0.11	53,53,53,53	0
56	MG	2A	3289	1/1	0.95	0.24	62,62,62,62	0
56	MG	2A	3771	1/1	0.95	0.06	62,62,62,62	0
56	MG	2A	3084	1/1	0.95	0.12	53,53,53,53	0
56	MG	1A	3837	1/1	0.95	0.17	66,66,66,66	0
56	MG	2A	3292	1/1	0.95	0.18	73,73,73,73	0
56	MG	2A	3776	1/1	0.95	0.10	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3442	1/1	0.95	0.09	57,57,57,57	0
56	MG	2a	3094	1/1	0.95	0.26	72,72,72,72	0
56	MG	1A	3154	1/1	0.95	0.21	42,42,42,42	0
56	MG	1A	3446	1/1	0.95	0.12	63,63,63,63	0
56	MG	1A	3447	1/1	0.95	0.09	47,47,47,47	0
56	MG	2A	3784	1/1	0.95	0.08	57,57,57,57	0
56	MG	2A	3785	1/1	0.95	0.07	47,47,47,47	0
56	MG	1A	3530	1/1	0.95	0.10	74,74,74,74	0
56	MG	2A	3787	1/1	0.95	0.14	68,68,68,68	0
56	MG	1N	204	1/1	0.95	0.34	48,48,48,48	0
56	MG	1N	205	1/1	0.95	0.14	58,58,58,58	0
56	MG	1A	3114	1/1	0.95	0.16	41,41,41,41	0
56	MG	1A	3449	1/1	0.95	0.23	47,47,47,47	0
56	MG	1A	3450	1/1	0.95	0.30	48,48,48,48	0
56	MG	1A	3451	1/1	0.95	0.17	36,36,36,36	0
56	MG	2A	3510	1/1	0.95	0.06	77,77,77,77	0
56	MG	2A	3100	1/1	0.95	0.10	59,59,59,59	0
56	MG	2A	3804	1/1	0.95	0.14	56,56,56,56	0
56	MG	2A	3305	1/1	0.95	0.14	64,64,64,64	0
56	MG	1A	3540	1/1	0.95	0.24	44,44,44,44	0
56	MG	1A	3370	1/1	0.95	0.10	56,56,56,56	0
56	MG	1Q	202	1/1	0.95	0.07	54,54,54,54	0
56	MG	1Q	204	1/1	0.95	0.07	51,51,51,51	0
56	MG	1A	4020	1/1	0.95	0.09	50,50,50,50	0
56	MG	1a	1721	1/1	0.95	0.19	49,49,49,49	0
56	MG	1A	4022	1/1	0.95	0.10	49,49,49,49	0
56	MG	1A	4023	1/1	0.95	0.10	57,57,57,57	0
56	MG	1R	203	1/1	0.95	0.19	42,42,42,42	0
56	MG	1A	3261	1/1	0.95	0.13	71,71,71,71	0
56	MG	2A	3817	1/1	0.95	0.06	67,67,67,67	0
56	MG	1a	1727	1/1	0.95	0.13	66,66,66,66	0
56	MG	1A	3702	1/1	0.95	0.09	47,47,47,47	0
56	MG	2A	3526	1/1	0.95	0.13	53,53,53,53	0
56	MG	1A	3372	1/1	0.95	0.11	56,56,56,56	0
56	MG	2A	3823	1/1	0.95	0.12	56,56,56,56	0
56	MG	1a	1733	1/1	0.95	0.12	50,50,50,50	0
56	MG	1a	1735	1/1	0.95	0.12	61,61,61,61	0
56	MG	2A	3121	1/1	0.95	0.12	55,55,55,55	0
56	MG	1A	3704	1/1	0.95	0.06	37,37,37,37	0
56	MG	1A	3320	1/1	0.95	0.09	60,60,60,60	0
56	MG	2A	3537	1/1	0.95	0.09	56,56,56,56	0
56	MG	2A	3540	1/1	0.95	0.07	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3321	1/1	0.95	0.16	50,50,50,50	0
56	MG	1A	3862	1/1	0.95	0.04	24,24,24,24	0
56	MG	1A	3322	1/1	0.95	0.12	53,53,53,53	0
56	MG	1U	210	1/1	0.95	0.18	43,43,43,43	0
56	MG	2A	3845	1/1	0.95	0.10	59,59,59,59	0
56	MG	2A	3328	1/1	0.95	0.07	49,49,49,49	0
56	MG	1A	3157	1/1	0.95	0.14	36,36,36,36	0
56	MG	1A	3462	1/1	0.95	0.12	48,48,48,48	0
56	MG	2A	3555	1/1	0.95	0.08	44,44,44,44	0
56	MG	2A	3556	1/1	0.95	0.08	60,60,60,60	0
56	MG	1A	3220	1/1	0.95	0.06	47,47,47,47	0
56	MG	1A	3221	1/1	0.95	0.08	55,55,55,55	0
56	MG	1A	3160	1/1	0.95	0.48	38,38,38,38	0
56	MG	1A	3225	1/1	0.95	0.13	53,53,53,53	0
56	MG	2A	3138	1/1	0.95	0.19	53,53,53,53	0
56	MG	1A	3386	1/1	0.95	0.09	46,46,46,46	0
56	MG	1A	3226	1/1	0.95	0.07	51,51,51,51	0
56	MG	2A	3572	1/1	0.95	0.12	74,74,74,74	0
56	MG	1X	103	1/1	0.95	0.08	43,43,43,43	0
56	MG	2A	3574	1/1	0.95	0.07	46,46,46,46	0
56	MG	2A	3869	1/1	0.95	0.11	59,59,59,59	0
56	MG	2A	3143	1/1	0.95	0.17	50,50,50,50	0
56	MG	1A	3470	1/1	0.95	0.17	41,41,41,41	0
56	MG	2A	3579	1/1	0.95	0.12	62,62,62,62	0
56	MG	1A	3727	1/1	0.95	0.07	51,51,51,51	0
56	MG	1A	4054	1/1	0.95	0.07	50,50,50,50	0
56	MG	1A	3561	1/1	0.95	0.12	36,36,36,36	0
56	MG	1A	3228	1/1	0.95	0.13	33,33,33,33	0
56	MG	10	101	1/1	0.95	0.26	46,46,46,46	0
56	MG	2A	3151	1/1	0.95	0.13	62,62,62,62	0
56	MG	2A	3589	1/1	0.95	0.12	60,60,60,60	0
56	MG	1A	3879	1/1	0.95	0.14	36,36,36,36	0
56	MG	1A	3273	1/1	0.95	0.06	43,43,43,43	0
56	MG	1A	3188	1/1	0.95	0.22	39,39,39,39	0
56	MG	1A	3885	1/1	0.95	0.11	39,39,39,39	0
56	MG	2A	3351	1/1	0.95	0.14	66,66,66,66	0
56	MG	1A	3278	1/1	0.95	0.18	35,35,35,35	0
56	MG	2a	3184	1/1	0.95	0.07	78,78,78,78	0
56	MG	2a	3185	1/1	0.95	0.10	59,59,59,59	0
56	MG	1A	3888	1/1	0.95	0.08	40,40,40,40	0
56	MG	2a	3187	1/1	0.95	0.11	70,70,70,70	0
56	MG	1A	3279	1/1	0.95	0.36	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	12	102	1/1	0.95	0.09	43,43,43,43	0
56	MG	1A	3280	1/1	0.95	0.10	36,36,36,36	0
56	MG	1a	1781	1/1	0.95	0.10	50,50,50,50	0
56	MG	13	104	1/1	0.95	0.13	59,59,59,59	0
56	MG	15	101	1/1	0.95	0.27	33,33,33,33	0
56	MG	1A	3740	1/1	0.95	0.07	64,64,64,64	0
56	MG	1A	3573	1/1	0.95	0.11	39,39,39,39	0
56	MG	1A	3284	1/1	0.95	0.06	45,45,45,45	0
56	MG	2A	3170	1/1	0.95	0.10	63,63,63,63	0
56	MG	16	102	1/1	0.95	0.07	60,60,60,60	0
56	MG	17	101	1/1	0.95	0.11	42,42,42,42	0
56	MG	1A	3577	1/1	0.95	0.19	43,43,43,43	0
56	MG	1a	1807	1/1	0.95	0.06	62,62,62,62	0
56	MG	1a	1809	1/1	0.95	0.18	66,66,66,66	0
56	MG	18	101	1/1	0.95	0.14	66,66,66,66	0
56	MG	1A	3578	1/1	0.95	0.19	53,53,53,53	0
56	MG	2A	3179	1/1	0.95	0.12	46,46,46,46	0
56	MG	1A	3286	1/1	0.95	0.07	57,57,57,57	0
56	MG	1A	4076	1/1	0.95	0.08	67,67,67,67	0
56	MG	2A	3623	1/1	0.95	0.07	32,32,32,32	0
56	MG	1A	4077	1/1	0.95	0.08	53,53,53,53	0
56	MG	2a	3210	1/1	0.95	0.19	72,72,72,72	0
56	MG	1A	3899	1/1	0.95	0.06	31,31,31,31	0
56	MG	1A	3746	1/1	0.95	0.09	56,56,56,56	0
56	MG	2A	3627	1/1	0.95	0.12	43,43,43,43	0
56	MG	2A	3185	1/1	0.95	0.13	51,51,51,51	0
56	MG	2E	310	1/1	0.95	0.14	73,73,73,73	0
56	MG	1A	3902	1/1	0.95	0.11	64,64,64,64	0
56	MG	1A	3161	1/1	0.95	0.15	54,54,54,54	0
56	MG	2F	303	1/1	0.95	0.09	51,51,51,51	0
56	MG	1a	1605	1/1	0.95	0.06	63,63,63,63	0
56	MG	1A	3583	1/1	0.95	0.12	34,34,34,34	0
56	MG	1A	3407	1/1	0.95	0.07	44,44,44,44	0
56	MG	1a	1610	1/1	0.95	0.17	59,59,59,59	0
56	MG	2O	201	1/1	0.95	0.16	67,67,67,67	0
56	MG	2A	3639	1/1	0.95	0.15	50,50,50,50	0
56	MG	1A	4087	1/1	0.95	0.19	61,61,61,61	0
56	MG	1A	3909	1/1	0.95	0.09	50,50,50,50	0
56	MG	2Q	203	1/1	0.95	0.07	60,60,60,60	0
56	MG	1A	4089	1/1	0.95	0.11	44,44,44,44	0
56	MG	1w	102	1/1	0.95	0.12	63,63,63,63	0
56	MG	1A	3028	1/1	0.95	0.18	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3086	1/1	0.95	0.20	33,33,33,33	0
56	MG	2A	3391	1/1	0.95	0.19	66,66,66,66	0
56	MG	1a	1620	1/1	0.95	0.08	56,56,56,56	0
56	MG	1A	3164	1/1	0.95	0.21	37,37,37,37	0
56	MG	1A	3590	1/1	0.95	0.13	38,38,38,38	0
56	MG	1A	3762	1/1	0.95	0.06	45,45,45,45	0
56	MG	1A	3591	1/1	0.95	0.13	59,59,59,59	0
56	MG	1A	3242	1/1	0.95	0.17	52,52,52,52	0
56	MG	20	101	1/1	0.95	0.20	68,68,68,68	0
56	MG	2a	3241	1/1	0.95	0.13	73,73,73,73	0
56	MG	1A	4097	1/1	0.95	0.23	57,57,57,57	0
56	MG	1A	3076	1/1	0.95	0.19	52,52,52,52	0
56	MG	2A	3666	1/1	0.95	0.10	52,52,52,52	0
56	MG	1A	3766	1/1	0.95	0.09	22,22,22,22	0
56	MG	1A	3201	1/1	0.95	0.09	34,34,34,34	0
56	MG	2l	203	1/1	0.95	0.08	78,78,78,78	0
56	MG	1A	3489	1/1	0.95	0.14	64,64,64,64	0
56	MG	25	102	1/1	0.95	0.15	55,55,55,55	0
56	MG	25	103	1/1	0.95	0.09	59,59,59,59	0
56	MG	1A	3776	1/1	0.95	0.08	33,33,33,33	0
56	MG	1A	3016	1/1	0.95	0.23	56,56,56,56	0
56	MG	1A	3102	1/1	0.95	0.17	43,43,43,43	0
56	MG	1B	3603	1/1	0.95	0.17	57,57,57,57	0
56	MG	1B	3605	1/1	0.95	0.06	47,47,47,47	0
56	MG	2A	3675	1/1	0.95	0.07	43,43,43,43	0
56	MG	1B	3606	1/1	0.95	0.17	50,50,50,50	0
56	MG	2A	3002	1/1	0.95	0.37	68,68,68,68	0
56	MG	2A	3678	1/1	0.95	0.07	56,56,56,56	0
56	MG	1A	3248	1/1	0.95	0.12	42,42,42,42	0
56	MG	2A	3681	1/1	0.95	0.25	75,75,75,75	0
56	MG	1a	1642	1/1	0.95	0.21	71,71,71,71	0
56	MG	1A	3941	1/1	0.95	0.07	43,43,43,43	0
56	MG	1A	3494	1/1	0.95	0.07	54,54,54,54	0
56	MG	2A	3414	1/1	0.95	0.12	67,67,67,67	0
56	MG	1a	1645	1/1	0.95	0.08	55,55,55,55	0
56	MG	1B	3610	1/1	0.95	0.11	54,54,54,54	0
56	MG	2A	3010	1/1	0.95	0.12	58,58,58,58	0
56	MG	2A	3011	1/1	0.95	0.09	61,61,61,61	0
56	MG	1a	1648	1/1	0.95	0.21	64,64,64,64	0
56	MG	1A	3949	1/1	0.95	0.10	31,31,31,31	0
56	MG	2A	3692	1/1	0.95	0.07	51,51,51,51	0
56	MG	1A	3793	1/1	0.95	0.05	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3350	1/1	0.95	0.10	43,43,43,43	0
56	MG	1a	1655	1/1	0.95	0.10	59,59,59,59	0
56	MG	2A	3022	1/1	0.95	0.22	48,48,48,48	0
59	ZN	24	501	1/1	0.95	0.09	108,108,108,108	0
56	MG	1D	308	1/1	0.96	0.12	53,53,53,53	0
56	MG	1A	3063	1/1	0.96	0.26	57,57,57,57	0
56	MG	1A	3706	1/1	0.96	0.10	26,26,26,26	0
56	MG	1E	301	1/1	0.96	0.15	42,42,42,42	0
56	MG	2A	3713	1/1	0.96	0.06	68,68,68,68	0
56	MG	2A	3244	1/1	0.96	0.20	59,59,59,59	0
56	MG	1A	3171	1/1	0.96	0.12	42,42,42,42	0
56	MG	1E	304	1/1	0.96	0.26	51,51,51,51	0
56	MG	2A	3247	1/1	0.96	0.14	44,44,44,44	0
56	MG	2A	3454	1/1	0.96	0.24	57,57,57,57	0
56	MG	2A	3723	1/1	0.96	0.08	42,42,42,42	0
56	MG	2A	3724	1/1	0.96	0.06	48,48,48,48	0
56	MG	1a	1664	1/1	0.96	0.14	60,60,60,60	0
56	MG	2A	3037	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3709	1/1	0.96	0.05	30,30,30,30	0
56	MG	1E	307	1/1	0.96	0.18	35,35,35,35	0
56	MG	1A	3847	1/1	0.96	0.05	42,42,42,42	0
56	MG	1A	3175	1/1	0.96	0.17	30,30,30,30	0
56	MG	1A	3178	1/1	0.96	0.07	38,38,38,38	0
56	MG	1A	3270	1/1	0.96	0.11	43,43,43,43	0
56	MG	1A	3853	1/1	0.96	0.08	53,53,53,53	0
56	MG	1A	3423	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3564	1/1	0.96	0.18	32,32,32,32	0
56	MG	1A	3271	1/1	0.96	0.13	53,53,53,53	0
56	MG	2A	3467	1/1	0.96	0.20	42,42,42,42	0
56	MG	1a	1675	1/1	0.96	0.10	67,67,67,67	0
56	MG	2A	3050	1/1	0.96	0.11	43,43,43,43	0
56	MG	1F	305	1/1	0.96	0.04	42,42,42,42	0
56	MG	2a	3050	1/1	0.96	0.11	65,65,65,65	0
56	MG	1F	308	1/1	0.96	0.07	53,53,53,53	0
56	MG	1A	3179	1/1	0.96	0.21	42,42,42,42	0
56	MG	1a	1680	1/1	0.96	0.11	78,78,78,78	0
56	MG	1F	310	1/1	0.96	0.10	38,38,38,38	0
56	MG	1A	3227	1/1	0.96	0.15	44,44,44,44	0
56	MG	1A	3065	1/1	0.96	0.29	65,65,65,65	0
56	MG	1A	3002	1/1	0.96	0.20	58,58,58,58	0
56	MG	1A	4015	1/1	0.96	0.05	34,34,34,34	0
56	MG	1A	4016	1/1	0.96	0.06	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3756	1/1	0.96	0.14	46,46,46,46	0
56	MG	1A	3863	1/1	0.96	0.07	27,27,27,27	0
56	MG	1A	3724	1/1	0.96	0.13	35,35,35,35	0
56	MG	1a	1689	1/1	0.96	0.19	55,55,55,55	0
56	MG	1A	3009	1/1	0.96	0.05	30,30,30,30	0
56	MG	1A	3866	1/1	0.96	0.17	33,33,33,33	0
56	MG	1A	3726	1/1	0.96	0.17	57,57,57,57	0
56	MG	1N	203	1/1	0.96	0.10	37,37,37,37	0
56	MG	1A	3491	1/1	0.96	0.10	44,44,44,44	0
56	MG	2A	3071	1/1	0.96	0.10	66,66,66,66	0
56	MG	2a	3070	1/1	0.96	0.23	54,54,54,54	0
56	MG	1A	3432	1/1	0.96	0.20	56,56,56,56	0
56	MG	2a	3072	1/1	0.96	0.07	64,64,64,64	0
56	MG	1A	3074	1/1	0.96	0.05	34,34,34,34	0
56	MG	1A	3184	1/1	0.96	0.10	42,42,42,42	0
56	MG	2A	3285	1/1	0.96	0.28	53,53,53,53	0
56	MG	2a	3076	1/1	0.96	0.17	55,55,55,55	0
56	MG	1A	3237	1/1	0.96	0.20	56,56,56,56	0
56	MG	2A	3078	1/1	0.96	0.06	52,52,52,52	0
56	MG	1A	3496	1/1	0.96	0.11	43,43,43,43	0
56	MG	1A	3238	1/1	0.96	0.12	32,32,32,32	0
56	MG	1P	201	1/1	0.96	0.21	35,35,35,35	0
56	MG	2A	3778	1/1	0.96	0.10	46,46,46,46	0
56	MG	1P	204	1/1	0.96	0.10	37,37,37,37	0
56	MG	2A	3507	1/1	0.96	0.10	68,68,68,68	0
56	MG	1A	4033	1/1	0.96	0.10	40,40,40,40	0
56	MG	1Q	201	1/1	0.96	0.09	35,35,35,35	0
56	MG	1A	3498	1/1	0.96	0.06	54,54,54,54	0
56	MG	2A	3087	1/1	0.96	0.09	57,57,57,57	0
56	MG	1Q	203	1/1	0.96	0.07	65,65,65,65	0
56	MG	1A	3586	1/1	0.96	0.10	44,44,44,44	0
56	MG	2A	3788	1/1	0.96	0.06	65,65,65,65	0
56	MG	1A	3499	1/1	0.96	0.14	58,58,58,58	0
56	MG	2A	3792	1/1	0.96	0.10	58,58,58,58	0
56	MG	2A	3793	1/1	0.96	0.08	59,59,59,59	0
56	MG	1A	3500	1/1	0.96	0.16	61,61,61,61	0
56	MG	1A	3882	1/1	0.96	0.21	36,36,36,36	0
56	MG	1A	4042	1/1	0.96	0.08	57,57,57,57	0
56	MG	1R	204	1/1	0.96	0.10	37,37,37,37	0
56	MG	1A	4043	1/1	0.96	0.16	51,51,51,51	0
56	MG	1A	3437	1/1	0.96	0.15	53,53,53,53	0
56	MG	1A	3239	1/1	0.96	0.13	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3099	1/1	0.96	0.10	53,53,53,53	0
56	MG	1A	3592	1/1	0.96	0.09	46,46,46,46	0
56	MG	1a	1720	1/1	0.96	0.14	53,53,53,53	0
56	MG	1A	3505	1/1	0.96	0.10	41,41,41,41	0
56	MG	2A	3528	1/1	0.96	0.11	58,58,58,58	0
56	MG	2a	3108	1/1	0.96	0.17	66,66,66,66	0
56	MG	1A	3139	1/1	0.96	0.06	20,20,20,20	0
56	MG	1A	4052	1/1	0.96	0.04	38,38,38,38	0
56	MG	1A	3380	1/1	0.96	0.08	51,51,51,51	0
56	MG	2A	3107	1/1	0.96	0.08	61,61,61,61	0
56	MG	1a	1725	1/1	0.96	0.13	60,60,60,60	0
56	MG	1U	208	1/1	0.96	0.21	38,38,38,38	0
56	MG	2a	3115	1/1	0.96	0.09	77,77,77,77	0
56	MG	1A	3291	1/1	0.96	0.22	42,42,42,42	0
56	MG	2A	3112	1/1	0.96	0.15	50,50,50,50	0
56	MG	1A	3382	1/1	0.96	0.09	45,45,45,45	0
56	MG	1A	3444	1/1	0.96	0.07	43,43,43,43	0
56	MG	2A	3543	1/1	0.96	0.06	37,37,37,37	0
56	MG	2A	3544	1/1	0.96	0.08	66,66,66,66	0
56	MG	1A	3757	1/1	0.96	0.07	42,42,42,42	0
56	MG	1A	3445	1/1	0.96	0.14	38,38,38,38	0
56	MG	1A	3759	1/1	0.96	0.06	46,46,46,46	0
56	MG	2A	3827	1/1	0.96	0.05	45,45,45,45	0
56	MG	1A	3897	1/1	0.96	0.07	29,29,29,29	0
56	MG	1A	3512	1/1	0.96	0.08	48,48,48,48	0
56	MG	1A	3051	1/1	0.96	0.11	32,32,32,32	0
56	MG	2A	3122	1/1	0.96	0.07	58,58,58,58	0
56	MG	2A	3836	1/1	0.96	0.07	45,45,45,45	0
56	MG	1X	102	1/1	0.96	0.09	43,43,43,43	0
56	MG	1A	3105	1/1	0.96	0.17	48,48,48,48	0
56	MG	2A	3559	1/1	0.96	0.07	45,45,45,45	0
56	MG	1A	3387	1/1	0.96	0.09	49,49,49,49	0
56	MG	1a	1746	1/1	0.96	0.08	63,63,63,63	0
56	MG	1A	3144	1/1	0.96	0.20	42,42,42,42	0
56	MG	1A	3612	1/1	0.96	0.11	55,55,55,55	0
56	MG	1Y	203	1/1	0.96	0.19	52,52,52,52	0
56	MG	1a	1751	1/1	0.96	0.08	59,59,59,59	0
56	MG	2A	3131	1/1	0.96	0.15	55,55,55,55	0
56	MG	1a	1752	1/1	0.96	0.14	62,62,62,62	0
56	MG	1A	3389	1/1	0.96	0.11	54,54,54,54	0
56	MG	2A	3577	1/1	0.96	0.07	49,49,49,49	0
56	MG	2A	3857	1/1	0.96	0.08	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	3769	1/1	0.96	0.09	25,25,25,25	0
56	MG	2A	3135	1/1	0.96	0.13	59,59,59,59	0
56	MG	2A	3136	1/1	0.96	0.06	54,54,54,54	0
56	MG	1Z	303	1/1	0.96	0.14	56,56,56,56	0
56	MG	2A	3862	1/1	0.96	0.06	42,42,42,42	0
56	MG	1A	4072	1/1	0.96	0.12	21,21,21,21	0
56	MG	2A	3864	1/1	0.96	0.14	51,51,51,51	0
56	MG	1A	3770	1/1	0.96	0.06	35,35,35,35	0
56	MG	1A	3771	1/1	0.96	0.05	31,31,31,31	0
56	MG	10	105	1/1	0.96	0.29	68,68,68,68	0
56	MG	1A	3774	1/1	0.96	0.10	31,31,31,31	0
56	MG	1A	3078	1/1	0.96	0.08	32,32,32,32	0
56	MG	11	102	1/1	0.96	0.13	49,49,49,49	0
56	MG	1A	4079	1/1	0.96	0.12	62,62,62,62	0
56	MG	1A	3917	1/1	0.96	0.09	39,39,39,39	0
56	MG	1A	3918	1/1	0.96	0.13	34,34,34,34	0
56	MG	1A	3452	1/1	0.96	0.09	65,65,65,65	0
56	MG	2A	3150	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3522	1/1	0.96	0.30	45,45,45,45	0
56	MG	2a	3168	1/1	0.96	0.06	58,58,58,58	0
56	MG	2a	3169	1/1	0.96	0.19	64,64,64,64	0
56	MG	1A	3779	1/1	0.96	0.05	64,64,64,64	0
56	MG	1A	3041	1/1	0.96	0.23	35,35,35,35	0
56	MG	15	102	1/1	0.96	0.10	42,42,42,42	0
56	MG	15	103	1/1	0.96	0.23	30,30,30,30	0
56	MG	15	104	1/1	0.96	0.07	32,32,32,32	0
56	MG	2A	3607	1/1	0.96	0.15	57,57,57,57	0
56	MG	15	105	1/1	0.96	0.08	50,50,50,50	0
56	MG	2a	3178	1/1	0.96	0.06	74,74,74,74	0
56	MG	2a	3179	1/1	0.96	0.09	75,75,75,75	0
56	MG	1A	3621	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3790	1/1	0.96	0.13	32,32,32,32	0
56	MG	1A	3623	1/1	0.96	0.04	42,42,42,42	0
56	MG	1A	3394	1/1	0.96	0.62	48,48,48,48	0
56	MG	2A	3162	1/1	0.96	0.09	64,64,64,64	0
56	MG	2A	3163	1/1	0.96	0.18	54,54,54,54	0
56	MG	1a	1794	1/1	0.96	0.05	82,82,82,82	0
56	MG	1A	3341	1/1	0.96	0.21	41,41,41,41	0
56	MG	2A	3166	1/1	0.96	0.09	44,44,44,44	0
56	MG	1A	3934	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3456	1/1	0.96	0.09	45,45,45,45	0
56	MG	1a	1805	1/1	0.96	0.06	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2A	3621	1/1	0.96	0.08	72,72,72,72	0
56	MG	18	102	1/1	0.96	0.20	45,45,45,45	0
56	MG	2A	3171	1/1	0.96	0.13	72,72,72,72	0
56	MG	18	104	1/1	0.96	0.14	53,53,53,53	0
56	MG	1A	3798	1/1	0.96	0.13	56,56,56,56	0
56	MG	1A	3629	1/1	0.96	0.07	37,37,37,37	0
56	MG	2D	302	1/1	0.96	0.33	70,70,70,70	0
56	MG	1A	3042	1/1	0.96	0.27	38,38,38,38	0
56	MG	2D	304	1/1	0.96	0.07	40,40,40,40	0
56	MG	1A	3943	1/1	0.96	0.08	66,66,66,66	0
56	MG	1A	3944	1/1	0.96	0.06	37,37,37,37	0
56	MG	1A	3946	1/1	0.96	0.08	55,55,55,55	0
56	MG	1A	3804	1/1	0.96	0.07	23,23,23,23	0
56	MG	1A	3043	1/1	0.96	0.15	46,46,46,46	0
56	MG	1A	3952	1/1	0.96	0.05	63,63,63,63	0
56	MG	2E	304	1/1	0.96	0.21	51,51,51,51	0
56	MG	1e	202	1/1	0.96	0.16	61,61,61,61	0
56	MG	1A	3641	1/1	0.96	0.10	57,57,57,57	0
56	MG	1l	201	1/1	0.96	0.08	76,76,76,76	0
56	MG	2E	309	1/1	0.96	0.11	45,45,45,45	0
56	MG	1A	3112	1/1	0.96	0.07	51,51,51,51	0
56	MG	2A	3643	1/1	0.96	0.16	68,68,68,68	0
56	MG	1m	3001	1/1	0.96	0.07	67,67,67,67	0
56	MG	2A	3647	1/1	0.96	0.06	50,50,50,50	0
56	MG	2A	3650	1/1	0.96	0.08	52,52,52,52	0
56	MG	1a	1608	1/1	0.96	0.07	58,58,58,58	0
56	MG	1a	1609	1/1	0.96	0.11	50,50,50,50	0
56	MG	2A	3653	1/1	0.96	0.09	48,48,48,48	0
56	MG	1A	3113	1/1	0.96	0.07	46,46,46,46	0
56	MG	1a	1611	1/1	0.96	0.07	33,33,33,33	0
56	MG	1A	3532	1/1	0.96	0.09	64,64,64,64	0
56	MG	2Q	201	1/1	0.96	0.10	61,61,61,61	0
56	MG	1A	3533	1/1	0.96	0.09	54,54,54,54	0
56	MG	1A	3534	1/1	0.96	0.08	50,50,50,50	0
56	MG	1A	3204	1/1	0.96	0.08	36,36,36,36	0
56	MG	1A	3536	1/1	0.96	0.11	44,44,44,44	0
56	MG	1a	1618	1/1	0.96	0.09	53,53,53,53	0
56	MG	1A	3965	1/1	0.96	0.05	38,38,38,38	0
56	MG	1A	3659	1/1	0.96	0.07	44,44,44,44	0
56	MG	2T	203	1/1	0.96	0.20	61,61,61,61	0
56	MG	1w	108	1/1	0.96	0.07	88,88,88,88	0
56	MG	2a	3234	1/1	0.96	0.12	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3056	1/1	0.96	0.17	48,48,48,48	0
56	MG	1A	3405	1/1	0.96	0.09	51,51,51,51	0
56	MG	2W	201	1/1	0.96	0.11	45,45,45,45	0
56	MG	1A	3969	1/1	0.96	0.08	56,56,56,56	0
56	MG	1A	3664	1/1	0.96	0.11	53,53,53,53	0
56	MG	1A	3971	1/1	0.96	0.09	27,27,27,27	0
56	MG	1A	3406	1/1	0.96	0.07	48,48,48,48	0
56	MG	1B	3619	1/1	0.96	0.21	58,58,58,58	0
56	MG	1B	3620	1/1	0.96	0.06	37,37,37,37	0
56	MG	2e	201	1/1	0.96	0.06	75,75,75,75	0
56	MG	2f	201	1/1	0.96	0.11	57,57,57,57	0
56	MG	1A	3117	1/1	0.96	0.10	52,52,52,52	0
56	MG	1A	3030	1/1	0.96	0.31	32,32,32,32	0
56	MG	2l	201	1/1	0.96	0.09	70,70,70,70	0
56	MG	2A	3212	1/1	0.96	0.09	63,63,63,63	0
56	MG	23	101	1/1	0.96	0.06	56,56,56,56	0
56	MG	1A	3034	1/1	0.96	0.23	35,35,35,35	0
56	MG	2A	3416	1/1	0.96	0.17	60,60,60,60	0
56	MG	1a	1635	1/1	0.96	0.15	69,69,69,69	0
56	MG	1A	3089	1/1	0.96	0.16	54,54,54,54	0
56	MG	1a	1637	1/1	0.96	0.07	50,50,50,50	0
56	MG	1A	3677	1/1	0.96	0.06	37,37,37,37	0
56	MG	1A	3681	1/1	0.96	0.05	22,22,22,22	0
56	MG	2A	3219	1/1	0.96	0.07	52,52,52,52	0
56	MG	1A	3979	1/1	0.96	0.08	70,70,70,70	0
56	MG	1B	3628	1/1	0.96	0.05	40,40,40,40	0
56	MG	1A	3471	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	3090	1/1	0.96	0.07	56,56,56,56	0
56	MG	1A	3060	1/1	0.96	0.07	36,36,36,36	0
56	MG	2A	3009	1/1	0.96	0.06	47,47,47,47	0
56	MG	1A	3127	1/1	0.96	0.09	39,39,39,39	0
56	MG	1A	3836	1/1	0.96	0.15	41,41,41,41	0
56	MG	2A	3012	1/1	0.96	0.06	43,43,43,43	0
56	MG	1A	3047	1/1	0.96	0.07	34,34,34,34	0
56	MG	1A	3698	1/1	0.96	0.07	25,25,25,25	0
56	MG	1A	3551	1/1	0.96	0.21	53,53,53,53	0
56	MG	2x	106	1/1	0.96	0.09	58,58,58,58	0
56	MG	1a	1651	1/1	0.96	0.08	58,58,58,58	0
56	MG	1a	1652	1/1	0.96	0.13	54,54,54,54	0
56	MG	1a	1653	1/1	0.96	0.07	57,57,57,57	0
56	MG	1B	3637	1/1	0.96	0.07	44,44,44,44	0
56	MG	2A	3703	1/1	0.96	0.10	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3236	1/1	0.96	0.21	44,44,44,44	0
56	MG	1D	301	1/1	0.96	0.25	41,41,41,41	0
56	MG	2A	3442	1/1	0.96	0.25	60,60,60,60	0
56	MG	1A	3005	1/1	0.96	0.08	43,43,43,43	0
56	MG	1A	3131	1/1	0.96	0.08	53,53,53,53	0
56	MG	1A	3130	1/1	0.97	0.08	46,46,46,46	0
56	MG	1A	3581	1/1	0.97	0.39	41,41,41,41	0
56	MG	1A	3155	1/1	0.97	0.10	45,45,45,45	0
56	MG	1A	3222	1/1	0.97	0.18	42,42,42,42	0
56	MG	1A	3705	1/1	0.97	0.10	30,30,30,30	0
56	MG	1a	1788	1/1	0.97	0.05	65,65,65,65	0
56	MG	1a	1790	1/1	0.97	0.10	72,72,72,72	0
56	MG	2A	3768	1/1	0.97	0.06	59,59,59,59	0
56	MG	2A	3139	1/1	0.97	0.19	46,46,46,46	0
56	MG	1A	3459	1/1	0.97	0.09	49,49,49,49	0
56	MG	1A	3223	1/1	0.97	0.24	54,54,54,54	0
56	MG	1a	1796	1/1	0.97	0.06	71,71,71,71	0
56	MG	1A	3091	1/1	0.97	0.07	29,29,29,29	0
56	MG	1A	3517	1/1	0.97	0.19	50,50,50,50	0
56	MG	2A	3775	1/1	0.97	0.20	68,68,68,68	0
56	MG	1a	1801	1/1	0.97	0.06	68,68,68,68	0
56	MG	2A	3777	1/1	0.97	0.05	44,44,44,44	0
56	MG	1A	3115	1/1	0.97	0.18	35,35,35,35	0
56	MG	2A	3536	1/1	0.97	0.11	42,42,42,42	0
56	MG	2A	3780	1/1	0.97	0.10	63,63,63,63	0
56	MG	1a	1612	1/1	0.97	0.05	64,64,64,64	0
56	MG	2A	3538	1/1	0.97	0.06	41,41,41,41	0
56	MG	2A	3539	1/1	0.97	0.07	57,57,57,57	0
56	MG	1A	3589	1/1	0.97	0.07	42,42,42,42	0
56	MG	1A	3158	1/1	0.97	0.09	36,36,36,36	0
56	MG	1A	3988	1/1	0.97	0.16	62,62,62,62	0
56	MG	1A	3464	1/1	0.97	0.21	41,41,41,41	0
56	MG	1A	3851	1/1	0.97	0.04	59,59,59,59	0
56	MG	1A	3357	1/1	0.97	0.14	40,40,40,40	0
56	MG	2A	3790	1/1	0.97	0.05	54,54,54,54	0
56	MG	2A	3791	1/1	0.97	0.04	59,59,59,59	0
56	MG	1a	1619	1/1	0.97	0.06	65,65,65,65	0
56	MG	1a	1814	1/1	0.97	0.16	58,58,58,58	0
56	MG	1A	3116	1/1	0.97	0.07	40,40,40,40	0
56	MG	2A	3551	1/1	0.97	0.08	65,65,65,65	0
56	MG	1A	3995	1/1	0.97	0.08	31,31,31,31	0
56	MG	1A	3265	1/1	0.97	0.18	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2A	3798	1/1	0.97	0.06	73,73,73,73	0
56	MG	1A	3191	1/1	0.97	0.12	52,52,52,52	0
56	MG	1D	304	1/1	0.97	0.07	24,24,24,24	0
56	MG	1f	201	1/1	0.97	0.14	49,49,49,49	0
56	MG	1A	3722	1/1	0.97	0.04	14,14,14,14	0
56	MG	2A	3805	1/1	0.97	0.10	79,79,79,79	0
56	MG	1A	3857	1/1	0.97	0.08	44,44,44,44	0
56	MG	2A	3562	1/1	0.97	0.11	42,42,42,42	0
56	MG	1D	309	1/1	0.97	0.10	46,46,46,46	0
56	MG	1D	310	1/1	0.97	0.11	29,29,29,29	0
56	MG	2A	3567	1/1	0.97	0.11	43,43,43,43	0
56	MG	1A	3858	1/1	0.97	0.09	28,28,28,28	0
56	MG	1A	4001	1/1	0.97	0.10	57,57,57,57	0
56	MG	1A	4002	1/1	0.97	0.06	62,62,62,62	0
56	MG	1A	3230	1/1	0.97	0.11	48,48,48,48	0
56	MG	1a	1634	1/1	0.97	0.12	37,37,37,37	0
56	MG	1A	3193	1/1	0.97	0.18	38,38,38,38	0
56	MG	1A	3318	1/1	0.97	0.15	40,40,40,40	0
56	MG	1A	3064	1/1	0.97	0.07	34,34,34,34	0
56	MG	1A	3103	1/1	0.97	0.07	33,33,33,33	0
56	MG	1A	3007	1/1	0.97	0.05	39,39,39,39	0
56	MG	1A	3235	1/1	0.97	0.27	39,39,39,39	0
56	MG	1A	3606	1/1	0.97	0.36	62,62,62,62	0
56	MG	2A	3824	1/1	0.97	0.12	61,61,61,61	0
56	MG	1E	315	1/1	0.97	0.17	46,46,46,46	0
56	MG	1A	3607	1/1	0.97	0.19	35,35,35,35	0
56	MG	1A	3275	1/1	0.97	0.12	53,53,53,53	0
56	MG	2A	3588	1/1	0.97	0.14	47,47,47,47	0
56	MG	1A	3197	1/1	0.97	0.20	39,39,39,39	0
56	MG	1A	3735	1/1	0.97	0.11	58,58,58,58	0
56	MG	2A	3833	1/1	0.97	0.09	46,46,46,46	0
56	MG	1A	3611	1/1	0.97	0.08	39,39,39,39	0
56	MG	2A	3835	1/1	0.97	0.07	58,58,58,58	0
56	MG	1F	306	1/1	0.97	0.10	31,31,31,31	0
56	MG	1A	3120	1/1	0.97	0.22	43,43,43,43	0
56	MG	1A	3614	1/1	0.97	0.06	43,43,43,43	0
56	MG	1x	109	1/1	0.97	0.08	32,32,32,32	0
56	MG	1A	3140	1/1	0.97	0.10	50,50,50,50	0
56	MG	2a	3117	1/1	0.97	0.17	66,66,66,66	0
56	MG	1A	3538	1/1	0.97	0.13	43,43,43,43	0
56	MG	2A	3190	1/1	0.97	0.06	59,59,59,59	0
56	MG	2A	3846	1/1	0.97	0.06	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3847	1/1	0.97	0.06	55,55,55,55	0
56	MG	1A	3240	1/1	0.97	0.17	37,37,37,37	0
56	MG	1A	3281	1/1	0.97	0.29	40,40,40,40	0
56	MG	1A	3878	1/1	0.97	0.04	40,40,40,40	0
56	MG	1A	3429	1/1	0.97	0.08	42,42,42,42	0
56	MG	1A	3283	1/1	0.97	0.14	50,50,50,50	0
56	MG	1A	3484	1/1	0.97	0.07	43,43,43,43	0
56	MG	1G	205	1/1	0.97	0.08	64,64,64,64	0
56	MG	1A	3023	1/1	0.97	0.05	20,20,20,20	0
56	MG	1A	4034	1/1	0.97	0.07	46,46,46,46	0
56	MG	1A	3751	1/1	0.97	0.04	51,51,51,51	0
56	MG	1A	3377	1/1	0.97	0.23	42,42,42,42	0
56	MG	1A	3285	1/1	0.97	0.06	46,46,46,46	0
56	MG	1A	3095	1/1	0.97	0.05	38,38,38,38	0
56	MG	1A	3631	1/1	0.97	0.10	44,44,44,44	0
56	MG	1O	202	1/1	0.97	0.15	59,59,59,59	0
56	MG	1A	3632	1/1	0.97	0.08	55,55,55,55	0
56	MG	1A	3548	1/1	0.97	0.06	28,28,28,28	0
56	MG	2A	3867	1/1	0.97	0.07	63,63,63,63	0
56	MG	1A	3635	1/1	0.97	0.09	53,53,53,53	0
56	MG	1A	3636	1/1	0.97	0.05	37,37,37,37	0
56	MG	2A	3019	1/1	0.97	0.07	42,42,42,42	0
56	MG	1A	3895	1/1	0.97	0.08	55,55,55,55	0
56	MG	1P	203	1/1	0.97	0.12	40,40,40,40	0
56	MG	1A	4047	1/1	0.97	0.04	53,53,53,53	0
56	MG	1a	1676	1/1	0.97	0.11	58,58,58,58	0
56	MG	1P	205	1/1	0.97	0.20	31,31,31,31	0
56	MG	1A	3243	1/1	0.97	0.05	42,42,42,42	0
56	MG	2A	3877	1/1	0.97	0.10	46,46,46,46	0
56	MG	1A	4049	1/1	0.97	0.10	29,29,29,29	0
56	MG	1A	3638	1/1	0.97	0.05	23,23,23,23	0
56	MG	1A	4051	1/1	0.97	0.05	25,25,25,25	0
56	MG	2A	3633	1/1	0.97	0.06	44,44,44,44	0
56	MG	1A	3124	1/1	0.97	0.20	42,42,42,42	0
56	MG	2a	3155	1/1	0.97	0.06	67,67,67,67	0
56	MG	2A	3032	1/1	0.97	0.05	47,47,47,47	0
56	MG	2A	3637	1/1	0.97	0.06	43,43,43,43	0
56	MG	1A	3642	1/1	0.97	0.11	32,32,32,32	0
56	MG	2A	3034	1/1	0.97	0.13	58,58,58,58	0
56	MG	1A	3900	1/1	0.97	0.04	36,36,36,36	0
56	MG	2A	3641	1/1	0.97	0.09	47,47,47,47	0
56	MG	1A	3643	1/1	0.97	0.09	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2a	3164	1/1	0.97	0.06	70,70,70,70	0
56	MG	1A	3644	1/1	0.97	0.05	43,43,43,43	0
56	MG	2B	207	1/1	0.97	0.05	67,67,67,67	0
56	MG	1A	3903	1/1	0.97	0.05	39,39,39,39	0
56	MG	2A	3646	1/1	0.97	0.13	60,60,60,60	0
56	MG	1A	3904	1/1	0.97	0.13	36,36,36,36	0
56	MG	2A	3648	1/1	0.97	0.06	45,45,45,45	0
56	MG	2A	3649	1/1	0.97	0.11	49,49,49,49	0
56	MG	2A	3418	1/1	0.97	0.14	43,43,43,43	0
56	MG	1A	3905	1/1	0.97	0.12	49,49,49,49	0
56	MG	1A	3645	1/1	0.97	0.05	51,51,51,51	0
56	MG	1A	3773	1/1	0.97	0.06	30,30,30,30	0
56	MG	1A	3206	1/1	0.97	0.14	34,34,34,34	0
56	MG	1U	202	1/1	0.97	0.28	43,43,43,43	0
56	MG	1A	3384	1/1	0.97	0.14	40,40,40,40	0
56	MG	1A	3553	1/1	0.97	0.07	53,53,53,53	0
56	MG	2D	301	1/1	0.97	0.07	43,43,43,43	0
56	MG	2A	3658	1/1	0.97	0.20	69,69,69,69	0
56	MG	1A	3145	1/1	0.97	0.05	36,36,36,36	0
56	MG	2A	3660	1/1	0.97	0.09	57,57,57,57	0
56	MG	1U	206	1/1	0.97	0.20	37,37,37,37	0
56	MG	2A	3049	1/1	0.97	0.08	32,32,32,32	0
56	MG	1U	207	1/1	0.97	0.24	44,44,44,44	0
56	MG	1A	3913	1/1	0.97	0.07	61,61,61,61	0
56	MG	1a	1700	1/1	0.97	0.32	69,69,69,69	0
56	MG	1U	209	1/1	0.97	0.20	38,38,38,38	0
56	MG	1A	3652	1/1	0.97	0.12	28,28,28,28	0
56	MG	1A	4070	1/1	0.97	0.07	54,54,54,54	0
56	MG	2E	306	1/1	0.97	0.06	46,46,46,46	0
56	MG	2A	3056	1/1	0.97	0.11	50,50,50,50	0
56	MG	1A	3653	1/1	0.97	0.07	35,35,35,35	0
56	MG	1V	205	1/1	0.97	0.07	42,42,42,42	0
56	MG	1A	3555	1/1	0.97	0.12	52,52,52,52	0
56	MG	1A	3788	1/1	0.97	0.08	56,56,56,56	0
56	MG	2A	3251	1/1	0.97	0.14	69,69,69,69	0
56	MG	1A	3789	1/1	0.97	0.09	66,66,66,66	0
56	MG	1A	3922	1/1	0.97	0.07	25,25,25,25	0
56	MG	1W	204	1/1	0.97	0.07	35,35,35,35	0
56	MG	1A	3125	1/1	0.97	0.23	41,41,41,41	0
56	MG	1A	3656	1/1	0.97	0.05	36,36,36,36	0
56	MG	1A	3792	1/1	0.97	0.08	56,56,56,56	0
56	MG	1A	3174	1/1	0.97	0.15	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1X	104	1/1	0.97	0.19	43,43,43,43	0
56	MG	1X	105	1/1	0.97	0.05	50,50,50,50	0
56	MG	1A	3928	1/1	0.97	0.17	45,45,45,45	0
56	MG	2A	3072	1/1	0.97	0.12	53,53,53,53	0
56	MG	1a	1719	1/1	0.97	0.17	51,51,51,51	0
56	MG	1A	3658	1/1	0.97	0.07	50,50,50,50	0
56	MG	1A	4084	1/1	0.97	0.06	35,35,35,35	0
56	MG	2A	3076	1/1	0.97	0.12	48,48,48,48	0
56	MG	1A	3212	1/1	0.97	0.06	48,48,48,48	0
56	MG	1A	3661	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3147	1/1	0.97	0.18	32,32,32,32	0
56	MG	1A	3800	1/1	0.97	0.08	53,53,53,53	0
56	MG	2A	3081	1/1	0.97	0.08	52,52,52,52	0
56	MG	1A	3177	1/1	0.97	0.08	25,25,25,25	0
56	MG	10	102	1/1	0.97	0.08	49,49,49,49	0
56	MG	1a	1729	1/1	0.97	0.08	55,55,55,55	0
56	MG	1A	3392	1/1	0.97	0.09	29,29,29,29	0
56	MG	1A	3071	1/1	0.97	0.24	37,37,37,37	0
56	MG	1A	3806	1/1	0.97	0.10	46,46,46,46	0
56	MG	10	106	1/1	0.97	0.07	47,47,47,47	0
56	MG	1A	3666	1/1	0.97	0.04	32,32,32,32	0
56	MG	1A	3667	1/1	0.97	0.04	27,27,27,27	0
56	MG	2A	3471	1/1	0.97	0.30	52,52,52,52	0
56	MG	1a	1738	1/1	0.97	0.07	63,63,63,63	0
56	MG	11	101	1/1	0.97	0.32	43,43,43,43	0
56	MG	2A	3093	1/1	0.97	0.11	43,43,43,43	0
56	MG	1A	3088	1/1	0.97	0.18	46,46,46,46	0
56	MG	1a	1741	1/1	0.97	0.05	50,50,50,50	0
56	MG	1A	3669	1/1	0.97	0.06	31,31,31,31	0
56	MG	2A	3479	1/1	0.97	0.19	48,48,48,48	0
56	MG	1A	3566	1/1	0.97	0.10	41,41,41,41	0
56	MG	28	102	1/1	0.97	0.12	59,59,59,59	0
56	MG	2A	3714	1/1	0.97	0.10	70,70,70,70	0
56	MG	2A	3715	1/1	0.97	0.06	35,35,35,35	0
56	MG	2A	3481	1/1	0.97	0.12	63,63,63,63	0
56	MG	2A	3482	1/1	0.97	0.09	74,74,74,74	0
56	MG	1A	3567	1/1	0.97	0.08	37,37,37,37	0
56	MG	2A	3484	1/1	0.97	0.18	48,48,48,48	0
56	MG	2A	3720	1/1	0.97	0.08	54,54,54,54	0
56	MG	1A	3151	1/1	0.97	0.08	39,39,39,39	0
56	MG	13	102	1/1	0.97	0.08	41,41,41,41	0
56	MG	1A	3955	1/1	0.97	0.06	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3675	1/1	0.97	0.06	23,23,23,23	0
56	MG	1a	1750	1/1	0.97	0.15	48,48,48,48	0
56	MG	2A	3490	1/1	0.97	0.06	47,47,47,47	0
56	MG	1A	3504	1/1	0.97	0.16	33,33,33,33	0
56	MG	1A	3679	1/1	0.97	0.07	25,25,25,25	0
56	MG	1A	3080	1/1	0.97	0.09	41,41,41,41	0
56	MG	1A	3682	1/1	0.97	0.10	24,24,24,24	0
56	MG	2A	3733	1/1	0.97	0.08	48,48,48,48	0
56	MG	2A	3109	1/1	0.97	0.12	49,49,49,49	0
56	MG	1B	3604	1/1	0.97	0.20	59,59,59,59	0
56	MG	2A	3737	1/1	0.97	0.05	59,59,59,59	0
56	MG	1A	3684	1/1	0.97	0.04	28,28,28,28	0
56	MG	1A	3685	1/1	0.97	0.05	35,35,35,35	0
56	MG	1A	3964	1/1	0.97	0.06	44,44,44,44	0
56	MG	1A	3397	1/1	0.97	0.08	58,58,58,58	0
56	MG	1A	3687	1/1	0.97	0.11	53,53,53,53	0
56	MG	17	102	1/1	0.97	0.08	30,30,30,30	0
56	MG	1A	3688	1/1	0.97	0.06	36,36,36,36	0
56	MG	1a	1765	1/1	0.97	0.06	60,60,60,60	0
56	MG	1A	3828	1/1	0.97	0.04	38,38,38,38	0
56	MG	1A	3015	1/1	0.97	0.07	36,36,36,36	0
56	MG	1a	1768	1/1	0.97	0.07	60,60,60,60	0
56	MG	18	103	1/1	0.97	0.09	44,44,44,44	0
56	MG	1A	3574	1/1	0.97	0.05	27,27,27,27	0
56	MG	1A	3347	1/1	0.97	0.10	39,39,39,39	0
56	MG	2A	3512	1/1	0.97	0.07	70,70,70,70	0
56	MG	1A	3304	1/1	0.97	0.37	62,62,62,62	0
56	MG	1a	1773	1/1	0.97	0.08	68,68,68,68	0
56	MG	1A	3697	1/1	0.97	0.13	31,31,31,31	0
56	MG	1A	3402	1/1	0.97	0.13	33,33,33,33	0
56	MG	1a	1777	1/1	0.97	0.06	70,70,70,70	0
59	ZN	2Y	202	1/1	0.97	0.05	95,95,95,95	0
56	MG	1A	3835	1/1	0.97	0.09	41,41,41,41	0
59	ZN	2n	501	1/1	0.97	0.07	98,98,98,98	0
56	MG	13	101	1/1	0.98	0.06	41,41,41,41	0
56	MG	1A	3209	1/1	0.98	0.11	38,38,38,38	0
56	MG	1A	3780	1/1	0.98	0.05	24,24,24,24	0
56	MG	1A	3210	1/1	0.98	0.11	42,42,42,42	0
56	MG	1A	3887	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	4008	1/1	0.98	0.03	32,32,32,32	0
56	MG	1A	3784	1/1	0.98	0.04	49,49,49,49	0
56	MG	1A	3786	1/1	0.98	0.03	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3390	1/1	0.98	0.34	35,35,35,35	0
56	MG	1a	1728	1/1	0.98	0.13	58,58,58,58	0
56	MG	1A	3173	1/1	0.98	0.34	37,37,37,37	0
56	MG	1A	4013	1/1	0.98	0.06	35,35,35,35	0
56	MG	1A	3008	1/1	0.98	0.11	29,29,29,29	0
56	MG	1a	1732	1/1	0.98	0.04	43,43,43,43	0
56	MG	1A	3692	1/1	0.98	0.04	35,35,35,35	0
56	MG	1a	1734	1/1	0.98	0.09	47,47,47,47	0
56	MG	1A	3613	1/1	0.98	0.08	29,29,29,29	0
56	MG	1D	303	1/1	0.98	0.10	44,44,44,44	0
56	MG	17	103	1/1	0.98	0.10	32,32,32,32	0
56	MG	1A	3694	1/1	0.98	0.03	26,26,26,26	0
56	MG	1A	3096	1/1	0.98	0.13	25,25,25,25	0
56	MG	1D	306	1/1	0.98	0.17	36,36,36,36	0
56	MG	2A	3534	1/1	0.98	0.05	52,52,52,52	0
56	MG	1D	307	1/1	0.98	0.11	39,39,39,39	0
56	MG	1A	3794	1/1	0.98	0.03	41,41,41,41	0
56	MG	1A	4021	1/1	0.98	0.06	39,39,39,39	0
56	MG	1A	3615	1/1	0.98	0.06	31,31,31,31	0
56	MG	1A	3796	1/1	0.98	0.07	24,24,24,24	0
56	MG	1A	3176	1/1	0.98	0.09	33,33,33,33	0
56	MG	1A	3699	1/1	0.98	0.07	32,32,32,32	0
56	MG	1E	302	1/1	0.98	0.23	36,36,36,36	0
56	MG	1A	4026	1/1	0.98	0.06	57,57,57,57	0
56	MG	1A	3301	1/1	0.98	0.09	37,37,37,37	0
56	MG	1A	3077	1/1	0.98	0.11	36,36,36,36	0
56	MG	2A	3383	1/1	0.98	0.09	38,38,38,38	0
56	MG	1E	306	1/1	0.98	0.07	36,36,36,36	0
56	MG	1A	3801	1/1	0.98	0.06	29,29,29,29	0
56	MG	2A	3549	1/1	0.98	0.08	45,45,45,45	0
56	MG	2A	3550	1/1	0.98	0.04	48,48,48,48	0
56	MG	1A	4030	1/1	0.98	0.04	47,47,47,47	0
56	MG	1E	309	1/1	0.98	0.05	45,45,45,45	0
56	MG	2A	3554	1/1	0.98	0.03	49,49,49,49	0
56	MG	2A	3738	1/1	0.98	0.05	43,43,43,43	0
56	MG	1a	1758	1/1	0.98	0.07	56,56,56,56	0
56	MG	1E	310	1/1	0.98	0.09	55,55,55,55	0
56	MG	1A	3802	1/1	0.98	0.05	29,29,29,29	0
56	MG	1A	3012	1/1	0.98	0.06	31,31,31,31	0
56	MG	1A	3349	1/1	0.98	0.17	35,35,35,35	0
56	MG	1A	3148	1/1	0.98	0.19	38,38,38,38	0
56	MG	1A	3503	1/1	0.98	0.16	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3563	1/1	0.98	0.07	42,42,42,42	0
56	MG	1A	3910	1/1	0.98	0.05	38,38,38,38	0
56	MG	1A	3019	1/1	0.98	0.17	48,48,48,48	0
56	MG	2A	3566	1/1	0.98	0.09	50,50,50,50	0
56	MG	1F	302	1/1	0.98	0.06	33,33,33,33	0
56	MG	1A	3708	1/1	0.98	0.09	39,39,39,39	0
56	MG	2A	3569	1/1	0.98	0.07	55,55,55,55	0
56	MG	2A	3570	1/1	0.98	0.07	38,38,38,38	0
56	MG	1A	3625	1/1	0.98	0.07	33,33,33,33	0
56	MG	1a	1621	1/1	0.98	0.05	49,49,49,49	0
56	MG	1A	3710	1/1	0.98	0.04	14,14,14,14	0
56	MG	1F	307	1/1	0.98	0.12	35,35,35,35	0
56	MG	2a	3161	1/1	0.98	0.04	69,69,69,69	0
56	MG	1A	3811	1/1	0.98	0.05	24,24,24,24	0
56	MG	1a	1774	1/1	0.98	0.04	67,67,67,67	0
56	MG	1A	3812	1/1	0.98	0.04	46,46,46,46	0
56	MG	1A	3401	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	3712	1/1	0.98	0.04	31,31,31,31	0
56	MG	1A	3560	1/1	0.98	0.21	41,41,41,41	0
56	MG	1A	3714	1/1	0.98	0.05	33,33,33,33	0
56	MG	2A	3583	1/1	0.98	0.10	53,53,53,53	0
56	MG	1A	3628	1/1	0.98	0.10	36,36,36,36	0
56	MG	1A	3306	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	3630	1/1	0.98	0.09	27,27,27,27	0
56	MG	2A	3587	1/1	0.98	0.08	47,47,47,47	0
56	MG	1A	3123	1/1	0.98	0.24	42,42,42,42	0
56	MG	1a	1786	1/1	0.98	0.07	49,49,49,49	0
56	MG	1a	1787	1/1	0.98	0.08	77,77,77,77	0
56	MG	1A	3013	1/1	0.98	0.19	28,28,28,28	0
56	MG	2A	3592	1/1	0.98	0.03	33,33,33,33	0
56	MG	1A	3021	1/1	0.98	0.10	24,24,24,24	0
56	MG	28	101	1/1	0.98	0.18	49,49,49,49	0
56	MG	1A	3003	1/1	0.98	0.06	31,31,31,31	0
56	MG	2a	3183	1/1	0.98	0.10	59,59,59,59	0
56	MG	1a	1793	1/1	0.98	0.08	74,74,74,74	0
56	MG	2A	3104	1/1	0.98	0.10	35,35,35,35	0
56	MG	1A	4056	1/1	0.98	0.06	34,34,34,34	0
56	MG	1A	3010	1/1	0.98	0.06	37,37,37,37	0
56	MG	1a	1798	1/1	0.98	0.04	76,76,76,76	0
56	MG	1A	3933	1/1	0.98	0.05	48,48,48,48	0
56	MG	1A	3186	1/1	0.98	0.09	38,38,38,38	0
56	MG	1A	3827	1/1	0.98	0.08	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3104	1/1	0.98	0.04	25,25,25,25	0
56	MG	1a	1804	1/1	0.98	0.05	70,70,70,70	0
56	MG	1A	3938	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	3939	1/1	0.98	0.04	63,63,63,63	0
56	MG	1A	3084	1/1	0.98	0.07	31,31,31,31	0
56	MG	1a	1646	1/1	0.98	0.09	61,61,61,61	0
56	MG	1A	4065	1/1	0.98	0.03	40,40,40,40	0
56	MG	1A	3085	1/1	0.98	0.15	35,35,35,35	0
56	MG	1P	202	1/1	0.98	0.15	32,32,32,32	0
56	MG	2A	3120	1/1	0.98	0.05	39,39,39,39	0
56	MG	1A	3190	1/1	0.98	0.20	40,40,40,40	0
56	MG	1A	3229	1/1	0.98	0.22	35,35,35,35	0
56	MG	1A	3945	1/1	0.98	0.04	53,53,53,53	0
56	MG	1A	3575	1/1	0.98	0.12	35,35,35,35	0
56	MG	1A	3947	1/1	0.98	0.04	48,48,48,48	0
56	MG	2A	3801	1/1	0.98	0.04	42,42,42,42	0
56	MG	2A	3802	1/1	0.98	0.07	58,58,58,58	0
56	MG	1A	3948	1/1	0.98	0.05	28,28,28,28	0
56	MG	1A	3108	1/1	0.98	0.04	43,43,43,43	0
56	MG	1A	3950	1/1	0.98	0.08	63,63,63,63	0
56	MG	2A	3445	1/1	0.98	0.23	62,62,62,62	0
56	MG	1A	3192	1/1	0.98	0.13	34,34,34,34	0
56	MG	1A	3648	1/1	0.98	0.04	22,22,22,22	0
56	MG	1A	3953	1/1	0.98	0.09	49,49,49,49	0
56	MG	2A	3628	1/1	0.98	0.06	44,44,44,44	0
56	MG	1R	202	1/1	0.98	0.22	41,41,41,41	0
56	MG	1A	3649	1/1	0.98	0.04	20,20,20,20	0
56	MG	1A	3520	1/1	0.98	0.10	30,30,30,30	0
56	MG	1A	3736	1/1	0.98	0.06	46,46,46,46	0
56	MG	1A	3159	1/1	0.98	0.07	35,35,35,35	0
56	MG	2A	3634	1/1	0.98	0.06	46,46,46,46	0
56	MG	1A	3739	1/1	0.98	0.06	27,27,27,27	0
56	MG	1A	3959	1/1	0.98	0.07	52,52,52,52	0
56	MG	1A	3580	1/1	0.98	0.14	46,46,46,46	0
56	MG	1U	201	1/1	0.98	0.06	29,29,29,29	0
56	MG	1A	3274	1/1	0.98	0.16	41,41,41,41	0
56	MG	2A	3822	1/1	0.98	0.04	50,50,50,50	0
56	MG	1A	3418	1/1	0.98	0.09	43,43,43,43	0
56	MG	1A	3524	1/1	0.98	0.16	33,33,33,33	0
56	MG	1A	3066	1/1	0.98	0.07	30,30,30,30	0
56	MG	1A	3369	1/1	0.98	0.18	34,34,34,34	0
56	MG	1A	3849	1/1	0.98	0.06	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3067	1/1	0.98	0.07	33,33,33,33	0
56	MG	1A	3277	1/1	0.98	0.09	28,28,28,28	0
56	MG	1A	3660	1/1	0.98	0.05	46,46,46,46	0
56	MG	1A	3749	1/1	0.98	0.09	23,23,23,23	0
56	MG	1V	201	1/1	0.98	0.18	35,35,35,35	0
56	MG	1A	3044	1/1	0.98	0.08	35,35,35,35	0
56	MG	1V	204	1/1	0.98	0.19	56,56,56,56	0
56	MG	1A	3236	1/1	0.98	0.15	33,33,33,33	0
56	MG	2A	3840	1/1	0.98	0.05	57,57,57,57	0
56	MG	1A	3752	1/1	0.98	0.03	23,23,23,23	0
56	MG	1A	4100	1/1	0.98	0.03	35,35,35,35	0
56	MG	1A	3069	1/1	0.98	0.09	24,24,24,24	0
56	MG	1A	3754	1/1	0.98	0.05	57,57,57,57	0
56	MG	1x	114	1/1	0.98	0.05	72,72,72,72	0
56	MG	1W	203	1/1	0.98	0.15	35,35,35,35	0
56	MG	1A	3136	1/1	0.98	0.06	43,43,43,43	0
56	MG	1A	4104	1/1	0.98	0.07	38,38,38,38	0
56	MG	1A	3756	1/1	0.98	0.07	40,40,40,40	0
56	MG	1A	3199	1/1	0.98	0.17	28,28,28,28	0
56	MG	1A	3200	1/1	0.98	0.09	45,45,45,45	0
56	MG	1A	3165	1/1	0.98	0.05	32,32,32,32	0
56	MG	1A	3055	1/1	0.98	0.07	37,37,37,37	0
56	MG	1A	3761	1/1	0.98	0.04	31,31,31,31	0
56	MG	1A	3203	1/1	0.98	0.08	22,22,22,22	0
56	MG	1A	3597	1/1	0.98	0.33	38,38,38,38	0
56	MG	1A	3072	1/1	0.98	0.09	19,19,19,19	0
56	MG	1A	3672	1/1	0.98	0.08	44,44,44,44	0
56	MG	1A	3599	1/1	0.98	0.14	45,45,45,45	0
56	MG	2A	3015	1/1	0.98	0.07	47,47,47,47	0
56	MG	1A	3674	1/1	0.98	0.06	33,33,33,33	0
56	MG	2a	3079	1/1	0.98	0.10	53,53,53,53	0
56	MG	1A	3032	1/1	0.98	0.10	27,27,27,27	0
56	MG	1A	3290	1/1	0.98	0.05	54,54,54,54	0
56	MG	1A	3033	1/1	0.98	0.29	34,34,34,34	0
56	MG	1A	3772	1/1	0.98	0.04	37,37,37,37	0
56	MG	2A	3498	1/1	0.98	0.06	51,51,51,51	0
56	MG	2A	3680	1/1	0.98	0.05	40,40,40,40	0
56	MG	1B	3617	1/1	0.98	0.09	55,55,55,55	0
56	MG	1A	3993	1/1	0.98	0.10	42,42,42,42	0
56	MG	1A	3680	1/1	0.98	0.05	24,24,24,24	0
56	MG	1A	3075	1/1	0.98	0.07	29,29,29,29	0
56	MG	1A	3604	1/1	0.98	0.15	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	2A	3027	1/1	0.98	0.04	43,43,43,43	0
56	MG	1A	3438	1/1	0.98	0.14	48,48,48,48	0
56	MG	1I	103	1/1	0.98	0.05	41,41,41,41	0
56	MG	1A	3880	1/1	0.98	0.13	41,41,41,41	0
56	MG	1A	3881	1/1	0.98	0.20	36,36,36,36	0
58	A1A1K	1A	4105	34/34	0.98	0.07	24,30,36,53	0
58	A1A1K	2A	3886	34/34	0.98	0.08	39,46,54,56	0
56	MG	1A	3777	1/1	0.98	0.06	30,30,30,30	0
56	MG	1A	3143	1/1	0.98	0.16	33,33,33,33	0
59	ZN	29	102	1/1	0.98	0.04	79,79,79,79	0
56	MG	2A	3882	1/1	0.98	0.04	52,52,52,52	0
60	SF4	1d	302	8/8	0.98	0.06	67,74,78,79	0
56	MG	2A	3527	1/1	0.99	0.07	46,46,46,46	0
56	MG	1A	4078	1/1	0.99	0.07	41,41,41,41	0
56	MG	2A	3197	1/1	0.99	0.03	54,54,54,54	0
56	MG	1a	1792	1/1	0.99	0.07	49,49,49,49	0
56	MG	1A	3640	1/1	0.99	0.06	27,27,27,27	0
56	MG	2A	3837	1/1	0.99	0.07	46,46,46,46	0
56	MG	2A	3605	1/1	0.99	0.04	44,44,44,44	0
56	MG	2A	3839	1/1	0.99	0.03	56,56,56,56	0
56	MG	1F	303	1/1	0.99	0.11	34,34,34,34	0
56	MG	2A	3070	1/1	0.99	0.07	33,33,33,33	0
56	MG	1A	3057	1/1	0.99	0.09	21,21,21,21	0
56	MG	1a	1797	1/1	0.99	0.04	60,60,60,60	0
56	MG	1A	3070	1/1	0.99	0.09	20,20,20,20	0
56	MG	1A	3622	1/1	0.99	0.04	23,23,23,23	0
56	MG	1A	3842	1/1	0.99	0.03	36,36,36,36	0
56	MG	1A	4038	1/1	0.99	0.02	42,42,42,42	0
56	MG	1A	3994	1/1	0.99	0.06	26,26,26,26	0
56	MG	2A	3849	1/1	0.99	0.05	35,35,35,35	0
56	MG	2A	3473	1/1	0.99	0.13	31,31,31,31	0
56	MG	2A	3013	1/1	0.99	0.05	51,51,51,51	0
56	MG	1a	1803	1/1	0.99	0.03	62,62,62,62	0
56	MG	2A	3853	1/1	0.99	0.07	66,66,66,66	0
56	MG	1A	3138	1/1	0.99	0.09	37,37,37,37	0
56	MG	1a	1742	1/1	0.99	0.07	40,40,40,40	0
56	MG	1A	3690	1/1	0.99	0.08	26,26,26,26	0
56	MG	1A	3915	1/1	0.99	0.09	38,38,38,38	0
56	MG	1a	1808	1/1	0.99	0.04	63,63,63,63	0
56	MG	1A	3266	1/1	0.99	0.08	41,41,41,41	0
56	MG	2A	3021	1/1	0.99	0.07	30,30,30,30	0
56	MG	1U	211	1/1	0.99	0.21	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	2A	3552	1/1	0.99	0.07	59,59,59,59	0
56	MG	1A	3037	1/1	0.99	0.08	35,35,35,35	0
56	MG	1A	3107	1/1	0.99	0.31	34,34,34,34	0
56	MG	1A	3813	1/1	0.99	0.05	32,32,32,32	0
56	MG	1V	203	1/1	0.99	0.10	33,33,33,33	0
56	MG	1A	3920	1/1	0.99	0.04	30,30,30,30	0
56	MG	1A	3921	1/1	0.99	0.03	32,32,32,32	0
56	MG	1A	3383	1/1	0.99	0.17	28,28,28,28	0
56	MG	2A	3560	1/1	0.99	0.12	44,44,44,44	0
56	MG	1A	3781	1/1	0.99	0.08	32,32,32,32	0
56	MG	1A	3782	1/1	0.99	0.04	46,46,46,46	0
56	MG	1a	1756	1/1	0.99	0.08	61,61,61,61	0
56	MG	1A	4007	1/1	0.99	0.10	24,24,24,24	0
56	MG	1A	3695	1/1	0.99	0.07	30,30,30,30	0
56	MG	1A	3926	1/1	0.99	0.03	37,37,37,37	0
56	MG	1W	205	1/1	0.99	0.06	39,39,39,39	0
56	MG	1A	3610	1/1	0.99	0.06	27,27,27,27	0
56	MG	1A	3785	1/1	0.99	0.04	28,28,28,28	0
56	MG	2A	3644	1/1	0.99	0.09	43,43,43,43	0
56	MG	1X	101	1/1	0.99	0.26	44,44,44,44	0
56	MG	1A	3038	1/1	0.99	0.21	33,33,33,33	0
56	MG	2A	3721	1/1	0.99	0.04	38,38,38,38	0
56	MG	2a	3170	1/1	0.99	0.04	59,59,59,59	0
56	MG	1A	3014	1/1	0.99	0.15	30,30,30,30	0
56	MG	1A	3563	1/1	0.99	0.13	37,37,37,37	0
56	MG	1A	3428	1/1	0.99	0.19	36,36,36,36	0
56	MG	1a	1712	1/1	0.99	0.11	54,54,54,54	0
56	MG	2A	3576	1/1	0.99	0.06	40,40,40,40	0
56	MG	1X	106	1/1	0.99	0.06	37,37,37,37	0
56	MG	1A	3701	1/1	0.99	0.07	29,29,29,29	0
56	MG	2A	3729	1/1	0.99	0.03	61,61,61,61	0
56	MG	1A	4017	1/1	0.99	0.03	32,32,32,32	0
56	MG	1A	3729	1/1	0.99	0.06	27,27,27,27	0
56	MG	1A	3282	1/1	0.99	0.22	36,36,36,36	0
56	MG	1A	3676	1/1	0.99	0.09	34,34,34,34	0
56	MG	1A	3937	1/1	0.99	0.03	13,13,13,13	0
56	MG	2A	3735	1/1	0.99	0.05	45,45,45,45	0
56	MG	1A	3634	1/1	0.99	0.09	28,28,28,28	0
56	MG	1A	3678	1/1	0.99	0.03	45,45,45,45	0
56	MG	1a	1778	1/1	0.99	0.05	59,59,59,59	0
56	MG	1A	3031	1/1	0.99	0.14	32,32,32,32	0
56	MG	1A	3036	1/1	0.99	0.07	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	1A	3297	1/1	0.99	0.05	38,38,38,38	0
56	MG	1A	3172	1/1	0.99	0.06	34,34,34,34	0
56	MG	1A	4073	1/1	0.99	0.10	35,35,35,35	0
56	MG	1E	313	1/1	0.99	0.09	30,30,30,30	0
56	MG	1A	3738	1/1	0.99	0.08	33,33,33,33	0
56	MG	1A	3768	1/1	0.99	0.07	39,39,39,39	0
56	MG	2A	3747	1/1	0.99	0.07	53,53,53,53	0
56	MG	1A	3683	1/1	0.99	0.04	33,33,33,33	0
59	ZN	1Y	204	1/1	0.99	0.03	65,65,65,65	0
59	ZN	14	501	1/1	0.99	0.04	87,87,87,87	0
59	ZN	15	108	1/1	0.99	0.05	45,45,45,45	0
59	ZN	16	103	1/1	0.99	0.04	44,44,44,44	0
59	ZN	1n	103	1/1	0.99	0.03	69,69,69,69	0
56	MG	1a	1789	1/1	0.99	0.06	59,59,59,59	0
56	MG	1A	3639	1/1	0.99	0.05	34,34,34,34	0
59	ZN	25	105	1/1	0.99	0.03	53,53,53,53	0
59	ZN	26	102	1/1	0.99	0.04	62,62,62,62	0
56	MG	2A	3829	1/1	0.99	0.15	55,55,55,55	0
56	MG	2A	3830	1/1	0.99	0.06	39,39,39,39	0
56	MG	2A	3598	1/1	0.99	0.08	53,53,53,53	0
60	SF4	2d	303	8/8	0.99	0.04	67,73,82,85	0
56	MG	1A	4037	1/1	1.00	0.03	28,28,28,28	0
56	MG	1A	3940	1/1	1.00	0.05	30,30,30,30	0
59	ZN	19	102	1/1	1.00	0.04	44,44,44,44	0
56	MG	1a	1795	1/1	1.00	0.05	55,55,55,55	0
56	MG	2A	3604	1/1	1.00	0.03	43,43,43,43	0
56	MG	1a	1783	1/1	1.00	0.02	73,73,73,73	0

6.5 Other polymers [i](#)

There are no such residues in this entry.