Full wwPDB X-ray Structure Validation Report (i)

Jan 4, 2024 – 09:17 pm GMT

PDB ID	:	4WT1
Title	:	Complex of 70S ribosome with tRNA-Phe and mRNA with A-A mismatch in the second position in the A-site
Authors	:	Rozov, A.; Demeshkina, N.; Yusupov, M.; Yusupova, G.
Deposited on	:	2014-10-29
Resolution	:	3.05 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 (i) 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 (i)) were used in the production of this report:

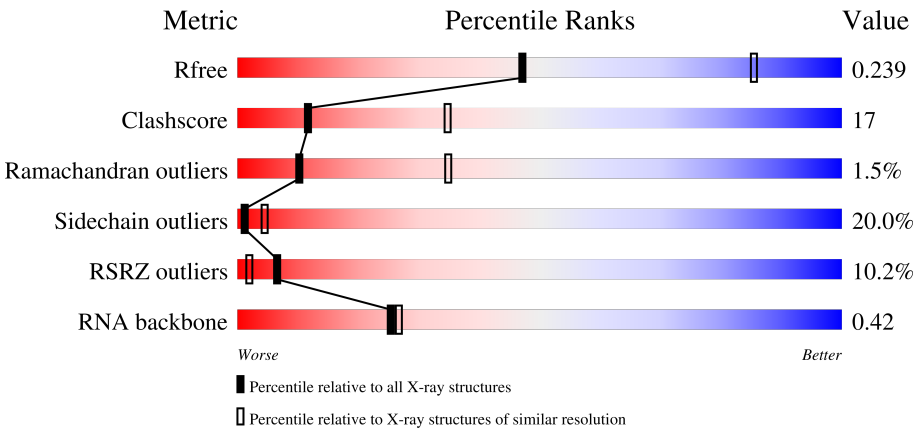
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 3.05 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}	130704	1754 (3.10-3.02)
Clashscore	141614	1864 (3.10-3.02)
Ramachandran outliers	138981	1794 (3.10-3.02)
Sidechain outliers	138945	1793 (3.10-3.02)
RSRZ outliers	127900	1713 (3.10-3.02)
RNA backbone	3102	1036 (3.32-2.80)

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 <=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	13	1522	3% 33% 43% 19% • •
1	1G	1522	5% 33% 46% 17% • •
2	12	256	7% 45% 38% 10% 7%
2	1E	256	3% 41% 39% 12% 7%

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Mol	Chain	Length	Quality of chain
3	22	239	3% 47% 34% 5% 14%
3	2E	239	56% 24% 5% 14%
4	32	209	9% 51% 39% 10%
4	3E	209	14% 45% 46% 8%
5	42	162	11% 45% 41% 7% 7%
5	4E	162	12% 47% 37% 9% 7%
6	52	101	56% 38% 6%
6	5E	101	66% 28% 6%
7	62	156	17% 55% 38% 6%
7	6E	156	10% 52% 39% 8%
8	72	138	30% 54% 40% 6%
8	7E	138	19% 43% 48% 9%
9	82	128	59% 43% 51% 5%
9	8E	128	35% 43% 45% 12%
10	1A	105	37% 41% 49% 5% 6%
10	1I	105	30% 43% 45% 7% 6%
11	2A	129	9% 50% 36% 10%
11	2I	129	6% 43% 40% 6% 10%
12	3A	132	27% 43% 42% 10% 5%
12	3I	132	8% 57% 33% 5% 5%
13	4A	126	24% 45% 38% 10% 7%
13	4I	126	6% 48% 37% 8% 6%
14	5A	61	75% 41% 48% 7% 5%
14	5I	61	39% 48% 39% 11%
15	6A	89	13% 56% 36% 7%

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Mol	Chain	Length	Quality of chain
15	6I	89	24% 62% 31% 6%
16	7A	88	22% 48% 43% 5% 5%
16	7I	88	63% 25% 56% 15% 5%
17	8A	105	20% 64% 27% 5% 5%
17	8I	105	13% 42% 44% 10% 5%
18	9A	88	2% 33% 41% 8% 18%
18	9I	88	48% 26% 8% 18%
19	AA	93	27% 34% 40% 9% 16%
19	AI	93	5% 40% 35% 10% 13%
20	BA	106	41% 51% 34% 8% 7%
20	BI	106	32% 46% 39% 8% 7%
21	1B	27	85% 33% 56% 7%
21	1F	27	81% 52% 37% 7%
22	1K	76	5% 30% 42% 24%
23	2K	77	39% 35% 22%
23	2L	77	% 34% 42% 23%
24	1L	76	16% 45% 37% 17%
24	3K	76	3% 25% 34% 39%
24	3L	76	12% 28% 46% 25%
25	4K	27	19% 19% 11% 52%
25	4L	27	7% 15% 11% 67%
26	14	2917	2% 31% 43% 22%
26	1H	2917	26% 42% 26% 6%
27	16	122	38% 39% 18% 5%
27	1J	122	% 26% 47% 23%

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Mol	Chain	Length	Quality of chain
28	11	276	3% 48% 41% 9%
28	19	276	14% 59% 32% 7%
29	21	206	13% 44% 39% 16%
29	29	206	33% 38% 48% 12%
30	31	210	.% 50% 37% 10%
30	39	210	7% 45% 42% 11%
31	41	182	5% 52% 38% 9%
31	49	182	23% 49% 43% 7%
32	51	180	3% 48% 37% 11%
32	59	180	34% 42% 42% 9% 6%
33	61	148	3% 34% 46% 17%
33	69	148	15% 50% 34% 13%
34	15	140	25% 54% 34% 11%
34	58	140	11% 51% 37% 9%
35	25	122	7% 51% 42% 7%
35	68	122	2% 58% 34% 8%
36	35	150	27% 46% 34% 15% 5%
36	78	150	7% 41% 40% 17%
37	45	141	55% 43% 42% 13%
37	88	141	4% 46% 41% 9%
38	55	118	17% 47% 40% 12%
38	98	118	11% 42% 47% 12%
39	65	112	32% 32% 50% 14%
39	A8	112	4% 36% 46% 14%
40	75	146	7% 39% 41% 14% 6%

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Mol	Chain	Length	Quality of chain
40	B8	146	8% 45% 36% 12% 6%
41	85	118	14% 55% 40%
41	C8	118	16% 46% 45% 8%
42	95	101	14% 44% 42% 14%
42	D8	101	10% 47% 39% 15%
43	A5	113	6% 65% 28% 7%
43	E8	113	3% 52% 36% 12%
44	B5	96	8% 51% 36% 8%
44	F8	96	% 46% 39% 11%
45	C5	110	23% 32% 42% 19% 5%
45	G8	110	40% 41% 13% 5%
46	D5	206	17% 38% 39% 9% 13%
46	H8	206	41% 36% 7% 15%
47	E5	85	41% 46% 35% 8% 11%
47	I8	85	24% 49% 35% 8% 6%
48	F5	98	33% 58% 29% 11%
48	J8	98	14% 63% 28% 7%
49	G5	72	3% 51% 32% 6% 8%
49	K8	72	3% 26% 42% 19% 6% 7%
50	H5	60	22% 52% 40% 7%
50	L8	60	37% 43% 13% 5%
51	I5	71	31% 30% 49% 10% 11%
51	M8	71	8% 32% 46% 13% 7%
52	J5	60	7% 53% 30% 8% 7%
52	N8	60	10% 53% 33% 10%

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Mol	Chain	Length	Quality of chain
53	K5	54	70% 35% 31% 15% • 17%
53	O8	54	59% 22% 39% 22% 17%
54	L5	49	6% 43% 47% • 6%
54	P8	49	45% 43% • 8%
55	M5	65	55% 38% 37% 17% 8%
55	Q8	65	35% 20% 34% 35% 5% 6%

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	13	1629	-	-	-	X
56	MG	13	1631	-	-	-	X
56	MG	13	1656	-	-	-	X
56	MG	13	1658	-	-	-	X
56	MG	13	1718	-	-	-	X
56	MG	13	1721	-	-	-	X
56	MG	13	1744	-	-	-	X
56	MG	14	3020	-	-	-	X
56	MG	14	3080	-	-	-	X
56	MG	14	3117	-	-	-	X
56	MG	14	3143	-	-	-	X
56	MG	14	3170	-	-	-	X
56	MG	14	3178	-	-	-	X
56	MG	14	3255	-	-	-	X
56	MG	14	3276	-	-	-	X
56	MG	14	3281	-	-	-	X
56	MG	14	3288	-	-	-	X
56	MG	14	3295	-	-	-	X
56	MG	14	3416	-	-	-	X
56	MG	1G	1632	-	-	-	X
56	MG	1G	1640	-	-	-	X
56	MG	1G	1670	-	-	-	X
56	MG	1H	3013	-	-	-	X
56	MG	1H	3028	-	-	-	X
56	MG	1H	3074	-	-	-	X
56	MG	1H	3119	-	-	-	X
56	MG	1H	3129	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
56	MG	1H	3137	-	-	-	X
56	MG	1H	3142	-	-	-	X
56	MG	1H	3143	-	-	-	X
56	MG	1H	3157	-	-	-	X
56	MG	1H	3158	-	-	-	X
56	MG	1H	3249	-	-	-	X
56	MG	1H	3255	-	-	-	X
56	MG	1H	3266	-	-	-	X
56	MG	1H	3270	-	-	-	X
56	MG	1H	3276	-	-	-	X
56	MG	1H	3280	-	-	-	X
56	MG	1H	3305	-	-	-	X
56	MG	1H	3306	-	-	-	X
56	MG	1H	3309	-	-	-	X
56	MG	1H	3311	-	-	-	X
56	MG	1H	3326	-	-	-	X
56	MG	1H	3328	-	-	-	X
56	MG	1H	3330	-	-	-	X
56	MG	1H	3331	-	-	-	X
56	MG	1H	3332	-	-	-	X
56	MG	1H	3337	-	-	-	X
56	MG	1H	3346	-	-	-	X
56	MG	29	301	-	-	-	X
56	MG	32	301	-	-	-	X
56	MG	39	303	-	-	-	X
56	MG	L8	101	-	-	-	X

2 Entry composition (i)

There are 58 unique types of molecules in this entry. The entry contains 299951 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 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	13	1498	32207	14334	5973	10402	1498	0	0	0
1	1G	1497	32182	14324	5968	10394	1496	0	0	0

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	1E	237	1924	1228	344	347	5	0	0	0
2	12	237	1924	1228	344	347	5	0	0	0

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	2E	205	1605	1011	313	280	1	0	0	0
3	22	206	1612	1016	314	281	1	0	0	0

- Molecule 4 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	3E	208	1702	1066	339	290	7	0	0	0
4	32	208	1702	1066	339	290	7	0	0	0

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	4E	151	1155	729	218	204	4	0	0	0
5	42	151	1155	729	218	204	4	0	0	0

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	5E	101	842	531	155	153	3	0	0	0
6	52	101	842	531	155	153	3	0	0	0

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	6E	155	1256	781	252	217	6	0	0	0
7	62	155	1256	781	252	217	6	0	0	0

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	7E	138	1115	705	215	192	3	0	0	0
8	72	138	1115	705	215	192	3	0	0	0

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
9	8E	127	1009	639	197	173	0	0	0
9	82	127	1009	639	197	173	0	0	0

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	1I	99	801	504	157	139	1	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	1A	99	801	504	157	139	1	0	0	0

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	2I	116	864	537	164	160	3	0	0	0
11	2A	116	864	537	164	160	3	0	0	0

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	3I	125	975	614	196	164	1	0	0	0
12	3A	125	975	614	196	164	1	0	0	0

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	4I	118	938	580	193	163	2	0	0	0
13	4A	117	933	577	192	162	2	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
4I	119	ALA	GLY	conflict	UNP P80377
4A	119	ALA	GLY	conflict	UNP P80377

- Molecule 14 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	5I	60	491	312	104	71	4	0	0	0
14	5A	58	475	303	99	69	4	0	0	0

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
15	6I	88	733	459	147	125	2	0	0	0
15	6A	88	733	459	147	125	2	0	0	0

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	7I	84	705	446	140	118	1	0	0	0
16	7A	84	705	446	140	118	1	0	0	0

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
17	8I	100	834	534	155	143	2	0	0	0
17	8A	100	834	534	155	143	2	0	0	0

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
18	9I	72	590	376	117	97	0	0	0
18	9A	72	590	376	117	97	0	0	0

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
19	AI	81	647	413	119	113	2	0	0	0
19	AA	78	624	398	115	109	2	0	0	0

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
20	BI	99	762	470	162	128	2	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
20	BA	99	762	470	162	128	2	0	0	0

- Molecule 21 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
21	1F	25	217	134	52	31	0	0	0
21	1B	25	217	134	52	31	0	0	0

- Molecule 22 is a RNA chain called tRNA-Phe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
			Total	C	N	O	P	S			
22	1K	76	1628	731	290	530	75	2	0	0	0

- Molecule 23 is a RNA chain called tRNA-fMet.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
			Total	C	N	O	P	S			
23	2K	77	1646	735	298	535	77	1	0	0	0
23	2L	77	1646	735	298	535	77	1	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
2K	18	C	U	conflict	GB 675818144
2L	18	C	U	conflict	GB 675818144

- Molecule 24 is a RNA chain called tRNA-Phe.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
24	3K	76	1619	723	290	531	75	0	0	0
24	1L	76	1619	723	290	531	75	0	0	0
24	3L	76	1619	723	290	531	75	0	0	0

- Molecule 25 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
25	4K	13	281	127	57	84	13	0	0	0
25	4L	9	193	87	37	60	9	0	0	0

- Molecule 26 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
26	1H	2912	62707	27911	11722	20163	2911	0	0	0
26	14	2909	62647	27884	11716	20139	2908	0	0	0

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1H	161	U	-	insertion	GB 48268
1H	493	G	-	insertion	GB 48268
1H	1228	G	-	insertion	GB 48268
14	161	U	-	insertion	GB 48268
14	493	G	-	insertion	GB 48268
14	1228	G	-	insertion	GB 48268

- Molecule 27 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
27	16	122	2617	1166	486	844	121	0	0	0
27	1J	122	2617	1166	486	844	121	0	0	0

- Molecule 28 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
28	11	272	2115	1335	420	357	3	0	0	0
28	19	273	2120	1338	421	358	3	0	0	0

- Molecule 29 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
29	21	205	1568	991	300	271	6	0	0	0
29	29	205	1568	991	300	271	6	0	0	0

- Molecule 30 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	31	202	1585	1011	297	275	2	0	0	0
30	39	208	1627	1037	304	283	3	0	0	0

- Molecule 31 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	41	181	1473	942	268	259	4	0	0	0
31	49	181	1473	942	268	259	4	0	0	0

- Molecule 32 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	51	174	1336	848	251	236	1	0	0	0
32	59	169	1299	823	244	231	1	0	0	0

- Molecule 33 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	61	146	1136	726	201	208	1	0	0	0
33	69	146	1136	726	201	208	1	0	0	0

- Molecule 34 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
34	58	138	1104	712	206	182	4	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
34	15	138	1104	712	206	182	4	0	0	0

- Molecule 35 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
35	68	122	932	588	171	169	4	0	0	0
			Total	C	N	O	S			
35	25	122	932	588	171	169	4	0	0	0

- Molecule 36 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
36	78	150	1144	712	232	197	3	0	0	0
			Total	C	N	O	S			
36	35	150	1144	712	232	197	3	0	0	0

- Molecule 37 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
37	88	138	1086	693	208	179	6	0	0	0
			Total	C	N	O	S			
37	45	141	1121	715	212	187	7	0	0	0

- Molecule 38 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
38	98	118	967	604	203	159	1	0	0	0
			Total	C	N	O				
38	55	117	959	599	202	158		0	0	0

- Molecule 39 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
39	A8	111	881	556	176	149	0	0	0
			Total	C	N	O			
39	65	111	881	556	176	149	0	0	0

- Molecule 40 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
40	B8	137	1141	710	234	196	1	0	0	0
40	75	137	1141	710	234	196	1	0	0	0

- Molecule 41 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
41	C8	117	963	610	202	150	1	0	0	0
41	85	117	963	610	202	150	1	0	0	0

- Molecule 42 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	D8	101	778	501	142	134	1	0	0	0
42	95	101	778	501	142	134	1	0	0	0

- Molecule 43 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
43	E8	113	899	566	177	154	2	0	0	0
43	A5	113	899	566	177	154	2	0	0	0

- Molecule 44 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
44	F8	94	742	482	134	125	1	0	0	0
44	B5	92	725	471	131	123		0	0	0

- Molecule 45 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
45	G8	104	791	510	149	127	5	0	0	0
45	C5	104	794	510	152	127	5	0	0	0

- Molecule 46 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
46	H8	175	1397	892	251	251	3	0	0	0
46	D5	179	1428	911	255	259	3	0	0	0

- Molecule 47 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
47	I8	80	626	388	132	105	1	0	0	0
47	E5	76	606	376	128	101	1	0	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
I8	6	ALA	GLY	conflict	UNP P60493
I8	8	ALA	GLY	conflict	UNP P60493
E5	6	ALA	GLY	conflict	UNP P60493
E5	8	ALA	GLY	conflict	UNP P60493

- Molecule 48 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
48	J8	97	762	481	150	130	1	0	0	0
48	F5	97	762	481	150	130	1	0	0	0

- Molecule 49 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
49	K8	67	563	349	114	99	1	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
49	G5	66	558	346	113	98	1	0	0	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
50	L8	57	452	288	88	76	0	0	0
50	H5	59	468	298	90	80	0	0	0

- Molecule 51 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
51	M8	66	533	335	96	97	5	0	0	0
51	I5	63	515	326	93	91	5	0	0	0

- Molecule 52 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
52	N8	58	453	285	89	74	5	0	0	0
52	J5	56	434	272	87	70	5	0	0	0

- Molecule 53 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
53	O8	45	389	241	79	65	4	0	0	0
53	K5	45	389	241	79	65	4	0	0	0

- Molecule 54 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
54	P8	45	391	240	97	52	2	0	0	0
54	L5	46	398	245	98	53	2	0	0	0

- Molecule 55 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
55	Q8	61	485	309	99	75	2	0	0	0
			Total	C	N	O	S			
55	M5	60	477	303	98	74	2	0	0	0

- Molecule 56 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Mg		
56	13	152	152	152	0	0
			Total	Mg		
56	5E	1	1	1	0	0
			Total	Mg		
56	3I	2	2	2	0	0
			Total	Mg		
56	2K	7	7	7	0	0
			Total	Mg		
56	4K	1	1	1	0	0
			Total	Mg		
56	1H	506	506	506	0	0
			Total	Mg		
56	16	15	15	15	0	0
			Total	Mg		
56	11	2	2	2	0	0
			Total	Mg		
56	21	2	2	2	0	0
			Total	Mg		
56	31	1	1	1	0	0
			Total	Mg		
56	41	2	2	2	0	0
			Total	Mg		
56	78	2	2	2	0	0
			Total	Mg		
56	88	2	2	2	0	0
			Total	Mg		
56	G8	1	1	1	0	0
			Total	Mg		
56	I8	2	2	2	0	0
			Total	Mg		
56	J8	1	1	1	0	0
			Total	Mg		
56	L8	1	1	1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Mg		
56	P8	1	1	1	0	0
56	1G	88	88	88	0	0
56	32	1	1	1	0	0
56	52	1	1	1	0	0
56	6A	1	1	1	0	0
56	2L	3	3	3	0	0
56	14	426	426	426	0	0
56	1J	10	10	10	0	0
56	29	2	2	2	0	0
56	39	3	3	3	0	0
56	49	1	1	1	0	0
56	15	1	1	1	0	0
56	25	2	2	2	0	0
56	35	1	1	1	0	0
56	45	2	2	2	0	0
56	85	1	1	1	0	0
56	C5	1	1	1	0	0
56	E5	1	1	1	0	0
56	M5	1	1	1	0	0

- Molecule 57 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	3E	1	Total Zn 1 1	0	0
57	5I	1	Total Zn 1 1	0	0
57	G8	1	Total Zn 1 1	0	0
57	32	1	Total Zn 1 1	0	0
57	5A	1	Total Zn 1 1	0	0
57	C5	1	Total Zn 1 1	0	0

- Molecule 58 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	13	164	Total O 164 164	0	0
58	3E	1	Total O 1 1	0	0
58	4E	1	Total O 1 1	0	0
58	1I	1	Total O 1 1	0	0
58	3I	1	Total O 1 1	0	0
58	5I	1	Total O 1 1	0	0
58	6I	1	Total O 1 1	0	0
58	7I	1	Total O 1 1	0	0
58	4K	1	Total O 1 1	0	0
58	1H	920	Total O 920 920	0	0
58	16	6	Total O 6 6	0	0
58	11	9	Total O 9 9	0	0
58	21	5	Total O 5 5	0	0
58	31	7	Total O 7 7	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	78	6	Total O 6 6	0	0
58	B8	1	Total O 1 1	0	0
58	C8	2	Total O 2 2	0	0
58	E8	1	Total O 1 1	0	0
58	F8	1	Total O 1 1	0	0
58	G8	3	Total O 3 3	0	0
58	J8	1	Total O 1 1	0	0
58	L8	3	Total O 3 3	0	0
58	P8	1	Total O 1 1	0	0
58	Q8	2	Total O 2 2	0	0
58	1G	64	Total O 64 64	0	0
58	32	1	Total O 1 1	0	0
58	7A	1	Total O 1 1	0	0
58	14	543	Total O 543 543	0	0
58	1J	18	Total O 18 18	0	0
58	19	3	Total O 3 3	0	0
58	29	3	Total O 3 3	0	0
58	39	8	Total O 8 8	0	0
58	15	1	Total O 1 1	0	0
58	35	1	Total O 1 1	0	0
58	85	1	Total O 1 1	0	0

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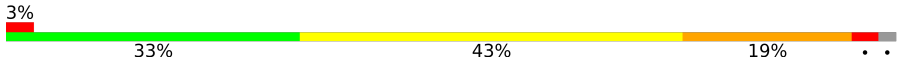
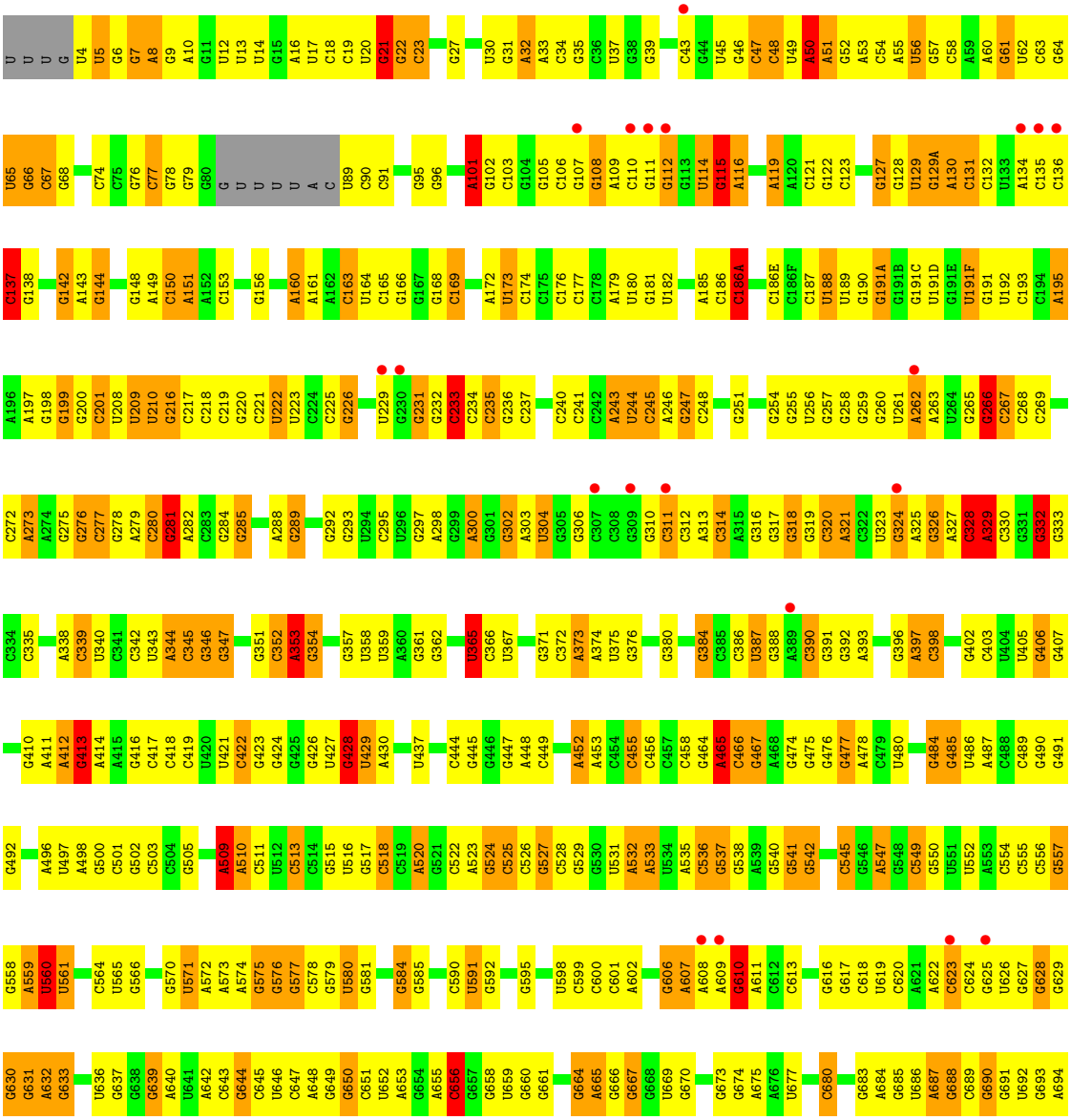
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	O		
58	L5	2	2	2	0	0

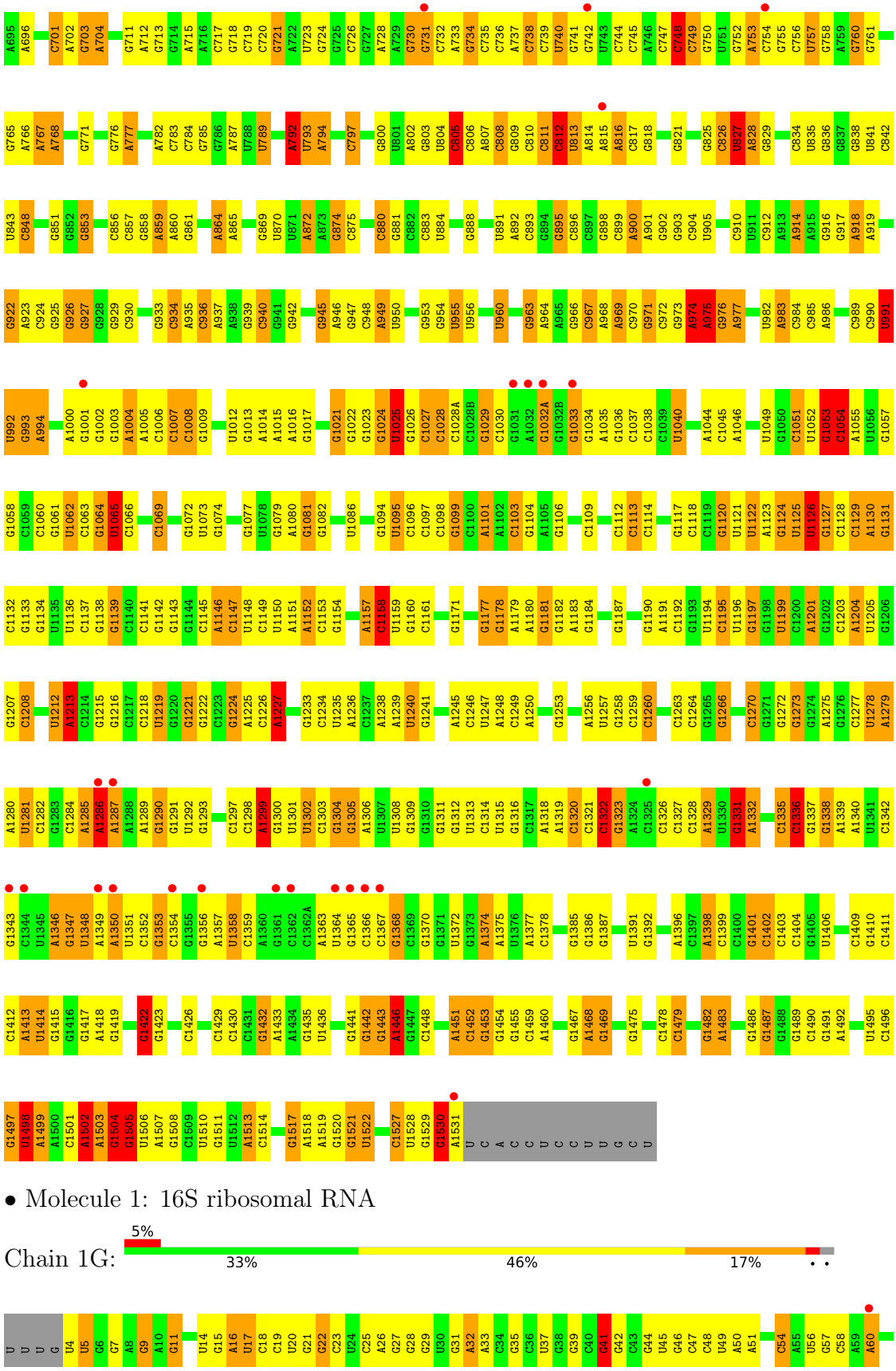
3 Residue-property plots (i)

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

- Molecule 1: 16S ribosomal RNA

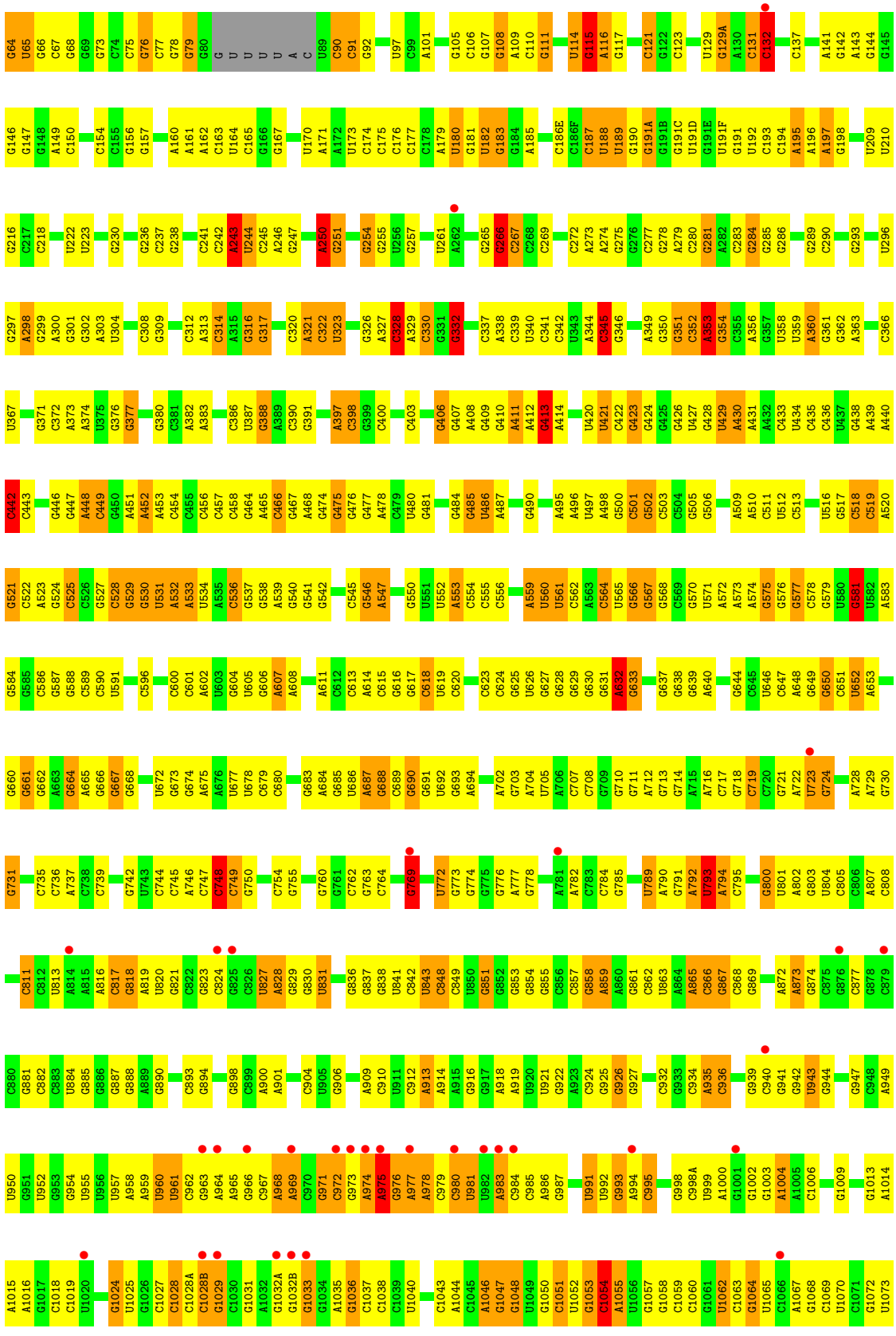
Chain 13: 

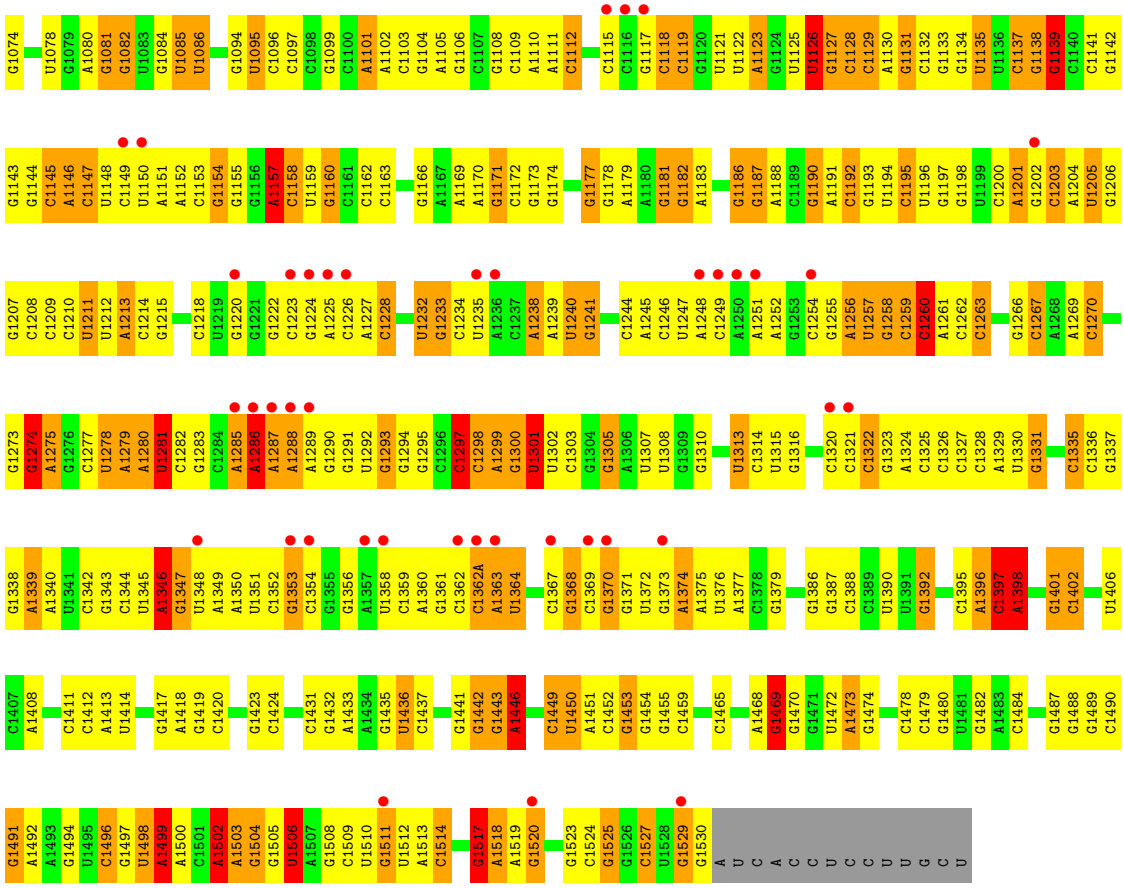




• Molecule 1: 16S ribosomal RNA

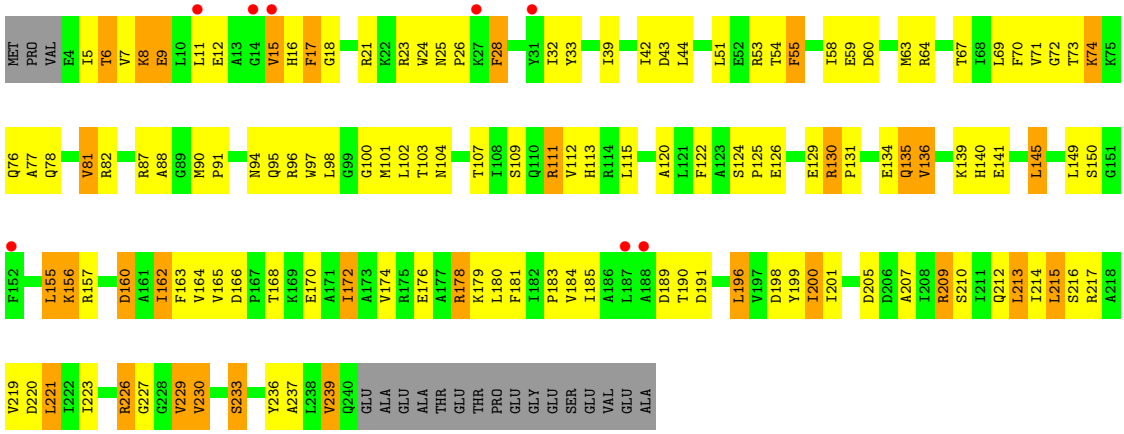
Chain 1G:


G64 U65 G66 C67 G68 G69 G73 C74 C75 G76 C77 G78 G79 G80 G U U U U A C U89 C90 C91 G92 U97 C99 A101 G105 C106 G107 G108 A109 C110 G111 U114 G115 A116 G117 C121 G122 C123 U129 G129A A130 C131 C132 C137 A141 G142 A143 G144 G145
G146 G147 G148 A149 C150 C154 C155 G156 G157 A160 A161 A162 C163 U164 C165 G166 G167 U170 A171 A172 U173 C174 C175 C176 C177 C178 A179 U180 G181 U182 G183 G184 A185 C186E C186F C187 U188 U189 G190 G191A G191B G191C U191D G191E U191F G191 U192 C193 C194 A195 A196 A197 G198 U209 U210
G216 C217 C218 U222 U223 G230 G236 C237 G238 C241 C242 A243 U244 C245 A246 G247 A250 G251 G254 G255 U256 G257 U261 A262 G265 G266 C267 C268 C269 C272 A273 A274 G275 G276 C277 G278 A279 C280 G281 A282 C283 G284 G285 G286 G289 C290 G293 U296
G297 A298 G299 A300 G301 G302 A303 U304 C308 G309 C312 A313 C314 A315 G316 G317 C320 A321 C322 U323 G326 A327 G328 A329 C330 G331 G332 C337 A338 C339 U340 C341 C342 U343 A344 C345 G346 A349 G350 G351 C352 A353 G354 C355 A356 G357 U358 U359 A360 G361 G362 A363 C366
U367 G371 C372 A373 A374 U375 G376 G377 G380 C381 A382 A383 C386 U387 G388 A389 C390 G391 A397 C398 G399 C400 C403 G406 G407 A408 G409 G410 A411 A412 G413 A414 U420 U421 C422 G423 G424 G425 G426 U427 G428 U429 A430 A431 A432 C433 U434 C435 C436 U437 G438 A439 A440
C442 C443 G446 G447 A448 C449 G450 A451 A452 A453 C454 C455 C456 C457 C458 G464 A465 C466 G467 A468 G474 G475 G476 G477 A478 C479 U480 G481 G484 G485 U486 A487 G490 A495 A496 U497 A498 G500 C501 G502 C503 C504 G505 G506 A509 A510 C511 U512 C513 U516 G517 C518 C519 A520
G521 C522 A523 G524 C525 C526 G527 C528 G529 G530 U531 A532 A533 U534 A535 C536 G537 G538 A539 G540 G541 G542 C545 G546 A547 G550 U551 U552 A553 C554 C555 C556 A559 U560 U561 C562 A563 C564 U565 G566 G567 G568 C569 G570 U571 A572 A573 A574 G575 G576 G577 C578 G579 U580 G581 U582 A583
G584 G585 C586 G587 G588 C589 C590 U591 C596 C600 C601 A602 U603 G604 U605 G606 A607 A608 A611 G612 C613 A614 C615 G616 G617 C618 U619 C620 C623 C624 G625 U626 G627 G628 G629 G630 G631 A632 G633 G637 G638 G639 A640 G644 C645 U646 C647 A648 G649 G650 C651 U652 A653
G660 G661 G662 A663 G664 A665 G666 G667 G668 U672 G673 G674 A675 A676 U677 G678 C679 C680 G683 A684 G685 U686 A687 G688 C689 G690 G691 U692 G693 A694 A702 G703 A704 U705 A706 C707 C708 G709 G710 G711 A712 G713 G714 A715 A716 C717 G718 C719 C720 G721 A722 U723 G724 A728 A729 G730
G731 C735 C736 A737 C738 C739 G742 U743 C744 C745 A746 C747 G748 C749 G750 C754 G755 G760 G761 C762 G763 C764 G769 U772 G773 G774 G775 G776 A777 G778 A781 A782 C783 C784 G785 U789 A790 G791 A792 U793 A794 C795 G800 U801 A802 G803 U804 C805 C806 A807 C808
C811 C812 U813 A814 A815 A816 C817 G818 A819 U820 G821 C822 G823 G824 G825 C826 U827 A828 G829 G830 U831 G836 G837 G838 U841 C842 U843 C848 C849 U850 C851 G852 G853 G854 G855 C856 C857 G858 A859 A860 G861 C862 U863 A864 A865 C866 G867 C868 G869 A872 A873 G874 C875 G876 C877 G878 C879
C880 G881 C882 C883 U884 G885 G886 G887 G888 A889 G890 C893 G894 G898 C899 A900 A901 C904 U905 G906 A909 C910 U911 C912 A913 A914 A915 G916 G917 A918 A919 U920 U921 G922 A923 C924 G925 G926 G927 C932 G933 C934 A935 C936 G939 C940 G941 G942 U943 G944 G947 C948 A949
U950 G951 U952 G953 G954 U955 U956 U957 A958 A959 U960 U961 C962 G963 A964 A965 G966 C967 A968 A969 C970 G971 C972 G973 A974 A975 G976 A977 A978 C979 C980 U981 U982 A983 C984 C985 A986 G987 U991 U992 G993 A994 C995 G998 C998A U999 A1000 G1001 G1002 G1003 A1004 A1005 C1006 G1009 G1013 A1014
A1015 A1016 G1017 C1018 C1019 U1020 G1024 U1025 G1026 C1027 C1028 C1028A C1028B G1029 C1030 G1031 A1032 G1032A G1032B G1033 G1034 A1035 G1036 C1037 C1038 G1039 U1040 C1043 A1044 C1045 A1046 G1047 G1048 U1049 G1050 C1051 U1052 G1053 C1054 A1055 U1056 G1057 G1058 C1059 C1060 G1061 U1062 C1063 G1064 U1065 C1066 A1067 G1068 C1069 U1070 C1071 G1072 U1073



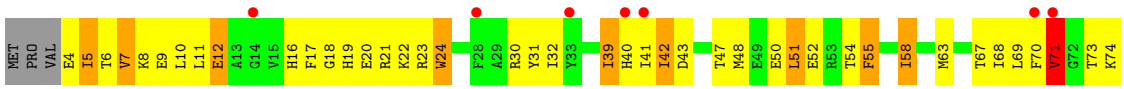
- Molecule 2: 30S ribosomal protein S2

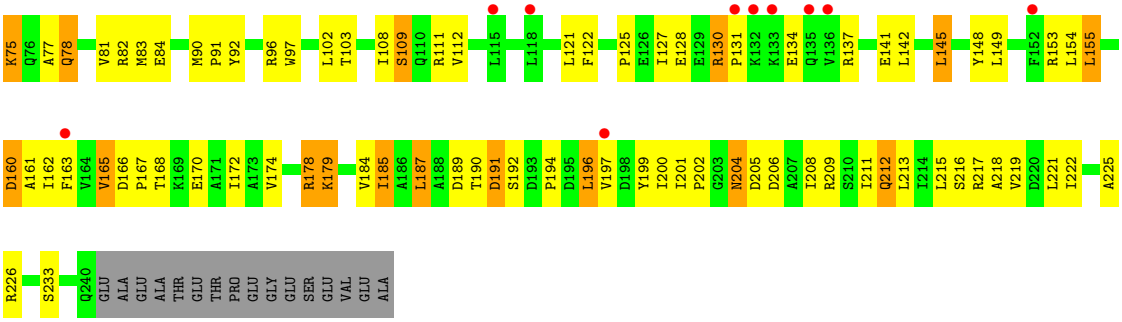
Chain 1E:



- Molecule 2: 30S ribosomal protein S2

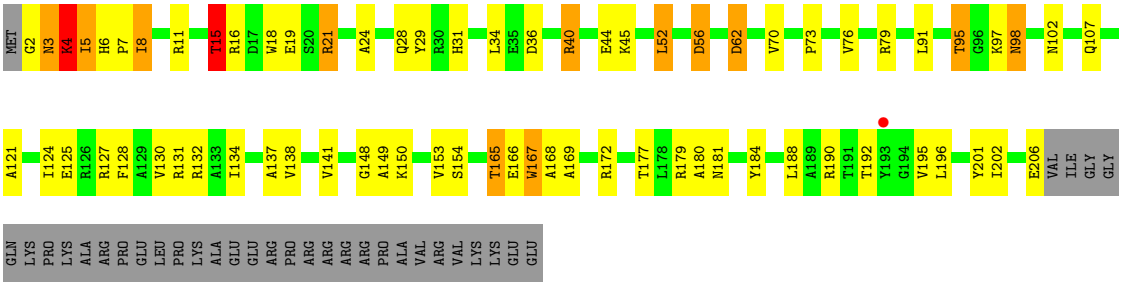
Chain 12:





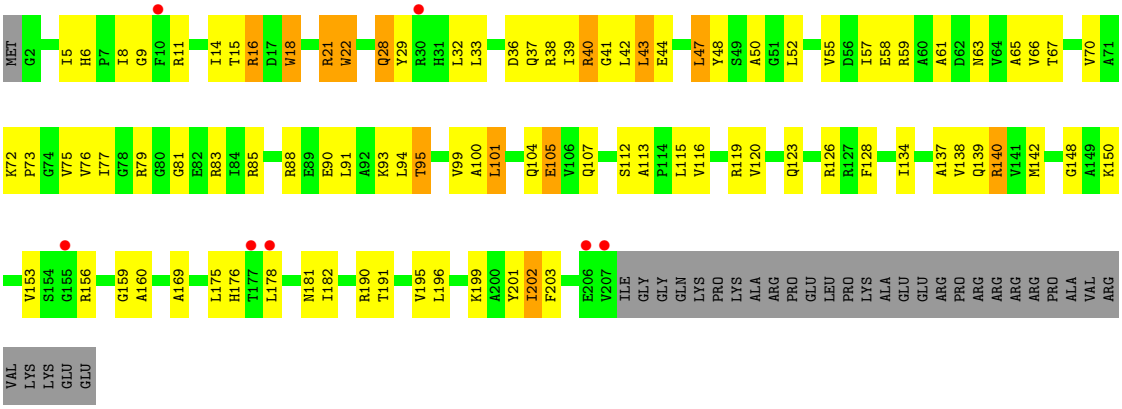
- Molecule 3: 30S ribosomal protein S3

Chain 2E:



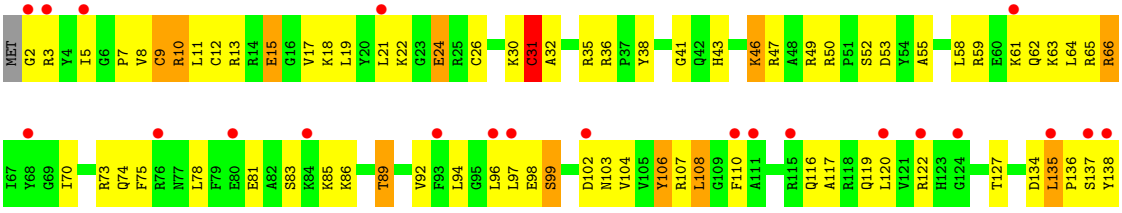
- Molecule 3: 30S ribosomal protein S3

Chain 22:



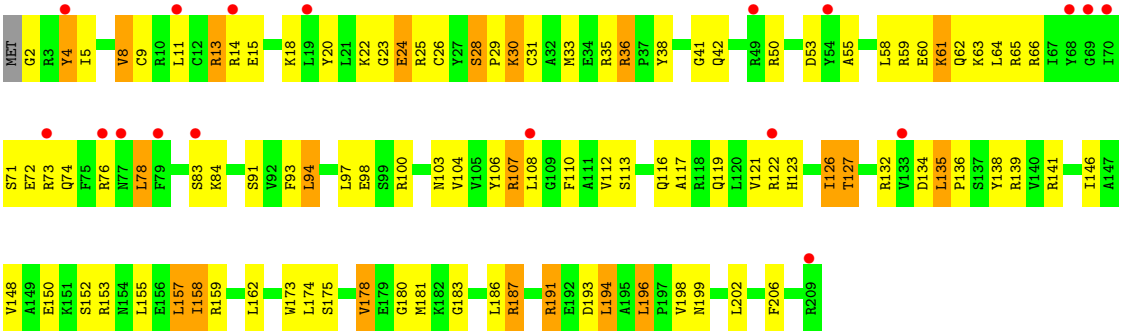
- Molecule 4: 30S ribosomal protein S4

Chain 3E:



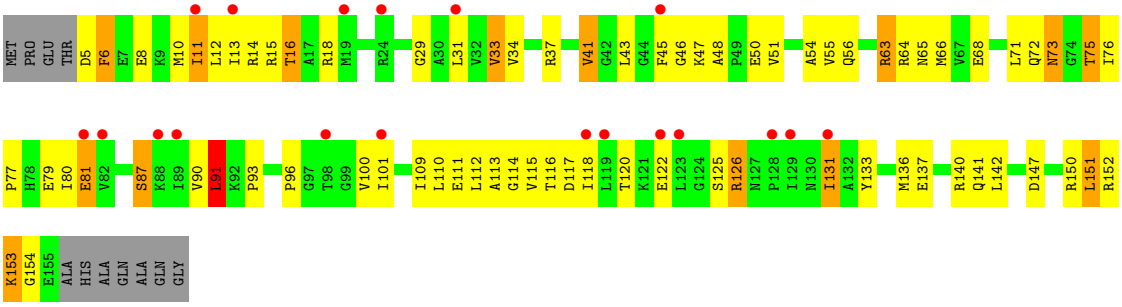
• Molecule 4: 30S ribosomal protein S4

Chain 32:



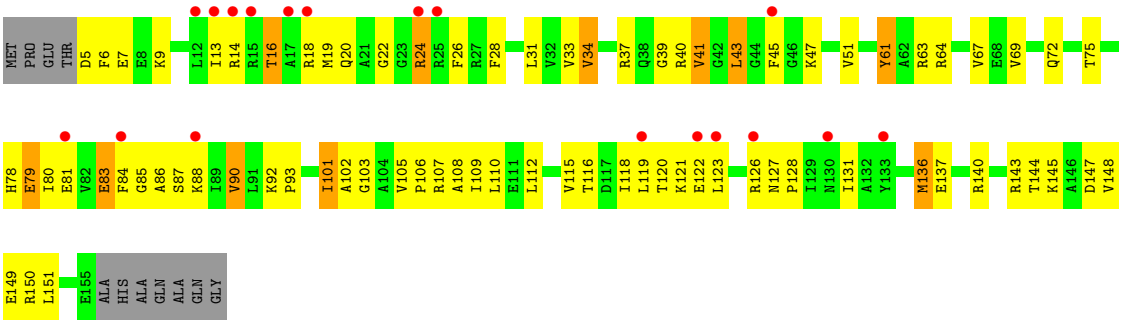
• Molecule 5: 30S ribosomal protein S5

Chain 4E:



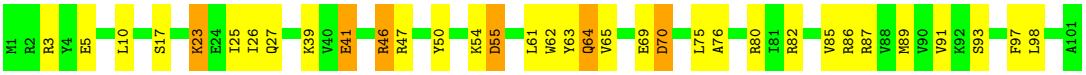
• Molecule 5: 30S ribosomal protein S5

Chain 42:



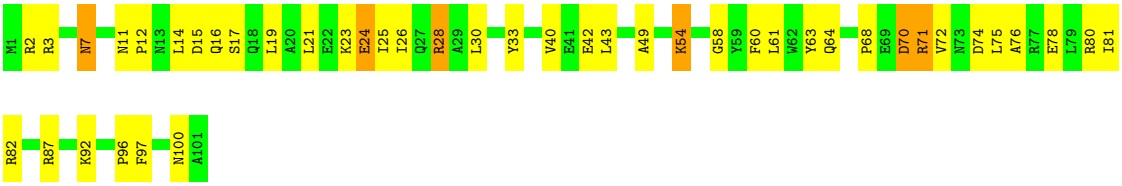
• Molecule 6: 30S ribosomal protein S6

Chain 5E:



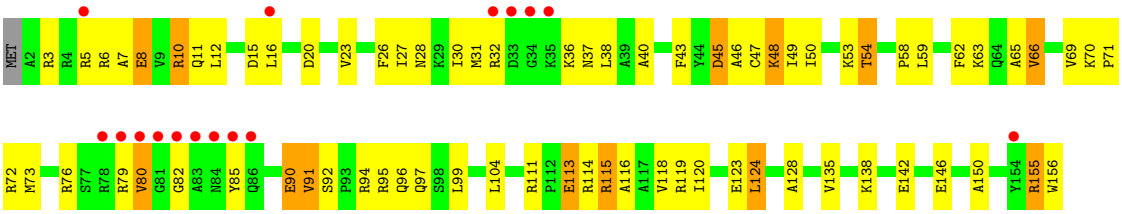
• Molecule 6: 30S ribosomal protein S6

Chain 52:



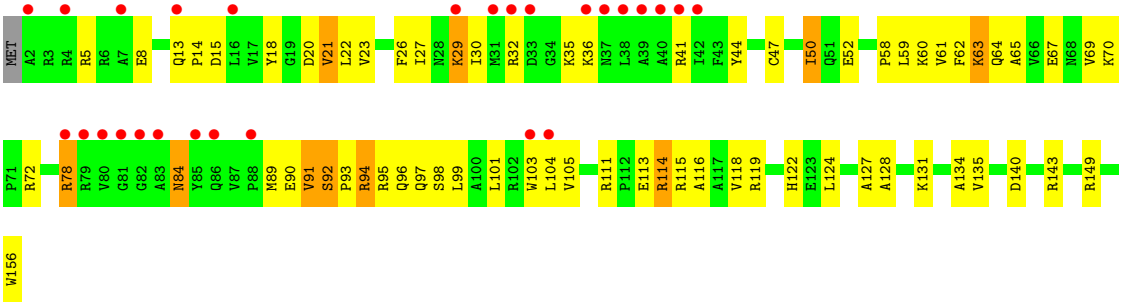
• Molecule 7: 30S ribosomal protein S7

Chain 6E:



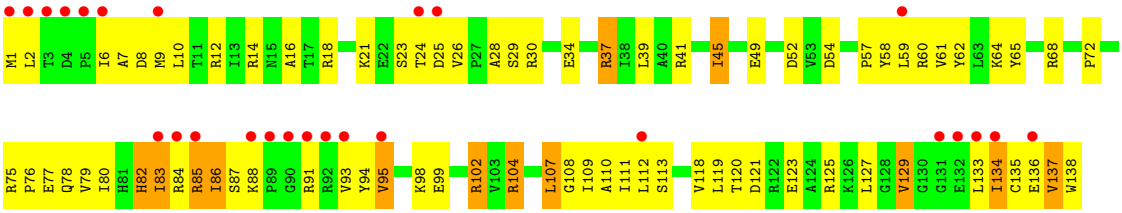
• Molecule 7: 30S ribosomal protein S7

Chain 62:



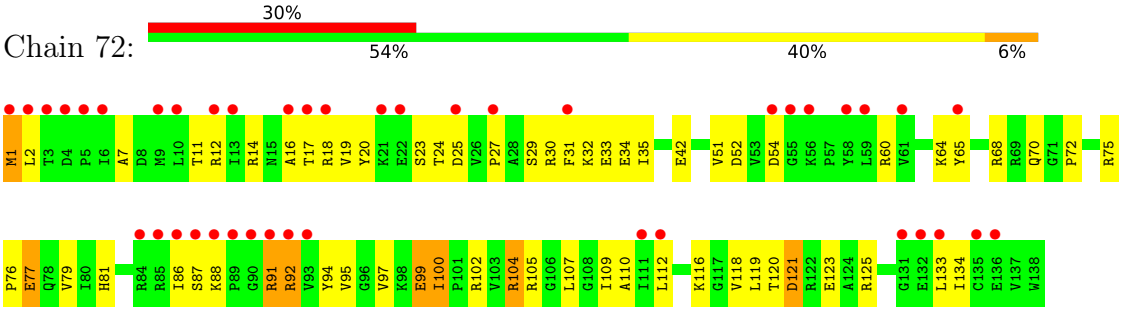
• Molecule 8: 30S ribosomal protein S8

Chain 7E:



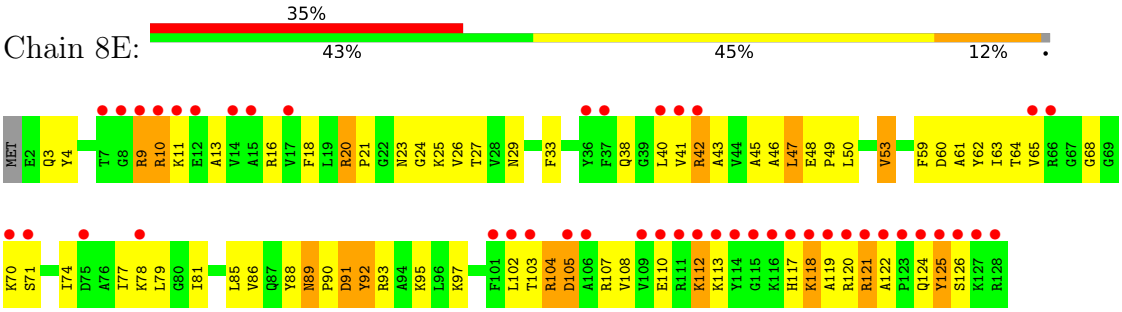
• Molecule 8: 30S ribosomal protein S8

Chain 72:



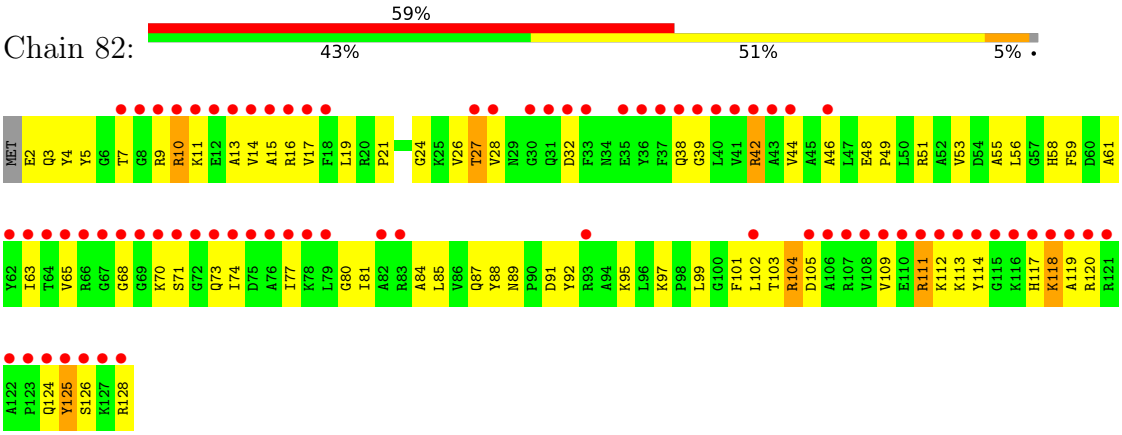
- Molecule 9: 30S ribosomal protein S9

Chain 8E:



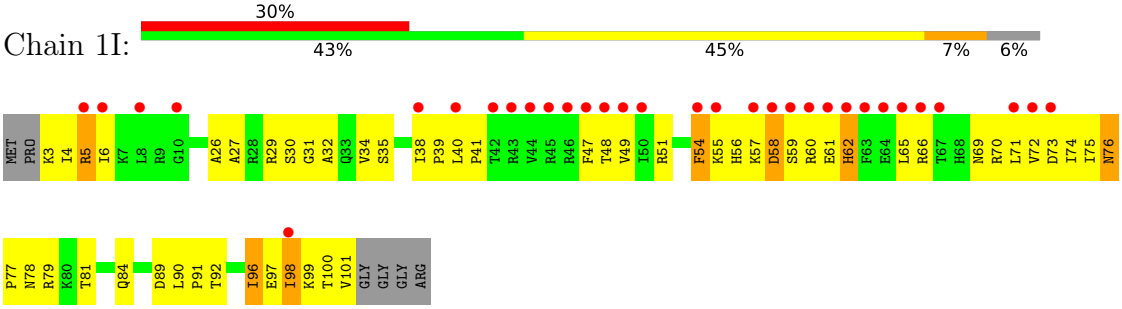
- Molecule 9: 30S ribosomal protein S9

Chain 82:



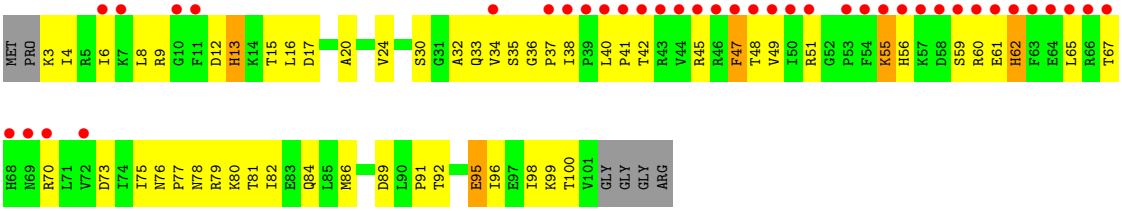
- Molecule 10: 30S ribosomal protein S10

Chain 1I:



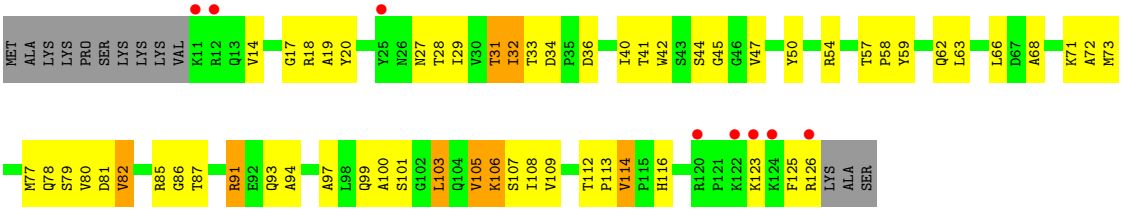
- Molecule 10: 30S ribosomal protein S10

Chain 1A:



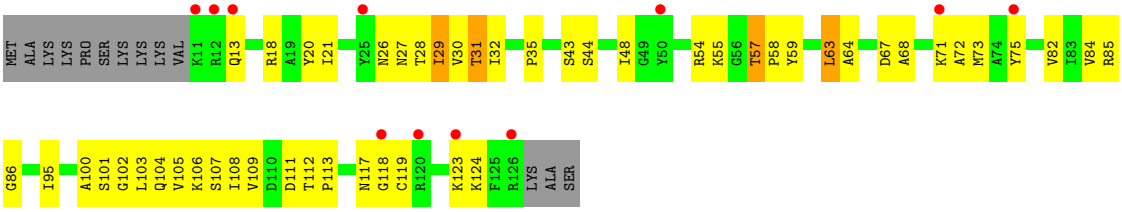
- Molecule 11: 30S ribosomal protein S11

Chain 2I:



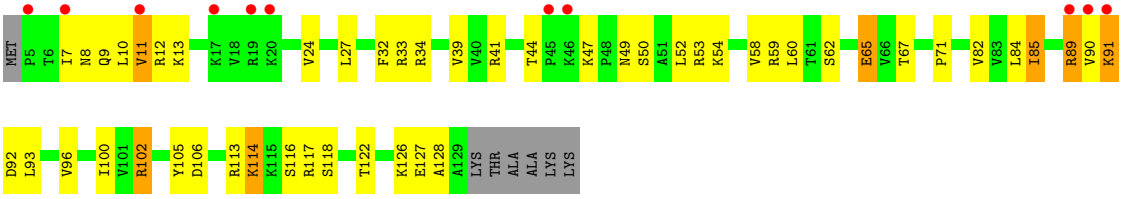
- Molecule 11: 30S ribosomal protein S11

Chain 2A:



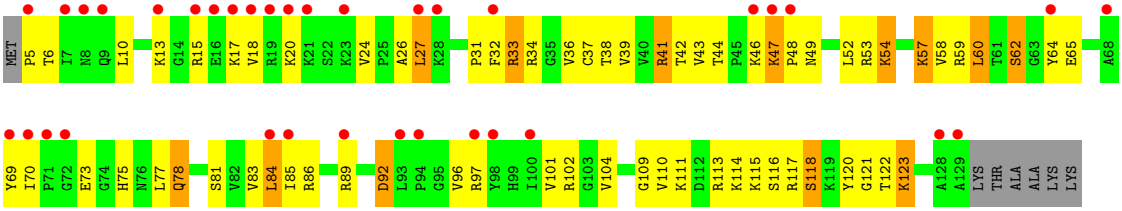
- Molecule 12: 30S ribosomal protein S12

Chain 3I:



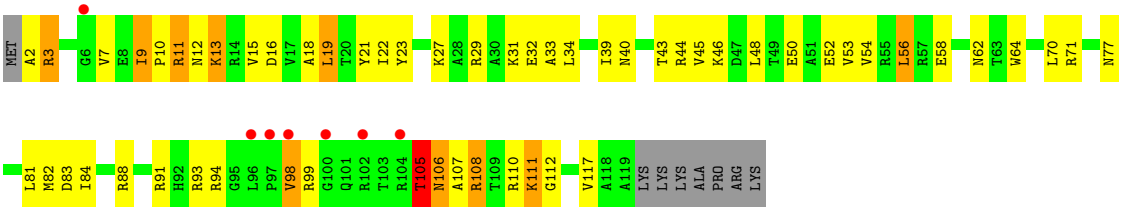
- Molecule 12: 30S ribosomal protein S12

Chain 3A:



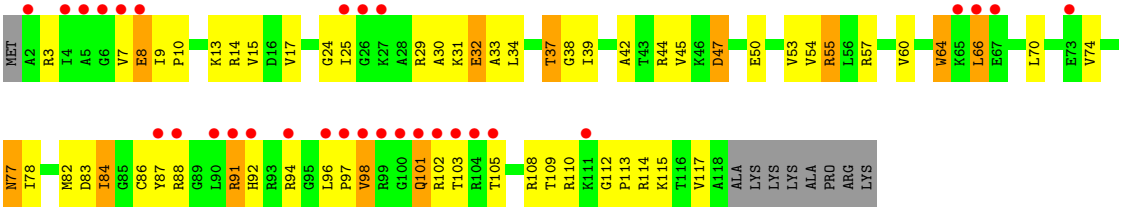
• Molecule 13: 30S ribosomal protein S13

Chain 4I:



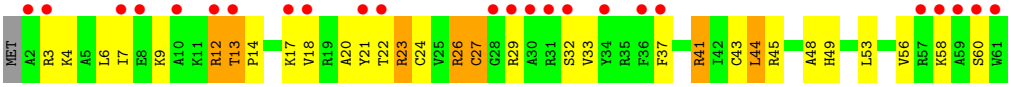
• Molecule 13: 30S ribosomal protein S13

Chain 4A:



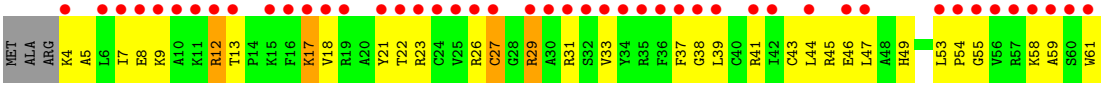
• Molecule 14: 30S ribosomal protein S14 type Z

Chain 5I:



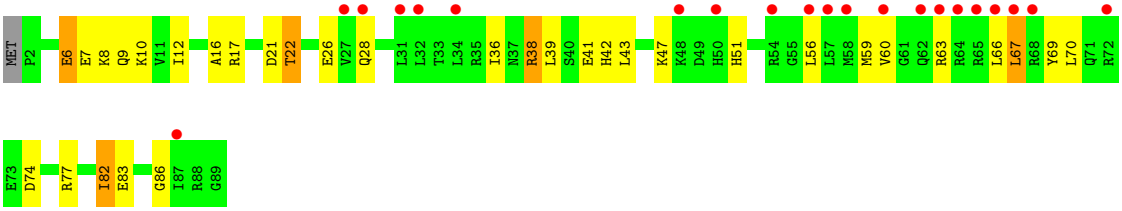
• Molecule 14: 30S ribosomal protein S14 type Z

Chain 5A:



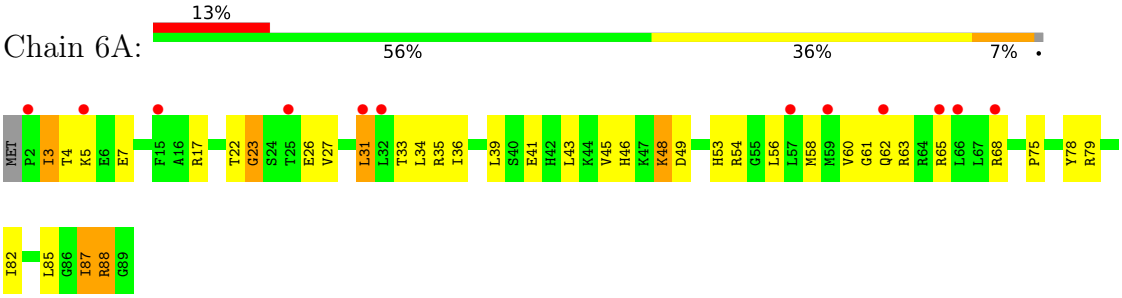
• Molecule 15: 30S ribosomal protein S15

Chain 6I:



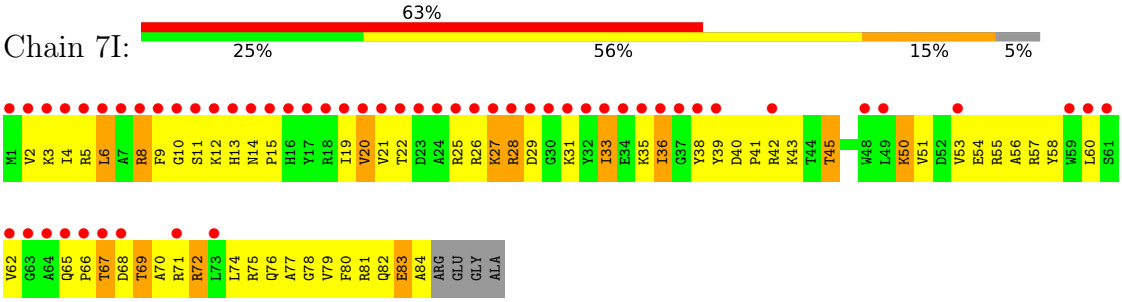
• Molecule 15: 30S ribosomal protein S15

Chain 6A:



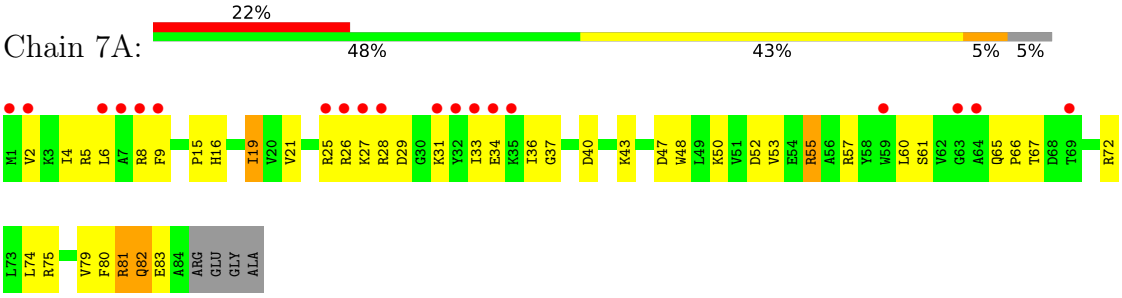
- Molecule 16: 30S ribosomal protein S16

Chain 7I:



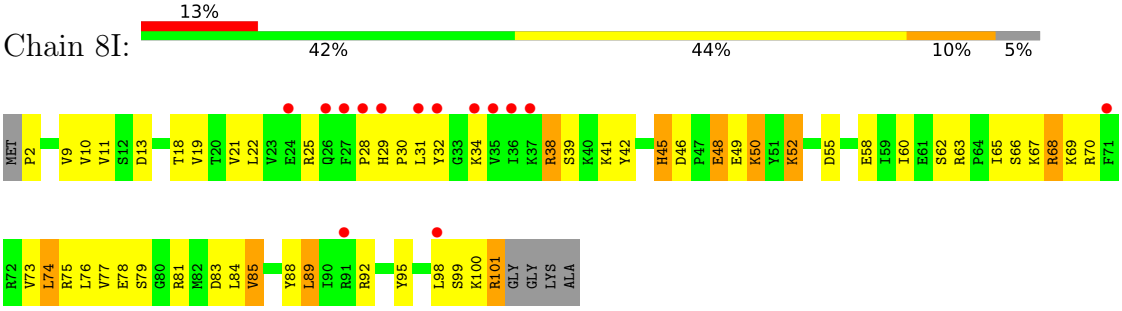
- Molecule 16: 30S ribosomal protein S16

Chain 7A:



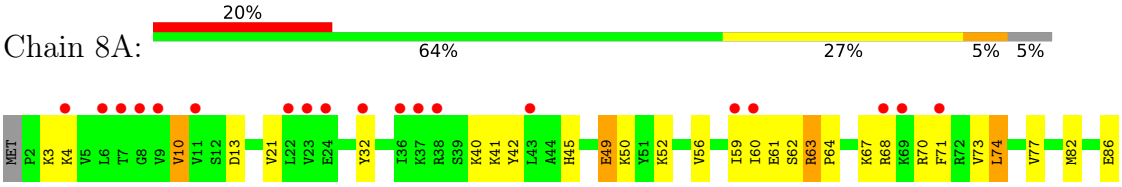
- Molecule 17: 30S ribosomal protein S17

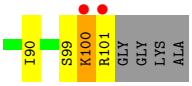
Chain 8I:



- Molecule 17: 30S ribosomal protein S17

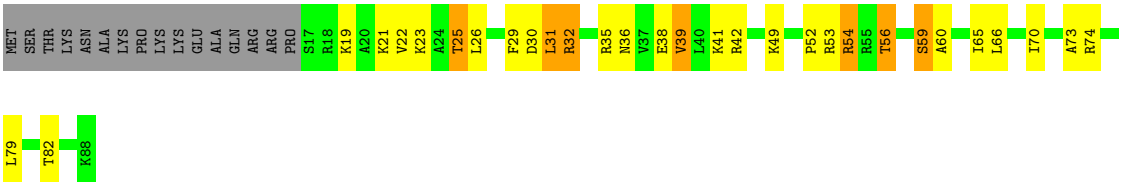
Chain 8A:





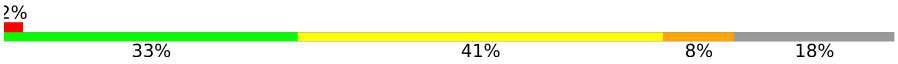
• Molecule 18: 30S ribosomal protein S18

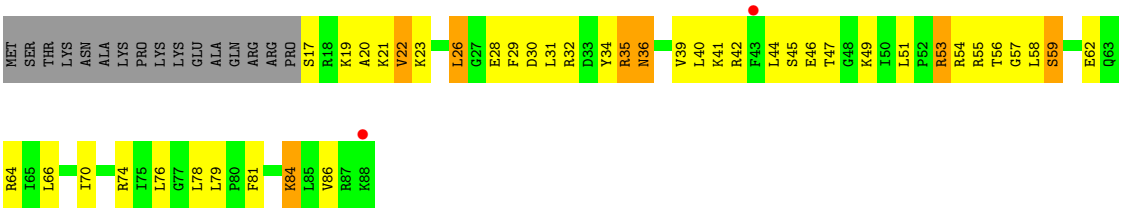
Chain 9I:



• Molecule 18: 30S ribosomal protein S18

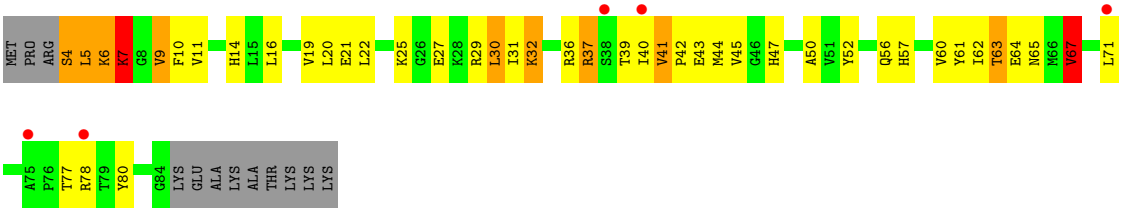
Chain 9A:





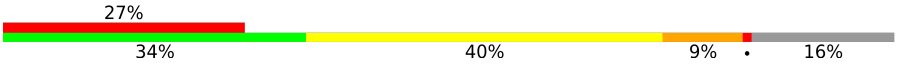
• Molecule 19: 30S ribosomal protein S19

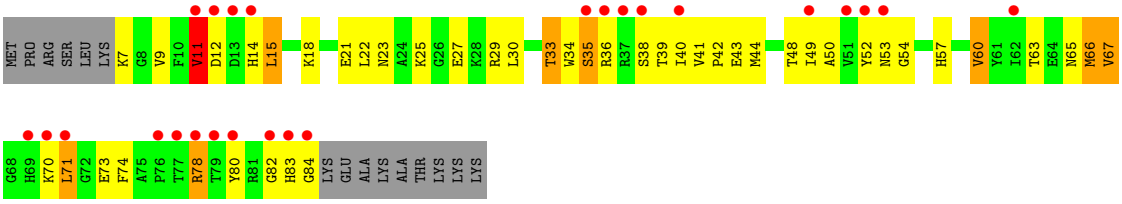
Chain AI:



• Molecule 19: 30S ribosomal protein S19

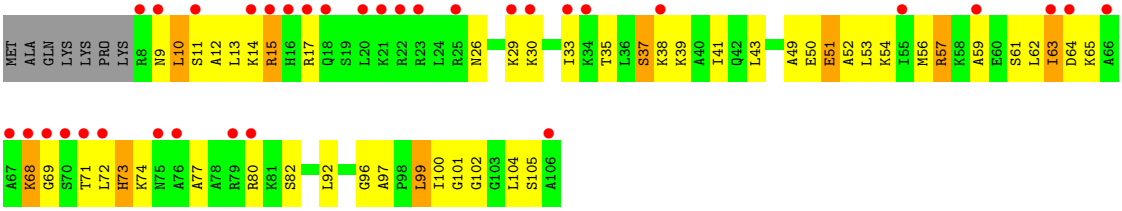
Chain AA:





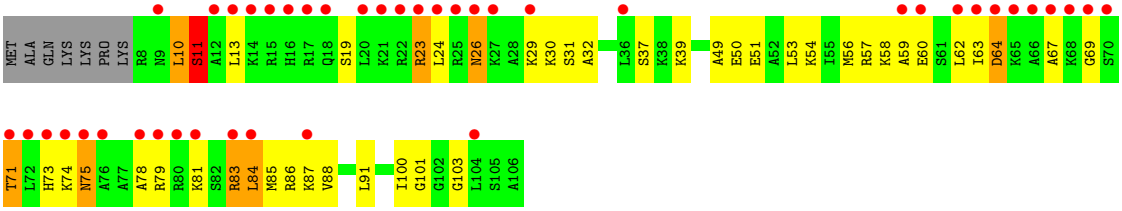
• Molecule 20: 30S ribosomal protein S20

Chain BI:



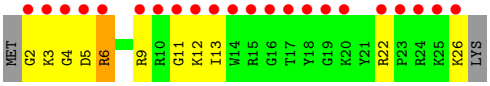
- Molecule 20: 30S ribosomal protein S20

Chain BA:



- Molecule 21: 30S ribosomal protein Thx

Chain 1F:

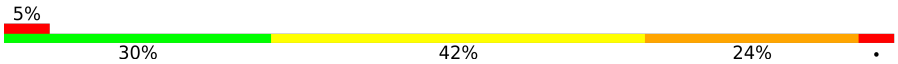


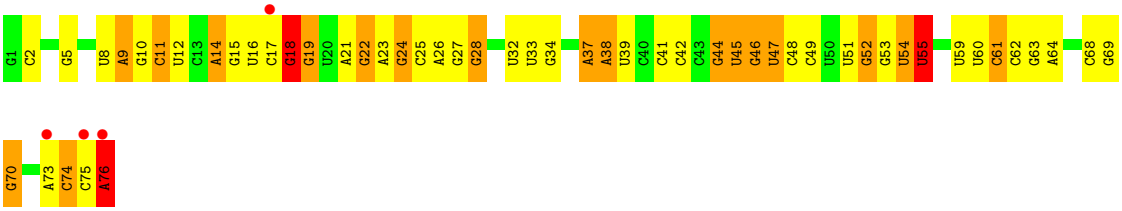
- Molecule 21: 30S ribosomal protein Thx

Chain 1B:

- Molecule 22: tRNA-Phe

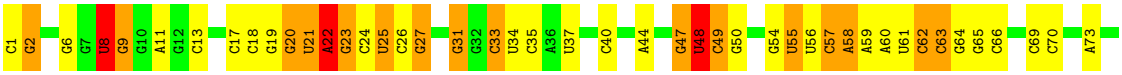
Chain 1K:





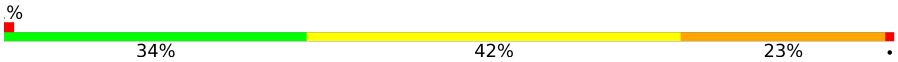
- Molecule 23: tRNA-fMet

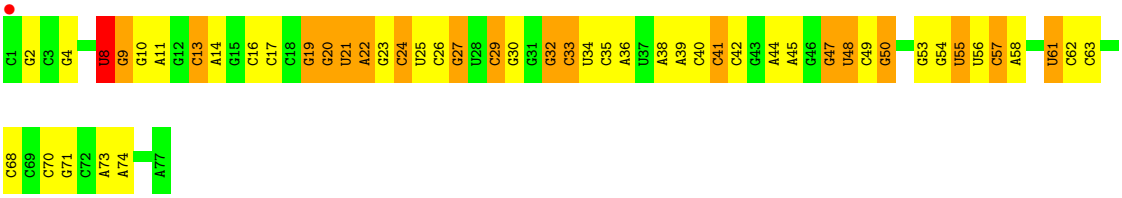
Chain 2K:



• Molecule 23: tRNA-fMet

Chain 2L:



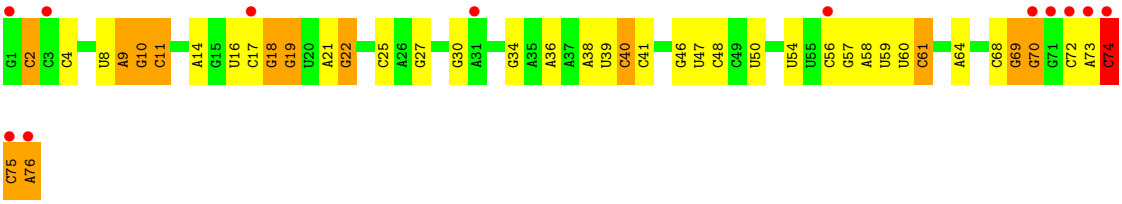


• Molecule 24: tRNA-Phe

Chain 3K:

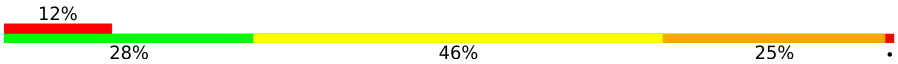
• Molecule 24: tRNA-Phe

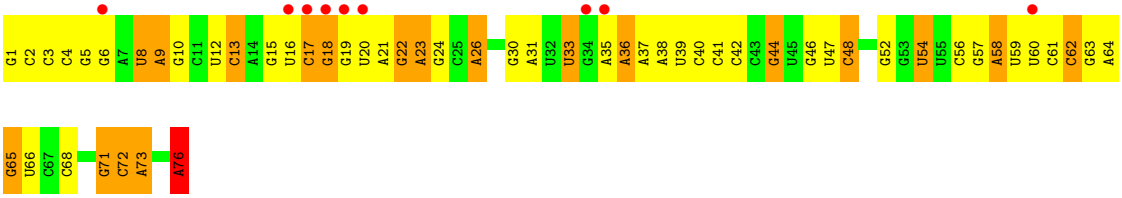
Chain 1L:



• Molecule 24: tRNA-Phe

Chain 3L:





• Molecule 25: mRNA

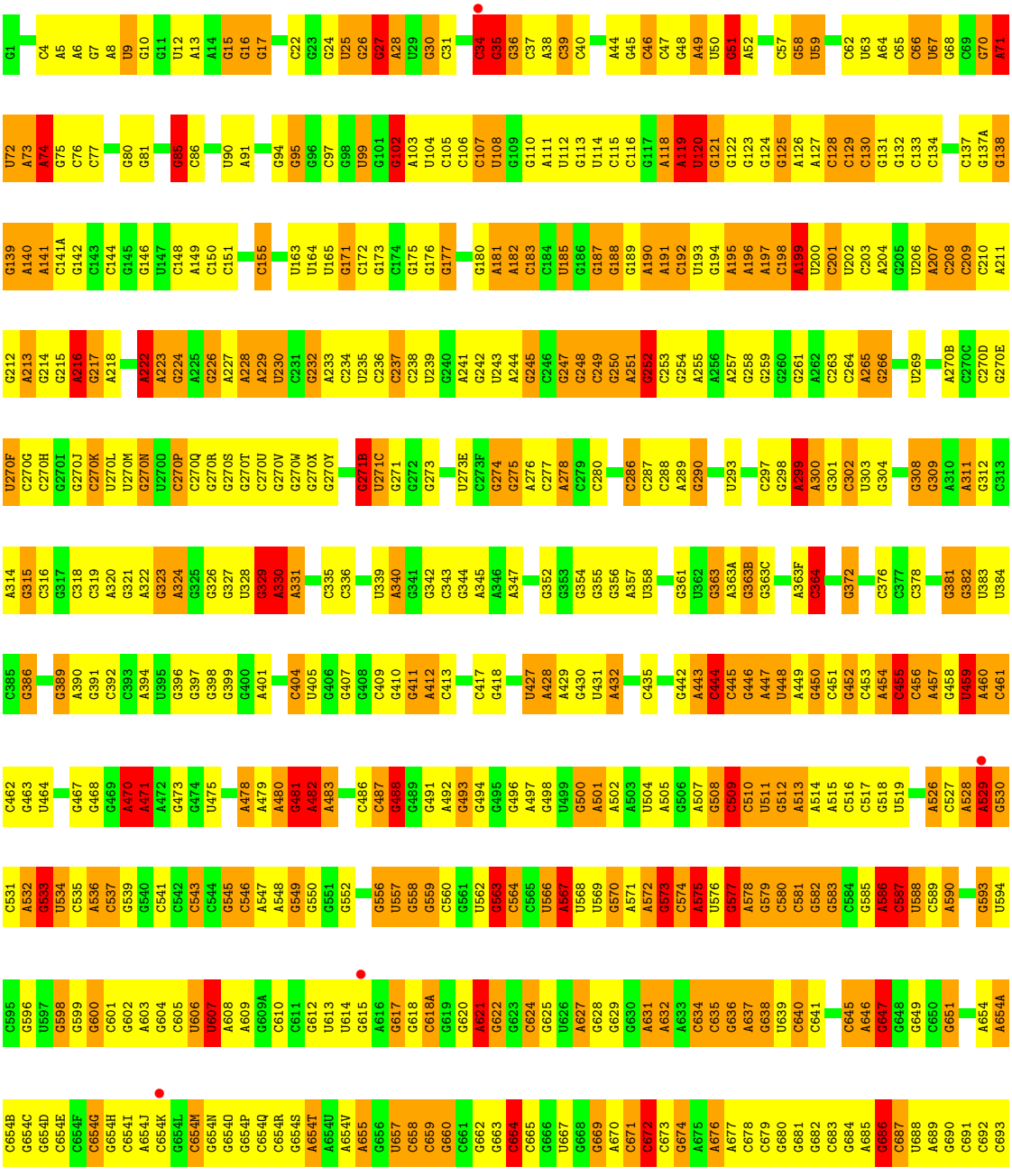
Chain 4K:

- Molecule 25: mRNA

Chain 4L: 7% 15% 11% 67%

- Molecule 26: 23S ribosomal RNA

Chain 1H: 26% 42% 26% 6%



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C758 A761 U762 G763 A764 G765 C766 U767 G768 G769 G770 G771 C772 U773 A774 G775 G776 A777 G778 U779 G780 A781 A782 A783 A784 G785 C786 U787 A788 A789 C790 C791 G792 A793 G794 C795 C796 C797 G798 G799 A800 G801 A802 U803 A804 G805 C806 U807 G808 G809 U810 U811 C812 U813 C814 C815 C816 C817 G818
A819 A820 A821 U822 G823 A824 C825 U826 U827 U828 A829 G830 G831 G832 U833 C834 A835 G836 C837 C838 U839 C840 A841 G842 G843 C844 G845 C846 U847 G848 A849 C850 U851 G852 G853 U858 G859 U860 A861 G862 A863 G864 C865 A866 C867 U868 G869 A870 U871 A872 G873 G874 A878 G879 G880 G881 G882 G883
C884 C885 C886 A887 C888 C889 A890 G892 G893 C894 U895 A896 C897 C898 A899 A900 A901 C902 C903 C904 U905 G906 U907 C908 A909 A910 A911 C912 U913 C914 C915 G916 A917 A918 G919 G920 C925 A926 G928 G929 U930 G931 G932 A933 G934 C935 C936 U937 G938 G939 G940 A941 G942 U943 G944 A945 G946 G947 G948
C949 G950 C951 G952 A953 G954 C955 G956 A957 U958 A959 A960 C961 G962 U963 C964 C965 G966 C967 G968 U969 C970 C971 G972 A973 G974 C974A G975 C976 G977 G978 A981 C982 A983 A984 C985 C986 G987 A988 G989 A990 C991 C992 G993 G994 C995 A996 G997 A1000 A1001 G1002 G1003 C1004 C1005 C1006 C1007 C1008 A1009
A1010 G1011 U1012 C1013 U1014 G1015 G1016 G1017 C1018 U1019 A1020 A1021 G1022 U1023 G1024 G1025 U1026 A1027 A1028 A1029 G1030 G1031 A1032 U1033 G1034 U1035 G1036 G1037 C1038 G1039 A1045 A1046 G1047 A1048 C1049 A1050 G1051 A1054 G1055 G1056 A1057 U1058 G1059 U1060 U1061 G1062 G1063 C1064 U1065 U1066 A1067 G1068 A1069 A1070 G1071 C1072 A1073
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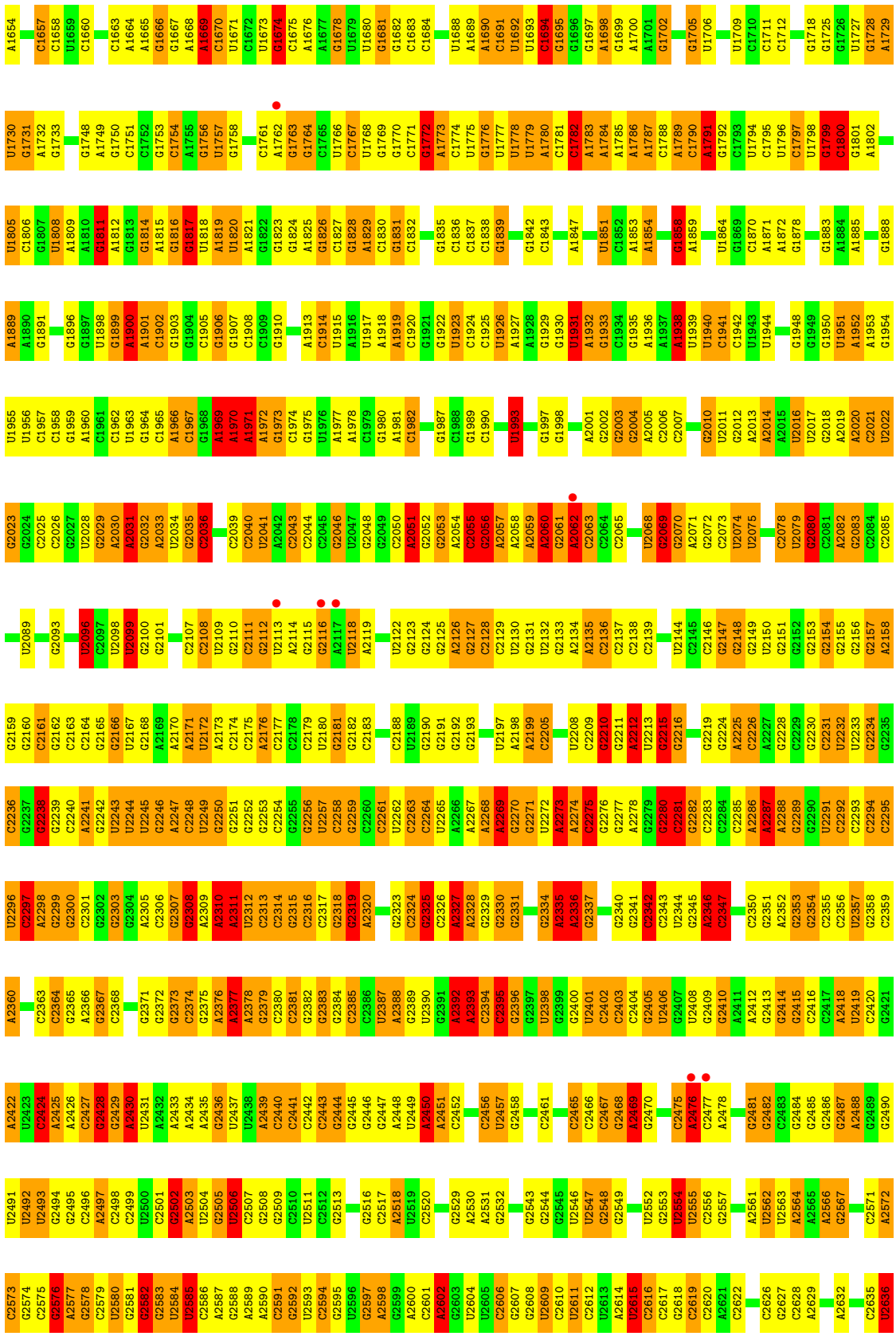
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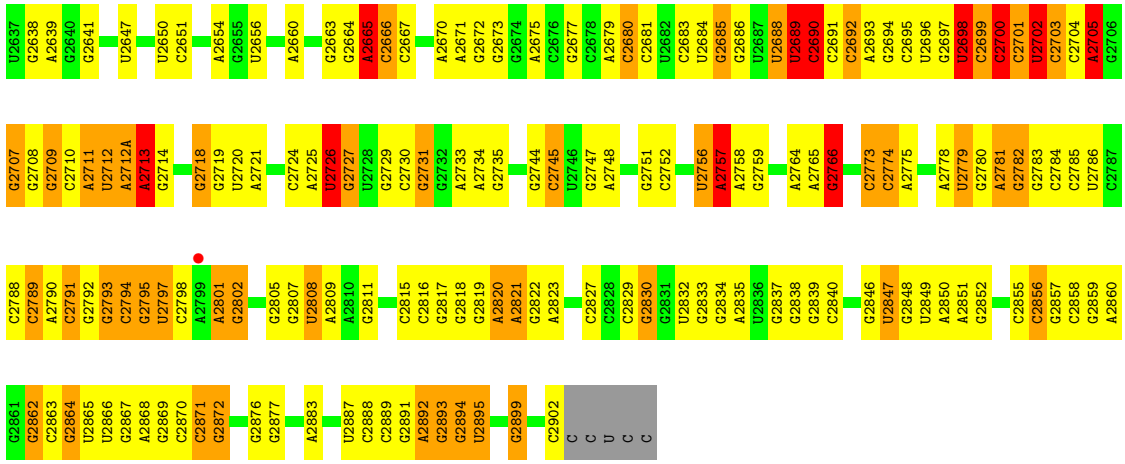

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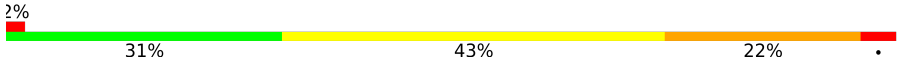

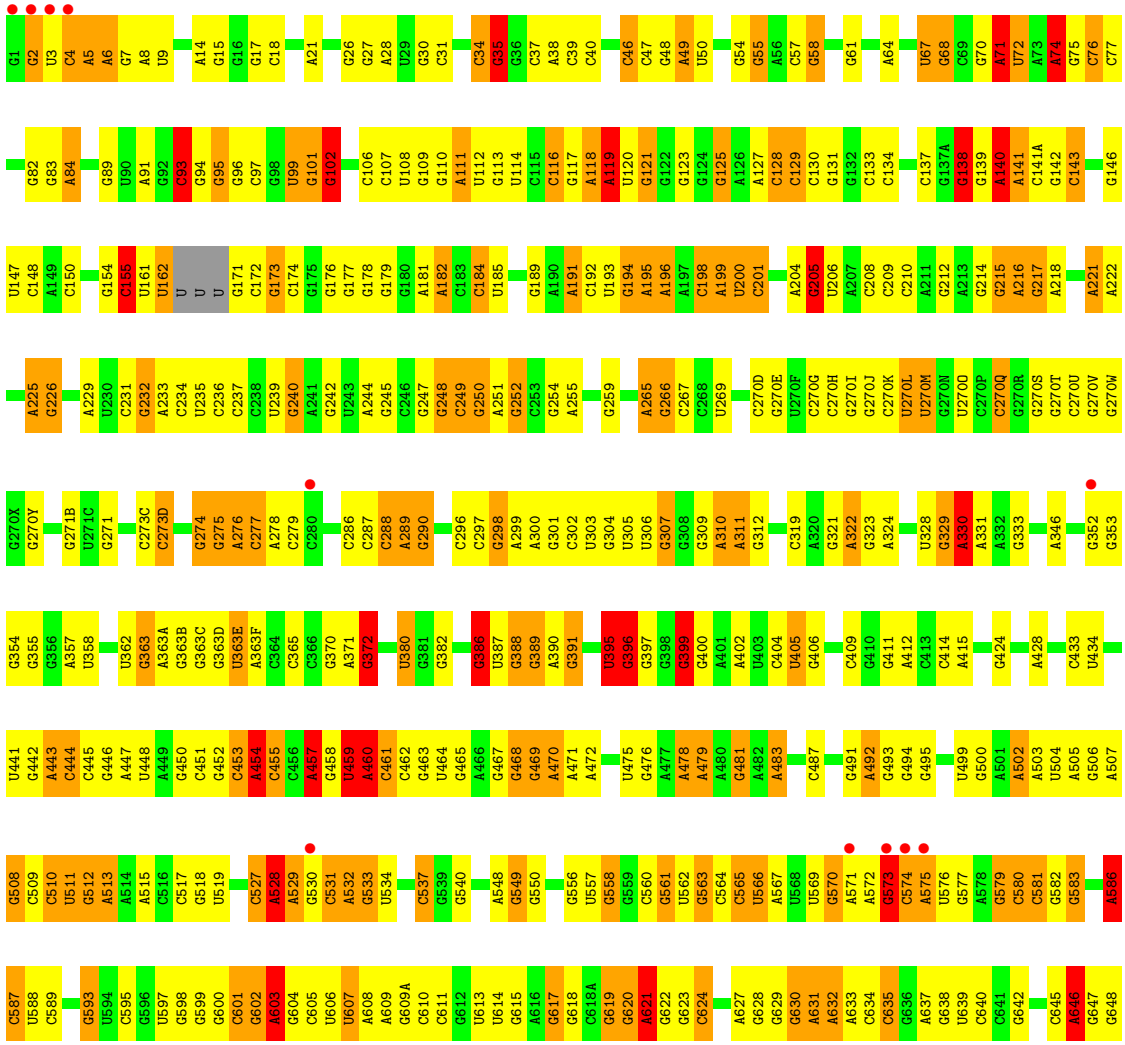

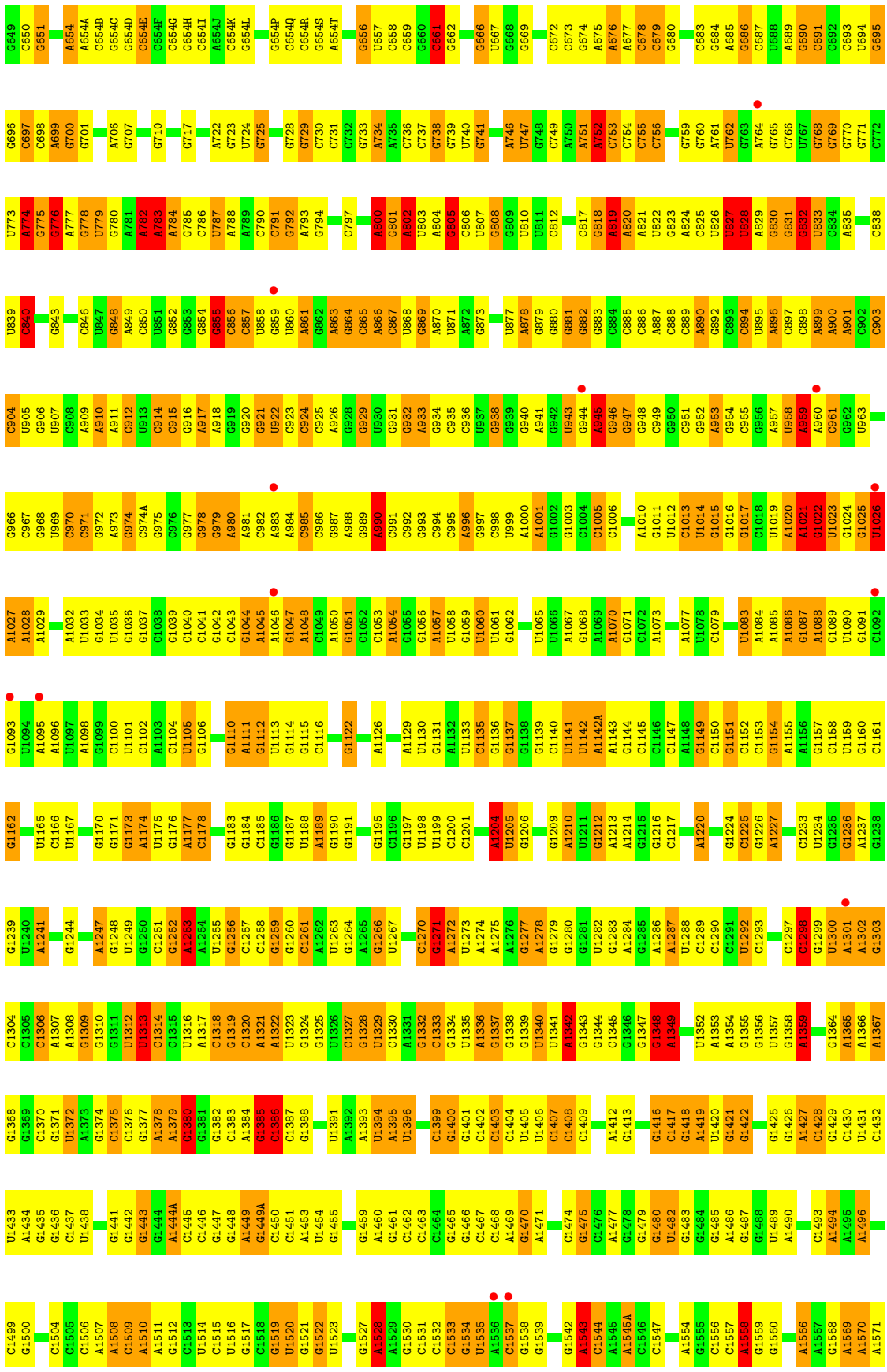
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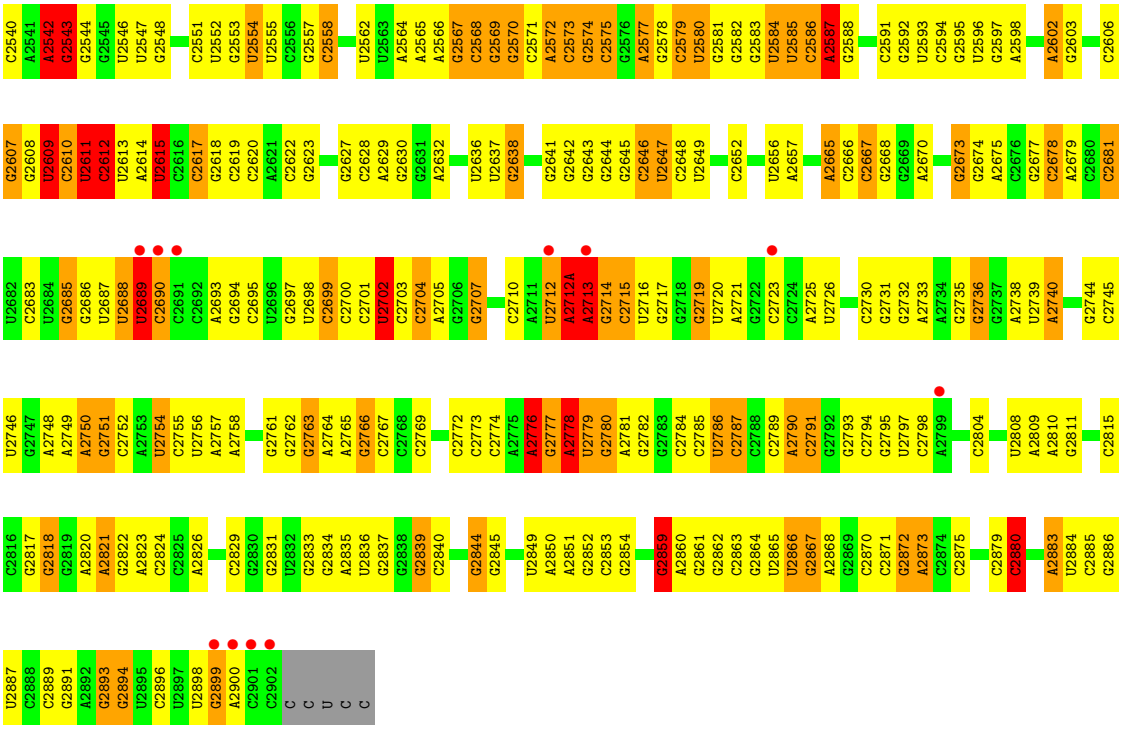
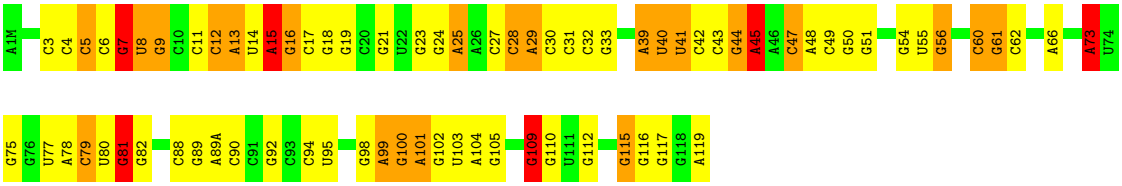


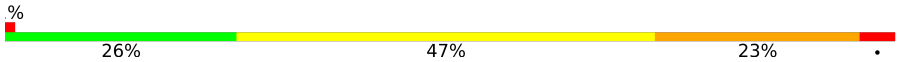
- Molecule 27: 5S ribosomal RNA

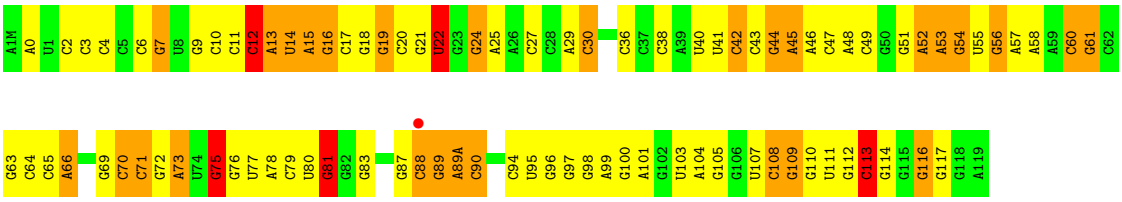
Chain 16:



- Molecule 27: 5S ribosomal RNA

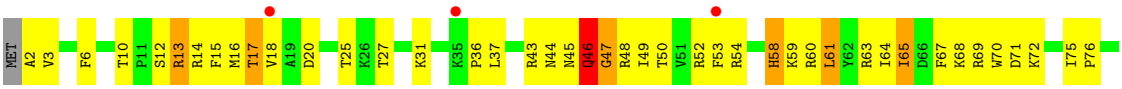
Chain 1J:

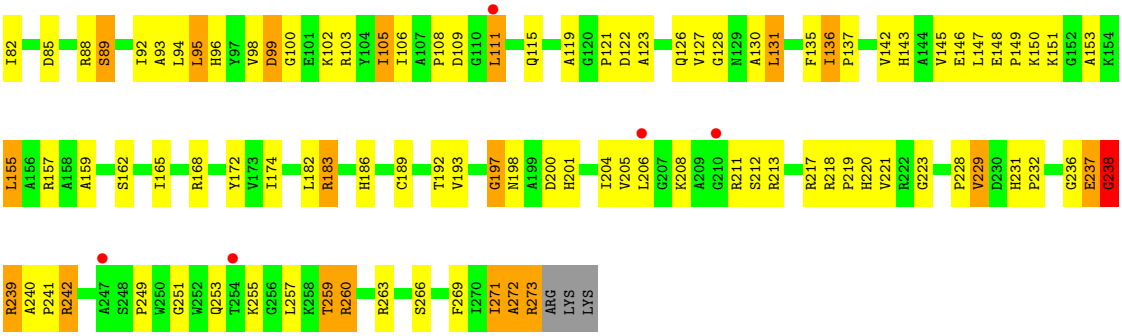




- Molecule 28: 50S ribosomal protein L2

Chain 11:





- Molecule 28: 50S ribosomal protein L2

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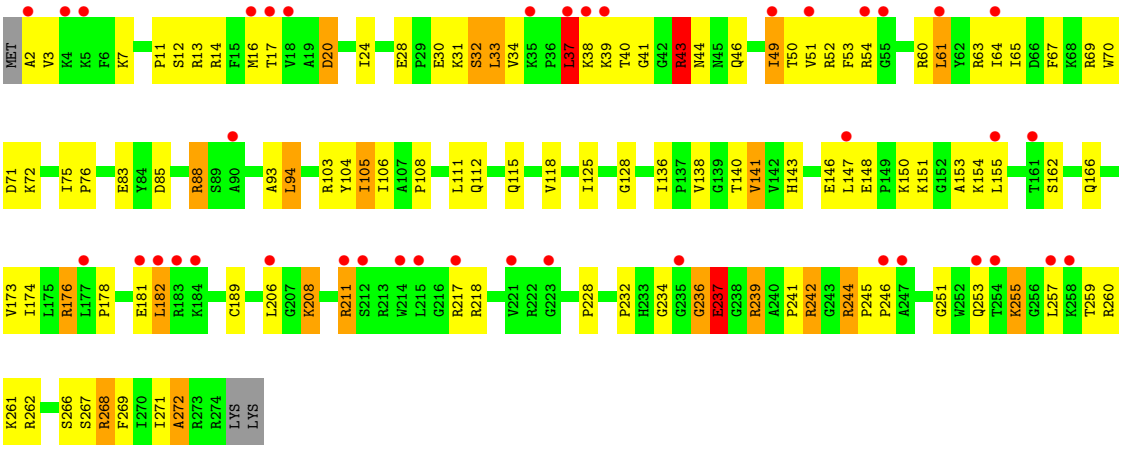
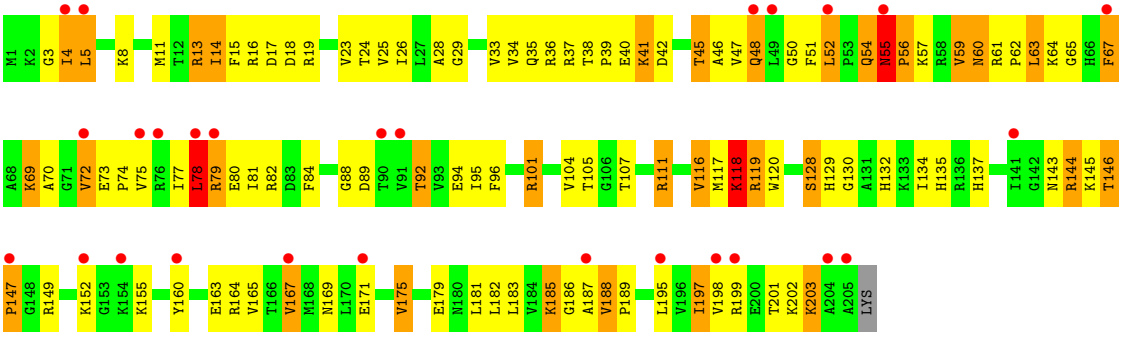


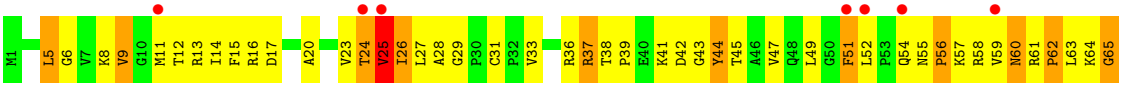
- Molecule 29: 50S ribosomal protein L3

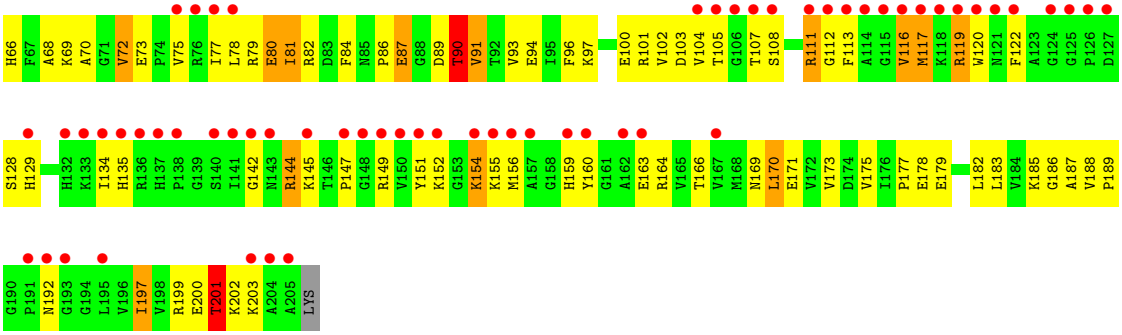
Chain 21:



- Molecule 29: 50S ribosomal protein L3

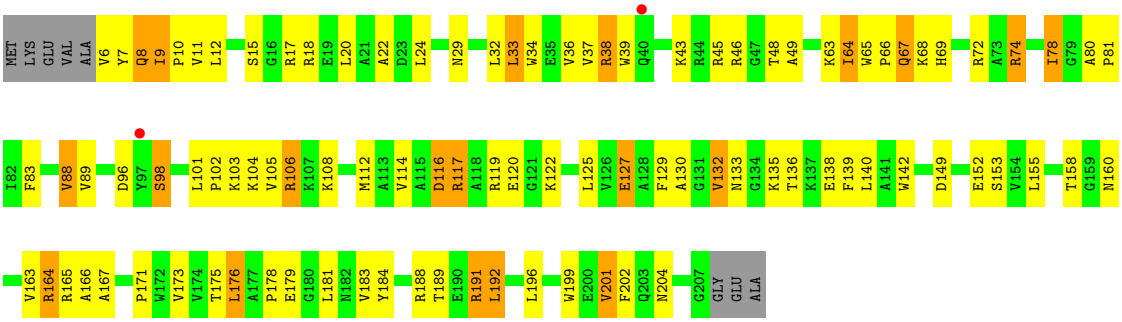
Chain 29:





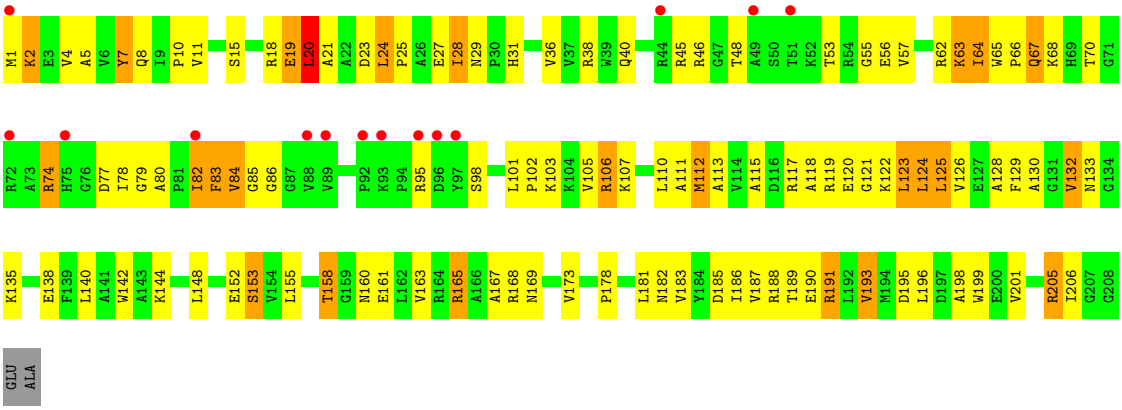
- Molecule 30: 50S ribosomal protein L4

Chain 31:



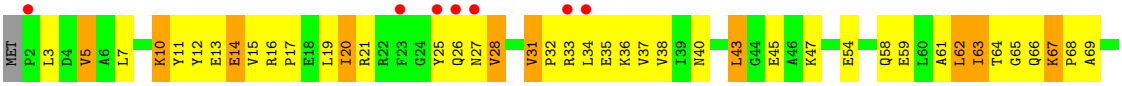
- Molecule 30: 50S ribosomal protein L4

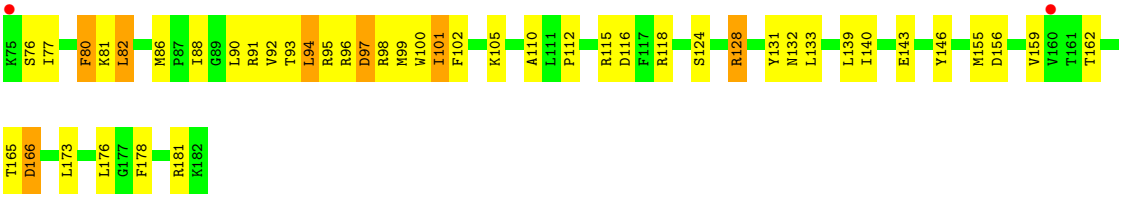
Chain 39:



- Molecule 31: 50S ribosomal protein L5

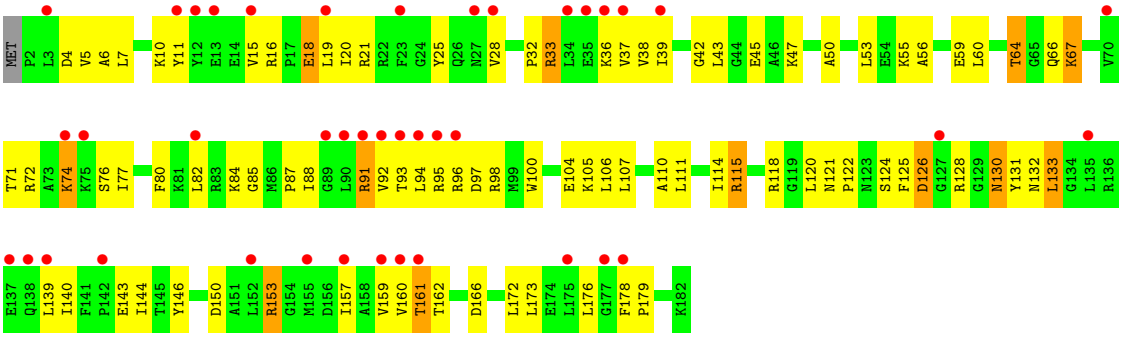
Chain 41:





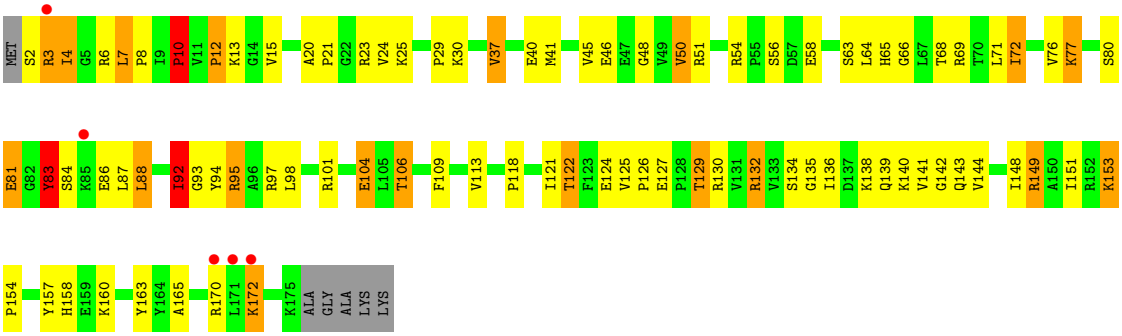
• Molecule 31: 50S ribosomal protein L5

Chain 49:



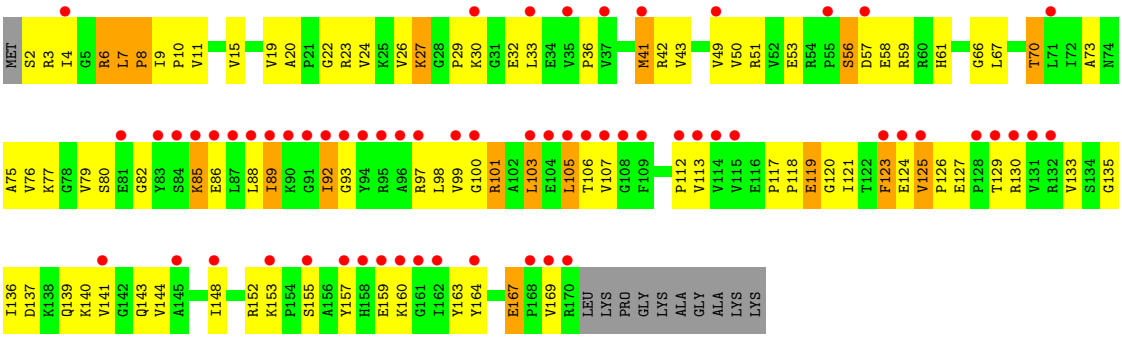
• Molecule 32: 50S ribosomal protein L6

Chain 51:



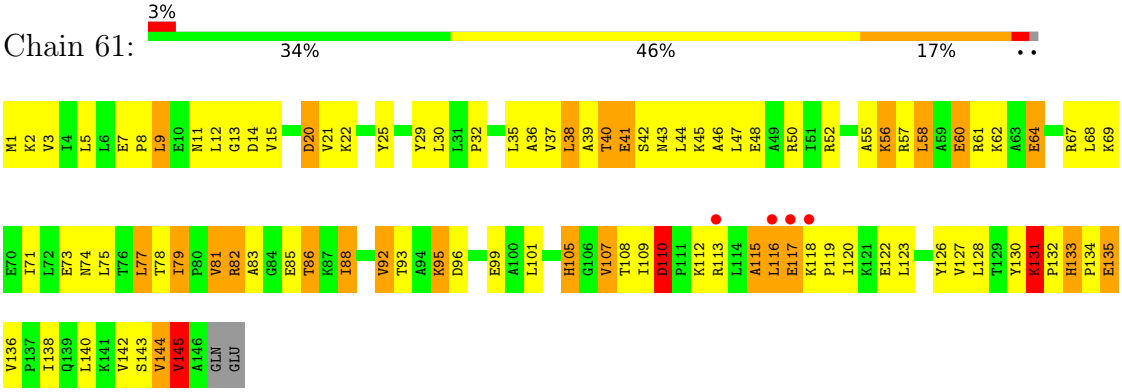
• Molecule 32: 50S ribosomal protein L6

Chain 59:



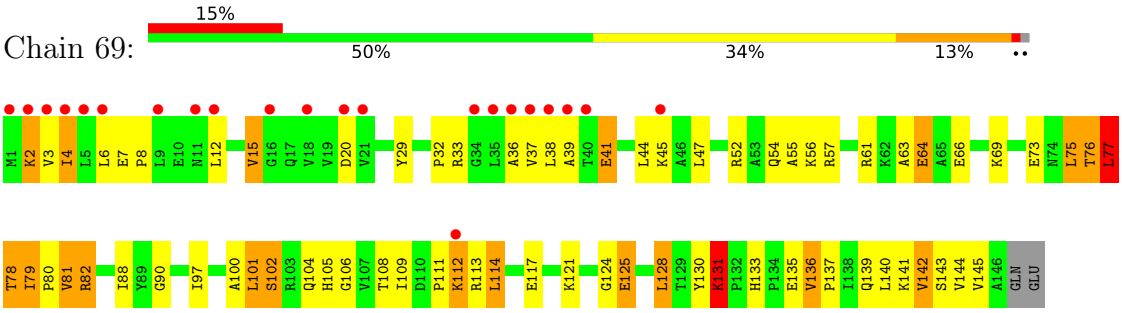
• Molecule 33: 50S ribosomal protein L9

Chain 61:



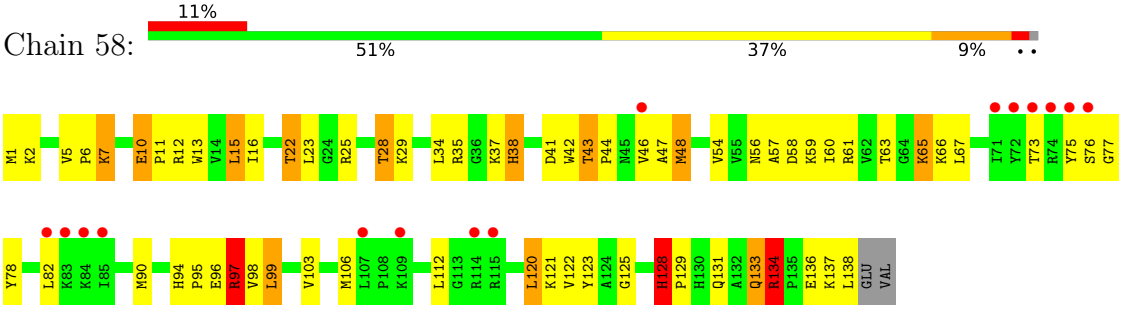
• Molecule 33: 50S ribosomal protein L9

Chain 69:



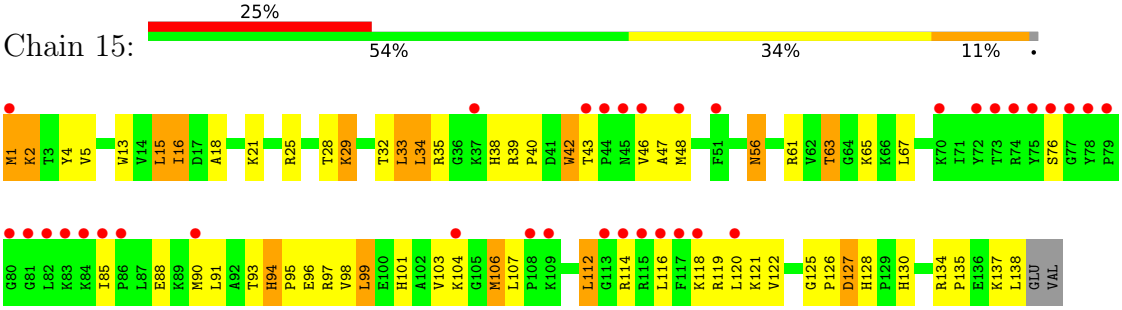
• Molecule 34: 50S ribosomal protein L13

Chain 58:



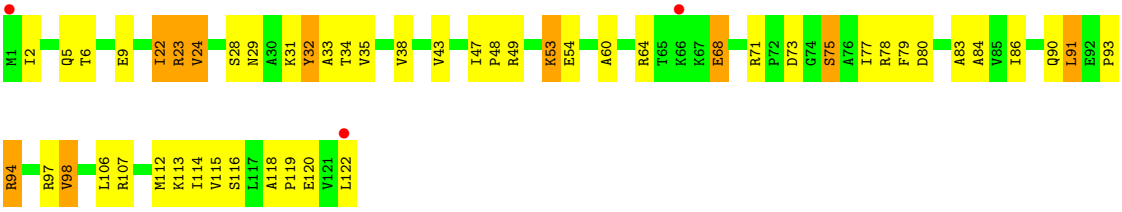
• Molecule 34: 50S ribosomal protein L13

Chain 15:



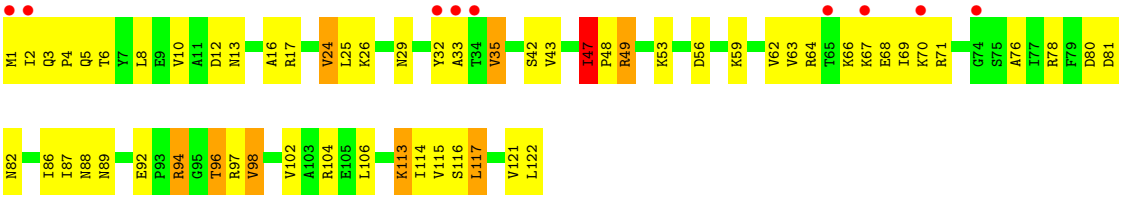
• Molecule 35: 50S ribosomal protein L14

Chain 68:



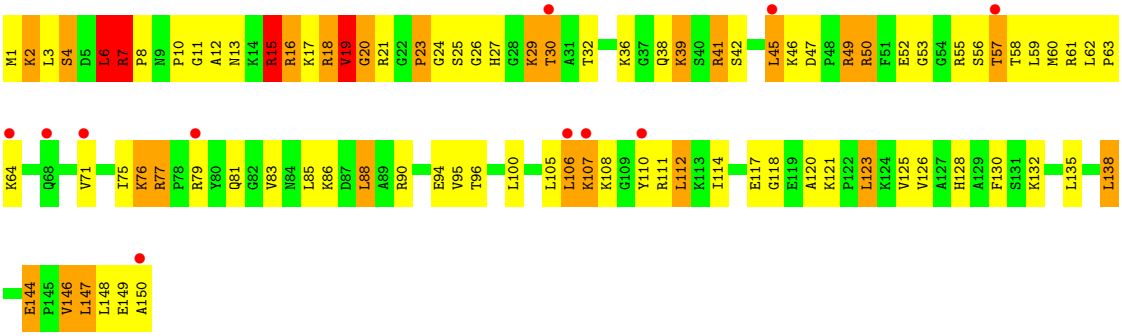
• Molecule 35: 50S ribosomal protein L14

Chain 25:



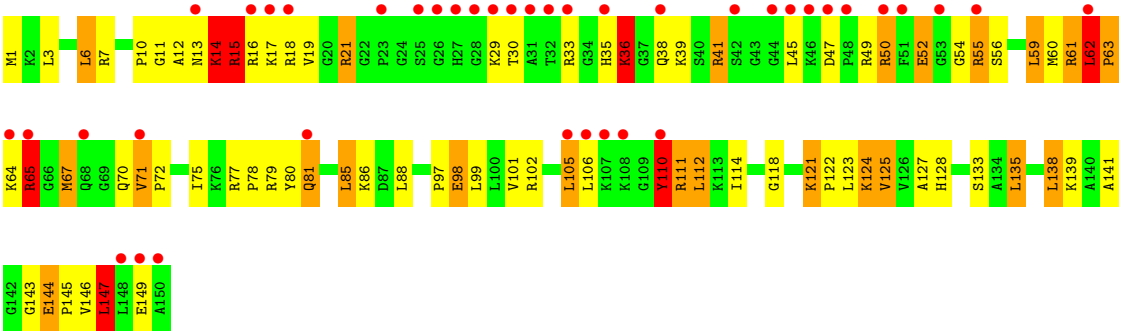
• Molecule 36: 50S ribosomal protein L15

Chain 78:



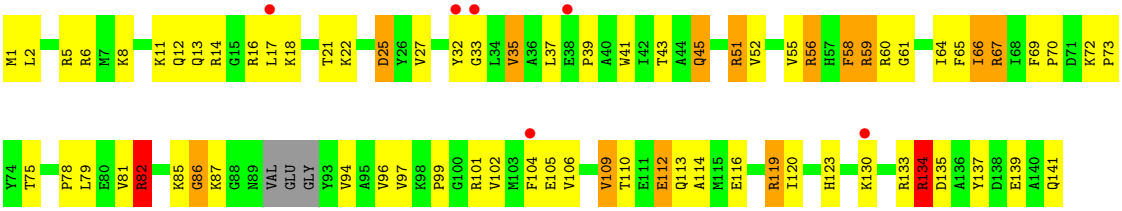
• Molecule 36: 50S ribosomal protein L15

Chain 35:



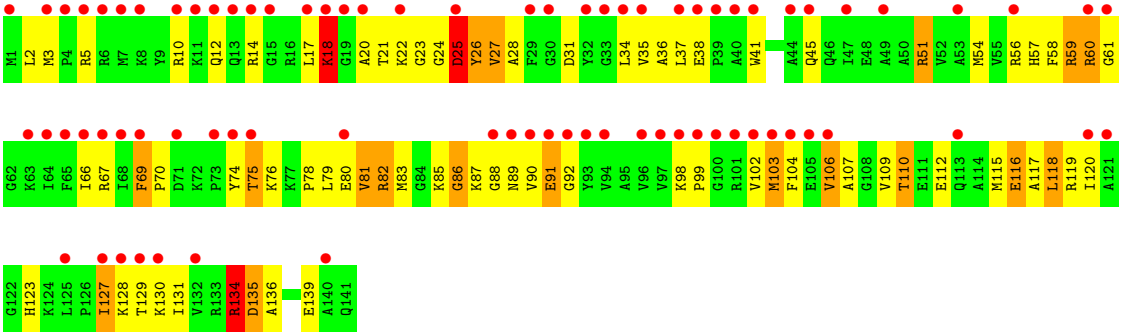
• Molecule 37: 50S ribosomal protein L16

Chain 88:



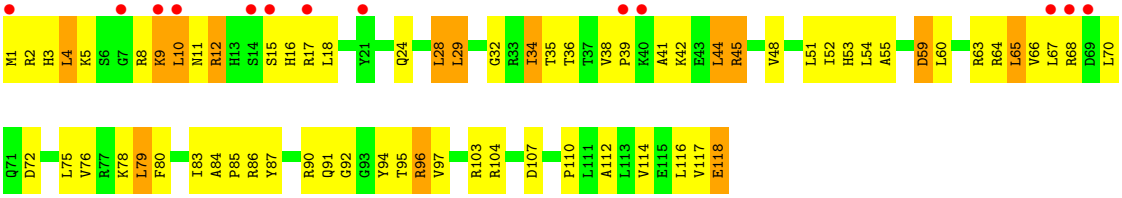
- Molecule 37: 50S ribosomal protein L16

Chain 45:



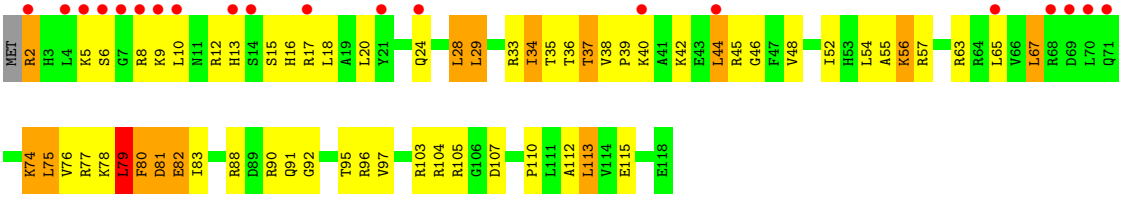
- Molecule 38: 50S ribosomal protein L17

Chain 98:



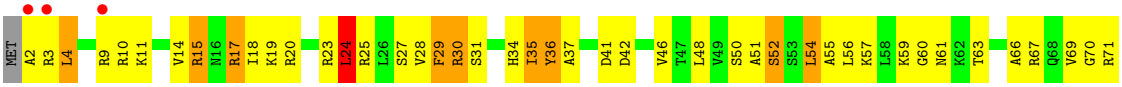
- Molecule 38: 50S ribosomal protein L17

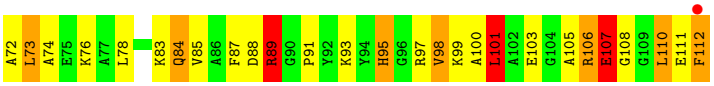
Chain 55:



- Molecule 39: 50S ribosomal protein L18

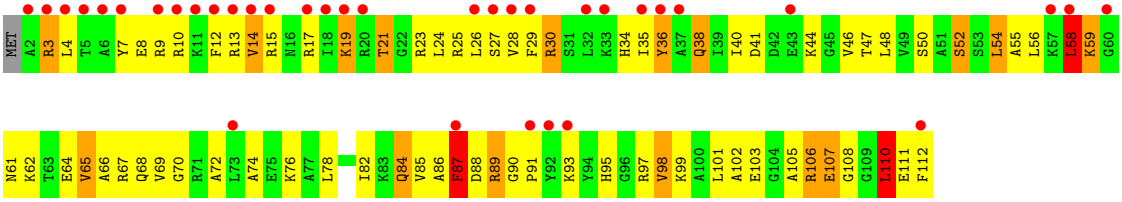
Chain A8:





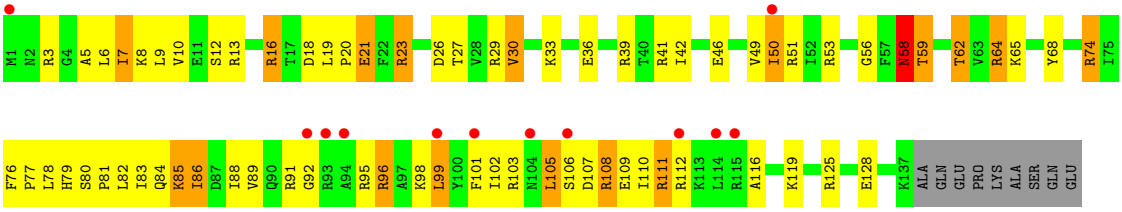
• Molecule 39: 50S ribosomal protein L18

Chain 65:



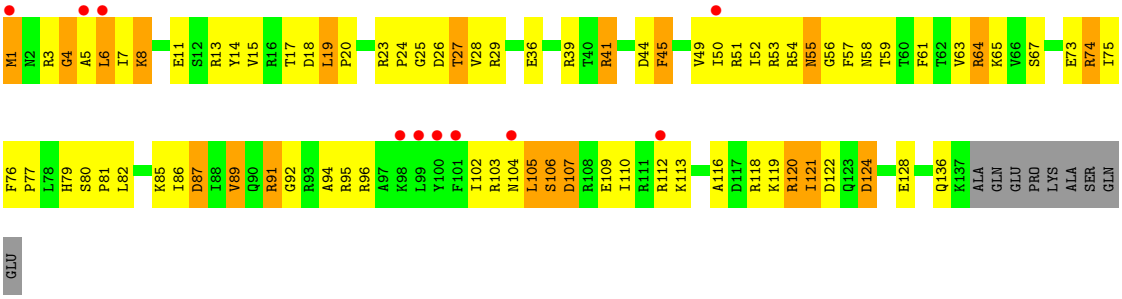
• Molecule 40: 50S ribosomal protein L19

Chain B8:



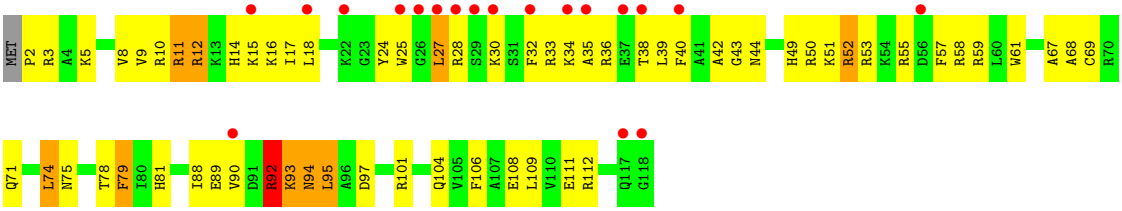
• Molecule 40: 50S ribosomal protein L19

Chain 75:



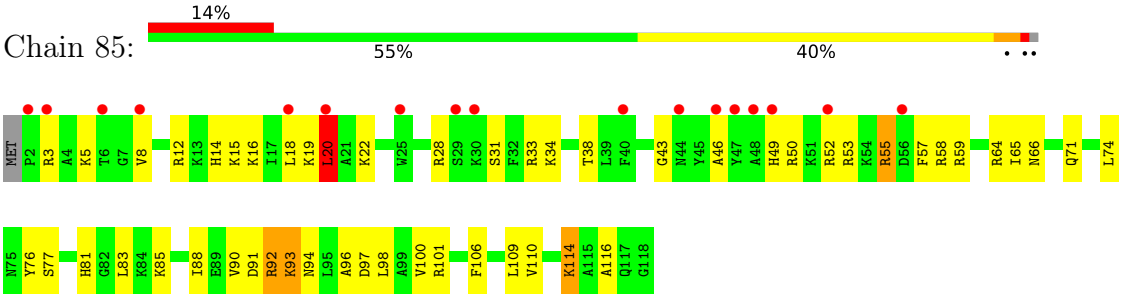
• Molecule 41: 50S ribosomal protein L20

Chain C8:



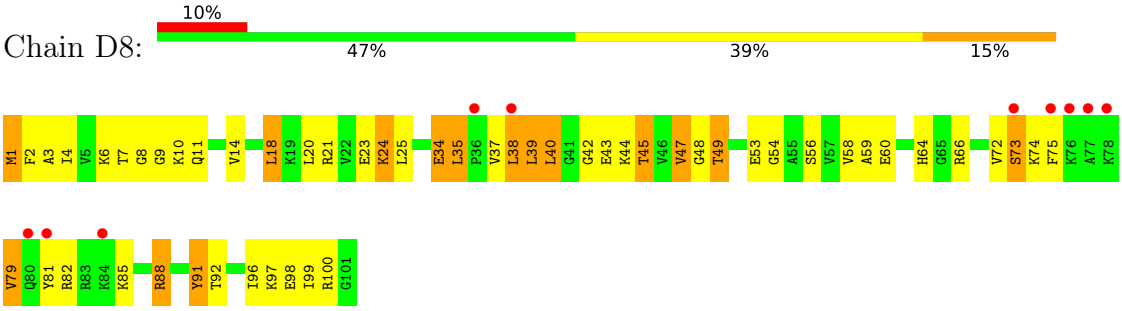
• Molecule 41: 50S ribosomal protein L20

Chain 85:



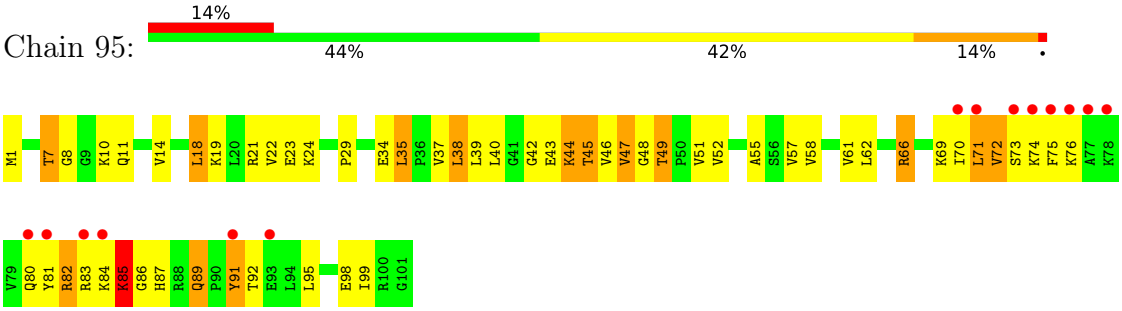
• Molecule 42: 50S ribosomal protein L21

Chain D8:



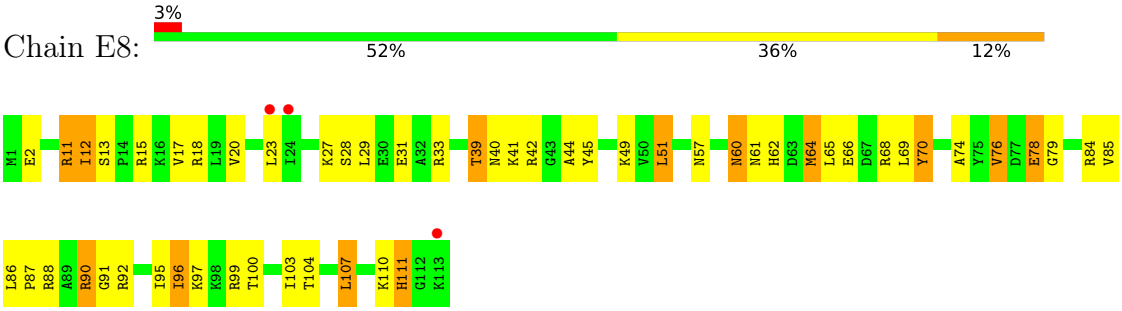
• Molecule 42: 50S ribosomal protein L21

Chain 95:



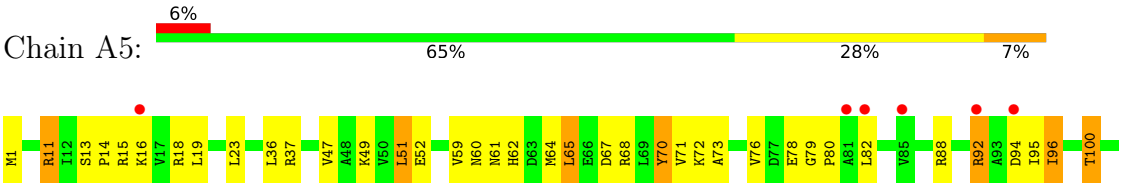
• Molecule 43: 50S ribosomal protein L22

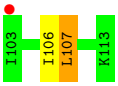
Chain E8:



• Molecule 43: 50S ribosomal protein L22

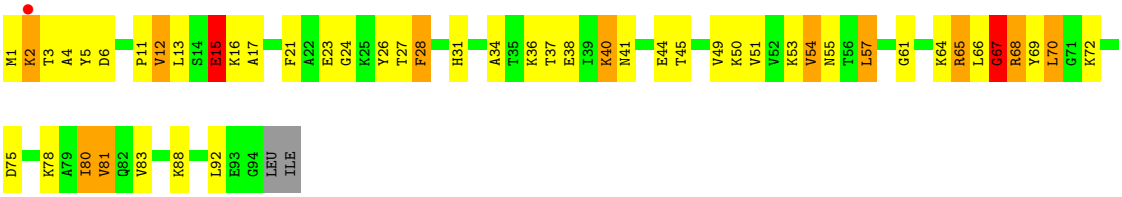
Chain A5:





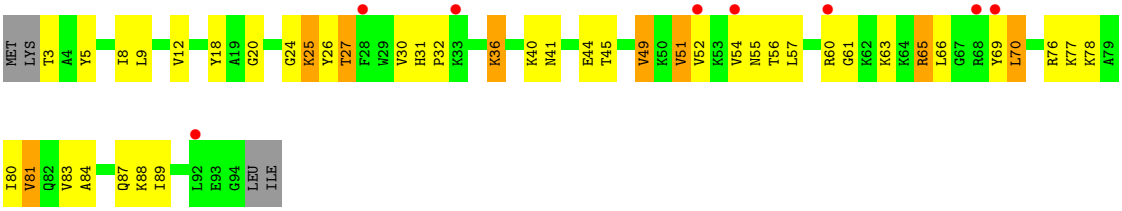
• Molecule 44: 50S ribosomal protein L23

Chain F8:



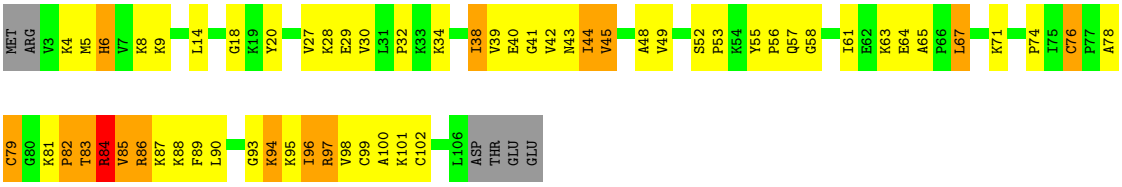
• Molecule 44: 50S ribosomal protein L23

Chain B5:



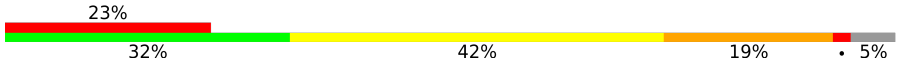
• Molecule 45: 50S ribosomal protein L24

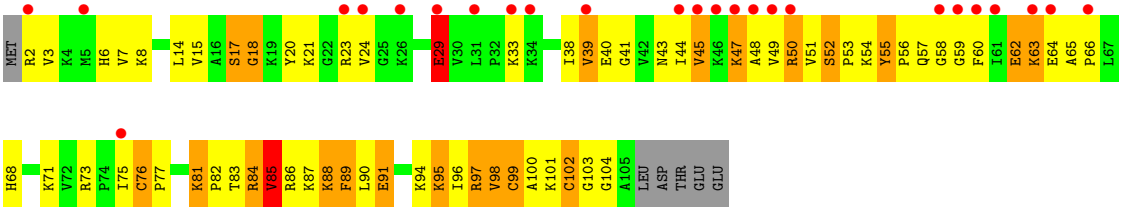
Chain G8:



• Molecule 45: 50S ribosomal protein L24

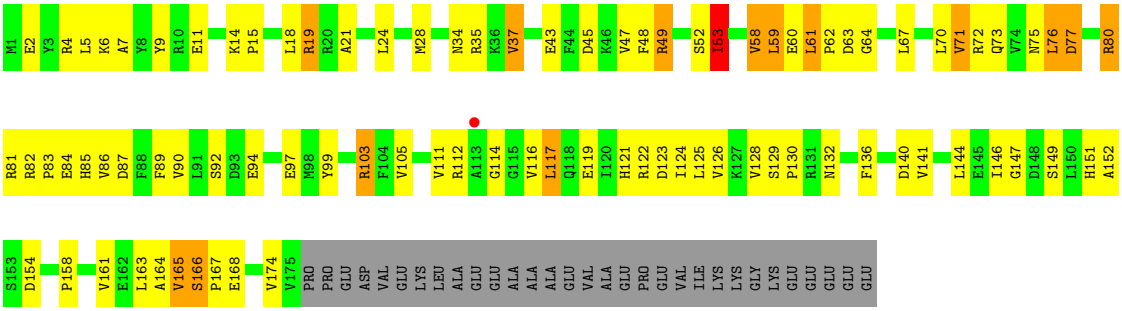
Chain C5:





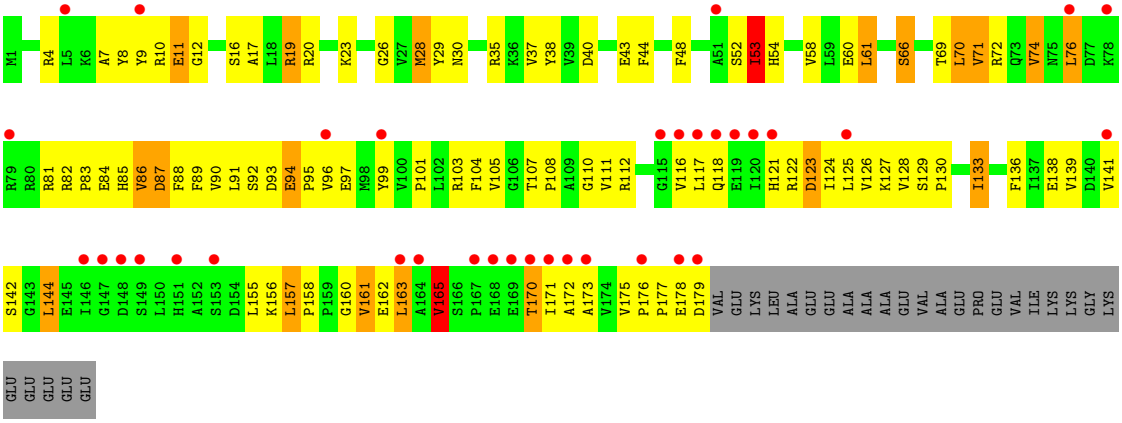
• Molecule 46: 50S ribosomal protein L25

Chain H8:



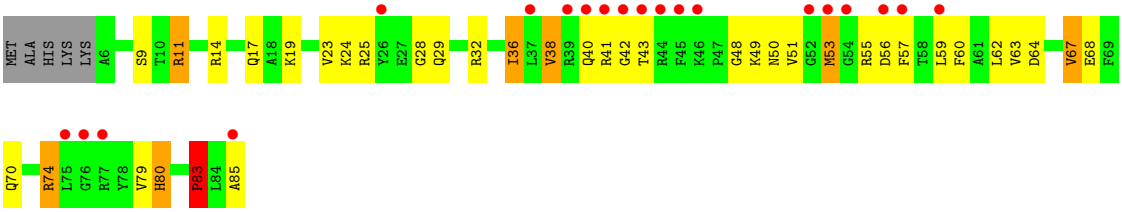
- Molecule 46: 50S ribosomal protein L25

Chain D5:



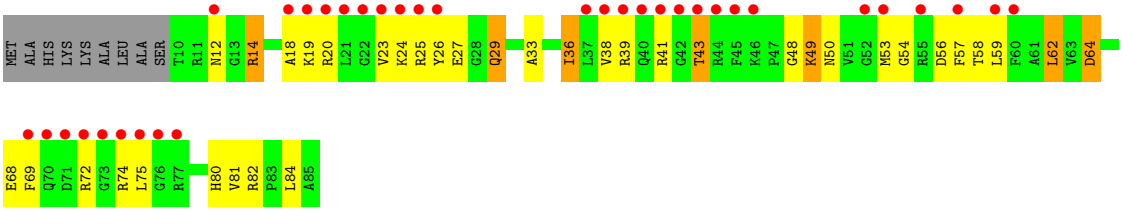
- Molecule 47: 50S ribosomal protein L27

Chain I8:



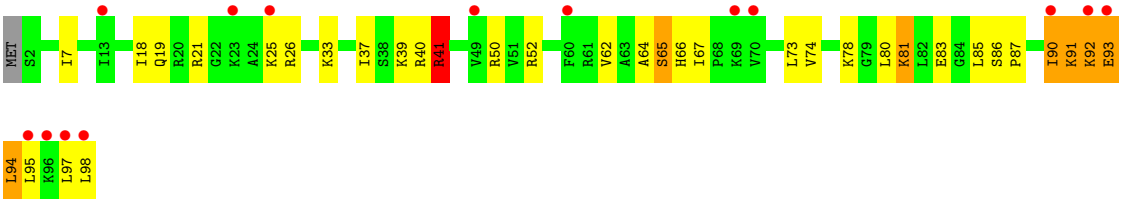
- Molecule 47: 50S ribosomal protein L27

Chain E5:



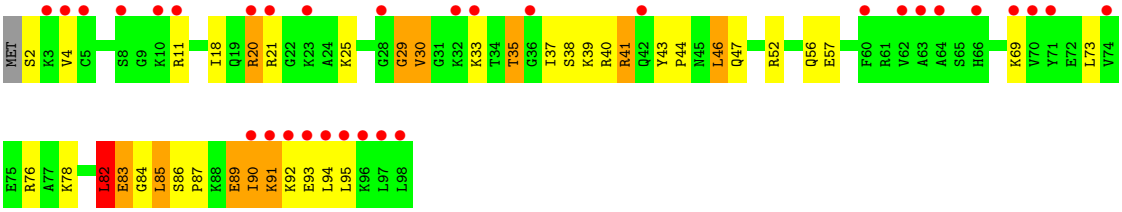
- Molecule 48: 50S ribosomal protein L28

Chain J8:



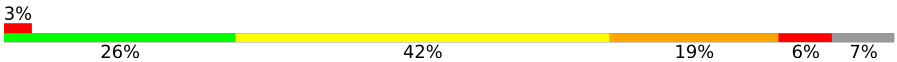
- Molecule 48: 50S ribosomal protein L28

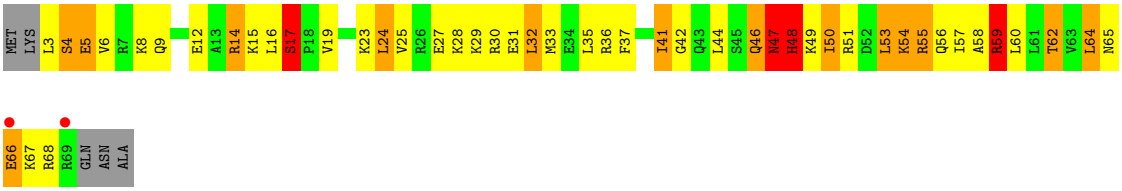
Chain F5:



- Molecule 49: 50S ribosomal protein L29

Chain K8:





- Molecule 49: 50S ribosomal protein L29

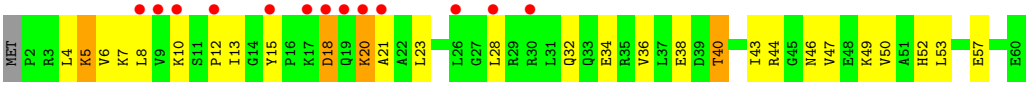
Chain G5:

- Molecule 50: 50S ribosomal protein L30

Chain L8:

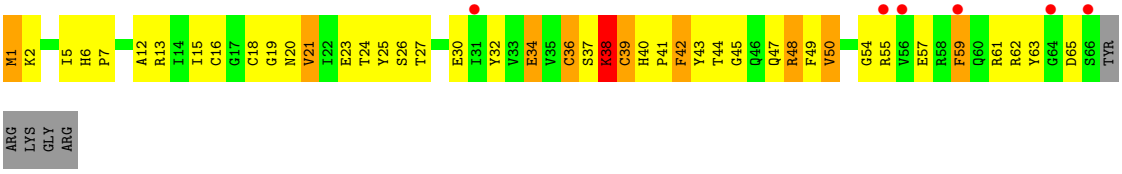
- Molecule 50: 50S ribosomal protein L30

Chain H5:



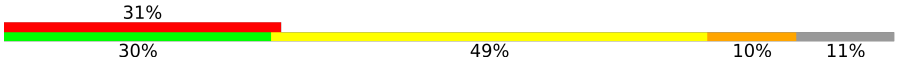
• Molecule 51: 50S ribosomal protein L31

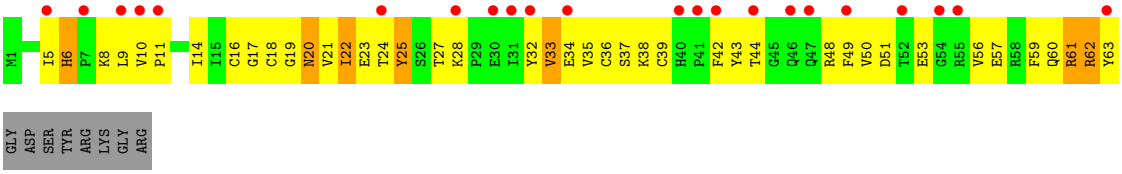
Chain M8:



• Molecule 51: 50S ribosomal protein L31

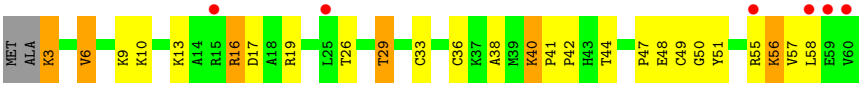
Chain I5:





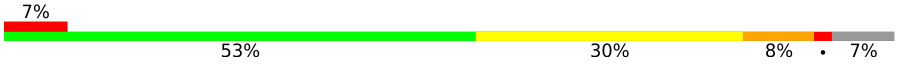
• Molecule 52: 50S ribosomal protein L32

Chain N8:



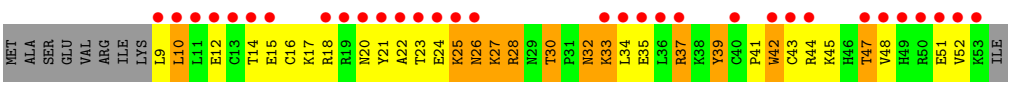
• Molecule 52: 50S ribosomal protein L32

Chain J5:



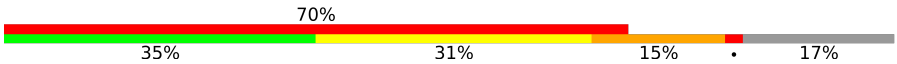
• Molecule 53: 50S ribosomal protein L33

Chain O8:



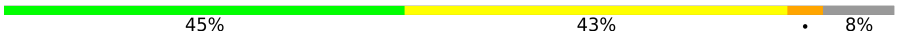
• Molecule 53: 50S ribosomal protein L33

Chain K5:



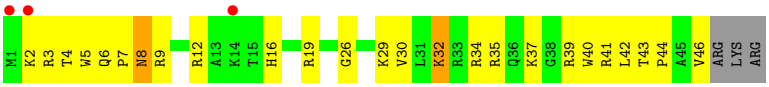
• Molecule 54: 50S ribosomal protein L34

Chain P8:



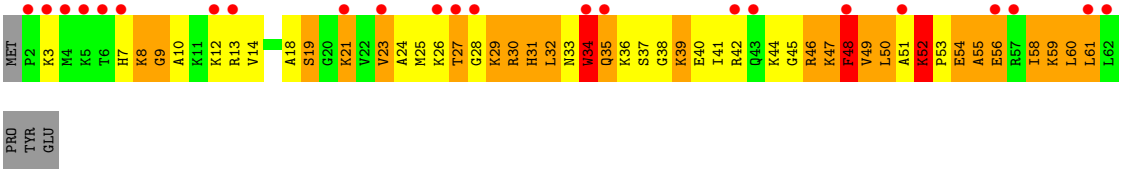
• Molecule 54: 50S ribosomal protein L34

Chain L5:



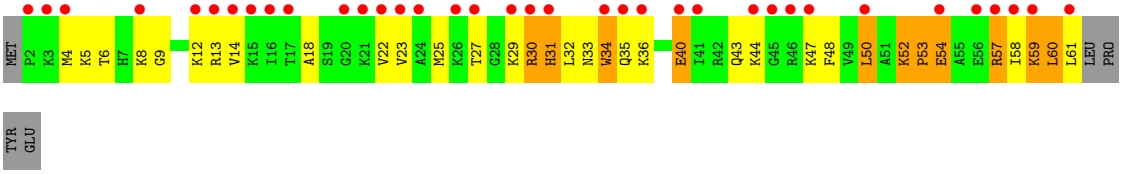
• Molecule 55: 50S ribosomal protein L35

Chain Q8:



• Molecule 55: 50S ribosomal protein L35

Chain M5:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.90Å 447.90Å 621.50Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	188.03 – 3.05 223.95 – 3.05	Depositor EDS
% Data completeness (in resolution range)	99.8 (188.03-3.05) 91.4 (223.95-3.05)	Depositor EDS
R_{merge}	0.28	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.71 (at 3.07Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.199 , (Not available) 0.200 , 0.239	Depositor DCC
R_{free} test set	1998 reflections (0.18%)	wwPDB-VP
Wilson B-factor (Å^2)	95.1	Xtriage
Anisotropy	0.265	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.27 , 89.3	EDS
L-test for twinning[2]	$< \|L\| > = 0.45$, $< L^2 > = 0.27$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.89	EDS
Total number of atoms	299951	wwPDB-VP
Average B, all atoms (Å^2)	128.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.50% of the height of the origin peak. No significant pseudotranslation is detected.*

[1]Intensities estimated from amplitudes.

[2]Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, OMC, 5MU, 4SU, MG, 7MG, PSU, MIA

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	13	0.77	9/36053 (0.0%)	1.46	483/56270 (0.9%)
1	1G	0.65	1/36025 (0.0%)	1.30	249/56227 (0.4%)
2	12	0.37	0/1959	0.58	1/2642 (0.0%)
2	1E	0.42	0/1959	0.65	0/2642
3	22	0.41	0/1636	0.60	0/2205
3	2E	0.52	0/1629	0.67	0/2195
4	32	0.50	0/1732	0.73	1/2318 (0.0%)
4	3E	0.65	2/1732 (0.1%)	0.76	1/2318 (0.0%)
5	42	0.47	0/1171	0.74	0/1576
5	4E	0.55	0/1171	0.76	1/1576 (0.1%)
6	52	0.48	0/855	0.65	0/1154
6	5E	0.58	0/855	0.70	0/1154
7	62	0.42	0/1275	0.60	0/1709
7	6E	0.46	0/1275	0.59	0/1709
8	72	0.39	0/1135	0.60	0/1527
8	7E	0.51	0/1135	0.72	0/1527
9	82	0.39	0/1028	0.59	0/1379
9	8E	0.48	0/1028	0.72	1/1379 (0.1%)
10	1A	0.38	0/814	0.60	0/1095
10	1I	0.46	0/814	0.66	0/1095
11	2A	0.46	0/879	0.65	0/1187
11	2I	0.51	0/879	0.78	0/1187
12	3A	0.54	0/991	0.76	0/1327
12	3I	0.71	0/991	0.92	0/1327
13	4A	0.36	0/943	0.59	0/1265
13	4I	0.51	0/948	0.69	0/1272
14	5A	0.43	0/484	0.65	0/643
14	5I	0.71	1/500 (0.2%)	0.79	0/664
15	6A	0.47	0/744	0.62	1/992 (0.1%)
15	6I	0.54	0/744	0.78	0/992
16	7A	0.47	0/721	0.69	0/970
16	7I	0.48	0/721	0.72	0/970

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	8A	0.52	1/847 (0.1%)	0.64	0/1131
17	8I	0.57	0/847	0.74	0/1131
18	9A	0.51	0/595	0.77	0/790
18	9I	0.56	0/595	0.78	0/790
19	AA	0.40	0/638	0.63	0/860
19	AI	0.58	0/661	0.79	0/890
20	BA	0.48	0/764	0.76	0/1007
20	BI	0.45	0/764	0.70	0/1007
21	1B	0.44	0/221	0.64	0/288
21	1F	0.50	0/221	0.73	0/288
22	1K	0.51	0/1647	1.15	10/2565 (0.4%)
23	2K	1.12	6/1721 (0.3%)	1.64	40/2682 (1.5%)
23	2L	0.99	6/1721 (0.3%)	1.42	20/2682 (0.7%)
24	1L	0.44	0/1809	0.98	4/2819 (0.1%)
24	3K	0.49	1/1809 (0.1%)	1.17	14/2819 (0.5%)
24	3L	0.49	0/1809	1.11	11/2819 (0.4%)
25	4K	0.92	0/316	1.49	5/490 (1.0%)
25	4L	0.80	0/215	1.52	3/330 (0.9%)
26	14	0.91	64/70167 (0.1%)	1.65	1671/109541 (1.5%)
26	1H	1.09	145/70233 (0.2%)	1.89	2868/109643 (2.6%)
27	16	0.92	3/2928 (0.1%)	1.67	74/4568 (1.6%)
27	1J	0.75	0/2928	1.36	17/4568 (0.4%)
28	11	0.84	1/2165 (0.0%)	1.04	7/2919 (0.2%)
28	19	0.71	0/2170	0.96	4/2926 (0.1%)
29	21	0.68	0/1601	0.91	0/2160
29	29	0.69	0/1601	0.97	2/2160 (0.1%)
30	31	0.77	0/1620	0.97	2/2194 (0.1%)
30	39	0.61	0/1662	0.84	1/2249 (0.0%)
31	41	0.58	0/1498	0.83	1/2016 (0.0%)
31	49	0.41	0/1498	0.63	0/2016
32	51	0.66	0/1362	0.87	2/1841 (0.1%)
32	59	0.37	0/1324	0.63	0/1791
33	61	0.56	0/1151	0.79	2/1558 (0.1%)
33	69	0.47	0/1151	0.73	2/1558 (0.1%)
34	15	0.62	1/1131 (0.1%)	0.86	5/1525 (0.3%)
34	58	0.65	0/1131	0.86	3/1525 (0.2%)
35	25	0.64	0/942	0.77	0/1269
35	68	0.71	0/942	0.84	1/1269 (0.1%)
36	35	0.68	0/1161	1.06	4/1544 (0.3%)
36	78	0.75	0/1161	1.08	1/1544 (0.1%)
37	45	0.66	1/1142 (0.1%)	0.88	1/1527 (0.1%)
37	88	0.87	0/1106	1.05	2/1478 (0.1%)
38	55	0.66	0/973	0.88	2/1302 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	98	0.60	0/981	0.87	0/1312
39	65	0.51	0/891	0.91	2/1187 (0.2%)
39	A8	0.71	0/891	0.98	4/1187 (0.3%)
40	75	0.59	0/1155	0.77	0/1542
40	B8	0.66	0/1155	0.84	1/1542 (0.1%)
41	85	0.57	0/981	0.75	1/1306 (0.1%)
41	C8	0.72	0/981	0.93	2/1306 (0.2%)
42	95	0.64	0/789	0.87	1/1057 (0.1%)
42	D8	0.66	0/789	0.84	1/1057 (0.1%)
43	A5	0.69	0/910	0.85	0/1220
43	E8	0.71	0/910	0.95	3/1220 (0.2%)
44	B5	0.77	0/739	0.86	0/993
44	F8	0.90	2/756 (0.3%)	0.98	0/1014
45	C5	0.69	0/807	0.90	1/1076 (0.1%)
45	G8	0.73	0/804	0.96	0/1073
46	D5	0.44	0/1460	0.67	0/1982
46	H8	0.50	0/1427	0.80	2/1935 (0.1%)
47	E5	0.66	0/614	0.88	0/819
47	I8	0.82	0/634	0.98	0/847
48	F5	0.66	0/769	0.93	2/1022 (0.2%)
48	J8	0.74	0/769	0.95	1/1022 (0.1%)
49	G5	0.58	0/560	0.81	1/741 (0.1%)
49	K8	0.94	2/565 (0.4%)	0.94	1/748 (0.1%)
50	H5	0.52	0/473	0.71	0/635
50	L8	0.73	1/457 (0.2%)	0.91	0/613
51	I5	0.46	0/527	0.72	0/709
51	M8	0.53	0/545	0.77	0/733
52	J5	0.71	0/448	0.88	0/606
52	N8	0.68	0/467	0.90	0/632
53	K5	0.74	0/396	0.85	1/529 (0.2%)
53	O8	0.87	1/396 (0.3%)	0.87	1/529 (0.2%)
54	L5	0.79	0/406	0.93	1/536 (0.2%)
54	P8	0.96	0/399	1.13	1/526 (0.2%)
55	M5	0.84	0/483	0.98	0/634
55	Q8	1.25	4/491 (0.8%)	1.62	7/645 (1.1%)
All	All	0.83	252/322599 (0.1%)	1.47	5551/483107 (1.1%)

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	3E	0	2
9	8E	0	1
10	1A	0	1
11	2I	0	2
13	4I	0	2
15	6I	0	1
16	7I	0	1
19	AI	0	2
20	BA	0	2
28	11	0	4
28	19	0	5
29	21	0	3
29	29	0	3
30	39	0	2
31	41	0	1
33	61	0	4
33	69	0	1
35	25	0	1
36	35	0	5
37	45	0	4
37	88	0	2
39	65	0	1
39	A8	0	2
40	75	0	2
40	B8	0	1
41	85	0	1
41	C8	0	1
43	E8	0	1
44	B5	0	2
44	F8	0	1
45	C5	0	3
45	G8	0	1
46	D5	0	1
46	H8	0	1
47	I8	0	2
48	F5	0	2
49	G5	0	3
49	K8	0	3
51	M8	0	2
52	J5	0	1
52	N8	0	1
53	O8	0	1
55	M5	0	1

Continued on next page...

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Mol	Chain	#Chirality outliers	#Planarity outliers
55	Q8	0	5
All	All	0	88

All (252) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2L	21	U	C5-C6	19.03	1.51	1.34
23	2K	21	U	C5-C6	16.80	1.49	1.34
26	1H	774	A	N9-C4	-13.91	1.29	1.37
26	14	783	A	N9-C4	-12.95	1.30	1.37
23	2K	21	U	C2-N3	12.76	1.46	1.37
23	2L	21	U	C2-N3	12.46	1.46	1.37
26	1H	2430	A	N9-C4	-12.19	1.30	1.37
26	1H	783	A	N3-C4	-11.22	1.28	1.34
26	1H	676	A	N9-C4	-11.21	1.31	1.37
34	15	42	TRP	NE1-CE2	-10.77	1.23	1.37
26	1H	783	A	N9-C4	-10.71	1.31	1.37
26	1H	1614	A	N9-C4	-10.49	1.31	1.37
23	2K	21	U	N1-C2	10.36	1.47	1.38
26	1H	783	A	C5-C6	-10.32	1.31	1.41
23	2L	21	U	C4-C5	9.83	1.52	1.43
4	3E	12	CYS	CB-SG	9.57	1.98	1.82
26	1H	676	A	C5-C4	9.48	1.45	1.38
26	14	774	A	N9-C4	-9.41	1.32	1.37
26	1H	676	A	N9-C8	9.39	1.45	1.37
26	1H	621	A	N9-C4	-9.21	1.32	1.37
14	5I	27	CYS	CB-SG	-9.15	1.66	1.82
26	14	1950	G	C2-N3	9.05	1.40	1.32
26	1H	71	A	N9-C4	-8.97	1.32	1.37
26	1H	783	A	N7-C5	-8.94	1.33	1.39
23	2K	21	U	C4-C5	8.88	1.51	1.43
26	1H	1899	G	N9-C4	-8.75	1.30	1.38
26	1H	693	C	N3-C4	-8.58	1.27	1.33
23	2L	21	U	N1-C2	8.58	1.46	1.38
26	1H	1616	A	N9-C4	-8.56	1.32	1.37
26	1H	1786	A	C5-C6	-8.42	1.33	1.41
26	1H	805	G	N9-C8	-8.40	1.31	1.37
26	14	783	A	N3-C4	-8.40	1.29	1.34
26	1H	2346	A	N3-C4	-8.38	1.29	1.34
26	1H	1786	A	N7-C5	-8.34	1.34	1.39
49	K8	5	GLU	CG-CD	8.17	1.64	1.51
26	1H	1698	A	N9-C4	-8.15	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1612	C	N1-C6	-8.13	1.32	1.37
26	1H	74	A	N9-C4	-7.92	1.33	1.37
26	14	783	A	C5-C6	-7.74	1.34	1.41
26	1H	1899	G	N3-C4	-7.71	1.30	1.35
23	2K	21	U	N3-C4	7.62	1.45	1.38
26	1H	945	A	C2-N3	7.53	1.40	1.33
26	1H	71	A	C6-N6	-7.52	1.27	1.33
26	14	945	A	C5-C6	-7.48	1.34	1.41
26	14	1616	A	N9-C4	-7.44	1.33	1.37
26	1H	1332	G	N9-C4	-7.42	1.32	1.38
1	13	792	A	N9-C4	-7.38	1.33	1.37
26	1H	2713	A	C5-C4	7.30	1.43	1.38
26	1H	676	A	N3-C4	-7.28	1.30	1.34
49	K8	5	GLU	CB-CG	7.27	1.66	1.52
53	O8	42	TRP	CB-CG	7.13	1.63	1.50
26	1H	1786	A	N3-C4	-6.98	1.30	1.34
26	1H	774	A	N3-C4	-6.97	1.30	1.34
23	2L	21	U	N3-C4	6.97	1.44	1.38
26	14	2346	A	N3-C4	-6.96	1.30	1.34
26	1H	2248	C	N3-C4	-6.94	1.29	1.33
23	2L	21	U	N1-C6	6.92	1.44	1.38
26	1H	860	U	N1-C2	6.92	1.44	1.38
26	1H	1786	A	N9-C4	-6.88	1.33	1.37
26	1H	1379	A	N9-C4	-6.87	1.33	1.37
26	14	74	A	N9-C4	-6.85	1.33	1.37
26	1H	945	A	N7-C5	-6.81	1.35	1.39
26	1H	1969	A	C6-N1	-6.80	1.30	1.35
55	Q8	54	GLU	CG-CD	6.79	1.62	1.51
26	1H	2252	G	C5-C4	-6.78	1.33	1.38
26	1H	828	U	C2-O2	6.75	1.28	1.22
26	1H	71	A	C5-C4	6.71	1.43	1.38
26	1H	138	G	N9-C8	6.70	1.42	1.37
26	1H	2585	U	N1-C2	6.66	1.44	1.38
26	1H	774	A	N9-C8	6.65	1.43	1.37
26	14	751	A	N9-C4	-6.64	1.33	1.37
26	14	676	A	N9-C4	-6.63	1.33	1.37
26	1H	1966	A	N9-C4	-6.62	1.33	1.37
4	3E	9	CYS	CB-SG	6.61	1.93	1.82
26	1H	945	A	N3-C4	-6.59	1.30	1.34
26	14	1272	A	N3-C4	6.58	1.38	1.34
26	1H	1899	G	N9-C8	6.58	1.42	1.37
26	1H	945	A	C5-C4	6.55	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1950	G	C5-C4	6.54	1.43	1.38
26	1H	579	G	C2-N3	-6.51	1.27	1.32
23	2K	21	U	N1-C6	6.49	1.43	1.38
26	14	783	A	N7-C5	-6.49	1.35	1.39
1	13	792	A	N7-C5	-6.48	1.35	1.39
26	14	2287	A	N9-C4	-6.47	1.33	1.37
26	1H	71	A	N9-C8	6.46	1.43	1.37
26	1H	265	A	N3-C4	-6.42	1.31	1.34
26	1H	2031	A	N9-C4	6.41	1.41	1.37
26	14	2506	U	C2-N3	6.37	1.42	1.37
26	1H	74	A	N3-C4	-6.34	1.31	1.34
26	1H	528	A	N9-C4	-6.33	1.34	1.37
26	1H	1786	A	C5-C4	6.31	1.43	1.38
26	1H	1254	A	C5-C6	-6.30	1.35	1.41
27	16	115	G	C2-N3	6.27	1.37	1.32
26	1H	751	A	N3-C4	-6.27	1.31	1.34
26	1H	2287	A	N9-C4	-6.27	1.34	1.37
1	13	792	A	C5-C6	-6.25	1.35	1.41
26	14	1678	G	N9-C4	-6.24	1.32	1.38
26	14	2506	U	N1-C2	6.24	1.44	1.38
1	13	1498	U	N1-C2	6.22	1.44	1.38
26	1H	1614	A	N3-C4	-6.21	1.31	1.34
27	16	119	A	N9-C4	6.19	1.41	1.37
26	1H	829	A	N9-C4	-6.17	1.34	1.37
26	1H	2246	G	N9-C8	-6.12	1.33	1.37
26	14	1204	A	N9-C4	-6.10	1.34	1.37
26	1H	71	A	C5-C6	-6.09	1.35	1.41
26	1H	689	A	N3-C4	-6.08	1.31	1.34
26	1H	777	A	N3-C4	-6.08	1.31	1.34
28	11	122	ASP	CB-CG	6.05	1.64	1.51
26	1H	1142(A)	A	N9-C4	-6.04	1.34	1.37
55	Q8	56	GLU	CG-CD	6.03	1.60	1.51
26	14	1605	C	N1-C6	-6.02	1.33	1.37
26	1H	1621	U	N1-C6	-6.00	1.32	1.38
26	1H	2250	G	C2-N3	-6.00	1.27	1.32
1	13	1502	A	C5-C6	-5.99	1.35	1.41
26	1H	783	A	N9-C8	5.98	1.42	1.37
26	1H	1678	G	C5-C4	5.95	1.42	1.38
26	1H	805	G	N7-C5	-5.94	1.35	1.39
26	1H	192	C	N3-C4	5.94	1.38	1.33
26	1H	679	C	N1-C6	-5.92	1.33	1.37
26	1H	945	A	N9-C4	-5.92	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2594	C	N1-C6	-5.91	1.33	1.37
26	1H	1161	C	N1-C6	5.90	1.40	1.37
26	1H	216	A	N9-C4	-5.90	1.34	1.37
26	14	1617	C	N1-C6	-5.89	1.33	1.37
26	14	1819	A	N7-C5	-5.89	1.35	1.39
26	14	1303	G	C6-N1	-5.88	1.35	1.39
26	1H	1616	A	N7-C5	-5.88	1.35	1.39
26	1H	2373	G	C2-N3	5.87	1.37	1.32
26	1H	1815	A	N3-C4	-5.86	1.31	1.34
26	14	774	A	N9-C8	5.85	1.42	1.37
26	1H	2062	A	N3-C4	5.84	1.38	1.34
26	14	821	A	N7-C5	-5.83	1.35	1.39
26	1H	2071	A	C6-N6	-5.80	1.29	1.33
26	14	2518	A	N9-C4	-5.79	1.34	1.37
26	1H	746	A	N3-C4	-5.77	1.31	1.34
1	13	760	G	N7-C5	-5.77	1.35	1.39
26	14	528	A	N9-C4	-5.74	1.34	1.37
26	1H	138	G	C5-C4	5.74	1.42	1.38
26	14	1613	G	C8-N7	-5.74	1.27	1.30
50	L8	38	GLU	CG-CD	5.74	1.60	1.51
26	14	2447	G	N9-C8	-5.71	1.33	1.37
26	1H	1950	G	C2-N3	5.70	1.37	1.32
26	14	1786	A	C5-C6	-5.70	1.35	1.41
26	1H	2346	A	N9-C4	-5.70	1.34	1.37
24	3K	76	A	C5-C4	5.69	1.42	1.38
44	F8	15	GLU	CG-CD	5.68	1.60	1.51
26	14	465	G	N9-C4	5.68	1.42	1.38
26	1H	463	G	N1-C2	-5.68	1.33	1.37
26	14	216	A	N9-C4	-5.67	1.34	1.37
26	1H	245	G	N7-C5	-5.67	1.35	1.39
26	1H	789	A	N9-C4	-5.67	1.34	1.37
26	1H	2346	A	N7-C5	-5.67	1.35	1.39
44	F8	15	GLU	CB-CG	5.67	1.62	1.52
26	14	1950	G	N9-C4	5.66	1.42	1.38
26	1H	1678	G	N9-C8	5.66	1.41	1.37
26	1H	621	A	C5-C6	-5.65	1.35	1.41
26	1H	821	A	N7-C5	-5.64	1.35	1.39
26	14	676	A	N9-C8	5.64	1.42	1.37
26	14	1950	G	N3-C4	5.64	1.39	1.35
26	1H	213	A	N9-C4	-5.63	1.34	1.37
26	1H	1692	U	C4-C5	-5.63	1.38	1.43
26	1H	774	A	C8-N7	5.63	1.35	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2254	C	N1-C2	-5.61	1.34	1.40
26	1H	1332	G	C5-C4	5.59	1.42	1.38
26	14	2332	U	C4-C5	5.58	1.48	1.43
26	1H	195	A	C6-N1	5.57	1.39	1.35
26	1H	203	C	N1-C2	-5.56	1.34	1.40
26	14	1396	U	N1-C2	5.55	1.43	1.38
26	1H	945	A	N1-C2	5.54	1.39	1.34
26	1H	52	A	N9-C4	5.54	1.41	1.37
26	14	1278	A	N9-C4	-5.54	1.34	1.37
26	14	2346	A	N9-C4	-5.54	1.34	1.37
27	16	101	A	N9-C4	-5.53	1.34	1.37
26	1H	1427	A	N9-C4	5.51	1.41	1.37
37	45	80	GLU	CG-CD	5.51	1.60	1.51
26	1H	1382	G	C5-C6	-5.49	1.36	1.42
26	14	2606	C	N1-C6	-5.49	1.33	1.37
26	1H	204	A	N3-C4	-5.49	1.31	1.34
26	1H	1255	U	C2-N3	5.47	1.41	1.37
26	1H	70	G	C6-N1	-5.46	1.35	1.39
26	14	2430	A	N9-C4	-5.46	1.34	1.37
26	1H	2440	C	N1-C6	-5.44	1.33	1.37
26	1H	451	C	N1-C6	-5.43	1.33	1.37
26	1H	2256	G	N7-C5	-5.42	1.35	1.39
26	14	1997	G	C2-N3	5.42	1.37	1.32
26	1H	1255	U	C4-O4	5.41	1.27	1.23
26	14	1332	G	C5-C4	5.41	1.42	1.38
26	14	2518	A	C5-C6	-5.40	1.36	1.41
26	14	1950	G	C5-C6	5.40	1.47	1.42
1	1G	1473	A	N9-C4	-5.38	1.34	1.37
26	1H	1957	C	N3-C4	-5.38	1.30	1.33
26	1H	2502	G	N1-C2	-5.38	1.33	1.37
26	14	1676	A	N3-C4	-5.36	1.31	1.34
26	14	472	A	N3-C4	-5.36	1.31	1.34
26	14	1660	C	N3-C4	-5.33	1.30	1.33
26	14	2249	U	C4-O4	5.33	1.27	1.23
26	1H	140	A	C5-C6	-5.32	1.36	1.41
26	1H	608	A	N3-C4	-5.32	1.31	1.34
26	14	1698	A	C5-C6	-5.32	1.36	1.41
26	14	2062	A	C6-N1	5.32	1.39	1.35
26	14	775	G	C6-O6	-5.31	1.19	1.24
55	Q8	48	PHE	CB-CG	-5.30	1.42	1.51
26	1H	783	A	C6-N1	-5.29	1.31	1.35
26	1H	2377	A	N9-C4	-5.29	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2062	A	N7-C5	5.28	1.42	1.39
26	1H	2713	A	N9-C4	-5.28	1.34	1.37
26	14	204	A	N7-C5	-5.28	1.36	1.39
26	1H	774	A	C2-N3	-5.27	1.28	1.33
26	1H	2602	A	N3-C4	5.27	1.38	1.34
26	1H	2430	A	C5-C6	-5.27	1.36	1.41
26	1H	1210	A	N9-C4	-5.26	1.34	1.37
26	14	2612	C	N3-C4	5.26	1.37	1.33
26	1H	470	A	N3-C4	-5.26	1.31	1.34
26	1H	698	C	N1-C6	-5.25	1.34	1.37
26	1H	1613	G	N7-C5	-5.24	1.36	1.39
1	13	690	G	C5-C4	5.24	1.42	1.38
26	1H	692	C	C2-N3	5.24	1.40	1.35
26	1H	140	A	N7-C5	-5.23	1.36	1.39
26	1H	777	A	N9-C4	-5.23	1.34	1.37
26	14	2015	A	N3-C4	-5.23	1.31	1.34
26	1H	1982	C	C4-C5	-5.23	1.38	1.43
26	1H	2713	A	N9-C8	5.23	1.42	1.37
26	1H	1784	A	N7-C5	5.23	1.42	1.39
26	1H	1392	A	N9-C4	5.22	1.41	1.37
26	14	1645	G	C5-C4	-5.21	1.34	1.38
26	14	676	A	C5-C4	5.19	1.42	1.38
26	1H	1698	A	C5-C6	-5.18	1.36	1.41
26	1H	2053	G	C5-C4	-5.18	1.34	1.38
26	1H	1888	G	N9-C4	5.17	1.42	1.38
26	1H	2494	G	C2-N3	-5.16	1.28	1.32
26	14	1786	A	N9-C4	-5.14	1.34	1.37
26	1H	187	G	N7-C5	-5.14	1.36	1.39
26	1H	1311	G	N9-C8	-5.14	1.34	1.37
26	1H	2451	A	C6-N1	-5.14	1.31	1.35
26	14	621	A	N9-C4	-5.13	1.34	1.37
26	1H	952	G	C5-C4	-5.12	1.34	1.38
26	14	1825	A	C6-N1	-5.12	1.31	1.35
26	14	1698	A	N7-C5	-5.12	1.36	1.39
1	13	1227	A	N9-C4	-5.11	1.34	1.37
26	1H	1385	G	N9-C4	-5.11	1.33	1.38
26	1H	1971	A	C5-C4	-5.11	1.35	1.38
55	Q8	54	GLU	CB-CG	5.11	1.61	1.52
26	1H	1786	A	N1-C2	5.11	1.39	1.34
26	1H	122	G	C2-N3	5.10	1.36	1.32
1	13	1483	A	N9-C4	-5.09	1.34	1.37
26	1H	1786	A	C6-N1	-5.08	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1950	G	N9-C8	5.08	1.41	1.37
26	14	515	A	N9-C4	-5.08	1.34	1.37
26	1H	663	G	N3-C4	-5.05	1.31	1.35
17	8A	49	GLU	CG-CD	5.04	1.59	1.51
26	14	1342	A	N3-C4	-5.04	1.31	1.34
26	1H	1349	A	N9-C8	5.03	1.41	1.37

All (5551) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1786	A	C2-N3-C4	-22.74	99.23	110.60
26	1H	1899	G	N3-C4-N9	-22.01	112.80	126.00
26	1H	676	A	C2-N3-C4	-20.28	100.46	110.60
26	1H	1899	G	C2-N3-C4	-19.38	102.21	111.90
26	1H	783	A	C2-N3-C4	-18.91	101.14	110.60
26	14	741	G	O5'-P-OP1	-18.63	88.34	110.70
26	1H	1786	A	N1-C2-N3	17.51	138.05	129.30
26	1H	1899	G	N3-C4-C5	17.49	137.35	128.60
26	1H	1982	C	O5'-P-OP2	-17.27	89.98	110.70
26	1H	1332	G	C2-N3-C4	-17.00	103.40	111.90
26	1H	1786	A	N7-C8-N9	16.89	122.25	113.80
26	1H	945	A	C4-C5-C6	16.82	125.41	117.00
26	1H	945	A	C6-C5-N7	-16.71	120.60	132.30
26	1H	774	A	N3-C4-N9	-16.44	114.25	127.40
26	1H	968	G	O5'-P-OP2	-16.32	91.01	105.70
26	1H	783	A	C5-N7-C8	-16.11	95.85	103.90
26	1H	74	A	C2-N3-C4	-15.94	102.63	110.60
26	14	1332	G	C6-C5-N7	-15.90	120.86	130.40
26	1H	1614	A	C2-N3-C4	-15.60	102.80	110.60
26	14	2436	G	O5'-P-OP1	-15.60	91.66	105.70
26	14	783	A	C2-N3-C4	-15.26	102.97	110.60
26	1H	1786	A	C5-N7-C8	-15.25	96.27	103.90
26	1H	2430	A	N1-C6-N6	15.12	127.67	118.60
26	14	945	A	N1-C6-N6	14.88	127.53	118.60
26	14	74	A	C2-N3-C4	-14.87	103.17	110.60
26	1H	1829	A	O5'-P-OP1	-14.86	92.33	105.70
26	1H	774	A	N3-C4-C5	14.76	137.13	126.80
26	1H	783	A	C8-N9-C4	-14.73	99.91	105.80
26	1H	676	A	C5-N7-C8	-14.63	96.58	103.90
26	1H	621	A	C5-N7-C8	-14.60	96.60	103.90
26	1H	621	A	C2-N3-C4	-14.57	103.31	110.60
26	1H	71	A	C2-N3-C4	-14.57	103.32	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1786	A	C6-C5-N7	-14.55	122.12	132.30
26	1H	1678	G	C2-N3-C4	-14.42	104.69	111.90
26	1H	2430	A	O5'-P-OP2	-14.37	92.77	105.70
26	1H	917	A	C2-N3-C4	-14.31	103.44	110.60
26	1H	1779	U	O5'-P-OP2	-14.27	92.86	105.70
26	1H	2314	C	O5'-P-OP2	-14.23	92.89	105.70
26	14	1698	A	N1-C6-N6	14.12	127.07	118.60
26	1H	1678	G	C5-N7-C8	-14.08	97.26	104.30
26	1H	1332	G	C5-N7-C8	-14.03	97.29	104.30
26	14	783	A	N1-C6-N6	14.01	127.00	118.60
26	1H	676	A	N3-C4-N9	-13.91	116.27	127.40
26	1H	945	A	N7-C8-N9	13.91	120.75	113.80
26	14	1899	G	N1-C2-N2	-13.88	103.71	116.20
26	1H	2430	A	C2-N3-C4	-13.85	103.68	110.60
26	14	530	G	N1-C6-O6	13.65	128.09	119.90
26	1H	676	A	N7-C8-N9	13.64	120.62	113.80
26	1H	1312	U	O5'-P-OP1	-13.63	93.44	105.70
26	1H	860	U	N3-C2-O2	-13.55	112.72	122.20
26	14	2430	A	N1-C6-N6	13.54	126.73	118.60
26	1H	621	A	N1-C6-N6	13.51	126.70	118.60
26	1H	860	U	C4-C5-C6	13.47	127.78	119.70
26	1H	801	G	O5'-P-OP2	-13.44	93.61	105.70
26	1H	676	A	N3-C4-C5	13.42	136.19	126.80
26	1H	917	A	N1-C2-N3	13.37	135.98	129.30
26	1H	2287	A	C2-N3-C4	-13.35	103.92	110.60
26	1H	1786	A	C8-N9-C4	-13.34	100.46	105.80
26	1H	774	A	C5-N7-C8	-13.25	97.27	103.90
26	1H	774	A	C6-N1-C2	13.23	126.54	118.60
26	14	1786	A	C2-N3-C4	-13.21	104.00	110.60
26	1H	140	A	N7-C8-N9	13.18	120.39	113.80
26	14	530	G	N9-C4-C5	-13.15	100.14	105.40
26	14	2518	A	N1-C6-N6	13.14	126.48	118.60
26	1H	1678	G	N7-C8-N9	13.04	119.62	113.10
26	1H	1698	A	C2-N3-C4	-13.04	104.08	110.60
26	1H	2490	G	C5-N7-C8	-12.97	97.81	104.30
23	2K	61	U	O5'-P-OP2	-12.96	94.04	105.70
26	1H	733	G	O5'-P-OP2	-12.92	94.07	105.70
26	1H	1332	G	N3-C4-C5	12.91	135.06	128.60
26	1H	2346	A	N1-C2-N3	12.89	135.75	129.30
26	1H	1616	A	C5-N7-C8	-12.89	97.46	103.90
26	1H	1204	A	O4'-C1'-N9	12.86	118.49	108.20
26	14	1332	G	C4-C5-N7	12.80	115.92	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	783	A	N7-C8-N9	12.79	120.19	113.80
26	14	1639	U	O5'-P-OP2	-12.78	94.20	105.70
26	14	1274	A	N1-C6-N6	12.77	126.26	118.60
26	14	1786	A	C5-N7-C8	-12.76	97.52	103.90
26	1H	1931	U	N3-C2-O2	-12.71	113.31	122.20
26	1H	793	A	O5'-P-OP2	-12.69	94.28	105.70
26	1H	945	A	N1-C2-N3	12.68	135.64	129.30
26	14	676	A	C2-N3-C4	-12.67	104.27	110.60
23	2K	21	U	C5-C4-O4	-12.64	118.31	125.90
26	1H	120	U	C5-C6-N1	-12.63	116.38	122.70
26	1H	140	A	C5-N7-C8	-12.63	97.59	103.90
26	1H	51	G	O5'-P-OP1	-12.57	94.39	105.70
26	1H	1382	G	C5-C6-O6	-12.54	121.08	128.60
26	14	1786	A	N7-C8-N9	12.52	120.06	113.80
26	1H	2430	A	C5-N7-C8	-12.49	97.66	103.90
26	1H	2699	C	C6-N1-C2	12.44	125.28	120.30
26	1H	1772	G	N1-C6-O6	-12.44	112.44	119.90
26	14	774	A	N3-C4-N9	-12.36	117.51	127.40
26	1H	71	A	C5-N7-C8	-12.35	97.73	103.90
26	14	774	A	N3-C4-C5	12.34	135.44	126.80
26	14	1332	G	C5-N7-C8	-12.34	98.13	104.30
26	14	783	A	C5-N7-C8	-12.27	97.77	103.90
1	13	792	A	O4'-C1'-N9	12.25	118.00	108.20
26	1H	1899	G	N3-C2-N2	-12.24	111.33	119.90
26	1H	676	A	C5-C6-N1	-12.22	111.59	117.70
26	1H	1678	G	C4-C5-N7	12.20	115.68	110.80
26	1H	945	A	N1-C6-N6	12.15	125.89	118.60
26	1H	2346	A	O4'-C1'-N9	12.15	117.92	108.20
26	14	2430	A	C2-N3-C4	-12.15	104.53	110.60
26	1H	46	C	O5'-P-OP2	-12.14	94.78	105.70
26	1H	2713	A	N7-C8-N9	12.10	119.85	113.80
26	14	2873	A	N7-C8-N9	12.09	119.85	113.80
1	13	690	G	C6-C5-N7	-12.08	123.15	130.40
26	1H	1393	A	O5'-P-OP2	-12.04	94.87	105.70
26	14	1602	U	O5'-P-OP2	12.02	125.13	110.70
24	3K	76	A	C5-N7-C8	-12.00	97.90	103.90
26	14	1332	G	N1-C6-O6	11.96	127.08	119.90
26	1H	133	C	C6-N1-C2	11.94	125.08	120.30
26	1H	2053	G	C5-C6-O6	-11.94	121.44	128.60
26	14	1332	G	N7-C8-N9	11.94	119.07	113.10
26	14	1899	G	N3-C2-N2	11.89	128.22	119.90
24	3K	76	A	N7-C8-N9	11.88	119.74	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	140	A	C8-N9-C4	-11.87	101.05	105.80
26	1H	2713	A	C5-N7-C8	-11.87	97.97	103.90
26	1H	945	A	C5-N7-C8	-11.77	98.01	103.90
26	1H	783	A	C4-C5-N7	11.72	116.56	110.70
26	14	828	U	C5-C4-O4	11.61	132.86	125.90
26	14	676	A	C5-N7-C8	-11.60	98.10	103.90
26	14	530	G	C5-C6-O6	-11.58	121.65	128.60
26	1H	2490	G	C4-C5-N7	11.56	115.42	110.80
26	1H	783	A	C6-C5-N7	-11.55	124.21	132.30
1	13	690	G	C4-N9-C1'	11.54	141.50	126.50
26	14	945	A	C6-C5-N7	-11.53	124.23	132.30
26	1H	1647	G	O5'-P-OP1	-11.53	95.33	105.70
26	1H	621	A	C4-C5-N7	11.52	116.46	110.70
26	1H	200	U	O5'-P-OP1	-11.51	95.34	105.70
26	14	945	A	C2-N3-C4	-11.51	104.85	110.60
26	1H	676	A	C8-N9-C4	-11.49	101.20	105.80
26	1H	945	A	C2-N3-C4	-11.49	104.85	110.60
26	14	922	U	O5'-P-OP1	-11.48	95.37	105.70
26	1H	2430	A	N3-C4-C5	11.48	134.84	126.80
26	1H	391	G	N1-C6-O6	11.48	126.79	119.90
26	14	945	A	C4-C5-N7	11.46	116.43	110.70
26	1H	530	G	N1-C6-O6	-11.46	113.03	119.90
26	1H	860	U	C5-C6-N1	-11.43	116.99	122.70
26	1H	624	C	O5'-P-OP2	11.43	124.41	110.70
26	1H	2265	U	O5'-P-OP1	-11.39	95.45	105.70
26	1H	2710	C	C6-N1-C2	11.38	124.85	120.30
26	1H	913	U	N1-C2-O2	11.36	130.75	122.80
26	1H	966	G	O5'-P-OP2	-11.34	95.50	105.70
26	1H	1249	U	O5'-P-OP1	-11.32	95.51	105.70
26	14	1698	A	C6-C5-N7	-11.31	124.38	132.30
26	1H	1616	A	N7-C8-N9	11.30	119.45	113.80
24	3L	76	A	N7-C8-N9	11.23	119.42	113.80
26	1H	1604	C	N1-C2-O2	-11.20	112.18	118.90
26	14	530	G	C8-N9-C4	11.16	110.86	106.40
26	1H	120	U	C4-C5-C6	11.15	126.39	119.70
26	14	2873	A	C5-N7-C8	-11.15	98.33	103.90
26	1H	2598	A	O5'-P-OP1	-11.13	95.68	105.70
26	1H	1336	A	N1-C6-N6	-11.12	111.93	118.60
26	1H	1899	G	N9-C4-C5	11.12	109.85	105.40
26	1H	2070	G	N1-C2-N2	-11.07	106.23	116.20
26	1H	2380	C	C5-C6-N1	-11.02	115.49	121.00
26	14	2778	A	O5'-P-OP2	-11.01	95.79	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1678	G	C6-C5-N7	-11.01	123.80	130.40
26	1H	446	G	N9-C4-C5	-11.01	101.00	105.40
1	13	792	A	C5-N7-C8	-11.00	98.40	103.90
26	1H	1496	A	C5-N7-C8	-11.00	98.40	103.90
26	1H	216	A	O5'-P-OP1	-10.98	95.82	105.70
26	14	2441	C	O5'-P-OP1	-10.93	95.86	105.70
26	1H	789	A	O5'-P-OP1	-10.93	95.87	105.70
26	1H	2070	G	N3-C2-N2	10.93	127.55	119.90
26	1H	827	U	O5'-P-OP2	-10.91	95.88	105.70
26	1H	799	G	C8-N9-C4	10.90	110.76	106.40
26	1H	2374	C	C5-C6-N1	-10.89	115.55	121.00
26	1H	1899	G	N1-C2-N3	10.89	130.43	123.90
26	1H	1614	A	N1-C2-N3	10.88	134.74	129.30
1	13	813	U	O5'-P-OP2	-10.87	95.92	105.70
26	1H	2062	A	C8-N9-C4	10.85	110.14	105.80
26	1H	2819	G	N1-C6-O6	10.85	126.41	119.90
26	14	1619	G	O5'-P-OP2	-10.84	95.94	105.70
26	1H	1786	A	N1-C6-N6	10.82	125.09	118.60
26	1H	1332	G	C4-C5-N7	10.82	115.13	110.80
26	1H	1332	G	N7-C8-N9	10.79	118.50	113.10
26	1H	613	U	N3-C2-O2	-10.78	114.65	122.20
26	1H	2518	A	C5-N7-C8	-10.74	98.53	103.90
26	1H	1787	A	O5'-P-OP1	-10.72	96.05	105.70
26	1H	2247	A	O5'-P-OP1	-10.72	96.05	105.70
26	1H	1496	A	N7-C8-N9	10.70	119.15	113.80
26	1H	2584	U	N3-C2-O2	-10.70	114.71	122.20
26	14	793	A	O5'-P-OP2	-10.70	96.07	105.70
26	14	1984	G	O5'-P-OP2	-10.69	96.08	105.70
26	1H	2295	C	C6-N1-C2	-10.68	116.03	120.30
26	14	2688	U	N3-C2-O2	-10.67	114.73	122.20
26	1H	945	A	C8-N9-C4	-10.67	101.53	105.80
23	2K	21	U	N3-C4-C5	10.63	120.98	114.60
26	14	1275	A	O5'-P-OP1	-10.60	96.16	105.70
26	14	2518	A	C5-N7-C8	-10.58	98.61	103.90
26	1H	2700	C	C6-N1-C2	10.57	124.53	120.30
26	14	312	G	O5'-P-OP1	-10.55	96.20	105.70
26	1H	1786	A	C4-C5-C6	10.54	122.27	117.00
26	1H	2507	C	N3-C2-O2	-10.54	114.53	121.90
26	1H	2606	C	O5'-P-OP1	-10.53	96.22	105.70
26	1H	2713	A	C8-N9-C4	-10.53	101.59	105.80
26	1H	774	A	C5-C6-N1	-10.52	112.44	117.70
26	1H	1379	A	N1-C6-N6	10.50	124.90	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	863	A	O5'-P-OP2	-10.49	96.26	105.70
26	1H	2698	U	O5'-P-OP2	-10.47	96.28	105.70
26	1H	1931	U	N1-C2-N3	10.46	121.18	114.90
26	1H	621	A	N7-C8-N9	10.45	119.02	113.80
26	14	945	A	C5-N7-C8	-10.45	98.68	103.90
26	14	687	C	O5'-P-OP1	-10.45	96.30	105.70
26	1H	783	A	N3-C4-N9	-10.42	119.06	127.40
26	14	689	A	O5'-P-OP2	-10.41	96.33	105.70
26	1H	2392	A	C5-N7-C8	-10.41	98.70	103.90
26	1H	265	A	C8-N9-C4	-10.39	101.64	105.80
26	1H	252	G	O5'-P-OP2	-10.39	96.35	105.70
26	1H	1566	A	O5'-P-OP2	-10.38	96.36	105.70
26	14	1816	G	O5'-P-OP1	-10.36	96.38	105.70
26	14	2702	U	O5'-P-OP2	-10.36	96.38	105.70
26	14	2430	A	C5-C6-N1	-10.35	112.52	117.70
27	16	47	C	C6-N1-C2	10.34	124.44	120.30
26	1H	330	A	C2-N3-C4	-10.34	105.43	110.60
26	14	929	G	N1-C6-O6	10.34	126.10	119.90
26	14	1616	A	C5-N7-C8	-10.33	98.73	103.90
26	1H	2036	C	C6-N1-C2	-10.33	116.17	120.30
26	1H	528	A	C6-N1-C2	10.32	124.79	118.60
26	1H	1437	C	C6-N1-C2	-10.29	116.19	120.30
26	1H	582	G	N1-C6-O6	10.26	126.06	119.90
26	14	963	U	O5'-P-OP1	-10.26	96.46	105.70
26	14	530	G	C4-C5-N7	10.26	114.90	110.80
26	1H	1528	A	C8-N9-C4	-10.25	101.70	105.80
26	14	1678	G	C5-N7-C8	-10.25	99.18	104.30
26	14	783	A	N3-C4-C5	10.24	133.97	126.80
26	1H	2311	A	C2-N3-C4	-10.24	105.48	110.60
1	13	789	U	C5-C4-O4	10.23	132.04	125.90
26	1H	463	G	N3-C2-N2	10.22	127.06	119.90
26	1H	461	C	N1-C2-O2	-10.22	112.77	118.90
26	14	140	A	C5-N7-C8	-10.20	98.80	103.90
26	1H	945	A	C4-N9-C1'	10.20	144.65	126.30
1	13	690	G	C8-N9-C1'	-10.19	113.75	127.00
26	14	2429	G	O5'-P-OP1	10.18	122.92	110.70
26	1H	802	A	O5'-P-OP2	-10.18	96.54	105.70
26	14	1332	G	C2-N3-C4	-10.18	106.81	111.90
26	1H	74	A	N1-C2-N3	10.18	134.39	129.30
26	1H	1616	A	C8-N9-C4	-10.16	101.74	105.80
26	1H	676	A	O4'-C1'-N9	10.15	116.32	108.20
26	14	2440	C	C6-N1-C2	10.13	124.35	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1281	G	O5'-P-OP2	10.13	122.86	110.70
1	1G	1395	C	O5'-P-OP1	-10.13	96.58	105.70
26	1H	765	G	O5'-P-OP1	-10.12	96.59	105.70
26	1H	624	C	O5'-P-OP1	-10.11	96.60	105.70
26	1H	812	C	N1-C2-O2	-10.11	112.84	118.90
26	14	783	A	C4-C5-N7	10.10	115.75	110.70
1	13	580	U	C5-C6-N1	-10.09	117.65	122.70
26	14	528	A	C2-N3-C4	-10.08	105.56	110.60
26	1H	49	A	O5'-P-OP2	-10.08	96.63	105.70
26	1H	769	G	N3-C2-N2	10.06	126.94	119.90
26	14	1698	A	C2-N3-C4	-10.06	105.57	110.60
26	14	2610	C	C6-N1-C2	10.06	124.32	120.30
26	1H	195	A	N1-C6-N6	10.05	124.63	118.60
26	1H	1394	U	O5'-P-OP1	-10.05	96.65	105.70
1	13	899	C	N1-C2-O2	-10.04	112.88	118.90
26	14	1367	A	N1-C6-N6	10.04	124.62	118.60
26	14	2712	U	C5-C6-N1	-10.03	117.69	122.70
26	14	1253	A	N1-C6-N6	9.99	124.59	118.60
26	1H	2346	A	C2-N3-C4	-9.98	105.61	110.60
26	1H	1825	A	N1-C6-N6	-9.97	112.62	118.60
26	1H	2430	A	O5'-P-OP1	9.97	122.66	110.70
1	13	792	A	C4-C5-N7	9.95	115.67	110.70
26	14	2244	U	N1-C2-O2	-9.94	115.84	122.80
26	1H	2747	G	N1-C6-O6	9.93	125.86	119.90
26	14	2430	A	N1-C2-N3	9.93	134.26	129.30
26	14	74	A	N1-C6-N6	9.91	124.55	118.60
26	1H	678	C	C2-N3-C4	-9.91	114.95	119.90
26	1H	2490	G	N7-C8-N9	9.90	118.05	113.10
24	3L	76	A	C5-N7-C8	-9.90	98.95	103.90
26	1H	2618	G	C8-N9-C4	-9.90	102.44	106.40
26	1H	1950	G	C5-N7-C8	-9.87	99.36	104.30
26	1H	2430	A	C4-C5-N7	9.86	115.63	110.70
26	1H	265	A	C2-N3-C4	-9.84	105.68	110.60
26	1H	739	G	O5'-P-OP2	-9.83	96.86	105.70
26	1H	913	U	N3-C4-O4	-9.83	112.52	119.40
26	1H	1210	A	C5-N7-C8	-9.83	98.99	103.90
26	1H	729	G	C8-N9-C4	-9.82	102.47	106.40
26	1H	974(A)	C	N1-C2-O2	9.80	124.78	118.90
26	1H	793	A	N1-C6-N6	9.79	124.47	118.60
26	1H	621	A	C6-C5-N7	-9.76	125.47	132.30
26	1H	839	U	O5'-P-OP2	-9.76	96.92	105.70
26	14	2068	U	O5'-P-OP1	-9.76	96.92	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1496	A	N7-C8-N9	9.76	118.68	113.80
26	1H	945	A	O4'-C1'-N9	9.74	116.00	108.20
26	14	2873	A	C2-N3-C4	-9.74	105.73	110.60
1	13	1158	C	N1-C2-O2	9.74	124.74	118.90
26	1H	1496	A	C4-C5-N7	9.74	115.57	110.70
26	1H	2085	C	O5'-P-OP2	-9.74	96.93	105.70
26	14	2502	G	O5'-P-OP1	-9.73	96.94	105.70
1	13	1502	A	C5-N7-C8	-9.71	99.05	103.90
26	14	2332	U	O5'-P-OP2	-9.70	96.97	105.70
26	1H	582	G	C5-C6-O6	-9.70	122.78	128.60
26	1H	1786	A	C4-C5-N7	9.68	115.54	110.70
26	1H	1816	G	O5'-P-OP1	-9.68	96.99	105.70
26	14	330	A	C2-N3-C4	-9.68	105.76	110.60
26	14	856	C	C6-N1-C2	-9.67	116.43	120.30
26	1H	837	C	N3-C4-N4	9.66	124.76	118.00
26	1H	1376	C	N3-C4-C5	-9.65	118.04	121.90
26	1H	2713	A	C2-N3-C4	-9.65	105.77	110.60
26	1H	793	A	C5-C6-N6	-9.65	115.98	123.70
26	14	565	C	C6-N1-C2	9.64	124.16	120.30
26	14	1681	G	C5-N7-C8	-9.64	99.48	104.30
26	14	2443	C	O5'-P-OP1	-9.64	97.02	105.70
26	1H	788	A	C5-C6-N1	-9.64	112.88	117.70
26	14	74	A	C5-C6-N1	-9.63	112.89	117.70
26	14	1332	G	C4-N9-C1'	9.63	139.01	126.50
26	1H	638	G	O5'-P-OP1	-9.62	97.04	105.70
26	14	1613	G	N3-C4-N9	9.62	131.77	126.00
26	1H	2346	A	C8-N9-C4	-9.62	101.95	105.80
26	1H	663	G	C8-N9-C4	-9.62	102.55	106.40
26	14	462	C	O5'-P-OP2	-9.61	97.05	105.70
26	1H	1772	G	C5-C6-O6	9.61	134.36	128.60
26	1H	667	U	N1-C2-O2	-9.60	116.08	122.80
26	14	140	A	N7-C8-N9	9.60	118.60	113.80
26	1H	245	G	C6-C5-N7	-9.60	124.64	130.40
26	1H	598	G	O5'-P-OP2	-9.59	97.07	105.70
26	1H	837	C	C5-C4-N4	-9.57	113.50	120.20
26	1H	1021	A	C2-N3-C4	-9.57	105.82	110.60
26	14	467	G	O5'-P-OP2	-9.56	97.09	105.70
26	1H	1255	U	N3-C4-O4	9.56	126.09	119.40
26	1H	2406	U	O5'-P-OP1	-9.56	97.10	105.70
26	14	1404	C	O5'-P-OP1	-9.55	97.10	105.70
26	14	2430	A	C6-C5-N7	-9.55	125.62	132.30
26	14	1902	C	O5'-P-OP1	-9.54	97.11	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1006	C	O5'-P-OP1	-9.54	97.11	105.70
26	14	2873	A	C6-C5-N7	-9.54	125.63	132.30
26	14	2713	A	C5-N7-C8	-9.52	99.14	103.90
1	13	1502	A	O5'-P-OP2	-9.52	97.13	105.70
26	1H	676	A	N1-C2-N3	9.52	134.06	129.30
26	1H	783	A	N3-C4-C5	9.51	133.45	126.80
26	1H	2518	A	N7-C8-N9	9.50	118.55	113.80
1	1G	1517	G	O5'-P-OP2	-9.48	97.16	105.70
26	1H	1255	U	N3-C2-O2	9.48	128.84	122.20
26	14	2565	A	C8-N9-C4	9.47	109.59	105.80
26	1H	2287	A	C5-C6-N1	-9.47	112.96	117.70
26	14	49	A	O5'-P-OP2	-9.47	97.18	105.70
26	14	856	C	O5'-P-OP1	-9.47	97.18	105.70
26	1H	265	A	N7-C8-N9	9.46	118.53	113.80
26	1H	799	G	N7-C8-N9	-9.45	108.37	113.10
26	1H	1376	C	O5'-P-OP1	-9.45	97.19	105.70
1	13	690	G	O4'-C1'-N9	9.45	115.76	108.20
26	14	2873	A	N1-C2-N3	9.45	134.02	129.30
1	13	760	G	N1-C6-O6	9.44	125.57	119.90
26	1H	71	A	C4-C5-N7	9.44	115.42	110.70
26	14	2592	G	O5'-P-OP2	-9.44	97.21	105.70
26	1H	74	A	C5-C6-N1	-9.43	112.98	117.70
26	1H	2581	G	O5'-P-OP1	-9.43	97.21	105.70
26	14	621	A	C2-N3-C4	-9.43	105.88	110.60
26	1H	860	U	C2-N1-C1'	9.42	129.01	117.70
26	14	2276	G	O5'-P-OP1	-9.42	97.22	105.70
26	1H	491	G	O5'-P-OP1	-9.42	97.22	105.70
26	14	783	A	C6-C5-N7	-9.42	125.71	132.30
26	1H	1950	G	N7-C8-N9	9.41	117.80	113.10
26	14	2424	C	O5'-P-OP1	-9.39	97.25	105.70
1	13	1502	A	C4-C5-N7	9.38	115.39	110.70
26	1H	735	A	C8-N9-C4	9.37	109.55	105.80
26	1H	2392	A	N1-C6-N6	9.36	124.22	118.60
26	1H	757	U	O5'-P-OP2	-9.36	97.28	105.70
26	1H	71	A	N1-C2-N3	9.36	133.98	129.30
26	14	1678	G	N3-C4-C5	9.33	133.26	128.60
26	14	2056	G	C5-C6-O6	-9.33	123.00	128.60
26	1H	788	A	C6-N1-C2	9.32	124.19	118.60
26	1H	1779	U	OP1-P-OP2	9.32	133.59	119.60
27	16	30	C	C6-N1-C2	-9.32	116.57	120.30
26	1H	2249	U	O5'-P-OP1	-9.32	97.31	105.70
1	13	690	G	N1-C6-O6	9.31	125.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1950	G	N3-C4-C5	-9.31	123.95	128.60
26	1H	733	G	OP1-P-OP2	9.30	133.56	119.60
24	3K	76	A	C8-N9-C4	-9.30	102.08	105.80
26	1H	930	U	C5-C4-O4	9.30	131.48	125.90
26	1H	593	G	O5'-P-OP2	-9.29	97.33	105.70
26	1H	1188	U	O5'-P-OP2	-9.29	97.34	105.70
26	1H	913	U	N3-C2-O2	-9.28	115.70	122.20
26	1H	2346	A	N7-C8-N9	9.28	118.44	113.80
26	1H	774	A	C4-C5-C6	-9.28	112.36	117.00
26	14	1673	U	O5'-P-OP1	-9.28	97.35	105.70
26	1H	2705	A	N1-C6-N6	9.27	124.16	118.60
1	13	281	G	O5'-P-OP1	-9.26	97.36	105.70
26	1H	512	G	O4'-C1'-N9	9.26	115.60	108.20
26	14	2430	A	C4-C5-C6	9.26	121.63	117.00
26	1H	774	A	C8-N9-C4	-9.25	102.10	105.80
26	1H	1678	G	C8-N9-C4	-9.25	102.70	106.40
26	1H	2330	G	C5-C6-O6	-9.23	123.06	128.60
26	1H	2392	A	C2-N3-C4	-9.23	105.99	110.60
26	1H	2374	C	C6-N1-C2	9.22	123.99	120.30
26	14	801	G	N1-C6-O6	-9.22	114.37	119.90
26	14	1616	A	C2-N3-C4	-9.20	106.00	110.60
1	13	811	C	C6-N1-C2	9.20	123.98	120.30
26	1H	2507	C	C6-N1-C2	-9.20	116.62	120.30
26	1H	728	G	O5'-P-OP2	-9.18	97.44	105.70
26	1H	203	C	N1-C2-O2	-9.18	113.39	118.90
26	14	2870	C	C6-N1-C2	-9.18	116.63	120.30
26	1H	1899	G	C8-N9-C4	-9.18	102.73	106.40
26	1H	2747	G	C6-C5-N7	-9.17	124.90	130.40
1	13	1266	G	N3-C4-N9	-9.17	120.50	126.00
26	1H	1558	A	O5'-P-OP1	-9.17	97.45	105.70
26	14	530	G	C6-C5-N7	-9.17	124.90	130.40
26	14	2253	G	N1-C6-O6	9.17	125.40	119.90
26	1H	2688	U	C5-C4-O4	9.16	131.40	125.90
26	14	2438	U	O5'-P-OP2	-9.16	97.45	105.70
26	14	2518	A	C6-C5-N7	-9.16	125.89	132.30
26	1H	2582	G	N3-C4-N9	9.16	131.49	126.00
26	14	252	G	N1-C6-O6	-9.13	114.42	119.90
26	14	1359	A	C8-N9-C4	9.13	109.45	105.80
26	14	209	C	C5-C4-N4	-9.12	113.81	120.20
26	1H	621	A	N1-C2-N3	9.11	133.86	129.30
26	14	774	A	O5'-P-OP2	-9.11	97.50	105.70
1	13	789	U	N3-C2-O2	-9.11	115.83	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2212	A	O4'-C1'-N9	9.10	115.48	108.20
26	1H	2585	U	N1-C2-O2	9.10	129.17	122.80
26	1H	1574	C	C6-N1-C2	9.10	123.94	120.30
36	35	147	LEU	CA-CB-CG	9.10	136.22	115.30
1	13	529	G	N1-C6-O6	9.09	125.36	119.90
26	1H	2010	G	O5'-P-OP1	-9.09	97.52	105.70
26	1H	1255	U	N1-C2-O2	-9.08	116.44	122.80
26	1H	2070	G	N1-C6-O6	-9.08	114.45	119.90
39	65	110	LEU	CA-CB-CG	9.08	136.19	115.30
26	1H	1300	U	N1-C2-N3	9.08	120.35	114.90
26	14	729	G	N3-C2-N2	-9.08	113.54	119.90
26	1H	1306	C	C6-N1-C2	9.08	123.93	120.30
26	14	2001	A	N1-C6-N6	9.08	124.05	118.60
26	1H	528	A	N3-C4-C5	9.07	133.15	126.80
26	1H	1990	C	C6-N1-C2	-9.07	116.67	120.30
26	14	1340	U	C6-N1-C2	9.07	126.44	121.00
27	16	79	C	C6-N1-C2	-9.07	116.67	120.30
26	1H	1332	G	N3-C4-N9	-9.06	120.57	126.00
26	1H	578	A	O5'-P-OP2	-9.06	97.55	105.70
34	15	42	TRP	CE2-CD2-CE3	9.05	129.57	118.70
26	1H	2380	C	C2-N3-C4	-9.05	115.37	119.90
26	14	140	A	C4-C5-N7	9.04	115.22	110.70
26	14	1325	G	C5-C6-O6	-9.04	123.17	128.60
26	1H	1386	C	C6-N1-C2	-9.04	116.68	120.30
26	14	2070	G	O5'-P-OP2	-9.02	97.58	105.70
26	1H	2503	A	N1-C2-N3	-9.01	124.79	129.30
26	1H	2584	U	C5-C4-O4	9.01	131.31	125.90
26	1H	1617	C	O5'-P-OP1	-9.00	97.60	105.70
26	1H	71	A	N7-C8-N9	8.99	118.30	113.80
1	13	1502	A	N1-C6-N6	8.99	123.99	118.60
1	13	792	A	N1-C6-N6	8.97	123.98	118.60
26	1H	138	G	C8-N9-C4	-8.97	102.81	106.40
26	14	250	G	O5'-P-OP1	-8.97	97.63	105.70
26	1H	71	A	O4'-C1'-N9	-8.97	101.03	108.20
26	1H	567	A	O5'-P-OP1	-8.96	97.63	105.70
26	1H	641	C	O5'-P-OP1	-8.96	97.64	105.70
26	1H	1382	G	N1-C6-O6	8.96	125.28	119.90
26	1H	1193	G	O5'-P-OP2	-8.96	97.64	105.70
26	1H	1814	G	N3-C4-N9	8.95	131.37	126.00
26	14	2056	G	N3-C2-N2	-8.94	113.64	119.90
26	1H	691	C	C6-N1-C2	8.94	123.88	120.30
26	14	1661	G	C8-N9-C4	8.94	109.98	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2468	G	O4'-C1'-N9	8.93	115.35	108.20
26	1H	1814	G	C5-C6-N1	8.93	115.96	111.50
26	1H	245	G	C5-C6-O6	-8.93	123.25	128.60
26	14	774	A	C4-C5-C6	-8.92	112.54	117.00
26	1H	1528	A	N7-C8-N9	8.92	118.26	113.80
26	14	791	C	C6-N1-C2	8.92	123.87	120.30
26	1H	2688	U	N3-C2-O2	-8.90	115.97	122.20
26	14	774	A	C2-N3-C4	-8.90	106.15	110.60
26	1H	1698	A	C5-N7-C8	-8.89	99.45	103.90
26	14	2518	A	C4-C5-N7	8.89	115.14	110.70
1	13	792	A	C6-C5-N7	-8.89	126.08	132.30
26	1H	530	G	C5-C6-O6	8.88	133.93	128.60
26	1H	2298	A	O5'-P-OP2	-8.88	97.71	105.70
55	Q8	25	MET	N-CA-C	8.88	134.98	111.00
1	1G	14	U	C5-C6-N1	8.88	127.14	122.70
26	14	1902	C	N3-C4-C5	8.88	125.45	121.90
26	1H	1814	G	N9-C4-C5	-8.87	101.85	105.40
26	14	2542	A	C8-N9-C4	8.86	109.34	105.80
26	1H	140	A	C6-C5-N7	-8.85	126.10	132.30
1	13	1260	C	C6-N1-C2	-8.85	116.76	120.30
26	1H	2712	U	C5-C6-N1	-8.84	118.28	122.70
1	13	745	C	C6-N1-C2	-8.84	116.77	120.30
26	14	821	A	N1-C6-N6	8.83	123.90	118.60
26	14	1786	A	C4-C5-N7	8.82	115.11	110.70
26	14	769	G	OP1-P-O3'	8.81	124.59	105.20
26	14	1496	A	C8-N9-C4	-8.80	102.28	105.80
26	1H	2311	A	N1-C2-N3	8.79	133.69	129.30
26	1H	2228	G	C6-C5-N7	-8.79	125.13	130.40
26	14	2272	U	N3-C2-O2	-8.79	116.05	122.20
23	2K	1	C	C6-N1-C2	-8.78	116.79	120.30
26	1H	1828	G	C5-C6-N1	-8.78	107.11	111.50
22	1K	76	A	C8-N9-C4	-8.77	102.29	105.80
26	1H	2270	G	C8-N9-C4	8.77	109.91	106.40
26	14	71	A	C2-N3-C4	-8.76	106.22	110.60
26	1H	1577	C	N3-C4-C5	-8.75	118.40	121.90
26	14	2501	C	C2-N1-C1'	-8.74	109.18	118.80
26	14	1774	C	O5'-P-OP1	-8.74	97.84	105.70
26	14	2512	C	N3-C4-C5	8.74	125.39	121.90
26	1H	1204	A	C2-N3-C4	-8.73	106.23	110.60
26	14	737	C	N1-C2-O2	-8.73	113.66	118.90
26	1H	693	C	C5-C4-N4	8.73	126.31	120.20
26	1H	1379	A	C5-N7-C8	-8.73	99.53	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	528	A	N3-C4-N9	-8.73	120.42	127.40
26	1H	189	G	C8-N9-C4	8.73	109.89	106.40
26	1H	140	A	C4-C5-N7	8.72	115.06	110.70
26	1H	144	C	C6-N1-C2	8.72	123.79	120.30
26	1H	463	G	O5'-P-OP2	-8.72	97.85	105.70
26	14	1827	C	OP1-P-O3'	8.72	124.39	105.20
1	13	974	A	N1-C6-N6	8.72	123.83	118.60
26	1H	691	C	N1-C2-O2	-8.71	113.67	118.90
26	1H	739	G	C8-N9-C4	8.71	109.88	106.40
26	1H	1616	A	C4-C5-N7	8.71	115.05	110.70
26	14	676	A	O4'-C1'-N9	8.69	115.15	108.20
26	1H	690	G	C8-N9-C4	8.69	109.88	106.40
26	1H	1517	G	OP1-P-O3'	8.69	124.31	105.20
26	14	1698	A	C4-C5-N7	8.69	115.04	110.70
26	14	1786	A	C6-C5-N7	-8.68	126.22	132.30
26	1H	858	U	O5'-P-OP2	-8.66	97.90	105.70
26	1H	2508	G	N9-C4-C5	8.66	108.87	105.40
26	1H	2053	G	N1-C6-O6	8.65	125.09	119.90
26	14	2307	G	O4'-C1'-N9	8.65	115.12	108.20
1	13	542	G	O5'-P-OP1	-8.65	97.92	105.70
26	14	1279	G	N1-C6-O6	-8.65	114.71	119.90
26	1H	1786	A	C5-C6-N1	-8.64	113.38	117.70
26	1H	2598	A	O5'-P-OP2	8.64	121.07	110.70
26	1H	957	A	N1-C6-N6	8.63	123.78	118.60
26	1H	1828	G	O5'-P-OP2	-8.64	97.93	105.70
26	1H	2331	G	C8-N9-C4	8.63	109.85	106.40
26	1H	2236	C	O5'-P-OP1	-8.62	97.94	105.70
26	1H	398	G	O5'-P-OP2	-8.62	97.94	105.70
26	1H	211	A	C8-N9-C4	8.62	109.25	105.80
26	1H	964	C	O5'-P-OP1	-8.62	97.94	105.70
26	1H	138	G	N7-C8-N9	8.62	117.41	113.10
26	14	2287	A	C2-N3-C4	-8.61	106.29	110.60
26	1H	74	A	C5-N7-C8	-8.61	99.60	103.90
26	14	1678	G	N3-C4-N9	-8.61	120.83	126.00
26	14	1908	C	C6-N1-C2	-8.61	116.86	120.30
26	1H	746	A	O5'-P-OP2	8.60	121.03	110.70
26	1H	226	G	O4'-C1'-N9	8.60	115.08	108.20
26	1H	752	A	P-O3'-C3'	8.60	130.02	119.70
26	1H	1610	A	C2-N3-C4	-8.60	106.30	110.60
26	1H	2330	G	N1-C6-O6	8.60	125.06	119.90
26	1H	1379	A	C4-C5-N7	8.60	115.00	110.70
26	1H	245	G	N1-C6-O6	8.59	125.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2054	A	OP2-P-O3'	8.58	124.08	105.20
26	1H	391	G	C6-C5-N7	-8.57	125.26	130.40
26	1H	774	A	C8-N9-C1'	8.57	143.13	127.70
26	1H	613	U	C5-C4-O4	8.57	131.04	125.90
26	14	829	A	OP1-P-OP2	8.57	132.45	119.60
26	1H	774	A	N1-C2-N3	-8.56	125.02	129.30
26	1H	1310	G	O5'-P-OP2	8.56	120.97	110.70
26	1H	617	G	C8-N9-C4	8.56	109.82	106.40
26	14	1342	A	N1-C6-N6	8.56	123.74	118.60
26	1H	1600	C	O5'-P-OP2	-8.56	98.00	105.70
26	14	1907	G	O5'-P-OP1	-8.56	98.00	105.70
26	1H	1820	U	C5-C6-N1	-8.55	118.42	122.70
37	88	82	ARG	N-CA-C	8.55	134.08	111.00
26	1H	2499	C	N1-C2-O2	-8.54	113.78	118.90
26	1H	245	G	C4-C5-N7	8.53	114.21	110.80
26	14	140	A	N1-C6-N6	8.53	123.72	118.60
26	1H	141	A	C5-N7-C8	-8.53	99.64	103.90
26	1H	1899	G	C5-C6-N1	-8.53	107.24	111.50
26	14	1786	A	C8-N9-C4	-8.52	102.39	105.80
26	14	2426	A	N7-C8-N9	8.52	118.06	113.80
26	1H	679	C	C6-N1-C2	8.51	123.70	120.30
26	1H	429	A	C8-N9-C4	-8.51	102.40	105.80
26	1H	796	C	C6-N1-C2	8.51	123.70	120.30
26	14	929	G	C6-C5-N7	-8.51	125.30	130.40
26	1H	2330	G	C6-C5-N7	-8.50	125.30	130.40
26	14	1394	U	O5'-P-OP2	8.50	120.90	110.70
26	1H	1431	U	C5-C6-N1	8.50	126.95	122.70
26	1H	2518	A	C4-C5-N7	8.49	114.95	110.70
26	1H	2451	A	N1-C6-N6	-8.49	113.51	118.60
23	2L	21	U	N1-C2-N3	8.49	119.99	114.90
26	14	2873	A	C8-N9-C4	-8.49	102.40	105.80
26	1H	1428	C	C6-N1-C2	8.49	123.69	120.30
26	1H	1528	A	O4'-C1'-N9	8.49	114.99	108.20
26	14	1616	A	N7-C8-N9	8.49	118.04	113.80
26	1H	1616	A	O4'-C1'-N9	8.48	114.98	108.20
26	1H	2425	A	O5'-P-OP2	-8.47	98.07	105.70
26	14	1618	A	C8-N9-C4	-8.47	102.41	105.80
26	1H	828	U	N1-C2-O2	8.46	128.72	122.80
26	1H	1660	C	N3-C2-O2	-8.46	115.97	121.90
23	2K	17	C	N1-C2-O2	8.46	123.98	118.90
26	1H	1636	C	N3-C4-C5	-8.45	118.52	121.90
26	14	463	G	O5'-P-OP2	-8.45	98.10	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	812	C	N1-C2-O2	8.44	123.97	118.90
36	78	20	GLY	N-CA-C	8.44	134.20	113.10
26	14	1762	A	O4'-C1'-N9	8.43	114.94	108.20
26	14	2873	A	N1-C6-N6	8.43	123.66	118.60
26	1H	1784	A	O4'-C1'-N9	-8.42	101.46	108.20
26	1H	2010	G	O5'-P-OP2	8.42	120.81	110.70
26	1H	2747	G	C5-C6-O6	-8.42	123.55	128.60
1	1G	254	G	O5'-P-OP1	-8.42	98.13	105.70
26	14	1898	U	N3-C4-C5	-8.42	109.55	114.60
26	14	1407	C	C5-C6-N1	8.41	125.21	121.00
26	14	1342	A	C2-N3-C4	-8.41	106.39	110.60
26	1H	330	A	N1-C2-N3	8.41	133.50	129.30
26	1H	788	A	N9-C4-C5	-8.40	102.44	105.80
26	14	1396	U	N3-C2-O2	-8.40	116.32	122.20
26	1H	2582	G	N9-C4-C5	-8.39	102.04	105.40
26	1H	1598	C	OP1-P-O3'	8.39	123.65	105.20
26	1H	1210	A	N1-C6-N6	8.38	123.63	118.60
26	14	1340	U	C5-C6-N1	-8.38	118.51	122.70
26	14	2087	G	O5'-P-OP2	-8.38	98.16	105.70
26	1H	972	G	N1-C6-O6	-8.37	114.88	119.90
26	1H	2392	A	N7-C8-N9	8.37	117.98	113.80
26	14	774	A	C6-N1-C2	8.37	123.62	118.60
26	1H	528	A	C5-C6-N1	-8.36	113.52	117.70
26	1H	2699	C	N3-C4-C5	8.36	125.25	121.90
26	1H	2430	A	C5-C6-N1	-8.36	113.52	117.70
26	1H	659	C	C6-N1-C2	8.36	123.64	120.30
26	14	676	A	N3-C4-C5	8.35	132.65	126.80
26	1H	1779	U	O5'-P-OP1	-8.35	98.19	105.70
26	14	2078	C	N3-C4-C5	-8.35	118.56	121.90
26	1H	2377	A	C8-N9-C4	8.35	109.14	105.80
26	14	737	C	N3-C4-N4	8.34	123.84	118.00
26	1H	2272	U	O5'-P-OP1	8.34	120.70	110.70
26	14	2429	G	O5'-P-OP2	-8.34	98.20	105.70
26	1H	2433	A	N1-C2-N3	8.33	133.47	129.30
26	14	2324	C	C6-N1-C2	8.33	123.63	120.30
26	1H	783	A	C5-C6-N1	-8.33	113.54	117.70
26	14	729	G	N1-C2-N2	8.33	123.69	116.20
23	2L	21	U	C5-C4-O4	-8.32	120.91	125.90
26	14	1698	A	C5-N7-C8	-8.32	99.74	103.90
30	31	176	LEU	CA-CB-CG	8.32	134.44	115.30
26	1H	634	C	O5'-P-OP2	-8.32	98.21	105.70
26	1H	961	C	C6-N1-C2	-8.31	116.97	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1142(A)	A	C2-N3-C4	-8.31	106.44	110.60
26	14	1327	C	N1-C2-O2	-8.31	113.91	118.90
26	1H	471	A	C2-N3-C4	-8.31	106.44	110.60
26	1H	140	A	N1-C6-N6	8.31	123.58	118.60
26	1H	681	G	N1-C2-N3	8.30	128.88	123.90
26	14	1678	G	N7-C8-N9	8.30	117.25	113.10
26	14	1394	U	O5'-P-OP1	-8.30	98.23	105.70
26	1H	1021	A	C5-N7-C8	-8.29	99.75	103.90
26	1H	459	U	O5'-P-OP2	-8.29	98.24	105.70
26	14	74	A	N3-C4-C5	8.29	132.60	126.80
26	14	2518	A	C2-N3-C4	-8.29	106.46	110.60
26	1H	2782	G	N1-C6-O6	8.28	124.87	119.90
26	1H	25	U	C5-C4-O4	-8.28	120.94	125.90
26	1H	2072	G	OP1-P-O3'	8.28	123.41	105.20
26	1H	2575	C	C5-C6-N1	-8.28	116.86	121.00
26	1H	2392	A	C4-C5-N7	8.27	114.84	110.70
26	14	818	G	C8-N9-C4	-8.27	103.09	106.40
26	1H	794	G	O5'-P-OP1	-8.27	98.26	105.70
26	14	1613	G	N3-C2-N2	8.27	125.69	119.90
26	1H	144	C	N3-C4-C5	8.27	125.21	121.90
55	Q8	60	LEU	CA-CB-CG	-8.27	96.29	115.30
26	1H	2822	G	N1-C6-O6	8.26	124.86	119.90
26	14	1681	G	C4-C5-N7	8.26	114.11	110.80
24	3K	76	A	C4-C5-N7	8.26	114.83	110.70
26	1H	2490	G	O5'-P-OP2	-8.26	98.27	105.70
1	13	811	C	C5-C6-N1	-8.26	116.87	121.00
1	13	1502	A	C2-N3-C4	-8.25	106.47	110.60
24	3L	76	A	C8-N9-C4	-8.25	102.50	105.80
1	13	1482	G	O5'-P-OP2	-8.24	98.28	105.70
26	1H	774	A	C2-N3-C4	-8.24	106.48	110.60
26	14	558	G	C8-N9-C4	8.24	109.70	106.40
26	1H	913	U	O5'-P-OP2	-8.23	98.29	105.70
26	1H	1567	A	N1-C6-N6	-8.23	113.66	118.60
26	1H	1629	U	O5'-P-OP2	8.23	120.57	110.70
34	15	42	TRP	CE2-CD2-CG	-8.23	100.72	107.30
26	1H	821	A	OP1-P-OP2	8.22	131.94	119.60
34	15	42	TRP	CD2-CE2-CZ2	-8.22	112.43	122.30
26	1H	769	G	N1-C2-N2	-8.21	108.81	116.20
1	1G	117	G	N1-C6-O6	8.21	124.83	119.90
26	1H	121	G	C5-C6-O6	-8.21	123.68	128.60
26	1H	141	A	N7-C8-N9	8.20	117.90	113.80
26	14	1253	A	C5-C6-N6	-8.21	117.14	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2880	C	C6-N1-C2	-8.20	117.02	120.30
26	1H	1950	G	C4-C5-N7	8.20	114.08	110.80
26	14	1950	G	C4-N9-C1'	8.20	137.16	126.50
1	13	760	G	C6-C5-N7	-8.20	125.48	130.40
26	1H	144	C	C5-C6-N1	-8.19	116.90	121.00
26	14	1614	A	C2-N3-C4	-8.19	106.50	110.60
26	1H	945	A	C5-C6-N1	-8.19	113.61	117.70
26	1H	245	G	N9-C4-C5	-8.19	102.12	105.40
26	14	1613	G	N9-C4-C5	-8.19	102.12	105.40
26	14	2357	U	O5'-P-OP2	-8.19	98.33	105.70
1	13	1496	C	C2-N1-C1'	-8.18	109.80	118.80
26	1H	705	A	N1-C6-N6	8.18	123.51	118.60
26	1H	2346	A	C5-N7-C8	-8.18	99.81	103.90
26	1H	1785	A	C4-C5-C6	8.18	121.09	117.00
26	14	1496	A	C5-N7-C8	-8.18	99.81	103.90
26	1H	1626	G	C8-N9-C4	-8.17	103.13	106.40
26	14	2713	A	N7-C8-N9	8.17	117.89	113.80
26	14	2253	G	C5-C6-O6	-8.16	123.70	128.60
26	14	2595	G	O5'-P-OP1	-8.16	98.36	105.70
26	14	1145	C	C6-N1-C2	-8.15	117.04	120.30
26	1H	123	G	O5'-P-OP2	-8.15	98.37	105.70
27	16	79	C	C2-N1-C1'	8.15	127.76	118.80
1	13	1502	A	C6-C5-N7	-8.14	126.60	132.30
26	1H	2702	U	C5-C6-N1	8.14	126.77	122.70
26	14	1520	U	C5-C4-O4	8.14	130.78	125.90
26	14	2437	U	C5-C4-O4	8.14	130.78	125.90
26	1H	263	C	O5'-P-OP2	-8.13	98.38	105.70
26	14	921	G	C8-N9-C4	-8.13	103.15	106.40
26	1H	2430	A	N3-C4-N9	-8.13	120.90	127.40
26	1H	189	G	O5'-P-OP2	8.13	120.45	110.70
26	1H	1350	C	C6-N1-C2	8.12	123.55	120.30
26	1H	1314	C	C2-N1-C1'	8.12	127.73	118.80
26	1H	2259	G	OP1-P-OP2	-8.12	107.43	119.60
26	14	2688	U	C5-C6-N1	-8.11	118.64	122.70
26	1H	1526	G	C8-N9-C4	-8.11	103.16	106.40
26	1H	801	G	N3-C2-N2	-8.11	114.23	119.90
26	14	2335	A	O4'-C1'-N9	8.10	114.68	108.20
26	1H	1496	A	N1-C6-N6	8.10	123.46	118.60
26	1H	146	G	C4-C5-N7	8.09	114.04	110.80
1	13	690	G	C4-C5-C6	8.09	123.66	118.80
26	1H	2446	G	C4-C5-N7	8.09	114.04	110.80
26	14	2518	A	O4'-C1'-N9	-8.09	101.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	808	C	N3-C4-C5	-8.09	118.67	121.90
26	1H	820	A	O5'-P-OP1	-8.09	98.42	105.70
26	14	676	A	N7-C8-N9	8.08	117.84	113.80
26	1H	189	G	N1-C6-O6	8.08	124.75	119.90
26	1H	1201	C	N3-C2-O2	8.08	127.56	121.90
26	1H	265	A	C5-N7-C8	-8.08	99.86	103.90
26	1H	2346	A	C6-C5-N7	-8.07	126.65	132.30
27	16	101	A	O5'-P-OP2	-8.07	98.43	105.70
1	1G	449	C	C6-N1-C2	-8.07	117.07	120.30
26	14	1970	A	O5'-P-OP2	-8.07	98.44	105.70
26	1H	681	G	N1-C2-N2	-8.07	108.94	116.20
26	14	71	A	C5-N7-C8	-8.07	99.86	103.90
26	1H	130	C	C5-C4-N4	-8.07	114.55	120.20
26	1H	1401	G	C8-N9-C4	-8.07	103.17	106.40
26	14	570	G	N3-C4-C5	-8.07	124.57	128.60
26	1H	462	C	C6-N1-C2	-8.06	117.08	120.30
26	14	783	A	C5-C6-N1	-8.06	113.67	117.70
26	1H	321	G	C6-C5-N7	-8.06	125.57	130.40
23	2K	13	C	C5-C6-N1	8.06	125.03	121.00
26	1H	659	C	C5-C6-N1	-8.06	116.97	121.00
26	1H	2688	U	N1-C2-N3	8.05	119.73	114.90
26	1H	2747	G	C4-C5-N7	8.05	114.02	110.80
26	1H	2577	A	N1-C6-N6	-8.05	113.77	118.60
26	1H	1518	C	O5'-P-OP1	-8.05	98.46	105.70
26	1H	2582	G	C4-C5-N7	8.05	114.02	110.80
26	1H	929	G	N1-C6-O6	8.04	124.73	119.90
26	1H	2507	C	N1-C2-O2	8.05	123.73	118.90
26	14	2249	U	C6-N1-C2	-8.04	116.18	121.00
26	1H	774	A	N7-C8-N9	8.04	117.82	113.80
26	14	121	G	C5-C6-O6	-8.04	123.78	128.60
26	1H	2282	G	O5'-P-OP1	-8.04	98.47	105.70
26	14	2351	G	N3-C4-C5	-8.04	124.58	128.60
26	1H	2518	A	C8-N9-C4	-8.03	102.59	105.80
26	1H	2252	G	C8-N9-C4	8.03	109.61	106.40
28	19	272	ALA	N-CA-C	8.03	132.67	111.00
26	1H	2238	G	O5'-P-OP2	-8.02	98.48	105.70
26	1H	2232	U	C5-C4-O4	8.02	130.71	125.90
26	1H	1950	G	O4'-C1'-N9	8.02	114.61	108.20
26	1H	1254	A	C2-N3-C4	-8.02	106.59	110.60
26	1H	2819	G	C5-C6-O6	-8.01	123.79	128.60
1	13	362	G	O5'-P-OP1	-8.01	98.50	105.70
1	13	528	C	C6-N1-C2	8.01	123.50	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1612	C	C6-N1-C2	8.01	123.50	120.30
26	1H	1022	G	N9-C4-C5	8.00	108.60	105.40
26	1H	1192	G	C8-N9-C4	8.00	109.60	106.40
22	1K	76	A	N7-C8-N9	7.99	117.80	113.80
26	1H	1781	C	N3-C2-O2	-7.99	116.31	121.90
26	1H	2435	A	O5'-P-OP1	-7.99	98.51	105.70
26	1H	784	A	O4'-C1'-N9	7.98	114.59	108.20
26	1H	2439	A	O5'-P-OP2	-7.98	98.52	105.70
26	14	2443	C	O5'-P-OP2	7.98	120.28	110.70
26	1H	1639	U	N3-C2-O2	-7.98	116.62	122.20
26	14	1324	G	N1-C6-O6	7.98	124.69	119.90
1	13	254	G	O5'-P-OP1	-7.98	98.52	105.70
26	1H	1605	C	O5'-P-OP1	-7.98	98.52	105.70
26	14	1342	A	N1-C2-N3	7.98	133.29	129.30
26	1H	286	C	O5'-P-OP2	-7.97	98.52	105.70
26	1H	222	A	P-O3'-C3'	7.97	129.27	119.70
26	14	2610	C	C5-C4-N4	-7.97	114.62	120.20
26	1H	917	A	N1-C6-N6	7.96	123.38	118.60
26	1H	797	C	C6-N1-C2	7.96	123.48	120.30
26	1H	2392	A	C5-C6-N1	-7.96	113.72	117.70
26	14	1932	A	O5'-P-OP1	-7.96	98.54	105.70
26	1H	1931	U	C5-C6-N1	-7.95	118.72	122.70
26	1H	2267	A	OP1-P-O3'	7.95	122.69	105.20
26	1H	2698	U	C5-C6-N1	-7.95	118.73	122.70
26	1H	1324	G	N1-C6-O6	7.94	124.67	119.90
26	1H	1520	U	N3-C2-O2	-7.94	116.64	122.20
26	14	929	G	N7-C8-N9	7.94	117.07	113.10
26	14	1306	C	O5'-P-OP1	-7.93	98.56	105.70
26	1H	2248	C	N3-C4-N4	-7.92	112.45	118.00
26	14	774	A	O5'-P-OP1	7.92	120.21	110.70
26	14	792	G	N3-C4-C5	-7.92	124.64	128.60
26	1H	834	C	OP2-P-O3'	7.92	122.63	105.20
26	1H	865	C	O5'-P-OP2	7.92	120.21	110.70
26	1H	1314	C	O5'-P-OP2	-7.92	98.57	105.70
26	1H	1496	A	C8-N9-C4	-7.92	102.63	105.80
1	13	353	A	C8-N9-C4	-7.92	102.63	105.80
26	1H	48	G	OP2-P-O3'	7.91	122.61	105.20
26	1H	692	C	C5-C4-N4	-7.91	114.66	120.20
26	1H	860	U	N1-C2-O2	7.91	128.34	122.80
1	13	789	U	C4-C5-C6	7.91	124.45	119.70
26	14	967	C	O5'-P-OP2	-7.91	98.58	105.70
26	1H	2576	G	C8-N9-C4	7.91	109.56	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	429	A	O5'-P-OP1	-7.90	98.59	105.70
26	14	1617	C	N1-C2-O2	-7.90	114.16	118.90
26	1H	2572	A	O5'-P-OP2	-7.90	98.59	105.70
26	14	676	A	C4-C5-N7	7.90	114.65	110.70
26	14	1283	G	N3-C4-C5	-7.90	124.65	128.60
26	1H	1021	A	N7-C8-N9	7.89	117.75	113.80
26	14	2439	A	N7-C8-N9	7.88	117.74	113.80
26	1H	946	G	C8-N9-C4	7.88	109.55	106.40
26	14	2542	A	N7-C8-N9	-7.87	109.86	113.80
26	1H	1302	A	OP1-P-OP2	7.87	131.40	119.60
26	1H	510	C	O5'-P-OP2	-7.86	98.62	105.70
26	1H	908	C	O5'-P-OP2	-7.86	98.62	105.70
26	14	945	A	C5-C6-N6	-7.86	117.41	123.70
1	13	990	C	C6-N1-C2	-7.86	117.16	120.30
26	1H	1622	G	N3-C2-N2	-7.86	114.40	119.90
26	1H	683	C	N3-C4-C5	7.85	125.04	121.90
36	35	62	LEU	N-CA-C	7.85	132.20	111.00
26	1H	693	C	N3-C4-N4	-7.85	112.51	118.00
26	14	1253	A	N9-C4-C5	-7.85	102.66	105.80
26	1H	49	A	C5-N7-C8	7.84	107.82	103.90
26	1H	942	G	N3-C2-N2	-7.84	114.41	119.90
26	1H	777	A	N1-C2-N3	7.84	133.22	129.30
26	1H	2457	U	N3-C2-O2	7.84	127.69	122.20
26	1H	1157	G	N1-C6-O6	7.83	124.60	119.90
26	1H	2518	A	N1-C6-N6	7.83	123.30	118.60
28	11	238	GLY	N-CA-C	7.83	132.67	113.10
1	1G	1397	C	C6-N1-C2	-7.83	117.17	120.30
26	1H	2380	C	C6-N1-C2	7.82	123.43	120.30
26	1H	664	C	O5'-P-OP2	-7.82	98.66	105.70
26	14	2046	G	N1-C6-O6	-7.82	115.21	119.90
26	14	2444	G	N1-C6-O6	-7.82	115.21	119.90
1	13	1322	C	C5-C6-N1	7.81	124.91	121.00
26	1H	839	U	OP1-P-OP2	7.81	131.31	119.60
42	D8	40	LEU	CA-CB-CG	7.81	133.26	115.30
26	1H	1526	G	N7-C8-N9	7.80	117.00	113.10
26	1H	640	C	O5'-P-OP2	-7.80	98.68	105.70
26	1H	1443	G	C4-C5-C6	7.80	123.48	118.80
26	14	783	A	N3-C4-N9	-7.80	121.16	127.40
27	16	79	C	C5-C6-N1	7.79	124.89	121.00
26	14	2267	A	OP1-P-OP2	7.79	131.29	119.60
26	1H	1210	A	C4-C5-N7	7.79	114.59	110.70
26	1H	529	A	N7-C8-N9	7.78	117.69	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	1346	A	P-O3'-C3'	7.78	129.04	119.70
26	14	2617	C	C6-N1-C2	7.78	123.41	120.30
1	13	792	A	C2-N3-C4	-7.78	106.71	110.60
25	4K	18	G	N9-C4-C5	7.78	108.51	105.40
26	1H	526	A	N1-C6-N6	-7.78	113.93	118.60
26	1H	2003	G	O5'-P-OP1	-7.78	98.70	105.70
26	14	741	G	O5'-P-OP2	7.78	120.03	110.70
1	13	898	G	O5'-P-OP1	-7.78	98.70	105.70
26	1H	758	C	N3-C4-C5	7.78	125.01	121.90
26	1H	783	A	N1-C2-N3	7.77	133.18	129.30
26	1H	1888	G	N3-C4-C5	-7.76	124.72	128.60
26	1H	768	G	O5'-P-OP2	-7.76	98.72	105.70
26	14	1313	U	C2-N1-C1'	7.76	127.02	117.70
26	1H	863	A	O5'-P-OP1	7.76	120.01	110.70
23	2L	21	U	N3-C4-C5	7.76	119.26	114.60
26	14	2731	G	C6-C5-N7	-7.76	125.75	130.40
1	13	1468	A	C8-N9-C4	7.76	108.90	105.80
26	1H	636	G	O5'-P-OP2	7.75	120.00	110.70
26	14	2051	A	C8-N9-C4	-7.75	102.70	105.80
26	1H	119	A	C5-N7-C8	7.75	107.77	103.90
26	14	746	A	O5'-P-OP2	7.75	119.99	110.70
1	13	1158	C	C2-N1-C1'	7.74	127.32	118.80
26	14	621	A	C5-C6-N1	-7.74	113.83	117.70
26	14	1925	C	N1-C2-O2	-7.74	114.25	118.90
26	14	2518	A	N7-C8-N9	7.74	117.67	113.80
26	1H	1225	C	C6-N1-C2	7.74	123.40	120.30
26	1H	146	G	C5-C6-O6	-7.74	123.96	128.60
26	1H	528	A	C2-N3-C4	-7.72	106.74	110.60
26	14	1332	G	C8-N9-C1'	-7.72	116.96	127.00
1	1G	337	C	C6-N1-C2	-7.72	117.21	120.30
26	1H	537	C	O5'-P-OP1	7.72	119.96	110.70
26	14	561	G	N3-C4-N9	-7.72	121.37	126.00
23	2L	21	U	C2-N3-C4	-7.71	122.37	127.00
26	1H	739	G	N7-C8-N9	-7.71	109.24	113.10
26	1H	945	A	C8-N9-C1'	-7.71	113.82	127.70
26	1H	2228	G	C4-N9-C1'	7.71	136.53	126.50
26	1H	1300	U	N1-C2-O2	-7.71	117.41	122.80
1	13	827	U	N3-C2-O2	-7.70	116.81	122.20
26	1H	1428	C	N3-C4-N4	-7.70	112.61	118.00
26	1H	681	G	C2-N3-C4	-7.69	108.06	111.90
26	1H	1336	A	N9-C4-C5	7.69	108.87	105.80
26	14	1671	U	O5'-P-OP1	-7.69	98.78	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	811	C	N1-C2-O2	-7.68	114.29	118.90
26	14	1527	G	N3-C4-N9	-7.68	121.39	126.00
26	1H	1614	A	N3-C4-C5	7.68	132.18	126.80
29	29	23	VAL	N-CA-C	7.68	131.74	111.00
26	1H	1611	C	C5-C6-N1	-7.67	117.16	121.00
26	1H	1022	G	C4-C5-N7	-7.67	107.73	110.80
1	13	816	A	C8-N9-C4	-7.67	102.73	105.80
26	1H	1297	C	O5'-P-OP2	-7.67	98.80	105.70
26	14	867	C	O5'-P-OP1	-7.66	98.80	105.70
26	1H	672	C	OP2-P-O3'	7.66	122.05	105.20
26	1H	1278	A	N1-C6-N6	7.66	123.20	118.60
55	Q8	50	LEU	CA-CB-CG	7.66	132.92	115.30
26	1H	2444	G	C8-N9-C4	-7.65	103.34	106.40
26	14	737	C	N3-C2-O2	7.65	127.26	121.90
26	14	2039	C	C2-N1-C1'	7.65	127.22	118.80
26	1H	2711	A	OP1-P-O3'	7.65	122.03	105.20
26	1H	984	A	O5'-P-OP2	-7.65	98.82	105.70
26	1H	2070	G	C8-N9-C4	7.64	109.46	106.40
26	14	979	G	C8-N9-C4	-7.64	103.34	106.40
1	13	23	C	C6-N1-C2	-7.63	117.25	120.30
27	16	115	G	C5-C6-N1	7.63	115.32	111.50
26	14	2463	C	C6-N1-C2	7.63	123.35	120.30
26	1H	610	C	C5-C6-N1	-7.63	117.19	121.00
26	1H	66	C	C6-N1-C2	-7.63	117.25	120.30
26	1H	1610	A	N9-C4-C5	-7.63	102.75	105.80
26	1H	678	C	N3-C4-C5	7.62	124.95	121.90
26	1H	1299	G	O5'-P-OP1	-7.62	98.84	105.70
1	13	656	C	C5-C6-N1	7.62	124.81	121.00
26	1H	778	G	C5-C6-O6	7.62	133.17	128.60
26	1H	203	C	O5'-P-OP2	7.61	119.84	110.70
26	14	943	U	O5'-P-OP1	-7.61	98.85	105.70
26	1H	265	A	N1-C2-N3	7.61	133.10	129.30
26	1H	1558	A	C2-N3-C4	-7.61	106.80	110.60
26	1H	1817	G	N3-C2-N2	7.61	125.23	119.90
26	1H	1501	C	O5'-P-OP2	7.61	119.83	110.70
26	1H	815	C	C6-N1-C2	7.61	123.34	120.30
1	1G	1499	A	O5'-P-OP1	-7.61	98.85	105.70
26	1H	1332	G	C6-C5-N7	-7.60	125.84	130.40
26	1H	1640	C	O5'-P-OP1	7.60	119.82	110.70
26	1H	1814	G	C4-C5-N7	7.60	113.84	110.80
1	1G	1297	C	P-O3'-C3'	7.60	128.82	119.70
1	1G	1502	A	N7-C8-N9	7.60	117.60	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	697	C	O5'-P-OP1	-7.60	98.86	105.70
26	1H	613	U	N1-C2-N3	7.59	119.46	114.90
26	1H	122	G	OP1-P-OP2	7.59	130.99	119.60
1	1G	337	C	C5-C6-N1	7.59	124.80	121.00
26	1H	1210	A	N7-C8-N9	7.59	117.59	113.80
1	13	1517	G	O5'-P-OP2	-7.59	98.87	105.70
24	3L	76	A	O4'-C1'-N9	7.59	114.27	108.20
26	1H	763	G	C6-C5-N7	-7.58	125.85	130.40
26	14	196	A	O4'-C1'-N9	7.58	114.27	108.20
26	1H	1939	U	N3-C2-O2	7.58	127.51	122.20
26	14	201	C	C5-C6-N1	-7.58	117.21	121.00
26	14	776	G	N3-C2-N2	-7.58	114.60	119.90
26	1H	1626	G	N7-C8-N9	7.57	116.89	113.10
26	14	2575	C	C5-C4-N4	7.57	125.50	120.20
26	1H	1265	A	O5'-P-OP1	-7.57	98.89	105.70
26	1H	2420	C	O5'-P-OP1	-7.57	98.89	105.70
26	1H	1397	U	N1-C2-O2	7.57	128.10	122.80
26	1H	827	U	O5'-P-OP1	7.57	119.78	110.70
26	1H	826	U	N1-C2-O2	-7.57	117.50	122.80
1	13	1354	C	C6-N1-C2	-7.56	117.28	120.30
26	1H	478	A	C6-N1-C2	-7.56	114.06	118.60
26	14	2273	A	O5'-P-OP2	-7.56	98.90	105.70
1	13	740	U	O5'-P-OP2	-7.56	98.90	105.70
23	2K	21	U	C2-N3-C4	-7.56	122.47	127.00
26	1H	1382	G	C4-C5-N7	7.55	113.82	110.80
1	13	1158	C	N3-C2-O2	-7.55	116.61	121.90
26	1H	2252	G	N7-C8-N9	-7.55	109.32	113.10
26	14	2255	G	O5'-P-OP2	-7.55	98.90	105.70
1	13	792	A	N7-C8-N9	7.55	117.57	113.80
55	Q8	52	LYS	C-N-CD	-7.55	104.00	120.60
26	1H	1430	C	OP1-P-O3'	7.54	121.79	105.20
26	1H	965	C	C5-C6-N1	7.54	124.77	121.00
26	1H	1621	U	N3-C4-O4	7.54	124.68	119.40
26	1H	1939	U	N1-C2-O2	-7.54	117.52	122.80
26	1H	2275	C	O4'-C1'-N1	-7.53	102.17	108.20
26	1H	2503	A	C2-N3-C4	7.53	114.36	110.60
26	14	2511	U	O5'-P-OP2	-7.53	98.92	105.70
26	14	2609	U	O5'-P-OP2	-7.53	98.92	105.70
26	1H	2330	G	C4-C5-N7	7.52	113.81	110.80
24	3K	71	G	O4'-C1'-N9	7.52	114.22	108.20
26	1H	2424	C	OP1-P-OP2	7.52	130.88	119.60
26	14	2818	G	C5-C6-O6	-7.52	124.09	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1391	U	N3-C4-O4	7.52	124.66	119.40
26	1H	271(B)	G	N3-C4-C5	-7.51	124.84	128.60
26	1H	526	A	N9-C4-C5	7.51	108.81	105.80
26	1H	735	A	N7-C8-N9	-7.51	110.05	113.80
26	1H	137	C	C6-N1-C2	-7.51	117.30	120.30
26	14	2587	A	N1-C6-N6	7.50	123.10	118.60
26	1H	1781	C	N1-C2-O2	7.49	123.40	118.90
26	14	388	G	C5-C6-N1	-7.49	107.75	111.50
26	1H	1546	C	C6-N1-C2	-7.49	117.31	120.30
26	14	1585	C	N1-C2-O2	7.49	123.39	118.90
26	14	1678	G	C4-C5-N7	7.49	113.80	110.80
26	1H	1698	A	N3-C4-C5	7.48	132.04	126.80
26	1H	596	G	N1-C6-O6	7.48	124.39	119.90
26	14	1024	G	N1-C6-O6	7.48	124.39	119.90
26	14	1274	A	C5-C6-N6	-7.48	117.72	123.70
26	14	2392	A	C8-N9-C4	-7.48	102.81	105.80
26	1H	74	A	N7-C8-N9	7.48	117.54	113.80
26	1H	617	G	N7-C8-N9	-7.48	109.36	113.10
26	1H	2586	C	N3-C4-N4	7.48	123.23	118.00
26	14	829	A	O5'-P-OP2	-7.47	98.97	105.70
26	14	2217	G	N1-C6-O6	7.47	124.39	119.90
26	1H	1323	U	OP1-P-OP2	-7.47	108.39	119.60
26	1H	1604	C	O5'-P-OP2	7.47	119.67	110.70
26	1H	528	A	C5-N7-C8	-7.47	100.17	103.90
26	1H	628	G	C8-N9-C4	7.47	109.39	106.40
26	14	530	G	C2-N3-C4	-7.47	108.17	111.90
26	14	1678	G	C2-N3-C4	-7.46	108.17	111.90
26	1H	852	G	O5'-P-OP2	-7.46	98.98	105.70
26	14	2038	G	C8-N9-C4	7.46	109.39	106.40
1	1G	1286	A	C8-N9-C4	-7.46	102.82	105.80
26	1H	1936	A	C5-C6-N6	-7.46	117.73	123.70
26	1H	2830	G	C8-N9-C4	-7.46	103.42	106.40
26	1H	2275	C	OP1-P-O3'	7.46	121.60	105.20
36	35	65	ARG	N-CA-C	-7.45	90.88	111.00
26	1H	446	G	N1-C6-O6	7.45	124.37	119.90
26	1H	271(B)	G	P-O3'-C3'	7.45	128.64	119.70
26	1H	859	G	N3-C4-C5	7.45	132.32	128.60
26	14	676	A	N1-C6-N6	7.45	123.07	118.60
26	14	1332	G	O4'-C1'-N9	-7.45	102.24	108.20
26	1H	252	G	O5'-P-OP1	7.44	119.63	110.70
26	1H	1128	A	O5'-P-OP2	-7.44	99.00	105.70
26	1H	1307	A	N1-C6-N6	7.44	123.06	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	1484	C	O5'-P-OP2	-7.44	99.00	105.70
23	2L	29	C	C5-C6-N1	7.44	124.72	121.00
26	14	1256	G	N1-C6-O6	7.44	124.36	119.90
26	14	2313	C	C6-N1-C2	-7.44	117.32	120.30
26	1H	1027	A	C2-N3-C4	-7.44	106.88	110.60
26	14	770	G	OP1-P-OP2	-7.44	108.44	119.60
26	14	2351	G	N3-C4-N9	7.44	130.46	126.00
26	1H	2401	U	C5-C6-N1	7.44	126.42	122.70
1	1G	183	G	N1-C6-O6	7.44	124.36	119.90
26	14	1274	A	C6-C5-N7	-7.43	127.10	132.30
26	14	1325	G	N3-C4-N9	7.43	130.46	126.00
26	1H	119	A	C4-C5-N7	-7.43	106.98	110.70
26	1H	946	G	N7-C8-N9	-7.43	109.38	113.10
26	1H	826	U	C4-C5-C6	7.43	124.16	119.70
26	1H	1123	C	N1-C2-O2	-7.43	114.44	118.90
26	14	684	G	C8-N9-C4	-7.43	103.43	106.40
26	14	1256	G	C5-C6-O6	-7.43	124.14	128.60
26	1H	223	A	O5'-P-OP2	-7.42	99.02	105.70
26	1H	1806	C	OP1-P-OP2	7.42	130.73	119.60
26	1H	1691	C	C6-N1-C2	-7.42	117.33	120.30
26	1H	140	A	C2-N3-C4	-7.42	106.89	110.60
1	13	295	C	O5'-P-OP2	-7.42	99.03	105.70
1	13	329	A	O5'-P-OP2	-7.41	99.03	105.70
26	1H	462	C	O5'-P-OP2	-7.41	99.03	105.70
26	1H	464	U	C5-C6-N1	-7.41	119.00	122.70
26	1H	860	U	C6-N1-C1'	-7.41	110.83	121.20
1	13	789	U	N1-C2-N3	7.41	119.34	114.90
26	14	1630(A)	C	N1-C2-O2	-7.41	114.46	118.90
1	13	687	A	P-O3'-C3'	7.40	128.58	119.70
26	1H	190	A	C6-N1-C2	-7.40	114.16	118.60
1	1G	320	C	C6-N1-C2	7.40	123.26	120.30
26	14	330	A	N1-C6-N6	7.40	123.04	118.60
26	1H	1914	C	C6-N1-C2	-7.40	117.34	120.30
26	14	2439	A	N1-C6-N6	7.40	123.04	118.60
26	1H	1940	U	N3-C4-O4	7.40	124.58	119.40
26	14	2301	C	C6-N1-C2	-7.39	117.34	120.30
26	1H	529	A	C8-N9-C4	-7.39	102.84	105.80
34	15	42	TRP	NE1-CE2-CD2	7.39	114.69	107.30
26	1H	2585	U	N3-C2-O2	-7.38	117.03	122.20
26	1H	1376	C	C6-N1-C2	-7.38	117.35	120.30
26	1H	2822	G	C6-C5-N7	-7.38	125.97	130.40
1	13	690	G	N3-C4-N9	7.38	130.43	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1605	C	C2-N3-C4	-7.38	116.21	119.90
26	1H	1367	A	C2-N3-C4	-7.38	106.91	110.60
1	13	535	A	N1-C6-N6	-7.38	114.17	118.60
26	1H	1443	G	C6-C5-N7	-7.38	125.97	130.40
26	14	113	G	N1-C6-O6	7.37	124.33	119.90
26	1H	1792	G	N1-C6-O6	-7.37	115.48	119.90
26	1H	2395	C	C2-N1-C1'	7.37	126.90	118.80
1	1G	1518	A	O5'-P-OP1	-7.37	99.07	105.70
26	14	113	G	N3-C4-C5	7.37	132.28	128.60
26	1H	663	G	C4-C5-C6	7.37	123.22	118.80
26	1H	2619	C	O5'-P-OP2	-7.37	99.07	105.70
26	14	1270	C	C6-N1-C2	-7.36	117.35	120.30
26	14	2001	A	C5-C6-N6	-7.36	117.81	123.70
26	14	1332	G	C4-C5-C6	7.36	123.22	118.80
26	14	2332	U	O5'-P-OP1	7.36	119.53	110.70
26	1H	763	G	C5-C6-O6	-7.36	124.18	128.60
26	14	1939	U	OP2-P-O3'	7.36	121.39	105.20
26	14	1616	A	O4'-C1'-N9	7.36	114.09	108.20
26	1H	37	C	N3-C4-C5	-7.36	118.96	121.90
26	14	1377	G	C8-N9-C4	-7.36	103.46	106.40
26	1H	1831	G	O5'-P-OP2	7.36	119.53	110.70
26	1H	811	U	O5'-P-OP1	-7.35	99.08	105.70
26	1H	762	U	N1-C2-O2	7.35	127.94	122.80
26	14	1742	C	C6-N1-C2	-7.35	117.36	120.30
1	13	219	C	C6-N1-C2	-7.35	117.36	120.30
26	14	74	A	C5-N7-C8	-7.35	100.23	103.90
26	1H	698	C	C4-C5-C6	7.34	121.07	117.40
26	14	2513	G	C5-C6-O6	-7.34	124.19	128.60
26	14	1313	U	C6-N1-C2	-7.34	116.59	121.00
23	2K	35	C	C2-N1-C1'	7.34	126.87	118.80
26	1H	783	A	N1-C6-N6	7.34	123.00	118.60
26	1H	1229(A)	G	O5'-P-OP2	-7.34	99.09	105.70
26	1H	537	C	O5'-P-OP2	-7.34	99.09	105.70
1	13	1199	U	N3-C4-C5	-7.34	110.20	114.60
26	1H	2446	G	C5-C6-O6	-7.34	124.20	128.60
26	14	1527	G	N3-C4-C5	7.33	132.27	128.60
26	1H	113	G	N1-C6-O6	7.33	124.30	119.90
26	1H	1817	G	N1-C2-N2	-7.33	109.60	116.20
26	14	528	A	N1-C6-N6	7.33	123.00	118.60
26	1H	762	U	C2-N1-C1'	7.33	126.49	117.70
26	1H	1521	G	C8-N9-C4	-7.33	103.47	106.40
26	1H	2080	G	O5'-P-OP1	-7.33	99.11	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	27	G	N1-C6-O6	7.33	124.30	119.90
26	1H	1967	C	N1-C2-O2	7.33	123.30	118.90
26	14	2346	A	C2-N3-C4	-7.33	106.94	110.60
27	16	81	G	C4-C5-N7	7.33	113.73	110.80
26	1H	967	C	O5'-P-OP2	-7.32	99.11	105.70
26	14	2087	G	N9-C4-C5	-7.32	102.47	105.40
26	1H	671	C	C6-N1-C2	7.32	123.23	120.30
26	14	945	A	N9-C4-C5	-7.32	102.87	105.80
26	14	774	A	C5-N7-C8	-7.31	100.24	103.90
26	14	2249	U	N3-C4-C5	-7.31	110.21	114.60
26	1H	2499	C	N3-C2-O2	7.31	127.02	121.90
26	1H	787	U	OP1-P-OP2	-7.31	108.64	119.60
26	1H	2060	A	N1-C6-N6	-7.31	114.22	118.60
26	1H	2379	G	N3-C4-N9	7.31	130.38	126.00
26	1H	1369	G	N3-C4-C5	-7.30	124.95	128.60
26	1H	2546	U	N1-C2-O2	-7.30	117.69	122.80
26	1H	1308	A	N1-C2-N3	7.30	132.95	129.30
26	1H	559	G	N1-C6-O6	7.30	124.28	119.90
26	1H	845	G	P-O3'-C3'	7.30	128.46	119.70
26	1H	2276	G	N3-C2-N2	-7.30	114.79	119.90
26	14	1284	A	O5'-P-OP2	-7.30	99.13	105.70
26	1H	446	G	N3-C4-N9	7.30	130.38	126.00
26	1H	1772	G	N3-C2-N2	7.29	125.01	119.90
26	1H	1681	G	N1-C6-O6	7.29	124.28	119.90
26	14	2386	C	C6-N1-C2	7.29	123.22	120.30
26	14	922	U	C5-C6-N1	7.29	126.34	122.70
26	1H	974(A)	C	N3-C2-O2	-7.29	116.80	121.90
26	1H	1691	C	OP1-P-O3'	7.29	121.23	105.20
1	1G	995	C	C6-N1-C2	-7.29	117.39	120.30
26	14	2301	C	C5-C6-N1	7.29	124.64	121.00
1	13	115	G	C8-N9-C4	-7.28	103.49	106.40
26	14	2776	A	C8-N9-C4	-7.28	102.89	105.80
26	1H	2586	C	C5-C4-N4	-7.28	115.10	120.20
26	14	2507	C	O5'-P-OP2	-7.28	99.15	105.70
1	1G	528	C	O4'-C1'-N1	7.28	114.02	108.20
26	1H	2497	A	C6-N1-C2	-7.28	114.23	118.60
26	1H	1854	A	N1-C6-N6	-7.28	114.23	118.60
26	1H	2582	G	C6-C5-N7	-7.28	126.03	130.40
26	14	2012	G	N1-C6-O6	7.28	124.27	119.90
26	1H	2415	G	N1-C6-O6	7.27	124.26	119.90
28	19	37	LEU	CA-CB-CG	7.27	132.03	115.30
26	1H	1332	G	N1-C6-O6	7.27	124.26	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	774	A	C8-N9-C1'	7.27	140.79	127.70
1	13	1505	G	OP1-P-OP2	-7.27	108.70	119.60
26	1H	1820	U	C6-N1-C2	7.27	125.36	121.00
26	14	113	G	C5-C6-O6	-7.27	124.24	128.60
26	14	1790	C	C6-N1-C2	7.27	123.21	120.30
1	13	1335	C	C6-N1-C2	7.26	123.20	120.30
26	1H	1410	G	C8-N9-C4	7.26	109.30	106.40
26	1H	1698	A	C4-C5-N7	7.26	114.33	110.70
1	13	280	C	C6-N1-C2	7.26	123.20	120.30
26	1H	107	C	C6-N1-C2	7.25	123.20	120.30
26	1H	729	G	N7-C8-N9	7.25	116.73	113.10
26	1H	688	U	N1-C2-N3	7.25	119.25	114.90
26	1H	1380	G	N1-C6-O6	7.25	124.25	119.90
26	14	2080	G	C5-C6-O6	7.25	132.95	128.60
26	1H	1428	C	N3-C4-C5	7.25	124.80	121.90
26	14	2444	G	C5-C6-O6	7.25	132.95	128.60
26	1H	146	G	N1-C6-O6	7.25	124.25	119.90
26	14	37	C	C6-N1-C2	-7.24	117.40	120.30
26	14	1681	G	N7-C8-N9	7.24	116.72	113.10
26	1H	470	A	N1-C6-N6	7.24	122.94	118.60
26	14	2080	G	C4-C5-N7	-7.24	107.91	110.80
1	1G	690	G	C5-N7-C8	-7.24	100.68	104.30
26	14	2623	G	O5'-P-OP1	7.24	119.38	110.70
26	14	2062	A	N1-C6-N6	7.23	122.94	118.60
26	1H	965	C	C6-N1-C2	-7.23	117.41	120.30
26	14	1653	G	O5'-P-OP2	-7.23	99.19	105.70
27	16	56	G	C8-N9-C4	-7.23	103.51	106.40
26	14	499	U	N3-C2-O2	-7.23	117.14	122.20
26	1H	2004	G	O5'-P-OP2	-7.22	99.20	105.70
26	1H	2847	U	O5'-P-OP1	-7.22	99.20	105.70
26	14	729	G	N1-C6-O6	7.22	124.23	119.90
26	14	2364	C	O5'-P-OP2	-7.22	99.20	105.70
26	14	1821	A	N1-C6-N6	7.22	122.93	118.60
26	1H	2057	A	C8-N9-C4	7.22	108.69	105.80
26	1H	663	G	N7-C8-N9	7.22	116.71	113.10
26	1H	2413	G	N1-C6-O6	7.21	124.23	119.90
26	14	2206	C	O5'-P-OP2	-7.21	99.21	105.70
26	1H	1271	G	O5'-P-OP2	-7.21	99.21	105.70
26	14	2623	G	N3-C4-C5	-7.21	124.99	128.60
26	14	1971	A	C8-N9-C4	7.21	108.69	105.80
26	14	2873	A	C4-C5-N7	7.21	114.31	110.70
26	1H	2567	G	O5'-P-OP1	-7.21	99.21	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2491	U	O5'-P-OP1	-7.21	99.21	105.70
26	1H	208	C	C5-C6-N1	-7.21	117.40	121.00
26	1H	636	G	O5'-P-OP1	-7.21	99.21	105.70
23	2K	21	U	C4-C5-C6	-7.20	115.38	119.70
26	1H	2406	U	O4'-C1'-N1	-7.20	102.44	108.20
1	1G	284	G	N1-C6-O6	7.20	124.22	119.90
26	1H	2700	C	N3-C4-C5	7.20	124.78	121.90
26	1H	696	G	O5'-P-OP2	7.20	119.34	110.70
24	3K	76	A	C6-C5-N7	-7.19	127.26	132.30
1	13	63	C	C6-N1-C2	-7.19	117.42	120.30
26	1H	1764	G	C8-N9-C4	-7.19	103.52	106.40
26	14	298	G	N1-C6-O6	7.19	124.22	119.90
1	13	956	U	C6-N1-C2	-7.19	116.69	121.00
26	1H	689	A	C2-N3-C4	-7.19	107.00	110.60
26	1H	2011	U	N3-C2-O2	7.19	127.23	122.20
26	14	1429	G	C8-N9-C4	-7.19	103.53	106.40
26	1H	810	U	O5'-P-OP2	-7.18	99.23	105.70
26	1H	822	U	N3-C2-O2	-7.18	117.17	122.20
26	1H	1653	G	O5'-P-OP2	-7.18	99.23	105.70
26	14	2607	G	N9-C4-C5	-7.18	102.53	105.40
26	1H	198	C	N1-C2-O2	7.18	123.21	118.90
24	3K	76	A	N1-C6-N6	7.18	122.91	118.60
26	1H	587	C	O5'-P-OP1	-7.18	99.24	105.70
26	1H	1279	G	O5'-P-OP1	7.18	119.31	110.70
26	1H	1622	G	C4-C5-N7	-7.18	107.93	110.80
26	1H	1772	G	N1-C2-N2	-7.18	109.74	116.20
26	1H	446	G	C8-N9-C1'	-7.17	117.67	127.00
26	1H	691	C	C5-C6-N1	-7.17	117.41	121.00
26	1H	2274	A	OP2-P-O3'	7.17	120.98	105.20
26	14	1336	A	O5'-P-OP2	-7.17	99.25	105.70
26	14	2038	G	N9-C4-C5	-7.17	102.53	105.40
1	13	5	U	P-O3'-C3'	7.17	128.31	119.70
1	13	122	G	N1-C6-O6	7.17	124.20	119.90
26	14	252	G	O5'-P-OP2	-7.17	99.25	105.70
26	14	1933	G	O5'-P-OP2	-7.17	99.25	105.70
26	1H	2506	U	N1-C2-O2	7.17	127.82	122.80
26	14	1239	G	O5'-P-OP1	-7.17	99.25	105.70
26	14	1782	C	C5-C4-N4	-7.16	115.19	120.20
26	1H	1786	A	OP1-P-O3'	7.16	120.95	105.20
26	1H	330	A	C5-N7-C8	-7.16	100.32	103.90
26	1H	2238	G	OP1-P-OP2	7.16	130.34	119.60
26	1H	1300	U	O5'-P-OP2	-7.16	99.26	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2859	G	C8-N9-C4	-7.16	103.54	106.40
26	1H	1611	C	C2-N3-C4	-7.15	116.32	119.90
26	14	1640	C	O5'-P-OP1	7.15	119.28	110.70
1	13	1199	U	C5-C4-O4	7.15	130.19	125.90
26	1H	839	U	N3-C4-C5	-7.15	110.31	114.60
26	14	752	A	C8-N9-C4	-7.15	102.94	105.80
26	14	2072	G	OP1-P-OP2	-7.15	108.87	119.60
26	1H	446	G	C8-N9-C4	7.15	109.26	106.40
26	14	801	G	C5-C6-O6	7.15	132.89	128.60
26	14	1698	A	C5-C6-N6	-7.15	117.98	123.70
26	14	1698	A	C4-C5-C6	7.15	120.57	117.00
26	1H	983	A	C8-N9-C4	7.14	108.66	105.80
27	16	99	A	OP1-P-OP2	7.14	130.31	119.60
26	1H	1332	G	N1-C2-N3	7.13	128.18	123.90
1	1G	529	G	C5-C6-O6	-7.13	124.32	128.60
26	14	1962	C	N3-C4-C5	7.13	124.75	121.90
26	14	2087	G	C8-N9-C4	7.13	109.25	106.40
26	1H	2073	C	OP2-P-O3'	7.13	120.89	105.20
26	1H	2847	U	O5'-P-OP2	7.13	119.26	110.70
23	2L	35	C	C2-N1-C1'	7.13	126.64	118.80
1	13	1266	G	N3-C4-C5	7.13	132.16	128.60
26	1H	299	A	OP2-P-O3'	7.12	120.88	105.20
26	1H	704	G	N9-C4-C5	7.12	108.25	105.40
26	1H	1800	C	O5'-P-OP2	7.12	119.25	110.70
1	13	564	C	N3-C4-C5	-7.12	119.05	121.90
26	1H	1998	G	C8-N9-C4	7.12	109.25	106.40
26	1H	2681	C	N3-C2-O2	-7.11	116.92	121.90
26	1H	845	G	N3-C4-C5	7.10	132.15	128.60
26	1H	954	G	N3-C2-N2	-7.10	114.93	119.90
26	1H	2318	G	O4'-C1'-N9	7.10	113.88	108.20
26	14	2001	A	N9-C4-C5	-7.10	102.96	105.80
26	14	783	A	O5'-P-OP2	-7.10	99.31	105.70
26	1H	575	A	O5'-P-OP1	-7.10	99.31	105.70
26	1H	2367	G	C8-N9-C4	-7.09	103.56	106.40
26	14	2452	C	N3-C2-O2	7.09	126.86	121.90
26	14	1313	U	O5'-P-OP2	-7.09	99.32	105.70
26	14	1964	G	O5'-P-OP1	-7.09	99.32	105.70
26	14	855	G	C8-N9-C4	-7.09	103.56	106.40
26	1H	974(A)	C	C2-N3-C4	7.09	123.44	119.90
26	1H	2314	C	O5'-P-OP1	7.09	119.20	110.70
26	1H	2697	G	OP1-P-OP2	7.09	130.23	119.60
25	4K	18	G	C8-N9-C4	-7.08	103.57	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2492	U	N1-C2-O2	7.08	127.76	122.80
26	1H	842	G	C5-C6-O6	-7.08	124.35	128.60
26	1H	1573	G	OP2-P-O3'	7.08	120.78	105.20
1	13	1498	U	C2-N1-C1'	7.08	126.19	117.70
26	14	912	C	C6-N1-C2	-7.08	117.47	120.30
26	1H	2249	U	C6-N1-C2	-7.08	116.75	121.00
26	1H	788	A	C8-N9-C4	7.07	108.63	105.80
26	1H	956	G	N1-C6-O6	7.07	124.14	119.90
26	14	1934	C	N1-C2-O2	7.07	123.14	118.90
26	1H	2638	G	N3-C4-N9	7.07	130.24	126.00
26	14	510	C	O5'-P-OP2	-7.07	99.34	105.70
26	14	2688	U	N1-C2-N3	7.07	119.14	114.90
26	1H	1274	A	C8-N9-C4	-7.07	102.97	105.80
26	1H	1787	A	O4'-C1'-N9	-7.07	102.55	108.20
26	1H	1825	A	C5-C6-N6	7.07	129.35	123.70
26	1H	189	G	N7-C8-N9	-7.06	109.57	113.10
26	1H	2346	A	C4-C5-C6	7.06	120.53	117.00
26	14	728	G	N3-C4-N9	7.06	130.24	126.00
26	14	955	C	C6-N1-C2	-7.06	117.47	120.30
26	14	2439	A	P-O3'-C3'	7.06	128.18	119.70
26	14	570	G	C4-N9-C1'	7.06	135.68	126.50
26	1H	1777	U	C4-C5-C6	7.06	123.94	119.70
26	1H	74	A	N3-C4-C5	7.06	131.74	126.80
26	1H	778	G	O5'-P-OP1	7.06	119.17	110.70
26	1H	1443	G	C5-C6-N1	-7.06	107.97	111.50
26	14	2256	G	O5'-P-OP2	-7.05	99.35	105.70
26	14	1347	G	OP1-P-O3'	7.05	120.71	105.20
26	1H	1958	C	OP1-P-O3'	7.05	120.70	105.20
26	1H	2048	G	C8-N9-C4	-7.05	103.58	106.40
26	14	1380	G	N1-C6-O6	7.05	124.13	119.90
26	1H	71	A	C6-C5-N7	-7.04	127.37	132.30
26	14	676	A	N3-C4-N9	-7.04	121.77	127.40
26	14	2526	G	N3-C4-N9	-7.04	121.78	126.00
26	1H	966	G	N1-C6-O6	-7.04	115.68	119.90
26	1H	774	A	N9-C4-C5	7.04	108.61	105.80
26	14	130	C	N3-C4-C5	7.04	124.72	121.90
26	1H	49	A	N7-C8-N9	-7.04	110.28	113.80
26	14	1608	A	N1-C6-N6	-7.04	114.38	118.60
1	13	186(A)	C	C6-N1-C2	-7.04	117.49	120.30
26	1H	1428	C	C5-C6-N1	-7.04	117.48	121.00
26	14	573	G	C2-N3-C4	7.03	115.42	111.90
26	14	1827	C	N3-C2-O2	-7.03	116.98	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	583	G	C8-N9-C4	-7.03	103.59	106.40
26	1H	1569	A	C8-N9-C4	-7.03	102.99	105.80
26	1H	2502	G	N3-C4-C5	-7.03	125.09	128.60
26	1H	2607	G	C2-N3-C4	-7.03	108.39	111.90
26	14	2374	C	C6-N1-C2	7.02	123.11	120.30
26	1H	321	G	N3-C4-N9	7.02	130.21	126.00
26	1H	1858	G	N1-C6-O6	7.02	124.11	119.90
26	1H	2428	G	C8-N9-C4	-7.02	103.59	106.40
1	1G	354	G	C6-C5-N7	-7.02	126.19	130.40
1	13	738	C	C6-N1-C2	-7.02	117.49	120.30
1	13	966	G	C8-N9-C4	7.01	109.21	106.40
26	1H	753	C	C6-N1-C2	-7.01	117.49	120.30
26	1H	1296	G	OP2-P-O3'	7.01	120.63	105.20
26	1H	1610	A	N1-C6-N6	7.01	122.81	118.60
26	1H	1698	A	C5-C6-N1	-7.01	114.19	117.70
1	13	872	A	O4'-C1'-N9	7.01	113.81	108.20
26	1H	1325	G	C6-C5-N7	-7.01	126.19	130.40
26	14	209	C	N3-C4-N4	7.01	122.91	118.00
26	1H	624	C	N1-C2-O2	-7.01	114.69	118.90
26	1H	1971	A	C6-N1-C2	-7.01	114.39	118.60
26	1H	2747	G	N9-C4-C5	-7.01	102.60	105.40
26	1H	679	C	O5'-P-OP1	-7.01	99.39	105.70
26	1H	1305	C	N1-C2-O2	7.00	123.10	118.90
26	14	825	C	N3-C4-C5	-7.00	119.10	121.90
26	14	2324	C	N3-C4-C5	7.00	124.70	121.90
26	1H	1363	C	N3-C4-C5	7.00	124.70	121.90
1	1G	1354	C	C6-N1-C2	-7.00	117.50	120.30
26	14	2386	C	C5-C6-N1	-7.00	117.50	121.00
26	14	2512	C	C6-N1-C2	7.00	123.10	120.30
26	1H	732	C	N1-C2-O2	-7.00	114.70	118.90
26	1H	1574	C	OP2-P-O3'	7.00	120.59	105.20
26	1H	664	C	C2-N3-C4	-7.00	116.40	119.90
26	1H	2609	U	C5-C6-N1	-6.99	119.20	122.70
1	13	525	C	N3-C4-N4	6.99	122.89	118.00
26	1H	1614	A	C5-N7-C8	-6.99	100.41	103.90
26	1H	2712	U	C2-N3-C4	-6.99	122.81	127.00
26	1H	2499	C	C5-C4-N4	-6.99	115.31	120.20
26	14	602	G	N1-C6-O6	6.99	124.09	119.90
26	14	1258	C	N3-C2-O2	6.99	126.79	121.90
26	1H	1204	A	C6-C5-N7	-6.99	127.41	132.30
26	1H	2449	U	C6-N1-C2	-6.99	116.81	121.00
1	1G	567	G	N1-C6-O6	-6.99	115.71	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	1519	A	C5-C6-N1	-6.98	114.21	117.70
26	1H	1971	A	C2-N3-C4	6.98	114.09	110.60
26	14	510	C	C6-N1-C2	-6.98	117.51	120.30
26	14	2518	A	C5-C6-N6	-6.98	118.12	123.70
26	14	1786	A	C5-C6-N1	-6.98	114.21	117.70
26	14	829	A	O5'-P-OP1	-6.98	99.42	105.70
26	1H	144	C	C2-N3-C4	-6.97	116.41	119.90
26	1H	733	G	N1-C2-N2	-6.97	109.92	116.20
23	2L	40	C	C6-N1-C2	-6.97	117.51	120.30
1	13	266	G	N1-C6-O6	6.97	124.08	119.90
26	1H	1537	C	C6-N1-C2	-6.97	117.51	120.30
26	1H	818	G	O5'-P-OP1	-6.97	99.43	105.70
26	1H	134	C	N3-C2-O2	-6.96	117.03	121.90
26	1H	1298	C	OP1-P-O3'	6.96	120.52	105.20
26	1H	2616	C	N1-C2-O2	-6.96	114.72	118.90
26	14	1142	U	C2-N1-C1'	6.96	126.06	117.70
26	1H	1278	A	C5-C6-N6	-6.96	118.13	123.70
26	1H	2598	A	OP2-P-O3'	6.96	120.52	105.20
26	1H	1399	C	C6-N1-C2	-6.96	117.52	120.30
23	2K	22	A	O5'-P-OP2	-6.96	99.44	105.70
26	1H	446	G	C6-C5-N7	-6.96	126.22	130.40
26	1H	837	C	C2-N1-C1'	6.96	126.45	118.80
26	14	729	G	C5-C6-O6	-6.96	124.43	128.60
26	1H	1764	G	N9-C4-C5	6.95	108.18	105.40
26	1H	1776	G	N9-C4-C5	-6.95	102.62	105.40
26	1H	2395	C	C6-N1-C1'	-6.95	112.46	120.80
26	14	1899	G	N1-C2-N3	6.95	128.07	123.90
26	1H	1621	U	N1-C2-O2	-6.95	117.94	122.80
26	1H	2575	C	C4-C5-C6	6.95	120.87	117.40
1	1G	317	G	N1-C6-O6	6.95	124.07	119.90
26	14	1902	C	O5'-P-OP2	6.95	119.04	110.70
26	14	2335	A	N1-C6-N6	-6.95	114.43	118.60
26	1H	1129	A	O5'-P-OP2	-6.95	99.45	105.70
26	14	1359	A	N9-C4-C5	-6.95	103.02	105.80
26	1H	689	A	N1-C2-N3	6.94	132.77	129.30
26	1H	925	C	O5'-P-OP2	-6.94	99.45	105.70
1	13	513	C	C5-C6-N1	6.94	124.47	121.00
26	1H	698	C	C5-C6-N1	-6.94	117.53	121.00
26	1H	1308	A	C6-N1-C2	-6.94	114.44	118.60
26	1H	1373	A	C8-N9-C4	6.94	108.58	105.80
26	1H	705	A	O5'-P-OP2	-6.94	99.45	105.70
26	1H	1621	U	N3-C2-O2	6.94	127.06	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	529	G	C5-C6-O6	-6.93	124.44	128.60
26	1H	1969	A	N1-C6-N6	-6.93	114.44	118.60
26	1H	2584	U	N3-C4-O4	-6.93	114.55	119.40
1	13	1266	G	C4-N9-C1'	-6.93	117.49	126.50
26	1H	2609	U	C4-C5-C6	6.93	123.86	119.70
26	14	971	C	C6-N1-C2	-6.93	117.53	120.30
26	1H	988	A	C8-N9-C4	-6.93	103.03	105.80
26	1H	2726	U	C5-C6-N1	-6.93	119.24	122.70
26	14	819	A	C8-N9-C4	-6.92	103.03	105.80
26	1H	774	A	C4-C5-N7	6.92	114.16	110.70
26	1H	1427	A	N1-C6-N6	-6.92	114.45	118.60
26	1H	691	C	N3-C2-O2	6.92	126.74	121.90
26	1H	1468	C	C6-N1-C2	-6.92	117.53	120.30
26	14	1029	A	N1-C6-N6	6.92	122.75	118.60
26	1H	2292	C	OP1-P-OP2	-6.92	109.22	119.60
26	1H	747	U	O5'-P-OP1	-6.92	99.47	105.70
26	1H	779	U	C5-C4-O4	-6.92	121.75	125.90
26	1H	2705	A	C5-C6-N6	-6.92	118.17	123.70
1	1G	818	G	C4-C5-N7	-6.92	108.03	110.80
26	1H	778	G	C4-C5-N7	-6.92	108.03	110.80
26	14	1314	C	C2-N1-C1'	6.92	126.41	118.80
26	1H	106	C	C6-N1-C2	-6.91	117.53	120.30
26	14	2012	G	C5-C6-O6	-6.91	124.45	128.60
26	14	1204	A	O4'-C1'-N9	6.91	113.73	108.20
26	14	2420	C	O5'-P-OP1	-6.91	99.48	105.70
26	1H	599	G	C8-N9-C4	6.91	109.16	106.40
1	13	1199	U	C6-N1-C2	-6.91	116.86	121.00
1	1G	332	G	C8-N9-C4	6.91	109.16	106.40
26	14	1379	A	N1-C6-N6	6.91	122.74	118.60
26	1H	493	G	C5-C6-N1	-6.91	108.05	111.50
26	1H	1660	C	N3-C4-C5	6.91	124.66	121.90
26	14	2688	U	C4-C5-C6	6.91	123.84	119.70
26	1H	1604	C	C6-N1-C2	-6.90	117.54	120.30
1	1G	111	G	N1-C6-O6	6.90	124.04	119.90
26	1H	146	G	N9-C4-C5	-6.90	102.64	105.40
26	1H	2609	U	C2-N3-C4	-6.90	122.86	127.00
26	14	1671	U	OP1-P-OP2	6.90	129.95	119.60
37	45	82	ARG	N-CA-C	6.90	129.63	111.00
26	14	252	G	C2-N3-C4	6.90	115.35	111.90
26	14	575	A	O5'-P-OP1	-6.90	99.49	105.70
26	1H	670	A	O4'-C1'-N9	-6.90	102.68	108.20
26	1H	1202	C	N1-C2-O2	-6.90	114.76	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2403	C	N1-C2-O2	-6.90	114.76	118.90
26	1H	429	A	N1-C2-N3	6.89	132.75	129.30
26	14	676	A	OP1-P-OP2	6.89	129.94	119.60
26	1H	34	C	N1-C2-O2	6.89	123.04	118.90
26	1H	2757	A	O5'-P-OP2	-6.89	99.50	105.70
26	1H	456	C	O5'-P-OP2	-6.89	99.50	105.70
26	1H	2486	G	O5'-P-OP2	-6.89	99.50	105.70
26	1H	1248	G	N3-C4-C5	6.89	132.04	128.60
26	14	388	G	N3-C4-N9	-6.89	121.87	126.00
26	1H	820	A	N1-C6-N6	-6.89	114.47	118.60
26	1H	133	C	C5-C6-N1	-6.89	117.56	121.00
26	14	1826	G	C8-N9-C4	6.89	109.15	106.40
26	1H	703	U	C5-C4-O4	6.88	130.03	125.90
26	1H	1657	C	C6-N1-C2	-6.88	117.55	120.30
1	1G	900	A	O5'-P-OP1	-6.88	99.51	105.70
26	14	602	G	C8-N9-C1'	-6.88	118.05	127.00
26	14	2272	U	N1-C2-O2	6.88	127.62	122.80
1	13	1224	G	O5'-P-OP1	6.88	118.96	110.70
26	1H	672	C	O5'-P-OP1	6.88	118.96	110.70
26	1H	2597	G	C4-C5-N7	6.88	113.55	110.80
1	13	101	A	N7-C8-N9	6.88	117.24	113.80
26	1H	1520	U	C6-N1-C2	-6.88	116.87	121.00
26	14	1899	G	C5-C6-O6	6.88	132.73	128.60
26	14	2315	G	N3-C4-N9	6.88	130.12	126.00
26	14	2447	G	P-O3'-C3'	6.87	127.95	119.70
26	1H	632	A	O5'-P-OP2	6.87	118.94	110.70
26	1H	1805	U	N3-C4-O4	6.87	124.21	119.40
26	1H	2418	A	OP1-P-OP2	-6.87	109.30	119.60
26	1H	2518	A	C6-C5-N7	-6.87	127.49	132.30
26	1H	1632	A	C4-C5-N7	6.87	114.13	110.70
26	1H	1914	C	N3-C2-O2	-6.87	117.09	121.90
26	1H	2439	A	N1-C6-N6	6.87	122.72	118.60
23	2K	58	A	O5'-P-OP2	6.86	118.94	110.70
26	1H	826	U	N1-C2-N3	6.86	119.02	114.90
26	14	1598	C	O5'-P-OP2	6.86	118.94	110.70
26	1H	239	U	C5-C4-O4	6.86	130.02	125.90
26	1H	1534	G	C8-N9-C4	-6.86	103.66	106.40
26	1H	1764	G	C5-C6-O6	6.86	132.72	128.60
26	14	204	A	C6-N1-C2	-6.86	114.48	118.60
26	14	2073	C	N1-C2-O2	-6.86	114.78	118.90
26	1H	621	A	O4'-C1'-N9	6.86	113.69	108.20
35	68	22	ILE	CG1-CB-CG2	-6.86	96.31	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1942	C	C5-C6-N1	6.86	124.43	121.00
1	13	535	A	N9-C4-C5	6.85	108.54	105.80
26	14	775	G	N3-C4-C5	-6.85	125.17	128.60
27	16	5	C	C6-N1-C2	6.85	123.04	120.30
22	1K	38	A	N1-C6-N6	6.85	122.71	118.60
23	2K	6	G	C8-N9-C4	6.85	109.14	106.40
26	1H	673	C	OP1-P-OP2	-6.85	109.33	119.60
26	1H	687	C	O5'-P-OP1	-6.85	99.54	105.70
26	14	1298	C	N1-C2-O2	6.85	123.01	118.90
26	1H	621	A	C5-C6-N6	-6.84	118.22	123.70
1	13	1475	G	O5'-P-OP1	-6.84	99.54	105.70
26	1H	594	U	C5-C6-N1	-6.84	119.28	122.70
26	14	1782	C	N3-C4-N4	6.84	122.79	118.00
1	13	30	U	N3-C2-O2	6.84	126.98	122.20
26	1H	1195	G	N3-C2-N2	-6.83	115.12	119.90
26	1H	2199	A	N1-C6-N6	-6.83	114.50	118.60
26	1H	2264	C	OP1-P-O3'	6.83	120.23	105.20
26	1H	2552	U	N1-C2-O2	-6.83	118.02	122.80
26	1H	2271	G	N3-C4-N9	6.82	130.09	126.00
26	14	1332	G	OP1-P-O3'	6.82	120.21	105.20
26	1H	1611	C	O5'-P-OP2	6.82	118.88	110.70
27	16	81	G	C5-N7-C8	-6.82	100.89	104.30
26	1H	2062	A	N9-C4-C5	-6.82	103.07	105.80
26	1H	621	A	N3-C4-C5	6.82	131.57	126.80
26	1H	667	U	N3-C4-O4	6.82	124.17	119.40
26	1H	2031	A	C2-N3-C4	6.82	114.01	110.60
26	1H	1888	G	N3-C4-N9	6.81	130.09	126.00
26	14	1154	G	C5-C6-O6	-6.81	124.51	128.60
26	1H	1604	C	O5'-P-OP1	-6.81	99.57	105.70
26	1H	1830	C	N1-C2-O2	-6.81	114.81	118.90
26	1H	913	U	N3-C4-C5	6.81	118.69	114.60
26	1H	2258	C	N1-C2-O2	-6.81	114.82	118.90
26	1H	2508	G	C8-N9-C4	-6.81	103.68	106.40
26	14	2513	G	N1-C6-O6	6.81	123.98	119.90
1	13	560	U	C5-C6-N1	6.80	126.10	122.70
26	1H	766	C	N1-C2-O2	-6.80	114.82	118.90
26	1H	1265	A	C8-N9-C4	-6.80	103.08	105.80
26	1H	1678	G	N1-C2-N3	6.80	127.98	123.90
1	1G	1502	A	C8-N9-C4	-6.80	103.08	105.80
26	14	929	G	C5-C6-O6	-6.80	124.52	128.60
26	14	2249	U	N3-C2-O2	-6.80	117.44	122.20
26	1H	768	G	OP1-P-OP2	6.80	129.80	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2248	C	OP1-P-O3'	6.80	120.17	105.20
1	13	365	U	C5-C6-N1	6.80	126.10	122.70
26	1H	635	C	O5'-P-OP2	-6.80	99.58	105.70
26	1H	676	A	C4-C5-N7	6.80	114.10	110.70
1	1G	1529	G	N3-C4-C5	-6.80	125.20	128.60
26	14	2581	G	C8-N9-C4	-6.80	103.68	106.40
1	1G	28	G	C8-N9-C4	-6.80	103.68	106.40
23	2L	35	C	N1-C2-O2	6.80	122.98	118.90
26	1H	2062	A	N7-C8-N9	-6.80	110.40	113.80
26	1H	2681	C	C6-N1-C2	-6.80	117.58	120.30
1	13	777	A	O5'-P-OP1	6.80	118.86	110.70
26	14	1379	A	C4-C5-N7	6.80	114.10	110.70
1	13	760	G	C5-C6-O6	-6.79	124.52	128.60
26	1H	138	G	C5-N7-C8	-6.79	100.90	104.30
26	14	2056	G	O5'-P-OP1	-6.79	99.59	105.70
1	13	1502	A	N7-C8-N9	6.79	117.20	113.80
26	1H	1312	U	O5'-P-OP2	6.79	118.85	110.70
26	14	1401	G	C8-N9-C4	-6.79	103.68	106.40
26	1H	692	C	N3-C4-N4	6.79	122.75	118.00
26	14	2338	G	O5'-P-OP1	-6.79	99.59	105.70
26	1H	1831	G	C8-N9-C4	-6.79	103.69	106.40
26	14	2401	U	C5-C6-N1	6.78	126.09	122.70
1	13	47	C	N1-C2-O2	-6.78	114.83	118.90
1	13	892	A	C2-N3-C4	-6.78	107.21	110.60
26	1H	1373	A	O5'-P-OP1	6.78	118.84	110.70
26	1H	1925	C	C6-N1-C2	-6.78	117.59	120.30
41	C8	12	ARG	NE-CZ-NH2	-6.78	116.91	120.30
26	14	1474	C	C6-N1-C2	-6.78	117.59	120.30
26	1H	528	A	O4'-C1'-N9	-6.78	102.78	108.20
26	1H	2246	G	C5-N7-C8	6.78	107.69	104.30
1	1G	690	G	N7-C8-N9	6.78	116.49	113.10
26	1H	1303	G	C5-C6-O6	6.77	132.66	128.60
26	1H	1899	G	OP2-P-O3'	6.77	120.10	105.20
26	14	2429	G	OP1-P-OP2	-6.77	109.44	119.60
26	1H	1534	G	C2-N3-C4	6.77	115.28	111.90
26	1H	1931	U	C2-N3-C4	-6.77	122.94	127.00
26	1H	2210	G	C8-N9-C4	-6.77	103.69	106.40
26	14	805	G	N3-C4-N9	6.77	130.06	126.00
26	1H	1634	A	C4-C5-C6	6.77	120.38	117.00
26	1H	2616	C	O5'-P-OP2	6.77	118.82	110.70
26	14	1660	C	OP1-P-OP2	6.77	129.75	119.60
26	1H	788	A	N1-C6-N6	6.76	122.66	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1477	A	O5'-P-OP2	-6.76	99.61	105.70
1	1G	108	G	C4-C5-N7	6.76	113.51	110.80
26	14	2818	G	C8-N9-C4	6.76	109.11	106.40
26	1H	2578	G	C8-N9-C4	6.76	109.11	106.40
1	13	1113	C	C6-N1-C2	-6.76	117.60	120.30
26	1H	1817	G	C8-N9-C4	6.76	109.10	106.40
26	1H	2444	G	N9-C4-C5	6.76	108.10	105.40
26	14	1332	G	C5-C6-O6	-6.76	124.55	128.60
26	1H	131	G	C5-C6-O6	-6.76	124.55	128.60
26	1H	468	G	C5-C6-O6	-6.76	124.55	128.60
26	1H	1299	G	N1-C6-O6	6.76	123.95	119.90
26	14	693	C	C5-C6-N1	-6.76	117.62	121.00
26	1H	678	C	C5-C6-N1	-6.75	117.62	121.00
26	1H	579	G	N1-C2-N3	-6.75	119.85	123.90
1	1G	108	G	C5-C6-O6	-6.75	124.55	128.60
26	14	570	G	C4-C5-C6	6.75	122.85	118.80
26	1H	404	C	C6-N1-C2	6.75	123.00	120.30
26	1H	2379	G	C5-C6-O6	-6.75	124.55	128.60
26	14	784	A	C5-C6-N1	-6.75	114.32	117.70
26	14	1826	G	N7-C8-N9	-6.75	109.72	113.10
26	1H	1935	G	N3-C2-N2	-6.75	115.18	119.90
26	1H	2447	G	C6-N1-C2	-6.75	121.05	125.10
4	3E	12	CYS	CA-CB-SG	6.75	126.14	114.00
26	1H	514	A	C5-N7-C8	6.75	107.27	103.90
26	1H	874	G	O5'-P-OP2	-6.75	99.63	105.70
26	1H	1763	G	O5'-P-OP2	-6.74	99.63	105.70
1	13	816	A	N9-C4-C5	6.74	108.50	105.80
26	1H	121	G	N3-C4-N9	6.74	130.04	126.00
26	1H	481	G	O5'-P-OP2	-6.74	99.63	105.70
26	1H	1653	G	N3-C2-N2	6.74	124.62	119.90
26	1H	2032	G	C2-N3-C4	-6.74	108.53	111.90
26	1H	2318	G	C8-N9-C4	-6.74	103.70	106.40
26	1H	2467	C	C5-C6-N1	-6.74	117.63	121.00
26	1H	1160	G	C8-N9-C4	-6.74	103.70	106.40
26	1H	600	G	N3-C4-C5	6.74	131.97	128.60
26	1H	860	U	N1-C2-N3	6.74	118.94	114.90
26	14	451	C	OP1-P-OP2	6.74	129.71	119.60
1	13	1496	C	C6-N1-C1'	6.74	128.88	120.80
26	1H	1443	G	C4-N9-C1'	6.74	135.26	126.50
26	1H	2563	U	O5'-P-OP1	-6.74	99.64	105.70
1	13	1521	G	O5'-P-OP1	-6.73	99.64	105.70
1	1G	690	G	O4'-C1'-N9	6.73	113.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	1290	G	C8-N9-C4	-6.73	103.71	106.40
26	1H	1265	A	N7-C8-N9	6.73	117.17	113.80
26	14	935	C	C6-N1-C2	6.73	122.99	120.30
26	14	2079	U	O5'-P-OP1	-6.73	99.64	105.70
1	13	970	C	O5'-P-OP1	-6.73	99.64	105.70
26	14	2506	U	C2-N1-C1'	6.73	125.78	117.70
26	1H	1204	A	N1-C6-N6	6.73	122.64	118.60
26	1H	1307	A	N9-C4-C5	-6.73	103.11	105.80
26	1H	1614	A	C5-C6-N1	-6.73	114.33	117.70
26	1H	372	G	C8-N9-C4	-6.73	103.71	106.40
26	1H	1678	G	N3-C4-C5	6.73	131.96	128.60
25	4L	21	C	C6-N1-C2	-6.73	117.61	120.30
26	1H	245	G	N3-C4-N9	6.72	130.03	126.00
26	14	472	A	N9-C4-C5	6.72	108.49	105.80
26	1H	197	A	N1-C2-N3	6.72	132.66	129.30
26	1H	690	G	N1-C6-O6	6.72	123.93	119.90
26	1H	917	A	C5-C6-N1	-6.72	114.34	117.70
26	14	974(A)	C	N1-C2-O2	6.72	122.93	118.90
26	1H	573	G	C2-N3-C4	6.72	115.26	111.90
26	14	775	G	N1-C6-O6	-6.72	115.87	119.90
26	1H	704	G	C8-N9-C4	-6.72	103.71	106.40
26	1H	1700	A	OP1-P-OP2	6.72	129.68	119.60
26	1H	1885	A	C8-N9-C4	6.72	108.49	105.80
26	1H	1971	A	C5-C6-N1	6.72	121.06	117.70
26	1H	655	A	N1-C6-N6	6.71	122.63	118.60
26	14	1950	G	N3-C4-N9	6.71	130.03	126.00
26	1H	790	C	N1-C2-O2	-6.71	114.87	118.90
26	14	1278	A	C2-N3-C4	-6.71	107.24	110.60
26	14	1613	G	N1-C2-N2	-6.71	110.16	116.20
26	1H	1577	C	C6-N1-C2	-6.71	117.62	120.30
27	16	79	C	N3-C4-N4	6.71	122.70	118.00
26	14	783	A	N7-C8-N9	6.71	117.15	113.80
26	14	2610	C	N3-C4-C5	6.71	124.58	121.90
1	1G	230	G	C5-C6-N1	-6.71	108.15	111.50
26	1H	1982	C	C2-N3-C4	6.70	123.25	119.90
26	1H	778	G	O5'-P-OP2	-6.70	99.67	105.70
26	1H	189	G	N3-C2-N2	-6.70	115.21	119.90
26	14	1999	C	OP2-P-O3'	6.70	119.94	105.20
24	3K	76	A	C2-N3-C4	-6.70	107.25	110.60
26	14	1999	C	N3-C4-C5	6.70	124.58	121.90
26	14	2252	G	O5'-P-OP2	-6.70	99.67	105.70
26	14	1258	C	N3-C4-C5	6.69	124.58	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2584	U	C2-N1-C1'	6.69	125.73	117.70
26	1H	1249	U	O5'-P-OP2	6.69	118.73	110.70
26	1H	77	C	OP1-P-OP2	-6.69	109.56	119.60
26	14	2501	C	P-O3'-C3'	6.69	127.73	119.70
26	14	464	U	O5'-P-OP2	-6.68	99.68	105.70
26	14	676	A	N1-C2-N3	6.68	132.64	129.30
1	13	776	G	O5'-P-OP1	-6.68	99.69	105.70
26	1H	210	C	C6-N1-C2	6.67	122.97	120.30
26	1H	560	C	N1-C2-O2	-6.67	114.90	118.90
26	1H	1931	U	C5-C4-O4	6.67	129.90	125.90
27	16	44	G	C4-N9-C1'	-6.67	117.83	126.50
26	14	621	A	C5-N7-C8	-6.67	100.56	103.90
26	14	2439	A	C5-N7-C8	-6.67	100.57	103.90
26	1H	67	U	C6-N1-C2	-6.67	117.00	121.00
26	1H	632	A	N7-C8-N9	6.67	117.13	113.80
26	14	48	G	OP2-P-O3'	6.67	119.86	105.20
26	14	1348	G	O5'-P-OP2	6.67	118.70	110.70
26	1H	1695	G	O5'-P-OP1	-6.66	99.70	105.70
26	1H	1828	G	C2-N3-C4	-6.66	108.57	111.90
26	1H	2053	G	N3-C2-N2	-6.66	115.24	119.90
26	14	1204	A	C2-N3-C4	-6.66	107.27	110.60
27	1J	30	C	C6-N1-C2	-6.66	117.64	120.30
26	1H	1569	A	N7-C8-N9	6.66	117.13	113.80
26	14	2326	C	O5'-P-OP1	-6.65	99.71	105.70
26	1H	2353	G	O5'-P-OP1	-6.65	99.71	105.70
26	1H	2731	G	C5-C6-O6	-6.65	124.61	128.60
26	1H	1380	G	C6-C5-N7	-6.65	126.41	130.40
26	14	1304	C	N3-C2-O2	-6.65	117.25	121.90
26	14	2314	C	C6-N1-C2	-6.65	117.64	120.30
26	14	208	C	C5-C4-N4	-6.65	115.55	120.20
26	1H	2281	C	OP1-P-O3'	6.65	119.82	105.20
26	1H	1379	A	N9-C4-C5	-6.64	103.14	105.80
1	13	792	A	N9-C1'-C2'	6.64	122.63	114.00
26	1H	1379	A	C5-C6-N6	-6.64	118.39	123.70
26	1H	122	G	O5'-P-OP2	-6.64	99.72	105.70
26	1H	1410	G	C4-N9-C1'	-6.64	117.87	126.50
26	1H	842	G	O5'-P-OP2	6.64	118.67	110.70
26	1H	1352	U	O5'-P-OP2	-6.64	99.72	105.70
26	14	1769	G	N3-C4-N9	6.64	129.98	126.00
26	1H	803	U	N1-C2-N3	6.64	118.88	114.90
26	1H	992	C	OP1-P-O3'	6.64	119.80	105.20
48	F5	82	LEU	CA-CB-CG	6.64	130.56	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	141	A	C8-N9-C4	-6.63	103.15	105.80
26	1H	1632	A	C5-N7-C8	-6.63	100.58	103.90
26	1H	2269	A	C8-N9-C4	6.63	108.45	105.80
26	1H	2447	G	O4'-C1'-N9	6.63	113.51	108.20
26	1H	566	U	C5-C4-O4	-6.63	121.92	125.90
26	1H	2018	G	C4-C5-N7	6.63	113.45	110.80
26	1H	2869	G	C8-N9-C4	-6.63	103.75	106.40
26	1H	871	U	N3-C4-O4	6.63	124.04	119.40
26	1H	973	A	C2-N3-C4	-6.63	107.28	110.60
26	1H	966	G	N3-C2-N2	6.63	124.54	119.90
26	14	2702	U	N3-C2-O2	-6.63	117.56	122.20
26	1H	866	A	N9-C4-C5	-6.63	103.15	105.80
26	1H	1993	U	C2-N3-C4	-6.62	123.03	127.00
26	1H	2555	U	N1-C2-N3	6.62	118.87	114.90
26	1H	1248	G	N1-C2-N2	6.62	122.16	116.20
26	14	691	C	N3-C4-C5	-6.62	119.25	121.90
1	13	311	C	C5-C6-N1	6.62	124.31	121.00
26	14	492	A	O5'-P-OP2	-6.62	99.74	105.70
26	1H	778	G	N1-C6-O6	-6.62	115.93	119.90
26	1H	2518	A	C5-C6-N6	-6.62	118.41	123.70
26	14	1251	C	N3-C4-N4	6.62	122.63	118.00
26	1H	177	G	N1-C6-O6	-6.61	115.93	119.90
26	1H	1425	G	C2-N3-C4	6.61	115.21	111.90
26	1H	1613	G	N3-C2-N2	6.61	124.53	119.90
26	14	140	A	C8-N9-C4	-6.61	103.16	105.80
26	14	1371	G	N1-C6-O6	6.61	123.87	119.90
26	1H	265	A	C5-C6-N1	-6.61	114.39	117.70
26	1H	2390	U	O5'-P-OP1	-6.61	99.75	105.70
26	14	74	A	C4-C5-N7	6.61	114.01	110.70
26	1H	1248	G	N3-C2-N2	-6.61	115.27	119.90
1	13	690	G	N7-C8-N9	6.61	116.41	113.10
26	1H	2713	A	C4-C5-N7	6.61	114.00	110.70
1	1G	972	C	C6-N1-C2	-6.61	117.66	120.30
26	1H	1496	A	C6-C5-N7	-6.61	127.68	132.30
26	1H	1204	A	C4-N9-C1'	6.60	138.19	126.30
1	1G	197	A	P-O3'-C3'	6.60	127.62	119.70
1	13	812	C	P-O3'-C3'	6.60	127.62	119.70
26	1H	944	G	C5-C6-O6	6.60	132.56	128.60
26	1H	1332	G	C5-C6-N1	-6.60	108.20	111.50
26	1H	2446	G	N9-C4-C5	-6.60	102.76	105.40
26	14	1342	A	C6-C5-N7	-6.60	127.68	132.30
26	1H	216	A	O5'-P-OP2	6.60	118.62	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	872	A	O5'-P-OP1	-6.60	99.76	105.70
26	14	786	C	O5'-P-OP2	-6.60	99.76	105.70
26	14	2712	U	C5-C4-O4	6.60	129.86	125.90
26	1H	1776	G	O5'-P-OP1	6.60	118.62	110.70
26	1H	1806	C	O5'-P-OP2	-6.60	99.76	105.70
28	11	95	LEU	CA-CB-CG	6.60	130.47	115.30
24	1L	74	C	C6-N1-C2	6.60	122.94	120.30
1	1G	1339	A	O4'-C1'-N9	6.60	113.48	108.20
1	13	715	A	O5'-P-OP2	-6.59	99.77	105.70
1	1G	114	U	C5-C6-N1	-6.59	119.40	122.70
24	1L	74	C	O4'-C1'-N1	6.59	113.47	108.20
26	1H	122	G	C2-N3-C4	-6.59	108.61	111.90
26	1H	1681	G	N3-C4-C5	6.59	131.90	128.60
26	14	1686	C	C6-N1-C2	6.59	122.94	120.30
27	1J	70	C	C6-N1-C2	-6.59	117.67	120.30
26	1H	509	C	OP2-P-O3'	6.59	119.69	105.20
40	B8	96	ARG	NE-CZ-NH1	-6.59	117.01	120.30
1	1G	912	C	O5'-P-OP2	-6.59	99.77	105.70
26	14	210	C	N3-C4-N4	-6.59	113.39	118.00
1	13	1219	U	C5-C6-N1	6.59	125.99	122.70
26	1H	1977	A	C8-N9-C4	6.59	108.43	105.80
26	1H	2301	C	C6-N1-C2	-6.59	117.67	120.30
26	1H	2385	C	O5'-P-OP2	-6.59	99.77	105.70
1	13	23	C	C5-C6-N1	6.58	124.29	121.00
26	14	1277	G	C8-N9-C4	6.58	109.03	106.40
1	1G	1529	G	C4-N9-C1'	6.58	135.06	126.50
26	14	2011	U	O5'-P-OP1	-6.58	99.78	105.70
26	1H	141	A	O4'-C1'-N9	6.58	113.47	108.20
26	1H	779	U	N1-C2-N3	-6.58	110.95	114.90
26	1H	808	G	N1-C2-N3	6.58	127.85	123.90
26	1H	2096	U	C6-N1-C2	-6.58	117.05	121.00
26	14	212	G	O5'-P-OP2	-6.58	99.78	105.70
26	14	395	U	O4'-C1'-N1	6.58	113.46	108.20
26	1H	582	G	C6-C5-N7	-6.58	126.45	130.40
26	1H	2703	C	N3-C2-O2	-6.58	117.30	121.90
26	14	2013	A	C2-N3-C4	-6.58	107.31	110.60
26	1H	58	G	C8-N9-C4	-6.58	103.77	106.40
26	1H	945	A	C4-C5-N7	6.58	113.99	110.70
26	1H	2013	A	N1-C6-N6	-6.58	114.66	118.60
1	1G	1286	A	N7-C8-N9	6.58	117.09	113.80
26	14	1621	U	N1-C2-O2	-6.58	118.20	122.80
26	14	2506	U	O4'-C1'-N1	-6.58	102.94	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	128	C	C6-N1-C2	6.57	122.93	120.30
26	1H	355	G	N1-C6-O6	6.57	123.84	119.90
26	14	2056	G	N1-C6-O6	6.57	123.84	119.90
26	1H	1978	A	O5'-P-OP1	-6.57	99.79	105.70
1	1G	11	G	O5'-P-OP1	-6.57	99.79	105.70
26	14	1791	A	OP1-P-OP2	-6.57	109.75	119.60
26	14	2256	G	N3-C2-N2	6.57	124.50	119.90
26	1H	2324	C	N3-C4-C5	6.57	124.53	121.90
26	1H	577	G	OP1-P-OP2	-6.56	109.75	119.60
26	1H	1786	A	C4-N9-C1'	6.56	138.11	126.30
26	14	93	C	C5-C6-N1	6.56	124.28	121.00
26	14	2840	C	O5'-P-OP2	-6.56	99.79	105.70
1	13	623	C	C6-N1-C2	-6.56	117.68	120.30
26	1H	599	G	N3-C2-N2	6.56	124.49	119.90
26	14	929	G	C8-N9-C4	-6.56	103.78	106.40
26	1H	1348	G	OP1-P-O3'	6.56	119.62	105.20
26	14	148	C	C6-N1-C2	6.56	122.92	120.30
26	1H	774	A	C4-N9-C1'	-6.55	114.50	126.30
26	1H	1931	U	C4-C5-C6	6.55	123.63	119.70
26	1H	1781	C	C2-N1-C1'	6.55	126.01	118.80
26	1H	148	C	C6-N1-C2	6.55	122.92	120.30
26	1H	381	G	N1-C6-O6	-6.55	115.97	119.90
26	1H	787	U	O5'-P-OP1	6.55	118.56	110.70
26	1H	954	G	O5'-P-OP2	6.55	118.56	110.70
26	14	828	U	N3-C2-O2	-6.55	117.61	122.20
26	14	1325	G	N9-C4-C5	-6.55	102.78	105.40
1	13	977	A	N1-C6-N6	-6.55	114.67	118.60
1	13	1508	G	N3-C4-N9	-6.55	122.07	126.00
26	1H	1623	G	OP2-P-O3'	6.55	119.60	105.20
26	1H	2871	C	O5'-P-OP1	6.55	118.56	110.70
26	1H	127	A	N1-C6-N6	6.54	122.53	118.60
26	1H	1618	A	OP1-P-OP2	-6.54	109.78	119.60
26	1H	2228	G	C8-N9-C1'	-6.54	118.49	127.00
26	14	1187	G	C8-N9-C4	-6.54	103.78	106.40
26	1H	482	A	C8-N9-C4	-6.54	103.18	105.80
26	1H	763	G	OP2-P-O3'	6.54	119.59	105.20
26	1H	2074	U	O5'-P-OP1	-6.54	99.81	105.70
1	1G	1498	U	C2-N1-C1'	6.54	125.55	117.70
26	1H	910	A	N1-C6-N6	6.54	122.52	118.60
26	14	2401	U	C2-N1-C1'	6.54	125.55	117.70
26	1H	454	A	O5'-P-OP2	-6.54	99.82	105.70
26	1H	663	G	N3-C4-C5	-6.54	125.33	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1375	C	OP1-P-O3'	6.54	119.58	105.20
26	1H	1616	A	OP1-P-OP2	6.54	129.41	119.60
26	14	1823	G	C5-C6-O6	6.54	132.52	128.60
26	14	2426	A	C5-N7-C8	-6.54	100.63	103.90
26	1H	528	A	C8-N9-C1'	6.53	139.46	127.70
26	1H	663	G	OP1-P-OP2	6.53	129.40	119.60
26	1H	2271	G	N3-C4-C5	-6.53	125.33	128.60
1	13	963	G	N1-C2-N2	-6.53	110.32	116.20
1	13	1205	U	N3-C4-C5	-6.53	110.68	114.60
26	1H	1157	G	C2-N3-C4	-6.53	108.64	111.90
26	1H	1265	A	N1-C2-N3	6.53	132.56	129.30
26	1H	1667	G	N3-C4-C5	6.53	131.87	128.60
1	1G	330	C	N1-C2-O2	6.53	122.82	118.90
26	1H	1966	A	O5'-P-OP2	-6.53	99.83	105.70
26	1H	1157	G	N1-C2-N3	6.53	127.82	123.90
26	1H	2331	G	N9-C4-C5	-6.53	102.79	105.40
26	14	1840	G	N3-C2-N2	-6.53	115.33	119.90
26	14	2244	U	N3-C2-O2	6.53	126.77	122.20
1	13	1498	U	P-O3'-C3'	6.52	127.53	119.70
26	1H	1574	C	C5-C6-N1	-6.52	117.74	121.00
26	14	2740	A	O5'-P-OP2	-6.52	99.83	105.70
26	1H	22	C	O5'-P-OP1	-6.52	99.83	105.70
26	1H	1128	A	OP1-P-OP2	6.52	129.38	119.60
26	1H	1559	G	N3-C4-C5	6.52	131.86	128.60
1	13	578	C	N3-C4-C5	-6.52	119.29	121.90
26	1H	688	U	O5'-P-OP2	-6.52	99.84	105.70
26	1H	2346	A	C4-N9-C1'	6.51	138.03	126.30
26	14	832	G	C8-N9-C4	-6.51	103.79	106.40
26	1H	1204	A	C5-C6-N1	-6.51	114.44	117.70
26	1H	821	A	O5'-P-OP2	-6.51	99.84	105.70
26	14	2243	U	OP2-P-O3'	6.51	119.52	105.20
26	14	2688	U	C5-C4-O4	6.51	129.81	125.90
26	1H	1623	G	N1-C6-O6	-6.51	116.00	119.90
26	1H	1674	G	C4-N9-C1'	6.50	134.96	126.50
1	13	1266	G	C6-C5-N7	6.50	134.30	130.40
26	1H	1278	A	C8-N9-C4	6.50	108.40	105.80
26	1H	2228	G	N3-C4-N9	6.50	129.90	126.00
26	1H	51	G	C5-C6-O6	6.50	132.50	128.60
26	1H	1970	A	C8-N9-C4	-6.50	103.20	105.80
26	1H	2342	C	C6-N1-C2	-6.50	117.70	120.30
26	14	805	G	C5-C6-O6	-6.50	124.70	128.60
26	14	76	C	C6-N1-C2	-6.50	117.70	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1969	A	C5-N7-C8	6.49	107.15	103.90
1	1G	353	A	N1-C6-N6	6.49	122.50	118.60
26	14	388	G	N3-C4-C5	6.49	131.85	128.60
26	1H	834	C	C6-N1-C2	-6.49	117.70	120.30
26	14	2713	A	C8-N9-C4	-6.49	103.20	105.80
26	1H	1397	U	N3-C2-O2	-6.49	117.66	122.20
26	1H	2263	C	N3-C4-C5	-6.49	119.30	121.90
26	14	455	C	N1-C2-O2	6.49	122.79	118.90
26	1H	1417	C	N3-C4-C5	-6.49	119.31	121.90
26	1H	579	G	C2-N3-C4	6.49	115.14	111.90
26	1H	1308	A	C8-N9-C4	-6.49	103.21	105.80
30	31	176	LEU	CB-CG-CD2	-6.49	99.98	111.00
26	1H	2702	U	C6-N1-C2	-6.48	117.11	121.00
26	1H	1831	G	OP1-P-OP2	-6.48	109.88	119.60
26	14	566	U	C6-N1-C2	6.48	124.89	121.00
26	1H	698	C	C6-N1-C2	6.48	122.89	120.30
26	14	138	G	O4'-C1'-N9	6.48	113.38	108.20
26	1H	210	C	N3-C4-C5	6.48	124.49	121.90
26	1H	467	G	N7-C8-N9	-6.48	109.86	113.10
26	14	1570	A	N1-C6-N6	6.48	122.49	118.60
26	14	2263	C	C5-C6-N1	6.48	124.24	121.00
26	1H	1621	U	C4-C5-C6	6.48	123.58	119.70
26	14	511	U	C6-N1-C2	-6.47	117.11	121.00
1	13	664	G	O5'-P-OP2	-6.47	99.87	105.70
26	1H	2330	G	C2-N3-C4	-6.47	108.66	111.90
27	16	8	U	O5'-P-OP1	6.47	118.47	110.70
26	1H	74	A	N3-C4-N9	-6.47	122.22	127.40
26	1H	952	G	O5'-P-OP2	6.47	118.46	110.70
26	1H	1425	G	C8-N9-C4	-6.47	103.81	106.40
26	1H	2228	G	N1-C6-O6	6.47	123.78	119.90
26	14	121	G	N1-C6-O6	6.47	123.78	119.90
26	14	270(Q)	C	C6-N1-C2	-6.47	117.71	120.30
26	1H	247	G	C8-N9-C4	6.47	108.99	106.40
26	1H	1248	G	N1-C6-O6	6.47	123.78	119.90
26	1H	2286	A	N7-C8-N9	6.47	117.03	113.80
27	16	9	G	OP2-P-O3'	6.47	119.43	105.20
26	14	2075	U	C5-C6-N1	-6.47	119.47	122.70
26	1H	85	G	O5'-P-OP2	-6.46	99.88	105.70
26	1H	1443	G	N1-C6-O6	6.46	123.78	119.90
26	1H	2713	A	N1-C6-N6	6.46	122.48	118.60
27	16	12	C	C5-C6-N1	-6.46	117.77	121.00
24	3K	71	G	C4-N9-C1'	-6.46	118.10	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2449	U	N1-C2-N3	6.46	118.78	114.90
26	14	775	G	N3-C4-N9	6.46	129.88	126.00
26	1H	613	U	N3-C4-O4	-6.46	114.88	119.40
26	1H	1786	A	N9-C1'-C2'	6.46	122.40	114.00
1	1G	1192	C	C6-N1-C2	-6.46	117.72	120.30
26	1H	192	C	N3-C2-O2	6.46	126.42	121.90
26	14	2297	C	O5'-P-OP1	-6.46	99.89	105.70
26	14	2427	C	C5-C4-N4	-6.46	115.68	120.20
26	1H	1660	C	N3-C4-N4	-6.46	113.48	118.00
1	1G	519	C	C6-N1-C2	6.46	122.88	120.30
32	51	172	LYS	C-N-CD	-6.46	106.40	120.60
26	1H	632	A	C8-N9-C4	-6.45	103.22	105.80
9	8E	47	LEU	CA-CB-CG	6.45	130.14	115.30
26	14	579	G	N1-C6-O6	6.45	123.77	119.90
1	13	1266	G	C8-N9-C1'	6.45	135.38	127.00
26	14	959	A	OP1-P-O3'	6.45	119.39	105.20
26	1H	1781	C	N3-C4-C5	6.45	124.48	121.90
26	14	494	G	N1-C6-O6	6.45	123.77	119.90
26	14	580	C	N3-C4-C5	-6.45	119.32	121.90
26	14	1574	C	C5-C4-N4	-6.45	115.69	120.20
26	14	1608	A	C5-C6-N6	6.45	128.86	123.70
26	14	1808	U	O5'-P-OP1	-6.45	99.90	105.70
26	1H	116	C	N3-C4-C5	-6.44	119.32	121.90
26	14	1999	C	C6-N1-C2	6.44	122.88	120.30
1	13	186	C	C6-N1-C2	-6.44	117.72	120.30
26	1H	2263	C	C5-C4-N4	6.44	124.71	120.20
26	1H	411	G	N9-C4-C5	6.44	107.98	105.40
26	1H	1938	A	C4-C5-C6	6.44	120.22	117.00
26	14	2042	A	O5'-P-OP2	-6.44	99.90	105.70
26	14	2071	A	C6-N1-C2	-6.44	114.73	118.60
26	14	2505	G	C5-C6-N1	-6.44	108.28	111.50
26	1H	271(B)	G	N3-C4-N9	6.44	129.86	126.00
26	14	1313	U	C5-C6-N1	6.44	125.92	122.70
26	1H	955	C	N3-C4-C5	-6.43	119.33	121.90
26	14	593	G	C8-N9-C4	6.43	108.97	106.40
26	1H	114	U	OP1-P-O3'	6.43	119.35	105.20
26	1H	2313	C	OP2-P-O3'	6.43	119.35	105.20
27	16	109	G	C8-N9-C4	-6.43	103.83	106.40
1	1G	818	G	C5-C6-O6	6.43	132.46	128.60
26	1H	190	A	C5-C6-N1	6.43	120.92	117.70
26	1H	1670	C	C5-C6-N1	-6.43	117.78	121.00
26	14	2263	C	C6-N1-C2	-6.43	117.73	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1558	A	N1-C2-N3	6.43	132.51	129.30
37	88	86	GLY	N-CA-C	-6.43	97.03	113.10
1	13	1051	C	C6-N1-C2	-6.42	117.73	120.30
26	1H	2374	C	O5'-P-OP2	-6.42	99.92	105.70
26	1H	2380	C	O5'-P-OP2	-6.42	99.92	105.70
26	1H	2726	U	N3-C4-O4	-6.42	114.90	119.40
26	14	1815	A	OP1-P-O3'	6.42	119.33	105.20
26	14	1950	G	C2-N3-C4	6.42	115.11	111.90
26	1H	265	A	O4'-C1'-N9	6.42	113.34	108.20
26	14	1332	G	N1-C2-N2	-6.42	110.42	116.20
26	14	1408	C	N1-C2-O2	-6.42	115.05	118.90
26	1H	213	A	C4-C5-C6	-6.42	113.79	117.00
26	1H	866	A	N1-C6-N6	6.42	122.45	118.60
26	1H	1590	U	O5'-P-OP1	-6.42	99.92	105.70
26	1H	1398	C	O5'-P-OP2	6.42	118.40	110.70
26	1H	746	A	O5'-P-OP1	-6.42	99.92	105.70
26	14	1613	G	C8-N9-C4	6.42	108.97	106.40
26	14	916	G	C8-N9-C4	-6.42	103.83	106.40
26	14	1613	G	C8-N9-C1'	-6.42	118.66	127.00
27	16	115	G	C6-N1-C2	-6.42	121.25	125.10
1	1G	723	U	C2-N1-C1'	6.42	125.40	117.70
26	1H	609	A	C8-N9-C4	6.41	108.37	105.80
26	1H	1596	A	OP2-P-O3'	6.41	119.31	105.20
1	1G	354	G	C4-N9-C1'	6.41	134.84	126.50
26	14	1607	C	N3-C4-N4	6.41	122.49	118.00
26	1H	182	A	C8-N9-C4	6.41	108.36	105.80
24	3L	76	A	C4-C5-N7	6.41	113.91	110.70
1	13	22	G	N3-C2-N2	-6.41	115.42	119.90
26	1H	594	U	C6-N1-C2	6.41	124.84	121.00
26	14	2039	C	N1-C2-O2	6.41	122.75	118.90
26	1H	672	C	O5'-P-OP2	-6.41	99.93	105.70
26	1H	444	C	OP1-P-OP2	-6.41	109.99	119.60
26	1H	1373	A	N7-C8-N9	-6.41	110.60	113.80
26	1H	1600	C	OP1-P-O3'	6.41	119.29	105.20
1	13	768	A	C8-N9-C4	-6.40	103.24	105.80
26	1H	2072	G	N9-C4-C5	-6.40	102.84	105.40
26	1H	2494	G	C5-C6-N1	-6.40	108.30	111.50
26	1H	2713	A	C5-C6-N1	-6.40	114.50	117.70
26	14	1784	A	C5-N7-C8	-6.40	100.70	103.90
1	13	910	C	C6-N1-C2	6.40	122.86	120.30
1	13	963	G	N3-C4-N9	6.40	129.84	126.00
26	14	1375	C	OP1-P-O3'	6.40	119.28	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	899	C	N3-C2-O2	6.40	126.38	121.90
26	14	775	G	C5-C6-N1	6.40	114.70	111.50
26	14	1318	C	C6-N1-C2	-6.40	117.74	120.30
1	13	1279	A	N7-C8-N9	6.39	117.00	113.80
26	1H	24	G	C5-C6-N1	-6.39	108.30	111.50
26	1H	2241	A	C2-N3-C4	-6.39	107.40	110.60
26	14	1594	G	C8-N9-C4	-6.39	103.84	106.40
26	14	2598	A	C8-N9-C4	6.39	108.36	105.80
26	1H	2552	U	N1-C2-N3	6.39	118.73	114.90
26	14	194	G	O5'-P-OP2	6.39	118.37	110.70
26	14	774	A	C4-N9-C1'	-6.39	114.79	126.30
26	1H	468	G	OP1-P-OP2	-6.39	110.02	119.60
26	14	2439	A	C8-N9-C4	-6.39	103.24	105.80
26	1H	1204	A	N1-C2-N3	6.39	132.49	129.30
26	14	1995	U	O5'-P-OP2	-6.39	99.95	105.70
23	2L	21	U	N3-C2-O2	-6.39	117.73	122.20
26	14	372	G	O4'-C1'-N9	6.39	113.31	108.20
26	14	821	A	C5-C6-N6	-6.39	118.59	123.70
26	14	2451	A	C8-N9-C4	-6.39	103.25	105.80
26	1H	2395	C	C5-C4-N4	-6.38	115.73	120.20
26	1H	2467	C	C6-N1-C2	6.38	122.85	120.30
26	1H	663	G	O5'-P-OP2	-6.38	99.95	105.70
26	1H	1355	G	N1-C6-O6	-6.38	116.07	119.90
26	1H	2412	A	C6-N1-C2	-6.38	114.77	118.60
26	1H	94	G	C5-C6-O6	-6.38	124.77	128.60
26	1H	1575	C	O5'-P-OP1	6.38	118.36	110.70
26	1H	2379	G	C8-N9-C1'	-6.38	118.70	127.00
26	1H	2358	G	C8-N9-C4	6.38	108.95	106.40
26	1H	685	A	C5-N7-C8	-6.38	100.71	103.90
26	1H	1280	G	OP1-P-OP2	-6.38	110.03	119.60
26	1H	2025	C	C6-N1-C2	-6.38	117.75	120.30
1	1G	1417	G	C6-C5-N7	-6.38	126.57	130.40
26	14	856	C	C5-C6-N1	6.38	124.19	121.00
26	14	1135	C	N1-C2-O2	6.38	122.73	118.90
26	14	2281	C	O5'-P-OP2	6.38	118.35	110.70
26	14	2572	A	O5'-P-OP1	-6.38	99.96	105.70
1	13	966	G	N9-C4-C5	-6.38	102.85	105.40
26	1H	958	U	O5'-P-OP1	6.38	118.35	110.70
1	1G	1346	A	OP2-P-O3'	6.38	119.23	105.20
26	14	1443	G	N1-C6-O6	6.38	123.72	119.90
26	14	2681	C	N3-C4-N4	-6.38	113.54	118.00
26	1H	120	U	N3-C2-O2	-6.37	117.74	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2029	G	O5'-P-OP1	-6.37	99.96	105.70
26	1H	2618	G	N7-C8-N9	6.37	116.29	113.10
26	14	2261	C	O5'-P-OP2	-6.37	99.96	105.70
26	14	2570	G	N1-C6-O6	6.37	123.72	119.90
26	14	2713	A	N1-C6-N6	6.37	122.42	118.60
26	14	1332	G	N9-C4-C5	-6.37	102.85	105.40
26	1H	1938	A	N1-C6-N6	6.37	122.42	118.60
26	1H	1908	C	C6-N1-C2	-6.37	117.75	120.30
26	14	2615	U	O5'-P-OP2	-6.37	99.97	105.70
26	14	922	U	C6-N1-C2	-6.37	117.18	121.00
1	13	720	C	C6-N1-C2	-6.36	117.75	120.30
26	1H	2286	A	C8-N9-C4	-6.36	103.25	105.80
26	14	1154	G	N1-C6-O6	6.36	123.72	119.90
26	14	2019	A	C8-N9-C4	6.36	108.34	105.80
26	1H	853	G	O5'-P-OP2	-6.36	99.98	105.70
26	1H	2216	G	C8-N9-C4	-6.36	103.86	106.40
26	14	2610	C	O5'-P-OP1	-6.36	99.98	105.70
26	14	2763	G	N3-C4-C5	-6.36	125.42	128.60
26	1H	860	U	C2-N3-C4	-6.36	123.19	127.00
26	1H	2427	C	O5'-P-OP2	6.36	118.33	110.70
26	14	1616	A	C4-C5-N7	6.36	113.88	110.70
26	14	1824	G	N1-C6-O6	6.36	123.72	119.90
26	14	1899	G	C2-N3-C4	-6.36	108.72	111.90
26	14	470	A	OP1-P-OP2	6.36	129.13	119.60
26	1H	196	A	C5-C6-N1	-6.35	114.52	117.70
26	1H	509	C	O5'-P-OP2	-6.35	99.98	105.70
26	1H	1265	A	C4-C5-C6	6.35	120.18	117.00
26	1H	1691	C	N3-C4-C5	-6.35	119.36	121.90
26	1H	966	G	N1-C2-N2	-6.35	110.49	116.20
26	1H	2779	U	N3-C2-O2	-6.35	117.75	122.20
26	14	1527	G	N3-C2-N2	-6.35	115.45	119.90
26	1H	134	C	C5-C6-N1	-6.35	117.83	121.00
26	1H	463	G	N1-C2-N2	-6.35	110.49	116.20
26	14	1950	G	C8-N9-C4	-6.35	103.86	106.40
26	1H	764	A	O5'-P-OP1	6.34	118.31	110.70
26	1H	1936	A	C5-N7-C8	-6.34	100.73	103.90
26	1H	2308	G	C6-N1-C2	6.34	128.91	125.10
26	1H	2597	G	C5-N7-C8	-6.34	101.13	104.30
26	14	386	G	C5-C6-O6	-6.34	124.79	128.60
26	1H	391	G	C5-C6-O6	-6.34	124.79	128.60
1	1G	1527	C	C5-C6-N1	-6.34	117.83	121.00
26	14	808	G	O5'-P-OP2	-6.34	99.99	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	140	A	OP2-P-O3'	6.34	119.15	105.20
26	1H	692	C	C2-N3-C4	-6.34	116.73	119.90
26	1H	968	G	O5'-P-OP1	6.34	118.31	110.70
26	1H	1443	G	N1-C2-N3	6.34	127.70	123.90
26	1H	1518	C	O5'-P-OP2	6.34	118.31	110.70
26	1H	1528	A	C5-N7-C8	-6.34	100.73	103.90
27	16	99	A	O5'-P-OP2	-6.34	99.99	105.70
26	1H	1209	G	C5-C6-O6	-6.34	124.80	128.60
26	1H	1254	A	N9-C4-C5	-6.34	103.26	105.80
26	1H	1300	U	C6-N1-C1'	6.34	130.08	121.20
26	1H	38	A	OP1-P-O3'	6.34	119.14	105.20
26	1H	664	C	C5-C6-N1	-6.34	117.83	121.00
26	14	465	G	N3-C4-C5	-6.34	125.43	128.60
26	1H	769	G	C5-C6-O6	6.34	132.40	128.60
1	13	789	U	N3-C4-C5	-6.33	110.80	114.60
26	1H	679	C	C5-C6-N1	-6.33	117.83	121.00
26	1H	2513	G	N3-C4-C5	-6.33	125.43	128.60
1	1G	1417	G	N1-C6-O6	6.33	123.70	119.90
26	1H	1307	A	C8-N9-C4	6.33	108.33	105.80
26	1H	747	U	OP1-P-OP2	6.33	129.10	119.60
26	1H	1272	A	C4-C5-C6	-6.33	113.83	117.00
26	1H	690	G	N7-C8-N9	-6.33	109.94	113.10
1	13	872	A	C6-N1-C2	6.33	122.40	118.60
26	1H	138	G	O4'-C1'-N9	6.33	113.26	108.20
26	1H	2375	G	N9-C1'-C2'	-6.33	105.04	112.00
26	14	613	U	N3-C2-O2	-6.33	117.77	122.20
26	1H	1303	G	OP2-P-O3'	6.33	119.12	105.20
26	1H	1973	G	C8-N9-C4	-6.33	103.87	106.40
26	1H	797	C	C5-C6-N1	-6.33	117.84	121.00
1	13	520	A	N1-C6-N6	6.32	122.39	118.60
26	1H	828	U	C2-N1-C1'	6.32	125.29	117.70
26	1H	845	G	C2-N3-C4	-6.32	108.74	111.90
26	14	1898	U	C5-C4-O4	6.32	129.69	125.90
26	14	602	G	C4-N9-C1'	6.32	134.72	126.50
1	13	690	G	O5'-P-OP1	-6.32	100.01	105.70
26	1H	199	A	N1-C2-N3	-6.32	126.14	129.30
26	1H	199	A	O5'-P-OP1	-6.32	100.01	105.70
26	1H	148	C	C5-C6-N1	-6.32	117.84	121.00
26	1H	802	A	O5'-P-OP1	6.32	118.28	110.70
26	1H	2430	A	C6-C5-N7	-6.32	127.88	132.30
26	1H	596	G	N1-C2-N2	6.32	121.89	116.20
26	1H	860	U	O5'-P-OP1	6.32	118.28	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	380	U	OP1-P-OP2	6.32	129.07	119.60
1	13	584	G	N1-C2-N2	-6.32	110.52	116.20
26	1H	195	A	C5-C6-N6	-6.32	118.65	123.70
26	1H	803	U	N3-C2-O2	-6.32	117.78	122.20
26	14	2356	C	N1-C2-O2	-6.32	115.11	118.90
1	13	812	C	C2-N1-C1'	6.31	125.75	118.80
23	2K	21	U	C2-N1-C1'	6.31	125.28	117.70
26	1H	1313	U	C5-C6-N1	6.31	125.86	122.70
1	13	1374	A	C2-N3-C4	-6.31	107.44	110.60
26	1H	815	C	O5'-P-OP1	6.31	118.27	110.70
26	1H	1124	C	C4-C5-C6	6.31	120.56	117.40
26	1H	2440	C	C2-N3-C4	6.31	123.06	119.90
1	1G	1498	U	C6-N1-C2	-6.31	117.21	121.00
26	1H	1520	U	C5-C4-O4	6.31	129.69	125.90
26	14	2062	A	N9-C4-C5	-6.31	103.28	105.80
26	14	1899	G	C8-N9-C4	-6.31	103.88	106.40
26	14	2248	C	N3-C4-C5	-6.31	119.38	121.90
26	1H	1369	G	N3-C4-N9	6.31	129.78	126.00
26	1H	2319	G	N3-C4-C5	-6.31	125.45	128.60
26	1H	504	U	C2-N1-C1'	6.30	125.26	117.70
26	14	1661	G	C5-C6-O6	-6.30	124.82	128.60
26	14	1678	G	C8-N9-C4	-6.30	103.88	106.40
26	14	2374	C	N3-C4-C5	6.30	124.42	121.90
26	1H	692	C	N1-C2-O2	-6.30	115.12	118.90
26	1H	842	G	O5'-P-OP1	-6.30	100.03	105.70
26	1H	2328	A	N1-C2-N3	6.30	132.45	129.30
26	14	453	C	C6-N1-C2	6.30	122.82	120.30
26	14	579	G	N3-C2-N2	-6.30	115.49	119.90
26	1H	140	A	O4'-C1'-N9	6.30	113.24	108.20
26	1H	997	G	C8-N9-C4	6.30	108.92	106.40
26	1H	2415	G	C6-C5-N7	-6.30	126.62	130.40
26	1H	2628	C	C6-N1-C2	6.30	122.82	120.30
1	13	1322	C	C2-N1-C1'	6.30	125.73	118.80
26	1H	2083	G	N1-C6-O6	6.30	123.68	119.90
26	1H	2287	A	N1-C2-N3	6.30	132.45	129.30
26	1H	2782	G	C6-C5-N7	-6.30	126.62	130.40
1	13	176	C	C6-N1-C2	-6.29	117.78	120.30
26	1H	1326	U	OP2-P-O3'	6.29	119.05	105.20
1	13	757	U	N3-C2-O2	-6.29	117.80	122.20
26	14	201	C	O5'-P-OP2	-6.29	100.04	105.70
26	1H	202	U	N1-C2-O2	6.29	127.20	122.80
26	1H	663	G	C6-C5-N7	-6.29	126.63	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1641	A	O5'-P-OP2	6.29	118.25	110.70
26	1H	2440	C	N1-C2-O2	6.29	122.67	118.90
1	1G	529	G	N1-C6-O6	6.29	123.67	119.90
26	1H	1424	G	O5'-P-OP2	-6.29	100.04	105.70
26	1H	1428	C	O5'-P-OP2	6.29	118.24	110.70
26	1H	1634	A	OP1-P-OP2	6.29	129.03	119.60
26	14	733	G	C8-N9-C4	-6.29	103.89	106.40
23	2K	35	C	C6-N1-C1'	-6.28	113.26	120.80
27	16	14	U	OP1-P-OP2	6.28	129.03	119.60
39	A8	101	LEU	CA-CB-CG	6.28	129.75	115.30
26	14	242	G	C8-N9-C4	6.28	108.91	106.40
26	14	2049	G	O5'-P-OP1	-6.28	100.05	105.70
26	14	2575	C	C2-N1-C1'	-6.28	111.89	118.80
1	13	103	C	C6-N1-C2	-6.28	117.79	120.30
1	13	386	C	C2-N1-C1'	-6.28	111.89	118.80
26	1H	852	G	OP2-P-O3'	6.28	119.02	105.20
26	14	2006	C	C5-C4-N4	-6.28	115.80	120.20
1	13	122	G	C5-C6-O6	-6.28	124.83	128.60
1	13	300	A	O5'-P-OP1	-6.28	100.05	105.70
27	16	77	U	N3-C4-C5	6.28	118.37	114.60
1	13	1199	U	N3-C2-O2	-6.28	117.81	122.20
1	1G	813	U	O5'-P-OP1	-6.28	100.05	105.70
1	1G	1487	G	N1-C6-O6	6.27	123.66	119.90
1	13	1498	U	O4'-C1'-N1	-6.27	103.18	108.20
26	1H	974(A)	C	C6-N1-C2	-6.27	117.79	120.30
26	1H	1950	G	C8-N9-C4	-6.27	103.89	106.40
26	14	470	A	C5-C6-N6	-6.27	118.68	123.70
26	14	2702	U	O5'-P-OP1	6.27	118.23	110.70
26	1H	797	C	N3-C2-O2	6.27	126.29	121.90
26	1H	2499	C	N3-C4-N4	6.27	122.39	118.00
26	14	1332	G	C5-C6-N1	-6.27	108.36	111.50
26	14	2577	A	N1-C6-N6	6.27	122.36	118.60
1	13	575	G	O4'-C1'-N9	-6.27	103.19	108.20
26	1H	640	C	OP1-P-O3'	6.27	118.99	105.20
26	1H	2228	G	C4-C5-C6	6.26	122.56	118.80
26	1H	2367	G	N7-C8-N9	6.26	116.23	113.10
26	1H	2375	G	C4-C5-N7	6.26	113.31	110.80
1	13	541	G	N1-C6-O6	6.26	123.66	119.90
26	1H	1678	G	N1-C6-O6	6.26	123.66	119.90
1	1G	1502	A	C5-N7-C8	-6.26	100.77	103.90
26	1H	585	G	N1-C6-O6	6.26	123.66	119.90
1	1G	932	C	N1-C2-O2	6.26	122.66	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	200	U	O5'-P-OP2	-6.26	100.07	105.70
26	14	1367	A	C2-N3-C4	-6.26	107.47	110.60
26	1H	1123	C	C5-C6-N1	-6.26	117.87	121.00
26	14	2251	G	C5-N7-C8	6.26	107.43	104.30
1	13	858	G	N1-C6-O6	-6.26	116.15	119.90
26	14	2291	U	C5-C4-O4	6.26	129.65	125.90
26	1H	1349	A	O5'-P-OP2	6.25	118.21	110.70
26	1H	2476	A	C8-N9-C4	-6.25	103.30	105.80
1	1G	267	C	N1-C2-O2	6.25	122.65	118.90
26	1H	828	U	C5-C4-O4	6.25	129.65	125.90
26	1H	1425	G	C5-C6-N1	6.25	114.63	111.50
26	1H	2324	C	C5-C4-N4	-6.25	115.82	120.20
26	14	2592	G	O5'-P-OP1	6.25	118.20	110.70
26	1H	1142(A)	A	N3-C4-N9	-6.25	122.40	127.40
1	1G	1502	A	C6-C5-N7	-6.25	127.92	132.30
1	13	1204	A	N1-C6-N6	6.25	122.35	118.60
26	14	2713	A	C4-C5-N7	6.25	113.83	110.70
26	1H	364	C	C6-N1-C2	-6.25	117.80	120.30
28	11	236	GLY	N-CA-C	6.25	128.71	113.10
26	14	1786	A	N1-C2-N3	6.25	132.42	129.30
26	14	2374	C	C2-N3-C4	-6.25	116.78	119.90
26	1H	1437	C	C5-C6-N1	6.25	124.12	121.00
26	1H	1978	A	O5'-P-OP2	6.25	118.19	110.70
26	14	1680	U	O5'-P-OP1	-6.25	100.08	105.70
23	2K	40	C	C6-N1-C2	-6.24	117.80	120.30
26	1H	37	C	C4-C5-C6	6.24	120.52	117.40
26	1H	193	U	N1-C2-O2	-6.24	118.43	122.80
26	1H	1142(A)	A	N3-C4-C5	6.24	131.17	126.80
26	1H	2340	G	C8-N9-C4	6.24	108.90	106.40
26	1H	2418	A	C2-N3-C4	6.24	113.72	110.60
26	14	752	A	P-O3'-C3'	6.24	127.19	119.70
26	14	1786	A	N9-C1'-C2'	6.24	122.12	114.00
26	14	2066	C	N3-C4-N4	6.24	122.37	118.00
26	1H	1323	U	N3-C4-C5	-6.24	110.86	114.60
26	1H	1666	G	N3-C4-C5	-6.24	125.48	128.60
26	1H	2070	G	N3-C4-N9	6.24	129.74	126.00
26	1H	996	A	C8-N9-C4	6.24	108.30	105.80
26	14	1982	C	C5-C6-N1	6.24	124.12	121.00
26	1H	58	G	N3-C4-N9	-6.24	122.26	126.00
26	14	1899	G	N7-C8-N9	6.24	116.22	113.10
26	1H	632	A	C5-N7-C8	-6.23	100.78	103.90
26	1H	1636	C	N3-C4-N4	6.23	122.36	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A8	24	LEU	CA-CB-CG	6.23	129.64	115.30
26	14	2238	G	O5'-P-OP2	-6.23	100.09	105.70
26	14	2392	A	C5-C6-N1	-6.23	114.58	117.70
1	13	1290	G	N7-C8-N9	6.23	116.22	113.10
26	14	1899	G	C6-C5-N7	-6.23	126.66	130.40
26	14	2445	G	N1-C6-O6	-6.23	116.16	119.90
49	G5	42	GLY	N-CA-C	-6.23	97.52	113.10
23	2K	21	U	C6-N1-C1'	-6.23	112.48	121.20
26	1H	1292	U	O5'-P-OP2	-6.23	100.09	105.70
1	13	748	C	C5-C6-N1	6.23	124.11	121.00
26	1H	1599	C	O5'-P-OP2	-6.23	100.10	105.70
26	14	179	G	C8-N9-C4	6.23	108.89	106.40
26	1H	113	G	C5-C6-N1	-6.22	108.39	111.50
26	14	2591	C	N1-C2-O2	-6.22	115.17	118.90
26	1H	1900	A	OP1-P-OP2	-6.22	110.27	119.60
26	1H	1569	A	C5-N7-C8	-6.22	100.79	103.90
26	1H	239	U	C2-N1-C1'	-6.22	110.24	117.70
26	1H	2461	C	N3-C4-N4	-6.22	113.65	118.00
26	1H	1382	G	OP2-P-O3'	6.22	118.88	105.20
26	14	447	A	N9-C4-C5	6.22	108.29	105.80
26	14	2346	A	N1-C2-N3	6.22	132.41	129.30
1	13	1299	A	N7-C8-N9	6.21	116.91	113.80
26	14	1154	G	C6-C5-N7	-6.21	126.67	130.40
26	14	2067	G	C8-N9-C4	-6.21	103.92	106.40
26	1H	628	G	OP1-P-OP2	6.21	128.92	119.60
26	1H	2018	G	C5-N7-C8	-6.21	101.19	104.30
1	13	1402	C	N3-C4-C5	-6.21	119.42	121.90
26	1H	213	A	C8-N9-C4	6.21	108.28	105.80
26	1H	335	C	N3-C4-C5	-6.21	119.42	121.90
26	1H	796	C	C5-C6-N1	-6.21	117.89	121.00
27	16	6	C	N1-C2-O2	-6.21	115.17	118.90
26	14	457	A	C8-N9-C4	-6.21	103.32	105.80
1	13	1522	U	C4-C5-C6	6.21	123.42	119.70
26	1H	500	G	O5'-P-OP1	-6.21	100.11	105.70
26	1H	692	C	C4-C5-C6	6.21	120.50	117.40
26	1H	974(A)	C	C5-C4-N4	6.21	124.55	120.20
26	14	1776	G	N3-C4-N9	6.21	129.72	126.00
28	19	60	ARG	NE-CZ-NH1	-6.21	117.20	120.30
26	1H	805	G	OP1-P-O3'	6.21	118.86	105.20
26	1H	1698	A	N1-C6-N6	6.21	122.32	118.60
43	E8	51	LEU	CA-CB-CG	6.21	129.58	115.30
26	14	1681	G	N1-C6-O6	6.21	123.62	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2500	U	C5-C6-N1	-6.21	119.60	122.70
26	14	74	A	C6-C5-N7	-6.21	127.96	132.30
26	1H	690	G	N9-C4-C5	-6.20	102.92	105.40
26	1H	2199	A	O5'-P-OP1	-6.20	100.12	105.70
26	14	1844	C	N3-C2-O2	6.20	126.24	121.90
26	1H	1799	G	P-O3'-C3'	6.20	127.14	119.70
26	1H	1815	A	C6-N1-C2	-6.20	114.88	118.60
26	14	2012	G	C6-C5-N7	-6.20	126.68	130.40
26	14	2821	A	C2-N3-C4	-6.20	107.50	110.60
1	13	266	G	C6-C5-N7	-6.20	126.68	130.40
1	13	767	A	N1-C2-N3	6.20	132.40	129.30
26	1H	1228	G	C2-N3-C4	-6.20	108.80	111.90
26	14	1558	A	C2-N3-C4	-6.20	107.50	110.60
1	13	564	C	C6-N1-C2	-6.20	117.82	120.30
1	13	1053	G	P-O3'-C3'	6.20	127.14	119.70
26	1H	111	A	O5'-P-OP2	-6.20	100.12	105.70
26	1H	1757	U	OP1-P-O3'	6.20	118.83	105.20
39	A8	48	LEU	CA-CB-CG	6.20	129.56	115.30
26	14	1814	G	N9-C4-C5	6.20	107.88	105.40
26	14	2256	G	N1-C2-N2	-6.20	110.62	116.20
26	14	2873	A	C4-N9-C1'	6.20	137.46	126.30
26	1H	1632	A	N1-C6-N6	6.20	122.32	118.60
26	14	979	G	N7-C8-N9	6.20	116.20	113.10
26	14	1400	G	C5-C6-O6	6.20	132.32	128.60
26	14	1619	G	C5-C6-O6	-6.20	124.88	128.60
26	14	2606	C	C2-N3-C4	-6.20	116.80	119.90
38	55	79	LEU	CA-CB-CG	6.20	129.55	115.30
1	13	1227	A	C5-N7-C8	-6.20	100.80	103.90
1	1G	1432	G	C5-C6-N1	-6.20	108.40	111.50
26	14	1950	G	C8-N9-C1'	-6.20	118.95	127.00
26	14	2000	G	C8-N9-C4	6.20	108.88	106.40
26	1H	2374	C	C2-N3-C4	-6.19	116.80	119.90
26	1H	2773	C	C6-N1-C2	6.19	122.78	120.30
1	1G	454	C	N1-C2-O2	6.19	122.62	118.90
26	14	672	C	C2-N1-C1'	-6.19	111.99	118.80
26	1H	651	G	OP1-P-OP2	-6.19	110.31	119.60
26	1H	1617	C	OP2-P-O3'	6.19	118.82	105.20
26	1H	2347	C	OP2-P-O3'	6.19	118.82	105.20
26	14	1283	G	O5'-P-OP2	-6.19	100.13	105.70
26	14	1304	C	N1-C2-O2	6.19	122.61	118.90
26	1H	671	C	C5-C6-N1	-6.19	117.91	121.00
26	1H	930	U	N3-C4-O4	-6.19	115.07	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	470	A	N1-C2-N3	6.19	132.40	129.30
26	14	1762	A	C5-C6-N1	-6.19	114.61	117.70
26	14	2553	G	OP1-P-O3'	6.19	118.81	105.20
26	1H	2286	A	N1-C6-N6	6.19	122.31	118.60
26	1H	783	A	N9-C1'-C2'	-6.18	105.20	112.00
26	1H	786	C	OP2-P-O3'	6.18	118.81	105.20
26	1H	1790	C	N1-C2-O2	-6.18	115.19	118.90
26	14	71	A	N1-C2-N3	6.18	132.39	129.30
26	14	791	C	N1-C2-O2	-6.18	115.19	118.90
27	16	61	G	C8-N9-C4	-6.18	103.93	106.40
27	16	98	G	N3-C4-N9	6.18	129.71	126.00
1	1G	913	A	P-O3'-C3'	6.18	127.12	119.70
26	1H	915	C	N1-C2-O2	6.18	122.61	118.90
26	1H	1307	A	C2-N3-C4	-6.18	107.51	110.60
26	1H	2296	U	N3-C4-O4	6.18	123.73	119.40
26	1H	2444	G	N3-C2-N2	-6.18	115.57	119.90
26	14	1319	G	O5'-P-OP2	-6.18	100.14	105.70
26	1H	2449	U	OP2-P-O3'	6.18	118.79	105.20
26	14	2501	C	C6-N1-C1'	6.18	128.21	120.80
1	13	768	A	C6-N1-C2	-6.18	114.89	118.60
26	1H	700	G	N3-C2-N2	-6.18	115.58	119.90
26	1H	1385	G	N3-C4-N9	-6.18	122.29	126.00
26	1H	2582	G	N3-C2-N2	6.18	124.22	119.90
26	14	2442	C	N3-C2-O2	-6.18	117.58	121.90
26	14	2039	C	N3-C4-N4	6.17	122.32	118.00
26	1H	2336	A	O5'-P-OP1	-6.17	100.14	105.70
26	1H	1640	C	OP1-P-OP2	-6.17	110.34	119.60
26	14	330	A	C5-N7-C8	-6.17	100.81	103.90
26	14	386	G	N1-C6-O6	6.17	123.60	119.90
26	1H	1681	G	C5-C6-O6	-6.17	124.90	128.60
26	1H	2713	A	C6-C5-N7	-6.17	127.98	132.30
26	14	137	C	C6-N1-C2	-6.17	117.83	120.30
26	1H	734	A	C6-N1-C2	6.17	122.30	118.60
26	1H	954	G	O5'-P-OP1	-6.17	100.15	105.70
26	1H	2591	C	C5-C4-N4	-6.17	115.88	120.20
26	14	2005	A	N7-C8-N9	-6.17	110.72	113.80
26	1H	391	G	C5-C6-N1	-6.17	108.42	111.50
26	1H	1502	C	C6-N1-C2	-6.16	117.83	120.30
26	1H	271(B)	G	C6-N1-C2	-6.16	121.40	125.10
26	1H	1189	A	N1-C6-N6	6.16	122.30	118.60
26	1H	1363	C	N3-C4-N4	-6.16	113.69	118.00
1	13	789	U	C6-N1-C2	-6.16	117.30	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	378	C	C5-C4-N4	-6.16	115.89	120.20
26	1H	378	C	N3-C4-N4	6.16	122.31	118.00
26	1H	1520	U	N1-C2-N3	6.16	118.60	114.90
26	14	2388	A	O4'-C1'-N9	6.16	113.13	108.20
26	1H	906	G	N9-C4-C5	6.16	107.86	105.40
26	14	217	G	O5'-P-OP1	-6.16	100.16	105.70
1	13	129	U	O4'-C1'-N1	6.16	113.12	108.20
26	1H	683	C	C2-N3-C4	-6.16	116.82	119.90
26	1H	1831	G	N7-C8-N9	6.16	116.18	113.10
26	14	2459	A	C8-N9-C4	-6.16	103.34	105.80
26	1H	481	G	O4'-C1'-N9	6.15	113.12	108.20
26	1H	911	A	N1-C6-N6	6.15	122.29	118.60
26	1H	1214	A	OP2-P-O3'	6.15	118.74	105.20
26	14	2019	A	N7-C8-N9	-6.15	110.72	113.80
26	14	2039	C	C6-N1-C2	-6.15	117.84	120.30
26	14	133	C	C2-N3-C4	-6.15	116.83	119.90
26	1H	263	C	N1-C2-O2	6.15	122.59	118.90
26	1H	793	A	C6-N1-C2	-6.15	114.91	118.60
26	1H	1161	C	C6-N1-C2	-6.15	117.84	120.30
26	14	2584	U	C6-N1-C1'	-6.15	112.59	121.20
26	14	1661	G	N9-C4-C5	-6.15	102.94	105.40
26	1H	1936	A	C4-C5-N7	6.14	113.77	110.70
27	16	98	G	N3-C2-N2	6.14	124.20	119.90
26	14	71	A	N7-C8-N9	6.14	116.87	113.80
26	1H	1161	C	C5-C6-N1	6.14	124.07	121.00
26	1H	2380	C	C4-C5-C6	6.14	120.47	117.40
1	1G	719	C	C6-N1-C2	-6.14	117.84	120.30
26	14	2258	C	N1-C2-O2	-6.14	115.22	118.90
26	1H	1623	G	C5-C6-O6	6.14	132.28	128.60
26	14	119	A	N1-C2-N3	6.14	132.37	129.30
26	1H	853	G	O5'-P-OP1	6.14	118.07	110.70
26	14	143	C	C6-N1-C2	-6.14	117.84	120.30
26	1H	624	C	N3-C2-O2	6.14	126.20	121.90
26	1H	2378	A	N1-C6-N6	6.14	122.28	118.60
26	14	1021	A	C2-N3-C4	-6.14	107.53	110.60
26	14	2873	A	C4-C5-C6	6.14	120.07	117.00
5	4E	91	LEU	CA-CB-CG	6.13	129.41	115.30
26	1H	1782	C	C2-N3-C4	-6.13	116.83	119.90
1	1G	115	G	N1-C6-O6	-6.13	116.22	119.90
26	14	915	C	N1-C2-O2	6.13	122.58	118.90
26	14	1333	C	C5-C4-N4	-6.13	115.91	120.20
26	14	1698	A	N1-C2-N3	6.13	132.37	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2258	C	N3-C2-O2	6.13	126.19	121.90
26	1H	227	A	N1-C6-N6	-6.13	114.92	118.60
26	1H	609	A	N1-C6-N6	6.13	122.28	118.60
1	13	1203	C	C6-N1-C2	-6.13	117.85	120.30
26	1H	784	A	N9-C4-C5	6.13	108.25	105.80
26	1H	1191	G	C8-N9-C4	6.13	108.85	106.40
26	1H	2394	C	O5'-P-OP2	-6.13	100.18	105.70
26	14	1786	A	N1-C6-N6	6.13	122.28	118.60
26	1H	265	A	C6-C5-N7	-6.13	128.01	132.30
26	1H	624	C	N3-C4-N4	6.13	122.29	118.00
26	1H	988	A	N7-C8-N9	6.13	116.86	113.80
26	1H	1754	C	C6-N1-C2	-6.13	117.85	120.30
26	1H	2430	A	C5-C6-N6	-6.13	118.80	123.70
26	1H	1228	G	N1-C2-N3	6.13	127.58	123.90
1	13	1329	A	N1-C6-N6	6.13	122.28	118.60
26	1H	596	G	N3-C2-N2	-6.13	115.61	119.90
26	1H	2300	G	C8-N9-C4	-6.13	103.95	106.40
26	1H	2837	G	N1-C6-O6	6.13	123.58	119.90
26	1H	2856	C	C6-N1-C2	-6.13	117.85	120.30
26	14	2329	G	N1-C6-O6	-6.13	116.22	119.90
26	1H	764	A	OP1-P-OP2	-6.12	110.41	119.60
26	1H	1613	G	N3-C4-N9	6.12	129.68	126.00
26	1H	1899	G	C5-N7-C8	-6.12	101.24	104.30
1	1G	904	C	O5'-P-OP1	-6.12	100.19	105.70
26	14	2439	A	C6-C5-N7	-6.12	128.01	132.30
26	1H	62	C	C5-C6-N1	-6.12	117.94	121.00
26	1H	831	G	C8-N9-C4	6.12	108.85	106.40
26	1H	1379	A	C6-C5-N7	-6.12	128.01	132.30
26	14	189	G	C8-N9-C4	6.12	108.85	106.40
26	14	803	U	O5'-P-OP1	6.12	118.04	110.70
26	14	2700	C	C6-N1-C1'	-6.12	113.46	120.80
26	1H	2318	G	N7-C8-N9	6.11	116.16	113.10
26	14	195	A	P-O3'-C3'	6.11	127.04	119.70
26	14	2031	A	N1-C6-N6	6.11	122.27	118.60
22	1K	76	A	O4'-C1'-N9	6.11	113.09	108.20
26	14	672	C	O5'-P-OP2	-6.11	100.20	105.70
26	14	1334	G	N7-C8-N9	6.11	116.16	113.10
26	14	1489	U	C5-C4-O4	6.11	129.57	125.90
1	13	112	G	C8-N9-C4	-6.11	103.96	106.40
1	13	137	C	C6-N1-C2	6.11	122.74	120.30
26	1H	1010	A	C8-N9-C4	6.11	108.24	105.80
26	1H	2752	C	C5-C6-N1	6.11	124.05	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	71	A	O4'-C1'-N9	-6.11	103.31	108.20
26	1H	207	A	C2-N3-C4	-6.11	107.55	110.60
26	1H	1998	G	N7-C8-N9	-6.11	110.05	113.10
26	1H	2392	A	N3-C4-C5	6.11	131.07	126.80
23	2L	48	U	P-O3'-C3'	6.10	127.03	119.70
1	13	903	G	O5'-P-OP2	-6.10	100.21	105.70
26	14	1785	A	C4-C5-C6	6.10	120.05	117.00
26	14	2031	A	C5-C6-N6	-6.10	118.82	123.70
26	1H	1187	G	OP2-P-O3'	6.10	118.62	105.20
1	13	728	A	C8-N9-C4	-6.10	103.36	105.80
26	1H	641	C	O5'-P-OP2	6.10	118.02	110.70
26	14	747	U	N3-C2-O2	6.10	126.47	122.20
26	14	2543	G	C8-N9-C4	6.10	108.84	106.40
26	1H	1596	A	N1-C6-N6	-6.10	114.94	118.60
26	1H	2299	G	C5-N7-C8	-6.10	101.25	104.30
26	1H	2375	G	N9-C4-C5	-6.10	102.96	105.40
26	14	1826	G	C5-N7-C8	6.10	107.35	104.30
26	1H	1789	A	C5-C6-N1	6.10	120.75	117.70
26	1H	1981	A	OP2-P-O3'	6.10	118.61	105.20
26	14	2712	U	N3-C4-O4	-6.10	115.13	119.40
26	1H	839	U	C4-C5-C6	6.09	123.36	119.70
26	1H	913	U	OP1-P-OP2	6.09	128.74	119.60
26	1H	2249	U	N3-C4-C5	-6.09	110.94	114.60
26	14	1613	G	C5-N7-C8	6.09	107.35	104.30
26	14	2501	C	N3-C4-C5	6.09	124.34	121.90
26	1H	1231	G	C5-C6-O6	-6.09	124.94	128.60
26	1H	1314	C	C6-N1-C1'	-6.09	113.49	120.80
26	1H	2329	G	OP1-P-OP2	6.09	128.74	119.60
26	14	864	G	OP1-P-OP2	-6.09	110.47	119.60
26	1H	127	A	C4-C5-N7	6.09	113.74	110.70
26	14	1517	G	OP1-P-O3'	6.09	118.59	105.20
26	1H	329	G	O5'-P-OP2	-6.09	100.22	105.70
26	14	831	G	C8-N9-C4	6.09	108.83	106.40
26	14	2373	G	N3-C2-N2	-6.09	115.64	119.90
26	1H	1899	G	C8-N9-C1'	6.08	134.91	127.00
26	1H	2281	C	N3-C4-N4	6.08	122.26	118.00
26	14	1636	C	N3-C4-N4	6.08	122.26	118.00
26	1H	579	G	N1-C2-N2	6.08	121.67	116.20
26	1H	1255	U	N3-C4-C5	-6.08	110.95	114.60
26	1H	1587	A	C8-N9-C4	-6.08	103.37	105.80
26	14	330	A	C5-C6-N1	-6.08	114.66	117.70
26	1H	452	G	C2-N3-C4	6.08	114.94	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	1356	G	C8-N9-C4	-6.08	103.97	106.40
26	14	1767	C	C5-C6-N1	-6.08	117.96	121.00
26	14	2078	C	C6-N1-C2	-6.08	117.87	120.30
1	13	516	U	C6-N1-C2	-6.08	117.35	121.00
1	13	967	C	N3-C2-O2	6.08	126.15	121.90
26	1H	1187	G	N1-C6-O6	6.08	123.55	119.90
26	1H	2331	G	C2-N3-C4	-6.08	108.86	111.90
1	13	413	G	O4'-C1'-N9	6.07	113.06	108.20
26	14	470	A	O5'-P-OP1	-6.07	100.23	105.70
26	14	1790	C	OP1-P-O3'	6.07	118.56	105.20
1	13	810	C	O5'-P-OP2	-6.07	100.23	105.70
26	1H	2337	G	C5-C6-O6	-6.07	124.96	128.60
26	14	2250	G	C8-N9-C4	-6.07	103.97	106.40
26	1H	501	A	O5'-P-OP2	-6.07	100.24	105.70
1	1G	1126	U	P-O3'-C3'	6.07	126.98	119.70
26	1H	570	G	C5-C6-N1	-6.07	108.47	111.50
26	1H	951	C	N3-C4-C5	6.07	124.33	121.90
26	14	2001	A	C8-N9-C4	6.07	108.23	105.80
1	13	1158	C	C6-N1-C2	-6.07	117.87	120.30
26	1H	464	U	C4-C5-C6	6.07	123.34	119.70
26	1H	762	U	C5-C6-N1	6.07	125.73	122.70
26	1H	957	A	C4-C5-C6	6.07	120.03	117.00
26	14	1901	A	OP1-P-O3'	6.07	118.55	105.20
26	1H	1674	G	O4'-C1'-N9	-6.07	103.35	108.20
26	1H	2699	C	C5-C4-N4	-6.07	115.95	120.20
26	1H	976	C	O5'-P-OP1	-6.06	100.24	105.70
26	1H	2293	C	N3-C2-O2	-6.06	117.66	121.90
26	1H	1616	A	C6-C5-N7	-6.06	128.06	132.30
26	1H	1915	U	C2-N3-C4	-6.06	123.36	127.00
26	1H	2006	C	O5'-P-OP1	6.06	117.97	110.70
26	1H	2282	G	C5-C6-O6	6.06	132.24	128.60
26	14	2321	G	N3-C4-C5	-6.06	125.57	128.60
26	1H	2422	A	N1-C6-N6	-6.06	114.97	118.60
26	1H	1204	A	C8-N9-C1'	-6.06	116.80	127.70
26	1H	1318	C	O5'-P-OP1	-6.06	100.25	105.70
26	1H	1612	C	C4-C5-C6	6.06	120.43	117.40
26	1H	2638	G	N3-C2-N2	6.06	124.14	119.90
1	1G	267	C	O5'-P-OP1	-6.06	100.25	105.70
1	1G	613	C	C5-C6-N1	6.06	124.03	121.00
26	14	835	A	C2-N3-C4	6.06	113.63	110.60
26	1H	735	A	N9-C4-C5	-6.06	103.38	105.80
26	14	1598	C	OP1-P-OP2	-6.06	110.52	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2389	G	C8-N9-C4	-6.06	103.98	106.40
26	14	1379	A	C5-N7-C8	-6.05	100.87	103.90
26	14	1839	G	O5'-P-OP1	-6.05	100.25	105.70
26	1H	2080	G	O4'-C1'-N9	-6.05	103.36	108.20
26	1H	2244	U	O5'-P-OP2	6.05	117.96	110.70
1	1G	866	C	C6-N1-C2	-6.05	117.88	120.30
26	1H	1275	A	N1-C6-N6	6.05	122.23	118.60
26	1H	1396	U	O5'-P-OP1	-6.05	100.25	105.70
26	1H	2406	U	N1-C2-O2	6.05	127.04	122.80
26	1H	2508	G	N3-C4-N9	-6.05	122.37	126.00
26	14	1618	A	N7-C8-N9	6.05	116.83	113.80
26	1H	1162	G	C8-N9-C4	-6.05	103.98	106.40
24	3L	71	G	N1-C6-O6	-6.05	116.27	119.90
26	14	558	G	N7-C8-N9	-6.05	110.08	113.10
26	14	1965	C	C6-N1-C2	6.05	122.72	120.30
26	1H	1166	C	C5-C6-N1	6.05	124.02	121.00
1	13	805	C	C6-N1-C2	-6.05	117.88	120.30
26	1H	1265	A	C5'-C4'-C3'	-6.05	106.32	116.00
26	1H	2731	G	N1-C6-O6	6.05	123.53	119.90
1	1G	413	G	C6-C5-N7	6.05	134.03	130.40
1	1G	1498	U	P-O3'-C3'	6.05	126.96	119.70
26	14	695	G	N1-C6-O6	6.05	123.53	119.90
26	1H	635	C	O5'-P-OP1	6.04	117.95	110.70
26	1H	1673	U	C2-N1-C1'	-6.04	110.45	117.70
26	1H	2248	C	C6-N1-C2	-6.04	117.88	120.30
1	1G	317	G	C6-C5-N7	-6.04	126.77	130.40
26	14	1252	G	O4'-C1'-N9	-6.04	103.37	108.20
1	13	827	U	C5-C4-O4	6.04	129.53	125.90
26	1H	778	G	C5-N7-C8	6.04	107.32	104.30
26	14	469	G	C5-C6-N1	6.04	114.52	111.50
1	13	1299	A	C5-N7-C8	-6.04	100.88	103.90
26	1H	238	C	C5-C6-N1	-6.04	117.98	121.00
26	1H	763	G	N1-C6-O6	6.04	123.52	119.90
26	1H	1778	U	OP2-P-O3'	6.04	118.49	105.20
26	1H	1905	C	P-O3'-C3'	6.04	126.95	119.70
26	1H	2689	U	N3-C4-O4	-6.04	115.17	119.40
26	14	133	C	C5-C6-N1	-6.04	117.98	121.00
26	1H	478	A	N1-C2-N3	6.04	132.32	129.30
26	1H	842	G	C4-N9-C1'	-6.04	118.65	126.50
1	1G	690	G	C2-N3-C4	-6.04	108.88	111.90
26	14	1787	A	O5'-P-OP1	-6.04	100.27	105.70
26	14	1953	A	O5'-P-OP2	6.04	117.94	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1307	A	OP1-P-OP2	6.04	128.65	119.60
26	1H	1313	U	C6-N1-C2	-6.04	117.38	121.00
26	1H	1446	C	C6-N1-C2	-6.04	117.89	120.30
26	1H	2295	C	N3-C4-C5	-6.04	119.49	121.90
26	14	1332	G	N1-C2-N3	6.04	127.52	123.90
26	1H	1368	G	O5'-P-OP2	-6.03	100.27	105.70
26	14	1804	C	C5-C6-N1	6.03	124.02	121.00
26	14	2546	U	OP1-P-OP2	6.03	128.65	119.60
26	1H	529	A	C5-N7-C8	-6.03	100.89	103.90
26	1H	2275	C	O5'-P-OP2	-6.03	100.27	105.70
26	14	2581	G	N7-C8-N9	6.03	116.12	113.10
1	13	266	G	C4-C5-N7	6.03	113.21	110.80
1	13	956	U	N3-C4-C5	-6.03	110.98	114.60
26	1H	2070	G	N7-C8-N9	-6.03	110.08	113.10
26	1H	1298	C	OP2-P-O3'	-6.03	91.94	105.20
27	16	92	G	OP2-P-O3'	6.03	118.46	105.20
26	14	621	A	N3-C4-C5	6.03	131.02	126.80
26	14	921	G	N7-C8-N9	6.03	116.11	113.10
1	13	449	C	N3-C2-O2	-6.03	117.68	121.90
27	16	13	A	OP1-P-OP2	6.03	128.64	119.60
1	13	268	C	O5'-P-OP2	6.02	117.93	110.70
53	O8	42	TRP	CA-CB-CG	6.02	125.14	113.70
26	14	508	G	O5'-P-OP1	-6.02	100.28	105.70
26	1H	1356	G	O5'-P-OP1	-6.02	100.28	105.70
26	1H	1513	C	C5-C6-N1	6.02	124.01	121.00
26	1H	2436	G	N3-C2-N2	-6.02	115.68	119.90
26	1H	2287	A	N1-C6-N6	6.02	122.21	118.60
26	14	1302	A	N1-C6-N6	-6.02	114.99	118.60
1	13	757	U	N1-C2-O2	6.02	127.01	122.80
26	1H	869	G	N1-C2-N2	-6.02	110.78	116.20
26	1H	1197	G	N7-C8-N9	-6.02	110.09	113.10
26	1H	1694	C	P-O3'-C3'	6.02	126.92	119.70
26	1H	2688	U	C6-N1-C2	-6.02	117.39	121.00
1	13	812	C	N3-C2-O2	-6.02	117.69	121.90
1	13	827	U	C4-C5-C6	6.02	123.31	119.70
26	1H	501	A	OP1-P-OP2	6.02	128.63	119.60
26	1H	598	G	OP1-P-OP2	6.02	128.63	119.60
22	1K	18	G	C4-N9-C1'	6.02	134.32	126.50
26	1H	1969	A	C5-C6-N6	6.02	128.51	123.70
26	1H	2070	G	C5-N7-C8	6.02	107.31	104.30
26	1H	2366	A	OP2-P-O3'	6.01	118.43	105.20
26	1H	2440	C	N3-C4-C5	-6.01	119.49	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1334	G	O5'-P-OP2	6.01	117.92	110.70
26	14	2281	C	C6-N1-C2	-6.01	117.89	120.30
26	14	140	A	C6-C5-N7	-6.01	128.09	132.30
26	14	386	G	C4-C5-N7	6.01	113.20	110.80
26	1H	74	A	O4'-C1'-N9	-6.01	103.39	108.20
26	1H	863	A	N7-C8-N9	-6.01	110.79	113.80
1	1G	353	A	C4-C5-N7	6.01	113.71	110.70
26	14	89	G	N1-C6-O6	6.01	123.51	119.90
26	1H	1308	A	N9-C4-C5	6.01	108.20	105.80
26	1H	1616	A	C2-N3-C4	-6.01	107.60	110.60
26	1H	2690	C	C2-N1-C1'	-6.01	112.19	118.80
26	14	1258	C	C4-C5-C6	-6.01	114.39	117.40
1	13	1222	G	O5'-P-OP2	-6.01	100.29	105.70
26	1H	201	C	C6-N1-C2	6.01	122.70	120.30
26	1H	1639	U	N1-C2-O2	6.01	127.00	122.80
26	14	827	U	O5'-P-OP2	-6.01	100.29	105.70
26	1H	71	A	C8-N9-C4	-6.01	103.40	105.80
26	1H	1271	G	N1-C6-O6	6.01	123.50	119.90
26	1H	1900	A	N9-C4-C5	-6.01	103.40	105.80
26	1H	2718	G	N1-C6-O6	6.01	123.50	119.90
26	14	245	G	C5-C6-O6	-6.01	125.00	128.60
26	14	574	C	C2-N1-C1'	-6.01	112.19	118.80
2	12	196	LEU	CA-CB-CG	6.00	129.11	115.30
26	1H	1201	C	N1-C2-O2	-6.00	115.30	118.90
26	1H	1347	G	OP1-P-O3'	6.00	118.41	105.20
26	1H	1489	U	C5-C4-O4	6.00	129.50	125.90
26	1H	1982	C	C5-C6-N1	6.00	124.00	121.00
26	1H	2822	G	C5-C6-O6	-6.00	125.00	128.60
26	1H	463	G	O5'-P-OP1	6.00	117.90	110.70
26	14	565	C	N1-C2-O2	6.00	122.50	118.90
26	14	2061	G	C8-N9-C4	6.00	108.80	106.40
1	1G	266	G	P-O3'-C3'	6.00	126.90	119.70
30	39	125	LEU	CA-CB-CG	6.00	129.09	115.30
23	2K	35	C	OP1-P-O3'	6.00	118.39	105.20
26	1H	1307	A	O5'-P-OP1	-6.00	100.30	105.70
1	1G	218	C	C6-N1-C2	-6.00	117.90	120.30
24	3L	71	G	O4'-C1'-N9	6.00	113.00	108.20
26	14	465	G	N3-C4-N9	6.00	129.60	126.00
26	1H	1259	G	OP2-P-O3'	6.00	118.39	105.20
26	1H	566	U	C6-N1-C2	5.99	124.60	121.00
26	14	2558	C	C5-C4-N4	-5.99	116.00	120.20
26	1H	391	G	C4-C5-C6	5.99	122.39	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	871	U	O5'-P-OP1	-5.99	100.31	105.70
26	14	1380	G	C2-N3-C4	-5.99	108.90	111.90
26	1H	1900	A	N3-C4-N9	5.99	132.19	127.40
26	1H	382	G	OP1-P-O3'	5.99	118.38	105.20
26	1H	803	U	C5-C6-N1	-5.99	119.71	122.70
1	1G	1514	C	C6-N1-C2	-5.99	117.90	120.30
26	14	565	C	C5-C6-N1	-5.99	118.01	121.00
26	1H	189	G	C5-C6-O6	-5.99	125.01	128.60
26	14	201	C	C2-N3-C4	-5.99	116.91	119.90
26	14	1239	G	N1-C6-O6	5.99	123.49	119.90
26	14	2606	C	O5'-P-OP1	-5.99	100.31	105.70
26	1H	940	G	N3-C4-C5	-5.98	125.61	128.60
1	1G	1157	A	P-O3'-C3'	5.98	126.88	119.70
1	13	1459	C	N1-C2-O2	5.98	122.49	118.90
26	1H	1967	C	OP1-P-OP2	5.98	128.57	119.60
26	1H	2705	A	C6-C5-N7	-5.98	128.11	132.30
26	14	737	C	C5-C4-N4	-5.98	116.01	120.20
26	14	1348	G	N1-C6-O6	5.98	123.49	119.90
1	13	690	G	C5-C6-N1	-5.98	108.51	111.50
26	1H	35	G	O5'-P-OP2	-5.98	100.32	105.70
26	1H	2507	C	N3-C4-C5	-5.98	119.51	121.90
1	1G	581	G	O5'-P-OP2	-5.98	100.32	105.70
25	4K	19	U	O5'-P-OP2	-5.98	100.32	105.70
1	1G	932	C	C2-N1-C1'	5.98	125.38	118.80
26	14	1332	G	C8-N9-C4	-5.98	104.01	106.40
26	14	1816	G	C5-C6-O6	-5.98	125.01	128.60
1	13	956	U	C5-C6-N1	5.98	125.69	122.70
26	1H	682	G	O5'-P-OP2	-5.98	100.32	105.70
26	1H	1398	C	OP1-P-OP2	-5.98	110.63	119.60
1	13	690	G	C4-C5-N7	5.98	113.19	110.80
1	13	1432	G	C5-C6-O6	-5.97	125.02	128.60
26	1H	134	C	C2-N3-C4	-5.97	116.91	119.90
26	1H	1611	C	C6-N1-C2	5.97	122.69	120.30
26	1H	1969	A	C4-C5-N7	-5.97	107.71	110.70
1	13	975	A	O4'-C1'-N9	-5.97	103.42	108.20
26	1H	2385	C	C2-N3-C4	-5.97	116.91	119.90
26	14	208	C	N3-C4-N4	5.97	122.18	118.00
26	14	1248	G	O5'-P-OP1	5.97	117.87	110.70
26	14	1248	G	OP1-P-OP2	-5.97	110.64	119.60
1	13	1201	A	N1-C6-N6	5.97	122.18	118.60
26	1H	2387	U	OP2-P-O3'	5.97	118.34	105.20
1	13	1025	U	C5-C6-N1	5.97	125.69	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	835	A	C2-N3-C4	5.97	113.58	110.60
26	14	570	G	C8-N9-C1'	-5.97	119.24	127.00
26	14	755	C	N1-C2-O2	-5.97	115.32	118.90
26	14	1698	A	N9-C4-C5	-5.97	103.41	105.80
26	1H	139	G	C2-N3-C4	5.96	114.88	111.90
26	1H	1559	G	N3-C4-N9	-5.96	122.42	126.00
26	14	830	G	N9-C4-C5	-5.96	103.01	105.40
26	14	911	A	OP1-P-O3'	5.96	118.32	105.20
26	1H	198	C	N3-C4-C5	5.96	124.28	121.90
26	14	2581	G	N3-C4-C5	-5.96	125.62	128.60
1	13	1279	A	C8-N9-C4	-5.96	103.42	105.80
26	1H	2286	A	C6-C5-N7	-5.96	128.13	132.30
1	1G	687	A	P-O3'-C3'	5.96	126.85	119.70
26	14	677	A	OP1-P-OP2	5.96	128.54	119.60
26	14	1367	A	C6-C5-N7	-5.96	128.13	132.30
26	14	2503	A	O5'-P-OP2	-5.96	100.33	105.70
26	1H	1141	U	N3-C2-O2	-5.96	118.03	122.20
26	1H	1515	C	C6-N1-C2	-5.96	117.92	120.30
26	14	2365	G	C5-C6-O6	-5.96	125.03	128.60
26	1H	121	G	N9-C4-C5	-5.96	103.02	105.40
26	1H	1941	C	N3-C4-C5	-5.96	119.52	121.90
26	1H	2312	U	O5'-P-OP1	-5.96	100.34	105.70
26	1H	2562	U	C5-C6-N1	-5.96	119.72	122.70
26	14	2049	G	N3-C2-N2	-5.96	115.73	119.90
1	13	1432	G	N1-C6-O6	5.95	123.47	119.90
26	1H	407	G	N3-C4-C5	-5.95	125.62	128.60
27	16	29	A	C8-N9-C4	-5.95	103.42	105.80
26	14	2463	C	N1-C2-O2	-5.95	115.33	118.90
26	14	2707	G	O4'-C1'-N9	5.95	112.96	108.20
1	13	977	A	C8-N9-C4	-5.95	103.42	105.80
23	2K	13	C	C2-N3-C4	5.95	122.88	119.90
26	1H	805	G	C4-C5-C6	5.95	122.37	118.80
26	1H	920	G	C8-N9-C4	5.95	108.78	106.40
26	1H	1653	G	N3-C4-N9	5.95	129.57	126.00
26	1H	2031	A	N1-C2-N3	-5.95	126.32	129.30
26	14	1418	G	C6-C5-N7	-5.95	126.83	130.40
26	14	2426	A	OP1-P-O3'	5.95	118.29	105.20
26	1H	1241	A	C5-N7-C8	-5.95	100.93	103.90
26	1H	2299	G	N1-C6-O6	5.95	123.47	119.90
1	13	525	C	C5-C4-N4	-5.95	116.04	120.20
26	1H	13	A	C8-N9-C4	-5.95	103.42	105.80
26	1H	906	G	C6-C5-N7	5.95	133.97	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1193	G	O5'-P-OP1	5.95	117.84	110.70
1	13	115	G	P-O3'-C3'	5.95	126.83	119.70
26	1H	1224	G	C4-N9-C1'	-5.95	118.77	126.50
1	13	967	C	N1-C2-O2	-5.94	115.33	118.90
26	1H	1349	A	N9-C4-C5	-5.94	103.42	105.80
26	14	1930	G	C4-C5-N7	-5.94	108.42	110.80
26	1H	1298	C	N1-C2-O2	5.94	122.47	118.90
26	1H	2248	C	C5-C4-N4	5.94	124.36	120.20
1	13	1336	C	P-O3'-C3'	5.94	126.83	119.70
26	1H	2273	A	N1-C2-N3	-5.94	126.33	129.30
26	1H	2546	U	N3-C2-O2	5.94	126.36	122.20
26	14	1972	A	OP2-P-O3'	5.94	118.27	105.20
26	14	2004	G	N1-C6-O6	5.94	123.46	119.90
26	1H	459	U	N1-C2-N3	5.94	118.46	114.90
26	1H	1785	A	C8-N9-C4	-5.94	103.42	105.80
26	1H	2465	C	C5-C6-N1	-5.94	118.03	121.00
26	1H	2336	A	C2-N3-C4	5.94	113.57	110.60
26	1H	2819	G	C6-C5-N7	-5.94	126.84	130.40
26	1H	793	A	N3-C4-C5	-5.93	122.64	126.80
26	1H	2576	G	N9-C4-C5	-5.93	103.03	105.40
26	1H	2591	C	N3-C4-N4	5.93	122.15	118.00
26	1H	2686	G	N3-C4-N9	5.93	129.56	126.00
26	14	856	C	C2-N1-C1'	5.93	125.33	118.80
26	14	1145	C	C5-C6-N1	5.93	123.97	121.00
1	1G	723	U	C5-C6-N1	5.93	125.67	122.70
26	1H	2006	C	C6-N1-C2	5.93	122.67	120.30
26	14	771	G	OP1-P-O3'	5.93	118.25	105.20
26	1H	2584	U	N1-C2-N3	5.93	118.46	114.90
26	14	123	G	C5-C6-O6	-5.93	125.04	128.60
26	1H	71	A	N1-C6-N6	5.93	122.16	118.60
26	1H	536	A	N9-C4-C5	5.93	108.17	105.80
26	1H	1418	G	N1-C6-O6	-5.93	116.34	119.90
26	1H	2016	U	N3-C4-O4	-5.93	115.25	119.40
27	16	81	G	N7-C8-N9	5.93	116.06	113.10
1	1G	353	A	C5-N7-C8	-5.93	100.94	103.90
26	14	794	G	C4-C5-N7	-5.93	108.43	110.80
26	1H	51	G	O4'-C1'-N9	-5.92	103.46	108.20
26	1H	1888	G	C4-N9-C1'	5.92	134.20	126.50
26	14	787	U	O5'-P-OP1	5.92	117.81	110.70
26	14	1302	A	OP1-P-OP2	5.92	128.49	119.60
26	14	1615	C	N3-C4-C5	-5.92	119.53	121.90
1	13	1519	A	C8-N9-C4	-5.92	103.43	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	372	G	N9-C4-C5	5.92	107.77	105.40
26	1H	755	C	N3-C4-C5	-5.92	119.53	121.90
26	1H	1348	G	O5'-P-OP2	5.92	117.81	110.70
22	1K	18	G	P-O3'-C3'	5.92	126.81	119.70
26	1H	775	G	O4'-C1'-N9	5.92	112.94	108.20
26	1H	1669	A	N7-C8-N9	5.92	116.76	113.80
26	1H	2243	U	OP2-P-O3'	5.92	118.22	105.20
26	1H	2375	G	C5-C6-N1	5.92	114.46	111.50
26	14	1309	G	N9-C4-C5	-5.92	103.03	105.40
26	1H	622	G	N7-C8-N9	-5.92	110.14	113.10
26	1H	914	C	C2-N1-C1'	-5.92	112.29	118.80
1	1G	664	G	N3-C4-N9	-5.92	122.45	126.00
1	1G	772	U	O5'-P-OP2	-5.92	100.37	105.70
26	14	138	G	C8-N9-C4	-5.92	104.03	106.40
26	1H	180	G	N9-C4-C5	-5.92	103.03	105.40
26	1H	808	G	N1-C2-N2	-5.92	110.88	116.20
26	1H	1790	C	N3-C4-C5	5.92	124.27	121.90
26	14	1141	U	P-O3'-C3'	5.92	126.80	119.70
26	14	1380	G	C5-C6-N1	-5.92	108.54	111.50
26	1H	663	G	N9-C4-C5	5.91	107.77	105.40
26	1H	1614	A	N3-C4-N9	-5.91	122.67	127.40
26	1H	2074	U	C5-C6-N1	-5.91	119.74	122.70
26	1H	2289	G	N1-C2-N2	5.91	121.52	116.20
26	14	857	C	C6-N1-C2	-5.91	117.93	120.30
26	14	1274	A	C4-C5-C6	5.91	119.96	117.00
26	14	2571	C	C5-C4-N4	-5.91	116.06	120.20
1	1G	1529	G	C8-N9-C4	-5.91	104.03	106.40
26	1H	113	G	C2-N3-C4	-5.91	108.94	111.90
26	1H	974(A)	C	N3-C4-C5	-5.91	119.54	121.90
26	1H	1340	U	C5-C4-O4	-5.91	122.35	125.90
26	1H	2065	C	N3-C2-O2	-5.91	117.76	121.90
1	13	797	C	O5'-P-OP1	-5.91	100.38	105.70
26	1H	354	G	N1-C6-O6	5.91	123.45	119.90
26	14	945	A	N7-C8-N9	5.91	116.75	113.80
26	14	1376	C	O5'-P-OP1	-5.91	100.38	105.70
26	14	1574	C	OP2-P-O3'	5.91	118.20	105.20
1	13	1299	A	C6-C5-N7	-5.91	128.16	132.30
27	16	60	C	C6-N1-C2	-5.91	117.94	120.30
26	14	2265	U	N3-C4-O4	5.91	123.53	119.40
26	1H	321	G	N1-C6-O6	5.91	123.44	119.90
26	1H	1197	G	C8-N9-C4	5.91	108.76	106.40
26	1H	2688	U	N3-C4-O4	-5.91	115.27	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	1408	A	N1-C6-N6	-5.91	115.06	118.60
26	14	265	A	C2-N3-C4	-5.91	107.65	110.60
26	14	1798	U	O5'-P-OP2	-5.91	100.39	105.70
26	14	2392	A	C2-N3-C4	-5.91	107.65	110.60
26	1H	517	C	N3-C4-N4	5.90	122.13	118.00
26	1H	209	C	O5'-P-OP2	-5.90	100.39	105.70
26	1H	2398	U	N1-C2-O2	5.90	126.93	122.80
24	3L	71	G	C5-C6-O6	5.90	132.14	128.60
26	14	121	G	C6-N1-C2	-5.90	121.56	125.10
26	14	1971	A	OP2-P-O3'	5.90	118.19	105.20
26	1H	606	U	O5'-P-OP2	-5.90	100.39	105.70
26	1H	735	A	N1-C6-N6	5.90	122.14	118.60
26	1H	802	A	OP1-P-O3'	-5.90	92.22	105.20
26	1H	908	C	OP2-P-O3'	5.90	118.18	105.20
26	1H	2249	U	C5-C6-N1	5.90	125.65	122.70
26	1H	2270	G	N1-C6-O6	5.90	123.44	119.90
26	1H	2680	C	N1-C2-O2	-5.90	115.36	118.90
26	14	215	G	C5-C6-O6	-5.90	125.06	128.60
26	14	2356	C	C2-N1-C1'	-5.90	112.31	118.80
26	1H	928	G	N1-C6-O6	5.90	123.44	119.90
26	1H	2747	G	N3-C4-N9	5.90	129.54	126.00
26	1H	1761	C	C5-C4-N4	-5.90	116.07	120.20
26	1H	2686	G	N3-C4-C5	-5.90	125.65	128.60
26	14	1769	G	N1-C6-O6	5.90	123.44	119.90
26	14	2623	G	O5'-P-OP2	-5.90	100.39	105.70
26	14	1162	G	O5'-P-OP1	-5.90	100.39	105.70
26	14	1614	A	N1-C6-N6	5.90	122.14	118.60
1	13	1103	C	C6-N1-C2	-5.89	117.94	120.30
26	1H	1702	G	C8-N9-C4	5.89	108.76	106.40
26	14	946	G	N9-C4-C5	-5.89	103.04	105.40
26	14	998	C	N1-C2-O2	5.89	122.44	118.90
26	14	2075	U	C2-N3-C4	-5.89	123.46	127.00
1	13	901	A	C2-N3-C4	-5.89	107.65	110.60
26	1H	1761	C	N3-C2-O2	5.89	126.03	121.90
26	14	2681	C	C5-C4-N4	5.89	124.33	120.20
26	1H	513	A	C8-N9-C4	-5.89	103.44	105.80
26	1H	1223	C	N3-C2-O2	5.89	126.02	121.90
26	1H	1784	A	N1-C2-N3	5.89	132.24	129.30
24	3L	71	G	C4-C5-N7	-5.89	108.44	110.80
1	13	428	G	C8-N9-C4	-5.89	104.05	106.40
1	1G	1474	G	N3-C4-C5	5.89	131.54	128.60
26	14	2489	G	OP2-P-O3'	5.89	118.15	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	791	C	OP2-P-O3'	5.88	118.15	105.20
26	1H	1900	A	C2-N3-C4	5.88	113.54	110.60
26	1H	2335	A	O4'-C1'-N9	5.88	112.91	108.20
26	1H	837	C	C5-C6-N1	5.88	123.94	121.00
26	1H	866	A	C4-C5-N7	5.88	113.64	110.70
26	1H	1817	G	N9-C4-C5	-5.88	103.05	105.40
26	1H	2396	G	C8-N9-C1'	5.88	134.65	127.00
1	1G	326	G	C5-C6-N1	-5.88	108.56	111.50
26	14	1804	C	C6-N1-C2	-5.88	117.95	120.30
26	1H	1649	G	N3-C4-C5	-5.88	125.66	128.60
26	1H	2392	A	C8-N9-C4	-5.88	103.45	105.80
26	1H	2509	G	C5-C6-N1	5.88	114.44	111.50
26	1H	2566	A	P-O3'-C3'	5.88	126.76	119.70
26	14	863	A	OP2-P-O3'	5.88	118.14	105.20
26	14	2281	C	N3-C4-N4	5.88	122.12	118.00
26	14	2287	A	N3-C4-C5	5.88	130.92	126.80
26	1H	1160	G	N7-C8-N9	5.88	116.04	113.10
26	1H	1357	U	N3-C4-C5	-5.88	111.07	114.60
26	1H	1319	G	C8-N9-C4	-5.88	104.05	106.40
26	1H	1902	C	C5-C4-N4	5.88	124.31	120.20
26	1H	2604	U	C6-N1-C2	-5.88	117.47	121.00
27	16	77	U	C5-C4-O4	-5.88	122.37	125.90
26	14	2392	A	O5'-P-OP1	-5.88	100.41	105.70
26	1H	581	C	N1-C2-O2	-5.88	115.37	118.90
26	1H	1915	U	N3-C4-C5	5.88	118.13	114.60
26	1H	26	G	N3-C4-N9	5.88	129.53	126.00
26	14	2719	G	C8-N9-C4	-5.88	104.05	106.40
26	14	791	C	N3-C2-O2	5.87	126.01	121.90
26	14	1616	A	C8-N9-C4	-5.87	103.45	105.80
1	13	857	C	C6-N1-C2	-5.87	117.95	120.30
26	1H	197	A	OP2-P-O3'	5.87	118.12	105.20
26	1H	564	C	C6-N1-C2	-5.87	117.95	120.30
26	1H	739	G	O5'-P-OP1	5.87	117.75	110.70
26	1H	795	C	O5'-P-OP2	-5.87	100.42	105.70
26	1H	1401	G	N7-C8-N9	5.87	116.04	113.10
26	1H	2727	G	N1-C6-O6	5.87	123.42	119.90
1	1G	769	G	N3-C4-C5	-5.87	125.66	128.60
26	14	1402	C	C6-N1-C2	-5.87	117.95	120.30
1	13	912	C	C6-N1-C2	5.87	122.65	120.30
26	14	2029	G	N1-C6-O6	5.87	123.42	119.90
26	14	2512	C	C4-C5-C6	-5.87	114.47	117.40
26	1H	2375	G	C5-C6-O6	-5.87	125.08	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2530	A	N1-C6-N6	5.87	122.12	118.60
26	1H	2618	G	N9-C4-C5	5.87	107.75	105.40
26	14	2617	C	N3-C4-C5	5.87	124.25	121.90
26	1H	694	U	O5'-P-OP1	5.87	117.74	110.70
26	1H	1939	U	O5'-P-OP1	-5.87	100.42	105.70
26	1H	1200	C	C4-C5-C6	5.87	120.33	117.40
26	1H	1614	A	O4'-C1'-N9	5.87	112.89	108.20
26	1H	2508	G	N3-C2-N2	-5.87	115.79	119.90
1	1G	1259	C	C6-N1-C2	-5.87	117.95	120.30
26	14	527	C	C4-C5-C6	5.87	120.33	117.40
26	14	1320	C	N3-C4-N4	5.87	122.11	118.00
26	1H	845	G	C4-C5-N7	5.86	113.15	110.80
26	1H	970	C	C4-C5-C6	5.86	120.33	117.40
26	1H	1837	C	N1-C2-O2	5.86	122.42	118.90
26	1H	2578	G	N7-C8-N9	-5.86	110.17	113.10
1	1G	117	G	C5-C6-O6	-5.86	125.08	128.60
26	14	690	G	N1-C6-O6	5.86	123.42	119.90
26	14	1594	G	O5'-P-OP2	5.86	117.74	110.70
26	14	2526	G	N3-C4-C5	5.86	131.53	128.60
26	1H	1637	A	N1-C6-N6	-5.86	115.08	118.60
26	1H	1021	A	C8-N9-C4	-5.86	103.46	105.80
26	1H	2231	C	C6-N1-C2	-5.86	117.96	120.30
1	1G	17	U	C5-C6-N1	5.86	125.63	122.70
26	1H	777	A	C2-N3-C4	-5.86	107.67	110.60
26	1H	1828	G	C5-C6-O6	5.86	132.12	128.60
26	14	1394	U	C5-C6-N1	5.86	125.63	122.70
26	14	2699	C	N1-C2-O2	-5.86	115.39	118.90
1	13	760	G	C4-C5-N7	5.86	113.14	110.80
26	1H	1379	A	C2-N3-C4	-5.86	107.67	110.60
1	1G	1195	C	C6-N1-C2	-5.86	117.96	120.30
26	14	1926	U	N1-C2-N3	5.86	118.41	114.90
26	1H	818	G	C6-C5-N7	5.85	133.91	130.40
1	1G	690	G	C8-N9-C4	-5.85	104.06	106.40
26	1H	931	G	N1-C6-O6	-5.85	116.39	119.90
26	1H	954	G	OP2-P-O3'	5.85	118.08	105.20
26	1H	2243	U	O5'-P-OP2	-5.85	100.43	105.70
27	16	14	U	O5'-P-OP2	-5.85	100.43	105.70
1	1G	1119	C	C6-N1-C2	-5.85	117.96	120.30
26	14	2427	C	C6-N1-C2	5.85	122.64	120.30
26	1H	767	U	C5-C4-O4	5.85	129.41	125.90
26	1H	866	A	N7-C8-N9	5.85	116.72	113.80
24	3L	76	A	N1-C6-N6	5.85	122.11	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1022	G	N9-C4-C5	5.85	107.74	105.40
26	14	1570	A	C6-C5-N7	-5.85	128.20	132.30
26	1H	1274	A	N7-C8-N9	5.85	116.72	113.80
1	1G	528	C	C5'-C4'-O4'	5.85	116.12	109.10
1	1G	800	G	N1-C6-O6	5.85	123.41	119.90
26	14	307	G	N1-C6-O6	5.85	123.41	119.90
26	14	2329	G	C5-C6-N1	5.85	114.42	111.50
26	1H	600	G	N1-C6-O6	5.85	123.41	119.90
27	16	49	C	N3-C4-N4	5.85	122.09	118.00
28	11	54	ARG	NE-CZ-NH2	-5.85	117.38	120.30
26	14	1804	C	O5'-P-OP2	5.85	117.72	110.70
1	1G	323	U	N3-C2-O2	5.85	126.29	122.20
26	14	1289	C	O5'-P-OP1	-5.85	100.44	105.70
1	13	276	G	N3-C2-N2	-5.84	115.81	119.90
1	13	771	G	C5-C6-O6	5.84	132.11	128.60
26	1H	936	C	C6-N1-C2	5.84	122.64	120.30
1	13	1495	U	O5'-P-OP2	-5.84	100.44	105.70
26	1H	1663	C	C6-N1-C2	5.84	122.64	120.30
26	1H	2297	C	O5'-P-OP2	-5.84	100.44	105.70
26	1H	2639	A	C2-N3-C4	-5.84	107.68	110.60
26	14	1989	G	N3-C2-N2	-5.84	115.81	119.90
26	14	2551	C	O5'-P-OP2	-5.84	100.44	105.70
26	14	2731	G	C4-N9-C1'	5.84	134.10	126.50
26	1H	417	C	O5'-P-OP2	5.84	117.71	110.70
26	1H	729	G	C4-N9-C1'	5.84	134.09	126.50
26	1H	816	C	OP1-P-OP2	-5.84	110.84	119.60
26	1H	1825	A	N9-C4-C5	5.84	108.14	105.80
26	1H	2259	G	O5'-P-OP2	5.84	117.71	110.70
26	1H	2310	A	C8-N9-C4	-5.84	103.46	105.80
27	16	23	G	N3-C4-C5	5.84	131.52	128.60
26	14	666	G	C2-N3-C4	-5.84	108.98	111.90
26	1H	113	G	OP1-P-O3'	5.84	118.05	105.20
26	1H	974(A)	C	P-O3'-C3'	5.84	126.71	119.70
26	1H	2594	C	C2-N3-C4	-5.84	116.98	119.90
26	14	1463	C	C6-N1-C2	-5.84	117.97	120.30
26	14	2571	C	N1-C2-O2	-5.84	115.40	118.90
26	14	2732	G	C5-C6-N1	5.84	114.42	111.50
26	14	1323	U	N3-C4-C5	-5.84	111.10	114.60
26	14	2017	U	O5'-P-OP1	-5.84	100.45	105.70
26	1H	103	A	C8-N9-C4	5.84	108.14	105.80
26	1H	1698	A	C6-C5-N7	-5.84	128.21	132.30
26	14	1422	G	N1-C6-O6	5.84	123.40	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2441	C	N3-C4-N4	-5.84	113.92	118.00
26	1H	866	A	C5-N7-C8	-5.83	100.98	103.90
26	14	1446	C	C6-N1-C2	-5.83	117.97	120.30
1	13	14	U	O5'-P-OP1	-5.83	100.45	105.70
23	2K	6	G	N9-C4-C5	-5.83	103.07	105.40
26	1H	1678	G	N1-C2-N2	-5.83	110.95	116.20
26	1H	2429	G	OP1-P-OP2	-5.83	110.85	119.60
26	1H	2698	U	C4-C5-C6	5.83	123.20	119.70
26	14	71	A	C4-C5-N7	5.83	113.62	110.70
26	14	2387	U	C5-C6-N1	-5.83	119.78	122.70
26	1H	110	G	OP1-P-OP2	5.83	128.34	119.60
26	14	579	G	C5-C6-O6	-5.83	125.10	128.60
26	1H	792	G	N3-C4-N9	5.83	129.50	126.00
26	1H	1496	A	C5-C6-N6	-5.83	119.04	123.70
26	1H	2060	A	O4'-C1'-N9	5.83	112.86	108.20
26	14	2451	A	N7-C8-N9	5.83	116.71	113.80
26	14	2448	A	C5-C6-N1	5.83	120.61	117.70
26	14	119	A	OP1-P-O3'	5.82	118.01	105.20
26	14	1985	G	O5'-P-OP2	-5.82	100.46	105.70
1	13	963	G	N1-C6-O6	-5.82	116.41	119.90
1	13	610	G	N3-C4-N9	5.82	129.49	126.00
26	1H	1357	U	C5-C4-O4	5.82	129.39	125.90
26	1H	2688	U	C4-C5-C6	5.82	123.19	119.70
26	1H	1254	A	C4-C5-N7	5.82	113.61	110.70
26	1H	2303	G	OP1-P-O3'	5.82	118.00	105.20
26	14	409	C	C6-N1-C2	5.82	122.63	120.30
26	14	1643	G	OP2-P-O3'	5.82	118.00	105.20
26	1H	445	C	N3-C2-O2	-5.82	117.83	121.90
26	1H	733	G	N7-C8-N9	5.82	116.01	113.10
26	14	123	G	N1-C6-O6	5.82	123.39	119.90
26	14	2287	A	C5-C6-N1	-5.82	114.79	117.70
26	1H	2594	C	C4-C5-C6	5.81	120.31	117.40
26	14	198	C	O5'-P-OP1	-5.81	100.47	105.70
23	2K	1	C	C5-C6-N1	5.81	123.91	121.00
26	1H	318	C	O5'-P-OP1	-5.81	100.47	105.70
26	1H	397	G	C4-N9-C1'	-5.81	118.94	126.50
26	1H	818	G	N3-C4-N9	-5.81	122.51	126.00
26	14	2859	G	N9-C4-C5	5.81	107.72	105.40
25	4K	16	A	C8-N9-C4	5.81	108.12	105.80
1	13	509	A	P-O3'-C3'	5.81	126.67	119.70
26	1H	2228	G	N3-C4-C5	-5.81	125.69	128.60
26	1H	2269	A	N9-C4-C5	-5.81	103.48	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	16	25	A	OP1-P-O3'	5.81	117.98	105.20
26	14	2066	C	C5-C6-N1	5.81	123.91	121.00
1	13	1332	A	C8-N9-C4	-5.81	103.48	105.80
26	1H	1246	A	C4-C5-C6	5.81	119.90	117.00
26	14	2449	U	N3-C4-O4	5.81	123.47	119.40
26	1H	258	G	N3-C2-N2	5.80	123.96	119.90
26	1H	397	G	N3-C4-N9	-5.80	122.52	126.00
26	1H	660	G	C5-N7-C8	-5.80	101.40	104.30
1	1G	1354	C	C5-C6-N1	5.80	123.90	121.00
26	14	820	A	N1-C6-N6	-5.80	115.12	118.60
26	1H	330	A	N7-C8-N9	5.80	116.70	113.80
26	1H	530	G	N1-C2-N2	-5.80	110.98	116.20
1	1G	377	G	N3-C4-N9	5.80	129.48	126.00
26	1H	251	A	O5'-P-OP1	-5.80	100.48	105.70
26	14	2249	U	C5-C4-O4	5.80	129.38	125.90
26	14	2423	U	C5-C6-N1	-5.80	119.80	122.70
1	13	1508	G	N9-C4-C5	5.80	107.72	105.40
26	1H	2293	C	C6-N1-C2	-5.80	117.98	120.30
26	1H	2491	U	N3-C2-O2	5.80	126.26	122.20
26	14	97	C	OP1-P-OP2	5.80	128.30	119.60
26	14	630	G	C8-N9-C4	5.80	108.72	106.40
26	14	970	C	N1-C2-O2	-5.80	115.42	118.90
26	14	1391	U	C2-N1-C1'	5.80	124.66	117.70
26	14	2071	A	C8-N9-C4	-5.80	103.48	105.80
26	1H	785	G	C8-N9-C4	-5.80	104.08	106.40
26	1H	910	A	O5'-P-OP2	-5.80	100.48	105.70
26	1H	940	G	C5-C6-O6	-5.80	125.12	128.60
26	1H	1021	A	C5-C6-N1	-5.80	114.80	117.70
26	1H	1611	C	C4-C5-C6	5.80	120.30	117.40
26	14	2385	C	C5-C4-N4	-5.80	116.14	120.20
26	1H	488	G	O5'-P-OP2	-5.79	100.48	105.70
26	1H	1426	G	N1-C6-O6	-5.79	116.42	119.90
26	14	778	G	N1-C6-O6	-5.79	116.42	119.90
23	2K	17	C	C2-N1-C1'	5.79	125.17	118.80
26	1H	1496	A	O4'-C1'-N9	5.79	112.83	108.20
26	1H	1761	C	N1-C2-O2	-5.79	115.42	118.90
26	1H	1773	A	C5-C6-N1	-5.79	114.80	117.70
26	1H	1932	A	N1-C6-N6	5.79	122.08	118.60
1	1G	1502	A	N1-C2-N3	5.79	132.20	129.30
26	14	1029	A	N9-C4-C5	-5.79	103.48	105.80
1	13	1219	U	C6-N1-C2	-5.79	117.53	121.00
26	1H	1336	A	C5-C6-N1	5.79	120.60	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	680	C	O5'-P-OP2	-5.79	100.49	105.70
26	14	818	G	N7-C8-N9	5.79	116.00	113.10
26	14	1396	U	C2-N1-C1'	5.79	124.65	117.70
1	13	580	U	C6-N1-C2	5.79	124.47	121.00
26	1H	1525	G	O5'-P-OP2	-5.79	100.49	105.70
26	14	1216	G	C4-N9-C1'	5.79	134.02	126.50
26	14	1519	G	C4-C5-N7	-5.79	108.48	110.80
26	1H	676	A	OP1-P-OP2	5.79	128.28	119.60
26	1H	1399	C	OP2-P-O3'	5.79	117.93	105.20
26	14	833	U	N1-C2-O2	-5.79	118.75	122.80
26	14	1470	G	N1-C6-O6	5.79	123.37	119.90
1	13	1502	A	N9-C4-C5	-5.79	103.49	105.80
26	1H	1828	G	C6-N1-C2	5.79	128.57	125.10
26	14	530	G	C8-N9-C1'	-5.79	119.48	127.00
26	14	783	A	O5'-P-OP1	5.79	117.64	110.70
26	1H	1013	C	N3-C2-O2	5.78	125.95	121.90
26	14	388	G	C2-N3-C4	-5.78	109.01	111.90
26	14	678	C	N3-C4-C5	5.78	124.21	121.90
26	14	1328	G	N9-C4-C5	-5.78	103.09	105.40
26	14	1379	A	C5-C6-N6	-5.78	119.07	123.70
1	13	756	C	C4-C5-C6	5.78	120.29	117.40
26	1H	1011	G	O5'-P-OP1	-5.78	100.50	105.70
26	1H	1246	A	C6-N1-C2	-5.78	115.13	118.60
26	1H	1851	U	N1-C2-O2	-5.78	118.75	122.80
26	1H	2492	U	N3-C2-O2	-5.78	118.15	122.20
26	14	2240	C	C5-C6-N1	5.78	123.89	121.00
26	1H	928	G	N3-C4-C5	5.78	131.49	128.60
26	1H	1938	A	O5'-P-OP1	-5.78	100.50	105.70
26	1H	2004	G	C6-C5-N7	-5.78	126.93	130.40
26	1H	2060	A	C4-C5-C6	-5.78	114.11	117.00
4	32	157	LEU	CA-CB-CG	5.78	128.59	115.30
26	14	1225	C	C6-N1-C2	5.78	122.61	120.30
26	14	1323	U	OP1-P-OP2	-5.78	110.93	119.60
26	1H	2070	G	C5-C6-O6	5.78	132.07	128.60
1	13	731	G	OP1-P-O3'	5.78	117.91	105.20
1	13	1469	G	N7-C8-N9	5.78	115.99	113.10
26	1H	676	A	C6-N1-C2	5.78	122.07	118.60
26	1H	940	G	C6-C5-N7	-5.78	126.93	130.40
26	14	265	A	N1-C6-N6	5.78	122.07	118.60
26	14	1189	A	OP1-P-OP2	-5.78	110.93	119.60
1	13	1359	C	O5'-P-OP1	-5.78	100.50	105.70
26	1H	1927	A	C8-N9-C4	-5.78	103.49	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2554	U	C5-C4-O4	-5.78	122.43	125.90
26	14	201	C	C6-N1-C2	5.78	122.61	120.30
26	14	2573	C	C5-C6-N1	5.78	123.89	121.00
26	14	1468	C	C5-C6-N1	5.77	123.89	121.00
26	14	2392	A	N7-C8-N9	5.77	116.69	113.80
1	13	813	U	OP1-P-OP2	5.77	128.26	119.60
26	1H	906	G	N1-C6-O6	-5.77	116.44	119.90
26	1H	1298	C	C2-N3-C4	5.77	122.79	119.90
26	1H	1347	G	C5-C6-O6	-5.77	125.14	128.60
26	1H	199	A	C4-C5-C6	-5.77	114.11	117.00
1	1G	121	C	C2-N1-C1'	5.77	125.15	118.80
26	14	1396	U	N1-C2-O2	5.77	126.84	122.80
26	14	1519	G	C5-C6-O6	5.77	132.06	128.60
26	14	2429	G	OP2-P-O3'	5.77	117.89	105.20
26	1H	961	C	O4'-C1'-N1	5.77	112.81	108.20
26	1H	1217	C	O5'-P-OP1	-5.77	100.51	105.70
26	1H	1626	G	C6-C5-N7	-5.77	126.94	130.40
26	1H	2068	U	N1-C2-O2	5.77	126.84	122.80
54	P8	9	ARG	NE-CZ-NH2	5.77	123.18	120.30
1	1G	137	C	C6-N1-C2	5.77	122.61	120.30
26	1H	1776	G	C4-C5-N7	5.77	113.11	110.80
26	14	577	G	C5-C6-O6	-5.77	125.14	128.60
26	14	2251	G	N3-C4-C5	-5.77	125.72	128.60
26	1H	1626	G	C5-N7-C8	-5.76	101.42	104.30
26	14	2606	C	OP2-P-O3'	5.76	117.88	105.20
26	1H	461	C	N3-C2-O2	5.76	125.93	121.90
26	1H	1950	G	N3-C2-N2	5.76	123.93	119.90
26	1H	2051	A	C8-N9-C4	-5.76	103.50	105.80
1	1G	748	C	P-O3'-C3'	5.76	126.62	119.70
26	14	778	G	C5-C6-O6	5.76	132.06	128.60
26	1H	752	A	N1-C2-N3	5.76	132.18	129.30
26	14	969	U	C6-N1-C2	-5.76	117.54	121.00
26	14	1965	C	C2-N1-C1'	-5.76	112.46	118.80
1	13	745	C	C5-C6-N1	5.76	123.88	121.00
1	13	963	G	N3-C2-N2	5.76	123.93	119.90
26	1H	461	C	C4-C5-C6	5.76	120.28	117.40
26	1H	793	A	N3-C4-N9	5.76	132.01	127.40
26	1H	2584	U	N1-C2-O2	5.76	126.83	122.80
26	14	697	C	C6-N1-C2	-5.76	118.00	120.30
26	14	1333	C	N3-C4-C5	5.76	124.20	121.90
26	1H	647	G	C8-N9-C4	-5.76	104.10	106.40
26	14	123	G	OP1-P-OP2	5.76	128.24	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	529	G	N9-C4-C5	-5.76	103.10	105.40
1	13	623	C	C5-C6-N1	5.76	123.88	121.00
1	1G	501	C	C6-N1-C2	-5.76	118.00	120.30
1	1G	1446	A	O4'-C1'-N9	5.76	112.81	108.20
1	13	373	A	C8-N9-C4	5.75	108.10	105.80
26	1H	192	C	C5-C4-N4	-5.75	116.17	120.20
26	1H	1950	G	C6-C5-N7	-5.75	126.95	130.40
1	13	891	U	OP2-P-O3'	5.75	117.86	105.20
1	13	1475	G	C8-N9-C4	-5.75	104.10	106.40
26	1H	116	C	N1-C2-O2	-5.75	115.45	118.90
26	1H	1224	G	N3-C4-C5	5.75	131.48	128.60
26	1H	1415	U	C5-C4-O4	5.75	129.35	125.90
26	1H	1544	C	N1-C2-O2	5.75	122.35	118.90
26	14	2062	A	C8-N9-C4	5.75	108.10	105.80
26	14	2678	C	C6-N1-C2	5.75	122.60	120.30
1	13	826	C	C6-N1-C2	-5.75	118.00	120.30
1	13	872	A	N1-C2-N3	-5.75	126.42	129.30
26	1H	119	A	C4-C5-C6	5.75	119.88	117.00
26	1H	865	C	C6-N1-C2	5.75	122.60	120.30
26	1H	2766	G	C5-C6-O6	-5.75	125.15	128.60
1	1G	197	A	C8-N9-C4	-5.75	103.50	105.80
26	14	1771	C	C5-C4-N4	-5.75	116.17	120.20
26	14	1774	C	O5'-P-OP2	5.75	117.60	110.70
26	14	1962	C	C5-C4-N4	-5.75	116.17	120.20
26	14	2685	G	C8-N9-C4	5.75	108.70	106.40
26	1H	139	G	N3-C4-C5	-5.75	125.72	128.60
26	1H	203	C	N3-C2-O2	5.75	125.92	121.90
26	1H	1284	A	C2-N3-C4	-5.75	107.73	110.60
26	1H	1287	A	O5'-P-OP1	5.75	117.60	110.70
26	1H	2392	A	C6-C5-N7	-5.75	128.28	132.30
23	2L	21	U	C4-C5-C6	-5.75	116.25	119.70
1	13	1501	C	C6-N1-C2	-5.75	118.00	120.30
26	1H	198	C	N3-C2-O2	-5.75	117.88	121.90
26	1H	768	G	C5-C6-O6	5.75	132.05	128.60
26	1H	1626	G	N3-C2-N2	-5.75	115.88	119.90
26	14	130	C	C2-N3-C4	-5.75	117.03	119.90
26	14	528	A	N1-C2-N3	5.75	132.17	129.30
26	1H	1312	U	C5-C4-O4	5.75	129.35	125.90
26	1H	2396	G	C4-N9-C1'	-5.75	119.03	126.50
26	14	1605	C	N1-C2-O2	-5.75	115.45	118.90
26	1H	128	C	N3-C4-C5	5.74	124.20	121.90
26	1H	954	G	C4-C5-N7	-5.74	108.50	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1347	G	N1-C6-O6	5.74	123.35	119.90
27	1J	22	U	C5-C6-N1	5.74	125.57	122.70
26	1H	196	A	C6-N1-C2	5.74	122.05	118.60
26	1H	2007	C	O5'-P-OP2	-5.74	100.53	105.70
26	1H	2287	A	N3-C4-C5	5.74	130.82	126.80
26	14	752	A	N1-C2-N3	5.74	132.17	129.30
1	13	644	G	C8-N9-C4	5.74	108.70	106.40
26	1H	802	A	C5-N7-C8	-5.74	101.03	103.90
26	1H	1764	G	N1-C6-O6	-5.74	116.46	119.90
23	2L	50	G	C8-N9-C4	-5.74	104.10	106.40
26	14	252	G	N9-C4-C5	5.74	107.70	105.40
26	14	270(Y)	G	C5-C6-O6	5.74	132.04	128.60
26	14	827	U	N1-C2-O2	-5.74	118.78	122.80
26	14	2432	A	N1-C6-N6	5.74	122.05	118.60
1	13	1426	C	N3-C4-N4	5.74	122.02	118.00
26	1H	533	G	N1-C2-N3	5.74	127.34	123.90
26	1H	845	G	C5-N7-C8	-5.74	101.43	104.30
26	1H	1814	G	C8-N9-C4	5.74	108.69	106.40
26	1H	2497	A	N1-C2-N3	5.74	132.17	129.30
26	1H	2592	G	C5-C6-N1	-5.74	108.63	111.50
26	14	2607	G	O5'-P-OP1	5.74	117.59	110.70
36	35	62	LEU	CA-CB-CG	-5.74	102.10	115.30
26	1H	1299	G	C4-C5-N7	5.74	113.09	110.80
26	14	191	A	N1-C6-N6	5.74	122.04	118.60
26	1H	209	C	N3-C4-C5	5.74	124.19	121.90
26	14	1312	U	O5'-P-OP1	-5.74	100.54	105.70
26	1H	471	A	C5-N7-C8	-5.73	101.03	103.90
26	1H	451	C	C6-N1-C2	5.73	122.59	120.30
26	1H	735	A	C6-N1-C2	-5.73	115.16	118.60
26	1H	1622	G	C6-C5-N7	5.73	133.84	130.40
26	1H	1622	G	N9-C4-C5	5.73	107.69	105.40
26	1H	2018	G	N7-C8-N9	5.73	115.97	113.10
26	1H	2718	G	C5-C6-O6	-5.73	125.16	128.60
26	14	1600	C	C6-N1-C2	5.73	122.59	120.30
26	14	2501	C	C6-N1-C2	5.73	122.59	120.30
1	13	365	U	C2-N1-C1'	5.73	124.58	117.70
26	1H	2446	G	C6-C5-N7	-5.73	126.96	130.40
26	14	205	G	N3-C4-N9	5.73	129.44	126.00
26	14	252	G	C6-C5-N7	5.73	133.84	130.40
26	14	855	G	N7-C8-N9	5.73	115.97	113.10
26	14	1314	C	N1-C2-O2	5.73	122.34	118.90
1	13	749	C	C2-N1-C1'	5.73	125.10	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2702	U	N1-C1'-C2'	5.73	121.45	114.00
26	1H	779	U	C6-N1-C2	5.73	124.44	121.00
26	14	2401	U	N3-C4-O4	5.73	123.41	119.40
26	14	2763	G	N1-C6-O6	-5.73	116.46	119.90
26	1H	141	A	C4-C5-N7	5.73	113.56	110.70
26	1H	792	G	N1-C6-O6	5.73	123.34	119.90
26	1H	972	G	C6-C5-N7	5.73	133.84	130.40
26	1H	2079	U	N1-C2-O2	-5.73	118.79	122.80
26	14	2433	A	N7-C8-N9	5.73	116.66	113.80
24	3K	71	G	C4-C5-N7	-5.72	108.51	110.80
26	1H	300	A	O4'-C1'-N9	5.72	112.78	108.20
26	1H	972	G	O5'-P-OP1	5.72	117.57	110.70
26	1H	2827	C	N3-C2-O2	5.72	125.91	121.90
26	14	694	U	O5'-P-OP2	-5.72	100.55	105.70
26	14	1827	C	N1-C2-O2	5.72	122.33	118.90
26	14	1905	C	O5'-P-OP2	-5.72	100.55	105.70
26	1H	708	C	O5'-P-OP1	5.72	117.57	110.70
26	1H	744	G	O5'-P-OP2	-5.72	100.55	105.70
26	1H	2210	G	C4-N9-C1'	5.72	133.94	126.50
1	1G	789	U	C6-N1-C2	-5.72	117.57	121.00
26	14	74	A	N1-C2-N3	5.72	132.16	129.30
26	14	861	A	O5'-P-OP2	5.72	117.57	110.70
26	14	2873	A	C5-C6-N1	-5.72	114.84	117.70
26	1H	996	A	N7-C8-N9	-5.72	110.94	113.80
26	14	684	G	N9-C4-C5	5.72	107.69	105.40
26	14	1992	G	C8-N9-C4	5.72	108.69	106.40
26	14	2818	G	N1-C6-O6	5.72	123.33	119.90
26	1H	845	G	C4-N9-C1'	-5.72	119.06	126.50
26	1H	866	A	C6-C5-N7	-5.72	128.30	132.30
26	1H	1936	A	N1-C6-N6	5.72	122.03	118.60
26	1H	2310	A	N7-C8-N9	5.72	116.66	113.80
26	1H	2702	U	C5'-C4'-O4'	5.72	115.96	109.10
1	1G	1432	G	N7-C8-N9	5.72	115.96	113.10
26	14	476	G	OP1-P-OP2	5.72	128.18	119.60
26	14	1386	C	C6-N1-C2	-5.72	118.01	120.30
26	14	1982	C	C2-N1-C1'	5.72	125.09	118.80
26	1H	1653	G	N1-C2-N2	-5.72	111.05	116.20
26	1H	2466	C	C6-N1-C2	5.72	122.59	120.30
26	1H	2581	G	N3-C2-N2	5.72	123.90	119.90
26	14	2492	U	O5'-P-OP2	5.72	117.56	110.70
1	13	266	G	C5-N7-C8	-5.72	101.44	104.30
1	13	1468	A	N7-C8-N9	-5.72	110.94	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	464	U	O5'-P-OP1	-5.72	100.56	105.70
26	1H	533	G	N3-C4-C5	-5.72	125.74	128.60
26	1H	1299	G	C5-N7-C8	-5.72	101.44	104.30
26	1H	1400	G	C8-N9-C4	-5.72	104.11	106.40
26	14	106	C	C6-N1-C2	-5.72	118.01	120.30
26	14	1528	A	N7-C8-N9	5.72	116.66	113.80
26	14	2251	G	C4-C5-N7	-5.72	108.51	110.80
26	14	2873	A	O5'-P-OP1	-5.72	100.56	105.70
1	13	1498	U	C5-C4-O4	-5.71	122.47	125.90
26	1H	2082	A	C8-N9-C4	5.71	108.09	105.80
26	14	667	U	OP2-P-O3'	5.71	117.77	105.20
26	14	2365	G	N3-C4-N9	5.71	129.43	126.00
26	14	2525	G	OP2-P-O3'	5.71	117.77	105.20
1	13	1446	A	O4'-C1'-N9	5.71	112.77	108.20
26	14	1742	C	C5-C6-N1	5.71	123.86	121.00
26	1H	1107	G	C8-N9-C4	-5.71	104.12	106.40
26	1H	1332	G	O4'-C1'-N9	-5.71	103.63	108.20
26	1H	1470	G	OP2-P-O3'	5.71	117.76	105.20
26	14	1681	G	N3-C4-C5	5.71	131.45	128.60
26	1H	1769	G	O5'-P-OP2	-5.71	100.56	105.70
26	1H	2490	G	C8-N9-C4	-5.71	104.12	106.40
26	1H	2700	C	C5-C6-N1	-5.71	118.15	121.00
1	1G	1270	C	C6-N1-C2	-5.71	118.02	120.30
26	14	577	G	O5'-P-OP2	5.71	117.55	110.70
26	14	929	G	C4-C5-C6	5.71	122.22	118.80
26	14	1029	A	C5-C6-N6	-5.71	119.14	123.70
26	14	1980	G	N1-C6-O6	5.71	123.32	119.90
26	14	2702	U	C2-N1-C1'	5.71	124.55	117.70
26	1H	71	A	N3-C4-C5	5.70	130.79	126.80
26	1H	948	G	O5'-P-OP2	5.70	117.54	110.70
26	1H	1013	C	N1-C2-O2	-5.70	115.48	118.90
26	1H	1624	G	C8-N9-C4	5.70	108.68	106.40
26	14	562	U	N3-C2-O2	-5.70	118.21	122.20
26	14	1255	U	N3-C2-O2	-5.70	118.21	122.20
26	14	2063	C	OP2-P-O3'	5.70	117.75	105.20
26	1H	2346	A	N1-C6-N6	5.70	122.02	118.60
1	13	332	G	O5'-P-OP1	-5.70	100.57	105.70
22	1K	18	G	C8-N9-C1'	-5.70	119.59	127.00
26	1H	1518	C	OP1-P-O3'	5.70	117.74	105.20
26	14	2866	U	O5'-P-OP2	-5.70	100.57	105.70
26	1H	192	C	C5-C6-N1	5.70	123.85	121.00
26	1H	498	G	O5'-P-OP2	5.70	117.54	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	322	C	C5-C4-N4	-5.70	116.21	120.20
1	1G	900	A	N1-C6-N6	5.70	122.02	118.60
26	14	530	G	N3-C4-C5	5.70	131.45	128.60
26	14	1642	G	OP2-P-O3'	5.70	117.74	105.20
26	1H	28	A	N7-C8-N9	-5.70	110.95	113.80
26	1H	793	A	C6-C5-N7	-5.70	128.31	132.30
26	1H	2060	A	C6-C5-N7	5.70	136.29	132.30
23	2K	48	U	P-O3'-C3'	5.70	126.53	119.70
26	1H	557	U	C5-C6-N1	-5.70	119.85	122.70
26	1H	755	C	C4-C5-C6	5.70	120.25	117.40
26	1H	2318	G	C5-N7-C8	-5.70	101.45	104.30
1	1G	1527	C	C2-N3-C4	-5.70	117.05	119.90
26	14	733	G	N7-C8-N9	5.70	115.95	113.10
26	14	2440	C	N1-C2-N3	-5.70	115.21	119.20
26	14	512	G	C5-C6-O6	5.69	132.02	128.60
1	13	1112	C	C6-N1-C2	-5.69	118.02	120.30
26	1H	627	A	C8-N9-C4	5.69	108.08	105.80
26	1H	1902	C	N3-C4-N4	-5.69	114.02	118.00
26	14	602	G	N3-C4-N9	5.69	129.42	126.00
1	13	584	G	N1-C6-O6	-5.69	116.48	119.90
26	1H	470	A	C5-N7-C8	-5.69	101.06	103.90
26	1H	1936	A	N7-C8-N9	5.69	116.65	113.80
26	1H	2323	G	C8-N9-C4	-5.69	104.12	106.40
26	1H	203	C	C2-N1-C1'	-5.69	112.54	118.80
26	1H	224	G	O5'-P-OP2	-5.69	100.58	105.70
26	1H	1779	U	OP1-P-O3'	5.69	117.71	105.20
26	1H	2377	A	C2-N3-C4	-5.69	107.76	110.60
26	1H	792	G	N3-C4-C5	-5.69	125.76	128.60
26	1H	2406	U	N3-C2-O2	-5.69	118.22	122.20
27	16	77	U	C2-N3-C4	-5.69	123.59	127.00
26	1H	558	G	O5'-P-OP2	-5.68	100.58	105.70
23	2L	50	G	N3-C4-C5	-5.68	125.76	128.60
26	14	2449	U	C5-C4-O4	-5.68	122.49	125.90
26	1H	1241	A	C2-N3-C4	-5.68	107.76	110.60
26	1H	1305	C	N3-C2-O2	-5.68	117.92	121.90
26	1H	2447	G	N3-C4-C5	-5.68	125.76	128.60
1	1G	1205	U	C5-C6-N1	5.68	125.54	122.70
26	14	1694	C	N1-C2-O2	5.68	122.31	118.90
26	1H	457	A	N1-C6-N6	-5.68	115.19	118.60
26	14	2607	G	C6-C5-N7	-5.68	126.99	130.40
26	1H	470	A	C2-N3-C4	-5.68	107.76	110.60
26	1H	771	G	C5-C6-O6	-5.68	125.19	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	793	A	C4-C5-C6	5.68	119.84	117.00
26	1H	839	U	N1-C2-O2	-5.68	118.82	122.80
26	1H	2377	A	N9-C4-C5	-5.68	103.53	105.80
26	1H	2428	G	N9-C4-C5	5.68	107.67	105.40
26	1H	2452	C	N3-C4-C5	5.68	124.17	121.90
27	16	44	G	C8-N9-C1'	5.68	134.38	127.00
1	1G	1048	G	C8-N9-C4	-5.68	104.13	106.40
26	14	1614	A	O4'-C1'-N9	5.68	112.74	108.20
26	14	2459	A	N7-C8-N9	5.68	116.64	113.80
26	14	2730	C	C6-N1-C2	-5.68	118.03	120.30
26	1H	448	U	C5-C6-N1	-5.68	119.86	122.70
1	1G	1139	G	N3-C4-C5	5.68	131.44	128.60
26	14	1309	G	C8-N9-C1'	-5.68	119.62	127.00
26	1H	1370	C	C2-N1-C1'	-5.68	112.56	118.80
26	1H	1603	A	OP1-P-OP2	-5.68	111.09	119.60
26	1H	2300	G	N7-C8-N9	5.68	115.94	113.10
24	1L	74	C	C5-C6-N1	-5.68	118.16	121.00
26	14	1607	C	C5-C4-N4	-5.68	116.23	120.20
1	13	858	G	N3-C4-C5	-5.67	125.76	128.60
26	14	1367	A	N9-C4-C5	-5.67	103.53	105.80
26	1H	2433	A	O5'-P-OP2	5.67	117.51	110.70
26	14	93	C	C2-N1-C1'	5.67	125.04	118.80
26	14	1251	C	OP1-P-OP2	5.67	128.11	119.60
26	14	1283	G	OP1-P-OP2	5.67	128.11	119.60
26	14	1474	C	C5-C6-N1	5.67	123.84	121.00
26	1H	52	A	C2-N3-C4	5.67	113.44	110.60
26	1H	755	C	OP2-P-O3'	5.67	117.67	105.20
26	1H	1610	A	O4'-C1'-N9	-5.67	103.66	108.20
26	1H	1800	C	C6-N1-C2	-5.67	118.03	120.30
26	1H	1982	C	N3-C4-N4	5.67	121.97	118.00
26	1H	2871	C	O5'-P-OP2	-5.67	100.60	105.70
27	16	102	G	N3-C2-N2	-5.67	115.93	119.90
26	1H	1914	C	N1-C2-O2	5.67	122.30	118.90
26	1H	1940	U	C4-C5-C6	5.67	123.10	119.70
1	1G	1203	C	C6-N1-C2	5.67	122.57	120.30
26	14	1629	U	N3-C4-O4	5.67	123.37	119.40
26	14	1772	G	N1-C6-O6	5.67	123.30	119.90
1	13	858	G	C8-N9-C4	-5.67	104.13	106.40
26	1H	185	U	C5-C6-N1	-5.67	119.87	122.70
26	1H	211	A	C2-N3-C4	-5.67	107.77	110.60
26	1H	456	C	C5-C6-N1	-5.67	118.17	121.00
26	1H	825	C	N3-C4-N4	5.67	121.97	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	986	C	OP1-P-OP2	-5.67	111.10	119.60
26	1H	1258	C	O5'-P-OP2	-5.67	100.60	105.70
26	1H	1366	A	C8-N9-C4	5.67	108.07	105.80
26	1H	1885	A	N7-C8-N9	-5.67	110.97	113.80
26	1H	1913	A	N1-C6-N6	5.67	122.00	118.60
26	1H	47	C	C5-C4-N4	-5.67	116.23	120.20
26	1H	1970	A	N7-C8-N9	5.66	116.63	113.80
26	1H	2444	G	OP1-P-O3'	5.66	117.66	105.20
1	1G	328	C	P-O3'-C3'	5.66	126.50	119.70
1	13	1422	G	C8-N9-C4	5.66	108.67	106.40
26	1H	452	G	N1-C6-O6	-5.66	116.50	119.90
26	1H	1942	C	N3-C4-C5	5.66	124.16	121.90
26	14	746	A	O5'-P-OP1	-5.66	100.61	105.70
26	14	2712	U	C4-C5-C6	5.66	123.10	119.70
26	1H	1221	C	N3-C2-O2	-5.66	117.94	121.90
26	14	866	A	C8-N9-C1'	-5.66	117.52	127.70
26	14	982	C	C6-N1-C2	-5.66	118.04	120.30
26	1H	214	G	O5'-P-OP2	-5.66	100.61	105.70
27	16	24	G	C8-N9-C4	-5.66	104.14	106.40
26	1H	487	C	O5'-P-OP1	-5.66	100.61	105.70
26	1H	1944	U	N3-C2-O2	-5.66	118.24	122.20
1	1G	117	G	C6-C5-N7	-5.66	127.01	130.40
1	1G	442	C	C6-N1-C2	-5.66	118.04	120.30
26	1H	842	G	N3-C4-C5	5.65	131.43	128.60
26	1H	2710	C	OP2-P-O3'	5.65	117.64	105.20
26	14	1441	G	C8-N9-C4	5.65	108.66	106.40
26	1H	1310	G	C5-C6-O6	-5.65	125.21	128.60
26	1H	2036	C	OP2-P-O3'	5.65	117.63	105.20
26	1H	2503	A	OP2-P-O3'	5.65	117.64	105.20
26	14	1609	A	C6-N1-C2	-5.65	115.21	118.60
26	1H	67	U	C5-C6-N1	5.65	125.53	122.70
1	1G	894	G	C5-C6-O6	-5.65	125.21	128.60
26	14	574	C	N3-C4-N4	-5.65	114.04	118.00
26	1H	1782	C	C4-C5-C6	5.65	120.22	117.40
26	1H	2282	G	O5'-P-OP2	5.65	117.48	110.70
27	1J	113	C	O4'-C1'-N1	5.65	112.72	108.20
1	13	656	C	C2-N3-C4	5.65	122.72	119.90
26	1H	251	A	O5'-P-OP2	5.65	117.48	110.70
26	1H	1409	C	O5'-P-OP1	-5.65	100.62	105.70
26	14	114	U	C2-N1-C1'	5.65	124.48	117.70
1	13	509	A	C2'-C3'-O3'	5.65	122.73	113.70
26	1H	123	G	C5-C6-N1	5.65	114.32	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	300	A	O5'-P-OP2	-5.65	100.62	105.70
26	1H	688	U	OP1-P-OP2	5.65	128.07	119.60
26	1H	1558	A	P-O3'-C3'	5.65	126.47	119.70
26	14	747	U	OP1-P-OP2	5.65	128.07	119.60
26	14	1494	A	C8-N9-C4	-5.65	103.54	105.80
1	13	1245	A	O5'-P-OP2	-5.64	100.62	105.70
26	1H	572	A	C8-N9-C4	-5.64	103.54	105.80
26	1H	1309	G	O5'-P-OP1	5.64	117.47	110.70
26	1H	1837	C	O5'-P-OP1	-5.64	100.62	105.70
26	1H	2030	A	C5-C6-N6	-5.64	119.18	123.70
26	1H	127	A	C5-C6-N6	-5.64	119.19	123.70
26	1H	684	G	C8-N9-C4	-5.64	104.14	106.40
26	14	782	A	C6-N1-C2	-5.64	115.21	118.60
26	14	866	A	O4'-C1'-N9	-5.64	103.69	108.20
26	14	1266	G	C5-C6-O6	-5.64	125.21	128.60
26	14	1775	U	OP1-P-OP2	-5.64	111.14	119.60
26	14	840	C	N3-C2-O2	5.64	125.85	121.90
26	14	1325	G	C4-C5-N7	5.64	113.06	110.80
1	13	900	A	OP1-P-OP2	-5.64	111.14	119.60
26	1H	699	A	C2-N3-C4	5.64	113.42	110.60
26	14	690	G	OP1-P-O3'	5.64	117.61	105.20
26	14	2674	G	O5'-P-OP2	-5.64	100.62	105.70
1	13	960	U	C2-N1-C1'	5.64	124.47	117.70
26	1H	1372	U	OP2-P-O3'	5.64	117.60	105.20
26	14	2367	G	C8-N9-C4	-5.64	104.14	106.40
26	1H	667	U	N3-C2-O2	5.64	126.15	122.20
23	2L	35	C	C6-N1-C1'	-5.64	114.04	120.80
26	14	642	G	N7-C8-N9	5.64	115.92	113.10
26	14	2068	U	OP1-P-O3'	5.64	117.60	105.20
26	14	2072	G	C4-C5-N7	5.64	113.05	110.80
1	13	1409	C	C5-C4-N4	-5.63	116.26	120.20
26	1H	467	G	C8-N9-C4	5.63	108.65	106.40
26	1H	805	G	N3-C4-N9	5.63	129.38	126.00
27	16	7	G	C4-C5-N7	5.63	113.05	110.80
26	14	1768	U	C5-C4-O4	5.63	129.28	125.90
26	14	2351	G	C4-N9-C1'	5.63	133.83	126.50
26	1H	2070	G	N9-C4-C5	-5.63	103.15	105.40
1	13	1069	C	C6-N1-C2	-5.63	118.05	120.30
26	1H	1544	C	C6-N1-C2	5.63	122.55	120.30
26	14	562	U	N1-C2-N3	5.63	118.28	114.90
26	14	1026	U	C5-C6-N1	5.63	125.52	122.70
26	14	1516	U	N1-C2-O2	5.63	126.74	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2826	A	N9-C4-C5	5.63	108.05	105.80
1	13	730	G	OP1-P-O3'	5.63	117.59	105.20
1	13	1246	C	C6-N1-C2	-5.63	118.05	120.30
26	1H	66	C	OP1-P-OP2	-5.63	111.15	119.60
26	1H	165	U	C2-N1-C1'	5.63	124.46	117.70
26	1H	756	C	N1-C2-O2	-5.63	115.52	118.90
26	1H	733	G	N3-C2-N2	5.63	123.84	119.90
26	14	1970	A	C8-N9-C4	-5.63	103.55	105.80
26	14	2039	C	C5-C6-N1	5.63	123.81	121.00
26	14	2333	A	O5'-P-OP2	-5.63	100.63	105.70
26	1H	1445	C	C2-N3-C4	5.63	122.71	119.90
26	14	1545(A)	A	C8-N9-C4	-5.63	103.55	105.80
26	14	2062	A	C5-C6-N6	-5.62	119.20	123.70
1	13	277	C	C6-N1-C2	-5.62	118.05	120.30
26	1H	1011	G	N3-C4-C5	-5.62	125.79	128.60
26	1H	1022	G	C8-N9-C4	-5.62	104.15	106.40
26	1H	1381	G	N3-C2-N2	-5.62	115.96	119.90
26	1H	2247	A	C2-N3-C4	-5.62	107.79	110.60
26	14	752	A	N7-C8-N9	5.62	116.61	113.80
26	14	818	G	N9-C4-C5	5.62	107.65	105.40
26	14	951	C	C6-N1-C2	-5.62	118.05	120.30
26	1H	1606	G	O5'-P-OP2	-5.62	100.64	105.70
26	1H	2280	G	C2-N3-C4	5.62	114.71	111.90
26	14	819	A	C4-C5-C6	5.62	119.81	117.00
26	1H	1593	G	OP1-P-O3'	5.62	117.56	105.20
26	14	700	G	OP1-P-OP2	-5.62	111.17	119.60
26	14	2592	G	N3-C4-N9	5.62	129.37	126.00
26	1H	1602	U	O5'-P-OP2	5.62	117.44	110.70
26	1H	2506	U	N3-C2-O2	-5.62	118.27	122.20
24	3L	76	A	C6-C5-N7	-5.62	128.37	132.30
26	14	1142	U	N1-C2-O2	5.62	126.73	122.80
1	13	326	G	C5-C6-O6	5.62	131.97	128.60
1	13	1359	C	C6-N1-C2	5.62	122.55	120.30
1	13	127	G	OP2-P-O3'	5.62	117.55	105.20
26	1H	183	C	N1-C2-O2	5.62	122.27	118.90
26	1H	430	G	N1-C6-O6	5.62	123.27	119.90
26	1H	746	A	N1-C6-N6	5.62	121.97	118.60
26	1H	1962	C	C2-N1-C1'	-5.62	112.62	118.80
26	1H	2689	U	C2-N3-C4	-5.62	123.63	127.00
26	14	1248	G	C8-N9-C4	5.62	108.65	106.40
26	14	1325	G	N1-C6-O6	5.62	123.27	119.90
1	13	767	A	C2-N3-C4	-5.61	107.79	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	2K	27	G	O5'-P-OP2	5.61	117.44	110.70
26	1H	566	U	N3-C4-C5	5.61	117.97	114.60
26	1H	1313	U	C2-N1-C1'	5.61	124.44	117.70
26	1H	2250	G	N9-C4-C5	5.61	107.65	105.40
27	16	81	G	C6-C5-N7	-5.61	127.03	130.40
26	14	791	C	C2-N3-C4	-5.61	117.09	119.90
26	1H	99	U	N3-C2-O2	-5.61	118.27	122.20
26	1H	183	C	N3-C2-O2	-5.61	117.97	121.90
26	1H	397	G	C8-N9-C1'	5.61	134.29	127.00
26	1H	2614	A	C2-N3-C4	5.61	113.41	110.60
26	14	821	A	OP1-P-OP2	5.61	128.02	119.60
26	14	2224	G	O5'-P-OP1	-5.61	100.65	105.70
26	1H	16	G	N3-C2-N2	-5.61	115.97	119.90
26	1H	340	A	O5'-P-OP2	5.61	117.43	110.70
26	1H	2469	A	N1-C6-N6	5.61	121.97	118.60
26	14	454	A	O5'-P-OP2	-5.61	100.65	105.70
26	14	2351	G	C6-C5-N7	-5.61	127.03	130.40
1	13	1027	C	OP1-P-O3'	5.61	117.53	105.20
26	1H	34	C	N1-C1'-C2'	5.61	121.29	114.00
26	1H	686	G	OP1-P-OP2	5.61	128.01	119.60
26	14	2627	G	C4-N9-C1'	5.61	133.79	126.50
26	1H	391	G	C2-N3-C4	-5.61	109.10	111.90
26	1H	678	C	OP1-P-O3'	5.61	117.53	105.20
26	1H	1258	C	OP2-P-O3'	5.60	117.53	105.20
26	1H	1400	G	N1-C6-O6	-5.60	116.54	119.90
26	1H	2060	A	N9-C4-C5	5.60	108.04	105.80
1	1G	275	G	N1-C6-O6	5.60	123.26	119.90
26	14	1320	C	N1-C2-O2	-5.60	115.54	118.90
26	1H	115	C	C5-C4-N4	-5.60	116.28	120.20
26	14	2334	G	N3-C4-N9	5.60	129.36	126.00
1	1G	817	C	C6-N1-C2	5.60	122.54	120.30
26	14	2638	G	P-O3'-C3'	5.60	126.42	119.70
26	1H	863	A	C8-N9-C4	5.60	108.04	105.80
26	1H	2577	A	N9-C4-C5	5.60	108.04	105.80
26	14	1407	C	C2-N3-C4	5.60	122.70	119.90
26	14	2607	G	N1-C6-O6	5.60	123.26	119.90
26	14	2818	G	N9-C4-C5	-5.60	103.16	105.40
1	13	858	G	C5-C6-O6	5.60	131.96	128.60
1	13	1413	A	C5-C6-N1	5.60	120.50	117.70
26	1H	622	G	C8-N9-C4	5.60	108.64	106.40
26	1H	1258	C	C2-N1-C1'	-5.60	112.64	118.80
23	2L	71	G	N3-C4-C5	5.60	131.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2424	C	N3-C4-C5	5.60	124.14	121.90
26	1H	190	A	C5-C6-N6	-5.60	119.22	123.70
26	14	1663	C	N1-C2-O2	-5.60	115.54	118.90
1	13	656	C	C6-N1-C2	-5.59	118.06	120.30
1	13	803	G	C5-C6-O6	5.59	131.96	128.60
26	1H	967	C	O5'-P-OP1	5.59	117.41	110.70
26	1H	1229(A)	G	N1-C2-N3	5.59	127.26	123.90
26	1H	2700	C	C2-N3-C4	-5.59	117.10	119.90
26	14	2580	U	O5'-P-OP1	-5.59	100.67	105.70
26	14	2731	G	N1-C6-O6	5.59	123.26	119.90
29	29	80	GLU	N-CA-C	5.59	126.10	111.00
26	1H	263	C	C6-N1-C1'	-5.59	114.09	120.80
26	14	138	G	C5-C6-O6	-5.59	125.25	128.60
26	14	195	A	N1-C6-N6	5.59	121.95	118.60
26	14	465	G	OP1-P-OP2	-5.59	111.21	119.60
26	14	954	G	N1-C6-O6	-5.59	116.55	119.90
26	14	1971	A	N7-C8-N9	-5.59	111.00	113.80
22	1K	18	G	OP1-P-O3'	5.59	117.50	105.20
26	1H	910	A	O5'-P-OP1	5.59	117.41	110.70
26	14	365	C	C6-N1-C2	-5.59	118.06	120.30
26	14	762	U	C2-N1-C1'	5.59	124.41	117.70
26	14	2023	G	C8-N9-C4	-5.59	104.16	106.40
1	13	606	G	C2-N3-C4	5.59	114.69	111.90
26	1H	1410	G	N3-C4-C5	5.59	131.39	128.60
1	13	465	A	C5-N7-C8	5.59	106.69	103.90
26	1H	1156	A	N1-C6-N6	5.59	121.95	118.60
26	14	209	C	C6-N1-C1'	-5.59	114.09	120.80
26	14	631	A	OP1-P-O3'	5.59	117.49	105.20
26	14	2314	C	N3-C2-O2	-5.59	117.99	121.90
26	1H	906	G	C8-N9-C1'	5.58	134.26	127.00
26	1H	1521	G	N7-C8-N9	5.58	115.89	113.10
26	1H	1534	G	N3-C4-C5	-5.58	125.81	128.60
26	1H	1625	C	C5-C4-N4	5.58	124.11	120.20
26	1H	2426	A	O5'-P-OP2	-5.58	100.67	105.70
26	14	1334	G	C8-N9-C4	-5.58	104.17	106.40
26	14	2030	A	O5'-P-OP2	-5.58	100.67	105.70
1	13	1504	G	P-O3'-C3'	5.58	126.40	119.70
26	1H	247	G	N3-C2-N2	5.58	123.81	119.90
26	1H	952	G	C2-N3-C4	5.58	114.69	111.90
26	1H	1398	C	C6-N1-C2	5.58	122.53	120.30
26	1H	1702	G	C5-C6-N1	5.58	114.29	111.50
26	1H	2072	G	C5-C6-O6	-5.58	125.25	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	61	131	LYS	C-N-CD	-5.58	108.32	120.60
1	1G	995	C	C5-C6-N1	5.58	123.79	121.00
1	1G	1398	A	N1-C6-N6	-5.58	115.25	118.60
26	14	710	G	N1-C6-O6	5.58	123.25	119.90
26	14	1438	U	N3-C4-C5	-5.58	111.25	114.60
26	14	1922	G	N1-C6-O6	5.58	123.25	119.90
26	14	2012	G	N9-C4-C5	-5.58	103.17	105.40
26	14	2286	A	N1-C6-N6	5.58	121.95	118.60
1	13	449	C	C6-N1-C2	-5.58	118.07	120.30
26	1H	271(B)	G	C4-N9-C1'	5.58	133.76	126.50
26	1H	835	A	C5-C6-N1	5.58	120.49	117.70
26	14	733	G	N3-C4-C5	-5.58	125.81	128.60
26	1H	1851	U	N3-C2-O2	5.58	126.11	122.20
26	1H	1938	A	C6-C5-N7	-5.58	128.39	132.30
26	14	2555	U	N3-C2-O2	5.58	126.11	122.20
26	1H	658	C	N1-C2-O2	5.58	122.25	118.90
26	1H	792	G	N7-C8-N9	5.58	115.89	113.10
26	1H	1972	A	O5'-P-OP2	-5.58	100.68	105.70
26	1H	2443	C	N3-C4-N4	5.58	121.90	118.00
26	1H	2867	G	O4'-C1'-N9	5.58	112.66	108.20
26	14	583	G	C5-C6-N1	-5.58	108.71	111.50
26	14	1585	C	N3-C2-O2	-5.58	118.00	121.90
26	1H	245	G	C8-N9-C1'	-5.58	119.75	127.00
26	1H	850	C	C6-N1-C2	-5.58	118.07	120.30
26	1H	1698	A	N9-C1'-C2'	5.58	121.25	114.00
26	14	2607	G	C8-N9-C4	5.58	108.63	106.40
26	1H	102	G	OP1-P-O3'	5.58	117.47	105.20
26	1H	685	A	O4'-C1'-N9	5.58	112.66	108.20
26	1H	1573	G	OP1-P-O3'	-5.58	92.94	105.20
26	1H	1836	C	OP1-P-O3'	5.58	117.47	105.20
26	14	2066	C	N3-C4-C5	-5.58	119.67	121.90
26	14	2829	C	C5-C4-N4	-5.58	116.30	120.20
26	1H	1142	U	C5-C6-N1	5.57	125.49	122.70
26	1H	1842	G	OP2-P-O3'	5.57	117.46	105.20
26	1H	1917	U	OP1-P-O3'	5.57	117.46	105.20
26	1H	2466	C	N3-C4-C5	5.57	124.13	121.90
26	1H	2493	U	C6-N1-C2	-5.57	117.66	121.00
26	14	1307	A	N1-C2-N3	5.57	132.09	129.30
26	14	2087	G	N1-C6-O6	5.57	123.24	119.90
1	13	747	C	O5'-P-OP2	-5.57	100.69	105.70
26	1H	132	G	O5'-P-OP1	-5.57	100.69	105.70
26	1H	691	C	C2-N3-C4	-5.57	117.11	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	795	C	C2-N1-C1'	-5.57	112.67	118.80
26	1H	940	G	C6-N1-C2	-5.57	121.76	125.10
26	1H	1781	C	C6-N1-C1'	-5.57	114.12	120.80
26	1H	2848	G	N3-C2-N2	5.57	123.80	119.90
26	14	1938	A	C6-N1-C2	-5.57	115.26	118.60
26	14	2731	G	N7-C8-N9	5.57	115.88	113.10
26	14	1001	A	N1-C6-N6	-5.57	115.26	118.60
1	13	892	A	N1-C2-N3	5.57	132.08	129.30
26	1H	444	C	O5'-P-OP1	5.57	117.38	110.70
26	1H	627	A	N7-C8-N9	-5.57	111.02	113.80
26	1H	1948	G	C5-C6-O6	5.57	131.94	128.60
27	16	81	G	O4'-C1'-N9	5.57	112.65	108.20
26	1H	1229(A)	G	C6-C5-N7	-5.56	127.06	130.40
26	1H	708	C	C5-C6-N1	-5.56	118.22	121.00
26	1H	740	U	O5'-P-OP2	-5.56	100.69	105.70
1	1G	481	G	N3-C4-C5	-5.56	125.82	128.60
26	14	2331	G	C5-C6-O6	-5.56	125.26	128.60
1	13	1495	U	C6-N1-C2	-5.56	117.66	121.00
23	2K	17	C	C2-N3-C4	5.56	122.68	119.90
1	13	1199	U	N1-C2-N3	5.56	118.23	114.90
26	1H	411	G	C8-N9-C4	-5.56	104.18	106.40
26	1H	1393	A	O4'-C1'-N9	5.56	112.65	108.20
26	1H	2246	G	N3-C4-N9	5.56	129.34	126.00
26	14	150	C	C6-N1-C2	-5.56	118.08	120.30
26	14	1600	C	C5-C6-N1	-5.56	118.22	121.00
26	14	2253	G	C4-C5-N7	5.56	113.02	110.80
26	14	2377	A	C8-N9-C4	5.56	108.02	105.80
1	13	575	G	C5-C6-O6	5.56	131.94	128.60
23	2K	21	U	N3-C2-O2	-5.56	118.31	122.20
26	1H	120	U	C5-C4-O4	5.56	129.23	125.90
26	14	1282	U	N1-C2-N3	5.56	118.23	114.90
26	14	2037	G	N3-C4-C5	-5.56	125.82	128.60
26	1H	2331	G	N1-C6-O6	5.56	123.23	119.90
26	1H	1257	C	C4-C5-C6	5.55	120.18	117.40
26	1H	1204	A	C5-N7-C8	-5.55	101.12	103.90
26	14	1283	G	N3-C4-N9	5.55	129.33	126.00
26	14	1594	G	O5'-P-OP1	-5.55	100.70	105.70
27	16	98	G	C6-C5-N7	-5.55	127.07	130.40
26	14	475	U	C6-N1-C2	-5.55	117.67	121.00
26	1H	596	G	C5-C6-O6	-5.55	125.27	128.60
26	1H	928	G	O5'-P-OP2	5.55	117.36	110.70
26	1H	1156	A	N9-C4-C5	-5.55	103.58	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2506	U	C5-C6-N1	5.55	125.47	122.70
1	1G	197	A	N7-C8-N9	5.55	116.58	113.80
26	14	580	C	N3-C4-N4	5.55	121.89	118.00
26	14	1356	G	O5'-P-OP1	-5.55	100.71	105.70
1	13	1414	U	OP2-P-O3'	5.55	117.40	105.20
26	1H	115	C	N3-C4-N4	5.55	121.88	118.00
26	1H	617	G	C5-N7-C8	5.55	107.07	104.30
26	1H	942	G	N9-C4-C5	5.55	107.62	105.40
26	1H	2247	A	C5-C6-N6	5.55	128.14	123.70
26	1H	2254	C	N1-C2-O2	-5.55	115.57	118.90
1	1G	1499	A	C8-N9-C4	5.55	108.02	105.80
26	14	945	A	N1-C2-N3	5.55	132.07	129.30
26	14	2056	G	N1-C2-N2	5.55	121.19	116.20
26	1H	925	C	O5'-P-OP1	5.54	117.35	110.70
26	1H	1625	C	N3-C4-N4	-5.54	114.12	118.00
26	14	1607	C	C6-N1-C1'	-5.54	114.15	120.80
26	1H	1284	A	O5'-P-OP2	-5.54	100.71	105.70
1	1G	230	G	C2-N3-C4	-5.54	109.13	111.90
26	1H	190	A	O5'-P-OP1	5.54	117.35	110.70
26	1H	1403	C	N3-C4-N4	-5.54	114.12	118.00
26	1H	2060	A	C8-N9-C1'	5.54	137.68	127.70
26	1H	2311	A	C5-N7-C8	-5.54	101.13	103.90
25	4L	21	C	C5-C6-N1	5.54	123.77	121.00
26	14	1314	C	C5-C6-N1	5.54	123.77	121.00
26	14	1769	G	N3-C4-C5	-5.54	125.83	128.60
1	13	584	G	N1-C2-N3	5.54	127.22	123.90
26	1H	239	U	C5-C6-N1	-5.54	119.93	122.70
26	1H	146	G	C8-N9-C4	5.54	108.62	106.40
26	1H	251	A	C4-C5-C6	5.54	119.77	117.00
26	1H	657	U	OP2-P-O3'	5.54	117.39	105.20
26	1H	1203	G	N3-C4-C5	-5.54	125.83	128.60
26	1H	1797	C	C4-C5-C6	5.54	120.17	117.40
26	1H	2308	G	C5-C6-N1	-5.54	108.73	111.50
26	1H	2490	G	C6-C5-N7	-5.54	127.08	130.40
26	1H	2554	U	C5-C6-N1	5.54	125.47	122.70
26	14	1029	A	C8-N9-C4	5.54	108.02	105.80
26	14	2233	U	N1-C2-N3	5.54	118.22	114.90
1	13	816	A	C5-C6-N6	5.54	128.13	123.70
1	13	1519	A	C4-C5-C6	5.54	119.77	117.00
26	1H	389	G	C8-N9-C1'	-5.54	119.80	127.00
26	1H	1344	G	C4-C5-N7	5.54	113.02	110.80
26	1H	2690	C	N1-C2-O2	-5.54	115.58	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	586	A	OP1-P-O3'	5.54	117.38	105.20
1	13	326	G	C4-C5-N7	-5.54	108.59	110.80
26	1H	1201	C	C5-C4-N4	-5.54	116.33	120.20
26	1H	2096	U	C5-C6-N1	5.54	125.47	122.70
26	1H	2257	U	N3-C2-O2	-5.54	118.33	122.20
26	1H	2416	C	OP2-P-O3'	5.54	117.38	105.20
27	16	56	G	N7-C8-N9	5.54	115.87	113.10
1	1G	345	C	P-O3'-C3'	5.54	126.34	119.70
26	14	569	U	OP1-P-O3'	5.54	117.38	105.20
1	13	1027	C	P-O3'-C3'	5.53	126.34	119.70
26	1H	803	U	C2-N3-C4	-5.53	123.68	127.00
26	1H	1158	C	C5-C6-N1	-5.53	118.23	121.00
26	1H	1695	G	N3-C4-N9	5.53	129.32	126.00
26	1H	1981	A	O4'-C1'-N9	-5.53	103.77	108.20
26	14	1931	U	OP1-P-OP2	-5.53	111.30	119.60
26	14	1899	G	N1-C6-O6	-5.53	116.58	119.90
26	14	2702	U	O4'-C1'-N1	5.53	112.62	108.20
53	K5	36	LEU	CA-CB-CG	5.53	128.02	115.30
26	1H	180	G	N3-C4-N9	5.53	129.32	126.00
26	1H	1705	G	C8-N9-C4	-5.53	104.19	106.40
26	1H	2544	G	C5-C6-O6	-5.53	125.28	128.60
26	14	1678	G	O5'-P-OP1	-5.53	100.72	105.70
26	1H	835	A	N9-C4-C5	5.53	108.01	105.80
26	1H	1990	C	N1-C2-N3	5.53	123.07	119.20
1	13	802	A	N1-C6-N6	5.53	121.92	118.60
26	1H	74	A	C6-C5-N7	-5.53	128.43	132.30
26	1H	1427	A	P-O3'-C3'	5.53	126.33	119.70
28	11	46	GLN	C-N-CA	-5.53	110.69	122.30
1	1G	17	U	N3-C4-O4	5.53	123.27	119.40
26	14	1443	G	C6-C5-N7	-5.53	127.08	130.40
26	14	1820	U	O5'-P-OP2	5.53	117.33	110.70
1	13	1354	C	C5-C6-N1	5.53	123.76	121.00
26	1H	429	A	N7-C8-N9	5.53	116.56	113.80
45	C5	39	VAL	N-CA-C	5.53	125.92	111.00
1	13	584	G	N3-C4-C5	-5.52	125.84	128.60
26	1H	795	C	N3-C4-N4	-5.52	114.14	118.00
26	1H	1191	G	OP1-P-OP2	5.52	127.88	119.60
26	14	667	U	N3-C4-O4	5.52	123.27	119.40
26	14	961	C	OP1-P-OP2	5.52	127.88	119.60
26	14	1253	A	C8-N9-C4	5.52	108.01	105.80
26	14	2575	C	N3-C4-N4	-5.52	114.14	118.00
26	1H	1502	C	OP2-P-O3'	5.52	117.34	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2018	G	C6-C5-N7	-5.52	127.09	130.40
26	14	1309	G	N1-C6-O6	5.52	123.21	119.90
26	14	2351	G	C8-N9-C4	-5.52	104.19	106.40
26	14	2392	A	O5'-P-OP2	5.52	117.32	110.70
27	1J	71	C	C2-N1-C1'	5.52	124.87	118.80
26	1H	649	G	O5'-P-OP2	-5.52	100.73	105.70
26	14	602	G	C6-C5-N7	-5.52	127.09	130.40
26	14	1395	A	OP2-P-O3'	5.52	117.34	105.20
26	1H	705	A	C5-C6-N6	-5.52	119.29	123.70
26	1H	2041	U	O5'-P-OP1	-5.52	100.74	105.70
26	1H	58	G	OP2-P-O3'	5.51	117.33	105.20
26	1H	108	U	O5'-P-OP1	-5.51	100.74	105.70
26	1H	1010	A	OP2-P-O3'	5.51	117.33	105.20
26	1H	2357	U	OP2-P-O3'	5.51	117.33	105.20
26	14	2829	C	N3-C4-N4	5.51	121.86	118.00
26	1H	1254	A	C8-N9-C4	5.51	108.00	105.80
26	1H	2244	U	OP1-P-OP2	-5.51	111.33	119.60
26	14	265	A	C5-N7-C8	-5.51	101.14	103.90
26	14	1767	C	C2-N3-C4	-5.51	117.14	119.90
26	1H	912	C	O5'-P-OP2	5.51	117.31	110.70
26	1H	1574	C	N3-C4-C5	5.51	124.10	121.90
26	1H	2451	A	N9-C4-C5	5.51	108.00	105.80
26	14	1279	G	C5-C6-O6	5.51	131.91	128.60
26	14	2315	G	N3-C4-C5	-5.51	125.84	128.60
1	13	726	C	N1-C2-O2	5.51	122.21	118.90
26	1H	955	C	C6-N1-C2	-5.51	118.10	120.30
26	1H	1823	G	N3-C2-N2	-5.51	116.04	119.90
26	1H	2057	A	N7-C8-N9	-5.51	111.05	113.80
26	1H	2622	C	O5'-P-OP2	-5.51	100.74	105.70
26	1H	2745	C	C6-N1-C2	-5.51	118.10	120.30
26	14	756	C	N3-C4-C5	-5.51	119.70	121.90
26	14	1698	A	C5-C6-N1	-5.51	114.94	117.70
26	14	810	U	N1-C2-O2	-5.51	118.94	122.80
1	13	129	U	C6-N1-C1'	5.51	128.91	121.20
26	1H	1247	A	OP2-P-O3'	5.51	117.31	105.20
26	1H	2375	G	C8-N9-C4	5.51	108.60	106.40
26	1H	2487	G	N1-C6-O6	5.51	123.20	119.90
1	1G	615	C	C6-N1-C2	-5.51	118.10	120.30
26	1H	192	C	N3-C4-N4	5.50	121.85	118.00
26	1H	1604	C	N3-C4-C5	-5.50	119.70	121.90
26	14	940	G	N3-C4-C5	-5.50	125.85	128.60
26	14	1613	G	N7-C8-N9	-5.50	110.35	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	2596	U	N1-C2-N3	5.50	118.20	114.90
26	14	2829	C	N3-C2-O2	5.50	125.75	121.90
1	13	503	C	C6-N1-C2	-5.50	118.10	120.30
26	1H	767	U	O5'-P-OP2	-5.50	100.75	105.70
26	1H	791	C	OP1-P-O3'	-5.50	93.09	105.20
26	1H	1314	C	OP2-P-O3'	5.50	117.31	105.20
26	1H	2583	G	C8-N9-C4	-5.50	104.20	106.40
1	1G	1192	C	C5-C6-N1	5.50	123.75	121.00
26	14	791	C	N3-C4-C5	5.50	124.10	121.90
26	14	2249	U	C5-C6-N1	5.50	125.45	122.70
26	1H	94	G	N1-C6-O6	5.50	123.20	119.90
26	1H	2330	G	N1-C2-N3	5.50	127.20	123.90
1	1G	925	G	C8-N9-C4	5.50	108.60	106.40
26	1H	2075	U	C4-C5-C6	5.50	123.00	119.70
27	16	39	A	C8-N9-C4	-5.50	103.60	105.80
26	14	2592	G	N3-C4-C5	-5.50	125.85	128.60
1	13	1432	G	C6-C5-N7	-5.50	127.10	130.40
26	1H	610	C	C2-N3-C4	-5.50	117.15	119.90
26	1H	2039	C	N3-C4-C5	-5.50	119.70	121.90
26	14	1359	A	N1-C2-N3	-5.50	126.55	129.30
26	14	2565	A	N9-C4-C5	-5.50	103.60	105.80
1	13	233	C	C6-N1-C2	-5.50	118.10	120.30
26	1H	1805	U	O5'-P-OP1	-5.50	100.75	105.70
26	1H	2830	G	O5'-P-OP2	-5.50	100.75	105.70
26	14	1313	U	N3-C4-C5	-5.50	111.30	114.60
1	13	580	U	C2-N3-C4	-5.49	123.70	127.00
26	1H	674	G	OP1-P-OP2	-5.49	111.36	119.60
26	1H	814	C	O5'-P-OP2	-5.49	100.76	105.70
26	1H	970	C	O5'-P-OP1	-5.49	100.76	105.70
26	1H	1300	U	OP1-P-O3'	5.49	117.29	105.20
26	1H	1437	C	C2-N1-C1'	5.49	124.84	118.80
26	1H	2450	A	N1-C6-N6	-5.49	115.30	118.60
26	14	1399	C	OP2-P-O3'	5.49	117.29	105.20
26	14	2867	G	O4'-C1'-N9	5.49	112.59	108.20
1	13	525	C	C5-C6-N1	5.49	123.75	121.00
26	1H	511	U	OP1-P-OP2	-5.49	111.36	119.60
26	1H	1443	G	C8-N9-C1'	-5.49	119.86	127.00
1	1G	1281	U	C5-C6-N1	5.49	125.45	122.70
26	14	1566	A	N1-C2-N3	-5.49	126.55	129.30
26	14	1790	C	C5-C4-N4	-5.49	116.36	120.20
26	1H	404	C	N3-C2-O2	5.49	125.74	121.90
26	1H	738	G	O4'-C1'-N9	5.49	112.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	764	A	N1-C6-N6	5.49	121.89	118.60
26	1H	835	A	C6-N1-C2	-5.49	115.31	118.60
26	1H	972	G	C5-C6-O6	5.49	131.89	128.60
26	1H	1422	G	C8-N9-C4	-5.49	104.20	106.40
26	1H	1670	C	C2-N3-C4	-5.49	117.16	119.90
26	1H	2393	A	OP2-P-O3'	5.49	117.28	105.20
26	1H	2532	G	N1-C6-O6	5.49	123.19	119.90
26	14	803	U	N3-C2-O2	-5.49	118.36	122.20
26	14	1396	U	C4-C5-C6	5.49	122.99	119.70
26	14	2346	A	C5-N7-C8	-5.49	101.16	103.90
26	1H	1466	G	OP2-P-O3'	5.49	117.28	105.20
26	14	786	C	OP2-P-O3'	5.49	117.28	105.20
26	14	992	C	C6-N1-C2	-5.49	118.10	120.30
26	14	2258	C	OP1-P-O3'	5.49	117.28	105.20
1	13	318	G	N1-C6-O6	5.49	123.19	119.90
26	1H	389	G	N9-C4-C5	-5.49	103.20	105.40
26	14	961	C	O5'-P-OP2	-5.49	100.76	105.70
26	1H	528	A	C4-N9-C1'	-5.49	116.43	126.30
26	1H	845	G	OP1-P-O3'	5.49	117.27	105.20
26	1H	2711	A	P-O3'-C3'	5.49	126.28	119.70
1	1G	230	G	N3-C2-N2	-5.49	116.06	119.90
1	13	1530	G	C5-C6-O6	-5.48	125.31	128.60
26	1H	1816	G	O5'-P-OP2	5.48	117.28	110.70
26	1H	777	A	N1-C6-N6	-5.48	115.31	118.60
26	1H	2324	C	C6-N1-C1'	-5.48	114.22	120.80
26	1H	2434	A	C4-C5-C6	-5.48	114.26	117.00
26	1H	2435	A	C8-N9-C4	-5.48	103.61	105.80
26	14	866	A	C4-N9-C1'	5.48	136.16	126.30
26	1H	401	A	N1-C2-N3	5.48	132.04	129.30
1	1G	1390	U	C5-C4-O4	5.48	129.19	125.90
1	13	101	A	C8-N9-C4	-5.48	103.61	105.80
1	13	792	A	C3'-C2'-C1'	-5.48	97.12	101.50
1	13	1475	G	N7-C8-N9	5.48	115.84	113.10
26	1H	121	G	C4-C5-N7	5.48	112.99	110.80
26	1H	2713	A	N3-C4-N9	-5.48	123.02	127.40
26	14	840	C	N1-C2-O2	-5.48	115.61	118.90
26	14	2755	C	C5-C6-N1	5.48	123.74	121.00
1	13	537	G	O5'-P-OP1	-5.47	100.77	105.70
26	1H	2219	G	N1-C6-O6	5.47	123.18	119.90
26	1H	2497	A	O5'-P-OP2	-5.47	100.77	105.70
26	14	199	A	OP2-P-O3'	5.47	117.25	105.20
26	14	2318	G	N7-C8-N9	5.47	115.84	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	55	113	LEU	CA-CB-CG	5.47	127.89	115.30
26	1H	645	C	N1-C2-O2	5.47	122.18	118.90
26	1H	727	A	OP2-P-O3'	5.47	117.24	105.20
26	1H	1319	G	N3-C4-C5	-5.47	125.86	128.60
26	1H	1435	G	N1-C6-O6	-5.47	116.62	119.90
26	1H	2692	C	C6-N1-C2	-5.47	118.11	120.30
26	1H	2827	C	N3-C4-N4	5.47	121.83	118.00
27	16	15	A	O4'-C1'-N9	5.47	112.58	108.20
26	14	2066	C	O5'-P-OP2	5.47	117.27	110.70
26	1H	188	G	N1-C2-N2	-5.47	111.28	116.20
26	1H	688	U	C2-N3-C4	-5.47	123.72	127.00
26	1H	1299	G	N7-C8-N9	5.47	115.84	113.10
1	13	1348	U	C5-C4-O4	5.47	129.18	125.90
1	13	1385	G	N1-C6-O6	5.47	123.18	119.90
26	1H	429	A	N9-C4-C5	5.47	107.99	105.80
26	1H	736	C	N1-C2-O2	-5.47	115.62	118.90
26	1H	2586	C	N3-C2-O2	5.47	125.73	121.90
1	1G	115	G	C4-C5-N7	-5.47	108.61	110.80
26	14	747	U	N1-C2-O2	-5.47	118.97	122.80
26	1H	2564	A	OP1-P-O3'	5.47	117.23	105.20
1	1G	613	C	C6-N1-C2	-5.47	118.11	120.30
26	14	784	A	P-O3'-C3'	5.47	126.26	119.70
26	14	791	C	P-O3'-C3'	5.47	126.26	119.70
26	14	995	C	C2-N1-C1'	-5.47	112.78	118.80
26	1H	1579	A	C8-N9-C4	-5.47	103.61	105.80
26	1H	1942	C	C4-C5-C6	-5.47	114.67	117.40
1	1G	894	G	C4-C5-N7	5.47	112.99	110.80
26	14	762	U	O4'-C1'-N1	-5.47	103.83	108.20
26	14	783	A	C5-C6-N6	-5.47	119.33	123.70
26	1H	73	A	C2-N3-C4	5.46	113.33	110.60
26	1H	2251	G	OP1-P-O3'	5.46	117.22	105.20
1	1G	632	A	P-O3'-C3'	5.46	126.26	119.70
26	14	184	C	OP2-P-O3'	5.46	117.22	105.20
26	14	460	A	C5-C6-N6	-5.46	119.33	123.70
26	14	2041	U	OP2-P-O3'	5.46	117.22	105.20
26	14	2360	A	C2-N3-C4	-5.46	107.87	110.60
26	14	2618	G	C4-C5-N7	-5.46	108.61	110.80
26	1H	2072	G	C8-N9-C4	5.46	108.58	106.40
26	1H	2253	G	N3-C4-N9	-5.46	122.72	126.00
26	14	270(U)	C	C6-N1-C2	-5.46	118.11	120.30
26	14	396	G	N1-C6-O6	5.46	123.18	119.90
26	14	693	C	C2-N3-C4	-5.46	117.17	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	422	C	P-O3'-C3'	5.46	126.25	119.70
23	2K	77	A	O5'-P-OP1	-5.46	100.78	105.70
26	1H	410	G	O5'-P-OP1	-5.46	100.78	105.70
26	1H	963	U	O5'-P-OP2	5.46	117.25	110.70
26	1H	1305	C	OP1-P-OP2	-5.46	111.41	119.60
26	1H	1359	A	OP1-P-OP2	5.46	127.79	119.60
26	1H	1366	A	C2-N3-C4	-5.46	107.87	110.60
26	1H	2319	G	N3-C4-N9	5.46	129.28	126.00
26	1H	2586	C	OP1-P-O3'	5.46	117.22	105.20
27	16	115	G	N3-C4-N9	5.46	129.28	126.00
26	14	1600	C	O5'-P-OP2	-5.46	100.78	105.70
26	14	1642	G	O5'-P-OP1	-5.46	100.78	105.70
1	13	1498	U	N3-C2-O2	-5.46	118.38	122.20
26	1H	120	U	N1-C2-N3	5.46	118.18	114.90
26	1H	541	C	N3-C2-O2	-5.46	118.08	121.90
26	1H	1299	G	C5-C6-O6	-5.46	125.32	128.60
26	1H	2004	G	C2-N3-C4	-5.46	109.17	111.90
26	1H	2589	A	O5'-P-OP2	-5.46	100.79	105.70
26	1H	430	G	OP1-P-O3'	5.46	117.21	105.20
26	1H	812	C	N3-C2-O2	5.46	125.72	121.90
26	1H	1601	G	OP1-P-O3'	5.46	117.21	105.20
26	1H	2779	U	C5-C6-N1	-5.46	119.97	122.70
1	1G	975	A	O4'-C1'-N9	-5.46	103.83	108.20
26	14	1365	A	C8-N9-C4	-5.46	103.62	105.80
26	14	1928	A	C8-N9-C4	5.46	107.98	105.80
24	3K	76	A	O4'-C1'-N9	5.46	112.56	108.20
28	11	131	LEU	CA-CB-CG	5.46	127.85	115.30
1	1G	865	A	C8-N9-C4	-5.46	103.62	105.80
26	14	298	G	C5-N7-C8	-5.46	101.57	104.30
1	13	231	G	C8-N9-C4	-5.46	104.22	106.40
26	1H	600	G	C5-C6-N1	-5.46	108.77	111.50
26	1H	988	A	P-O3'-C3'	5.46	126.25	119.70
26	14	728	G	C8-N9-C4	5.46	108.58	106.40
26	1H	417	C	N3-C4-C5	5.45	124.08	121.90
26	1H	617	G	C5-C6-N1	5.45	114.23	111.50
26	1H	955	C	C4-C5-C6	5.45	120.13	117.40
26	1H	1192	G	N7-C8-N9	-5.45	110.37	113.10
26	1H	2360	A	C2-N3-C4	-5.45	107.87	110.60
26	1H	2606	C	OP1-P-O3'	5.45	117.20	105.20
26	14	2259	G	N1-C2-N2	5.45	121.11	116.20
1	13	1195	C	C6-N1-C2	-5.45	118.12	120.30
1	13	1519	A	C5-C6-N6	5.45	128.06	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2022	U	N3-C2-O2	5.45	126.02	122.20
26	14	1355	G	N7-C8-N9	5.45	115.83	113.10
26	14	1831	G	N1-C2-N3	5.45	127.17	123.90
26	1H	1325	G	C5-C6-O6	-5.45	125.33	128.60
26	1H	2389	G	C8-N9-C4	-5.45	104.22	106.40
26	1H	2705	A	C4-C5-N7	5.45	113.42	110.70
26	14	93	C	C6-N1-C2	-5.45	118.12	120.30
1	13	557	G	N3-C4-N9	5.45	129.27	126.00
1	13	1065	U	P-O3'-C3'	5.45	126.24	119.70
26	1H	1241	A	C5-C6-N1	-5.45	114.98	117.70
26	14	127	A	OP1-P-O3'	5.45	117.19	105.20
26	14	2444	G	C4-C5-N7	-5.45	108.62	110.80
26	14	797	C	N3-C4-N4	5.45	121.81	118.00
26	14	802	A	C6-N1-C2	-5.45	115.33	118.60
26	14	1725	G	C4-N9-C1'	5.45	133.58	126.50
26	14	2443	C	C2-N3-C4	-5.45	117.18	119.90
1	1G	243	A	P-O3'-C3'	5.45	126.23	119.70
26	14	1463	C	N3-C4-C5	-5.45	119.72	121.90
26	14	1520	U	N3-C4-O4	-5.45	115.59	119.40
26	14	2618	G	C5-C6-O6	5.45	131.87	128.60
26	1H	1764	G	N1-C2-N3	5.44	127.17	123.90
1	13	14	U	C6-N1-C2	-5.44	117.73	121.00
26	1H	2508	G	C8-N9-C1'	5.44	134.07	127.00
1	1G	793	U	O4'-C1'-N1	5.44	112.55	108.20
26	14	632	A	O5'-P-OP2	5.44	117.23	110.70
1	13	581	G	C6-C5-N7	-5.44	127.14	130.40
1	13	945	G	OP1-P-O3'	5.44	117.17	105.20
1	1G	586	C	C6-N1-C2	-5.44	118.12	120.30
26	14	1327	C	C6-N1-C1'	5.44	127.33	120.80
26	1H	530	G	N3-C2-N2	5.44	123.71	119.90
26	1H	1616	A	OP1-P-O3'	5.44	117.17	105.20
26	1H	1688	U	OP2-P-O3'	5.44	117.17	105.20
26	1H	105	C	C6-N1-C2	-5.44	118.12	120.30
27	16	12	C	C4-C5-C6	5.44	120.12	117.40
26	14	459	U	O5'-P-OP2	-5.44	100.81	105.70
26	1H	389	G	N3-C4-N9	5.44	129.26	126.00
26	1H	1363	C	C2-N3-C4	-5.43	117.18	119.90
26	1H	2598	A	C8-N9-C4	5.43	107.97	105.80
1	13	503	C	C2-N1-C1'	5.43	124.78	118.80
1	13	963	G	N3-C4-C5	-5.43	125.88	128.60
26	1H	116	C	C6-N1-C1'	5.43	127.32	120.80
26	1H	713	G	N1-C6-O6	5.43	123.16	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1577	C	C4-C5-C6	5.43	120.12	117.40
1	1G	950	U	C5-C6-N1	5.43	125.42	122.70
26	14	601	C	N1-C2-O2	-5.43	115.64	118.90
26	14	1266	G	C5-C6-N1	5.43	114.22	111.50
26	14	37	C	OP2-P-O3'	5.43	117.15	105.20
26	14	1024	G	C6-C5-N7	-5.43	127.14	130.40
26	1H	1189	A	C5-C6-N6	-5.43	119.36	123.70
1	1G	377	G	N9-C4-C5	-5.43	103.23	105.40
1	13	974	A	C6-C5-N7	-5.43	128.50	132.30
26	1H	1367	A	O5'-P-OP1	5.43	117.21	110.70
1	13	1335	C	C2-N1-C1'	-5.43	112.83	118.80
26	1H	2267	A	P-O3'-C3'	5.43	126.21	119.70
1	1G	132	C	N3-C4-C5	-5.43	119.73	121.90
1	1G	354	G	C8-N9-C1'	-5.43	119.95	127.00
1	1G	377	G	C6-C5-N7	-5.43	127.14	130.40
1	1G	858	G	C4-C5-N7	5.43	112.97	110.80
26	14	570	G	N1-C2-N2	-5.43	111.32	116.20
26	14	828	U	N3-C4-C5	-5.43	111.34	114.60
26	14	1836	C	OP1-P-O3'	5.43	117.14	105.20
1	13	335	C	C2-N1-C1'	-5.42	112.83	118.80
24	3K	34	G	C8-N9-C4	-5.42	104.23	106.40
26	1H	1777	U	N3-C4-C5	-5.42	111.34	114.60
26	1H	2439	A	OP1-P-OP2	5.42	127.74	119.60
26	1H	2871	C	C6-N1-C2	-5.42	118.13	120.30
1	1G	1112	C	C6-N1-C2	-5.42	118.13	120.30
26	14	2053	G	C8-N9-C4	5.42	108.57	106.40
26	14	2086	U	C5-C4-O4	5.42	129.15	125.90
26	1H	126	A	OP2-P-O3'	5.42	117.13	105.20
26	1H	818	G	C5-C6-O6	5.42	131.85	128.60
26	1H	955	C	C5-C4-N4	5.42	124.00	120.20
26	1H	1319	G	N7-C8-N9	5.42	115.81	113.10
26	1H	685	A	C6-C5-N7	-5.42	128.50	132.30
26	1H	1336	A	C8-N9-C4	-5.42	103.63	105.80
26	1H	2328	A	C4-C5-C6	5.42	119.71	117.00
26	14	330	A	C4-C5-N7	5.42	113.41	110.70
26	14	576	U	OP2-P-O3'	5.42	117.13	105.20
26	14	776	G	N1-C2-N2	5.42	121.08	116.20
1	13	114	U	O5'-P-OP2	-5.42	100.82	105.70
26	1H	1324	G	C5-C6-N1	-5.42	108.79	111.50
26	14	985	C	OP2-P-O3'	5.42	117.12	105.20
26	1H	85	G	O5'-P-OP1	5.42	117.20	110.70
26	1H	700	G	C5-C6-O6	-5.42	125.35	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	942	G	C4-C5-N7	-5.42	108.63	110.80
26	1H	1428	C	C2-N1-C1'	-5.42	112.84	118.80
1	13	19	C	C6-N1-C2	-5.42	118.13	120.30
26	1H	1786	A	N3-C4-C5	5.42	130.59	126.80
26	14	1639	U	N3-C4-O4	-5.42	115.61	119.40
26	14	2008	C	N1-C2-N3	5.42	122.99	119.20
26	14	2463	C	N3-C2-O2	5.42	125.69	121.90
26	1H	1385	G	N3-C4-C5	5.42	131.31	128.60
26	1H	2026	C	C4-C5-C6	5.42	120.11	117.40
26	14	2502	G	C5-N7-C8	-5.42	101.59	104.30
26	1H	1993	U	N1-C2-O2	-5.41	119.01	122.80
26	1H	2029	G	N7-C8-N9	5.41	115.81	113.10
1	1G	1511	G	C8-N9-C4	-5.41	104.23	106.40
26	14	1352	U	O5'-P-OP2	-5.41	100.83	105.70
26	14	1418	G	N1-C6-O6	5.41	123.15	119.90
26	14	1784	A	OP1-P-O3'	5.41	117.11	105.20
26	14	2232	U	O5'-P-OP2	-5.41	100.83	105.70
26	1H	206	U	N3-C4-O4	-5.41	115.61	119.40
26	1H	1269	A	N7-C8-N9	5.41	116.51	113.80
26	14	468	G	OP1-P-OP2	-5.41	111.48	119.60
1	13	101	A	C5-N7-C8	-5.41	101.19	103.90
1	13	805	C	C5-C6-N1	5.41	123.70	121.00
26	1H	1311	G	O5'-P-OP2	-5.41	100.83	105.70
26	1H	1643	G	N1-C6-O6	-5.41	116.65	119.90
26	1H	2228	G	C5-C6-O6	-5.41	125.35	128.60
26	14	389	G	C8-N9-C1'	-5.41	119.97	127.00
26	14	487	C	N1-C2-O2	-5.41	115.65	118.90
26	14	583	G	C8-N9-C4	-5.41	104.23	106.40
26	14	1336	A	C5-C6-N1	5.41	120.41	117.70
26	1H	2597	G	OP2-P-O3'	5.41	117.10	105.20
26	14	1782	C	N3-C2-O2	5.41	125.69	121.90
1	13	718	G	O5'-P-OP2	5.41	117.19	110.70
26	1H	1776	G	C5-C6-O6	-5.41	125.36	128.60
1	13	591	U	N3-C2-O2	-5.41	118.42	122.20
26	1H	715	G	N3-C4-C5	-5.41	125.90	128.60
26	1H	1520	U	OP2-P-O3'	5.41	117.09	105.20
26	14	570	G	C8-N9-C4	-5.41	104.24	106.40
26	14	1754	C	N1-C2-O2	5.41	122.14	118.90
26	14	2426	A	N1-C6-N6	5.41	121.84	118.60
26	1H	189	G	C2-N3-C4	-5.40	109.20	111.90
26	1H	446	G	C5-C6-N1	-5.40	108.80	111.50
26	1H	481	G	C5-C6-O6	-5.40	125.36	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	1432	G	C6-C5-N7	-5.40	127.16	130.40
1	13	314	C	N3-C2-O2	-5.40	118.12	121.90
1	13	934	C	C2-N1-C1'	-5.40	112.86	118.80
26	14	728	G	N3-C2-N2	5.40	123.68	119.90
1	13	966	G	C5-C6-O6	-5.40	125.36	128.60
43	E8	23	LEU	CA-CB-CG	5.40	127.72	115.30
1	1G	817	C	C5-C6-N1	-5.40	118.30	121.00
26	14	1841	U	OP2-P-O3'	5.40	117.08	105.20
26	14	1979	C	O5'-P-OP2	-5.40	100.84	105.70
26	1H	843	G	OP2-P-O3'	5.40	117.08	105.20
27	1J	22	U	C6-N1-C2	-5.40	117.76	121.00
26	1H	196	A	O4'-C1'-N9	5.40	112.52	108.20
26	1H	671	C	C2-N3-C4	-5.40	117.20	119.90
26	1H	761	A	C5-N7-C8	-5.40	101.20	103.90
26	1H	2261	C	OP2-P-O3'	5.40	117.08	105.20
1	1G	121	C	N1-C2-O2	5.40	122.14	118.90
26	14	1616	A	N3-C4-C5	5.40	130.58	126.80
26	14	1695	G	C6-C5-N7	-5.40	127.16	130.40
26	14	1801	G	O5'-P-OP1	-5.40	100.84	105.70
26	14	1982	C	N1-C2-N3	-5.40	115.42	119.20
26	1H	2465	C	C4-C5-C6	5.40	120.10	117.40
26	1H	2509	G	N1-C6-O6	-5.40	116.66	119.90
26	14	1772	G	C5-C6-O6	-5.40	125.36	128.60
26	14	2447	G	O5'-P-OP2	-5.40	100.84	105.70
1	13	1469	G	C8-N9-C4	-5.39	104.24	106.40
26	1H	739	G	N1-C2-N3	-5.39	120.66	123.90
26	1H	2296	U	O5'-P-OP1	-5.39	100.84	105.70
26	14	2235	G	N3-C4-N9	5.39	129.24	126.00
26	1H	673	C	N1-C2-O2	-5.39	115.67	118.90
26	1H	951	C	N3-C4-N4	-5.39	114.22	118.00
26	1H	1475	G	N3-C2-N2	-5.39	116.12	119.90
26	1H	1695	G	N3-C4-C5	-5.39	125.90	128.60
26	1H	1924	C	N1-C2-O2	5.39	122.14	118.90
26	1H	2367	G	N3-C2-N2	-5.39	116.13	119.90
1	1G	17	U	C5-C4-O4	-5.39	122.67	125.90
26	14	1826	G	C4-C5-N7	-5.39	108.64	110.80
26	1H	799	G	C5-N7-C8	5.39	107.00	104.30
26	1H	945	A	O5'-P-OP2	-5.39	100.85	105.70
26	14	1770	G	N7-C8-N9	5.39	115.80	113.10
1	13	950	U	OP1-P-O3'	5.39	117.06	105.20
26	1H	749	C	C6-N1-C2	5.39	122.46	120.30
1	1G	1414	U	C5-C4-O4	5.39	129.13	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	133	C	C6-N1-C2	5.39	122.45	120.30
26	14	508	G	OP1-P-OP2	5.39	127.68	119.60
1	13	1522	U	C5-C6-N1	-5.39	120.01	122.70
26	14	540	G	N3-C4-N9	-5.39	122.77	126.00
26	14	1385	G	N3-C4-C5	5.39	131.29	128.60
26	1H	700	G	N1-C6-O6	5.39	123.13	119.90
26	1H	1231	G	N1-C6-O6	5.39	123.13	119.90
26	1H	2378	A	N9-C4-C5	-5.39	103.65	105.80
1	1G	1314	C	C6-N1-C2	-5.39	118.14	120.30
26	14	2440	C	OP1-P-O3'	5.39	117.05	105.20
23	2K	40	C	C5-C6-N1	5.38	123.69	121.00
26	1H	825	C	N3-C2-O2	5.38	125.67	121.90
26	14	1300	U	O5'-P-OP1	5.38	117.16	110.70
26	14	2581	G	C4-N9-C1'	5.38	133.50	126.50
26	1H	674	G	O5'-P-OP2	5.38	117.16	110.70
26	1H	1594	G	OP1-P-O3'	5.38	117.04	105.20
26	14	461	C	OP1-P-OP2	5.38	127.67	119.60
26	1H	607	U	C5-C4-O4	5.38	129.13	125.90
26	1H	734	A	OP1-P-OP2	5.38	127.67	119.60
26	1H	1670	C	C6-N1-C2	5.38	122.45	120.30
26	1H	2457	U	N1-C2-O2	-5.38	119.03	122.80
27	16	5	C	C5-C4-N4	-5.38	116.43	120.20
27	16	29	A	OP1-P-OP2	-5.38	111.53	119.60
1	1G	1070	U	N3-C2-O2	-5.38	118.43	122.20
1	1G	1228	C	O5'-P-OP2	-5.38	100.86	105.70
1	1G	1469	G	N1-C6-O6	5.38	123.13	119.90
26	14	102	G	O5'-P-OP1	-5.38	100.86	105.70
26	14	2066	C	C6-N1-C2	-5.38	118.15	120.30
26	1H	2553	G	OP1-P-O3'	5.38	117.03	105.20
25	4K	18	G	N3-C4-N9	-5.38	122.77	126.00
26	1H	2378	A	O5'-P-OP2	5.38	117.16	110.70
1	1G	586	C	C5-C6-N1	5.38	123.69	121.00
26	14	1814	G	C8-N9-C4	-5.38	104.25	106.40
26	1H	121	G	C5-C6-N1	5.38	114.19	111.50
26	1H	447	A	N1-C6-N6	-5.38	115.37	118.60
26	1H	937	U	C6-N1-C2	5.38	124.23	121.00
26	1H	1123	C	C2-N3-C4	-5.38	117.21	119.90
26	1H	1811	G	N9-C4-C5	5.38	107.55	105.40
26	1H	2232	U	O5'-P-OP2	-5.38	100.86	105.70
26	1H	2392	A	C6-N1-C2	5.38	121.83	118.60
46	H8	117	LEU	CA-CB-CG	5.38	127.67	115.30
26	14	494	G	C5-C6-N1	-5.38	108.81	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1929	G	OP1-P-OP2	5.38	127.67	119.60
26	1H	957	A	C6-C5-N7	-5.38	128.54	132.30
27	16	6	C	C6-N1-C2	5.38	122.45	120.30
26	14	116	C	C6-N1-C2	-5.38	118.15	120.30
27	1J	60	C	C6-N1-C2	-5.38	118.15	120.30
1	13	693	G	N1-C6-O6	-5.37	116.68	119.90
1	13	1208	C	N1-C2-O2	-5.37	115.68	118.90
26	1H	1210	A	N3-C4-C5	5.37	130.56	126.80
26	1H	1406	U	OP1-P-O3'	5.37	117.02	105.20
26	1H	2096	U	N3-C2-O2	-5.37	118.44	122.20
26	14	932	G	N3-C4-N9	-5.37	122.78	126.00
26	1H	599	G	N1-C6-O6	-5.37	116.68	119.90
26	1H	2330	G	C5-N7-C8	-5.37	101.61	104.30
26	1H	2615	U	N1-C2-O2	5.37	126.56	122.80
55	Q8	52	LYS	C-N-CA	5.37	144.56	122.00
26	14	1308	A	N1-C2-N3	5.37	131.99	129.30
26	14	1849	G	N9-C4-C5	5.37	107.55	105.40
26	14	2595	G	N3-C4-C5	5.37	131.28	128.60
26	1H	52	A	O5'-P-OP2	-5.37	100.87	105.70
26	1H	866	A	C6-N1-C2	5.37	121.82	118.60
1	1G	400	C	N1-C2-O2	-5.37	115.68	118.90
1	1G	1285	A	P-O3'-C3'	5.37	126.14	119.70
24	1L	74	C	N3-C4-N4	-5.37	114.24	118.00
26	14	209	C	OP2-P-O3'	5.37	117.01	105.20
26	14	1372	U	C4-C5-C6	5.37	122.92	119.70
26	14	1443	G	C4-C5-C6	5.37	122.02	118.80
26	14	2573	C	C2-N1-C1'	5.37	124.70	118.80
1	13	1304	G	N3-C4-C5	-5.37	125.92	128.60
26	1H	859	G	N3-C4-N9	-5.37	122.78	126.00
26	1H	1394	U	C5-C6-N1	5.37	125.38	122.70
55	Q8	60	LEU	CB-CG-CD2	5.37	120.12	111.00
26	14	1657	C	OP1-P-O3'	5.37	117.01	105.20
26	14	1698	A	N7-C8-N9	5.37	116.48	113.80
1	13	465	A	N7-C8-N9	-5.37	111.12	113.80
26	1H	590	A	C8-N9-C4	-5.37	103.65	105.80
26	1H	2082	A	N7-C8-N9	-5.37	111.12	113.80
26	14	248	G	C6-C5-N7	-5.37	127.18	130.40
26	14	2381	C	C6-N1-C2	5.37	122.45	120.30
1	13	934	C	C6-N1-C1'	5.36	127.24	120.80
26	1H	638	G	OP1-P-OP2	5.36	127.65	119.60
26	1H	690	G	C5-C6-O6	-5.36	125.38	128.60
26	1H	2234	G	O5'-P-OP1	5.36	117.14	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2441	C	OP1-P-O3'	5.36	117.00	105.20
26	14	2611	U	C5-C6-N1	5.36	125.38	122.70
26	1H	2783	G	C6-C5-N7	-5.36	127.18	130.40
26	1H	853	G	C8-N9-C4	5.36	108.55	106.40
26	14	1898	U	C6-N1-C2	-5.36	117.78	121.00
26	1H	971	C	C4-C5-C6	5.36	120.08	117.40
26	1H	137(A)	G	O4'-C1'-N9	5.36	112.49	108.20
26	1H	617	G	N1-C6-O6	-5.36	116.69	119.90
26	1H	735	A	C5-C6-N6	-5.36	119.41	123.70
27	16	101	A	C8-N9-C4	5.36	107.94	105.80
26	14	1930	G	N9-C4-C5	5.36	107.54	105.40
1	13	1299	A	N1-C6-N6	5.36	121.81	118.60
1	13	1433	A	O5'-P-OP1	-5.36	100.88	105.70
26	1H	982	C	OP1-P-O3'	5.36	116.98	105.20
26	1H	1024	G	N3-C4-C5	-5.36	125.92	128.60
26	1H	1608	A	O5'-P-OP1	-5.36	100.88	105.70
1	1G	266	G	O4'-C1'-N9	-5.36	103.92	108.20
26	14	182	A	OP2-P-O3'	5.36	116.98	105.20
26	14	1304	C	N3-C4-C5	5.36	124.04	121.90
26	1H	2281	C	C5-C4-N4	-5.35	116.45	120.20
26	14	1270	C	OP2-P-O3'	5.35	116.98	105.20
1	13	974	A	O4'-C1'-N9	5.35	112.48	108.20
26	1H	701	G	C5-C6-N1	-5.35	108.82	111.50
26	1H	701	G	N1-C6-O6	5.35	123.11	119.90
26	1H	757	U	OP1-P-OP2	5.35	127.63	119.60
26	1H	2014	A	N1-C6-N6	5.35	121.81	118.60
26	1H	2036	C	N3-C4-C5	-5.35	119.76	121.90
26	14	1286	A	OP2-P-O3'	5.35	116.98	105.20
26	14	1321	A	N1-C6-N6	5.35	121.81	118.60
26	14	1696	G	O5'-P-OP2	-5.35	100.88	105.70
1	13	809	G	O5'-P-OP1	-5.35	100.88	105.70
26	1H	1284	A	C5-C6-N1	-5.35	115.02	117.70
26	14	2329	G	N3-C4-C5	-5.35	125.92	128.60
26	1H	113	G	C6-C5-N7	-5.35	127.19	130.40
26	1H	463	G	N9-C4-C5	-5.35	103.26	105.40
26	1H	1610	A	C5-C6-N1	-5.35	115.03	117.70
1	1G	301	G	N1-C6-O6	5.35	123.11	119.90
1	1G	667	G	C5-C6-O6	-5.35	125.39	128.60
26	14	288	C	C2-N1-C1'	5.35	124.68	118.80
26	14	659	C	C6-N1-C2	5.35	122.44	120.30
26	14	852	G	N1-C6-O6	-5.35	116.69	119.90
33	69	131	LYS	C-N-CD	-5.35	108.83	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	219	C	C5-C6-N1	5.35	123.67	121.00
1	13	1081	G	OP1-P-O3'	5.35	116.96	105.20
26	1H	1300	U	C5-C4-O4	5.35	129.11	125.90
1	1G	506	G	O5'-P-OP2	5.35	117.12	110.70
26	14	1419	A	C8-N9-C4	5.35	107.94	105.80
26	1H	617	G	O5'-P-OP2	5.34	117.11	110.70
26	1H	1366	A	N1-C2-N3	5.34	131.97	129.30
26	1H	1391	U	C2-N1-C1'	5.34	124.11	117.70
26	1H	1780	A	N1-C2-N3	5.34	131.97	129.30
26	1H	2587	A	OP2-P-O3'	5.34	116.96	105.20
26	1H	2698	U	OP1-P-OP2	5.34	127.62	119.60
1	1G	293	G	N1-C6-O6	5.34	123.11	119.90
26	14	2080	G	N1-C6-O6	-5.34	116.69	119.90
26	14	2253	G	O5'-P-OP1	5.34	117.11	110.70
26	14	2283	C	N3-C4-N4	5.34	121.74	118.00
26	14	2731	G	C4-C5-C6	5.34	122.01	118.80
23	2K	22	A	C8-N9-C4	-5.34	103.66	105.80
26	1H	1437	C	N3-C2-O2	-5.34	118.16	121.90
34	15	2	LYS	N-CA-C	-5.34	96.57	111.00
26	1H	729	G	OP2-P-O3'	5.34	116.95	105.20
26	1H	2513	G	N3-C4-N9	5.34	129.21	126.00
26	14	733	G	O5'-P-OP2	-5.34	100.89	105.70
26	14	1586	A	C8-N9-C4	-5.34	103.66	105.80
26	14	2080	G	O5'-P-OP2	-5.34	100.89	105.70
26	14	2406	U	OP1-P-O3'	5.34	116.95	105.20
26	1H	1626	G	N1-C6-O6	5.34	123.10	119.90
26	1H	1690	A	N1-C6-N6	-5.34	115.40	118.60
1	1G	596	C	C6-N1-C2	5.34	122.44	120.30
26	1H	1303	G	N1-C6-O6	-5.34	116.70	119.90
26	1H	1779	U	C6-N1-C2	5.34	124.20	121.00
26	14	1664	A	O4'-C1'-N9	-5.34	103.93	108.20
26	14	2278	A	N9-C4-C5	5.34	107.94	105.80
26	1H	216	A	C8-N9-C4	5.34	107.94	105.80
26	1H	790	C	N3-C2-O2	5.34	125.64	121.90
26	1H	1147	C	C6-N1-C2	5.34	122.44	120.30
26	1H	81	G	C5-C6-O6	5.33	131.80	128.60
26	1H	1942	C	C6-N1-C2	-5.33	118.17	120.30
26	14	566	U	C5-C6-N1	-5.33	120.03	122.70
26	14	1770	G	O5'-P-OP2	5.33	117.10	110.70
26	1H	24	G	C8-N9-C4	-5.33	104.27	106.40
26	1H	946	G	C4-C5-N7	-5.33	108.67	110.80
26	1H	1123	C	C4-C5-C6	5.33	120.07	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1900	A	C5-C6-N6	-5.33	119.43	123.70
26	1H	2068	U	OP1-P-O3'	5.33	116.94	105.20
26	14	2510	C	OP1-P-OP2	5.33	127.60	119.60
1	13	477	G	N3-C4-C5	5.33	131.27	128.60
26	1H	245	G	C4-N9-C1'	5.33	133.43	126.50
26	1H	906	G	N3-C4-N9	-5.33	122.80	126.00
26	1H	1785	A	C5-C6-N1	-5.33	115.03	117.70
26	1H	1977	A	N9-C4-C5	-5.33	103.67	105.80
26	1H	2604	U	N3-C4-C5	-5.33	111.40	114.60
26	1H	2616	C	C6-N1-C2	-5.33	118.17	120.30
26	1H	80	G	C8-N9-C4	-5.33	104.27	106.40
26	1H	574	C	N1-C2-N3	-5.33	115.47	119.20
26	14	761	A	C4-C5-C6	-5.33	114.34	117.00
26	14	1386	C	C2-N3-C4	5.33	122.56	119.90
26	14	2004	G	N3-C2-N2	-5.33	116.17	119.90
26	1H	455	C	C4-C5-C6	-5.33	114.74	117.40
26	1H	514	A	OP1-P-O3'	5.33	116.92	105.20
26	1H	526	A	C8-N9-C4	-5.33	103.67	105.80
26	1H	1209	G	N3-C2-N2	-5.33	116.17	119.90
26	1H	1974	C	O5'-P-OP2	-5.33	100.91	105.70
26	1H	2561	A	OP1-P-OP2	5.33	127.59	119.60
26	14	679	C	N1-C2-O2	-5.33	115.70	118.90
26	14	1474	C	C2-N3-C4	5.33	122.56	119.90
26	14	1528	A	C8-N9-C4	-5.33	103.67	105.80
26	14	1926	U	N3-C2-O2	-5.33	118.47	122.20
26	1H	728	G	OP2-P-O3'	5.32	116.91	105.20
26	1H	763	G	N3-C4-N9	5.32	129.19	126.00
26	1H	2571	C	C6-N1-C2	-5.32	118.17	120.30
26	14	756	C	C6-N1-C2	-5.32	118.17	120.30
26	14	2712(A)	A	C8-N9-C4	5.32	107.93	105.80
1	13	880	C	C6-N1-C2	5.32	122.43	120.30
26	1H	391	G	N9-C4-C5	-5.32	103.27	105.40
26	1H	799	G	OP1-P-OP2	-5.32	111.62	119.60
26	1H	2267	A	OP2-P-O3'	-5.32	93.49	105.20
26	1H	2373	G	C6-N1-C2	-5.32	121.91	125.10
26	14	2615	U	C2-N1-C1'	5.32	124.09	117.70
1	13	532	A	O4'-C1'-N9	5.32	112.46	108.20
1	13	1513	A	OP2-P-O3'	5.32	116.90	105.20
26	1H	471	A	C5-C6-N1	-5.32	115.04	117.70
26	1H	631	A	C8-N9-C4	5.32	107.93	105.80
26	1H	939	G	C5-C6-O6	5.32	131.79	128.60
26	1H	1257	C	N1-C2-O2	-5.32	115.71	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1407	C	OP1-P-O3'	5.32	116.91	105.20
27	16	47	C	N3-C2-O2	5.32	125.62	121.90
1	13	1205	U	C5-C4-O4	5.32	129.09	125.90
26	1H	2295	C	C5-C6-N1	5.32	123.66	121.00
1	13	1505	G	O5'-P-OP2	5.32	117.08	110.70
26	1H	271(B)	G	C8-N9-C1'	-5.32	120.09	127.00
1	1G	108	G	C6-C5-N7	-5.32	127.21	130.40
26	14	1355	G	C8-N9-C4	-5.32	104.27	106.40
26	14	1657	C	N3-C2-O2	-5.32	118.18	121.90
26	14	1956	U	O5'-P-OP2	-5.32	100.91	105.70
26	14	2817	G	OP1-P-OP2	5.32	127.58	119.60
26	1H	1310	G	O5'-P-OP1	-5.32	100.92	105.70
1	1G	293	G	C6-C5-N7	-5.32	127.21	130.40
1	1G	913	A	OP2-P-O3'	5.32	116.89	105.20
26	14	2767	C	C6-N1-C2	-5.32	118.17	120.30
1	13	1299	A	C8-N9-C4	-5.31	103.67	105.80
26	1H	27	G	O4'-C1'-N9	5.31	112.45	108.20
26	14	1339	G	O5'-P-OP1	-5.31	100.92	105.70
26	1H	1373	A	O5'-P-OP2	-5.31	100.92	105.70
26	14	810	U	OP1-P-O3'	5.31	116.89	105.20
26	14	1558	A	P-O3'-C3'	5.31	126.07	119.70
26	14	1784	A	N1-C2-N3	5.31	131.96	129.30
27	1J	75	G	O5'-P-OP2	-5.31	100.92	105.70
1	13	129	U	C5-C4-O4	5.31	129.09	125.90
26	1H	1647	G	O5'-P-OP2	5.31	117.07	110.70
26	1H	2424	C	O5'-P-OP1	-5.31	100.92	105.70
1	13	1329	A	C4-C5-N7	5.31	113.36	110.70
26	1H	1298	C	C5-C6-N1	5.31	123.66	121.00
26	1H	1356	G	N3-C4-C5	5.31	131.25	128.60
26	1H	1962	C	N3-C2-O2	5.31	125.62	121.90
26	14	788	A	N1-C6-N6	5.31	121.79	118.60
26	14	2367	G	N7-C8-N9	5.31	115.75	113.10
26	1H	217	G	C4-C5-N7	-5.31	108.68	110.80
26	1H	528	A	N7-C8-N9	5.31	116.45	113.80
26	1H	1785	A	OP2-P-O3'	5.31	116.88	105.20
26	1H	1814	G	C6-N1-C2	-5.31	121.92	125.10
26	1H	2822	G	C4-C5-N7	5.31	112.92	110.80
26	14	951	C	OP1-P-O3'	5.31	116.88	105.20
26	14	963	U	O5'-P-OP2	5.31	117.07	110.70
26	14	1402	C	N3-C4-C5	-5.31	119.78	121.90
26	14	2844	G	C5-C6-O6	-5.31	125.42	128.60
27	1J	71	C	C6-N1-C2	-5.31	118.18	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	677	A	N1-C6-N6	-5.31	115.42	118.60
26	1H	1334	G	C8-N9-C4	-5.31	104.28	106.40
26	14	2042	A	C8-N9-C4	5.31	107.92	105.80
27	1J	81	G	C4-C5-N7	5.31	112.92	110.80
26	1H	2477	C	C6-N1-C2	-5.30	118.18	120.30
26	14	1367	A	C5-C6-N6	-5.30	119.46	123.70
23	2K	48	U	OP2-P-O3'	5.30	116.87	105.20
26	1H	1973	G	N3-C4-C5	-5.30	125.95	128.60
26	1H	2439	A	C2-N3-C4	-5.30	107.95	110.60
26	1H	309	G	C8-N9-C4	-5.30	104.28	106.40
26	1H	552	G	O5'-P-OP1	5.30	117.06	110.70
26	1H	815	C	N3-C4-C5	5.30	124.02	121.90
26	1H	945	A	N9-C1'-C2'	5.30	120.89	114.00
28	19	43	ARG	NE-CZ-NH2	-5.30	117.65	120.30
26	1H	389	G	C8-N9-C4	5.30	108.52	106.40
26	1H	590	A	N1-C2-N3	5.30	131.95	129.30
26	1H	680	G	O5'-P-OP1	-5.30	100.93	105.70
26	1H	1546	C	C5-C6-N1	5.30	123.65	121.00
26	1H	2766	G	N1-C6-O6	5.30	123.08	119.90
42	95	18	LEU	CA-CB-CG	5.30	127.49	115.30
1	13	901	A	C5-N7-C8	-5.30	101.25	103.90
26	1H	2354	G	OP1-P-O3'	5.30	116.86	105.20
27	16	41	U	O5'-P-OP1	-5.30	100.93	105.70
26	1H	480	A	N1-C6-N6	5.30	121.78	118.60
26	1H	2434	A	OP2-P-O3'	5.30	116.85	105.20
1	1G	943	U	C2-N1-C1'	5.30	124.06	117.70
26	14	2387	U	OP2-P-O3'	5.30	116.85	105.20
26	14	2440	C	C2-N1-C1'	-5.30	112.97	118.80
26	1H	2424	C	C4-C5-C6	-5.29	114.75	117.40
1	1G	1062	U	O5'-P-OP2	-5.29	100.94	105.70
26	14	828	U	OP2-P-O3'	5.29	116.85	105.20
26	1H	1198	U	C5-C6-N1	-5.29	120.05	122.70
26	1H	1787	A	C2-N3-C4	-5.29	107.95	110.60
26	1H	2381	C	C5-C4-N4	-5.29	116.50	120.20
26	1H	2867	G	O5'-P-OP1	-5.29	100.94	105.70
26	14	2509	G	N1-C6-O6	5.29	123.08	119.90
1	13	108	G	C4-C5-N7	5.29	112.92	110.80
26	1H	1621	U	C5-C4-O4	-5.29	122.72	125.90
26	1H	1705	G	OP1-P-OP2	-5.29	111.66	119.60
26	14	1821	A	C6-C5-N7	-5.29	128.60	132.30
26	14	2873	A	N9-C1'-C2'	5.29	120.88	114.00
26	1H	685	A	C4-C5-N7	5.29	113.34	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	764	A	OP1-P-O3'	5.29	116.84	105.20
26	1H	2299	G	N7-C8-N9	5.29	115.75	113.10
26	1H	2435	A	N7-C8-N9	5.29	116.44	113.80
27	16	98	G	N9-C4-C5	-5.29	103.28	105.40
26	14	140	A	C5-C6-N6	-5.29	119.47	123.70
26	14	1908	C	N3-C4-C5	-5.29	119.78	121.90
26	14	2084	C	N1-C2-O2	-5.29	115.73	118.90
26	14	2610	C	N1-C2-N3	-5.29	115.50	119.20
23	2K	62	C	C6-N1-C2	-5.29	118.19	120.30
26	1H	645	C	C5-C6-N1	5.29	123.64	121.00
26	1H	1959	G	C2-N3-C4	5.29	114.54	111.90
26	1H	2253	G	N9-C4-C5	5.29	107.52	105.40
26	14	127	A	O5'-P-OP2	-5.29	100.94	105.70
26	14	503	A	N9-C4-C5	5.29	107.92	105.80
26	14	866	A	N9-C4-C5	-5.29	103.69	105.80
26	1H	1382	G	C6-C5-N7	-5.29	127.23	130.40
26	1H	2488	A	N1-C2-N3	5.29	131.94	129.30
1	13	644	G	O5'-P-OP2	-5.29	100.94	105.70
26	1H	58	G	N9-C4-C5	5.29	107.51	105.40
26	1H	321	G	N9-C4-C5	-5.29	103.29	105.40
26	1H	844	C	N3-C4-C5	-5.29	119.79	121.90
26	1H	2511	U	N3-C2-O2	-5.29	118.50	122.20
26	1H	2711	A	OP2-P-O3'	-5.29	93.57	105.20
26	14	2585	U	OP1-P-O3'	5.29	116.83	105.20
1	13	570	G	C2-N3-C4	5.28	114.54	111.90
26	1H	448	U	C4-C5-C6	5.28	122.87	119.70
26	1H	683	C	C5-C4-N4	-5.28	116.50	120.20
26	1H	828	U	C6-N1-C1'	-5.28	113.80	121.20
49	K8	59	ARG	NE-CZ-NH2	5.28	122.94	120.30
26	14	1142	U	C6-N1-C1'	-5.28	113.80	121.20
26	14	1290	C	OP1-P-OP2	5.28	127.52	119.60
26	14	1292	U	C5-C4-O4	-5.28	122.73	125.90
26	14	1598	C	C2-N1-C1'	5.28	124.61	118.80
26	14	1786	A	N3-C4-C5	5.28	130.50	126.80
26	1H	1294	U	O5'-P-OP1	-5.28	100.95	105.70
26	14	1673	U	O5'-P-OP2	5.28	117.04	110.70
26	14	1904	G	O5'-P-OP2	-5.28	100.95	105.70
1	13	542	G	C5-N7-C8	-5.28	101.66	104.30
26	1H	335	C	C2-N3-C4	5.28	122.54	119.90
26	1H	1901	A	OP1-P-O3'	5.28	116.82	105.20
26	1H	2199	A	C8-N9-C4	-5.28	103.69	105.80
26	1H	2665	A	O4'-C1'-N9	5.28	112.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	894	G	N1-C6-O6	5.28	123.07	119.90
26	14	1271	G	C5-C6-O6	5.28	131.77	128.60
26	1H	2532	G	C6-C5-N7	-5.28	127.23	130.40
1	1G	932	C	N3-C2-O2	-5.28	118.20	121.90
26	14	1313	U	OP1-P-O3'	5.28	116.81	105.20
1	13	53	A	N1-C6-N6	5.28	121.77	118.60
26	1H	678	C	P-O3'-C3'	-5.28	113.37	119.70
26	1H	713	G	C5-C6-N1	-5.28	108.86	111.50
26	1H	1325	G	N1-C6-O6	5.28	123.07	119.90
27	16	19	G	N3-C4-C5	5.28	131.24	128.60
26	14	945	A	C5-C6-N1	-5.28	115.06	117.70
26	14	1349	A	N1-C6-N6	5.28	121.77	118.60
1	13	275	G	N3-C4-N9	5.28	129.17	126.00
26	1H	629	G	C2-N3-C4	-5.28	109.26	111.90
26	1H	1905	C	OP1-P-OP2	-5.28	111.69	119.60
26	1H	2506	U	C2-N1-C1'	5.28	124.03	117.70
1	13	1491	G	OP2-P-O3'	5.27	116.80	105.20
26	1H	663	G	C4-N9-C1'	5.27	133.36	126.50
26	1H	682	G	C8-N9-C4	5.27	108.51	106.40
26	14	130	C	C5-C4-N4	-5.27	116.51	120.20
26	1H	354	G	C5-C6-O6	-5.27	125.44	128.60
26	1H	410	G	O5'-P-OP2	5.27	117.03	110.70
26	1H	1908	C	O5'-P-OP2	-5.27	100.96	105.70
26	1H	2363	C	OP2-P-O3'	5.27	116.80	105.20
26	14	768	G	O5'-P-OP2	-5.27	100.95	105.70
26	14	2230	G	C5-C6-O6	5.27	131.76	128.60
26	1H	533	G	C4-C5-N7	-5.27	108.69	110.80
26	1H	1790	C	C2-N3-C4	-5.27	117.26	119.90
26	14	661	C	N3-C4-C5	-5.27	119.79	121.90
1	13	701	C	N1-C2-O2	5.27	122.06	118.90
1	13	1197	G	OP1-P-O3'	5.27	116.79	105.20
26	1H	617	G	N3-C2-N2	5.27	123.59	119.90
26	1H	983	A	N7-C8-N9	-5.27	111.17	113.80
26	1H	1380	G	N1-C2-N3	5.27	127.06	123.90
26	1H	1633	G	OP2-P-O3'	5.27	116.79	105.20
26	1H	2561	A	N1-C2-N3	5.27	131.94	129.30
34	58	15	LEU	CA-CB-CG	5.27	127.42	115.30
1	13	413	G	C8-N9-C4	-5.27	104.29	106.40
26	1H	131	G	N1-C6-O6	5.27	123.06	119.90
26	1H	585	G	C5-C6-O6	-5.27	125.44	128.60
26	1H	612	G	N1-C6-O6	-5.27	116.74	119.90
26	1H	1021	A	C4-C5-N7	5.27	113.33	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1899	G	C5-C6-O6	5.27	131.76	128.60
1	1G	1270	C	C5-C6-N1	5.27	123.63	121.00
1	1G	1374	A	O4'-C1'-N9	5.27	112.41	108.20
26	14	141(A)	C	C6-N1-C2	-5.27	118.19	120.30
26	14	773	U	C5-C6-N1	-5.27	120.07	122.70
26	14	1616	A	C6-C5-N7	-5.27	128.61	132.30
26	14	2329	G	C6-N1-C2	-5.27	121.94	125.10
1	13	550	G	N1-C2-N2	5.27	120.94	116.20
23	2K	76	C	N3-C4-N4	5.27	121.69	118.00
26	1H	837	C	C6-N1-C2	-5.27	118.19	120.30
1	1G	784	C	C6-N1-C2	5.27	122.41	120.30
26	14	1806	C	OP2-P-O3'	5.27	116.79	105.20
1	13	529	G	C4-C5-N7	5.26	112.91	110.80
26	1H	1394	U	O5'-P-OP2	5.26	117.02	110.70
26	1H	1926	U	O5'-P-OP2	-5.26	100.96	105.70
26	1H	2210	G	N7-C8-N9	5.26	115.73	113.10
26	1H	2866	U	C5-C4-O4	5.26	129.06	125.90
46	H8	24	LEU	CA-CB-CG	5.26	127.41	115.30
26	14	821	A	C6-C5-N7	-5.26	128.62	132.30
1	13	1099	G	C8-N9-C4	-5.26	104.30	106.40
26	1H	188	G	O5'-P-OP2	-5.26	100.96	105.70
26	1H	736	C	O5'-P-OP2	5.26	117.01	110.70
26	1H	1188	U	OP2-P-O3'	5.26	116.78	105.20
26	1H	1990	C	N3-C2-O2	-5.26	118.22	121.90
26	1H	2069	G	C8-N9-C4	5.26	108.50	106.40
26	1H	2830	G	N7-C8-N9	5.26	115.73	113.10
48	J8	41	ARG	NE-CZ-NH1	5.26	122.93	120.30
26	14	252	G	C4-C5-N7	-5.26	108.69	110.80
26	14	775	G	C6-N1-C2	-5.26	121.94	125.10
26	14	2542	A	C5-N7-C8	5.26	106.53	103.90
26	1H	621	A	C5-C6-N1	-5.26	115.07	117.70
26	1H	1819	A	N1-C6-N6	5.26	121.75	118.60
1	1G	388	G	C5-C6-O6	5.26	131.75	128.60
1	13	185	A	C8-N9-C4	-5.26	103.70	105.80
1	13	285	G	C8-N9-C4	5.26	108.50	106.40
26	14	756	C	C2-N3-C4	5.26	122.53	119.90
26	14	1556	C	C6-N1-C2	5.26	122.40	120.30
1	1G	1397	C	C5-C6-N1	5.25	123.63	121.00
26	14	415	A	O5'-P-OP2	-5.25	100.97	105.70
26	14	2523	G	N1-C6-O6	5.25	123.05	119.90
24	3K	71	G	C8-N9-C1'	5.25	133.83	127.00
26	1H	191	A	O5'-P-OP1	5.25	117.00	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	729	G	N3-C2-N2	-5.25	116.22	119.90
26	1H	911	A	C5-N7-C8	-5.25	101.27	103.90
26	1H	1408	C	OP1-P-O3'	5.25	116.76	105.20
26	1H	1566	A	O5'-P-OP1	5.25	117.00	110.70
26	1H	2424	C	C5-C6-N1	5.25	123.63	121.00
26	1H	2547	U	N3-C4-O4	5.25	123.08	119.40
26	1H	266	G	O5'-P-OP2	-5.25	100.97	105.70
26	1H	864	G	C2-N3-C4	5.25	114.53	111.90
26	1H	1357	U	C4-C5-C6	5.25	122.85	119.70
26	1H	2396	G	N3-C4-N9	-5.25	122.85	126.00
1	1G	28	G	N7-C8-N9	5.25	115.73	113.10
1	1G	1465	C	N1-C2-O2	5.25	122.05	118.90
26	14	476	G	N1-C6-O6	5.25	123.05	119.90
26	14	773	U	N1-C2-N3	5.25	118.05	114.90
26	14	2490	G	C8-N9-C4	-5.25	104.30	106.40
26	1H	782	A	C2-N3-C4	-5.25	107.97	110.60
1	1G	1487	G	N3-C2-N2	-5.25	116.22	119.90
26	14	2501	C	N3-C2-O2	5.25	125.58	121.90
26	14	2755	C	C2-N1-C1'	5.25	124.58	118.80
1	13	994	A	C2-N3-C4	5.25	113.22	110.60
26	1H	59	U	N3-C4-C5	-5.25	111.45	114.60
26	1H	791	C	P-O3'-C3'	5.25	126.00	119.70
26	1H	870	A	C5-C6-N1	5.25	120.32	117.70
26	1H	2056	G	OP1-P-O3'	5.25	116.75	105.20
26	1H	2491	U	N1-C2-N3	-5.25	111.75	114.90
26	14	97	C	O5'-P-OP2	-5.25	100.98	105.70
26	14	863	A	C8-N9-C4	-5.25	103.70	105.80
26	14	978	G	O5'-P-OP2	-5.25	100.98	105.70
26	14	1770	G	C8-N9-C4	-5.25	104.30	106.40
26	14	2038	G	C4-C5-N7	5.25	112.90	110.80
1	13	738	C	C5-C6-N1	5.25	123.62	121.00
26	1H	321	G	C4-N9-C1'	5.25	133.32	126.50
26	1H	2469	A	C4-C5-N7	5.25	113.32	110.70
1	1G	690	G	C4-C5-N7	5.25	112.90	110.80
23	2L	24	C	C6-N1-C2	-5.25	118.20	120.30
26	14	774	A	C5-C6-N1	-5.25	115.08	117.70
26	14	911	A	OP2-P-O3'	-5.25	93.66	105.20
1	13	1404	C	N1-C2-O2	-5.25	115.75	118.90
26	1H	624	C	C5-C4-N4	-5.25	116.53	120.20
26	1H	946	G	C5-N7-C8	5.25	106.92	104.30
26	14	2406	U	O4'-C1'-N1	-5.25	104.00	108.20
26	1H	937	U	N3-C2-O2	5.24	125.87	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	945	A	C6-N1-C2	-5.24	115.45	118.60
26	1H	1246	A	N1-C2-N3	5.24	131.92	129.30
26	1H	1369	G	C5-N7-C8	5.24	106.92	104.30
26	1H	1381	G	C4-C5-N7	-5.24	108.70	110.80
26	1H	1939	U	C4-C5-C6	-5.24	116.55	119.70
26	1H	2414	G	N3-C2-N2	-5.24	116.23	119.90
26	1H	2433	A	C4-C5-C6	5.24	119.62	117.00
26	1H	2580	U	OP2-P-O3'	5.24	116.74	105.20
26	1H	2731	G	C4-C5-N7	5.24	112.90	110.80
26	14	1334	G	O5'-P-OP1	-5.24	100.98	105.70
1	1G	893	C	N1-C2-O2	5.24	122.05	118.90
26	14	2070	G	C2-N3-C4	-5.24	109.28	111.90
1	13	1508	G	C6-C5-N7	5.24	133.54	130.40
26	1H	869	G	N3-C2-N2	5.24	123.57	119.90
26	1H	1464	C	O5'-P-OP1	-5.24	100.98	105.70
27	16	79	C	C5-C4-N4	-5.24	116.53	120.20
1	1G	115	G	P-O3'-C3'	5.24	125.99	119.70
26	14	1955	U	C5-C4-O4	5.24	129.04	125.90
1	13	452	A	C8-N9-C4	5.24	107.89	105.80
1	13	513	C	C2-N3-C4	5.24	122.52	119.90
26	1H	314	A	C4-C5-C6	-5.24	114.38	117.00
26	1H	1007	C	N1-C2-O2	-5.24	115.76	118.90
26	1H	1163	G	C8-N9-C4	-5.24	104.30	106.40
26	1H	1264	G	N3-C4-C5	-5.24	125.98	128.60
26	1H	1278	A	N9-C4-C5	-5.24	103.70	105.80
26	1H	1788	C	N1-C2-O2	5.24	122.04	118.90
26	1H	2085	C	N3-C2-O2	5.24	125.57	121.90
26	1H	2271	G	C8-N9-C1'	-5.24	120.19	127.00
1	1G	904	C	C6-N1-C2	-5.24	118.20	120.30
26	14	1805	U	N1-C2-N3	5.24	118.04	114.90
1	13	63	C	C5-C6-N1	5.24	123.62	121.00
1	1G	525	C	C5-C6-N1	5.24	123.62	121.00
26	14	1297	C	OP1-P-O3'	5.24	116.72	105.20
26	14	2437	U	N3-C4-O4	-5.24	115.73	119.40
26	1H	116	C	OP2-P-O3'	5.24	116.72	105.20
26	1H	409	C	C6-N1-C2	5.24	122.39	120.30
26	1H	831	G	N7-C8-N9	-5.24	110.48	113.10
26	1H	944	G	C4-N9-C1'	5.24	133.31	126.50
26	14	270(U)	C	C5-C6-N1	5.24	123.62	121.00
26	14	603	A	O4'-C1'-N9	5.24	112.39	108.20
26	14	776	G	N1-C6-O6	5.24	123.04	119.90
1	13	101	A	N1-C6-N6	5.23	121.74	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	387	U	OP1-P-O3'	5.23	116.71	105.20
26	1H	575	A	C6-N1-C2	-5.23	115.46	118.60
26	1H	128	C	C5-C6-N1	-5.23	118.38	121.00
26	1H	963	U	OP1-P-OP2	-5.23	111.75	119.60
26	1H	1200	C	N3-C4-C5	-5.23	119.81	121.90
26	1H	1681	G	C4-C5-N7	5.23	112.89	110.80
26	1H	1838	C	C6-N1-C2	5.23	122.39	120.30
26	1H	2870	C	OP2-P-O3'	5.23	116.71	105.20
1	1G	316	G	OP1-P-O3'	5.23	116.71	105.20
26	14	2235	G	N3-C4-C5	-5.23	125.98	128.60
26	1H	914	C	C6-N1-C1'	5.23	127.08	120.80
26	1H	946	G	OP1-P-OP2	-5.23	111.75	119.60
26	1H	2359	C	O5'-P-OP1	-5.23	100.99	105.70
26	14	2826	A	N1-C6-N6	-5.23	115.46	118.60
26	1H	1836	C	C6-N1-C2	-5.23	118.21	120.30
26	1H	2583	G	N7-C8-N9	5.23	115.71	113.10
26	14	624	C	N1-C2-O2	-5.23	115.76	118.90
26	14	1302	A	N9-C4-C5	5.23	107.89	105.80
26	14	1819	A	P-O3'-C3'	5.23	125.97	119.70
23	2K	63	C	N1-C2-O2	5.23	122.03	118.90
26	1H	586	A	C2-N3-C4	5.23	113.21	110.60
26	1H	2378	A	C8-N9-C4	5.23	107.89	105.80
26	1H	2506	U	P-O3'-C3'	5.23	125.97	119.70
26	14	1618	A	N9-C4-C5	5.23	107.89	105.80
26	1H	779	U	N3-C2-O2	5.22	125.86	122.20
26	1H	1571	A	C6-N1-C2	-5.22	115.47	118.60
26	1H	1899	G	N7-C8-N9	5.22	115.71	113.10
26	1H	2708	G	C5-C6-O6	-5.22	125.47	128.60
26	14	1001	A	O5'-P-OP1	-5.22	101.00	105.70
26	14	1811	G	C5-C6-O6	-5.22	125.47	128.60
1	13	23	C	N3-C4-C5	-5.22	119.81	121.90
1	13	949	A	N7-C8-N9	-5.22	111.19	113.80
1	13	1402	C	C5-C4-N4	5.22	123.86	120.20
26	1H	534	U	OP1-P-OP2	5.22	127.43	119.60
41	C8	74	LEU	CA-CB-CG	5.22	127.31	115.30
1	1G	380	G	N9-C4-C5	5.22	107.49	105.40
1	1G	667	G	N1-C6-O6	5.22	123.03	119.90
1	1G	1496	C	O5'-P-OP2	-5.22	101.00	105.70
1	13	949	A	C8-N9-C4	5.22	107.89	105.80
26	1H	1808	U	N3-C4-O4	5.22	123.05	119.40
26	14	819	A	N7-C8-N9	5.22	116.41	113.80
26	14	2497	A	O5'-P-OP2	5.22	116.97	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1805	U	OP2-P-O3'	5.22	116.68	105.20
27	16	56	G	C4-N9-C1'	5.22	133.29	126.50
26	14	67	U	N3-C4-C5	-5.22	111.47	114.60
26	14	470	A	N1-C6-N6	5.22	121.73	118.60
26	14	835	A	C5-C6-N1	5.22	120.31	117.70
27	1J	14	U	OP1-P-OP2	5.22	127.43	119.60
26	1H	2074	U	C5-C4-O4	5.22	129.03	125.90
26	1H	2079	U	N3-C4-O4	5.22	123.05	119.40
26	14	270(Q)	C	C5-C6-N1	5.22	123.61	121.00
26	14	1672	C	N3-C4-C5	-5.22	119.81	121.90
26	14	1779	U	C6-N1-C1'	-5.22	113.89	121.20
26	14	2274	A	C5-N7-C8	-5.22	101.29	103.90
1	13	1502	A	C5-C6-N6	-5.22	119.53	123.70
26	1H	321	G	C8-N9-C1'	-5.22	120.22	127.00
26	1H	985	C	OP1-P-OP2	-5.22	111.78	119.60
26	1H	1391	U	N3-C4-O4	5.22	123.05	119.40
26	1H	2502	G	C5-C6-N1	5.22	114.11	111.50
27	16	50	G	OP2-P-O3'	5.22	116.68	105.20
26	14	35	G	N3-C2-N2	-5.22	116.25	119.90
27	1J	116	G	N1-C6-O6	5.22	123.03	119.90
26	1H	763	G	C4-C5-N7	5.21	112.89	110.80
26	1H	938	G	N1-C6-O6	-5.21	116.77	119.90
26	1H	1644	C	C2-N1-C1'	5.21	124.54	118.80
26	1H	2068	U	O5'-P-OP1	-5.21	101.01	105.70
26	1H	2337	G	OP1-P-OP2	-5.21	111.78	119.60
1	1G	345	C	C2-N1-C1'	5.21	124.54	118.80
26	14	680	G	N1-C6-O6	-5.21	116.77	119.90
26	14	797	C	N3-C4-C5	-5.21	119.81	121.90
26	14	801	G	C6-C5-N7	5.21	133.53	130.40
26	14	1324	G	C5-C6-O6	-5.21	125.47	128.60
1	13	1286	A	C8-N9-C4	-5.21	103.72	105.80
26	14	1590	U	O5'-P-OP1	-5.21	101.01	105.70
26	14	1997	G	C6-N1-C2	-5.21	121.97	125.10
26	14	2689	U	P-O3'-C3'	5.21	125.96	119.70
27	1J	12	C	N3-C2-O2	-5.21	118.25	121.90
1	13	1483	A	C5-N7-C8	-5.21	101.29	103.90
26	1H	397	G	N3-C4-C5	5.21	131.21	128.60
26	1H	835	A	C8-N9-C4	-5.21	103.72	105.80
26	1H	2494	G	N3-C2-N2	-5.21	116.25	119.90
27	16	60	C	N1-C2-O2	5.21	122.03	118.90
1	1G	666	G	C6-C5-N7	-5.21	127.27	130.40
26	14	800	A	OP1-P-OP2	-5.21	111.78	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	921	G	N9-C4-C5	5.21	107.48	105.40
26	14	1778	U	N3-C2-O2	5.21	125.85	122.20
26	14	2602	A	N1-C6-N6	-5.21	115.47	118.60
33	69	77	LEU	CA-CB-CG	5.21	127.28	115.30
26	1H	450	G	C5-C6-N1	-5.21	108.89	111.50
26	14	1672	C	N1-C2-O2	-5.21	115.77	118.90
26	14	2423	U	C2-N1-C1'	-5.21	111.45	117.70
26	1H	324	A	C4-C5-C6	5.21	119.60	117.00
26	1H	411	G	N3-C2-N2	-5.21	116.25	119.90
26	1H	600	G	C2-N3-C4	-5.21	109.30	111.90
26	1H	1274	A	C4-C5-C6	5.21	119.60	117.00
26	1H	1624	G	N7-C8-N9	-5.21	110.50	113.10
26	1H	1660	C	C6-N1-C2	-5.21	118.22	120.30
26	1H	2862	G	OP1-P-O3'	5.21	116.66	105.20
26	14	949	C	OP2-P-O3'	5.21	116.66	105.20
1	13	1358	U	C5-C4-O4	-5.21	122.78	125.90
26	1H	1939	U	C5-C4-O4	-5.21	122.78	125.90
26	14	83	G	C8-N9-C4	-5.21	104.32	106.40
26	14	2243	U	OP1-P-O3'	-5.21	93.74	105.20
1	13	721	G	N3-C4-C5	-5.21	126.00	128.60
26	1H	928	G	C4-C5-N7	5.21	112.88	110.80
26	1H	2060	A	C4-N9-C1'	-5.21	116.93	126.30
26	14	1216	G	C4-C5-C6	5.21	121.92	118.80
26	14	1605	C	OP1-P-OP2	5.21	127.41	119.60
23	2K	58	A	OP1-P-OP2	-5.20	111.79	119.60
26	1H	815	C	O5'-P-OP2	-5.20	101.02	105.70
26	1H	2215	G	C8-N9-C4	5.20	108.48	106.40
26	14	571	A	N1-C6-N6	5.20	121.72	118.60
26	14	1809	A	OP1-P-OP2	-5.20	111.79	119.60
26	14	1950	G	N1-C6-O6	-5.20	116.78	119.90
48	F5	29	GLY	N-CA-C	5.20	126.11	113.10
26	14	386	G	C6-C5-N7	-5.20	127.28	130.40
26	14	2700	C	N1-C2-O2	5.20	122.02	118.90
26	1H	740	U	OP1-P-O3'	-5.20	93.76	105.20
26	1H	1229(A)	G	C2-N3-C4	-5.20	109.30	111.90
26	14	573	G	N9-C4-C5	5.20	107.48	105.40
26	14	738	G	O5'-P-OP2	-5.20	101.02	105.70
26	14	2239	G	OP2-P-O3'	5.20	116.64	105.20
1	13	402	G	O5'-P-OP1	5.20	116.94	110.70
26	1H	579	G	C6-N1-C2	5.20	128.22	125.10
26	1H	845	G	C8-N9-C1'	5.20	133.76	127.00
26	1H	2327	A	C2-N3-C4	5.20	113.20	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2330	G	N9-C4-C5	-5.20	103.32	105.40
26	1H	2490	G	O4'-C1'-N9	5.20	112.36	108.20
26	1H	2636	U	O5'-P-OP1	-5.20	101.02	105.70
26	14	646	A	C8-N9-C4	-5.20	103.72	105.80
1	13	571	U	C5-C6-N1	5.20	125.30	122.70
26	1H	729	G	C5-N7-C8	-5.20	101.70	104.30
26	1H	754	C	C2-N3-C4	-5.20	117.30	119.90
26	1H	950	G	N1-C6-O6	5.20	123.02	119.90
26	1H	953	A	O5'-P-OP2	-5.20	101.02	105.70
26	1H	2416	C	O5'-P-OP2	-5.20	101.02	105.70
26	14	2060	A	O4'-C1'-N9	5.20	112.36	108.20
26	1H	1936	A	C6-C5-N7	-5.20	128.66	132.30
26	1H	2072	G	OP1-P-OP2	-5.20	111.81	119.60
26	1H	2251	G	N3-C4-C5	-5.20	126.00	128.60
27	16	110	G	C8-N9-C4	-5.20	104.32	106.40
26	14	226	G	C6-C5-N7	-5.20	127.28	130.40
26	14	2544	G	N1-C6-O6	5.20	123.02	119.90
26	14	2607	G	N3-C4-N9	5.20	129.12	126.00
1	13	56	U	C6-N1-C2	-5.19	117.88	121.00
26	1H	807	U	OP1-P-OP2	5.19	127.39	119.60
1	13	893	C	C5-C4-N4	-5.19	116.56	120.20
26	1H	1613	G	OP2-P-O3'	5.19	116.62	105.20
26	1H	1673	U	C5-C6-N1	-5.19	120.10	122.70
26	1H	2034	U	C6-N1-C2	-5.19	117.88	121.00
26	14	133	C	N3-C4-C5	5.19	123.98	121.90
26	14	566	U	N3-C4-C5	5.19	117.72	114.60
26	14	2346	A	N9-C1'-C2'	5.19	120.75	114.00
26	1H	428	A	OP1-P-O3'	5.19	116.62	105.20
26	1H	659	C	C2-N1-C1'	-5.19	113.09	118.80
26	1H	2057	A	N1-C2-N3	5.19	131.90	129.30
26	1H	2415	G	C5-C6-O6	-5.19	125.48	128.60
26	14	677	A	O5'-P-OP1	-5.19	101.03	105.70
26	14	1773	A	OP1-P-O3'	5.19	116.62	105.20
26	1H	2373	G	N3-C4-N9	5.19	129.11	126.00
1	1G	1398	A	O4'-C1'-N9	5.19	112.35	108.20
26	14	2258	C	O5'-P-OP1	-5.19	101.03	105.70
26	1H	1195	G	C5-C6-O6	-5.19	125.49	128.60
26	14	511	U	N3-C2-O2	-5.19	118.57	122.20
26	14	2320	A	P-O3'-C3'	5.19	125.92	119.70
39	65	58	LEU	CA-CB-CG	5.19	127.23	115.30
1	13	550	G	N3-C2-N2	-5.19	116.27	119.90
1	13	576	G	C8-N9-C1'	-5.19	120.26	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	991	U	C2-N1-C1'	5.19	123.92	117.70
26	1H	404	C	P-O3'-C3'	5.19	125.92	119.70
26	1H	1900	A	C5'-C4'-O4'	-5.19	102.88	109.10
26	1H	631	A	N7-C8-N9	-5.18	111.21	113.80
26	1H	1303	G	N3-C2-N2	5.18	123.53	119.90
26	1H	1770	G	C8-N9-C4	5.18	108.47	106.40
26	1H	2485	G	N1-C2-N2	-5.18	111.53	116.20
26	14	399	G	N1-C2-N2	-5.18	111.53	116.20
54	L5	8	ASN	CB-CA-C	5.18	120.77	110.40
26	1H	2291	U	OP2-P-O3'	5.18	116.60	105.20
26	1H	2745	C	OP1-P-OP2	-5.18	111.83	119.60
26	1H	2822	G	N9-C4-C5	-5.18	103.33	105.40
1	1G	1489	G	O5'-P-OP2	-5.18	101.04	105.70
26	14	1258	C	OP2-P-O3'	5.18	116.60	105.20
26	14	1807	G	N1-C6-O6	5.18	123.01	119.90
26	14	1967	C	O5'-P-OP2	-5.18	101.04	105.70
26	14	2325	G	C8-N9-C4	-5.18	104.33	106.40
26	14	2331	G	O5'-P-OP2	-5.18	101.04	105.70
26	1H	2577	A	C5-C6-N6	5.18	127.84	123.70
26	1H	2709	G	O5'-P-OP1	5.18	116.92	110.70
26	14	1259	G	OP2-P-O3'	5.18	116.60	105.20
1	13	580	U	N3-C4-O4	-5.18	115.77	119.40
26	1H	77	C	C5-C4-N4	-5.18	116.57	120.20
26	1H	130	C	N3-C4-N4	5.18	121.63	118.00
26	1H	211	A	N9-C4-C5	-5.18	103.73	105.80
26	1H	629	G	O5'-P-OP1	5.18	116.92	110.70
26	1H	2294	C	OP1-P-OP2	-5.18	111.83	119.60
26	14	2380	C	C2-N3-C4	-5.18	117.31	119.90
26	14	2568	C	N3-C2-O2	-5.18	118.27	121.90
26	14	1337	G	OP1-P-O3'	5.18	116.59	105.20
1	13	1322	C	O5'-P-OP2	-5.18	101.04	105.70
1	13	1328	C	N3-C2-O2	5.18	125.52	121.90
26	1H	609	A	N9-C4-C5	-5.18	103.73	105.80
26	1H	2573	C	C6-N1-C2	-5.18	118.23	120.30
26	14	1969	A	OP1-P-OP2	-5.18	111.83	119.60
26	14	1982	C	C2-N3-C4	5.18	122.49	119.90
26	14	2001	A	C6-C5-N7	-5.18	128.68	132.30
26	14	2323	G	C8-N9-C4	5.18	108.47	106.40
1	13	1099	G	N9-C4-C5	5.17	107.47	105.40
1	13	1305	G	C5-C6-N1	-5.17	108.91	111.50
26	1H	46	C	OP2-P-O3'	5.17	116.58	105.20
1	1G	1054	C	N1-C2-O2	5.17	122.00	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	138	G	N7-C8-N9	5.17	115.69	113.10
26	14	1272	A	N1-C2-N3	-5.17	126.71	129.30
1	13	1527	C	C6-N1-C2	-5.17	118.23	120.30
26	1H	1368	G	N3-C4-C5	-5.17	126.01	128.60
26	1H	1416	G	O4'-C1'-N9	5.17	112.34	108.20
26	1H	2252	G	N3-C4-C5	5.17	131.19	128.60
1	1G	553	A	C8-N9-C4	-5.17	103.73	105.80
26	14	2278	A	OP1-P-O3'	5.17	116.58	105.20
26	1H	114	U	N1-C2-O2	5.17	126.42	122.80
26	1H	2256	G	OP2-P-O3'	5.17	116.58	105.20
26	1H	2331	G	N3-C4-C5	5.17	131.19	128.60
1	1G	41	G	C8-N9-C4	5.17	108.47	106.40
26	14	1544	C	N1-C2-O2	5.17	122.00	118.90
1	13	67	C	C6-N1-C2	-5.17	118.23	120.30
1	13	437	U	C6-N1-C2	-5.17	117.90	121.00
1	13	1058	G	OP1-P-OP2	-5.17	111.85	119.60
26	1H	202	U	C4-C5-C6	-5.17	116.60	119.70
26	1H	1640	C	C2-N1-C1'	-5.17	113.11	118.80
26	1H	2705	A	C5-N7-C8	-5.17	101.32	103.90
1	1G	1506	U	O5'-P-OP1	5.17	116.90	110.70
26	1H	952	G	N1-C2-N3	-5.17	120.80	123.90
26	1H	1425	G	N1-C6-O6	-5.17	116.80	119.90
1	1G	1301	U	N3-C2-O2	-5.17	118.58	122.20
26	14	1771	C	OP1-P-O3'	5.17	116.57	105.20
26	14	2256	G	N3-C4-N9	5.17	129.10	126.00
26	1H	257	A	C8-N9-C4	-5.17	103.73	105.80
26	1H	2325	G	C8-N9-C4	-5.17	104.33	106.40
23	2L	30	G	N3-C4-N9	5.17	129.10	126.00
26	14	1678	G	N1-C6-O6	5.17	123.00	119.90
27	16	115	G	N3-C4-C5	-5.16	126.02	128.60
1	1G	774	G	C4-C5-N7	5.16	112.86	110.80
26	14	155	C	N1-C2-O2	5.16	122.00	118.90
26	14	642	G	C5-N7-C8	-5.16	101.72	104.30
26	14	840	C	C6-N1-C2	5.16	122.37	120.30
26	14	1914	C	C2-N1-C1'	5.16	124.48	118.80
26	14	2433	A	OP2-P-O3'	5.16	116.56	105.20
1	1G	793	U	C2-N1-C1'	-5.16	111.51	117.70
26	14	833	U	N3-C4-O4	5.16	123.01	119.40
1	13	1205	U	N1-C2-O2	-5.16	119.19	122.80
1	13	1513	A	N1-C6-N6	5.16	121.70	118.60
26	1H	97	C	OP1-P-OP2	5.16	127.34	119.60
26	1H	698	C	OP1-P-OP2	5.16	127.34	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1597	A	O4'-C1'-N9	5.16	112.33	108.20
26	14	595	C	C5-C6-N1	5.16	123.58	121.00
26	14	2244	U	C2-N1-C1'	-5.16	111.51	117.70
26	14	2365	G	C4-C5-N7	5.16	112.86	110.80
26	14	2423	U	C6-N1-C2	5.16	124.10	121.00
1	13	813	U	N3-C4-C5	5.16	117.69	114.60
1	13	1451	A	C8-N9-C4	-5.16	103.74	105.80
26	1H	755	C	N1-C2-O2	-5.16	115.80	118.90
26	14	828	U	C6-N1-C2	-5.16	117.91	121.00
26	14	1479	G	N1-C6-O6	5.16	123.00	119.90
26	1H	1670	C	C4-C5-C6	5.16	119.98	117.40
26	14	1372	U	N1-C2-N3	5.16	117.99	114.90
26	14	1970	A	C5-C6-N6	5.16	127.83	123.70
26	14	2404	C	O5'-P-OP1	-5.16	101.06	105.70
1	13	782	A	OP2-P-O3'	5.16	116.54	105.20
26	1H	564	C	OP1-P-O3'	5.16	116.54	105.20
26	1H	1674	G	C6-C5-N7	-5.16	127.31	130.40
26	1H	2030	A	N1-C6-N6	5.16	121.69	118.60
26	1H	2301	C	O5'-P-OP1	-5.16	101.06	105.70
26	1H	2548	G	C6-N1-C2	-5.16	122.01	125.10
26	14	828	U	N3-C4-O4	-5.16	115.79	119.40
26	14	2520	C	N1-C2-O2	-5.16	115.81	118.90
26	1H	982	C	C6-N1-C2	-5.15	118.24	120.30
26	1H	1144	G	OP1-P-O3'	5.15	116.54	105.20
26	14	1979	C	C6-N1-C2	-5.15	118.24	120.30
1	13	353	A	OP2-P-O3'	5.15	116.53	105.20
26	1H	302	C	C6-N1-C2	-5.15	118.24	120.30
26	1H	1252	G	O4'-C1'-N9	-5.15	104.08	108.20
26	1H	1891	G	N3-C2-N2	-5.15	116.29	119.90
26	14	2586	C	C5-C4-N4	-5.15	116.59	120.20
26	14	2699	C	N3-C2-O2	5.15	125.51	121.90
1	13	856	C	C5-C6-N1	5.15	123.58	121.00
26	1H	121	G	C6-C5-N7	-5.15	127.31	130.40
26	1H	751	A	C6-N1-C2	-5.15	115.51	118.60
26	1H	1417	C	C6-N1-C2	-5.15	118.24	120.30
26	1H	2089	U	N3-C4-O4	5.15	123.01	119.40
26	1H	2346	A	C5-C6-N1	-5.15	115.12	117.70
26	1H	2602	A	C2-N3-C4	5.15	113.17	110.60
26	1H	122	G	C5-C6-O6	-5.15	125.51	128.60
26	1H	132	G	C4-N9-C1'	5.15	133.19	126.50
26	1H	1982	C	C2-N1-C1'	5.15	124.46	118.80
26	14	1648	C	C6-N1-C2	-5.15	118.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	721	G	N3-C4-N9	5.15	129.09	126.00
26	1H	148	C	OP1-P-OP2	5.15	127.32	119.60
26	1H	432	A	C5-N7-C8	-5.15	101.33	103.90
26	1H	2665	A	N1-C2-N3	5.15	131.87	129.30
43	E8	64	MET	N-CA-C	5.15	124.90	111.00
1	1G	322	C	N3-C4-N4	5.15	121.60	118.00
26	14	1359	A	C4-C5-C6	-5.15	114.43	117.00
26	14	1695	G	N9-C4-C5	-5.15	103.34	105.40
26	1H	814	C	N3-C4-C5	5.15	123.96	121.90
26	1H	939	G	OP2-P-O3'	5.15	116.52	105.20
1	13	812	C	O5'-P-OP2	5.14	116.87	110.70
26	1H	1031	G	N1-C2-N2	-5.14	111.57	116.20
23	2L	41	C	C6-N1-C2	-5.14	118.24	120.30
26	14	459	U	C2-N1-C1'	5.14	123.87	117.70
26	14	518	G	N3-C2-N2	-5.14	116.30	119.90
26	14	1256	G	C6-C5-N7	-5.14	127.31	130.40
26	14	1644	C	N3-C2-O2	-5.14	118.30	121.90
26	14	1950	G	N3-C2-N2	5.14	123.50	119.90
26	1H	70	G	C5-C6-O6	5.14	131.69	128.60
1	1G	180	U	C5-C6-N1	5.14	125.27	122.70
1	1G	1441	G	O5'-P-OP1	-5.14	101.07	105.70
26	14	479	A	P-O3'-C3'	5.14	125.87	119.70
26	14	861	A	O5'-P-OP1	-5.14	101.07	105.70
26	14	1336	A	C6-N1-C2	-5.14	115.52	118.60
1	13	696	A	C8-N9-C4	-5.14	103.74	105.80
1	13	1406	U	OP2-P-O3'	5.14	116.51	105.20
26	14	929	G	C4-N9-C1'	5.14	133.18	126.50
26	14	1236	G	C8-N9-C4	5.14	108.46	106.40
26	14	1849	G	C8-N9-C4	-5.14	104.34	106.40
26	14	1930	G	C8-N9-C1'	5.14	133.68	127.00
26	1H	500	G	C4-C5-N7	-5.14	108.74	110.80
26	1H	748	G	C4-N9-C1'	-5.14	119.82	126.50
26	1H	840	C	C2-N1-C1'	-5.14	113.15	118.80
26	1H	2031	A	C5-C6-N6	-5.14	119.59	123.70
26	1H	2685	G	C4-C5-N7	-5.14	108.75	110.80
26	14	463	G	OP1-P-O3'	5.14	116.51	105.20
26	14	561	G	N3-C4-C5	5.14	131.17	128.60
26	14	621	A	N7-C8-N9	5.14	116.37	113.80
26	14	2584	U	O4'-C1'-N1	5.14	112.31	108.20
26	1H	321	G	C4-C5-C6	5.14	121.88	118.80
26	1H	543	C	C6-N1-C2	5.14	122.36	120.30
26	1H	1225	C	OP1-P-OP2	5.14	127.31	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	2495	G	C5-C6-O6	5.14	131.68	128.60
26	14	2508	G	C5-C6-N1	5.14	114.07	111.50
1	13	1518	A	C5-C6-N1	-5.14	115.13	117.70
26	1H	30	G	N1-C6-O6	-5.14	116.82	119.90
26	1H	2588	G	OP1-P-OP2	-5.14	111.90	119.60
26	14	391	G	C6-C5-N7	-5.14	127.32	130.40
26	14	982	C	C5-C6-N1	5.14	123.57	121.00
26	14	1728	G	N3-C4-N9	5.14	129.08	126.00
23	2K	9	G	C2-N3-C4	5.13	114.47	111.90
26	1H	719	C	C6-N1-C2	-5.13	118.25	120.30
26	1H	1643	G	OP2-P-O3'	5.13	116.50	105.20
26	1H	2713	A	N3-C4-C5	5.13	130.39	126.80
1	1G	769	G	C4-N9-C1'	5.13	133.17	126.50
15	6A	23	GLY	N-CA-C	5.13	125.94	113.10
26	14	561	G	N9-C4-C5	5.13	107.45	105.40
1	13	1332	A	N7-C8-N9	5.13	116.37	113.80
23	2K	31	G	C5-C6-N1	-5.13	108.93	111.50
26	1H	640	C	N3-C4-C5	-5.13	119.85	121.90
26	1H	1625	C	N1-C2-O2	5.13	121.98	118.90
26	1H	2364	C	OP2-P-O3'	5.13	116.49	105.20
26	14	2374	C	C5-C6-N1	-5.13	118.43	121.00
26	1H	655	A	N7-C8-N9	5.13	116.37	113.80
26	1H	919	G	C4-C5-C6	5.13	121.88	118.80
26	1H	1579	A	O5'-P-OP2	-5.13	101.08	105.70
26	14	1409	C	OP1-P-OP2	5.13	127.30	119.60
26	14	1899	G	P-O3'-C3'	5.13	125.86	119.70
26	14	1970	A	N1-C6-N6	-5.13	115.52	118.60
26	14	2673	G	C4-N9-C1'	5.13	133.17	126.50
26	1H	965	C	OP1-P-OP2	5.13	127.30	119.60
26	1H	1781	C	N3-C4-N4	-5.13	114.41	118.00
26	1H	792	G	C6-C5-N7	-5.13	127.32	130.40
26	1H	814	C	C6-N1-C2	5.13	122.35	120.30
26	1H	865	C	OP1-P-OP2	-5.13	111.91	119.60
26	1H	1284	A	N1-C2-N3	5.13	131.86	129.30
1	1G	650	G	N3-C2-N2	-5.13	116.31	119.90
26	14	791	C	C5-C4-N4	-5.13	116.61	120.20
26	14	1301	A	O4'-C1'-N9	5.13	112.30	108.20
1	13	771	G	C5-C6-N1	-5.13	108.94	111.50
1	13	1290	G	N1-C6-O6	5.13	122.97	119.90
26	1H	471	A	C4-C5-N7	5.13	113.26	110.70
26	1H	1281	G	C5-C6-O6	-5.13	125.53	128.60
26	1H	1297	C	N3-C2-O2	-5.13	118.31	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1377	G	C4-C5-C6	5.13	121.88	118.80
26	1H	2079	U	N3-C4-C5	-5.13	111.52	114.60
26	1H	2373	G	N1-C2-N3	5.13	126.98	123.90
26	14	441	U	O5'-P-OP1	-5.13	101.09	105.70
26	14	528	A	N3-C4-C5	5.13	130.39	126.80
26	14	733	G	OP1-P-OP2	5.13	127.29	119.60
26	14	947	G	C5-C6-N1	-5.13	108.94	111.50
26	14	2321	G	C4-N9-C1'	5.13	133.16	126.50
26	14	2574	G	C8-N9-C4	-5.13	104.35	106.40
1	13	904	C	N3-C2-O2	-5.12	118.31	121.90
27	16	110	G	N9-C4-C5	5.12	107.45	105.40
26	14	2700	C	C2-N1-C1'	5.12	124.44	118.80
1	13	235	C	N3-C4-N4	5.12	121.59	118.00
1	13	783	C	C5-C6-N1	-5.12	118.44	121.00
1	13	1501	C	N3-C4-C5	-5.12	119.85	121.90
26	1H	826	U	N3-C4-C5	-5.12	111.53	114.60
26	1H	942	G	N1-C2-N2	5.12	120.81	116.20
26	1H	1816	G	C4-N9-C1'	-5.12	119.84	126.50
26	1H	2048	G	C5-C6-N1	-5.12	108.94	111.50
26	14	1728	G	C2-N3-C4	5.12	114.46	111.90
26	14	2504	U	OP1-P-OP2	-5.12	111.92	119.60
27	1J	61	G	N1-C6-O6	5.12	122.97	119.90
26	1H	293	U	N3-C4-O4	5.12	122.98	119.40
26	1H	1667	G	O5'-P-OP1	-5.12	101.09	105.70
1	1G	1433	A	O5'-P-OP1	-5.12	101.09	105.70
26	14	725	G	N3-C2-N2	-5.12	116.31	119.90
26	14	2587	A	C5-C6-N6	-5.12	119.60	123.70
26	1H	1768	U	OP2-P-O3'	5.12	116.46	105.20
26	1H	2713	A	OP2-P-O3'	5.12	116.47	105.20
26	14	479	A	N1-C6-N6	-5.12	115.53	118.60
1	13	129	U	C2-N1-C1'	-5.12	111.56	117.70
26	1H	2048	G	N7-C8-N9	5.12	115.66	113.10
26	1H	2269	A	N1-C6-N6	5.12	121.67	118.60
26	1H	2351	G	C6-C5-N7	-5.12	127.33	130.40
1	1G	1274	G	N7-C8-N9	5.12	115.66	113.10
26	14	1022	G	P-O3'-C3'	5.12	125.84	119.70
26	14	2332	U	C5-C6-N1	-5.12	120.14	122.70
41	85	20	LEU	CA-CB-CG	5.12	127.07	115.30
26	14	388	G	C5-C6-O6	5.12	131.67	128.60
26	14	593	G	N7-C8-N9	-5.12	110.54	113.10
26	14	2518	A	N9-C4-C5	-5.12	103.75	105.80
1	13	169	C	C6-N1-C2	-5.12	118.25	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	895	G	O5'-P-OP2	-5.12	101.10	105.70
26	1H	868	U	C4-C5-C6	5.12	122.77	119.70
26	1H	1012	U	N3-C2-O2	5.12	125.78	122.20
26	1H	1124	C	C5-C6-N1	-5.12	118.44	121.00
26	1H	1660	C	N1-C2-O2	5.12	121.97	118.90
26	1H	2335	A	O5'-P-OP1	-5.12	101.10	105.70
26	14	2352	A	N1-C2-N3	5.12	131.86	129.30
23	2K	11	A	OP2-P-O3'	5.11	116.45	105.20
26	1H	204	A	C6-N1-C2	-5.11	115.53	118.60
26	1H	2324	C	O5'-P-OP2	-5.11	101.10	105.70
26	1H	2456	C	C4-C5-C6	5.11	119.96	117.40
25	4L	21	C	C2-N1-C1'	5.11	124.42	118.80
26	14	502	A	N1-C2-N3	5.11	131.86	129.30
26	14	677	A	C8-N9-C4	-5.11	103.75	105.80
26	14	775	G	N1-C2-N2	-5.11	111.60	116.20
26	1H	2040	C	N3-C2-O2	5.11	125.48	121.90
27	16	61	G	N7-C8-N9	5.11	115.66	113.10
26	14	683	C	C2-N3-C4	-5.11	117.34	119.90
1	13	975	A	N1-C6-N6	5.11	121.67	118.60
26	1H	1403	C	N3-C2-O2	-5.11	118.32	121.90
26	14	784	A	C5-C6-N6	5.11	127.79	123.70
26	14	1280	G	OP2-P-O3'	5.11	116.44	105.20
27	1J	103	U	C6-N1-C2	5.11	124.07	121.00
1	13	1195	C	N1-C2-O2	-5.11	115.83	118.90
26	1H	451	C	N1-C2-O2	-5.11	115.83	118.90
26	1H	1357	U	N1-C2-N3	5.11	117.97	114.90
26	1H	1767	C	O5'-P-OP1	-5.11	101.10	105.70
1	1G	380	G	C8-N9-C4	-5.11	104.36	106.40
1	13	311	C	C6-N1-C2	-5.11	118.26	120.30
1	13	1331	G	C8-N9-C4	-5.11	104.36	106.40
26	1H	467	G	N1-C6-O6	5.11	122.96	119.90
26	1H	557	U	O5'-P-OP2	-5.11	101.10	105.70
26	1H	826	U	C5-C6-N1	-5.11	120.15	122.70
26	1H	974(A)	C	C2-N1-C1'	5.11	124.42	118.80
26	1H	1688	U	O5'-P-OP2	-5.11	101.10	105.70
26	1H	1910	G	O5'-P-OP1	-5.11	101.10	105.70
1	1G	831	U	C6-N1-C2	-5.11	117.94	121.00
26	14	751	A	OP1-P-OP2	-5.11	111.94	119.60
26	14	1726	G	C8-N9-C4	-5.11	104.36	106.40
1	13	1213	A	OP2-P-O3'	5.11	116.43	105.20
22	1K	34	G	C8-N9-C4	-5.11	104.36	106.40
26	1H	534	U	OP2-P-O3'	5.11	116.43	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	563	G	C8-N9-C4	5.11	108.44	106.40
27	16	73	A	N1-C6-N6	-5.11	115.54	118.60
23	2K	11	A	N1-C6-N6	-5.10	115.54	118.60
26	14	1816	G	O5'-P-OP2	5.10	116.83	110.70
22	1K	33	U	N3-C4-C5	-5.10	111.54	114.60
23	2K	11	A	N9-C4-C5	5.10	107.84	105.80
1	1G	924	C	OP1-P-OP2	5.10	127.25	119.60
26	1H	126	A	OP1-P-O3'	-5.10	93.98	105.20
26	1H	1192	G	N9-C4-C5	-5.10	103.36	105.40
26	1H	2199	A	OP2-P-O3'	5.10	116.42	105.20
26	14	1625	C	O5'-P-OP2	-5.10	101.11	105.70
26	1H	705	A	N9-C4-C5	-5.10	103.76	105.80
26	1H	1357	U	C6-N1-C2	-5.10	117.94	121.00
26	1H	2595	G	C5-N7-C8	-5.10	101.75	104.30
1	1G	1500	A	N1-C6-N6	5.10	121.66	118.60
26	14	621	A	C6-N1-C2	5.10	121.66	118.60
1	13	50	A	P-O3'-C3'	5.10	125.82	119.70
26	1H	199	A	C2-N3-C4	5.10	113.15	110.60
26	1H	237	C	N3-C4-C5	-5.10	119.86	121.90
26	1H	330	A	C4-C5-N7	5.10	113.25	110.70
26	1H	709	U	N1-C2-O2	-5.10	119.23	122.80
26	1H	915	C	OP1-P-OP2	-5.10	111.95	119.60
26	1H	978	G	OP1-P-O3'	5.10	116.42	105.20
26	1H	2075	U	N1-C2-N3	5.10	117.96	114.90
26	14	921	G	N3-C2-N2	-5.10	116.33	119.90
1	13	1479	C	C5-C4-N4	-5.10	116.63	120.20
26	1H	1310	G	N1-C6-O6	5.10	122.96	119.90
26	14	2887	U	O5'-P-OP1	-5.10	101.11	105.70
1	13	23	C	C2-N3-C4	5.09	122.45	119.90
1	13	302	G	N3-C4-C5	-5.09	126.05	128.60
23	2K	25	U	N3-C2-O2	-5.09	118.63	122.20
26	1H	526	A	C5-C6-N6	5.09	127.78	123.70
26	1H	631	A	OP1-P-O3'	5.09	116.41	105.20
26	1H	1142(A)	A	C5-N7-C8	-5.09	101.35	103.90
26	1H	1594	G	N3-C2-N2	-5.09	116.33	119.90
26	1H	2099	U	C6-N1-C2	-5.09	117.94	121.00
26	1H	2430	A	N7-C8-N9	5.09	116.35	113.80
32	51	172	LYS	C-N-CA	5.09	143.39	122.00
26	14	792	G	OP2-P-O3'	5.09	116.41	105.20
26	14	2829	C	N1-C2-O2	-5.09	115.84	118.90
1	13	974	A	N9-C4-C5	-5.09	103.76	105.80
26	1H	1386	C	C5-C6-N1	5.09	123.55	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	1669	A	C5-N7-C8	-5.09	101.35	103.90
26	1H	2578	G	OP2-P-O3'	5.09	116.41	105.20
26	14	1267	U	OP2-P-O3'	5.09	116.41	105.20
1	13	330	C	C6-N1-C2	-5.09	118.26	120.30
1	13	449	C	C2-N1-C1'	5.09	124.40	118.80
1	13	1290	G	C6-C5-N7	-5.09	127.34	130.40
26	1H	1982	C	OP1-P-OP2	5.09	127.24	119.60
1	1G	314	C	C6-N1-C2	-5.09	118.26	120.30
1	1G	413	G	N1-C6-O6	-5.09	116.85	119.90
1	1G	1260	C	C5-C6-N1	5.09	123.55	121.00
26	14	113	G	C8-N9-C4	5.09	108.44	106.40
1	13	918	A	N1-C6-N6	5.09	121.65	118.60
26	1H	68	G	O5'-P-OP1	-5.09	101.12	105.70
26	1H	701	G	C6-C5-N7	-5.09	127.35	130.40
26	1H	1204	A	C3'-C2'-C1'	-5.09	97.43	101.50
26	1H	1814	G	C6-C5-N7	-5.09	127.35	130.40
26	1H	2609	U	N1-C2-N3	5.09	117.95	114.90
26	14	537	C	N1-C2-O2	5.09	121.95	118.90
26	14	1322	A	OP2-P-O3'	5.09	116.40	105.20
26	14	1339	G	C2-N3-C4	-5.09	109.36	111.90
26	14	2318	G	C8-N9-C4	-5.09	104.36	106.40
1	13	527	G	C8-N9-C4	-5.09	104.36	106.40
26	1H	2589	A	C8-N9-C4	5.09	107.83	105.80
26	14	1680	U	OP1-P-O3'	5.09	116.39	105.20
26	14	1681	G	C2-N3-C4	-5.09	109.36	111.90
26	1H	1252	G	C4-C5-N7	-5.09	108.77	110.80
26	14	1394	U	OP1-P-OP2	-5.09	111.97	119.60
26	14	1844	C	OP1-P-OP2	-5.09	111.97	119.60
26	1H	1344	G	C5-N7-C8	-5.08	101.76	104.30
26	1H	1858	G	C6-C5-N7	-5.08	127.35	130.40
26	1H	2011	U	C2-N1-C1'	-5.08	111.60	117.70
26	1H	2638	G	N3-C4-C5	-5.08	126.06	128.60
26	14	1261	C	C2-N3-C4	-5.08	117.36	119.90
26	14	2330	G	N1-C2-N2	-5.08	111.62	116.20
24	3K	76	A	O5'-P-OP1	-5.08	101.12	105.70
26	1H	828	U	N1-C2-N3	-5.08	111.85	114.90
26	1H	1428	C	C2-N3-C4	-5.08	117.36	119.90
26	1H	2487	G	C5-C6-O6	-5.08	125.55	128.60
23	2L	40	C	O5'-P-OP1	-5.08	101.12	105.70
26	14	141	A	O4'-C1'-N9	5.08	112.27	108.20
26	14	774	A	C4-C5-N7	5.08	113.24	110.70
26	14	915	C	N3-C2-O2	-5.08	118.34	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1383	C	N3-C2-O2	5.08	125.46	121.90
26	14	1801	G	C5-C6-O6	-5.08	125.55	128.60
26	14	2715	C	O5'-P-OP1	5.08	116.80	110.70
26	1H	609	A	N7-C8-N9	-5.08	111.26	113.80
26	14	632	A	OP1-P-OP2	-5.08	111.98	119.60
26	14	792	G	N3-C4-N9	5.08	129.05	126.00
26	1H	695	G	N1-C6-O6	-5.08	116.85	119.90
26	1H	1156	A	O5'-P-OP2	-5.08	101.13	105.70
26	1H	1258	C	C6-N1-C1'	5.08	126.89	120.80
26	1H	1791	A	C2-N3-C4	5.08	113.14	110.60
26	1H	2710	C	O5'-P-OP2	5.08	116.80	110.70
26	14	581	C	C6-N1-C2	-5.08	118.27	120.30
1	13	628	G	N1-C6-O6	5.08	122.95	119.90
26	1H	2300	G	N3-C4-C5	-5.08	126.06	128.60
26	1H	2571	C	N3-C4-C5	-5.08	119.87	121.90
26	14	1391	U	C5-C4-O4	-5.08	122.85	125.90
1	13	535	A	C5-C6-N6	5.08	127.76	123.70
26	1H	1139	G	O5'-P-OP2	-5.08	101.13	105.70
26	1H	2197	U	OP2-P-O3'	5.08	116.37	105.20
26	1H	2827	C	N1-C2-O2	-5.08	115.85	118.90
26	14	2579	C	C5-C4-N4	-5.08	116.65	120.20
1	13	304	U	N3-C4-C5	-5.08	111.56	114.60
23	2K	73	A	C8-N9-C4	5.08	107.83	105.80
26	1H	330	A	C6-C5-N7	-5.08	128.75	132.30
26	14	1309	G	C8-N9-C4	5.08	108.43	106.40
1	13	413	G	N9-C4-C5	5.07	107.43	105.40
26	1H	115	C	N1-C2-O2	-5.07	115.86	118.90
26	1H	622	G	C5-N7-C8	5.07	106.84	104.30
26	1H	1792	G	OP1-P-O3'	5.07	116.36	105.20
26	1H	1800	C	C4-C5-C6	5.07	119.94	117.40
26	1H	2243	U	OP1-P-O3'	-5.07	94.04	105.20
26	1H	2379	G	N9-C4-C5	-5.07	103.37	105.40
27	16	45	A	OP1-P-OP2	5.07	127.21	119.60
1	1G	261	U	N3-C2-O2	-5.07	118.65	122.20
26	14	580	C	C6-N1-C2	-5.07	118.27	120.30
26	1H	593	G	N1-C2-N3	5.07	126.94	123.90
26	1H	988	A	OP2-P-O3'	5.07	116.36	105.20
26	1H	1733	G	C5-C6-N1	-5.07	108.96	111.50
26	1H	2587	A	C5-C6-N6	5.07	127.76	123.70
26	1H	2261	C	O5'-P-OP2	-5.07	101.14	105.70
1	1G	284	G	C5-C6-O6	-5.07	125.56	128.60
26	14	1822	G	C5-C6-N1	-5.07	108.96	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	320	C	N3-C2-O2	5.07	125.45	121.90
26	1H	59	U	C5-C4-O4	5.07	128.94	125.90
26	1H	692	C	N3-C2-O2	5.07	125.45	121.90
26	1H	738	G	N1-C2-N2	-5.07	111.64	116.20
1	1G	1431	C	N3-C4-N4	5.07	121.55	118.00
26	14	602	G	N9-C4-C5	-5.07	103.37	105.40
27	1J	54	G	N7-C8-N9	5.07	115.63	113.10
1	13	792	A	C1'-O4'-C4'	-5.07	105.84	109.90
1	13	1126	U	P-O3'-C3'	5.07	125.78	119.70
26	1H	682	G	N9-C4-C5	-5.07	103.37	105.40
26	1H	1671	U	N3-C4-O4	5.07	122.95	119.40
26	14	1664	A	N1-C6-N6	-5.07	115.56	118.60
26	14	2314	C	N1-C2-O2	5.07	121.94	118.90
26	14	2510	C	O5'-P-OP2	-5.07	101.14	105.70
26	1H	2323	G	N7-C8-N9	5.07	115.63	113.10
1	1G	115	G	C5-C6-O6	5.07	131.64	128.60
1	1G	1498	U	N3-C2-O2	-5.07	118.65	122.20
26	14	806	C	C5-C4-N4	-5.07	116.65	120.20
26	14	1314	C	C6-N1-C1'	-5.07	114.72	120.80
26	14	1327	C	N3-C4-C5	-5.07	119.87	121.90
26	14	2365	G	C6-C5-N7	-5.07	127.36	130.40
26	14	2840	C	N3-C4-C5	-5.07	119.87	121.90
26	14	2859	G	N3-C4-C5	-5.07	126.07	128.60
1	13	667	G	C8-N9-C4	-5.06	104.37	106.40
1	13	1224	G	OP1-P-OP2	-5.06	112.00	119.60
26	1H	290	G	N3-C4-C5	-5.06	126.07	128.60
26	1H	940	G	N3-C4-N9	5.06	129.04	126.00
1	1G	180	U	N3-C4-O4	5.06	122.94	119.40
26	14	1274	A	N3-C4-N9	5.06	131.45	127.40
1	13	805	C	OP1-P-OP2	-5.06	112.00	119.60
26	1H	665	C	N1-C2-O2	-5.06	115.86	118.90
26	1H	913	U	C4-C5-C6	-5.06	116.66	119.70
26	1H	1260	G	C5-N7-C8	5.06	106.83	104.30
26	1H	1362	C	N3-C2-O2	5.06	125.44	121.90
26	1H	2392	A	O5'-P-OP1	-5.06	101.14	105.70
27	16	103	U	OP2-P-O3'	5.06	116.34	105.20
26	14	1757	U	N3-C4-C5	-5.06	111.56	114.60
1	13	535	A	C8-N9-C4	-5.06	103.78	105.80
26	1H	809	G	N7-C8-N9	-5.06	110.57	113.10
26	1H	2271	G	C4-N9-C1'	5.06	133.08	126.50
26	14	2225	A	P-O3'-C3'	5.06	125.77	119.70
26	14	2419	U	OP1-P-O3'	5.06	116.33	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	328	C	O5'-P-OP1	-5.06	101.15	105.70
1	13	1335	C	C5-C6-N1	-5.06	118.47	121.00
1	13	1432	G	N3-C4-N9	5.06	129.03	126.00
26	1H	129	C	OP2-P-O3'	5.06	116.33	105.20
26	1H	243	U	O5'-P-OP2	-5.06	101.15	105.70
26	1H	938	G	C5-C6-O6	5.06	131.64	128.60
26	1H	1204	A	C4-C5-C6	5.06	119.53	117.00
26	1H	1431	U	C4-C5-C6	-5.06	116.67	119.70
26	1H	1625	C	O5'-P-OP1	5.06	116.77	110.70
26	1H	1692	U	C2-N1-C1'	5.06	123.77	117.70
26	1H	1817	G	N1-C6-O6	-5.06	116.86	119.90
26	1H	1964	G	OP2-P-O3'	5.06	116.33	105.20
26	1H	2300	G	C6-C5-N7	-5.06	127.36	130.40
26	1H	2388	A	O4'-C1'-N9	5.06	112.25	108.20
26	1H	2451	A	C5-C6-N6	5.06	127.75	123.70
1	1G	898	G	O5'-P-OP2	-5.06	101.15	105.70
26	14	511	U	N3-C4-C5	-5.06	111.56	114.60
26	14	2427	C	N3-C2-O2	5.06	125.44	121.90
26	14	2689	U	C5-C4-O4	5.06	128.94	125.90
1	13	191(F)	U	C5-C6-N1	5.06	125.23	122.70
26	1H	26	G	N3-C4-C5	-5.06	126.07	128.60
26	1H	536	A	N1-C6-N6	-5.06	115.56	118.60
26	1H	1300	U	C6-N1-C2	-5.06	117.97	121.00
26	1H	1792	G	C5-C6-O6	5.06	131.63	128.60
26	1H	2823	A	N1-C6-N6	5.06	121.63	118.60
1	1G	1259	C	C5-C6-N1	5.06	123.53	121.00
26	14	1274	A	N9-C4-C5	-5.06	103.78	105.80
26	14	2612	C	O5'-P-OP2	-5.06	101.15	105.70
26	14	2732	G	C8-N9-C4	-5.06	104.38	106.40
1	13	574	A	OP1-P-OP2	-5.06	112.02	119.60
26	1H	686	G	O5'-P-OP2	-5.06	101.15	105.70
26	1H	871	U	C2-N1-C1'	5.06	123.77	117.70
26	1H	1354	A	C2-N3-C4	-5.06	108.07	110.60
26	1H	2557	G	C8-N9-C4	-5.06	104.38	106.40
26	1H	651	G	N1-C6-O6	-5.05	116.87	119.90
26	1H	1034	G	C5-C6-O6	-5.05	125.57	128.60
26	1H	1936	A	C5-C6-N1	5.05	120.23	117.70
26	1H	1987	G	N3-C2-N2	-5.05	116.36	119.90
1	1G	1356	G	N7-C8-N9	5.05	115.63	113.10
26	14	201	C	C2-N1-C1'	-5.05	113.24	118.80
26	14	205	G	N3-C2-N2	5.05	123.44	119.90
26	14	1772	G	OP1-P-OP2	5.05	127.18	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	552	U	O5'-P-OP2	-5.05	101.15	105.70
26	1H	62	C	C4-C5-C6	5.05	119.93	117.40
26	1H	146	G	C6-C5-N7	-5.05	127.37	130.40
26	1H	579	G	OP2-P-O3'	5.05	116.32	105.20
26	1H	618(A)	C	C6-N1-C2	5.05	122.32	120.30
26	1H	1408	C	N1-C2-O2	-5.05	115.87	118.90
26	1H	1526	G	C6-C5-N7	-5.05	127.37	130.40
26	1H	1977	A	C2-N3-C4	-5.05	108.07	110.60
26	14	1227	A	N1-C6-N6	-5.05	115.57	118.60
26	14	2627	G	N3-C4-C5	-5.05	126.07	128.60
26	1H	483	A	C8-N9-C4	-5.05	103.78	105.80
26	1H	621	A	C8-N9-C4	-5.05	103.78	105.80
26	1H	1024	G	C4-N9-C1'	5.05	133.07	126.50
26	1H	1204	A	N7-C8-N9	5.05	116.33	113.80
26	1H	1826	G	OP1-P-O3'	5.05	116.31	105.20
26	1H	1888	G	C8-N9-C1'	-5.05	120.43	127.00
26	14	134	C	N3-C4-C5	5.05	123.92	121.90
26	14	503	A	N1-C6-N6	-5.05	115.57	118.60
26	14	1610	A	N9-C4-C5	-5.05	103.78	105.80
27	1J	14	U	O5'-P-OP2	-5.05	101.15	105.70
1	13	768	A	N1-C2-N3	5.05	131.82	129.30
26	1H	645	C	C6-N1-C2	-5.05	118.28	120.30
26	1H	907	U	C5-C6-N1	-5.05	120.17	122.70
26	1H	2246	G	N7-C8-N9	-5.05	110.58	113.10
26	1H	2280	G	OP1-P-O3'	5.05	116.31	105.20
27	16	5	C	N3-C4-C5	5.05	123.92	121.90
39	A8	110	LEU	CA-CB-CG	-5.05	103.69	115.30
26	14	1210	A	C2-N3-C4	-5.05	108.08	110.60
26	14	2370	G	C8-N9-C4	5.05	108.42	106.40
26	14	2736	G	N1-C6-O6	5.05	122.93	119.90
26	1H	208	C	OP1-P-OP2	5.05	127.17	119.60
26	1H	418	G	N9-C4-C5	-5.05	103.38	105.40
26	1H	446	G	C4-N9-C1'	5.05	133.06	126.50
26	1H	928	G	C5-N7-C8	-5.05	101.78	104.30
26	1H	1241	A	C4-C5-N7	5.05	113.22	110.70
1	13	749	C	N1-C2-O2	5.04	121.93	118.90
26	1H	828	U	C2-N3-C4	5.04	130.03	127.00
26	1H	1783	A	C5-C6-N1	-5.04	115.18	117.70
26	1H	2439	A	C5-N7-C8	-5.04	101.38	103.90
26	14	734	A	C4-C5-C6	5.04	119.52	117.00
26	14	1216	G	C5-C6-N1	-5.04	108.98	111.50
26	14	1527	G	N1-C2-N2	5.04	120.74	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	229	U	C5-C6-N1	5.04	125.22	122.70
26	1H	49	A	C8-N9-C4	5.04	107.82	105.80
26	1H	383	U	O4'-C1'-N1	5.04	112.23	108.20
26	1H	1933	G	C8-N9-C4	-5.04	104.38	106.40
1	1G	250	A	P-O3'-C3'	5.04	125.75	119.70
26	14	191	A	N1-C2-N3	-5.04	126.78	129.30
26	14	2038	G	N3-C2-N2	5.04	123.43	119.90
26	14	2356	C	N3-C2-O2	5.04	125.43	121.90
26	14	2433	A	C5-N7-C8	-5.04	101.38	103.90
26	14	2719	G	C5-C6-N1	-5.04	108.98	111.50
1	13	1058	G	C8-N9-C4	5.04	108.42	106.40
26	1H	1269	A	C5-N7-C8	-5.04	101.38	103.90
26	1H	1602	U	C4-C5-C6	5.04	122.72	119.70
26	1H	1773	A	C6-N1-C2	5.04	121.62	118.60
27	16	56	G	N3-C4-C5	-5.04	126.08	128.60
26	14	216	A	OP1-P-O3'	5.04	116.28	105.20
26	14	995	C	C6-N1-C1'	5.04	126.85	120.80
26	14	2033	A	C5-C6-N1	5.04	120.22	117.70
26	14	2281	C	C2-N1-C1'	5.04	124.34	118.80
1	13	912	C	O5'-P-OP1	-5.04	101.17	105.70
26	1H	1924	C	N3-C4-C5	5.04	123.92	121.90
26	1H	2702	U	N3-C2-O2	-5.04	118.67	122.20
26	1H	2782	G	N7-C8-N9	5.04	115.62	113.10
34	58	120	LEU	CA-CB-CG	5.04	126.89	115.30
26	14	1681	G	C6-C5-N7	-5.04	127.38	130.40
1	13	1249	C	C6-N1-C2	-5.04	118.29	120.30
1	13	1498	U	C6-N1-C1'	-5.04	114.15	121.20
26	1H	486	C	O5'-P-OP2	5.04	116.74	110.70
26	14	111	A	N1-C6-N6	5.04	121.62	118.60
26	14	209	C	C2-N1-C1'	5.04	124.34	118.80
1	13	1260	C	C5-C6-N1	5.03	123.52	121.00
26	1H	471	A	N1-C6-N6	5.03	121.62	118.60
26	1H	937	U	C5-C6-N1	-5.03	120.18	122.70
26	1H	2450	A	N1-C2-N3	5.03	131.82	129.30
55	Q8	34	TRP	N-CA-C	5.03	124.59	111.00
26	14	790	C	OP2-P-O3'	5.03	116.27	105.20
26	14	1799	G	OP1-P-OP2	5.03	127.15	119.60
26	1H	1923	U	C6-N1-C2	-5.03	117.98	121.00
27	16	100	G	N3-C4-N9	5.03	129.02	126.00
26	14	389	G	N3-C4-N9	5.03	129.02	126.00
26	14	463	G	O5'-P-OP1	5.03	116.74	110.70
26	14	1588	C	O5'-P-OP2	-5.03	101.17	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	606	U	N1-C2-N3	5.03	117.92	114.90
26	1H	1602	U	N1-C2-O2	-5.03	119.28	122.80
26	1H	1761	C	N3-C4-N4	5.03	121.52	118.00
26	1H	1898	U	OP1-P-O3'	5.03	116.27	105.20
26	1H	2382	G	C8-N9-C4	-5.03	104.39	106.40
34	58	134	ARG	N-CA-C	5.03	124.58	111.00
26	14	1776	G	C6-C5-N7	-5.03	127.38	130.40
1	13	335	C	C5-C6-N1	-5.03	118.49	121.00
1	13	578	C	N3-C4-N4	5.03	121.52	118.00
1	13	585	G	C8-N9-C4	5.03	108.41	106.40
1	13	1222	G	O5'-P-OP1	5.03	116.73	110.70
26	1H	470	A	C5-C6-N6	-5.03	119.68	123.70
26	1H	804	A	O4'-C1'-N9	5.03	112.22	108.20
26	14	322	A	N1-C6-N6	-5.03	115.58	118.60
26	14	1001	A	N9-C4-C5	5.03	107.81	105.80
26	14	1632	A	C5-C6-N6	-5.03	119.68	123.70
1	13	1054	C	O5'-P-OP2	5.03	116.73	110.70
26	1H	1463	C	C6-N1-C2	-5.03	118.29	120.30
26	1H	1777	U	OP2-P-O3'	5.03	116.26	105.20
26	1H	2035	G	O4'-C1'-N9	5.03	112.22	108.20
26	1H	2230	G	N3-C4-N9	-5.03	122.98	126.00
27	16	28	C	N3-C4-C5	-5.03	119.89	121.90
27	16	100	G	N3-C4-C5	-5.03	126.09	128.60
1	1G	360	A	C8-N9-C4	5.03	107.81	105.80
26	14	478	A	O5'-P-OP1	-5.03	101.17	105.70
26	14	2597	G	C5-C6-N1	-5.03	108.99	111.50
26	1H	673	C	C5-C4-N4	-5.03	116.68	120.20
26	1H	842	G	OP2-P-O3'	5.03	116.26	105.20
26	1H	2419	U	OP1-P-OP2	-5.03	112.06	119.60
31	41	34	LEU	CA-CB-CG	5.03	126.86	115.30
26	14	990	A	C8-N9-C4	-5.03	103.79	105.80
26	14	2059	A	C6-N1-C2	-5.03	115.58	118.60
26	14	2435	A	N7-C8-N9	5.03	116.31	113.80
26	1H	669	G	N7-C8-N9	5.02	115.61	113.10
26	1H	2672	G	C6-C5-N7	-5.02	127.39	130.40
1	1G	1480	G	C5-C6-O6	-5.02	125.58	128.60
26	14	1197	G	C5-C6-O6	5.02	131.61	128.60
26	14	1904	G	N1-C6-O6	-5.02	116.89	119.90
26	14	2615	U	N1-C2-O2	5.02	126.32	122.80
26	1H	212	G	OP2-P-O3'	5.02	116.25	105.20
26	1H	391	G	C8-N9-C1'	-5.02	120.47	127.00
26	1H	463	G	OP1-P-O3'	5.02	116.25	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	1H	534	U	O5'-P-OP1	-5.02	101.18	105.70
26	1H	1368	G	C2-N3-C4	5.02	114.41	111.90
26	14	561	G	N3-C2-N2	-5.02	116.39	119.90
26	14	953	A	N1-C6-N6	5.02	121.61	118.60
26	14	2326	C	N3-C4-C5	-5.02	119.89	121.90
26	14	2330	G	C6-C5-N7	-5.02	127.39	130.40
1	13	557	G	N3-C2-N2	5.02	123.42	119.90
26	1H	842	G	C8-N9-C1'	5.02	133.53	127.00
26	1H	2530	A	C4-C5-N7	5.02	113.21	110.70
26	1H	2759	G	O4'-C1'-N9	-5.02	104.18	108.20
1	13	1299	A	C4-C5-N7	5.02	113.21	110.70
26	1H	456	C	C6-N1-C2	5.02	122.31	120.30
26	1H	1260	G	C4-C5-N7	-5.02	108.79	110.80
26	1H	1345	C	N3-C4-C5	5.02	123.91	121.90
26	1H	1368	G	OP1-P-OP2	5.02	127.13	119.60
26	1H	2446	G	C5-N7-C8	-5.02	101.79	104.30
26	1H	2589	A	N7-C8-N9	-5.02	111.29	113.80
26	14	2428	G	P-O3'-C3'	5.02	125.72	119.70
1	13	942	G	OP1-P-O3'	5.02	116.24	105.20
26	1H	196	A	C5-N7-C8	-5.02	101.39	103.90
26	1H	515	A	O4'-C1'-N9	5.02	112.22	108.20
26	1H	733	G	C5-C6-O6	5.02	131.61	128.60
26	1H	2401	U	C6-N1-C2	-5.02	117.99	121.00
28	11	43	ARG	NE-CZ-NH1	-5.02	117.79	120.30
26	14	787	U	OP1-P-OP2	-5.02	112.08	119.60
26	14	803	U	C5-C6-N1	-5.02	120.19	122.70
26	14	940	G	C2-N3-C4	5.02	114.41	111.90
26	14	1347	G	C5-C6-N1	-5.02	108.99	111.50
26	14	2442	C	OP2-P-O3'	5.02	116.24	105.20
26	1H	1334	G	N7-C8-N9	5.02	115.61	113.10
26	14	1950	G	N7-C8-N9	5.02	115.61	113.10
26	14	2335	A	O5'-P-OP1	-5.02	101.19	105.70
1	13	21	G	C4-C5-N7	-5.01	108.79	110.80
1	13	518	C	C2-N1-C1'	5.01	124.32	118.80
1	13	579	G	C5-C6-N1	-5.01	108.99	111.50
26	1H	120	U	C2-N3-C4	-5.01	123.99	127.00
26	1H	580	C	C4-C5-C6	5.01	119.91	117.40
26	1H	762	U	C6-N1-C1'	-5.01	114.18	121.20
26	1H	766	C	OP2-P-O3'	5.01	116.23	105.20
26	1H	2358	G	C5-C6-N1	5.01	114.01	111.50
33	61	110	ASP	C-N-CD	-5.01	109.57	120.60
26	14	330	A	C6-C5-N7	-5.01	128.79	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	766	C	C6-N1-C1'	5.01	126.82	120.80
26	14	1925	C	C2-N1-C1'	-5.01	113.28	118.80
26	14	2075	U	N3-C4-C5	5.01	117.61	114.60
26	14	2391	G	OP1-P-O3'	5.01	116.23	105.20
1	1G	1436	U	C5-C6-N1	5.01	125.21	122.70
1	13	1062	U	O5'-P-OP2	-5.01	101.19	105.70
1	13	1482	G	N1-C6-O6	5.01	122.91	119.90
26	1H	463	G	N1-C6-O6	-5.01	116.89	119.90
26	1H	1773	A	C8-N9-C4	5.01	107.80	105.80
1	1G	1432	G	C8-N9-C4	-5.01	104.39	106.40
26	14	819	A	N3-C4-C5	-5.01	123.29	126.80
26	14	1407	C	C6-N1-C2	-5.01	118.30	120.30
26	1H	138	G	N9-C1'-C2'	5.01	120.51	114.00
26	1H	232	G	N3-C4-N9	5.01	129.01	126.00
26	1H	829	A	OP1-P-OP2	5.01	127.11	119.60
26	1H	1060	U	P-O3'-C3'	5.01	125.71	119.70
26	1H	1783	A	C6-N1-C2	5.01	121.61	118.60
26	1H	2055	C	N1-C2-O2	-5.01	115.89	118.90
26	1H	2379	G	C8-N9-C4	5.01	108.40	106.40
26	1H	2774	C	C6-N1-C2	5.01	122.30	120.30
26	14	1543	A	O5'-P-OP1	5.01	116.71	110.70
26	14	2249	U	C2-N3-C4	5.01	130.00	127.00
26	1H	1951	U	N1-C2-O2	-5.01	119.30	122.80
1	1G	60	A	C8-N9-C4	5.01	107.80	105.80
1	1G	454	C	N3-C2-O2	-5.01	118.39	121.90
26	1H	457	A	C8-N9-C4	-5.01	103.80	105.80
26	1H	1799	G	N3-C4-C5	-5.01	126.10	128.60
26	1H	1816	G	C6-C5-N7	5.01	133.40	130.40
26	1H	2245	U	O4'-C1'-N1	5.01	112.20	108.20
26	1H	2443	C	C5-C4-N4	-5.01	116.69	120.20
23	2L	35	C	N3-C2-O2	-5.01	118.39	121.90
26	14	68	G	N1-C6-O6	5.01	122.90	119.90
26	14	465	G	C4-N9-C1'	5.01	133.01	126.50
26	14	759	G	OP1-P-OP2	-5.01	112.09	119.60
26	14	2831	G	C5-C6-O6	-5.01	125.60	128.60
26	1H	66	C	C5-C6-N1	5.00	123.50	121.00
27	16	81	G	C5-C6-O6	-5.00	125.60	128.60
26	14	1241	A	C5-C6-N1	-5.00	115.20	117.70
1	13	1221	G	OP2-P-O3'	5.00	116.21	105.20
26	1H	2712	U	P-O3'-C3'	5.00	125.70	119.70
26	14	265	A	C6-C5-N7	-5.00	128.80	132.30
26	14	1821	A	C5-C6-N6	-5.00	119.70	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	14	1983	C	C6-N1-C2	-5.00	118.30	120.30
26	14	2286	A	N7-C8-N9	5.00	116.30	113.80
26	14	2330	G	P-O3'-C3'	-5.00	113.70	119.70
1	13	22	G	OP2-P-O3'	5.00	116.20	105.20
1	13	1158	C	C6-N1-C1'	-5.00	114.80	120.80
26	1H	126	A	O5'-P-OP2	-5.00	101.20	105.70
26	1H	622	G	N3-C2-N2	5.00	123.40	119.90
26	1H	973	A	N1-C2-N3	5.00	131.80	129.30
26	1H	1256	G	C8-N9-C4	5.00	108.40	106.40
26	1H	1775	U	OP1-P-O3'	5.00	116.20	105.20
26	1H	2316	C	C6-N1-C2	-5.00	118.30	120.30
26	14	138	G	N1-C6-O6	5.00	122.90	119.90
26	14	574	C	C6-N1-C1'	5.00	126.80	120.80
26	14	651	G	C5-C6-O6	5.00	131.60	128.60
26	14	1371	G	N3-C2-N2	-5.00	116.40	119.90
26	14	1523	U	C5-C6-N1	5.00	125.20	122.70
26	14	2427	C	OP1-P-OP2	-5.00	112.10	119.60

There are no chirality outliers.

All (88) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
28	11	197	GLY	Peptide
28	11	237	GLU	Peptide
28	11	238	GLY	Peptide
28	11	47	GLY	Peptide
28	19	236	GLY	Peptide
28	19	237	GLU	Peptide
28	19	268	ARG	Peptide
28	19	32	SER	Peptide
28	19	37	LEU	Peptide
10	1A	55	LYS	Peptide
29	21	186	GLY	Peptide
29	21	56	PRO	Peptide
29	21	78	LEU	Peptide
35	25	47	ILE	Peptide
29	29	201	THR	Peptide
29	29	65	GLY	Peptide
29	29	72	VAL	Peptide
11	2I	100	ALA	Peptide
11	2I	101	SER	Peptide
36	35	110	TYR	Peptide

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Mol	Chain	Res	Type	Group
36	35	14	LYS	Peptide
36	35	36	LYS	Peptide
36	35	52	GLU	Peptide
36	35	64	LYS	Peptide
30	39	20	LEU	Peptide
30	39	85	GLY	Peptide
4	3E	166	LYS	Peptide
4	3E	30	LYS	Peptide
31	41	95	ARG	Peptide
37	45	134	ARG	Peptide
37	45	25	ASP	Peptide
37	45	86	GLY	Peptide
37	45	87	LYS	Peptide
13	4I	105	THR	Peptide
13	4I	107	ALA	Peptide
33	61	11	ASN	Peptide
33	61	115	ALA	Peptide
33	61	134	PRO	Peptide
33	61	82	ARG	Peptide
39	65	59	LYS	Peptide
33	69	112	LYS	Peptide
15	6I	22	THR	Peptide
40	75	104	ASN	Peptide
40	75	4	GLY	Peptide
16	7I	76	GLN	Peptide
41	85	98	LEU	Peptide
37	88	58	PHE	Peptide
37	88	78	PRO	Peptide
9	8E	110	GLU	Peptide
39	A8	107	GLU	Peptide
39	A8	89	ARG	Peptide
19	AI	6	LYS	Peptide
19	AI	7	LYS	Peptide
44	B5	24	GLY	Peptide
44	B5	61	GLY	Peptide
40	B8	58	ASN	Peptide
20	BA	101	GLY	Peptide
20	BA	11	SER	Peptide
45	C5	18	GLY	Peptide
45	C5	81	LYS	Peptide
45	C5	91	GLU	Peptide
41	C8	92	ARG	Peptide

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Mol	Chain	Res	Type	Group
46	D5	61	LEU	Peptide
43	E8	91	GLY	Peptide
48	F5	35	THR	Peptide
48	F5	85	LEU	Peptide
44	F8	67	GLY	Peptide
49	G5	15	LYS	Peptide
49	G5	17	SER	Peptide
49	G5	47	ASN	Peptide
45	G8	94	LYS	Peptide
46	H8	158	PRO	Peptide
47	I8	83	PRO	Peptide
47	I8	9	SER	Peptide
52	J5	3	LYS	Peptide
49	K8	17	SER	Peptide
49	K8	4	SER	Peptide
49	K8	46	GLN	Peptide
55	M5	40	GLU	Peptide
51	M8	38	LYS	Peptide
51	M8	45	GLY	Peptide
52	N8	58	LEU	Peptide
53	O8	25	LYS	Peptide
55	Q8	18	ALA	Peptide
55	Q8	19	SER	Peptide
55	Q8	27	THR	Peptide
55	Q8	29	LYS	Peptide
55	Q8	9	GLY	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	13	32207	0	16254	745	0
1	1G	32182	0	16245	835	1
2	12	1924	0	1975	96	0
2	1E	1924	0	1975	96	0
3	22	1612	0	1677	71	0
3	2E	1605	0	1668	48	0
4	32	1702	0	1763	86	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	3E	1702	0	1762	81	0
5	42	1155	0	1213	60	0
5	4E	1155	0	1213	51	0
6	52	842	0	857	31	0
6	5E	842	0	857	21	0
7	62	1256	0	1296	53	0
7	6E	1256	0	1296	52	0
8	72	1115	0	1177	47	0
8	7E	1115	0	1177	59	0
9	82	1009	0	1037	68	0
9	8E	1009	0	1037	60	0
10	1A	801	0	849	44	0
10	1I	801	0	849	52	0
11	2A	864	0	881	32	0
11	2I	864	0	881	35	0
12	3A	975	0	1062	53	0
12	3I	975	0	1062	37	0
13	4A	933	0	992	64	0
13	4I	938	0	997	51	0
14	5A	475	0	511	30	0
14	5I	491	0	529	24	0
15	6A	733	0	771	29	0
15	6I	733	0	771	29	0
16	7A	705	0	725	25	0
16	7I	705	0	725	58	0
17	8A	834	0	904	22	0
17	8I	834	0	904	47	0
18	9A	590	0	662	32	0
18	9I	590	0	662	22	0
19	AA	624	0	636	40	0
19	AI	647	0	665	33	0
20	BA	762	0	861	34	0
20	BI	762	0	861	48	0
21	1B	217	0	234	15	0
21	1F	217	0	234	10	0
22	1K	1628	0	840	36	0
23	2K	1646	0	845	29	0
23	2L	1646	0	845	32	0
24	1L	1619	0	822	21	0
24	3K	1619	0	822	53	0
24	3L	1619	0	822	40	0
25	4K	281	0	142	6	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
25	4L	193	0	99	8	0
26	14	62647	0	31581	1303	0
26	1H	62707	0	31607	1456	1
27	16	2617	0	1328	55	0
27	1J	2617	0	1328	92	0
28	11	2115	0	2195	101	0
28	19	2120	0	2197	89	0
29	21	1568	0	1634	100	0
29	29	1568	0	1634	119	0
30	31	1585	0	1632	77	0
30	39	1627	0	1680	100	0
31	41	1473	0	1535	75	0
31	49	1473	0	1535	61	0
32	51	1336	0	1418	75	0
32	59	1299	0	1371	68	0
33	61	1136	0	1223	63	0
33	69	1136	0	1223	51	0
34	15	1104	0	1180	56	0
34	58	1104	0	1180	52	0
35	25	932	0	996	37	0
35	68	932	0	996	46	0
36	35	1144	0	1228	81	0
36	78	1144	0	1228	102	0
37	45	1121	0	1179	61	0
37	88	1086	0	1129	65	0
38	55	959	0	1021	47	0
38	98	967	0	1033	58	0
39	65	881	0	943	68	0
39	A8	881	0	943	61	0
40	75	1141	0	1202	69	0
40	B8	1141	0	1202	55	0
41	85	963	0	1022	49	0
41	C8	963	0	1022	62	0
42	95	778	0	852	62	0
42	D8	778	0	852	42	0
43	A5	899	0	964	31	0
43	E8	899	0	964	33	0
44	B5	725	0	778	34	0
44	F8	742	0	803	42	0
45	C5	794	0	884	56	0
45	G8	791	0	881	55	0
46	D5	1428	0	1454	69	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	H8	1397	0	1430	56	0
47	E5	606	0	628	39	0
47	I8	626	0	642	38	0
48	F5	762	0	848	30	0
48	J8	762	0	848	28	0
49	G5	558	0	610	27	0
49	K8	563	0	612	44	0
50	H5	468	0	518	17	0
50	L8	452	0	503	35	0
51	I5	515	0	514	33	0
51	M8	533	0	526	42	0
52	J5	434	0	454	23	0
52	N8	453	0	475	18	0
53	K5	389	0	404	18	0
53	O8	389	0	404	30	0
54	L5	398	0	441	19	0
54	P8	391	0	432	14	0
55	M5	477	0	540	44	0
55	Q8	485	0	551	72	0
56	11	2	0	0	0	0
56	13	152	0	0	0	0
56	14	426	0	0	0	0
56	15	1	0	0	0	0
56	16	15	0	0	0	0
56	1G	88	0	0	0	0
56	1H	506	0	0	0	0
56	1J	10	0	0	0	0
56	21	2	0	0	0	0
56	25	2	0	0	0	0
56	29	2	0	0	0	0
56	2K	7	0	0	0	0
56	2L	3	0	0	0	0
56	31	1	0	0	0	0
56	32	1	0	0	0	0
56	35	1	0	0	0	0
56	39	3	0	0	0	0
56	3I	2	0	0	0	0
56	41	2	0	0	0	0
56	45	2	0	0	0	0
56	49	1	0	0	0	0
56	4K	1	0	0	0	0
56	52	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	5E	1	0	0	0	0
56	6A	1	0	0	0	0
56	78	2	0	0	0	0
56	85	1	0	0	0	0
56	88	2	0	0	0	0
56	C5	1	0	0	0	0
56	E5	1	0	0	0	0
56	G8	1	0	0	0	0
56	I8	2	0	0	0	0
56	J8	1	0	0	0	0
56	L8	1	0	0	0	0
56	M5	1	0	0	0	0
56	P8	1	0	0	0	0
57	32	1	0	0	0	0
57	3E	1	0	0	0	0
57	5A	1	0	0	0	0
57	5I	1	0	0	0	0
57	C5	1	0	0	0	0
57	G8	1	0	0	0	0
58	11	9	0	0	3	0
58	13	164	0	0	12	0
58	14	543	0	0	112	0
58	15	1	0	0	0	0
58	16	6	0	0	2	0
58	19	3	0	0	3	0
58	1G	64	0	0	12	0
58	1H	920	0	0	187	0
58	1I	1	0	0	1	0
58	1J	18	0	0	2	0
58	21	5	0	0	2	0
58	29	3	0	0	0	0
58	31	7	0	0	0	0
58	32	1	0	0	0	0
58	35	1	0	0	0	0
58	39	8	0	0	0	0
58	3E	1	0	0	0	0
58	3I	1	0	0	0	0
58	4E	1	0	0	0	0
58	4K	1	0	0	0	0
58	5I	1	0	0	0	0
58	6I	1	0	0	0	0
58	78	6	0	0	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	7A	1	0	0	0	0
58	7I	1	0	0	0	0
58	85	1	0	0	0	0
58	B8	1	0	0	0	0
58	C8	2	0	0	0	0
58	E8	1	0	0	0	0
58	F8	1	0	0	0	0
58	G8	3	0	0	1	0
58	J8	1	0	0	0	0
58	L5	2	0	0	0	0
58	L8	3	0	0	1	0
58	P8	1	0	0	0	0
58	Q8	2	0	0	0	0
All	All	299951	0	200381	8425	1

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 17.

All (8425) 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)
26:1H:1604:C:OP2	58:1H:3643:HOH:O	1.58	1.18
40:B8:50:ILE:HD11	40:B8:102:ILE:HD11	1.35	1.08
26:1H:2576:G:OP1	58:1H:3756:HOH:O	1.73	1.07
26:1H:1614:A:OP1	58:1H:3859:HOH:O	1.76	1.03
26:14:1774:C:OP1	58:14:3564:HOH:O	1.77	1.03
26:1H:2308:G:H1	26:1H:2311:A:H2	1.04	1.03
26:1H:1783:A:OP2	58:1H:3629:HOH:O	1.75	1.02
26:1H:1771:C:HO2'	26:1H:1786:A:H8	1.03	1.02
26:1H:862:G:OP2	58:1H:3905:HOH:O	1.78	1.01
26:14:2701:C:H3'	26:14:2702:U:H5"	1.42	1.01
26:1H:574:C:OP1	58:1H:4144:HOH:O	1.77	1.01
1:1G:963:G:H21	10:1A:55:LYS:HE3	1.25	1.01
26:1H:1496:A:H8	26:1H:1577:C:HO2'	1.01	1.00
26:1H:1622:G:OP2	58:1H:4336:HOH:O	1.77	1.00
26:14:1828:G:OP2	58:14:3539:HOH:O	1.79	0.99
24:3L:71:G:O2'	26:14:1851:U:O2'	1.78	0.99
26:14:1582:C:HO2'	26:14:1586:A:H8	1.03	0.99
1:1G:588:G:H1	1:1G:651:C:H42	1.07	0.98
36:78:19:VAL:HG12	36:78:21:ARG:H	1.29	0.98
26:1H:155:C:H42	26:1H:171:G:H1	1.03	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:741:G:OP1	58:1H:4205:HOH:O	1.80	0.97
22:1K:74:C:H42	26:1H:2554:U:H3	1.12	0.97
27:1J:15:A:H5'	27:1J:16:G:H8	1.30	0.97
26:1H:1899:G:H22	26:1H:1902:C:N4	1.63	0.97
26:14:676:A:H8	26:14:2069:G:H21	1.06	0.97
26:1H:2154:G:HO2'	26:1H:2155:G:H8	1.09	0.96
26:14:1496:A:H8	26:14:1577:C:HO2'	1.05	0.96
26:1H:567:A:OP1	58:1H:3604:HOH:O	1.80	0.96
26:1H:1780:A:OP1	58:1H:3625:HOH:O	1.81	0.96
26:1H:566:U:OP1	36:78:29:LYS:NZ	1.97	0.96
26:14:662:G:H5'	36:35:15:ARG:HA	1.48	0.95
26:14:1327:C:OP2	58:14:3606:HOH:O	1.82	0.95
26:1H:913:U:O4	58:1H:4214:HOH:O	1.84	0.95
24:1L:76:A:N7	26:14:2583:G:N2	2.13	0.95
26:1H:607:U:H3	26:1H:621:A:H2	1.14	0.95
26:1H:1828:G:OP2	58:1H:3705:HOH:O	1.83	0.95
26:1H:943:U:OP2	58:1H:4419:HOH:O	1.84	0.95
26:14:1359:A:H62	26:14:1372:U:H3	1.12	0.94
26:1H:511:U:OP2	58:1H:4189:HOH:O	1.84	0.94
2:1E:185:ILE:HG22	2:1E:199:TYR:HB2	1.46	0.94
26:14:1613:G:N7	58:14:3799:HOH:O	2.00	0.94
31:41:112:PRO:HB3	51:M8:37:SER:H	1.29	0.94
26:1H:330:A:H2	26:1H:1210:A:HO2'	1.13	0.94
26:1H:2017:U:OP1	58:1H:4151:HOH:O	1.84	0.93
26:14:2588:G:OP1	58:14:3588:HOH:O	1.87	0.93
1:13:200:G:H1	1:13:217:C:H42	1.14	0.93
1:1G:1277:C:HO2'	1:1G:1279:A:H8	1.05	0.93
26:1H:593:G:H4'	55:Q8:60:LEU:HD13	1.49	0.93
27:1J:80:U:H2'	27:1J:81:G:H21	1.33	0.93
26:1H:945:A:OP1	58:1H:3982:HOH:O	1.86	0.93
26:1H:2419:U:O4	55:Q8:29:LYS:NZ	2.02	0.92
24:3K:76:A:H8	26:1H:2394:C:H42	1.15	0.92
26:1H:1997:G:OP2	58:1H:3916:HOH:O	1.88	0.91
26:1H:1899:G:H22	26:1H:1902:C:H41	1.04	0.91
27:16:101:A:OP2	58:16:306:HOH:O	1.89	0.91
2:12:12:GLU:HB3	2:12:213:LEU:HD22	1.52	0.91
1:13:1368:G:H5"	9:8E:112:LYS:HB3	1.52	0.91
26:1H:2701:C:H3'	26:1H:2702:U:H5"	1.53	0.91
31:49:104:GLU:HG2	51:I5:23:GLU:HG2	1.51	0.91
1:13:664:G:H22	1:13:741:G:H1	1.18	0.91
26:14:1614:A:OP1	58:14:3513:HOH:O	1.88	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:11:228:PRO:O	58:11:407:HOH:O	1.88	0.90
26:14:741:G:OP1	58:14:3561:HOH:O	1.89	0.90
1:13:1502:A:H2	1:13:1505:G:H1	1.15	0.90
26:14:450:G:O6	58:14:3864:HOH:O	1.89	0.90
26:1H:249:C:OP1	58:1H:3665:HOH:O	1.89	0.90
26:1H:1603:A:OP1	58:1H:3643:HOH:O	1.88	0.90
26:14:71:A:H2	44:B5:31:HIS:HE2	1.15	0.90
26:1H:326:G:N7	58:1H:4427:HOH:O	2.05	0.90
26:1H:973:A:OP2	58:1H:3817:HOH:O	1.89	0.90
29:21:135:HIS:NE2	58:21:402:HOH:O	2.04	0.90
26:14:1416:G:H1	26:14:1582:C:H42	1.20	0.89
26:1H:568:U:O4	58:1H:3817:HOH:O	1.90	0.89
32:59:159:GLU:O	32:59:163:TYR:OH	1.88	0.89
45:G8:87:LYS:HB3	45:G8:94:LYS:HG2	1.55	0.89
1:1G:1502:A:H2	1:1G:1505:G:H1	1.21	0.89
26:14:323:G:HO2'	26:14:1205:U:H3	1.03	0.89
1:1G:533:A:OP1	58:1G:1725:HOH:O	1.91	0.89
30:39:188:ARG:HA	36:35:3:LEU:HD11	1.52	0.89
26:14:1899:G:H21	26:14:1902:C:N4	1.70	0.89
26:14:1757:U:H3	26:14:1762:A:H2	1.22	0.88
26:14:125:G:H5"	54:L5:19:ARG:HD3	1.55	0.88
39:A8:34:HIS:HB2	39:A8:36:TYR:HE1	1.39	0.88
26:14:567:A:OP1	58:14:3841:HOH:O	1.91	0.88
26:14:1043:C:N3	26:14:1112:G:N2	2.22	0.87
24:3K:72:C:H3'	24:3K:73:A:H5"	1.57	0.87
26:1H:1970:A:OP2	58:1H:4211:HOH:O	1.91	0.87
7:6E:111:ARG:NH1	7:6E:113:GLU:OE2	2.07	0.87
1:1G:589:C:N3	1:1G:650:G:N2	2.22	0.87
26:1H:1728:G:H8	26:1H:1732:A:H62	1.23	0.87
26:1H:674:G:OP2	58:1H:3846:HOH:O	1.93	0.87
26:14:2357:U:OP1	47:E5:20:ARG:NH1	2.07	0.87
1:1G:976:G:N2	1:1G:1362(A):C:OP2	2.07	0.86
1:13:538:G:H5"	12:3I:114:LYS:HB2	1.55	0.86
26:1H:748:G:OP2	58:1H:4196:HOH:O	1.92	0.86
26:14:1141:U:OP2	34:15:63:THR:OG1	1.92	0.86
2:12:91:PRO:HG3	2:12:154:LEU:HB2	1.55	0.86
43:A5:88:ARG:NH1	43:A5:94:ASP:OD2	2.09	0.86
26:1H:878:A:N6	26:1H:899:A:O2'	2.08	0.86
26:1H:330:A:HO2'	26:1H:331:A:H8	1.21	0.86
26:1H:510:C:OP1	58:1H:4189:HOH:O	1.93	0.86
1:1G:750:G:N2	15:6A:23:GLY:O	2.08	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6I:17:ARG:HD3	15:6I:26:GLU:HG3	1.57	0.86
26:14:1372:U:OP2	58:14:3971:HOH:O	1.92	0.86
26:14:2035:G:OP1	58:14:3847:HOH:O	1.92	0.86
36:78:86:LYS:HB3	36:78:118:GLY:HA3	1.58	0.86
45:G8:84:ARG:NH2	58:G8:302:HOH:O	2.08	0.86
26:1H:392:C:OP1	58:1H:3721:HOH:O	1.94	0.86
26:1H:2256:G:N7	58:1H:3987:HOH:O	2.09	0.86
1:1G:1154:G:H2'	1:1G:1155:G:H8	1.41	0.86
8:72:86:ILE:HG21	8:72:133:LEU:HD23	1.58	0.86
36:35:19:VAL:HG13	36:35:21:ARG:H	1.40	0.85
2:1E:67:THR:HG21	2:1E:155:LEU:HG	1.59	0.85
26:1H:987:G:OP2	58:1H:3911:HOH:O	1.94	0.85
26:1H:2033:A:OP1	58:1H:3948:HOH:O	1.92	0.85
5:42:102:ALA:HB1	5:42:106:PRO:HG2	1.58	0.85
16:7A:40:ASP:HB3	16:7A:48:TRP:HB2	1.58	0.85
36:35:39:LYS:HD2	36:35:45:LEU:HD21	1.56	0.85
26:1H:945:A:OP1	58:1H:3979:HOH:O	1.93	0.85
1:13:452:A:OP1	16:7I:43:LYS:NZ	2.09	0.85
26:1H:1601:G:N7	58:1H:4227:HOH:O	2.09	0.85
26:1H:1479:G:N7	26:1H:1510:A:N6	2.24	0.85
26:1H:2053:G:OP2	58:1H:3755:HOH:O	1.92	0.85
1:13:1348:U:H3	1:13:1374:A:H2	1.23	0.85
11:2I:99:GLN:HG2	11:2I:105:VAL:HG11	1.59	0.85
26:1H:2593:U:O4	58:1H:3678:HOH:O	1.92	0.85
40:75:64:ARG:HB2	40:75:73:GLU:HG2	1.59	0.85
26:1H:138:G:N2	44:F8:44:GLU:OE2	2.08	0.85
24:1L:74:C:N4	26:14:2554:U:O2	2.09	0.85
47:E5:53:MET:HG3	47:E5:59:LEU:HD23	1.58	0.85
1:13:768:A:OP2	58:13:1890:HOH:O	1.94	0.84
26:1H:49:A:N7	26:1H:120:U:H5	1.75	0.84
26:1H:399:G:OP2	58:1H:4236:HOH:O	1.95	0.84
2:1E:120:ALA:O	2:1E:124:SER:OG	1.95	0.84
26:1H:1386:C:H2'	26:1H:1387:C:H6	1.39	0.84
26:1H:1434:A:H61	26:1H:1558:A:N6	1.75	0.84
26:14:1997:G:OP2	58:14:3782:HOH:O	1.94	0.84
42:95:71:LEU:H	42:95:86:GLY:HA2	1.41	0.84
26:1H:2582:G:OP2	58:1H:4163:HOH:O	1.94	0.84
26:1H:2597:G:O3'	58:1H:3656:HOH:O	1.96	0.84
36:78:47:ASP:OD2	36:78:50:ARG:NH2	2.11	0.84
26:14:138:G:N2	44:B5:44:GLU:OE2	2.09	0.84
26:14:2114:A:N6	26:14:2119:A:N7	2.26	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1525:G:H2'	26:1H:1526:G:H8	1.42	0.84
34:58:47:ALA:HB2	34:58:112:LEU:HD11	1.57	0.84
55:Q8:49:VAL:HG22	55:Q8:50:LEU:H	1.43	0.84
29:21:201:THR:HG22	29:21:203:LYS:H	1.41	0.84
44:F8:67:GLY:O	44:F8:69:TYR:N	2.09	0.84
26:1H:1156:A:OP2	58:1H:3762:HOH:O	1.96	0.84
26:1H:1581:G:N7	58:1H:4513:HOH:O	2.11	0.84
26:1H:2392:A:H2	26:1H:2424:C:H42	1.22	0.84
1:1G:680:C:H42	1:1G:710:G:H1	1.25	0.84
24:3K:13:C:H2'	24:3K:14:A:H8	1.43	0.83
26:1H:751:A:OP1	58:1H:3861:HOH:O	1.96	0.83
27:1J:15:A:H5'	27:1J:16:G:C8	2.13	0.83
1:1G:590:C:O2	1:1G:649:G:N2	2.11	0.83
46:H8:72:ARG:NH2	46:H8:97:GLU:O	2.10	0.83
26:1H:878:A:N6	26:1H:899:A:HO2'	1.75	0.83
26:1H:1899:G:N2	26:1H:1902:C:H41	1.76	0.83
42:95:35:LEU:HD12	42:95:37:VAL:HG11	1.61	0.83
26:1H:563:G:OP2	58:1H:3638:HOH:O	1.97	0.83
26:1H:1265:A:OP2	58:1H:3612:HOH:O	1.95	0.83
26:14:1485:G:H1	26:14:1504:C:H42	1.27	0.83
42:95:69:LYS:HB3	42:95:86:GLY:HA3	1.59	0.83
1:13:1008:C:N4	1:13:1021:G:O6	2.11	0.83
26:1H:2032:G:H21	29:21:146:THR:HG23	1.44	0.83
26:14:2255:G:OP2	58:14:3652:HOH:O	1.95	0.83
39:65:50:SER:O	39:65:76:LYS:NZ	2.10	0.83
26:1H:259:G:HO2'	26:1H:621:A:HO2'	1.23	0.83
26:1H:1665:A:OP2	58:1H:3712:HOH:O	1.95	0.83
26:1H:2127:G:H22	26:1H:2162:G:H1'	1.41	0.83
26:1H:2502:G:OP2	58:1H:3635:HOH:O	1.95	0.83
1:1G:286:G:N7	58:1G:1753:HOH:O	2.11	0.83
26:1H:1516:U:H2'	26:1H:1517:G:H8	1.43	0.82
1:1G:456:C:H42	1:1G:476:G:H1	1.27	0.82
2:12:75:LYS:HA	2:12:78:GLN:HB2	1.59	0.82
26:1H:71:A:H2	44:F8:31:HIS:HE2	1.26	0.82
26:14:517:C:OP1	52:J5:16:ARG:NH2	2.12	0.82
26:14:1263:U:OP2	58:14:3977:HOH:O	1.96	0.82
29:29:101:ARG:HB2	29:29:203:LYS:HD3	1.60	0.82
26:1H:576:U:OP1	58:1H:3622:HOH:O	1.95	0.82
13:4A:66:LEU:HA	13:4A:70:LEU:HB2	1.61	0.82
26:14:1970:A:OP2	58:14:3577:HOH:O	1.95	0.82
1:1G:54:C:N4	1:1G:353:A:OP2	2.12	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:998:G:N2	1:1G:1043:C:N3	2.27	0.82
1:13:156:G:H1	1:13:165:C:H42	1.24	0.82
6:5E:50:TYR:OH	18:9I:74:ARG:O	1.96	0.82
20:BI:71:THR:HG22	20:BI:72:LEU:H	1.45	0.82
26:1H:120:U:OP1	58:1H:4405:HOH:O	1.97	0.82
29:21:57:LYS:HG3	29:21:59:VAL:HG12	1.61	0.82
48:J8:41:ARG:HH11	48:J8:41:ARG:HG3	1.41	0.82
26:14:84:A:N6	26:14:102:G:O2'	2.12	0.82
44:B5:8:ILE:O	49:G5:36:ARG:NH2	2.12	0.82
50:L8:37:LEU:HD12	50:L8:43:ILE:HD13	1.61	0.82
26:1H:2062:A:OP1	58:1H:3788:HOH:O	1.97	0.82
26:14:2074:U:OP1	58:14:3511:HOH:O	1.96	0.82
22:1K:22:G:O6	22:1K:46:7MG:N2	2.12	0.81
26:1H:676:A:H8	26:1H:2069:G:H21	1.28	0.81
32:51:124:GLU:HB3	32:51:132:ARG:HB3	1.62	0.81
37:88:109:VAL:HG13	37:88:113:GLN:HB3	1.61	0.81
55:Q8:14:VAL:HG21	55:Q8:21:LYS:HZ2	1.43	0.81
24:1L:50:U:O4	24:1L:64:A:N6	2.13	0.81
26:14:586:A:OP2	58:14:3535:HOH:O	1.96	0.81
1:13:737:A:H2'	1:13:738:C:H6	1.44	0.81
45:G8:100:ALA:HB1	45:G8:101:LYS:HB2	1.62	0.81
26:14:2343:C:O2'	26:14:2373:G:O2'	1.96	0.81
27:1J:18:G:H1	27:1J:65:C:H42	1.23	0.81
1:13:1007:C:H42	1:13:1022:G:H1	1.28	0.81
26:1H:2608:G:N7	58:1H:4164:HOH:O	2.13	0.81
35:25:115:VAL:HG13	35:25:121:VAL:HG21	1.62	0.81
36:78:138:LEU:HD12	36:78:144:GLU:HG3	1.61	0.81
26:14:1622:G:OP2	58:14:3933:HOH:O	1.96	0.81
40:B8:21:GLU:OE1	40:B8:91:ARG:NH2	2.13	0.81
14:5A:21:TYR:OH	14:5A:23:ARG:NH2	2.14	0.81
26:14:2415:G:H4'	36:35:67:MET:H	1.44	0.81
1:13:559:A:OP1	5:4E:126:ARG:NH2	2.13	0.81
26:1H:142:G:H1'	44:F8:37:THR:HG21	1.60	0.81
26:1H:620:G:H4'	26:1H:621:A:H5"	1.63	0.81
3:22:182:ILE:HG22	3:22:203:PHE:HA	1.63	0.81
26:14:1754:C:OP1	40:75:96:ARG:NH1	2.14	0.81
30:39:25:PRO:HD3	30:39:115:ALA:HB1	1.61	0.81
1:1G:21:G:OP1	58:1G:1737:HOH:O	1.99	0.81
26:1H:453:C:OP1	58:1H:3839:HOH:O	1.99	0.81
26:1H:1395:A:OP2	58:1H:3645:HOH:O	1.97	0.81
26:1H:1678:G:N2	26:1H:1989:G:H22	1.78	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:6E:111:ARG:HD2	7:6E:123:GLU:HB2	1.63	0.80
26:1H:442:G:H1'	30:31:48:THR:HG21	1.63	0.80
26:1H:860:U:H5	26:1H:917:A:C2	1.99	0.80
32:59:10:PRO:HD2	32:59:50:VAL:HG13	1.62	0.80
28:11:85:ASP:HB2	28:11:92:ILE:HG12	1.62	0.80
33:61:7:GLU:HA	33:61:15:VAL:HG22	1.63	0.80
26:1H:654(E):C:N3	26:1H:654(P):G:N2	2.29	0.80
26:1H:2035:G:OP1	58:1H:3744:HOH:O	1.99	0.80
1:1G:1298:C:OP2	7:62:114:ARG:NH2	2.14	0.80
45:C5:17:SER:OG	45:C5:18:GLY:N	2.13	0.80
26:1H:1187:G:OP2	58:1H:3824:HOH:O	1.98	0.80
26:1H:654(G):C:O2	26:1H:654(N):G:N2	2.15	0.80
26:1H:780:G:H21	26:1H:783:A:H62	1.28	0.80
11:2A:54:ARG:NH2	24:3L:39:U:O2'	2.12	0.80
34:15:67:LEU:HG	34:15:88:GLU:HG2	1.62	0.80
53:K5:33:LYS:HE2	53:K5:34:LEU:H	1.46	0.80
1:13:310:G:OP2	16:7I:27:LYS:NZ	2.13	0.80
26:14:574:C:OP2	58:14:3825:HOH:O	1.99	0.80
26:1H:192:C:OP2	58:1H:4128:HOH:O	2.00	0.80
26:14:2304:G:N2	26:14:2312:U:O4	2.14	0.80
8:7E:10:LEU:HD22	8:7E:83:ILE:HD11	1.63	0.80
26:1H:1399:C:N4	58:1H:4305:HOH:O	2.14	0.80
4:32:30:LYS:HB3	4:32:35:ARG:HD2	1.64	0.80
20:BI:73:HIS:HB3	20:BI:74:LYS:HD2	1.64	0.80
26:1H:2577:A:OP1	58:1H:3752:HOH:O	1.99	0.80
1:1G:617:G:H1	1:1G:623:C:H42	1.28	0.80
26:14:800:A:OP1	58:14:3859:HOH:O	1.98	0.79
26:14:1249:U:OP1	58:14:3530:HOH:O	2.00	0.79
4:3E:15:GLU:OE1	4:3E:66:ARG:NH1	2.16	0.79
5:4E:8:GLU:HG2	5:4E:34:VAL:HG22	1.65	0.79
33:61:110:ASP:HB2	33:61:112:LYS:HG2	1.62	0.79
26:14:739:G:OP1	58:14:3506:HOH:O	1.99	0.79
47:E5:49:LYS:HG3	47:E5:80:HIS:HB3	1.63	0.79
1:13:1160:G:H1	1:13:1177:G:H22	1.30	0.79
9:8E:21:PRO:HA	9:8E:59:PHE:HA	1.65	0.79
26:1H:120:U:OP2	58:1H:3999:HOH:O	2.00	0.79
27:16:12:C:O2	47:I8:74:ARG:NH1	2.15	0.79
1:1G:961:U:O2	1:1G:1201:A:N6	2.15	0.79
26:1H:1316:U:H2'	26:1H:1317:A:H8	1.45	0.79
1:1G:1435:G:H2'	1:1G:1436:U:C6	2.17	0.79
10:1I:77:PRO:HB2	10:1I:79:ARG:HH12	1.46	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:848:G:H2'	26:14:849:A:C8	2.17	0.79
26:14:2681:C:H5	26:14:2725:A:H62	1.26	0.79
2:1E:189:ASP:HB2	2:1E:205:ASP:HB3	1.65	0.79
4:32:31:CYS:HB3	4:32:33:MET:HB2	1.65	0.79
39:65:36:TYR:HA	39:65:52:SER:HB3	1.63	0.79
1:1G:1069:C:O2'	1:1G:1192:C:O2	2.01	0.79
2:12:73:THR:HG21	2:12:97:TRP:H	1.48	0.79
26:14:751:A:OP1	58:14:3512:HOH:O	2.01	0.79
30:39:46:ARG:HG2	30:39:46:ARG:HH11	1.48	0.79
2:1E:21:ARG:HB2	2:1E:39:ILE:HA	1.65	0.79
26:1H:879:G:O6	26:1H:898:C:N4	2.15	0.79
26:14:631:A:OP2	55:M5:47:LYS:NZ	2.11	0.79
27:1J:3:C:N3	27:1J:117:G:N2	2.30	0.79
30:39:117:ARG:HH12	36:35:1:MET:H2	1.30	0.79
55:M5:40:GLU:HA	55:M5:43:GLN:HB2	1.65	0.79
26:14:2012:G:OP1	43:A5:11:ARG:NH2	2.16	0.79
27:1J:38:C:N3	27:1J:44:G:N2	2.29	0.79
45:C5:39:VAL:HG23	45:C5:41:GLY:H	1.48	0.79
26:1H:2046:G:H5'	52:N8:19:ARG:HA	1.63	0.78
26:1H:2056:G:OP2	58:1H:3617:HOH:O	2.01	0.78
26:14:833:U:O2	36:35:55:ARG:NH1	2.17	0.78
26:1H:654(H):G:N7	26:1H:654(N):G:N2	2.30	0.78
4:32:153:ARG:NH1	4:32:181:MET:SD	2.56	0.78
27:1J:38:C:H42	27:1J:44:G:H1	1.29	0.78
1:13:1213:A:O2'	1:13:1215:G:N7	2.14	0.78
10:1I:61:GLU:OE2	14:5I:45:ARG:NH1	2.16	0.78
26:1H:2126:A:N6	26:1H:2163:C:O2	2.16	0.78
27:16:100:G:OP1	58:16:303:HOH:O	2.01	0.78
39:A8:28:VAL:HG11	39:A8:98:VAL:HG13	1.65	0.78
1:13:972:C:OP1	58:13:1882:HOH:O	1.99	0.78
2:1E:100:GLY:O	2:1E:104:ASN:N	2.16	0.78
26:1H:1633:G:OP2	58:1H:4369:HOH:O	2.01	0.78
1:1G:362:G:H4'	12:3A:33:ARG:HH21	1.49	0.78
1:1G:376:G:H5"	16:7A:5:ARG:HD2	1.63	0.78
9:8E:121:ARG:NH1	9:8E:122:ALA:O	2.16	0.78
26:1H:1639:U:OP1	58:1H:3674:HOH:O	2.02	0.78
26:1H:1778:U:H2'	26:1H:1784:A:N6	1.98	0.78
26:1H:2135:A:N6	26:1H:2156:G:O2'	2.17	0.78
26:1H:2210:G:H3'	26:1H:2211:G:C8	2.19	0.78
26:14:2270:G:OP2	58:14:3728:HOH:O	2.01	0.78
10:1I:57:LYS:HD2	10:1I:60:ARG:HH12	1.49	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2334:G:O6	47:I8:74:ARG:NH2	2.15	0.78
31:41:66:GLN:OE1	31:41:98:ARG:NH1	2.15	0.78
36:78:2:LYS:HE3	36:78:4:SER:HB2	1.65	0.78
51:M8:48:ARG:HA	51:M8:48:ARG:HH11	1.49	0.78
26:14:1019:U:H3	26:14:1142(A):A:H62	1.30	0.78
46:H8:19:ARG:NH1	46:H8:84:GLU:O	2.17	0.78
1:1G:490:G:OP2	4:32:132:ARG:NH2	2.16	0.78
26:14:2134:A:O2'	26:14:2159:G:N2	2.16	0.78
26:14:2392:A:H2	26:14:2424:C:H42	1.29	0.78
29:29:66:HIS:NE2	29:29:73:GLU:OE1	2.15	0.78
39:65:74:ALA:HB1	39:65:107:GLU:HB2	1.65	0.78
26:1H:1900:A:H5'	26:1H:1900:A:H8	1.47	0.78
28:11:93:ALA:HB3	28:11:105:ILE:HG22	1.64	0.78
26:14:593:G:H4'	55:M5:60:LEU:HD22	1.64	0.78
26:14:780:G:H21	26:14:783:A:H62	1.31	0.78
36:35:47:ASP:OD1	36:35:50:ARG:NH1	2.17	0.78
19:AI:40:ILE:HG23	19:AI:41:VAL:HG13	1.64	0.78
26:1H:1774:C:OP1	58:1H:3750:HOH:O	2.01	0.78
1:1G:853:G:H2'	1:1G:854:G:H8	1.47	0.78
1:1G:1002:G:N2	1:1G:1038:C:N3	2.32	0.78
12:3A:52:LEU:O	12:3A:54:LYS:NZ	2.17	0.78
32:59:6:ARG:HH11	32:59:6:ARG:H	1.32	0.78
36:35:81:GLN:NE2	36:35:106:LEU:O	2.17	0.78
26:1H:1287:A:N7	38:98:107:ASP:HB2	1.98	0.78
26:1H:2789:C:O2	26:1H:2894:G:N2	2.15	0.78
41:C8:8:VAL:HG23	41:C8:11:ARG:HH21	1.49	0.78
19:AA:41:VAL:HG12	19:AA:43:GLU:H	1.49	0.78
26:14:1702:G:N7	58:14:4006:HOH:O	2.16	0.78
33:69:130:TYR:HB3	33:69:136:VAL:HG13	1.66	0.78
1:1G:673:G:H2'	1:1G:674:G:C8	2.19	0.77
26:14:273(C):C:H42	26:14:363(C):G:H1	1.32	0.77
26:14:1786:A:OP1	58:14:3569:HOH:O	2.02	0.77
41:85:28:ARG:NH1	41:85:38:THR:OG1	2.17	0.77
1:13:510:A:OP2	4:3E:49:ARG:NH2	2.17	0.77
26:14:270(Q):C:H5"	33:69:45:LYS:HE3	1.65	0.77
26:14:2352:A:C2	47:E5:33:ALA:HB1	2.17	0.77
1:13:376:G:H1	1:13:387:U:H3	1.30	0.77
48:J8:65:SER:OG	48:J8:66:HIS:ND1	2.17	0.77
1:1G:1210:C:HO2'	1:1G:1213:A:HO2'	1.29	0.77
9:82:13:ALA:HB2	9:82:68:GLY:HA3	1.67	0.77
26:14:1113:U:H5'	32:59:2:SER:HA	1.65	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:81:ILE:HG22	29:29:82:ARG:H	1.49	0.77
46:D5:157:LEU:HB3	46:D5:161:VAL:HG11	1.65	0.77
52:N8:33:CYS:HB2	52:N8:40:LYS:HD3	1.65	0.77
26:1H:509:C:O3'	58:1H:4191:HOH:O	2.02	0.77
35:25:13:ASN:HD21	35:25:96:THR:HG23	1.50	0.77
1:13:1029:G:H1'	1:13:1032(A):G:H22	1.49	0.77
26:14:654(D):G:H22	26:14:654(Q):C:H42	1.33	0.77
1:13:859:A:H2'	1:13:860:A:H8	1.49	0.77
26:1H:259:G:H21	26:1H:621:A:H8	1.30	0.77
2:12:47:THR:HG23	2:12:202:PRO:HG2	1.64	0.77
14:5A:45:ARG:O	14:5A:49:HIS:ND1	2.18	0.77
26:14:397:G:N7	58:14:3752:HOH:O	2.18	0.77
34:15:18:ALA:HA	34:15:21:LYS:HG3	1.66	0.77
45:C5:17:SER:HB2	45:C5:71:LYS:HD2	1.66	0.77
33:61:144:VAL:HG13	33:61:145:VAL:HG23	1.65	0.77
1:1G:156:G:N2	1:1G:165:C:O2	2.18	0.77
27:1J:104:A:OP1	46:D5:72:ARG:NH1	2.18	0.77
26:1H:1782:C:OP1	58:1H:3627:HOH:O	2.02	0.77
26:14:920:G:H2'	26:14:921:G:H8	1.49	0.77
42:95:71:LEU:N	42:95:86:GLY:HA2	1.99	0.77
33:61:39:ALA:HB1	33:61:44:LEU:HD13	1.66	0.76
26:14:2068:U:H3	26:14:2430:A:H2	1.33	0.76
9:8E:50:LEU:HD23	9:8E:85:LEU:HD11	1.67	0.76
41:C8:92:ARG:O	41:C8:94:ASN:N	2.19	0.76
53:O8:41:PRO:HB2	53:O8:43:CYS:HB2	1.65	0.76
1:13:812:C:N3	58:13:1802:HOH:O	2.18	0.76
26:1H:187:G:N7	58:1H:4055:HOH:O	2.17	0.76
26:1H:751:A:OP1	58:1H:3860:HOH:O	2.03	0.76
26:14:1992:G:N7	58:14:3597:HOH:O	2.17	0.76
26:14:2689:U:P	26:14:2719:G:H22	2.09	0.76
8:7E:7:ALA:HB2	8:7E:85:ARG:HH11	1.50	0.76
49:K8:15:LYS:H	49:K8:67:LYS:NZ	1.84	0.76
46:D5:4:ARG:HA	46:D5:58:VAL:HB	1.65	0.76
47:E5:27:GLU:HG3	47:E5:68:GLU:HA	1.68	0.76
26:1H:192:C:N3	58:1H:3654:HOH:O	2.19	0.76
32:51:83:TYR:HD1	32:51:84:SER:H	1.31	0.76
48:J8:91:LYS:O	48:J8:94:LEU:N	2.18	0.76
1:1G:1359:C:O2'	1:1G:1361:G:N7	2.17	0.76
1:13:737:A:H2'	1:13:738:C:C6	2.20	0.76
1:13:1305:G:N2	1:13:1331:G:H2'	2.01	0.76
26:1H:2807:G:N1	26:1H:2893:G:O6	2.19	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:11:G:N2	1:1G:525:C:O2'	2.19	0.76
26:14:2419:U:O4	55:M5:31:HIS:ND1	2.19	0.76
26:1H:1165:U:H2'	26:1H:1166:C:C6	2.20	0.76
26:1H:1814:G:O6	58:1H:4231:HOH:O	2.03	0.76
26:1H:330:A:O2'	26:1H:331:A:H8	1.68	0.76
26:1H:1828:G:OP1	58:1H:3896:HOH:O	2.04	0.76
39:A8:93:LYS:HG2	39:A8:95:HIS:HB2	1.67	0.76
19:AA:50:ALA:HB1	19:AA:57:HIS:HB3	1.67	0.76
26:14:2686:G:N7	58:14:3783:HOH:O	2.19	0.76
49:G5:25:VAL:HG12	49:G5:60:LEU:HD23	1.67	0.76
1:13:187:C:O2	1:13:191(A):G:N1	2.19	0.75
26:1H:450:G:OP2	58:1H:3835:HOH:O	2.04	0.75
46:H8:76:LEU:H	46:H8:76:LEU:HD22	1.51	0.75
32:59:15:VAL:HG11	32:59:29:PRO:HD3	1.67	0.75
32:59:125:VAL:HG22	32:59:126:PRO:HA	1.67	0.75
34:15:47:ALA:HB2	34:15:112:LEU:HD21	1.66	0.75
26:14:67:U:H3	26:14:74:A:H2	1.31	0.75
26:14:1970:A:OP1	58:14:3572:HOH:O	2.04	0.75
26:1H:2838:G:N7	58:1H:4314:HOH:O	2.19	0.75
39:A8:37:ALA:HB2	39:A8:101:LEU:HD21	1.66	0.75
26:14:958:U:OP2	37:45:14:ARG:NH1	2.15	0.75
36:35:128:HIS:HA	36:35:147:LEU:HA	1.69	0.75
42:95:80:GLN:HG3	42:95:81:TYR:H	1.51	0.75
1:13:1003:G:N2	1:13:1037:C:O2	2.19	0.75
1:1G:192:U:H2'	1:1G:193:C:H6	1.51	0.75
26:14:1434:A:H61	26:14:1558:A:H62	1.33	0.75
33:61:37:VAL:HG12	33:61:38:LEU:HD12	1.68	0.75
26:14:1864:U:OP1	26:14:2410:G:O2'	2.03	0.75
26:14:2475:C:HO2'	26:14:2477:C:H5	1.35	0.75
27:1J:18:G:N2	27:1J:65:C:N3	2.35	0.75
44:B5:41:ASN:HA	44:B5:44:GLU:HB2	1.69	0.75
1:1G:41:G:H2'	1:1G:42:G:C8	2.21	0.75
26:1H:1495:A:OP2	58:1H:4102:HOH:O	2.04	0.75
26:1H:2199:A:H5"	26:1H:2205:C:H5	1.52	0.75
26:1H:2656:U:H3	26:1H:2665:A:H2	1.32	0.75
1:1G:377:G:H1	1:1G:386:C:H42	1.33	0.75
15:6A:54:ARG:NH1	15:6A:58:MET:SD	2.59	0.75
10:1I:57:LYS:O	10:1I:60:ARG:NH1	2.19	0.75
26:14:2210:G:H3'	26:14:2211:G:C2	2.22	0.75
45:C5:97:ARG:NH2	45:C5:104:GLY:O	2.20	0.75
26:1H:2577:A:OP1	58:1H:3756:HOH:O	2.04	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:15:94:HIS:HB2	34:15:97:ARG:HG3	1.69	0.75
26:1H:1664:A:OP1	58:1H:3712:HOH:O	2.05	0.74
24:3L:26:A:H61	24:3L:44:G:H1	1.31	0.74
26:14:749:C:OP2	58:14:3643:HOH:O	2.03	0.74
1:13:1086:U:O4	1:13:1099:G:N2	2.17	0.74
16:7I:4:ILE:HB	16:7I:66:PRO:HB3	1.69	0.74
26:1H:1580:A:OP1	58:1H:4512:HOH:O	2.04	0.74
29:21:105:THR:OG1	29:21:199:ARG:NH2	2.20	0.74
27:1J:76:G:N7	58:1J:310:HOH:O	2.20	0.74
1:13:1004:A:O5'	1:13:1025:U:N3	2.15	0.74
40:B8:6:LEU:HA	40:B8:9:LEU:HB2	1.68	0.74
26:14:2250:G:C4	37:45:82:ARG:HG3	2.23	0.74
43:A5:65:LEU:HD13	43:A5:68:ARG:HD3	1.69	0.74
1:13:352:C:O2'	1:13:354:G:OP1	2.04	0.74
1:13:827:U:H5	1:13:872:A:N1	1.85	0.74
2:1E:33:TYR:HB2	2:1E:43:ASP:HB2	1.68	0.74
10:1I:34:VAL:HG12	10:1I:74:ILE:HG23	1.70	0.74
12:3I:52:LEU:O	12:3I:54:LYS:NZ	2.20	0.74
1:1G:587:G:N2	1:1G:754:C:OP2	2.20	0.74
1:1G:1248:A:N6	1:1G:1288:A:OP2	2.21	0.74
1:1G:1248:A:N3	9:82:70:LYS:NZ	2.33	0.74
29:29:16:ARG:NH2	29:29:171:GLU:OE1	2.20	0.74
26:1H:1611:C:OP2	58:1H:4174:HOH:O	2.05	0.74
26:1H:1791:A:H5'	28:11:206:LEU:HD12	1.68	0.74
26:14:2839:G:H5'	38:55:46:GLY:HA2	1.68	0.74
40:75:77:PRO:HG2	40:75:80:SER:HB2	1.69	0.74
1:13:353:A:H8	1:13:353:A:H5'	1.52	0.74
1:13:766:A:OP2	58:13:1803:HOH:O	2.04	0.74
1:13:1149:C:H2'	1:13:1150:U:H6	1.52	0.74
12:3I:126:LYS:HG3	12:3I:128:ALA:H	1.53	0.74
24:3K:15:G:H1	24:3K:48:C:H41	1.34	0.74
26:1H:1900:A:H5'	26:1H:1900:A:C8	2.23	0.74
42:D8:60:GLU:HB2	42:D8:97:LYS:HE2	1.69	0.74
26:14:2331:G:O3'	47:E5:43:THR:HG22	1.87	0.74
28:19:69:ARG:HD3	28:19:105:ILE:HD11	1.70	0.74
26:1H:2059:A:OP2	58:1H:4045:HOH:O	2.04	0.74
47:I8:49:LYS:NZ	47:I8:68:GLU:OE2	2.13	0.74
1:1G:1003:G:N2	1:1G:1037:C:O2	2.19	0.74
4:32:98:GLU:OE2	4:32:103:ASN:ND2	2.18	0.74
26:14:1061:U:H4'	26:14:1070:A:H1'	1.68	0.74
26:14:2873:A:H8	38:55:6:SER:H	1.35	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:577:G:O6	58:1H:3922:HOH:O	2.06	0.74
1:1G:1002:G:H2'	1:1G:1003:G:C8	2.23	0.74
1:1G:1004:A:OP1	1:1G:1024:G:N1	2.17	0.74
1:13:1423:G:OP1	35:68:49:ARG:NH2	2.21	0.74
13:4I:3:ARG:HE	13:4I:9:ILE:HD11	1.53	0.74
26:1H:1533:C:H3'	26:1H:1534:G:H5"	1.69	0.74
26:1H:2583:G:OP2	58:1H:4163:HOH:O	2.05	0.74
2:12:134:GLU:OE1	2:12:137:ARG:NH1	2.21	0.74
2:12:185:ILE:HG22	2:12:199:TYR:HB2	1.69	0.74
26:14:760:G:OP1	58:14:3870:HOH:O	2.05	0.74
1:13:1329:A:H5'	13:4I:29:ARG:HD2	1.68	0.73
2:12:67:THR:HG21	2:12:155:LEU:HG	1.68	0.73
26:14:877:U:O4	26:14:899:A:N6	2.21	0.73
26:14:920:G:H2'	26:14:921:G:C8	2.23	0.73
26:1H:1466:G:N2	26:1H:1547:C:N3	2.36	0.73
1:1G:591:U:OP2	8:72:30:ARG:NH1	2.19	0.73
26:14:1434:A:H61	26:14:1558:A:N6	1.86	0.73
29:21:36:ARG:NH2	29:21:88:GLY:O	2.21	0.73
30:31:11:VAL:HG22	30:31:125:LEU:HB2	1.71	0.73
26:14:1041:C:H42	26:14:1114:G:H1	1.32	0.73
26:14:1856:G:H1	26:14:1886:C:H42	1.33	0.73
1:13:74:C:H42	1:13:96:G:H1	1.36	0.73
1:13:963:G:H21	10:1I:55:LYS:HE2	1.53	0.73
26:1H:1249:U:OP1	58:1H:3828:HOH:O	2.06	0.73
26:1H:2199:A:H5'	26:1H:2205:C:OP2	1.89	0.73
37:88:51:ARG:HH12	37:88:52:VAL:HG23	1.52	0.73
1:1G:353:A:H5'	1:1G:353:A:H8	1.53	0.73
1:1G:1126:U:H4'	1:1G:1127:G:C8	2.23	0.73
26:14:751:A:OP1	58:14:3515:HOH:O	2.06	0.73
26:1H:1434:A:H61	26:1H:1558:A:H61	1.34	0.73
32:51:4:ILE:HB	32:51:6:ARG:HG3	1.71	0.73
26:14:1382:G:N7	58:14:3672:HOH:O	2.20	0.73
29:29:151:TYR:HD2	29:29:154:LYS:HZ2	1.35	0.73
38:55:33:ARG:HD3	38:55:113:LEU:HD11	1.70	0.73
26:14:1270:C:H5"	26:14:1271:G:H5'	1.71	0.73
26:14:1900:A:OP2	58:14:3578:HOH:O	2.05	0.73
55:M5:52:LYS:HZ1	55:M5:53:PRO:HA	1.53	0.73
1:13:177:C:OP1	20:BI:65:LYS:NZ	2.17	0.73
26:1H:500:G:N7	58:1H:4351:HOH:O	2.22	0.73
27:16:40:U:H1'	27:16:45:A:H61	1.52	0.73
29:21:119:ARG:HD3	29:21:160:TYR:HB2	1.70	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:78:50:ARG:HG3	55:Q8:58:ILE:HD11	1.69	0.73
49:K8:17:SER:HB3	49:K8:67:LYS:HE3	1.71	0.73
5:42:101:ILE:HD11	5:42:119:LEU:HD23	1.71	0.73
16:7A:53:VAL:HG13	16:7A:79:VAL:HG22	1.71	0.73
26:14:453:C:OP1	58:14:3860:HOH:O	2.06	0.73
43:A5:13:SER:HB3	43:A5:16:LYS:HD2	1.70	0.73
30:31:103:LYS:HA	30:31:106:ARG:HG3	1.70	0.73
37:88:116:GLU:OE2	37:88:119:ARG:NH2	2.21	0.73
26:14:607:U:H3	26:14:621:A:H2	1.36	0.73
26:14:1249:U:OP1	58:14:3534:HOH:O	2.06	0.73
1:13:606:G:N3	1:13:632:A:N6	2.36	0.73
26:1H:1525:G:H2'	26:1H:1526:G:C8	2.23	0.73
26:1H:1689:A:H62	26:1H:1698:A:H2	1.37	0.73
34:58:56:ASN:N	34:58:125:GLY:O	2.13	0.73
41:85:92:ARG:HH22	42:95:10:LYS:HA	1.53	0.73
1:13:975:A:H4'	1:13:976:G:H5"	1.71	0.73
11:2A:85:ARG:HD3	11:2A:113:PRO:HD3	1.70	0.73
30:39:122:LYS:O	30:39:124:LEU:N	2.22	0.73
5:4E:137:GLU:OE1	5:4E:141:GLN:NE2	2.21	0.72
19:AI:41:VAL:HG21	19:AI:67:VAL:HG12	1.68	0.72
26:1H:598:G:H5'	36:78:11:GLY:HA3	1.71	0.72
26:1H:1441:G:H2'	26:1H:1442:G:H8	1.53	0.72
55:Q8:53:PRO:HA	55:Q8:55:ALA:N	2.04	0.72
3:22:88:ARG:HB2	3:22:101:LEU:HD22	1.71	0.72
3:22:91:LEU:HB2	3:22:99:VAL:HG11	1.69	0.72
26:14:399:G:OP2	58:14:3682:HOH:O	2.06	0.72
26:1H:574:C:OP2	58:1H:3919:HOH:O	2.07	0.72
26:1H:2062:A:H2'	26:1H:2062:A:N3	2.03	0.72
16:7I:53:VAL:HG13	16:7I:79:VAL:HG22	1.70	0.72
26:1H:1797:C:HO2'	28:11:259:THR:HG1	1.35	0.72
27:16:42:C:O3'	31:41:67:LYS:NZ	2.22	0.72
37:88:35:VAL:HG13	37:88:130:LYS:HB3	1.72	0.72
26:14:574:C:OP2	58:14:3827:HOH:O	2.07	0.72
55:M5:52:LYS:NZ	55:M5:53:PRO:HA	2.04	0.72
24:3K:30:G:H1	24:3K:40:C:H42	1.37	0.72
13:4A:97:PRO:HA	13:4A:110:ARG:HD3	1.72	0.72
16:7I:21:VAL:HG12	16:7I:33:ILE:HD12	1.69	0.72
26:1H:1828:G:OP1	58:1H:3893:HOH:O	2.06	0.72
1:1G:888:G:O2'	1:1G:1488:G:O2'	2.07	0.72
1:1G:985:C:N3	1:1G:1220:G:N2	2.37	0.72
3:22:57:ILE:HG12	3:22:66:VAL:HG22	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:395:U:H2'	26:14:396:G:N7	2.03	0.72
34:15:42:TRP:O	41:85:64:ARG:NH2	2.19	0.72
5:4E:45:PHE:CE2	5:4E:47:LYS:HD2	2.25	0.72
43:E8:12:ILE:HG13	43:E8:42:ARG:HH11	1.55	0.72
1:1G:983:A:N1	1:1G:1222:G:N2	2.38	0.72
26:14:910:A:H62	37:45:12:GLN:HA	1.54	0.72
26:14:1225:C:O2'	42:95:85:LYS:N	2.23	0.72
26:1H:2419:U:H5'	53:O8:23:THR:HG21	1.71	0.72
1:1G:1057:G:H1	1:1G:1203:C:H42	1.37	0.72
9:82:28:VAL:HG22	9:82:63:ILE:HB	1.72	0.72
28:19:70:TRP:CH2	28:19:150:LYS:HA	2.24	0.72
19:AI:5:LEU:HD13	19:AI:10:PHE:HD2	1.54	0.72
26:1H:1257:C:H4'	30:31:83:PHE:CD1	2.25	0.72
46:H8:152:ALA:HB1	46:H8:163:LEU:HD11	1.70	0.72
46:H8:165:VAL:HB	46:H8:167:PRO:HD3	1.72	0.72
27:1J:80:U:H2'	27:1J:81:G:N2	2.05	0.72
31:49:67:LYS:H	51:I5:6:HIS:CD2	2.07	0.72
38:55:38:VAL:HG12	38:55:42:LYS:HD2	1.71	0.72
39:65:84:GLN:HA	39:65:110:LEU:HD12	1.72	0.72
1:13:1372:U:H5"	9:8E:71:SER:HB2	1.70	0.72
26:1H:141:A:H8	26:1H:1595:G:H21	1.36	0.72
1:1G:532:A:N6	1:1G:1206:G:O2'	2.23	0.72
1:1G:589:C:H42	1:1G:650:G:H1	1.38	0.72
40:B8:3:ARG:HB2	40:B8:6:LEU:HB3	1.70	0.72
26:14:2134:A:OP2	26:14:2157:G:N2	2.23	0.72
36:35:14:LYS:O	36:35:16:ARG:N	2.23	0.72
1:13:1069:C:OP2	58:13:1951:HOH:O	2.08	0.71
36:78:50:ARG:HG3	36:78:50:ARG:HH21	1.55	0.71
37:88:137:TYR:CE1	46:H8:83:PRO:HG3	2.25	0.71
1:1G:680:C:N4	1:1G:710:G:H1	1.88	0.71
26:14:2002:G:N7	58:14:3900:HOH:O	2.22	0.71
46:D5:87:ASP:N	46:D5:87:ASP:OD1	2.21	0.71
26:1H:1386:C:H2'	26:1H:1387:C:C6	2.24	0.71
28:11:146:GLU:HB2	28:11:189:CYS:HB3	1.72	0.71
26:14:1357:U:O4	58:14:3968:HOH:O	2.03	0.71
1:13:974:A:OP2	14:5I:41:ARG:NH1	2.23	0.71
1:13:1129:C:H4'	1:13:1130:A:H5'	1.72	0.71
26:1H:265:A:C8	26:1H:266:G:H1'	2.25	0.71
26:1H:2033:A:H8	58:1H:3948:HOH:O	1.72	0.71
8:72:120:THR:HG23	8:72:123:GLU:H	1.55	0.71
24:1L:19:G:N2	24:1L:56:C:N3	2.38	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2324:C:H5"	26:14:2325:G:H5'	1.70	0.71
26:14:2720:U:H3	26:14:2873:A:H2	1.36	0.71
26:1H:945:A:N3	58:1H:3801:HOH:O	2.24	0.71
26:1H:1658:C:OP1	58:1H:3694:HOH:O	2.07	0.71
1:1G:516:U:O4	58:1G:1725:HOH:O	2.07	0.71
7:62:20:ASP:HB3	7:62:23:VAL:HG23	1.71	0.71
26:14:602:G:O2'	26:14:604:G:O2'	2.06	0.71
32:59:89:ILE:HD12	32:59:130:ARG:HA	1.69	0.71
8:7E:34:GLU:OE1	8:7E:37:ARG:NH1	2.23	0.71
30:31:32:LEU:HD21	30:31:105:VAL:HG13	1.72	0.71
45:G8:49:VAL:HG21	45:G8:55:TYR:HE2	1.56	0.71
1:1G:1305:G:H22	1:1G:1331:G:H2'	1.56	0.71
2:12:178:ARG:HH21	8:72:68:ARG:HH22	1.39	0.71
26:14:619:G:H5"	26:14:620:G:H21	1.56	0.71
45:C5:17:SER:HB3	45:C5:71:LYS:HB3	1.71	0.71
10:1I:58:ASP:OD1	58:1I:201:HOH:O	2.09	0.71
26:1H:958:U:OP2	37:88:14:ARG:NH1	2.23	0.71
26:1H:1772:G:OP1	58:1H:3895:HOH:O	2.08	0.71
37:88:59:ARG:HH11	37:88:59:ARG:H	1.38	0.71
2:1E:53:ARG:HH12	2:1E:200:ILE:HD12	1.55	0.71
26:1H:1062:G:H2'	26:1H:1063:G:C8	2.26	0.71
2:12:18:GLY:O	2:12:204:ASN:ND2	2.23	0.71
1:13:835:U:H3	1:13:851:G:H1	1.37	0.71
8:7E:87:SER:HB2	8:7E:93:VAL:HB	1.73	0.71
11:2I:54:ARG:NH1	24:3K:40:C:OP1	2.24	0.71
32:51:4:ILE:HD13	32:51:4:ILE:H	1.56	0.71
40:B8:77:PRO:HG2	40:B8:80:SER:HB2	1.72	0.71
43:E8:70:TYR:HD1	43:E8:70:TYR:H	1.37	0.71
46:H8:9:TYR:HE1	46:H8:35:ARG:HD3	1.55	0.71
26:14:270(I):G:H2'	26:14:270(J):G:H8	1.55	0.71
26:14:1416:G:O2'	26:14:1417:C:O5'	2.08	0.71
26:14:2439:A:H5'	26:14:2439:A:C8	2.25	0.71
2:1E:178:ARG:HG3	8:7E:72:PRO:HA	1.73	0.71
26:1H:2298:A:H62	26:1H:2318:G:H8	1.37	0.71
45:G8:82:PRO:HG3	45:G8:97:ARG:HG3	1.73	0.71
46:H8:9:TYR:CE1	46:H8:35:ARG:HD3	2.26	0.71
1:1G:411:A:H62	1:1G:413:G:H21	1.38	0.71
1:1G:853:G:H2'	1:1G:854:G:C8	2.26	0.71
26:14:2572:A:C8	29:29:144:ARG:HD2	2.26	0.71
1:13:523:A:H61	12:3I:92:ASP:HB2	1.55	0.71
9:8E:112:LYS:HA	9:8E:119:ALA:HB2	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AA:39:THR:OG1	19:AA:70:LYS:NZ	2.24	0.71
26:14:1048:A:N6	26:14:1112:G:O2'	2.24	0.71
26:14:2127:G:O6	26:14:2161:C:N4	2.18	0.71
45:C5:18:GLY:O	45:C5:21:LYS:N	2.24	0.71
23:2K:54:G:H2'	23:2K:55:5MU:H6	1.54	0.70
26:14:2287:A:H62	26:14:2344:U:H3	1.38	0.70
26:14:662:G:OP1	36:35:15:ARG:NH2	2.24	0.70
55:M5:53:PRO:O	55:M5:57:ARG:NH1	2.24	0.70
24:3K:64:A:N3	24:3K:65:G:N2	2.39	0.70
40:B8:50:ILE:HD13	40:B8:64:ARG:HB3	1.71	0.70
1:1G:662:G:O2'	1:1G:836:G:OP1	2.10	0.70
26:14:323:G:O2'	26:14:1205:U:N3	2.16	0.70
26:14:459:U:H5"	54:L5:40:TRP:CD2	2.24	0.70
26:14:479:A:N3	26:14:481:G:H5"	2.06	0.70
11:2I:79:SER:HB2	11:2I:106:LYS:HD2	1.73	0.70
16:7I:26:ARG:HE	16:7I:31:LYS:HB3	1.57	0.70
26:14:831:G:N7	58:14:3657:HOH:O	2.24	0.70
42:95:71:LEU:H	42:95:86:GLY:CA	2.05	0.70
1:13:584:G:O6	58:13:1921:HOH:O	2.06	0.70
26:1H:2313:C:H4'	31:41:91:ARG:HG3	1.73	0.70
33:61:3:VAL:HG12	33:61:38:LEU:HA	1.73	0.70
51:M8:12:ALA:HB3	51:M8:24:THR:HB	1.72	0.70
1:1G:474:G:H2'	1:1G:475:G:C8	2.26	0.70
19:AA:9:VAL:HG22	51:I5:62:ARG:HB3	1.73	0.70
26:14:1019:U:OP1	26:14:1035:U:O2'	2.10	0.70
28:19:242:ARG:HH11	28:19:242:ARG:H	1.39	0.70
35:25:2:ILE:HD12	35:25:6:THR:HG21	1.73	0.70
36:35:15:ARG:HH21	36:35:17:LYS:HE3	1.57	0.70
1:13:659:U:H2'	1:13:660:G:H8	1.56	0.70
26:1H:1156:A:C8	41:C8:51:LYS:HD3	2.27	0.70
36:78:121:LYS:HE2	36:78:123:LEU:HD12	1.72	0.70
13:4A:33:ALA:O	13:4A:37:THR:OG1	2.09	0.70
1:13:1302:U:OP2	13:4I:21:TYR:OH	2.03	0.70
1:13:1348:U:N3	1:13:1374:A:H2	1.88	0.70
1:1G:1368:G:H5'	9:82:112:LYS:HB3	1.73	0.70
7:62:67:GLU:OE2	7:62:70:LYS:NZ	2.24	0.70
26:1H:265:A:H8	26:1H:266:G:H1'	1.56	0.70
26:1H:2032:G:H21	29:21:146:THR:CG2	2.03	0.70
32:51:30:LYS:HE3	32:51:81:GLU:H	1.56	0.70
10:1A:51:ARG:HB2	10:1A:60:ARG:HA	1.74	0.70
32:59:137:ASP:HB3	32:59:140:LYS:HB2	1.71	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1265:A:H3'	52:N8:19:ARG:NH1	2.07	0.70
26:14:943:U:OP2	36:35:36:LYS:HG3	1.92	0.70
2:1E:15:VAL:HG21	2:1E:209:ARG:HB3	1.73	0.70
36:78:56:SER:HB2	36:78:61:ARG:HD3	1.73	0.70
38:98:41:ALA:O	38:98:44:LEU:N	2.23	0.70
1:1G:564:C:O2'	8:72:91:ARG:NH2	2.25	0.70
26:14:2429:G:O6	36:35:61:ARG:NH2	2.25	0.70
30:39:103:LYS:HA	30:39:106:ARG:HG3	1.74	0.70
1:13:77:C:N3	1:13:90:C:N4	2.39	0.69
6:5E:97:PHE:N	18:9I:30:ASP:OD1	2.22	0.69
17:8I:67:LYS:HA	17:8I:70:ARG:HH12	1.56	0.69
26:1H:2577:A:H5"	26:1H:2578:G:H5'	1.74	0.69
30:31:64:ILE:HG23	30:31:65:TRP:CD1	2.27	0.69
46:H8:128:VAL:HG23	46:H8:161:VAL:HG11	1.74	0.69
26:14:1581:G:H2'	26:14:1582:C:O4'	1.92	0.69
26:14:1945:G:H2'	26:14:1946:U:C6	2.27	0.69
30:39:28:ILE:HA	30:39:112:MET:HG2	1.71	0.69
1:13:630:G:H2'	1:13:631:G:O4'	1.92	0.69
26:14:1378:A:O2'	26:14:1380:G:N7	2.23	0.69
26:14:2307:G:O2'	26:14:2308:G:OP2	2.07	0.69
26:14:2327:A:H2'	26:14:2328:A:C8	2.27	0.69
31:49:125:PHE:HB3	31:49:166:ASP:HB2	1.74	0.69
1:13:1125:U:H5'	1:13:1126:U:H5	1.56	0.69
49:K8:47:ASN:O	49:K8:49:LYS:N	2.24	0.69
26:14:607:U:OP1	30:39:102:PRO:HA	1.92	0.69
26:14:848:G:H2'	26:14:849:A:H8	1.58	0.69
23:2K:47:7MG:H81	23:2K:48:U:H5	1.56	0.69
26:1H:1021:A:H62	26:1H:1141:U:H3	1.40	0.69
51:M8:13:ARG:O	51:M8:30:GLU:HA	1.92	0.69
26:14:654(E):C:H42	26:14:654(P):G:H22	1.40	0.69
26:14:1329:U:H5"	26:14:1330:C:H5	1.58	0.69
36:35:138:LEU:HD12	36:35:144:GLU:HG3	1.74	0.69
5:4E:126:ARG:HG3	5:4E:126:ARG:HH11	1.57	0.69
26:1H:76:C:O2'	49:K8:62:THR:HG21	1.92	0.69
26:1H:900:A:H3'	26:1H:901:A:H8	1.57	0.69
26:1H:1516:U:H2'	26:1H:1517:G:C8	2.27	0.69
26:1H:1676:A:OP2	58:1H:3703:HOH:O	2.09	0.69
26:1H:1678:G:H21	26:1H:1989:G:H22	1.37	0.69
40:75:4:GLY:O	40:75:7:ILE:N	2.25	0.69
45:C5:77:PRO:HD2	45:C5:103:GLY:HA2	1.73	0.69
12:3I:7:ILE:HD13	12:3I:10:LEU:HD12	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:573:G:O2'	26:1H:574:C:H3'	1.92	0.69
26:1H:1113:U:H5'	32:51:2:SER:HB2	1.72	0.69
26:1H:2683:C:OP1	40:B8:53:ARG:NH2	2.26	0.69
37:88:82:ARG:HD2	37:88:82:ARG:N	2.08	0.69
37:88:135:ASP:HB3	37:88:137:TYR:H	1.56	0.69
15:6A:33:THR:HG21	15:6A:85:LEU:HD22	1.72	0.69
26:14:987:G:O2'	26:14:1000:A:N3	2.21	0.69
28:19:40:THR:OG1	28:19:41:GLY:N	2.25	0.69
9:8E:13:ALA:HB2	9:8E:68:GLY:HA3	1.75	0.69
26:1H:1174:A:H1'	26:1H:1178:C:H41	1.57	0.69
26:1H:2308:G:N1	26:1H:2311:A:H2	1.84	0.69
39:A8:89:ARG:HG2	39:A8:89:ARG:O	1.92	0.69
1:1G:1014:A:H4'	19:AA:14:HIS:CE1	2.27	0.69
26:14:882:G:H22	26:14:894:C:H42	1.40	0.69
26:14:1022:G:O2'	26:14:1023:U:OP2	2.05	0.69
26:14:2685:G:C6	58:14:3783:HOH:O	2.46	0.69
29:29:33:VAL:HG23	29:29:47:VAL:HG13	1.73	0.69
32:59:106:THR:HG22	32:59:112:PRO:HB3	1.75	0.69
1:13:963:G:N3	10:1I:55:LYS:NZ	2.40	0.69
4:3E:26:CYS:HA	4:3E:31:CYS:HB2	1.74	0.69
13:4I:81:LEU:HD22	13:4I:88:ARG:HB2	1.72	0.69
19:AI:5:LEU:HD13	19:AI:10:PHE:CD2	2.27	0.69
26:1H:2134:A:OP2	26:1H:2157:G:N2	2.25	0.69
31:41:131:TYR:O	31:41:159:VAL:HG22	1.93	0.69
1:1G:943:U:H1'	9:82:124:GLN:HE22	1.57	0.69
1:1G:1376:U:H2'	1:1G:1377:A:H8	1.56	0.69
12:3A:41:ARG:HB3	12:3A:41:ARG:HH11	1.58	0.69
12:3A:117:ARG:HB3	12:3A:122:THR:HB	1.74	0.69
26:14:1676:A:OP2	58:14:3549:HOH:O	2.11	0.69
26:1H:863:A:N7	58:1H:3909:HOH:O	2.25	0.69
34:58:96:GLU:O	34:58:98:VAL:N	2.26	0.69
39:A8:11:LYS:HD3	39:A8:91:PRO:HD3	1.75	0.69
44:F8:51:VAL:HG13	44:F8:81:VAL:HG23	1.75	0.69
7:62:21:VAL:HG23	7:62:22:LEU:HD12	1.74	0.69
26:14:1689:A:H62	26:14:1698:A:H2	1.40	0.69
27:1J:42:C:O2'	31:49:67:LYS:O	2.10	0.69
17:8I:22:LEU:HD11	17:8I:39:SER:HB3	1.74	0.69
26:1H:2136:C:N3	26:1H:2155:G:N1	2.38	0.69
1:1G:1256:A:N6	1:1G:1278:U:OP2	2.24	0.69
26:14:2025:C:N4	58:14:3843:HOH:O	2.26	0.69
1:13:1453:G:H2'	20:BI:39:LYS:HE2	1.74	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2E:40:ARG:O	3:2E:44:GLU:HG2	1.92	0.68
10:1I:27:ALA:HB1	10:1I:34:VAL:HG11	1.74	0.68
26:1H:242:G:OP1	58:1H:4111:HOH:O	2.10	0.68
26:1H:386:G:OP2	58:1H:4346:HOH:O	2.11	0.68
26:1H:1603:A:OP1	58:1H:3648:HOH:O	2.09	0.68
40:75:8:LYS:HB2	40:75:8:LYS:HZ2	1.58	0.68
40:75:50:ILE:HD11	40:75:102:ILE:HD11	1.73	0.68
49:G5:47:ASN:O	49:G5:49:LYS:N	2.24	0.68
51:I5:38:LYS:HA	51:I5:44:THR:HG21	1.75	0.68
1:13:1001:G:N2	1:13:1040:U:O2	2.27	0.68
7:6E:20:ASP:HB3	7:6E:23:VAL:HG23	1.75	0.68
28:11:223:GLY:HA3	28:11:231:HIS:ND1	2.08	0.68
30:31:12:LEU:O	30:31:127:GLU:N	2.25	0.68
55:Q8:23:VAL:HG13	55:Q8:46:ARG:HG3	1.75	0.68
26:14:881:G:O6	26:14:882:G:N2	2.26	0.68
8:7E:77:GLU:HG2	8:7E:78:GLN:H	1.59	0.68
26:1H:1786:A:H2	26:1H:2606:C:H1'	1.59	0.68
28:11:242:ARG:O	58:11:401:HOH:O	2.11	0.68
39:A8:35:ILE:HG22	39:A8:97:ARG:HH21	1.59	0.68
1:1G:501:C:H2'	1:1G:502:G:H8	1.58	0.68
1:1G:1352:C:H42	1:1G:1370:G:H1	1.42	0.68
50:L8:56:VAL:HG12	50:L8:57:GLU:H	1.58	0.68
26:14:2632:A:HO2'	26:14:2811:G:HO2'	1.21	0.68
46:D5:111:VAL:HG22	46:D5:112:ARG:HG2	1.74	0.68
51:I5:20:ASN:ND2	51:I5:39:CYS:SG	2.66	0.68
23:2K:47:7MG:H81	23:2K:48:U:C5	2.29	0.68
26:1H:357:A:H2'	26:1H:358:U:H6	1.58	0.68
26:1H:1189:A:OP2	58:1H:3820:HOH:O	2.11	0.68
26:1H:2096:U:H3	26:1H:2193:G:H1	1.42	0.68
40:B8:56:GLY:O	40:B8:59:THR:HG22	1.94	0.68
1:1G:1014:A:H2'	1:1G:1015:A:C8	2.29	0.68
10:1A:48:THR:HA	10:1A:62:HIS:HB3	1.76	0.68
19:AA:18:LYS:HA	19:AA:21:GLU:HG2	1.74	0.68
26:14:1332:G:C8	26:14:1332:G:H5'	2.29	0.68
30:39:102:PRO:HB2	30:39:105:VAL:HG23	1.74	0.68
36:35:55:ARG:HG2	36:35:56:SER:H	1.57	0.68
46:D5:163:LEU:HD23	46:D5:163:LEU:H	1.58	0.68
1:13:101:A:H2'	1:13:102:G:H8	1.58	0.68
1:13:1319:A:O2'	1:13:1323:G:N7	2.22	0.68
1:13:1391:U:H2'	1:13:1392:G:C8	2.29	0.68
26:1H:192:C:OP1	58:1H:4127:HOH:O	2.11	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:578:A:OP2	58:1H:4150:HOH:O	2.11	0.68
26:1H:2136:C:N4	26:1H:2155:G:O6	2.20	0.68
44:F8:5:TYR:O	49:K8:36:ARG:NH2	2.27	0.68
55:Q8:7:HIS:HB3	55:Q8:58:ILE:HG23	1.76	0.68
1:1G:1238:A:OP1	1:1G:1335:C:O2'	2.12	0.68
26:14:71:A:H2	44:B5:31:HIS:NE2	1.90	0.68
26:14:274:G:H2'	26:14:275:G:H4'	1.76	0.68
26:14:2777:G:H5"	26:14:2778:A:H5'	1.76	0.68
2:1E:87:ARG:NH2	2:1E:220:ASP:OD1	2.27	0.68
3:2E:15:THR:HG22	3:2E:16:ARG:H	1.59	0.68
26:1H:1664:A:OP2	58:1H:3962:HOH:O	2.10	0.68
26:1H:2057:A:OP2	58:1H:3617:HOH:O	2.12	0.68
36:78:26:GLY:O	58:78:302:HOH:O	2.12	0.68
11:2A:29:ILE:HG22	11:2A:44:SER:HB2	1.76	0.68
19:AA:60:VAL:HG21	19:AA:74:PHE:HB3	1.73	0.68
48:F5:20:ARG:HG2	48:F5:20:ARG:HH11	1.58	0.68
1:13:1454:G:OP1	20:BI:39:LYS:NZ	2.18	0.68
13:4I:94:ARG:HH22	26:1H:887:A:H5"	1.56	0.68
26:1H:1163:G:H2'	26:1H:1164:G:H8	1.59	0.68
26:1H:1697:G:OP2	26:1H:1698:A:O2'	2.11	0.68
26:1H:2685:G:O6	58:1H:4249:HOH:O	2.08	0.68
26:1H:2695:C:H2'	26:1H:2696:U:H6	1.59	0.68
30:31:167:ALA:HB1	30:31:173:VAL:HG11	1.74	0.68
44:F8:5:TYR:CE1	49:K8:30:ARG:HG3	2.29	0.68
1:1G:1513:A:H2'	1:1G:1514:C:C6	2.28	0.68
23:2L:24:C:H2'	23:2L:25:U:C6	2.29	0.68
26:14:2017:U:OP1	58:14:3835:HOH:O	2.12	0.68
26:14:2393:A:H4'	36:35:62:LEU:H	1.58	0.68
1:13:1178:G:OP2	9:8E:93:ARG:NH2	2.26	0.68
38:98:83:ILE:HG22	38:98:87:TYR:HE2	1.58	0.68
29:29:111:ARG:HA	38:55:2:ARG:HH12	1.59	0.68
1:13:1145:C:H4'	1:13:1146:A:H8	1.58	0.68
26:1H:270(V):G:H2'	26:1H:270(W):G:H8	1.59	0.68
26:1H:2709:G:O2'	58:1H:3672:HOH:O	2.12	0.68
34:58:96:GLU:C	34:58:98:VAL:H	1.98	0.68
1:1G:1190:G:H5'	3:22:176:HIS:CE1	2.29	0.68
26:14:2074:U:OP1	58:14:3509:HOH:O	2.11	0.68
1:13:128:G:H5'	17:8I:2:PRO:O	1.93	0.67
3:2E:19:GLU:O	3:2E:40:ARG:NH2	2.27	0.67
15:6I:74:ASP:HB3	15:6I:77:ARG:HG2	1.76	0.67
26:1H:1329:U:H5"	26:1H:1330:C:H5	1.59	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:21:23:VAL:HA	29:21:185:LYS:HA	1.76	0.67
44:F8:61:GLY:N	44:F8:75:ASP:OD1	2.27	0.67
1:1G:516:U:O4	58:1G:1729:HOH:O	2.09	0.67
5:42:81:GLU:HB3	5:42:90:VAL:HG13	1.75	0.67
15:6A:87:ILE:HG22	15:6A:88:ARG:H	1.59	0.67
2:1E:73:THR:O	2:1E:78:GLN:NE2	2.27	0.67
26:1H:1406:U:H2'	26:1H:1407:C:C6	2.28	0.67
55:Q8:49:VAL:HG11	55:Q8:52:LYS:HG3	1.77	0.67
1:1G:837:G:H1	1:1G:849:C:H42	1.42	0.67
26:14:469:G:O6	54:L5:37:LYS:HE2	1.94	0.67
26:14:1060:U:H4'	26:14:1061:U:H5"	1.77	0.67
43:A5:72:LYS:HB3	43:A5:106:ILE:HG13	1.76	0.67
5:4E:8:GLU:OE1	5:4E:63:ARG:NH2	2.27	0.67
26:1H:2815:C:H5'	52:N8:29:THR:HG21	1.76	0.67
45:G8:76:CYS:SG	45:G8:97:ARG:HG2	2.35	0.67
45:C5:68:HIS:HB3	45:C5:71:LYS:HG3	1.77	0.67
1:13:1133:G:H22	1:13:1141:C:H42	1.41	0.67
16:7I:51:VAL:HG11	16:7I:77:ALA:HB1	1.77	0.67
26:1H:593:G:O3'	55:Q8:60:LEU:HD22	1.95	0.67
26:1H:2212:A:H1'	26:1H:2215:G:C5	2.30	0.67
28:11:10:THR:OG1	28:11:13:ARG:HB2	1.94	0.67
40:B8:111:ARG:HD3	40:B8:111:ARG:H	1.58	0.67
23:2L:24:C:H2'	23:2L:25:U:H6	1.58	0.67
24:3L:5:G:H22	24:3L:68:C:H42	1.41	0.67
26:14:1614:A:OP1	58:14:3514:HOH:O	2.13	0.67
41:85:90:VAL:HG22	42:95:39:LEU:HB3	1.74	0.67
1:13:129(A):G:H4'	1:13:130:A:H5"	1.77	0.67
26:1H:192:C:OP1	58:1H:4130:HOH:O	2.12	0.67
26:1H:459:U:H5"	54:P8:40:TRP:CD2	2.29	0.67
26:1H:1194:A:H8	26:1H:1194:A:OP2	1.78	0.67
2:12:163:PHE:HD1	2:12:185:ILE:HG13	1.60	0.67
5:42:61:TYR:HA	5:42:64:ARG:HB2	1.76	0.67
26:14:2294:C:OP2	39:65:89:ARG:NH2	2.28	0.67
42:95:85:LYS:HG3	42:95:87:HIS:N	2.09	0.67
1:13:524:G:H2'	1:13:525:C:C6	2.30	0.67
5:4E:110:LEU:HD13	5:4E:118:ILE:HD13	1.77	0.67
26:1H:2346:A:O2'	53:O8:24:GLU:OE2	2.13	0.67
29:21:18:ASP:HB3	40:B8:82:LEU:HD11	1.76	0.67
38:98:97:VAL:HG22	38:98:114:VAL:HG22	1.75	0.67
2:12:42:ILE:HD11	2:12:202:PRO:HB2	1.77	0.67
13:4A:3:ARG:HB2	51:I5:34:GLU:HG3	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4A:13:LYS:HA	13:4A:44:ARG:HH11	1.60	0.67
26:14:71:A:H5'	26:14:71:A:C8	2.29	0.67
26:14:198:C:H5'	26:14:2244:U:OP1	1.94	0.67
26:14:661:C:H1'	36:35:12:ALA:HA	1.76	0.67
26:14:892:G:N2	26:14:894:C:OP1	2.28	0.67
28:19:255:LYS:CE	28:19:255:LYS:H	2.08	0.67
38:55:67:LEU:HD12	38:55:76:VAL:HG21	1.75	0.67
38:55:74:LYS:HE2	38:55:77:ARG:HH21	1.59	0.67
42:95:48:GLY:N	42:95:52:VAL:HG22	2.10	0.67
43:A5:73:ALA:HB3	43:A5:106:ILE:HD11	1.75	0.67
26:1H:2271:G:N7	58:1H:4058:HOH:O	2.27	0.67
29:21:116:VAL:O	29:21:117:MET:HB3	1.94	0.67
40:B8:20:PRO:HD2	40:B8:86:ILE:HG23	1.77	0.67
26:14:993:G:N3	42:95:89:GLN:NE2	2.38	0.67
46:D5:17:ALA:HA	46:D5:20:ARG:HD2	1.75	0.67
1:13:1435:G:H2'	1:13:1436:U:C6	2.30	0.67
26:1H:662:G:H5'	36:78:15:ARG:H	1.60	0.67
26:1H:860:U:C5	26:1H:917:A:C2	2.82	0.67
26:1H:981:A:OP1	58:1H:4157:HOH:O	2.12	0.67
37:88:106:VAL:HG21	37:88:114:ALA:HB1	1.76	0.67
37:45:22:LYS:HB3	37:45:23:GLY:HA2	1.76	0.67
37:45:27:VAL:HG11	46:D5:81:ARG:NH2	2.09	0.67
37:45:57:HIS:NE2	37:45:116:GLU:HB3	2.09	0.67
46:D5:44:PHE:HE1	46:D5:88:PHE:HZ	1.43	0.67
26:1H:450:G:OP2	58:1H:3833:HOH:O	2.12	0.67
27:16:8:U:O2	27:16:112:G:N1	2.19	0.67
31:41:77:ILE:HG22	31:41:82:LEU:HD12	1.77	0.67
1:1G:458:C:N3	1:1G:474:G:N2	2.43	0.67
1:1G:474:G:H2'	1:1G:475:G:H8	1.59	0.67
26:14:630:G:N2	26:14:633:A:OP2	2.28	0.67
26:14:1485:G:H1	26:14:1504:C:N4	1.93	0.67
30:39:4:VAL:HA	30:39:19:GLU:HB3	1.77	0.67
40:75:1:MET:HA	40:75:5:ALA:HB3	1.76	0.67
26:1H:912:C:OP1	37:88:8:LYS:NZ	2.25	0.67
26:1H:1676:A:OP2	58:1H:3698:HOH:O	2.12	0.67
46:H8:147:GLY:N	46:H8:174:VAL:O	2.25	0.67
1:1G:456:C:N3	1:1G:476:G:N2	2.38	0.67
1:1G:644:G:H4'	8:72:92:ARG:HH12	1.60	0.67
1:1G:1177:G:OP2	9:82:97:LYS:NZ	2.27	0.67
9:82:10:ARG:NH1	9:82:105:ASP:OD2	2.28	0.67
25:4L:13:A:O2'	25:4L:14:A:OP1	2.13	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:453:C:OP1	58:14:3864:HOH:O	2.13	0.67
34:15:15:LEU:HB2	34:15:134:ARG:HG2	1.76	0.67
42:95:35:LEU:O	42:95:37:VAL:HG22	1.94	0.67
1:13:1023:G:H3'	1:13:1024:G:H5"	1.77	0.66
26:1H:606:U:OP2	30:31:104:LYS:NZ	2.29	0.66
26:1H:1839:G:OP2	58:1H:4115:HOH:O	2.12	0.66
26:1H:2057:A:OP2	58:1H:3613:HOH:O	2.13	0.66
26:1H:2164:C:OP2	26:1H:2166:G:N2	2.29	0.66
1:1G:1286:A:H5'	21:1B:25:LYS:HD3	1.77	0.66
4:32:59:ARG:O	4:32:63:LYS:N	2.27	0.66
26:14:34:C:O2'	26:14:35:G:OP1	2.12	0.66
26:1H:31:C:OP1	58:1H:3738:HOH:O	2.12	0.66
26:1H:308:G:N7	58:1H:4397:HOH:O	2.27	0.66
26:1H:1061:U:H4'	26:1H:1070:A:H1'	1.77	0.66
39:A8:24:LEU:HD12	39:A8:41:ASP:HB2	1.75	0.66
1:1G:1081:G:OP1	5:42:18:ARG:HB2	1.95	0.66
3:22:81:GLY:HA2	3:22:85:ARG:HD3	1.76	0.66
13:4A:86:CYS:HB2	19:AA:73:GLU:HB3	1.76	0.66
26:14:2273:A:H2'	26:14:2274:A:C8	2.31	0.66
1:13:859:A:H2'	1:13:860:A:C8	2.31	0.66
13:4I:23:TYR:CE2	13:4I:71:ARG:HG3	2.30	0.66
14:5I:24:CYS:HB3	14:5I:27:CYS:HB2	1.76	0.66
26:1H:1140:C:OP1	34:58:23:LEU:HB3	1.94	0.66
31:41:21:ARG:HG2	31:41:21:ARG:HH11	1.59	0.66
1:1G:1173:G:OP1	7:62:5:ARG:NH2	2.28	0.66
1:1G:1235:U:O2'	1:1G:1305:G:O5'	2.13	0.66
1:1G:1274:G:H2'	1:1G:1275:A:H8	1.60	0.66
26:14:21:A:H61	26:14:519:U:H3	1.41	0.66
26:14:1226:G:OP1	42:95:69:LYS:NZ	2.17	0.66
28:19:2:ALA:HB3	28:19:20:ASP:HB2	1.76	0.66
26:1H:1405:U:H2'	26:1H:1406:U:C6	2.30	0.66
26:1H:1514:U:H2'	26:1H:1515:C:H6	1.60	0.66
1:1G:957:U:O2'	1:1G:959:A:N7	2.26	0.66
1:13:1297:C:OP1	13:4I:13:LYS:NZ	2.28	0.66
1:1G:1028:C:H42	1:1G:1033:G:H1	1.44	0.66
4:32:199:ASN:HB3	4:32:202:LEU:HG	1.77	0.66
26:14:1839:G:OP2	58:14:3688:HOH:O	2.12	0.66
26:14:2701:C:H3'	26:14:2702:U:C5'	2.24	0.66
27:1J:14:U:O2'	27:1J:107:U:O2'	2.14	0.66
30:39:79:GLY:HA2	30:39:86:GLY:HA2	1.77	0.66
1:13:396:G:O2'	1:13:398:C:OP1	2.08	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:6E:16:LEU:HD11	9:8E:45:ALA:HB2	1.76	0.66
13:4I:94:ARG:NH1	26:1H:888:C:OP1	2.25	0.66
22:1K:18:G:H4'	22:1K:19:G:OP1	1.96	0.66
26:1H:86:C:H4'	26:1H:104:U:H1'	1.76	0.66
26:1H:2058:A:N7	58:1H:3615:HOH:O	2.27	0.66
26:1H:2306:C:H3'	26:1H:2307:G:H5'	1.77	0.66
26:14:1537:C:O2'	26:14:1538:G:O4'	2.13	0.66
26:14:2130:U:H2'	26:14:2158:A:N1	2.11	0.66
30:39:167:ALA:HB1	30:39:173:VAL:HG11	1.77	0.66
31:49:20:ILE:HA	31:49:25:TYR:HB2	1.77	0.66
1:13:991:U:O4	1:13:1212:U:O2'	2.12	0.66
26:1H:229:A:H4'	26:1H:230:U:H5'	1.76	0.66
1:1G:742:G:OP2	15:6A:35:ARG:NH2	2.29	0.66
1:1G:999:U:H2'	1:1G:1000:A:C8	2.30	0.66
26:1H:571:A:OP2	58:1H:3813:HOH:O	2.14	0.66
26:1H:1800:C:OP1	28:11:266:SER:OG	2.11	0.66
26:14:1639:U:OP1	58:14:3555:HOH:O	2.13	0.66
1:13:963:G:H1	1:13:972:C:H42	1.41	0.66
1:13:1062:U:H2'	1:13:1063:C:C6	2.31	0.66
26:1H:2502:G:OP2	58:1H:3632:HOH:O	2.14	0.66
28:11:96:HIS:CE1	28:11:102:LYS:HE2	2.31	0.66
32:51:4:ILE:HG13	32:51:6:ARG:NE	2.11	0.66
1:1G:411:A:C5	1:1G:413:G:H1'	2.30	0.66
1:1G:1213:A:N6	1:1G:1215:G:N3	2.43	0.66
26:14:249:C:OP1	58:14:3522:HOH:O	2.13	0.66
26:14:1019:U:H2'	26:14:1020:A:C8	2.31	0.66
26:14:1428:C:N4	26:14:1570:A:OP2	2.23	0.66
26:14:2537:U:H2'	26:14:2538:C:C6	2.30	0.66
29:29:55:ASN:O	29:29:57:LYS:NZ	2.29	0.66
1:13:972:C:OP1	58:13:1881:HOH:O	2.13	0.66
31:41:173:LEU:HB3	31:41:178:PHE:HD2	1.61	0.66
33:61:132:PRO:O	33:61:133:HIS:ND1	2.29	0.66
38:98:12:ARG:HD3	38:98:16:HIS:CD2	2.30	0.66
46:H8:165:VAL:HB	46:H8:166:SER:HA	1.77	0.66
9:82:4:TYR:HB2	9:82:19:LEU:HD12	1.78	0.66
23:2L:41:C:H2'	23:2L:42:C:H6	1.61	0.66
26:14:273(C):C:N4	26:14:363(C):G:H1	1.94	0.66
29:29:102:VAL:HG12	29:29:200:GLU:HA	1.77	0.66
30:39:123:LEU:O	30:39:125:LEU:N	2.25	0.66
51:I5:16:CYS:HA	51:I5:33:VAL:HG13	1.77	0.66
1:13:235:C:H5'	17:8I:70:ARG:HG2	1.77	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:272:C:H2'	1:13:273:A:H8	1.60	0.65
1:13:736:C:H2'	1:13:737:A:C8	2.31	0.65
1:13:1034:G:N2	1:13:1035:A:N7	2.43	0.65
2:1E:111:ARG:HG2	2:1E:111:ARG:HH11	1.60	0.65
38:98:67:LEU:HD22	38:98:76:VAL:HG21	1.78	0.65
4:32:64:LEU:HB2	4:32:198:VAL:HG11	1.78	0.65
26:14:252:G:OP2	36:35:50:ARG:NH2	2.29	0.65
26:14:330:A:H2	26:14:1210:A:HO2'	1.44	0.65
40:75:24:PRO:HD3	40:75:52:ILE:HD12	1.78	0.65
26:1H:1658:C:OP1	58:1H:3695:HOH:O	2.14	0.65
26:1H:2781:A:H5"	26:1H:2782:G:H5'	1.77	0.65
9:82:27:THR:HB	9:82:32:ASP:HA	1.79	0.65
26:14:1225:C:H4'	42:95:85:LYS:HB2	1.78	0.65
26:14:1341:U:OP2	26:14:1394:U:O2'	2.12	0.65
31:49:11:TYR:OH	31:49:16:ARG:NH2	2.28	0.65
42:95:85:LYS:HD2	42:95:86:GLY:H	1.61	0.65
26:1H:507:A:H5"	26:1H:508:G:H5'	1.78	0.65
1:1G:661:G:H1	1:1G:744:C:H42	1.43	0.65
5:42:88:LYS:HB3	5:42:123:LEU:HB2	1.78	0.65
10:1A:12:ASP:OD1	10:1A:13:HIS:N	2.29	0.65
13:4A:94:ARG:CZ	19:AA:78:ARG:HH22	2.09	0.65
26:14:309:G:N3	26:14:329:G:O2'	2.30	0.65
26:14:2845:G:N2	26:14:2871:C:O2	2.27	0.65
7:6E:15:ASP:HB3	7:6E:20:ASP:H	1.61	0.65
26:1H:2125:G:N2	26:1H:2172:U:OP1	2.27	0.65
26:1H:2593:U:H2'	26:1H:2594:C:C6	2.31	0.65
46:H8:45:ASP:OD2	46:H8:49:ARG:NH1	2.29	0.65
1:1G:947:G:O3'	13:4A:109:THR:OG1	2.13	0.65
28:19:69:ARG:NH2	28:19:128:GLY:O	2.29	0.65
30:39:130:ALA:H	30:39:142:TRP:HD1	1.42	0.65
38:55:29:LEU:HB3	38:55:75:LEU:HD21	1.78	0.65
1:13:1263:C:H2'	1:13:1264:C:H6	1.61	0.65
26:1H:287:C:H2'	26:1H:288:C:H6	1.62	0.65
26:1H:1438:U:H2'	26:1H:1439:A:H8	1.61	0.65
26:1H:2061:G:H5'	58:1H:3632:HOH:O	1.96	0.65
26:1H:2327:A:H2'	26:1H:2328:A:C8	2.30	0.65
26:1H:2580:U:H4'	29:21:130:GLY:HA3	1.78	0.65
26:1H:2636:U:OP1	29:21:79:ARG:HA	1.97	0.65
32:51:6:ARG:HB3	32:51:65:HIS:CG	2.31	0.65
1:1G:683:G:N2	1:1G:707:C:O2	2.30	0.65
4:32:61:LYS:HE2	4:32:206:PHE:CE2	2.32	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1188:U:O2'	26:14:1189:A:H5'	1.96	0.65
26:14:2331:G:H4'	47:E5:43:THR:H	1.61	0.65
27:1J:70:C:H2'	27:1J:71:C:H6	1.61	0.65
19:AI:50:ALA:HB1	19:AI:57:HIS:HB3	1.77	0.65
26:1H:226:G:H21	26:1H:228:A:H2	1.45	0.65
26:1H:607:U:OP1	30:31:102:PRO:HA	1.97	0.65
26:1H:1141:U:H6	34:58:63:THR:HG1	1.44	0.65
26:1H:1332:G:N2	26:1H:1609:A:O2'	2.30	0.65
26:1H:1342:A:OP2	58:1H:4224:HOH:O	2.14	0.65
26:1H:2502:G:OP2	58:1H:3633:HOH:O	2.13	0.65
39:A8:59:LYS:HG2	39:A8:60:GLY:H	1.60	0.65
47:I8:53:MET:HG3	47:I8:59:LEU:CD2	2.26	0.65
27:1J:6:C:H2'	27:1J:7:G:H5"	1.78	0.65
48:F5:89:GLU:HA	48:F5:93:GLU:HG3	1.77	0.65
1:13:448:A:OP2	1:13:485:G:N2	2.23	0.65
1:13:1177:G:OP1	1:13:1177:G:H4'	1.95	0.65
2:1E:5:ILE:HG13	2:1E:6:THR:HG22	1.78	0.65
12:3I:24:VAL:HB	12:3I:27:LEU:HD12	1.79	0.65
26:1H:2115:G:N2	26:1H:2172:U:O2	2.30	0.65
26:1H:2232:U:P	48:J8:40:ARG:HH12	2.20	0.65
26:1H:2285:C:OP2	53:O8:28:ARG:HG3	1.96	0.65
27:16:8:U:N3	27:16:112:G:O6	2.19	0.65
33:61:92:VAL:HG13	33:61:120:ILE:HG23	1.78	0.65
49:K8:47:ASN:HB2	49:K8:50:ILE:HD11	1.79	0.65
26:14:599:G:N7	58:14:4021:HOH:O	2.29	0.65
26:14:1670:C:O2	29:29:129:HIS:NE2	2.29	0.65
26:1H:2070:G:OP1	58:1H:4121:HOH:O	2.14	0.65
45:G8:53:PRO:HA	45:G8:56:PRO:HG3	1.79	0.65
47:I8:11:ARG:O	47:I8:14:ARG:NH2	2.29	0.65
7:62:113:GLU:HB2	7:62:119:ARG:HG2	1.77	0.65
8:72:110:ALA:H	8:72:121:ASP:HB3	1.61	0.65
26:14:2256:G:N7	58:14:3650:HOH:O	2.29	0.65
26:14:2645:G:H3'	26:14:2646:C:H5'	1.78	0.65
29:29:47:VAL:HG21	29:29:86:PRO:HD2	1.78	0.65
50:H5:40:THR:HG23	50:H5:43:ILE:HG12	1.77	0.65
26:1H:624:C:OP1	58:1H:4113:HOH:O	2.14	0.65
26:1H:1447:G:N7	58:1H:4360:HOH:O	2.30	0.65
27:16:7:G:H4'	39:A8:29:PHE:CD2	2.31	0.65
28:11:136:ILE:O	28:11:168:ARG:NH2	2.30	0.65
4:32:23:GLY:H	4:32:26:CYS:HB2	1.62	0.65
6:52:70:ASP:N	6:52:70:ASP:OD1	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2738:A:OP2	58:14:3999:HOH:O	2.14	0.65
26:14:2745:C:O2	32:59:139:GLN:NE2	2.24	0.65
36:35:55:ARG:HG2	36:35:56:SER:N	2.12	0.65
28:11:59:LYS:HD2	28:11:60:ARG:H	1.61	0.65
1:1G:538:G:H5"	12:3A:114:LYS:HB2	1.78	0.65
26:14:629:G:H1	26:14:634:C:H42	1.43	0.65
39:65:14:VAL:HG11	39:65:89:ARG:HE	1.62	0.65
42:95:43:GLU:O	42:95:45:THR:OG1	2.15	0.65
1:13:659:U:H2'	1:13:660:G:C8	2.32	0.64
7:6E:91:VAL:HB	7:6E:96:GLN:HG2	1.79	0.64
31:41:67:LYS:HE2	51:M8:6:HIS:CE1	2.32	0.64
1:1G:426:G:OP1	4:32:36:ARG:NH2	2.30	0.64
1:1G:579:G:O3'	15:6A:54:ARG:NH2	2.30	0.64
26:14:34:C:HO2'	26:14:35:G:P	2.20	0.64
26:14:96:G:H4'	49:G5:48:HIS:CE1	2.33	0.64
36:35:85:LEU:HA	36:35:88:LEU:HB3	1.79	0.64
1:13:262:A:H2'	1:13:263:A:C8	2.32	0.64
1:13:1224:G:C6	1:13:1322:C:H1'	2.32	0.64
8:7E:21:LYS:O	8:7E:65:TYR:OH	2.14	0.64
26:1H:1024:G:H3'	26:1H:1025:G:H5"	1.79	0.64
26:1H:1036:G:H1	26:1H:1119:C:H42	1.46	0.64
26:1H:1332:G:H21	26:1H:1610:A:H8	1.45	0.64
26:1H:1441:G:H2'	26:1H:1442:G:C8	2.32	0.64
30:31:66:PRO:O	30:31:67:GLN:HB3	1.96	0.64
40:B8:58:ASN:O	40:B8:58:ASN:ND2	2.26	0.64
1:1G:1342:C:H4'	9:82:125:TYR:HB3	1.78	0.64
11:2I:32:ILE:HD11	11:2I:68:ALA:HB1	1.79	0.64
26:1H:570:G:OP2	58:1H:3811:HOH:O	2.14	0.64
29:21:77:ILE:O	29:21:79:ARG:N	2.29	0.64
1:1G:406:G:H1	1:1G:436:C:H42	1.46	0.64
1:1G:1348:U:H4'	9:82:120:ARG:HD2	1.77	0.64
26:14:2689:U:OP2	26:14:2719:G:N2	2.31	0.64
55:Q8:52:LYS:HA	55:Q8:54:GLU:HB2	1.79	0.64
2:12:190:THR:O	2:12:191:ASP:HB3	1.98	0.64
5:42:6:PHE:HB2	5:42:34:VAL:HG22	1.80	0.64
26:14:635:C:O2'	26:14:639:U:OP1	2.15	0.64
26:14:1327:C:OP2	58:14:3607:HOH:O	2.15	0.64
26:14:2272:U:O4	58:14:3727:HOH:O	2.09	0.64
52:J5:16:ARG:NH1	52:J5:17:ASP:OD1	2.30	0.64
1:13:1291:G:OP1	7:6E:37:ASN:ND2	2.30	0.64
26:1H:2286:A:N6	53:O8:24:GLU:OE1	2.30	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:51:15:VAL:HG12	32:51:29:PRO:HD2	1.79	0.64
26:14:1945:G:H2'	26:14:1946:U:H6	1.62	0.64
29:29:66:HIS:HB3	29:29:68:ALA:HB2	1.79	0.64
41:85:91:ASP:OD1	41:85:96:ALA:HB2	1.97	0.64
1:13:390:C:H2'	1:13:391:G:C8	2.33	0.64
1:13:405:U:O4	4:3E:2:GLY:N	2.31	0.64
1:13:412:A:H4'	1:13:413:G:O5'	1.98	0.64
2:1E:17:PHE:HB3	2:1E:44:LEU:HD21	1.79	0.64
17:8I:76:LEU:HD11	17:8I:79:SER:HB3	1.79	0.64
1:1G:1095:U:P	1:1G:1108:G:H1	2.20	0.64
26:14:2415:G:H4'	36:35:67:MET:N	2.13	0.64
29:29:11:MET:HG3	29:29:24:THR:H	1.62	0.64
29:29:29:GLY:H	29:29:51:PHE:HE1	1.43	0.64
31:49:50:ALA:HB2	31:49:87:PRO:HG3	1.79	0.64
1:13:828:A:H2'	1:13:829:G:O4'	1.97	0.64
26:1H:270(E):G:H1	26:1H:270(U):C:H42	1.46	0.64
26:1H:2839:G:H21	38:98:92:GLY:HA3	1.62	0.64
28:11:182:LEU:H	28:11:272:ALA:HB3	1.62	0.64
38:98:51:LEU:HD22	38:98:66:VAL:HG13	1.79	0.64
26:14:731:C:OP1	58:14:3866:HOH:O	2.15	0.64
35:25:104:ARG:HH12	40:75:36:GLU:HB3	1.63	0.64
1:13:1412:C:H2'	1:13:1413:A:C8	2.33	0.64
17:8I:66:SER:O	17:8I:70:ARG:NH1	2.31	0.64
23:2K:20:G:C2	23:2K:58:A:N3	2.66	0.64
27:16:43:C:H5"	51:M8:1:MET:HG2	1.79	0.64
35:68:2:ILE:HD12	35:68:6:THR:HG21	1.79	0.64
42:D8:59:ALA:HB2	42:D8:96:ILE:HD13	1.80	0.64
1:1G:1295:G:O2'	13:4A:14:ARG:NH1	2.30	0.64
2:12:84:GLU:HB3	2:12:219:VAL:HG11	1.79	0.64
26:14:994:C:OP1	41:85:53:ARG:NH2	2.30	0.64
26:14:1019:U:H2'	26:14:1020:A:H8	1.62	0.64
42:95:70:ILE:N	42:95:86:GLY:O	2.19	0.64
1:13:345:C:O2'	1:13:346:G:N2	2.31	0.64
1:13:1122:U:O4	1:13:1123:A:N6	2.31	0.64
2:1E:98:LEU:HB2	2:1E:101:MET:HG3	1.79	0.64
12:3I:117:ARG:HB3	12:3I:122:THR:HB	1.80	0.64
26:1H:2811:G:H1	26:1H:2889:C:H42	1.46	0.64
40:B8:99:LEU:HB3	40:B8:101:PHE:CE1	2.33	0.64
1:1G:1133:G:N2	1:1G:1141:C:O2	2.31	0.64
1:1G:1251:A:H2'	1:1G:1252:A:C8	2.33	0.64
1:1G:1316:G:H4'	14:5A:18:VAL:HG11	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1347:G:O2'	1:1G:1373:G:O6	2.13	0.64
12:3A:89:ARG:HG3	12:3A:97:ARG:HG2	1.79	0.64
16:7A:26:ARG:HH21	16:7A:31:LYS:HD3	1.62	0.64
46:D5:53:ILE:HG22	46:D5:71:VAL:HG13	1.80	0.64
1:13:601:C:H2'	1:13:602:A:H8	1.62	0.64
1:13:1301:U:O2'	1:13:1302:U:H5'	1.98	0.64
24:3K:19:G:O2'	24:3K:57:G:N3	2.31	0.64
26:1H:543:C:H42	26:1H:550:G:H1	1.44	0.64
26:1H:2080:G:H5"	26:1H:2080:G:H8	1.63	0.64
44:F8:55:ASN:HB2	44:F8:80:ILE:HG13	1.79	0.64
1:1G:978:A:O2'	1:1G:1322:C:N3	2.31	0.64
26:14:1264:G:OP1	52:J5:19:ARG:NH2	2.25	0.64
40:75:23:ARG:HG3	40:75:120:ARG:NH1	2.13	0.64
45:C5:8:LYS:HG3	45:C5:95:LYS:HE3	1.80	0.64
1:13:324:G:N2	1:13:327:A:OP2	2.31	0.63
2:1E:126:GLU:HA	2:1E:129:GLU:HG2	1.80	0.63
26:1H:1614:A:H2	58:1H:3859:HOH:O	1.80	0.63
26:1H:2773:C:H5"	29:21:164:ARG:HG2	1.80	0.63
30:31:96:ASP:OD1	30:31:98:SER:HB3	1.98	0.63
33:61:115:ALA:O	33:61:117:GLU:N	2.31	0.63
53:O8:14:THR:HA	53:O8:21:TYR:CD2	2.33	0.63
2:12:43:ASP:O	2:12:47:THR:OG1	2.16	0.63
28:19:148:GLU:HB2	28:19:151:LYS:HD2	1.80	0.63
49:G5:53:LEU:O	49:G5:57:ILE:HG13	1.97	0.63
1:13:736:C:H2'	1:13:737:A:H8	1.64	0.63
1:13:1160:G:H1	1:13:1177:G:N2	1.94	0.63
2:1E:212:GLN:O	2:1E:216:SER:OG	2.11	0.63
13:4I:10:PRO:HB2	13:4I:18:ALA:HB1	1.79	0.63
26:1H:121:G:OP1	58:1H:3996:HOH:O	2.15	0.63
26:1H:743:G:O6	58:1H:3889:HOH:O	2.11	0.63
29:21:128:SER:OG	29:21:129:HIS:N	2.30	0.63
55:Q8:9:GLY:H	55:Q8:12:LYS:HG3	1.62	0.63
26:14:1036:G:OP1	32:59:59:ARG:N	2.28	0.63
26:14:1342:A:H2	26:14:1602:U:H3	1.46	0.63
26:14:2297:C:H2'	26:14:2298:A:H8	1.63	0.63
1:13:963:G:H21	10:1I:55:LYS:CE	2.11	0.63
26:1H:443:A:H1'	26:1H:1201:C:O4'	1.98	0.63
26:1H:831:G:N2	36:78:53:GLY:O	2.30	0.63
38:98:55:ALA:HA	38:98:80:PHE:HE1	1.64	0.63
1:1G:345:C:O3'	40:75:41:ARG:NH2	2.31	0.63
1:1G:1288:A:H4'	21:1B:13:ILE:HD13	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1966:A:H4'	26:14:1967:C:OP1	1.96	0.63
26:14:2250:G:C6	37:45:82:ARG:HD2	2.33	0.63
26:1H:587:C:OP2	36:78:21:ARG:NH2	2.30	0.63
26:1H:2150:U:H2'	26:1H:2151:G:C8	2.32	0.63
30:31:33:LEU:HD23	36:78:1:MET:HG3	1.79	0.63
34:58:96:GLU:O	34:58:98:VAL:HG12	1.99	0.63
1:1G:280:C:H3'	1:1G:281:G:H5'	1.79	0.63
2:12:178:ARG:NH1	2:12:196:LEU:O	2.29	0.63
31:49:124:SER:HB2	31:49:131:TYR:CE1	2.33	0.63
38:55:24:GLN:NE2	38:55:36:THR:HG21	2.14	0.63
1:13:1240:U:OP2	7:6E:116:ALA:N	2.31	0.63
14:5I:26:ARG:NH1	14:5I:43:CYS:SG	2.72	0.63
26:1H:2611:U:H2'	52:N8:3:LYS:HG3	1.79	0.63
30:31:6:VAL:HG11	30:31:119:ARG:HA	1.80	0.63
52:N8:50:GLY:H	52:N8:56:LYS:HG3	1.64	0.63
13:4A:97:PRO:HB2	13:4A:101:GLN:HG3	1.81	0.63
26:14:363(C):G:H2'	26:14:363(D):G:H8	1.63	0.63
44:B5:49:VAL:HB	44:B5:83:VAL:HG21	1.81	0.63
1:13:649:G:H2'	1:13:650:G:H8	1.64	0.63
1:13:1259:C:N4	1:13:1260:C:O2	2.31	0.63
2:1E:174:VAL:HG13	2:1E:184:VAL:HG11	1.79	0.63
15:6I:6:GLU:HA	15:6I:9:GLN:HB2	1.81	0.63
26:1H:2334:G:H5'	39:A8:9:ARG:HG2	1.80	0.63
26:1H:2371:G:H4'	53:O8:45:LYS:HG3	1.81	0.63
47:I8:53:MET:HG3	47:I8:59:LEU:HD23	1.80	0.63
1:1G:588:G:H1	1:1G:651:C:N4	1.90	0.63
26:14:972:G:OP2	26:14:973:A:O2'	2.09	0.63
26:14:2238:G:N7	58:14:3617:HOH:O	2.30	0.63
33:69:77:LEU:HD13	33:69:141:LYS:HB3	1.81	0.63
1:13:642:A:N3	8:7E:113:SER:OG	2.31	0.63
26:1H:125:G:H5'	26:1H:125:G:H8	1.63	0.63
26:1H:1430:C:H2'	26:1H:1431:U:C6	2.32	0.63
1:1G:434:U:H2'	1:1G:435:C:C6	2.33	0.63
1:1G:1343:G:H2'	1:1G:1344:C:C6	2.33	0.63
1:1G:1502:A:H5"	1:1G:1504:G:N7	2.13	0.63
2:12:68:ILE:HG12	2:12:161:ALA:HB3	1.80	0.63
3:22:6:HIS:HB3	14:5A:49:HIS:CD2	2.33	0.63
3:22:134:ILE:HG13	3:22:153:VAL:HG21	1.78	0.63
23:2L:10:G:N2	23:2L:27:G:H1'	2.14	0.63
26:14:4:C:H42	26:14:2899:G:H22	1.44	0.63
26:14:567:A:P	58:14:3841:HOH:O	2.54	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1664:A:OP2	58:14:3595:HOH:O	2.16	0.63
29:29:200:GLU:OE2	29:29:200:GLU:N	2.25	0.63
1:13:1177:G:O2'	1:13:1178:G:O4'	2.16	0.63
4:3E:173:TRP:CD1	4:3E:174:LEU:HG	2.33	0.63
5:4E:71:LEU:HD11	5:4E:114:GLY:HA3	1.81	0.63
26:1H:1159:U:OP1	50:L8:30:ARG:NH2	2.31	0.63
26:1H:2287:A:H62	26:1H:2344:U:H3	1.46	0.63
26:1H:2343:C:O2'	26:1H:2373:G:O2'	2.16	0.63
26:1H:2572:A:N7	29:21:145:LYS:HB2	2.13	0.63
29:21:167:VAL:HG21	29:21:187:ALA:HB3	1.80	0.63
30:31:6:VAL:N	30:31:24:LEU:O	2.31	0.63
33:61:21:VAL:HG21	33:61:25:TYR:HD2	1.64	0.63
2:12:22:LYS:HG2	2:12:40:HIS:NE2	2.14	0.63
4:32:173:TRP:CZ3	4:32:193:ASP:HB3	2.34	0.63
26:14:996:A:N6	26:14:1160:G:C6	2.67	0.63
26:14:1778:U:H2'	26:14:1784:A:N6	2.14	0.63
26:14:2128:C:H42	26:14:2160:G:H1	1.45	0.63
45:C5:73:ARG:NH2	45:C5:81:LYS:O	2.30	0.63
46:D5:4:ARG:NH1	46:D5:60:GLU:OE2	2.32	0.63
1:13:79:G:H21	1:13:89:U:H2'	1.63	0.63
8:7E:86:ILE:HG22	8:7E:87:SER:H	1.63	0.63
24:3K:75:C:HO2'	24:3K:76:A:H2	1.47	0.63
26:1H:2311:A:H8	31:41:88:ILE:HD12	1.63	0.63
44:F8:3:THR:OG1	44:F8:4:ALA:HA	1.99	0.63
50:L8:10:LYS:NZ	50:L8:15:TYR:OH	2.29	0.63
1:1G:114:U:H2'	1:1G:115:G:C8	2.34	0.63
1:1G:420:U:O2'	1:1G:423:G:O6	2.09	0.63
1:1G:426:G:H4'	4:32:42:GLN:HA	1.81	0.63
2:12:74:LYS:NZ	2:12:166:ASP:OD2	2.24	0.63
10:1A:8:LEU:HD22	10:1A:20:ALA:HB2	1.81	0.63
24:1L:54:U:H5'	37:45:51:ARG:HH22	1.64	0.63
26:14:1364:G:OP2	48:F5:2:SER:N	2.32	0.63
26:14:1688:U:O2	26:14:1700:A:H5'	1.99	0.63
27:1J:44:G:O2'	27:1J:47:C:N4	2.30	0.63
32:59:119:GLU:O	32:59:140:LYS:NZ	2.20	0.63
37:45:98:LYS:HB3	37:45:99:PRO:HD2	1.81	0.63
42:95:35:LEU:HB2	42:95:37:VAL:HG13	1.80	0.63
42:95:48:GLY:H	42:95:52:VAL:HG22	1.64	0.63
26:1H:563:G:OP2	58:1H:3639:HOH:O	2.16	0.62
26:1H:860:U:C5	26:1H:917:A:H2	2.15	0.62
26:1H:1796:U:H2'	26:1H:1797:C:C6	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:Q8:46:ARG:HH21	55:Q8:48:PHE:HA	1.64	0.62
4:32:26:CYS:HA	4:32:31:CYS:HA	1.81	0.62
26:14:1784:A:H5"	58:14:3559:HOH:O	1.97	0.62
26:14:2015:A:N3	52:J5:2:ALA:N	2.46	0.62
31:49:66:GLN:OE1	31:49:98:ARG:NH1	2.31	0.62
37:45:35:VAL:HG22	37:45:102:VAL:HG22	1.82	0.62
1:13:667:G:H4'	15:6I:51:HIS:CE1	2.34	0.62
4:3E:31:CYS:SG	4:3E:32:ALA:N	2.72	0.62
12:3I:93:LEU:O	12:3I:96:VAL:HG13	1.99	0.62
13:4I:108:ARG:NH1	13:4I:112:GLY:O	2.31	0.62
26:1H:155:C:N4	26:1H:171:G:H1	1.87	0.62
26:1H:270(L):U:H3	33:61:50:ARG:HG2	1.64	0.62
42:D8:1:MET:HG2	42:D8:43:GLU:HB3	1.80	0.62
1:1G:957:U:H2'	1:1G:959:A:OP2	1.99	0.62
6:52:2:ARG:HD3	6:52:92:LYS:HE3	1.81	0.62
9:82:112:LYS:HG2	9:82:119:ALA:HB2	1.81	0.62
11:2A:48:ILE:HD11	11:2A:64:ALA:HA	1.81	0.62
13:4A:57:ARG:NH1	51:I5:34:GLU:O	2.31	0.62
26:14:824:A:H1'	26:14:2358:G:N7	2.14	0.62
1:13:600:C:H2'	1:13:601:C:C6	2.34	0.62
1:13:601:C:H2'	1:13:602:A:C8	2.33	0.62
1:13:1429:C:H2'	1:13:1430:C:H6	1.65	0.62
9:8E:26:VAL:HG13	9:8E:61:ALA:HB3	1.80	0.62
24:3K:6:G:N2	24:3K:68:C:N3	2.47	0.62
36:78:19:VAL:HB	36:78:27:HIS:HB2	1.79	0.62
1:1G:711:G:OP1	6:52:54:LYS:NZ	2.29	0.62
13:4A:34:LEU:O	13:4A:38:GLY:N	2.32	0.62
16:7A:34:GLU:OE2	16:7A:55:ARG:NH1	2.32	0.62
26:14:1013:C:H42	26:14:1149:G:H1	1.45	0.62
2:1E:179:LYS:HA	8:7E:72:PRO:HG3	1.82	0.62
4:3E:102:ASP:OD1	4:3E:103:ASN:N	2.32	0.62
26:1H:2600:A:N6	58:1H:3678:HOH:O	2.22	0.62
38:98:55:ALA:HA	38:98:80:PHE:CE1	2.33	0.62
49:K8:15:LYS:H	49:K8:67:LYS:HZ3	1.46	0.62
1:1G:1054:C:O2'	1:1G:1055:A:O5'	2.14	0.62
1:1G:1141:C:H2'	1:1G:1142:G:H8	1.64	0.62
7:62:92:SER:HB2	7:62:94:ARG:HG2	1.82	0.62
26:14:801:G:OP2	58:14:3700:HOH:O	2.15	0.62
26:14:2012:G:H5"	43:A5:96:ILE:HD11	1.81	0.62
26:14:2378:A:H4'	39:65:23:ARG:HH11	1.64	0.62
32:59:42:ARG:NH1	32:59:53:GLU:O	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:69:80:PRO:HA	33:69:143:SER:HA	1.79	0.62
44:B5:36:LYS:HG3	44:B5:56:THR:HG23	1.81	0.62
10:1I:4:ILE:HG12	10:1I:100:THR:HA	1.82	0.62
26:1H:736:C:H5"	58:1H:4337:HOH:O	1.98	0.62
39:A8:51:ALA:HB3	39:A8:73:LEU:HG	1.81	0.62
1:1G:1376:U:H2'	1:1G:1377:A:C8	2.34	0.62
1:1G:1502:A:H4'	1:1G:1503:A:OP2	1.99	0.62
26:14:259:G:H21	26:14:621:A:H8	1.48	0.62
1:13:390:C:O3'	16:7I:28:ARG:NH2	2.31	0.62
26:1H:1858:G:H2'	26:1H:1883:G:H22	1.64	0.62
34:58:96:GLU:HG2	34:58:97:ARG:N	2.13	0.62
48:J8:87:PRO:HA	48:J8:90:ILE:HG13	1.81	0.62
1:1G:222:U:H2'	1:1G:223:U:C6	2.35	0.62
1:1G:1047:G:H1	1:1G:1210:C:H42	1.47	0.62
1:1G:1060:C:H5"	10:1A:51:ARG:HG2	1.80	0.62
7:62:84:ASN:OD1	7:62:84:ASN:N	2.32	0.62
11:2A:32:ILE:HD11	11:2A:68:ALA:HB1	1.81	0.62
24:3L:72:C:H3'	24:3L:73:A:H5"	1.81	0.62
26:14:329:G:P	45:C5:71:LYS:HD3	2.39	0.62
26:14:1729:A:H2'	26:14:1731:G:N2	2.15	0.62
26:1H:1514:U:H2'	26:1H:1515:C:C6	2.33	0.62
1:1G:1002:G:H2'	1:1G:1003:G:H8	1.63	0.62
12:3A:78:GLN:HG3	12:3A:81:SER:HB2	1.80	0.62
29:29:89:ASP:OD1	29:29:90:THR:N	2.33	0.62
45:C5:18:GLY:O	45:C5:20:TYR:N	2.32	0.62
1:13:1061:G:OP1	10:1I:59:SER:OG	2.15	0.62
26:1H:1534:G:H2'	26:1H:1535:U:H4'	1.81	0.62
1:1G:716:A:N3	11:2A:118:GLY:HA2	2.15	0.62
1:1G:980:C:H3'	1:1G:981:U:C6	2.34	0.62
6:52:97:PHE:HD2	18:9A:31:LEU:HD21	1.65	0.62
26:14:1485:G:N2	26:14:1504:C:N3	2.43	0.62
30:39:7:TYR:HE2	30:39:10:PRO:HG3	1.65	0.62
30:39:63:LYS:HE2	30:39:67:GLN:HB3	1.80	0.62
32:59:101:ARG:NH1	32:59:121:ILE:O	2.33	0.62
33:69:75:LEU:HD22	33:69:76:THR:H	1.65	0.62
47:E5:26:TYR:O	47:E5:29:GLN:HB2	2.00	0.62
1:13:7:G:H5'	1:13:298:A:O4'	1.99	0.62
1:13:624:C:O3'	16:7I:10:GLY:HA2	1.99	0.62
2:1E:11:LEU:O	2:1E:16:HIS:NE2	2.33	0.62
17:8I:31:LEU:HD23	17:8I:32:TYR:CZ	2.35	0.62
22:1K:76:A:O3'	26:1H:2506:U:H1'	1.98	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1510:A:O2'	26:1H:1512:G:N7	2.27	0.62
26:1H:2584:U:H2'	26:1H:2585:U:H2'	1.82	0.62
1:1G:1300:G:O2'	1:1G:1301:U:O5'	2.13	0.62
7:62:27:ILE:HA	7:62:30:ILE:HD12	1.82	0.62
13:4A:8:GLU:OE1	13:4A:9:ILE:N	2.32	0.62
15:6A:17:ARG:HD3	15:6A:26:GLU:HG3	1.82	0.62
26:14:67:U:H2'	26:14:68:G:C8	2.34	0.62
26:14:2153:G:N2	26:14:2154:G:O6	2.32	0.62
32:59:6:ARG:HH11	32:59:6:ARG:N	1.98	0.62
37:45:135:ASP:OD2	46:D5:81:ARG:NH2	2.33	0.62
40:75:105:LEU:HD23	40:75:109:GLU:HG3	1.80	0.62
3:2E:11:ARG:HH21	3:2E:180:ALA:HB3	1.64	0.62
19:AI:63:THR:OG1	19:AI:64:GLU:N	2.32	0.62
26:1H:1178:C:H4'	26:1H:1179:C:OP1	2.00	0.62
26:1H:1711:C:H2'	26:1H:1712:C:H6	1.64	0.62
26:1H:2314:C:H2'	26:1H:2315:G:H8	1.65	0.62
28:11:108:PRO:HG3	28:11:143:HIS:CE1	2.34	0.62
36:78:50:ARG:HD3	55:Q8:7:HIS:CD2	2.35	0.62
9:82:112:LYS:HA	9:82:119:ALA:HB2	1.81	0.62
26:14:2150:U:H2'	26:14:2151:G:H8	1.64	0.62
47:E5:18:ALA:HB3	47:E5:20:ARG:HH21	1.64	0.62
24:3K:4:C:H2'	24:3K:5:G:C8	2.35	0.61
26:1H:848:G:H2'	26:1H:849:A:C8	2.35	0.61
26:1H:1188:U:H4'	42:D8:79:VAL:HG22	1.82	0.61
26:1H:2503:A:H4'	26:1H:2504:U:OP1	2.00	0.61
32:51:6:ARG:HA	32:51:66:GLY:HA2	1.82	0.61
46:H8:151:HIS:HB3	46:H8:168:GLU:HA	1.81	0.61
1:1G:1274:G:H2'	1:1G:1275:A:C8	2.35	0.61
13:4A:91:ARG:NH2	13:4A:97:PRO:O	2.33	0.61
26:14:93:C:H5'	26:14:94:G:OP2	2.00	0.61
26:14:303:U:H2'	26:14:304:G:C8	2.35	0.61
26:14:1678:G:H22	26:14:1989:G:N2	1.98	0.61
1:13:811:C:N3	58:13:1805:HOH:O	2.31	0.61
26:1H:125:G:H5'	26:1H:125:G:C8	2.35	0.61
26:1H:323:G:C8	30:31:171:PRO:HG3	2.35	0.61
26:1H:581:C:H2'	26:1H:582:G:C8	2.35	0.61
26:1H:1509:C:H3'	26:1H:1510:A:H5"	1.82	0.61
39:A8:52:SER:HB2	39:A8:55:ALA:H	1.65	0.61
1:1G:971:G:N2	1:1G:1363:A:OP2	2.33	0.61
1:1G:1423:G:H2'	1:1G:1424:C:C6	2.35	0.61
26:14:528:A:O2'	26:14:529:A:H5'	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1819:A:H4'	26:14:1820:U:O5'	2.00	0.61
28:19:44:ASN:ND2	28:19:46:GLN:HG3	2.15	0.61
37:45:20:ALA:HA	37:45:99:PRO:HG2	1.83	0.61
15:6I:17:ARG:HH11	15:6I:17:ARG:HG3	1.65	0.61
26:1H:779:U:OP1	28:11:49:ILE:HG13	2.00	0.61
26:1H:1316:U:H2'	26:1H:1317:A:C8	2.33	0.61
26:1H:2505:G:O6	26:1H:2576:G:H2'	2.00	0.61
1:1G:745:C:H5'	1:1G:851:G:H21	1.63	0.61
1:1G:1279:A:O2'	1:1G:1282:C:N4	2.33	0.61
4:32:18:LYS:HB3	4:32:33:MET:HG3	1.81	0.61
26:14:2689:U:H4'	26:14:2690:C:H5'	1.82	0.61
37:45:21:THR:HG22	37:45:23:GLY:HA3	1.81	0.61
1:13:453:A:H4'	16:7I:72:ARG:HB2	1.81	0.61
1:13:1028:C:H42	1:13:1033:G:H1	1.48	0.61
1:13:1060:C:HO2'	10:1I:56:HIS:HD1	1.41	0.61
16:7I:50:LYS:HD3	16:7I:51:VAL:H	1.63	0.61
26:1H:654(J):A:N1	26:1H:654(M):C:N4	2.48	0.61
26:1H:2250:G:C4	37:88:82:ARG:HG2	2.35	0.61
26:1H:2347:C:O5'	53:O8:39:TYR:OH	2.11	0.61
29:21:54:GLN:O	29:21:55:ASN:ND2	2.33	0.61
32:51:113:VAL:HG11	32:51:151:ILE:HD13	1.83	0.61
32:51:157:TYR:O	32:51:158:HIS:ND1	2.32	0.61
38:98:9:LYS:HA	38:98:17:ARG:NE	2.15	0.61
41:C8:11:ARG:O	41:C8:15:LYS:HG3	2.01	0.61
49:K8:32:LEU:HD11	49:K8:54:LYS:HG3	1.82	0.61
3:22:8:ILE:HG23	3:22:16:ARG:HG2	1.83	0.61
26:14:2210:G:H3'	26:14:2211:G:N2	2.16	0.61
26:14:2675:A:H4'	35:25:29:ASN:HD21	1.65	0.61
1:13:1182:G:H4'	1:13:1183:A:H5"	1.81	0.61
9:8E:89:ASN:O	9:8E:89:ASN:ND2	2.30	0.61
26:1H:482:A:OP2	26:1H:482:A:H8	1.83	0.61
26:1H:952:G:H5"	26:1H:953:A:OP2	2.00	0.61
29:21:119:ARG:HH11	29:21:119:ARG:HG3	1.65	0.61
37:88:12:GLN:HG2	37:88:73:PRO:HD2	1.83	0.61
37:88:51:ARG:HB3	37:88:51:ARG:HH11	1.64	0.61
49:K8:42:GLY:O	49:K8:44:LEU:N	2.33	0.61
1:1G:1286:A:H8	1:1G:1286:A:H3'	1.65	0.61
1:1G:1423:G:H2'	1:1G:1424:C:H6	1.65	0.61
4:32:9:CYS:SG	4:32:22:LYS:HD2	2.41	0.61
11:2A:27:ASN:OD1	11:2A:28:THR:N	2.33	0.61
26:14:322:A:H3'	30:39:169:ASN:OD1	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1412:A:H2'	26:14:1413:G:C8	2.35	0.61
26:14:2016:U:O2	52:J5:7:PRO:HG2	2.00	0.61
26:14:2572:A:OP1	26:14:2574:G:O2'	2.18	0.61
42:95:85:LYS:HG3	42:95:87:HIS:H	1.64	0.61
48:F5:84:GLY:O	48:F5:87:PRO:HD2	2.00	0.61
1:13:1452:C:O2'	1:13:1453:G:OP2	2.18	0.61
20:BI:49:ALA:CB	20:BI:99:LEU:HB2	2.31	0.61
26:1H:2849:U:H4'	26:1H:2868:A:C2	2.35	0.61
1:1G:567:G:N3	58:1G:1738:HOH:O	2.31	0.61
1:1G:1349:A:P	9:82:118:LYS:HZ1	2.22	0.61
11:2A:82:VAL:HG13	11:2A:108:ILE:HG23	1.83	0.61
26:14:7:G:H2'	26:14:8:A:C8	2.35	0.61
34:15:56:ASN:HA	34:15:125:GLY:H	1.64	0.61
1:13:1178:G:H5"	9:8E:93:ARG:HH22	1.66	0.61
36:78:52:GLU:HG3	36:78:57:THR:HA	1.83	0.61
41:C8:97:ASP:OD2	41:C8:101:ARG:NH1	2.34	0.61
1:1G:503:C:OP2	12:3A:116:SER:HB3	2.00	0.61
1:1G:517:G:N2	1:1G:530:G:OP1	2.21	0.61
12:3A:41:ARG:HH12	12:3A:43:VAL:HG22	1.65	0.61
26:14:588:U:H2'	26:14:589:C:C6	2.36	0.61
26:14:990:A:H5'	26:14:990:A:H8	1.65	0.61
26:14:994:C:O2'	26:14:996:A:OP1	2.19	0.61
26:14:1856:G:H1	26:14:1886:C:N4	1.99	0.61
1:13:757:U:H2'	1:13:758:G:O4'	2.00	0.61
1:13:881:G:OP2	12:3I:12:ARG:NH2	2.33	0.61
24:3K:19:G:C6	26:1H:2112:G:H1'	2.36	0.61
26:1H:639:U:H2'	26:1H:640:C:C6	2.35	0.61
26:1H:1509:C:H2'	26:1H:1511:A:C8	2.34	0.61
26:1H:1814:G:C6	58:1H:4231:HOH:O	2.51	0.61
26:1H:2887:U:H2'	26:1H:2888:C:C6	2.35	0.61
36:78:18:ARG:O	36:78:19:VAL:HG22	2.00	0.61
3:22:36:ASP:HA	3:22:39:ILE:HD12	1.82	0.61
13:4A:86:CYS:SG	13:4A:88:ARG:HB3	2.40	0.61
26:14:446:G:OP2	58:14:3676:HOH:O	2.16	0.61
27:1J:16:G:H2'	27:1J:17:C:C6	2.36	0.61
46:D5:11:GLU:CD	46:D5:12:GLY:H	2.03	0.61
1:13:484:G:O2'	1:13:485:G:OP2	2.17	0.61
1:13:591:U:H2'	1:13:592:G:H8	1.65	0.61
39:A8:27:SER:HA	39:A8:88:ASP:HB3	1.82	0.61
1:1G:1126:U:N3	1:1G:1281:U:O4'	2.34	0.61
3:22:70:VAL:HG12	3:22:72:LYS:H	1.65	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:88:ARG:HA	3:22:101:LEU:HD13	1.81	0.61
24:3L:33:U:O2'	24:3L:35:A:OP2	2.18	0.61
26:14:900:A:H3'	26:14:901:A:H8	1.65	0.61
26:14:1022:G:H22	26:14:1142(A):A:H2	1.48	0.61
26:14:1198:U:H2'	26:14:1199:U:C6	2.36	0.61
26:14:1664:A:OP2	58:14:3594:HOH:O	2.16	0.61
26:14:1678:G:H22	26:14:1989:G:H22	1.48	0.61
40:75:26:ASP:O	40:75:49:VAL:HG22	2.01	0.61
47:E5:49:LYS:HE3	47:E5:82:ARG:NH1	2.16	0.61
3:2E:44:GLU:HA	3:2E:52:LEU:HD11	1.82	0.61
26:1H:49:A:N7	26:1H:120:U:C5	2.64	0.61
26:1H:66:C:H2'	26:1H:67:U:H6	1.66	0.61
26:1H:910:A:N7	37:88:13:GLN:HG3	2.15	0.61
26:1H:919:G:N2	26:1H:2269:A:OP2	2.33	0.61
26:1H:1287:A:C8	38:98:107:ASP:HB2	2.36	0.61
26:1H:2702:U:H6	26:1H:2702:U:OP1	1.84	0.61
40:B8:26:ASP:O	40:B8:49:VAL:HG12	2.00	0.61
43:E8:17:VAL:HG13	43:E8:76:VAL:HG11	1.82	0.61
1:1G:371:G:O2'	1:1G:373:A:N7	2.33	0.61
1:1G:926:G:N2	25:4L:15:A:OP2	2.33	0.61
10:1A:8:LEU:HA	10:1A:96:ILE:HG22	1.82	0.61
16:7A:75:ARG:HG3	16:7A:80:PHE:CD2	2.36	0.61
26:14:2273:A:H2'	26:14:2274:A:H8	1.66	0.61
26:14:2845:G:H5"	40:75:54:ARG:O	2.00	0.61
1:13:110:C:H2'	1:13:111:G:O4'	2.01	0.60
12:3I:59:ARG:HA	12:3I:65:GLU:HA	1.83	0.60
30:31:129:PHE:HA	30:31:142:TRP:NE1	2.16	0.60
11:2A:100:ALA:O	11:2A:102:GLY:N	2.34	0.60
26:14:736:C:OP1	58:14:3934:HOH:O	2.17	0.60
26:14:2611:U:H3'	26:14:2611:U:OP2	2.01	0.60
35:25:102:VAL:HB	35:25:106:LEU:HD12	1.81	0.60
44:B5:51:VAL:H	44:B5:83:VAL:HG23	1.65	0.60
51:I5:18:CYS:H	51:I5:19:GLY:HA2	1.66	0.60
1:13:1060:C:H5"	10:1I:51:ARG:HG2	1.83	0.60
1:13:1305:G:H21	1:13:1331:G:H2'	1.66	0.60
1:13:1497:G:H2'	1:13:1498:U:H5'	1.82	0.60
19:AI:19:VAL:HG13	19:AI:47:HIS:HD2	1.65	0.60
26:1H:547:A:H2'	26:1H:548:A:C8	2.35	0.60
26:1H:2243:U:OP1	58:1H:4129:HOH:O	2.16	0.60
26:1H:2849:U:OP2	40:B8:95:ARG:NH1	2.34	0.60
32:51:8:PRO:HG2	32:51:69:ARG:NH2	2.15	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2A:18:ARG:NH2	11:2A:35:PRO:O	2.34	0.60
11:2A:67:ASP:OD2	11:2A:71:LYS:NZ	2.34	0.60
24:3L:3:C:H2'	24:3L:4:C:O4'	2.01	0.60
26:14:155:C:H42	26:14:171:G:H1	1.49	0.60
26:14:654(E):C:N4	26:14:654(P):G:H22	1.99	0.60
53:K5:10:LEU:HB3	55:M5:34:TRP:CZ3	2.36	0.60
24:3K:58:A:O2'	24:3K:59:U:OP1	2.19	0.60
26:1H:880:G:O2'	26:1H:881:G:O5'	2.19	0.60
26:1H:957:A:N1	26:1H:2458:G:H4'	2.16	0.60
26:1H:2817:G:H1	26:1H:2829:C:H42	1.50	0.60
30:31:108:LYS:O	30:31:112:MET:HG3	2.00	0.60
45:G8:55:TYR:HB2	45:G8:58:GLY:HA3	1.81	0.60
1:1G:728:A:H2'	1:1G:729:A:C8	2.35	0.60
1:1G:1028(A):C:O2	1:1G:1033:G:N2	2.34	0.60
1:1G:1095:U:OP1	1:1G:1108:G:N1	2.35	0.60
16:7A:37:GLY:HA2	16:7A:50:LYS:HD3	1.82	0.60
26:14:2275:C:H6	26:14:2275:C:H5'	1.67	0.60
27:1J:56:G:H4'	27:1J:57:A:C8	2.37	0.60
33:69:54:GLN:HA	33:69:57:ARG:HB3	1.84	0.60
1:13:1007:C:N4	1:13:1022:G:H1	1.99	0.60
26:1H:140:A:H8	26:1H:1408:C:HO2'	1.48	0.60
26:1H:176:G:O2'	26:1H:177:G:H5'	2.02	0.60
26:1H:1086:A:H1'	26:1H:1103:A:H61	1.64	0.60
26:1H:1668:A:N6	26:1H:1676:A:H61	1.99	0.60
26:1H:2857:G:N2	26:1H:2860:A:OP2	2.27	0.60
40:B8:16:ARG:HE	40:B8:19:LEU:HD11	1.65	0.60
3:22:14:ILE:HG12	3:22:15:THR:H	1.66	0.60
9:82:10:ARG:HD2	9:82:105:ASP:HB3	1.82	0.60
26:14:2280:G:O2'	26:14:2388:A:N1	2.33	0.60
31:49:173:LEU:HA	31:49:176:LEU:HB2	1.83	0.60
51:I5:20:ASN:OD1	51:I5:36:CYS:HB2	2.02	0.60
13:4I:27:LYS:HA	13:4I:31:LYS:HZ3	1.65	0.60
26:1H:873:G:N2	26:1H:904:C:O2	2.27	0.60
26:1H:1230:C:H2'	26:1H:1231:G:C8	2.37	0.60
26:1H:1607:C:H4'	26:1H:1608:A:O5'	2.01	0.60
26:1H:2165:G:N7	26:1H:2166:G:N2	2.48	0.60
28:11:223:GLY:HA3	28:11:231:HIS:CE1	2.36	0.60
30:31:114:VAL:HG11	30:31:202:PHE:HE2	1.67	0.60
36:78:50:ARG:HD3	55:Q8:7:HIS:NE2	2.16	0.60
45:G8:76:CYS:HB2	45:G8:82:PRO:HD3	1.83	0.60
46:H8:7:ALA:HB3	46:H8:61:LEU:HB2	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:72:7:ALA:O	8:72:11:THR:OG1	2.12	0.60
15:6A:43:LEU:HD11	15:6A:53:HIS:HA	1.84	0.60
26:14:1794:U:O2'	26:14:1795:C:H5'	2.00	0.60
37:45:75:THR:HA	37:45:89:ASN:HA	1.84	0.60
5:4E:77:PRO:HD2	5:4E:142:LEU:HD13	1.83	0.60
26:1H:399:G:OP2	58:1H:4238:HOH:O	2.16	0.60
26:1H:620:G:H4'	26:1H:621:A:C5'	2.31	0.60
26:1H:1534:G:H22	26:1H:1538:G:H22	1.48	0.60
28:11:68:LYS:HB3	28:11:70:TRP:CH2	2.36	0.60
36:78:58:THR:HG21	55:Q8:52:LYS:HD3	1.83	0.60
49:K8:58:ALA:O	49:K8:62:THR:HG22	2.00	0.60
26:14:1757:U:N3	26:14:1762:A:H2	1.96	0.60
26:14:2836:U:H2'	26:14:2837:G:C8	2.37	0.60
35:25:59:LYS:HB3	35:25:87:ILE:HG22	1.83	0.60
8:7E:41:ARG:NH2	8:7E:123:GLU:OE1	2.33	0.60
26:1H:2598:A:OP1	58:1H:3655:HOH:O	2.16	0.60
1:1G:976:G:OP2	1:1G:1358:U:O2'	2.18	0.60
3:22:11:ARG:HB2	3:22:11:ARG:NH1	2.17	0.60
1:13:1306:A:H61	1:13:1331:G:H1'	1.66	0.60
26:1H:534:U:H5'	41:C8:42:ALA:HB1	1.83	0.60
26:1H:2347:C:P	53:O8:39:TYR:HH	2.24	0.60
34:58:38:HIS:O	41:C8:67:ALA:HB1	2.01	0.60
10:1A:40:LEU:HD12	10:1A:41:PRO:HD2	1.83	0.60
18:9A:21:LYS:HZ1	18:9A:57:GLY:HA3	1.66	0.60
26:14:870:A:H2'	26:14:871:U:O4'	2.02	0.60
26:14:2335:A:O2'	26:14:2337:G:N7	2.31	0.60
31:49:32:PRO:HB2	31:49:172:LEU:HD13	1.83	0.60
39:65:30:ARG:HG3	39:65:35:ILE:HD13	1.83	0.60
46:D5:139:VAL:HG13	46:D5:156:LYS:HE2	1.82	0.60
53:K5:18:ARG:NH2	53:K5:43:CYS:O	2.34	0.60
1:13:1028(A):C:H42	1:13:1032(A):G:H1	1.50	0.60
20:BI:26:ASN:HB2	20:BI:71:THR:HG23	1.83	0.60
26:1H:1705:G:C2'	26:1H:1706:U:H5'	2.31	0.60
30:31:160:ASN:OD1	30:31:163:VAL:HG23	2.02	0.60
31:41:65:GLY:HA2	51:M8:7:PRO:HG2	1.84	0.60
32:51:54:ARG:HD3	32:51:65:HIS:ND1	2.16	0.60
46:H8:163:LEU:HD13	46:H8:165:VAL:HA	1.82	0.60
1:1G:690:G:H2'	1:1G:691:G:O4'	2.01	0.60
1:1G:785:G:N7	58:1G:1746:HOH:O	2.31	0.60
1:1G:1099:G:OP1	2:12:148:TYR:OH	2.19	0.60
1:1G:1160:G:N7	1:1G:1181:G:N1	2.40	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1240:U:N3	7:62:32:ARG:HG3	2.16	0.60
1:1G:1298:C:H41	7:62:114:ARG:HA	1.67	0.60
8:72:20:TYR:HA	8:72:65:TYR:CZ	2.37	0.60
24:3L:9:A:O2'	24:3L:10:G:N7	2.32	0.60
26:14:729:G:P	28:19:208:LYS:HZ1	2.25	0.60
31:49:56:ALA:HA	31:49:59:GLU:HB2	1.84	0.60
1:13:236:G:H5"	17:8I:42:TYR:OH	2.02	0.60
1:13:276:G:O3'	17:8I:68:ARG:NH1	2.34	0.60
1:13:631:G:H2'	1:13:632:A:N3	2.16	0.60
1:13:768:A:OP2	58:13:1885:HOH:O	2.17	0.60
1:13:1263:C:H2'	1:13:1264:C:C6	2.36	0.60
12:3I:89:ARG:HD3	12:3I:91:LYS:HB3	1.83	0.60
26:1H:10:G:N2	26:1H:2801:A:O2'	2.35	0.60
26:1H:764:A:O4'	28:11:213:ARG:HG3	2.02	0.60
12:3A:27:LEU:HG	12:3A:33:ARG:HG2	1.84	0.60
12:3A:58:VAL:O	12:3A:65:GLU:HA	2.02	0.60
21:1B:8:THR:HG22	21:1B:11:GLY:H	1.65	0.60
15:6I:16:ALA:HB1	15:6I:21:ASP:HB3	1.84	0.59
26:1H:357:A:H2'	26:1H:358:U:C6	2.37	0.59
26:1H:607:U:N3	26:1H:621:A:C2	2.67	0.59
26:1H:1113:U:H2'	26:1H:1114:G:C8	2.36	0.59
26:1H:1693:U:H1'	28:11:14:ARG:NH2	2.16	0.59
27:16:40:U:H5	51:M8:2:LYS:HE2	1.67	0.59
29:21:101:ARG:HG2	29:21:169:ASN:OD1	2.02	0.59
32:51:12:PRO:HG2	32:51:13:LYS:HG2	1.84	0.59
32:51:144:VAL:O	32:51:148:ILE:HG12	2.02	0.59
37:88:133:ARG:O	37:88:134:ARG:HB2	2.01	0.59
1:1G:147:G:H1	1:1G:175:C:H42	1.50	0.59
26:14:861:A:N3	27:1J:79:C:O2'	2.34	0.59
26:14:2123:G:H2'	26:14:2124:G:H8	1.67	0.59
26:14:2261:C:O2'	26:14:2262:U:H5'	2.02	0.59
35:25:10:VAL:HG22	35:25:17:ARG:O	2.02	0.59
37:88:21:THR:OG1	37:88:22:LYS:O	2.15	0.59
2:12:63:MET:HG3	2:12:225:ALA:HB1	1.84	0.59
3:22:21:ARG:HH12	10:1A:92:THR:HB	1.67	0.59
11:2A:32:ILE:HD13	11:2A:72:ALA:HB2	1.84	0.59
12:3A:41:ARG:HB3	12:3A:41:ARG:NH1	2.17	0.59
19:AA:50:ALA:CB	19:AA:57:HIS:HB3	2.32	0.59
23:2L:20:G:C2	23:2L:58:A:C2	2.90	0.59
26:14:140:A:H8	26:14:1408:C:HO2'	1.46	0.59
26:14:1366:A:H2'	26:14:1367:A:O4'	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2528:U:O2'	26:14:2530:A:OP1	2.16	0.59
4:3E:74:GLN:O	4:3E:78:LEU:HD13	2.02	0.59
26:1H:58:G:N2	26:1H:70:G:C4	2.70	0.59
26:1H:1374:G:H2'	26:1H:1375:C:H6	1.66	0.59
33:61:109:ILE:HB	33:61:130:TYR:CZ	2.36	0.59
1:1G:45:U:H2'	1:1G:46:G:C8	2.37	0.59
1:1G:556:C:OP2	12:3A:20:LYS:NZ	2.35	0.59
1:1G:581:G:OP1	15:6A:61:GLY:HA3	2.02	0.59
1:1G:632:A:H1'	1:1G:633:G:OP2	2.01	0.59
1:1G:1316:G:H5"	14:5A:17:LYS:NZ	2.17	0.59
24:3L:15:G:H22	24:3L:48:C:H41	1.50	0.59
26:14:172:C:H2'	26:14:173:G:H8	1.66	0.59
26:14:2151:G:H2'	26:14:2152:G:H8	1.67	0.59
37:45:38:GLU:HB2	37:45:127:ILE:HG22	1.83	0.59
2:1E:178:ARG:NH1	2:1E:196:LEU:O	2.31	0.59
26:1H:1331:A:HO2'	26:1H:1332:G:H8	1.51	0.59
26:1H:2636:U:H3	26:1H:2782:G:H1	1.49	0.59
31:41:143:GLU:OE1	51:M8:26:SER:OG	2.20	0.59
52:N8:41:PRO:HG2	52:N8:44:THR:HG21	1.82	0.59
1:1G:1503:A:N3	25:4L:13:A:N6	2.51	0.59
18:9A:53:ARG:NE	18:9A:59:SER:O	2.23	0.59
26:14:1771:C:O2'	26:14:1786:A:H8	1.85	0.59
34:15:4:TYR:O	41:85:64:ARG:NH1	2.35	0.59
1:13:142:G:H2'	1:13:143:A:H8	1.68	0.59
1:13:692:U:H5'	1:13:797:C:H5'	1.85	0.59
26:1H:580:C:H2'	26:1H:581:C:C6	2.38	0.59
26:1H:625:G:N7	36:78:107:LYS:NZ	2.50	0.59
26:1H:1438:U:H2'	26:1H:1439:A:C8	2.37	0.59
28:11:59:LYS:HD2	28:11:60:ARG:N	2.16	0.59
35:68:71:ARG:NH1	40:B8:74:ARG:HH21	2.00	0.59
38:98:87:TYR:HD1	38:98:90:ARG:HD2	1.68	0.59
1:1G:683:G:C6	1:1G:684:A:C6	2.90	0.59
18:9A:56:THR:HB	18:9A:58:LEU:HD12	1.84	0.59
26:14:247:G:H4'	26:14:386:G:C5	2.37	0.59
1:13:1429:C:H2'	1:13:1430:C:C6	2.36	0.59
3:2E:40:ARG:HH11	3:2E:40:ARG:HG3	1.65	0.59
1:1G:1128:C:O2	1:1G:1144:G:N2	2.35	0.59
1:1G:1227:A:OP1	19:AA:80:TYR:OH	2.19	0.59
26:14:288:C:O2	26:14:353:G:N2	2.27	0.59
26:14:1111:A:H5'	32:59:3:ARG:HD3	1.85	0.59
26:14:1266:G:O4'	43:A5:15:ARG:NH2	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2712:U:H2'	26:14:2714:G:H5"	1.83	0.59
27:1J:24:G:H4'	27:1J:25:A:H5'	1.85	0.59
31:49:95:ARG:HG2	31:49:96:ARG:H	1.67	0.59
40:75:56:GLY:O	40:75:59:THR:HG23	2.03	0.59
42:95:43:GLU:OE2	42:95:44:LYS:NZ	2.27	0.59
45:C5:39:VAL:O	45:C5:40:GLU:HB2	2.02	0.59
1:13:201:C:H42	1:13:216:G:H1	1.49	0.59
1:13:272:C:H2'	1:13:273:A:C8	2.37	0.59
1:13:342:C:H2'	1:13:343:U:O4'	2.01	0.59
1:13:445:G:H1	1:13:489:C:H42	1.48	0.59
3:2E:8:ILE:HD12	3:2E:16:ARG:HG3	1.83	0.59
15:6I:42:HIS:HD2	15:6I:43:LEU:HD23	1.67	0.59
26:1H:606:U:H4'	26:1H:658:C:H4'	1.85	0.59
26:1H:654(A):A:H2	26:1H:654(T):A:N1	2.00	0.59
30:31:6:VAL:HG21	30:31:119:ARG:HB2	1.85	0.59
31:41:68:PRO:HB3	31:41:92:VAL:HB	1.85	0.59
38:98:1:MET:O	38:98:1:MET:HG2	2.02	0.59
39:A8:34:HIS:NE2	39:A8:54:LEU:HD23	2.17	0.59
1:1G:1203:C:H2'	1:1G:1204:A:O4'	2.03	0.59
1:1G:1326:C:OP1	21:1B:17:THR:OG1	2.15	0.59
14:5A:27:CYS:SG	14:5A:29:ARG:HG2	2.43	0.59
26:14:527:C:H4'	26:14:528:A:O5'	2.02	0.59
26:14:2781:A:H5"	26:14:2782:G:H5'	1.85	0.59
35:25:13:ASN:ND2	35:25:96:THR:HG23	2.17	0.59
1:13:1504:G:H3'	1:13:1504:G:P	2.43	0.59
4:3E:83:SER:HA	4:3E:89:THR:HG23	1.85	0.59
19:AI:5:LEU:HB3	19:AI:10:PHE:HE2	1.68	0.59
26:1H:1265:A:H3'	52:N8:19:ARG:HH12	1.68	0.59
26:1H:1532:C:H2'	26:1H:1533:C:O4'	2.03	0.59
50:L8:30:ARG:HH11	50:L8:33:GLN:HE21	1.51	0.59
1:1G:192:U:O4'	20:BA:103:GLY:HA2	2.03	0.59
1:1G:413:G:H2'	1:1G:428:G:N2	2.17	0.59
1:1G:618:C:H5'	1:1G:619:U:H5"	1.84	0.59
3:22:40:ARG:HB3	3:22:55:VAL:HG11	1.84	0.59
9:82:99:LEU:HB3	9:82:101:PHE:CE2	2.38	0.59
26:14:1942:C:OP2	26:14:1943:U:O2'	2.13	0.59
33:69:61:ARG:HA	33:69:64:GLU:HB2	1.85	0.59
33:69:76:THR:HG23	33:69:77:LEU:H	1.67	0.59
38:55:20:LEU:HD21	38:55:40:LYS:HD3	1.84	0.59
1:13:130:A:O2'	1:13:131:C:O5'	2.18	0.59
1:13:598:U:H4'	8:7E:94:TYR:CG	2.38	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1133:G:H2'	1:13:1134:G:C8	2.38	0.59
5:4E:33:VAL:HG11	5:4E:109:ILE:HA	1.84	0.59
26:1H:1332:G:N2	26:1H:1610:A:C8	2.70	0.59
43:E8:79:GLY:HA3	43:E8:100:THR:HG22	1.85	0.59
2:12:70:PHE:HB2	2:12:92:TYR:HB2	1.84	0.59
7:62:143:ARG:NH1	24:3L:41:C:O2'	2.35	0.59
13:4A:15:VAL:HG12	13:4A:45:VAL:HG22	1.85	0.59
17:8A:86:GLU:O	17:8A:90:ILE:HG12	2.03	0.59
26:14:573:G:O2'	26:14:574:C:H3'	2.03	0.59
26:14:1058:U:H2'	26:14:1059:G:H8	1.67	0.59
52:J5:3:LYS:O	52:J5:4:HIS:C	2.41	0.59
1:13:1000:A:H2'	1:13:1001:G:C8	2.37	0.59
1:13:1218:C:H2'	1:13:1219:U:C6	2.38	0.59
20:BI:26:ASN:O	20:BI:30:LYS:HB2	2.03	0.59
40:B8:80:SER:HB3	40:B8:83:ILE:HG13	1.84	0.59
43:E8:86:LEU:HD12	43:E8:87:PRO:HD2	1.85	0.59
47:I8:17:GLN:O	47:I8:19:LYS:HE3	2.02	0.59
26:14:1607:C:H4'	26:14:1608:A:O5'	2.03	0.59
26:14:2048:G:N7	58:14:3823:HOH:O	2.31	0.59
31:49:39:ILE:O	31:49:91:ARG:HG2	2.03	0.59
37:45:134:ARG:O	37:45:136:ALA:N	2.35	0.59
39:65:35:ILE:HB	39:65:97:ARG:NH2	2.18	0.59
53:K5:27:LYS:O	53:K5:28:ARG:NH1	2.36	0.59
1:13:1356:G:H2'	1:13:1357:A:C8	2.38	0.58
15:6I:42:HIS:CD2	15:6I:43:LEU:HD23	2.38	0.58
17:8I:76:LEU:HD12	17:8I:77:VAL:H	1.68	0.58
26:1H:1021:A:H3'	26:1H:1022:G:H5"	1.84	0.58
26:1H:1774:C:OP1	58:1H:3745:HOH:O	2.16	0.58
26:1H:2679:A:H4'	29:21:165:VAL:HG11	1.85	0.58
26:1H:2734:A:H5'	26:1H:2735:G:OP2	2.03	0.58
28:11:201:HIS:O	28:11:204:ILE:HG12	2.03	0.58
2:12:7:VAL:HG22	2:12:8:LYS:H	1.68	0.58
10:1A:99:LYS:HD3	10:1A:100:THR:H	1.67	0.58
16:7A:74:LEU:HD12	16:7A:79:VAL:HG21	1.85	0.58
35:25:10:VAL:HG21	35:25:16:ALA:O	2.03	0.58
51:I5:34:GLU:HG2	51:I5:35:VAL:H	1.68	0.58
4:3E:170:VAL:HG22	4:3E:171:GLY:H	1.67	0.58
26:1H:1858:G:H2'	26:1H:1883:G:N2	2.17	0.58
44:F8:3:THR:HA	44:F8:6:ASP:OD2	2.03	0.58
46:H8:99:TYR:HD1	46:H8:123:ASP:HB3	1.69	0.58
47:I8:24:LYS:O	47:I8:25:ARG:NH1	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:804:U:H5"	1:1G:805:C:OP2	2.02	0.58
1:1G:823:G:H21	8:72:1:MET:HE2	1.68	0.58
3:22:139:GLN:NE2	3:22:142:MET:SD	2.73	0.58
5:42:9:LYS:HG2	5:42:108:ALA:HB1	1.85	0.58
26:14:289:A:H3'	26:14:290:G:H8	1.68	0.58
26:14:1327:C:O3'	38:55:105:ARG:NH2	2.36	0.58
27:1J:104:A:H2'	27:1J:105:G:O4'	2.03	0.58
52:J5:36:CYS:SG	52:J5:48:GLU:HB2	2.43	0.58
1:13:661:G:H1	1:13:744:C:H42	1.51	0.58
9:8E:25:LYS:N	9:8E:60:ASP:OD1	2.35	0.58
20:BI:30:LYS:NZ	20:BI:80:ARG:HH12	2.01	0.58
23:2K:62:C:H2'	23:2K:63:C:H6	1.68	0.58
26:1H:1509:C:N3	26:1H:1511:A:N6	2.51	0.58
26:1H:1537:C:H2'	26:1H:1538:G:C8	2.38	0.58
26:1H:2179:C:H2'	26:1H:2180:U:C6	2.38	0.58
33:61:68:LEU:HA	33:61:71:ILE:HG22	1.85	0.58
49:K8:4:SER:HA	49:K8:6:VAL:HG22	1.85	0.58
1:1G:501:C:H2'	1:1G:502:G:C8	2.36	0.58
1:1G:1370:G:C8	9:82:109:VAL:HG11	2.38	0.58
5:42:16:THR:O	5:42:16:THR:OG1	2.22	0.58
26:14:579:G:H2'	26:14:580:C:C6	2.38	0.58
26:14:646:A:H2'	26:14:647:G:O4'	2.03	0.58
1:13:1118:C:H1'	1:13:1179:A:C4	2.38	0.58
9:8E:43:ALA:HA	9:8E:74:ILE:HD13	1.84	0.58
16:7I:39:TYR:OH	16:7I:41:PRO:HB3	2.03	0.58
26:1H:586:A:P	58:1H:3827:HOH:O	2.61	0.58
26:1H:1266:G:O4'	43:E8:15:ARG:NH2	2.35	0.58
26:1H:1432:C:H2'	26:1H:1433:U:O4'	2.03	0.58
27:16:15:A:H3'	27:16:16:G:H5'	1.84	0.58
40:B8:29:ARG:HB2	40:B8:46:GLU:HG3	1.86	0.58
4:32:55:ALA:O	4:32:59:ARG:HG2	2.03	0.58
26:14:860:U:O2'	26:14:861:A:H5'	2.02	0.58
28:19:37:LEU:HB2	28:19:38:LYS:HG2	1.84	0.58
1:13:221:C:H2'	1:13:222:U:H6	1.67	0.58
1:13:613:C:H42	1:13:627:G:H1	1.51	0.58
1:13:711:G:OP1	6:5E:54:LYS:NZ	2.26	0.58
1:13:1118:C:H1'	1:13:1179:A:C5	2.38	0.58
1:13:1346:A:H5"	9:8E:120:ARG:HH12	1.69	0.58
20:BI:50:GLU:HB2	20:BI:100:ILE:HB	1.84	0.58
26:1H:598:G:C5'	36:78:11:GLY:HA3	2.32	0.58
26:1H:1794:U:H2'	26:1H:1795:C:C6	2.39	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1980:G:H4'	58:1H:3657:HOH:O	2.02	0.58
26:1H:2315:G:OP1	31:41:36:LYS:NZ	2.33	0.58
26:1H:2492:U:H2'	26:1H:2493:U:C6	2.38	0.58
29:21:104:VAL:HG22	29:21:198:VAL:HG22	1.86	0.58
30:31:114:VAL:HG21	30:31:202:PHE:CE2	2.39	0.58
43:E8:97:LYS:HE2	43:E8:99:ARG:NH2	2.18	0.58
55:Q8:34:TRP:C	55:Q8:34:TRP:CD1	2.77	0.58
1:1G:987:G:N2	1:1G:1218:C:N3	2.51	0.58
1:1G:1157:A:H8	1:1G:1158:C:C5	2.22	0.58
26:14:5:A:H2'	26:14:6:A:C8	2.39	0.58
26:14:70:G:H21	26:14:71:A:H62	1.49	0.58
26:14:527:C:H5	58:14:3922:HOH:O	1.85	0.58
26:14:780:G:OP1	28:19:218:ARG:NH2	2.37	0.58
26:14:2786:U:H4'	29:29:64:LYS:C	2.23	0.58
31:49:122:PRO:O	31:49:125:PHE:HD2	1.87	0.58
35:25:88:ASN:HB3	35:25:94:ARG:HD3	1.86	0.58
36:35:59:LEU:O	36:35:59:LEU:HD22	2.03	0.58
42:95:58:VAL:HB	42:95:98:GLU:HB2	1.84	0.58
1:13:872:A:C5	1:13:874:G:C8	2.91	0.58
6:5E:76:ALA:O	6:5E:80:ARG:HG3	2.04	0.58
20:BI:53:LEU:HD12	20:BI:56:MET:HE2	1.85	0.58
38:98:24:GLN:OE1	38:98:36:THR:HG21	2.03	0.58
40:B8:26:ASP:HB2	40:B8:91:ARG:HA	1.84	0.58
1:1G:520:A:OP1	12:3A:52:LEU:HB2	2.04	0.58
1:1G:546:G:OP2	4:32:72:GLU:N	2.36	0.58
1:1G:877:C:H5"	8:72:88:LYS:HD3	1.85	0.58
1:1G:1154:G:H2'	1:1G:1155:G:C8	2.32	0.58
25:4L:15:A:H8	25:4L:15:A:O5'	1.87	0.58
26:14:2062:A:O2'	26:14:2063:C:OP1	2.18	0.58
26:14:2528:U:O3'	26:14:2529:G:N2	2.26	0.58
27:1J:40:U:H3	27:1J:43:C:H5"	1.69	0.58
29:29:33:VAL:HG12	29:29:89:ASP:HB3	1.85	0.58
36:35:62:LEU:HD23	55:M5:27:THR:HG22	1.85	0.58
1:13:793:U:H5'	1:13:794:A:H5"	1.86	0.58
4:3E:36:ARG:HB3	4:3E:38:TYR:CZ	2.39	0.58
7:6E:155:ARG:O	7:6E:155:ARG:NH2	2.35	0.58
26:1H:528:A:C2	26:1H:2043:C:H4'	2.38	0.58
26:1H:1997:G:H5"	58:1H:3916:HOH:O	2.03	0.58
31:41:26:GLN:NE2	31:41:27:ASN:HB2	2.19	0.58
48:J8:7:ILE:HG12	48:J8:62:VAL:HG11	1.86	0.58
26:14:654(D):G:H22	26:14:654(Q):C:N4	2.00	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2557:G:H2'	26:14:2558:C:C6	2.37	0.58
27:1J:46:A:H2'	27:1J:47:C:H6	1.69	0.58
29:29:12:THR:HG22	40:75:58:ASN:HD21	1.69	0.58
33:69:101:LEU:HD23	33:69:101:LEU:H	1.67	0.58
39:65:3:ARG:HE	39:65:4:LEU:N	2.01	0.58
44:B5:18:TYR:O	44:B5:20:GLY:N	2.36	0.58
55:M5:48:PHE:HE2	55:M5:50:LEU:HD13	1.67	0.58
1:13:247:G:OP2	17:8I:100:LYS:HB2	2.04	0.58
26:1H:1799:G:H5'	26:1H:1819:A:H61	1.68	0.58
26:1H:2224:G:H4'	26:1H:2226:C:C2	2.39	0.58
26:1H:2680:C:H5'	29:21:189:PRO:HA	1.86	0.58
28:11:17:THR:CG2	28:11:204:ILE:HA	2.34	0.58
1:1G:975:A:H4'	1:1G:976:G:H5"	1.85	0.58
1:1G:1302:U:OP1	13:4A:13:LYS:NZ	2.36	0.58
26:14:617:G:OP1	30:39:40:GLN:HG3	2.03	0.58
26:14:2125:G:N2	26:14:2172:U:OP1	2.37	0.58
27:1J:7:G:H1	27:1J:113:C:H42	1.52	0.58
29:29:25:VAL:O	29:29:26:ILE:HG12	2.03	0.58
46:D5:60:GLU:HA	46:D5:66:SER:HA	1.86	0.58
1:13:116:A:H61	1:13:313:A:H1'	1.69	0.58
1:13:195:A:H4'	20:BI:68:LYS:HE2	1.83	0.58
1:13:343:U:O2'	1:13:346:G:O6	2.18	0.58
1:13:375:U:OP1	16:7I:69:THR:HG21	2.03	0.58
1:13:1226:C:H4'	19:AI:80:TYR:OH	2.04	0.58
1:13:1240:U:C5	7:6E:32:ARG:HD2	2.37	0.58
26:1H:270(J):G:H2'	26:1H:270(K):C:O4'	2.04	0.58
26:1H:604:G:OP2	36:78:90:ARG:NH1	2.37	0.58
26:1H:607:U:N3	26:1H:621:A:H2	1.94	0.58
26:1H:729:G:O5'	28:11:208:LYS:NZ	2.37	0.58
26:1H:816:C:OP2	58:1H:3823:HOH:O	2.17	0.58
26:1H:1209:G:O6	58:1H:4267:HOH:O	2.16	0.58
26:1H:1771:C:H1'	26:1H:1786:A:C8	2.39	0.58
30:31:139:PHE:HB2	30:31:166:ALA:HB1	1.86	0.58
32:51:97:ARG:NH2	32:51:104:GLU:OE2	2.33	0.58
44:F8:57:LEU:HD11	44:F8:78:LYS:HD2	1.86	0.58
1:1G:363:A:OP1	12:3A:33:ARG:HG3	2.03	0.58
5:42:140:ARG:O	5:42:143:ARG:NH2	2.37	0.58
26:14:1161:C:H2'	26:14:1162:G:H8	1.69	0.58
37:45:66:ILE:HG13	37:45:67:ARG:H	1.69	0.58
37:45:117:ALA:HA	37:45:120:ILE:HB	1.85	0.58
48:F5:85:LEU:HA	48:F5:87:PRO:HG2	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:L5:19:ARG:HG2	54:L5:19:ARG:HH11	1.69	0.58
3:2E:95:THR:HB	3:2E:97:LYS:H	1.67	0.58
4:3E:102:ASP:HB3	4:3E:136:PRO:HB2	1.85	0.58
8:7E:8:ASP:O	8:7E:12:ARG:HG3	2.04	0.58
8:7E:87:SER:HB2	8:7E:93:VAL:CB	2.33	0.58
19:AI:39:THR:HG22	19:AI:40:ILE:H	1.68	0.58
26:1H:581:C:H2'	26:1H:582:G:H8	1.68	0.58
26:1H:654(D):G:N2	26:1H:654(R):C:N3	2.52	0.58
26:1H:1590:U:H2'	26:1H:1591:G:C8	2.38	0.58
40:B8:108:ARG:HA	40:B8:111:ARG:NE	2.18	0.58
46:H8:7:ALA:HB2	46:H8:59:LEU:HD22	1.85	0.58
49:K8:35:LEU:HD12	49:K8:53:LEU:HD12	1.86	0.58
1:1G:537:G:H5"	12:3A:113:ARG:NH1	2.19	0.58
8:72:99:GLU:OE2	8:72:100:ILE:N	2.25	0.58
26:14:605:C:O2	26:14:657:U:O2'	2.20	0.58
26:14:674:G:O2'	30:39:74:ARG:HG3	2.04	0.58
26:14:2873:A:C8	38:55:5:LYS:HA	2.39	0.58
58:14:3700:HOH:O	30:39:55:GLY:HA2	2.04	0.58
27:1J:88:C:H3'	27:1J:89:G:C8	2.39	0.58
29:29:60:ASN:C	29:29:62:PRO:HD3	2.25	0.58
38:55:33:ARG:NH2	38:55:115:GLU:OE2	2.37	0.58
3:2E:7:PRO:O	3:2E:11:ARG:HG2	2.04	0.57
10:1I:65:LEU:HD13	14:5I:56:VAL:HG22	1.86	0.57
22:1K:52:G:H5'	37:88:56:ARG:HH21	1.68	0.57
26:1H:825:C:H5"	58:1H:3765:HOH:O	2.02	0.57
26:1H:2261:C:H1'	26:1H:2388:A:N3	2.19	0.57
26:1H:2311:A:C8	31:41:88:ILE:HD12	2.39	0.57
31:41:20:ILE:HG23	31:41:25:TYR:HB2	1.86	0.57
34:58:15:LEU:HB2	34:58:134:ARG:HB3	1.85	0.57
41:C8:32:PHE:HZ	41:C8:36:ARG:HH21	1.52	0.57
48:J8:18:ILE:HG12	48:J8:37:ILE:HG12	1.85	0.57
10:1A:24:VAL:HG13	10:1A:34:VAL:HG11	1.86	0.57
12:3A:62:SER:HB2	12:3A:64:TYR:CD1	2.38	0.57
25:4L:12:A:H4'	25:4L:13:A:OP2	2.04	0.57
26:14:2656:U:H3	26:14:2665:A:H2	1.52	0.57
32:59:163:TYR:CE1	32:59:169:VAL:HG21	2.39	0.57
39:65:34:HIS:CD2	39:65:54:LEU:HD22	2.39	0.57
1:13:686:U:O4	1:13:703:G:H1'	2.04	0.57
1:13:1160:G:H1	1:13:1177:G:H1	1.52	0.57
26:1H:1210:A:OP1	26:1H:1211:U:O2'	2.21	0.57
26:1H:2400:G:H2'	26:1H:2401:U:H6	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:51:126:PRO:HG2	32:51:130:ARG:HH12	1.68	0.57
46:H8:77:ASP:OD2	46:H8:80:ARG:NH1	2.38	0.57
26:14:72:U:OP2	49:G5:29:LYS:NZ	2.30	0.57
26:14:2015:A:H1'	52:J5:2:ALA:HA	1.86	0.57
27:1J:46:A:H2'	27:1J:47:C:C6	2.39	0.57
46:D5:128:VAL:HG22	46:D5:129:SER:H	1.69	0.57
1:13:455:C:H42	1:13:477:G:H1	1.51	0.57
1:13:1004:A:H1'	1:13:1036:G:H22	1.68	0.57
1:13:1051:C:H2'	1:13:1052:U:H6	1.69	0.57
1:13:1178:G:N7	9:8E:97:LYS:NZ	2.52	0.57
2:1E:124:SER:HB2	2:1E:125:PRO:HD2	1.86	0.57
4:3E:94:LEU:HA	4:3E:97:LEU:HD12	1.85	0.57
26:1H:1331:A:O2'	26:1H:1332:G:H8	1.86	0.57
26:1H:1702:G:O6	58:1H:4087:HOH:O	2.14	0.57
26:1H:2345:G:H4'	26:1H:2346:A:O5'	2.03	0.57
29:21:29:GLY:H	29:21:51:PHE:HE1	1.49	0.57
29:21:111:ARG:HD3	29:21:160:TYR:CE2	2.39	0.57
31:41:5:VAL:H	51:M8:25:TYR:HE2	1.52	0.57
32:51:4:ILE:HG21	32:51:6:ARG:NH1	2.18	0.57
34:58:73:THR:HB	34:58:82:LEU:HD11	1.86	0.57
54:P8:5:TRP:NE1	54:P8:7:PRO:HG3	2.19	0.57
1:1G:1141:C:H2'	1:1G:1142:G:C8	2.39	0.57
1:1G:1179:A:H4'	9:82:103:THR:HA	1.86	0.57
1:1G:1360:A:H8	1:1G:1360:A:OP1	1.88	0.57
4:32:24:GLU:HG2	4:32:25:ARG:H	1.70	0.57
26:14:2064:C:H2'	26:14:2065:C:C6	2.40	0.57
26:14:2232:U:P	48:F5:40:ARG:HH12	2.27	0.57
37:45:26:TYR:O	37:45:28:ALA:N	2.36	0.57
2:1E:97:TRP:CZ3	2:1E:172:ILE:HB	2.40	0.57
7:6E:73:MET:HG2	7:6E:90:GLU:HA	1.85	0.57
24:3K:10:G:H1	24:3K:25:C:H42	1.52	0.57
26:1H:1602:U:O4	58:1H:4224:HOH:O	2.18	0.57
26:1H:2298:A:H2'	26:1H:2299:G:O4'	2.04	0.57
26:1H:2684:U:C4	26:1H:2685:G:N7	2.72	0.57
27:16:94:C:H2'	27:16:95:U:C6	2.40	0.57
29:21:64:LYS:O	29:21:70:ALA:HB2	2.05	0.57
30:31:164:ARG:HG2	30:31:164:ARG:HH11	1.68	0.57
41:C8:92:ARG:HD2	42:D8:11:GLN:HB2	1.86	0.57
2:12:19:HIS:CD2	2:12:20:GLU:HG2	2.39	0.57
8:72:27:PRO:O	8:72:32:LYS:HD3	2.04	0.57
14:5A:12:ARG:HD3	14:5A:13:THR:H	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:3L:18:G:H2'	24:3L:57:G:H22	1.69	0.57
26:14:363(E):U:H5'	26:14:363(F):A:OP2	2.04	0.57
26:14:945:A:P	58:14:3658:HOH:O	2.61	0.57
26:14:1292:U:H2'	26:14:1293:C:C6	2.39	0.57
26:14:2392:A:H2	26:14:2424:C:N4	2.00	0.57
27:1J:75:G:H21	46:D5:85:HIS:CE1	2.22	0.57
37:45:81:VAL:O	37:45:82:ARG:NH1	2.37	0.57
40:75:45:PHE:CE2	40:75:74:ARG:HD3	2.39	0.57
1:13:280:C:H3'	1:13:281:G:H5'	1.85	0.57
4:3E:175:SER:HB3	4:3E:186:LEU:HD21	1.86	0.57
26:1H:2111:C:H2'	26:1H:2118:U:H4'	1.86	0.57
26:1H:2147:G:H2'	26:1H:2148:G:H4'	1.85	0.57
26:1H:2689:U:H5"	26:1H:2713:A:C2	2.40	0.57
33:61:56:LYS:O	33:61:60:GLU:HB3	2.04	0.57
35:68:68:GLU:OE2	35:68:78:ARG:NH1	2.37	0.57
55:Q8:49:VAL:HG13	55:Q8:50:LEU:N	2.18	0.57
1:1G:330:C:O2	58:1G:1713:HOH:O	2.17	0.57
1:1G:668:G:H4'	15:6A:48:LYS:HB3	1.85	0.57
1:1G:1131:G:H2'	1:1G:1132:C:H6	1.68	0.57
1:1G:1226:C:H3'	13:4A:96:LEU:HD21	1.86	0.57
18:9A:22:VAL:HG22	18:9A:23:LYS:H	1.68	0.57
26:14:855:G:H5"	26:14:856:C:OP2	2.05	0.57
33:69:101:LEU:O	33:69:106:GLY:N	2.38	0.57
36:35:78:PRO:HB3	36:35:111:ARG:NH2	2.19	0.57
1:13:664:G:N2	1:13:741:G:H1	1.97	0.57
1:13:973:G:H3'	1:13:974:A:H5"	1.87	0.57
1:13:1286:A:H5"	21:1F:26:LYS:HG2	1.86	0.57
3:2E:128:PHE:CZ	3:2E:132:ARG:HD2	2.40	0.57
24:3K:7:A:O2'	24:3K:49:C:H5'	2.05	0.57
26:1H:654(D):G:H1	26:1H:654(Q):C:H42	1.50	0.57
26:1H:1278:A:H4'	38:98:34:ILE:HD11	1.87	0.57
26:1H:2287:A:N6	26:1H:2344:U:H3	2.03	0.57
26:1H:2469:A:H61	26:1H:2481:G:H1'	1.70	0.57
41:C8:92:ARG:CZ	42:D8:11:GLN:H	2.18	0.57
1:1G:957:U:H1'	1:1G:960:U:H5	1.70	0.57
6:52:61:LEU:HD23	6:52:63:TYR:OH	2.04	0.57
7:62:113:GLU:O	7:62:119:ARG:HD3	2.05	0.57
26:14:619:G:H5"	26:14:620:G:N2	2.20	0.57
41:85:92:ARG:NH1	42:95:11:GLN:H	2.01	0.57
1:13:673:G:H2'	1:13:674:G:C8	2.39	0.57
1:13:1342:C:O2'	9:8E:124:GLN:HG2	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1374:G:H2'	26:1H:1375:C:C6	2.39	0.57
27:16:80:U:H2'	27:16:81:G:H21	1.69	0.57
46:H8:62:PRO:C	46:H8:64:GLY:HA2	2.24	0.57
53:O8:41:PRO:HB2	53:O8:43:CYS:H	1.69	0.57
10:1A:51:ARG:HE	10:1A:61:GLU:HB2	1.69	0.57
26:14:1288:U:C2	26:14:1327:C:O2	2.58	0.57
26:14:2111:C:N4	26:14:2147:G:H21	2.03	0.57
26:14:2688:U:H5	26:14:2720:U:OP2	1.88	0.57
29:29:12:THR:HG22	40:75:58:ASN:ND2	2.19	0.57
35:25:43:VAL:HG23	35:25:56:ASP:O	2.04	0.57
1:13:21:G:OP1	58:13:1814:HOH:O	2.17	0.57
1:13:31:G:O2'	1:13:48:C:N4	2.37	0.57
1:13:411:A:C4	1:13:413:G:H1'	2.39	0.57
1:13:1003:G:N2	1:13:1004:A:O2'	2.37	0.57
5:4E:76:ILE:HG13	5:4E:93:PRO:HB3	1.87	0.57
11:2I:19:ALA:O	11:2I:82:VAL:HA	2.04	0.57
26:1H:99:U:O4	45:G8:8:LYS:NZ	2.31	0.57
26:1H:996:A:H4'	41:C8:92:ARG:HE	1.68	0.57
28:11:46:GLN:HB2	28:11:48:ARG:HG2	1.87	0.57
38:98:42:LYS:HA	38:98:45:ARG:HD2	1.87	0.57
41:C8:17:ILE:HD12	41:C8:32:PHE:CE1	2.40	0.57
41:C8:50:ARG:HH12	42:D8:72:VAL:HG12	1.69	0.57
1:1G:192:U:H2'	1:1G:193:C:C6	2.35	0.57
6:52:81:ILE:HD11	28:19:125:ILE:HG12	1.85	0.57
8:72:18:ARG:NH2	8:72:81:HIS:O	2.38	0.57
26:14:300:A:N6	58:14:3887:HOH:O	2.38	0.57
26:14:2438:U:O3'	26:14:2439:A:H3'	2.05	0.57
30:39:110:LEU:HD13	30:39:205:ARG:HG2	1.86	0.57
34:15:56:ASN:H	34:15:125:GLY:HA3	1.68	0.57
39:65:87:PHE:CZ	39:65:102:ALA:HB2	2.39	0.57
40:75:92:GLY:HA2	40:75:116:ALA:HA	1.86	0.57
1:13:1497:G:C2'	1:13:1498:U:H5'	2.35	0.57
23:2K:22:A:H5"	23:2K:22:A:C8	2.40	0.57
24:3K:66:U:H2'	24:3K:67:C:C6	2.40	0.57
26:1H:299:A:H5'	26:1H:300:A:OP2	2.04	0.57
26:1H:1550:C:H2'	26:1H:1551:C:H6	1.70	0.57
31:41:35:GLU:OE1	31:41:36:LYS:N	2.37	0.57
1:1G:1372:U:OP2	9:82:11:LYS:NZ	2.24	0.57
2:12:8:LYS:HE2	2:12:213:LEU:HD21	1.87	0.57
26:14:531:C:OP1	26:14:561:G:C2	2.57	0.57
26:14:698:C:O2'	26:14:734:A:N6	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:706:A:H2'	26:14:707:G:O4'	2.04	0.57
26:14:981:A:N1	26:14:2027:G:O2'	2.27	0.57
26:14:2207:C:H42	26:14:2217:G:H1	1.52	0.57
26:14:2420:C:H41	55:M5:31:HIS:HB3	1.70	0.57
33:69:63:ALA:HA	33:69:66:GLU:HG2	1.86	0.57
35:25:68:GLU:HB3	35:25:78:ARG:HB2	1.85	0.57
39:65:25:ARG:HD3	39:65:40:ILE:HD12	1.87	0.57
41:85:92:ARG:NH2	42:95:10:LYS:HA	2.19	0.57
45:C5:29:GLU:OE1	45:C5:29:GLU:N	2.38	0.57
47:E5:23:VAL:HG13	47:E5:38:VAL:HG22	1.87	0.57
1:13:56:U:H4'	33:69:82:ARG:HH21	1.69	0.57
1:13:244:U:H4'	1:13:245:C:O5'	2.05	0.57
1:13:1289:A:H3'	1:13:1290:G:H8	1.69	0.57
2:1E:141:GLU:O	2:1E:145:LEU:HB2	2.05	0.57
12:3I:47:LYS:HA	12:3I:49:ASN:H	1.70	0.57
22:1K:15:G:N2	22:1K:59:U:O2	2.36	0.57
35:68:86:ILE:HG22	35:68:94:ARG:HG3	1.86	0.57
1:1G:1326:C:H2'	1:1G:1327:C:C6	2.39	0.57
9:82:102:LEU:O	9:82:103:THR:OG1	2.20	0.57
20:BA:11:SER:HA	20:BA:13:LEU:H	1.68	0.57
29:29:119:ARG:HG3	29:29:160:TYR:HB2	1.86	0.57
1:13:179:A:H2'	1:13:180:U:H6	1.69	0.56
1:13:624:C:H2'	1:13:625:G:C8	2.39	0.56
1:13:1157:A:N6	1:13:1178:G:N3	2.53	0.56
2:1E:87:ARG:NH1	2:1E:233:SER:HB2	2.19	0.56
4:3E:106:TYR:HE2	4:3E:107:ARG:HH11	1.53	0.56
12:3I:82:VAL:HG12	12:3I:106:ASP:OD2	2.05	0.56
20:BI:14:LYS:HG3	20:BI:17:ARG:HE	1.70	0.56
26:1H:511:U:C5	26:1H:512:G:C5	2.93	0.56
26:1H:960:A:H61	37:88:82:ARG:NH2	2.04	0.56
29:21:146:THR:HA	29:21:147:PRO:C	2.25	0.56
30:31:65:TRP:CZ3	30:31:72:ARG:HB3	2.40	0.56
46:H8:63:ASP:N	46:H8:64:GLY:HA2	2.20	0.56
50:L8:10:LYS:HD3	50:L8:53:LEU:HD23	1.87	0.56
1:1G:448:A:H2'	1:1G:449:C:O2	2.05	0.56
1:1G:562:C:H1'	12:3A:15:ARG:HD2	1.87	0.56
1:1G:983:A:H2	1:1G:984:C:C6	2.23	0.56
2:12:77:ALA:HB2	2:12:211:ILE:HD13	1.86	0.56
3:22:11:ARG:HB2	3:22:11:ARG:HH11	1.69	0.56
4:32:173:TRP:CD1	4:32:174:LEU:HG	2.39	0.56
24:1L:10:G:H2'	24:1L:11:C:C6	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2L:9:G:O2'	23:2L:10:G:N7	2.24	0.56
26:14:863:A:H2	26:14:914:C:H41	1.51	0.56
26:14:1335:U:OP1	44:B5:65:ARG:NH1	2.38	0.56
26:14:2210:G:O5'	26:14:2211:G:N2	2.38	0.56
26:14:2464:C:H2'	26:14:2465:C:O4'	2.04	0.56
27:1J:15:A:H3'	27:1J:16:G:H5'	1.86	0.56
47:E5:64:ASP:OD1	47:E5:64:ASP:N	2.38	0.56
5:4E:126:ARG:HG3	5:4E:126:ARG:NH1	2.17	0.56
9:8E:125:TYR:HD1	9:8E:126:SER:H	1.53	0.56
13:4I:11:ARG:HG3	13:4I:12:ASN:N	2.20	0.56
19:AI:9:VAL:HG21	51:M8:63:TYR:O	2.04	0.56
26:1H:1381:G:N7	58:1H:3924:HOH:O	2.33	0.56
31:41:102:PHE:HA	31:41:105:LYS:HE2	1.87	0.56
32:51:83:TYR:HB3	32:51:134:SER:HA	1.87	0.56
51:M8:41:PRO:HA	51:M8:47:GLN:HG3	1.87	0.56
1:1G:1320:C:N3	19:AA:36:ARG:NH2	2.54	0.56
11:2A:21:ILE:HB	11:2A:84:VAL:HG12	1.86	0.56
26:14:1328:G:H2'	26:14:1330:C:C5	2.40	0.56
26:14:1537:C:H2'	26:14:1538:G:C8	2.39	0.56
26:14:2312:U:OP1	31:49:74:LYS:HD2	2.06	0.56
31:49:97:ASP:HA	31:49:100:TRP:HD1	1.70	0.56
32:59:6:ARG:H	32:59:6:ARG:HD2	1.70	0.56
36:35:52:GLU:O	36:35:54:GLY:N	2.38	0.56
40:75:45:PHE:CE2	40:75:74:ARG:HB2	2.40	0.56
47:E5:68:GLU:OE2	47:E5:82:ARG:NH2	2.38	0.56
1:13:201:C:N4	1:13:209:U:H1'	2.21	0.56
1:13:277:C:H2'	1:13:278:G:H8	1.71	0.56
1:13:1194:U:H2'	1:13:1195:C:C6	2.39	0.56
2:1E:5:ILE:HG13	2:1E:6:THR:H	1.70	0.56
3:2E:15:THR:HG21	3:2E:181:ASN:HA	1.87	0.56
4:3E:65:ARG:NH1	4:3E:70:ILE:O	2.32	0.56
4:3E:141:ARG:HB2	4:3E:141:ARG:NH1	2.20	0.56
7:6E:11:GLN:OE1	7:6E:12:LEU:N	2.39	0.56
15:6I:6:GLU:CD	15:6I:6:GLU:H	2.09	0.56
26:1H:236:C:H2'	26:1H:237:C:H6	1.70	0.56
26:1H:363(B):G:H2'	26:1H:363(C):G:H8	1.70	0.56
26:1H:833:U:O2	36:78:55:ARG:NH2	2.38	0.56
26:1H:1486:A:H2'	26:1H:1487:G:H8	1.71	0.56
26:1H:2098:U:H3	26:1H:2191:G:H1	1.54	0.56
26:1H:2257:U:O2'	26:1H:2258:C:H5'	2.05	0.56
26:1H:2376:A:H2	39:A8:112:PHE:HB3	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2789:C:H1'	26:1H:2892:A:H2	1.69	0.56
27:16:15:A:H5'	27:16:16:G:C8	2.40	0.56
28:11:6:PHE:HE2	28:11:18:VAL:HG23	1.71	0.56
39:A8:10:ARG:O	39:A8:14:VAL:HG13	2.05	0.56
1:1G:373:A:H2'	1:1G:374:A:H8	1.70	0.56
1:1G:540:G:H2'	1:1G:541:G:O4'	2.05	0.56
1:1G:560:U:O2'	1:1G:561:U:OP2	2.21	0.56
1:1G:600:C:H2'	1:1G:601:C:C6	2.39	0.56
7:62:115:ARG:HB2	7:62:118:VAL:HG13	1.87	0.56
24:3L:52:G:N2	24:3L:63:G:N7	2.53	0.56
26:14:1224:G:N2	26:14:1227:A:OP2	2.33	0.56
26:14:1839:G:C8	26:14:1927:A:H1'	2.41	0.56
26:14:2318:G:H5'	26:14:2319:G:OP2	2.05	0.56
26:14:2404:C:O3'	36:35:77:ARG:NH2	2.38	0.56
29:29:55:ASN:O	29:29:57:LYS:N	2.33	0.56
30:39:101:LEU:O	30:39:106:ARG:NH1	2.38	0.56
36:35:11:GLY:C	36:35:13:ASN:H	2.06	0.56
39:65:34:HIS:NE2	39:65:54:LEU:HD13	2.20	0.56
1:13:600:C:H2'	1:13:601:C:H6	1.71	0.56
1:13:814:A:N7	1:13:816:A:C4	2.73	0.56
2:1E:189:ASP:HB3	2:1E:191:ASP:HB2	1.87	0.56
17:8I:13:ASP:HA	17:8I:19:VAL:HG12	1.87	0.56
20:BI:69:GLY:O	20:BI:73:HIS:NE2	2.38	0.56
26:1H:107:C:H2'	26:1H:108:U:H6	1.70	0.56
26:1H:1336:A:H2'	26:1H:1337:G:C8	2.40	0.56
55:Q8:35:GLN:C	55:Q8:37:SER:H	2.08	0.56
33:69:38:LEU:HD12	33:69:38:LEU:H	1.71	0.56
39:65:3:ARG:HE	39:65:4:LEU:H	1.53	0.56
45:C5:52:SER:HA	45:C5:55:TYR:O	2.05	0.56
46:D5:124:ILE:HD11	46:D5:165:VAL:HG11	1.87	0.56
46:D5:128:VAL:HG11	46:D5:133:ILE:HG23	1.88	0.56
1:13:1247:U:H3	1:13:1290:G:H1	1.54	0.56
8:7E:127:LEU:HB2	8:7E:129:VAL:HG22	1.86	0.56
26:1H:1103:A:H3'	26:1H:1104:C:H6	1.70	0.56
26:1H:2233:U:H2'	26:1H:2234:G:C8	2.40	0.56
26:1H:2781:A:C5'	26:1H:2782:G:H5'	2.36	0.56
32:51:86:GLU:H	32:51:86:GLU:CD	2.07	0.56
45:G8:87:LYS:HD2	45:G8:96:ILE:HD11	1.87	0.56
55:Q8:53:PRO:HA	55:Q8:54:GLU:C	2.26	0.56
1:1G:519:C:H2'	1:1G:520:A:O4'	2.04	0.56
1:1G:1286:A:H3'	1:1G:1286:A:C8	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:328:U:H4'	45:C5:68:HIS:CD2	2.41	0.56
26:14:1217:C:OP1	41:85:15:LYS:NZ	2.29	0.56
29:29:182:LEU:O	29:29:183:LEU:HD12	2.06	0.56
43:A5:11:ARG:HD2	43:A5:82:LEU:HD12	1.86	0.56
11:2I:41:THR:HG22	11:2I:42:TRP:H	1.70	0.56
26:1H:582:G:H1	26:1H:1258:C:H42	1.54	0.56
34:58:13:TRP:O	34:58:134:ARG:HA	2.06	0.56
1:1G:1080:A:H5'	5:42:14:ARG:NH2	2.20	0.56
2:12:73:THR:HG21	2:12:97:TRP:N	2.19	0.56
3:22:21:ARG:HB3	3:22:21:ARG:NH1	2.21	0.56
7:62:15:ASP:OD1	7:62:44:TYR:OH	2.22	0.56
26:14:639:U:H2'	26:14:640:C:C6	2.40	0.56
26:14:800:A:OP1	58:14:3856:HOH:O	2.17	0.56
26:14:1386:C:H2'	26:14:1387:C:C6	2.40	0.56
26:14:1784:A:H4'	26:14:1785:A:O5'	2.06	0.56
26:14:2377:A:H4'	39:65:111:GLU:HG2	1.86	0.56
26:14:2432:A:C8	48:F5:33:LYS:HD2	2.40	0.56
28:19:228:PRO:HD3	28:19:234:GLY:O	2.06	0.56
35:25:76:ALA:HB3	40:75:75:ILE:HB	1.88	0.56
37:45:25:ASP:OD1	37:45:25:ASP:N	2.37	0.56
42:95:48:GLY:HA3	42:95:51:VAL:C	2.26	0.56
13:4I:27:LYS:HD3	13:4I:31:LYS:HZ3	1.70	0.56
26:1H:130:C:O3'	26:1H:1349:A:H1'	2.05	0.56
26:1H:1021:A:H3'	26:1H:1021:A:H8	1.70	0.56
26:1H:1433:U:O2	26:1H:1561:G:C2	2.58	0.56
26:1H:1709:U:H1'	26:1H:2860:A:N3	2.20	0.56
26:1H:1827:C:C2'	26:1H:1828:G:H5'	2.35	0.56
31:41:67:LYS:HE2	31:41:67:LYS:H	1.71	0.56
32:51:157:TYR:CE1	32:51:172:LYS:HB2	2.40	0.56
41:C8:68:ALA:O	41:C8:71:GLN:HB2	2.06	0.56
1:1G:297:G:N2	1:1G:300:A:OP2	2.38	0.56
1:1G:313:A:H2'	1:1G:314:C:C6	2.41	0.56
1:1G:376:G:O3'	16:7A:5:ARG:NH1	2.35	0.56
1:1G:957:U:H1'	1:1G:960:U:C5	2.40	0.56
1:1G:1028(A):C:H42	1:1G:1032(B):G:H22	1.52	0.56
2:12:91:PRO:HG2	2:12:155:LEU:HB2	1.88	0.56
26:14:67:U:H2'	26:14:68:G:H8	1.71	0.56
26:14:185:U:H4'	26:14:218:A:H4'	1.88	0.56
29:29:147:PRO:HB2	29:29:149:ARG:HG2	1.88	0.56
31:49:37:VAL:HG22	31:49:159:VAL:HG12	1.87	0.56
36:35:78:PRO:HA	36:35:110:TYR:CE2	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:426:G:OP1	4:3E:38:TYR:OH	2.22	0.56
22:1K:51:U:H2'	22:1K:52:G:H8	1.71	0.56
26:1H:1266:G:O2'	26:1H:2012:G:O6	2.18	0.56
27:16:94:C:H2'	27:16:95:U:H6	1.70	0.56
31:41:17:PRO:HA	31:41:20:ILE:HG13	1.88	0.56
41:C8:112:ARG:CZ	42:D8:47:VAL:HG22	2.36	0.56
42:D8:10:LYS:NZ	42:D8:23:GLU:OE1	2.38	0.56
9:82:24:GLY:HA2	9:82:59:PHE:O	2.06	0.56
23:2L:41:C:H2'	23:2L:42:C:C6	2.39	0.56
26:14:1461:G:H2'	26:14:1462:C:C6	2.41	0.56
26:14:2126:A:N1	26:14:2163:C:H1'	2.20	0.56
26:14:2529:G:H21	26:14:2529:G:P	2.28	0.56
26:14:2880:C:H1'	38:55:92:GLY:HA3	1.86	0.56
33:69:112:LYS:HA	33:69:114:LEU:H	1.70	0.56
34:15:1:MET:O	34:15:2:LYS:HG2	2.06	0.56
36:35:63:PRO:HB3	55:M5:13:ARG:HG3	1.87	0.56
37:45:26:TYR:O	37:45:26:TYR:HD1	1.87	0.56
40:75:45:PHE:CD2	40:75:74:ARG:HD3	2.40	0.56
10:1I:29:ARG:HH22	10:1I:84:GLN:HE22	1.52	0.56
26:1H:259:G:C2'	26:1H:621:A:HO2'	2.18	0.56
26:1H:460:A:H5"	26:1H:461:C:OP2	2.06	0.56
26:1H:817:C:H4'	26:1H:932:G:C5	2.40	0.56
26:1H:1021:A:H3'	26:1H:1021:A:C8	2.39	0.56
26:1H:1590:U:H2'	26:1H:1591:G:H8	1.69	0.56
26:1H:1657:C:H2'	26:1H:1658:C:C6	2.40	0.56
26:1H:2123:G:H2'	26:1H:2124:G:H8	1.71	0.56
26:1H:2331:G:O3'	47:I8:43:THR:HG22	2.05	0.56
27:16:40:U:H1'	27:16:45:A:N6	2.21	0.56
28:11:111:LEU:HD23	28:11:127:VAL:HG12	1.88	0.56
30:31:101:LEU:O	30:31:106:ARG:NH1	2.38	0.56
45:G8:97:ARG:HB2	45:G8:102:CYS:HB2	1.88	0.56
1:1G:793:U:H5'	1:1G:794:A:O5'	2.06	0.56
8:72:17:THR:HB	8:72:18:ARG:HH11	1.70	0.56
23:2L:13:C:O2'	26:14:1924:C:H4'	2.05	0.56
26:14:2537:U:H2'	26:14:2538:C:H6	1.68	0.56
30:39:135:LYS:HB3	30:39:138:GLU:HG3	1.88	0.56
1:13:598:U:H4'	8:7E:94:TYR:CD2	2.41	0.56
1:13:1096:C:H2'	1:13:1097:C:H6	1.70	0.56
1:13:1378:C:O2	7:6E:76:ARG:NH1	2.39	0.56
2:1E:70:PHE:HE2	2:1E:90:MET:HB3	1.71	0.56
13:4I:82:MET:HG2	13:4I:93:ARG:HG3	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:637:A:H2'	36:78:117:GLU:OE1	2.06	0.56
26:1H:859:G:H5'	26:1H:2268:A:O2'	2.06	0.56
26:1H:1556:C:H2'	26:1H:1557:C:H6	1.71	0.56
26:1H:2032:G:H1'	29:21:145:LYS:HE3	1.87	0.56
31:41:40:ASN:HB2	31:41:91:ARG:HG2	1.88	0.56
34:58:57:ALA:C	34:58:59:LYS:H	2.08	0.56
1:1G:522:C:OP2	12:3A:69:TYR:OH	2.24	0.56
4:32:31:CYS:C	4:32:33:MET:H	2.06	0.56
26:14:95:G:H4'	49:G5:46:GLN:HB2	1.88	0.56
26:14:531:C:H4'	26:14:532:A:H5"	1.87	0.56
26:14:597:U:H2'	26:14:598:G:C8	2.41	0.56
26:14:606:U:H4'	26:14:658:C:H4'	1.88	0.56
26:14:1871:A:H2'	26:14:1872:A:C8	2.40	0.56
39:65:62:LYS:O	39:65:66:ALA:N	2.39	0.56
1:13:1130:A:O2'	9:8E:3:GLN:NE2	2.32	0.55
2:1E:236:TYR:HA	2:1E:239:VAL:HG21	1.87	0.55
20:BI:35:THR:HA	20:BI:38:LYS:HD3	1.88	0.55
26:1H:234:C:H2'	26:1H:235:U:H6	1.71	0.55
26:1H:806:C:C2	26:1H:807:U:C5	2.94	0.55
26:1H:1063:G:N2	26:1H:1076:C:O2'	2.39	0.55
26:1H:1337:G:H2'	26:1H:1338:G:H8	1.70	0.55
26:1H:1568:G:H5"	28:11:61:LEU:HD22	1.86	0.55
26:1H:1711:C:H2'	26:1H:1712:C:C6	2.42	0.55
26:1H:1963:U:O5'	26:1H:1963:U:H6	1.88	0.55
26:1H:2292:C:OP1	39:A8:17:ARG:NH2	2.34	0.55
39:A8:100:ALA:HA	39:A8:103:GLU:HG2	1.88	0.55
1:1G:1294:G:H2'	1:1G:1295:G:C8	2.42	0.55
10:1A:33:GLN:HB3	10:1A:75:ILE:HG12	1.87	0.55
13:4A:57:ARG:HH12	51:I5:17:GLY:HA3	1.70	0.55
15:6A:39:LEU:HD12	15:6A:56:LEU:HD13	1.88	0.55
23:2L:8:4SU:C2	23:2L:14:A:H62	2.19	0.55
26:14:890:A:H2'	26:14:892:G:H8	1.71	0.55
26:14:1053:C:H42	26:14:1106:G:H1	1.54	0.55
26:14:2793:G:N2	26:14:2804:C:N3	2.54	0.55
26:1H:1448:G:H1'	26:1H:1528:A:H62	1.72	0.55
26:1H:1692:U:O2'	26:1H:1693:U:H2'	2.06	0.55
26:1H:1899:G:N2	26:1H:1902:C:C5	2.74	0.55
28:11:12:SER:O	28:11:16:MET:HB2	2.06	0.55
29:21:46:ALA:HA	29:21:82:ARG:O	2.05	0.55
30:31:179:GLU:OE1	30:31:179:GLU:N	2.38	0.55
32:51:37:VAL:HG22	32:51:68:THR:HG23	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:78:19:VAL:HB	36:78:20:GLY:HA2	1.88	0.55
1:1G:707:C:H2'	1:1G:708:C:C6	2.41	0.55
1:1G:861:G:H2'	1:1G:862:C:C6	2.41	0.55
4:32:61:LYS:NZ	4:32:72:GLU:OE2	2.37	0.55
11:2A:43:SER:OG	11:2A:44:SER:N	2.38	0.55
12:3A:47:LYS:HG2	12:3A:48:PRO:HD2	1.88	0.55
26:14:996:A:H1'	41:85:92:ARG:NH2	2.22	0.55
26:14:996:A:H2'	26:14:997:G:H8	1.71	0.55
26:14:1204:A:O2'	26:14:1205:U:OP2	2.23	0.55
26:14:1557:C:H5"	26:14:1558:A:OP2	2.07	0.55
26:14:2562:U:O3'	35:25:25:LEU:HD21	2.06	0.55
29:29:94:GLU:HG3	29:29:177:PRO:HB3	1.88	0.55
36:35:39:LYS:CD	36:35:45:LEU:HD21	2.34	0.55
41:85:52:ARG:HA	41:85:55:ARG:HD3	1.89	0.55
42:95:71:LEU:CA	42:95:86:GLY:HA2	2.36	0.55
53:K5:25:LYS:HB2	55:M5:34:TRP:CZ3	2.41	0.55
53:K5:28:ARG:HG3	53:K5:31:PRO:HD2	1.88	0.55
1:13:50:A:H1'	1:13:52:G:C8	2.41	0.55
1:13:376:G:O3'	16:7I:5:ARG:NH1	2.26	0.55
1:13:517:G:N1	1:13:533:A:OP2	2.35	0.55
1:13:963:G:N2	10:1I:55:LYS:HZ1	2.04	0.55
1:13:1149:C:H2'	1:13:1150:U:C6	2.40	0.55
2:1E:115:LEU:HD13	2:1E:145:LEU:HB3	1.88	0.55
26:1H:67:U:H3	26:1H:74:A:H2	1.55	0.55
26:1H:796:C:H2'	26:1H:797:C:C6	2.41	0.55
26:1H:1168:G:C2	26:1H:1182:A:C2	2.94	0.55
26:1H:1265:A:H8	26:1H:1265:A:OP1	1.89	0.55
26:1H:1359:A:C2	26:1H:1372:U:O4	2.59	0.55
26:1H:1517:G:H5"	26:1H:1518:C:OP2	2.05	0.55
26:1H:2392:A:H2	26:1H:2424:C:N4	2.00	0.55
42:D8:47:VAL:HG23	42:D8:48:GLY:N	2.21	0.55
1:1G:359:U:H2'	1:1G:360:A:C8	2.40	0.55
1:1G:963:G:N2	10:1A:55:LYS:HE3	2.07	0.55
1:1G:1109:C:H2'	1:1G:1110:A:O4'	2.07	0.55
1:1G:1171:G:H2'	1:1G:1172:C:C6	2.42	0.55
1:1G:1310:G:OP1	13:4A:77:ASN:ND2	2.34	0.55
26:14:26:G:OP1	43:A5:80:PRO:HB3	2.05	0.55
26:14:929:G:H8	26:14:929:G:O5'	1.90	0.55
26:14:2392:A:H8	36:35:61:ARG:HD2	1.71	0.55
35:25:104:ARG:NH1	40:75:36:GLU:HB3	2.21	0.55
36:35:121:LYS:HG3	36:35:122:PRO:HD2	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:75:4:GLY:HA2	40:75:8:LYS:HZ2	1.71	0.55
41:85:66:ASN:HB2	41:85:76:TYR:HB2	1.88	0.55
1:13:591:U:H2'	1:13:592:G:C8	2.42	0.55
1:13:658:G:H2'	1:13:659:U:C6	2.41	0.55
6:5E:97:PHE:HD2	18:9I:31:LEU:HD21	1.72	0.55
13:4I:7:VAL:HB	31:41:115:ARG:CZ	2.36	0.55
22:1K:51:U:H2'	22:1K:52:G:C8	2.40	0.55
26:1H:1038:C:H2'	26:1H:1039:G:O4'	2.06	0.55
26:1H:1101:U:H2'	26:1H:1102:C:C6	2.42	0.55
26:1H:1557:C:OP2	26:1H:1558:A:O2'	2.16	0.55
26:1H:2830:G:H5"	26:1H:2830:G:H8	1.72	0.55
29:21:13:ARG:HG2	29:21:13:ARG:HH11	1.72	0.55
32:51:98:LEU:HD13	32:51:125:VAL:HG23	1.89	0.55
3:22:150:LYS:HG3	3:22:169:ALA:HB2	1.89	0.55
26:14:1593:G:H2'	26:14:1594:G:C8	2.41	0.55
26:14:1935:G:H1'	26:14:1964:G:N2	2.22	0.55
26:14:2420:C:N4	55:M5:31:HIS:O	2.39	0.55
29:29:8:LYS:HB3	29:29:192:ASN:HA	1.88	0.55
29:29:49:LEU:O	29:29:78:LEU:HA	2.07	0.55
30:39:53:THR:HG23	30:39:55:GLY:H	1.71	0.55
1:13:917:G:H2'	1:13:918:A:C8	2.42	0.55
1:13:1311:G:N2	1:13:1326:C:O2	2.19	0.55
19:AI:41:VAL:HB	19:AI:42:PRO:HA	1.89	0.55
26:1H:569:U:C4	26:1H:570:G:C6	2.95	0.55
26:1H:882:G:N2	26:1H:894:C:H42	2.03	0.55
26:1H:1018:C:O2'	26:1H:1019:U:H5'	2.06	0.55
26:1H:1533:C:H3'	26:1H:1534:G:C5'	2.35	0.55
26:1H:1728:G:N1	26:1H:1730:U:OP2	2.38	0.55
26:1H:1903:G:OP1	28:11:241:PRO:HB2	2.06	0.55
44:F8:36:LYS:HG2	44:F8:54:VAL:HB	1.89	0.55
46:H8:73:GLN:HB2	46:H8:87:ASP:HB2	1.87	0.55
1:1G:316:G:OP2	1:1G:351:G:O2'	2.25	0.55
1:1G:433:C:H2'	1:1G:434:U:H6	1.71	0.55
1:1G:660:G:H1	1:1G:745:C:H42	1.54	0.55
11:2A:73:MET:HG2	11:2A:103:LEU:HD13	1.87	0.55
14:5A:43:CYS:HA	14:5A:46:GLU:OE2	2.07	0.55
26:14:363(C):G:H2'	26:14:363(D):G:C8	2.42	0.55
26:14:1006:C:H1'	34:15:106:MET:HE3	1.89	0.55
26:14:1247:A:OP1	30:39:95:ARG:NH2	2.38	0.55
26:14:2335:A:C8	26:14:2337:G:C5	2.94	0.55
27:1J:44:G:H5"	27:1J:45:A:OP1	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:101:ARG:O	29:29:201:THR:OG1	2.25	0.55
34:15:104:LYS:HA	34:15:107:LEU:HD12	1.87	0.55
1:13:137:C:H42	1:13:226:G:H1	1.55	0.55
1:13:1316:G:N2	1:13:1318:A:H3'	2.20	0.55
26:1H:518:G:H2'	26:1H:519:U:C6	2.42	0.55
26:1H:1113:U:OP1	32:51:2:SER:N	2.40	0.55
26:1H:1338:G:O2'	26:1H:1339:G:H5'	2.07	0.55
26:1H:1416:G:HO2'	26:1H:1417:C:H6	1.54	0.55
26:1H:1859:A:N6	26:1H:1883:G:O2'	2.39	0.55
26:1H:2128:C:N4	26:1H:2160:G:H1	2.03	0.55
26:1H:2636:U:P	29:21:79:ARG:HA	2.46	0.55
39:A8:84:GLN:HG2	39:A8:110:LEU:HD12	1.89	0.55
55:Q8:14:VAL:HG11	55:Q8:21:LYS:HZ1	1.71	0.55
1:1G:77:C:H42	1:1G:92:G:H1	1.53	0.55
1:1G:464:G:O6	1:1G:466:C:H5'	2.06	0.55
1:1G:1105:A:H2'	1:1G:1106:G:H8	1.71	0.55
4:32:4:TYR:CE2	4:32:11:LEU:HD11	2.41	0.55
26:14:362:U:H5'	26:14:363:G:OP2	2.07	0.55
26:14:424:G:O6	58:14:4028:HOH:O	2.18	0.55
26:14:751:A:P	58:14:3512:HOH:O	2.62	0.55
26:14:1225:C:O3'	42:95:85:LYS:HD3	2.07	0.55
26:14:1442:G:H2'	26:14:1443:G:C8	2.42	0.55
30:39:53:THR:HG22	30:39:56:GLU:HG3	1.88	0.55
42:95:85:LYS:CD	42:95:86:GLY:H	2.20	0.55
46:D5:7:ALA:O	46:D5:8:TYR:CG	2.59	0.55
1:13:624:C:H2'	1:13:625:G:H8	1.70	0.55
1:13:1014:A:C2	1:13:1219:U:H1'	2.41	0.55
1:13:1120:G:H2'	1:13:1121:U:C6	2.42	0.55
5:4E:15:ARG:NH1	25:4K:25:A:H3'	2.22	0.55
7:6E:49:ILE:O	7:6E:53:LYS:HB2	2.07	0.55
15:6I:63:ARG:HG2	15:6I:67:LEU:HD12	1.88	0.55
22:1K:37:MIA:H121	22:1K:38:A:N1	2.21	0.55
26:1H:241:A:H5"	58:1H:4112:HOH:O	2.06	0.55
26:1H:356:G:H2'	26:1H:357:A:H8	1.72	0.55
26:1H:1001:A:H2'	26:1H:1002:G:O4'	2.07	0.55
26:1H:1534:G:H3'	26:1H:1534:G:N3	2.22	0.55
31:41:97:ASP:O	31:41:100:TRP:N	2.40	0.55
4:32:20:TYR:HA	4:32:26:CYS:HB3	1.89	0.55
7:62:111:ARG:NH2	7:62:122:HIS:HB3	2.21	0.55
8:72:121:ASP:OD2	8:72:125:ARG:NH2	2.40	0.55
26:14:141:A:H8	26:14:1595:G:H21	1.53	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:330:A:H2	26:14:1210:A:O2'	1.89	0.55
26:14:734:A:O2'	26:14:1635:G:H5'	2.07	0.55
26:14:1040:C:H2'	26:14:1041:C:C6	2.41	0.55
26:14:1963:U:H5"	26:14:1963:U:O2	2.07	0.55
26:14:2542:A:N3	26:14:2542:A:H5"	2.22	0.55
26:14:2652:C:H42	26:14:2668:G:H1	1.54	0.55
26:14:2849:U:H4'	26:14:2868:A:C2	2.41	0.55
38:55:96:ARG:NH1	38:55:115:GLU:OE1	2.38	0.55
40:75:4:GLY:HA2	40:75:8:LYS:NZ	2.22	0.55
54:L5:35:ARG:HG3	54:L5:42:LEU:HD11	1.87	0.55
1:13:199:G:O6	1:13:218:C:N4	2.40	0.55
12:3I:8:ASN:O	12:3I:11:VAL:HG23	2.07	0.55
21:1F:5:ASP:O	21:1F:11:GLY:HA3	2.07	0.55
26:1H:270(V):G:H2'	26:1H:270(W):G:C8	2.40	0.55
26:1H:2053:G:H5'	29:21:144:ARG:O	2.07	0.55
26:1H:2341:G:H2'	26:1H:2342:C:C6	2.41	0.55
26:1H:2503:A:OP1	58:1H:3623:HOH:O	2.18	0.55
42:D8:25:LEU:H	42:D8:92:THR:CG2	2.20	0.55
45:G8:49:VAL:HG21	45:G8:55:TYR:CE2	2.40	0.55
50:L8:13:ILE:HG22	58:L8:201:HOH:O	2.06	0.55
53:O8:32:ASN:OD1	53:O8:32:ASN:N	2.39	0.55
55:Q8:38:GLY:HA2	55:Q8:40:GLU:N	2.22	0.55
1:1G:73:G:H1	1:1G:97:U:H3	1.53	0.55
1:1G:922:G:H21	1:1G:1398:A:H2	1.55	0.55
1:1G:1057:G:H1	1:1G:1203:C:N4	2.03	0.55
1:1G:1132:C:H2'	1:1G:1133:G:H8	1.71	0.55
1:1G:1208:C:H2'	1:1G:1209:C:H6	1.71	0.55
1:1G:1305:G:H22	1:1G:1331:G:C2'	2.20	0.55
26:14:399:G:OP2	58:14:3687:HOH:O	2.18	0.55
26:14:587:C:O2	36:35:33:ARG:NH1	2.40	0.55
26:14:817:C:H2'	26:14:818:G:O4'	2.07	0.55
26:14:1027:A:C2	26:14:2488:A:H5'	2.42	0.55
26:14:1171:G:N2	26:14:1174:A:N1	2.55	0.55
26:14:2062:A:HO2'	26:14:2063:C:P	2.29	0.55
28:19:16:MET:HE1	28:19:208:LYS:HE2	1.88	0.55
30:39:169:ASN:O	30:39:169:ASN:ND2	2.40	0.55
38:55:77:ARG:HH11	38:55:77:ARG:HG3	1.71	0.55
45:C5:14:LEU:HD12	45:C5:15:VAL:H	1.71	0.55
1:13:631:G:C8	1:13:632:A:H2	2.25	0.55
1:13:748:C:H6	1:13:748:C:O5'	1.89	0.55
10:1I:48:THR:HA	10:1I:62:HIS:HB3	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3I:58:VAL:O	12:3I:65:GLU:HA	2.07	0.55
12:3I:84:LEU:HB2	12:3I:105:TYR:CE2	2.41	0.55
26:1H:1088:A:H5'	26:1H:1089:G:H5'	1.88	0.55
26:1H:2057:A:P	58:1H:3613:HOH:O	2.65	0.55
39:A8:14:VAL:O	39:A8:18:ILE:HD13	2.06	0.55
41:C8:17:ILE:HG23	41:C8:39:LEU:HD12	1.88	0.55
44:F8:1:MET:C	44:F8:3:THR:H	2.10	0.55
49:K8:50:ILE:HD12	49:K8:51:ARG:H	1.72	0.55
1:1G:250:A:H1'	1:1G:251:G:OP2	2.07	0.55
2:12:162:ILE:O	2:12:185:ILE:HG12	2.07	0.55
3:22:112:SER:O	3:22:116:VAL:HG23	2.07	0.55
26:14:218:A:H2	26:14:235:U:H4'	1.71	0.55
26:14:2693:A:H2'	26:14:2694:G:H8	1.72	0.55
29:29:39:PRO:HA	29:29:43:GLY:HA2	1.89	0.55
3:2E:128:PHE:HZ	3:2E:132:ARG:HD2	1.71	0.55
26:1H:34:C:H4'	26:1H:35:G:OP1	2.07	0.55
26:1H:516:C:OP1	52:N8:13:LYS:NZ	2.30	0.55
26:1H:580:C:H2'	26:1H:581:C:H6	1.72	0.55
26:1H:1188:U:O2'	26:1H:1189:A:H5'	2.07	0.55
27:16:15:A:H1'	27:16:109:G:C8	2.41	0.55
33:61:47:LEU:HA	33:61:50:ARG:HB2	1.89	0.55
50:L8:31:LEU:O	50:L8:32:GLN:HB2	2.06	0.55
51:M8:39:CYS:H	51:M8:41:PRO:CD	2.20	0.55
1:1G:458:C:H2'	1:1G:464:G:H8	1.72	0.55
1:1G:707:C:OP1	11:2A:85:ARG:NH1	2.40	0.55
26:14:39:C:O2	30:39:46:ARG:NH2	2.39	0.55
26:14:232:G:H8	26:14:232:G:OP2	1.90	0.55
26:14:729:G:O5'	28:19:208:LYS:NZ	2.38	0.55
26:14:731:C:H5"	58:14:3871:HOH:O	2.07	0.55
26:14:1316:U:O2'	26:14:1317:A:H5'	2.07	0.55
26:14:2317:C:H2'	26:14:2318:G:O4'	2.06	0.55
27:1J:15:A:H1'	27:1J:109:G:C5	2.42	0.55
27:1J:21:G:H2'	27:1J:22:U:O4'	2.07	0.55
33:69:6:LEU:H	33:69:36:ALA:HA	1.72	0.55
1:13:237:C:H5"	17:8I:25:ARG:CZ	2.37	0.54
20:BI:10:LEU:HG	20:BI:12:ALA:H	1.72	0.54
26:1H:1460:A:O2'	26:1H:1461:G:OP1	2.22	0.54
26:1H:1798:U:H5'	28:11:259:THR:OG1	2.08	0.54
26:1H:2562:U:O2'	35:68:23:ARG:NH1	2.40	0.54
29:21:50:GLY:HA2	29:21:77:ILE:HA	1.89	0.54
41:C8:58:ARG:HA	41:C8:61:TRP:CE3	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:E8:18:ARG:HD3	43:E8:76:VAL:HG13	1.89	0.54
45:G8:76:CYS:CB	45:G8:97:ARG:HG2	2.37	0.54
51:M8:18:CYS:SG	51:M8:19:GLY:N	2.78	0.54
1:1G:181:G:O2'	1:1G:183:G:O6	2.22	0.54
1:1G:649:G:H2'	1:1G:650:G:C8	2.43	0.54
7:62:65:ALA:HB1	7:62:127:ALA:HB3	1.89	0.54
11:2A:85:ARG:HA	11:2A:112:THR:OG1	2.07	0.54
24:3L:5:G:N2	24:3L:68:C:H42	2.04	0.54
26:14:943:U:OP2	36:35:36:LYS:HE3	2.06	0.54
26:14:2439:A:H5'	26:14:2439:A:H8	1.72	0.54
30:39:80:ALA:O	30:39:83:PHE:HB2	2.06	0.54
36:35:60:MET:C	36:35:61:ARG:HG2	2.27	0.54
38:55:44:LEU:HD22	38:55:48:VAL:HG23	1.88	0.54
46:D5:104:PHE:HA	46:D5:139:VAL:H	1.71	0.54
1:13:1286:A:C8	1:13:1287:A:H4'	2.43	0.54
2:1E:97:TRP:HZ3	2:1E:172:ILE:HB	1.73	0.54
12:3I:90:VAL:HG12	12:3I:92:ASP:H	1.73	0.54
18:9I:73:ALA:HB1	18:9I:79:LEU:HG	1.89	0.54
26:1H:322:A:H5'	26:1H:340:A:H1'	1.90	0.54
26:1H:1167:U:C2	26:1H:1183:G:N2	2.75	0.54
26:1H:2336:A:H61	47:I8:43:THR:HB	1.71	0.54
26:1H:2855:C:H2'	26:1H:2856:C:H6	1.72	0.54
31:41:21:ARG:HG2	31:41:21:ARG:NH1	2.20	0.54
34:58:75:TYR:CE2	34:58:77:GLY:HA2	2.42	0.54
36:78:50:ARG:CG	55:Q8:58:ILE:HD11	2.36	0.54
44:F8:65:ARG:HH11	44:F8:70:LEU:HD22	1.71	0.54
1:1G:909:A:H2'	1:1G:910:C:O4'	2.07	0.54
6:52:24:GLU:OE2	6:52:28:ARG:NH1	2.40	0.54
9:82:112:LYS:HA	9:82:119:ALA:CB	2.37	0.54
19:AA:66:MET:SD	19:AA:66:MET:N	2.81	0.54
24:3L:23:A:H2'	24:3L:24:G:H8	1.72	0.54
26:14:1026:U:H2'	27:1J:88:C:H42	1.72	0.54
26:14:1111:A:H4'	32:59:3:ARG:HD3	1.89	0.54
29:29:151:TYR:HD2	29:29:154:LYS:NZ	2.04	0.54
35:25:49:ARG:HA	35:25:53:LYS:NZ	2.21	0.54
35:25:63:VAL:HG12	35:25:106:LEU:HD11	1.89	0.54
35:25:92:GLU:OE1	35:25:113:LYS:HD2	2.07	0.54
41:85:88:ILE:HD13	42:95:47:VAL:HG21	1.87	0.54
42:95:85:LYS:CG	42:95:86:GLY:H	2.21	0.54
52:J5:3:LYS:N	52:J5:3:LYS:HD2	2.21	0.54
1:13:1346:A:H5"	9:8E:120:ARG:NH1	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:107:ARG:NH2	4:3E:194:LEU:HD22	2.23	0.54
8:7E:49:GLU:HG2	8:7E:62:TYR:HE2	1.72	0.54
8:7E:95:VAL:HG12	8:7E:99:GLU:HB2	1.88	0.54
11:2I:86:GLY:N	11:2I:112:THR:OG1	2.27	0.54
14:5I:21:TYR:HE2	14:5I:23:ARG:NE	2.06	0.54
19:AI:41:VAL:O	51:M8:63:TYR:OH	2.26	0.54
22:1K:9:A:H2	22:1K:11:C:H41	1.54	0.54
26:1H:1636:C:H2'	26:1H:1637:A:C8	2.42	0.54
29:21:60:ASN:OD1	29:21:62:PRO:HD2	2.07	0.54
40:B8:5:ALA:HA	40:B8:8:LYS:HE2	1.90	0.54
45:G8:87:LYS:O	45:G8:94:LYS:HB2	2.08	0.54
1:1G:619:U:N3	4:32:134:ASP:OD1	2.34	0.54
3:22:32:LEU:HD22	3:22:59:ARG:HH12	1.72	0.54
7:62:115:ARG:O	7:62:118:VAL:HG22	2.07	0.54
10:1A:47:PHE:CZ	14:5A:37:PHE:HE2	2.25	0.54
26:14:46:C:H2'	26:14:47:C:C6	2.43	0.54
30:39:67:GLN:HG3	30:39:67:GLN:O	2.06	0.54
1:13:156:G:N2	1:13:165:C:N3	2.40	0.54
1:13:618:C:H5"	1:13:619:U:H5"	1.90	0.54
1:13:963:G:N2	1:13:972:C:N3	2.48	0.54
1:13:1004:A:H2'	1:13:1005:A:O4'	2.06	0.54
26:1H:194:G:H2'	26:1H:195:A:O4'	2.08	0.54
26:1H:818:G:H5'	26:1H:839:U:OP1	2.08	0.54
26:1H:1108:U:O4	26:1H:1109:C:N4	2.41	0.54
26:1H:1805:U:O2	28:11:50:THR:HB	2.06	0.54
26:1H:2345:G:N3	26:1H:2381:C:H2'	2.22	0.54
36:78:111:ARG:HG2	36:78:128:HIS:CD2	2.43	0.54
37:88:59:ARG:C	37:88:61:GLY:H	2.09	0.54
43:E8:60:ASN:N	43:E8:60:ASN:OD1	2.39	0.54
1:1G:742:G:P	15:6A:35:ARG:HH22	2.30	0.54
1:1G:1412:C:H2'	1:1G:1413:A:C8	2.42	0.54
5:42:34:VAL:O	5:42:41:VAL:HG12	2.07	0.54
24:3L:18:G:H2'	24:3L:57:G:N2	2.23	0.54
26:14:4:C:H42	26:14:2899:G:N2	2.05	0.54
26:14:582:G:H2'	26:14:583:G:C8	2.42	0.54
26:14:1857:G:O2'	26:14:1885:A:N6	2.40	0.54
26:14:2615:U:C2	52:J5:7:PRO:HA	2.42	0.54
33:69:69:LYS:NZ	33:69:73:GLU:OE2	2.32	0.54
37:45:17:LEU:HD21	37:45:41:TRP:HE1	1.73	0.54
40:75:91:ARG:HD3	40:75:120:ARG:HB3	1.89	0.54
1:13:1133:G:H22	1:13:1141:C:N4	2.04	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:4E:147:ASP:HA	5:4E:150:ARG:HH22	1.71	0.54
26:1H:768:G:N7	58:1H:4260:HOH:O	2.33	0.54
26:1H:994:C:OP1	41:C8:53:ARG:NH2	2.41	0.54
26:1H:1058:U:H3	26:1H:1080:A:H61	1.54	0.54
26:1H:1069:A:O2'	26:1H:1072:C:OP1	2.22	0.54
26:1H:1221:C:H2'	26:1H:1222:C:H6	1.72	0.54
26:1H:1827:C:H2'	26:1H:1828:G:H5'	1.88	0.54
26:1H:2593:U:H2'	26:1H:2594:C:H6	1.71	0.54
39:A8:24:LEU:HB2	39:A8:85:VAL:HG12	1.88	0.54
39:A8:99:LYS:HE2	39:A8:103:GLU:OE1	2.07	0.54
55:Q8:34:TRP:CD1	55:Q8:35:GLN:N	2.75	0.54
55:Q8:38:GLY:HA2	55:Q8:41:ILE:H	1.73	0.54
1:1G:1130:A:N6	1:1G:1144:G:H21	2.05	0.54
13:4A:37:THR:HG22	13:4A:55:ARG:HD2	1.90	0.54
24:3L:58:A:H2'	24:3L:60:U:OP2	2.07	0.54
26:14:46:C:H2'	26:14:47:C:H6	1.72	0.54
26:14:527:C:OP2	26:14:2779:U:H5	1.90	0.54
26:14:2228:G:OP1	28:19:261:LYS:NZ	2.38	0.54
26:14:2257:U:H2'	26:14:2258:C:C6	2.42	0.54
29:29:68:ALA:C	29:29:70:ALA:H	2.10	0.54
29:29:202:LYS:HD2	29:29:202:LYS:N	2.22	0.54
30:39:7:TYR:CE2	30:39:10:PRO:HG3	2.42	0.54
55:M5:48:PHE:CE2	55:M5:50:LEU:HD13	2.42	0.54
1:13:17:U:H2'	1:13:18:C:C6	2.42	0.54
1:13:976:G:H5'	1:13:1358:U:O2'	2.07	0.54
5:4E:11:ILE:HD11	5:4E:31:LEU:HD13	1.90	0.54
9:8E:27:THR:N	9:8E:61:ALA:O	2.36	0.54
26:1H:507:A:H5"	26:1H:508:G:H3'	1.89	0.54
26:1H:962:G:H2'	26:1H:963:U:C6	2.43	0.54
26:1H:2887:U:H2'	26:1H:2888:C:H6	1.72	0.54
33:61:131:LYS:HB3	33:61:132:PRO:HA	1.89	0.54
40:B8:26:ASP:HB3	40:B8:92:GLY:H	1.72	0.54
45:G8:9:LYS:HA	45:G8:27:VAL:HG22	1.88	0.54
51:M8:18:CYS:SG	51:M8:39:CYS:HB3	2.47	0.54
1:1G:160:A:H1'	1:1G:344:A:C5	2.43	0.54
1:1G:542:G:H5'	4:32:41:GLY:HA3	1.88	0.54
1:1G:688:G:H2'	1:1G:689:C:H6	1.73	0.54
10:1A:4:ILE:HG12	10:1A:100:THR:HG22	1.89	0.54
26:14:958:U:O2	27:1J:89(A):A:O2'	2.23	0.54
26:14:1111:A:O2'	32:59:2:SER:OG	2.25	0.54
26:14:1485:G:H2'	26:14:1486:A:C8	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:66:A:N6	27:1J:107:U:H2'	2.23	0.54
30:39:25:PRO:HG3	30:39:28:ILE:HG23	1.89	0.54
35:25:63:VAL:HB	35:25:102:VAL:HG12	1.90	0.54
36:35:15:ARG:HB2	36:35:15:ARG:CZ	2.37	0.54
41:85:16:LYS:O	41:85:20:LEU:HD23	2.08	0.54
41:85:65:ILE:HD11	41:85:96:ALA:HB3	1.88	0.54
46:D5:97:GLU:HB3	46:D5:125:LEU:HD11	1.90	0.54
46:D5:110:GLY:HA2	46:D5:144:LEU:H	1.72	0.54
46:D5:118:GLN:HG3	46:D5:173:ALA:O	2.07	0.54
52:J5:41:PRO:O	52:J5:44:THR:OG1	2.24	0.54
1:13:875:C:O2'	8:7E:14:ARG:NH1	2.41	0.54
1:13:1095:U:H5'	1:13:1109:C:O2	2.08	0.54
2:1E:18:GLY:N	2:1E:42:ILE:HG22	2.22	0.54
3:2E:150:LYS:HB3	3:2E:201:TYR:HB2	1.89	0.54
4:3E:152:SER:HB2	4:3E:155:LEU:HG	1.90	0.54
9:8E:45:ALA:HA	9:8E:48:GLU:HG2	1.89	0.54
14:5I:3:ARG:O	14:5I:7:ILE:HG23	2.08	0.54
26:1H:1077:A:H3'	26:1H:1078:U:C5'	2.38	0.54
26:1H:1593:G:H2'	26:1H:1594:G:C8	2.43	0.54
26:1H:2116:G:O6	26:1H:2172:U:N3	2.40	0.54
28:11:89:SER:HB2	28:11:159:ALA:CB	2.37	0.54
31:41:10:LYS:O	31:41:15:VAL:HG23	2.07	0.54
34:58:42:TRP:HA	34:58:48:MET:CE	2.37	0.54
54:P8:12:ARG:HH21	54:P8:44:PRO:HB3	1.73	0.54
55:Q8:53:PRO:HB2	55:Q8:56:GLU:HB2	1.89	0.54
1:1G:944:G:O2'	1:1G:1339:A:N6	2.40	0.54
1:1G:1375:A:H4'	7:62:29:LYS:HE3	1.88	0.54
17:8A:56:VAL:HG12	17:8A:77:VAL:HB	1.90	0.54
19:AA:63:THR:OG1	19:AA:65:ASN:O	2.21	0.54
26:14:251:A:C5	26:14:252:G:H1'	2.42	0.54
26:14:1771:C:HO2'	26:14:1786:A:H8	1.54	0.54
26:14:2105:C:H42	26:14:2184:G:H1	1.55	0.54
26:14:2789:C:H2'	26:14:2790:A:O4'	2.08	0.54
27:1J:116:G:O5'	27:1J:116:G:H8	1.90	0.54
32:59:9:ILE:HG22	32:59:51:ARG:HA	1.88	0.54
36:35:99:LEU:HD12	36:35:102:ARG:HH22	1.73	0.54
39:65:66:ALA:O	39:65:70:GLY:N	2.33	0.54
47:E5:12:ASN:HA	47:E5:14:ARG:HH21	1.72	0.54
53:K5:36:LEU:HD23	53:K5:50:ARG:HD3	1.89	0.54
1:13:277:C:P	17:8I:68:ARG:HH12	2.30	0.54
1:13:1098:C:C2	1:13:1099:G:C8	2.96	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1157:A:N6	1:13:1178:G:H21	2.06	0.54
3:2E:3:ASN:N	3:2E:3:ASN:OD1	2.40	0.54
20:BI:49:ALA:O	20:BI:52:ALA:N	2.40	0.54
24:3K:18:G:O2'	24:3K:19:G:OP1	2.24	0.54
26:1H:899:A:HO2'	26:1H:900:A:H8	1.54	0.54
26:1H:2377:A:H4'	39:A8:111:GLU:HB3	1.90	0.54
27:16:31:C:H2'	27:16:32:C:C6	2.41	0.54
28:11:149:PRO:O	28:11:150:LYS:HB2	2.08	0.54
32:51:77:LYS:HE2	32:51:138:LYS:HB2	1.90	0.54
43:E8:27:LYS:HB3	43:E8:31:GLU:HG3	1.90	0.54
43:E8:45:TYR:CZ	43:E8:49:LYS:HE3	2.43	0.54
53:O8:47:THR:HG22	53:O8:48:VAL:H	1.72	0.54
1:1G:713:G:H2'	1:1G:714:G:C8	2.42	0.54
1:1G:1210:C:H3'	1:1G:1211:U:H5"	1.88	0.54
1:1G:1244:C:H2'	1:1G:1245:A:C8	2.43	0.54
5:42:93:PRO:HG2	8:72:105:ARG:NE	2.22	0.54
12:3A:111:LYS:H	12:3A:111:LYS:HD2	1.72	0.54
26:14:800:A:P	58:14:3859:HOH:O	2.64	0.54
26:14:2776:A:OP1	26:14:2776:A:H3'	2.07	0.54
31:49:160:VAL:HG12	31:49:161:THR:H	1.73	0.54
39:65:84:GLN:HB3	39:65:110:LEU:H	1.73	0.54
1:13:677:U:H3	1:13:713:G:H22	1.55	0.54
1:13:1422:G:H5'	35:68:48:PRO:HB3	1.89	0.54
2:1E:163:PHE:CD1	2:1E:185:ILE:HG13	2.43	0.54
4:3E:148:VAL:HG12	4:3E:149:ALA:O	2.08	0.54
10:1I:6:ILE:HG22	10:1I:98:ILE:HG13	1.89	0.54
22:1K:5:G:H1'	22:1K:69:G:N2	2.23	0.54
26:1H:2830:G:H5"	26:1H:2830:G:C8	2.43	0.54
27:16:42:C:O2'	31:41:67:LYS:HE3	2.08	0.54
41:C8:44:ASN:ND2	42:D8:75:PHE:O	2.40	0.54
1:1G:502:G:OP1	12:3A:118:SER:HB3	2.08	0.54
1:1G:838:G:H2'	1:1G:841:U:H5"	1.89	0.54
1:1G:1371:G:OP1	9:82:11:LYS:HB3	2.08	0.54
32:59:6:ARG:HB2	32:59:66:GLY:HA2	1.90	0.54
43:A5:62:HIS:HB2	43:A5:64:MET:HG3	1.89	0.54
45:C5:47:LYS:HG3	45:C5:60:PHE:CE2	2.43	0.54
52:J5:46:CYS:SG	52:J5:48:GLU:HG2	2.48	0.54
1:13:135:C:H2'	1:13:136:C:H5'	1.89	0.54
1:13:353:A:H5'	1:13:353:A:C8	2.38	0.54
1:13:474:G:H5"	16:7I:81:ARG:HE	1.72	0.54
1:13:536:C:H2'	1:13:537:G:C8	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:760:G:H2'	1:13:761:G:H5'	1.89	0.54
1:13:963:G:H21	10:1I:55:LYS:NZ	2.06	0.54
1:13:1190:G:OP1	3:2E:4:LYS:HA	2.08	0.54
2:1E:15:VAL:HB	2:1E:210:SER:HB2	1.89	0.54
5:4E:65:ASN:OD1	5:4E:140:ARG:NH2	2.41	0.54
16:7I:11:SER:HB2	16:7I:14:ASN:HB3	1.89	0.54
26:1H:198:C:O2'	26:1H:199:A:H5'	2.08	0.54
26:1H:638:G:C5	26:1H:651:G:C2	2.96	0.54
26:1H:832:G:H5'	36:78:45:LEU:HD11	1.90	0.54
26:1H:1026:U:H1'	26:1H:1027:A:O5'	2.07	0.54
26:1H:1058:U:H2'	26:1H:1059:G:H8	1.73	0.54
26:1H:1359:A:H2	26:1H:1372:U:O4	1.91	0.54
26:1H:1494:A:H2'	26:1H:1495:A:C8	2.43	0.54
26:1H:1510:A:H2'	26:1H:1510:A:N3	2.22	0.54
26:1H:1970:A:P	58:1H:4211:HOH:O	2.62	0.54
26:1H:1971:A:C4	28:11:241:PRO:HD3	2.43	0.54
26:1H:2108:C:H2'	26:1H:2109:U:O4'	2.07	0.54
26:1H:2146:C:H4'	26:1H:2147:G:N7	2.23	0.54
26:1H:2327:A:H2'	26:1H:2328:A:H8	1.72	0.54
26:1H:2680:C:OP2	29:21:111:ARG:NH2	2.41	0.54
33:61:1:MET:O	33:61:20:ASP:HA	2.07	0.54
33:61:46:ALA:C	33:61:50:ARG:HD3	2.28	0.54
34:58:133:GLN:O	34:58:134:ARG:HB2	2.07	0.54
35:68:98:VAL:HG11	35:68:114:ILE:HG23	1.89	0.54
36:78:59:LEU:HD11	55:Q8:10:ALA:HA	1.89	0.54
43:E8:68:ARG:O	43:E8:110:LYS:HB2	2.07	0.54
49:K8:48:HIS:N	49:K8:50:ILE:HD11	2.23	0.54
50:L8:50:VAL:HG23	50:L8:54:VAL:HG11	1.89	0.54
1:1G:719:C:O2'	18:9A:49:LYS:HB3	2.08	0.54
1:1G:942:G:H2'	1:1G:943:U:H6	1.72	0.54
1:1G:1224:G:O2'	1:1G:1322:C:OP2	2.26	0.54
1:1G:1249:C:O2'	9:82:73:GLN:OE1	2.25	0.54
1:1G:1367:C:H5'	10:1A:60:ARG:NH2	2.23	0.54
5:42:67:VAL:HG21	5:42:140:ARG:HA	1.90	0.54
6:52:23:LYS:HE3	6:52:61:LEU:HD21	1.90	0.54
6:52:25:ILE:HD13	6:52:82:ARG:HD2	1.90	0.54
19:AA:66:MET:N	19:AA:67:VAL:HB	2.23	0.54
26:14:1190:G:H2'	26:14:1191:G:H8	1.73	0.54
26:14:1999:C:H4'	26:14:2723:C:O2	2.07	0.54
26:14:2392:A:C8	36:35:61:ARG:HD2	2.43	0.54
27:1J:87:G:H3'	27:1J:88:C:C5'	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:188:VAL:HG23	29:29:189:PRO:HD2	1.89	0.54
32:59:58:GLU:HB2	32:59:61:HIS:ND1	2.23	0.54
44:B5:8:ILE:H	44:B5:8:ILE:HD12	1.72	0.54
44:B5:65:ARG:HB3	44:B5:70:LEU:HB3	1.89	0.54
46:D5:139:VAL:HG22	46:D5:156:LYS:HG2	1.89	0.54
46:D5:157:LEU:CB	46:D5:161:VAL:HG11	2.35	0.54
1:13:109:A:N7	1:13:326:G:H2'	2.23	0.53
1:13:142:G:H2'	1:13:143:A:C8	2.43	0.53
1:13:688:G:H2'	1:13:689:C:H6	1.72	0.53
1:13:1150:U:O2	10:1I:39:PRO:HG2	2.07	0.53
2:1E:7:VAL:HG21	2:1E:217:ARG:HH11	1.72	0.53
3:2E:24:ALA:HB1	3:2E:28:GLN:HB2	1.90	0.53
5:4E:51:VAL:O	5:4E:55:VAL:HG23	2.08	0.53
7:6E:16:LEU:HD12	9:8E:42:ARG:HA	1.90	0.53
16:7I:39:TYR:CZ	16:7I:41:PRO:HB3	2.44	0.53
26:1H:825:C:O2	36:78:55:ARG:HD3	2.09	0.53
26:1H:2137:C:H42	26:1H:2154:G:N2	2.05	0.53
47:I8:23:VAL:HA	47:I8:38:VAL:HG22	1.90	0.53
48:J8:92:LYS:HA	48:J8:95:LEU:HB2	1.89	0.53
1:1G:448:A:P	1:1G:485:G:H22	2.31	0.53
1:1G:1123:A:O2'	10:1A:37:PRO:O	2.18	0.53
2:12:77:ALA:O	2:12:81:VAL:HG23	2.07	0.53
3:22:156:ARG:NH2	3:22:159:GLY:O	2.41	0.53
35:25:4:PRO:O	35:25:5:GLN:HB2	2.08	0.53
1:13:67:C:H2'	1:13:68:G:C8	2.44	0.53
1:13:474:G:H2'	1:13:475:G:C8	2.43	0.53
9:8E:125:TYR:HD1	9:8E:126:SER:N	2.06	0.53
19:AI:6:LYS:O	19:AI:7:LYS:HB3	2.07	0.53
26:1H:646:A:H2'	26:1H:647:G:O4'	2.09	0.53
26:1H:1061:U:O2'	26:1H:1070:A:O4'	2.25	0.53
26:1H:1508:A:O2'	26:1H:1509:C:O4'	2.26	0.53
26:1H:1871:A:H2'	26:1H:1872:A:C8	2.42	0.53
26:1H:1889:A:N1	26:1H:2234:G:H1'	2.23	0.53
26:1H:1901:A:OP2	28:11:255:LYS:HE2	2.08	0.53
26:1H:2074:U:H2'	26:1H:2075:U:C6	2.44	0.53
27:16:54:G:H2'	27:16:55:U:H6	1.73	0.53
31:41:64:THR:HG23	31:41:94:LEU:HD22	1.91	0.53
31:41:139:LEU:HD22	31:41:146:TYR:HD1	1.73	0.53
45:G8:84:ARG:HD2	45:G8:84:ARG:O	2.08	0.53
1:1G:9:G:OP1	5:42:122:GLU:HB2	2.08	0.53
1:1G:456:C:N4	1:1G:476:G:H1	2.04	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1028(A):C:H5	1:1G:1029:G:C5	2.25	0.53
6:52:7:ASN:N	6:52:7:ASN:OD1	2.42	0.53
7:62:95:ARG:HH21	7:62:99:LEU:HD11	1.74	0.53
15:6A:4:THR:O	15:6A:7:GLU:HG2	2.07	0.53
17:8A:63:ARG:HG2	17:8A:64:PRO:HD2	1.89	0.53
23:2L:26:C:H2'	23:2L:27:G:O4'	2.09	0.53
26:14:249:C:O2	55:M5:12:LYS:NZ	2.38	0.53
26:14:1417:C:H42	26:14:1581:G:H1	1.56	0.53
26:14:1997:G:H5"	58:14:3782:HOH:O	2.06	0.53
26:14:2572:A:N7	29:29:145:LYS:HB2	2.23	0.53
26:14:2572:A:H62	29:29:145:LYS:HD2	1.72	0.53
27:1J:90:C:H5'	37:45:18:LYS:HA	1.90	0.53
27:1J:94:C:H2'	27:1J:95:U:C6	2.44	0.53
28:19:239:ARG:NE	58:19:302:HOH:O	2.41	0.53
26:1H:249:C:P	58:1H:3665:HOH:O	2.64	0.53
26:1H:270(P):C:H2'	26:1H:270(Q):C:C6	2.42	0.53
26:1H:363:G:H2'	26:1H:363(A):A:H8	1.73	0.53
26:1H:1534:G:H22	26:1H:1538:G:H1	1.56	0.53
26:1H:1932:A:H2'	26:1H:1933:G:O4'	2.08	0.53
28:11:145:VAL:HG12	28:11:146:GLU:O	2.08	0.53
31:41:33:ARG:O	31:41:162:THR:HG23	2.08	0.53
33:61:107:VAL:HG12	33:61:108:THR:H	1.73	0.53
55:Q8:33:ASN:O	55:Q8:34:TRP:CD1	2.62	0.53
1:1G:1478:C:H2'	1:1G:1479:C:H6	1.73	0.53
1:1G:1502:A:H5"	1:1G:1504:G:C8	2.43	0.53
7:62:18:TYR:HB3	7:62:59:LEU:HD12	1.90	0.53
26:14:690:G:O2'	28:19:43:ARG:NH2	2.41	0.53
26:14:1538:G:H2'	26:14:1539:G:H8	1.74	0.53
26:14:2052:G:O4'	29:29:142:GLY:HA3	2.08	0.53
26:14:2376:A:C2	39:65:112:PHE:HB2	2.43	0.53
26:14:2748:A:H2'	26:14:2749:A:C8	2.43	0.53
33:69:79:ILE:HD11	33:69:140:LEU:HD11	1.91	0.53
41:85:85:LYS:HD3	41:85:116:ALA:O	2.09	0.53
46:D5:4:ARG:HG2	46:D5:58:VAL:HG21	1.88	0.53
1:13:262:A:H5"	1:13:263:A:OP2	2.08	0.53
1:13:1423:G:P	35:68:49:ARG:HH22	2.31	0.53
15:6I:39:LEU:HD13	15:6I:56:LEU:HB2	1.90	0.53
26:1H:1453:A:O2'	26:1H:1454:U:H2'	2.07	0.53
26:1H:1728:G:H3'	26:1H:1729:A:H5"	1.88	0.53
26:1H:2023:G:H5'	26:1H:2617:C:H4'	1.89	0.53
26:1H:2318:G:H22	39:A8:2:ALA:N	2.07	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2675:A:H5'	35:68:29:ASN:O	2.09	0.53
29:21:34:VAL:HG22	29:21:48:GLN:HB3	1.90	0.53
32:51:8:PRO:O	32:51:10:PRO:HD3	2.07	0.53
33:61:55:ALA:HA	33:61:58:LEU:HB3	1.90	0.53
33:61:81:VAL:HG11	33:61:88:ILE:HD12	1.91	0.53
44:F8:15:GLU:HG3	44:F8:16:LYS:N	2.23	0.53
45:G8:29:GLU:HB3	45:G8:38:ILE:CG2	2.38	0.53
1:1G:284:G:H2'	1:1G:285:G:H8	1.73	0.53
1:1G:789:U:H2'	1:1G:791:G:N7	2.24	0.53
1:1G:952:U:H4'	1:1G:964:A:N1	2.23	0.53
7:62:69:VAL:HG12	7:62:103:TRP:HE3	1.73	0.53
13:4A:60:VAL:HG13	13:4A:64:TRP:HE1	1.73	0.53
26:14:582:G:N7	58:14:3964:HOH:O	2.34	0.53
26:14:2873:A:H8	38:55:6:SER:N	2.06	0.53
33:69:102:SER:HB2	33:69:108:THR:HG23	1.90	0.53
40:75:24:PRO:HA	40:75:49:VAL:HG23	1.91	0.53
44:B5:55:ASN:HB2	44:B5:80:ILE:HG13	1.89	0.53
55:M5:34:TRP:CD1	55:M5:35:GLN:N	2.74	0.53
1:13:10:A:OP2	5:4E:126:ARG:HD3	2.08	0.53
1:13:22:G:H2'	1:13:23:C:C6	2.44	0.53
1:13:393:A:OP2	16:7I:12:LYS:NZ	2.30	0.53
1:13:554:C:H2'	1:13:555:C:H6	1.72	0.53
2:1E:5:ILE:HG13	2:1E:6:THR:N	2.24	0.53
3:2E:62:ASP:O	3:2E:98:ASN:ND2	2.42	0.53
6:5E:86:ARG:O	6:5E:87:ARG:HG2	2.08	0.53
8:7E:83:ILE:HB	8:7E:137:VAL:HG13	1.91	0.53
10:1I:57:LYS:HD2	10:1I:60:ARG:NH1	2.22	0.53
16:7I:53:VAL:O	16:7I:57:ARG:HG2	2.08	0.53
17:8I:88:TYR:HD2	17:8I:89:LEU:HD22	1.73	0.53
18:9I:66:LEU:O	18:9I:70:ILE:HG13	2.07	0.53
26:1H:1055:G:H1'	26:1H:1085:A:C2	2.44	0.53
26:1H:2032:G:N2	29:21:146:THR:HG23	2.20	0.53
28:11:182:LEU:H	28:11:272:ALA:CB	2.22	0.53
29:21:78:LEU:O	29:21:79:ARG:HB2	2.08	0.53
30:31:152:GLU:HB2	30:31:191:ARG:HD2	1.91	0.53
37:88:66:ILE:HG22	37:88:67:ARG:N	2.24	0.53
46:H8:146:ILE:HD13	46:H8:174:VAL:HG12	1.90	0.53
47:I8:29:GLN:H	47:I8:67:VAL:HG23	1.74	0.53
1:1G:1059:C:OP2	3:22:199:LYS:NZ	2.41	0.53
6:52:7:ASN:HD22	18:9A:76:LEU:HD11	1.74	0.53
8:72:51:VAL:HG11	8:72:60:ARG:HE	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4A:14:ARG:HD2	13:4A:42:ALA:HA	1.91	0.53
26:14:443:A:H1'	26:14:1201:C:O4'	2.09	0.53
26:14:1161:C:H2'	26:14:1162:G:C8	2.44	0.53
28:19:255:LYS:H	28:19:255:LYS:NZ	2.06	0.53
40:75:20:PRO:HD2	40:75:86:ILE:HG23	1.89	0.53
40:75:124:ASP:O	40:75:128:GLU:HB2	2.08	0.53
55:M5:29:LYS:HB3	55:M5:44:LYS:CB	2.38	0.53
1:13:590:C:N3	1:13:649:G:N2	2.52	0.53
1:13:881:G:P	12:3I:12:ARG:HH22	2.31	0.53
1:13:974:A:OP2	14:5I:29:ARG:NH2	2.40	0.53
15:6I:39:LEU:HB3	15:6I:56:LEU:HD12	1.89	0.53
19:AI:41:VAL:HG11	19:AI:67:VAL:HA	1.90	0.53
26:1H:547:A:H8	26:1H:547:A:O5'	1.92	0.53
26:1H:831:G:N7	58:1H:3980:HOH:O	2.33	0.53
26:1H:1257:C:H4'	30:31:83:PHE:CE1	2.43	0.53
36:78:39:LYS:HG3	36:78:45:LEU:HD22	1.89	0.53
49:K8:55:ARG:O	49:K8:58:ALA:HB3	2.08	0.53
1:1G:426:G:OP1	4:32:38:TYR:OH	2.22	0.53
1:1G:600:C:H2'	1:1G:601:C:H6	1.73	0.53
26:14:192:C:P	58:14:3625:HOH:O	2.66	0.53
26:14:445:C:O2'	26:14:446:G:H5'	2.08	0.53
26:14:882:G:H22	26:14:894:C:N4	2.07	0.53
26:14:952:G:C6	26:14:966:G:C6	2.96	0.53
26:14:1533:C:C4	26:14:1534:G:H1'	2.44	0.53
29:29:116:VAL:HG23	29:29:120:TRP:HD1	1.74	0.53
30:39:117:ARG:HH12	36:35:1:MET:N	2.04	0.53
35:25:47:ILE:HG23	35:25:48:PRO:HD2	1.91	0.53
36:35:122:PRO:HB3	36:35:141:ALA:HB1	1.90	0.53
45:C5:76:CYS:SG	45:C5:97:ARG:HG3	2.49	0.53
3:2E:134:ILE:HG22	3:2E:168:ALA:HB3	1.90	0.53
26:1H:232:G:H8	26:1H:232:G:OP2	1.91	0.53
26:1H:2144:U:N3	26:1H:2146:C:O2	2.42	0.53
26:1H:2689:U:H5"	26:1H:2713:A:H2	1.73	0.53
26:1H:2788:C:O2'	26:1H:2809:A:N3	2.40	0.53
33:61:57:ARG:O	33:61:61:ARG:HG2	2.09	0.53
36:78:126:VAL:HG12	36:78:147:LEU:HD22	1.90	0.53
39:A8:25:ARG:NH1	39:A8:42:ASP:OD2	2.41	0.53
1:1G:649:G:H2'	1:1G:650:G:H8	1.72	0.53
1:1G:811:C:O2'	1:1G:901:A:N1	2.41	0.53
5:42:43:LEU:HD22	5:42:136:MET:HG3	1.90	0.53
5:42:136:MET:O	5:42:140:ARG:N	2.32	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:52:68:PRO:HG2	6:52:71:ARG:HG3	1.90	0.53
15:6A:56:LEU:O	15:6A:60:VAL:HG23	2.09	0.53
26:14:676:A:H8	26:14:2069:G:N2	1.90	0.53
26:14:2677:G:H2'	26:14:2678:C:C6	2.43	0.53
28:19:141:VAL:HG23	28:19:162:SER:HB2	1.90	0.53
33:69:81:VAL:O	33:69:143:SER:OG	2.26	0.53
1:13:49:U:C2	1:13:361:G:N2	2.76	0.53
1:13:107:G:O6	20:BI:15:ARG:HG3	2.09	0.53
1:13:1106:G:H5"	3:2E:172:ARG:HG2	1.90	0.53
1:13:1147:C:O2	9:8E:16:ARG:NH1	2.42	0.53
2:1E:136:VAL:O	2:1E:140:HIS:N	2.42	0.53
3:2E:28:GLN:O	3:2E:31:HIS:N	2.41	0.53
5:4E:100:VAL:HG13	5:4E:118:ILE:HG22	1.89	0.53
7:6E:94:ARG:O	7:6E:97:GLN:HB3	2.09	0.53
13:4I:12:ASN:OD1	13:4I:13:LYS:N	2.41	0.53
17:8I:29:HIS:CE1	17:8I:32:TYR:HD2	2.26	0.53
20:BI:10:LEU:HD11	20:BI:12:ALA:HB3	1.89	0.53
22:1K:47:U:H5'	22:1K:48:C:H5'	1.90	0.53
26:1H:910:A:C5	37:88:13:GLN:HG3	2.44	0.53
26:1H:1021:A:H8	26:1H:1022:G:H5"	1.74	0.53
26:1H:1049:C:H2'	26:1H:1050:A:H5'	1.90	0.53
27:16:78:A:C2	27:16:99:A:C4	2.96	0.53
55:Q8:32:LEU:HG	55:Q8:33:ASN:N	2.24	0.53
3:22:90:GLU:HA	3:22:93:LYS:HB2	1.91	0.53
10:1A:30:SER:OG	10:1A:81:THR:HG22	2.08	0.53
23:2L:22:A:N6	23:2L:47:7MG:H2'	2.22	0.53
24:3L:64:A:C2	24:3L:65:G:H1'	2.44	0.53
26:14:265:A:H1'	26:14:266:G:O4'	2.09	0.53
26:14:832:G:H5'	36:35:45:LEU:CD1	2.38	0.53
26:14:1899:G:N2	26:14:1902:C:N4	2.49	0.53
29:29:56:PRO:HD2	29:29:58:ARG:NH2	2.24	0.53
37:45:75:THR:HB	37:45:86:GLY:HA3	1.91	0.53
42:95:87:HIS:CE1	42:95:89:GLN:HB2	2.44	0.53
48:F5:41:ARG:HD3	48:F5:43:TYR:HE1	1.73	0.53
53:K5:14:THR:OG1	53:K5:19:ARG:HA	2.08	0.53
1:13:926:G:N2	25:4K:15:A:OP2	2.36	0.53
1:13:1077:G:N2	1:13:1080:A:OP2	2.31	0.53
1:13:1080:A:H5"	5:4E:16:THR:HG21	1.91	0.53
1:13:1157:A:H1'	1:13:1158:C:C4	2.44	0.53
1:13:1326:C:H2'	1:13:1327:C:C6	2.44	0.53
1:13:1327:C:OP2	21:1F:12:LYS:NZ	2.40	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:163:PHE:HD1	2:1E:185:ILE:HG13	1.73	0.53
17:8I:45:HIS:O	17:8I:73:VAL:HG23	2.09	0.53
17:8I:58:GLU:O	17:8I:74:LEU:N	2.35	0.53
19:AI:40:ILE:HD11	19:AI:62:ILE:HD13	1.89	0.53
26:1H:150:C:H2'	26:1H:151:C:C6	2.44	0.53
26:1H:309:G:N3	26:1H:329:G:O2'	2.41	0.53
26:1H:588:U:H2'	26:1H:589:C:C6	2.44	0.53
26:1H:1416:G:H1	26:1H:1582:C:H42	1.56	0.53
26:1H:2068:U:H3	26:1H:2430:A:H2	1.55	0.53
36:78:59:LEU:O	55:Q8:13:ARG:HD2	2.08	0.53
50:L8:4:LEU:HG	50:L8:39:ASP:HB2	1.91	0.53
50:L8:26:LEU:HB2	50:L8:28:LEU:HD12	1.89	0.53
1:1G:371:G:H1	1:1G:390:C:H42	1.56	0.53
1:1G:1307:U:H2'	1:1G:1308:U:C6	2.44	0.53
2:12:73:THR:HB	2:12:96:ARG:H	1.74	0.53
3:22:37:GLN:O	3:22:40:ARG:HG3	2.09	0.53
4:32:24:GLU:N	4:32:24:GLU:OE2	2.41	0.53
19:AA:42:PRO:HG3	51:I5:60:GLN:HG3	1.91	0.53
26:14:140:A:C8	26:14:1408:C:O2'	2.62	0.53
26:14:460:A:H5"	26:14:461:C:OP2	2.09	0.53
26:14:2027:G:H2'	26:14:2028:U:O4'	2.09	0.53
26:14:2308:G:H3'	26:14:2310:A:OP2	2.08	0.53
27:1J:13:A:H5"	27:1J:15:A:C6	2.43	0.53
28:19:182:LEU:H	28:19:272:ALA:HB2	1.73	0.53
31:49:42:GLY:O	31:49:43:LEU:HD13	2.09	0.53
37:45:25:ASP:CB	37:45:102:VAL:H	2.22	0.53
42:95:21:ARG:NH2	42:95:91:TYR:O	2.41	0.53
1:13:260:G:H2'	1:13:261:U:C6	2.44	0.53
4:3E:102:ASP:HB3	4:3E:136:PRO:CB	2.39	0.53
13:4I:82:MET:O	13:4I:84:ILE:N	2.42	0.53
26:1H:931:G:O2'	50:L8:24:LYS:NZ	2.35	0.53
26:1H:1359:A:H2'	26:1H:1360:A:H5'	1.91	0.53
26:1H:2061:G:OP2	26:1H:2502:G:H5'	2.09	0.53
26:1H:2502:G:P	58:1H:3635:HOH:O	2.66	0.53
39:A8:70:GLY:O	39:A8:105:ALA:HA	2.09	0.53
54:P8:15:THR:HG22	54:P8:16:HIS:CE1	2.43	0.53
1:1G:1082:G:H8	1:1G:1082:G:OP2	1.91	0.53
1:1G:1281:U:H3'	1:1G:1282:C:C5	2.44	0.53
4:32:106:TYR:HE1	4:32:112:VAL:O	1.91	0.53
12:3A:84:LEU:HD12	12:3A:104:VAL:HG11	1.91	0.53
26:14:93:C:H4'	45:C5:54:LYS:HE3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:782:A:H5'	26:14:783:A:C2	2.43	0.53
26:14:2270:G:OP2	58:14:3726:HOH:O	2.19	0.53
26:14:2303:G:N2	26:14:2314:C:N3	2.56	0.53
26:14:2685:G:OP2	40:75:51:ARG:NH1	2.42	0.53
29:29:11:MET:HE3	29:29:186:GLY:HA2	1.91	0.53
40:75:1:MET:HB3	40:75:6:LEU:HB2	1.90	0.53
1:13:153:C:N4	1:13:168:G:H22	2.06	0.52
2:1E:178:ARG:HB2	2:1E:178:ARG:HH11	1.74	0.52
7:6E:50:ILE:HB	7:6E:58:PRO:HB3	1.91	0.52
9:8E:18:PHE:HD2	9:8E:62:TYR:HD2	1.57	0.52
9:8E:97:LYS:HB2	9:8E:102:LEU:HD12	1.90	0.52
21:1F:2:GLY:O	21:1F:4:GLY:N	2.42	0.52
26:1H:674:G:H1'	30:31:74:ARG:HD3	1.90	0.52
26:1H:1230:C:H2'	26:1H:1231:G:H8	1.71	0.52
29:21:105:THR:HB	29:21:197:ILE:HG23	1.91	0.52
31:41:47:LYS:NZ	31:41:80:PHE:HD1	2.07	0.52
32:51:4:ILE:HD11	32:51:7:LEU:HD11	1.90	0.52
33:61:41:GLU:O	33:61:45:LYS:HB2	2.09	0.52
35:68:43:VAL:HG12	35:68:54:GLU:HA	1.90	0.52
41:C8:106:PHE:HA	41:C8:109:LEU:HD12	1.90	0.52
46:H8:28:MET:HB2	46:H8:37:VAL:HG11	1.91	0.52
1:1G:1080:A:H5'	5:42:14:ARG:HH22	1.73	0.52
1:1G:1261:A:H5'	1:1G:1283:G:O3'	2.09	0.52
2:12:178:ARG:HH21	8:72:68:ARG:NH2	2.07	0.52
4:32:18:LYS:HD2	4:32:20:TYR:CZ	2.44	0.52
6:52:96:PRO:HB3	18:9A:30:ASP:CG	2.30	0.52
26:14:443:A:N7	30:39:45:ARG:HD2	2.24	0.52
26:14:1257:C:H4'	30:39:83:PHE:CD1	2.43	0.52
26:14:2197:U:H1'	26:14:2198:A:C8	2.44	0.52
31:49:43:LEU:HD12	31:49:45:GLU:OE1	2.08	0.52
35:25:64:ARG:NH1	35:25:81:ASP:OD1	2.42	0.52
41:85:28:ARG:HH11	41:85:38:THR:HG1	1.54	0.52
48:F5:52:ARG:HH11	48:F5:57:GLU:HG3	1.74	0.52
51:I5:21:VAL:HG22	51:I5:22:ILE:H	1.74	0.52
1:13:1051:C:H2'	1:13:1052:U:C6	2.43	0.52
1:13:1125:U:H5'	1:13:1126:U:C5	2.43	0.52
4:3E:161:ASN:O	4:3E:165:MET:HB2	2.09	0.52
15:6I:56:LEU:O	15:6I:60:VAL:HG23	2.09	0.52
22:1K:46:7MG:H5"	22:1K:46:7MG:C8	2.43	0.52
26:1H:963:U:OP1	58:1H:3799:HOH:O	2.19	0.52
27:16:44:G:H1'	27:16:47:C:N4	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:11:25:THR:HB	28:11:82:ILE:H	1.74	0.52
29:21:52:LEU:O	29:21:75:VAL:HG23	2.09	0.52
29:21:119:ARG:HG3	29:21:119:ARG:NH1	2.24	0.52
36:78:38:GLN:HG2	36:78:45:LEU:HD12	1.92	0.52
38:98:48:VAL:O	38:98:51:LEU:N	2.42	0.52
39:A8:34:HIS:HB2	39:A8:36:TYR:CE1	2.31	0.52
41:C8:14:HIS:O	41:C8:18:LEU:HD12	2.08	0.52
1:1G:9:G:H1	1:1G:25:C:H42	1.57	0.52
1:1G:1294:G:H2'	1:1G:1295:G:H8	1.74	0.52
1:1G:1308:U:H5"	13:4A:98:VAL:CG2	2.38	0.52
3:22:18:TRP:CD1	14:5A:54:PRO:HA	2.43	0.52
5:42:151:LEU:HD13	8:72:77:GLU:HG2	1.91	0.52
9:82:103:THR:HG22	9:82:105:ASP:H	1.74	0.52
26:14:993:G:C5	26:14:994:C:H5	2.27	0.52
26:14:2346:A:H5"	26:14:2383:G:C1'	2.40	0.52
42:95:35:LEU:HB2	42:95:37:VAL:CG1	2.39	0.52
1:13:631:G:C8	1:13:632:A:C2	2.98	0.52
1:13:963:G:H5'	58:13:1866:HOH:O	2.08	0.52
1:13:1072:G:H2'	1:13:1073:U:O4'	2.10	0.52
6:5E:39:LYS:HB2	6:5E:64:GLN:HB2	1.90	0.52
9:8E:77:ILE:O	9:8E:81:ILE:HG12	2.09	0.52
14:5I:48:ALA:HB2	14:5I:53:LEU:HD12	1.91	0.52
24:3K:30:G:H1	24:3K:40:C:N4	2.07	0.52
26:1H:1110:G:O2'	26:1H:1111:A:O5'	2.25	0.52
26:1H:1268:A:H2'	26:1H:1269:A:O4'	2.09	0.52
26:1H:1324:G:C4	26:1H:1328:G:O6	2.62	0.52
26:1H:1336:A:H2'	26:1H:1337:G:H8	1.73	0.52
26:1H:1766:U:H2'	26:1H:1767:C:H6	1.74	0.52
26:1H:2392:A:H8	36:78:61:ARG:HG2	1.73	0.52
27:16:7:G:O5'	39:A8:29:PHE:CE2	2.63	0.52
36:78:49:ARG:HG3	55:Q8:58:ILE:HG13	1.92	0.52
37:88:11:LYS:HE2	37:88:86:GLY:HA2	1.90	0.52
38:98:79:LEU:HD23	38:98:83:ILE:HD12	1.91	0.52
47:I8:64:ASP:HB2	47:I8:85:ALA:HB1	1.90	0.52
48:J8:87:PRO:O	48:J8:91:LYS:HB2	2.10	0.52
52:N8:41:PRO:O	52:N8:44:THR:HG22	2.09	0.52
1:1G:865:A:N3	1:1G:918:A:O2'	2.37	0.52
1:1G:962:C:H42	1:1G:973:G:H1	1.57	0.52
1:1G:1122:U:N3	1:1G:1123:A:N7	2.58	0.52
1:1G:1256:A:H62	1:1G:1277:C:H3'	1.72	0.52
1:1G:1340:A:O2'	23:2L:33:OMC:H5"	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:12:196:LEU:HD12	2:12:197:VAL:HG23	1.91	0.52
6:52:33:TYR:OH	6:52:78:GLU:HG3	2.09	0.52
7:62:26:PHE:CD2	7:62:30:ILE:HD11	2.45	0.52
9:82:119:ALA:O	9:82:120:ARG:HB2	2.10	0.52
26:14:567:A:OP2	36:35:29:LYS:NZ	2.42	0.52
26:14:1454:U:OP1	38:55:77:ARG:NH1	2.42	0.52
26:14:2233:U:H2'	26:14:2234:G:C8	2.43	0.52
26:14:2720:U:N3	26:14:2873:A:H2	2.06	0.52
29:29:9:VAL:HG23	29:29:26:ILE:O	2.10	0.52
30:39:27:GLU:C	30:39:28:ILE:HG13	2.29	0.52
33:69:124:GLY:H	33:69:142:VAL:HG12	1.74	0.52
37:45:135:ASP:CG	46:D5:81:ARG:HH22	2.13	0.52
1:13:222:U:H2'	1:13:223:U:H6	1.74	0.52
1:13:316:G:OP2	1:13:351:G:O2'	2.27	0.52
1:13:1060:C:O2'	10:1I:56:HIS:ND1	2.34	0.52
1:13:1298:C:P	7:6E:114:ARG:HH22	2.32	0.52
2:1E:7:VAL:HG22	2:1E:8:LYS:H	1.75	0.52
5:4E:73:ASN:O	5:4E:73:ASN:ND2	2.40	0.52
15:6I:7:GLU:OE1	15:6I:38:ARG:NH2	2.42	0.52
16:7I:13:HIS:C	16:7I:15:PRO:HD3	2.30	0.52
26:1H:529:A:H8	26:1H:530:G:C6	2.26	0.52
26:1H:1126:A:H4'	26:1H:1127:A:O5'	2.09	0.52
26:1H:2287:A:C2	26:1H:2289:G:C8	2.97	0.52
26:1H:2335:A:C8	26:1H:2337:G:C5	2.98	0.52
30:31:29:ASN:N	30:31:112:MET:HE1	2.25	0.52
34:58:28:THR:N	34:58:106:MET:HE1	2.24	0.52
46:H8:126:VAL:HG12	46:H8:163:LEU:HD23	1.91	0.52
1:1G:500:G:H2'	1:1G:501:C:C6	2.44	0.52
1:1G:591:U:OP2	8:72:30:ARG:HD3	2.08	0.52
1:1G:862:C:H1'	1:1G:874:G:H5"	1.90	0.52
1:1G:998:G:H2'	1:1G:998(A):C:C6	2.44	0.52
4:32:134:ASP:O	4:32:136:PRO:HD3	2.09	0.52
6:52:23:LYS:NZ	6:52:42:GLU:OE2	2.30	0.52
6:52:100:ASN:ND2	18:9A:26:LEU:O	2.41	0.52
26:14:548:A:C5	26:14:549:G:H1'	2.44	0.52
26:14:2150:U:H2'	26:14:2151:G:C8	2.44	0.52
26:14:2641:G:O3'	34:15:76:SER:OG	2.26	0.52
26:14:2839:G:H21	38:55:92:GLY:HA2	1.73	0.52
28:19:17:THR:O	28:19:211:ARG:NH2	2.39	0.52
32:59:41:MET:N	32:59:41:MET:SD	2.82	0.52
32:59:75:ALA:O	32:59:79:VAL:HG13	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M5:9:GLY:O	55:M5:13:ARG:HD2	2.09	0.52
1:13:243:A:H4'	1:13:244:U:H5"	1.92	0.52
1:13:804:U:H5"	1:13:805:C:OP2	2.09	0.52
1:13:984:C:H42	1:13:1221:G:H1	1.56	0.52
2:1E:223:ILE:HG21	2:1E:230:VAL:HG22	1.90	0.52
7:6E:5:ARG:NH2	7:6E:7:ALA:HA	2.25	0.52
20:BI:53:LEU:HD23	20:BI:100:ILE:HG22	1.92	0.52
20:BI:53:LEU:O	20:BI:57:ARG:HB2	2.10	0.52
26:1H:198:C:H5'	26:1H:2244:U:OP1	2.10	0.52
26:1H:773:U:C4'	28:11:47:GLY:HA3	2.39	0.52
26:1H:1328:G:H2'	26:1H:1330:C:C5	2.45	0.52
26:1H:1336:A:OP2	44:F8:64:LYS:NZ	2.34	0.52
26:1H:2422:A:N7	55:Q8:30:ARG:NH2	2.55	0.52
26:1H:2427:C:H5"	26:1H:2428:G:OP1	2.10	0.52
53:O8:10:LEU:HD23	55:Q8:32:LEU:HD13	1.92	0.52
1:1G:1096:C:O2'	1:1G:1170:A:O2'	2.21	0.52
1:1G:1411:C:H2'	1:1G:1412:C:C6	2.44	0.52
2:12:145:LEU:O	2:12:149:LEU:HB2	2.10	0.52
4:32:112:VAL:HG12	4:32:116:GLN:OE1	2.10	0.52
21:1B:2:GLY:O	21:1B:4:GLY:N	2.43	0.52
26:14:99:U:H4'	26:14:101:G:H5'	1.90	0.52
26:14:1058:U:H2'	26:14:1059:G:C8	2.45	0.52
26:14:2757:A:N1	32:59:67:LEU:HD22	2.24	0.52
37:45:103:MET:HB2	37:45:104:PHE:HD1	1.75	0.52
39:65:110:LEU:HB3	39:65:112:PHE:HE1	1.74	0.52
41:85:92:ARG:C	41:85:94:ASN:H	2.13	0.52
1:13:800:G:O6	58:13:1943:HOH:O	2.18	0.52
1:13:1142:G:H2'	1:13:1143:G:O4'	2.09	0.52
11:2I:27:ASN:OD1	11:2I:28:THR:N	2.43	0.52
15:6I:74:ASP:OD1	15:6I:77:ARG:N	2.41	0.52
17:8I:81:ARG:NH2	17:8I:83:ASP:OD2	2.42	0.52
26:1H:654(B):C:H2'	26:1H:654(C):G:C8	2.44	0.52
26:1H:1111:A:H4'	32:51:3:ARG:HH11	1.74	0.52
26:1H:1931:U:H5	26:1H:1969:A:N7	2.07	0.52
26:1H:2179:C:H2'	26:1H:2180:U:H6	1.74	0.52
28:11:2:ALA:HA	28:11:20:ASP:HB2	1.91	0.52
37:88:85:LYS:HG3	37:88:86:GLY:N	2.24	0.52
45:G8:85:VAL:HG22	45:G8:98:VAL:HB	1.91	0.52
2:12:19:HIS:CG	2:12:20:GLU:H	2.28	0.52
3:22:73:PRO:O	3:22:76:VAL:HG13	2.09	0.52
6:52:49:ALA:HB2	18:9A:78:LEU:O	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:72:104:ARG:HB3	8:72:107:LEU:HB2	1.91	0.52
9:82:118:LYS:NZ	9:82:118:LYS:HB3	2.24	0.52
20:BA:67:ALA:O	20:BA:73:HIS:ND1	2.43	0.52
26:14:1035:U:H2'	26:14:1036:G:C8	2.44	0.52
26:14:1111:A:H4'	32:59:3:ARG:HH11	1.73	0.52
26:14:1309:G:N7	58:14:3924:HOH:O	2.34	0.52
26:14:1796:U:H2'	26:14:1797:C:C6	2.45	0.52
26:14:2468:G:H3'	26:14:2476:A:N1	2.24	0.52
26:14:2643:G:H2'	26:14:2644:G:O4'	2.09	0.52
26:14:2776:A:H4'	26:14:2777:G:O5'	2.10	0.52
30:39:5:ALA:HB1	30:39:125:LEU:HD21	1.92	0.52
30:39:18:ARG:HG2	30:39:19:GLU:N	2.23	0.52
34:15:33:LEU:HD12	34:15:38:HIS:CD2	2.45	0.52
37:45:31:ASP:H	37:45:107:ALA:HB2	1.73	0.52
41:85:66:ASN:OD1	41:85:76:TYR:N	2.42	0.52
55:M5:59:LYS:C	55:M5:60:LEU:HG	2.30	0.52
1:13:191(C):G:H2'	1:13:191(D):U:O4'	2.09	0.52
1:13:1441:G:H21	1:13:1460:A:H62	1.57	0.52
1:13:1502:A:H2	1:13:1505:G:N1	1.97	0.52
9:8E:10:ARG:NE	9:8E:105:ASP:OD2	2.38	0.52
20:BI:30:LYS:HZ3	20:BI:80:ARG:HH12	1.58	0.52
26:1H:66:C:H2'	26:1H:67:U:C6	2.45	0.52
26:1H:533:G:H5'	41:C8:24:TYR:CE1	2.45	0.52
26:1H:881:G:O6	26:1H:895:U:N3	2.42	0.52
26:1H:1443:G:C2	26:1H:1549:C:N3	2.77	0.52
26:1H:1512:G:H2'	26:1H:1513:C:C6	2.45	0.52
26:1H:2123:G:H22	26:1H:2175:C:N4	2.08	0.52
26:1H:2801:A:H2'	26:1H:2802:G:H4'	1.90	0.52
27:16:28:C:H2'	27:16:29:A:C8	2.45	0.52
1:1G:16:A:H2'	1:1G:17:U:H6	1.75	0.52
1:1G:872:A:O2'	1:1G:873:A:H5"	2.10	0.52
9:82:70:LYS:O	9:82:74:ILE:HG13	2.09	0.52
15:6A:78:TYR:CZ	15:6A:82:ILE:HD12	2.45	0.52
17:8A:67:LYS:O	17:8A:68:ARG:HB3	2.10	0.52
20:BA:63:ILE:HG21	20:BA:81:LYS:HG3	1.92	0.52
26:14:899:A:H2'	26:14:900:A:H8	1.73	0.52
26:14:944:G:O3'	58:14:3658:HOH:O	2.19	0.52
26:14:1131:G:O6	26:14:2040:C:H1'	2.10	0.52
26:14:1386:C:OP2	26:14:1396:U:H5	1.92	0.52
26:14:1810:A:H2'	26:14:1811:G:O4'	2.09	0.52
26:14:2683:C:OP1	40:75:53:ARG:NH2	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:59:30:LYS:HB3	32:59:79:VAL:HA	1.92	0.52
34:15:61:ARG:HA	34:15:61:ARG:NE	2.25	0.52
40:75:26:ASP:OD1	40:75:120:ARG:NH2	2.39	0.52
46:D5:69:THR:HG22	46:D5:90:VAL:HG22	1.91	0.52
1:13:1352:C:OP1	21:1F:3:LYS:NZ	2.29	0.52
6:5E:41:GLU:HB2	6:5E:62:TRP:CE3	2.45	0.52
8:7E:64:LYS:HG2	8:7E:79:VAL:HG21	1.91	0.52
13:4I:27:LYS:HA	13:4I:31:LYS:NZ	2.25	0.52
26:1H:455:C:N3	26:1H:473:G:H5'	2.25	0.52
26:1H:2109:U:N3	26:1H:2110:G:O6	2.41	0.52
26:1H:2785:C:H2'	26:1H:2786:U:O4'	2.09	0.52
26:1H:2846:G:N7	58:1H:4384:HOH:O	2.34	0.52
30:31:67:GLN:O	30:31:67:GLN:HG3	2.08	0.52
49:K8:24:LEU:HD13	49:K8:60:LEU:HD11	1.91	0.52
53:O8:25:LYS:HB2	55:Q8:32:LEU:HD12	1.91	0.52
1:1G:626:U:C2	1:1G:627:G:C8	2.98	0.52
1:1G:807:A:H2'	1:1G:808:C:C6	2.44	0.52
1:1G:866:C:O2'	1:1G:919:A:OP1	2.23	0.52
3:22:9:GLY:N	14:5A:49:HIS:O	2.43	0.52
3:22:47:LEU:HD13	3:22:50:ALA:HB3	1.91	0.52
24:1L:30:G:H1	24:1L:40:C:H42	1.57	0.52
26:14:666:G:H5"	36:35:47:ASP:O	2.10	0.52
26:14:1028:A:N3	26:14:2486:G:O2'	2.34	0.52
26:14:1209:G:H21	26:14:1210:A:H62	1.56	0.52
26:14:2130:U:H2'	26:14:2158:A:C6	2.45	0.52
26:14:2287:A:C2	26:14:2289:G:C8	2.98	0.52
29:29:11:MET:HE3	29:29:187:ALA:H	1.74	0.52
37:45:26:TYR:O	37:45:26:TYR:CD1	2.63	0.52
50:H5:43:ILE:O	50:H5:47:VAL:HG23	2.10	0.52
1:13:520:A:N1	1:13:536:C:H1'	2.25	0.52
1:13:953:G:H2'	1:13:954:G:O4'	2.10	0.52
1:13:1321:C:H3'	1:13:1322:C:H5"	1.92	0.52
2:1E:210:SER:O	2:1E:214:ILE:HG12	2.09	0.52
26:1H:270(L):U:O2	33:61:50:ARG:HG2	2.09	0.52
26:1H:274:G:H2'	26:1H:275:G:H4'	1.92	0.52
26:1H:547:A:C6	26:1H:548:A:C6	2.97	0.52
26:1H:1164:G:H2'	26:1H:1165:U:C6	2.45	0.52
26:1H:1262:A:N3	52:N8:10:LYS:HE3	2.25	0.52
26:1H:1486:A:H2'	26:1H:1487:G:C8	2.45	0.52
26:1H:2232:U:OP1	48:J8:40:ARG:NH1	2.42	0.52
26:1H:2690:C:H5"	26:1H:2872:G:N2	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:166:ASP:N	31:41:166:ASP:OD1	2.42	0.52
31:41:173:LEU:HB3	31:41:178:PHE:CD2	2.43	0.52
32:51:92:ILE:HD11	32:51:160:LYS:HZ2	1.75	0.52
36:78:130:PHE:HE1	36:78:146:VAL:HG23	1.75	0.52
41:C8:50:ARG:NH1	42:D8:72:VAL:HG12	2.25	0.52
48:J8:91:LYS:HZ3	48:J8:91:LYS:HA	1.74	0.52
1:1G:538:G:OP2	12:3A:115:LYS:HB2	2.10	0.52
1:1G:1328:C:O2'	13:4A:29:ARG:NE	2.41	0.52
1:1G:1435:G:H2'	1:1G:1436:U:H6	1.74	0.52
8:72:16:ALA:HA	8:72:19:VAL:HG22	1.91	0.52
26:14:71:A:H5'	26:14:71:A:H8	1.70	0.52
26:14:118:A:N3	26:14:178:G:H1'	2.25	0.52
26:14:1057:A:H2'	26:14:1058:U:O4'	2.09	0.52
26:14:1451:C:H3'	26:14:1453:A:H5'	1.90	0.52
26:14:1533:C:N3	26:14:1534:G:O2'	2.39	0.52
26:14:2068:U:N3	26:14:2430:A:H2	2.03	0.52
30:39:117:ARG:NH1	30:39:120:GLU:OE1	2.43	0.52
32:59:77:LYS:HD2	32:59:80:SER:HB2	1.90	0.52
40:75:61:PHE:CE1	40:75:76:PHE:HB2	2.44	0.52
48:F5:29:GLY:O	48:F5:30:VAL:HG22	2.10	0.52
1:13:232:G:H2'	1:13:233:C:H6	1.76	0.52
1:13:558:G:H2'	1:13:559:A:H2	1.74	0.52
4:3E:108:LEU:HB3	4:3E:110:PHE:CE1	2.45	0.52
26:1H:1190:G:C5	58:1H:3819:HOH:O	2.63	0.52
26:1H:2056:G:C2	26:1H:2057:A:C8	2.98	0.52
27:16:7:G:H5"	27:16:7:G:H8	1.75	0.52
29:21:135:HIS:CE1	58:21:402:HOH:O	2.58	0.52
31:41:7:LEU:HD11	31:41:176:LEU:HD22	1.91	0.52
31:41:67:LYS:HZ3	51:M8:6:HIS:CE1	2.28	0.52
39:A8:29:PHE:HD1	39:A8:30:ARG:N	2.08	0.52
43:E8:78:GLU:OE1	43:E8:99:ARG:HD3	2.10	0.52
49:K8:14:ARG:NH1	49:K8:66:GLU:OE2	2.43	0.52
49:K8:33:MET:O	49:K8:37:PHE:HD1	1.93	0.52
55:Q8:54:GLU:O	55:Q8:56:GLU:N	2.42	0.52
1:1G:164:U:H2'	1:1G:165:C:C6	2.44	0.52
1:1G:278:G:OP2	17:8A:41:LYS:NZ	2.34	0.52
1:1G:1046:A:H61	1:1G:1213:A:H61	1.58	0.52
1:1G:1259:C:O2	1:1G:1283:G:O2'	2.27	0.52
2:12:162:ILE:HD11	2:12:184:VAL:HG13	1.91	0.52
12:3A:86:ARG:HB2	12:3A:101:VAL:HG23	1.91	0.52
13:4A:37:THR:O	13:4A:55:ARG:NE	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:3L:36:A:N7	25:4L:14:A:N6	2.58	0.52
26:14:322:A:OP2	30:39:169:ASN:HB2	2.10	0.52
26:14:1142(A):A:H4'	34:15:25:ARG:HH22	1.75	0.52
26:14:1847:A:O2'	26:14:1848:A:H5'	2.10	0.52
26:14:1903:G:OP1	28:19:241:PRO:HB2	2.09	0.52
28:19:16:MET:HE1	28:19:208:LYS:HG2	1.91	0.52
38:55:12:ARG:HD3	38:55:16:HIS:CD2	2.45	0.52
1:13:148:G:H2'	1:13:149:A:H8	1.75	0.51
1:13:323:U:H2'	1:13:324:G:O4'	2.10	0.51
1:13:767:A:H2'	1:13:768:A:O4'	2.09	0.51
1:13:1348:U:H4'	9:8E:120:ARG:HD2	1.91	0.51
7:6E:69:VAL:HG22	7:6E:135:VAL:HG22	1.92	0.51
13:4I:52:GLU:O	13:4I:56:LEU:HB2	2.09	0.51
16:7I:58:TYR:O	16:7I:62:VAL:HG22	2.09	0.51
24:3K:13:C:H2'	24:3K:14:A:C8	2.33	0.51
24:3K:37:A:H2'	24:3K:38:A:O4'	2.11	0.51
26:1H:747:U:O2	26:1H:2014:A:H1'	2.10	0.51
29:21:39:PRO:HD3	29:21:45:THR:HG22	1.92	0.51
35:68:120:GLU:HG2	35:68:122:LEU:HG	1.92	0.51
41:C8:52:ARG:HA	41:C8:55:ARG:HG3	1.93	0.51
45:G8:28:LYS:HD2	45:G8:40:GLU:OE2	2.09	0.51
1:1G:20:U:H2'	1:1G:21:G:O4'	2.10	0.51
1:1G:975:A:H4'	1:1G:976:G:C5'	2.41	0.51
5:42:5:ASP:HA	5:42:63:ARG:NH1	2.25	0.51
6:52:97:PHE:O	18:9A:31:LEU:HD23	2.10	0.51
9:82:48:GLU:OE1	9:82:51:ARG:NH1	2.43	0.51
26:14:1322:A:N1	26:14:1333:C:O2'	2.35	0.51
26:14:1599:C:H2'	26:14:1600:C:H6	1.75	0.51
26:14:2557:G:H2'	26:14:2558:C:H6	1.73	0.51
26:14:2808:U:H5"	26:14:2891:G:O6	2.10	0.51
29:29:120:TRP:CE3	29:29:155:LYS:HD3	2.45	0.51
38:55:45:ARG:HA	38:55:95:THR:HG21	1.93	0.51
39:65:62:LYS:HA	39:65:65:VAL:HG12	1.92	0.51
51:I5:48:ARG:NH1	51:I5:51:ASP:HB3	2.25	0.51
1:13:1131:G:H2'	1:13:1132:C:C6	2.44	0.51
23:2K:34:U:N3	23:2K:37:U:OP2	2.40	0.51
26:1H:2157:G:O2'	26:1H:2158:A:O5'	2.25	0.51
27:16:5:C:O2'	27:16:27:C:O2	2.27	0.51
27:16:44:G:C2	27:16:48:A:C2	2.97	0.51
32:51:83:TYR:CB	32:51:134:SER:HA	2.39	0.51
41:C8:17:ILE:HD12	41:C8:32:PHE:HE1	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:590:C:H2'	1:1G:591:U:C6	2.45	0.51
1:1G:1028:C:H2'	1:1G:1028(A):C:O4'	2.10	0.51
1:1G:1181:G:N7	1:1G:1182:G:N2	2.54	0.51
1:1G:1256:A:N6	1:1G:1277:C:H3'	2.25	0.51
1:1G:1387:G:H2'	1:1G:1388:C:C6	2.45	0.51
2:12:174:VAL:HG11	2:12:196:LEU:HD13	1.90	0.51
13:4A:102:ARG:HH11	13:4A:105:THR:HG23	1.75	0.51
24:1L:38:A:H2'	24:1L:39:U:C6	2.45	0.51
26:14:172:C:H2'	26:14:173:G:C8	2.44	0.51
26:14:273(D):C:H42	26:14:363(B):G:H1	1.56	0.51
26:14:1259:G:H2'	26:14:1260:G:C8	2.45	0.51
26:14:1416:G:H1	26:14:1582:C:N4	1.98	0.51
26:14:2037:G:H2'	26:14:2038:G:C8	2.45	0.51
26:14:2850:A:C2	26:14:2851:A:C4	2.98	0.51
33:69:7:GLU:HG3	33:69:8:PRO:HD2	1.92	0.51
37:45:91:GLU:HG3	37:45:92:GLY:N	2.25	0.51
40:75:4:GLY:N	40:75:7:ILE:HG22	2.25	0.51
50:H5:10:LYS:NZ	50:H5:15:TYR:OH	2.43	0.51
3:2E:18:TRP:HE3	3:2E:18:TRP:H	1.58	0.51
20:BI:57:ARG:NH1	20:BI:102:GLY:HA2	2.23	0.51
26:1H:6:A:N3	34:58:131:GLN:HG3	2.24	0.51
26:1H:141(A):C:H2'	26:1H:142:G:O4'	2.09	0.51
26:1H:412:A:H5"	26:1H:413:C:OP2	2.11	0.51
26:1H:579:G:H2'	26:1H:580:C:C6	2.46	0.51
26:1H:602:G:O2'	26:1H:655:A:N6	2.43	0.51
26:1H:1103:A:H3'	26:1H:1104:C:C6	2.45	0.51
26:1H:1800:C:OP2	28:11:183:ARG:NH2	2.43	0.51
26:1H:1827:C:H3'	58:1H:3705:HOH:O	2.10	0.51
26:1H:2564:A:C2	26:1H:2647:U:H4'	2.45	0.51
33:61:68:LEU:HA	33:61:71:ILE:CG2	2.40	0.51
39:A8:103:GLU:O	39:A8:106:ARG:HD3	2.11	0.51
40:B8:3:ARG:O	40:B8:7:ILE:N	2.43	0.51
1:1G:56:U:H2'	1:1G:57:G:C8	2.45	0.51
1:1G:313:A:H2'	1:1G:314:C:H6	1.75	0.51
1:1G:458:C:H2'	1:1G:464:G:C8	2.45	0.51
1:1G:921:U:O2	5:42:19:MET:HB3	2.11	0.51
1:1G:1074:G:O2'	1:1G:1101:A:N1	2.34	0.51
2:12:19:HIS:CE1	2:12:206:ASP:H	2.29	0.51
7:62:47:CYS:O	7:62:50:ILE:HB	2.09	0.51
18:9A:53:ARG:HA	18:9A:56:THR:OG1	2.10	0.51
26:14:1686:C:H2'	26:14:1687:G:O4'	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2019:A:H4'	41:85:34:LYS:HD2	1.92	0.51
26:14:2122:U:H2'	26:14:2123:G:O4'	2.09	0.51
26:14:2468:G:H3'	26:14:2476:A:C2	2.45	0.51
26:14:2749:A:H5"	32:59:6:ARG:NH2	2.26	0.51
27:1J:117:G:O5'	27:1J:117:G:H8	1.93	0.51
30:39:158:THR:HB	30:39:195:ASP:HB2	1.92	0.51
37:45:37:LEU:HB2	37:45:128:LYS:O	2.10	0.51
39:65:26:LEU:HD22	39:65:87:PHE:CE1	2.45	0.51
39:65:66:ALA:HA	39:65:69:VAL:HG12	1.93	0.51
55:M5:22:VAL:HG12	55:M5:50:LEU:HD23	1.91	0.51
1:13:4:U:C4	8:7E:102:ARG:HG3	2.45	0.51
1:13:701:C:O2	1:13:703:G:N1	2.44	0.51
1:13:1117:G:OP1	9:8E:9:ARG:NH2	2.39	0.51
1:13:1313:U:O4	19:AI:4:SER:HB2	2.10	0.51
1:13:1318:A:H1'	19:AI:37:ARG:HH21	1.75	0.51
1:13:1442:G:C6	1:13:1446:A:C6	2.99	0.51
1:13:1478:C:H2'	1:13:1479:C:C6	2.45	0.51
2:1E:7:VAL:HB	2:1E:217:ARG:HD2	1.91	0.51
6:5E:98:LEU:HA	18:9I:29:PHE:O	2.10	0.51
9:8E:24:GLY:HA2	9:8E:59:PHE:O	2.10	0.51
11:2I:34:ASP:HB3	11:2I:40:ILE:HD11	1.91	0.51
26:1H:7:G:N2	26:1H:8:A:H1'	2.26	0.51
26:1H:443:A:N7	30:31:45:ARG:HG2	2.26	0.51
26:1H:880:G:H2'	26:1H:881:G:C8	2.46	0.51
26:1H:1026:U:H1'	26:1H:1027:A:P	2.51	0.51
26:1H:1312:U:H4'	26:1H:1313:U:O5'	2.10	0.51
26:1H:1444:G:C2	26:1H:1548:C:N3	2.79	0.51
26:1H:2690:C:H5"	26:1H:2872:G:H21	1.74	0.51
44:F8:27:THR:HB	44:F8:80:ILE:HG22	1.91	0.51
1:1G:78:G:N2	1:1G:91:C:O2	2.42	0.51
1:1G:179:A:H2'	1:1G:180:U:H6	1.74	0.51
1:1G:243:A:H4'	1:1G:244:U:O5'	2.09	0.51
4:32:30:LYS:CB	4:32:35:ARG:HD2	2.39	0.51
5:42:24:ARG:HB2	5:42:26:PHE:CE2	2.45	0.51
5:42:145:LYS:HA	5:42:148:VAL:HB	1.93	0.51
7:62:50:ILE:HG21	7:62:58:PRO:HA	1.91	0.51
17:8A:45:HIS:O	17:8A:73:VAL:HG12	2.10	0.51
26:14:1014:U:N3	26:14:1015:G:N7	2.58	0.51
26:14:1027:A:H5'	27:1J:88:C:H41	1.75	0.51
29:29:25:VAL:HG12	29:29:26:ILE:H	1.74	0.51
34:15:4:TYR:CD2	41:85:100:VAL:HG11	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:B5:25:LYS:HA	44:B5:81:VAL:O	2.10	0.51
1:13:1278:U:H5"	1:13:1279:A:O4'	2.11	0.51
1:13:1374:A:O2'	7:6E:28:ASN:HB3	2.11	0.51
20:BI:53:LEU:HA	20:BI:56:MET:HB3	1.93	0.51
24:3K:15:G:H1	24:3K:48:C:N4	2.04	0.51
26:1H:779:U:O4	58:1H:4240:HOH:O	2.19	0.51
26:1H:882:G:H22	26:1H:894:C:H42	1.58	0.51
26:1H:1027:A:C2	26:1H:2488:A:H5'	2.45	0.51
26:1H:1248:G:N2	30:31:88:VAL:HG21	2.26	0.51
26:1H:1826:G:H4'	28:11:242:ARG:CZ	2.41	0.51
26:1H:2001:A:H2'	26:1H:2002:G:C8	2.46	0.51
26:1H:2250:G:C8	26:1H:2496:C:H5"	2.45	0.51
26:1H:2636:U:OP1	29:21:80:GLU:HG3	2.09	0.51
31:41:35:GLU:HG3	31:41:36:LYS:HB3	1.93	0.51
33:61:40:THR:H	33:61:43:ASN:HB2	1.75	0.51
36:78:15:ARG:HA	36:78:16:ARG:HB2	1.93	0.51
50:L8:12:PRO:O	50:L8:20:LYS:NZ	2.43	0.51
1:1G:107:G:C2	1:1G:108:G:H1'	2.45	0.51
1:1G:162:A:O5'	1:1G:162:A:H8	1.93	0.51
1:1G:502:G:C2	1:1G:503:C:C2	2.98	0.51
1:1G:993:G:O2'	1:1G:994:A:N7	2.40	0.51
1:1G:1148:U:H2'	1:1G:1149:C:O4'	2.11	0.51
1:1G:1315:U:H2'	1:1G:1316:G:O4'	2.11	0.51
4:32:53:ASP:OD2	5:42:107:ARG:NH2	2.43	0.51
23:2L:44:A:H2'	23:2L:45:A:C8	2.45	0.51
26:14:1936:A:C8	26:14:1940:U:O2	2.63	0.51
27:1J:94:C:H2'	27:1J:95:U:H6	1.76	0.51
27:1J:99:A:H3'	58:1J:313:HOH:O	2.09	0.51
31:49:95:ARG:HG2	31:49:96:ARG:HG3	1.91	0.51
39:65:78:LEU:HD11	39:65:107:GLU:HB3	1.93	0.51
1:13:130:A:OP2	17:8I:63:ARG:NH2	2.42	0.51
1:13:660:G:H2'	1:13:661:G:H8	1.74	0.51
5:4E:77:PRO:HG2	5:4E:142:LEU:HD22	1.93	0.51
5:4E:122:GLU:HG2	5:4E:131:ILE:HD12	1.92	0.51
11:2I:123:LYS:O	11:2I:126:ARG:HG3	2.11	0.51
17:8I:11:VAL:HG12	17:8I:85:VAL:HG22	1.93	0.51
22:1K:22:G:H2'	22:1K:23:A:C8	2.45	0.51
22:1K:76:A:H8	26:1H:2583:G:H21	1.59	0.51
23:2K:65:G:H2'	23:2K:66:C:O4'	2.11	0.51
26:1H:303:U:H2'	26:1H:304:G:H8	1.76	0.51
26:1H:950:G:H2'	26:1H:951:C:C6	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1048:G:O4'	1:1G:1215:G:H4'	2.10	0.51
1:1G:1130:A:H62	1:1G:1144:G:H21	1.59	0.51
5:42:105:VAL:HG21	5:42:128:PRO:HB3	1.92	0.51
10:1A:8:LEU:HB3	10:1A:16:LEU:HD22	1.92	0.51
12:3A:36:VAL:O	12:3A:59:ARG:N	2.44	0.51
26:14:993:G:C5	26:14:994:C:C5	2.99	0.51
26:14:1993:U:H4'	29:29:128:SER:HB3	1.91	0.51
29:29:169:ASN:OD1	29:29:203:LYS:HB3	2.10	0.51
34:15:128:HIS:CE1	34:15:130:HIS:HB3	2.46	0.51
36:35:15:ARG:NH2	36:35:17:LYS:HE3	2.24	0.51
37:45:74:TYR:O	37:45:89:ASN:HB2	2.11	0.51
1:13:60:A:N6	1:13:110:C:N3	2.57	0.51
1:13:240:C:H2'	1:13:241:C:C6	2.46	0.51
1:13:407:G:O4'	4:3E:119:GLN:NE2	2.43	0.51
1:13:717:C:H5"	1:13:717:C:H6	1.76	0.51
1:13:964:A:N3	1:13:969:A:O2'	2.32	0.51
1:13:1410:G:H2'	1:13:1411:C:H6	1.76	0.51
2:1E:94:ASN:OD1	2:1E:95:GLN:N	2.40	0.51
18:9I:25:THR:HB	18:9I:42:ARG:HH12	1.75	0.51
26:1H:723:G:H2'	26:1H:724:U:O4'	2.10	0.51
26:1H:1243:G:H4'	36:78:7:ARG:HH21	1.76	0.51
26:1H:1520:U:H2'	26:1H:1521:G:O4'	2.11	0.51
38:98:3:HIS:O	38:98:5:LYS:N	2.44	0.51
38:98:63:ARG:HB2	38:98:80:PHE:HE2	1.75	0.51
42:D8:45:THR:O	42:D8:45:THR:OG1	2.24	0.51
43:E8:57:ASN:HA	43:E8:61:ASN:HD22	1.74	0.51
45:G8:5:MET:HE1	45:G8:32:PRO:HA	1.92	0.51
1:1G:1257:U:H5'	1:1G:1258:G:C8	2.46	0.51
1:1G:1502:A:H2	1:1G:1505:G:N1	2.00	0.51
5:42:33:VAL:HG21	5:42:109:ILE:HG12	1.93	0.51
6:52:12:PRO:HB3	6:52:58:GLY:HA2	1.93	0.51
9:82:89:ASN:O	9:82:92:TYR:HB2	2.10	0.51
26:14:1053:C:H2'	26:14:1054:A:O4'	2.11	0.51
26:14:1110:G:O2'	32:59:3:ARG:NH1	2.44	0.51
26:14:1849:G:H2'	26:14:1850:G:H8	1.74	0.51
29:29:51:PHE:O	29:29:52:LEU:HB2	2.09	0.51
29:29:57:LYS:NZ	29:29:57:LYS:H	2.09	0.51
33:69:75:LEU:HD13	33:69:76:THR:N	2.25	0.51
41:85:85:LYS:HB3	41:85:116:ALA:HB1	1.93	0.51
44:B5:36:LYS:HG2	44:B5:54:VAL:HB	1.93	0.51
54:L5:12:ARG:HH21	54:L5:44:PRO:HB3	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:547:A:OP2	4:3E:2:GLY:HA2	2.11	0.51
1:13:1417:G:N2	1:13:1482:G:H2'	2.25	0.51
16:7I:79:VAL:HG12	16:7I:80:PHE:CD1	2.45	0.51
26:1H:934:G:H2'	26:1H:935:C:H6	1.76	0.51
26:1H:1204:A:H2	26:1H:1241:A:N1	2.08	0.51
46:H8:52:SER:O	46:H8:52:SER:OG	2.21	0.51
49:K8:42:GLY:C	49:K8:44:LEU:H	2.14	0.51
55:Q8:49:VAL:CG1	55:Q8:52:LYS:HG3	2.39	0.51
1:1G:617:G:H1	1:1G:623:C:N4	2.04	0.51
1:1G:1227:A:N3	19:AA:84:GLY:HA2	2.25	0.51
2:12:5:ILE:HA	2:12:221:LEU:HD21	1.92	0.51
2:12:178:ARG:HH11	2:12:178:ARG:HB2	1.75	0.51
20:BA:51:GLU:HA	20:BA:54:LYS:HB3	1.93	0.51
26:14:481:G:OP2	45:C5:47:LYS:HB2	2.10	0.51
26:14:747:U:OP2	52:J5:3:LYS:HD3	2.11	0.51
26:14:802:A:H4'	58:14:3855:HOH:O	2.10	0.51
26:14:1856:G:N2	26:14:1886:C:N3	2.48	0.51
26:14:2105:C:H2'	26:14:2106:G:O4'	2.10	0.51
26:14:2310:A:H5'	26:14:2311:A:OP2	2.11	0.51
29:29:37:ARG:HD3	29:29:44:TYR:CE1	2.46	0.51
34:15:42:TRP:O	41:85:64:ARG:HD2	2.10	0.51
45:C5:14:LEU:HD12	45:C5:15:VAL:N	2.25	0.51
46:D5:126:VAL:HA	46:D5:163:LEU:HA	1.93	0.51
1:13:1410:G:H2'	1:13:1411:C:C6	2.45	0.51
26:1H:754:C:H2'	26:1H:755:C:C6	2.46	0.51
26:1H:821:A:H5"	26:1H:822:U:H6	1.76	0.51
29:21:147:PRO:HB2	29:21:149:ARG:HG3	1.93	0.51
33:61:62:LYS:HG3	33:61:133:HIS:NE2	2.26	0.51
33:61:127:VAL:HA	33:61:138:ILE:O	2.11	0.51
37:88:65:PHE:O	37:88:66:ILE:HB	2.11	0.51
37:88:135:ASP:HB3	37:88:137:TYR:N	2.26	0.51
45:G8:93:GLY:O	45:G8:94:LYS:HB2	2.11	0.51
55:Q8:49:VAL:HG22	55:Q8:50:LEU:N	2.21	0.51
1:1G:15:G:N7	1:1G:1396:A:C2	2.79	0.51
1:1G:35:G:C2	1:1G:550:G:N3	2.79	0.51
1:1G:858:G:OP2	1:1G:858:G:H8	1.94	0.51
1:1G:1062:U:H2'	1:1G:1063:C:C6	2.45	0.51
1:1G:1096:C:HO2'	1:1G:1170:A:HO2'	1.48	0.51
1:1G:1411:C:H2'	1:1G:1412:C:H6	1.76	0.51
12:3A:53:ARG:HH12	12:3A:92:ASP:HB3	1.75	0.51
23:2L:24:C:C2	23:2L:25:U:C5	2.99	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:380:U:H5'	48:F5:18:ILE:HD12	1.93	0.51
26:14:907:U:O5'	37:45:24:GLY:HA2	2.11	0.51
26:14:1336:A:H2'	26:14:1337:G:C8	2.46	0.51
26:14:1448:G:H1'	26:14:1528:A:H62	1.76	0.51
26:14:1842:G:O2'	28:19:253:GLN:OE1	2.28	0.51
28:19:43:ARG:HD2	28:19:49:ILE:HB	1.91	0.51
30:39:148:LEU:HD21	30:39:191:ARG:HH11	1.75	0.51
33:69:77:LEU:HD12	33:69:78:THR:H	1.76	0.51
37:45:112:GLU:HA	37:45:115:MET:HB2	1.93	0.51
43:A5:14:PRO:HG2	43:A5:78:GLU:HG3	1.92	0.51
1:13:105:G:H2'	1:13:106:C:C6	2.46	0.51
1:13:1178:G:N2	1:13:1181:G:H8	2.09	0.51
2:1E:172:ILE:O	2:1E:176:GLU:HG3	2.11	0.51
11:2I:20:TYR:HB2	11:2I:31:THR:HG23	1.91	0.51
11:2I:57:THR:HG22	11:2I:59:TYR:H	1.75	0.51
21:1F:9:ARG:O	21:1F:13:ILE:HG13	2.11	0.51
23:2K:22:A:H5"	23:2K:22:A:H8	1.76	0.51
26:1H:583:G:N7	58:1H:3992:HOH:O	2.35	0.51
26:1H:780:G:H21	26:1H:783:A:N6	2.01	0.51
26:1H:1187:G:H5"	42:D8:81:TYR:CE1	2.46	0.51
26:1H:1427:A:H4'	26:1H:1428:C:O5'	2.10	0.51
26:1H:2160:G:C2	26:1H:2161:C:H1'	2.46	0.51
26:1H:2199:A:H5"	26:1H:2205:C:C5	2.41	0.51
26:1H:2394:C:H2'	26:1H:2395:C:H6	1.76	0.51
29:21:4:ILE:HD13	29:21:28:ALA:HB1	1.92	0.51
32:51:86:GLU:HG3	32:51:165:ALA:HB3	1.92	0.51
36:78:1:MET:HE2	36:78:6:LEU:HD13	1.92	0.51
39:A8:78:LEU:HD12	39:A8:108:GLY:HA2	1.91	0.51
47:I8:51:VAL:N	47:I8:62:LEU:HD12	2.25	0.51
1:1G:179:A:H2'	1:1G:180:U:C6	2.45	0.51
1:1G:452:A:H62	1:1G:480:U:H3	1.59	0.51
1:1G:668:G:O4'	15:6A:49:ASP:HB2	2.11	0.51
1:1G:838:G:N2	1:1G:849:C:N3	2.58	0.51
1:1G:1060:C:HO2'	10:1A:56:HIS:HD1	1.57	0.51
1:1G:1119:C:OP2	9:82:9:ARG:NH2	2.41	0.51
1:1G:1392:G:H21	1:1G:1502:A:H8	1.57	0.51
19:AA:29:ARG:NH1	19:AA:48:THR:HG23	2.26	0.51
20:BA:26:ASN:HA	20:BA:29:LYS:HG2	1.92	0.51
26:14:64:A:C4	44:B5:66:LEU:HD12	2.45	0.51
26:14:648:G:O2'	26:14:2351:G:OP1	2.20	0.51
26:14:1021:A:H8	26:14:1021:A:H3'	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1654:A:H1'	26:14:2823:A:H5'	1.93	0.51
26:14:2104:G:H2'	26:14:2105:C:C6	2.46	0.51
26:14:2257:U:O2'	26:14:2258:C:H5'	2.11	0.51
26:14:2295:C:P	39:65:10:ARG:HD3	2.50	0.51
26:14:2431:U:O2'	26:14:2433:A:N7	2.38	0.51
27:1J:40:U:N3	27:1J:43:C:H5"	2.26	0.51
29:29:103:ASP:OD1	29:29:201:THR:HG23	2.11	0.51
31:49:106:LEU:HA	31:49:110:ALA:HB3	1.91	0.51
31:49:107:LEU:HD21	31:49:178:PHE:CE2	2.46	0.51
38:55:56:LYS:NZ	38:55:90:ARG:O	2.42	0.51
45:C5:48:ALA:HB3	45:C5:59:GLY:C	2.31	0.51
45:C5:62:GLU:CD	45:C5:63:LYS:H	2.15	0.51
47:E5:18:ALA:HB3	47:E5:20:ARG:HE	1.76	0.51
51:I5:49:PHE:HD2	51:I5:50:VAL:HG22	1.75	0.51
1:13:827:U:C5	1:13:872:A:N1	2.74	0.50
1:13:1199:U:H4'	10:1I:54:PHE:CE2	2.47	0.50
1:13:1349:A:OP2	9:8E:118:LYS:NZ	2.36	0.50
3:2E:149:ALA:HA	3:2E:201:TYR:O	2.11	0.50
4:3E:150:GLU:OE1	4:3E:150:GLU:N	2.45	0.50
8:7E:16:ALA:HB1	8:7E:24:THR:HG21	1.93	0.50
11:2I:17:GLY:HA3	11:2I:77:MET:SD	2.51	0.50
26:1H:44:A:O2'	26:1H:45:G:H5'	2.11	0.50
26:1H:453:C:OP1	58:1H:3841:HOH:O	2.19	0.50
26:1H:536:A:H2'	26:1H:537:C:C6	2.46	0.50
26:1H:1242:A:N1	36:78:4:SER:OG	2.43	0.50
26:1H:1290:C:H2'	26:1H:1291:C:C6	2.46	0.50
26:1H:1443:G:N2	26:1H:1549:C:N3	2.58	0.50
26:1H:2408:U:H2'	26:1H:2409:G:C8	2.47	0.50
26:1H:2531:A:H5'	32:51:157:TYR:CE1	2.45	0.50
26:1H:2695:C:H2'	26:1H:2696:U:C6	2.43	0.50
26:1H:2702:U:OP1	26:1H:2702:U:C6	2.64	0.50
26:1H:2734:A:H3'	26:1H:2735:G:H8	1.75	0.50
30:31:101:LEU:HD13	30:31:102:PRO:HD2	1.93	0.50
36:78:6:LEU:O	36:78:7:ARG:HG2	2.12	0.50
4:32:108:LEU:HD21	4:32:183:GLY:HA3	1.94	0.50
4:32:202:LEU:O	4:32:206:PHE:N	2.45	0.50
24:3L:76:A:O2'	26:14:2394:C:N3	2.39	0.50
26:14:77:C:OP1	49:G5:59:ARG:HD3	2.11	0.50
26:14:400:G:O6	58:14:3683:HOH:O	2.20	0.50
26:14:2697:G:H2'	26:14:2698:U:O4'	2.10	0.50
28:19:166:GLN:HB3	28:19:174:ILE:HG22	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:57:LYS:H	29:29:57:LYS:HZ2	1.58	0.50
29:29:81:ILE:HG22	29:29:82:ARG:N	2.22	0.50
30:39:113:ALA:HB1	30:39:186:ILE:HG21	1.93	0.50
39:65:64:GLU:O	39:65:68:GLN:HG3	2.11	0.50
45:C5:43:ASN:HB3	45:C5:64:GLU:HA	1.93	0.50
55:M5:14:VAL:CG1	55:M5:22:VAL:HG13	2.42	0.50
1:13:153:C:H42	1:13:168:G:H22	1.58	0.50
1:13:674:G:H2'	1:13:675:A:C8	2.45	0.50
3:2E:52:LEU:HA	3:2E:70:VAL:HG12	1.93	0.50
4:3E:43:HIS:O	4:3E:46:LYS:HG2	2.12	0.50
24:3K:18:G:HO2'	24:3K:19:G:P	2.34	0.50
26:1H:1102:C:H2'	26:1H:1103:A:C8	2.46	0.50
26:1H:1668:A:H61	26:1H:1676:A:H61	1.58	0.50
26:1H:2199:A:H3'	26:1H:2205:C:H6	1.76	0.50
29:21:15:PHE:HB3	40:B8:81:PRO:HG3	1.92	0.50
31:41:110:ALA:HA	31:41:140:ILE:O	2.11	0.50
39:A8:66:ALA:HA	39:A8:69:VAL:HG12	1.93	0.50
1:1G:79:G:H2'	1:1G:79:G:N3	2.26	0.50
1:1G:222:U:H2'	1:1G:223:U:H6	1.74	0.50
1:1G:976:G:H5'	1:1G:1358:U:O2'	2.11	0.50
1:1G:1469:G:H2'	1:1G:1470:G:H8	1.76	0.50
2:12:166:ASP:OD1	2:12:168:THR:OG1	2.28	0.50
10:1A:99:LYS:CD	10:1A:100:THR:H	2.23	0.50
18:9A:74:ARG:HB3	18:9A:81:PHE:CE1	2.46	0.50
20:BA:86:ARG:CZ	20:BA:86:ARG:HB2	2.41	0.50
24:3L:17:C:N4	26:14:2112:G:OP1	2.44	0.50
26:14:864:G:C6	26:14:865:C:N4	2.79	0.50
26:14:1277:G:O2'	38:55:24:GLN:HG2	2.11	0.50
27:1J:13:A:H5"	27:1J:15:A:N6	2.25	0.50
28:19:43:ARG:HA	28:19:49:ILE:HA	1.93	0.50
31:49:53:LEU:HD21	31:49:87:PRO:HB2	1.94	0.50
2:1E:111:ARG:HG2	2:1E:111:ARG:NH1	2.27	0.50
4:3E:175:SER:O	4:3E:183:GLY:HA2	2.12	0.50
7:6E:15:ASP:OD1	7:6E:16:LEU:N	2.44	0.50
9:8E:4:TYR:CZ	9:8E:88:TYR:HB2	2.46	0.50
18:9I:52:PRO:O	18:9I:56:THR:HG23	2.10	0.50
24:3K:13:C:O2'	24:3K:14:A:H5'	2.10	0.50
25:4K:13:A:O2'	25:4K:14:A:OP1	2.30	0.50
26:1H:6:A:O2'	34:58:129:PRO:HB3	2.12	0.50
26:1H:2347:C:P	53:O8:39:TYR:OH	2.70	0.50
26:1H:2698:U:H2'	26:1H:2699:C:C6	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:118:ARG:O	31:41:181:ARG:HG3	2.12	0.50
32:51:12:PRO:HG2	32:51:13:LYS:HE2	1.93	0.50
55:Q8:46:ARG:NH2	55:Q8:48:PHE:HA	2.25	0.50
1:1G:298:A:H5"	1:1G:299:G:OP2	2.11	0.50
1:1G:967:C:H3'	1:1G:968:A:H2'	1.94	0.50
2:12:12:GLU:HB2	2:12:16:HIS:CG	2.46	0.50
2:12:163:PHE:CD1	2:12:185:ILE:HG13	2.44	0.50
5:42:101:ILE:O	5:42:120:THR:OG1	2.19	0.50
8:72:120:THR:OG1	8:72:121:ASP:N	2.44	0.50
13:4A:70:LEU:O	13:4A:74:VAL:HG23	2.11	0.50
20:BA:50:GLU:HA	20:BA:100:ILE:HG21	1.93	0.50
26:14:30:G:H2'	26:14:31:C:C6	2.46	0.50
26:14:1708:C:O2'	26:14:1709:U:H5'	2.11	0.50
29:29:120:TRP:CD1	29:29:155:LYS:HB3	2.46	0.50
33:69:90:GLY:O	33:69:121:LYS:HD2	2.11	0.50
40:75:107:ASP:OD1	40:75:109:GLU:HB2	2.11	0.50
43:A5:73:ALA:O	43:A5:106:ILE:HG12	2.11	0.50
50:H5:7:LYS:HG3	50:H5:34:GLU:HG3	1.92	0.50
24:3K:48:C:C5	24:3K:59:U:H1'	2.47	0.50
26:1H:390:A:C6	36:78:71:VAL:HG21	2.47	0.50
26:1H:1216:G:OP2	41:C8:12:ARG:NH2	2.42	0.50
26:1H:1424:G:H2'	26:1H:1425:G:O4'	2.12	0.50
26:1H:1718:G:C2	26:1H:1725:G:C8	2.99	0.50
44:F8:3:THR:CB	44:F8:4:ALA:HA	2.41	0.50
53:O8:28:ARG:CZ	53:O8:30:THR:HG23	2.41	0.50
1:1G:373:A:N3	1:1G:374:A:C8	2.80	0.50
2:12:82:ARG:HG3	2:12:92:TYR:OH	2.10	0.50
18:9A:70:ILE:HG23	18:9A:79:LEU:HD12	1.92	0.50
20:BA:64:ASP:OD1	20:BA:81:LYS:HD2	2.11	0.50
26:14:832:G:H5'	36:35:45:LEU:HD12	1.94	0.50
26:14:882:G:N2	26:14:894:C:H42	2.08	0.50
26:14:1507:A:C5	26:14:1508:A:H1'	2.46	0.50
26:14:2184:G:H2'	26:14:2185:C:C6	2.45	0.50
26:14:2646:C:H2'	26:14:2647:U:O4'	2.11	0.50
28:19:32:SER:O	28:19:33:LEU:HB2	2.11	0.50
28:19:33:LEU:HD21	28:19:103:ARG:HA	1.93	0.50
34:15:35:ARG:HB2	34:15:42:TRP:CZ3	2.47	0.50
36:35:78:PRO:HA	36:35:110:TYR:CD2	2.46	0.50
42:95:76:LYS:HD2	42:95:80:GLN:O	2.10	0.50
43:A5:79:GLY:HA3	43:A5:100:THR:HG22	1.94	0.50
43:A5:88:ARG:HD3	43:A5:94:ASP:OD2	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:L5:12:ARG:NH2	54:L5:44:PRO:HB3	2.27	0.50
1:13:807:A:H2'	1:13:808:C:C6	2.46	0.50
1:13:1260:C:H3'	1:13:1260:C:H6	1.76	0.50
8:7E:109:ILE:HD11	8:7E:120:THR:CG2	2.42	0.50
10:1I:96:ILE:HD13	10:1I:96:ILE:H	1.77	0.50
26:1H:50:U:H3'	26:1H:51:G:H5'	1.93	0.50
26:1H:320:A:H2'	30:31:136:THR:HG21	1.94	0.50
26:1H:336:C:OP1	45:G8:83:THR:HG23	2.11	0.50
26:1H:518:G:H2'	26:1H:519:U:H6	1.76	0.50
26:1H:1187:G:HO2'	26:1H:1188:U:H6	1.57	0.50
26:1H:1534:G:H21	26:1H:1535:U:H5"	1.76	0.50
26:1H:2246:G:H2'	26:1H:2247:A:C8	2.46	0.50
28:11:52:ARG:HB2	28:11:53:PHE:CD2	2.46	0.50
29:21:3:GLY:HA3	29:21:81:ILE:HG21	1.94	0.50
35:68:120:GLU:HB2	40:B8:68:TYR:CE2	2.46	0.50
49:K8:47:ASN:C	49:K8:49:LYS:H	2.14	0.50
50:L8:7:LYS:HA	50:L8:33:GLN:O	2.12	0.50
1:1G:748:C:H4'	1:1G:749:C:O5'	2.12	0.50
1:1G:1352:C:N4	1:1G:1370:G:H1	2.08	0.50
1:1G:1387:G:H2'	1:1G:1388:C:H6	1.76	0.50
5:42:24:ARG:CZ	5:42:24:ARG:HB3	2.41	0.50
5:42:37:ARG:HG2	5:42:112:LEU:HA	1.93	0.50
5:42:79:GLU:OE1	8:72:104:ARG:HA	2.11	0.50
23:2L:54:G:H2'	23:2L:55:5MU:H6	1.76	0.50
24:3L:54:U:H3	24:3L:58:A:H62	1.59	0.50
26:14:819:A:C4	26:14:1189:A:C2	2.99	0.50
26:14:1011:G:C2	26:14:1151:G:C2	3.00	0.50
26:14:1298:C:H5"	26:14:1299:G:OP2	2.11	0.50
26:14:2693:A:H2'	26:14:2694:G:C8	2.47	0.50
40:75:29:ARG:HD3	40:75:44:ASP:OD2	2.11	0.50
40:75:55:ASN:N	40:75:59:THR:HG22	2.26	0.50
53:K5:28:ARG:HB3	53:K5:32:ASN:H	1.77	0.50
55:M5:40:GLU:H	55:M5:43:GLN:HG3	1.77	0.50
1:13:627:G:H2'	1:13:628:G:H8	1.76	0.50
2:1E:9:GLU:HA	2:1E:12:GLU:HB2	1.93	0.50
6:5E:69:GLU:HG2	6:5E:70:ASP:H	1.77	0.50
8:7E:110:ALA:HB3	8:7E:121:ASP:HB3	1.92	0.50
9:8E:86:VAL:O	9:8E:90:PRO:HB3	2.11	0.50
26:1H:7:G:H2'	26:1H:8:A:O4'	2.11	0.50
26:1H:140:A:C8	26:1H:1408:C:O2'	2.63	0.50
26:1H:270(E):G:C6	26:1H:270(F):U:C4	2.99	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:586:A:OP1	58:1H:3827:HOH:O	2.20	0.50
26:1H:1013:C:O2'	26:1H:1014:U:H5'	2.12	0.50
26:1H:1062:G:N2	26:1H:1076:C:O2	2.44	0.50
26:1H:1843:C:H5'	28:11:253:GLN:OE1	2.11	0.50
40:B8:84:GLN:HG2	40:B8:85:LYS:HG2	1.92	0.50
41:C8:92:ARG:NH1	42:D8:11:GLN:O	2.45	0.50
44:F8:3:THR:HB	44:F8:6:ASP:HB2	1.93	0.50
44:F8:11:PRO:HD3	49:K8:37:PHE:CD2	2.47	0.50
45:G8:38:ILE:HD11	45:G8:64:GLU:HG3	1.93	0.50
46:H8:48:PHE:HE1	46:H8:71:VAL:HG11	1.76	0.50
46:H8:124:ILE:HD12	46:H8:125:LEU:H	1.76	0.50
1:1G:631:G:H3'	1:1G:632:A:H8	1.76	0.50
1:1G:690:G:H22	11:2A:55:LYS:HE2	1.77	0.50
1:1G:1329:A:H5'	13:4A:29:ARG:NE	2.26	0.50
26:14:94:G:N3	49:G5:47:ASN:ND2	2.59	0.50
26:14:273(C):C:H5'	26:14:273(D):C:OP2	2.11	0.50
26:14:654(R):C:N4	26:14:654(S):G:O6	2.44	0.50
26:14:1044:G:O2'	26:14:1045:A:H5"	2.11	0.50
26:14:1532:C:H42	26:14:1539:G:H1	1.59	0.50
26:14:2074:U:H2'	26:14:2075:U:C6	2.47	0.50
26:14:2540:C:O2'	26:14:2740:A:N3	2.43	0.50
37:45:25:ASP:HB3	37:45:102:VAL:HG23	1.93	0.50
37:45:34:LEU:HD12	37:45:130:LYS:O	2.12	0.50
46:D5:69:THR:HB	46:D5:88:PHE:HB3	1.93	0.50
1:13:371:G:O2'	1:13:373:A:N7	2.43	0.50
1:13:984:C:N4	1:13:1221:G:H1	2.09	0.50
2:1E:126:GLU:HA	2:1E:129:GLU:CG	2.42	0.50
3:2E:130:VAL:O	3:2E:134:ILE:HG12	2.11	0.50
17:8I:48:GLU:O	17:8I:50:LYS:HG2	2.12	0.50
22:1K:27:G:H2'	22:1K:28:G:C8	2.46	0.50
23:2K:33:OMC:HM22	23:2K:34:U:H5'	1.94	0.50
24:3K:58:A:HO2'	24:3K:59:U:P	2.35	0.50
26:1H:259:G:N2	26:1H:621:A:H8	2.06	0.50
26:1H:1864:U:OP1	26:1H:2410:G:O2'	2.23	0.50
26:1H:2864:G:OP1	40:B8:119:LYS:HD2	2.12	0.50
28:11:271:ILE:O	28:11:272:ALA:HB2	2.11	0.50
40:B8:111:ARG:H	40:B8:111:ARG:CD	2.24	0.50
51:M8:23:GLU:OE1	51:M8:24:THR:N	2.45	0.50
1:1G:742:G:H5"	15:6A:58:MET:HE1	1.93	0.50
6:52:72:VAL:O	6:52:75:LEU:HB3	2.12	0.50
26:14:194:G:H2'	26:14:195:A:O4'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1434:A:H2'	26:14:1435:G:C8	2.47	0.50
26:14:1680:U:N3	26:14:1764:G:OP2	2.31	0.50
26:14:2134:A:N7	26:14:2157:G:H1'	2.26	0.50
26:14:2292:C:OP1	39:65:17:ARG:NH2	2.43	0.50
26:14:2302:G:O2'	31:49:126:ASP:HB3	2.10	0.50
26:14:2675:A:H4'	35:25:29:ASN:ND2	2.26	0.50
29:29:128:SER:OG	29:29:129:HIS:N	2.43	0.50
30:39:112:MET:O	30:39:115:ALA:HB3	2.12	0.50
34:15:13:TRP:O	34:15:135:PRO:HD2	2.12	0.50
35:25:24:VAL:HG23	35:25:33:ALA:HB2	1.94	0.50
1:13:300:A:H1'	1:13:565:U:O2	2.11	0.50
1:13:444:C:H2'	1:13:445:G:H8	1.77	0.50
1:13:1399:C:C2	1:13:1502:A:N6	2.80	0.50
4:3E:108:LEU:HD23	4:3E:110:PHE:HE1	1.77	0.50
5:4E:15:ARG:HH11	25:4K:25:A:H3'	1.75	0.50
18:9I:32:ARG:NH1	18:9I:65:ILE:HD13	2.27	0.50
23:2K:48:U:O2'	23:2K:49:C:OP2	2.26	0.50
24:3K:75:C:O2'	24:3K:76:A:H2	1.94	0.50
26:1H:198:C:H4'	26:1H:2243:U:O2'	2.12	0.50
26:1H:1296:G:O2'	26:1H:1297:C:H5'	2.11	0.50
26:1H:1500:G:O2'	28:11:100:GLY:O	2.26	0.50
26:1H:2583:G:OP1	58:1H:4456:HOH:O	2.20	0.50
37:88:134:ARG:NH2	46:H8:122:ARG:HD2	2.27	0.50
42:D8:24:LYS:HA	42:D8:92:THR:HG23	1.94	0.50
45:G8:78:ALA:HB3	45:G8:79:CYS:SG	2.52	0.50
46:H8:116:VAL:O	46:H8:174:VAL:HA	2.11	0.50
1:1G:538:G:H2'	1:1G:539:A:C8	2.46	0.50
1:1G:1386:G:C2	1:1G:1387:G:N7	2.80	0.50
16:7A:19:ILE:HB	16:7A:36:ILE:O	2.11	0.50
24:1L:2:C:N3	24:1L:72:C:N4	2.60	0.50
26:14:389:G:H22	36:35:72:PRO:CD	2.25	0.50
26:14:1111:A:O3'	32:59:3:ARG:HB3	2.11	0.50
26:14:1779:U:H5"	26:14:1780:A:H5'	1.94	0.50
26:14:2567:G:H2'	26:14:2568:C:C6	2.47	0.50
29:29:81:ILE:HG21	29:29:84:PHE:HD2	1.77	0.50
29:29:120:TRP:CD2	29:29:155:LYS:HD3	2.47	0.50
37:45:31:ASP:O	37:45:134:ARG:HB3	2.11	0.50
55:M5:22:VAL:HB	55:M5:53:PRO:HG3	1.94	0.50
5:4E:12:LEU:HB3	5:4E:31:LEU:HB2	1.93	0.50
24:3K:46:G:O2'	24:3K:48:C:O2	2.30	0.50
24:3K:71:G:O2'	26:1H:1851:U:O2'	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:280:C:N3	26:1H:361:G:C2	2.80	0.50
26:1H:963:U:H5"	58:1H:3796:HOH:O	2.11	0.50
26:1H:1288:U:H4'	26:1H:1289:C:OP2	2.11	0.50
29:21:19:ARG:HA	35:68:73:ASP:HA	1.93	0.50
29:21:48:GLN:OE1	29:21:77:ILE:HG21	2.11	0.50
30:31:178:PRO:HB2	30:31:201:VAL:HG21	1.94	0.50
32:51:154:PRO:HB3	32:51:163:TYR:CZ	2.47	0.50
1:1G:464:G:C6	1:1G:466:C:H5'	2.47	0.50
1:1G:685:G:C2	1:1G:686:U:C4	2.99	0.50
1:1G:1018:C:H2'	1:1G:1019:C:O4'	2.12	0.50
5:42:122:GLU:HG2	5:42:131:ILE:HD12	1.94	0.50
9:82:49:PRO:HB2	9:82:85:LEU:HD21	1.94	0.50
13:4A:78:ILE:HD13	13:4A:92:HIS:CE1	2.47	0.50
20:BA:79:ARG:HE	20:BA:83:ARG:NH1	2.10	0.50
26:14:354:G:H2'	26:14:355:G:H8	1.76	0.50
26:14:900:A:H3'	26:14:901:A:C8	2.45	0.50
26:14:1630:G:N2	26:14:1636:C:O2	2.33	0.50
26:14:2394:C:OP1	36:35:63:PRO:HG2	2.11	0.50
26:14:2823:A:OP1	29:29:159:HIS:NE2	2.42	0.50
29:29:70:ALA:HB1	29:29:72:VAL:HG23	1.94	0.50
30:39:128:ALA:O	30:39:142:TRP:NE1	2.45	0.50
32:59:163:TYR:CZ	32:59:169:VAL:HG21	2.47	0.50
44:B5:56:THR:HB	44:B5:77:LYS:HE2	1.94	0.50
51:I5:56:VAL:HG22	51:I5:57:GLU:HG3	1.94	0.50
55:M5:30:ARG:O	55:M5:32:LEU:N	2.44	0.50
1:13:67:C:H2'	1:13:68:G:H8	1.75	0.49
1:13:522:C:H2'	1:13:523:A:O4'	2.12	0.49
1:13:592:G:H1	1:13:647:C:H42	1.58	0.49
1:13:624:C:H4'	16:7I:11:SER:N	2.26	0.49
1:13:963:G:H21	10:1I:55:LYS:HZ1	1.60	0.49
1:13:1192:C:OP2	3:2E:4:LYS:NZ	2.44	0.49
4:3E:162:LEU:O	4:3E:165:MET:HB3	2.12	0.49
7:6E:150:ALA:HB2	11:2I:50:TYR:OH	2.12	0.49
10:1I:49:VAL:HG23	14:5I:41:ARG:HB2	1.94	0.49
15:6I:38:ARG:HG2	15:6I:38:ARG:HH11	1.77	0.49
16:7I:67:THR:H	16:7I:70:ALA:HB3	1.77	0.49
26:1H:229:A:OP2	36:78:150:ALA:HB1	2.11	0.49
26:1H:492:A:H2'	26:1H:493:G:O4'	2.12	0.49
26:1H:997:G:OP1	41:C8:93:LYS:HD2	2.11	0.49
26:1H:2275:C:C6	26:1H:2275:C:H5'	2.47	0.49
27:16:21:G:H1	27:16:62:C:H42	1.58	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:61:69:LYS:HA	33:61:136:VAL:HB	1.94	0.49
37:88:112:GLU:H	37:88:112:GLU:CD	2.15	0.49
51:M8:21:VAL:O	51:M8:24:THR:HG23	2.11	0.49
1:1G:427:U:H3'	1:1G:428:G:H2'	1.93	0.49
1:1G:577:G:C8	1:1G:816:A:C6	3.00	0.49
1:1G:672:U:H2'	1:1G:673:G:C8	2.47	0.49
1:1G:848:C:H2'	1:1G:849:C:C6	2.47	0.49
1:1G:1139:G:H1	1:1G:1143:G:H22	1.59	0.49
1:1G:1194:U:H2'	1:1G:1195:C:C6	2.47	0.49
5:42:7:GLU:OE1	5:42:37:ARG:NH2	2.45	0.49
5:42:102:ALA:HB3	5:42:107:ARG:HB2	1.94	0.49
13:4A:3:ARG:HB2	51:I5:34:GLU:CG	2.40	0.49
26:14:321:G:OP1	30:39:135:LYS:NZ	2.31	0.49
26:14:531:C:C5	26:14:2035:G:C2	3.00	0.49
26:14:988:A:N6	50:H5:13:ILE:HG21	2.27	0.49
26:14:1027:A:H5'	27:1J:88:C:N4	2.27	0.49
26:14:1340:U:H4'	26:14:1341:U:OP2	2.11	0.49
26:14:2151:G:H2'	26:14:2152:G:C8	2.47	0.49
26:14:2301:C:H2'	26:14:2302:G:H8	1.77	0.49
26:14:2412:A:H2'	26:14:2413:G:O4'	2.12	0.49
26:14:2542:A:H4'	26:14:2542:A:OP1	2.11	0.49
30:39:160:ASN:HB3	30:39:163:VAL:HB	1.94	0.49
37:45:34:LEU:HD11	37:45:129:THR:HB	1.94	0.49
41:85:8:VAL:O	41:85:12:ARG:HG2	2.12	0.49
1:13:342:C:N4	1:13:347:G:H1	2.10	0.49
1:13:444:C:H2'	1:13:445:G:C8	2.47	0.49
8:7E:6:ILE:HB	8:7E:85:ARG:HH12	1.76	0.49
11:2I:45:GLY:O	11:2I:50:TYR:HB2	2.12	0.49
24:3K:45:U:H1'	24:3K:46:G:H5"	1.94	0.49
26:1H:128:C:H2'	26:1H:129:C:H6	1.77	0.49
26:1H:270(L):U:N3	33:61:50:ARG:HG2	2.26	0.49
26:1H:582:G:H2'	26:1H:583:G:C8	2.48	0.49
26:1H:1580:A:H8	26:1H:1580:A:OP2	1.96	0.49
26:1H:2693:A:H2'	26:1H:2694:G:H8	1.76	0.49
26:1H:2807:G:H3'	26:1H:2808:U:H5"	1.94	0.49
28:11:183:ARG:NH1	28:11:269:PHE:HB2	2.27	0.49
55:Q8:50:LEU:O	55:Q8:51:ALA:HB3	2.12	0.49
1:1G:736:C:H2'	1:1G:737:A:C8	2.46	0.49
1:1G:1015:A:H8	1:1G:1015:A:O5'	1.95	0.49
20:BA:26:ASN:O	20:BA:30:LYS:HB2	2.12	0.49
26:14:654(B):C:H2'	26:14:654(C):G:C8	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1657:C:H2'	26:14:1658:C:C6	2.46	0.49
26:14:2262:U:O2'	26:14:2263:C:H5'	2.13	0.49
27:1J:72:G:O2'	27:1J:104:A:N6	2.45	0.49
28:19:37:LEU:HD13	28:19:39:LYS:HB2	1.94	0.49
37:45:75:THR:HG23	37:45:89:ASN:HB3	1.94	0.49
45:C5:84:ARG:NH2	45:C5:94:LYS:HE2	2.27	0.49
55:M5:34:TRP:CG	55:M5:35:GLN:N	2.81	0.49
1:13:43:C:HO2'	1:13:623:C:HO2'	1.60	0.49
1:13:129(A):G:N2	1:13:188:U:HO2'	2.10	0.49
1:13:792:A:H4'	1:13:793:U:O5'	2.12	0.49
1:13:994:A:H2'	1:13:994:A:N3	2.27	0.49
1:13:1128:C:O2'	1:13:1129:C:H5"	2.12	0.49
1:13:1363:A:H1'	1:13:1365:G:N7	2.27	0.49
1:13:1418:A:C2	1:13:1483:A:C2	3.01	0.49
2:1E:88:ALA:HB2	2:1E:219:VAL:HG13	1.94	0.49
16:7I:57:ARG:NH2	16:7I:79:VAL:O	2.44	0.49
17:8I:29:HIS:CD2	17:8I:30:PRO:HD2	2.47	0.49
19:AI:19:VAL:HG13	19:AI:47:HIS:CD2	2.45	0.49
26:1H:172:C:H2'	26:1H:173:G:C8	2.46	0.49
26:1H:598:G:H1'	36:78:12:ALA:HB2	1.94	0.49
26:1H:821:A:H2'	26:1H:946:G:H5"	1.94	0.49
26:1H:2635:C:H5"	29:21:78:LEU:HA	1.94	0.49
28:11:65:ILE:HD11	28:11:67:PHE:CE1	2.48	0.49
28:11:67:PHE:HB3	28:11:153:ALA:H	1.77	0.49
28:11:172:TYR:CD2	28:11:186:HIS:HA	2.46	0.49
39:A8:67:ARG:NH1	39:A8:67:ARG:HB2	2.27	0.49
47:I8:38:VAL:HG12	47:I8:40:GLN:HG2	1.95	0.49
48:J8:92:LYS:HG3	48:J8:95:LEU:HD12	1.94	0.49
1:1G:410:G:N1	1:1G:429:U:O2	2.45	0.49
1:1G:601:C:H2'	1:1G:602:A:C8	2.48	0.49
1:1G:620:C:C2	4:32:135:LEU:HG	2.48	0.49
1:1G:1147:C:O2	9:82:16:ARG:NE	2.46	0.49
1:1G:1443:G:O2'	40:75:122:ASP:OD2	2.30	0.49
4:32:178:VAL:C	4:32:180:GLY:H	2.16	0.49
8:72:30:ARG:O	8:72:34:GLU:HG2	2.13	0.49
24:1L:18:G:O2'	24:1L:19:G:OP1	2.30	0.49
26:14:305:U:H2'	26:14:306:U:C6	2.46	0.49
26:14:633:A:O2'	26:14:2404:C:OP1	2.28	0.49
26:14:975:G:C2	26:14:990:A:C8	2.99	0.49
26:14:1005:C:O2'	34:15:28:THR:HG21	2.12	0.49
26:14:1083:U:H1'	26:14:1086:A:N6	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1693:U:O2'	28:19:14:ARG:NH2	2.45	0.49
26:14:1716:U:H2'	26:14:1717:G:H8	1.76	0.49
26:14:2239:G:P	58:14:3510:HOH:O	2.69	0.49
26:14:2346:A:H5"	26:14:2383:G:O4'	2.12	0.49
29:29:117:MET:HA	29:29:122:PHE:N	2.28	0.49
30:39:21:ALA:C	30:39:23:ASP:H	2.16	0.49
32:59:82:GLY:HA3	32:59:135:GLY:O	2.11	0.49
36:35:127:ALA:O	36:35:147:LEU:N	2.45	0.49
36:35:146:VAL:HG13	36:35:147:LEU:HD22	1.93	0.49
46:D5:40:ASP:HB3	46:D5:43:GLU:HB2	1.94	0.49
46:D5:60:GLU:HB2	46:D5:66:SER:OG	2.12	0.49
1:13:79:G:N2	1:13:89:U:H2'	2.26	0.49
1:13:209:U:H5'	1:13:210:U:OP2	2.12	0.49
1:13:284:G:H2'	1:13:285:G:C8	2.48	0.49
1:13:1352:C:H2'	1:13:1353:G:C8	2.47	0.49
4:3E:155:LEU:O	4:3E:158:ILE:N	2.45	0.49
10:1I:5:ARG:HB2	10:1I:73:ASP:OD1	2.13	0.49
12:3I:9:GLN:O	12:3I:13:LYS:HG2	2.12	0.49
24:3K:24:G:H2'	24:3K:25:C:C6	2.46	0.49
24:3K:24:G:H2'	24:3K:25:C:H6	1.77	0.49
26:1H:1301:A:N3	26:1H:1301:A:H2'	2.28	0.49
26:1H:1641:A:H2'	26:1H:1642:G:O4'	2.12	0.49
26:1H:2010:G:N7	58:1H:4106:HOH:O	2.35	0.49
26:1H:2209:C:O2	26:1H:2216:G:C2	2.66	0.49
28:11:89:SER:HB2	28:11:159:ALA:HB2	1.94	0.49
32:51:4:ILE:C	32:51:6:ARG:H	2.14	0.49
43:E8:57:ASN:O	43:E8:61:ASN:HB2	2.13	0.49
50:L8:50:VAL:O	50:L8:54:VAL:HG12	2.13	0.49
1:1G:111:G:H8	1:1G:111:G:O5'	1.96	0.49
1:1G:129:U:O4	58:1G:1763:HOH:O	2.18	0.49
1:1G:1086:U:H3	1:1G:1099:G:H22	1.60	0.49
1:1G:1299:A:C6	1:1G:1301:U:C2	3.00	0.49
3:22:15:THR:HG21	3:22:181:ASN:HA	1.94	0.49
24:1L:68:C:H2'	24:1L:69:G:C8	2.46	0.49
26:14:71:A:H4'	26:14:72:U:H5"	1.94	0.49
26:14:918:A:O2'	27:1J:96:G:N2	2.45	0.49
26:14:1021:A:H3'	26:14:1021:A:C8	2.46	0.49
26:14:1542:G:O5'	26:14:1543:A:H5"	2.11	0.49
26:14:1754:C:H2'	26:14:1755:A:C8	2.47	0.49
26:14:2241:A:H2'	26:14:2242:G:C8	2.47	0.49
26:14:2262:U:OP2	47:E5:19:LYS:HE2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2296:U:OP2	39:65:9:ARG:NH1	2.44	0.49
26:14:2352:A:H2	47:E5:33:ALA:HB1	1.72	0.49
26:14:2889:C:H3'	26:14:2891:G:H8	1.77	0.49
27:1J:9:G:H5'	39:65:25:ARG:HH12	1.77	0.49
27:1J:38:C:O4'	39:65:95:HIS:NE2	2.45	0.49
28:19:255:LYS:H	28:19:255:LYS:HE3	1.77	0.49
31:49:60:LEU:O	31:49:64:THR:HG22	2.11	0.49
1:13:45:U:O5'	1:13:45:U:H6	1.95	0.49
1:13:64:G:H4'	1:13:65:U:H5'	1.94	0.49
1:13:258:G:H2'	1:13:259:G:H8	1.77	0.49
1:13:458:C:N4	1:13:475:G:H1	2.10	0.49
1:13:1187:G:O5'	9:8E:113:LYS:NZ	2.45	0.49
1:13:1489:G:H2'	1:13:1490:C:O4'	2.13	0.49
4:3E:11:LEU:HD22	4:3E:66:ARG:HG2	1.94	0.49
6:5E:3:ARG:HB3	6:5E:93:SER:HB2	1.94	0.49
9:8E:26:VAL:HB	9:8E:33:PHE:HB2	1.95	0.49
26:1H:270(L):U:C2	33:61:50:ARG:HG2	2.47	0.49
26:1H:2111:C:O2'	26:1H:2119:A:OP1	2.29	0.49
26:1H:2127:G:N2	26:1H:2162:G:H1'	2.18	0.49
26:1H:2309:A:C5	26:1H:2310:A:H8	2.30	0.49
26:1H:2531:A:H5'	32:51:157:TYR:CZ	2.47	0.49
27:16:12:C:C2	47:I8:74:ARG:NH1	2.81	0.49
28:11:76:PRO:HG2	28:11:98:VAL:HG11	1.94	0.49
1:1G:447:G:O2'	1:1G:487:A:N6	2.45	0.49
1:1G:644:G:H4'	8:72:92:ARG:NH1	2.27	0.49
1:1G:692:U:H5	11:2A:26:ASN:OD1	1.96	0.49
2:12:71:VAL:HB	2:12:170:GLU:HG2	1.95	0.49
3:22:120:VAL:HG21	3:22:137:ALA:HB2	1.94	0.49
7:62:149:ARG:HD3	11:2A:59:TYR:CE1	2.47	0.49
9:82:53:VAL:HG23	9:82:55:ALA:H	1.76	0.49
23:2L:62:C:H2'	23:2L:63:C:H6	1.78	0.49
26:14:110:G:C2	26:14:111:A:C8	3.01	0.49
26:14:882:G:H1	26:14:894:C:H42	1.60	0.49
26:14:2320:A:C6	26:14:2333:A:C8	3.00	0.49
26:14:2376:A:H2	39:65:112:PHE:HB2	1.78	0.49
29:29:24:THR:HG21	29:29:188:VAL:HG12	1.93	0.49
32:59:66:GLY:O	32:59:70:THR:OG1	2.29	0.49
33:69:73:GLU:HG3	33:69:136:VAL:HG23	1.94	0.49
39:65:106:ARG:O	39:65:106:ARG:HD2	2.12	0.49
43:A5:71:VAL:HA	43:A5:107:LEU:HD12	1.95	0.49
48:F5:52:ARG:CZ	48:F5:56:GLN:HA	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1309:G:OP1	13:4I:88:ARG:NH1	2.46	0.49
7:6E:113:GLU:HB2	7:6E:118:VAL:HG13	1.94	0.49
13:4I:7:VAL:HB	31:41:115:ARG:NH2	2.28	0.49
13:4I:91:ARG:HB2	13:4I:98:VAL:HG23	1.94	0.49
24:3K:71:G:HO2'	26:1H:1851:U:HO2'	1.55	0.49
26:1H:445:C:O2'	26:1H:446:G:H5'	2.13	0.49
26:1H:991:C:H42	26:1H:1163:G:H1	1.61	0.49
26:1H:1188:U:C4'	42:D8:79:VAL:HG22	2.42	0.49
26:1H:1621:U:H5"	26:1H:1622:G:OP1	2.13	0.49
26:1H:2053:G:OP1	29:21:144:ARG:HD3	2.12	0.49
26:1H:2059:A:H5"	26:1H:2060:A:OP2	2.12	0.49
26:1H:2404:C:O3'	36:78:77:ARG:NH2	2.45	0.49
26:1H:2688:U:H5	26:1H:2720:U:OP2	1.96	0.49
32:51:92:ILE:CD1	32:51:93:GLY:H	2.25	0.49
33:61:40:THR:O	33:61:44:LEU:HB2	2.13	0.49
45:G8:28:LYS:NZ	45:G8:64:GLU:OE2	2.28	0.49
55:Q8:8:LYS:N	55:Q8:8:LYS:HD2	2.27	0.49
1:1G:440:A:H3'	1:1G:442:C:C6	2.47	0.49
1:1G:559:A:H4'	1:1G:560:U:H5"	1.93	0.49
1:1G:728:A:C2	1:1G:729:A:C5	3.01	0.49
1:1G:1266:G:N2	1:1G:1270:C:N3	2.61	0.49
2:12:222:ILE:O	2:12:226:ARG:HB2	2.13	0.49
4:32:150:GLU:C	4:32:152:SER:H	2.16	0.49
26:14:289:A:H3'	26:14:290:G:C8	2.46	0.49
26:14:755:C:H2'	26:14:756:C:C6	2.48	0.49
26:14:857:C:H2'	26:14:858:U:H6	1.77	0.49
26:14:921:G:C6	26:14:922:U:C4	3.01	0.49
26:14:1190:G:O2'	26:14:1191:G:H5'	2.12	0.49
26:14:1480:G:C6	26:14:1482:U:C4	3.00	0.49
26:14:2116:G:H2'	26:14:2117:A:C4	2.48	0.49
26:14:2690:C:OP1	38:55:17:ARG:NH1	2.44	0.49
26:14:2889:C:H3'	26:14:2891:G:C8	2.47	0.49
27:1J:38:C:N4	27:1J:44:G:H1	2.05	0.49
27:1J:53:A:H2'	27:1J:54:G:O4'	2.12	0.49
29:29:5:LEU:HD23	29:29:51:PHE:HB2	1.95	0.49
35:25:98:VAL:CG1	35:25:117:LEU:HB3	2.42	0.49
35:25:98:VAL:HG12	35:25:117:LEU:HB3	1.93	0.49
42:95:48:GLY:HA3	42:95:52:VAL:N	2.28	0.49
47:E5:49:LYS:HE3	47:E5:82:ARG:CZ	2.43	0.49
1:13:163:C:H2'	1:13:164:U:C6	2.48	0.49
1:13:192:U:H2'	1:13:193:C:C6	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:737:A:O2'	1:13:738:C:H5'	2.13	0.49
1:13:1392:G:H21	1:13:1502:A:H8	1.61	0.49
1:13:1503:A:O2'	25:4K:13:A:N6	2.45	0.49
2:1E:69:LEU:HB3	2:1E:162:ILE:HG22	1.95	0.49
18:9I:38:GLU:HA	18:9I:41:LYS:NZ	2.28	0.49
23:2K:54:G:C5	23:2K:55:5MU:H72	2.47	0.49
26:1H:687:C:OP2	58:1H:4021:HOH:O	2.20	0.49
26:1H:930:U:H4'	26:1H:931:G:O5'	2.12	0.49
26:1H:1025:G:C4	26:1H:1135:C:H1'	2.47	0.49
26:1H:1729:A:C6	26:1H:1731:G:C2	3.00	0.49
26:1H:2056:G:N3	26:1H:2056:G:H2'	2.28	0.49
29:21:51:PHE:O	29:21:74:PRO:HB2	2.11	0.49
33:61:40:THR:HG22	33:61:41:GLU:H	1.77	0.49
39:A8:59:LYS:HG2	39:A8:60:GLY:N	2.28	0.49
39:A8:83:LYS:HG3	39:A8:110:LEU:CD1	2.43	0.49
44:F8:11:PRO:HB3	44:F8:92:LEU:HD21	1.95	0.49
47:I8:23:VAL:HG13	47:I8:38:VAL:HG23	1.95	0.49
1:1G:403:C:N4	1:1G:547:A:H5'	2.28	0.49
1:1G:485:G:O2'	1:1G:486:U:H6	1.96	0.49
1:1G:1067:A:H4'	1:1G:1068:G:O5'	2.13	0.49
1:1G:1162:C:H42	1:1G:1174:G:H1	1.61	0.49
2:12:67:THR:H	2:12:160:ASP:HB2	1.78	0.49
10:1A:4:ILE:HG13	10:1A:77:PRO:HB3	1.95	0.49
13:4A:84:ILE:O	13:4A:86:CYS:N	2.46	0.49
15:6A:87:ILE:HG22	15:6A:88:ARG:N	2.25	0.49
18:9A:19:LYS:HG3	18:9A:20:ALA:H	1.78	0.49
21:1B:2:GLY:O	21:1B:5:ASP:N	2.34	0.49
26:14:4:C:N4	26:14:2899:G:H1	2.11	0.49
26:14:984:A:H5"	26:14:985:C:H5	1.77	0.49
26:14:1171:G:O2'	26:14:1173:G:N3	2.46	0.49
26:14:2638:G:OP1	29:29:82:ARG:NH2	2.45	0.49
29:29:111:ARG:HB2	29:29:160:TYR:O	2.12	0.49
30:39:83:PHE:O	30:39:84:VAL:HB	2.13	0.49
30:39:129:PHE:HA	30:39:142:TRP:CD1	2.48	0.49
32:59:103:LEU:HD23	32:59:103:LEU:H	1.78	0.49
37:45:59:ARG:O	37:45:60:ARG:HG3	2.12	0.49
40:75:8:LYS:HZ2	40:75:8:LYS:CB	2.24	0.49
41:85:100:VAL:O	41:85:101:ARG:HG2	2.12	0.49
49:G5:43:GLN:HB2	49:G5:45:SER:H	1.76	0.49
1:13:111:G:H5"	16:7I:27:LYS:HG2	1.95	0.49
1:13:403:C:OP1	4:3E:137:SER:OG	2.30	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:237:ALA:O	2:1E:239:VAL:HG23	2.12	0.49
26:1H:265:A:H1'	26:1H:266:G:O4'	2.12	0.49
26:1H:475:U:C4	26:1H:481:G:O6	2.65	0.49
26:1H:1111:A:N3	26:1H:1112:G:H1'	2.27	0.49
26:1H:1669:A:H5"	26:1H:1670:C:OP2	2.13	0.49
26:1H:2262:U:OP1	26:1H:2387:U:O2'	2.19	0.49
26:1H:2294:C:H2'	26:1H:2295:C:H6	1.78	0.49
26:1H:2395:C:H5"	26:1H:2396:G:OP2	2.13	0.49
26:1H:2650:U:H2'	26:1H:2651:C:C6	2.48	0.49
26:1H:2725:A:C4	26:1H:2727:G:C8	3.01	0.49
26:1H:2729:G:N3	29:21:187:ALA:HB2	2.27	0.49
27:16:90:C:P	37:88:16:ARG:HH21	2.35	0.49
38:98:72:ASP:O	38:98:76:VAL:HG23	2.13	0.49
39:A8:35:ILE:HD11	39:A8:101:LEU:HD23	1.93	0.49
39:A8:36:TYR:N	39:A8:36:TYR:CD1	2.81	0.49
49:K8:59:ARG:O	49:K8:62:THR:HG23	2.13	0.49
1:1G:67:C:H2'	1:1G:68:G:C8	2.46	0.49
1:1G:830:G:H2'	1:1G:831:U:O4'	2.12	0.49
1:1G:1036:G:H5'	1:1G:1037:C:OP2	2.12	0.49
1:1G:1126:U:H4'	1:1G:1127:G:H8	1.77	0.49
3:22:6:HIS:HB3	14:5A:49:HIS:HD2	1.76	0.49
8:72:92:ARG:HB3	8:72:94:TYR:CE2	2.48	0.49
9:82:44:VAL:O	9:82:51:ARG:NH2	2.45	0.49
13:4A:3:ARG:HG2	13:4A:8:GLU:O	2.13	0.49
26:14:868:U:H2'	26:14:869:G:C8	2.47	0.49
26:14:1011:G:H2'	26:14:1013:C:O4'	2.13	0.49
1:13:191(F):U:H2'	1:13:191:G:C8	2.47	0.49
1:13:292:G:N7	1:13:293:G:H1'	2.27	0.49
1:13:486:U:H2'	1:13:487:A:H8	1.77	0.49
1:13:1148:U:H2'	1:13:1149:C:O4'	2.13	0.49
2:1E:162:ILE:HD11	2:1E:184:VAL:HG22	1.94	0.49
3:2E:167:TRP:CD1	3:2E:168:ALA:N	2.80	0.49
20:BI:63:ILE:HG22	20:BI:77:ALA:HB1	1.94	0.49
26:1H:993:G:C4	26:1H:994:C:C5	3.01	0.49
26:1H:1808:U:H2'	26:1H:1809:A:O4'	2.12	0.49
26:1H:2378:A:H4'	39:A8:23:ARG:NH1	2.28	0.49
26:1H:2579:C:H2'	26:1H:2580:U:O4'	2.13	0.49
27:16:29:A:OP2	39:A8:31:SER:HB2	2.13	0.49
28:11:17:THR:HG22	28:11:204:ILE:HA	1.95	0.49
33:61:69:LYS:O	33:61:73:GLU:HB2	2.13	0.49
38:98:60:LEU:O	38:98:64:ARG:HG3	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:648:A:H2'	1:1G:649:G:H8	1.77	0.49
1:1G:1051:C:H2'	1:1G:1052:U:C6	2.48	0.49
1:1G:1273:G:H3'	1:1G:1274:G:C8	2.48	0.49
1:1G:1517:G:C6	1:1G:1518:A:C5	3.00	0.49
18:9A:45:SER:OG	18:9A:46:GLU:N	2.46	0.49
26:14:27:G:O2'	26:14:28:A:OP2	2.28	0.49
26:14:39:C:H2'	26:14:40:C:C6	2.48	0.49
26:14:1442:G:H2'	26:14:1443:G:H8	1.75	0.49
26:14:2036:C:N4	58:14:3845:HOH:O	2.44	0.49
30:39:46:ARG:HG2	30:39:46:ARG:NH1	2.23	0.49
34:15:39:ARG:HD3	34:15:48:MET:HE2	1.95	0.49
52:J5:49:CYS:SG	52:J5:50:GLY:N	2.86	0.49
1:13:1015:A:H2'	1:13:1016:A:C8	2.48	0.49
2:1E:226:ARG:HG3	2:1E:227:GLY:H	1.77	0.49
16:7I:38:TYR:CE1	16:7I:50:LYS:HB2	2.47	0.49
26:1H:90:U:H4'	26:1H:91:A:H5'	1.95	0.49
26:1H:242:G:H5'	55:Q8:61:LEU:HD13	1.93	0.49
26:1H:2280:G:C2'	26:1H:2281:C:H5'	2.42	0.49
28:11:136:ILE:HG22	28:11:137:PRO:HD2	1.95	0.49
32:51:8:PRO:HG2	32:51:69:ARG:HH21	1.75	0.49
36:78:62:LEU:O	55:Q8:13:ARG:HD3	2.13	0.49
1:1G:552:U:O2'	12:3A:86:ARG:O	2.26	0.49
1:1G:607:A:H2'	1:1G:608:A:O4'	2.13	0.49
1:1G:854:G:C2	1:1G:855:G:C8	3.01	0.49
3:22:156:ARG:HB3	3:22:160:ALA:O	2.13	0.49
8:72:12:ARG:CZ	8:72:27:PRO:HD3	2.42	0.49
11:2A:13:GLN:HA	11:2A:75:TYR:O	2.12	0.49
26:14:566:U:O3'	58:14:3841:HOH:O	2.19	0.49
26:14:1000:A:C6	26:14:1001:A:N1	2.81	0.49
26:14:1364:G:N7	48:F5:2:SER:HB2	2.28	0.49
26:14:2012:G:O3'	43:A5:96:ILE:HG12	2.13	0.49
26:14:2207:C:O2	28:19:151:LYS:NZ	2.38	0.49
28:19:85:ASP:OD2	28:19:88:ARG:HD2	2.13	0.49
31:49:120:LEU:HG	31:49:179:PRO:O	2.13	0.49
33:69:88:ILE:HG22	33:69:90:GLY:H	1.78	0.49
43:A5:13:SER:O	43:A5:16:LYS:HB2	2.13	0.49
46:D5:91:LEU:HB3	46:D5:130:PRO:HG3	1.94	0.49
47:E5:48:GLY:HA3	47:E5:80:HIS:ND1	2.28	0.49
1:13:12:U:O2'	1:13:526:C:H4'	2.13	0.48
1:13:313:A:H2'	1:13:314:C:H6	1.78	0.48
1:13:428:G:C8	1:13:430:A:C5	3.01	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:545:C:O2'	1:13:549:C:OP1	2.30	0.48
1:13:711:G:O2'	1:13:712:A:H5'	2.13	0.48
1:13:1060:C:C5	3:2E:2:GLY:HA2	2.47	0.48
2:1E:17:PHE:HD1	2:1E:17:PHE:H	1.61	0.48
5:4E:29:GLY:HA2	5:4E:46:GLY:O	2.12	0.48
7:6E:45:ASP:O	7:6E:49:ILE:HG12	2.13	0.48
7:6E:91:VAL:HG12	7:6E:95:ARG:HB3	1.95	0.48
10:1I:90:LEU:N	10:1I:91:PRO:HD3	2.28	0.48
12:3I:39:VAL:HG12	12:3I:41:ARG:HG2	1.95	0.48
19:AI:41:VAL:H	19:AI:44:MET:HB2	1.78	0.48
26:1H:818:G:H4'	26:1H:838:C:O3'	2.13	0.48
26:1H:1591:G:H2'	26:1H:1592:C:H6	1.78	0.48
26:1H:2315:G:H5"	26:1H:2316:C:OP2	2.13	0.48
26:1H:2791:C:H42	26:1H:2805:G:H1	1.61	0.48
26:1H:2850:A:C2	26:1H:2851:A:C4	3.01	0.48
28:11:131:LEU:HB2	28:11:136:ILE:HD11	1.95	0.48
28:11:145:VAL:HB	28:11:155:LEU:HB2	1.95	0.48
29:21:73:GLU:HG3	29:21:74:PRO:HD2	1.95	0.48
30:31:78:ILE:HA	30:31:83:PHE:CD2	2.49	0.48
30:31:130:ALA:H	30:31:132:VAL:HG13	1.78	0.48
42:D8:3:ALA:HB1	42:D8:38:LEU:HD11	1.94	0.48
1:1G:19:C:H5"	5:42:86:ALA:HB1	1.95	0.48
1:1G:60:A:N6	1:1G:110:C:N3	2.59	0.48
1:1G:861:G:N2	1:1G:872:A:H2	2.11	0.48
1:1G:868:C:H2'	1:1G:869:G:O4'	2.12	0.48
1:1G:973:G:O6	1:1G:974:A:N6	2.46	0.48
1:1G:1095:U:H5"	1:1G:1109:C:O2	2.12	0.48
1:1G:1262:C:H2'	1:1G:1263:C:C6	2.48	0.48
1:1G:1499:A:H1'	1:1G:1520:G:H5'	1.94	0.48
1:1G:1509:C:H2'	1:1G:1510:U:O4'	2.12	0.48
7:62:62:PHE:HD1	7:62:124:LEU:HD11	1.77	0.48
20:BA:75:ASN:N	20:BA:75:ASN:OD1	2.45	0.48
26:14:1316:U:H2'	26:14:1317:A:C8	2.48	0.48
26:14:1337:G:H2'	26:14:1338:G:H8	1.78	0.48
26:14:1794:U:H2'	26:14:1795:C:H6	1.77	0.48
26:14:2331:G:H4'	47:E5:43:THR:N	2.28	0.48
29:29:113:PHE:HA	29:29:159:HIS:HD2	1.78	0.48
29:29:119:ARG:HA	29:29:160:TYR:CD2	2.48	0.48
38:55:78:LYS:O	38:55:83:ILE:HG13	2.13	0.48
51:I5:43:TYR:CG	51:I5:43:TYR:O	2.66	0.48
1:13:31:G:HO2'	1:13:48:C:N4	2.10	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:392:G:H5'	16:7I:12:LYS:HE3	1.95	0.48
8:7E:104:ARG:O	8:7E:107:LEU:HB2	2.12	0.48
23:2K:57:C:H5"	23:2K:58:A:OP2	2.13	0.48
26:1H:363(A):A:H2'	26:1H:363(B):G:H8	1.77	0.48
26:1H:845:G:H8	26:1H:845:G:OP2	1.96	0.48
26:1H:1576:U:N3	26:1H:1577:C:C5	2.81	0.48
31:41:173:LEU:HD22	31:41:178:PHE:CE2	2.48	0.48
33:61:77:LEU:HD23	33:61:101:LEU:HB2	1.96	0.48
35:68:73:ASP:OD1	35:68:75:SER:N	2.46	0.48
38:98:78:LYS:O	38:98:83:ILE:HG13	2.13	0.48
41:C8:43:GLY:HA3	42:D8:73:SER:OG	2.13	0.48
51:M8:15:ILE:HD11	51:M8:32:TYR:CD1	2.48	0.48
53:O8:9:LEU:HB3	53:O8:26:ASN:O	2.13	0.48
1:1G:1131:G:C8	1:1G:1132:C:H5	2.31	0.48
1:1G:1256:A:H2'	1:1G:1278:U:O2	2.13	0.48
4:32:59:ARG:HA	4:32:62:GLN:HB2	1.95	0.48
9:82:21:PRO:HA	9:82:59:PHE:HD1	1.78	0.48
26:14:273(D):C:N4	26:14:363(B):G:H1	2.11	0.48
26:14:1210:A:H5'	26:14:1212:G:O4'	2.13	0.48
26:14:1430:C:H2'	26:14:1431:U:C6	2.49	0.48
26:14:1859:A:N6	26:14:1883:G:O2'	2.46	0.48
29:29:63:LEU:HD23	29:29:63:LEU:H	1.77	0.48
30:39:20:LEU:HG	30:39:199:TRP:HH2	1.77	0.48
30:39:111:ALA:HB2	30:39:206:ILE:HG21	1.94	0.48
33:69:2:LYS:HA	33:69:20:ASP:HA	1.95	0.48
41:85:90:VAL:HA	42:95:39:LEU:HD23	1.95	0.48
46:D5:138:GLU:O	46:D5:156:LYS:HG3	2.13	0.48
47:E5:18:ALA:CB	47:E5:20:ARG:HE	2.26	0.48
50:H5:12:PRO:HB2	50:H5:20:LYS:HG3	1.95	0.48
51:I5:27:THR:HG22	51:I5:28:LYS:HG3	1.94	0.48
1:13:55:A:H2	33:69:82:ARG:HG2	1.79	0.48
1:13:186(A):C:O2	20:BI:104:LEU:HD12	2.14	0.48
1:13:923:A:O2'	1:13:1399:C:OP2	2.23	0.48
9:8E:112:LYS:CA	9:8E:119:ALA:HB2	2.41	0.48
11:2I:32:ILE:HD12	11:2I:72:ALA:HB2	1.95	0.48
24:3K:56:C:N4	26:1H:2112:G:H1	2.11	0.48
26:1H:197:A:N6	26:1H:2430:A:H2'	2.27	0.48
26:1H:356:G:H2'	26:1H:357:A:C8	2.47	0.48
26:1H:1204:A:C2	26:1H:1241:A:N1	2.82	0.48
26:1H:1252:G:H5"	58:1H:3993:HOH:O	2.12	0.48
26:1H:1385:G:O2'	26:1H:1396:U:C6	2.62	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1728:G:C6	26:1H:1730:U:OP2	2.67	0.48
26:1H:2093:G:OP2	33:61:22:LYS:HD2	2.13	0.48
29:21:13:ARG:HD2	40:B8:58:ASN:HB3	1.94	0.48
32:51:20:ALA:HB1	32:51:21:PRO:HD2	1.95	0.48
37:88:101:ARG:HG3	37:88:102:VAL:N	2.29	0.48
41:C8:106:PHE:O	41:C8:109:LEU:HB2	2.14	0.48
55:Q8:31:HIS:CD2	55:Q8:34:TRP:CH2	3.02	0.48
1:1G:1469:G:H2'	1:1G:1470:G:C8	2.48	0.48
2:12:21:ARG:HA	2:12:39:ILE:HA	1.94	0.48
24:3L:30:G:N2	24:3L:41:C:N3	2.62	0.48
26:14:35:G:C4	26:14:454:A:C2	3.02	0.48
26:14:200:U:O2	26:14:386:G:N2	2.47	0.48
26:14:601:C:O2	26:14:605:C:H4'	2.13	0.48
26:14:753:C:O2'	26:14:754:C:H5'	2.14	0.48
26:14:807:U:H2'	26:14:808:G:H8	1.77	0.48
26:14:1798:U:H5'	28:19:259:THR:OG1	2.14	0.48
26:14:2748:A:H2'	26:14:2749:A:H8	1.78	0.48
29:29:120:TRP:HE1	29:29:156:MET:H	1.61	0.48
30:39:117:ARG:HD3	30:39:120:GLU:OE1	2.13	0.48
34:15:95:PRO:O	34:15:98:VAL:HG22	2.13	0.48
41:85:106:PHE:O	41:85:109:LEU:HB2	2.13	0.48
46:D5:9:TYR:HD1	46:D5:37:VAL:HG12	1.78	0.48
49:G5:32:LEU:HB2	49:G5:53:LEU:HD13	1.93	0.48
55:M5:33:ASN:O	55:M5:36:LYS:NZ	2.36	0.48
1:13:648:A:C6	1:13:649:G:C6	3.01	0.48
1:13:1266:G:N2	1:13:1270:C:C2	2.81	0.48
10:1I:49:VAL:HG23	14:5I:41:ARG:HD2	1.94	0.48
13:4I:94:ARG:HH22	26:1H:887:A:C5'	2.26	0.48
15:6I:70:LEU:HD11	15:6I:77:ARG:HG3	1.94	0.48
26:1H:190:A:OP2	48:J8:39:LYS:HE3	2.13	0.48
26:1H:301:G:C4	26:1H:302:C:C5	3.02	0.48
26:1H:1142:U:H5'	26:1H:1142(A):A:C8	2.48	0.48
26:1H:2061:G:P	58:1H:3632:HOH:O	2.70	0.48
26:1H:2176:A:H2'	26:1H:2177:C:C6	2.48	0.48
28:11:85:ASP:OD2	28:11:88:ARG:NH1	2.41	0.48
38:98:9:LYS:HA	38:98:17:ARG:HE	1.77	0.48
39:A8:83:LYS:HG3	39:A8:110:LEU:HD12	1.95	0.48
43:E8:110:LYS:HG3	43:E8:111:HIS:H	1.79	0.48
45:G8:27:VAL:HA	45:G8:39:VAL:HG22	1.95	0.48
1:1G:430:A:OP2	4:32:8:VAL:HG23	2.14	0.48
3:22:73:PRO:O	3:22:77:ILE:HG13	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:191:ARG:NH2	4:32:194:LEU:O	2.46	0.48
13:4A:3:ARG:NH1	13:4A:7:VAL:HG12	2.28	0.48
23:2L:41:C:C2	23:2L:42:C:C5	3.02	0.48
26:14:508:G:N2	43:A5:80:PRO:HG2	2.27	0.48
26:14:933:A:C5	26:14:934:G:C8	3.01	0.48
26:14:1486:A:H2'	26:14:1487:G:C8	2.48	0.48
26:14:1849:G:H2'	26:14:1850:G:C8	2.48	0.48
37:45:2:LEU:O	37:45:70:PRO:HG2	2.12	0.48
38:55:28:LEU:HD12	38:55:48:VAL:HG21	1.95	0.48
42:95:69:LYS:HE3	42:95:85:LYS:HD2	1.96	0.48
26:1H:140:A:H8	26:1H:1408:C:O2'	1.94	0.48
26:1H:298:G:N7	58:1H:4010:HOH:O	2.35	0.48
26:1H:1790:C:H2'	26:1H:1791:A:C5	2.48	0.48
26:1H:2080:G:H5"	26:1H:2080:G:C8	2.47	0.48
26:1H:2376:A:C2	39:A8:112:PHE:HB3	2.48	0.48
26:1H:2619:C:O2'	26:1H:2620:C:H5'	2.12	0.48
30:31:149:ASP:OD1	30:31:149:ASP:N	2.44	0.48
46:H8:15:PRO:O	46:H8:19:ARG:HB2	2.13	0.48
46:H8:75:ASN:O	46:H8:84:GLU:N	2.36	0.48
1:1G:79:G:N2	1:1G:90:C:N3	2.58	0.48
1:1G:1112:C:C4	3:22:178:LEU:HD23	2.48	0.48
1:1G:1187:G:H4'	9:82:111:ARG:NH1	2.28	0.48
26:14:533:G:H2'	26:14:534:U:O4'	2.14	0.48
26:14:1071:G:N2	26:14:1087:G:H22	2.12	0.48
26:14:1278:A:C5'	38:55:36:THR:HG22	2.42	0.48
26:14:1530:G:H2'	26:14:1531:C:O4'	2.13	0.48
26:14:1889:A:O2'	26:14:2087:G:H5'	2.13	0.48
26:14:2297:C:H2'	26:14:2298:A:C8	2.46	0.48
26:14:2746:U:OP1	32:59:85:LYS:NZ	2.46	0.48
27:1J:12:C:O2'	47:E5:74:ARG:HG2	2.13	0.48
27:1J:63:G:C2	27:1J:64:C:C2	3.02	0.48
40:75:25:GLY:H	40:75:49:VAL:HG23	1.78	0.48
41:85:88:ILE:HA	42:95:49:THR:O	2.13	0.48
1:13:160:A:H61	1:13:347:G:H1'	1.79	0.48
1:13:284:G:H2'	1:13:285:G:H8	1.79	0.48
1:13:590:C:H42	1:13:649:G:H1	1.60	0.48
1:13:1053:G:O5'	1:13:1054:C:H3'	2.14	0.48
7:6E:92:SER:O	7:6E:96:GLN:HG3	2.12	0.48
8:7E:86:ILE:HG22	8:7E:87:SER:N	2.28	0.48
8:7E:87:SER:CB	8:7E:93:VAL:H	2.26	0.48
26:1H:71:A:H2	44:F8:31:HIS:NE2	2.04	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:195:A:H4'	26:1H:251:A:O2'	2.13	0.48
26:1H:1465:G:C4	26:1H:1466:G:C8	3.02	0.48
26:1H:2331:G:H4'	47:I8:42:GLY:HA3	1.95	0.48
26:1H:2615:U:H2'	26:1H:2616:C:H6	1.79	0.48
29:21:37:ARG:HA	29:21:42:ASP:OD2	2.14	0.48
34:58:6:PRO:HG3	34:58:41:ASP:HB2	1.94	0.48
34:58:99:LEU:HD23	34:58:99:LEU:HA	1.74	0.48
35:68:118:ALA:HA	35:68:119:PRO:HD2	1.75	0.48
48:J8:64:ALA:HA	48:J8:67:ILE:HG13	1.95	0.48
55:Q8:46:ARG:HH21	55:Q8:48:PHE:HB2	1.78	0.48
1:1G:321:A:N7	1:1G:328:C:C6	2.81	0.48
1:1G:397:A:H3'	1:1G:397:A:N3	2.28	0.48
1:1G:1060:C:O2'	10:1A:56:HIS:ND1	2.45	0.48
6:52:15:ASP:OD1	6:52:17:SER:N	2.46	0.48
9:82:10:ARG:HA	9:82:104:ARG:HH21	1.79	0.48
11:2A:86:GLY:H	11:2A:112:THR:HG23	1.79	0.48
12:3A:36:VAL:HG13	12:3A:81:SER:H	1.79	0.48
18:9A:31:LEU:HD23	18:9A:31:LEU:H	1.79	0.48
23:2L:32:G:C5	23:2L:33:OMC:C5	3.01	0.48
26:14:747:U:O2	26:14:2014:A:H1'	2.14	0.48
26:14:2749:A:N1	26:14:2750:A:N6	2.61	0.48
30:39:7:TYR:HD1	30:39:18:ARG:H	1.61	0.48
31:49:76:SER:OG	31:49:84:LYS:N	2.47	0.48
39:65:67:ARG:CZ	39:65:67:ARG:HB2	2.43	0.48
1:13:465:A:N7	1:13:467:G:C5	2.82	0.48
1:13:1026:G:H1	1:13:1035:A:H61	1.62	0.48
26:1H:99:U:C6	26:1H:102:G:C2	3.01	0.48
26:1H:487:C:H2'	26:1H:488:G:H5'	1.94	0.48
26:1H:960:A:H61	37:88:82:ARG:HH21	1.62	0.48
26:1H:993:G:H5"	41:C8:50:ARG:HH21	1.78	0.48
26:1H:1021:A:C8	26:1H:1022:G:H5"	2.48	0.48
26:1H:1170:G:N2	26:1H:1180:C:C2	2.81	0.48
26:1H:1543:A:H3'	26:1H:1543:A:OP2	2.13	0.48
26:1H:1676:A:C2	26:1H:1993:U:H5'	2.48	0.48
29:21:92:THR:HB	29:21:94:GLU:HG2	1.95	0.48
33:61:95:LYS:HE3	33:61:99:GLU:CD	2.34	0.48
36:78:85:LEU:HD13	36:78:120:ALA:HB2	1.95	0.48
37:88:39:PRO:HA	37:88:97:VAL:O	2.13	0.48
50:L8:5:LYS:HD2	50:L8:34:GLU:OE1	2.14	0.48
12:3A:47:LYS:O	12:3A:49:ASN:N	2.46	0.48
18:9A:36:ASN:ND2	18:9A:39:VAL:HB	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:38:A:H2'	26:14:39:C:C6	2.49	0.48
26:14:1003:G:N2	26:14:1153:C:C2	2.81	0.48
26:14:1354:A:OP2	58:14:3772:HOH:O	2.20	0.48
26:14:1485:G:H2'	26:14:1486:A:H8	1.77	0.48
26:14:1653:G:C6	38:55:9:LYS:HB2	2.49	0.48
28:19:83:GLU:OE1	28:19:104:TYR:OH	2.23	0.48
29:29:51:PHE:CE2	29:29:52:LEU:HG	2.48	0.48
36:35:80:TYR:CD2	36:35:111:ARG:HB3	2.49	0.48
39:65:28:VAL:HG11	39:65:98:VAL:HG12	1.94	0.48
44:B5:57:LEU:N	44:B5:57:LEU:HD23	2.29	0.48
46:D5:28:MET:O	46:D5:35:ARG:N	2.34	0.48
1:13:486:U:H2'	1:13:487:A:C8	2.48	0.48
4:3E:7:PRO:HB2	4:3E:10:ARG:HG2	1.95	0.48
5:4E:80:ILE:HG13	5:4E:81:GLU:N	2.28	0.48
16:7I:28:ARG:HG3	16:7I:29:ASP:N	2.28	0.48
26:1H:107:C:H2'	26:1H:108:U:C6	2.49	0.48
26:1H:207:A:H2'	26:1H:208:C:O4'	2.14	0.48
26:1H:783:A:C8	26:1H:783:A:H3'	2.48	0.48
26:1H:900:A:H5'	26:1H:901:A:OP2	2.14	0.48
26:1H:1491:G:H5'	28:11:99:ASP:OD1	2.14	0.48
26:1H:1533:C:H2'	26:1H:1534:G:C2	2.49	0.48
33:61:93:THR:N	33:61:96:ASP:OD2	2.38	0.48
42:D8:25:LEU:H	42:D8:92:THR:HG23	1.79	0.48
46:H8:53:ILE:HG22	46:H8:71:VAL:HG22	1.95	0.48
47:I8:50:ASN:ND2	47:I8:83:PRO:HD3	2.29	0.48
1:1G:667:G:N2	1:1G:739:C:O2	2.42	0.48
1:1G:942:G:N2	9:82:124:GLN:OE1	2.35	0.48
1:1G:1126:U:C4	1:1G:1281:U:C6	3.02	0.48
1:1G:1338:G:C6	1:1G:1339:A:N1	2.82	0.48
2:12:19:HIS:HE1	2:12:206:ASP:HB2	1.79	0.48
20:BA:67:ALA:HA	20:BA:73:HIS:HA	1.94	0.48
26:14:972:G:OP2	26:14:974:G:H5"	2.13	0.48
26:14:1418:G:H8	26:14:1418:G:O5'	1.96	0.48
26:14:2872:G:C4	26:14:2873:A:C2	3.01	0.48
28:19:67:PHE:HB3	28:19:153:ALA:H	1.78	0.48
1:13:101:A:H8	1:13:101:A:OP2	1.97	0.48
1:13:983:A:H5'	14:5I:3:ARG:HH12	1.79	0.48
3:2E:62:ASP:N	3:2E:62:ASP:OD1	2.47	0.48
5:4E:63:ARG:HA	5:4E:66:MET:HE2	1.96	0.48
13:4I:50:GLU:HA	13:4I:53:VAL:HB	1.95	0.48
13:4I:50:GLU:O	13:4I:54:VAL:HG23	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:7I:19:ILE:HB	16:7I:36:ILE:O	2.14	0.48
17:8I:74:LEU:HD22	17:8I:74:LEU:HA	1.74	0.48
17:8I:76:LEU:HD21	17:8I:79:SER:HB3	1.95	0.48
23:2K:54:G:H2'	23:2K:55:5MU:C6	2.43	0.48
26:1H:910:A:H62	37:88:12:GLN:HA	1.79	0.48
26:1H:1221:C:H2'	26:1H:1222:C:C6	2.48	0.48
26:1H:1264:G:OP1	52:N8:19:ARG:NH2	2.27	0.48
26:1H:1794:U:H2'	26:1H:1795:C:H6	1.78	0.48
26:1H:2050:C:H2'	26:1H:2051:A:O4'	2.14	0.48
26:1H:2239:G:H5'	28:11:251:GLY:HA3	1.96	0.48
26:1H:2496:C:OP1	37:88:82:ARG:HD3	2.14	0.48
32:51:101:ARG:NH1	32:51:122:THR:OG1	2.31	0.48
37:88:75:THR:HA	37:88:87:LYS:O	2.13	0.48
40:B8:50:ILE:HG22	40:B8:62:THR:OG1	2.14	0.48
44:F8:24:GLY:O	44:F8:83:VAL:HG22	2.14	0.48
45:G8:5:MET:HG3	45:G8:6:HIS:H	1.78	0.48
47:I8:38:VAL:CG1	47:I8:40:GLN:HG2	2.44	0.48
50:L8:54:VAL:O	50:L8:54:VAL:HG13	2.14	0.48
1:1G:17:U:H2'	1:1G:18:C:C6	2.49	0.48
1:1G:195:A:N7	1:1G:196:A:C6	2.82	0.48
1:1G:1149:C:OP2	9:82:9:ARG:NH1	2.47	0.48
1:1G:1218:C:OP2	14:5A:9:LYS:NZ	2.37	0.48
1:1G:1220:G:O3'	19:AA:36:ARG:HD3	2.14	0.48
1:1G:1468:A:H5"	1:1G:1469:G:OP2	2.12	0.48
16:7A:28:ARG:NE	16:7A:29:ASP:OD1	2.37	0.48
26:14:491:G:O6	43:A5:49:LYS:HD3	2.14	0.48
26:14:1427:A:H4'	26:14:1428:C:O5'	2.14	0.48
26:14:2295:C:OP2	39:65:10:ARG:HD3	2.13	0.48
26:14:2439:A:H8	26:14:2439:A:C5'	2.27	0.48
30:39:78:ILE:HA	30:39:83:PHE:CD2	2.48	0.48
34:15:135:PRO:HB2	34:15:137:LYS:HZ1	1.78	0.48
37:45:36:ALA:HB2	37:45:103:MET:SD	2.54	0.48
37:45:57:HIS:CD2	37:45:117:ALA:HB2	2.49	0.48
40:75:118:ARG:NH1	40:75:121:ILE:HG21	2.29	0.48
1:13:963:G:H1	1:13:972:C:N4	2.10	0.48
1:13:1073:U:O2'	2:1E:104:ASN:ND2	2.37	0.48
1:13:1366:C:H2'	1:13:1367:C:C6	2.49	0.48
8:7E:9:MET:HG3	8:7E:26:VAL:HG21	1.96	0.48
26:1H:583:G:H5"	41:C8:10:ARG:HH12	1.78	0.48
26:1H:654(M):C:H5'	26:1H:654(N):G:C5	2.49	0.48
26:1H:1001:A:C8	26:1H:1002:G:C8	3.02	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1550:C:H2'	26:1H:1551:C:C6	2.49	0.48
26:1H:1705:G:H2'	26:1H:1706:U:H5'	1.96	0.48
26:1H:1730:U:H5"	26:1H:1731:G:OP2	2.14	0.48
26:1H:1831:G:H2'	26:1H:1832:C:C6	2.49	0.48
26:1H:2287:A:N1	26:1H:2346:A:H2	2.12	0.48
26:1H:2306:C:H3'	26:1H:2307:G:C5'	2.43	0.48
26:1H:2318:G:N2	39:A8:2:ALA:HA	2.29	0.48
26:1H:2756:U:H4'	26:1H:2757:A:OP1	2.13	0.48
33:61:69:LYS:HG3	33:61:136:VAL:HB	1.96	0.48
49:K8:31:GLU:HB2	49:K8:53:LEU:HD11	1.95	0.48
1:1G:789:U:O2'	1:1G:791:G:O6	2.32	0.48
1:1G:1238:A:N3	1:1G:1241:G:O2'	2.28	0.48
1:1G:1291:G:H4'	9:82:39:GLY:HA3	1.95	0.48
1:1G:1298:C:C5	7:62:114:ARG:HD2	2.48	0.48
1:1G:1386:G:H2'	1:1G:1387:G:H8	1.79	0.48
24:3L:23:A:H2'	24:3L:24:G:C8	2.49	0.48
26:14:673:C:H4'	30:39:82:ILE:CG1	2.44	0.48
26:14:2290:G:O2'	26:14:2381:C:H1'	2.13	0.48
26:14:2593:U:H2'	26:14:2594:C:C6	2.49	0.48
26:14:2763:G:OP2	58:14:4000:HOH:O	2.20	0.48
31:49:72:ARG:HD2	31:49:85:GLY:O	2.13	0.48
38:55:38:VAL:HG22	38:55:112:ALA:HB2	1.95	0.48
43:A5:70:TYR:O	43:A5:107:LEU:HD12	2.14	0.48
46:D5:127:LYS:O	46:D5:162:GLU:HB2	2.14	0.48
1:13:34:C:H2'	1:13:35:G:C8	2.49	0.47
1:13:825:G:O4'	8:7E:2:LEU:HD21	2.14	0.47
1:13:985:C:H2'	1:13:986:A:C8	2.49	0.47
1:13:1113:C:H2'	1:13:1114:C:H6	1.79	0.47
1:13:1236:A:O2'	1:13:1304:G:H4'	2.14	0.47
1:13:1347:G:H5"	9:8E:107:ARG:HG2	1.95	0.47
4:3E:18:LYS:HD3	4:3E:31:CYS:SG	2.54	0.47
5:4E:150:ARG:CZ	5:4E:150:ARG:HB3	2.44	0.47
26:1H:1337:G:H2'	26:1H:1338:G:C8	2.48	0.47
26:1H:2400:G:H2'	26:1H:2401:U:C6	2.48	0.47
42:D8:43:GLU:OE2	42:D8:44:LYS:HG2	2.14	0.47
49:K8:8:LYS:HZ2	49:K8:12:GLU:HG2	1.79	0.47
54:P8:10:ARG:O	54:P8:10:ARG:HG2	2.14	0.47
1:1G:604:G:H2'	1:1G:605:U:O4'	2.14	0.47
1:1G:660:G:N2	1:1G:745:C:N3	2.53	0.47
1:1G:762:C:H2'	1:1G:763:G:H8	1.78	0.47
1:1G:801:U:H2'	1:1G:802:A:C8	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1240:U:H2'	7:62:32:ARG:NH2	2.29	0.47
1:1G:1255:G:O3'	1:1G:1258:G:H1'	2.14	0.47
1:1G:1453:G:H8	20:BA:39:LYS:HD2	1.79	0.47
3:22:38:ARG:O	3:22:42:LEU:N	2.31	0.47
5:42:84:PHE:O	5:42:86:ALA:N	2.37	0.47
10:1A:78:ASN:OD1	10:1A:80:LYS:HB3	2.14	0.47
14:5A:4:LYS:O	14:5A:7:ILE:HG12	2.13	0.47
21:1B:9:ARG:HG3	21:1B:10:ARG:N	2.29	0.47
26:14:5:A:H2'	26:14:6:A:H8	1.78	0.47
26:14:869:G:C2	26:14:870:A:C8	3.02	0.47
26:14:1379:A:H4'	26:14:1380:G:OP2	2.14	0.47
26:14:2353:G:H2'	26:14:2354:G:O4'	2.13	0.47
26:14:2420:C:N4	55:M5:31:HIS:HB3	2.29	0.47
28:19:267:SER:O	28:19:268:ARG:HG2	2.14	0.47
29:29:13:ARG:NH2	40:75:77:PRO:HB3	2.29	0.47
37:45:17:LEU:HD21	37:45:41:TRP:NE1	2.28	0.47
38:55:104:ARG:HD2	38:55:107:ASP:OD2	2.13	0.47
44:B5:84:ALA:O	44:B5:87:GLN:HG3	2.13	0.47
1:13:186(E):C:N3	1:13:191(C):G:C2	2.82	0.47
1:13:838:G:H1	1:13:848:C:N4	2.12	0.47
26:1H:654(D):G:H22	26:1H:654(Q):C:N4	2.12	0.47
26:1H:1408:C:C2	26:1H:1595:G:N2	2.82	0.47
26:1H:1442:G:C2	26:1H:1550:C:O2	2.67	0.47
26:1H:2022:U:O2'	26:1H:2617:C:H5'	2.14	0.47
26:1H:2238:G:H4'	26:1H:2239:G:OP1	2.14	0.47
26:1H:2562:U:H1'	35:68:23:ARG:HD3	1.95	0.47
26:1H:2785:C:OP1	29:21:41:LYS:HE3	2.14	0.47
29:21:70:ALA:O	29:21:73:GLU:N	2.47	0.47
37:88:21:THR:HG22	37:88:99:PRO:O	2.13	0.47
1:1G:308:C:H2'	1:1G:309:G:C8	2.49	0.47
1:1G:578:C:H42	1:1G:763:G:H1	1.60	0.47
1:1G:790:A:H8	1:1G:790:A:O5'	1.97	0.47
1:1G:1154:G:N3	1:1G:1155:G:C8	2.83	0.47
1:1G:1240:U:OP2	7:62:116:ALA:N	2.43	0.47
1:1G:1459:C:OP1	20:BA:31:SER:OG	2.30	0.47
2:12:5:ILE:HG12	2:12:6:THR:HG22	1.95	0.47
2:12:215:LEU:HA	2:12:218:ALA:HB3	1.97	0.47
4:32:108:LEU:CD1	4:32:174:LEU:HB3	2.44	0.47
7:62:116:ALA:HA	7:62:119:ARG:HE	1.79	0.47
10:1A:9:ARG:NH2	10:1A:95:GLU:OE1	2.46	0.47
10:1A:36:GLY:O	10:1A:38:ILE:HG13	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:70:ILE:HD13	12:3A:77:LEU:HD12	1.95	0.47
19:AA:15:LEU:HD12	19:AA:33:THR:HB	1.95	0.47
24:1L:18:G:O2'	24:1L:60:U:O4	2.26	0.47
26:14:1259:G:H2'	26:14:1260:G:H8	1.79	0.47
26:14:1316:U:H2'	26:14:1317:A:H8	1.79	0.47
26:14:2065:C:H2'	26:14:2066:C:H6	1.79	0.47
26:14:2619:C:OP1	29:29:152:LYS:HE3	2.14	0.47
26:14:2861:G:O2'	26:14:2862:G:H5'	2.14	0.47
29:29:89:ASP:CG	29:29:90:THR:H	2.17	0.47
32:59:99:VAL:HG13	32:59:100:GLY:H	1.78	0.47
34:15:15:LEU:HD13	34:15:16:ILE:N	2.28	0.47
38:55:38:VAL:HB	38:55:39:PRO:HD3	1.97	0.47
41:85:91:ASP:CG	41:85:96:ALA:HB2	2.35	0.47
45:C5:83:THR:HG22	45:C5:84:ARG:H	1.79	0.47
1:13:266:G:H5"	1:13:267:C:H5	1.78	0.47
1:13:1326:C:H2'	1:13:1327:C:H6	1.80	0.47
6:5E:41:GLU:HB2	6:5E:62:TRP:HE3	1.80	0.47
13:4I:12:ASN:O	13:4I:45:VAL:HG12	2.13	0.47
24:3K:9:A:N6	24:3K:23:A:H62	2.13	0.47
24:3K:23:A:H2'	24:3K:24:G:C8	2.48	0.47
26:1H:446:G:OP2	58:1H:3691:HOH:O	2.19	0.47
26:1H:1022:G:O6	34:58:66:LYS:NZ	2.47	0.47
26:1H:1055:G:O2'	26:1H:1086:A:N6	2.47	0.47
26:1H:1534:G:H22	26:1H:1538:G:N2	2.09	0.47
26:1H:2383:G:O2'	26:1H:2384:G:H5'	2.13	0.47
26:1H:2591:C:P	28:11:239:ARG:HG3	2.54	0.47
28:11:231:HIS:CD2	28:11:249:PRO:HA	2.49	0.47
33:61:52:ARG:O	33:61:56:LYS:HB3	2.15	0.47
34:58:7:LYS:HE3	34:58:7:LYS:HB3	1.67	0.47
36:78:63:PRO:HG2	55:Q8:24:ALA:HB3	1.96	0.47
37:88:81:VAL:O	37:88:82:ARG:HB2	2.14	0.47
46:H8:92:SER:O	46:H8:130:PRO:HG2	2.13	0.47
53:O8:47:THR:HG22	53:O8:48:VAL:HG23	1.96	0.47
1:1G:57:G:H2'	1:1G:58:C:C6	2.49	0.47
1:1G:303:A:H2'	1:1G:304:U:O4'	2.14	0.47
1:1G:616:G:C2	1:1G:617:G:C8	3.02	0.47
1:1G:616:G:N3	1:1G:617:G:C8	2.82	0.47
1:1G:1037:C:H2'	1:1G:1038:C:C6	2.49	0.47
1:1G:1261:A:C2	1:1G:1262:C:H1'	2.50	0.47
1:1G:1280:A:H5'	1:1G:1281:U:OP2	2.14	0.47
3:22:44:GLU:HA	3:22:52:LEU:HD11	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:112:SER:HB3	3:22:115:LEU:HD12	1.96	0.47
24:1L:74:C:O2'	24:1L:75:C:OP2	2.28	0.47
26:14:754:C:H2'	26:14:755:C:C6	2.49	0.47
26:14:861:A:C2	26:14:917:A:C4	3.03	0.47
26:14:2439:A:C8	26:14:2439:A:C5'	2.96	0.47
45:C5:90:LEU:HA	45:C5:91:GLU:HA	1.74	0.47
48:F5:76:ARG:HG3	48:F5:94:LEU:HD13	1.95	0.47
1:13:129(A):G:N2	1:13:188:U:O2'	2.48	0.47
1:13:692:U:O2'	1:13:694:A:N7	2.37	0.47
3:2E:91:LEU:O	3:2E:95:THR:OG1	2.29	0.47
10:1I:40:LEU:HB2	10:1I:69:ASN:HB2	1.96	0.47
16:7I:5:ARG:HH21	16:7I:22:THR:HG21	1.79	0.47
18:9I:66:LEU:HD11	18:9I:70:ILE:HD11	1.95	0.47
22:1K:76:A:H1'	26:1H:2583:G:H21	1.80	0.47
23:2K:8:4SU:O2	23:2K:22:A:H2	1.97	0.47
23:2K:62:C:O2'	23:2K:63:C:H5'	2.14	0.47
26:1H:35:G:H2'	26:1H:36:G:O4'	2.13	0.47
26:1H:330:A:O2'	26:1H:331:A:C8	2.58	0.47
26:1H:635:C:O2'	26:1H:639:U:OP1	2.32	0.47
26:1H:900:A:H3'	26:1H:901:A:C8	2.45	0.47
26:1H:1156:A:P	58:1H:3762:HOH:O	2.69	0.47
26:1H:2074:U:P	58:1H:3682:HOH:O	2.72	0.47
26:1H:2376:A:H2'	26:1H:2377:A:O4'	2.14	0.47
32:51:129:THR:O	32:51:129:THR:OG1	2.25	0.47
36:78:94:GLU:HG3	36:78:96:THR:HG23	1.97	0.47
37:88:16:ARG:HE	37:88:16:ARG:HB3	1.63	0.47
39:A8:67:ARG:O	39:A8:71:ARG:HG3	2.15	0.47
40:B8:88:ILE:HD13	40:B8:91:ARG:HH21	1.79	0.47
45:G8:20:TYR:CE1	45:G8:43:ASN:HA	2.49	0.47
7:62:65:ALA:HB2	7:62:128:ALA:HB2	1.96	0.47
26:14:192:C:OP1	58:14:3628:HOH:O	2.20	0.47
26:14:506:G:O3'	26:14:507:A:H8	1.98	0.47
26:14:807:U:C2	26:14:808:G:C8	3.03	0.47
26:14:1353:A:OP2	58:14:3768:HOH:O	2.20	0.47
26:14:1358:G:N2	26:14:1372:U:C5	2.82	0.47
26:14:1387:C:C2	26:14:1388:G:C8	3.01	0.47
27:1J:3:C:H2'	27:1J:4:C:C6	2.49	0.47
30:39:118:ALA:O	30:39:121:GLY:N	2.46	0.47
32:59:20:ALA:O	32:59:22:GLY:N	2.46	0.47
42:95:29:PRO:HA	42:95:61:VAL:HG11	1.95	0.47
45:C5:87:LYS:H	45:C5:94:LYS:HG2	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M5:34:TRP:H	55:M5:34:TRP:HD1	1.62	0.47
1:13:232:G:C5	1:13:233:C:C5	3.02	0.47
1:13:619:U:H3	4:3E:134:ASP:HB2	1.79	0.47
1:13:953:G:H8	1:13:953:G:O5'	1.97	0.47
1:13:1313:U:P	19:AI:6:LYS:HD3	2.55	0.47
1:13:1346:A:OP1	9:8E:120:ARG:NH1	2.47	0.47
4:3E:173:TRP:CG	4:3E:189:PRO:HG3	2.48	0.47
8:7E:87:SER:HB3	8:7E:133:LEU:O	2.14	0.47
26:1H:376:C:P	58:1H:3724:HOH:O	2.73	0.47
26:1H:587:C:H4'	26:1H:588:U:H6	1.79	0.47
26:1H:602:G:N2	26:1H:655:A:C8	2.82	0.47
58:1H:4235:HOH:O	48:J8:65:SER:HA	2.13	0.47
29:21:144:ARG:HH11	29:21:144:ARG:HG3	1.80	0.47
31:41:82:LEU:HD21	31:41:88:ILE:HD11	1.97	0.47
32:51:118:PRO:HG2	32:51:140:LYS:HE2	1.95	0.47
43:E8:28:SER:OG	43:E8:31:GLU:HG2	2.15	0.47
49:K8:27:GLU:O	49:K8:31:GLU:HG3	2.14	0.47
1:1G:4:U:H3'	1:1G:5:U:H5'	1.96	0.47
1:1G:1172:C:H2'	1:1G:1173:G:H8	1.79	0.47
1:1G:1524:C:N4	1:1G:1525:G:O6	2.47	0.47
8:72:64:LYS:O	8:72:79:VAL:HB	2.15	0.47
9:82:42:ARG:NH1	9:82:71:SER:O	2.47	0.47
10:1A:30:SER:HB3	10:1A:84:GLN:OE1	2.15	0.47
23:2L:32:G:H5"	23:2L:33:OMC:OP2	2.14	0.47
26:14:61:G:OP2	49:G5:54:LYS:NZ	2.47	0.47
26:14:311:A:C6	26:14:328:U:C4	3.03	0.47
26:14:898:C:H3'	26:14:899:A:H5"	1.95	0.47
26:14:931:G:H3'	26:14:931:G:C8	2.49	0.47
26:14:959:A:N6	26:14:960:A:N1	2.62	0.47
26:14:977:G:C4	26:14:978:G:C8	3.02	0.47
26:14:1167:U:O2	26:14:1183:G:N2	2.48	0.47
26:14:1200:C:H5'	58:14:3677:HOH:O	2.13	0.47
26:14:1729:A:H2'	26:14:1731:G:H22	1.80	0.47
30:39:1:MET:HB2	30:39:2:LYS:HD3	1.96	0.47
31:49:64:THR:OG1	31:49:94:LEU:HD21	2.15	0.47
33:69:41:GLU:HA	33:69:44:LEU:HB2	1.96	0.47
45:C5:40:GLU:N	45:C5:40:GLU:OE2	2.47	0.47
51:I5:42:PHE:O	51:I5:43:TYR:HB3	2.15	0.47
1:13:119:A:N6	1:13:288:A:H1'	2.30	0.47
1:13:136:C:O3'	16:7I:65:GLN:NE2	2.47	0.47
1:13:266:G:O3'	17:8I:67:LYS:HB2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:560:U:H5'	1:13:566:G:N2	2.29	0.47
1:13:622:A:C8	1:13:623:C:C6	3.03	0.47
1:13:1260:C:OP1	1:13:1284:C:H4'	2.14	0.47
1:13:1320:C:N4	19:AI:36:ARG:HG3	2.29	0.47
2:1E:59:GLU:HB2	2:1E:221:LEU:HD11	1.96	0.47
7:6E:120:ILE:O	7:6E:124:LEU:HB2	2.14	0.47
16:7I:5:ARG:HE	16:7I:22:THR:CG2	2.28	0.47
26:1H:270(B):A:N1	26:1H:273:G:O2'	2.44	0.47
26:1H:298:G:H5"	26:1H:299:A:OP1	2.15	0.47
26:1H:392:C:P	58:1H:3725:HOH:O	2.72	0.47
26:1H:751:A:P	58:1H:3860:HOH:O	2.71	0.47
26:1H:888:C:H2'	26:1H:889:C:C2	2.50	0.47
26:1H:1748:G:H2'	26:1H:1749:A:C8	2.49	0.47
26:1H:1969:A:H1'	26:1H:1973:G:O4'	2.14	0.47
26:1H:2123:G:H22	26:1H:2175:C:H42	1.62	0.47
29:21:101:ARG:O	29:21:201:THR:OG1	2.28	0.47
30:31:39:TRP:O	30:31:43:LYS:HG2	2.15	0.47
34:58:43:THR:HB	34:58:46:VAL:HG12	1.96	0.47
51:M8:39:CYS:H	51:M8:41:PRO:HD2	1.78	0.47
1:1G:114:U:H2'	1:1G:115:G:H8	1.79	0.47
1:1G:170:U:O2'	1:1G:171:A:H5'	2.15	0.47
1:1G:1095:U:OP1	1:1G:1108:G:N2	2.48	0.47
1:1G:1129:C:C4	1:1G:1139:G:N1	2.82	0.47
2:12:6:THR:OG1	2:12:7:VAL:N	2.46	0.47
2:12:84:GLU:O	2:12:219:VAL:HG21	2.15	0.47
3:22:113:ALA:HA	3:22:202:ILE:HD11	1.95	0.47
5:42:7:GLU:O	5:42:34:VAL:HA	2.15	0.47
26:14:298:G:OP1	45:C5:85:VAL:HA	2.15	0.47
26:14:857:C:H2'	26:14:858:U:C6	2.48	0.47
26:14:860:U:C2	26:14:2268:A:C8	3.02	0.47
26:14:1154:G:OP1	41:85:58:ARG:HD3	2.14	0.47
26:14:1926:U:H2'	26:14:1928:A:OP2	2.14	0.47
26:14:2031:A:C6	26:14:2498:C:H1'	2.50	0.47
26:14:2319:G:H4'	26:14:2320:A:O5'	2.14	0.47
34:15:33:LEU:HA	34:15:38:HIS:HD2	1.80	0.47
36:35:86:LYS:HB3	36:35:118:GLY:HA3	1.97	0.47
1:13:22:G:H2'	1:13:23:C:H6	1.80	0.47
1:13:445:G:H1	1:13:489:C:N4	2.12	0.47
1:13:547:A:OP1	4:3E:73:ARG:NH2	2.48	0.47
1:13:703:G:H4'	1:13:704:A:O5'	2.15	0.47
1:13:719:C:O2'	18:9I:49:LYS:HB3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:947:G:H2'	1:13:948:C:O4'	2.14	0.47
2:1E:54:THR:HB	2:1E:201:ILE:HD11	1.97	0.47
4:3E:19:LEU:HD11	4:3E:63:LYS:HG3	1.97	0.47
4:3E:108:LEU:HB3	4:3E:110:PHE:CD1	2.50	0.47
5:4E:153:LYS:HD3	5:4E:154:GLY:H	1.79	0.47
7:6E:71:PRO:O	7:6E:91:VAL:HG21	2.15	0.47
9:8E:49:PRO:O	9:8E:53:VAL:HB	2.15	0.47
9:8E:118:LYS:O	9:8E:119:ALA:HB3	2.15	0.47
10:1I:77:PRO:CB	10:1I:79:ARG:HH12	2.23	0.47
13:4I:40:ASN:HB3	13:4I:43:THR:HG23	1.96	0.47
20:BI:61:SER:O	20:BI:65:LYS:HB2	2.15	0.47
24:3K:59:U:H3'	24:3K:60:U:C6	2.50	0.47
26:1H:15:G:C2	26:1H:16:G:C8	3.02	0.47
26:1H:95:G:O2'	49:K8:48:HIS:HB3	2.15	0.47
26:1H:185:U:H4'	26:1H:218:A:H4'	1.97	0.47
26:1H:600:G:H2'	26:1H:601:C:O4'	2.15	0.47
26:1H:987:G:O2'	26:1H:1000:A:N3	2.41	0.47
26:1H:1155:A:H5'	41:C8:55:ARG:HE	1.80	0.47
26:1H:1690:A:H3'	26:1H:1691:C:H6	1.80	0.47
26:1H:1705:G:O2'	26:1H:1706:U:H5'	2.14	0.47
26:1H:1753:G:N1	26:1H:1756:G:C2	2.82	0.47
26:1H:2111:C:H5	26:1H:2147:G:C6	2.33	0.47
26:1H:2171:A:O2'	26:1H:2172:U:O5'	2.32	0.47
26:1H:2244:U:H2'	26:1H:2245:U:O4'	2.15	0.47
26:1H:2475:C:H4'	26:1H:2476:A:OP1	2.13	0.47
28:11:6:PHE:CE2	28:11:18:VAL:HG23	2.48	0.47
31:41:64:THR:HG22	31:41:66:GLN:N	2.30	0.47
34:58:10:GLU:HA	34:58:11:PRO:HD3	1.72	0.47
34:58:95:PRO:O	34:58:96:GLU:CD	2.53	0.47
35:68:93:PRO:HG3	35:68:114:ILE:HG12	1.96	0.47
36:78:15:ARG:HA	36:78:15:ARG:HD2	1.79	0.47
36:78:130:PHE:CE1	36:78:146:VAL:HG23	2.50	0.47
37:88:41:TRP:CD1	37:88:96:VAL:HG22	2.50	0.47
38:98:38:VAL:HB	38:98:39:PRO:HD3	1.97	0.47
41:C8:95:LEU:HG	42:D8:4:ILE:HD13	1.97	0.47
50:L8:46:ASN:O	50:L8:50:VAL:HG22	2.15	0.47
50:L8:56:VAL:HG12	50:L8:57:GLU:N	2.29	0.47
53:O8:27:LYS:NZ	53:O8:27:LYS:H	2.13	0.47
1:1G:142:G:H2'	1:1G:143:A:H8	1.80	0.47
1:1G:451:A:N6	1:1G:480:U:H2'	2.30	0.47
1:1G:518:C:H5"	1:1G:519:C:C6	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:545:C:OP1	4:32:61:LYS:NZ	2.48	0.47
1:1G:568:G:N3	1:1G:574:A:H2	2.11	0.47
1:1G:570:G:H1'	1:1G:820:U:C4	2.50	0.47
1:1G:890:G:O2'	1:1G:906:G:O6	2.29	0.47
1:1G:1084:G:H5'	1:1G:1102:A:OP2	2.14	0.47
1:1G:1096:C:H2'	1:1G:1097:C:H6	1.80	0.47
1:1G:1126:U:H4'	1:1G:1127:G:N7	2.29	0.47
1:1G:1286:A:C8	1:1G:1287:A:H4'	2.49	0.47
1:1G:1401:G:C2	1:1G:1402:C:H1'	2.50	0.47
1:1G:1443:G:H22	40:75:119:LYS:HB2	1.80	0.47
1:1G:1446:A:OP1	1:1G:1446:A:H4'	2.14	0.47
2:12:54:THR:HG22	2:12:58:ILE:HD11	1.97	0.47
2:12:179:LYS:HA	8:72:72:PRO:HG3	1.96	0.47
3:22:91:LEU:HD11	3:22:101:LEU:HD12	1.97	0.47
3:22:120:VAL:O	3:22:123:GLN:HB3	2.14	0.47
8:72:104:ARG:O	8:72:107:LEU:HG	2.14	0.47
10:1A:3:LYS:HD2	10:1A:77:PRO:HG3	1.97	0.47
12:3A:54:LYS:HD2	12:3A:54:LYS:H	1.79	0.47
13:4A:32:GLU:OE2	13:4A:33:ALA:N	2.47	0.47
20:BA:49:ALA:O	20:BA:100:ILE:HG21	2.14	0.47
24:3L:56:C:H5'	26:14:2169:A:C8	2.49	0.47
26:14:76:C:O3'	49:G5:59:ARG:HG3	2.13	0.47
26:14:249:C:OP1	58:14:3518:HOH:O	2.20	0.47
26:14:459:U:H4'	54:L5:40:TRP:CZ3	2.49	0.47
26:14:628:G:H5"	55:M5:18:ALA:HB2	1.96	0.47
26:14:1011:G:N3	26:14:1151:G:N2	2.62	0.47
26:14:1027:A:OP2	26:14:1027:A:H8	1.98	0.47
26:14:1115:G:H2'	26:14:1116:C:C6	2.49	0.47
26:14:1159:U:O2'	26:14:1160:G:H5'	2.14	0.47
26:14:1520:U:H2'	26:14:1521:G:O4'	2.15	0.47
26:14:2065:C:H2'	26:14:2066:C:C6	2.50	0.47
26:14:2139:C:N4	26:14:2152:G:O6	2.47	0.47
26:14:2586:C:C2'	26:14:2587:A:H5'	2.44	0.47
26:14:2862:G:H2'	26:14:2863:C:H6	1.80	0.47
27:1J:10:C:C4	27:1J:11:C:C5	3.03	0.47
28:19:43:ARG:HH11	28:19:43:ARG:CG	2.28	0.47
36:35:49:ARG:CZ	55:M5:58:ILE:HG22	2.45	0.47
37:45:115:MET:O	37:45:119:ARG:HB2	2.15	0.47
38:55:24:GLN:HE22	38:55:36:THR:HG21	1.79	0.47
44:B5:32:PRO:HA	44:B5:77:LYS:HB2	1.96	0.47
47:E5:27:GLU:HB2	47:E5:69:PHE:HD1	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:F5:4:VAL:HG11	48:F5:11:ARG:HH12	1.80	0.47
51:I5:48:ARG:HH12	51:I5:51:ASP:HB3	1.79	0.47
1:13:598:U:H2'	1:13:599:C:H6	1.80	0.47
1:13:683:G:H2'	1:13:684:A:C8	2.50	0.47
1:13:971:G:N2	1:13:1363:A:OP2	2.45	0.47
1:13:1455:G:OP1	20:BI:35:THR:OG1	2.11	0.47
8:7E:10:LEU:CD2	8:7E:83:ILE:HD11	2.40	0.47
20:BI:14:LYS:HG3	20:BI:17:ARG:HH21	1.79	0.47
22:1K:11:C:H2'	22:1K:12:U:O4'	2.14	0.47
26:1H:278:A:H8	26:1H:278:A:H5"	1.79	0.47
26:1H:562:U:C4	26:1H:2036:C:O4'	2.67	0.47
26:1H:1127:A:N7	26:1H:2488:A:O2'	2.43	0.47
31:41:128:ARG:HB2	31:41:128:ARG:NH2	2.30	0.47
33:61:95:LYS:HE3	33:61:99:GLU:OE1	2.15	0.47
37:88:59:ARG:HH11	37:88:59:ARG:N	2.10	0.47
39:A8:15:ARG:HD2	39:A8:88:ASP:OD2	2.14	0.47
45:G8:89:PHE:HD1	45:G8:90:LEU:N	2.13	0.47
55:Q8:48:PHE:CD2	55:Q8:49:VAL:HG12	2.50	0.47
1:1G:520:A:N1	1:1G:536:C:H1'	2.29	0.47
1:1G:539:A:H2'	1:1G:540:G:H8	1.80	0.47
1:1G:624:C:H2'	1:1G:625:G:H8	1.80	0.47
1:1G:685:G:N1	1:1G:686:U:O4	2.47	0.47
1:1G:960:U:H4'	1:1G:961:U:H5"	1.96	0.47
1:1G:1368:G:C5'	9:82:112:LYS:HB3	2.41	0.47
4:32:13:ARG:C	4:32:15:GLU:H	2.18	0.47
12:3A:49:ASN:N	12:3A:49:ASN:OD1	2.48	0.47
19:AA:9:VAL:HG13	51:I5:63:TYR:CE1	2.49	0.47
19:AA:41:VAL:HB	19:AA:44:MET:HG3	1.97	0.47
23:2L:38:A:H2'	23:2L:39:A:O4'	2.15	0.47
26:14:57:C:H2'	26:14:58:G:O4'	2.15	0.47
26:14:138:G:H22	44:B5:44:GLU:CD	2.12	0.47
26:14:389:G:H22	36:35:72:PRO:HD3	1.79	0.47
26:14:1022:G:C6	26:14:1140:C:C4	3.03	0.47
26:14:1669:A:H5"	26:14:1670:C:OP2	2.15	0.47
26:14:2244:U:H2'	26:14:2245:U:O4'	2.14	0.47
26:14:2298:A:H61	26:14:2318:G:H2'	1.80	0.47
27:1J:97:G:H2'	27:1J:98:G:O4'	2.14	0.47
30:39:107:LYS:HE2	30:39:205:ARG:HD2	1.97	0.47
30:39:123:LEU:HG	30:39:125:LEU:HD22	1.97	0.47
31:49:121:ASN:OD1	31:49:124:SER:N	2.46	0.47
34:15:15:LEU:HB2	34:15:134:ARG:CG	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:35:63:PRO:HA	55:M5:13:ARG:HA	1.95	0.47
39:65:69:VAL:O	39:65:72:ALA:HB3	2.15	0.47
46:D5:108:PRO:HG3	46:D5:142:SER:HB2	1.97	0.47
48:F5:82:LEU:HD23	48:F5:82:LEU:H	1.79	0.47
51:I5:22:ILE:HG12	51:I5:23:GLU:H	1.80	0.47
53:K5:27:LYS:NZ	53:K5:27:LYS:HB3	2.29	0.47
1:13:321:A:C2	1:13:333:G:C2	3.03	0.47
1:13:501:C:H2'	1:13:502:G:H8	1.80	0.47
1:13:509:A:H5"	4:3E:55:ALA:HB2	1.97	0.47
1:13:639:G:C2	1:13:640:A:C5	3.03	0.47
1:13:684:A:C6	1:13:685:G:C6	3.03	0.47
1:13:741:G:H2'	1:13:742:G:O4'	2.15	0.47
1:13:1074:G:O2'	1:13:1101:A:N1	2.42	0.47
7:6E:5:ARG:CZ	7:6E:7:ALA:HA	2.45	0.47
8:7E:82:HIS:CE1	8:7E:136:GLU:OE2	2.68	0.47
11:2I:112:THR:O	11:2I:114:VAL:HG12	2.14	0.47
12:3I:89:ARG:HG2	12:3I:90:VAL:N	2.30	0.47
15:6I:10:LYS:HD2	15:6I:10:LYS:HA	1.68	0.47
26:1H:181:A:H1'	26:1H:435:C:H5'	1.96	0.47
26:1H:241:A:H4'	26:1H:242:G:OP1	2.14	0.47
26:1H:768:G:O2'	26:1H:1379:A:N6	2.48	0.47
26:1H:1324:G:N2	26:1H:1331:A:C4	2.83	0.47
26:1H:1657:C:H2'	26:1H:1658:C:H6	1.79	0.47
26:1H:1774:C:H5"	58:1H:3750:HOH:O	2.15	0.47
26:1H:2074:U:OP1	58:1H:3681:HOH:O	2.20	0.47
26:1H:2164:C:H41	26:1H:2165:G:N2	2.13	0.47
26:1H:2774:C:H2'	26:1H:2775:A:O4'	2.15	0.47
29:21:33:VAL:CG1	29:21:89:ASP:HA	2.45	0.47
31:41:64:THR:HG21	31:41:66:GLN:HB2	1.97	0.47
33:61:86:THR:HA	33:61:123:LEU:HD13	1.96	0.47
36:78:96:THR:HG22	36:78:126:VAL:HG21	1.97	0.47
43:E8:12:ILE:HG13	43:E8:42:ARG:NH1	2.27	0.47
44:F8:3:THR:CB	44:F8:6:ASP:HB2	2.45	0.47
49:K8:15:LYS:H	49:K8:67:LYS:HZ1	1.56	0.47
54:P8:35:ARG:NH1	54:P8:42:LEU:HD11	2.30	0.47
1:1G:547:A:OP2	4:32:2:GLY:N	2.48	0.47
1:1G:718:G:H5'	11:2A:117:ASN:ND2	2.29	0.47
1:1G:1324:A:H4'	1:1G:1362:C:H4'	1.96	0.47
2:12:48:MET:HA	2:12:51:LEU:HB2	1.97	0.47
4:32:4:TYR:HE2	4:32:11:LEU:HD21	1.80	0.47
12:3A:54:LYS:HD2	12:3A:54:LYS:N	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:109:GLY:HA3	12:3A:121:GLY:O	2.15	0.47
19:AA:9:VAL:HG13	51:I5:63:TYR:HE1	1.80	0.47
24:1L:58:A:O2'	24:1L:61:C:N4	2.48	0.47
24:3L:52:G:H1	24:3L:62:C:N4	2.13	0.47
26:14:276:A:N3	26:14:277:C:N4	2.63	0.47
26:14:654:A:H8	26:14:654:A:OP1	1.98	0.47
26:14:779:U:OP1	28:19:49:ILE:HG22	2.15	0.47
26:14:818:G:H4'	26:14:838:C:O3'	2.15	0.47
26:14:1167:U:C2	26:14:1183:G:N2	2.83	0.47
26:14:2286:A:C8	26:14:2287:A:N6	2.83	0.47
26:14:2361:A:OP1	55:M5:27:THR:HG23	2.14	0.47
27:1J:76:G:H2'	27:1J:77:U:O4'	2.15	0.47
28:19:71:ASP:N	28:19:71:ASP:OD1	2.47	0.47
28:19:181:GLU:HA	28:19:272:ALA:HB1	1.97	0.47
34:15:91:LEU:O	34:15:95:PRO:HB3	2.14	0.47
34:15:103:VAL:HG11	34:15:120:LEU:HD22	1.96	0.47
40:75:27:THR:HG23	40:75:89:VAL:HG22	1.96	0.47
55:M5:14:VAL:HG11	55:M5:22:VAL:HG13	1.97	0.47
1:13:342:C:H42	1:13:347:G:H1	1.63	0.47
1:13:765:G:H5"	1:13:766:A:OP1	2.15	0.47
1:13:1442:G:H2'	1:13:1443:G:H5'	1.97	0.47
2:1E:97:TRP:HZ2	2:1E:102:LEU:HD13	1.79	0.47
3:2E:6:HIS:HE1	3:2E:184:TYR:CD2	2.33	0.47
5:4E:43:LEU:HD23	5:4E:133:TYR:CD1	2.50	0.47
20:BI:50:GLU:HG3	20:BI:100:ILE:HG12	1.97	0.47
23:2K:8:4SU:OP2	23:2K:8:4SU:H6	2.14	0.47
24:3K:18:G:H1'	24:3K:58:A:C2	2.50	0.47
24:3K:72:C:H3'	24:3K:73:A:C5'	2.37	0.47
26:1H:59:U:O2'	26:1H:73:A:H2'	2.15	0.47
26:1H:248:G:H5'	26:1H:250:G:N7	2.30	0.47
26:1H:598:G:H1	26:1H:659:C:H42	1.61	0.47
26:1H:942:G:OP2	36:78:39:LYS:HE2	2.14	0.47
26:1H:989:G:C8	50:L8:13:ILE:HD11	2.49	0.47
26:1H:1093:G:H1'	26:1H:1099:G:H1	1.80	0.47
26:1H:1337:G:C4	26:1H:1338:G:C8	3.03	0.47
26:1H:1515:C:H2'	26:1H:1516:U:C6	2.49	0.47
26:1H:1533:C:C2	26:1H:1534:G:N2	2.83	0.47
26:1H:2598:A:P	58:1H:3656:HOH:O	2.69	0.47
26:1H:2788:C:P	29:21:61:ARG:HH22	2.37	0.47
27:16:28:C:H2'	27:16:29:A:H8	1.79	0.47
31:41:112:PRO:HA	51:M8:37:SER:HB2	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:78:114:ILE:HG12	36:78:130:PHE:CD2	2.50	0.47
37:88:37:LEU:HD21	37:88:130:LYS:HE3	1.96	0.47
38:98:70:LEU:HA	38:98:70:LEU:HD23	1.72	0.47
1:1G:176:C:O2'	1:1G:177:C:H5'	2.16	0.47
1:1G:560:U:H5'	1:1G:566:G:N2	2.29	0.47
1:1G:1187:G:H4'	9:82:111:ARG:HH11	1.79	0.47
1:1G:1258:G:H2'	1:1G:1259:C:H6	1.80	0.47
2:12:30:ARG:NH1	2:12:194:PRO:HB2	2.30	0.47
2:12:213:LEU:HA	2:12:216:SER:HB3	1.96	0.47
3:22:21:ARG:HB3	3:22:21:ARG:HH11	1.80	0.47
5:42:147:ASP:O	5:42:151:LEU:HG	2.14	0.47
20:BA:69:GLY:O	20:BA:73:HIS:NE2	2.48	0.47
24:3L:62:C:O5'	24:3L:62:C:H6	1.97	0.47
26:14:372:G:OP2	48:F5:69:LYS:NZ	2.46	0.47
26:14:654(A):A:H2'	26:14:654(B):C:C6	2.50	0.47
26:14:1449(A):G:H2'	26:14:1450:C:H6	1.80	0.47
26:14:1576:U:H2'	26:14:1577:C:H6	1.79	0.47
26:14:1779:U:H5"	26:14:1780:A:C5'	2.45	0.47
26:14:1788:C:H2'	26:14:1789:A:H8	1.79	0.47
26:14:2176:A:H2'	26:14:2177:C:H6	1.79	0.47
26:14:2228:G:C6	26:14:2229:C:C4	3.03	0.47
26:14:2757:A:C6	32:59:67:LEU:HD22	2.50	0.47
26:14:2808:U:H2'	26:14:2809:A:H8	1.79	0.47
30:39:153:SER:HB2	30:39:190:GLU:H	1.79	0.47
32:59:88:LEU:HB2	32:59:163:TYR:HB2	1.95	0.47
32:59:120:GLY:O	32:59:135:GLY:HA2	2.15	0.47
35:25:68:GLU:OE2	35:25:78:ARG:NH1	2.47	0.47
39:65:14:VAL:HG21	39:65:90:GLY:O	2.15	0.47
39:65:78:LEU:HD21	39:65:108:GLY:HA3	1.97	0.47
47:E5:25:ARG:HD2	47:E5:29:GLN:NE2	2.29	0.47
50:H5:6:VAL:O	50:H5:34:GLU:HA	2.15	0.47
55:M5:6:THR:HG22	55:M5:59:LYS:O	2.15	0.47
1:13:344:A:O2'	1:13:346:G:N7	2.47	0.46
1:13:626:U:C2	1:13:627:G:C8	3.03	0.46
1:13:939:G:C6	1:13:940:C:N4	2.83	0.46
1:13:1190:G:OP2	3:2E:5:ILE:HG23	2.15	0.46
1:13:1367:C:N3	1:13:1368:G:C8	2.84	0.46
1:13:1392:G:N2	1:13:1502:A:H8	2.14	0.46
2:1E:60:ASP:HB3	2:1E:64:ARG:NH1	2.30	0.46
4:3E:8:VAL:CG1	4:3E:21:LEU:HB2	2.45	0.46
4:3E:190:ASP:HB3	4:3E:192:GLU:OE1	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1I:77:PRO:HB2	10:1I:79:ARG:NH1	2.23	0.46
12:3I:126:LYS:HG3	12:3I:128:ALA:N	2.26	0.46
16:7I:67:THR:HG22	16:7I:68:ASP:H	1.80	0.46
24:3K:6:G:H22	24:3K:67:C:H42	1.63	0.46
26:1H:639:U:O2'	26:1H:640:C:H5'	2.14	0.46
26:1H:1142:U:H5'	26:1H:1142(A):A:H8	1.79	0.46
34:58:96:GLU:C	34:58:98:VAL:N	2.68	0.46
37:88:106:VAL:HG21	37:88:114:ALA:CB	2.44	0.46
40:B8:107:ASP:OD2	40:B8:109:GLU:HG3	2.14	0.46
1:1G:408:A:H2'	1:1G:409:G:O4'	2.16	0.46
4:32:14:ARG:HH11	4:32:14:ARG:HG3	1.80	0.46
5:42:103:GLY:C	5:42:106:PRO:HD2	2.35	0.46
13:4A:92:HIS:NE2	13:4A:98:VAL:HG21	2.30	0.46
16:7A:57:ARG:HA	16:7A:60:LEU:HD12	1.96	0.46
20:BA:19:SER:O	20:BA:23:ARG:N	2.43	0.46
20:BA:53:LEU:O	20:BA:57:ARG:HG3	2.14	0.46
24:3L:8:U:H4'	24:3L:9:A:OP1	2.14	0.46
24:3L:71:G:H2'	24:3L:72:C:C5'	2.45	0.46
26:14:270(I):G:H2'	26:14:270(J):G:C8	2.43	0.46
26:14:528:A:C2	26:14:2043:C:H4'	2.50	0.46
26:14:1003:G:O2'	26:14:1010:A:N1	2.34	0.46
26:14:1043:C:H2'	26:14:1044:G:H5'	1.98	0.46
26:14:1071:G:H1'	26:14:1089:G:H2'	1.96	0.46
26:14:1225:C:H4'	42:95:85:LYS:CB	2.45	0.46
26:14:2327:A:H2'	26:14:2328:A:H8	1.79	0.46
27:1J:24:G:C8	27:1J:56:G:C5	3.03	0.46
28:19:37:LEU:CB	28:19:38:LYS:HG2	2.45	0.46
32:59:121:ILE:HD12	32:59:133:VAL:HG13	1.97	0.46
34:15:35:ARG:HB2	34:15:42:TRP:HZ3	1.79	0.46
38:55:55:ALA:HA	38:55:80:PHE:CZ	2.50	0.46
42:95:22:VAL:HG22	42:95:23:GLU:H	1.80	0.46
45:C5:50:ARG:HG2	45:C5:53:PRO:HG3	1.97	0.46
46:D5:10:ARG:HH21	46:D5:26:GLY:H	1.61	0.46
1:13:1527:C:N4	1:13:1528:U:O4	2.48	0.46
2:1E:215:LEU:O	2:1E:219:VAL:HG23	2.15	0.46
5:4E:75:THR:OG1	5:4E:76:ILE:N	2.41	0.46
12:3I:71:PRO:O	12:3I:102:ARG:HD3	2.15	0.46
24:3K:2:C:N3	24:3K:72:C:N4	2.62	0.46
26:1H:527:C:H4'	26:1H:528:A:H5'	1.96	0.46
26:1H:775:G:C5	26:1H:794:G:C8	3.03	0.46
26:1H:945:A:OP2	26:1H:945:A:H4'	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1064:C:N4	26:1H:1070:A:OP1	2.48	0.46
26:1H:2707:G:O3'	38:98:68:ARG:HG2	2.15	0.46
27:16:31:C:H2'	27:16:32:C:H6	1.79	0.46
28:11:174:ILE:HD12	28:11:174:ILE:N	2.30	0.46
29:21:14:ILE:HD12	29:21:14:ILE:HA	1.58	0.46
30:31:129:PHE:O	30:31:130:ALA:HB3	2.16	0.46
33:61:21:VAL:CG2	33:61:25:TYR:HD2	2.29	0.46
41:C8:108:GLU:OE1	41:C8:112:ARG:NH1	2.48	0.46
1:1G:149:A:H2'	1:1G:150:C:C6	2.50	0.46
1:1G:340:U:H2'	1:1G:341:C:C6	2.49	0.46
1:1G:442:C:H2'	1:1G:443:C:C6	2.50	0.46
1:1G:837:G:H1	1:1G:849:C:N4	2.12	0.46
1:1G:1299:A:N1	1:1G:1301:U:N3	2.64	0.46
2:12:165:VAL:O	2:12:167:PRO:HD3	2.15	0.46
9:82:63:ILE:HD11	9:82:81:ILE:HD11	1.96	0.46
18:9A:34:TYR:HA	18:9A:40:LEU:HD11	1.97	0.46
24:1L:10:G:O2'	24:1L:11:C:OP1	2.31	0.46
26:14:107:C:H2'	26:14:108:U:H6	1.80	0.46
26:14:510:C:H2'	26:14:511:U:O4'	2.15	0.46
26:14:839:U:H2'	26:14:840:C:C6	2.51	0.46
26:14:903:C:H2'	26:14:904:C:C6	2.50	0.46
26:14:925:C:H2'	26:14:926:A:H8	1.79	0.46
26:14:1006:C:O2	34:15:106:MET:HB3	2.15	0.46
26:14:1716:U:H2'	26:14:1717:G:C8	2.50	0.46
26:14:1770:G:H1	26:14:1982:C:H42	1.63	0.46
26:14:2577:A:H2'	26:14:2614:A:N6	2.31	0.46
29:29:111:ARG:HD2	29:29:160:TYR:CD2	2.51	0.46
40:75:64:ARG:NH1	40:75:103:ARG:HA	2.28	0.46
42:95:71:LEU:HA	42:95:86:GLY:HA2	1.97	0.46
1:13:57:G:H2'	1:13:58:C:C6	2.50	0.46
1:13:413:G:N2	1:13:428:G:H1'	2.29	0.46
1:13:447:G:H8	1:13:447:G:O5'	1.99	0.46
4:3E:64:LEU:HD22	4:3E:198:VAL:HG11	1.96	0.46
6:5E:23:LYS:HA	6:5E:26:ILE:HD12	1.97	0.46
7:6E:5:ARG:NH1	7:6E:8:GLU:OE2	2.48	0.46
26:1H:459:U:H4'	54:P8:40:TRP:CZ3	2.50	0.46
26:1H:963:U:OP1	58:1H:3797:HOH:O	2.21	0.46
26:1H:1068:G:H1'	26:1H:1096:A:N3	2.30	0.46
26:1H:1534:G:N2	26:1H:1538:G:H22	2.11	0.46
26:1H:1567:A:H5'	28:11:58:HIS:ND1	2.30	0.46
26:1H:1789:A:H5"	28:11:220:HIS:O	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2101:G:H1	26:1H:2188:C:H42	1.63	0.46
32:51:4:ILE:HG13	32:51:6:ARG:HB2	1.96	0.46
32:51:154:PRO:HB3	32:51:163:TYR:CE2	2.49	0.46
33:61:113:ARG:H	33:61:116:LEU:HD13	1.80	0.46
34:58:35:ARG:O	34:58:42:TRP:HZ3	1.98	0.46
36:78:29:LYS:HD2	36:78:30:THR:HG22	1.98	0.46
37:88:51:ARG:NH1	37:88:52:VAL:HG23	2.25	0.46
38:98:10:LEU:O	38:98:12:ARG:N	2.49	0.46
39:A8:34:HIS:CD2	39:A8:54:LEU:HD23	2.50	0.46
55:Q8:26:LYS:O	55:Q8:26:LYS:HD3	2.15	0.46
1:1G:1449:C:H3'	1:1G:1450:U:H4'	1.97	0.46
5:42:83:GLU:HB3	5:42:88:LYS:HG3	1.98	0.46
23:2L:4:G:H1	23:2L:70:C:H42	1.63	0.46
26:14:1154:G:OP2	41:85:58:ARG:NH1	2.48	0.46
27:1J:44:G:C2	27:1J:48:A:C2	3.03	0.46
32:59:76:VAL:HA	32:59:79:VAL:HG22	1.97	0.46
40:75:18:ASP:OD1	40:75:19:LEU:HG	2.15	0.46
42:95:76:LYS:NZ	42:95:82:ARG:HE	2.14	0.46
46:D5:128:VAL:HG23	46:D5:160:GLY:HA3	1.97	0.46
54:L5:6:GLN:HA	54:L5:7:PRO:HD3	1.72	0.46
1:13:475:G:H2'	1:13:476:G:O4'	2.16	0.46
1:13:853:G:H5"	1:13:853:G:H8	1.80	0.46
1:13:954:G:H2'	1:13:955:U:C6	2.50	0.46
1:13:1063:C:H3'	1:13:1064:G:H2'	1.97	0.46
1:13:1292:U:H2'	1:13:1293:G:C8	2.50	0.46
11:2I:112:THR:HA	11:2I:113:PRO:HD3	1.68	0.46
16:7I:26:ARG:HH21	16:7I:31:LYS:HD3	1.80	0.46
18:9I:32:ARG:HH11	18:9I:65:ILE:HD13	1.81	0.46
19:AI:6:LYS:HE2	19:AI:6:LYS:HB3	1.77	0.46
19:AI:52:TYR:HA	19:AI:56:GLN:O	2.15	0.46
26:1H:297:C:H2'	26:1H:298:G:O4'	2.16	0.46
26:1H:483:A:O4'	45:G8:48:ALA:HB1	2.16	0.46
26:1H:581:C:OP1	41:C8:33:ARG:HG3	2.16	0.46
26:1H:960:A:C8	26:1H:962:G:C8	3.02	0.46
26:1H:1142(A):A:H4'	34:58:25:ARG:NH2	2.29	0.46
26:1H:1519:G:C2'	26:1H:1520:U:H5'	2.45	0.46
26:1H:1664:A:OP1	58:1H:3715:HOH:O	2.19	0.46
26:1H:2061:G:C2	26:1H:2063:C:C4	3.03	0.46
26:1H:2062:A:N6	26:1H:2503:A:H62	2.13	0.46
26:1H:2107:C:O2	26:1H:2182:G:N2	2.29	0.46
26:1H:2457:U:C2'	26:1H:2458:G:H5'	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2748:A:C2	32:51:63:SER:HB3	2.50	0.46
28:11:17:THR:CG2	28:11:205:VAL:H	2.28	0.46
33:61:8:PRO:HA	33:61:14:ASP:HA	1.96	0.46
34:58:137:LYS:HE3	34:58:138:LEU:HB2	1.98	0.46
36:78:1:MET:HE1	36:78:6:LEU:HA	1.96	0.46
36:78:138:LEU:CD1	36:78:144:GLU:HG3	2.40	0.46
46:H8:5:LEU:HD23	46:H8:47:VAL:HG21	1.96	0.46
47:I8:60:PHE:CD1	47:I8:60:PHE:N	2.83	0.46
49:K8:28:LYS:HD2	49:K8:56:GLN:NE2	2.30	0.46
1:1G:37:U:O2'	1:1G:547:A:N1	2.43	0.46
1:1G:448:A:OP2	1:1G:485:G:N2	2.40	0.46
1:1G:536:C:H2'	1:1G:537:G:C8	2.51	0.46
1:1G:617:G:C2	1:1G:618:C:C5	3.04	0.46
1:1G:801:U:H2'	1:1G:802:A:H8	1.80	0.46
1:1G:1329:A:H5'	13:4A:29:ARG:HE	1.80	0.46
1:1G:1352:C:H2'	1:1G:1353:G:C8	2.51	0.46
1:1G:1372:U:H2'	1:1G:1373:G:O4'	2.15	0.46
2:12:9:GLU:HB2	2:12:217:ARG:NH2	2.30	0.46
6:52:97:PHE:HE2	18:9A:62:GLU:HG2	1.81	0.46
23:2L:20:G:OP1	23:2L:61:U:N3	2.46	0.46
26:14:96:G:H4'	49:G5:48:HIS:ND1	2.30	0.46
26:14:656:G:H2'	26:14:657:U:O4'	2.15	0.46
26:14:739:G:P	58:14:3506:HOH:O	2.70	0.46
26:14:1087:G:H2'	26:14:1089:G:H1'	1.97	0.46
26:14:1166:C:H1'	26:14:1184:G:N2	2.30	0.46
27:1J:99:A:C5	27:1J:100:G:C8	3.03	0.46
29:29:31:CYS:O	29:29:91:VAL:HG22	2.15	0.46
31:49:56:ALA:HB2	31:49:153:ARG:CZ	2.46	0.46
34:15:39:ARG:HA	34:15:40:PRO:HD2	1.70	0.46
42:95:1:MET:HB3	42:95:42:GLY:HA3	1.96	0.46
47:E5:12:ASN:HA	47:E5:14:ARG:NH2	2.31	0.46
48:F5:4:VAL:HG11	48:F5:11:ARG:NH1	2.30	0.46
1:13:1364:U:O2'	1:13:1365:G:H5'	2.15	0.46
4:3E:106:TYR:HE2	4:3E:107:ARG:NH1	2.14	0.46
4:3E:108:LEU:HD21	4:3E:183:GLY:HA3	1.96	0.46
11:2I:29:ILE:HG13	11:2I:44:SER:HB3	1.97	0.46
11:2I:78:GLN:O	11:2I:103:LEU:HA	2.15	0.46
12:3I:91:LYS:HG3	12:3I:91:LYS:O	2.14	0.46
22:1K:23:A:H2'	22:1K:24:G:O4'	2.14	0.46
23:2K:23:G:H2'	23:2K:24:C:H6	1.81	0.46
23:2K:26:C:H2'	23:2K:27:G:O4'	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:556:G:H2'	26:1H:557:U:C6	2.50	0.46
26:1H:600:G:N2	26:1H:605:C:O3'	2.48	0.46
26:1H:1171:G:N2	26:1H:1178:C:N3	2.63	0.46
26:1H:1400:G:H2'	26:1H:1401:G:C8	2.51	0.46
26:1H:1443:G:N2	26:1H:1549:C:C2	2.84	0.46
26:1H:1530:G:O6	26:1H:1542:G:N2	2.48	0.46
26:1H:2314:C:H5"	31:41:38:VAL:HG21	1.96	0.46
26:1H:2863:C:H2'	26:1H:2864:G:C8	2.50	0.46
29:21:37:ARG:O	29:21:45:THR:HA	2.16	0.46
29:21:105:THR:HG21	29:21:164:ARG:CZ	2.46	0.46
36:78:62:LEU:HB3	55:Q8:23:VAL:HG21	1.96	0.46
36:78:76:LYS:HD3	36:78:76:LYS:HA	1.57	0.46
39:A8:87:PHE:HZ	39:A8:98:VAL:HG12	1.81	0.46
41:C8:90:VAL:HG22	42:D8:39:LEU:HB3	1.98	0.46
44:F8:34:ALA:HA	44:F8:38:GLU:OE1	2.16	0.46
45:G8:34:LYS:O	45:G8:34:LYS:HG2	2.16	0.46
52:N8:38:ALA:HB3	52:N8:40:LYS:HE3	1.96	0.46
1:1G:390:C:H2'	1:1G:391:G:C8	2.51	0.46
1:1G:403:C:H42	1:1G:547:A:H5'	1.79	0.46
1:1G:516:U:O2'	1:1G:519:C:N3	2.49	0.46
1:1G:728:A:N7	15:6A:54:ARG:HD2	2.31	0.46
1:1G:1226:C:H4'	19:AA:80:TYR:CZ	2.51	0.46
1:1G:1297:C:OP1	13:4A:13:LYS:HG3	2.15	0.46
2:12:7:VAL:HG13	2:12:8:LYS:HG3	1.98	0.46
4:32:126:ILE:HG22	4:32:127:THR:H	1.79	0.46
11:2A:54:ARG:NH1	24:3L:39:U:O3'	2.48	0.46
11:2A:109:VAL:HG22	18:9A:86:VAL:HG13	1.97	0.46
13:4A:3:ARG:HD3	13:4A:7:VAL:HA	1.97	0.46
16:7A:15:PRO:O	16:7A:16:HIS:HD2	1.99	0.46
26:14:239:U:H2'	26:14:240:G:O4'	2.15	0.46
26:14:623:G:H2'	26:14:624:C:C6	2.50	0.46
26:14:1970:A:P	58:14:3577:HOH:O	2.70	0.46
26:14:2295:C:H5	39:65:13:ARG:NH2	2.14	0.46
26:14:2547:U:O2'	26:14:2548:G:H5'	2.16	0.46
26:14:2867:G:OP2	40:75:119:LYS:NZ	2.34	0.46
31:49:6:ALA:O	31:49:10:LYS:N	2.38	0.46
32:59:27:LYS:HA	32:59:27:LYS:HD2	1.69	0.46
34:15:90:MET:HB3	34:15:98:VAL:HG12	1.98	0.46
37:45:86:GLY:O	37:45:88:GLY:N	2.47	0.46
39:65:15:ARG:O	39:65:19:LYS:HD3	2.14	0.46
46:D5:126:VAL:HG12	46:D5:163:LEU:HB3	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:221:C:H2'	1:13:222:U:C6	2.49	0.46
1:13:297:G:H4'	1:13:557:G:H4'	1.98	0.46
1:13:834:C:C2	1:13:853:G:C2	3.04	0.46
2:1E:130:ARG:H	2:1E:130:ARG:HG2	1.50	0.46
13:4I:23:TYR:HE2	13:4I:71:ARG:HG3	1.79	0.46
17:8I:67:LYS:O	17:8I:68:ARG:HB3	2.16	0.46
17:8I:88:TYR:CD2	17:8I:89:LEU:HD22	2.49	0.46
22:1K:76:A:H1'	26:1H:2583:G:N2	2.30	0.46
26:1H:118:A:H3'	26:1H:119:A:H5"	1.97	0.46
26:1H:234:C:C2	26:1H:235:U:C5	3.03	0.46
26:1H:487:C:C2'	26:1H:488:G:H5'	2.46	0.46
26:1H:1278:A:H5"	38:98:36:THR:HG22	1.98	0.46
26:1H:1952:A:C6	35:68:22:ILE:HD12	2.50	0.46
26:1H:2182:G:H2'	26:1H:2183:C:C6	2.50	0.46
28:11:69:ARG:HD3	28:11:105:ILE:HD11	1.97	0.46
34:58:65:LYS:HE3	34:58:65:LYS:HB2	1.56	0.46
45:G8:94:LYS:HD2	45:G8:94:LYS:HA	1.68	0.46
49:K8:28:LYS:HD3	49:K8:53:LEU:HD21	1.98	0.46
1:1G:358:U:H2'	1:1G:359:U:H6	1.80	0.46
1:1G:707:C:H2'	1:1G:708:C:H6	1.81	0.46
1:1G:1111:A:H2'	1:1G:1112:C:C6	2.51	0.46
1:1G:1369:C:H2'	1:1G:1370:G:O4'	2.16	0.46
1:1G:1418:A:H2	26:14:1948:G:N3	2.13	0.46
1:1G:1453:G:O6	20:BA:51:GLU:HB3	2.16	0.46
3:22:61:ALA:C	3:22:63:ASN:H	2.19	0.46
3:22:134:ILE:HD13	3:22:134:ILE:HA	1.81	0.46
5:42:122:GLU:OE1	5:42:131:ILE:HG13	2.16	0.46
8:72:11:THR:HG23	8:72:14:ARG:HH12	1.80	0.46
9:82:17:VAL:HG22	9:82:63:ILE:HD11	1.96	0.46
10:1A:6:ILE:HG22	10:1A:98:ILE:HG12	1.98	0.46
20:BA:75:ASN:HA	20:BA:78:ALA:HB3	1.97	0.46
24:1L:22:G:OP2	24:1L:22:G:H8	1.98	0.46
24:3L:52:G:H1	24:3L:62:C:H42	1.63	0.46
26:14:276:A:H2'	26:14:277:C:C5	2.50	0.46
26:14:695:G:C2	26:14:768:G:C5	3.04	0.46
26:14:895:U:H4'	26:14:896:A:C5	2.51	0.46
26:14:1665:A:H4'	35:25:67:LYS:HB2	1.98	0.46
26:14:1805:U:C2	26:14:1806:C:C5	3.03	0.46
26:14:2388:A:C2'	26:14:2389:G:H5'	2.45	0.46
26:14:2394:C:H2'	26:14:2395:C:H6	1.79	0.46
28:19:51:VAL:HG12	28:19:54:ARG:HD2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:19:146:GLU:HB2	28:19:189:CYS:HB3	1.95	0.46
29:29:26:ILE:HG21	29:29:28:ALA:HB2	1.96	0.46
29:29:33:VAL:HG11	29:29:36:ARG:NH2	2.30	0.46
29:29:87:GLU:O	29:29:89:ASP:HA	2.15	0.46
30:39:36:VAL:HG11	30:39:183:VAL:HG11	1.96	0.46
30:39:165:ARG:HA	30:39:168:ARG:HD3	1.97	0.46
34:15:34:LEU:HD21	34:15:120:LEU:HB2	1.98	0.46
38:55:29:LEU:HD12	38:55:29:LEU:HA	1.81	0.46
41:85:19:LYS:O	41:85:22:LYS:HG3	2.16	0.46
45:C5:39:VAL:HG23	45:C5:41:GLY:N	2.24	0.46
46:D5:71:VAL:HB	46:D5:88:PHE:CE1	2.51	0.46
55:M5:29:LYS:HB3	55:M5:44:LYS:HB2	1.98	0.46
1:13:37:U:O2'	1:13:500:G:H4'	2.15	0.46
1:13:60:A:H4'	1:13:61:G:H5'	1.98	0.46
1:13:79:G:O2'	1:13:90:C:O2	2.25	0.46
1:13:280:C:C2	17:8I:38:ARG:HG3	2.51	0.46
1:13:319:G:H2'	1:13:320:C:O4'	2.16	0.46
1:13:632:A:H8	1:13:633:G:N9	2.14	0.46
1:13:991:U:C4	1:13:1212:U:H1'	2.51	0.46
1:13:1177:G:C8	1:13:1178:G:C2	3.03	0.46
4:3E:99:SER:O	4:3E:140:VAL:HG22	2.16	0.46
8:7E:58:TYR:O	8:7E:59:LEU:HD23	2.15	0.46
9:8E:46:ALA:HA	9:8E:78:LYS:HB2	1.97	0.46
13:4I:3:ARG:HB2	51:M8:34:GLU:OE2	2.15	0.46
26:1H:58:G:N2	26:1H:70:G:C5	2.84	0.46
26:1H:312:G:H5'	26:1H:331:A:O2'	2.15	0.46
26:1H:576:U:H5	58:1H:3921:HOH:O	1.98	0.46
26:1H:1058:U:H3	26:1H:1080:A:N6	2.13	0.46
26:1H:1141:U:H6	34:58:63:THR:OG1	1.99	0.46
26:1H:1317:A:H2'	26:1H:1318:C:C6	2.51	0.46
26:1H:2012:G:OP1	43:E8:11:ARG:NH2	2.43	0.46
26:1H:2336:A:N6	47:I8:43:THR:HB	2.31	0.46
26:1H:2376:A:N1	39:A8:87:PHE:HB3	2.31	0.46
26:1H:2849:U:O4	40:B8:23:ARG:NH2	2.48	0.46
29:21:119:ARG:HB3	29:21:120:TRP:CD1	2.51	0.46
46:H8:125:LEU:HG	46:H8:164:ALA:HB3	1.98	0.46
51:M8:37:SER:OG	51:M8:42:PHE:HB3	2.16	0.46
51:M8:49:PHE:CD2	51:M8:50:VAL:HG12	2.50	0.46
1:1G:922:G:H4'	5:42:20:GLN:HA	1.97	0.46
1:1G:1194:U:H2'	1:1G:1195:C:H6	1.79	0.46
2:12:22:LYS:C	2:12:24:TRP:H	2.17	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:12:42:ILE:HD13	2:12:43:ASP:N	2.31	0.46
2:12:189:ASP:OD1	2:12:189:ASP:N	2.49	0.46
26:14:817:C:O2'	26:14:839:U:H5"	2.16	0.46
26:14:1435:G:H1	26:14:1557:C:H42	1.64	0.46
26:14:1569:A:H5'	28:19:61:LEU:CD2	2.46	0.46
26:14:2306:C:H3'	26:14:2307:G:H5"	1.98	0.46
26:14:2469:A:C2	26:14:2470:G:C5	3.04	0.46
28:19:37:LEU:HA	28:19:38:LYS:HG2	1.98	0.46
29:29:41:LYS:HG3	29:29:42:ASP:H	1.81	0.46
31:49:16:ARG:O	31:49:20:ILE:HG13	2.15	0.46
33:69:125:GLU:OE1	33:69:141:LYS:HG3	2.16	0.46
36:35:98:GLU:HA	36:35:101:VAL:HG12	1.98	0.46
46:D5:76:LEU:H	46:D5:76:LEU:HD23	1.81	0.46
46:D5:76:LEU:HA	46:D5:83:PRO:HA	1.98	0.46
1:13:32:A:H2'	1:13:33:A:C8	2.51	0.46
1:13:452:A:H2'	1:13:453:A:C8	2.51	0.46
9:8E:3:GLN:OE1	9:8E:20:ARG:NH1	2.48	0.46
9:8E:70:LYS:O	9:8E:74:ILE:HG13	2.16	0.46
11:2I:44:SER:OG	11:2I:47:VAL:HG23	2.15	0.46
26:1H:309:G:H4'	45:G8:18:GLY:HA2	1.98	0.46
26:1H:581:C:O2'	26:1H:582:G:H5'	2.15	0.46
26:1H:1213:A:H1'	26:1H:1238:G:N3	2.30	0.46
26:1H:1317:A:H2'	26:1H:1318:C:H6	1.81	0.46
26:1H:1665:A:N6	58:1H:3964:HOH:O	2.48	0.46
26:1H:1843:C:O5'	26:1H:1843:C:H6	1.99	0.46
26:1H:2070:G:C2	26:1H:2442:C:C2	3.04	0.46
26:1H:2082:A:H2'	26:1H:2083:G:O4'	2.16	0.46
26:1H:2210:G:H5"	26:1H:2211:G:N7	2.31	0.46
26:1H:2632:A:O2'	26:1H:2811:G:O2'	2.27	0.46
26:1H:2726:U:O2'	26:1H:2727:G:H8	1.99	0.46
26:1H:2793:G:H2'	26:1H:2794:C:C6	2.51	0.46
28:11:218:ARG:HB3	28:11:219:PRO:HD2	1.98	0.46
30:31:117:ARG:HG2	30:31:192:LEU:HB2	1.98	0.46
30:31:125:LEU:HD21	30:31:199:TRP:CE3	2.51	0.46
35:68:22:ILE:HD13	35:68:22:ILE:HA	1.59	0.46
40:B8:99:LEU:HB3	40:B8:101:PHE:HE1	1.77	0.46
42:D8:21:ARG:HG2	42:D8:91:TYR:CE2	2.51	0.46
49:K8:64:LEU:HD22	49:K8:68:ARG:HD2	1.96	0.46
1:1G:590:C:H2'	1:1G:591:U:H6	1.81	0.46
1:1G:639:G:H2'	1:1G:640:A:H8	1.80	0.46
1:1G:971:G:C6	1:1G:1364:U:O2'	2.69	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1053:G:O2'	1:1G:1054:C:P	2.74	0.46
1:1G:1065:U:C5	1:1G:1190:G:H1'	2.50	0.46
2:12:141:GLU:O	2:12:145:LEU:HB2	2.15	0.46
9:82:17:VAL:HA	9:82:63:ILE:HG12	1.98	0.46
24:1L:9:A:H5'	24:1L:9:A:N3	2.31	0.46
26:14:307:G:N2	26:14:310:A:OP2	2.47	0.46
26:14:1665:A:H2'	26:14:1666:G:O4'	2.16	0.46
26:14:2080:G:O2'	26:14:2081:C:H5'	2.15	0.46
26:14:2212:A:O2'	26:14:2213:U:O5'	2.33	0.46
26:14:2628:C:H1'	26:14:2781:A:H2'	1.97	0.46
26:14:2688:U:H1'	26:14:2721:A:N6	2.31	0.46
30:39:152:GLU:HA	30:39:190:GLU:OE2	2.16	0.46
33:69:97:ILE:O	33:69:100:ALA:HB3	2.16	0.46
45:C5:2:ARG:HD3	45:C5:2:ARG:HA	1.66	0.46
46:D5:96:VAL:N	46:D5:128:VAL:O	2.41	0.46
48:F5:92:LYS:O	48:F5:94:LEU:N	2.48	0.46
50:H5:28:LEU:HD23	50:H5:28:LEU:HA	1.79	0.46
1:13:138:G:H1	1:13:225:C:H42	1.64	0.46
1:13:265:G:N2	1:13:267:C:H5'	2.31	0.46
1:13:616:G:C2	1:13:617:G:N7	2.84	0.46
1:13:656:C:H2'	15:6I:28:GLN:NE2	2.31	0.46
1:13:872:A:C4	1:13:874:G:N7	2.84	0.46
1:13:1346:A:O3'	1:13:1347:G:H4'	2.16	0.46
2:1E:178:ARG:HA	2:1E:178:ARG:HD3	1.86	0.46
3:2E:6:HIS:CD2	14:5I:49:HIS:HB3	2.50	0.46
13:4I:3:ARG:HB3	13:4I:9:ILE:HG12	1.98	0.46
19:AI:40:ILE:HD11	19:AI:62:ILE:HG23	1.97	0.46
24:3K:22:G:N7	24:3K:46:G:N2	2.63	0.46
26:1H:6:A:H2'	26:1H:7:G:O4'	2.16	0.46
26:1H:85:G:OP2	45:G8:9:LYS:HB2	2.14	0.46
26:1H:950:G:C6	26:1H:951:C:C4	3.04	0.46
26:1H:1055:G:H1	26:1H:1104:C:H42	1.64	0.46
26:1H:1163:G:N3	26:1H:1164:G:C8	2.84	0.46
26:1H:1359:A:N1	26:1H:1372:U:C4	2.83	0.46
26:1H:1405:U:H2'	26:1H:1406:U:H6	1.80	0.46
26:1H:1591:G:H2'	26:1H:1592:C:C6	2.51	0.46
26:1H:2261:C:O2'	26:1H:2262:U:H5'	2.15	0.46
26:1H:2543:G:H1'	26:1H:2766:G:H5'	1.97	0.46
26:1H:2615:U:P	58:1H:3608:HOH:O	2.73	0.46
27:16:78:A:H2'	27:16:79:C:O4'	2.16	0.46
28:11:146:GLU:HB2	28:11:189:CYS:CB	2.44	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:51:87:LEU:HA	32:51:163:TYR:O	2.16	0.46
35:68:107:ARG:NH1	40:B8:36:GLU:HG2	2.31	0.46
37:88:12:GLN:HE21	37:88:72:LYS:HG3	1.81	0.46
39:A8:24:LEU:HB2	39:A8:85:VAL:CG1	2.46	0.46
44:F8:50:LYS:O	44:F8:83:VAL:HA	2.16	0.46
51:M8:16:CYS:SG	51:M8:36:CYS:N	2.89	0.46
52:N8:9:LYS:HD3	52:N8:9:LYS:HA	1.74	0.46
1:1G:308:C:H2'	1:1G:309:G:H8	1.81	0.46
1:1G:517:G:N3	1:1G:531:U:H5"	2.31	0.46
1:1G:553:A:H2'	1:1G:554:C:H6	1.80	0.46
1:1G:672:U:H2'	1:1G:673:G:H8	1.81	0.46
1:1G:1134:G:C2	1:1G:1135:U:H1'	2.51	0.46
1:1G:1327:C:H2'	1:1G:1328:C:C6	2.51	0.46
1:1G:1346:A:H3'	1:1G:1346:A:OP2	2.15	0.46
1:1G:1508:G:H1	1:1G:1527:C:H42	1.64	0.46
2:12:8:LYS:HE3	2:12:11:LEU:HD23	1.98	0.46
2:12:10:LEU:HD13	2:12:10:LEU:HA	1.79	0.46
2:12:212:GLN:O	2:12:216:SER:N	2.34	0.46
15:6A:36:ILE:HD12	15:6A:63:ARG:HD3	1.98	0.46
19:AA:80:TYR:CZ	19:AA:82:GLY:HA2	2.50	0.46
26:14:560:C:O2	41:85:49:HIS:CE1	2.69	0.46
26:14:579:G:H2'	26:14:580:C:H6	1.78	0.46
26:14:686:G:N7	54:L5:5:TRP:CH2	2.84	0.46
26:14:1252:G:N3	41:85:33:ARG:HD2	2.30	0.46
26:14:1475:G:C2	26:14:1519:G:C2	3.04	0.46
26:14:2271:G:OP1	47:E5:18:ALA:HB1	2.15	0.46
26:14:2420:C:OP1	55:M5:34:TRP:HB3	2.16	0.46
28:19:236:GLY:N	28:19:237:GLU:HG2	2.31	0.46
29:29:199:ARG:HH12	29:29:202:LYS:NZ	2.14	0.46
31:49:95:ARG:CG	31:49:96:ARG:H	2.27	0.46
36:35:105:LEU:HD12	36:35:105:LEU:H	1.81	0.46
45:C5:15:VAL:HG12	45:C5:21:LYS:HA	1.96	0.46
49:G5:12:GLU:O	49:G5:16:LEU:HB3	2.15	0.46
51:I5:57:GLU:O	51:I5:61:ARG:NH2	2.48	0.46
55:M5:60:LEU:HB2	55:M5:61:LEU:H	1.38	0.46
1:13:575:G:C5	1:13:881:G:C2	3.04	0.46
1:13:991:U:O2'	1:13:992:U:O5'	2.33	0.46
2:1E:67:THR:N	2:1E:160:ASP:OD2	2.44	0.46
7:6E:62:PHE:HA	7:6E:124:LEU:HD21	1.97	0.46
10:1I:3:LYS:N	10:1I:75:ILE:HA	2.31	0.46
12:3I:84:LEU:HB2	12:3I:105:TYR:HE2	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4I:15:VAL:O	13:4I:19:LEU:HD23	2.16	0.46
16:7I:71:ARG:O	16:7I:75:ARG:N	2.49	0.46
26:1H:773:U:H5'	28:11:47:GLY:HA3	1.98	0.46
26:1H:813:U:H2'	26:1H:814:C:C6	2.51	0.46
26:1H:2016:U:H1'	52:N8:6:VAL:HG13	1.98	0.46
26:1H:2344:U:O2'	53:O8:37:ARG:HG2	2.15	0.46
29:21:18:ASP:CB	40:B8:82:LEU:HD11	2.46	0.46
30:31:63:LYS:HE2	30:31:67:GLN:HB3	1.98	0.46
30:31:64:ILE:HG23	30:31:65:TRP:NE1	2.31	0.46
36:78:58:THR:O	36:78:62:LEU:HG	2.16	0.46
36:78:112:LEU:O	36:78:128:HIS:HB2	2.16	0.46
1:1G:1163:C:N3	1:1G:1174:G:N2	2.64	0.46
2:12:189:ASP:H	2:12:192:SER:HB2	1.81	0.46
4:32:28:SER:HA	4:32:29:PRO:HA	1.61	0.46
6:52:76:ALA:O	6:52:80:ARG:HG3	2.16	0.46
14:5A:26:ARG:CZ	14:5A:47:LEU:HD21	2.46	0.46
19:AA:35:SER:O	19:AA:71:LEU:HD12	2.16	0.46
24:3L:58:A:H1'	24:3L:60:U:C5	2.51	0.46
26:14:1421:G:C2	26:14:1422:G:N7	2.83	0.46
26:14:1426:G:H5"	26:14:1427:A:OP2	2.16	0.46
26:14:2115:G:N2	26:14:2172:U:H3	2.14	0.46
26:14:2275:C:H5'	26:14:2275:C:C6	2.49	0.46
26:14:2299:G:N1	26:14:2318:G:C8	2.84	0.46
26:14:2340:G:H2'	26:14:2341:G:H8	1.80	0.46
37:45:59:ARG:H	37:45:59:ARG:HG3	1.44	0.46
37:45:85:LYS:HG2	37:45:86:GLY:H	1.81	0.46
42:95:29:PRO:HA	42:95:61:VAL:CG1	2.46	0.46
42:95:38:LEU:HD22	42:95:55:ALA:HB1	1.99	0.46
46:D5:92:SER:O	46:D5:94:GLU:N	2.48	0.46
1:13:665:A:N3	1:13:732:C:H2'	2.31	0.45
2:1E:58:ILE:HB	2:1E:221:LEU:HD12	1.97	0.45
3:2E:3:ASN:O	3:2E:4:LYS:HG2	2.16	0.45
26:1H:208:C:H2'	26:1H:209:C:H6	1.81	0.45
26:1H:570:G:H5"	58:1H:3815:HOH:O	2.16	0.45
26:1H:1515:C:H2'	26:1H:1516:U:H6	1.81	0.45
26:1H:2294:C:O2'	26:1H:2295:C:H5'	2.16	0.45
35:68:64:ARG:HG2	35:68:79:PHE:CG	2.50	0.45
35:68:120:GLU:HB2	40:B8:68:TYR:HE2	1.81	0.45
46:H8:129:SER:HA	46:H8:130:PRO:HD3	1.77	0.45
1:1G:29:G:H5'	1:1G:296:U:OP1	2.16	0.45
1:1G:279:A:C8	1:1G:281:G:C2	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:406:G:H1'	1:1G:495:A:C6	2.51	0.45
1:1G:954:G:H2'	1:1G:955:U:C6	2.51	0.45
1:1G:1233:G:H2'	1:1G:1234:C:C6	2.51	0.45
1:1G:1298:C:H5	7:62:114:ARG:HD2	1.81	0.45
1:1G:1320:C:H2'	1:1G:1321:C:C6	2.51	0.45
2:12:102:LEU:HD21	2:12:162:ILE:HG21	1.98	0.45
7:62:63:LYS:HG3	7:62:64:GLN:N	2.31	0.45
10:1A:49:VAL:O	10:1A:60:ARG:HB2	2.15	0.45
23:2L:11:A:O5'	23:2L:11:A:H8	1.99	0.45
26:14:270(G):C:H2'	26:14:270(H):C:C6	2.51	0.45
26:14:548:A:C6	26:14:549:G:H1'	2.51	0.45
26:14:690:G:H2'	26:14:691:C:C6	2.51	0.45
26:14:696:G:H2'	26:14:697:C:H6	1.80	0.45
26:14:1113:U:OP1	32:59:3:ARG:N	2.49	0.45
26:14:2648:C:H2'	26:14:2649:U:C6	2.51	0.45
30:39:178:PRO:HB3	30:39:198:ALA:HB1	1.98	0.45
36:35:3:LEU:H	36:35:3:LEU:HD12	1.80	0.45
39:65:41:ASP:CG	39:65:44:LYS:HD2	2.36	0.45
46:D5:157:LEU:HA	46:D5:158:PRO:HD2	1.53	0.45
1:13:1013:G:N2	1:13:1016:A:OP2	2.47	0.45
1:13:1022:G:H2'	1:13:1023:G:H8	1.82	0.45
2:1E:76:GLN:NE2	2:1E:207:ALA:H	2.13	0.45
3:2E:150:LYS:HG3	3:2E:169:ALA:HB2	1.98	0.45
4:3E:9:CYS:HB3	4:3E:32:ALA:HB2	1.98	0.45
13:4I:15:VAL:HG23	13:4I:43:THR:O	2.16	0.45
13:4I:19:LEU:O	13:4I:22:ILE:HG13	2.17	0.45
26:1H:902:C:H2'	26:1H:903:C:H6	1.81	0.45
26:1H:1478:G:H1'	26:1H:1557:C:O2'	2.17	0.45
26:1H:1728:G:H3'	26:1H:1729:A:C5'	2.46	0.45
26:1H:1899:G:N2	26:1H:1902:C:H5	2.13	0.45
26:1H:2287:A:C2	26:1H:2346:A:H2	2.34	0.45
30:31:7:TYR:O	30:31:22:ALA:N	2.49	0.45
30:31:64:ILE:HD13	30:31:64:ILE:HA	1.68	0.45
30:31:133:ASN:HB3	30:31:138:GLU:OE1	2.15	0.45
33:61:79:ILE:HD13	33:61:79:ILE:HA	1.76	0.45
34:58:41:ASP:OD1	34:58:41:ASP:N	2.50	0.45
36:78:17:LYS:HE2	36:78:27:HIS:CD2	2.51	0.45
36:78:83:VAL:O	36:78:114:ILE:HA	2.16	0.45
36:78:114:ILE:O	36:78:114:ILE:HG13	2.16	0.45
38:98:53:HIS:HB2	38:98:94:TYR:HE2	1.81	0.45
43:E8:70:TYR:N	43:E8:70:TYR:CD1	2.83	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:F8:57:LEU:HG	44:F8:78:LYS:HG2	1.99	0.45
47:I8:11:ARG:H	47:I8:11:ARG:HG3	1.44	0.45
1:1G:75:C:H2'	1:1G:76:G:O4'	2.16	0.45
1:1G:457:C:H2'	1:1G:458:C:C6	2.51	0.45
1:1G:748:C:H6	1:1G:748:C:O5'	1.99	0.45
1:1G:979:C:OP1	1:1G:1223:C:N4	2.49	0.45
1:1G:1151:A:O2'	1:1G:1152:A:O5'	2.34	0.45
1:1G:1166:G:N2	1:1G:1170:A:OP2	2.49	0.45
1:1G:1335:C:OP1	1:1G:1337:G:N2	2.35	0.45
1:1G:1443:G:N2	40:75:119:LYS:HB2	2.31	0.45
2:12:172:ILE:H	2:12:172:ILE:HD12	1.81	0.45
4:32:97:LEU:O	4:32:100:ARG:HB2	2.16	0.45
4:32:121:VAL:O	4:32:134:ASP:HA	2.16	0.45
4:32:155:LEU:O	4:32:158:ILE:HG13	2.16	0.45
17:8A:100:LYS:HD3	17:8A:100:LYS:HA	1.51	0.45
26:14:176:G:O2'	26:14:177:G:H5'	2.16	0.45
26:14:662:G:H5'	36:35:15:ARG:CA	2.34	0.45
26:14:2467:C:H4'	37:45:123:HIS:CD2	2.52	0.45
29:29:42:ASP:HB3	29:29:44:TYR:CE2	2.51	0.45
32:59:97:ARG:HG2	32:59:98:LEU:H	1.81	0.45
32:59:136:ILE:H	32:59:136:ILE:HG13	1.48	0.45
36:35:99:LEU:HD12	36:35:102:ARG:NH2	2.31	0.45
38:55:56:LYS:HD2	38:55:88:ARG:HA	1.98	0.45
45:C5:82:PRO:CB	45:C5:97:ARG:HB3	2.46	0.45
48:F5:83:GLU:OE1	48:F5:83:GLU:N	2.49	0.45
54:L5:34:ARG:NH1	54:L5:39:ARG:HG3	2.32	0.45
1:13:684:A:H2'	1:13:685:G:C8	2.51	0.45
1:13:955:U:H1'	1:13:1227:A:N6	2.30	0.45
1:13:1129:C:N4	1:13:1139:G:H1	2.13	0.45
2:1E:12:GLU:HA	2:1E:16:HIS:CG	2.52	0.45
3:2E:16:ARG:HD2	3:2E:16:ARG:HA	1.69	0.45
8:7E:25:ASP:OD1	8:7E:60:ARG:HG3	2.16	0.45
9:8E:27:THR:HB	9:8E:62:TYR:HA	1.99	0.45
20:BI:33:ILE:O	20:BI:37:SER:OG	2.33	0.45
26:1H:535:C:O3'	41:C8:53:ARG:NH1	2.48	0.45
26:1H:1050:A:H2'	26:1H:1051:G:O4'	2.17	0.45
26:1H:1155:A:H5'	41:C8:55:ARG:NE	2.30	0.45
26:1H:1419:A:C8	26:1H:1421:G:C6	3.05	0.45
26:1H:2505:G:H2'	26:1H:2576:G:O6	2.15	0.45
26:1H:2784:C:H1'	29:21:37:ARG:NH1	2.30	0.45
26:1H:2795:G:H3'	26:1H:2797:U:C5'	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:88:11:LYS:CE	37:88:86:GLY:HA2	2.46	0.45
38:98:2:ARG:HB3	38:98:3:HIS:H	1.48	0.45
43:E8:40:ASN:O	43:E8:41:LYS:HG2	2.16	0.45
49:K8:23:LYS:HE3	49:K8:27:GLU:OE2	2.16	0.45
53:O8:17:LYS:O	53:O8:18:ARG:HB2	2.16	0.45
1:1G:35:G:C2	1:1G:550:G:C2	3.03	0.45
1:1G:1028(A):C:N4	1:1G:1032(B):G:H22	2.14	0.45
1:1G:1145:C:H1'	1:1G:1146:A:N7	2.32	0.45
14:5A:53:LEU:HD23	14:5A:53:LEU:HA	1.67	0.45
17:8A:40:LYS:HD3	17:8A:42:TYR:CE1	2.51	0.45
19:AA:22:LEU:O	19:AA:27:GLU:HA	2.15	0.45
21:1B:10:ARG:HA	21:1B:13:ILE:HD12	1.97	0.45
26:14:270(L):U:O2'	26:14:270(M):U:OP1	2.32	0.45
26:14:354:G:H2'	26:14:355:G:C8	2.52	0.45
26:14:528:A:OP2	34:15:114:ARG:NH1	2.49	0.45
26:14:863:A:H2'	26:14:864:G:H8	1.82	0.45
26:14:931:G:H3'	26:14:931:G:H8	1.81	0.45
26:14:1257:C:H4'	30:39:83:PHE:CE1	2.52	0.45
26:14:2134:A:H2	26:14:2159:G:HO2'	1.63	0.45
26:14:2261:C:H1'	26:14:2388:A:N3	2.31	0.45
26:14:2296:U:H4'	26:14:2297:C:OP1	2.16	0.45
26:14:2346:A:H5"	26:14:2383:G:H1'	1.97	0.45
26:14:2716:U:O2'	26:14:2717:G:H5'	2.16	0.45
28:19:94:LEU:HD23	28:19:94:LEU:HA	1.73	0.45
30:39:25:PRO:HB2	30:39:27:GLU:HB2	1.98	0.45
31:49:144:ILE:HG22	31:49:146:TYR:H	1.82	0.45
32:59:19:VAL:HG12	32:59:20:ALA:H	1.81	0.45
34:15:29:LYS:H	34:15:29:LYS:HG2	1.38	0.45
39:65:86:ALA:O	39:65:87:PHE:HB2	2.17	0.45
39:65:99:LYS:NZ	39:65:103:GLU:OE1	2.36	0.45
41:85:92:ARG:O	41:85:94:ASN:N	2.48	0.45
49:G5:63:VAL:O	49:G5:67:LYS:HG2	2.15	0.45
1:13:465:A:N7	1:13:467:G:C6	2.84	0.45
1:13:1315:U:C5	1:13:1316:G:C5	3.05	0.45
4:3E:188:LEU:HA	4:3E:189:PRO:HD3	1.69	0.45
7:6E:26:PHE:CE2	7:6E:30:ILE:HD11	2.52	0.45
7:6E:50:ILE:O	7:6E:54:THR:HG23	2.17	0.45
8:7E:134:ILE:HG22	8:7E:135:CYS:SG	2.57	0.45
9:8E:112:LYS:HD3	9:8E:113:LYS:N	2.31	0.45
20:BI:69:GLY:O	20:BI:73:HIS:CE1	2.70	0.45
26:1H:654(C):G:H2'	26:1H:654(D):G:O4'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:784:A:C5	28:11:229:VAL:HG21	2.51	0.45
26:1H:1385:G:O6	26:1H:1403:C:N4	2.50	0.45
26:1H:1416:G:H2'	26:1H:1417:C:C5	2.51	0.45
26:1H:2159:G:H2'	26:1H:2160:G:O4'	2.17	0.45
37:88:119:ARG:HE	37:88:119:ARG:HB3	1.42	0.45
44:F8:12:VAL:HG13	44:F8:27:THR:O	2.16	0.45
47:I8:42:GLY:C	47:I8:57:PHE:HD2	2.20	0.45
47:I8:50:ASN:HD22	47:I8:83:PRO:HD3	1.80	0.45
55:Q8:45:GLY:CA	55:Q8:46:ARG:C	2.84	0.45
1:1G:16:A:H2'	1:1G:17:U:C6	2.51	0.45
1:1G:49:U:C2	1:1G:361:G:N2	2.85	0.45
1:1G:187:C:H2'	1:1G:188:U:O4'	2.16	0.45
1:1G:421:U:O2'	1:1G:423:G:N7	2.49	0.45
1:1G:793:U:O4	1:1G:1517:G:H5"	2.17	0.45
1:1G:980:C:H5'	1:1G:981:U:OP2	2.17	0.45
1:1G:991:U:O2	1:1G:993:G:H8	2.00	0.45
1:1G:1057:G:H2'	1:1G:1058:G:C8	2.52	0.45
7:62:93:PRO:HG2	7:62:94:ARG:HD3	1.98	0.45
26:14:1171:G:N2	26:14:1178:C:H42	2.14	0.45
26:14:1342:A:H2	26:14:1602:U:N3	2.12	0.45
26:14:1449:A:H5'	26:14:1449(A):G:OP2	2.16	0.45
26:14:1572:A:H8	26:14:1572:A:O5'	1.99	0.45
26:14:1794:U:H2'	26:14:1795:C:C6	2.51	0.45
26:14:2002:G:C5	58:14:3900:HOH:O	2.68	0.45
26:14:2496:C:P	37:45:81:VAL:HG12	2.56	0.45
26:14:2511:U:H2'	26:14:2512:C:C6	2.51	0.45
26:14:2754:U:H5"	26:14:2754:U:H6	1.82	0.45
27:1J:65:C:H41	27:1J:108:C:C2'	2.29	0.45
28:19:16:MET:HG3	28:19:206:LEU:O	2.16	0.45
28:19:206:LEU:HD22	28:19:211:ARG:HG2	1.98	0.45
29:29:15:PHE:CE1	29:29:20:ALA:HB2	2.52	0.45
31:49:66:GLN:NE2	31:49:93:THR:O	2.49	0.45
34:15:96:GLU:H	34:15:96:GLU:CD	2.18	0.45
40:75:85:LYS:HD2	40:75:87:ASP:OD1	2.17	0.45
45:C5:88:LYS:O	45:C5:89:PHE:HB3	2.15	0.45
46:D5:175:VAL:HA	46:D5:177:PRO:HD3	1.97	0.45
1:13:112:G:P	16:7I:27:LYS:HD2	2.57	0.45
1:13:417:C:H2'	1:13:418:C:H6	1.80	0.45
1:13:967:C:O5'	1:13:967:C:H6	2.00	0.45
1:13:1183:A:O2'	1:13:1184:G:OP1	2.28	0.45
1:13:1309:G:C6	1:13:1329:A:C2	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2E:121:ALA:O	3:2E:125:GLU:HG3	2.17	0.45
4:3E:59:ARG:HH21	4:3E:66:ARG:HH12	1.64	0.45
10:1I:78:ASN:O	10:1I:81:THR:N	2.50	0.45
13:4I:3:ARG:CZ	13:4I:7:VAL:HG13	2.47	0.45
23:2K:63:C:O2	23:2K:64:G:C8	2.70	0.45
26:1H:479:A:N3	26:1H:481:G:H5'	2.32	0.45
26:1H:931:G:H4'	50:L8:24:LYS:HZ3	1.81	0.45
26:1H:1069:A:H4'	26:1H:1070:A:H5"	1.99	0.45
26:1H:1348:G:C2'	26:1H:1349:A:H5"	2.46	0.45
26:1H:1486:A:C2	26:1H:1487:G:C5	3.04	0.45
26:1H:1665:A:H2'	26:1H:1666:G:O4'	2.17	0.45
26:1H:2789:C:H1'	26:1H:2892:A:C2	2.50	0.45
35:68:53:LYS:HD2	35:68:53:LYS:HA	1.82	0.45
43:E8:57:ASN:O	43:E8:62:HIS:HD2	2.00	0.45
46:H8:76:LEU:HA	46:H8:83:PRO:HA	1.98	0.45
1:1G:564:C:HO2'	8:72:91:ARG:HH22	1.61	0.45
1:1G:678:U:H2'	1:1G:679:C:C6	2.51	0.45
1:1G:1169:A:H2'	1:1G:1170:A:C8	2.52	0.45
1:1G:1420:C:O5'	1:1G:1420:C:H6	2.00	0.45
3:22:175:LEU:H	3:22:175:LEU:HD12	1.82	0.45
4:32:22:LYS:HG3	4:32:26:CYS:SG	2.56	0.45
16:7A:4:ILE:HB	16:7A:66:PRO:HB3	1.98	0.45
21:1B:9:ARG:HG3	21:1B:10:ARG:HG3	1.97	0.45
24:1L:14:A:N1	24:1L:22:G:H1'	2.31	0.45
26:14:225:A:N6	26:14:226:G:C2	2.85	0.45
26:14:1359:A:N7	26:14:1372:U:O4	2.49	0.45
26:14:1533:C:H42	26:14:1538:G:H1	1.64	0.45
27:1J:40:U:C2'	27:1J:45:A:H61	2.30	0.45
30:39:181:LEU:CD2	30:39:186:ILE:HD11	2.46	0.45
34:15:134:ARG:HE	34:15:134:ARG:HB3	1.49	0.45
36:35:41:ARG:N	36:35:41:ARG:HD2	2.31	0.45
36:35:125:VAL:HG13	36:35:144:GLU:HB3	1.99	0.45
46:D5:52:SER:O	46:D5:54:HIS:N	2.50	0.45
55:M5:54:GLU:HA	55:M5:57:ARG:NH1	2.32	0.45
1:13:191(C):G:H2'	1:13:191(D):U:C6	2.52	0.45
1:13:633:G:OP2	1:13:633:G:H8	2.00	0.45
1:13:922:G:C6	1:13:923:A:C6	3.04	0.45
1:13:1239:A:H62	1:13:1299:A:H62	1.64	0.45
2:1E:70:PHE:HD2	2:1E:91:PRO:O	2.00	0.45
2:1E:130:ARG:HB2	2:1E:134:GLU:HB2	1.98	0.45
18:9I:41:LYS:HB3	18:9I:41:LYS:HE3	1.73	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2K:48:U:C6	23:2K:48:U:OP2	2.69	0.45
26:1H:654(H):G:H2'	26:1H:654(H):G:N3	2.32	0.45
26:1H:1280:G:N2	26:1H:1291:C:C2	2.85	0.45
26:1H:1444:G:N2	26:1H:1548:C:N3	2.65	0.45
26:1H:1465:G:H2'	26:1H:1466:G:H8	1.81	0.45
26:1H:1534:G:N2	26:1H:1538:G:H1	2.14	0.45
26:1H:2502:G:N7	58:1H:3791:HOH:O	2.36	0.45
28:11:121:PRO:HB3	28:11:135:PHE:CE2	2.52	0.45
31:41:43:LEU:HD12	31:41:43:LEU:HA	1.61	0.45
31:41:112:PRO:HB3	51:M8:37:SER:N	2.12	0.45
32:51:95:ARG:HB3	32:51:95:ARG:NH1	2.31	0.45
38:98:29:LEU:HD23	38:98:70:LEU:HD11	1.99	0.45
38:98:42:LYS:O	38:98:45:ARG:HD2	2.17	0.45
44:F8:12:VAL:HG22	44:F8:17:ALA:HB2	1.99	0.45
47:I8:63:VAL:HG23	47:I8:64:ASP:O	2.15	0.45
51:M8:15:ILE:HG22	51:M8:20:ASN:OD1	2.16	0.45
55:Q8:45:GLY:HA2	55:Q8:46:ARG:C	2.36	0.45
1:1G:1104:G:H4'	2:12:111:ARG:HE	1.82	0.45
1:1G:1149:C:H2'	1:1G:1150:U:O4'	2.17	0.45
2:12:75:LYS:HD2	2:12:75:LYS:O	2.16	0.45
10:1A:82:ILE:O	10:1A:86:MET:HB2	2.16	0.45
23:2L:32:G:C4	23:2L:33:OMC:C5	3.04	0.45
23:2L:36:A:C2	25:4L:18:G:C2	3.05	0.45
26:14:550:G:O2'	26:14:1220:A:N3	2.44	0.45
26:14:768:G:H2'	26:14:769:G:H8	1.81	0.45
26:14:1011:G:N3	26:14:1151:G:C2	2.84	0.45
26:14:1050:A:N3	26:14:2751:G:H2'	2.32	0.45
26:14:1357:U:H2'	26:14:1358:G:O4'	2.17	0.45
26:14:1542:G:H3'	26:14:1543:A:H5"	1.99	0.45
26:14:1826:G:H4'	28:19:242:ARG:HE	1.80	0.45
27:1J:111:U:H2'	27:1J:112:G:H8	1.82	0.45
28:19:75:ILE:O	28:19:118:VAL:HG23	2.17	0.45
31:49:110:ALA:HA	31:49:140:ILE:O	2.16	0.45
33:69:113:ARG:HD3	33:69:113:ARG:HA	1.73	0.45
41:85:110:VAL:O	41:85:114:LYS:HG2	2.16	0.45
43:A5:73:ALA:HB3	43:A5:106:ILE:CD1	2.43	0.45
44:B5:60:ARG:HH11	44:B5:60:ARG:HG2	1.81	0.45
45:C5:17:SER:CB	45:C5:71:LYS:HB3	2.44	0.45
45:C5:87:LYS:HG2	45:C5:88:LYS:N	2.31	0.45
46:D5:19:ARG:NH1	46:D5:84:GLU:HB2	2.32	0.45
53:K5:51:GLU:HG2	53:K5:52:VAL:N	2.30	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:358:U:H2'	1:13:359:U:O4'	2.17	0.45
1:13:674:G:H2'	1:13:675:A:H8	1.81	0.45
1:13:730:G:C5	1:13:731:G:H1'	2.52	0.45
1:13:1207:G:H2'	1:13:1208:C:C6	2.52	0.45
1:13:1366:C:H2'	1:13:1367:C:H6	1.81	0.45
15:6I:82:ILE:HG22	15:6I:83:GLU:N	2.32	0.45
21:1F:6:ARG:H	21:1F:6:ARG:HG3	1.41	0.45
26:1H:26:G:C6	26:1H:27:G:N1	2.85	0.45
26:1H:183:C:H42	26:1H:213:A:H61	1.64	0.45
26:1H:583:G:H5"	41:C8:10:ARG:NH1	2.31	0.45
26:1H:1392:A:C6	26:1H:1393:A:N1	2.84	0.45
26:1H:1446:C:H2'	26:1H:1447:G:H8	1.81	0.45
26:1H:2592:G:C6	26:1H:2593:U:N3	2.84	0.45
32:51:92:ILE:HD12	32:51:93:GLY:H	1.81	0.45
35:68:60:ALA:HB1	35:68:84:ALA:HB1	1.99	0.45
36:78:19:VAL:HG12	36:78:21:ARG:N	2.11	0.45
37:88:72:LYS:HB3	37:88:94:VAL:HG23	1.97	0.45
38:98:83:ILE:HG22	38:98:87:TYR:CE2	2.46	0.45
39:A8:72:ALA:O	39:A8:76:LYS:HG3	2.16	0.45
51:M8:13:ARG:HA	51:M8:24:THR:HG21	1.99	0.45
1:1G:538:G:H2'	1:1G:539:A:H8	1.81	0.45
1:1G:854:G:N1	1:1G:855:G:N7	2.64	0.45
1:1G:1239:A:H4'	1:1G:1240:U:H5'	1.99	0.45
4:32:74:GLN:O	4:32:78:LEU:HD12	2.17	0.45
24:1L:57:G:H2'	24:1L:58:A:H5"	1.98	0.45
26:14:108:U:H2'	26:14:109:G:C8	2.52	0.45
26:14:270(S):G:OP1	48:F5:76:ARG:NH1	2.49	0.45
26:14:1034:G:H2'	26:14:1035:U:O4'	2.17	0.45
26:14:1042:G:H2'	26:14:1043:C:C6	2.52	0.45
26:14:1153:C:OP1	41:85:93:LYS:NZ	2.50	0.45
26:14:1204:A:C2	26:14:1241:A:N1	2.85	0.45
26:14:2059:A:H5"	26:14:2060:A:OP2	2.17	0.45
26:14:2712(A):A:H5"	26:14:2713:A:OP2	2.17	0.45
30:39:40:GLN:OE1	30:39:182:ASN:HB2	2.17	0.45
30:39:107:LYS:HD2	30:39:205:ARG:HG3	1.98	0.45
33:69:73:GLU:HG2	33:69:137:PRO:O	2.17	0.45
1:13:134:A:H1'	1:13:325:A:C5	2.52	0.45
1:13:181:G:HO2'	1:13:182:U:H6	1.61	0.45
1:13:753:A:H4'	1:13:754:C:H5"	1.99	0.45
1:13:1015:A:H1'	1:13:1219:U:H5'	1.98	0.45
1:13:1248:A:C2	9:8E:70:LYS:HD2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:59:ARG:NH2	4:3E:66:ARG:HH12	2.15	0.45
7:6E:80:VAL:C	7:6E:82:GLY:H	2.20	0.45
8:7E:82:HIS:HB3	8:7E:138:TRP:CH2	2.52	0.45
20:BI:100:ILE:HG13	20:BI:101:GLY:H	1.82	0.45
26:1H:28:A:C2	26:1H:513:A:C8	3.04	0.45
26:1H:289:A:H2'	26:1H:290:G:O4'	2.17	0.45
26:1H:302:C:H2'	26:1H:303:U:C6	2.52	0.45
26:1H:556:G:H2'	26:1H:557:U:H6	1.82	0.45
26:1H:775:G:C4	26:1H:794:G:C8	3.05	0.45
26:1H:806:C:H2'	26:1H:807:U:H6	1.82	0.45
26:1H:992:C:OP1	42:D8:74:LYS:NZ	2.50	0.45
26:1H:2068:U:N3	26:1H:2430:A:C2	2.74	0.45
26:1H:2666:C:H5"	26:1H:2667:C:OP2	2.16	0.45
29:21:34:VAL:HG21	29:21:77:ILE:HD13	1.99	0.45
29:21:92:THR:O	29:21:95:ILE:HG22	2.17	0.45
29:21:171:GLU:OE1	29:21:185:LYS:HD3	2.17	0.45
30:31:135:LYS:HB3	30:31:138:GLU:HG3	1.98	0.45
32:51:86:GLU:HG2	32:51:87:LEU:H	1.82	0.45
32:51:95:ARG:HB3	32:51:95:ARG:HH11	1.82	0.45
33:61:9:LEU:HD12	33:61:9:LEU:HA	1.69	0.45
40:B8:51:ARG:HB2	40:B8:98:LYS:HD3	1.98	0.45
43:E8:2:GLU:HB2	43:E8:107:LEU:O	2.17	0.45
43:E8:29:LEU:HD21	43:E8:33:ARG:NH2	2.32	0.45
49:K8:15:LYS:HE2	49:K8:67:LYS:HZ3	1.81	0.45
55:Q8:38:GLY:HA2	55:Q8:39:LYS:C	2.38	0.45
1:1G:498:A:H4'	1:1G:500:G:OP1	2.16	0.45
1:1G:567:G:O6	12:3A:5:PRO:HD3	2.17	0.45
1:1G:704:A:H5'	1:1G:705:U:OP2	2.17	0.45
1:1G:942:G:C2	1:1G:1342:C:C2	3.05	0.45
1:1G:1063:C:H3'	1:1G:1064:G:H2'	1.99	0.45
1:1G:1345:U:O2	1:1G:1377:A:N6	2.50	0.45
4:32:126:ILE:HG22	4:32:127:THR:N	2.32	0.45
4:32:146:ILE:H	4:32:146:ILE:HD12	1.81	0.45
9:82:125:TYR:HD1	9:82:126:SER:N	2.15	0.45
12:3A:38:THR:OG1	12:3A:57:LYS:HB2	2.17	0.45
16:7A:9:PHE:HB2	16:7A:16:HIS:O	2.17	0.45
23:2L:29:C:O5'	23:2L:29:C:H6	1.99	0.45
26:14:921:G:H2'	26:14:922:U:C6	2.52	0.45
26:14:1025:G:O2'	26:14:1026:U:OP1	2.27	0.45
26:14:1412:A:H2'	26:14:1413:G:H8	1.81	0.45
26:14:2332:U:H5'	47:E5:43:THR:HG21	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:165:ARG:HB3	30:39:165:ARG:HH11	1.81	0.45
40:75:50:ILE:HD11	40:75:102:ILE:CD1	2.45	0.45
43:A5:18:ARG:HG3	43:A5:76:VAL:HG13	1.99	0.45
45:C5:52:SER:H	45:C5:57:GLN:N	2.14	0.45
47:E5:56:ASP:CG	47:E5:58:THR:HG1	2.20	0.45
48:F5:44:PRO:HB2	48:F5:46:LEU:HD12	1.98	0.45
1:13:456:C:H42	1:13:476:G:H1	1.65	0.45
1:13:926:G:H5'	1:13:927:G:O5'	2.16	0.45
1:13:1044:A:C5	1:13:1045:C:H1'	2.52	0.45
1:13:1103:C:H2'	1:13:1104:G:O4'	2.17	0.45
5:4E:11:ILE:HG12	5:4E:31:LEU:HB3	1.98	0.45
5:4E:41:VAL:HG13	5:4E:113:ALA:HB2	1.98	0.45
13:4I:94:ARG:HD3	13:4I:94:ARG:HA	1.70	0.45
22:1K:27:G:H2'	22:1K:28:G:H8	1.82	0.45
22:1K:52:G:H2'	22:1K:53:G:O4'	2.17	0.45
26:1H:919:G:H4'	27:16:81:G:H4'	1.98	0.45
26:1H:1045:A:H1'	26:1H:1047:G:N3	2.32	0.45
26:1H:1125:G:OP2	26:1H:1126:A:O2'	2.32	0.45
26:1H:1163:G:C2	26:1H:1164:G:N7	2.85	0.45
26:1H:1637:A:H4'	26:1H:2711:A:O2'	2.17	0.45
26:1H:1858:G:H8	26:1H:1858:G:OP2	2.00	0.45
26:1H:2040:C:H2'	26:1H:2041:U:O4'	2.17	0.45
26:1H:2058:A:N6	58:1H:3615:HOH:O	2.48	0.45
26:1H:2093:G:C6	26:1H:2225:A:C8	3.05	0.45
26:1H:2667:C:H1'	32:51:109:PHE:HD1	1.81	0.45
30:31:66:PRO:O	30:31:67:GLN:CB	2.64	0.45
30:31:127:GLU:OE2	30:31:127:GLU:HA	2.11	0.45
32:51:92:ILE:HD11	32:51:160:LYS:NZ	2.32	0.45
35:68:71:ARG:NH2	35:68:122:LEU:O	2.48	0.45
36:78:18:ARG:C	36:78:19:VAL:HG22	2.37	0.45
36:78:39:LYS:HG3	36:78:45:LEU:CD2	2.47	0.45
39:A8:36:TYR:N	39:A8:36:TYR:HD1	2.13	0.45
40:B8:30:VAL:HG23	40:B8:83:ILE:HG23	1.98	0.45
48:J8:97:LEU:HG	48:J8:98:LEU:H	1.82	0.45
1:1G:795:C:H1'	1:1G:1506:U:C5	2.52	0.45
1:1G:1043:C:H2'	1:1G:1044:A:H8	1.82	0.45
1:1G:1145:C:H4'	1:1G:1146:A:O5'	2.17	0.45
1:1G:1152:A:H2'	1:1G:1153:C:H6	1.81	0.45
1:1G:1240:U:C2	7:62:32:ARG:HG3	2.51	0.45
1:1G:1300:G:HO2'	1:1G:1301:U:P	2.38	0.45
1:1G:1325:C:H2'	1:1G:1326:C:C6	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1505:G:H4'	1:1G:1506:U:H5"	1.99	0.45
9:82:17:VAL:HG21	9:82:80:GLY:C	2.37	0.45
17:8A:59:ILE:HG22	17:8A:71:PHE:HD2	1.81	0.45
26:14:840:C:H42	26:14:938:G:H1	1.65	0.45
26:14:1113:U:O5'	26:14:1113:U:H6	1.99	0.45
26:14:1678:G:N2	26:14:1989:G:N2	2.65	0.45
27:1J:15:A:H1'	27:1J:109:G:C4	2.52	0.45
29:29:197:ILE:O	29:29:197:ILE:HG13	2.17	0.45
31:49:114:ILE:HG12	31:49:140:ILE:HG21	1.99	0.45
38:55:10:LEU:HA	38:55:10:LEU:HD23	1.71	0.45
51:I5:18:CYS:N	51:I5:19:GLY:HA2	2.29	0.45
1:13:317:G:C6	1:13:318:G:C6	3.05	0.45
1:13:689:C:C4	1:13:690:G:C2	3.05	0.45
1:13:861:G:H4'	8:7E:18:ARG:HH21	1.81	0.45
1:13:895:G:H2'	1:13:896:C:C6	2.52	0.45
4:3E:62:GLN:O	4:3E:66:ARG:HD3	2.16	0.45
5:4E:80:ILE:HG23	5:4E:91:LEU:HD23	1.99	0.45
11:2I:125:PHE:O	11:2I:126:ARG:HG2	2.17	0.45
12:3I:82:VAL:HG13	12:3I:105:TYR:HB3	1.97	0.45
16:7I:78:GLY:HA2	16:7I:81:ARG:HH12	1.82	0.45
22:1K:44:G:H1'	22:1K:45:U:C5	2.52	0.45
22:1K:76:A:HO3'	26:1H:2506:U:H1'	1.82	0.45
22:1K:76:A:H2	26:1H:2602:A:C2	2.34	0.45
23:2K:20:G:N2	23:2K:58:A:H1'	2.32	0.45
26:1H:25:U:H2'	26:1H:26:G:C8	2.52	0.45
26:1H:1799:G:O2'	26:1H:1800:C:OP2	2.24	0.45
26:1H:2109:U:H2'	26:1H:2110:G:C8	2.52	0.45
26:1H:2308:G:H2'	26:1H:2308:G:N3	2.32	0.45
26:1H:2592:G:C5	26:1H:2593:U:C4	3.05	0.45
29:21:134:ILE:O	29:21:137:HIS:HB2	2.17	0.45
32:51:83:TYR:HA	32:51:135:GLY:H	1.82	0.45
33:61:5:LEU:HD13	33:61:13:GLY:O	2.17	0.45
34:58:22:THR:HG22	34:58:23:LEU:N	2.32	0.45
35:68:71:ARG:HH21	35:68:77:ILE:HG21	1.82	0.45
44:F8:41:ASN:O	44:F8:45:THR:HG23	2.17	0.45
45:G8:40:GLU:HB3	45:G8:64:GLU:OE1	2.17	0.45
45:G8:97:ARG:HB3	45:G8:99:CYS:SG	2.57	0.45
1:1G:129(A):G:C2	1:1G:191(A):G:C8	3.05	0.45
1:1G:191(F):U:H2'	1:1G:191:G:C8	2.52	0.45
1:1G:257:G:H1	1:1G:269:C:H42	1.66	0.45
1:1G:300:A:H1'	1:1G:565:U:O2	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:677:U:H3	1:1G:713:G:H22	1.64	0.45
1:1G:827:U:H3	1:1G:872:A:H62	1.63	0.45
1:1G:857:C:H2'	1:1G:858:G:O4'	2.17	0.45
1:1G:881:G:C6	1:1G:882:C:C4	3.05	0.45
1:1G:1523:G:OP1	11:2A:123:LYS:HD2	2.16	0.45
2:12:19:HIS:CE1	2:12:206:ASP:HB2	2.51	0.45
2:12:54:THR:HG23	2:12:199:TYR:HB3	1.99	0.45
2:12:111:ARG:HD3	2:12:111:ARG:HA	1.80	0.45
3:22:18:TRP:HE1	14:5A:55:GLY:N	2.15	0.45
7:62:101:LEU:O	7:62:105:VAL:HG23	2.17	0.45
23:2L:54:G:H2'	23:2L:55:5MU:C6	2.52	0.45
26:14:2022:U:O2'	26:14:2617:C:H5'	2.17	0.45
26:14:2302:G:N2	26:14:2314:C:O2	2.48	0.45
30:39:53:THR:HG22	30:39:56:GLU:CG	2.45	0.45
30:39:122:LYS:HB3	30:39:191:ARG:HB2	1.98	0.45
31:49:111:LEU:HD23	31:49:111:LEU:HA	1.82	0.45
33:69:41:GLU:H	33:69:41:GLU:HG3	1.56	0.45
35:25:71:ARG:NH2	35:25:122:LEU:O	2.48	0.45
36:35:135:LEU:HD13	36:35:139:LYS:HE2	1.99	0.45
38:55:13:HIS:HD2	38:55:15:SER:H	1.65	0.45
41:85:66:ASN:CB	41:85:76:TYR:HB2	2.47	0.45
47:E5:72:ARG:HB3	47:E5:75:LEU:HB2	1.98	0.45
1:13:338:A:C6	1:13:339:C:C4	3.05	0.44
1:13:1002:G:C4	1:13:1003:G:C8	3.05	0.44
1:13:1151:A:H5'	10:1I:41:PRO:HA	1.99	0.44
4:3E:22:LYS:HB2	4:3E:26:CYS:SG	2.57	0.44
8:7E:28:ALA:HB3	8:7E:57:PRO:HB2	1.99	0.44
9:8E:23:ASN:HD22	9:8E:23:ASN:H	1.64	0.44
26:1H:532:A:N7	26:1H:2021:C:O2'	2.35	0.44
26:1H:664:C:H4'	26:1H:941:A:OP1	2.17	0.44
26:1H:937:U:H2'	26:1H:938:G:O4'	2.17	0.44
26:1H:1348:G:H2'	26:1H:1349:A:H5"	1.98	0.44
26:1H:1371:G:H2'	26:1H:1372:U:H5	1.82	0.44
26:1H:1519:G:O2'	26:1H:1520:U:H5'	2.16	0.44
26:1H:2291:U:O2'	26:1H:2374:C:O2	2.27	0.44
26:1H:2744:G:N2	32:51:143:GLN:OE1	2.49	0.44
26:1H:2793:G:H8	26:1H:2793:G:OP2	1.99	0.44
30:31:63:LYS:HG2	30:31:65:TRP:O	2.17	0.44
39:A8:67:ARG:HB2	39:A8:67:ARG:CZ	2.48	0.44
44:F8:21:PHE:O	44:F8:23:GLU:O	2.33	0.44
45:G8:43:ASN:OD1	45:G8:65:ALA:HB3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:H8:62:PRO:O	46:H8:63:ASP:HB2	2.17	0.44
51:M8:38:LYS:HA	51:M8:40:HIS:H	1.82	0.44
1:1G:45:U:H2'	1:1G:46:G:H8	1.81	0.44
1:1G:123:C:OP1	1:1G:312:C:H5'	2.17	0.44
1:1G:222:U:C2	1:1G:223:U:C5	3.06	0.44
1:1G:554:C:H2'	1:1G:555:C:C6	2.52	0.44
1:1G:983:A:H61	1:1G:1222:G:H22	1.64	0.44
1:1G:1289:A:OP1	21:1B:10:ARG:NE	2.50	0.44
7:62:78:ARG:HB2	7:62:156:TRP:CZ3	2.52	0.44
8:72:29:SER:H	8:72:32:LYS:HB2	1.81	0.44
21:1B:3:LYS:O	21:1B:14:TRP:CE3	2.70	0.44
26:14:638:G:H2'	26:14:639:U:O4'	2.16	0.44
26:14:947:G:N2	26:14:971:C:C2	2.85	0.44
26:14:1045:A:H1'	26:14:1047:G:C4	2.52	0.44
26:14:1510:A:H2'	26:14:1511:A:O4'	2.17	0.44
26:14:1652:A:OP1	38:55:8:ARG:NH1	2.50	0.44
26:14:1858:G:H2'	26:14:1883:G:H22	1.81	0.44
26:14:2773:C:OP1	29:29:166:THR:OG1	2.36	0.44
29:29:11:MET:HG3	29:29:24:THR:N	2.30	0.44
30:39:31:HIS:O	30:39:31:HIS:CG	2.70	0.44
30:39:107:LYS:HA	30:39:107:LYS:HD3	1.76	0.44
31:49:18:GLU:O	31:49:21:ARG:HB3	2.16	0.44
31:49:33:ARG:NH2	31:49:162:THR:HG21	2.31	0.44
33:69:76:THR:HG21	33:69:139:GLN:O	2.17	0.44
36:35:144:GLU:HA	36:35:145:PRO:HD3	1.74	0.44
41:85:92:ARG:CZ	42:95:11:GLN:H	2.29	0.44
43:A5:79:GLY:CA	43:A5:100:THR:HG22	2.47	0.44
1:13:739:C:C4	1:13:740:U:C5	3.05	0.44
1:13:1272:G:C6	1:13:1273:G:C5	3.05	0.44
1:13:1417:G:C6	1:13:1482:G:C6	3.06	0.44
1:13:1499:A:O2'	1:13:1520:G:H5'	2.16	0.44
4:3E:24:GLU:H	4:3E:24:GLU:HG2	1.43	0.44
4:3E:117:ALA:O	4:3E:120:LEU:HB2	2.17	0.44
11:2I:80:VAL:HG22	11:2I:103:LEU:HD12	1.99	0.44
13:4I:108:ARG:N	13:4I:108:ARG:HD2	2.32	0.44
21:1F:12:LYS:HB3	21:1F:22:ARG:HD2	1.98	0.44
22:1K:46:7MG:H5"	22:1K:46:7MG:H82	1.98	0.44
24:3K:39:U:H1'	24:3K:40:C:C6	2.52	0.44
26:1H:30:G:H2'	26:1H:31:C:C6	2.53	0.44
26:1H:236:C:H2'	26:1H:237:C:C6	2.50	0.44
26:1H:1386:C:OP2	26:1H:1396:U:H5	2.01	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2692:C:O2'	26:1H:2693:A:H5'	2.17	0.44
29:21:182:LEU:HD12	29:21:183:LEU:H	1.82	0.44
31:41:13:GLU:O	31:41:14:GLU:HB3	2.16	0.44
32:51:10:PRO:HG2	32:51:50:VAL:O	2.17	0.44
35:68:34:THR:OG1	35:68:35:VAL:N	2.50	0.44
36:78:125:VAL:O	36:78:144:GLU:HB2	2.17	0.44
37:88:104:PHE:O	37:88:105:GLU:HB3	2.17	0.44
39:A8:29:PHE:CD1	39:A8:30:ARG:N	2.85	0.44
39:A8:87:PHE:CE2	39:A8:89:ARG:HB2	2.52	0.44
41:C8:16:LYS:HB3	41:C8:16:LYS:HE2	1.72	0.44
41:C8:79:PHE:C	41:C8:79:PHE:CD2	2.91	0.44
42:D8:8:GLY:O	42:D8:10:LYS:HE3	2.17	0.44
42:D8:43:GLU:HA	42:D8:44:LYS:HA	1.70	0.44
45:G8:30:VAL:O	45:G8:32:PRO:HD3	2.17	0.44
1:1G:160:A:H2'	1:1G:161:A:O4'	2.17	0.44
1:1G:848:C:H2'	1:1G:849:C:H6	1.82	0.44
1:1G:940:C:H2'	1:1G:941:G:C8	2.53	0.44
1:1G:1329:A:H5"	13:4A:25:ILE:O	2.17	0.44
3:22:58:GLU:O	3:22:59:ARG:HG3	2.17	0.44
6:52:11:ASN:OD1	6:52:12:PRO:HD2	2.17	0.44
9:82:77:ILE:O	9:82:81:ILE:HG12	2.17	0.44
10:1A:89:ASP:HB3	10:1A:91:PRO:HD3	1.98	0.44
11:2A:20:TYR:HB2	11:2A:31:THR:HG23	1.98	0.44
24:3L:4:C:H2'	24:3L:5:G:O4'	2.18	0.44
26:14:299:A:OP2	58:14:3888:HOH:O	2.21	0.44
26:14:483:A:H4'	45:C5:49:VAL:HA	2.00	0.44
26:14:1344:G:H4'	26:14:1384:A:C5	2.52	0.44
26:14:1702:G:H2'	26:14:1703:G:O4'	2.17	0.44
26:14:2472:G:N2	26:14:2477:C:OP2	2.47	0.44
26:14:2657:A:O2'	32:59:160:LYS:HE3	2.16	0.44
26:14:2688:U:C5	26:14:2720:U:OP2	2.69	0.44
27:1J:55:U:O2'	27:1J:56:G:H5'	2.17	0.44
28:19:12:SER:O	28:19:16:MET:HB2	2.18	0.44
36:35:65:ARG:NH1	36:35:65:ARG:HB3	2.31	0.44
39:65:3:ARG:NH2	39:65:4:LEU:HB2	2.33	0.44
43:A5:19:LEU:HB3	52:J5:25:LEU:HD12	2.00	0.44
48:F5:41:ARG:HD3	48:F5:43:TYR:CE1	2.51	0.44
49:G5:47:ASN:C	49:G5:49:LYS:H	2.17	0.44
1:13:464:G:C6	1:13:466:C:H5'	2.52	0.44
1:13:490:G:H2'	1:13:491:G:C8	2.52	0.44
1:13:667:G:H4'	15:6I:51:HIS:ND1	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:70:PHE:HE2	2:1E:90:MET:CB	2.31	0.44
2:1E:72:GLY:HA2	2:1E:165:VAL:HG22	1.99	0.44
4:3E:61:LYS:HG3	4:3E:203:VAL:HG13	1.98	0.44
10:1I:47:PHE:CZ	14:5I:37:PHE:HE1	2.35	0.44
12:3I:127:GLU:OE1	12:3I:127:GLU:N	2.50	0.44
26:1H:44:A:C2'	26:1H:45:G:H5'	2.47	0.44
26:1H:582:G:H2'	26:1H:583:G:H8	1.82	0.44
26:1H:1060:U:O2	26:1H:1088:A:H8	2.01	0.44
26:1H:1092:C:H2'	26:1H:1093:G:H5'	1.99	0.44
26:1H:1449:A:H5'	26:1H:1449(A):G:OP2	2.16	0.44
26:1H:1814:G:N1	58:1H:4231:HOH:O	2.50	0.44
26:1H:2153:G:O6	26:1H:2154:G:N2	2.50	0.44
26:1H:2246:G:H2'	26:1H:2247:A:H8	1.81	0.44
26:1H:2273:A:H2'	26:1H:2274:A:C8	2.52	0.44
26:1H:2445:G:OP1	30:31:74:ARG:NH2	2.51	0.44
26:1H:2547:U:H2'	26:1H:2548:G:C8	2.52	0.44
26:1H:2863:C:H2'	26:1H:2864:G:H8	1.83	0.44
28:11:159:ALA:HB1	28:11:198:ASN:O	2.18	0.44
31:41:37:VAL:HG23	31:41:99:MET:CE	2.47	0.44
35:68:68:GLU:HA	35:68:78:ARG:HB3	1.99	0.44
38:98:59:ASP:OD1	38:98:59:ASP:N	2.36	0.44
41:C8:28:ARG:HD3	41:C8:38:THR:OG1	2.17	0.44
47:I8:19:LYS:HD3	47:I8:19:LYS:HA	1.65	0.44
47:I8:28:GLY:N	47:I8:67:VAL:O	2.42	0.44
1:1G:64:G:H4'	1:1G:65:U:O5'	2.17	0.44
1:1G:533:A:H2'	58:1G:1728:HOH:O	2.17	0.44
1:1G:545:C:OP2	4:32:65:ARG:NH2	2.51	0.44
1:1G:1118:C:H1'	1:1G:1179:A:C4	2.52	0.44
1:1G:1186:G:H8	1:1G:1186:G:OP2	2.00	0.44
1:1G:1362:C:H2'	1:1G:1362(A):C:H5"	1.99	0.44
3:22:18:TRP:HE1	14:5A:55:GLY:H	1.65	0.44
4:32:108:LEU:HD23	4:32:110:PHE:HE2	1.81	0.44
7:62:69:VAL:HG13	7:62:134:ALA:O	2.17	0.44
13:4A:84:ILE:C	13:4A:86:CYS:H	2.20	0.44
13:4A:96:LEU:HD22	13:4A:103:THR:HG21	1.99	0.44
26:14:297:C:H2'	26:14:298:G:O4'	2.18	0.44
26:14:849:A:H3'	26:14:850:C:C6	2.52	0.44
26:14:993:G:C6	26:14:994:C:N4	2.85	0.44
26:14:1260:G:C6	26:14:1261:C:C4	3.05	0.44
26:14:1786:A:H1'	26:14:1938:A:N6	2.32	0.44
26:14:2286:A:C8	26:14:2287:A:C6	3.05	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2287:A:N6	26:14:2344:U:H3	2.08	0.44
26:14:2298:A:N6	26:14:2318:G:C8	2.85	0.44
26:14:2453:A:H2'	26:14:2454:G:O4'	2.18	0.44
33:69:3:VAL:HA	33:69:39:ALA:HB2	1.99	0.44
36:35:19:VAL:HG13	36:35:21:ARG:N	2.21	0.44
36:35:39:LYS:HB2	36:35:45:LEU:HD11	1.99	0.44
37:45:118:LEU:HD12	37:45:131:ILE:HG23	1.99	0.44
1:13:279:A:C5	17:8I:98:LEU:HD12	2.53	0.44
1:13:595:G:N2	1:13:643:C:N4	2.65	0.44
1:13:607:A:H2	16:7I:31:LYS:HG3	1.82	0.44
1:13:690:G:H2'	1:13:691:G:O4'	2.16	0.44
1:13:1029:G:O2'	1:13:1032(A):G:N2	2.51	0.44
1:13:1218:C:OP2	14:5I:9:LYS:NZ	2.49	0.44
1:13:1336:C:C6	1:13:1336:C:H5"	2.52	0.44
5:4E:37:ARG:HA	5:4E:113:ALA:HA	1.99	0.44
5:4E:110:LEU:HD13	5:4E:118:ILE:HG21	1.97	0.44
7:6E:72:ARG:HG3	7:6E:142:GLU:OE1	2.18	0.44
10:1I:26:ALA:C	10:1I:30:SER:HB3	2.37	0.44
11:2I:73:MET:HG2	11:2I:103:LEU:HD23	1.99	0.44
15:6I:17:ARG:HG2	15:6I:21:ASP:OD2	2.17	0.44
17:8I:28:PRO:HA	17:8I:34:LYS:O	2.16	0.44
20:BI:97:ALA:O	20:BI:99:LEU:N	2.51	0.44
24:3K:34:G:H8	24:3K:34:G:OP1	2.00	0.44
26:1H:8:A:H2'	26:1H:9:U:C6	2.52	0.44
26:1H:270(L):U:H3	33:61:50:ARG:CG	2.30	0.44
26:1H:839:U:O2'	26:1H:1191:G:N3	2.50	0.44
26:1H:1065:U:H2'	26:1H:1066:U:O4'	2.18	0.44
26:1H:1370:C:HO2'	26:1H:1811:G:HO2'	1.66	0.44
26:1H:1750:G:C2	26:1H:1751:C:C5	3.05	0.44
26:1H:2296:U:H4'	26:1H:2297:C:OP1	2.17	0.44
26:1H:2430:A:H8	26:1H:2431:U:H5	1.65	0.44
26:1H:2699:C:H2'	26:1H:2700:C:O4'	2.18	0.44
26:1H:2705:A:O2'	26:1H:2852:G:OP1	2.23	0.44
27:16:11:C:O5'	27:16:12:C:H5	2.01	0.44
27:16:32:C:C2	27:16:51:G:N2	2.86	0.44
29:21:120:TRP:CD2	29:21:155:LYS:HG2	2.53	0.44
30:31:127:GLU:HG2	30:31:196:LEU:HD12	2.00	0.44
31:41:66:GLN:NE2	31:41:93:THR:O	2.42	0.44
34:58:16:ILE:HB	34:58:54:VAL:HG22	1.99	0.44
34:58:96:GLU:HG2	34:58:97:ARG:H	1.82	0.44
37:88:66:ILE:O	37:88:104:PHE:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:98:28:LEU:HD23	38:98:28:LEU:HA	1.88	0.44
41:C8:92:ARG:HH11	41:C8:95:LEU:CD2	2.31	0.44
49:K8:33:MET:HG2	49:K8:37:PHE:CE1	2.52	0.44
50:L8:32:GLN:HA	50:L8:32:GLN:NE2	2.32	0.44
53:O8:21:TYR:HB2	53:O8:22:ALA:H	1.43	0.44
1:1G:116:A:O5'	1:1G:116:A:H8	2.00	0.44
1:1G:191:G:C6	1:1G:192:U:C4	3.05	0.44
1:1G:935:A:H2'	1:1G:936:C:C6	2.52	0.44
1:1G:1254:C:OP1	10:1A:45:ARG:HA	2.17	0.44
2:12:75:LYS:HA	2:12:78:GLN:CB	2.40	0.44
5:42:90:VAL:HG23	5:42:121:LYS:O	2.18	0.44
7:62:94:ARG:O	7:62:97:GLN:HB3	2.18	0.44
10:1A:76:ASN:HB3	10:1A:78:ASN:HD22	1.83	0.44
23:2L:33:OMC:HM22	23:2L:34:U:H5'	1.98	0.44
26:14:270(G):C:H2'	26:14:270(H):C:H6	1.81	0.44
26:14:303:U:H2'	26:14:304:G:H8	1.81	0.44
26:14:531:C:OP1	26:14:561:G:N2	2.51	0.44
26:14:673:C:H4'	30:39:82:ILE:HG12	1.99	0.44
26:14:675:A:C4	26:14:804:A:C2	3.05	0.44
26:14:777:A:C2	26:14:778:G:C4	3.05	0.44
26:14:873:G:N2	26:14:905:U:C2	2.85	0.44
26:14:1973:G:H2'	26:14:1974:C:C6	2.53	0.44
26:14:2250:G:C2	37:45:82:ARG:HB3	2.52	0.44
32:59:144:VAL:O	32:59:148:ILE:HG12	2.18	0.44
34:15:56:ASN:HD22	34:15:126:PRO:HA	1.83	0.44
35:25:87:ILE:HG23	35:25:88:ASN:O	2.18	0.44
44:B5:5:TYR:CE1	49:G5:30:ARG:HG3	2.52	0.44
50:H5:46:ASN:O	50:H5:50:VAL:HG22	2.17	0.44
1:13:115:G:C2	1:13:289:G:N7	2.86	0.44
4:3E:98:GLU:O	4:3E:103:ASN:ND2	2.50	0.44
5:4E:48:ALA:HB3	5:4E:54:ALA:HB2	2.00	0.44
8:7E:87:SER:HB2	8:7E:93:VAL:N	2.32	0.44
12:3I:85:ILE:HA	12:3I:85:ILE:HD13	1.73	0.44
14:5I:6:LEU:HB3	14:5I:23:ARG:NH2	2.32	0.44
16:7I:82:GLN:H	16:7I:82:GLN:HG2	1.67	0.44
26:1H:270(G):C:H2'	26:1H:270(H):C:O4'	2.18	0.44
26:1H:568:U:OP1	36:78:36:LYS:HE3	2.18	0.44
26:1H:1024:G:C3'	26:1H:1025:G:H5"	2.46	0.44
26:1H:1050:A:C8	26:1H:2751:G:C8	3.06	0.44
26:1H:1055:G:H1'	26:1H:1085:A:H2	1.81	0.44
26:1H:1102:C:H2'	26:1H:1103:A:H8	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2582:G:C2	26:1H:2583:G:C8	3.06	0.44
28:11:36:PRO:HA	28:11:61:LEU:HD12	2.00	0.44
29:21:11:MET:HG2	29:21:24:THR:HA	1.99	0.44
29:21:82:ARG:O	29:21:84:PHE:N	2.50	0.44
29:21:119:ARG:HH11	29:21:119:ARG:CG	2.28	0.44
36:78:23:PRO:O	36:78:25:SER:N	2.50	0.44
43:E8:85:VAL:HA	43:E8:95:ILE:HG22	2.00	0.44
47:I8:36:ILE:O	47:I8:36:ILE:HD13	2.17	0.44
51:M8:54:GLY:HA2	51:M8:57:GLU:HB3	1.99	0.44
53:O8:41:PRO:C	53:O8:43:CYS:H	2.21	0.44
54:P8:8:ASN:OD1	54:P8:8:ASN:C	2.56	0.44
1:1G:115:G:H1'	1:1G:116:A:N7	2.33	0.44
1:1G:183:G:H1	1:1G:194:C:H42	1.65	0.44
1:1G:762:C:H2'	1:1G:763:G:C8	2.52	0.44
1:1G:836:G:C6	1:1G:851:G:C6	3.05	0.44
1:1G:994:A:C2	14:5A:5:ALA:HB2	2.53	0.44
1:1G:1127:G:H1'	1:1G:1148:U:N3	2.32	0.44
1:1G:1227:A:O2'	13:4A:115:LYS:HE2	2.18	0.44
1:1G:1302:U:C5	13:4A:17:VAL:HG21	2.53	0.44
19:AA:40:ILE:HA	19:AA:44:MET:SD	2.57	0.44
26:14:610:C:H2'	26:14:611:C:C6	2.52	0.44
26:14:1013:C:N3	26:14:1149:G:N2	2.44	0.44
26:14:1432:C:H2'	26:14:1433:U:O4'	2.17	0.44
26:14:2134:A:H2	26:14:2159:G:O2'	2.01	0.44
29:29:102:VAL:HB	29:29:199:ARG:O	2.17	0.44
29:29:170:LEU:HA	29:29:170:LEU:HD13	1.58	0.44
30:39:144:LYS:HD2	30:39:144:LYS:HA	1.52	0.44
34:15:120:LEU:HG	34:15:122:VAL:HG23	1.98	0.44
1:13:825:G:C6	1:13:826:C:C4	3.05	0.44
4:3E:110:PHE:CE2	4:3E:148:VAL:HG23	2.52	0.44
4:3E:173:TRP:HA	4:3E:187:ARG:HG2	2.00	0.44
9:8E:10:ARG:HD2	9:8E:11:LYS:HG3	2.00	0.44
13:4I:105:THR:OG1	13:4I:106:ASN:N	2.51	0.44
16:7I:77:ALA:HB3	16:7I:79:VAL:HG23	2.00	0.44
17:8I:78:GLU:HG2	17:8I:81:ARG:HD2	1.99	0.44
20:BI:71:THR:HG22	20:BI:72:LEU:N	2.24	0.44
26:1H:216:A:H2'	26:1H:217:G:H8	1.82	0.44
26:1H:2430:A:H8	26:1H:2431:U:C5	2.35	0.44
28:11:109:ASP:HB2	28:11:197:GLY:HA3	2.00	0.44
28:11:119:ALA:CB	28:11:130:ALA:HB3	2.47	0.44
30:31:32:LEU:CD2	30:31:105:VAL:HG13	2.44	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:98:ARG:HH21	51:M8:1:MET:HG3	1.82	0.44
33:61:118:LYS:HA	33:61:119:PRO:HD3	1.73	0.44
47:I8:48:GLY:N	47:I8:79:VAL:O	2.43	0.44
1:1G:149:A:H2'	1:1G:150:C:H6	1.83	0.44
1:1G:157:G:H1	1:1G:164:U:H3	1.64	0.44
1:1G:321:A:O2'	1:1G:322:C:H5'	2.18	0.44
1:1G:818:G:O2'	1:1G:819:A:H5'	2.18	0.44
1:1G:1376:U:OP1	7:62:98:SER:OG	2.26	0.44
1:1G:1455:G:H5'	20:BA:32:ALA:HB2	2.00	0.44
7:62:78:ARG:HB2	7:62:156:TRP:HZ3	1.83	0.44
7:62:91:VAL:HG12	7:62:95:ARG:HB3	1.99	0.44
8:72:42:GLU:HG3	8:72:109:ILE:HD12	1.99	0.44
9:82:10:ARG:HH21	9:82:11:LYS:HG3	1.83	0.44
10:1A:42:THR:HG23	10:1A:67:THR:O	2.17	0.44
20:BA:26:ASN:HB3	20:BA:71:THR:OG1	2.18	0.44
23:2L:19:G:H4'	23:2L:20:G:OP1	2.17	0.44
26:14:2:G:N2	26:14:2900:A:H61	2.15	0.44
26:14:234:C:H2'	26:14:235:U:H6	1.82	0.44
26:14:362:U:H3'	26:14:363:G:H5"	1.99	0.44
26:14:572:A:H2'	26:14:573:G:O4'	2.18	0.44
26:14:1449(A):G:H2'	26:14:1450:C:C6	2.53	0.44
26:14:2494:G:C5	26:14:2495:G:N7	2.86	0.44
29:29:37:ARG:HA	29:29:42:ASP:OD1	2.17	0.44
44:B5:5:TYR:HB3	49:G5:33:MET:HB2	1.99	0.44
45:C5:57:GLN:HB3	45:C5:58:GLY:H	1.53	0.44
1:13:256:U:H2'	1:13:257:G:C8	2.53	0.44
1:13:900:A:H8	1:13:900:A:O5'	2.01	0.44
1:13:1226:C:O3'	13:4I:111:LYS:NZ	2.49	0.44
1:13:1284:C:H2'	1:13:1285:A:N7	2.32	0.44
1:13:1327:C:P	21:1F:12:LYS:HZ1	2.41	0.44
1:13:1402:C:H2'	1:13:1403:C:O4'	2.17	0.44
4:3E:116:GLN:NE2	4:3E:157:LEU:HD11	2.32	0.44
7:6E:71:PRO:HA	7:6E:138:LYS:HG2	1.99	0.44
8:7E:84:ARG:O	8:7E:135:CYS:HB2	2.17	0.44
10:1I:54:PHE:HB3	10:1I:55:LYS:H	1.70	0.44
26:1H:671:C:OP1	36:78:42:SER:O	2.36	0.44
26:1H:1225:C:O2'	42:D8:85:LYS:HA	2.18	0.44
26:1H:1965:C:H3'	26:1H:1966:A:H2'	1.99	0.44
26:1H:2099:U:H2'	26:1H:2100:G:C8	2.53	0.44
26:1H:2428:G:N2	36:78:61:ARG:NH2	2.66	0.44
27:16:3:C:H2'	27:16:4:C:H6	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:16:3:C:H2'	27:16:4:C:C6	2.52	0.44
27:16:15:A:H1'	27:16:109:G:C4	2.51	0.44
27:16:42:C:C6	31:41:69:ALA:HB2	2.53	0.44
32:51:149:ARG:O	32:51:149:ARG:HG2	2.17	0.44
36:78:52:GLU:CG	36:78:57:THR:HA	2.47	0.44
53:O8:45:LYS:HD3	53:O8:45:LYS:HA	1.66	0.44
54:P8:10:ARG:HD3	54:P8:14:LYS:HD3	2.00	0.44
55:Q8:26:LYS:O	55:Q8:28:GLY:N	2.50	0.44
1:1G:236:G:H2'	1:1G:237:C:O4'	2.17	0.44
1:1G:453:A:H4'	16:7A:72:ARG:HB2	1.98	0.44
1:1G:646:U:H2'	1:1G:647:C:C6	2.52	0.44
1:1G:1325:C:H5"	21:1B:17:THR:HG21	1.98	0.44
2:12:32:ILE:HD12	2:12:41:ILE:O	2.18	0.44
2:12:128:GLU:O	2:12:130:ARG:HG2	2.18	0.44
4:32:175:SER:HB3	4:32:186:LEU:HD11	1.98	0.44
6:52:15:ASP:O	6:52:19:LEU:HB2	2.18	0.44
12:3A:27:LEU:HD11	12:3A:62:SER:OG	2.17	0.44
13:4A:30:ALA:O	13:4A:34:LEU:HG	2.18	0.44
17:8A:59:ILE:HD13	17:8A:73:VAL:HA	1.99	0.44
26:14:231:C:C2'	26:14:232:G:H5'	2.48	0.44
26:14:1157:G:C2	26:14:1158:C:C2	3.06	0.44
26:14:1225:C:H4'	42:95:85:LYS:CG	2.47	0.44
26:14:1805:U:C2'	26:14:1806:C:H5'	2.48	0.44
26:14:1826:G:H2'	26:14:1827:C:C6	2.53	0.44
26:14:2257:U:O4	58:14:3651:HOH:O	2.21	0.44
27:1J:66:A:C6	27:1J:107:U:H2'	2.53	0.44
30:39:187:VAL:HG13	36:35:1:MET:O	2.18	0.44
43:A5:36:LEU:HD11	43:A5:47:VAL:HG12	1.99	0.44
44:B5:18:TYR:C	44:B5:20:GLY:N	2.69	0.44
46:D5:99:TYR:HA	46:D5:124:ILE:O	2.17	0.44
49:G5:29:LYS:HG2	49:G5:57:ILE:HD13	1.99	0.44
1:13:27:G:H4'	4:3E:209:ARG:HG3	1.99	0.44
1:13:255:G:P	17:8I:69:LYS:HZ3	2.40	0.44
1:13:458:C:H42	1:13:475:G:H1	1.65	0.44
10:1I:38:ILE:HG23	10:1I:71:LEU:HB3	1.99	0.44
16:7I:28:ARG:NH1	16:7I:29:ASP:OD1	2.39	0.44
23:2K:2:G:H2'	23:2K:2:G:N3	2.32	0.44
26:1H:49:A:C8	26:1H:120:U:H5	2.34	0.44
26:1H:276:A:C5	26:1H:278:A:H2	2.36	0.44
26:1H:557:U:H2'	26:1H:558:G:H8	1.83	0.44
26:1H:1466:G:N3	26:1H:1547:C:N4	2.66	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1771:C:C1'	26:1H:1786:A:C8	3.00	0.44
26:1H:1786:A:H1'	26:1H:1938:A:N6	2.33	0.44
26:1H:2400:G:H4'	53:O8:18:ARG:O	2.18	0.44
26:1H:2820:A:O2'	26:1H:2821:A:OP1	2.35	0.44
28:11:44:ASN:O	28:11:46:GLN:O	2.35	0.44
28:11:273:ARG:HH21	28:11:273:ARG:HG2	1.82	0.44
29:21:63:LEU:HD23	29:21:63:LEU:O	2.17	0.44
32:51:46:GLU:OE1	32:51:51:ARG:NH2	2.51	0.44
34:58:43:THR:HA	34:58:44:PRO:HD2	1.79	0.44
34:58:128:HIS:HB2	34:58:129:PRO:HD2	1.99	0.44
36:78:17:LYS:HE2	36:78:27:HIS:NE2	2.32	0.44
37:88:17:LEU:HB3	37:88:39:PRO:HB2	1.99	0.44
48:J8:73:LEU:HD11	48:J8:95:LEU:HD21	1.99	0.44
51:M8:39:CYS:H	51:M8:41:PRO:HD3	1.83	0.44
1:1G:323:U:O4'	20:BA:19:SER:HB2	2.18	0.44
1:1G:575:G:OP1	1:1G:575:G:H4'	2.18	0.44
1:1G:624:C:H2'	1:1G:625:G:C8	2.53	0.44
1:1G:1115:C:H1'	14:5A:61:TRP:HB2	1.99	0.44
1:1G:1232:U:H2'	1:1G:1233:G:O4'	2.17	0.44
2:12:6:THR:HG21	2:12:217:ARG:HB3	2.00	0.44
3:22:33:LEU:O	3:22:36:ASP:N	2.51	0.44
3:22:199:LYS:HB3	3:22:201:TYR:HE1	1.82	0.44
11:2A:57:THR:HG22	11:2A:58:PRO:HD2	1.98	0.44
12:3A:110:VAL:CG2	12:3A:120:TYR:HB3	2.48	0.44
14:5A:23:ARG:HD3	14:5A:23:ARG:HA	1.79	0.44
14:5A:38:GLY:O	14:5A:39:LEU:HD23	2.18	0.44
15:6A:3:ILE:H	15:6A:3:ILE:HG12	1.47	0.44
18:9A:22:VAL:HG12	18:9A:55:ARG:O	2.17	0.44
26:14:55:G:C2	26:14:116:C:C2	3.05	0.44
26:14:94:G:O2'	49:G5:46:GLN:HB3	2.18	0.44
26:14:184:C:H2'	26:14:185:U:C6	2.53	0.44
26:14:699:A:H2'	26:14:700:G:O4'	2.17	0.44
26:14:827:U:H2'	26:14:2430:A:H2	1.82	0.44
26:14:843:G:N2	26:14:936:C:C2	2.86	0.44
26:14:1101:U:H2'	26:14:1102:C:H6	1.83	0.44
26:14:1278:A:O3'	38:55:34:ILE:HG13	2.17	0.44
26:14:1695:G:OP1	28:19:7:LYS:NZ	2.51	0.44
26:14:2295:C:OP1	39:65:10:ARG:NH1	2.46	0.44
26:14:2312:U:O2	31:49:42:GLY:HA3	2.18	0.44
26:14:2461:C:H2'	26:14:2462:U:C6	2.52	0.44
26:14:2611:U:O2'	52:J5:3:LYS:HG2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2666:C:H3'	26:14:2667:C:H6	1.83	0.44
27:1J:2:C:H2'	27:1J:3:C:C5	2.53	0.44
28:19:53:PHE:O	28:19:218:ARG:HB2	2.18	0.44
28:19:166:GLN:HE22	28:19:176:ARG:NH2	2.15	0.44
31:49:120:LEU:HD22	31:49:133:LEU:HD11	1.99	0.44
34:15:67:LEU:O	34:15:88:GLU:HG3	2.17	0.44
36:35:62:LEU:HD13	36:35:63:PRO:HD2	2.00	0.44
40:75:36:GLU:HG3	40:75:36:GLU:O	2.18	0.44
48:F5:90:ILE:HG22	48:F5:91:LYS:N	2.33	0.44
1:13:278:G:N2	17:8I:95:TYR:HB3	2.33	0.44
1:13:1279:A:O2'	1:13:1281:U:OP2	2.26	0.44
1:13:1338:G:C6	1:13:1339:A:C6	3.05	0.44
1:13:1348:U:H2'	1:13:1349:A:H8	1.82	0.44
6:5E:25:ILE:HA	6:5E:25:ILE:HD13	1.83	0.44
9:8E:89:ASN:O	9:8E:91:ASP:N	2.50	0.44
12:3I:113:ARG:O	12:3I:114:LYS:HD2	2.17	0.44
15:6I:82:ILE:O	15:6I:86:GLY:N	2.50	0.44
16:7I:74:LEU:HD22	16:7I:79:VAL:HG21	2.00	0.44
24:3K:3:C:H2'	24:3K:4:C:O4'	2.18	0.44
26:1H:39:C:H2'	26:1H:40:C:C6	2.52	0.44
26:1H:70:G:H21	26:1H:71:A:N6	2.16	0.44
26:1H:287:C:H2'	26:1H:288:C:C6	2.48	0.44
26:1H:932:G:H4'	26:1H:933:A:O5'	2.17	0.44
26:1H:1675:C:H2'	26:1H:1676:A:O4'	2.17	0.44
26:1H:2670:A:O2'	26:1H:2671:A:H5'	2.18	0.44
27:16:89:G:H2'	27:16:89(A):A:C8	2.53	0.44
29:21:67:PHE:C	29:21:69:LYS:H	2.21	0.44
30:31:80:ALA:HA	30:31:81:PRO:HD3	1.88	0.44
31:41:67:LYS:HE3	31:41:67:LYS:O	2.18	0.44
37:88:17:LEU:HA	37:88:17:LEU:HD23	1.58	0.44
48:J8:91:LYS:CG	48:J8:92:LYS:H	2.30	0.44
52:N8:42:PRO:O	52:N8:44:THR:HG22	2.18	0.44
55:Q8:34:TRP:C	55:Q8:34:TRP:HD1	2.19	0.44
1:1G:66:G:C2	1:1G:67:C:C6	3.05	0.44
1:1G:243:A:C2	1:1G:245:C:C2	3.05	0.44
1:1G:272:C:H2'	1:1G:273:A:C8	2.53	0.44
1:1G:302:G:H4'	12:3A:17:LYS:HE2	2.00	0.44
1:1G:338:A:H2'	1:1G:339:C:C6	2.53	0.44
1:1G:944:G:C2	1:1G:1340:A:C6	3.06	0.44
1:1G:1028:C:N4	1:1G:1033:G:H1	2.13	0.44
1:1G:1028(A):C:C4	1:1G:1028(B):C:H5	2.36	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1321:C:H4'	13:4A:87:TYR:CE1	2.53	0.44
1:1G:1347:G:N2	1:1G:1373:G:H2'	2.33	0.44
7:62:26:PHE:O	7:62:30:ILE:HG13	2.18	0.44
18:9A:66:LEU:O	18:9A:70:ILE:HG13	2.18	0.44
26:14:26:G:C6	26:14:27:G:N1	2.85	0.44
26:14:996:A:H4'	41:85:92:ARG:HD3	1.98	0.44
26:14:1405:U:H2'	26:14:1406:U:C6	2.53	0.44
26:14:1636:C:H2'	26:14:1637:A:C8	2.53	0.44
26:14:1785:A:H4'	26:14:1982:C:O2'	2.18	0.44
26:14:1894:C:O2'	26:14:1895:C:H5'	2.17	0.44
26:14:2402:C:H5	26:14:2415:G:H22	1.65	0.44
26:14:2648:C:H2'	26:14:2649:U:O4'	2.18	0.44
26:14:2694:G:C5	26:14:2695:C:C5	3.06	0.44
28:19:71:ASP:CG	28:19:103:ARG:HH12	2.21	0.44
29:29:62:PRO:C	29:29:64:LYS:N	2.71	0.44
34:15:116:LEU:O	34:15:119:ARG:N	2.38	0.44
35:25:104:ARG:CZ	35:25:104:ARG:HB3	2.48	0.44
44:B5:5:TYR:HD1	49:G5:33:MET:SD	2.41	0.44
44:B5:12:VAL:HG13	44:B5:27:THR:OG1	2.18	0.44
1:13:658:G:H2'	1:13:659:U:H6	1.82	0.43
1:13:752:G:H4'	15:6I:69:TYR:OH	2.18	0.43
1:13:1289:A:H3'	1:13:1290:G:C8	2.52	0.43
5:4E:6:PHE:HD1	5:4E:6:PHE:HA	1.74	0.43
5:4E:43:LEU:HD23	5:4E:133:TYR:HD1	1.83	0.43
8:7E:8:ASP:OD2	8:7E:12:ARG:HD2	2.17	0.43
15:6I:39:LEU:O	15:6I:42:HIS:N	2.50	0.43
24:3K:8:U:H2'	24:3K:13:C:H5	1.81	0.43
26:1H:431:U:O2'	26:1H:432:A:H5'	2.18	0.43
26:1H:444:C:O2'	26:1H:445:C:H5'	2.17	0.43
26:1H:910:A:N1	26:1H:2277:G:H1'	2.32	0.43
26:1H:950:G:C5	26:1H:951:C:C4	3.06	0.43
26:1H:1025:G:H8	26:1H:1025:G:OP1	1.99	0.43
26:1H:1063:G:H22	26:1H:1076:C:C2'	2.31	0.43
26:1H:1153:C:C4	26:1H:1154:G:C5	3.06	0.43
26:1H:1474:C:H2'	26:1H:1475:G:C8	2.53	0.43
26:1H:1668:A:OP1	35:68:5:GLN:HG3	2.18	0.43
26:1H:1754:C:P	40:B8:96:ARG:HH12	2.40	0.43
26:1H:2028:U:H2'	26:1H:2029:G:O4'	2.17	0.43
26:1H:2256:G:N2	26:1H:2275:C:N4	2.66	0.43
28:11:148:GLU:HB2	28:11:151:LYS:HD2	2.00	0.43
32:51:4:ILE:O	32:51:4:ILE:HG12	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:61:120:ILE:HG12	33:61:126:TYR:CE2	2.53	0.43
38:98:34:ILE:HG22	38:98:114:VAL:HB	1.99	0.43
45:G8:6:HIS:CD2	45:G8:6:HIS:N	2.86	0.43
45:G8:63:LYS:HG3	45:G8:64:GLU:H	1.83	0.43
46:H8:67:LEU:HD22	46:H8:90:VAL:HG11	2.00	0.43
46:H8:97:GLU:HB3	46:H8:125:LEU:HD11	2.00	0.43
48:J8:73:LEU:HD21	48:J8:95:LEU:HD23	1.99	0.43
1:1G:363:A:C5	12:3A:31:PRO:HD2	2.53	0.43
1:1G:539:A:H2'	1:1G:540:G:C8	2.53	0.43
14:5A:17:LYS:NZ	14:5A:18:VAL:HG13	2.33	0.43
17:8A:10:VAL:HG21	17:8A:52:LYS:O	2.18	0.43
19:AA:66:MET:H	19:AA:67:VAL:HB	1.82	0.43
20:BA:87:LYS:HE3	20:BA:91:LEU:HD11	2.00	0.43
26:14:511:U:C5	26:14:512:G:C5	3.05	0.43
26:14:1374:G:H2'	26:14:1375:C:C6	2.53	0.43
26:14:2016:U:H2'	26:14:2017:U:C6	2.52	0.43
26:14:2611:U:O2'	26:14:2612:C:O5'	2.30	0.43
26:14:2773:C:H2'	26:14:2774:C:H6	1.83	0.43
26:14:2784:C:H1'	29:29:37:ARG:NH2	2.33	0.43
27:1J:2:C:H2'	27:1J:3:C:C6	2.53	0.43
27:1J:99:A:C4	27:1J:100:G:C8	3.06	0.43
31:49:53:LEU:CD2	31:49:87:PRO:HB2	2.48	0.43
31:49:60:LEU:HD21	31:49:92:VAL:HG11	1.99	0.43
44:B5:26:TYR:CE2	44:B5:89:ILE:HG13	2.53	0.43
53:K5:12:GLU:HA	53:K5:23:THR:HB	2.00	0.43
1:13:45:U:H2'	1:13:46:G:C8	2.53	0.43
1:13:61:G:H2'	1:13:62:U:O4'	2.18	0.43
1:13:429:U:H1'	1:13:430:A:H5"	1.98	0.43
1:13:869:G:H8	1:13:869:G:O5'	2.01	0.43
1:13:1486:G:H2'	1:13:1487:G:O4'	2.18	0.43
7:6E:115:ARG:HB3	7:6E:118:VAL:HG12	1.98	0.43
9:8E:27:THR:O	9:8E:63:ILE:N	2.49	0.43
9:8E:29:ASN:OD1	9:8E:65:VAL:N	2.51	0.43
20:BI:92:LEU:O	20:BI:96:GLY:HA3	2.19	0.43
26:1H:39:C:O2	30:31:46:ARG:NH2	2.51	0.43
26:1H:322:A:H5'	26:1H:340:A:C1'	2.48	0.43
26:1H:577:G:OP1	26:1H:2502:G:O2'	2.30	0.43
26:1H:1465:G:C5	26:1H:1466:G:N7	2.86	0.43
26:1H:1532:C:H42	26:1H:1539:G:H1	1.67	0.43
26:1H:2019:A:C6	26:1H:2020:A:N7	2.86	0.43
26:1H:2259:G:C2	26:1H:2282:G:C6	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2320:A:H2'	26:1H:2320:A:N3	2.32	0.43
30:31:46:ARG:HA	30:31:46:ARG:HD2	1.70	0.43
31:41:47:LYS:NZ	31:41:81:LYS:HB2	2.32	0.43
31:41:61:ALA:HA	31:41:66:GLN:O	2.18	0.43
34:58:28:THR:HG22	34:58:29:LYS:N	2.33	0.43
36:78:79:ARG:HB2	36:78:110:TYR:HD1	1.82	0.43
37:88:43:THR:HG22	37:88:94:VAL:HG12	1.99	0.43
39:A8:84:GLN:OE1	39:A8:110:LEU:HD13	2.19	0.43
45:G8:39:VAL:O	45:G8:42:VAL:HG22	2.16	0.43
46:H8:14:LYS:HA	46:H8:15:PRO:HD2	1.72	0.43
1:1G:523:A:H61	12:3A:92:ASP:HB2	1.83	0.43
1:1G:828:A:C4	1:1G:859:A:C8	3.06	0.43
1:1G:976:G:N2	1:1G:1362:C:H2'	2.33	0.43
1:1G:1014:A:H4'	19:AA:14:HIS:HE1	1.79	0.43
1:1G:1072:G:C6	1:1G:1073:U:C4	3.07	0.43
1:1G:1347:G:N2	1:1G:1374:A:OP2	2.41	0.43
1:1G:1496:C:H2'	1:1G:1497:G:C8	2.53	0.43
10:1A:45:ARG:HB3	10:1A:65:LEU:HB3	1.99	0.43
26:14:822:U:O2'	26:14:823:G:H5'	2.18	0.43
26:14:878:A:H2'	26:14:879:G:O4'	2.17	0.43
26:14:1149:G:H2'	26:14:1150:C:C6	2.53	0.43
26:14:1639:U:H5'	58:14:3552:HOH:O	2.17	0.43
26:14:2512:C:H2'	26:14:2513:G:O4'	2.17	0.43
26:14:2552:U:C2	26:14:2554:U:H5"	2.53	0.43
26:14:2619:C:H2'	26:14:2620:C:C6	2.52	0.43
28:19:41:GLY:HA3	28:19:43:ARG:HD3	2.00	0.43
29:29:9:VAL:HA	40:75:3:ARG:HG3	2.00	0.43
39:65:38:GLN:HG2	39:65:47:THR:HG21	1.98	0.43
45:C5:48:ALA:HB1	45:C5:50:ARG:HD3	2.00	0.43
48:F5:92:LYS:O	48:F5:93:GLU:C	2.54	0.43
1:13:150:C:H2'	1:13:151:A:O4'	2.18	0.43
1:13:376:G:O3'	16:7I:5:ARG:HD2	2.19	0.43
1:13:595:G:H22	1:13:643:C:N4	2.16	0.43
1:13:963:G:N2	10:1I:55:LYS:NZ	2.66	0.43
1:13:1320:C:H42	19:AI:36:ARG:HG3	1.83	0.43
1:13:1320:C:H2'	1:13:1321:C:O4'	2.18	0.43
8:7E:39:LEU:HB3	8:7E:45:ILE:HG12	2.01	0.43
11:2I:57:THR:HA	11:2I:58:PRO:HD2	1.71	0.43
20:BI:56:MET:HE2	20:BI:56:MET:HB3	1.88	0.43
26:1H:270(X):G:C6	26:1H:270(Y):G:N1	2.87	0.43
26:1H:1049:C:H1'	26:1H:1113:U:H4'	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1085:A:H1'	26:1H:1086:A:C2	2.53	0.43
26:1H:1387:C:O2	26:1H:1388:G:C8	2.71	0.43
26:1H:1389:G:C2	26:1H:1399:C:O2	2.72	0.43
26:1H:2144:U:H1'	26:1H:2148:G:N2	2.32	0.43
26:1H:2330:G:H2'	26:1H:2331:G:O4'	2.17	0.43
29:21:13:ARG:HG2	29:21:13:ARG:NH1	2.33	0.43
29:21:35:GLN:HB3	29:21:48:GLN:HB2	2.00	0.43
29:21:65:GLY:HA2	29:21:70:ALA:CB	2.49	0.43
30:31:155:LEU:HB2	30:31:189:THR:HG21	2.00	0.43
32:51:86:GLU:HG3	32:51:165:ALA:H	1.82	0.43
35:68:31:LYS:HB3	35:68:32:TYR:CE2	2.54	0.43
36:78:24:GLY:O	36:78:26:GLY:N	2.51	0.43
1:1G:476:G:H2'	1:1G:477:G:H8	1.83	0.43
1:1G:800:G:H8	1:1G:800:G:O5'	2.01	0.43
1:1G:1048:G:N2	1:1G:1209:C:N3	2.62	0.43
1:1G:1105:A:H2'	1:1G:1106:G:C8	2.52	0.43
2:12:204:ASN:N	2:12:204:ASN:OD1	2.52	0.43
3:22:21:ARG:O	3:22:58:GLU:HA	2.18	0.43
3:22:40:ARG:HA	3:22:43:LEU:HB2	2.00	0.43
13:4A:54:VAL:HA	13:4A:57:ARG:HB3	1.99	0.43
26:14:140:A:H8	26:14:1408:C:O2'	1.98	0.43
26:14:142:G:H5"	26:14:1598:C:O2'	2.17	0.43
26:14:390:A:C6	36:35:71:VAL:HG11	2.53	0.43
26:14:1151:G:H4'	41:85:81:HIS:CG	2.53	0.43
26:14:1152:C:H4'	41:85:77:SER:HA	2.00	0.43
26:14:1298:C:C2'	26:14:1302:A:HO2'	2.24	0.43
26:14:1511:A:H2'	26:14:1512:G:O4'	2.19	0.43
26:14:1771:C:H1'	26:14:1786:A:C8	2.53	0.43
26:14:1795:C:H2'	26:14:1796:U:H6	1.83	0.43
26:14:1946:U:H2'	26:14:1947:C:C6	2.54	0.43
26:14:2153:G:HO2'	26:14:2154:G:H8	1.63	0.43
26:14:2336:A:H61	47:E5:43:THR:HB	1.83	0.43
26:14:2567:G:H2'	26:14:2568:C:H6	1.83	0.43
26:14:2893:G:H4'	26:14:2894:G:O5'	2.18	0.43
30:39:64:ILE:HG13	30:39:65:TRP:CE2	2.53	0.43
33:69:4:ILE:HG21	33:69:47:LEU:HD13	2.00	0.43
38:55:103:ARG:CZ	38:55:110:PRO:HD3	2.48	0.43
40:75:57:PHE:HA	40:75:79:HIS:CD2	2.53	0.43
49:G5:38:GLN:O	49:G5:43:GLN:HA	2.18	0.43
53:K5:18:ARG:HH12	53:K5:43:CYS:HB2	1.83	0.43
1:13:536:C:H2'	1:13:537:G:H8	1.81	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:651:C:H2'	1:13:652:U:C6	2.54	0.43
1:13:660:G:H2'	1:13:661:G:C8	2.53	0.43
1:13:1226:C:H4'	1:13:1227:A:OP1	2.19	0.43
2:1E:21:ARG:C	2:1E:23:ARG:H	2.22	0.43
2:1E:25:ASN:HA	2:1E:26:PRO:HD3	1.84	0.43
4:3E:18:LYS:HB2	4:3E:18:LYS:HE3	1.63	0.43
7:6E:111:ARG:HB3	7:6E:111:ARG:HH11	1.83	0.43
14:5I:4:LYS:O	14:5I:7:ILE:HG13	2.19	0.43
14:5I:13:THR:HG23	14:5I:20:ALA:HB2	2.00	0.43
26:1H:303:U:H2'	26:1H:304:G:C8	2.52	0.43
26:1H:1086:A:H1'	26:1H:1103:A:N6	2.33	0.43
26:1H:1195:G:N3	26:1H:1227:A:H2	2.16	0.43
26:1H:1395:A:P	58:1H:3645:HOH:O	2.70	0.43
26:1H:1471:A:C2	26:1H:1472:A:C8	3.06	0.43
26:1H:1782:C:H2'	26:1H:2608:G:O2'	2.19	0.43
26:1H:2314:C:H2'	26:1H:2315:G:C8	2.50	0.43
29:21:188:VAL:HA	29:21:189:PRO:HD3	1.77	0.43
37:88:87:LYS:HD2	37:88:87:LYS:HA	1.47	0.43
39:A8:84:GLN:O	39:A8:85:VAL:HG13	2.18	0.43
48:J8:81:LYS:N	48:J8:81:LYS:HD2	2.34	0.43
55:Q8:48:PHE:CE2	55:Q8:52:LYS:HB2	2.54	0.43
1:1G:843:U:H3'	1:1G:848:C:O4'	2.18	0.43
1:1G:862:C:H2'	1:1G:863:U:H5'	2.01	0.43
1:1G:1084:G:H2'	1:1G:1085:U:H6	1.84	0.43
1:1G:1273:G:H3'	1:1G:1274:G:H8	1.83	0.43
4:32:199:ASN:CB	4:32:202:LEU:HG	2.48	0.43
5:42:107:ARG:CZ	5:42:107:ARG:HB3	2.48	0.43
8:72:118:VAL:O	8:72:119:LEU:HD23	2.19	0.43
11:2A:85:ARG:HE	11:2A:111:ASP:HB3	1.82	0.43
17:8A:63:ARG:HG2	17:8A:64:PRO:CD	2.48	0.43
20:BA:81:LYS:O	20:BA:85:MET:HG2	2.18	0.43
26:14:296:C:H2'	26:14:297:C:H6	1.83	0.43
26:14:492:A:H2'	26:14:493:G:O4'	2.17	0.43
26:14:500:G:N2	26:14:502:A:H3'	2.33	0.43
26:14:564:C:H5"	42:95:75:PHE:CZ	2.54	0.43
26:14:890:A:H2'	26:14:892:G:C8	2.50	0.43
26:14:996:A:N3	26:14:997:G:C8	2.86	0.43
26:14:1060:U:H5'	26:14:1061:U:C6	2.53	0.43
26:14:2542:A:H1'	26:14:2543:G:C8	2.53	0.43
26:14:2893:G:H5'	26:14:2894:G:OP1	2.18	0.43
27:1J:113:C:O2'	39:65:46:VAL:HG13	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:10:LYS:O	31:49:15:VAL:HG23	2.17	0.43
32:59:76:VAL:O	32:59:80:SER:OG	2.20	0.43
1:13:1448:C:H42	1:13:1455:G:H1	1.67	0.43
1:13:1507:A:OP2	25:4K:13:A:N6	2.52	0.43
8:7E:34:GLU:HB3	8:7E:118:VAL:HG21	2.01	0.43
16:7I:3:LYS:O	16:7I:21:VAL:HA	2.18	0.43
16:7I:25:ARG:HG3	16:7I:25:ARG:HH11	1.84	0.43
17:8I:101:ARG:HB2	17:8I:101:ARG:NH2	2.32	0.43
18:9I:21:LYS:HD2	18:9I:21:LYS:HA	1.86	0.43
22:1K:14:A:C6	22:1K:22:G:N3	2.86	0.43
22:1K:60:U:H5'	22:1K:61:C:OP2	2.18	0.43
26:1H:65:C:H2'	26:1H:66:C:C6	2.54	0.43
26:1H:287:C:O2'	26:1H:288:C:H5'	2.19	0.43
26:1H:478:A:C6	26:1H:480:A:C6	3.06	0.43
26:1H:572:A:H5"	26:1H:573:G:OP2	2.17	0.43
26:1H:720:C:H2'	26:1H:721:C:C6	2.54	0.43
26:1H:1820:U:H4'	26:1H:1821:A:OP2	2.19	0.43
26:1H:2181:G:H2'	26:1H:2182:G:C8	2.53	0.43
26:1H:2208:U:H4'	28:11:151:LYS:HG2	2.00	0.43
26:1H:2262:U:H4'	26:1H:2328:A:C2	2.54	0.43
26:1H:2846:G:H2'	26:1H:2847:U:O4'	2.18	0.43
26:1H:2862:G:H2'	26:1H:2863:C:H6	1.83	0.43
30:31:34:TRP:CZ2	36:78:8:PRO:HB3	2.53	0.43
30:31:81:PRO:HB3	30:31:89:VAL:HG23	1.99	0.43
31:41:37:VAL:H	31:41:99:MET:HE3	1.82	0.43
35:68:71:ARG:NH2	35:68:77:ILE:HG21	2.33	0.43
36:78:19:VAL:HG21	36:78:27:HIS:CG	2.54	0.43
40:B8:91:ARG:O	40:B8:116:ALA:HA	2.19	0.43
45:G8:89:PHE:CD1	45:G8:90:LEU:N	2.87	0.43
49:K8:51:ARG:NH1	49:K8:55:ARG:HH12	2.16	0.43
50:L8:7:LYS:HD2	50:L8:34:GLU:HG2	1.99	0.43
1:1G:791:G:C6	1:1G:792:A:N7	2.87	0.43
1:1G:980:C:H3'	1:1G:981:U:H6	1.79	0.43
4:32:25:ARG:HG2	4:32:30:LYS:O	2.18	0.43
6:52:60:PHE:C	6:52:61:LEU:HD12	2.39	0.43
7:62:92:SER:O	7:62:96:GLN:HG3	2.19	0.43
14:5A:59:ALA:HB1	14:5A:61:TRP:HZ3	1.83	0.43
15:6A:75:PRO:HA	15:6A:78:TYR:HB3	1.99	0.43
20:BA:11:SER:HA	20:BA:13:LEU:HB2	1.99	0.43
26:14:117:G:C6	26:14:119:A:C6	3.07	0.43
26:14:249:C:H5"	58:14:3522:HOH:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:286:C:H2'	26:14:287:C:C6	2.53	0.43
26:14:990:A:H5'	26:14:990:A:C8	2.49	0.43
26:14:1088:A:N3	26:14:1088:A:H2'	2.32	0.43
26:14:1213:A:H2'	26:14:1214:A:C8	2.53	0.43
26:14:1317:A:H2'	26:14:1318:C:H6	1.83	0.43
26:14:1416:G:O2'	26:14:1417:C:O4'	2.35	0.43
26:14:1858:G:H8	26:14:1858:G:OP2	2.02	0.43
26:14:2086:U:H2'	26:14:2087:G:C8	2.54	0.43
26:14:2815:C:H5'	52:J5:29:THR:HG21	2.00	0.43
28:19:44:ASN:HD21	28:19:46:GLN:HG3	1.82	0.43
29:29:33:VAL:HG12	29:29:89:ASP:CB	2.47	0.43
35:25:89:ASN:OD1	35:25:89:ASN:N	2.52	0.43
38:55:81:ASP:O	38:55:82:GLU:HB3	2.18	0.43
45:C5:52:SER:OG	45:C5:56:PRO:HA	2.18	0.43
46:D5:53:ILE:HA	46:D5:70:LEU:HD22	2.01	0.43
53:K5:45:LYS:N	53:K5:45:LYS:HD2	2.33	0.43
1:13:280:C:O2	17:8I:38:ARG:HG3	2.19	0.43
1:13:416:G:H2'	1:13:417:C:C6	2.54	0.43
1:13:609:A:H2'	1:13:610:G:H5'	2.01	0.43
6:5E:46:ARG:HG3	6:5E:47:ARG:N	2.34	0.43
8:7E:23:SER:HA	8:7E:61:VAL:O	2.19	0.43
23:2K:64:G:C2	23:2K:65:G:N7	2.87	0.43
26:1H:315:G:C6	26:1H:316:C:C4	3.06	0.43
26:1H:803:U:C4	26:1H:804:A:N7	2.86	0.43
26:1H:851:U:O2'	50:L8:42:ALA:O	2.37	0.43
26:1H:1108:U:C4	26:1H:1109:C:N4	2.87	0.43
26:1H:1264:G:H3'	26:1H:1265:A:H5"	1.99	0.43
26:1H:1387:C:C2	26:1H:1388:G:C8	3.05	0.43
26:1H:1568:G:P	28:11:63:ARG:HH12	2.42	0.43
26:1H:1922:G:H2'	26:1H:1923:U:C6	2.54	0.43
26:1H:2127:G:H2'	26:1H:2128:C:O4'	2.18	0.43
26:1H:2303:G:O2'	31:41:132:ASN:HB2	2.18	0.43
26:1H:2572:A:N7	29:21:144:ARG:HD2	2.34	0.43
26:1H:2712:U:H1'	26:1H:2712(A):A:C8	2.53	0.43
27:16:73:A:C4	27:16:104:A:C2	3.07	0.43
30:31:184:TYR:CE1	36:78:3:LEU:HD11	2.53	0.43
32:51:121:ILE:HG12	32:51:140:LYS:HD3	2.00	0.43
32:51:130:ARG:HH11	32:51:130:ARG:HB3	1.84	0.43
33:61:29:TYR:O	33:61:32:PRO:HD2	2.18	0.43
41:C8:36:ARG:HD3	41:C8:40:PHE:CZ	2.54	0.43
48:J8:85:LEU:HD13	48:J8:85:LEU:HA	1.72	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:373:A:C2	1:1G:374:A:C8	3.07	0.43
1:1G:583:A:H2'	1:1G:584:G:O4'	2.19	0.43
1:1G:711:G:O2'	1:1G:712:A:H5'	2.18	0.43
1:1G:829:G:O2'	1:1G:830:G:H5'	2.18	0.43
1:1G:1472:U:H2'	1:1G:1473:A:O4'	2.19	0.43
3:22:140:ARG:NE	3:22:140:ARG:HA	2.34	0.43
4:32:4:TYR:HE2	4:32:11:LEU:HD11	1.83	0.43
5:42:127:ASN:HA	5:42:128:PRO:HD3	1.91	0.43
10:1A:61:GLU:OE1	14:5A:58:LYS:HE2	2.18	0.43
13:4A:7:VAL:HG21	31:49:115:ARG:NE	2.34	0.43
13:4A:25:ILE:O	13:4A:29:ARG:HB2	2.19	0.43
26:14:162:U:H4'	26:14:171:G:O4'	2.18	0.43
26:14:270(S):G:H2'	26:14:270(T):G:H8	1.83	0.43
26:14:511:U:O4	26:14:512:G:N1	2.50	0.43
26:14:557:U:H2'	26:14:558:G:C8	2.54	0.43
26:14:1225:C:O3'	42:95:85:LYS:HA	2.18	0.43
26:14:1233:C:H2'	26:14:1234:U:H6	1.84	0.43
26:14:2395:C:H2'	26:14:2396:G:O4'	2.18	0.43
26:14:2408:U:H2'	26:14:2409:G:C8	2.54	0.43
26:14:2543:G:H1'	26:14:2766:G:H5'	2.01	0.43
28:19:108:PRO:HB3	28:19:143:HIS:HE2	1.83	0.43
31:49:96:ARG:C	31:49:98:ARG:H	2.22	0.43
33:69:130:TYR:C	33:69:131:LYS:HD2	2.38	0.43
39:65:10:ARG:O	39:65:14:VAL:HG22	2.18	0.43
40:75:86:ILE:HD13	40:75:86:ILE:HG21	1.82	0.43
42:95:66:ARG:H	42:95:66:ARG:HG2	1.68	0.43
47:E5:50:ASN:O	47:E5:62:LEU:HB2	2.18	0.43
49:G5:33:MET:O	49:G5:37:PHE:HD1	2.02	0.43
1:13:101:A:C4	1:13:102:G:C8	3.06	0.43
1:13:240:C:H2'	1:13:241:C:H6	1.82	0.43
1:13:265:G:H5"	17:8I:65:ILE:O	2.19	0.43
1:13:617:G:H5'	16:7I:45:THR:HG23	2.00	0.43
1:13:1104:G:H4'	2:1E:111:ARG:NH1	2.34	0.43
1:13:1422:G:C5'	35:68:48:PRO:HB3	2.49	0.43
11:2I:59:TYR:CE2	11:2I:63:LEU:HD11	2.53	0.43
20:BI:26:ASN:HB3	20:BI:71:THR:OG1	2.19	0.43
26:1H:4:C:H42	26:1H:2899:G:H1	1.65	0.43
26:1H:234:C:H2'	26:1H:235:U:C6	2.50	0.43
26:1H:286:C:H2'	26:1H:287:C:C6	2.53	0.43
26:1H:550:G:O2'	26:1H:1220:A:N3	2.38	0.43
26:1H:1332:G:N2	26:1H:1610:A:N7	2.67	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1389:G:C2	26:1H:1390:U:O2	2.72	0.43
26:1H:2280:G:H2'	26:1H:2281:C:H5'	2.00	0.43
26:1H:2335:A:N7	26:1H:2337:G:C5	2.87	0.43
26:1H:2467:C:H4'	37:88:123:HIS:CG	2.53	0.43
26:1H:2680:C:O3'	29:21:8:LYS:NZ	2.52	0.43
30:31:178:PRO:HB2	30:31:201:VAL:CG2	2.48	0.43
32:51:12:PRO:HB3	32:51:48:GLY:HA2	2.00	0.43
34:58:133:GLN:H	34:58:133:GLN:CD	2.22	0.43
37:88:32:TYR:CE1	37:88:133:ARG:HG3	2.54	0.43
45:G8:85:VAL:O	45:G8:86:ARG:HD3	2.19	0.43
46:H8:4:ARG:HD3	46:H8:60:GLU:OE2	2.18	0.43
46:H8:4:ARG:HB3	46:H8:58:VAL:HG23	1.99	0.43
50:L8:6:VAL:HG11	50:L8:47:VAL:HG22	2.01	0.43
50:L8:8:LEU:HD13	50:L8:31:LEU:HA	2.00	0.43
52:N8:16:ARG:HG3	52:N8:17:ASP:N	2.34	0.43
1:1G:141:A:H1'	1:1G:182:U:O2	2.19	0.43
1:1G:241:C:C2	1:1G:286:G:C2	3.07	0.43
1:1G:316:G:H2'	1:1G:317:G:C8	2.54	0.43
1:1G:1368:G:OP2	9:82:112:LYS:HD2	2.18	0.43
2:12:208:ILE:HA	2:12:211:ILE:HD12	1.99	0.43
3:22:148:GLY:O	3:22:203:PHE:HB3	2.19	0.43
5:42:92:LYS:HE2	8:72:105:ARG:NH2	2.34	0.43
10:1A:32:ALA:HA	10:1A:76:ASN:HB2	2.01	0.43
14:5A:12:ARG:H	14:5A:12:ARG:HG3	1.38	0.43
16:7A:40:ASP:HB3	16:7A:48:TRP:CB	2.39	0.43
26:14:1176:G:H5'	26:14:1177:A:OP1	2.19	0.43
26:14:1425:G:H2'	26:14:1426:G:C8	2.53	0.43
26:14:2346:A:C2	26:14:2383:G:C2	3.06	0.43
30:39:126:VAL:HG13	30:39:193:VAL:HG23	2.01	0.43
32:59:117:PRO:HA	32:59:118:PRO:HD2	1.88	0.43
33:69:135:GLU:OE2	33:69:135:GLU:N	2.50	0.43
1:13:13:U:O2	1:13:914:A:H3'	2.18	0.43
1:13:410:G:H5"	1:13:411:A:OP1	2.18	0.43
2:1E:135:GLN:O	2:1E:139:LYS:HB2	2.17	0.43
3:2E:148:GLY:HA3	3:2E:172:ARG:O	2.19	0.43
12:3I:32:PHE:HB3	12:3I:84:LEU:HD11	2.01	0.43
13:4I:2:ALA:O	13:4I:10:PRO:HD2	2.18	0.43
13:4I:108:ARG:NH1	13:4I:111:LYS:HB3	2.34	0.43
17:8I:10:VAL:HG13	17:8I:19:VAL:HB	2.01	0.43
26:1H:270(R):G:H2'	26:1H:270(S):G:C8	2.53	0.43
26:1H:1779:U:H2'	58:1H:3625:HOH:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1954:G:O2'	26:1H:1956:U:O4	2.30	0.43
26:1H:2840:C:H42	26:1H:2877:G:H1	1.67	0.43
27:16:11:C:H3'	27:16:12:C:H6	1.82	0.43
28:11:260:ARG:HH22	28:11:266:SER:HB3	1.83	0.43
36:78:121:LYS:HE2	36:78:121:LYS:HB3	1.82	0.43
37:88:2:LEU:HD12	37:88:2:LEU:HA	1.75	0.43
40:B8:88:ILE:HG13	40:B8:88:ILE:O	2.18	0.43
46:H8:18:LEU:O	46:H8:21:ALA:HB3	2.18	0.43
53:O8:33:LYS:O	53:O8:35:GLU:HG3	2.19	0.43
1:1G:109:A:H5'	1:1G:110:C:H5	1.84	0.43
1:1G:1148:U:OP1	9:82:7:THR:HG21	2.19	0.43
1:1G:1350:A:C2	1:1G:1351:U:C2	3.06	0.43
1:1G:1352:C:OP1	21:1B:3:LYS:NZ	2.38	0.43
1:1G:1512:U:H2'	1:1G:1513:A:C8	2.53	0.43
3:22:91:LEU:O	3:22:95:THR:OG1	2.32	0.43
4:32:8:VAL:HA	4:32:11:LEU:HD12	2.01	0.43
5:42:92:LYS:HG2	5:42:93:PRO:HD2	2.00	0.43
9:82:111:ARG:HG2	9:82:112:LYS:H	1.84	0.43
12:3A:10:LEU:HD23	12:3A:10:LEU:HA	1.86	0.43
12:3A:75:HIS:HA	12:3A:111:LYS:NZ	2.34	0.43
19:AA:66:MET:HA	19:AA:67:VAL:O	2.18	0.43
21:1B:6:ARG:HH11	21:1B:15:ARG:NH2	2.16	0.43
24:3L:71:G:H2'	24:3L:72:C:H5"	2.01	0.43
26:14:563:G:H5'	26:14:572:A:H4'	2.01	0.43
26:14:826:U:H2'	26:14:828:U:O4'	2.19	0.43
26:14:957:A:N6	26:14:2459:A:C8	2.87	0.43
26:14:1171:G:O2'	26:14:1173:G:O4'	2.20	0.43
26:14:2239:G:H5'	28:19:251:GLY:HA3	2.01	0.43
26:14:2340:G:H2'	26:14:2341:G:C8	2.54	0.43
29:29:173:VAL:N	29:29:183:LEU:O	2.37	0.43
31:49:55:LYS:HG2	31:49:150:ASP:OD1	2.19	0.43
31:49:56:ALA:HB2	31:49:153:ARG:NH2	2.34	0.43
32:59:56:SER:OG	32:59:57:ASP:N	2.52	0.43
34:15:15:LEU:HD23	34:15:134:ARG:HD2	2.00	0.43
36:35:110:TYR:HB3	36:35:111:ARG:H	1.72	0.43
40:75:107:ASP:OD1	40:75:107:ASP:N	2.51	0.43
42:95:85:LYS:HG3	42:95:87:HIS:CA	2.48	0.43
55:M5:32:LEU:HD12	55:M5:32:LEU:HA	1.63	0.43
1:13:266:G:H5"	1:13:267:C:C5	2.53	0.43
1:13:864:A:H5"	1:13:865:A:OP2	2.19	0.43
1:13:945:G:C2	1:13:946:A:C8	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:992:U:O2	1:13:993:G:N2	2.52	0.43
1:13:1375:A:P	7:6E:28:ASN:HD22	2.42	0.43
2:1E:180:LEU:O	2:1E:181:PHE:HB2	2.19	0.43
3:2E:134:ILE:HD11	3:2E:153:VAL:HG21	2.00	0.43
4:3E:92:VAL:O	4:3E:96:LEU:HD22	2.19	0.43
8:7E:87:SER:HB2	8:7E:93:VAL:H	1.83	0.43
13:4I:13:LYS:O	13:4I:44:ARG:NH2	2.51	0.43
22:1K:69:G:H3'	22:1K:70:G:H5"	2.01	0.43
26:1H:72:U:OP2	44:F8:1:MET:N	2.51	0.43
26:1H:208:C:H2'	26:1H:209:C:C6	2.53	0.43
26:1H:507:A:C5'	26:1H:508:G:H5'	2.47	0.43
26:1H:548:A:C5	26:1H:549:G:H1'	2.53	0.43
26:1H:849:A:H5"	26:1H:850:C:OP2	2.18	0.43
26:1H:1063:G:N1	26:1H:1076:C:O2	2.51	0.43
26:1H:1110:G:O2'	26:1H:1111:A:C8	2.72	0.43
26:1H:1279:G:N2	26:1H:1292:U:C2	2.87	0.43
26:1H:1313:U:H4'	26:1H:1332:G:H4'	2.00	0.43
26:1H:1799:G:H5'	26:1H:1819:A:N6	2.33	0.43
26:1H:2130:U:H1'	26:1H:2159:G:N2	2.33	0.43
26:1H:2259:G:C2	26:1H:2282:G:N1	2.86	0.43
26:1H:2288:A:C2	26:1H:2325:G:C8	3.07	0.43
26:1H:2858:C:H2'	26:1H:2859:G:O4'	2.19	0.43
28:11:17:THR:HG22	28:11:205:VAL:H	1.82	0.43
29:21:60:ASN:HB2	29:21:61:ARG:H	1.62	0.43
31:41:28:VAL:O	31:41:31:VAL:HG13	2.19	0.43
50:L8:8:LEU:HB2	50:L8:28:LEU:HD22	2.00	0.43
1:1G:537:G:H5"	12:3A:113:ARG:HH12	1.80	0.43
1:1G:651:C:H2'	1:1G:652:U:O4'	2.18	0.43
1:1G:674:G:H2'	1:1G:675:A:C8	2.54	0.43
1:1G:755:G:OP2	15:6A:65:ARG:HD3	2.18	0.43
1:1G:949:A:C2	1:1G:1233:G:N3	2.87	0.43
1:1G:1028(A):C:H42	1:1G:1032(B):G:N2	2.16	0.43
9:82:2:GLU:HG2	9:82:3:GLN:HG3	2.00	0.43
13:4A:112:GLY:HA3	13:4A:113:PRO:HD3	1.78	0.43
26:14:254:G:O6	55:M5:5:LYS:HG2	2.19	0.43
26:14:270(V):G:H2'	26:14:270(W):G:O4'	2.19	0.43
26:14:629:G:H1	26:14:634:C:N4	2.14	0.43
26:14:725:G:H8	26:14:725:G:O5'	2.02	0.43
26:14:831:G:H5"	26:14:832:G:OP2	2.19	0.43
26:14:1348:G:H5"	26:14:1349:A:OP2	2.19	0.43
26:14:1599:C:C2	26:14:1600:C:C5	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1693:U:H4'	26:14:1694:C:OP2	2.19	0.43
26:14:2298:A:N6	26:14:2318:G:H2'	2.34	0.43
26:14:2685:G:P	40:75:51:ARG:HH12	2.41	0.43
26:14:2751:G:N1	32:59:2:SER:HB3	2.34	0.43
28:19:41:GLY:C	28:19:43:ARG:H	2.22	0.43
28:19:49:ILE:HD11	28:19:52:ARG:HA	2.00	0.43
28:19:112:GLN:O	28:19:115:GLN:HG3	2.18	0.43
28:19:242:ARG:N	28:19:242:ARG:HD3	2.32	0.43
39:65:54:LEU:O	39:65:56:LEU:N	2.46	0.43
42:95:7:THR:HG23	42:95:22:VAL:HG21	2.00	0.43
46:D5:70:LEU:O	46:D5:89:PHE:N	2.46	0.43
46:D5:155:LEU:HD12	46:D5:163:LEU:HD13	2.00	0.43
47:E5:20:ARG:HA	47:E5:20:ARG:HD3	1.76	0.43
54:L5:16:HIS:HB2	54:L5:44:PRO:HG2	2.00	0.43
1:13:417:C:H2'	1:13:418:C:C6	2.54	0.43
1:13:491:G:H2'	1:13:492:G:O4'	2.19	0.43
1:13:636:U:H2'	1:13:637:G:C8	2.53	0.43
1:13:721:G:C6	1:13:733:A:C2	3.07	0.43
1:13:821:G:C2	1:13:880:C:N3	2.87	0.43
1:13:1096:C:H2'	1:13:1097:C:C6	2.50	0.43
1:13:1126:U:N3	1:13:1127:G:C2	2.87	0.43
1:13:1530:G:H2'	1:13:1531:A:H8	1.84	0.43
2:1E:51:LEU:HD23	2:1E:201:ILE:HD12	2.01	0.43
2:1E:156:LYS:HD3	2:1E:156:LYS:HA	1.58	0.43
4:3E:108:LEU:HD23	4:3E:110:PHE:CE1	2.54	0.43
4:3E:154:ASN:H	4:3E:154:ASN:ND2	2.17	0.43
5:4E:126:ARG:HH11	5:4E:126:ARG:CG	2.28	0.43
6:5E:82:ARG:HB2	6:5E:85:VAL:HG23	2.00	0.43
8:7E:82:HIS:HE1	8:7E:136:GLU:OE2	2.02	0.43
20:BI:53:LEU:O	20:BI:57:ARG:NH1	2.52	0.43
20:BI:59:ALA:HA	20:BI:62:LEU:HD12	1.99	0.43
26:1H:800:A:OP1	58:1H:3653:HOH:O	2.21	0.43
26:1H:1292:U:H2'	26:1H:1293:C:O4'	2.19	0.43
26:1H:1448:G:N2	26:1H:1449:A:N6	2.66	0.43
30:31:68:LYS:O	30:31:69:HIS:HB2	2.18	0.43
32:51:92:ILE:H	32:51:92:ILE:HG13	1.48	0.43
33:61:29:TYR:C	33:61:32:PRO:HD2	2.39	0.43
38:98:32:GLY:HA2	38:98:116:LEU:HD12	2.01	0.43
46:H8:53:ILE:HA	46:H8:71:VAL:HG13	2.00	0.43
46:H8:72:ARG:NH1	46:H8:89:PHE:HD2	2.17	0.43
53:O8:27:LYS:H	53:O8:27:LYS:CE	2.31	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:Q8:14:VAL:HG11	55:Q8:21:LYS:NZ	2.33	0.43
55:Q8:47:LYS:HA	55:Q8:47:LYS:HZ2	1.83	0.43
1:1G:277:C:H5"	17:8A:68:ARG:NH2	2.34	0.43
1:1G:332:G:OP2	20:BA:10:LEU:HD12	2.19	0.43
1:1G:722:A:C8	1:1G:724:G:H1'	2.54	0.43
1:1G:965:A:C2	1:1G:969:A:C2	3.07	0.43
1:1G:977:A:OP1	14:5A:31:ARG:HD3	2.19	0.43
1:1G:1228:C:H5'	13:4A:114:ARG:HB3	2.01	0.43
1:1G:1246:C:H2'	1:1G:1247:U:O4'	2.18	0.43
1:1G:1396:A:H4'	1:1G:1397:C:OP2	2.19	0.43
4:32:113:SER:O	4:32:117:ALA:N	2.51	0.43
8:72:68:ARG:NH1	8:72:70:GLN:HG2	2.34	0.43
18:9A:35:ARG:HE	18:9A:35:ARG:HB2	1.50	0.43
19:AA:12:ASP:HB3	19:AA:38:SER:HA	2.00	0.43
19:AA:52:TYR:HB2	19:AA:57:HIS:CE1	2.54	0.43
24:3L:9:A:H61	24:3L:22:G:H5'	1.84	0.43
26:14:128:C:H2'	26:14:129:C:H6	1.84	0.43
26:14:468:G:N7	54:L5:39:ARG:NH2	2.62	0.43
26:14:977:G:H2'	26:14:978:G:H8	1.83	0.43
26:14:997:G:P	41:85:58:ARG:HH21	2.41	0.43
26:14:1570:A:H2'	26:14:1571:A:C8	2.54	0.43
26:14:1778:U:P	58:14:3501:HOH:O	2.77	0.43
26:14:1782:C:H1'	26:14:2609:U:H5"	2.00	0.43
26:14:2228:G:C5	26:14:2229:C:C4	3.07	0.43
26:14:2378:A:O3'	39:65:23:ARG:HD2	2.19	0.43
26:14:2582:G:N3	26:14:2582:G:H2'	2.34	0.43
26:14:2637:U:C2	26:14:2782:G:N2	2.87	0.43
27:1J:13:A:N1	27:1J:69:G:O2'	2.45	0.43
27:1J:36:C:N3	27:1J:49:C:O2'	2.46	0.43
29:29:16:ARG:O	29:29:17:ASP:HB2	2.19	0.43
29:29:119:ARG:HA	29:29:160:TYR:CE2	2.54	0.43
29:29:170:LEU:HD11	29:29:185:LYS:O	2.19	0.43
30:39:7:TYR:O	30:39:15:SER:HA	2.19	0.43
33:69:44:LEU:HD23	33:69:44:LEU:HA	1.85	0.43
35:25:35:VAL:HG12	35:25:62:VAL:O	2.19	0.43
38:55:38:VAL:CG1	38:55:42:LYS:HD2	2.45	0.43
39:65:56:LEU:HB3	39:65:58:LEU:HD22	2.01	0.43
47:E5:26:TYR:HB2	47:E5:29:GLN:OE1	2.19	0.43
48:F5:46:LEU:C	48:F5:47:GLN:HG2	2.38	0.43
1:13:490:G:O2'	1:13:491:G:H5'	2.18	0.42
1:13:883:C:O2'	1:13:884:U:H5'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1124:G:H5'	10:1I:35:SER:HB2	2.01	0.42
6:5E:55:ASP:HB2	6:5E:86:ARG:HH12	1.83	0.42
13:4I:82:MET:C	13:4I:84:ILE:H	2.23	0.42
20:BI:29:LYS:HB2	20:BI:29:LYS:HE3	1.81	0.42
26:1H:120:U:C5	26:1H:149:A:N6	2.87	0.42
26:1H:1009:A:OP2	34:58:37:LYS:NZ	2.51	0.42
26:1H:2317:C:C2'	26:1H:2318:G:H5'	2.49	0.42
26:1H:2689:U:H4'	26:1H:2690:C:H5'	2.01	0.42
29:21:96:PHE:O	29:21:175:VAL:HG11	2.18	0.42
36:78:19:VAL:CB	36:78:27:HIS:HB2	2.47	0.42
36:78:132:LYS:HE3	36:78:132:LYS:HB3	1.83	0.42
38:98:29:LEU:HB3	38:98:75:LEU:HD11	2.01	0.42
38:98:79:LEU:HA	38:98:83:ILE:HG13	2.01	0.42
44:F8:2:LYS:HE2	44:F8:2:LYS:O	2.19	0.42
46:H8:128:VAL:HB	46:H8:161:VAL:HG21	2.01	0.42
55:Q8:9:GLY:HA2	55:Q8:12:LYS:HB2	2.00	0.42
1:1G:468:A:H2'	1:1G:474:G:H5'	2.00	0.42
1:1G:571:U:O2	1:1G:918:A:H5'	2.19	0.42
1:1G:974:A:P	14:5A:41:ARG:HH12	2.42	0.42
2:12:50:GLU:HB3	2:12:200:ILE:O	2.19	0.42
2:12:131:PRO:HG2	2:12:134:GLU:HB2	2.01	0.42
2:12:142:LEU:O	2:12:142:LEU:HD23	2.19	0.42
3:22:9:GLY:HA3	14:5A:49:HIS:HA	2.01	0.42
3:22:72:LYS:NZ	3:22:75:VAL:HG23	2.33	0.42
8:72:12:ARG:NH2	8:72:27:PRO:HD3	2.34	0.42
16:7A:15:PRO:C	16:7A:16:HIS:HD2	2.22	0.42
26:14:402:A:H8	26:14:402:A:O5'	2.02	0.42
26:14:580:C:H2'	26:14:581:C:C6	2.54	0.42
26:14:747:U:P	52:J5:3:LYS:HD3	2.59	0.42
26:14:850:C:O3'	50:H5:49:LYS:HE2	2.19	0.42
26:14:979:G:H3'	26:14:980:A:C5'	2.49	0.42
26:14:1142(A):A:C5	26:14:1144:G:C5	3.07	0.42
26:14:1312:U:H4'	26:14:1313:U:O5'	2.19	0.42
26:14:1813:G:H1'	28:19:50:THR:OG1	2.18	0.42
26:14:1921:G:H2'	26:14:1922:G:H8	1.84	0.42
26:14:2467:C:H2'	26:14:2468:G:O4'	2.18	0.42
26:14:2527:C:C4	26:14:2528:U:C5	3.07	0.42
26:14:2862:G:H2'	26:14:2863:C:C6	2.54	0.42
27:1J:9:G:OP1	39:65:25:ARG:NH2	2.52	0.42
30:39:181:LEU:HD21	30:39:186:ILE:HD11	2.01	0.42
36:35:78:PRO:HB3	36:35:111:ARG:HH21	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:D5:91:LEU:HD22	46:D5:96:VAL:HG21	2.00	0.42
52:J5:16:ARG:HD2	52:J5:20:ARG:NH1	2.33	0.42
55:M5:40:GLU:CA	55:M5:43:GLN:HB2	2.42	0.42
1:13:380:G:N2	1:13:384:G:C6	2.87	0.42
1:13:474:G:H5"	16:7I:81:ARG:NE	2.35	0.42
1:13:474:G:C6	1:13:475:G:C6	3.06	0.42
1:13:645:C:H2'	1:13:646:U:O4'	2.18	0.42
1:13:738:C:H2'	1:13:739:C:C6	2.53	0.42
1:13:933:G:OP2	7:6E:3:ARG:HB2	2.19	0.42
1:13:1182:G:H4'	1:13:1183:A:C5'	2.49	0.42
1:13:1312:G:H5'	19:AI:6:LYS:HD2	2.01	0.42
1:13:1350:A:C5	1:13:1351:U:C4	3.08	0.42
2:1E:82:ARG:HH21	2:1E:150:SER:HB3	1.84	0.42
13:4I:58:GLU:O	13:4I:62:ASN:HB2	2.19	0.42
16:7I:83:GLU:HB3	16:7I:84:ALA:H	1.54	0.42
22:1K:62:C:H2'	22:1K:63:G:C8	2.53	0.42
22:1K:70:G:OP1	22:1K:70:G:H4'	2.18	0.42
24:3K:34:G:H2'	24:3K:35:A:C8	2.54	0.42
26:1H:57:C:H2'	26:1H:58:G:O4'	2.19	0.42
26:1H:141:A:OP2	26:1H:141(A):C:N4	2.33	0.42
26:1H:270(E):G:N2	26:1H:270(U):C:N3	2.59	0.42
26:1H:381:G:C4	26:1H:394:A:C2	3.07	0.42
26:1H:456:C:C4	44:F8:69:TYR:CE1	3.07	0.42
26:1H:569:U:O4	26:1H:570:G:C6	2.72	0.42
26:1H:931:G:H4'	50:L8:24:LYS:NZ	2.34	0.42
26:1H:1556:C:H2'	26:1H:1557:C:C6	2.53	0.42
26:1H:1591:G:O2'	26:1H:1592:C:H5'	2.19	0.42
26:1H:1766:U:H2'	26:1H:1767:C:C6	2.54	0.42
26:1H:2148:G:H2'	26:1H:2149:G:O4'	2.19	0.42
26:1H:2393:A:C2'	26:1H:2394:C:H5'	2.49	0.42
26:1H:2748:A:H2	32:51:63:SER:HB3	1.82	0.42
28:11:69:ARG:NH2	28:11:128:GLY:O	2.39	0.42
28:11:119:ALA:HB1	28:11:130:ALA:HB3	2.00	0.42
30:31:9:ILE:HG12	30:31:10:PRO:HD2	2.01	0.42
34:58:46:VAL:CG1	34:58:48:MET:HG3	2.50	0.42
34:58:76:SER:O	34:58:78:TYR:N	2.51	0.42
45:G8:45:VAL:N	45:G8:63:LYS:O	2.47	0.42
45:G8:74:PRO:O	45:G8:82:PRO:HD2	2.18	0.42
55:Q8:53:PRO:CB	55:Q8:56:GLU:H	2.32	0.42
1:1G:1292:U:H2'	1:1G:1293:G:C8	2.54	0.42
1:1G:1321:C:H4'	13:4A:87:TYR:CZ	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1511:G:H8	1:1G:1511:G:O5'	2.02	0.42
4:32:15:GLU:OE1	4:32:59:ARG:NH2	2.34	0.42
4:32:18:LYS:HD2	4:32:20:TYR:CE1	2.55	0.42
13:4A:39:ILE:HG12	13:4A:55:ARG:HH21	1.85	0.42
26:14:631:A:N3	26:14:2415:G:O2'	2.34	0.42
26:14:746:A:H2'	26:14:2612:C:H5"	2.00	0.42
26:14:1754:C:OP2	40:75:113:LYS:NZ	2.52	0.42
26:14:1805:U:H2'	26:14:1806:C:H6	1.84	0.42
26:14:1945:G:C4	26:14:1946:U:C5	3.07	0.42
26:14:2097:C:H2'	26:14:2098:U:C6	2.54	0.42
26:14:2360:A:H2'	26:14:2361:A:O4'	2.19	0.42
27:1J:42:C:N4	27:1J:43:C:C4	2.87	0.42
27:1J:104:A:O4'	46:D5:29:TYR:HE2	2.02	0.42
35:25:8:LEU:HD13	35:25:82:ASN:CB	2.49	0.42
40:75:18:ASP:OD1	40:75:18:ASP:N	2.50	0.42
42:95:80:GLN:HG3	42:95:81:TYR:N	2.25	0.42
43:A5:88:ARG:HB3	43:A5:92:ARG:HB3	2.00	0.42
1:13:321:A:H62	1:13:328:C:H1'	1.84	0.42
1:13:555:C:H2'	1:13:556:C:C6	2.54	0.42
1:13:734:G:C2	1:13:735:C:C2	3.08	0.42
1:13:1145:C:H4'	1:13:1146:A:C8	2.46	0.42
3:2E:137:ALA:O	3:2E:141:VAL:HG23	2.19	0.42
5:4E:147:ASP:HA	5:4E:150:ARG:NH2	2.35	0.42
7:6E:66:VAL:O	7:6E:70:LYS:HG3	2.19	0.42
8:7E:16:ALA:CB	8:7E:24:THR:HG21	2.48	0.42
9:8E:40:LEU:HD11	9:8E:70:LYS:HD3	2.01	0.42
19:AI:30:LEU:H	19:AI:30:LEU:HD13	1.85	0.42
26:1H:16:G:H2'	26:1H:17:G:H8	1.84	0.42
26:1H:191:A:H2'	26:1H:192:C:C6	2.54	0.42
26:1H:339:U:O5'	26:1H:339:U:H6	2.02	0.42
26:1H:902:C:H2'	26:1H:903:C:C6	2.54	0.42
26:1H:1341:U:H4'	26:1H:1342:A:OP2	2.18	0.42
26:1H:1344:G:C2	26:1H:1385:G:C8	3.08	0.42
26:1H:1542:G:OP2	26:1H:1543:A:O2'	2.30	0.42
29:21:152:LYS:HG2	34:58:78:TYR:CE1	2.54	0.42
30:31:116:ASP:O	30:31:120:GLU:HG3	2.18	0.42
32:51:88:LEU:HD12	32:51:88:LEU:O	2.17	0.42
35:68:78:ARG:HH21	40:B8:103:ARG:HH21	1.68	0.42
36:78:147:LEU:HD12	36:78:147:LEU:HA	1.81	0.42
38:98:84:ALA:HB3	38:98:85:PRO:HD3	2.00	0.42
42:D8:21:ARG:HG2	42:D8:91:TYR:HE2	1.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:G8:76:CYS:HB2	45:G8:97:ARG:HG2	2.00	0.42
48:J8:91:LYS:O	48:J8:93:GLU:N	2.52	0.42
49:K8:24:LEU:HD23	49:K8:24:LEU:HA	1.84	0.42
1:1G:160:A:H1'	1:1G:344:A:N7	2.34	0.42
1:1G:555:C:H2'	1:1G:556:C:C6	2.54	0.42
1:1G:987:G:O5'	1:1G:987:G:H8	2.02	0.42
1:1G:999:U:H2'	1:1G:1000:A:H8	1.82	0.42
1:1G:1134:G:H2'	1:1G:1135:U:O4'	2.19	0.42
2:12:109:SER:HA	2:12:112:VAL:HG23	2.02	0.42
3:22:47:LEU:HB3	3:22:52:LEU:HD13	2.01	0.42
4:32:18:LYS:HB2	4:32:31:CYS:SG	2.58	0.42
4:32:71:SER:OG	4:32:74:GLN:HG3	2.20	0.42
5:42:5:ASP:HA	5:42:63:ARG:HH12	1.83	0.42
5:42:6:PHE:HD2	5:42:63:ARG:HD3	1.83	0.42
26:14:387:U:H4'	26:14:388:G:O5'	2.19	0.42
26:14:631:A:H2'	26:14:632:A:O4'	2.18	0.42
26:14:948:G:C2	26:14:970:C:O2	2.73	0.42
29:29:16:ARG:HH11	29:29:16:ARG:HG3	1.85	0.42
29:29:57:LYS:HD3	29:29:57:LYS:HA	1.61	0.42
30:39:64:ILE:HG13	30:39:65:TRP:CD1	2.54	0.42
37:45:58:PHE:CD2	37:45:61:GLY:HA3	2.54	0.42
50:H5:5:LYS:HB3	50:H5:5:LYS:HE3	1.60	0.42
54:L5:26:GLY:O	54:L5:30:VAL:HG23	2.19	0.42
1:13:222:U:C2	1:13:223:U:C5	3.07	0.42
1:13:313:A:H2'	1:13:314:C:C6	2.54	0.42
1:13:324:G:H22	1:13:327:A:P	2.41	0.42
1:13:406:G:H5'	4:3E:5:ILE:HD13	2.00	0.42
1:13:427:U:H3'	1:13:428:G:H2'	2.01	0.42
1:13:524:G:H2'	1:13:525:C:C5	2.53	0.42
1:13:669:U:C2	1:13:670:G:C8	3.07	0.42
1:13:1277:C:O2'	1:13:1279:A:H1'	2.19	0.42
1:13:1391:U:H2'	1:13:1392:G:H8	1.76	0.42
2:1E:185:ILE:HA	2:1E:199:TYR:O	2.19	0.42
10:1I:31:GLY:HA3	10:1I:81:THR:CG2	2.48	0.42
12:3I:11:VAL:HG13	17:8I:29:HIS:ND1	2.34	0.42
12:3I:53:ARG:HH12	12:3I:92:ASP:CB	2.32	0.42
13:4I:27:LYS:HA	13:4I:27:LYS:HD3	1.71	0.42
17:8I:52:LYS:HD2	17:8I:55:ASP:OD1	2.19	0.42
24:3K:5:G:H2'	24:3K:6:G:O4'	2.19	0.42
26:1H:142:G:H1'	44:F8:37:THR:CG2	2.41	0.42
26:1H:216:A:C4	26:1H:432:A:C2	3.07	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:271(B):G:H4'	26:1H:271(C):U:C5'	2.49	0.42
26:1H:286:C:H2'	26:1H:287:C:H6	1.84	0.42
26:1H:343:C:O2'	26:1H:344:G:H5'	2.19	0.42
26:1H:363(B):G:H2'	26:1H:363(C):G:C8	2.52	0.42
26:1H:557:U:C2	26:1H:558:G:C8	3.08	0.42
26:1H:763:G:O2'	26:1H:764:A:H3'	2.19	0.42
26:1H:1034:G:C5	26:1H:1035:U:C5	3.07	0.42
26:1H:1431:U:C2	26:1H:1563:G:N2	2.87	0.42
26:1H:1812:A:O2'	28:11:45:ASN:N	2.53	0.42
28:11:206:LEU:O	28:11:211:ARG:HD3	2.20	0.42
31:41:99:MET:HG3	31:41:100:TRP:N	2.34	0.42
37:88:65:PHE:HD1	37:88:105:GLU:O	2.02	0.42
39:A8:89:ARG:O	39:A8:89:ARG:CG	2.66	0.42
42:D8:66:ARG:HH21	42:D8:88:ARG:HH11	1.65	0.42
46:H8:103:ARG:HG3	46:H8:136:PHE:CD2	2.54	0.42
49:K8:3:LEU:O	49:K8:6:VAL:HG22	2.19	0.42
55:Q8:36:LYS:O	55:Q8:40:GLU:HB2	2.19	0.42
1:1G:5:U:O2'	4:32:84:LYS:HG3	2.19	0.42
1:1G:44:G:N2	1:1G:398:C:O2	2.40	0.42
1:1G:485:G:O2'	1:1G:486:U:O5'	2.36	0.42
1:1G:673:G:O3'	6:52:87:ARG:NH2	2.52	0.42
1:1G:680:C:N3	1:1G:710:G:N2	2.53	0.42
1:1G:967:C:H2'	1:1G:968:A:C8	2.54	0.42
1:1G:974:A:H5'	1:1G:975:A:OP1	2.18	0.42
1:1G:1117:G:O3'	9:82:104:ARG:HD2	2.19	0.42
3:22:65:ALA:HA	3:22:100:ALA:HB3	2.01	0.42
4:32:93:PHE:CZ	4:32:97:LEU:HD11	2.54	0.42
5:42:80:ILE:HG13	8:72:104:ARG:HH21	1.84	0.42
5:42:107:ARG:O	5:42:110:LEU:N	2.53	0.42
6:52:96:PRO:HB3	18:9A:30:ASP:OD2	2.20	0.42
13:4A:31:LYS:HA	13:4A:34:LEU:HD12	2.01	0.42
26:14:249:C:H4'	26:14:250:G:O5'	2.20	0.42
26:14:871:U:OP1	37:45:5:ARG:HG2	2.18	0.42
26:14:1051:G:H8	26:14:1051:G:OP2	2.03	0.42
26:14:1338:G:N3	26:14:1393:A:H2	2.17	0.42
26:14:1465:G:C4	26:14:1466:G:C8	3.07	0.42
26:14:1654:A:C1'	26:14:2823:A:H5'	2.49	0.42
26:14:1812:A:H2'	26:14:1813:G:C8	2.54	0.42
26:14:1950:G:C2	26:14:1951:U:C5	3.06	0.42
26:14:2003:G:C6	26:14:2004:G:N7	2.88	0.42
26:14:2312:U:C5	26:14:2313:C:C4	3.08	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2331:G:O2'	47:E5:43:THR:HB	2.19	0.42
26:14:2579:C:H2'	26:14:2580:U:O4'	2.19	0.42
26:14:2852:G:H2'	26:14:2853:C:O4'	2.20	0.42
28:19:12:SER:HB2	28:19:208:LYS:HB3	2.00	0.42
29:29:97:LYS:O	29:29:100:GLU:HG3	2.20	0.42
30:39:24:LEU:HD11	30:39:119:ARG:HB2	2.01	0.42
30:39:82:ILE:H	30:39:82:ILE:HG13	1.50	0.42
30:39:185:ASP:CG	30:39:188:ARG:HH21	2.21	0.42
32:59:105:LEU:HG	32:59:113:VAL:HG13	2.01	0.42
33:69:75:LEU:HA	33:69:139:GLN:OE1	2.19	0.42
34:15:28:THR:HG22	34:15:29:LYS:N	2.34	0.42
39:65:7:TYR:CZ	39:65:91:PRO:HG3	2.54	0.42
40:75:45:PHE:CE1	40:75:65:LYS:HG2	2.55	0.42
41:85:91:ASP:OD2	41:85:96:ALA:HB2	2.19	0.42
1:13:688:G:H2'	1:13:689:C:C6	2.52	0.42
1:13:1052:U:O2'	1:13:1055:A:OP2	2.32	0.42
1:13:1117:G:H5"	9:8E:104:ARG:NH1	2.33	0.42
2:1E:53:ARG:NH1	2:1E:200:ILE:HD12	2.29	0.42
3:2E:177:THR:HB	3:2E:180:ALA:HB2	2.01	0.42
9:8E:46:ALA:HB2	9:8E:74:ILE:HG23	2.00	0.42
9:8E:92:TYR:HD1	9:8E:92:TYR:HA	1.69	0.42
10:1I:54:PHE:CG	10:1I:55:LYS:HG2	2.54	0.42
13:4I:32:GLU:OE2	13:4I:33:ALA:N	2.52	0.42
20:BI:35:THR:O	20:BI:38:LYS:HB2	2.19	0.42
20:BI:73:HIS:HB3	20:BI:74:LYS:CD	2.44	0.42
26:1H:900:A:H5'	26:1H:901:A:P	2.59	0.42
26:1H:996:A:O3'	41:C8:92:ARG:HG2	2.18	0.42
26:1H:1590:U:C2	26:1H:1591:G:N7	2.87	0.42
26:1H:1952:A:H5"	26:1H:1953:A:OP2	2.19	0.42
26:1H:2078:C:H2'	26:1H:2079:U:C6	2.54	0.42
26:1H:2335:A:C8	26:1H:2337:G:C6	3.07	0.42
26:1H:2364:C:H4'	47:I8:56:ASP:OD1	2.20	0.42
26:1H:2516:G:O2'	26:1H:2517:C:H5'	2.19	0.42
26:1H:2677:G:N2	26:1H:2731:G:C4	2.87	0.42
26:1H:2684:U:O2'	35:68:68:GLU:HG3	2.18	0.42
26:1H:2859:G:C6	26:1H:2860:A:N6	2.87	0.42
27:16:40:U:C5	51:M8:2:LYS:HG2	2.55	0.42
28:11:46:GLN:H	28:11:46:GLN:HG3	1.44	0.42
36:78:60:MET:HA	55:Q8:13:ARG:NH1	2.34	0.42
41:C8:49:HIS:HA	41:C8:52:ARG:HG2	2.01	0.42
45:G8:88:LYS:HD3	45:G8:88:LYS:HA	1.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:L8:7:LYS:O	50:L8:54:VAL:HA	2.20	0.42
55:Q8:33:ASN:HB3	55:Q8:34:TRP:H	1.60	0.42
1:1G:4:U:C4	8:72:102:ARG:HD2	2.54	0.42
1:1G:21:G:H2'	1:1G:22:G:C8	2.54	0.42
1:1G:56:U:H2'	1:1G:57:G:H8	1.84	0.42
1:1G:91:C:H2'	1:1G:92:G:C8	2.55	0.42
1:1G:428:G:C5	1:1G:430:A:C6	3.08	0.42
1:1G:865:A:H2	1:1G:918:A:H4'	1.85	0.42
1:1G:984:C:H2'	1:1G:985:C:H6	1.84	0.42
1:1G:986:A:H1'	19:AA:54:GLY:O	2.18	0.42
1:1G:1197:G:N3	1:1G:1197:G:H2'	2.35	0.42
5:42:31:LEU:HD23	5:42:45:PHE:HB2	2.02	0.42
15:6A:45:VAL:HB	15:6A:46:HIS:CD2	2.55	0.42
16:7A:43:LYS:HE2	16:7A:43:LYS:HB2	1.66	0.42
20:BA:67:ALA:HA	20:BA:73:HIS:H	1.83	0.42
26:14:971:C:H2'	26:14:972:G:O4'	2.19	0.42
26:14:1386:C:OP2	26:14:1396:U:C5	2.73	0.42
26:14:2022:U:OP2	52:J5:15:ARG:NH2	2.52	0.42
26:14:2506:U:H4'	26:14:2507:C:OP1	2.15	0.42
27:1J:56:G:H4'	27:1J:57:A:N7	2.35	0.42
29:29:116:VAL:HG21	29:29:122:PHE:CE2	2.55	0.42
30:39:117:ARG:NH1	36:35:1:MET:H2	2.08	0.42
30:39:122:LYS:HD2	30:39:191:ARG:HE	1.84	0.42
30:39:205:ARG:HB2	30:39:205:ARG:NH1	2.33	0.42
33:69:29:TYR:C	33:69:32:PRO:HD2	2.40	0.42
34:15:127:ASP:OD1	34:15:127:ASP:N	2.53	0.42
53:K5:11:LEU:HD13	53:K5:26:ASN:HD22	1.84	0.42
1:13:8:A:H5"	5:4E:120:THR:O	2.19	0.42
1:13:179:A:H2'	1:13:180:U:C6	2.53	0.42
1:13:412:A:N6	4:3E:35:ARG:HA	2.34	0.42
1:13:452:A:O2'	1:13:453:A:O4'	2.34	0.42
1:13:949:A:C2	1:13:1233:G:N3	2.88	0.42
1:13:1286:A:H5"	21:1F:26:LYS:CG	2.48	0.42
4:3E:70:ILE:HG23	4:3E:75:PHE:HB2	1.99	0.42
5:4E:81:GLU:HG2	5:4E:90:VAL:HG23	2.02	0.42
8:7E:75:ARG:HE	8:7E:75:ARG:HB2	1.50	0.42
13:4I:11:ARG:HD3	13:4I:46:LYS:NZ	2.33	0.42
17:8I:22:LEU:HD13	17:8I:41:LYS:HG3	2.01	0.42
18:9I:59:SER:OG	18:9I:60:ALA:N	2.51	0.42
18:9I:70:ILE:HG23	18:9I:79:LEU:HD12	2.02	0.42
22:1K:54:5MU:H2'	22:1K:55:PSU:O4'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:242:G:H5'	55:Q8:61:LEU:HD22	2.02	0.42
26:1H:319:C:H2'	26:1H:320:A:C8	2.54	0.42
26:1H:442:G:C6	26:1H:444:C:N4	2.87	0.42
26:1H:496:G:H2'	26:1H:497:A:H5'	2.00	0.42
26:1H:512:G:C8	58:1H:4190:HOH:O	2.57	0.42
26:1H:660:G:O3'	30:31:38:ARG:NH2	2.52	0.42
26:1H:993:G:OP1	41:C8:50:ARG:NH2	2.52	0.42
26:1H:1590:U:N3	26:1H:1591:G:N7	2.68	0.42
27:16:89(A):A:C5	27:16:90:C:H1'	2.54	0.42
28:11:27:THR:O	28:11:27:THR:OG1	2.34	0.42
28:11:61:LEU:HD13	28:11:61:LEU:HA	1.72	0.42
29:21:13:ARG:HH11	29:21:13:ARG:CG	2.33	0.42
29:21:134:ILE:C	29:21:134:ILE:HD12	2.39	0.42
30:31:9:ILE:HD12	30:31:125:LEU:HG	2.01	0.42
31:41:131:TYR:HB3	31:41:159:VAL:CG2	2.50	0.42
32:51:4:ILE:H	32:51:4:ILE:CD1	2.26	0.42
33:61:75:LEU:HB3	33:61:105:HIS:HD2	1.85	0.42
35:68:24:VAL:HB	35:68:33:ALA:HB2	2.01	0.42
38:98:63:ARG:HG2	38:98:67:LEU:HD23	2.01	0.42
45:G8:43:ASN:ND2	45:G8:67:LEU:HD11	2.35	0.42
1:1G:246:A:N6	1:1G:281:G:H1'	2.35	0.42
1:1G:637:G:C2	1:1G:638:G:C4	3.08	0.42
1:1G:1072:G:C2	1:1G:1073:U:C2	3.07	0.42
1:1G:1172:C:H2'	1:1G:1173:G:C8	2.55	0.42
2:12:142:LEU:HA	2:12:145:LEU:HB2	2.01	0.42
4:32:8:VAL:O	4:32:11:LEU:N	2.39	0.42
19:AA:29:ARG:HH11	19:AA:48:THR:HG23	1.84	0.42
20:BA:10:LEU:O	20:BA:10:LEU:HD13	2.20	0.42
26:14:205:G:O2'	26:14:206:U:OP2	2.36	0.42
26:14:235:U:H2'	26:14:236:C:C6	2.54	0.42
26:14:654(C):G:C2	26:14:654(S):G:C2	3.07	0.42
26:14:754:C:H2'	26:14:755:C:H6	1.84	0.42
26:14:854:G:H2'	26:14:855:G:C8	2.54	0.42
26:14:1253:A:OP1	58:14:3962:HOH:O	2.21	0.42
26:14:1499:C:H2'	26:14:1500:G:H8	1.84	0.42
26:14:1639:U:H2'	26:14:1640:C:H5'	2.00	0.42
26:14:1682:G:H2'	26:14:1683:C:C6	2.55	0.42
26:14:2014:A:H2'	26:14:2015:A:C8	2.55	0.42
26:14:2031:A:N3	26:14:2455:G:O2'	2.45	0.42
26:14:2129:C:H2'	26:14:2130:U:O4'	2.19	0.42
26:14:2212:A:H1'	26:14:2215:G:C5	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2262:U:H4'	26:14:2328:A:C2	2.54	0.42
26:14:2436:G:C5	26:14:2437:U:C5	3.08	0.42
27:1J:83:G:H4'	50:H5:52:HIS:CG	2.55	0.42
29:29:37:ARG:HD3	29:29:44:TYR:CZ	2.54	0.42
32:59:103:LEU:HD22	32:59:123:PHE:CE1	2.54	0.42
33:69:141:LYS:HE2	33:69:141:LYS:HB2	1.88	0.42
37:45:58:PHE:HZ	37:45:106:VAL:HG11	1.85	0.42
37:45:110:THR:OG1	37:45:112:GLU:OE2	2.29	0.42
39:65:106:ARG:H	39:65:106:ARG:HG3	1.48	0.42
53:K5:9:LEU:N	53:K5:27:LYS:HG3	2.34	0.42
1:13:127:G:H4'	17:8I:2:PRO:HD2	2.01	0.42
1:13:373:A:C2	1:13:374:A:C8	3.07	0.42
1:13:784:C:H2'	1:13:785:G:C8	2.55	0.42
1:13:1386:G:O2'	1:13:1387:G:H5'	2.20	0.42
2:1E:74:LYS:H	2:1E:74:LYS:HD2	1.85	0.42
3:2E:6:HIS:HA	3:2E:7:PRO:HD2	1.88	0.42
4:3E:96:LEU:HD12	4:3E:139:ARG:HD3	2.01	0.42
5:4E:37:ARG:HA	5:4E:114:GLY:H	1.84	0.42
17:8I:74:LEU:HB3	17:8I:75:ARG:HG2	2.00	0.42
26:1H:470:A:C2	26:1H:471:A:C4	3.07	0.42
26:1H:631:A:H61	26:1H:2402:C:N4	2.18	0.42
26:1H:657:U:H2'	26:1H:658:C:C6	2.54	0.42
26:1H:1324:G:C5	26:1H:1328:G:O6	2.73	0.42
26:1H:1444:G:N2	26:1H:1548:C:C2	2.88	0.42
26:1H:1693:U:H4'	26:1H:1694:C:OP2	2.20	0.42
26:1H:2155:G:H2'	26:1H:2156:G:H5'	2.00	0.42
26:1H:2481:G:HO2'	26:1H:2482:G:P	2.42	0.42
27:16:42:C:O2'	31:41:67:LYS:O	2.29	0.42
28:11:136:ILE:H	28:11:136:ILE:HG12	1.61	0.42
30:31:164:ARG:HG3	30:31:175:THR:OG1	2.19	0.42
30:31:184:TYR:HE1	36:78:3:LEU:HD11	1.85	0.42
33:61:81:VAL:HG23	33:61:143:SER:O	2.20	0.42
33:61:128:LEU:O	33:61:138:ILE:N	2.52	0.42
49:K8:8:LYS:NZ	49:K8:12:GLU:HG2	2.34	0.42
50:L8:26:LEU:CB	50:L8:28:LEU:HD12	2.49	0.42
50:L8:35:ARG:HB3	50:L8:37:LEU:HD22	2.02	0.42
55:Q8:7:HIS:CB	55:Q8:58:ILE:HG23	2.45	0.42
1:1G:746:A:H2'	1:1G:747:C:C6	2.54	0.42
1:1G:939:G:H1	1:1G:1344:C:H42	1.67	0.42
1:1G:1281:U:H3'	1:1G:1282:C:H5	1.81	0.42
1:1G:1442:G:H2'	1:1G:1443:G:H5"	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:62:114:ARG:H	7:62:114:ARG:HG2	1.51	0.42
9:82:9:ARG:HG2	9:82:14:VAL:HG22	2.01	0.42
12:3A:123:LYS:H	12:3A:123:LYS:HG2	1.44	0.42
16:7A:81:ARG:HD2	16:7A:83:GLU:OE2	2.19	0.42
18:9A:84:LYS:H	18:9A:84:LYS:HG2	1.50	0.42
26:14:38:A:H1'	30:39:48:THR:HB	2.02	0.42
26:14:61:G:H8	26:14:61:G:O5'	2.02	0.42
26:14:619:G:OP2	26:14:620:G:N2	2.40	0.42
26:14:805:G:H4'	36:35:38:GLN:HB2	2.01	0.42
26:14:1403:C:OP1	26:14:1522:G:N2	2.49	0.42
26:14:1509:C:H5'	26:14:1510:A:O4'	2.19	0.42
26:14:1644:C:O2'	26:14:1645:G:H5'	2.19	0.42
26:14:2168:G:H2'	26:14:2168:G:N3	2.34	0.42
26:14:2459:A:C4	26:14:2460:U:C5	3.08	0.42
26:14:2642:G:P	34:15:76:SER:HG	2.42	0.42
26:14:2854:G:C2	26:14:2864:G:C2	3.07	0.42
26:14:2865:U:C4	26:14:2866:U:C4	3.07	0.42
27:1J:43:C:H4'	31:49:98:ARG:HH12	1.84	0.42
29:29:11:MET:HA	29:29:24:THR:HA	2.01	0.42
36:35:11:GLY:HA2	36:35:13:ASN:OD1	2.19	0.42
39:65:47:THR:HG22	39:65:48:LEU:H	1.84	0.42
46:D5:52:SER:C	46:D5:54:HIS:H	2.21	0.42
46:D5:74:VAL:HA	46:D5:86:VAL:HG22	2.02	0.42
49:G5:16:LEU:O	49:G5:16:LEU:HG	2.19	0.42
51:I5:14:ILE:HB	51:I5:24:THR:HG21	2.01	0.42
53:K5:52:VAL:HG22	53:K5:53:LYS:H	1.85	0.42
55:M5:8:LYS:HD3	55:M5:8:LYS:HA	1.62	0.42
1:13:232:G:H2'	1:13:233:C:C6	2.55	0.42
1:13:232:G:H1'	1:13:262:A:N1	2.34	0.42
1:13:577:G:O2'	1:13:816:A:H2'	2.20	0.42
1:13:648:A:N6	1:13:649:G:O6	2.53	0.42
1:13:1005:A:H5"	1:13:1038:C:H1'	2.01	0.42
1:13:1308:U:OP1	13:4I:98:VAL:HG12	2.20	0.42
4:3E:134:ASP:HB2	4:3E:135:LEU:HD13	2.01	0.42
5:4E:87:SER:HB3	5:4E:125:SER:O	2.20	0.42
10:1I:32:ALA:HB1	10:1I:76:ASN:OD1	2.20	0.42
11:2I:18:ARG:HB3	11:2I:33:THR:OG1	2.19	0.42
11:2I:91:ARG:O	11:2I:94:ALA:HB3	2.19	0.42
14:5I:29:ARG:HH21	14:5I:41:ARG:NH1	2.18	0.42
18:9I:36:ASN:ND2	18:9I:39:VAL:HG21	2.34	0.42
26:1H:139:G:N3	26:1H:141:A:N1	2.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:250:G:C6	26:1H:251:A:C6	3.08	0.42
26:1H:270(N):G:OP2	33:61:57:ARG:NH2	2.52	0.42
26:1H:827:U:H5'	26:1H:828:U:O5'	2.19	0.42
26:1H:1006:C:C2	26:1H:1138:G:N2	2.87	0.42
26:1H:1414:G:C6	26:1H:1415:U:C4	3.07	0.42
26:1H:2309:A:C4	26:1H:2310:A:H8	2.37	0.42
30:31:9:ILE:HG22	30:31:20:LEU:O	2.19	0.42
30:31:114:VAL:HG21	30:31:202:PHE:CZ	2.54	0.42
32:51:149:ARG:HH11	32:51:149:ARG:HG3	1.85	0.42
35:68:90:GLN:O	35:68:91:LEU:HB2	2.18	0.42
40:B8:9:LEU:HD23	40:B8:9:LEU:HA	1.90	0.42
40:B8:76:PHE:HB3	40:B8:83:ILE:HD11	2.02	0.42
42:D8:14:VAL:HA	42:D8:18:LEU:HD12	2.02	0.42
42:D8:66:ARG:NH2	42:D8:88:ARG:HH11	2.17	0.42
43:E8:12:ILE:HD13	43:E8:17:VAL:HB	2.02	0.42
43:E8:86:LEU:HD12	43:E8:87:PRO:CD	2.50	0.42
53:O8:20:ASN:C	53:O8:21:TYR:CG	2.92	0.42
1:1G:131:C:H2'	1:1G:132:C:C6	2.55	0.42
1:1G:691:G:O6	11:2A:55:LYS:NZ	2.39	0.42
1:1G:1048:G:N2	1:1G:1210:C:N3	2.67	0.42
1:1G:1206:G:C6	1:1G:1207:G:C5	3.07	0.42
3:22:37:GLN:O	3:22:41:GLY:N	2.50	0.42
3:22:156:ARG:HB2	3:22:159:GLY:HA2	2.02	0.42
6:52:71:ARG:H	6:52:71:ARG:HG2	1.51	0.42
9:82:84:ALA:O	9:82:87:GLN:HB3	2.20	0.42
18:9A:19:LYS:HD2	18:9A:19:LYS:HA	1.94	0.42
18:9A:22:VAL:CG1	18:9A:56:THR:HA	2.49	0.42
26:14:452:G:N3	26:14:457:A:H2	2.16	0.42
26:14:1133:U:O2	26:14:1137:G:H5'	2.19	0.42
26:14:2244:U:O5'	26:14:2244:U:H6	2.02	0.42
26:14:2689:U:H5"	26:14:2713:A:C2	2.54	0.42
27:1J:40:U:H1'	27:1J:46:A:N1	2.34	0.42
28:19:37:LEU:HA	28:19:38:LYS:CB	2.50	0.42
28:19:106:ILE:O	28:19:108:PRO:HD3	2.19	0.42
30:39:122:LYS:CB	30:39:191:ARG:HB2	2.49	0.42
32:59:135:GLY:HA3	32:59:141:VAL:HG22	2.02	0.42
35:25:10:VAL:HG23	35:25:10:VAL:O	2.20	0.42
39:65:24:LEU:HB2	39:65:85:VAL:HG12	2.02	0.42
45:C5:101:LYS:C	45:C5:102:CYS:SG	2.98	0.42
46:D5:30:ASN:HB3	46:D5:90:VAL:HB	2.02	0.42
48:F5:21:ARG:HD3	48:F5:35:THR:HG21	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:46:G:H2'	1:13:366:C:C5	2.55	0.42
1:13:101:A:OP2	1:13:101:A:C8	2.73	0.42
1:13:165:C:H2'	1:13:166:G:O4'	2.19	0.42
1:13:266:G:N2	1:13:269:C:C5	2.88	0.42
1:13:375:U:O3'	16:7I:6:LEU:HB2	2.20	0.42
1:13:537:G:H2'	1:13:538:G:C8	2.55	0.42
1:13:665:A:C5	1:13:733:A:C5	3.07	0.42
1:13:1304:G:N1	1:13:1332:A:OP2	2.48	0.42
2:1E:109:SER:O	2:1E:112:VAL:HB	2.20	0.42
2:1E:183:PRO:HA	2:1E:198:ASP:OD2	2.20	0.42
7:6E:43:PHE:O	7:6E:46:ALA:HB3	2.20	0.42
14:5I:9:LYS:HA	14:5I:12:ARG:HG2	2.02	0.42
16:7I:4:ILE:HA	16:7I:20:VAL:O	2.19	0.42
19:AI:32:LYS:H	19:AI:32:LYS:HG2	1.56	0.42
19:AI:42:PRO:O	19:AI:45:VAL:HG22	2.20	0.42
26:1H:345:A:N3	26:1H:347:A:N6	2.68	0.42
26:1H:537:C:H2'	26:1H:539:G:C8	2.55	0.42
26:1H:2052:G:C2	26:1H:2053:G:C8	3.08	0.42
26:1H:2128:C:H2'	26:1H:2129:C:C6	2.54	0.42
26:1H:2270:G:OP2	58:1H:4056:HOH:O	2.22	0.42
26:1H:2456:C:O5'	26:1H:2456:C:H6	2.03	0.42
26:1H:2577:A:C5'	26:1H:2578:G:H5'	2.46	0.42
26:1H:2608:G:H8	26:1H:2608:G:O5'	2.03	0.42
26:1H:2620:C:OP1	29:21:152:LYS:O	2.37	0.42
27:16:17:C:H2'	27:16:18:G:O4'	2.20	0.42
27:16:61:G:C6	27:16:62:C:C4	3.08	0.42
32:51:94:TYR:HA	32:51:106:THR:O	2.20	0.42
33:61:93:THR:HG22	33:61:119:PRO:HB3	2.01	0.42
34:58:99:LEU:O	34:58:103:VAL:HG23	2.20	0.42
42:D8:9:GLY:O	42:D8:10:LYS:HG3	2.20	0.42
1:1G:32:A:H2'	1:1G:33:A:C8	2.55	0.42
1:1G:1103:C:C2	1:1G:1104:G:C8	3.08	0.42
1:1G:1149:C:OP1	9:82:9:ARG:HD3	2.20	0.42
5:42:84:PHE:N	5:42:87:SER:O	2.51	0.42
12:3A:84:LEU:C	12:3A:85:ILE:HD12	2.40	0.42
13:4A:8:GLU:OE2	13:4A:10:PRO:HG3	2.20	0.42
13:4A:78:ILE:HD13	13:4A:92:HIS:HE1	1.84	0.42
26:14:275:G:H2'	26:14:276:A:C8	2.54	0.42
26:14:442:G:C6	26:14:444:C:N4	2.87	0.42
26:14:511:U:H5"	26:14:512:G:OP2	2.19	0.42
26:14:1141:U:P	34:15:25:ARG:HH21	2.42	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1788:C:C2	26:14:1789:A:C8	3.07	0.42
26:14:2074:U:P	58:14:3509:HOH:O	2.75	0.42
26:14:2079:U:H2'	26:14:2080:G:O4'	2.20	0.42
26:14:2135:A:O2'	26:14:2160:G:H4'	2.19	0.42
26:14:2361:A:N7	58:14:3994:HOH:O	2.37	0.42
26:14:2459:A:C5	26:14:2460:U:C5	3.08	0.42
26:14:2712:U:O2'	26:14:2712(A):A:P	2.77	0.42
26:14:2883:A:H5'	26:14:2884:U:H5'	2.02	0.42
27:1J:42:C:N3	31:49:91:ARG:NH2	2.67	0.42
28:19:76:PRO:HA	28:19:118:VAL:HG23	2.01	0.42
29:29:44:TYR:HE1	29:29:80:GLU:OE1	2.03	0.42
35:25:47:ILE:HD12	35:25:47:ILE:HA	1.76	0.42
41:85:46:ALA:HB1	41:85:50:ARG:HH11	1.85	0.42
46:D5:48:PHE:CE1	46:D5:52:SER:HA	2.55	0.42
50:H5:23:LEU:HD11	50:H5:53:LEU:HD13	2.01	0.42
51:I5:25:TYR:CD1	51:I5:25:TYR:N	2.87	0.42
1:13:21:G:H2'	1:13:22:G:C8	2.55	0.42
1:13:259:G:H1	1:13:267:C:H42	1.68	0.42
1:13:303:A:C5	1:13:304:U:C5	3.07	0.42
1:13:447:G:C6	1:13:485:G:H1'	2.55	0.42
1:13:1014:A:N3	1:13:1219:U:H1'	2.35	0.42
4:3E:9:CYS:O	4:3E:13:ARG:HG3	2.20	0.42
7:6E:65:ALA:HB2	7:6E:128:ALA:HB2	2.00	0.42
10:1I:96:ILE:O	10:1I:97:GLU:HG2	2.19	0.42
11:2I:62:GLN:HB2	11:2I:93:GLN:OE1	2.20	0.42
13:4I:27:LYS:HD3	13:4I:31:LYS:NZ	2.34	0.42
16:7I:40:ASP:O	16:7I:42:ARG:N	2.53	0.42
20:BI:43:LEU:HB2	20:BI:52:ALA:HB2	2.00	0.42
24:3K:9:A:H62	24:3K:23:A:H62	1.66	0.42
26:1H:197:A:H62	26:1H:2430:A:H2'	1.85	0.42
26:1H:247:G:H4'	26:1H:386:G:C5	2.55	0.42
26:1H:363(F):A:H4'	26:1H:364:C:H5'	2.02	0.42
26:1H:470:A:H2'	26:1H:471:A:O4'	2.20	0.42
26:1H:493:G:H2'	26:1H:494:G:O4'	2.19	0.42
26:1H:526:A:N3	26:1H:2044:C:H1'	2.35	0.42
26:1H:634:C:H2'	26:1H:635:C:C6	2.54	0.42
26:1H:654(D):G:H22	26:1H:654(Q):C:H42	1.66	0.42
26:1H:714:U:O2'	26:1H:716:A:N7	2.47	0.42
26:1H:1021:A:C8	26:1H:1021:A:C3'	3.01	0.42
26:1H:1094:U:O2	26:1H:1096:A:H5'	2.20	0.42
26:1H:1124:C:H2'	26:1H:1125:G:O4'	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1615:C:H2'	26:1H:1617:C:C5	2.55	0.42
26:1H:1817:G:C6	26:1H:1818:U:C5	3.08	0.42
26:1H:2354:G:N2	26:1H:2355:C:C2	2.88	0.42
27:16:75:G:H21	46:H8:85:HIS:CE1	2.38	0.42
31:41:62:LEU:HD12	31:41:62:LEU:HA	1.72	0.42
35:68:9:GLU:O	35:68:83:ALA:HA	2.20	0.42
35:68:22:ILE:HD12	35:68:22:ILE:HG23	1.80	0.42
36:78:81:GLN:OE1	36:78:106:LEU:HA	2.20	0.42
40:B8:16:ARG:HG3	40:B8:18:ASP:OD2	2.20	0.42
42:D8:2:PHE:O	42:D8:42:GLY:N	2.53	0.42
49:K8:25:VAL:O	49:K8:29:LYS:HG3	2.20	0.42
55:Q8:59:LYS:HZ2	55:Q8:59:LYS:HG3	1.61	0.42
1:1G:192:U:C4'	20:BA:103:GLY:HA2	2.50	0.42
1:1G:376:G:H1	1:1G:387:U:H3	1.68	0.42
1:1G:1302:U:H5	13:4A:17:VAL:HG21	1.84	0.42
1:1G:1329:A:H2'	1:1G:1330:U:O4'	2.20	0.42
1:1G:1349:A:P	9:82:118:LYS:NZ	2.92	0.42
2:12:165:VAL:HG23	2:12:166:ASP:H	1.85	0.42
4:32:91:SER:OG	4:32:191:ARG:HG3	2.20	0.42
4:32:107:ARG:HH22	4:32:196:LEU:HD21	1.85	0.42
5:42:28:PHE:CE1	5:42:51:VAL:HG22	2.55	0.42
12:3A:32:PHE:HE1	12:3A:86:ARG:HG3	1.85	0.42
13:4A:92:HIS:HE2	13:4A:98:VAL:HG21	1.84	0.42
15:6A:75:PRO:HB2	15:6A:79:ARG:NH2	2.35	0.42
18:9A:41:LYS:O	18:9A:41:LYS:HD3	2.20	0.42
18:9A:51:LEU:HD23	18:9A:51:LEU:HA	1.87	0.42
26:14:28:A:C2	26:14:513:A:C8	3.07	0.42
26:14:244:A:C2	26:14:255:A:C4	3.07	0.42
26:14:433:C:C4	26:14:434:U:O4	2.73	0.42
26:14:528:A:H2	26:14:2043:C:C5'	2.33	0.42
26:14:565:C:H4'	26:14:1253:A:C6	2.54	0.42
26:14:676:A:H2	26:14:802:A:H61	1.58	0.42
26:14:678:C:H2'	26:14:679:C:C6	2.55	0.42
26:14:839:U:H2'	26:14:840:C:H6	1.84	0.42
26:14:1750:G:O2'	26:14:1751:C:H5'	2.20	0.42
26:14:1791:A:H3'	26:14:1792:G:H8	1.84	0.42
26:14:1889:A:H2'	26:14:1890:A:O4'	2.20	0.42
26:14:2106:G:C2	26:14:2184:G:C2	3.07	0.42
26:14:2495:G:O3'	37:45:81:VAL:HG12	2.20	0.42
28:19:244:ARG:HB2	28:19:245:PRO:HD2	2.02	0.42
34:15:40:PRO:O	41:85:64:ARG:HG2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:95:24:LYS:HA	42:95:92:THR:OG1	2.19	0.42
45:C5:97:ARG:HG2	45:C5:102:CYS:O	2.20	0.42
50:H5:4:LEU:O	50:H5:36:VAL:HA	2.19	0.42
1:13:129:U:N3	1:13:131:C:N4	2.67	0.41
1:13:198:G:N7	1:13:220:G:N2	2.68	0.41
1:13:453:A:C4'	16:7I:72:ARG:HB2	2.48	0.41
1:13:864:A:H3'	1:13:865:A:C8	2.55	0.41
1:13:1126:U:O4	1:13:1127:G:N1	2.53	0.41
1:13:1331:G:H5"	1:13:1331:G:H8	1.85	0.41
2:1E:77:ALA:O	2:1E:81:VAL:HG12	2.20	0.41
2:1E:131:PRO:HD2	2:1E:134:GLU:HG3	2.02	0.41
2:1E:226:ARG:HG3	2:1E:227:GLY:N	2.35	0.41
6:5E:97:PHE:O	18:9I:31:LEU:HD23	2.19	0.41
7:6E:95:ARG:HH21	7:6E:99:LEU:HD11	1.85	0.41
7:6E:142:GLU:O	7:6E:146:GLU:HG2	2.20	0.41
11:2I:66:LEU:HD21	11:2I:97:ALA:O	2.20	0.41
22:1K:37:MIA:H2'	22:1K:38:A:O4'	2.20	0.41
26:1H:58:G:C2	26:1H:70:G:C6	3.08	0.41
26:1H:242:G:C8	55:Q8:3:LYS:HE3	2.55	0.41
26:1H:589:C:H2'	26:1H:590:A:C8	2.56	0.41
26:1H:978:G:C2	26:1H:986:C:C2	3.07	0.41
26:1H:1093:G:O2'	26:1H:1099:G:N2	2.52	0.41
26:1H:2816:C:H2'	26:1H:2817:G:C8	2.55	0.41
38:98:54:LEU:HA	38:98:54:LEU:HD12	1.85	0.41
40:B8:88:ILE:HD13	40:B8:91:ARG:NH2	2.34	0.41
41:C8:28:ARG:O	41:C8:35:ALA:HA	2.20	0.41
41:C8:92:ARG:O	41:C8:92:ARG:HD3	2.20	0.41
42:D8:91:TYR:HD1	42:D8:91:TYR:H	1.67	0.41
47:I8:55:ARG:HG3	47:I8:55:ARG:HH11	1.85	0.41
49:K8:47:ASN:ND2	49:K8:47:ASN:H	2.17	0.41
49:K8:48:HIS:ND1	49:K8:48:HIS:C	2.73	0.41
1:1G:109:A:H5'	1:1G:110:C:C5	2.55	0.41
1:1G:553:A:H2'	1:1G:554:C:C6	2.54	0.41
1:1G:693:G:H2'	1:1G:694:A:C8	2.55	0.41
1:1G:1478:C:O2'	1:1G:1479:C:H5'	2.20	0.41
2:12:213:LEU:O	2:12:213:LEU:HD23	2.20	0.41
3:22:73:PRO:HG3	3:22:105:GLU:HG3	2.01	0.41
6:52:26:ILE:O	6:52:30:LEU:HG	2.20	0.41
7:62:13:GLN:HA	7:62:14:PRO:HD3	1.74	0.41
8:72:31:PHE:HZ	8:72:134:ILE:HD11	1.85	0.41
10:1A:78:ASN:OD1	10:1A:81:THR:HG23	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6A:27:VAL:O	15:6A:31:LEU:HB2	2.20	0.41
16:7A:25:ARG:HH11	16:7A:25:ARG:HG3	1.85	0.41
26:14:600:G:N2	26:14:605:C:O3'	2.53	0.41
26:14:882:G:H2'	26:14:883:G:H8	1.85	0.41
26:14:1742:C:H5'	26:14:1743:G:OP2	2.20	0.41
26:14:2002:G:C6	58:14:3900:HOH:O	2.70	0.41
26:14:2115:G:O2'	26:14:2171:A:N6	2.51	0.41
26:14:2250:G:C8	26:14:2496:C:H5'	2.55	0.41
26:14:2490:G:H2'	26:14:2490:G:N3	2.35	0.41
26:14:2687:U:C4	26:14:2688:U:C5	3.08	0.41
26:14:2704:C:H2'	26:14:2705:A:O4'	2.20	0.41
26:14:2787:C:H4'	29:29:63:LEU:HD21	2.02	0.41
26:14:2790:A:H4'	26:14:2791:C:OP2	2.20	0.41
27:1J:19:G:H2'	27:1J:20:C:O4'	2.20	0.41
27:1J:73:A:C4	27:1J:104:A:C2	3.08	0.41
29:29:62:PRO:C	29:29:64:LYS:H	2.23	0.41
29:29:81:ILE:HD12	29:29:81:ILE:HG23	1.81	0.41
31:49:36:LYS:HG2	31:49:38:VAL:HG23	2.01	0.41
33:69:2:LYS:H	33:69:2:LYS:HG2	1.56	0.41
42:95:38:LEU:HD23	42:95:52:VAL:HG21	2.02	0.41
43:A5:51:LEU:HD23	43:A5:51:LEU:HA	1.79	0.41
45:C5:64:GLU:H	45:C5:64:GLU:HG3	1.57	0.41
45:C5:65:ALA:HA	45:C5:66:PRO:HD3	1.94	0.41
46:D5:178:GLU:HG3	46:D5:179:ASP:H	1.85	0.41
1:13:20:U:H2'	1:13:21:G:O4'	2.20	0.41
1:13:35:G:O2'	12:3I:118:SER:O	2.22	0.41
1:13:142:G:C2	1:13:143:A:N7	2.88	0.41
1:13:380:G:N2	1:13:384:G:C5	2.89	0.41
1:13:924:C:H2'	1:13:925:G:C8	2.54	0.41
1:13:1124:G:N7	1:13:1145:C:H2'	2.35	0.41
1:13:1510:U:H2'	1:13:1511:G:C8	2.56	0.41
3:2E:73:PRO:O	3:2E:76:VAL:HG13	2.21	0.41
4:3E:17:VAL:HG11	4:3E:197:PRO:HB3	2.02	0.41
4:3E:141:ARG:HB2	4:3E:141:ARG:CZ	2.50	0.41
8:7E:118:VAL:O	8:7E:119:LEU:HD23	2.20	0.41
10:1I:34:VAL:O	10:1I:34:VAL:HG23	2.21	0.41
26:1H:255:A:H1'	26:1H:384:U:C6	2.55	0.41
26:1H:479:A:O2'	26:1H:481:G:H2'	2.20	0.41
26:1H:528:A:N1	26:1H:2043:C:H4'	2.34	0.41
26:1H:782:A:H5'	26:1H:783:A:C2	2.55	0.41
26:1H:1561:G:O2'	26:1H:1562:A:H5'	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2137:C:H2'	26:1H:2138:C:C6	2.55	0.41
26:1H:2241:A:O2'	26:1H:2242:G:H5'	2.20	0.41
26:1H:2436:G:C6	26:1H:2437:U:C4	3.09	0.41
26:1H:2468:G:H5"	37:88:120:ILE:HD12	2.02	0.41
26:1H:2574:G:O2'	29:21:143:ASN:HB3	2.20	0.41
28:11:72:LYS:HD2	28:11:75:ILE:HD12	2.01	0.41
34:58:35:ARG:HB3	34:58:37:LYS:HG3	2.02	0.41
35:68:47:ILE:HG12	35:68:48:PRO:HD2	2.02	0.41
38:98:52:ILE:O	38:98:55:ALA:N	2.53	0.41
38:98:86:ARG:HB3	38:98:118:GLU:OE2	2.19	0.41
40:B8:105:LEU:HD12	40:B8:105:LEU:HA	1.75	0.41
41:C8:9:VAL:H	41:C8:9:VAL:HG23	1.60	0.41
45:G8:9:LYS:HA	45:G8:27:VAL:CG2	2.50	0.41
46:H8:48:PHE:CE1	46:H8:71:VAL:HG11	2.55	0.41
49:K8:50:ILE:HD12	49:K8:50:ILE:N	2.35	0.41
1:1G:186(E):C:C2	1:1G:191(C):G:N2	2.88	0.41
1:1G:284:G:H2'	1:1G:285:G:C8	2.55	0.41
1:1G:605:U:H2'	1:1G:606:G:O4'	2.20	0.41
1:1G:1054:C:N4	24:1L:34:G:C4	2.89	0.41
1:1G:1347:G:H22	1:1G:1374:A:P	2.43	0.41
1:1G:1490:C:C4	1:1G:1491:G:N7	2.88	0.41
3:22:22:TRP:HB3	3:22:59:ARG:HB2	2.01	0.41
4:32:13:ARG:HD2	4:32:38:TYR:O	2.19	0.41
5:42:39:GLY:O	5:42:69:VAL:N	2.40	0.41
5:42:145:LYS:HG2	5:42:149:GLU:HG3	2.02	0.41
8:72:75:ARG:HA	8:72:76:PRO:HD2	1.84	0.41
9:82:5:TYR:CE2	9:82:7:THR:HG23	2.54	0.41
13:4A:29:ARG:HB3	13:4A:64:TRP:CZ2	2.55	0.41
17:8A:99:SER:O	17:8A:100:LYS:NZ	2.47	0.41
18:9A:21:LYS:NZ	18:9A:57:GLY:HA3	2.33	0.41
26:14:17:G:H2'	26:14:18:C:H6	1.84	0.41
26:14:446:G:H8	58:14:3676:HOH:O	2.03	0.41
26:14:747:U:C6	52:J5:2:ALA:HB3	2.54	0.41
26:14:993:G:C4	26:14:994:C:H5	2.38	0.41
26:14:1184:G:C6	26:14:1185:C:C4	3.09	0.41
26:14:1399:C:H2'	26:14:1400:G:H8	1.84	0.41
26:14:1801:G:OP2	28:19:154:LYS:NZ	2.47	0.41
26:14:2001:A:H2'	26:14:2002:G:C8	2.55	0.41
26:14:2439:A:O2'	26:14:2440:C:OP2	2.31	0.41
28:19:242:ARG:HG3	28:19:246:PRO:HG3	2.02	0.41
29:29:6:GLY:HA2	29:29:51:PHE:CZ	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:105:THR:HG21	29:29:164:ARG:CZ	2.50	0.41
37:45:58:PHE:HD2	37:45:61:GLY:HA3	1.84	0.41
41:85:14:HIS:O	41:85:18:LEU:HD12	2.19	0.41
44:B5:44:GLU:HG2	44:B5:49:VAL:O	2.20	0.41
45:C5:85:VAL:HG23	45:C5:96:ILE:HG22	2.02	0.41
50:H5:40:THR:CG2	50:H5:43:ILE:HG12	2.46	0.41
1:13:233:C:O2'	1:13:234:C:H5'	2.20	0.41
1:13:397:A:H3'	1:13:397:A:N3	2.36	0.41
1:13:478:A:H8	1:13:478:A:O5'	2.03	0.41
1:13:501:C:H2'	1:13:502:G:C8	2.56	0.41
1:13:540:G:H2'	1:13:541:G:O4'	2.20	0.41
1:13:659:U:C2	1:13:660:G:C8	3.08	0.41
1:13:947:G:H2'	1:13:948:C:C6	2.56	0.41
1:13:963:G:C2	10:1I:55:LYS:NZ	2.84	0.41
1:13:1036:G:H5'	1:13:1037:C:OP2	2.20	0.41
1:13:1132:C:H2'	1:13:1133:G:O4'	2.20	0.41
5:4E:136:MET:O	5:4E:140:ARG:NH1	2.53	0.41
7:6E:48:LYS:HD2	7:6E:49:ILE:HD13	2.03	0.41
16:7I:56:ALA:O	16:7I:60:LEU:HD12	2.20	0.41
19:AI:25:LYS:HD3	19:AI:27:GLU:HB2	2.02	0.41
26:1H:270(T):G:C6	26:1H:270(U):C:C4	3.09	0.41
26:1H:974(A):C:H4'	26:1H:975:G:C5'	2.50	0.41
26:1H:1187:G:P	58:1H:3822:HOH:O	2.78	0.41
26:1H:1274:A:N1	26:1H:1644:C:O2'	2.40	0.41
26:1H:1323:U:H2'	26:1H:1324:G:H5'	2.01	0.41
26:1H:2352:A:H2'	26:1H:2353:G:O4'	2.20	0.41
30:31:122:LYS:HD2	30:31:191:ARG:HG2	2.02	0.41
31:41:67:LYS:CE	51:M8:6:HIS:CE1	3.02	0.41
36:78:2:LYS:HE3	36:78:4:SER:CB	2.43	0.41
42:D8:35:LEU:HD12	42:D8:37:VAL:O	2.21	0.41
42:D8:75:PHE:HD1	42:D8:82:ARG:HG3	1.86	0.41
47:I8:14:ARG:H	47:I8:14:ARG:HE	1.68	0.41
47:I8:48:GLY:HA3	47:I8:80:HIS:ND1	2.35	0.41
47:I8:49:LYS:HE2	47:I8:80:HIS:CB	2.50	0.41
49:K8:41:ILE:HD13	49:K8:41:ILE:O	2.20	0.41
55:Q8:9:GLY:N	55:Q8:12:LYS:HG3	2.31	0.41
1:1G:438:G:H5'	4:32:123:HIS:ND1	2.35	0.41
1:1G:446:G:H2'	1:1G:447:G:O4'	2.20	0.41
1:1G:963:G:H21	10:1A:55:LYS:CE	2.13	0.41
1:1G:984:C:H2'	1:1G:985:C:C6	2.55	0.41
1:1G:1224:G:N1	1:1G:1322:C:H1'	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1248:A:C6	1:1G:1249:C:N4	2.88	0.41
2:12:125:PRO:HA	2:12:127:ILE:HG12	2.02	0.41
3:22:70:VAL:HG21	3:22:76:VAL:HG11	2.02	0.41
3:22:123:GLN:O	3:22:126:ARG:HB2	2.20	0.41
4:32:14:ARG:HG3	4:32:14:ARG:NH1	2.35	0.41
4:32:104:VAL:O	4:32:108:LEU:HB2	2.19	0.41
17:8A:21:VAL:O	17:8A:41:LYS:HA	2.20	0.41
19:AA:71:LEU:HD23	19:AA:71:LEU:HA	1.77	0.41
26:14:111:A:C2	26:14:112:U:C2	3.08	0.41
26:14:370:G:H4'	26:14:371:A:OP2	2.21	0.41
26:14:495:G:H21	43:A5:61:ASN:HD21	1.68	0.41
26:14:610:C:H2'	26:14:611:C:H6	1.85	0.41
26:14:752:A:OP1	54:L5:3:ARG:NH2	2.44	0.41
26:14:1534:G:H5'	26:14:1535:U:OP2	2.21	0.41
26:14:1614:A:H2	58:14:3515:HOH:O	2.02	0.41
26:14:2176:A:H2'	26:14:2177:C:C6	2.55	0.41
26:14:2418:A:OP1	55:M5:29:LYS:NZ	2.52	0.41
26:14:2622:C:H5'	29:29:159:HIS:ND1	2.35	0.41
28:19:72:LYS:HB3	28:19:75:ILE:HD12	2.02	0.41
30:39:29:ASN:HB3	30:39:112:MET:HE1	2.03	0.41
31:49:105:LYS:HE3	31:49:105:LYS:HB2	1.92	0.41
1:13:16:A:N1	1:13:919:A:H2	2.18	0.41
1:13:789:U:H5	1:13:792:A:OP2	2.03	0.41
1:13:812:C:H6	1:13:812:C:H2'	1.52	0.41
1:13:1513:A:H2'	1:13:1514:C:C6	2.55	0.41
12:3I:7:ILE:HD12	12:3I:7:ILE:HG23	1.82	0.41
12:3I:102:ARG:HE	12:3I:102:ARG:HB3	1.58	0.41
15:6I:8:LYS:O	15:6I:12:ILE:HG13	2.20	0.41
20:BI:51:GLU:O	20:BI:54:LYS:HB3	2.20	0.41
23:2K:59:A:H4'	23:2K:60:A:OP1	2.21	0.41
26:1H:754:C:H2'	26:1H:755:C:H6	1.82	0.41
26:1H:972:G:OP2	26:1H:973:A:O2'	2.28	0.41
26:1H:1359:A:N3	26:1H:1359:A:O4'	2.53	0.41
26:1H:1526:G:H2'	26:1H:1527:G:O4'	2.21	0.41
26:1H:2031:A:C6	26:1H:2498:C:H1'	2.56	0.41
26:1H:2300:G:H1	26:1H:2316:C:H42	1.67	0.41
26:1H:2404:C:N4	26:1H:2405:G:C6	2.88	0.41
28:11:232:PRO:HA	58:11:408:HOH:O	2.20	0.41
33:61:64:GLU:OE1	33:61:67:ARG:NH1	2.52	0.41
35:68:64:ARG:HG2	35:68:79:PHE:CD2	2.56	0.41
42:D8:53:GLU:HG2	42:D8:54:GLY:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:D8:98:GLU:HG2	42:D8:99:ILE:N	2.34	0.41
43:E8:39:THR:HG22	43:E8:44:ALA:HB2	2.02	0.41
43:E8:64:MET:O	43:E8:65:LEU:HB2	2.20	0.41
46:H8:111:VAL:O	46:H8:114:GLY:HA2	2.20	0.41
52:N8:40:LYS:HE2	52:N8:47:PRO:HD2	2.02	0.41
55:Q8:34:TRP:CG	55:Q8:35:GLN:N	2.86	0.41
55:Q8:46:ARG:NH1	55:Q8:46:ARG:HB2	2.35	0.41
1:1G:188:U:O2'	1:1G:189:U:H5'	2.21	0.41
1:1G:255:G:C2	1:1G:272:C:C2	3.07	0.41
1:1G:406:G:C2	1:1G:407:G:N7	2.88	0.41
1:1G:430:A:C4	1:1G:431:A:C8	3.08	0.41
1:1G:468:A:O2'	16:7A:81:ARG:HA	2.19	0.41
1:1G:500:G:H2'	1:1G:501:C:H6	1.84	0.41
1:1G:994:A:H2'	1:1G:995:C:C6	2.55	0.41
1:1G:1084:G:C8	1:1G:1085:U:C6	3.08	0.41
1:1G:1121:U:H2'	1:1G:1122:U:O4'	2.20	0.41
9:82:26:VAL:HG13	9:82:61:ALA:O	2.20	0.41
11:2A:54:ARG:O	11:2A:57:THR:OG1	2.39	0.41
12:3A:10:LEU:HD13	17:8A:32:TYR:CZ	2.55	0.41
12:3A:60:LEU:HA	12:3A:60:LEU:HD13	1.74	0.41
24:3L:33:U:OP2	24:3L:33:U:H2'	2.21	0.41
26:14:303:U:H2'	26:14:304:G:O4'	2.21	0.41
26:14:723:G:H2'	26:14:724:U:O4'	2.20	0.41
26:14:776:G:H4'	26:14:777:A:O5'	2.19	0.41
26:14:959:A:C6	26:14:960:A:N1	2.87	0.41
26:14:1022:G:N2	26:14:1142(A):A:H2	2.16	0.41
26:14:1165:U:H2'	26:14:1166:C:C6	2.55	0.41
26:14:1743:G:C2	26:14:1746:G:C8	3.08	0.41
26:14:1777:U:O2'	26:14:1778:U:H5'	2.19	0.41
26:14:1799:G:O6	28:19:178:PRO:HD2	2.21	0.41
26:14:2131:G:C5'	26:14:2158:A:H61	2.33	0.41
26:14:2376:A:H2'	26:14:2377:A:C8	2.55	0.41
26:14:2552:U:H2'	26:14:2554:U:OP2	2.20	0.41
32:59:152:ARG:HD2	32:59:153:LYS:HG3	2.02	0.41
40:75:23:ARG:HG3	40:75:120:ARG:HH12	1.84	0.41
40:75:80:SER:HA	40:75:81:PRO:HD3	1.95	0.41
42:95:72:VAL:O	42:95:72:VAL:HG13	2.21	0.41
45:C5:6:HIS:CD2	45:C5:7:VAL:HG13	2.56	0.41
1:13:48:C:H6	1:13:365:U:O4	2.03	0.41
1:13:1133:G:H2'	1:13:1134:G:H8	1.83	0.41
3:2E:21:ARG:NH2	3:2E:56:ASP:OD1	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:5E:10:LEU:HD13	6:5E:61:LEU:HD13	2.02	0.41
8:7E:75:ARG:HA	8:7E:76:PRO:HD2	1.81	0.41
13:4I:56:LEU:HD22	13:4I:56:LEU:HA	1.84	0.41
15:6I:26:GLU:H	15:6I:26:GLU:HG2	1.56	0.41
16:7I:72:ARG:O	16:7I:75:ARG:HB3	2.20	0.41
20:BI:38:LYS:O	20:BI:41:ILE:HG13	2.21	0.41
22:1K:12:U:O2	22:1K:24:G:N2	2.54	0.41
26:1H:311:A:C6	26:1H:328:U:C4	3.09	0.41
26:1H:1022:G:N2	26:1H:1142(A):A:N1	2.67	0.41
26:1H:1533:C:H2'	26:1H:1534:G:C4	2.55	0.41
26:1H:1534:G:N2	26:1H:1538:G:N2	2.68	0.41
26:1H:1643:G:C6	26:1H:1644:C:C4	3.08	0.41
26:1H:2316:C:H1'	31:41:128:ARG:NH2	2.35	0.41
35:68:106:LEU:HA	35:68:106:LEU:HD23	1.77	0.41
36:78:19:VAL:CB	36:78:20:GLY:HA2	2.51	0.41
37:88:59:ARG:C	37:88:61:GLY:N	2.73	0.41
38:98:65:LEU:HD12	38:98:65:LEU:HA	1.68	0.41
54:P8:30:VAL:O	54:P8:34:ARG:HG3	2.21	0.41
1:1G:279:A:H4'	1:1G:280:C:H5"	2.03	0.41
1:1G:374:A:N3	1:1G:374:A:H2'	2.35	0.41
1:1G:474:G:C2	1:1G:475:G:C5	3.09	0.41
1:1G:521:G:O5'	12:3A:73:GLU:HG2	2.20	0.41
1:1G:867:G:O2'	1:1G:868:C:H5'	2.21	0.41
1:1G:918:A:H2'	1:1G:919:A:O4'	2.21	0.41
1:1G:1137:C:H5"	1:1G:1138:G:OP1	2.21	0.41
1:1G:1205:U:H1'	3:22:195:VAL:CG2	2.51	0.41
2:12:5:ILE:HB	2:12:221:LEU:HD21	2.03	0.41
3:22:11:ARG:O	3:22:14:ILE:O	2.39	0.41
4:32:173:TRP:HA	4:32:187:ARG:HG2	2.02	0.41
5:42:136:MET:H	5:42:136:MET:HG2	1.58	0.41
13:4A:50:GLU:O	13:4A:53:VAL:HB	2.20	0.41
16:7A:52:ASP:OD2	16:7A:55:ARG:HG3	2.21	0.41
17:8A:82:MET:O	17:8A:86:GLU:N	2.43	0.41
19:AA:11:VAL:HB	19:AA:12:ASP:H	1.78	0.41
20:BA:58:LYS:O	20:BA:58:LYS:HD3	2.21	0.41
26:14:923:C:H2'	26:14:924:C:C6	2.55	0.41
26:14:1011:G:C2	26:14:1013:C:C2	3.09	0.41
26:14:1033:U:H3'	26:14:1033:U:H6	1.84	0.41
26:14:1053:C:N4	26:14:1106:G:H1	2.17	0.41
26:14:1310:G:OP2	54:L5:9:ARG:NE	2.53	0.41
26:14:2378:A:O2'	39:65:21:THR:HG21	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2756:U:C2	26:14:2757:A:N7	2.88	0.41
26:14:2772:C:H2'	26:14:2773:C:C6	2.55	0.41
27:1J:78:A:C2	27:1J:99:A:C4	3.09	0.41
28:19:11:PRO:O	28:19:12:SER:OG	2.25	0.41
30:39:122:LYS:HB2	30:39:123:LEU:H	1.52	0.41
32:59:73:ALA:O	32:59:76:VAL:HB	2.21	0.41
33:69:128:LEU:O	33:69:137:PRO:HA	2.21	0.41
34:15:135:PRO:HB2	34:15:137:LYS:NZ	2.36	0.41
38:55:104:ARG:HB2	38:55:107:ASP:OD1	2.21	0.41
39:65:26:LEU:O	39:65:88:ASP:HB2	2.20	0.41
40:75:82:LEU:HD12	40:75:82:LEU:H	1.84	0.41
43:A5:59:VAL:HG12	43:A5:60:ASN:N	2.34	0.41
45:C5:43:ASN:HB2	45:C5:62:GLU:O	2.20	0.41
51:I5:8:LYS:HD3	51:I5:8:LYS:HA	1.55	0.41
1:13:76:G:H1'	1:13:95:G:N2	2.35	0.41
1:13:143:A:H5"	1:13:144:G:H5'	2.02	0.41
1:13:411:A:N9	1:13:413:G:H1'	2.35	0.41
1:13:515:G:N2	1:13:537:G:C4	2.89	0.41
1:13:971:G:N1	1:13:1363:A:OP2	2.50	0.41
1:13:1131:G:H2'	1:13:1132:C:H6	1.85	0.41
1:13:1396:A:O4'	1:13:1398:A:H1'	2.20	0.41
2:1E:28:PHE:O	2:1E:32:ILE:HG22	2.20	0.41
3:2E:188:LEU:HD13	3:2E:195:VAL:HG11	2.02	0.41
6:5E:5:GLU:HA	6:5E:63:TYR:O	2.20	0.41
22:1K:37:MIA:H121	22:1K:38:A:C2	2.55	0.41
24:3K:7:A:H2	24:3K:67:C:O2	2.04	0.41
26:1H:444:C:H4'	30:31:49:ALA:HB2	2.03	0.41
26:1H:722:A:H2'	26:1H:723:G:C8	2.56	0.41
26:1H:744:G:P	29:21:132:HIS:HD1	2.43	0.41
26:1H:1250:G:OP2	36:78:18:ARG:NH1	2.54	0.41
26:1H:2003:G:H2'	26:1H:2004:G:O5'	2.21	0.41
26:1H:2098:U:H2'	26:1H:2099:U:O4'	2.20	0.41
26:1H:2319:G:H4'	26:1H:2320:A:OP1	2.21	0.41
26:1H:2365:G:H4'	47:I8:60:PHE:CZ	2.55	0.41
27:16:7:G:H5"	27:16:7:G:C8	2.54	0.41
27:16:88:C:H2'	27:16:89:G:O4'	2.20	0.41
27:16:116:G:H2'	27:16:117:G:O4'	2.21	0.41
31:41:31:VAL:HA	31:41:32:PRO:HD3	1.92	0.41
31:41:101:ILE:O	31:41:105:LYS:HE2	2.21	0.41
32:51:23:ARG:NH1	32:51:25:LYS:HG3	2.35	0.41
34:58:22:THR:HB	34:58:25:ARG:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:58:121:LYS:HB3	34:58:123:TYR:CE1	2.56	0.41
37:88:11:LYS:NZ	37:88:86:GLY:HA2	2.36	0.41
37:88:33:GLY:HA2	37:88:105:GLU:HA	2.03	0.41
37:88:45:GLN:CD	37:88:45:GLN:H	2.23	0.41
38:98:4:LEU:HD13	38:98:4:LEU:HA	1.38	0.41
38:98:63:ARG:HB2	38:98:80:PHE:CE2	2.53	0.41
39:A8:34:HIS:O	39:A8:97:ARG:NH2	2.54	0.41
46:H8:152:ALA:HB3	46:H8:167:PRO:HA	2.03	0.41
51:M8:59:PHE:O	51:M8:63:TYR:HB2	2.20	0.41
1:1G:382:A:H2'	1:1G:383:A:H8	1.86	0.41
1:1G:440:A:H8	1:1G:440:A:OP2	2.04	0.41
1:1G:533:A:P	58:1G:1728:HOH:O	2.78	0.41
1:1G:627:G:C2	1:1G:628:G:C8	3.09	0.41
1:1G:664:G:P	18:9A:64:ARG:HH21	2.44	0.41
1:1G:1014:A:H5'	19:AA:15:LEU:HG	2.03	0.41
1:1G:1015:A:C6	1:1G:1016:A:C5	3.09	0.41
1:1G:1291:G:H2'	1:1G:1292:U:C6	2.55	0.41
2:12:21:ARG:HB2	2:12:22:LYS:H	1.78	0.41
2:12:153:ARG:HG3	2:12:154:LEU:HD23	2.01	0.41
2:12:187:LEU:HA	2:12:201:ILE:O	2.21	0.41
3:22:50:ALA:HB1	3:22:70:VAL:HG11	2.02	0.41
4:32:148:VAL:HG12	4:32:152:SER:OG	2.21	0.41
7:62:69:VAL:HG22	7:62:135:VAL:HG22	2.01	0.41
9:82:118:LYS:O	9:82:119:ALA:HB3	2.20	0.41
20:BA:50:GLU:N	20:BA:100:ILE:HG12	2.36	0.41
24:1L:4:C:O2	24:1L:70:G:N2	2.53	0.41
24:3L:36:A:C8	25:4L:14:A:N6	2.88	0.41
26:14:273(C):C:N3	26:14:363(C):G:N2	2.59	0.41
26:14:309:G:O3'	45:C5:18:GLY:HA2	2.20	0.41
26:14:404:C:O2'	26:14:405:U:OP2	2.35	0.41
26:14:882:G:H1	26:14:894:C:N4	2.18	0.41
26:14:1016:G:C6	26:14:1017:G:C5	3.08	0.41
26:14:1137:G:O2'	26:14:2039:C:H5'	2.20	0.41
26:14:1174:A:N6	26:14:1176:G:O2'	2.54	0.41
26:14:1385:G:C4	26:14:1386:C:C5	3.09	0.41
26:14:1759:A:H4'	26:14:2715:C:O4'	2.20	0.41
26:14:2128:C:C4	26:14:2129:C:C4	3.08	0.41
26:14:2698:U:H2'	26:14:2699:C:C6	2.56	0.41
27:1J:60:C:H2'	27:1J:61:G:H8	1.85	0.41
27:1J:109:G:C6	27:1J:110:G:C5	3.09	0.41
29:29:33:VAL:CG2	29:29:47:VAL:HG13	2.47	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:69:8:PRO:HD3	33:69:15:VAL:HG22	2.01	0.41
33:69:52:ARG:HA	33:69:55:ALA:HB3	2.02	0.41
45:C5:44:ILE:HG13	45:C5:45:VAL:N	2.36	0.41
46:D5:108:PRO:HB2	46:D5:110:GLY:O	2.20	0.41
46:D5:127:LYS:HB3	46:D5:127:LYS:HE2	1.68	0.41
51:I5:37:SER:C	51:I5:39:CYS:H	2.24	0.41
51:I5:37:SER:OG	51:I5:38:LYS:N	2.53	0.41
1:13:66:G:O4'	1:13:173:U:C4	2.74	0.41
1:13:498:A:H4'	1:13:500:G:OP1	2.19	0.41
1:13:1368:G:C5'	9:8E:112:LYS:HB3	2.38	0.41
3:2E:154:SER:HA	3:2E:165:THR:HA	2.03	0.41
5:4E:96:PRO:HA	5:4E:117:ASP:OD2	2.21	0.41
7:6E:27:ILE:HD12	7:6E:40:ALA:HA	2.02	0.41
7:6E:28:ASN:O	7:6E:31:MET:HB3	2.21	0.41
14:5I:53:LEU:HB3	14:5I:56:VAL:HG21	2.03	0.41
17:8I:9:VAL:HG21	17:8I:84:LEU:HB3	2.02	0.41
18:9I:53:ARG:NE	18:9I:59:SER:O	2.50	0.41
23:2K:19:G:C2	23:2K:59:A:C5	3.09	0.41
26:1H:869:G:H2'	26:1H:870:A:O4'	2.21	0.41
26:1H:973:A:O4'	26:1H:1188:U:C6	2.74	0.41
26:1H:993:G:H5"	41:C8:50:ARG:NH2	2.36	0.41
26:1H:996:A:O2'	41:C8:92:ARG:HG3	2.21	0.41
26:1H:997:G:OP1	41:C8:93:LYS:N	2.51	0.41
26:1H:1470:G:H5"	26:1H:1471:A:OP1	2.21	0.41
26:1H:1479:G:H2'	26:1H:1480:G:H8	1.83	0.41
26:1H:1523:U:H2'	26:1H:1524:G:O4'	2.21	0.41
26:1H:1783:A:P	58:1H:3626:HOH:O	2.79	0.41
26:1H:1824:G:OP1	28:11:52:ARG:HD3	2.21	0.41
26:1H:2061:G:H2'	26:1H:2501:C:O2'	2.20	0.41
26:1H:2356:C:C5	26:1H:2357:U:C4	3.09	0.41
26:1H:2792:G:C6	26:1H:2805:G:N1	2.88	0.41
31:41:101:ILE:HG13	51:M8:25:TYR:O	2.21	0.41
32:51:56:SER:OG	32:51:58:GLU:HG2	2.19	0.41
33:61:135:GLU:HB2	33:61:136:VAL:H	1.73	0.41
34:58:96:GLU:HB2	34:58:122:VAL:HG12	2.02	0.41
38:98:38:VAL:HG22	38:98:112:ALA:HB2	2.01	0.41
41:C8:88:ILE:HG22	41:C8:90:VAL:HB	2.01	0.41
43:E8:95:ILE:HD13	43:E8:95:ILE:HG21	1.65	0.41
55:Q8:28:GLY:HA3	55:Q8:29:LYS:HA	1.09	0.41
55:Q8:58:ILE:HG21	55:Q8:58:ILE:HD13	1.76	0.41
1:1G:338:A:H2	1:1G:351:G:H22	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:341:C:H2'	1:1G:342:C:H6	1.86	0.41
1:1G:345:C:OP2	40:75:39:ARG:NH2	2.54	0.41
1:1G:533:A:C5	1:1G:536:C:C4	3.09	0.41
1:1G:861:G:H21	1:1G:872:A:H2	1.68	0.41
1:1G:862:C:C2'	1:1G:863:U:H5'	2.51	0.41
1:1G:1286:A:C8	1:1G:1286:A:C3'	3.00	0.41
4:32:22:LYS:N	4:32:26:CYS:SG	2.91	0.41
13:4A:92:HIS:CD2	13:4A:98:VAL:HG11	2.54	0.41
17:8A:59:ILE:HG22	17:8A:71:PHE:CD2	2.56	0.41
26:14:265:A:C8	26:14:266:G:H1'	2.56	0.41
26:14:301:G:C4	26:14:302:C:C5	3.09	0.41
26:14:557:U:H2'	26:14:558:G:H8	1.86	0.41
26:14:1104:C:H2'	26:14:1105:U:C6	2.55	0.41
26:14:1141:U:H3'	34:15:63:THR:HG21	2.02	0.41
26:14:1860:G:H8	26:14:1860:G:O5'	2.04	0.41
27:1J:27:C:O3'	39:65:36:TYR:OH	2.32	0.41
28:19:239:ARG:CZ	58:19:302:HOH:O	2.68	0.41
31:49:128:ARG:HD3	31:49:128:ARG:HA	1.79	0.41
31:49:130:ASN:HB3	31:49:160:VAL:HA	2.02	0.41
32:59:7:LEU:N	32:59:8:PRO:HD2	2.34	0.41
32:59:23:ARG:HA	32:59:36:PRO:HA	2.02	0.41
33:69:128:LEU:HD13	33:69:128:LEU:HA	1.73	0.41
34:15:118:LYS:O	34:15:121:LYS:NZ	2.47	0.41
36:35:97:PRO:HG3	36:35:112:LEU:CB	2.50	0.41
46:D5:23:LYS:HB3	46:D5:38:TYR:CD2	2.55	0.41
1:13:46:G:H2'	1:13:366:C:H5	1.85	0.41
1:13:57:G:C5	1:13:58:C:C4	3.08	0.41
1:13:683:G:H2'	1:13:684:A:H8	1.84	0.41
1:13:874:G:C6	1:13:875:C:C4	3.09	0.41
1:13:946:A:H2'	1:13:947:G:C8	2.56	0.41
1:13:1314:C:N3	1:13:1315:U:C4	2.89	0.41
2:1E:55:PHE:HD1	2:1E:55:PHE:HA	1.68	0.41
9:8E:89:ASN:C	9:8E:91:ASP:H	2.24	0.41
16:7I:8:ARG:O	16:7I:9:PHE:HD1	2.03	0.41
16:7I:55:ARG:HA	16:7I:55:ARG:HD2	1.71	0.41
26:1H:545:G:H2'	26:1H:546:C:H5"	2.02	0.41
26:1H:574:C:H4'	26:1H:575:A:O5'	2.21	0.41
26:1H:618:G:H2'	26:1H:618(A):C:H6	1.85	0.41
26:1H:654(B):C:H42	26:1H:654(S):G:H1	1.68	0.41
26:1H:654(P):G:H2'	26:1H:654(Q):C:C6	2.56	0.41
26:1H:729:G:C6	28:11:208:LYS:HB2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:731:C:C2	26:1H:732:C:C5	3.09	0.41
26:1H:878:A:C2	26:1H:879:G:C5	3.08	0.41
26:1H:1831:G:C4	26:1H:1975:G:N2	2.89	0.41
26:1H:1853:A:H2'	26:1H:1854:A:C8	2.56	0.41
26:1H:1906:G:O2'	26:1H:1907:G:H5'	2.21	0.41
31:41:124:SER:HB2	31:41:131:TYR:CE1	2.56	0.41
33:61:35:LEU:O	33:61:36:ALA:HB2	2.21	0.41
36:78:50:ARG:HH21	36:78:50:ARG:CG	2.27	0.41
36:78:144:GLU:OE1	36:78:144:GLU:O	2.39	0.41
37:88:72:LYS:HA	37:88:73:PRO:HD3	1.84	0.41
43:E8:90:ARG:HE	43:E8:90:ARG:HB3	1.55	0.41
43:E8:96:ILE:HG23	43:E8:96:ILE:HD12	1.75	0.41
44:F8:11:PRO:HG2	44:F8:13:LEU:HD21	2.03	0.41
47:I8:32:ARG:HE	47:I8:32:ARG:HB3	1.52	0.41
54:P8:26:GLY:O	54:P8:30:VAL:HG23	2.21	0.41
1:1G:105:G:C6	1:1G:106:C:C4	3.08	0.41
1:1G:559:A:H4'	1:1G:560:U:C5'	2.51	0.41
1:1G:660:G:OP2	15:6A:5:LYS:HD3	2.21	0.41
1:1G:683:G:H2'	1:1G:684:A:C8	2.55	0.41
1:1G:827:U:H5"	1:1G:828:A:OP2	2.21	0.41
1:1G:865:A:H5'	1:1G:1078:U:C5	2.56	0.41
1:1G:991:U:OP2	1:1G:991:U:H6	2.04	0.41
1:1G:1260:C:H3'	1:1G:1260:C:H6	1.85	0.41
2:12:131:PRO:HG2	2:12:134:GLU:HG3	2.02	0.41
10:1A:35:SER:HB3	10:1A:73:ASP:HB2	2.01	0.41
13:4A:94:ARG:NH2	19:AA:78:ARG:HH12	2.18	0.41
26:14:288:C:H2'	26:14:289:A:C8	2.55	0.41
26:14:603:A:H8	26:14:604:G:H1'	1.86	0.41
26:14:867:C:C5	26:14:868:U:C5	3.09	0.41
26:14:1020:A:H61	26:14:1141:U:HO2'	1.68	0.41
26:14:1149:G:C2	26:14:1150:C:N3	2.88	0.41
26:14:1328:G:H2'	26:14:1330:C:C4	2.55	0.41
26:14:1599:C:H2'	26:14:1600:C:C6	2.56	0.41
26:14:1639:U:OP2	58:14:3529:HOH:O	2.22	0.41
26:14:1695:G:H2'	26:14:1696:G:O4'	2.20	0.41
26:14:1993:U:H4'	29:29:128:SER:CB	2.50	0.41
26:14:2329:G:N2	47:E5:41:ARG:HB3	2.36	0.41
26:14:2393:A:C2'	26:14:2394:C:H5'	2.51	0.41
26:14:2422:A:O2'	26:14:2423:U:H5"	2.20	0.41
26:14:2569:G:C2	26:14:2570:G:C8	3.09	0.41
27:1J:66:A:C2	27:1J:108:C:C4	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:109:G:C5	27:1J:110:G:N7	2.88	0.41
36:35:124:LYS:HA	36:35:143:GLY:O	2.21	0.41
40:75:57:PHE:HA	40:75:79:HIS:HD2	1.86	0.41
45:C5:85:VAL:CG2	45:C5:98:VAL:HB	2.50	0.41
45:C5:99:CYS:SG	45:C5:100:ALA:N	2.93	0.41
50:H5:18:ASP:O	50:H5:21:ALA:N	2.51	0.41
1:13:187:C:H1'	1:13:191(A):G:N2	2.36	0.41
1:13:246:A:C2	1:13:282:A:C5	3.09	0.41
1:13:452:A:H62	1:13:480:U:H3	1.68	0.41
1:13:458:C:N3	1:13:475:G:N2	2.69	0.41
1:13:542:G:H5'	4:3E:41:GLY:HA3	2.03	0.41
1:13:1152:A:C6	1:13:1153:C:C4	3.09	0.41
1:13:1399:C:C2	1:13:1401:G:C5	3.09	0.41
2:1E:69:LEU:HD13	2:1E:91:PRO:HB2	2.02	0.41
4:3E:13:ARG:HD3	4:3E:36:ARG:O	2.21	0.41
5:4E:37:ARG:HH12	5:4E:111:GLU:HG2	1.86	0.41
5:4E:151:LEU:HD23	5:4E:151:LEU:HA	1.93	0.41
6:5E:61:LEU:HB3	6:5E:63:TYR:HE2	1.86	0.41
7:6E:113:GLU:HG3	7:6E:119:ARG:HA	2.03	0.41
8:7E:9:MET:O	8:7E:12:ARG:N	2.54	0.41
10:1I:5:ARG:NH1	10:1I:99:LYS:HD2	2.36	0.41
10:1I:89:ASP:C	10:1I:91:PRO:HD3	2.41	0.41
11:2I:57:THR:HG22	11:2I:59:TYR:N	2.36	0.41
11:2I:73:MET:CG	11:2I:103:LEU:HD23	2.50	0.41
14:5I:3:ARG:HH21	14:5I:6:LEU:HG	1.86	0.41
15:6I:36:ILE:HA	15:6I:59:MET:CE	2.51	0.41
17:8I:18:THR:HG23	17:8I:69:LYS:HD2	2.03	0.41
17:8I:46:ASP:OD2	17:8I:49:GLU:HG3	2.21	0.41
19:AI:11:VAL:HG13	19:AI:16:LEU:HD22	2.03	0.41
22:1K:14:A:C5	22:1K:22:G:N2	2.89	0.41
24:3K:21:A:H2'	24:3K:22:G:O4'	2.21	0.41
26:1H:182:A:H2'	26:1H:183:C:C6	2.56	0.41
26:1H:216:A:H2'	26:1H:217:G:C8	2.56	0.41
26:1H:266:G:N2	26:1H:427:U:H1'	2.35	0.41
26:1H:607:U:O2	26:1H:621:A:N1	2.54	0.41
26:1H:662:G:C5'	36:78:15:ARG:H	2.30	0.41
26:1H:811:U:H2'	36:78:21:ARG:HA	2.03	0.41
26:1H:887:A:H5'	26:1H:888:C:OP1	2.21	0.41
26:1H:988:A:P	50:L8:11:SER:HB2	2.61	0.41
26:1H:1007:C:OP2	26:1H:1008:C:O2'	2.35	0.41
26:1H:1029:A:N1	26:1H:2465:C:O2'	2.48	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1176:G:H5'	26:1H:1177:A:C8	2.55	0.41
26:1H:1420:U:HO2'	26:1H:1421:G:P	2.43	0.41
26:1H:1429:G:C4	26:1H:1568:G:C2	3.08	0.41
26:1H:1475:G:H2'	26:1H:1476:C:C6	2.56	0.41
26:1H:1776:G:N3	26:1H:1776:G:H2'	2.36	0.41
26:1H:2157:G:HO2'	26:1H:2158:A:P	2.43	0.41
26:1H:2244:U:O5'	26:1H:2244:U:H6	2.03	0.41
26:1H:2286:A:H8	53:O8:37:ARG:HH11	1.69	0.41
26:1H:2443:C:O2'	26:1H:2444:G:H5'	2.20	0.41
26:1H:2450:A:C2	26:1H:2451:A:C4	3.09	0.41
26:1H:2590:A:OP2	28:11:238:GLY:HA3	2.20	0.41
26:1H:2592:G:C6	26:1H:2593:U:C4	3.08	0.41
26:1H:2663:G:C6	26:1H:2664:G:C4	3.09	0.41
26:1H:2724:C:OP1	29:21:118:LYS:HE3	2.21	0.41
28:11:36:PRO:HA	28:11:61:LEU:CD1	2.51	0.41
28:11:68:LYS:HB3	28:11:70:TRP:CZ2	2.55	0.41
28:11:108:PRO:HG3	28:11:143:HIS:HE1	1.81	0.41
29:21:4:ILE:HG12	29:21:5:LEU:H	1.85	0.41
29:21:50:GLY:CA	29:21:77:ILE:HG12	2.51	0.41
29:21:181:LEU:HD12	29:21:181:LEU:HA	1.77	0.41
31:41:37:VAL:HG22	31:41:159:VAL:HG12	2.03	0.41
32:51:98:LEU:HD13	32:51:125:VAL:CG2	2.50	0.41
32:51:153:LYS:H	32:51:153:LYS:CE	2.34	0.41
33:61:130:TYR:O	33:61:135:GLU:HB2	2.21	0.41
36:78:64:LYS:HE3	55:Q8:12:LYS:HD2	2.03	0.41
37:88:69:PHE:HA	37:88:70:PRO:HD2	1.90	0.41
38:98:118:GLU:OE1	38:98:118:GLU:HA	2.20	0.41
40:B8:19:LEU:HA	40:B8:20:PRO:HD3	1.90	0.41
42:D8:34:GLU:HG3	42:D8:56:SER:OG	2.19	0.41
44:F8:21:PHE:CD1	44:F8:26:TYR:CD1	3.08	0.41
44:F8:41:ASN:N	44:F8:41:ASN:OD1	2.54	0.41
46:H8:70:LEU:HD23	46:H8:70:LEU:HA	1.97	0.41
46:H8:80:ARG:H	46:H8:80:ARG:HG2	1.48	0.41
50:L8:2:PRO:HB2	50:L8:3:ARG:H	1.66	0.41
50:L8:38:GLU:CD	50:L8:38:GLU:H	2.24	0.41
55:Q8:53:PRO:HB3	55:Q8:56:GLU:H	1.86	0.41
1:1G:115:G:H4'	1:1G:116:A:O5'	2.20	0.41
1:1G:502:G:H2'	1:1G:503:C:O4'	2.20	0.41
1:1G:776:G:N2	1:1G:802:A:OP2	2.43	0.41
1:1G:1207:G:H2'	1:1G:1208:C:H6	1.85	0.41
1:1G:1267:C:O2	21:1B:20:LYS:HD2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1436:U:H2'	1:1G:1437:C:O4'	2.21	0.41
4:32:139:ARG:HH11	4:32:139:ARG:HG3	1.86	0.41
7:62:143:ARG:NH1	24:3L:42:C:O5'	2.54	0.41
9:82:15:ALA:HB2	9:82:65:VAL:HB	2.03	0.41
9:82:46:ALA:O	9:82:49:PRO:HD2	2.21	0.41
12:3A:110:VAL:HG23	12:3A:120:TYR:HB3	2.03	0.41
13:4A:47:ASP:OD1	13:4A:47:ASP:N	2.54	0.41
26:14:49:A:H4'	26:14:50:U:H5"	2.02	0.41
26:14:94:G:H21	49:G5:47:ASN:HD22	1.67	0.41
26:14:146:G:H2'	26:14:147:U:O4'	2.21	0.41
26:14:193:U:H5	58:14:3625:HOH:O	2.03	0.41
26:14:491:G:H2'	26:14:492:A:C8	2.56	0.41
26:14:608:A:H2'	26:14:609:A:C8	2.56	0.41
26:14:729:G:OP2	28:19:13:ARG:NH1	2.52	0.41
26:14:774:A:H2	26:14:787:U:HO2'	1.60	0.41
26:14:1021:A:C8	26:14:1021:A:C3'	3.03	0.41
26:14:1100:C:H2'	26:14:1101:U:C6	2.56	0.41
26:14:1226:G:P	42:95:85:LYS:HD3	2.60	0.41
26:14:1317:A:H2'	26:14:1318:C:C6	2.56	0.41
26:14:1340:U:H4'	26:14:1394:U:O2'	2.21	0.41
26:14:1568:G:P	28:19:63:ARG:HH12	2.42	0.41
26:14:1614:A:H61	43:A5:88:ARG:H	1.67	0.41
26:14:1910:G:H1	26:14:1920:C:H42	1.68	0.41
26:14:2017:U:P	58:14:3835:HOH:O	2.78	0.41
26:14:2134:A:C8	26:14:2158:A:N7	2.89	0.41
26:14:2410:G:H2'	26:14:2411:A:O4'	2.21	0.41
26:14:2484:G:C2	26:14:2485:G:C8	3.09	0.41
26:14:2488:A:O5'	26:14:2488:A:H8	2.04	0.41
26:14:2575:C:H2'	26:14:2578:G:O6	2.21	0.41
26:14:2780:G:OP1	34:15:118:LYS:HE2	2.21	0.41
26:14:2822:G:O2'	26:14:2824:C:OP2	2.31	0.41
27:1J:40:U:O2'	27:1J:45:A:N6	2.44	0.41
28:19:31:LYS:O	28:19:32:SER:OG	2.37	0.41
28:19:70:TRP:CD1	28:19:71:ASP:N	2.89	0.41
28:19:232:PRO:HA	58:19:301:HOH:O	2.21	0.41
29:29:96:PHE:HD2	29:29:182:LEU:HD21	1.85	0.41
30:39:21:ALA:O	30:39:23:ASP:N	2.54	0.41
30:39:129:PHE:HA	30:39:142:TRP:NE1	2.35	0.41
32:59:9:ILE:HD12	32:59:49:VAL:HB	2.02	0.41
32:59:140:LYS:HE2	32:59:140:LYS:HB3	1.81	0.41
33:69:76:THR:HG21	33:69:140:LEU:HA	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:15:39:ARG:HH11	34:15:48:MET:HE2	1.86	0.41
37:45:69:PHE:HA	37:45:70:PRO:HD2	1.81	0.41
38:55:52:ILE:O	38:55:55:ALA:N	2.53	0.41
39:65:24:LEU:HB2	39:65:85:VAL:CG1	2.50	0.41
41:85:43:GLY:HA3	42:95:73:SER:OG	2.21	0.41
44:B5:18:TYR:C	44:B5:20:GLY:H	2.23	0.41
44:B5:31:HIS:HA	44:B5:32:PRO:HD3	1.89	0.41
47:E5:36:ILE:HD11	47:E5:39:ARG:HG2	2.03	0.41
48:F5:73:LEU:HB3	48:F5:90:ILE:HG23	2.03	0.41
1:13:76:G:H2'	1:13:77:C:H5'	2.02	0.41
1:13:580:U:H3	1:13:761:G:H1	1.69	0.41
1:13:595:G:H22	1:13:643:C:H41	1.69	0.41
1:13:622:A:H2'	1:13:623:C:O4'	2.21	0.41
1:13:805:C:O2'	1:13:806:C:H5'	2.21	0.41
1:13:936:C:H2'	1:13:937:A:H5'	2.03	0.41
1:13:1057:G:C5	1:13:1204:A:C2	3.09	0.41
1:13:1181:G:O2'	1:13:1184:G:H5'	2.21	0.41
1:13:1182:G:O5'	1:13:1182:G:C8	2.74	0.41
1:13:1303:C:N4	1:13:1304:G:C6	2.89	0.41
7:6E:10:ARG:HE	7:6E:10:ARG:HB2	1.61	0.41
7:6E:27:ILE:CD1	7:6E:40:ALA:HA	2.51	0.41
8:7E:108:GLY:HA3	8:7E:138:TRP:HB3	2.03	0.41
10:1I:6:ILE:HD11	10:1I:72:VAL:HB	2.03	0.41
12:3I:8:ASN:HA	12:3I:11:VAL:HG23	2.03	0.41
14:5I:6:LEU:HB3	14:5I:23:ARG:HH22	1.86	0.41
14:5I:44:LEU:HD12	14:5I:44:LEU:O	2.21	0.41
26:1H:449:A:C6	26:1H:450:G:C5	3.09	0.41
26:1H:880:G:H2'	26:1H:881:G:H8	1.83	0.41
26:1H:1177:A:OP1	26:1H:1178:C:H5	2.03	0.41
26:1H:1181:C:O2'	26:1H:1182:A:H5'	2.21	0.41
26:1H:1728:G:C2	26:1H:1730:U:OP2	2.74	0.41
26:1H:2035:G:H4'	26:1H:2036:C:OP2	2.21	0.41
26:1H:2396:G:H5"	48:J8:25:LYS:NZ	2.36	0.41
26:1H:2626:C:H2'	26:1H:2627:G:O4'	2.21	0.41
26:1H:2864:G:H2'	26:1H:2865:U:H6	1.85	0.41
27:16:15:A:H1'	27:16:109:G:N9	2.35	0.41
31:41:11:TYR:O	31:41:16:ARG:HG3	2.21	0.41
34:58:94:HIS:C	34:58:95:PRO:O	2.59	0.41
35:68:78:ARG:HH21	40:B8:103:ARG:NH2	2.18	0.41
36:78:24:GLY:C	36:78:26:GLY:N	2.74	0.41
38:98:29:LEU:HD12	38:98:29:LEU:HA	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:98:87:TYR:CD1	38:98:90:ARG:HD2	2.53	0.41
39:A8:27:SER:HA	39:A8:88:ASP:CB	2.48	0.41
39:A8:63:THR:O	39:A8:66:ALA:HB3	2.20	0.41
41:C8:27:LEU:O	41:C8:30:LYS:N	2.54	0.41
44:F8:1:MET:C	44:F8:3:THR:N	2.73	0.41
45:G8:44:ILE:H	45:G8:44:ILE:HG13	1.55	0.41
54:P8:24:THR:HA	54:P8:25:PRO:HD2	1.96	0.41
1:1G:440:A:H3'	1:1G:442:C:C5	2.56	0.41
1:1G:735:C:H2'	1:1G:736:C:H6	1.85	0.41
1:1G:772:U:H2'	1:1G:773:G:O4'	2.20	0.41
1:1G:823:G:H2'	1:1G:824:C:C6	2.56	0.41
1:1G:1013:G:O2'	1:1G:1014:A:N7	2.38	0.41
1:1G:1227:A:C8	1:1G:1227:A:H3'	2.56	0.41
1:1G:1326:C:H2'	1:1G:1327:C:H6	1.83	0.41
3:22:47:LEU:HD22	3:22:47:LEU:HA	1.84	0.41
4:32:59:ARG:NH2	4:32:66:ARG:NH1	2.70	0.41
4:32:94:LEU:HA	4:32:97:LEU:HD12	2.01	0.41
5:42:40:ARG:HA	5:42:67:VAL:O	2.20	0.41
11:2A:59:TYR:CZ	11:2A:63:LEU:HD12	2.56	0.41
15:6A:61:GLY:O	15:6A:65:ARG:HG3	2.21	0.41
17:8A:74:LEU:HD22	17:8A:74:LEU:HA	1.85	0.41
23:2L:54:G:O2'	23:2L:55:5MU:H5"	2.21	0.41
26:14:909:A:C8	26:14:912:C:N4	2.89	0.41
26:14:1444(A):A:H2'	26:14:1444(A):A:N3	2.36	0.41
26:14:1447:G:H1'	26:14:1545(A):A:H1'	2.02	0.41
26:14:1514:U:H2'	26:14:1515:C:C6	2.56	0.41
26:14:2370:G:C6	26:14:2371:G:C6	3.08	0.41
30:39:155:LEU:HB2	30:39:189:THR:HG21	2.03	0.41
32:59:92:ILE:HB	32:59:93:GLY:H	1.64	0.41
36:35:50:ARG:HH11	36:35:50:ARG:CB	2.34	0.41
39:65:102:ALA:O	39:65:105:ALA:N	2.54	0.41
40:75:95:ARG:HD2	40:75:95:ARG:HA	1.92	0.41
47:E5:54:GLY:O	47:E5:57:PHE:N	2.52	0.41
48:F5:56:GLN:NE2	48:F5:83:GLU:HA	2.35	0.41
54:L5:19:ARG:HG2	54:L5:19:ARG:NH1	2.34	0.41
1:13:114:U:O2'	1:13:115:G:H5'	2.20	0.40
1:13:339:C:OP2	35:68:97:ARG:NH1	2.44	0.40
1:13:1004:A:H1'	1:13:1036:G:N2	2.34	0.40
1:13:1521:G:H2'	1:13:1522:U:C6	2.55	0.40
2:1E:165:VAL:HG23	2:1E:166:ASP:N	2.36	0.40
4:3E:89:THR:H	4:3E:92:VAL:CG2	2.34	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3I:53:ARG:HB2	12:3I:93:LEU:HD11	2.03	0.40
13:4I:39:ILE:HD12	13:4I:56:LEU:HD23	2.03	0.40
23:2K:24:C:H2'	23:2K:25:U:C6	2.56	0.40
24:3K:7:A:H2	24:3K:67:C:C2	2.39	0.40
24:3K:51:U:N3	24:3K:63:G:O6	2.54	0.40
26:1H:71:A:OP1	26:1H:72:U:H2'	2.21	0.40
26:1H:458:G:O2'	54:P8:39:ARG:HD3	2.21	0.40
26:1H:934:G:H2'	26:1H:935:C:C6	2.56	0.40
26:1H:1454:U:H5'	38:98:63:ARG:CZ	2.51	0.40
26:1H:1545(A):A:N7	26:1H:1546:C:O2	2.54	0.40
26:1H:1680:U:H2'	26:1H:1681:G:O4'	2.21	0.40
26:1H:2261:C:O4'	26:1H:2388:A:H1'	2.21	0.40
26:1H:2356:C:H2'	26:1H:2357:U:O4'	2.21	0.40
30:31:37:VAL:HG21	36:78:6:LEU:HD21	2.03	0.40
31:41:12:TYR:HA	31:41:16:ARG:HG3	2.04	0.40
31:41:67:LYS:NZ	51:M8:6:HIS:CE1	2.89	0.40
34:58:1:MET:HE1	41:C8:95:LEU:HD11	2.03	0.40
38:98:103:ARG:CZ	38:98:110:PRO:HD3	2.50	0.40
41:C8:78:THR:O	41:C8:81:HIS:N	2.54	0.40
45:G8:95:LYS:HE2	45:G8:97:ARG:HH22	1.86	0.40
47:I8:49:LYS:HE3	47:I8:49:LYS:HB2	1.89	0.40
48:J8:25:LYS:HE3	48:J8:25:LYS:HB3	1.90	0.40
48:J8:41:ARG:HH11	48:J8:41:ARG:CG	2.22	0.40
1:1G:23:C:H5	1:1G:561:U:O4	2.03	0.40
1:1G:589:C:C2	1:1G:650:G:N2	2.84	0.40
1:1G:625:G:H2'	1:1G:626:U:H6	1.85	0.40
1:1G:1194:U:H4'	5:42:22:GLY:O	2.21	0.40
3:22:28:GLN:CD	3:22:28:GLN:H	2.24	0.40
7:62:18:TYR:HB3	7:62:59:LEU:CD1	2.51	0.40
7:62:89:MET:HE2	7:62:89:MET:HB3	1.87	0.40
10:1A:12:ASP:HB3	10:1A:15:THR:HG23	2.03	0.40
17:8A:3:LYS:HB3	17:8A:61:GLU:HB3	2.03	0.40
26:14:357:A:C2	26:14:358:U:C2	3.09	0.40
26:14:1436:G:O2'	26:14:1477:A:H4'	2.21	0.40
26:14:1638:C:H4'	26:14:2710:C:O2	2.21	0.40
26:14:1751:C:H2'	26:14:1752:C:C6	2.56	0.40
26:14:1899:G:O2'	26:14:1900:A:H5"	2.22	0.40
26:14:2017:U:O2	52:J5:10:LYS:HB2	2.21	0.40
26:14:2187:G:C6	26:14:2188:C:N3	2.90	0.40
26:14:2735:G:H2'	26:14:2736:G:H8	1.86	0.40
26:14:2875:C:OP1	40:75:3:ARG:NH1	2.54	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:19:136:ILE:HG22	28:19:140:THR:OG1	2.21	0.40
28:19:176:ARG:HG2	28:19:176:ARG:HH11	1.85	0.40
29:29:64:LYS:HB3	29:29:65:GLY:H	1.59	0.40
29:29:112:GLY:O	29:29:159:HIS:HA	2.22	0.40
31:49:88:ILE:HA	31:49:88:ILE:HD12	1.88	0.40
32:59:41:MET:HB3	32:59:42:ARG:H	1.71	0.40
36:35:65:ARG:HB3	36:35:65:ARG:HH11	1.86	0.40
39:65:59:LYS:HZ3	39:65:61:ASN:HA	1.87	0.40
46:D5:123:ASP:OD1	46:D5:123:ASP:N	2.53	0.40
53:K5:36:LEU:HB3	53:K5:50:ARG:HH11	1.86	0.40
1:13:607:A:C2	16:7I:31:LYS:HG3	2.55	0.40
1:13:926:G:C6	1:13:1505:G:C5	3.09	0.40
1:13:929:G:C6	1:13:930:C:C4	3.10	0.40
1:13:1179:A:O3'	9:8E:103:THR:HG23	2.21	0.40
1:13:1285:A:H4'	1:13:1286:A:C5'	2.52	0.40
1:13:1342:C:H2'	1:13:1343:G:C8	2.56	0.40
1:13:1414:U:H2'	1:13:1415:G:H8	1.86	0.40
1:13:1442:G:C5	1:13:1446:A:C6	3.09	0.40
2:1E:100:GLY:HA2	2:1E:103:THR:OG1	2.21	0.40
3:2E:40:ARG:HG3	3:2E:40:ARG:NH1	2.34	0.40
4:3E:8:VAL:C	4:3E:10:ARG:N	2.75	0.40
4:3E:116:GLN:HE22	4:3E:157:LEU:HD11	1.87	0.40
17:8I:9:VAL:O	17:8I:21:VAL:HA	2.22	0.40
20:BI:14:LYS:O	20:BI:14:LYS:HG2	2.20	0.40
23:2K:20:G:C4	23:2K:58:A:C2	3.09	0.40
26:1H:251:A:C5	26:1H:252:G:H1'	2.56	0.40
26:1H:575:A:OP2	26:1H:2055:C:N4	2.54	0.40
26:1H:1331:A:O2'	26:1H:1332:G:C8	2.70	0.40
26:1H:1539:G:C2	26:1H:1540:G:C5	3.10	0.40
26:1H:2402:C:H5	26:1H:2415:G:H22	1.70	0.40
26:1H:2689:U:C6	26:1H:2689:U:H5'	2.56	0.40
26:1H:2745:C:H4'	32:51:142:GLY:O	2.21	0.40
35:68:75:SER:OG	40:B8:74:ARG:NH2	2.54	0.40
37:88:25:ASP:H	37:88:102:VAL:HG22	1.87	0.40
39:A8:74:ALA:HB1	39:A8:107:GLU:O	2.21	0.40
41:C8:25:TRP:O	41:C8:28:ARG:HB2	2.21	0.40
44:F8:57:LEU:N	44:F8:57:LEU:HD23	2.35	0.40
45:G8:40:GLU:HA	45:G8:41:GLY:HA2	1.82	0.40
45:G8:43:ASN:CG	45:G8:67:LEU:HD11	2.42	0.40
46:H8:126:VAL:HA	46:H8:164:ALA:H	1.85	0.40
48:J8:73:LEU:HD23	48:J8:73:LEU:HA	1.87	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:191(F):U:H2'	1:1G:191:G:H8	1.86	0.40
1:1G:254:G:OP1	17:8A:67:LYS:O	2.40	0.40
1:1G:763:G:H2'	1:1G:764:C:H6	1.86	0.40
1:1G:1149:C:P	9:82:9:ARG:HH11	2.44	0.40
1:1G:1307:U:H6	1:1G:1307:U:O5'	2.04	0.40
1:1G:1313:U:OP1	19:AA:7:LYS:N	2.54	0.40
2:12:55:PHE:HD1	2:12:55:PHE:HA	1.78	0.40
5:42:93:PRO:HG2	8:72:105:ARG:HE	1.86	0.40
9:82:53:VAL:HG11	9:82:92:TYR:CZ	2.56	0.40
16:7A:82:GLN:H	16:7A:82:GLN:HG2	1.61	0.40
23:2L:57:C:H2'	23:2L:58:A:C8	2.56	0.40
24:3L:5:G:H2'	24:3L:6:G:C8	2.56	0.40
26:14:2:G:H22	26:14:2900:A:H61	1.67	0.40
26:14:142:G:H2'	26:14:143:C:H6	1.86	0.40
26:14:236:C:H2'	26:14:237:C:C6	2.56	0.40
26:14:259:G:N2	26:14:621:A:H8	2.15	0.40
26:14:1337:G:H2'	26:14:1338:G:C8	2.54	0.40
26:14:1907:G:C2	26:14:1924:C:O2	2.75	0.40
26:14:2101:G:H2'	26:14:2102:U:O4'	2.22	0.40
26:14:2294:C:P	39:65:89:ARG:HH22	2.44	0.40
26:14:2299:G:C2	26:14:2318:G:H8	2.39	0.40
26:14:2304:G:H5'	31:49:132:ASN:HB2	2.03	0.40
26:14:2356:C:H4'	47:E5:20:ARG:HG3	2.02	0.40
26:14:2607:G:H2'	26:14:2608:G:O4'	2.22	0.40
26:14:2619:C:H2'	26:14:2620:C:H6	1.86	0.40
27:1J:51:G:C6	27:1J:52:A:H2	2.39	0.40
29:29:5:LEU:HD12	29:29:197:ILE:HG22	2.03	0.40
29:29:14:ILE:HB	40:75:14:TYR:CE2	2.56	0.40
29:29:108:SER:OG	29:29:163:GLU:HG2	2.22	0.40
29:29:134:ILE:O	29:29:135:HIS:C	2.59	0.40
30:39:132:VAL:HG22	30:39:133:ASN:H	1.85	0.40
30:39:161:GLU:O	30:39:165:ARG:HG3	2.22	0.40
33:69:3:VAL:HG12	33:69:38:LEU:HA	2.03	0.40
37:45:54:MET:HE1	37:45:104:PHE:HB3	2.03	0.40
39:65:29:PHE:O	39:65:35:ILE:HD12	2.21	0.40
40:75:106:SER:HA	40:75:110:ILE:HD12	2.03	0.40
44:B5:9:LEU:HA	49:G5:36:ARG:HH21	1.86	0.40
1:13:123:C:OP1	1:13:312:C:H5'	2.21	0.40
1:13:247:G:C2	1:13:248:C:C6	3.09	0.40
1:13:329:A:C5	1:13:332:G:C6	3.09	0.40
1:13:342:C:N3	1:13:347:G:N2	2.62	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:537:G:H2'	1:13:538:G:H8	1.87	0.40
1:13:607:A:O2'	1:13:608:A:H5'	2.20	0.40
1:13:610:G:H2'	1:13:611:A:O4'	2.21	0.40
1:13:632:A:C8	1:13:633:G:C4	3.09	0.40
1:13:644:G:H2'	1:13:645:C:O4'	2.22	0.40
1:13:1350:A:C6	1:13:1351:U:N3	2.90	0.40
1:13:1432:G:N2	1:13:1468:A:OP2	2.55	0.40
2:1E:11:LEU:HB3	2:1E:213:LEU:HD11	2.02	0.40
2:1E:149:LEU:HD23	2:1E:149:LEU:HA	1.91	0.40
4:3E:19:LEU:HB3	4:3E:21:LEU:HD21	2.02	0.40
8:7E:39:LEU:CD1	8:7E:111:ILE:HD11	2.50	0.40
11:2I:85:ARG:HD3	11:2I:113:PRO:HD3	2.01	0.40
11:2I:107:SER:O	11:2I:108:ILE:HG13	2.21	0.40
26:1H:65:C:H2'	26:1H:66:C:H6	1.86	0.40
26:1H:253:C:H2'	26:1H:254:G:O4'	2.22	0.40
26:1H:412:A:N3	26:1H:412:A:H2'	2.37	0.40
26:1H:459:U:H2'	26:1H:460:A:H8	1.86	0.40
26:1H:784:A:C8	26:1H:792:G:C5	3.10	0.40
26:1H:806:C:OP2	36:78:41:ARG:HD3	2.21	0.40
26:1H:1161:C:C6	26:1H:1161:C:H3'	2.56	0.40
26:1H:1337:G:C2	26:1H:1338:G:C4	3.10	0.40
26:1H:1582:C:HO2'	26:1H:1586:A:H8	1.68	0.40
26:1H:1635:G:C4	26:1H:1636:C:C5	3.10	0.40
26:1H:1727:U:H2'	26:1H:1728:G:O4'	2.22	0.40
26:1H:2126:A:H62	26:1H:2163:C:H1'	1.86	0.40
26:1H:2231:C:H2'	26:1H:2232:U:O4'	2.21	0.40
28:11:131:LEU:HB2	28:11:136:ILE:CD1	2.51	0.40
34:58:121:LYS:HB3	34:58:123:TYR:HE1	1.86	0.40
36:78:85:LEU:HA	36:78:88:LEU:HD22	2.02	0.40
38:98:63:ARG:NH2	38:98:80:PHE:HD2	2.19	0.40
49:K8:29:LYS:HG2	49:K8:57:ILE:HD13	2.04	0.40
51:M8:12:ALA:C	51:M8:24:THR:HG21	2.41	0.40
51:M8:16:CYS:HG	51:M8:36:CYS:HG	1.68	0.40
51:M8:37:SER:O	51:M8:41:PRO:HD2	2.22	0.40
53:O8:27:LYS:H	53:O8:27:LYS:HZ2	1.68	0.40
1:1G:32:A:C2	1:1G:33:A:C4	3.10	0.40
1:1G:266:G:H2'	1:1G:266:G:N3	2.37	0.40
1:1G:352:C:P	58:1G:1717:HOH:O	2.79	0.40
1:1G:485:G:HO2'	1:1G:486:U:P	2.43	0.40
1:1G:545:C:H2'	1:1G:546:G:O4'	2.22	0.40
1:1G:994:A:H2'	1:1G:995:C:H6	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1068:G:N3	1:1G:1191:A:C2	2.89	0.40
4:32:60:GLU:HG2	4:32:202:LEU:HB2	2.03	0.40
8:72:31:PHE:CE2	8:72:35:ILE:HD11	2.56	0.40
9:82:16:ARG:O	9:82:63:ILE:HG23	2.20	0.40
10:1A:65:LEU:HD12	14:5A:55:GLY:O	2.21	0.40
12:3A:78:GLN:HG3	12:3A:81:SER:CB	2.51	0.40
26:14:71:A:C2	44:B5:31:HIS:NE2	2.78	0.40
26:14:221:A:C4	26:14:266:G:N7	2.89	0.40
26:14:310:A:OP1	45:C5:17:SER:O	2.40	0.40
26:14:1032:A:H2	26:14:1122:G:H1	1.69	0.40
26:14:1625:C:H2'	26:14:1626:G:H5'	2.04	0.40
26:14:1639:U:P	58:14:3529:HOH:O	2.78	0.40
26:14:1657:C:H2'	26:14:1658:C:H6	1.86	0.40
26:14:1795:C:H2'	26:14:1796:U:C6	2.56	0.40
26:14:2307:G:HO2'	26:14:2308:G:P	2.35	0.40
26:14:2392:A:C2	26:14:2424:C:N4	2.79	0.40
26:14:2784:C:H2'	26:14:2785:C:C6	2.56	0.40
28:19:93:ALA:HB3	28:19:105:ILE:HG22	2.04	0.40
28:19:267:SER:C	28:19:269:PHE:H	2.24	0.40
29:29:47:VAL:O	29:29:47:VAL:HG12	2.21	0.40
31:49:143:GLU:OE2	31:49:143:GLU:N	2.54	0.40
33:69:76:THR:HG23	33:69:77:LEU:N	2.35	0.40
38:55:37:THR:OG1	38:55:39:PRO:HD2	2.20	0.40
38:55:79:LEU:HA	38:55:83:ILE:HB	2.02	0.40
39:65:66:ALA:HA	39:65:69:VAL:CG1	2.52	0.40
42:95:8:GLY:O	42:95:10:LYS:HE3	2.21	0.40
42:95:76:LYS:NZ	42:95:82:ARG:HH21	2.19	0.40
44:B5:27:THR:HG22	44:B5:80:ILE:HG22	2.02	0.40
54:L5:29:LYS:HA	54:L5:32:LYS:HB2	2.03	0.40
1:13:51:A:C6	1:13:353:A:C2	3.10	0.40
1:13:277:C:H2'	1:13:278:G:C8	2.55	0.40
1:13:339:C:H2'	1:13:340:U:H6	1.86	0.40
1:13:560:U:H4'	1:13:561:U:H5"	2.02	0.40
1:13:989:C:H42	1:13:1216:G:H1	1.68	0.40
1:13:1024:G:OP1	1:13:1024:G:H4'	2.20	0.40
1:13:1064:G:H4'	1:13:1065:U:OP1	2.21	0.40
1:13:1180:A:H5"	1:13:1181:G:OP1	2.21	0.40
1:13:1234:C:O2'	1:13:1235:U:H5'	2.22	0.40
2:1E:162:ILE:HD13	2:1E:183:PRO:O	2.21	0.40
5:4E:101:ILE:HD13	5:4E:101:ILE:HA	1.79	0.40
8:7E:120:THR:H	8:7E:123:GLU:HB2	1.87	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:7E:121:ASP:O	8:7E:125:ARG:HB2	2.21	0.40
11:2I:41:THR:HG21	11:2I:71:LYS:HB3	2.04	0.40
15:6I:6:GLU:CD	15:6I:6:GLU:N	2.74	0.40
18:9I:35:ARG:HE	18:9I:35:ARG:HB2	1.64	0.40
18:9I:52:PRO:HB2	18:9I:54:ARG:HG2	2.03	0.40
20:BI:14:LYS:HE2	20:BI:14:LYS:HB3	1.78	0.40
23:2K:69:C:H2'	23:2K:70:C:C6	2.56	0.40
24:3K:6:G:H22	24:3K:67:C:N4	2.19	0.40
26:1H:445:C:OP1	41:C8:2:PRO:HA	2.22	0.40
26:1H:512:G:N7	58:1H:4190:HOH:O	2.54	0.40
26:1H:536:A:OP1	41:C8:53:ARG:NH1	2.54	0.40
26:1H:671:C:O2'	26:1H:672:C:H5'	2.21	0.40
26:1H:686:G:H1	54:P8:16:HIS:CD2	2.40	0.40
26:1H:775:G:O5'	26:1H:777:A:H1'	2.21	0.40
26:1H:2377:A:H2'	26:1H:2378:A:C8	2.56	0.40
26:1H:2562:U:C1'	35:68:23:ARG:HD3	2.52	0.40
26:1H:2593:U:O2'	26:1H:2594:C:H5'	2.21	0.40
27:16:60:C:C2	27:16:61:G:C8	3.09	0.40
40:B8:64:ARG:HH11	40:B8:64:ARG:HD3	1.76	0.40
41:C8:75:ASN:HB2	41:C8:78:THR:OG1	2.21	0.40
46:H8:7:ALA:HB3	46:H8:61:LEU:CB	2.50	0.40
48:J8:50:ARG:HE	48:J8:50:ARG:HB3	1.76	0.40
48:J8:83:GLU:CG	48:J8:85:LEU:HB2	2.51	0.40
50:L8:50:VAL:CG2	50:L8:54:VAL:HG11	2.51	0.40
51:M8:13:ARG:CA	51:M8:24:THR:HG21	2.51	0.40
1:1G:265:G:H5'	17:8A:64:PRO:O	2.21	0.40
1:1G:413:G:H2'	1:1G:428:G:H22	1.84	0.40
1:1G:730:G:C5	1:1G:731:G:H1'	2.56	0.40
1:1G:769:G:H4'	1:1G:1513:A:H4'	2.04	0.40
1:1G:1158:C:N3	1:1G:1160:G:C8	2.89	0.40
1:1G:1171:G:H2'	1:1G:1172:C:H6	1.84	0.40
1:1G:1227:A:H3'	1:1G:1227:A:H8	1.87	0.40
1:1G:1330:U:H5'	13:4A:24:GLY:H	1.86	0.40
1:1G:1478:C:H2'	1:1G:1479:C:C6	2.56	0.40
7:62:60:LYS:HA	7:62:60:LYS:HD2	1.88	0.40
7:62:65:ALA:HB3	7:62:124:LEU:HD22	2.03	0.40
16:7A:55:ARG:HA	16:7A:55:ARG:HE	1.87	0.40
23:2L:73:A:C6	23:2L:74:A:C6	3.10	0.40
24:3L:12:U:C4	24:3L:13:C:C4	3.09	0.40
26:14:270(D):C:H2'	26:14:270(E):G:C8	2.56	0.40
26:14:458:G:O2'	54:L5:39:ARG:HD3	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1287:A:H5"	26:14:1288:U:OP2	2.21	0.40
26:14:1774:C:H6	26:14:1774:C:O5'	2.05	0.40
26:14:2388:A:H2'	26:14:2389:G:H5'	2.02	0.40
26:14:2844:G:C6	26:14:2845:G:C4	3.09	0.40
27:1J:38:C:O4'	39:65:95:HIS:CE1	2.75	0.40
32:59:26:VAL:CG1	32:59:33:LEU:H	2.34	0.40
34:15:99:LEU:HD23	34:15:99:LEU:HA	1.95	0.40
39:65:3:ARG:NH2	39:65:4:LEU:HD12	2.36	0.40
48:F5:91:LYS:HE2	48:F5:91:LYS:HB2	1.54	0.40
51:I5:10:VAL:HA	51:I5:11:PRO:HD2	1.82	0.40
52:J5:36:CYS:HG	52:J5:49:CYS:CB	2.34	0.40
1:13:407:G:O2'	4:3E:116:GLN:HG3	2.21	0.40
1:13:628:G:C2	1:13:629:G:C4	3.10	0.40
1:13:973:G:H4'	10:1I:54:PHE:O	2.22	0.40
1:13:975:A:C4'	1:13:976:G:H5"	2.46	0.40
1:13:1022:G:H2'	1:13:1023:G:C8	2.57	0.40
1:13:1079:G:H2'	1:13:1080:A:C8	2.57	0.40
1:13:1171:G:O5'	1:13:1171:G:H8	2.04	0.40
1:13:1446:A:O2'	40:B8:125:ARG:NH2	2.55	0.40
2:1E:7:VAL:HG21	2:1E:217:ARG:NH1	2.37	0.40
3:2E:124:ILE:HG12	3:2E:130:VAL:HG22	2.04	0.40
3:2E:131:ARG:HG2	3:2E:166:GLU:OE2	2.22	0.40
8:7E:41:ARG:NH1	8:7E:123:GLU:OE1	2.54	0.40
8:7E:98:LYS:H	8:7E:98:LYS:HG3	1.74	0.40
13:4I:16:ASP:OD1	13:4I:16:ASP:N	2.55	0.40
19:AI:40:ILE:O	19:AI:41:VAL:HG22	2.22	0.40
26:1H:222:A:H8	26:1H:222:A:H2'	1.80	0.40
26:1H:270(X):G:C6	26:1H:270(Y):G:C6	3.09	0.40
26:1H:280:C:C2	26:1H:361:G:N2	2.90	0.40
26:1H:1050:A:C8	26:1H:2751:G:C5	3.09	0.40
26:1H:1194:A:OP2	26:1H:1194:A:C8	2.67	0.40
26:1H:1215:G:C5	26:1H:1216:G:C8	3.09	0.40
26:1H:1413:G:N2	26:1H:1589:C:O2	2.44	0.40
26:1H:1668:A:C5	26:1H:1674:G:C5	3.10	0.40
26:1H:1682:G:C6	26:1H:1683:C:C4	3.10	0.40
26:1H:1918:A:N3	26:1H:1919:A:N6	2.67	0.40
26:1H:2248:C:C5	26:1H:2249:U:C4	3.09	0.40
26:1H:2263:C:H2'	26:1H:2264:C:H6	1.86	0.40
26:1H:2367:G:H2'	26:1H:2368:C:C6	2.56	0.40
26:1H:2555:U:H5"	26:1H:2556:C:OP2	2.22	0.40
26:1H:2729:G:H2'	26:1H:2730:C:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2801:A:H5'	26:1H:2895:U:O2'	2.22	0.40
30:31:8:GLN:CD	30:31:8:GLN:H	2.24	0.40
31:41:59:GLU:O	31:41:63:ILE:HG23	2.21	0.40
32:51:72:ILE:O	32:51:76:VAL:HG23	2.22	0.40
33:61:29:TYR:HD2	33:61:30:LEU:HD23	1.87	0.40
38:98:8:ARG:NH1	38:98:39:PRO:HB3	2.36	0.40
38:98:96:ARG:NH2	38:98:117:VAL:HG23	2.36	0.40
40:B8:78:LEU:HD12	40:B8:79:HIS:CD2	2.57	0.40
42:D8:72:VAL:O	42:D8:72:VAL:HG23	2.22	0.40
43:E8:74:ALA:HA	43:E8:104:THR:O	2.21	0.40
44:F8:28:PHE:CD1	44:F8:28:PHE:N	2.89	0.40
45:G8:85:VAL:HG23	45:G8:96:ILE:O	2.21	0.40
1:1G:674:G:N2	1:1G:717:C:O2	2.55	0.40
1:1G:791:G:N1	1:1G:792:A:N6	2.70	0.40
1:1G:926:G:C6	1:1G:1505:G:C5	3.09	0.40
1:1G:1096:C:H2'	1:1G:1097:C:C6	2.57	0.40
1:1G:1288:A:H1'	1:1G:1352:C:O2'	2.21	0.40
4:32:138:TYR:CD2	4:32:138:TYR:C	2.94	0.40
5:42:101:ILE:H	5:42:101:ILE:HD13	1.87	0.40
6:52:33:TYR:CZ	6:52:78:GLU:HG3	2.56	0.40
8:72:1:MET:SD	8:72:1:MET:N	2.75	0.40
15:6A:58:MET:O	15:6A:62:GLN:N	2.37	0.40
20:BA:59:ALA:HB3	20:BA:84:LEU:HD11	2.03	0.40
24:3L:1:G:H8	24:3L:1:G:HO5'	1.70	0.40
26:14:30:G:C5	26:14:31:C:C4	3.09	0.40
26:14:128:C:H2'	26:14:129:C:C6	2.56	0.40
26:14:191:A:H1'	26:14:679:C:H1'	2.02	0.40
26:14:869:G:N2	26:14:870:A:H1'	2.37	0.40
26:14:945:A:C4	26:14:2448:A:C2	3.08	0.40
26:14:1026:U:H6	26:14:1026:U:H5"	1.87	0.40
26:14:1111:A:C4'	32:59:3:ARG:HH11	2.33	0.40
26:14:1469:A:H2'	26:14:1470:G:O4'	2.22	0.40
26:14:1639:U:C2'	26:14:1640:C:H5'	2.51	0.40
26:14:2489:G:C6	26:14:2490:G:N7	2.89	0.40
26:14:2859:G:H3'	26:14:2859:G:C8	2.57	0.40
30:39:64:ILE:HG13	30:39:65:TRP:NE1	2.36	0.40
46:D5:54:HIS:HB3	46:D5:101:PRO:HG3	2.03	0.40
46:D5:94:GLU:HA	46:D5:95:PRO:HD3	1.86	0.40
46:D5:170:THR:C	46:D5:172:ALA:H	2.24	0.40
47:E5:24:LYS:O	47:E5:25:ARG:HD3	2.21	0.40
50:H5:13:ILE:HD12	50:H5:13:ILE:H	1.87	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2137:C:OP1	1:1G:999:U:O2'[4_555]	2.14	0.06

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
2	12	235/256 (92%)	198 (84%)	34 (14%)	3 (1%)	12 38
2	1E	235/256 (92%)	199 (85%)	30 (13%)	6 (3%)	5 22
3	22	204/239 (85%)	178 (87%)	26 (13%)	0	100 100
3	2E	203/239 (85%)	186 (92%)	14 (7%)	3 (2%)	10 35
4	32	206/209 (99%)	179 (87%)	27 (13%)	0	100 100
4	3E	206/209 (99%)	189 (92%)	14 (7%)	3 (2%)	10 35
5	42	149/162 (92%)	139 (93%)	9 (6%)	1 (1%)	22 52
5	4E	149/162 (92%)	139 (93%)	9 (6%)	1 (1%)	22 52
6	52	99/101 (98%)	95 (96%)	4 (4%)	0	100 100
6	5E	99/101 (98%)	94 (95%)	5 (5%)	0	100 100
7	62	153/156 (98%)	143 (94%)	10 (6%)	0	100 100
7	6E	153/156 (98%)	142 (93%)	11 (7%)	0	100 100
8	72	136/138 (99%)	125 (92%)	11 (8%)	0	100 100
8	7E	136/138 (99%)	126 (93%)	9 (7%)	1 (1%)	22 52
9	82	125/128 (98%)	116 (93%)	9 (7%)	0	100 100
9	8E	125/128 (98%)	110 (88%)	15 (12%)	0	100 100
10	1A	97/105 (92%)	88 (91%)	9 (9%)	0	100 100
10	1I	97/105 (92%)	88 (91%)	9 (9%)	0	100 100
11	2A	114/129 (88%)	103 (90%)	10 (9%)	1 (1%)	17 47

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
11	2I	114/129 (88%)	101 (89%)	12 (10%)	1 (1%)	17	47
12	3A	123/132 (93%)	101 (82%)	18 (15%)	4 (3%)	4	17
12	3I	123/132 (93%)	104 (85%)	19 (15%)	0	100	100
13	4A	115/126 (91%)	95 (83%)	19 (16%)	1 (1%)	17	47
13	4I	116/126 (92%)	95 (82%)	20 (17%)	1 (1%)	17	47
14	5A	56/61 (92%)	47 (84%)	8 (14%)	1 (2%)	8	30
14	5I	58/61 (95%)	49 (84%)	7 (12%)	2 (3%)	3	17
15	6A	86/89 (97%)	78 (91%)	8 (9%)	0	100	100
15	6I	86/89 (97%)	77 (90%)	9 (10%)	0	100	100
16	7A	82/88 (93%)	78 (95%)	4 (5%)	0	100	100
16	7I	82/88 (93%)	78 (95%)	4 (5%)	0	100	100
17	8A	98/105 (93%)	89 (91%)	9 (9%)	0	100	100
17	8I	98/105 (93%)	95 (97%)	3 (3%)	0	100	100
18	9A	70/88 (80%)	57 (81%)	12 (17%)	1 (1%)	11	36
18	9I	70/88 (80%)	62 (89%)	6 (9%)	2 (3%)	4	20
19	AA	76/93 (82%)	60 (79%)	14 (18%)	2 (3%)	5	22
19	AI	79/93 (85%)	68 (86%)	8 (10%)	3 (4%)	3	15
20	BA	97/106 (92%)	84 (87%)	12 (12%)	1 (1%)	15	45
20	BI	97/106 (92%)	84 (87%)	12 (12%)	1 (1%)	15	45
21	1B	23/27 (85%)	21 (91%)	2 (9%)	0	100	100
21	1F	23/27 (85%)	22 (96%)	1 (4%)	0	100	100
28	11	270/276 (98%)	247 (92%)	17 (6%)	6 (2%)	6	25
28	19	271/276 (98%)	252 (93%)	16 (6%)	3 (1%)	14	42
29	21	203/206 (98%)	166 (82%)	29 (14%)	8 (4%)	3	15
29	29	203/206 (98%)	160 (79%)	32 (16%)	11 (5%)	2	9
30	31	200/210 (95%)	183 (92%)	16 (8%)	1 (0%)	29	60
30	39	206/210 (98%)	174 (84%)	28 (14%)	4 (2%)	8	29
31	41	179/182 (98%)	155 (87%)	20 (11%)	4 (2%)	6	25
31	49	179/182 (98%)	155 (87%)	22 (12%)	2 (1%)	14	42
32	51	172/180 (96%)	148 (86%)	19 (11%)	5 (3%)	4	20
32	59	167/180 (93%)	136 (81%)	28 (17%)	3 (2%)	8	30

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
33	61	144/148 (97%)	118 (82%)	21 (15%)	5 (4%)	3	17
33	69	144/148 (97%)	116 (81%)	25 (17%)	3 (2%)	7	26
34	15	136/140 (97%)	122 (90%)	14 (10%)	0	100	100
34	58	136/140 (97%)	114 (84%)	19 (14%)	3 (2%)	6	25
35	25	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
35	68	120/122 (98%)	112 (93%)	8 (7%)	0	100	100
36	35	148/150 (99%)	110 (74%)	35 (24%)	3 (2%)	7	27
36	78	148/150 (99%)	115 (78%)	25 (17%)	8 (5%)	2	9
37	45	139/141 (99%)	113 (81%)	22 (16%)	4 (3%)	4	20
37	88	134/141 (95%)	112 (84%)	18 (13%)	4 (3%)	4	19
38	55	115/118 (98%)	108 (94%)	7 (6%)	0	100	100
38	98	116/118 (98%)	100 (86%)	15 (13%)	1 (1%)	17	47
39	65	109/112 (97%)	87 (80%)	19 (17%)	3 (3%)	5	21
39	A8	109/112 (97%)	89 (82%)	19 (17%)	1 (1%)	17	47
40	75	135/146 (92%)	113 (84%)	21 (16%)	1 (1%)	22	52
40	B8	135/146 (92%)	122 (90%)	13 (10%)	0	100	100
41	85	115/118 (98%)	107 (93%)	7 (6%)	1 (1%)	17	47
41	C8	115/118 (98%)	108 (94%)	6 (5%)	1 (1%)	17	47
42	95	99/101 (98%)	81 (82%)	15 (15%)	3 (3%)	4	19
42	D8	99/101 (98%)	90 (91%)	8 (8%)	1 (1%)	15	45
43	A5	111/113 (98%)	103 (93%)	8 (7%)	0	100	100
43	E8	111/113 (98%)	103 (93%)	8 (7%)	0	100	100
44	B5	90/96 (94%)	82 (91%)	7 (8%)	1 (1%)	14	42
44	F8	92/96 (96%)	83 (90%)	6 (6%)	3 (3%)	4	17
45	C5	102/110 (93%)	73 (72%)	24 (24%)	5 (5%)	2	11
45	G8	102/110 (93%)	84 (82%)	14 (14%)	4 (4%)	3	15
46	D5	177/206 (86%)	136 (77%)	31 (18%)	10 (6%)	2	9
46	H8	173/206 (84%)	142 (82%)	27 (16%)	4 (2%)	6	24
47	E5	74/85 (87%)	68 (92%)	6 (8%)	0	100	100
47	I8	78/85 (92%)	66 (85%)	11 (14%)	1 (1%)	12	38
48	F5	95/98 (97%)	83 (87%)	11 (12%)	1 (1%)	14	42

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
48	J8	95/98 (97%)	88 (93%)	7 (7%)	0	100	100
49	G5	64/72 (89%)	57 (89%)	5 (8%)	2 (3%)	4	19
49	K8	65/72 (90%)	56 (86%)	7 (11%)	2 (3%)	4	19
50	H5	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
50	L8	55/60 (92%)	49 (89%)	5 (9%)	1 (2%)	8	30
51	I5	61/71 (86%)	32 (52%)	27 (44%)	2 (3%)	4	17
51	M8	64/71 (90%)	45 (70%)	16 (25%)	3 (5%)	2	12
52	J5	54/60 (90%)	49 (91%)	5 (9%)	0	100	100
52	N8	56/60 (93%)	52 (93%)	4 (7%)	0	100	100
53	K5	43/54 (80%)	29 (67%)	14 (33%)	0	100	100
53	O8	43/54 (80%)	31 (72%)	12 (28%)	0	100	100
54	L5	44/49 (90%)	43 (98%)	1 (2%)	0	100	100
54	P8	43/49 (88%)	41 (95%)	2 (5%)	0	100	100
55	M5	58/65 (89%)	46 (79%)	11 (19%)	1 (2%)	9	32
55	Q8	59/65 (91%)	39 (66%)	16 (27%)	4 (7%)	1	6
All	All	11325/12054 (94%)	9841 (87%)	1312 (12%)	172 (2%)	10	35

All (172) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
28	11	239	ARG
31	41	14	GLU
44	F8	68	ARG
49	K8	47	ASN
49	K8	48	HIS
55	Q8	49	VAL
29	29	25	VAL
30	39	124	LEU
45	C5	29	GLU
46	D5	53	ILE
46	D5	165	VAL
46	D5	171	ILE
48	F5	30	VAL
51	I5	5	ILE
8	7E	86	ILE
18	9I	22	VAL
29	21	78	LEU

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Mol	Chain	Res	Type
32	51	92	ILE
36	78	107	LYS
37	88	66	ILE
37	88	79	LEU
41	C8	93	LYS
46	H8	165	VAL
55	Q8	27	THR
55	Q8	44	LYS
55	Q8	55	ALA
2	12	7	VAL
2	12	71	VAL
12	3A	18	VAL
12	3A	26	ALA
19	AA	11	VAL
28	19	33	LEU
29	29	81	ILE
30	39	84	VAL
30	39	123	LEU
36	35	15	ARG
37	45	135	ASP
39	65	89	ARG
46	D5	105	VAL
4	3E	31	CYS
13	4I	83	ASP
28	11	272	ALA
29	21	60	ASN
31	41	96	ARG
33	61	116	LEU
33	61	145	VAL
34	58	97	ARG
34	58	128	HIS
36	78	6	LEU
38	98	11	ASN
46	H8	6	LYS
11	2A	101	SER
28	19	237	GLU
29	29	9	VAL
29	29	24	THR
29	29	51	PHE
30	39	132	VAL
36	35	6	LEU
36	35	35	HIS

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Mol	Chain	Res	Type
39	65	87	PHE
49	G5	47	ASN
4	3E	81	GLU
4	3E	155	LEU
28	11	237	GLU
28	11	240	ALA
29	21	56	PRO
29	21	118	LYS
31	41	97	ASP
36	78	19	VAL
36	78	23	PRO
39	A8	4	LEU
44	F8	40	LYS
45	G8	81	LYS
45	G8	84	ARG
51	M8	34	GLU
5	42	85	GLY
14	5A	29	ARG
29	29	26	ILE
29	29	90	THR
31	49	47	LYS
32	59	92	ILE
33	69	111	PRO
33	69	145	VAL
37	45	18	LYS
39	65	55	ALA
41	85	93	LYS
42	95	85	LYS
45	C5	17	SER
46	D5	116	VAL
46	D5	161	VAL
49	G5	48	HIS
55	M5	31	HIS
2	1E	156	LYS
2	1E	168	THR
3	2E	15	THR
3	2E	107	GLN
31	41	5	VAL
32	51	10	PRO
32	51	83	TYR
33	61	83	ALA
34	58	22	THR

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Mol	Chain	Res	Type
36	78	16	ARG
37	88	134	ARG
45	G8	83	THR
47	I8	83	PRO
50	L8	54	VAL
29	29	62	PRO
37	45	78	PRO
46	D5	93	ASP
2	1E	135	GLN
3	2E	4	LYS
5	4E	115	VAL
14	5I	13	THR
14	5I	14	PRO
32	51	12	PRO
33	61	12	LEU
33	61	133	HIS
36	78	15	ARG
20	BA	71	THR
40	75	94	ALA
42	95	72	VAL
2	1E	230	VAL
11	2I	82	VAL
19	AI	41	VAL
29	21	55	ASN
44	F8	67	GLY
29	29	91	VAL
37	45	27	VAL
51	I5	33	VAL
20	BI	63	ILE
29	21	72	VAL
36	78	95	VAL
28	19	3	VAL
31	49	5	VAL
44	B5	51	VAL
45	C5	76	CYS
45	C5	85	VAL
2	1E	229	VAL
18	9I	39	VAL
28	11	3	VAL
30	31	132	VAL
46	H8	53	ILE
46	H8	141	VAL

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Mol	Chain	Res	Type
51	M8	50	VAL
2	12	39	ILE
12	3A	47	LYS
13	4A	84	ILE
29	29	59	VAL
2	1E	239	VAL
19	AI	9	VAL
19	AI	67	VAL
29	21	4	ILE
32	51	127	GLU
36	78	7	ARG
37	88	27	VAL
51	M8	5	ILE
12	3A	96	VAL
19	AA	67	VAL
29	29	56	PRO
33	69	144	VAL
42	95	99	ILE
46	D5	61	LEU
46	D5	141	VAL
28	11	123	ALA
42	D8	49	THR
45	G8	76	CYS
18	9A	22	VAL
32	59	8	PRO
32	59	167	GLU
45	C5	3	VAL
46	D5	176	PRO
29	21	147	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
2	12	205/220 (93%)	167 (82%)	38 (18%)	1 6
2	1E	205/220 (93%)	167 (82%)	38 (18%)	1 6

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	22	160/188 (85%)	132 (82%)	28 (18%)	2	7
3	2E	159/188 (85%)	131 (82%)	28 (18%)	2	7
4	32	180/181 (99%)	148 (82%)	32 (18%)	2	7
4	3E	180/181 (99%)	147 (82%)	33 (18%)	1	6
5	42	116/123 (94%)	93 (80%)	23 (20%)	1	5
5	4E	116/123 (94%)	87 (75%)	29 (25%)	0	1
6	52	90/90 (100%)	76 (84%)	14 (16%)	2	10
6	5E	90/90 (100%)	78 (87%)	12 (13%)	4	14
7	62	126/127 (99%)	105 (83%)	21 (17%)	2	8
7	6E	126/127 (99%)	103 (82%)	23 (18%)	1	6
8	72	119/119 (100%)	99 (83%)	20 (17%)	2	8
8	7E	119/119 (100%)	97 (82%)	22 (18%)	1	6
9	82	98/99 (99%)	81 (83%)	17 (17%)	2	7
9	8E	98/99 (99%)	76 (78%)	22 (22%)	1	3
10	1A	89/92 (97%)	81 (91%)	8 (9%)	9	30
10	1I	89/92 (97%)	78 (88%)	11 (12%)	4	17
11	2A	88/99 (89%)	76 (86%)	12 (14%)	3	14
11	2I	88/99 (89%)	75 (85%)	13 (15%)	3	11
12	3A	104/109 (95%)	81 (78%)	23 (22%)	1	3
12	3I	104/109 (95%)	88 (85%)	16 (15%)	2	10
13	4A	94/101 (93%)	79 (84%)	15 (16%)	2	9
13	4I	94/101 (93%)	75 (80%)	19 (20%)	1	4
14	5A	48/50 (96%)	41 (85%)	7 (15%)	3	12
14	5I	49/50 (98%)	37 (76%)	12 (24%)	0	2
15	6A	79/80 (99%)	70 (89%)	9 (11%)	5	20
15	6I	79/80 (99%)	71 (90%)	8 (10%)	7	25
16	7A	72/74 (97%)	58 (81%)	14 (19%)	1	5
16	7I	72/74 (97%)	56 (78%)	16 (22%)	1	3
17	8A	95/97 (98%)	83 (87%)	12 (13%)	4	16
17	8I	95/97 (98%)	81 (85%)	14 (15%)	3	11
18	9A	63/77 (82%)	49 (78%)	14 (22%)	1	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	9I	63/77 (82%)	53 (84%)	10 (16%)	2	9
19	AA	67/80 (84%)	52 (78%)	15 (22%)	1	3
19	AI	70/80 (88%)	49 (70%)	21 (30%)	0	0
20	BA	76/82 (93%)	61 (80%)	15 (20%)	1	5
20	BI	76/82 (93%)	62 (82%)	14 (18%)	1	6
21	1B	20/22 (91%)	18 (90%)	2 (10%)	7	25
21	1F	20/22 (91%)	19 (95%)	1 (5%)	24	54
28	11	214/218 (98%)	171 (80%)	43 (20%)	1	4
28	19	214/218 (98%)	180 (84%)	34 (16%)	2	9
29	21	165/166 (99%)	122 (74%)	43 (26%)	0	1
29	29	165/166 (99%)	134 (81%)	31 (19%)	1	5
30	31	161/166 (97%)	130 (81%)	31 (19%)	1	5
30	39	165/166 (99%)	132 (80%)	33 (20%)	1	4
31	41	155/156 (99%)	128 (83%)	27 (17%)	2	7
31	49	155/156 (99%)	132 (85%)	23 (15%)	3	11
32	51	145/148 (98%)	114 (79%)	31 (21%)	1	3
32	59	141/148 (95%)	112 (79%)	29 (21%)	1	4
33	61	122/124 (98%)	88 (72%)	34 (28%)	0	1
33	69	122/124 (98%)	93 (76%)	29 (24%)	0	2
34	15	117/119 (98%)	95 (81%)	22 (19%)	1	5
34	58	117/119 (98%)	94 (80%)	23 (20%)	1	5
35	25	100/100 (100%)	77 (77%)	23 (23%)	1	2
35	68	100/100 (100%)	84 (84%)	16 (16%)	2	9
36	35	116/116 (100%)	76 (66%)	40 (34%)	0	0
36	78	116/116 (100%)	80 (69%)	36 (31%)	0	0
37	45	111/111 (100%)	84 (76%)	27 (24%)	0	2
37	88	104/111 (94%)	81 (78%)	23 (22%)	1	3
38	55	100/101 (99%)	78 (78%)	22 (22%)	1	3
38	98	101/101 (100%)	81 (80%)	20 (20%)	1	5
39	65	87/88 (99%)	64 (74%)	23 (26%)	0	1
39	A8	87/88 (99%)	60 (69%)	27 (31%)	0	0

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
40	75	120/127 (94%)	92 (77%)	28 (23%)	1	2
40	B8	120/127 (94%)	89 (74%)	31 (26%)	0	1
41	85	93/94 (99%)	80 (86%)	13 (14%)	3	13
41	C8	93/94 (99%)	76 (82%)	17 (18%)	1	6
42	95	82/82 (100%)	57 (70%)	25 (30%)	0	0
42	D8	82/82 (100%)	61 (74%)	21 (26%)	0	1
43	A5	92/92 (100%)	78 (85%)	14 (15%)	3	10
43	E8	92/92 (100%)	72 (78%)	20 (22%)	1	3
44	B5	74/78 (95%)	57 (77%)	17 (23%)	1	2
44	F8	76/78 (97%)	59 (78%)	17 (22%)	1	3
45	C5	85/91 (93%)	61 (72%)	24 (28%)	0	1
45	G8	85/91 (93%)	67 (79%)	18 (21%)	1	4
46	D5	158/179 (88%)	131 (83%)	27 (17%)	2	7
46	H8	154/179 (86%)	123 (80%)	31 (20%)	1	4
47	E5	61/67 (91%)	52 (85%)	9 (15%)	3	11
47	I8	61/67 (91%)	52 (85%)	9 (15%)	3	11
48	F5	82/83 (99%)	67 (82%)	15 (18%)	1	6
48	J8	82/83 (99%)	65 (79%)	17 (21%)	1	4
49	G5	62/67 (92%)	53 (86%)	9 (14%)	3	12
49	K8	62/67 (92%)	41 (66%)	21 (34%)	0	0
50	H5	51/52 (98%)	42 (82%)	9 (18%)	2	7
50	L8	49/52 (94%)	40 (82%)	9 (18%)	1	6
51	I5	57/63 (90%)	47 (82%)	10 (18%)	2	7
51	M8	59/63 (94%)	44 (75%)	15 (25%)	0	1
52	J5	48/52 (92%)	37 (77%)	11 (23%)	1	2
52	N8	51/52 (98%)	38 (74%)	13 (26%)	0	1
53	K5	44/52 (85%)	32 (73%)	12 (27%)	0	1
53	O8	44/52 (85%)	26 (59%)	18 (41%)	0	0
54	L5	39/42 (93%)	32 (82%)	7 (18%)	2	6
54	P8	38/42 (90%)	32 (84%)	6 (16%)	2	9
55	M5	49/55 (89%)	37 (76%)	12 (24%)	0	2

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
55	Q8	50/55 (91%)	32 (64%)	18 (36%)	0 0
All	All	9556/9998 (96%)	7642 (80%)	1914 (20%)	1 4

All (1914) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	1E	6	THR
2	1E	8	LYS
2	1E	9	GLU
2	1E	15	VAL
2	1E	17	PHE
2	1E	24	TRP
2	1E	28	PHE
2	1E	55	PHE
2	1E	63	MET
2	1E	71	VAL
2	1E	74	LYS
2	1E	81	VAL
2	1E	96	ARG
2	1E	107	THR
2	1E	111	ARG
2	1E	113	HIS
2	1E	122	PHE
2	1E	130	ARG
2	1E	136	VAL
2	1E	145	LEU
2	1E	155	LEU
2	1E	157	ARG
2	1E	160	ASP
2	1E	162	ILE
2	1E	164	VAL
2	1E	170	GLU
2	1E	172	ILE
2	1E	178	ARG
2	1E	190	THR
2	1E	196	LEU
2	1E	200	ILE
2	1E	209	ARG
2	1E	213	LEU
2	1E	215	LEU
2	1E	221	LEU
2	1E	226	ARG

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Mol	Chain	Res	Type
2	1E	229	VAL
2	1E	233	SER
3	2E	3	ASN
3	2E	4	LYS
3	2E	5	ILE
3	2E	8	ILE
3	2E	15	THR
3	2E	21	ARG
3	2E	29	TYR
3	2E	34	LEU
3	2E	36	ASP
3	2E	40	ARG
3	2E	45	LYS
3	2E	52	LEU
3	2E	56	ASP
3	2E	62	ASP
3	2E	79	ARG
3	2E	95	THR
3	2E	98	ASN
3	2E	102	ASN
3	2E	127	ARG
3	2E	138	VAL
3	2E	165	THR
3	2E	167	TRP
3	2E	179	ARG
3	2E	190	ARG
3	2E	192	THR
3	2E	196	LEU
3	2E	202	ILE
3	2E	206	GLU
4	3E	3	ARG
4	3E	10	ARG
4	3E	15	GLU
4	3E	24	GLU
4	3E	31	CYS
4	3E	46	LYS
4	3E	47	ARG
4	3E	50	ARG
4	3E	52	SER
4	3E	53	ASP
4	3E	58	LEU
4	3E	66	ARG

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Mol	Chain	Res	Type
4	3E	85	LYS
4	3E	86	LYS
4	3E	89	THR
4	3E	99	SER
4	3E	104	VAL
4	3E	106	TYR
4	3E	108	LEU
4	3E	122	ARG
4	3E	127	THR
4	3E	135	LEU
4	3E	138	TYR
4	3E	141	ARG
4	3E	156	GLU
4	3E	175	SER
4	3E	179	GLU
4	3E	184	LYS
4	3E	190	ASP
4	3E	191	ARG
4	3E	193	ASP
4	3E	200	GLU
4	3E	209	ARG
5	4E	5	ASP
5	4E	6	PHE
5	4E	10	MET
5	4E	11	ILE
5	4E	13	ILE
5	4E	14	ARG
5	4E	16	THR
5	4E	18	ARG
5	4E	33	VAL
5	4E	41	VAL
5	4E	50	GLU
5	4E	56	GLN
5	4E	63	ARG
5	4E	64	ARG
5	4E	68	GLU
5	4E	72	GLN
5	4E	73	ASN
5	4E	75	THR
5	4E	79	GLU
5	4E	81	GLU
5	4E	87	SER

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Mol	Chain	Res	Type
5	4E	91	LEU
5	4E	112	LEU
5	4E	116	THR
5	4E	126	ARG
5	4E	131	ILE
5	4E	151	LEU
5	4E	152	ARG
5	4E	153	LYS
6	5E	17	SER
6	5E	23	LYS
6	5E	27	GLN
6	5E	41	GLU
6	5E	46	ARG
6	5E	55	ASP
6	5E	64	GLN
6	5E	65	VAL
6	5E	70	ASP
6	5E	75	LEU
6	5E	89	MET
6	5E	91	VAL
7	6E	6	ARG
7	6E	8	GLU
7	6E	10	ARG
7	6E	36	LYS
7	6E	38	LEU
7	6E	45	ASP
7	6E	47	CYS
7	6E	48	LYS
7	6E	54	THR
7	6E	59	LEU
7	6E	63	LYS
7	6E	66	VAL
7	6E	79	ARG
7	6E	80	VAL
7	6E	85	TYR
7	6E	90	GLU
7	6E	91	VAL
7	6E	104	LEU
7	6E	113	GLU
7	6E	115	ARG
7	6E	124	LEU
7	6E	155	ARG

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Mol	Chain	Res	Type
7	6E	156	TRP
8	7E	1	MET
8	7E	29	SER
8	7E	30	ARG
8	7E	37	ARG
8	7E	45	ILE
8	7E	52	ASP
8	7E	54	ASP
8	7E	68	ARG
8	7E	80	ILE
8	7E	82	HIS
8	7E	83	ILE
8	7E	85	ARG
8	7E	88	LYS
8	7E	91	ARG
8	7E	95	VAL
8	7E	102	ARG
8	7E	104	ARG
8	7E	107	LEU
8	7E	112	LEU
8	7E	129	VAL
8	7E	134	ILE
8	7E	137	VAL
9	8E	9	ARG
9	8E	10	ARG
9	8E	20	ARG
9	8E	38	GLN
9	8E	41	VAL
9	8E	42	ARG
9	8E	47	LEU
9	8E	53	VAL
9	8E	64	THR
9	8E	79	LEU
9	8E	89	ASN
9	8E	91	ASP
9	8E	92	TYR
9	8E	95	LYS
9	8E	104	ARG
9	8E	105	ASP
9	8E	108	VAL
9	8E	112	LYS
9	8E	117	HIS

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Mol	Chain	Res	Type
9	8E	118	LYS
9	8E	121	ARG
9	8E	125	TYR
10	1I	5	ARG
10	1I	54	PHE
10	1I	58	ASP
10	1I	62	HIS
10	1I	66	ARG
10	1I	70	ARG
10	1I	76	ASN
10	1I	92	THR
10	1I	96	ILE
10	1I	98	ILE
10	1I	101	VAL
11	2I	14	VAL
11	2I	31	THR
11	2I	32	ILE
11	2I	36	ASP
11	2I	81	ASP
11	2I	87	THR
11	2I	91	ARG
11	2I	103	LEU
11	2I	105	VAL
11	2I	106	LYS
11	2I	109	VAL
11	2I	114	VAL
11	2I	116	HIS
12	3I	11	VAL
12	3I	33	ARG
12	3I	34	ARG
12	3I	44	THR
12	3I	50	SER
12	3I	60	LEU
12	3I	62	SER
12	3I	65	GLU
12	3I	67	THR
12	3I	85	ILE
12	3I	89	ARG
12	3I	91	LYS
12	3I	100	ILE
12	3I	102	ARG
12	3I	114	LYS

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Mol	Chain	Res	Type
12	3I	116	SER
13	4I	3	ARG
13	4I	9	ILE
13	4I	11	ARG
13	4I	13	LYS
13	4I	19	LEU
13	4I	34	LEU
13	4I	48	LEU
13	4I	56	LEU
13	4I	64	TRP
13	4I	70	LEU
13	4I	77	ASN
13	4I	98	VAL
13	4I	99	ARG
13	4I	105	THR
13	4I	106	ASN
13	4I	108	ARG
13	4I	110	ARG
13	4I	111	LYS
13	4I	117	VAL
14	5I	12	ARG
14	5I	17	LYS
14	5I	18	VAL
14	5I	22	THR
14	5I	23	ARG
14	5I	26	ARG
14	5I	32	SER
14	5I	33	VAL
14	5I	41	ARG
14	5I	44	LEU
14	5I	58	LYS
14	5I	60	SER
15	6I	6	GLU
15	6I	22	THR
15	6I	38	ARG
15	6I	41	GLU
15	6I	47	LYS
15	6I	66	LEU
15	6I	67	LEU
15	6I	82	ILE
16	7I	2	VAL
16	7I	6	LEU

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Mol	Chain	Res	Type
16	7I	8	ARG
16	7I	20	VAL
16	7I	27	LYS
16	7I	28	ARG
16	7I	33	ILE
16	7I	35	LYS
16	7I	36	ILE
16	7I	45	THR
16	7I	50	LYS
16	7I	54	GLU
16	7I	67	THR
16	7I	69	THR
16	7I	72	ARG
16	7I	83	GLU
17	8I	38	ARG
17	8I	45	HIS
17	8I	48	GLU
17	8I	50	LYS
17	8I	52	LYS
17	8I	60	ILE
17	8I	62	SER
17	8I	68	ARG
17	8I	74	LEU
17	8I	85	VAL
17	8I	89	LEU
17	8I	92	ARG
17	8I	99	SER
17	8I	101	ARG
18	9I	19	LYS
18	9I	23	LYS
18	9I	25	THR
18	9I	26	LEU
18	9I	31	LEU
18	9I	32	ARG
18	9I	54	ARG
18	9I	56	THR
18	9I	59	SER
18	9I	82	THR
19	AI	4	SER
19	AI	5	LEU
19	AI	7	LYS
19	AI	14	HIS

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Mol	Chain	Res	Type
19	AI	20	LEU
19	AI	21	GLU
19	AI	22	LEU
19	AI	29	ARG
19	AI	30	LEU
19	AI	31	ILE
19	AI	32	LYS
19	AI	37	ARG
19	AI	43	GLU
19	AI	60	VAL
19	AI	61	TYR
19	AI	63	THR
19	AI	65	ASN
19	AI	67	VAL
19	AI	71	LEU
19	AI	77	THR
19	AI	78	ARG
20	BI	9	ASN
20	BI	10	LEU
20	BI	11	SER
20	BI	13	LEU
20	BI	15	ARG
20	BI	37	SER
20	BI	51	GLU
20	BI	57	ARG
20	BI	64	ASP
20	BI	68	LYS
20	BI	73	HIS
20	BI	82	SER
20	BI	99	LEU
20	BI	105	SER
21	1F	6	ARG
28	11	13	ARG
28	11	15	PHE
28	11	17	THR
28	11	31	LYS
28	11	37	LEU
28	11	46	GLN
28	11	58	HIS
28	11	61	LEU
28	11	64	ILE
28	11	65	ILE

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Mol	Chain	Res	Type
28	11	71	ASP
28	11	89	SER
28	11	94	LEU
28	11	95	LEU
28	11	99	ASP
28	11	103	ARG
28	11	105	ILE
28	11	106	ILE
28	11	111	LEU
28	11	115	GLN
28	11	126	GLN
28	11	136	ILE
28	11	142	VAL
28	11	147	LEU
28	11	155	LEU
28	11	157	ARG
28	11	162	SER
28	11	165	ILE
28	11	183	ARG
28	11	192	THR
28	11	193	VAL
28	11	200	ASP
28	11	212	SER
28	11	217	ARG
28	11	221	VAL
28	11	229	VAL
28	11	242	ARG
28	11	257	LEU
28	11	259	THR
28	11	260	ARG
28	11	263	ARG
28	11	271	ILE
28	11	273	ARG
29	21	5	LEU
29	21	13	ARG
29	21	14	ILE
29	21	16	ARG
29	21	17	ASP
29	21	25	VAL
29	21	26	ILE
29	21	38	THR
29	21	40	GLU

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Mol	Chain	Res	Type
29	21	41	LYS
29	21	45	THR
29	21	47	VAL
29	21	48	GLN
29	21	52	LEU
29	21	54	GLN
29	21	55	ASN
29	21	59	VAL
29	21	63	LEU
29	21	67	PHE
29	21	69	LYS
29	21	72	VAL
29	21	78	LEU
29	21	79	ARG
29	21	92	THR
29	21	101	ARG
29	21	107	THR
29	21	111	ARG
29	21	116	VAL
29	21	118	LYS
29	21	119	ARG
29	21	128	SER
29	21	144	ARG
29	21	146	THR
29	21	163	GLU
29	21	167	VAL
29	21	175	VAL
29	21	179	GLU
29	21	185	LYS
29	21	188	VAL
29	21	195	LEU
29	21	197	ILE
29	21	202	LYS
29	21	203	LYS
30	31	8	GLN
30	31	9	ILE
30	31	15	SER
30	31	17	ARG
30	31	18	ARG
30	31	33	LEU
30	31	36	VAL
30	31	38	ARG

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Mol	Chain	Res	Type
30	31	64	ILE
30	31	67	GLN
30	31	74	ARG
30	31	78	ILE
30	31	88	VAL
30	31	98	SER
30	31	106	ARG
30	31	116	ASP
30	31	117	ARG
30	31	127	GLU
30	31	140	LEU
30	31	153	SER
30	31	158	THR
30	31	164	ARG
30	31	165	ARG
30	31	176	LEU
30	31	181	LEU
30	31	183	VAL
30	31	188	ARG
30	31	191	ARG
30	31	192	LEU
30	31	201	VAL
30	31	204	ASN
31	41	3	LEU
31	41	10	LYS
31	41	19	LEU
31	41	20	ILE
31	41	28	VAL
31	41	31	VAL
31	41	43	LEU
31	41	45	GLU
31	41	54	GLU
31	41	58	GLN
31	41	62	LEU
31	41	63	ILE
31	41	67	LYS
31	41	76	SER
31	41	80	PHE
31	41	82	LEU
31	41	86	MET
31	41	90	LEU
31	41	94	LEU

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Mol	Chain	Res	Type
31	41	101	ILE
31	41	116	ASP
31	41	128	ARG
31	41	133	LEU
31	41	155	MET
31	41	156	ASP
31	41	165	THR
31	41	166	ASP
32	51	3	ARG
32	51	4	ILE
32	51	7	LEU
32	51	10	PRO
32	51	24	VAL
32	51	37	VAL
32	51	40	GLU
32	51	41	MET
32	51	45	VAL
32	51	50	VAL
32	51	64	LEU
32	51	71	LEU
32	51	72	ILE
32	51	77	LYS
32	51	80	SER
32	51	81	GLU
32	51	83	TYR
32	51	88	LEU
32	51	92	ILE
32	51	95	ARG
32	51	104	GLU
32	51	106	THR
32	51	122	THR
32	51	129	THR
32	51	132	ARG
32	51	136	ILE
32	51	139	GLN
32	51	141	VAL
32	51	149	ARG
32	51	153	LYS
32	51	170	ARG
33	61	2	LYS
33	61	9	LEU
33	61	20	ASP

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Mol	Chain	Res	Type
33	61	38	LEU
33	61	40	THR
33	61	41	GLU
33	61	42	SER
33	61	48	GLU
33	61	56	LYS
33	61	58	LEU
33	61	60	GLU
33	61	64	GLU
33	61	74	ASN
33	61	77	LEU
33	61	78	THR
33	61	79	ILE
33	61	81	VAL
33	61	82	ARG
33	61	85	GLU
33	61	86	THR
33	61	88	ILE
33	61	92	VAL
33	61	95	LYS
33	61	105	HIS
33	61	107	VAL
33	61	110	ASP
33	61	117	GLU
33	61	122	GLU
33	61	131	LYS
33	61	135	GLU
33	61	140	LEU
33	61	142	VAL
33	61	144	VAL
33	61	145	VAL
34	58	2	LYS
34	58	5	VAL
34	58	7	LYS
34	58	10	GLU
34	58	12	ARG
34	58	28	THR
34	58	34	LEU
34	58	38	HIS
34	58	43	THR
34	58	48	MET
34	58	58	ASP

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Mol	Chain	Res	Type
34	58	60	ILE
34	58	61	ARG
34	58	65	LYS
34	58	67	LEU
34	58	90	MET
34	58	97	ARG
34	58	99	LEU
34	58	120	LEU
34	58	128	HIS
34	58	133	GLN
34	58	134	ARG
34	58	136	GLU
35	68	23	ARG
35	68	24	VAL
35	68	28	SER
35	68	32	TYR
35	68	38	VAL
35	68	53	LYS
35	68	68	GLU
35	68	75	SER
35	68	80	ASP
35	68	91	LEU
35	68	94	ARG
35	68	98	VAL
35	68	112	MET
35	68	113	LYS
35	68	115	VAL
35	68	116	SER
36	78	2	LYS
36	78	4	SER
36	78	6	LEU
36	78	7	ARG
36	78	10	PRO
36	78	13	ASN
36	78	15	ARG
36	78	18	ARG
36	78	19	VAL
36	78	29	LYS
36	78	30	THR
36	78	32	THR
36	78	39	LYS
36	78	41	ARG

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Mol	Chain	Res	Type
36	78	45	LEU
36	78	46	LYS
36	78	49	ARG
36	78	50	ARG
36	78	57	THR
36	78	75	ILE
36	78	76	LYS
36	78	77	ARG
36	78	88	LEU
36	78	100	LEU
36	78	105	LEU
36	78	106	LEU
36	78	108	LYS
36	78	112	LEU
36	78	123	LEU
36	78	135	LEU
36	78	138	LEU
36	78	144	GLU
36	78	146	VAL
36	78	147	LEU
36	78	148	LEU
36	78	149	GLU
37	88	1	MET
37	88	5	ARG
37	88	6	ARG
37	88	18	LYS
37	88	25	ASP
37	88	35	VAL
37	88	45	GLN
37	88	51	ARG
37	88	55	VAL
37	88	56	ARG
37	88	58	PHE
37	88	59	ARG
37	88	60	ARG
37	88	64	ILE
37	88	67	ARG
37	88	82	ARG
37	88	109	VAL
37	88	110	THR
37	88	112	GLU
37	88	119	ARG

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Mol	Chain	Res	Type
37	88	134	ARG
37	88	139	GLU
37	88	141	GLN
38	98	4	LEU
38	98	9	LYS
38	98	10	LEU
38	98	12	ARG
38	98	15	SER
38	98	18	LEU
38	98	28	LEU
38	98	29	LEU
38	98	34	ILE
38	98	35	THR
38	98	44	LEU
38	98	45	ARG
38	98	59	ASP
38	98	65	LEU
38	98	79	LEU
38	98	91	GLN
38	98	95	THR
38	98	96	ARG
38	98	104	ARG
38	98	118	GLU
39	A8	3	ARG
39	A8	4	LEU
39	A8	15	ARG
39	A8	17	ARG
39	A8	19	LYS
39	A8	20	ARG
39	A8	24	LEU
39	A8	29	PHE
39	A8	30	ARG
39	A8	35	ILE
39	A8	36	TYR
39	A8	46	VAL
39	A8	50	SER
39	A8	52	SER
39	A8	54	LEU
39	A8	56	LEU
39	A8	57	LYS
39	A8	61	ASN
39	A8	73	LEU

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Mol	Chain	Res	Type
39	A8	84	GLN
39	A8	89	ARG
39	A8	95	HIS
39	A8	98	VAL
39	A8	101	LEU
39	A8	106	ARG
39	A8	107	GLU
39	A8	112	PHE
40	B8	7	ILE
40	B8	10	VAL
40	B8	12	SER
40	B8	13	ARG
40	B8	16	ARG
40	B8	21	GLU
40	B8	23	ARG
40	B8	27	THR
40	B8	30	VAL
40	B8	33	LYS
40	B8	39	ARG
40	B8	41	ARG
40	B8	42	ILE
40	B8	50	ILE
40	B8	58	ASN
40	B8	59	THR
40	B8	62	THR
40	B8	64	ARG
40	B8	65	LYS
40	B8	74	ARG
40	B8	85	LYS
40	B8	86	ILE
40	B8	89	VAL
40	B8	99	LEU
40	B8	105	LEU
40	B8	106	SER
40	B8	108	ARG
40	B8	110	ILE
40	B8	111	ARG
40	B8	112	ARG
40	B8	128	GLU
41	C8	3	ARG
41	C8	5	LYS
41	C8	11	ARG

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Mol	Chain	Res	Type
41	C8	27	LEU
41	C8	34	LYS
41	C8	52	ARG
41	C8	57	PHE
41	C8	59	ARG
41	C8	69	CYS
41	C8	74	LEU
41	C8	79	PHE
41	C8	89	GLU
41	C8	92	ARG
41	C8	94	ASN
41	C8	95	LEU
41	C8	104	GLN
41	C8	111	GLU
42	D8	1	MET
42	D8	6	LYS
42	D8	7	THR
42	D8	18	LEU
42	D8	20	LEU
42	D8	24	LYS
42	D8	34	GLU
42	D8	35	LEU
42	D8	38	LEU
42	D8	39	LEU
42	D8	40	LEU
42	D8	45	THR
42	D8	47	VAL
42	D8	49	THR
42	D8	58	VAL
42	D8	64	HIS
42	D8	73	SER
42	D8	79	VAL
42	D8	88	ARG
42	D8	91	TYR
42	D8	100	ARG
43	E8	11	ARG
43	E8	12	ILE
43	E8	13	SER
43	E8	20	VAL
43	E8	39	THR
43	E8	51	LEU
43	E8	60	ASN

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Mol	Chain	Res	Type
43	E8	66	GLU
43	E8	69	LEU
43	E8	70	TYR
43	E8	76	VAL
43	E8	78	GLU
43	E8	84	ARG
43	E8	88	ARG
43	E8	90	ARG
43	E8	92	ARG
43	E8	96	ILE
43	E8	103	ILE
43	E8	107	LEU
43	E8	111	HIS
44	F8	2	LYS
44	F8	12	VAL
44	F8	15	GLU
44	F8	28	PHE
44	F8	40	LYS
44	F8	49	VAL
44	F8	53	LYS
44	F8	54	VAL
44	F8	57	LEU
44	F8	65	ARG
44	F8	66	LEU
44	F8	68	ARG
44	F8	70	LEU
44	F8	72	LYS
44	F8	80	ILE
44	F8	81	VAL
44	F8	88	LYS
45	G8	4	LYS
45	G8	6	HIS
45	G8	14	LEU
45	G8	38	ILE
45	G8	44	ILE
45	G8	45	VAL
45	G8	52	SER
45	G8	57	GLN
45	G8	61	ILE
45	G8	67	LEU
45	G8	71	LYS
45	G8	79	CYS

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Mol	Chain	Res	Type
45	G8	82	PRO
45	G8	84	ARG
45	G8	85	VAL
45	G8	86	ARG
45	G8	96	ILE
45	G8	97	ARG
46	H8	2	GLU
46	H8	11	GLU
46	H8	19	ARG
46	H8	34	ASN
46	H8	37	VAL
46	H8	43	GLU
46	H8	49	ARG
46	H8	53	ILE
46	H8	58	VAL
46	H8	59	LEU
46	H8	61	LEU
46	H8	71	VAL
46	H8	76	LEU
46	H8	77	ASP
46	H8	80	ARG
46	H8	81	ARG
46	H8	82	ARG
46	H8	86	VAL
46	H8	94	GLU
46	H8	103	ARG
46	H8	105	VAL
46	H8	112	ARG
46	H8	117	LEU
46	H8	119	GLU
46	H8	121	HIS
46	H8	132	ASN
46	H8	140	ASP
46	H8	144	LEU
46	H8	149	SER
46	H8	154	ASP
46	H8	166	SER
47	I8	11	ARG
47	I8	36	ILE
47	I8	38	VAL
47	I8	41	ARG
47	I8	53	MET

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Mol	Chain	Res	Type
47	I8	67	VAL
47	I8	70	GLN
47	I8	74	ARG
47	I8	80	HIS
48	J8	19	GLN
48	J8	21	ARG
48	J8	26	ARG
48	J8	33	LYS
48	J8	41	ARG
48	J8	52	ARG
48	J8	65	SER
48	J8	74	VAL
48	J8	78	LYS
48	J8	80	LEU
48	J8	81	LYS
48	J8	86	SER
48	J8	90	ILE
48	J8	91	LYS
48	J8	92	LYS
48	J8	93	GLU
48	J8	94	LEU
49	K8	5	GLU
49	K8	9	GLN
49	K8	14	ARG
49	K8	16	LEU
49	K8	17	SER
49	K8	19	VAL
49	K8	24	LEU
49	K8	32	LEU
49	K8	41	ILE
49	K8	46	GLN
49	K8	47	ASN
49	K8	48	HIS
49	K8	50	ILE
49	K8	53	LEU
49	K8	54	LYS
49	K8	55	ARG
49	K8	59	ARG
49	K8	62	THR
49	K8	64	LEU
49	K8	65	ASN
49	K8	66	GLU

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Mol	Chain	Res	Type
50	L8	6	VAL
50	L8	8	LEU
50	L8	11	SER
50	L8	31	LEU
50	L8	32	GLN
50	L8	37	LEU
50	L8	38	GLU
50	L8	40	THR
50	L8	53	LEU
51	M8	1	MET
51	M8	21	VAL
51	M8	27	THR
51	M8	36	CYS
51	M8	38	LYS
51	M8	39	CYS
51	M8	42	PHE
51	M8	43	TYR
51	M8	44	THR
51	M8	48	ARG
51	M8	55	ARG
51	M8	59	PHE
51	M8	61	ARG
51	M8	62	ARG
51	M8	65	ASP
52	N8	3	LYS
52	N8	6	VAL
52	N8	16	ARG
52	N8	26	THR
52	N8	29	THR
52	N8	36	CYS
52	N8	40	LYS
52	N8	48	GLU
52	N8	49	CYS
52	N8	51	TYR
52	N8	55	ARG
52	N8	56	LYS
52	N8	57	VAL
53	O8	10	LEU
53	O8	12	GLU
53	O8	15	GLU
53	O8	16	CYS
53	O8	26	ASN

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Mol	Chain	Res	Type
53	O8	27	LYS
53	O8	28	ARG
53	O8	30	THR
53	O8	32	ASN
53	O8	33	LYS
53	O8	34	LEU
53	O8	37	ARG
53	O8	39	TYR
53	O8	42	TRP
53	O8	44	ARG
53	O8	47	THR
53	O8	51	GLU
53	O8	52	VAL
54	P8	4	THR
54	P8	8	ASN
54	P8	14	LYS
54	P8	22	MET
54	P8	23	ARG
54	P8	43	THR
55	Q8	8	LYS
55	Q8	19	SER
55	Q8	21	LYS
55	Q8	23	VAL
55	Q8	30	ARG
55	Q8	31	HIS
55	Q8	32	LEU
55	Q8	34	TRP
55	Q8	35	GLN
55	Q8	39	LYS
55	Q8	42	ARG
55	Q8	46	ARG
55	Q8	47	LYS
55	Q8	48	PHE
55	Q8	52	LYS
55	Q8	58	ILE
55	Q8	59	LYS
55	Q8	61	LEU
2	12	4	GLU
2	12	5	ILE
2	12	12	GLU
2	12	17	PHE
2	12	23	ARG

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Mol	Chain	Res	Type
2	12	24	TRP
2	12	31	TYR
2	12	42	ILE
2	12	51	LEU
2	12	52	GLU
2	12	55	PHE
2	12	58	ILE
2	12	69	LEU
2	12	71	VAL
2	12	75	LYS
2	12	78	GLN
2	12	83	MET
2	12	90	MET
2	12	103	THR
2	12	108	ILE
2	12	109	SER
2	12	121	LEU
2	12	122	PHE
2	12	130	ARG
2	12	145	LEU
2	12	155	LEU
2	12	160	ASP
2	12	165	VAL
2	12	178	ARG
2	12	179	LYS
2	12	185	ILE
2	12	187	LEU
2	12	191	ASP
2	12	204	ASN
2	12	205	ASP
2	12	209	ARG
2	12	212	GLN
2	12	233	SER
3	22	5	ILE
3	22	16	ARG
3	22	18	TRP
3	22	21	ARG
3	22	22	TRP
3	22	28	GLN
3	22	29	TYR
3	22	40	ARG
3	22	43	LEU

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Mol	Chain	Res	Type
3	22	47	LEU
3	22	48	TYR
3	22	67	THR
3	22	79	ARG
3	22	83	ARG
3	22	94	LEU
3	22	95	THR
3	22	101	LEU
3	22	104	GLN
3	22	105	GLU
3	22	107	GLN
3	22	119	ARG
3	22	128	PHE
3	22	138	VAL
3	22	140	ARG
3	22	190	ARG
3	22	191	THR
3	22	196	LEU
3	22	202	ILE
4	32	4	TYR
4	32	5	ILE
4	32	8	VAL
4	32	13	ARG
4	32	24	GLU
4	32	28	SER
4	32	30	LYS
4	32	36	ARG
4	32	50	ARG
4	32	58	LEU
4	32	61	LYS
4	32	73	ARG
4	32	76	ARG
4	32	78	LEU
4	32	83	SER
4	32	94	LEU
4	32	107	ARG
4	32	119	GLN
4	32	122	ARG
4	32	126	ILE
4	32	127	THR
4	32	135	LEU
4	32	141	ARG

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Mol	Chain	Res	Type
4	32	157	LEU
4	32	158	ILE
4	32	159	ARG
4	32	162	LEU
4	32	178	VAL
4	32	187	ARG
4	32	191	ARG
4	32	194	LEU
4	32	196	LEU
5	42	13	ILE
5	42	16	THR
5	42	24	ARG
5	42	34	VAL
5	42	41	VAL
5	42	43	LEU
5	42	47	LYS
5	42	61	TYR
5	42	72	GLN
5	42	75	THR
5	42	78	HIS
5	42	79	GLU
5	42	83	GLU
5	42	90	VAL
5	42	101	ILE
5	42	115	VAL
5	42	116	THR
5	42	118	ILE
5	42	126	ARG
5	42	136	MET
5	42	137	GLU
5	42	144	THR
5	42	150	ARG
6	52	3	ARG
6	52	7	ASN
6	52	14	LEU
6	52	16	GLN
6	52	21	LEU
6	52	24	GLU
6	52	28	ARG
6	52	40	VAL
6	52	43	LEU
6	52	54	LYS

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Mol	Chain	Res	Type
6	52	64	GLN
6	52	70	ASP
6	52	71	ARG
6	52	74	ASP
7	62	8	GLU
7	62	21	VAL
7	62	29	LYS
7	62	35	LYS
7	62	36	LYS
7	62	41	ARG
7	62	50	ILE
7	62	52	GLU
7	62	61	VAL
7	62	63	LYS
7	62	72	ARG
7	62	78	ARG
7	62	84	ASN
7	62	90	GLU
7	62	91	VAL
7	62	92	SER
7	62	94	ARG
7	62	104	LEU
7	62	114	ARG
7	62	131	LYS
7	62	140	ASP
8	72	1	MET
8	72	2	LEU
8	72	23	SER
8	72	24	THR
8	72	25	ASP
8	72	33	GLU
8	72	52	ASP
8	72	54	ASP
8	72	77	GLU
8	72	87	SER
8	72	91	ARG
8	72	92	ARG
8	72	95	VAL
8	72	97	VAL
8	72	99	GLU
8	72	100	ILE
8	72	104	ARG

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Mol	Chain	Res	Type
8	72	112	LEU
8	72	116	LYS
8	72	121	ASP
9	82	10	ARG
9	82	27	THR
9	82	38	GLN
9	82	42	ARG
9	82	56	LEU
9	82	58	HIS
9	82	88	TYR
9	82	91	ASP
9	82	95	LYS
9	82	104	ARG
9	82	111	ARG
9	82	113	LYS
9	82	114	TYR
9	82	117	HIS
9	82	118	LYS
9	82	125	TYR
9	82	128	ARG
10	1A	13	HIS
10	1A	17	ASP
10	1A	47	PHE
10	1A	59	SER
10	1A	62	HIS
10	1A	70	ARG
10	1A	79	ARG
10	1A	95	GLU
11	2A	29	ILE
11	2A	30	VAL
11	2A	31	THR
11	2A	57	THR
11	2A	63	LEU
11	2A	95	ILE
11	2A	104	GLN
11	2A	105	VAL
11	2A	106	LYS
11	2A	107	SER
11	2A	119	CYS
11	2A	124	LYS
12	3A	6	THR
12	3A	13	LYS

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Mol	Chain	Res	Type
12	3A	24	VAL
12	3A	27	LEU
12	3A	33	ARG
12	3A	34	ARG
12	3A	37	CYS
12	3A	39	VAL
12	3A	41	ARG
12	3A	42	THR
12	3A	44	THR
12	3A	46	LYS
12	3A	54	LYS
12	3A	57	LYS
12	3A	60	LEU
12	3A	62	SER
12	3A	78	GLN
12	3A	83	VAL
12	3A	84	LEU
12	3A	92	ASP
12	3A	102	ARG
12	3A	118	SER
12	3A	123	LYS
13	4A	8	GLU
13	4A	32	GLU
13	4A	37	THR
13	4A	47	ASP
13	4A	55	ARG
13	4A	64	TRP
13	4A	66	LEU
13	4A	77	ASN
13	4A	82	MET
13	4A	83	ASP
13	4A	91	ARG
13	4A	98	VAL
13	4A	101	GLN
13	4A	108	ARG
13	4A	117	VAL
14	5A	8	GLU
14	5A	12	ARG
14	5A	17	LYS
14	5A	22	THR
14	5A	27	CYS
14	5A	33	VAL

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Mol	Chain	Res	Type
14	5A	44	LEU
15	6A	3	ILE
15	6A	22	THR
15	6A	31	LEU
15	6A	34	LEU
15	6A	41	GLU
15	6A	48	LYS
15	6A	68	ARG
15	6A	87	ILE
15	6A	88	ARG
16	7A	2	VAL
16	7A	6	LEU
16	7A	8	ARG
16	7A	19	ILE
16	7A	21	VAL
16	7A	27	LYS
16	7A	33	ILE
16	7A	47	ASP
16	7A	55	ARG
16	7A	61	SER
16	7A	65	GLN
16	7A	67	THR
16	7A	81	ARG
16	7A	82	GLN
17	8A	4	LYS
17	8A	10	VAL
17	8A	13	ASP
17	8A	49	GLU
17	8A	50	LYS
17	8A	60	ILE
17	8A	62	SER
17	8A	63	ARG
17	8A	70	ARG
17	8A	74	LEU
17	8A	100	LYS
17	8A	101	ARG
18	9A	17	SER
18	9A	26	LEU
18	9A	28	GLU
18	9A	29	PHE
18	9A	32	ARG
18	9A	35	ARG

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Mol	Chain	Res	Type
18	9A	36	ASN
18	9A	42	ARG
18	9A	44	LEU
18	9A	47	THR
18	9A	53	ARG
18	9A	54	ARG
18	9A	59	SER
18	9A	84	LYS
19	AA	11	VAL
19	AA	15	LEU
19	AA	23	ASN
19	AA	25	LYS
19	AA	30	LEU
19	AA	33	THR
19	AA	34	TRP
19	AA	35	SER
19	AA	49	ILE
19	AA	53	ASN
19	AA	60	VAL
19	AA	66	MET
19	AA	71	LEU
19	AA	78	ARG
19	AA	83	HIS
20	BA	10	LEU
20	BA	11	SER
20	BA	23	ARG
20	BA	24	LEU
20	BA	26	ASN
20	BA	37	SER
20	BA	56	MET
20	BA	60	GLU
20	BA	62	LEU
20	BA	64	ASP
20	BA	74	LYS
20	BA	75	ASN
20	BA	83	ARG
20	BA	84	LEU
20	BA	88	VAL
21	1B	9	ARG
21	1B	22	ARG
28	19	20	ASP
28	19	24	ILE

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Mol	Chain	Res	Type
28	19	28	GLU
28	19	30	GLU
28	19	34	VAL
28	19	37	LEU
28	19	43	ARG
28	19	49	ILE
28	19	61	LEU
28	19	64	ILE
28	19	65	ILE
28	19	88	ARG
28	19	94	LEU
28	19	105	ILE
28	19	111	LEU
28	19	138	VAL
28	19	141	VAL
28	19	147	LEU
28	19	155	LEU
28	19	173	VAL
28	19	176	ARG
28	19	182	LEU
28	19	208	LYS
28	19	211	ARG
28	19	217	ARG
28	19	239	ARG
28	19	242	ARG
28	19	244	ARG
28	19	255	LYS
28	19	257	LEU
28	19	260	ARG
28	19	262	ARG
28	19	266	SER
28	19	271	ILE
29	29	5	LEU
29	29	25	VAL
29	29	27	LEU
29	29	37	ARG
29	29	38	THR
29	29	44	TYR
29	29	45	THR
29	29	54	GLN
29	29	60	ASN
29	29	61	ARG

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Mol	Chain	Res	Type
29	29	69	LYS
29	29	75	VAL
29	29	77	ILE
29	29	79	ARG
29	29	87	GLU
29	29	90	THR
29	29	93	VAL
29	29	104	VAL
29	29	107	THR
29	29	111	ARG
29	29	116	VAL
29	29	117	MET
29	29	119	ARG
29	29	144	ARG
29	29	154	LYS
29	29	170	LEU
29	29	175	VAL
29	29	178	GLU
29	29	179	GLU
29	29	197	ILE
29	29	201	THR
30	39	2	LYS
30	39	7	TYR
30	39	8	GLN
30	39	11	VAL
30	39	19	GLU
30	39	20	LEU
30	39	24	LEU
30	39	28	ILE
30	39	38	ARG
30	39	57	VAL
30	39	62	ARG
30	39	63	LYS
30	39	64	ILE
30	39	66	PRO
30	39	67	GLN
30	39	68	LYS
30	39	70	THR
30	39	74	ARG
30	39	77	ASP
30	39	82	ILE
30	39	83	PHE

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Mol	Chain	Res	Type
30	39	98	SER
30	39	106	ARG
30	39	112	MET
30	39	140	LEU
30	39	153	SER
30	39	158	THR
30	39	165	ARG
30	39	191	ARG
30	39	193	VAL
30	39	196	LEU
30	39	201	VAL
30	39	205	ARG
31	49	4	ASP
31	49	7	LEU
31	49	18	GLU
31	49	19	LEU
31	49	28	VAL
31	49	33	ARG
31	49	64	THR
31	49	67	LYS
31	49	71	THR
31	49	74	LYS
31	49	77	ILE
31	49	80	PHE
31	49	82	LEU
31	49	91	ARG
31	49	115	ARG
31	49	118	ARG
31	49	126	ASP
31	49	130	ASN
31	49	133	LEU
31	49	139	LEU
31	49	153	ARG
31	49	157	ILE
31	49	161	THR
32	59	4	ILE
32	59	6	ARG
32	59	7	LEU
32	59	11	VAL
32	59	24	VAL
32	59	27	LYS
32	59	32	GLU

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Mol	Chain	Res	Type
32	59	41	MET
32	59	43	VAL
32	59	56	SER
32	59	70	THR
32	59	85	LYS
32	59	86	GLU
32	59	89	ILE
32	59	101	ARG
32	59	103	LEU
32	59	105	LEU
32	59	107	VAL
32	59	119	GLU
32	59	123	PHE
32	59	124	GLU
32	59	125	VAL
32	59	127	GLU
32	59	129	THR
32	59	143	GLN
32	59	155	SER
32	59	157	TYR
32	59	164	TYR
32	59	167	GLU
33	69	2	LYS
33	69	4	ILE
33	69	12	LEU
33	69	15	VAL
33	69	33	ARG
33	69	37	VAL
33	69	41	GLU
33	69	56	LYS
33	69	64	GLU
33	69	75	LEU
33	69	76	THR
33	69	77	LEU
33	69	78	THR
33	69	79	ILE
33	69	81	VAL
33	69	82	ARG
33	69	101	LEU
33	69	102	SER
33	69	104	GLN
33	69	105	HIS

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Mol	Chain	Res	Type
33	69	109	ILE
33	69	114	LEU
33	69	117	GLU
33	69	125	GLU
33	69	128	LEU
33	69	131	LYS
33	69	133	HIS
33	69	136	VAL
33	69	142	VAL
34	15	1	MET
34	15	5	VAL
34	15	15	LEU
34	15	16	ILE
34	15	29	LYS
34	15	32	THR
34	15	33	LEU
34	15	34	LEU
34	15	43	THR
34	15	46	VAL
34	15	56	ASN
34	15	63	THR
34	15	65	LYS
34	15	85	ILE
34	15	93	THR
34	15	94	HIS
34	15	99	LEU
34	15	101	HIS
34	15	106	MET
34	15	112	LEU
34	15	127	ASP
34	15	138	LEU
35	25	1	MET
35	25	3	GLN
35	25	12	ASP
35	25	24	VAL
35	25	26	LYS
35	25	32	TYR
35	25	35	VAL
35	25	42	SER
35	25	47	ILE
35	25	49	ARG
35	25	66	LYS

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Mol	Chain	Res	Type
35	25	69	ILE
35	25	70	LYS
35	25	80	ASP
35	25	86	ILE
35	25	94	ARG
35	25	96	THR
35	25	97	ARG
35	25	98	VAL
35	25	113	LYS
35	25	114	ILE
35	25	116	SER
35	25	117	LEU
36	35	6	LEU
36	35	7	ARG
36	35	10	PRO
36	35	14	LYS
36	35	15	ARG
36	35	18	ARG
36	35	21	ARG
36	35	30	THR
36	35	36	LYS
36	35	41	ARG
36	35	50	ARG
36	35	55	ARG
36	35	59	LEU
36	35	61	ARG
36	35	62	LEU
36	35	63	PRO
36	35	65	ARG
36	35	67	MET
36	35	70	GLN
36	35	71	VAL
36	35	75	ILE
36	35	79	ARG
36	35	81	GLN
36	35	85	LEU
36	35	98	GLU
36	35	105	LEU
36	35	110	TYR
36	35	111	ARG
36	35	112	LEU
36	35	114	ILE

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Mol	Chain	Res	Type
36	35	121	LYS
36	35	123	LEU
36	35	124	LYS
36	35	125	VAL
36	35	133	SER
36	35	135	LEU
36	35	138	LEU
36	35	144	GLU
36	35	147	LEU
36	35	149	GLU
37	45	3	MET
37	45	10	ARG
37	45	18	LYS
37	45	25	ASP
37	45	26	TYR
37	45	45	GLN
37	45	51	ARG
37	45	56	ARG
37	45	59	ARG
37	45	60	ARG
37	45	69	PHE
37	45	75	THR
37	45	76	LYS
37	45	79	LEU
37	45	81	VAL
37	45	83	MET
37	45	90	VAL
37	45	91	GLU
37	45	103	MET
37	45	106	VAL
37	45	109	VAL
37	45	110	THR
37	45	116	GLU
37	45	118	LEU
37	45	127	ILE
37	45	134	ARG
37	45	139	GLU
38	55	2	ARG
38	55	18	LEU
38	55	28	LEU
38	55	29	LEU
38	55	34	ILE

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Mol	Chain	Res	Type
38	55	35	THR
38	55	37	THR
38	55	44	LEU
38	55	54	LEU
38	55	56	LYS
38	55	57	ARG
38	55	63	ARG
38	55	65	LEU
38	55	67	LEU
38	55	74	LYS
38	55	75	LEU
38	55	79	LEU
38	55	80	PHE
38	55	81	ASP
38	55	82	GLU
38	55	91	GLN
38	55	97	VAL
39	65	3	ARG
39	65	8	GLU
39	65	12	PHE
39	65	14	VAL
39	65	19	LYS
39	65	21	THR
39	65	27	SER
39	65	30	ARG
39	65	36	TYR
39	65	38	GLN
39	65	52	SER
39	65	54	LEU
39	65	58	LEU
39	65	65	VAL
39	65	82	ILE
39	65	84	GLN
39	65	87	PHE
39	65	93	LYS
39	65	98	VAL
39	65	101	LEU
39	65	106	ARG
39	65	107	GLU
39	65	110	LEU
40	75	1	MET
40	75	6	LEU

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Mol	Chain	Res	Type
40	75	8	LYS
40	75	11	GLU
40	75	13	ARG
40	75	15	VAL
40	75	17	THR
40	75	19	LEU
40	75	27	THR
40	75	28	VAL
40	75	41	ARG
40	75	45	PHE
40	75	55	ASN
40	75	63	VAL
40	75	64	ARG
40	75	67	SER
40	75	74	ARG
40	75	87	ASP
40	75	89	VAL
40	75	91	ARG
40	75	105	LEU
40	75	106	SER
40	75	107	ASP
40	75	112	ARG
40	75	120	ARG
40	75	121	ILE
40	75	124	ASP
40	75	136	GLN
41	85	3	ARG
41	85	5	LYS
41	85	20	LEU
41	85	31	SER
41	85	55	ARG
41	85	57	PHE
41	85	59	ARG
41	85	71	GLN
41	85	74	LEU
41	85	83	LEU
41	85	92	ARG
41	85	97	ASP
41	85	114	LYS
42	95	7	THR
42	95	14	VAL
42	95	18	LEU

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Mol	Chain	Res	Type
42	95	19	LYS
42	95	34	GLU
42	95	35	LEU
42	95	38	LEU
42	95	40	LEU
42	95	44	LYS
42	95	45	THR
42	95	46	VAL
42	95	47	VAL
42	95	49	THR
42	95	57	VAL
42	95	62	LEU
42	95	66	ARG
42	95	71	LEU
42	95	74	LYS
42	95	82	ARG
42	95	83	ARG
42	95	84	LYS
42	95	85	LYS
42	95	89	GLN
42	95	91	TYR
42	95	95	LEU
43	A5	1	MET
43	A5	11	ARG
43	A5	23	LEU
43	A5	37	ARG
43	A5	51	LEU
43	A5	52	GLU
43	A5	65	LEU
43	A5	67	ASP
43	A5	70	TYR
43	A5	92	ARG
43	A5	95	ILE
43	A5	96	ILE
43	A5	100	THR
43	A5	107	LEU
44	B5	3	THR
44	B5	25	LYS
44	B5	27	THR
44	B5	30	VAL
44	B5	36	LYS
44	B5	40	LYS

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Mol	Chain	Res	Type
44	B5	45	THR
44	B5	49	VAL
44	B5	52	VAL
44	B5	63	LYS
44	B5	65	ARG
44	B5	69	TYR
44	B5	70	LEU
44	B5	76	ARG
44	B5	78	LYS
44	B5	81	VAL
44	B5	88	LYS
45	C5	23	ARG
45	C5	24	VAL
45	C5	29	GLU
45	C5	33	LYS
45	C5	38	ILE
45	C5	45	VAL
45	C5	47	LYS
45	C5	50	ARG
45	C5	51	VAL
45	C5	52	SER
45	C5	55	TYR
45	C5	62	GLU
45	C5	63	LYS
45	C5	75	ILE
45	C5	84	ARG
45	C5	85	VAL
45	C5	86	ARG
45	C5	88	LYS
45	C5	89	PHE
45	C5	95	LYS
45	C5	97	ARG
45	C5	98	VAL
45	C5	99	CYS
45	C5	102	CYS
46	D5	11	GLU
46	D5	16	SER
46	D5	19	ARG
46	D5	28	MET
46	D5	53	ILE
46	D5	66	SER
46	D5	70	LEU

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Mol	Chain	Res	Type
46	D5	71	VAL
46	D5	74	VAL
46	D5	76	LEU
46	D5	82	ARG
46	D5	86	VAL
46	D5	87	ASP
46	D5	94	GLU
46	D5	103	ARG
46	D5	107	THR
46	D5	117	LEU
46	D5	121	HIS
46	D5	122	ARG
46	D5	123	ASP
46	D5	133	ILE
46	D5	136	PHE
46	D5	144	LEU
46	D5	157	LEU
46	D5	163	LEU
46	D5	165	VAL
46	D5	170	THR
47	E5	14	ARG
47	E5	29	GLN
47	E5	36	ILE
47	E5	43	THR
47	E5	49	LYS
47	E5	62	LEU
47	E5	64	ASP
47	E5	81	VAL
47	E5	84	LEU
48	F5	20	ARG
48	F5	25	LYS
48	F5	37	ILE
48	F5	38	SER
48	F5	39	LYS
48	F5	41	ARG
48	F5	46	LEU
48	F5	78	LYS
48	F5	82	LEU
48	F5	83	GLU
48	F5	86	SER
48	F5	89	GLU
48	F5	90	ILE

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Mol	Chain	Res	Type
48	F5	91	LYS
48	F5	95	LEU
49	G5	14	ARG
49	G5	16	LEU
49	G5	24	LEU
49	G5	40	SER
49	G5	45	SER
49	G5	47	ASN
49	G5	48	HIS
49	G5	53	LEU
49	G5	59	ARG
50	H5	5	LYS
50	H5	8	LEU
50	H5	18	ASP
50	H5	20	LYS
50	H5	32	GLN
50	H5	38	GLU
50	H5	40	THR
50	H5	44	ARG
50	H5	57	GLU
51	I5	6	HIS
51	I5	9	LEU
51	I5	20	ASN
51	I5	22	ILE
51	I5	25	TYR
51	I5	32	TYR
51	I5	53	GLU
51	I5	59	PHE
51	I5	61	ARG
51	I5	62	ARG
52	J5	3	LYS
52	J5	4	HIS
52	J5	8	LYS
52	J5	15	ARG
52	J5	23	HIS
52	J5	29	THR
52	J5	44	THR
52	J5	48	GLU
52	J5	52	TYR
52	J5	55	ARG
52	J5	56	LYS
53	K5	10	LEU

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Mol	Chain	Res	Type
53	K5	12	GLU
53	K5	23	THR
53	K5	25	LYS
53	K5	27	LYS
53	K5	28	ARG
53	K5	29	ASN
53	K5	36	LEU
53	K5	44	ARG
53	K5	45	LYS
53	K5	47	THR
53	K5	52	VAL
54	L5	2	LYS
54	L5	4	THR
54	L5	8	ASN
54	L5	32	LYS
54	L5	41	ARG
54	L5	43	THR
54	L5	46	VAL
55	M5	4	MET
55	M5	23	VAL
55	M5	25	MET
55	M5	30	ARG
55	M5	34	TRP
55	M5	50	LEU
55	M5	52	LYS
55	M5	53	PRO
55	M5	54	GLU
55	M5	57	ARG
55	M5	59	LYS
55	M5	60	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (29) such sidechains are listed below:

Mol	Chain	Res	Type
3	2E	6	HIS
3	2E	102	ASN
3	2E	136	GLN
6	5E	64	GLN
9	8E	23	ASN
16	7I	14	ASN
19	AI	47	HIS
28	11	96	HIS

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Mol	Chain	Res	Type
28	11	129	ASN
29	21	55	ASN
37	88	13	GLN
38	98	31	HIS
46	H8	34	ASN
2	12	19	HIS
8	72	15	ASN
19	AA	14	HIS
30	39	203	GLN
34	15	56	ASN
36	35	35	HIS
37	45	113	GLN
38	55	13	HIS
40	75	58	ASN
42	95	87	HIS
47	E5	70	GLN
49	G5	48	HIS
50	H5	32	GLN
51	I5	6	HIS
51	I5	20	ASN
53	K5	46	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	13	1496/1522 (98%)	328 (21%)	30 (2%)
1	1G	1495/1522 (98%)	348 (23%)	39 (2%)
22	1K	74/76 (97%)	31 (41%)	2 (2%)
23	2K	76/77 (98%)	15 (19%)	3 (3%)
23	2L	76/77 (98%)	20 (26%)	3 (3%)
24	1L	75/76 (98%)	26 (34%)	2 (2%)
24	3K	75/76 (98%)	38 (50%)	4 (5%)
24	3L	75/76 (98%)	32 (42%)	2 (2%)
25	4K	12/27 (44%)	4 (33%)	0
25	4L	8/27 (29%)	3 (37%)	1 (12%)
26	14	2908/2917 (99%)	736 (25%)	37 (1%)
26	1H	2911/2917 (99%)	688 (23%)	52 (1%)
27	16	121/122 (99%)	19 (15%)	0
27	1J	121/122 (99%)	31 (25%)	3 (2%)
All	All	9523/9634 (98%)	2319 (24%)	178 (1%)

All (2319) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	6	G
1	13	7	G
1	13	8	A
1	13	9	G
1	13	21	G
1	13	32	A
1	13	39	G
1	13	47	C
1	13	48	C
1	13	50	A
1	13	51	A
1	13	54	C
1	13	61	G
1	13	65	U
1	13	66	G
1	13	77	C
1	13	78	G
1	13	91	C
1	13	101	A
1	13	108	G
1	13	116	A
1	13	119	A
1	13	121	C
1	13	129(A)	G
1	13	130	A
1	13	131	C
1	13	132	C
1	13	137	C
1	13	142	G
1	13	144	G
1	13	150	C
1	13	151	A
1	13	160	A
1	13	161	A
1	13	163	C
1	13	169	C
1	13	172	A
1	13	173	U
1	13	174	C
1	13	186(A)	C
1	13	188	U
1	13	189	U

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Mol	Chain	Res	Type
1	13	190	G
1	13	191(A)	G
1	13	195	A
1	13	197	A
1	13	199	G
1	13	201	C
1	13	208	U
1	13	209	U
1	13	210	U
1	13	216	G
1	13	222	U
1	13	226	G
1	13	231	G
1	13	233	C
1	13	243	A
1	13	244	U
1	13	245	C
1	13	247	G
1	13	251	G
1	13	262	A
1	13	266	G
1	13	267	C
1	13	273	A
1	13	281	G
1	13	289	G
1	13	302	G
1	13	306	G
1	13	311	C
1	13	321	A
1	13	324	G
1	13	328	C
1	13	329	A
1	13	332	G
1	13	339	C
1	13	344	A
1	13	345	C
1	13	346	G
1	13	347	G
1	13	352	C
1	13	353	A
1	13	354	G
1	13	357	G

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Mol	Chain	Res	Type
1	13	365	U
1	13	367	U
1	13	372	C
1	13	384	G
1	13	388	G
1	13	390	C
1	13	397	A
1	13	398	C
1	13	406	G
1	13	412	A
1	13	413	G
1	13	414	A
1	13	419	C
1	13	421	U
1	13	423	G
1	13	424	G
1	13	428	G
1	13	429	U
1	13	455	C
1	13	465	A
1	13	466	C
1	13	467	G
1	13	485	G
1	13	496	A
1	13	497	U
1	13	505	G
1	13	509	A
1	13	510	A
1	13	511	C
1	13	513	C
1	13	518	C
1	13	524	G
1	13	527	G
1	13	531	U
1	13	532	A
1	13	533	A
1	13	536	C
1	13	545	C
1	13	547	A
1	13	549	C
1	13	559	A
1	13	560	U

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Mol	Chain	Res	Type
1	13	561	U
1	13	571	U
1	13	572	A
1	13	573	A
1	13	576	G
1	13	577	G
1	13	607	A
1	13	610	G
1	13	620	C
1	13	630	G
1	13	631	G
1	13	632	A
1	13	633	G
1	13	639	G
1	13	650	G
1	13	653	A
1	13	655	A
1	13	656	C
1	13	665	A
1	13	666	G
1	13	680	C
1	13	687	A
1	13	688	G
1	13	702	A
1	13	704	A
1	13	723	U
1	13	724	G
1	13	734	G
1	13	748	C
1	13	749	C
1	13	750	G
1	13	753	A
1	13	755	G
1	13	777	A
1	13	787	A
1	13	792	A
1	13	793	U
1	13	794	A
1	13	805	C
1	13	813	U
1	13	815	A
1	13	817	C

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Mol	Chain	Res	Type
1	13	818	G
1	13	827	U
1	13	828	A
1	13	836	G
1	13	841	U
1	13	842	C
1	13	843	U
1	13	848	C
1	13	853	G
1	13	859	A
1	13	864	A
1	13	870	U
1	13	874	G
1	13	888	G
1	13	902	G
1	13	905	U
1	13	914	A
1	13	916	G
1	13	922	G
1	13	926	G
1	13	927	G
1	13	934	C
1	13	935	A
1	13	936	C
1	13	940	C
1	13	955	U
1	13	960	U
1	13	968	A
1	13	969	A
1	13	971	G
1	13	974	A
1	13	975	A
1	13	976	G
1	13	977	A
1	13	982	U
1	13	983	A
1	13	991	U
1	13	992	U
1	13	993	G
1	13	1004	A
1	13	1006	C
1	13	1007	C

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Mol	Chain	Res	Type
1	13	1008	C
1	13	1009	G
1	13	1012	U
1	13	1017	G
1	13	1021	G
1	13	1024	G
1	13	1025	U
1	13	1028	C
1	13	1029	G
1	13	1030	C
1	13	1032(A)	G
1	13	1033	G
1	13	1040	U
1	13	1046	A
1	13	1049	U
1	13	1053	G
1	13	1054	C
1	13	1064	G
1	13	1065	U
1	13	1066	C
1	13	1081	G
1	13	1082	G
1	13	1094	G
1	13	1095	U
1	13	1101	A
1	13	1120	G
1	13	1122	U
1	13	1124	G
1	13	1125	U
1	13	1126	U
1	13	1127	G
1	13	1129	C
1	13	1130	A
1	13	1131	G
1	13	1136	U
1	13	1137	C
1	13	1138	G
1	13	1139	G
1	13	1146	A
1	13	1147	C
1	13	1152	A
1	13	1154	G

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Mol	Chain	Res	Type
1	13	1157	A
1	13	1158	C
1	13	1159	U
1	13	1161	C
1	13	1177	G
1	13	1178	G
1	13	1181	G
1	13	1191	A
1	13	1196	U
1	13	1197	G
1	13	1201	A
1	13	1212	U
1	13	1213	A
1	13	1225	A
1	13	1227	A
1	13	1238	A
1	13	1240	U
1	13	1241	G
1	13	1250	A
1	13	1253	G
1	13	1256	A
1	13	1257	U
1	13	1258	G
1	13	1270	C
1	13	1273	G
1	13	1275	A
1	13	1278	U
1	13	1280	A
1	13	1281	U
1	13	1282	C
1	13	1286	A
1	13	1287	A
1	13	1299	A
1	13	1300	G
1	13	1302	U
1	13	1320	C
1	13	1322	C
1	13	1323	G
1	13	1331	G
1	13	1335	C
1	13	1336	C
1	13	1337	G

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Mol	Chain	Res	Type
1	13	1338	G
1	13	1340	A
1	13	1346	A
1	13	1347	G
1	13	1350	A
1	13	1353	G
1	13	1368	G
1	13	1370	G
1	13	1377	A
1	13	1398	A
1	13	1401	G
1	13	1419	G
1	13	1422	G
1	13	1442	G
1	13	1443	G
1	13	1446	A
1	13	1451	A
1	13	1452	C
1	13	1453	G
1	13	1467	G
1	13	1469	G
1	13	1487	G
1	13	1492	A
1	13	1497	G
1	13	1499	A
1	13	1502	A
1	13	1503	A
1	13	1504	G
1	13	1505	G
1	13	1506	U
1	13	1517	G
1	13	1529	G
1	13	1530	G
22	1K	2	C
22	1K	9	A
22	1K	10	G
22	1K	11	C
22	1K	14	A
22	1K	16	U
22	1K	17	C
22	1K	18	G
22	1K	19	G

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Mol	Chain	Res	Type
22	1K	21	A
22	1K	22	G
22	1K	24	G
22	1K	25	C
22	1K	26	A
22	1K	28	G
22	1K	41	C
22	1K	42	C
22	1K	44	G
22	1K	45	U
22	1K	47	U
22	1K	49	C
22	1K	52	G
22	1K	55	PSU
22	1K	61	C
22	1K	64	A
22	1K	68	C
22	1K	70	G
22	1K	73	A
22	1K	74	C
22	1K	75	C
22	1K	76	A
23	2K	2	G
23	2K	8	4SU
23	2K	9	G
23	2K	18	C
23	2K	20	G
23	2K	21	U
23	2K	22	A
23	2K	23	G
23	2K	31	G
23	2K	44	A
23	2K	48	U
23	2K	49	C
23	2K	50	G
23	2K	57	C
23	2K	77	A
24	3K	2	C
24	3K	3	C
24	3K	7	A
24	3K	9	A
24	3K	10	G

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Mol	Chain	Res	Type
24	3K	13	C
24	3K	14	A
24	3K	17	C
24	3K	19	G
24	3K	20	U
24	3K	21	A
24	3K	22	G
24	3K	31	A
24	3K	35	A
24	3K	36	A
24	3K	39	U
24	3K	40	C
24	3K	41	C
24	3K	42	C
24	3K	45	U
24	3K	46	G
24	3K	47	U
24	3K	48	C
24	3K	49	C
24	3K	52	G
24	3K	55	U
24	3K	56	C
24	3K	58	A
24	3K	59	U
24	3K	63	G
24	3K	64	A
24	3K	65	G
24	3K	66	U
24	3K	67	C
24	3K	70	G
24	3K	72	C
24	3K	73	A
24	3K	76	A
25	4K	14	A
25	4K	15	A
25	4K	21	C
25	4K	25	A
26	1H	5	A
26	1H	9	U
26	1H	12	U
26	1H	15	G
26	1H	17	G

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Mol	Chain	Res	Type
26	1H	27	G
26	1H	34	C
26	1H	35	G
26	1H	36	G
26	1H	39	C
26	1H	46	C
26	1H	51	G
26	1H	63	U
26	1H	64	A
26	1H	71	A
26	1H	72	U
26	1H	74	A
26	1H	75	G
26	1H	85	G
26	1H	95	G
26	1H	102	G
26	1H	112	U
26	1H	118	A
26	1H	119	A
26	1H	120	U
26	1H	124	G
26	1H	125	G
26	1H	155	C
26	1H	163	U
26	1H	164	U
26	1H	171	G
26	1H	175	G
26	1H	181	A
26	1H	188	G
26	1H	196	A
26	1H	199	A
26	1H	201	C
26	1H	215	G
26	1H	216	A
26	1H	222	A
26	1H	223	A
26	1H	224	G
26	1H	228	A
26	1H	229	A
26	1H	230	U
26	1H	233	A
26	1H	244	A

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Mol	Chain	Res	Type
26	1H	245	G
26	1H	248	G
26	1H	250	G
26	1H	252	G
26	1H	261	G
26	1H	264	C
26	1H	269	U
26	1H	270(D)	C
26	1H	270(F)	U
26	1H	270(K)	C
26	1H	270(M)	U
26	1H	270(N)	G
26	1H	270(P)	C
26	1H	271(C)	U
26	1H	271	G
26	1H	273(E)	U
26	1H	274	G
26	1H	275	G
26	1H	277	C
26	1H	278	A
26	1H	299	A
26	1H	308	G
26	1H	311	A
26	1H	315	G
26	1H	323	G
26	1H	324	A
26	1H	327	G
26	1H	329	G
26	1H	330	A
26	1H	331	A
26	1H	342	G
26	1H	352	G
26	1H	363	G
26	1H	363(B)	G
26	1H	364	C
26	1H	372	G
26	1H	382	G
26	1H	386	G
26	1H	389	G
26	1H	396	G
26	1H	405	U
26	1H	411	G

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Mol	Chain	Res	Type
26	1H	412	A
26	1H	427	U
26	1H	428	A
26	1H	443	A
26	1H	444	C
26	1H	447	A
26	1H	448	U
26	1H	452	G
26	1H	454	A
26	1H	455	C
26	1H	457	A
26	1H	459	U
26	1H	460	A
26	1H	470	A
26	1H	471	A
26	1H	481	G
26	1H	482	A
26	1H	488	G
26	1H	501	A
26	1H	502	A
26	1H	505	A
26	1H	508	G
26	1H	509	C
26	1H	529	A
26	1H	531	C
26	1H	532	A
26	1H	533	G
26	1H	545	G
26	1H	546	C
26	1H	549	G
26	1H	556	G
26	1H	559	G
26	1H	563	G
26	1H	564	C
26	1H	567	A
26	1H	573	G
26	1H	575	A
26	1H	577	G
26	1H	586	A
26	1H	588	U
26	1H	603	A
26	1H	607	U

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Mol	Chain	Res	Type
26	1H	614	U
26	1H	615	G
26	1H	617	G
26	1H	621	A
26	1H	622	G
26	1H	627	A
26	1H	632	A
26	1H	636	G
26	1H	637	A
26	1H	645	C
26	1H	646	A
26	1H	647	G
26	1H	654	A
26	1H	654(A)	A
26	1H	654(G)	C
26	1H	654(I)	C
26	1H	654(K)	C
26	1H	654(M)	C
26	1H	654(O)	G
26	1H	654(T)	A
26	1H	654(V)	A
26	1H	664	C
26	1H	669	G
26	1H	672	C
26	1H	686	G
26	1H	699	A
26	1H	717	G
26	1H	724	U
26	1H	729	G
26	1H	730	C
26	1H	731	C
26	1H	745	G
26	1H	752	A
26	1H	753	C
26	1H	764	A
26	1H	765	G
26	1H	775	G
26	1H	776	G
26	1H	777	A
26	1H	782	A
26	1H	784	A
26	1H	785	G

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Mol	Chain	Res	Type
26	1H	790	C
26	1H	792	G
26	1H	801	G
26	1H	805	G
26	1H	812	C
26	1H	824	A
26	1H	827	U
26	1H	828	U
26	1H	832	G
26	1H	845	G
26	1H	846	C
26	1H	847	U
26	1H	859	G
26	1H	861	A
26	1H	866	A
26	1H	870	A
26	1H	879	G
26	1H	880	G
26	1H	881	G
26	1H	882	G
26	1H	884	C
26	1H	885	C
26	1H	886	C
26	1H	887	A
26	1H	888	C
26	1H	890	A
26	1H	892	G
26	1H	893	C
26	1H	894	C
26	1H	895	U
26	1H	896	A
26	1H	897	C
26	1H	900	A
26	1H	901	A
26	1H	910	A
26	1H	914	C
26	1H	917	A
26	1H	918	A
26	1H	932	G
26	1H	938	G
26	1H	940	G
26	1H	941	A

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Mol	Chain	Res	Type
26	1H	946	G
26	1H	947	G
26	1H	952	G
26	1H	953	A
26	1H	959	A
26	1H	961	C
26	1H	974	G
26	1H	974(A)	C
26	1H	975	G
26	1H	981	A
26	1H	982	C
26	1H	983	A
26	1H	996	A
26	1H	997	G
26	1H	1003	G
26	1H	1005	C
26	1H	1011	G
26	1H	1012	U
26	1H	1013	C
26	1H	1016	G
26	1H	1020	A
26	1H	1022	G
26	1H	1023	U
26	1H	1025	G
26	1H	1026	U
26	1H	1027	A
26	1H	1033	U
26	1H	1046	A
26	1H	1047	G
26	1H	1054	A
26	1H	1057	A
26	1H	1060	U
26	1H	1061	U
26	1H	1062	G
26	1H	1064	C
26	1H	1068	G
26	1H	1070	A
26	1H	1071	G
26	1H	1072	C
26	1H	1073	A
26	1H	1076	C
26	1H	1078	U

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Mol	Chain	Res	Type
26	1H	1079	C
26	1H	1082	U
26	1H	1084	A
26	1H	1085	A
26	1H	1086	A
26	1H	1087	G
26	1H	1088	A
26	1H	1090	U
26	1H	1095	A
26	1H	1096	A
26	1H	1097	U
26	1H	1104	C
26	1H	1106	G
26	1H	1110	G
26	1H	1111	A
26	1H	1112	G
26	1H	1121	C
26	1H	1122	G
26	1H	1126	A
26	1H	1127	A
26	1H	1128	A
26	1H	1129	A
26	1H	1130	U
26	1H	1135	C
26	1H	1136	G
26	1H	1139	G
26	1H	1142	U
26	1H	1142(A)	A
26	1H	1144	G
26	1H	1155	A
26	1H	1156	A
26	1H	1171	G
26	1H	1174	A
26	1H	1175	U
26	1H	1176	G
26	1H	1178	C
26	1H	1179	C
26	1H	1180	C
26	1H	1190	G
26	1H	1194	A
26	1H	1195	G
26	1H	1204	A

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Mol	Chain	Res	Type
26	1H	1205	U
26	1H	1220	A
26	1H	1221	C
26	1H	1229(A)	G
26	1H	1244	G
26	1H	1253	A
26	1H	1255	U
26	1H	1256	G
26	1H	1265	A
26	1H	1267	U
26	1H	1271	G
26	1H	1272	A
26	1H	1273	U
26	1H	1274	A
26	1H	1280	G
26	1H	1292	U
26	1H	1300	U
26	1H	1301	A
26	1H	1305	C
26	1H	1313	U
26	1H	1314	C
26	1H	1321	A
26	1H	1329	U
26	1H	1332	G
26	1H	1344	G
26	1H	1345	C
26	1H	1349	A
26	1H	1352	U
26	1H	1358	G
26	1H	1359	A
26	1H	1360	A
26	1H	1365	A
26	1H	1368	G
26	1H	1369	G
26	1H	1379	A
26	1H	1380	G
26	1H	1384	A
26	1H	1385	G
26	1H	1386	C
26	1H	1388	G
26	1H	1389	G
26	1H	1390	U

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Mol	Chain	Res	Type
26	1H	1416	G
26	1H	1417	C
26	1H	1420	U
26	1H	1421	G
26	1H	1427	A
26	1H	1428	C
26	1H	1431	U
26	1H	1437	C
26	1H	1444(A)	A
26	1H	1449	A
26	1H	1449(A)	G
26	1H	1455	G
26	1H	1458	C
26	1H	1459	G
26	1H	1460	A
26	1H	1461	G
26	1H	1467	C
26	1H	1471	A
26	1H	1473	G
26	1H	1483	G
26	1H	1492	G
26	1H	1493	C
26	1H	1494	A
26	1H	1497	U
26	1H	1506	C
26	1H	1507	A
26	1H	1508	A
26	1H	1509	C
26	1H	1510	A
26	1H	1511	A
26	1H	1517	G
26	1H	1520	U
26	1H	1526	G
26	1H	1534	G
26	1H	1535	U
26	1H	1536	A
26	1H	1537	C
26	1H	1538	G
26	1H	1540	G
26	1H	1543	A
26	1H	1544	C
26	1H	1545	A

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Mol	Chain	Res	Type
26	1H	1548	C
26	1H	1554	A
26	1H	1558	A
26	1H	1559	G
26	1H	1560	G
26	1H	1562	A
26	1H	1566	A
26	1H	1569	A
26	1H	1578	U
26	1H	1580	A
26	1H	1586	A
26	1H	1592	C
26	1H	1608	A
26	1H	1609	A
26	1H	1610	A
26	1H	1617	C
26	1H	1618	A
26	1H	1634	A
26	1H	1647	G
26	1H	1648	C
26	1H	1651	G
26	1H	1654	A
26	1H	1669	A
26	1H	1674	G
26	1H	1684	C
26	1H	1694	C
26	1H	1695	G
26	1H	1699	G
26	1H	1728	G
26	1H	1729	A
26	1H	1730	U
26	1H	1731	G
26	1H	1756	G
26	1H	1758	G
26	1H	1762	A
26	1H	1763	G
26	1H	1764	G
26	1H	1772	G
26	1H	1773	A
26	1H	1782	C
26	1H	1787	A
26	1H	1791	A

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Mol	Chain	Res	Type
26	1H	1799	G
26	1H	1800	C
26	1H	1801	G
26	1H	1802	A
26	1H	1811	G
26	1H	1816	G
26	1H	1817	G
26	1H	1829	A
26	1H	1835	G
26	1H	1839	G
26	1H	1847	A
26	1H	1858	G
26	1H	1870	C
26	1H	1878	G
26	1H	1889	A
26	1H	1896	G
26	1H	1900	A
26	1H	1906	G
26	1H	1914	C
26	1H	1919	A
26	1H	1920	C
26	1H	1926	U
26	1H	1929	G
26	1H	1930	G
26	1H	1931	U
26	1H	1938	A
26	1H	1940	U
26	1H	1941	C
26	1H	1951	U
26	1H	1952	A
26	1H	1955	U
26	1H	1960	A
26	1H	1967	C
26	1H	1969	A
26	1H	1970	A
26	1H	1971	A
26	1H	1972	A
26	1H	1982	C
26	1H	1993	U
26	1H	2005	A
26	1H	2020	A
26	1H	2021	C

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Mol	Chain	Res	Type
26	1H	2023	G
26	1H	2030	A
26	1H	2031	A
26	1H	2033	A
26	1H	2036	C
26	1H	2043	C
26	1H	2046	G
26	1H	2051	A
26	1H	2055	C
26	1H	2056	G
26	1H	2059	A
26	1H	2060	A
26	1H	2061	G
26	1H	2062	A
26	1H	2063	C
26	1H	2069	G
26	1H	2078	C
26	1H	2080	G
26	1H	2096	U
26	1H	2099	U
26	1H	2108	C
26	1H	2111	C
26	1H	2112	G
26	1H	2113	U
26	1H	2114	A
26	1H	2116	G
26	1H	2118	U
26	1H	2122	U
26	1H	2126	A
26	1H	2127	G
26	1H	2128	C
26	1H	2131	G
26	1H	2132	U
26	1H	2133	G
26	1H	2135	A
26	1H	2136	C
26	1H	2139	C
26	1H	2147	G
26	1H	2148	G
26	1H	2154	G
26	1H	2157	G
26	1H	2158	A

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Mol	Chain	Res	Type
26	1H	2161	C
26	1H	2166	G
26	1H	2167	U
26	1H	2168	G
26	1H	2170	A
26	1H	2171	A
26	1H	2172	U
26	1H	2173	A
26	1H	2174	C
26	1H	2176	A
26	1H	2181	G
26	1H	2190	G
26	1H	2192	G
26	1H	2198	A
26	1H	2205	C
26	1H	2210	G
26	1H	2212	A
26	1H	2213	U
26	1H	2215	G
26	1H	2225	A
26	1H	2226	C
26	1H	2236	C
26	1H	2238	G
26	1H	2240	C
26	1H	2268	A
26	1H	2269	A
26	1H	2273	A
26	1H	2275	C
26	1H	2278	A
26	1H	2280	G
26	1H	2281	C
26	1H	2283	C
26	1H	2287	A
26	1H	2288	A
26	1H	2297	C
26	1H	2305	A
26	1H	2307	G
26	1H	2308	G
26	1H	2310	A
26	1H	2311	A
26	1H	2312	U
26	1H	2315	G

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Mol	Chain	Res	Type
26	1H	2319	G
26	1H	2320	A
26	1H	2324	C
26	1H	2325	G
26	1H	2326	C
26	1H	2327	A
26	1H	2334	G
26	1H	2335	A
26	1H	2336	A
26	1H	2342	C
26	1H	2346	A
26	1H	2347	C
26	1H	2350	C
26	1H	2360	A
26	1H	2372	G
26	1H	2376	A
26	1H	2377	A
26	1H	2379	G
26	1H	2383	G
26	1H	2385	C
26	1H	2392	A
26	1H	2393	A
26	1H	2395	C
26	1H	2398	U
26	1H	2402	C
26	1H	2403	C
26	1H	2405	G
26	1H	2406	U
26	1H	2410	G
26	1H	2414	G
26	1H	2418	A
26	1H	2424	C
26	1H	2425	A
26	1H	2428	G
26	1H	2429	G
26	1H	2430	A
26	1H	2439	A
26	1H	2440	C
26	1H	2441	C
26	1H	2448	A
26	1H	2450	A
26	1H	2469	A

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Mol	Chain	Res	Type
26	1H	2470	G
26	1H	2476	A
26	1H	2478	A
26	1H	2482	G
26	1H	2484	G
26	1H	2487	G
26	1H	2497	A
26	1H	2502	G
26	1H	2505	G
26	1H	2506	U
26	1H	2518	A
26	1H	2520	C
26	1H	2529	G
26	1H	2549	G
26	1H	2554	U
26	1H	2566	A
26	1H	2567	G
26	1H	2573	C
26	1H	2576	G
26	1H	2582	G
26	1H	2585	U
26	1H	2601	C
26	1H	2602	A
26	1H	2609	U
26	1H	2610	C
26	1H	2611	U
26	1H	2612	C
26	1H	2615	U
26	1H	2629	A
26	1H	2636	U
26	1H	2641	G
26	1H	2654	A
26	1H	2660	A
26	1H	2665	A
26	1H	2666	C
26	1H	2673	G
26	1H	2689	U
26	1H	2690	C
26	1H	2691	C
26	1H	2698	U
26	1H	2700	C
26	1H	2701	C

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Mol	Chain	Res	Type
26	1H	2702	U
26	1H	2703	C
26	1H	2704	C
26	1H	2705	A
26	1H	2707	G
26	1H	2712(A)	A
26	1H	2713	A
26	1H	2714	G
26	1H	2718	G
26	1H	2719	G
26	1H	2721	A
26	1H	2726	U
26	1H	2733	A
26	1H	2756	U
26	1H	2757	A
26	1H	2758	A
26	1H	2764	A
26	1H	2765	A
26	1H	2766	G
26	1H	2778	A
26	1H	2779	U
26	1H	2780	G
26	1H	2781	A
26	1H	2789	C
26	1H	2790	A
26	1H	2791	C
26	1H	2793	G
26	1H	2794	C
26	1H	2795	G
26	1H	2797	U
26	1H	2798	C
26	1H	2801	A
26	1H	2802	G
26	1H	2808	U
26	1H	2818	G
26	1H	2820	A
26	1H	2821	A
26	1H	2832	U
26	1H	2833	G
26	1H	2834	G
26	1H	2835	A
26	1H	2864	G

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Mol	Chain	Res	Type
26	1H	2871	C
26	1H	2872	G
26	1H	2876	G
26	1H	2883	A
26	1H	2891	G
26	1H	2892	A
26	1H	2893	G
26	1H	2894	G
26	1H	2895	U
26	1H	2899	G
26	1H	2902	C
27	16	7	G
27	16	9	G
27	16	13	A
27	16	15	A
27	16	16	G
27	16	25	A
27	16	33	G
27	16	39	A
27	16	40	U
27	16	41	U
27	16	45	A
27	16	56	G
27	16	66	A
27	16	73	A
27	16	81	G
27	16	82	G
27	16	105	G
27	16	109	G
27	16	115	G
1	1G	5	U
1	1G	7	G
1	1G	9	G
1	1G	16	A
1	1G	22	G
1	1G	26	A
1	1G	31	G
1	1G	32	A
1	1G	39	G
1	1G	41	G
1	1G	47	C
1	1G	48	C

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Mol	Chain	Res	Type
1	1G	50	A
1	1G	51	A
1	1G	54	C
1	1G	65	U
1	1G	76	G
1	1G	79	G
1	1G	90	C
1	1G	91	C
1	1G	101	A
1	1G	115	G
1	1G	116	A
1	1G	121	C
1	1G	129(A)	G
1	1G	131	C
1	1G	132	C
1	1G	144	G
1	1G	146	G
1	1G	154	C
1	1G	163	C
1	1G	167	G
1	1G	173	U
1	1G	174	C
1	1G	182	U
1	1G	185	A
1	1G	187	C
1	1G	188	U
1	1G	189	U
1	1G	190	G
1	1G	191(A)	G
1	1G	191(D)	U
1	1G	195	A
1	1G	197	A
1	1G	198	G
1	1G	209	U
1	1G	210	U
1	1G	216	G
1	1G	238	G
1	1G	242	C
1	1G	244	U
1	1G	247	G
1	1G	250	A
1	1G	251	G

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Mol	Chain	Res	Type
1	1G	266	G
1	1G	267	C
1	1G	274	A
1	1G	281	G
1	1G	283	C
1	1G	289	G
1	1G	290	C
1	1G	298	A
1	1G	321	A
1	1G	328	C
1	1G	329	A
1	1G	332	G
1	1G	346	G
1	1G	349	A
1	1G	350	G
1	1G	351	G
1	1G	352	C
1	1G	353	A
1	1G	354	G
1	1G	356	A
1	1G	366	C
1	1G	367	U
1	1G	372	C
1	1G	388	G
1	1G	397	A
1	1G	398	C
1	1G	406	G
1	1G	411	A
1	1G	412	A
1	1G	413	G
1	1G	414	A
1	1G	421	U
1	1G	422	C
1	1G	423	G
1	1G	424	G
1	1G	429	U
1	1G	430	A
1	1G	439	A
1	1G	442	C
1	1G	448	A
1	1G	452	A
1	1G	465	A

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Mol	Chain	Res	Type
1	1G	466	C
1	1G	467	G
1	1G	475	G
1	1G	478	A
1	1G	484	G
1	1G	485	G
1	1G	486	U
1	1G	496	A
1	1G	497	U
1	1G	502	G
1	1G	505	G
1	1G	509	A
1	1G	510	A
1	1G	511	C
1	1G	512	U
1	1G	513	C
1	1G	518	C
1	1G	521	G
1	1G	524	G
1	1G	527	G
1	1G	529	G
1	1G	530	G
1	1G	531	U
1	1G	532	A
1	1G	533	A
1	1G	534	U
1	1G	536	C
1	1G	546	G
1	1G	547	A
1	1G	559	A
1	1G	561	U
1	1G	564	C
1	1G	566	G
1	1G	572	A
1	1G	573	A
1	1G	575	G
1	1G	576	G
1	1G	577	G
1	1G	581	G
1	1G	607	A
1	1G	611	A
1	1G	614	A

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Mol	Chain	Res	Type
1	1G	618	C
1	1G	629	G
1	1G	630	G
1	1G	632	A
1	1G	633	G
1	1G	652	U
1	1G	653	A
1	1G	661	G
1	1G	665	A
1	1G	687	A
1	1G	688	G
1	1G	702	A
1	1G	703	G
1	1G	721	G
1	1G	724	G
1	1G	731	G
1	1G	749	C
1	1G	760	G
1	1G	769	G
1	1G	777	A
1	1G	778	G
1	1G	782	A
1	1G	792	A
1	1G	794	A
1	1G	803	G
1	1G	817	C
1	1G	821	G
1	1G	827	U
1	1G	828	A
1	1G	842	C
1	1G	843	U
1	1G	848	C
1	1G	851	G
1	1G	859	A
1	1G	867	G
1	1G	873	A
1	1G	885	G
1	1G	887	G
1	1G	914	A
1	1G	916	G
1	1G	926	G
1	1G	927	G

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Mol	Chain	Res	Type
1	1G	934	C
1	1G	935	A
1	1G	936	C
1	1G	958	A
1	1G	960	U
1	1G	961	U
1	1G	966	G
1	1G	968	A
1	1G	969	A
1	1G	971	G
1	1G	972	C
1	1G	974	A
1	1G	975	A
1	1G	976	G
1	1G	977	A
1	1G	978	A
1	1G	980	C
1	1G	981	U
1	1G	983	A
1	1G	991	U
1	1G	992	U
1	1G	993	G
1	1G	1004	A
1	1G	1006	C
1	1G	1009	G
1	1G	1024	G
1	1G	1025	U
1	1G	1027	C
1	1G	1028	C
1	1G	1028(B)	C
1	1G	1029	G
1	1G	1031	G
1	1G	1032(A)	G
1	1G	1033	G
1	1G	1035	A
1	1G	1036	G
1	1G	1040	U
1	1G	1046	A
1	1G	1047	G
1	1G	1050	G
1	1G	1051	C
1	1G	1053	G

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Mol	Chain	Res	Type
1	1G	1054	C
1	1G	1055	A
1	1G	1081	G
1	1G	1082	G
1	1G	1085	U
1	1G	1086	U
1	1G	1094	G
1	1G	1095	U
1	1G	1101	A
1	1G	1118	C
1	1G	1123	A
1	1G	1125	U
1	1G	1127	G
1	1G	1128	C
1	1G	1129	C
1	1G	1131	G
1	1G	1135	U
1	1G	1137	C
1	1G	1138	G
1	1G	1139	G
1	1G	1145	C
1	1G	1146	A
1	1G	1147	C
1	1G	1154	G
1	1G	1157	A
1	1G	1158	C
1	1G	1159	U
1	1G	1160	G
1	1G	1171	G
1	1G	1177	G
1	1G	1178	G
1	1G	1181	G
1	1G	1182	G
1	1G	1183	A
1	1G	1186	G
1	1G	1187	G
1	1G	1188	A
1	1G	1190	G
1	1G	1193	G
1	1G	1196	U
1	1G	1198	G
1	1G	1200	C

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Mol	Chain	Res	Type
1	1G	1201	A
1	1G	1202	G
1	1G	1211	U
1	1G	1212	U
1	1G	1213	A
1	1G	1214	C
1	1G	1225	A
1	1G	1232	U
1	1G	1233	G
1	1G	1238	A
1	1G	1240	U
1	1G	1241	G
1	1G	1256	A
1	1G	1257	U
1	1G	1258	G
1	1G	1260	C
1	1G	1263	C
1	1G	1267	C
1	1G	1269	A
1	1G	1274	G
1	1G	1275	A
1	1G	1278	U
1	1G	1279	A
1	1G	1280	A
1	1G	1281	U
1	1G	1286	A
1	1G	1287	A
1	1G	1288	A
1	1G	1290	G
1	1G	1293	G
1	1G	1297	C
1	1G	1298	C
1	1G	1299	A
1	1G	1301	U
1	1G	1303	C
1	1G	1305	G
1	1G	1313	U
1	1G	1322	C
1	1G	1323	G
1	1G	1331	G
1	1G	1335	C
1	1G	1336	C

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Mol	Chain	Res	Type
1	1G	1346	A
1	1G	1347	G
1	1G	1353	G
1	1G	1362(A)	C
1	1G	1363	A
1	1G	1364	U
1	1G	1368	G
1	1G	1370	G
1	1G	1379	G
1	1G	1392	G
1	1G	1396	A
1	1G	1397	C
1	1G	1398	A
1	1G	1401	G
1	1G	1402	C
1	1G	1406	U
1	1G	1419	G
1	1G	1442	G
1	1G	1443	G
1	1G	1446	A
1	1G	1449	C
1	1G	1450	U
1	1G	1451	A
1	1G	1452	C
1	1G	1453	G
1	1G	1454	G
1	1G	1469	G
1	1G	1482	G
1	1G	1491	G
1	1G	1492	A
1	1G	1494	G
1	1G	1499	A
1	1G	1502	A
1	1G	1503	A
1	1G	1504	G
1	1G	1506	U
1	1G	1517	G
1	1G	1519	A
1	1G	1520	G
1	1G	1525	G
1	1G	1529	G
1	1G	1530	G

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Mol	Chain	Res	Type
24	1L	2	C
24	1L	8	U
24	1L	9	A
24	1L	10	G
24	1L	11	C
24	1L	16	U
24	1L	17	C
24	1L	19	G
24	1L	21	A
24	1L	22	G
24	1L	25	C
24	1L	27	G
24	1L	36	A
24	1L	40	C
24	1L	41	C
24	1L	46	G
24	1L	47	U
24	1L	48	C
24	1L	59	U
24	1L	61	C
24	1L	69	G
24	1L	70	G
24	1L	73	A
24	1L	74	C
24	1L	75	C
24	1L	76	A
23	2L	2	G
23	2L	8	4SU
23	2L	9	G
23	2L	13	C
23	2L	16	C
23	2L	17	C
23	2L	19	G
23	2L	20	G
23	2L	21	U
23	2L	22	A
23	2L	23	G
23	2L	27	G
23	2L	32	G
23	2L	48	U
23	2L	49	C
23	2L	50	G

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Mol	Chain	Res	Type
23	2L	53	G
23	2L	57	C
23	2L	61	U
23	2L	68	C
24	3L	2	C
24	3L	9	A
24	3L	13	C
24	3L	16	U
24	3L	17	C
24	3L	18	G
24	3L	19	G
24	3L	20	U
24	3L	21	A
24	3L	22	G
24	3L	23	A
24	3L	26	A
24	3L	31	A
24	3L	33	U
24	3L	36	A
24	3L	37	A
24	3L	38	A
24	3L	40	C
24	3L	44	G
24	3L	46	G
24	3L	47	U
24	3L	48	C
24	3L	54	U
24	3L	58	A
24	3L	59	U
24	3L	61	C
24	3L	62	C
24	3L	65	G
24	3L	66	U
24	3L	72	C
24	3L	73	A
24	3L	76	A
25	4L	13	A
25	4L	14	A
25	4L	19	U
26	14	2	G
26	14	3	U
26	14	4	C

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Mol	Chain	Res	Type
26	14	5	A
26	14	6	A
26	14	9	U
26	14	14	A
26	14	15	G
26	14	34	C
26	14	35	G
26	14	46	C
26	14	54	G
26	14	55	G
26	14	58	G
26	14	71	A
26	14	72	U
26	14	74	A
26	14	75	G
26	14	82	G
26	14	84	A
26	14	91	A
26	14	93	C
26	14	95	G
26	14	99	U
26	14	102	G
26	14	118	A
26	14	119	A
26	14	120	U
26	14	121	G
26	14	125	G
26	14	129	C
26	14	131	G
26	14	138	G
26	14	139	G
26	14	140	A
26	14	154	G
26	14	155	C
26	14	161	U
26	14	162	U
26	14	173	G
26	14	174	C
26	14	181	A
26	14	182	A
26	14	196	A
26	14	199	A

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Mol	Chain	Res	Type
26	14	201	C
26	14	205	G
26	14	214	G
26	14	215	G
26	14	216	A
26	14	217	G
26	14	221	A
26	14	222	A
26	14	225	A
26	14	229	A
26	14	232	G
26	14	233	A
26	14	240	G
26	14	248	G
26	14	249	C
26	14	266	G
26	14	267	C
26	14	269	U
26	14	270(K)	C
26	14	270(L)	U
26	14	270(M)	U
26	14	270(O)	U
26	14	271(B)	G
26	14	271	G
26	14	273(D)	C
26	14	274	G
26	14	275	G
26	14	276	A
26	14	277	C
26	14	278	A
26	14	279	C
26	14	289	A
26	14	290	G
26	14	310	A
26	14	311	A
26	14	319	C
26	14	324	A
26	14	329	G
26	14	330	A
26	14	331	A
26	14	333	G
26	14	346	A

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Mol	Chain	Res	Type
26	14	352	G
26	14	363	G
26	14	363(A)	A
26	14	363(E)	U
26	14	372	G
26	14	382	G
26	14	386	G
26	14	391	G
26	14	395	U
26	14	396	G
26	14	399	G
26	14	405	U
26	14	406	G
26	14	411	G
26	14	412	A
26	14	414	C
26	14	428	A
26	14	443	A
26	14	444	C
26	14	448	U
26	14	454	A
26	14	455	C
26	14	457	A
26	14	459	U
26	14	460	A
26	14	470	A
26	14	471	A
26	14	478	A
26	14	481	G
26	14	483	A
26	14	504	U
26	14	505	A
26	14	509	C
26	14	513	A
26	14	528	A
26	14	529	A
26	14	531	C
26	14	532	A
26	14	533	G
26	14	537	C
26	14	549	G
26	14	556	G

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Mol	Chain	Res	Type
26	14	563	G
26	14	570	G
26	14	573	G
26	14	575	A
26	14	586	A
26	14	587	C
26	14	603	A
26	14	607	U
26	14	609(A)	G
26	14	614	U
26	14	615	G
26	14	617	G
26	14	618	G
26	14	619	G
26	14	620	G
26	14	621	A
26	14	622	G
26	14	627	A
26	14	635	C
26	14	637	A
26	14	645	C
26	14	646	A
26	14	650	C
26	14	651	G
26	14	654	A
26	14	654(E)	C
26	14	654(G)	C
26	14	654(H)	G
26	14	654(I)	C
26	14	654(K)	C
26	14	654(L)	G
26	14	654(T)	A
26	14	656	G
26	14	661	C
26	14	669	G
26	14	686	G
26	14	699	A
26	14	701	G
26	14	717	G
26	14	722	A
26	14	730	C
26	14	738	G

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Mol	Chain	Res	Type
26	14	740	U
26	14	752	A
26	14	753	C
26	14	762	U
26	14	765	G
26	14	775	G
26	14	776	G
26	14	779	U
26	14	782	A
26	14	783	A
26	14	784	A
26	14	785	G
26	14	791	C
26	14	792	G
26	14	800	A
26	14	802	A
26	14	805	G
26	14	812	C
26	14	819	A
26	14	820	A
26	14	827	U
26	14	828	U
26	14	830	G
26	14	832	G
26	14	840	C
26	14	846	C
26	14	848	G
26	14	855	G
26	14	859	G
26	14	865	C
26	14	866	A
26	14	869	G
26	14	878	A
26	14	880	G
26	14	881	G
26	14	882	G
26	14	885	C
26	14	886	C
26	14	887	A
26	14	888	C
26	14	889	C
26	14	890	A

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Mol	Chain	Res	Type
26	14	894	C
26	14	896	A
26	14	897	C
26	14	899	A
26	14	900	A
26	14	901	A
26	14	903	C
26	14	904	C
26	14	906	G
26	14	910	A
26	14	914	C
26	14	915	C
26	14	917	A
26	14	924	C
26	14	932	G
26	14	933	A
26	14	938	G
26	14	941	A
26	14	945	A
26	14	946	G
26	14	953	A
26	14	958	U
26	14	959	A
26	14	961	C
26	14	968	G
26	14	974	G
26	14	980	A
26	14	983	A
26	14	986	C
26	14	989	G
26	14	990	A
26	14	991	C
26	14	996	A
26	14	999	U
26	14	1005	C
26	14	1012	U
26	14	1013	C
26	14	1014	U
26	14	1015	G
26	14	1017	G
26	14	1020	A
26	14	1021	A

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Mol	Chain	Res	Type
26	14	1022	G
26	14	1023	U
26	14	1025	G
26	14	1026	U
26	14	1027	A
26	14	1028	A
26	14	1037	G
26	14	1039	G
26	14	1044	G
26	14	1045	A
26	14	1046	A
26	14	1047	G
26	14	1048	A
26	14	1051	G
26	14	1054	A
26	14	1056	G
26	14	1057	A
26	14	1060	U
26	14	1062	G
26	14	1065	U
26	14	1067	A
26	14	1068	G
26	14	1070	A
26	14	1073	A
26	14	1077	A
26	14	1079	C
26	14	1083	U
26	14	1084	A
26	14	1085	A
26	14	1086	A
26	14	1087	G
26	14	1088	A
26	14	1090	U
26	14	1091	G
26	14	1093	G
26	14	1095	A
26	14	1096	A
26	14	1098	A
26	14	1105	U
26	14	1110	G
26	14	1111	A
26	14	1112	G

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Mol	Chain	Res	Type
26	14	1122	G
26	14	1126	A
26	14	1129	A
26	14	1130	U
26	14	1135	C
26	14	1136	G
26	14	1137	G
26	14	1139	G
26	14	1142	U
26	14	1142(A)	A
26	14	1143	A
26	14	1147	C
26	14	1149	G
26	14	1151	G
26	14	1155	A
26	14	1170	G
26	14	1173	G
26	14	1174	A
26	14	1175	U
26	14	1177	A
26	14	1178	C
26	14	1195	G
26	14	1204	A
26	14	1205	U
26	14	1206	G
26	14	1212	G
26	14	1220	A
26	14	1236	G
26	14	1237	A
26	14	1244	G
26	14	1247	A
26	14	1253	A
26	14	1256	G
26	14	1271	G
26	14	1272	A
26	14	1273	U
26	14	1287	A
26	14	1298	C
26	14	1300	U
26	14	1301	A
26	14	1303	G
26	14	1306	C

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Mol	Chain	Res	Type
26	14	1313	U
26	14	1314	C
26	14	1319	G
26	14	1320	C
26	14	1321	A
26	14	1329	U
26	14	1342	A
26	14	1343	G
26	14	1345	C
26	14	1348	G
26	14	1349	A
26	14	1359	A
26	14	1365	A
26	14	1368	G
26	14	1370	C
26	14	1378	A
26	14	1380	G
26	14	1385	G
26	14	1386	C
26	14	1395	A
26	14	1403	C
26	14	1407	C
26	14	1416	G
26	14	1417	C
26	14	1419	A
26	14	1420	U
26	14	1421	G
26	14	1427	A
26	14	1428	C
26	14	1437	C
26	14	1444(A)	A
26	14	1445	C
26	14	1449	A
26	14	1449(A)	G
26	14	1455	G
26	14	1459	G
26	14	1460	A
26	14	1467	C
26	14	1471	A
26	14	1475	G
26	14	1480	G
26	14	1482	U

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Mol	Chain	Res	Type
26	14	1483	G
26	14	1490	A
26	14	1493	C
26	14	1494	A
26	14	1506	C
26	14	1508	A
26	14	1509	C
26	14	1510	A
26	14	1522	G
26	14	1528	A
26	14	1533	C
26	14	1534	G
26	14	1535	U
26	14	1537	C
26	14	1543	A
26	14	1544	C
26	14	1547	C
26	14	1554	A
26	14	1558	A
26	14	1559	G
26	14	1560	G
26	14	1566	A
26	14	1569	A
26	14	1577	C
26	14	1578	U
26	14	1585	C
26	14	1586	A
26	14	1588	C
26	14	1589	C
26	14	1598	C
26	14	1608	A
26	14	1609	A
26	14	1610	A
26	14	1613	G
26	14	1618	A
26	14	1628	G
26	14	1632	A
26	14	1640	C
26	14	1647	G
26	14	1648	C
26	14	1654	A
26	14	1669	A

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Mol	Chain	Res	Type
26	14	1671	U
26	14	1674	G
26	14	1675	C
26	14	1678	G
26	14	1680	U
26	14	1682	G
26	14	1696	G
26	14	1697	G
26	14	1700	A
26	14	1701	A
26	14	1717	G
26	14	1725	G
26	14	1726	G
26	14	1728	G
26	14	1729	A
26	14	1730	U
26	14	1735	C
26	14	1742	C
26	14	1743	G
26	14	1756	G
26	14	1758	G
26	14	1762	A
26	14	1763	G
26	14	1764	G
26	14	1773	A
26	14	1779	U
26	14	1780	A
26	14	1782	C
26	14	1787	A
26	14	1791	A
26	14	1800	C
26	14	1801	G
26	14	1802	A
26	14	1806	C
26	14	1811	G
26	14	1813	G
26	14	1816	G
26	14	1819	A
26	14	1820	U
26	14	1829	A
26	14	1847	A
26	14	1848	A

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Mol	Chain	Res	Type
26	14	1851	U
26	14	1858	G
26	14	1878	G
26	14	1885	A
26	14	1888	G
26	14	1889	A
26	14	1894	C
26	14	1897	G
26	14	1906	G
26	14	1913	A
26	14	1917	U
26	14	1919	A
26	14	1920	C
26	14	1929	G
26	14	1930	G
26	14	1931	U
26	14	1936	A
26	14	1937	A
26	14	1938	A
26	14	1941	C
26	14	1944	U
26	14	1955	U
26	14	1960	A
26	14	1963	U
26	14	1967	C
26	14	1970	A
26	14	1971	A
26	14	1972	A
26	14	1985	G
26	14	1991	U
26	14	1993	U
26	14	1995	U
26	14	1996	C
26	14	2018	G
26	14	2020	A
26	14	2023	G
26	14	2031	A
26	14	2033	A
26	14	2039	C
26	14	2043	C
26	14	2049	G
26	14	2054	A

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Mol	Chain	Res	Type
26	14	2055	C
26	14	2056	G
26	14	2059	A
26	14	2060	A
26	14	2061	G
26	14	2062	A
26	14	2063	C
26	14	2069	G
26	14	2071	A
26	14	2082	A
26	14	2093	G
26	14	2096	U
26	14	2099	U
26	14	2100	G
26	14	2108	C
26	14	2111	C
26	14	2112	G
26	14	2113	U
26	14	2114	A
26	14	2117	A
26	14	2118	U
26	14	2127	G
26	14	2128	C
26	14	2131	G
26	14	2132	U
26	14	2133	G
26	14	2134	A
26	14	2136	C
26	14	2137	C
26	14	2140	C
26	14	2144	U
26	14	2145	C
26	14	2146	C
26	14	2147	G
26	14	2148	G
26	14	2157	G
26	14	2166	G
26	14	2173	A
26	14	2174	C
26	14	2175	C
26	14	2178	C
26	14	2189	U

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Mol	Chain	Res	Type
26	14	2191	G
26	14	2192	G
26	14	2198	A
26	14	2207	C
26	14	2210	G
26	14	2211	G
26	14	2212	A
26	14	2213	U
26	14	2215	G
26	14	2225	A
26	14	2226	C
26	14	2234	G
26	14	2238	G
26	14	2239	G
26	14	2240	C
26	14	2251	G
26	14	2252	G
26	14	2253	G
26	14	2259	G
26	14	2261	C
26	14	2267	A
26	14	2268	A
26	14	2269	A
26	14	2273	A
26	14	2275	C
26	14	2278	A
26	14	2280	G
26	14	2283	C
26	14	2286	A
26	14	2287	A
26	14	2288	A
26	14	2289	G
26	14	2291	U
26	14	2294	C
26	14	2297	C
26	14	2305	A
26	14	2307	G
26	14	2308	G
26	14	2309	A
26	14	2310	A
26	14	2311	A
26	14	2318	G

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Mol	Chain	Res	Type
26	14	2321	G
26	14	2324	C
26	14	2325	G
26	14	2334	G
26	14	2335	A
26	14	2336	A
26	14	2343	C
26	14	2346	A
26	14	2347	C
26	14	2350	C
26	14	2354	G
26	14	2383	G
26	14	2385	C
26	14	2388	A
26	14	2389	G
26	14	2392	A
26	14	2394	C
26	14	2396	G
26	14	2402	C
26	14	2403	C
26	14	2406	U
26	14	2407	G
26	14	2408	U
26	14	2414	G
26	14	2422	A
26	14	2423	U
26	14	2425	A
26	14	2429	G
26	14	2430	A
26	14	2431	U
26	14	2434	A
26	14	2435	A
26	14	2439	A
26	14	2440	C
26	14	2441	C
26	14	2445	G
26	14	2447	G
26	14	2448	A
26	14	2449	U
26	14	2469	A
26	14	2470	G
26	14	2476	A

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Mol	Chain	Res	Type
26	14	2477	C
26	14	2482	G
26	14	2483	C
26	14	2484	G
26	14	2487	G
26	14	2489	G
26	14	2492	U
26	14	2496	C
26	14	2497	A
26	14	2502	G
26	14	2504	U
26	14	2505	G
26	14	2506	U
26	14	2513	G
26	14	2518	A
26	14	2519	U
26	14	2528	U
26	14	2529	G
26	14	2532	G
26	14	2538	C
26	14	2542	A
26	14	2543	G
26	14	2554	U
26	14	2564	A
26	14	2566	A
26	14	2567	G
26	14	2569	G
26	14	2573	C
26	14	2584	U
26	14	2585	U
26	14	2587	A
26	14	2602	A
26	14	2603	G
26	14	2609	U
26	14	2610	C
26	14	2611	U
26	14	2612	C
26	14	2613	U
26	14	2615	U
26	14	2630	G
26	14	2636	U
26	14	2646	C

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Mol	Chain	Res	Type
26	14	2647	U
26	14	2665	A
26	14	2667	C
26	14	2670	A
26	14	2673	G
26	14	2679	A
26	14	2689	U
26	14	2690	C
26	14	2702	U
26	14	2703	C
26	14	2704	C
26	14	2707	G
26	14	2712(A)	A
26	14	2713	A
26	14	2714	G
26	14	2726	U
26	14	2733	A
26	14	2739	U
26	14	2744	G
26	14	2750	A
26	14	2751	G
26	14	2752	C
26	14	2754	U
26	14	2758	A
26	14	2761	G
26	14	2762	G
26	14	2764	A
26	14	2765	A
26	14	2766	G
26	14	2769	C
26	14	2777	G
26	14	2778	A
26	14	2779	U
26	14	2780	G
26	14	2786	U
26	14	2787	C
26	14	2790	A
26	14	2791	C
26	14	2794	C
26	14	2795	G
26	14	2797	U
26	14	2798	C

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Mol	Chain	Res	Type
26	14	2810	A
26	14	2818	G
26	14	2820	A
26	14	2821	A
26	14	2833	G
26	14	2834	G
26	14	2835	A
26	14	2839	G
26	14	2860	A
26	14	2872	G
26	14	2879	C
26	14	2880	C
26	14	2883	A
26	14	2885	C
26	14	2886	G
26	14	2894	G
26	14	2896	C
26	14	2898	U
26	14	2899	G
27	1J	0	A
27	1J	7	G
27	1J	12	C
27	1J	13	A
27	1J	15	A
27	1J	16	G
27	1J	19	G
27	1J	22	U
27	1J	24	G
27	1J	29	A
27	1J	30	C
27	1J	41	U
27	1J	42	C
27	1J	44	G
27	1J	45	A
27	1J	52	A
27	1J	53	A
27	1J	58	A
27	1J	66	A
27	1J	73	A
27	1J	75	G
27	1J	81	G
27	1J	88	C

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Mol	Chain	Res	Type
27	1J	89	G
27	1J	89(A)	A
27	1J	90	C
27	1J	101	A
27	1J	108	C
27	1J	109	G
27	1J	113	C
27	1J	114	G

All (178) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	50	A
1	13	115	G
1	13	119	A
1	13	244	U
1	13	266	G
1	13	412	A
1	13	422	C
1	13	484	G
1	13	509	A
1	13	560	U
1	13	687	A
1	13	703	G
1	13	748	C
1	13	793	U
1	13	812	C
1	13	991	U
1	13	992	U
1	13	1027	C
1	13	1053	G
1	13	1054	C
1	13	1065	U
1	13	1126	U
1	13	1285	A
1	13	1300	G
1	13	1302	U
1	13	1336	C
1	13	1452	C
1	13	1498	U
1	13	1504	G

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Mol	Chain	Res	Type
22	1K	10	G
22	1K	18	G
23	2K	21	U
23	2K	22	A
23	2K	48	U
24	3K	2	C
24	3K	18	G
24	3K	45	U
24	3K	58	A
26	1H	125	G
26	1H	222	A
26	1H	229	A
26	1H	249	C
26	1H	271(B)	G
26	1H	404	C
26	1H	508	G
26	1H	587	C
26	1H	746	A
26	1H	752	A
26	1H	764	A
26	1H	776	G
26	1H	800	A
26	1H	858	U
26	1H	880	G
26	1H	974(A)	C
26	1H	1022	G
26	1H	1026	U
26	1H	1060	U
26	1H	1085	A
26	1H	1110	G
26	1H	1178	C
26	1H	1301	A
26	1H	1312	U
26	1H	1378	A
26	1H	1396	U
26	1H	1420	U
26	1H	1427	A
26	1H	1508	A
26	1H	1558	A
26	1H	1608	A
26	1H	1609	A
26	1H	1647	G

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Mol	Chain	Res	Type
26	1H	1694	C
26	1H	1699	G
26	1H	1757	U
26	1H	1799	G
26	1H	2060	A
26	1H	2062	A
26	1H	2135	A
26	1H	2157	G
26	1H	2171	A
26	1H	2212	A
26	1H	2225	A
26	1H	2346	A
26	1H	2428	G
26	1H	2439	A
26	1H	2475	C
26	1H	2481	G
26	1H	2566	A
26	1H	2689	U
26	1H	2756	U
1	1G	7	G
1	1G	64	G
1	1G	115	G
1	1G	197	A
1	1G	243	A
1	1G	250	A
1	1G	266	G
1	1G	327	A
1	1G	328	C
1	1G	345	C
1	1G	412	A
1	1G	429	U
1	1G	485	G
1	1G	509	A
1	1G	528	C
1	1G	560	U
1	1G	632	A
1	1G	687	A
1	1G	723	U
1	1G	748	C
1	1G	793	U
1	1G	884	U
1	1G	913	A

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Mol	Chain	Res	Type
1	1G	991	U
1	1G	992	U
1	1G	1053	G
1	1G	1054	C
1	1G	1064	G
1	1G	1126	U
1	1G	1128	C
1	1G	1145	C
1	1G	1157	A
1	1G	1285	A
1	1G	1297	C
1	1G	1300	G
1	1G	1346	A
1	1G	1396	A
1	1G	1453	G
1	1G	1498	U
24	1L	10	G
24	1L	18	G
23	2L	19	G
23	2L	21	U
23	2L	48	U
24	3L	8	U
24	3L	58	A
25	4L	12	A
26	14	34	C
26	14	101	G
26	14	128	C
26	14	196	A
26	14	278	A
26	14	528	A
26	14	685	A
26	14	752	A
26	14	764	A
26	14	774	A
26	14	990	A
26	14	1022	G
26	14	1085	A
26	14	1342	A
26	14	1378	A
26	14	1416	G
26	14	1427	A
26	14	1558	A

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Mol	Chain	Res	Type
26	14	1608	A
26	14	1609	A
26	14	1819	A
26	14	1984	G
26	14	2062	A
26	14	2210	G
26	14	2225	A
26	14	2335	A
26	14	2406	U
26	14	2439	A
26	14	2447	G
26	14	2602	A
26	14	2611	U
26	14	2629	A
26	14	2689	U
26	14	2776	A
26	14	2778	A
26	14	2859	G
26	14	2893	G
27	1J	12	C
27	1J	56	G
27	1J	88	C

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

17 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	$\#\|Z\| > 2$
23	7MG	2K	47	23	22,26,27	3.19	6 (27%)	29,39,42	2.69	11 (37%)
22	7MG	1K	46	22	22,26,27	3.07	7 (31%)	29,39,42	2.87	9 (31%)
22	5MU	1K	54	22	19,22,23	3.94	5 (26%)	28,32,35	3.10	7 (25%)
23	7MG	2L	47	23	22,26,27	3.11	6 (27%)	29,39,42	2.80	10 (34%)
23	4SU	2L	8	23	18,21,22	1.96	5 (27%)	26,30,33	2.36	7 (26%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
22	PSU	1K	55	22	18,21,22	1.36	1 (5%)	22,30,33	1.49	4 (18%)
23	OMC	2L	33	23	19,22,23	1.84	3 (15%)	26,31,34	1.31	3 (11%)
23	5MU	2L	55	23	19,22,23	3.89	5 (26%)	28,32,35	3.38	8 (28%)
23	5MU	2K	55	23	19,22,23	3.90	5 (26%)	28,32,35	3.38	7 (25%)
22	PSU	1K	32	22	18,21,22	1.26	1 (5%)	22,30,33	1.39	3 (13%)
23	OMC	2K	33	23	19,22,23	1.82	3 (15%)	26,31,34	1.03	1 (3%)
23	PSU	2L	56	23	18,21,22	1.30	2 (11%)	22,30,33	1.68	2 (9%)
22	PSU	1K	39	22	18,21,22	1.06	2 (11%)	22,30,33	1.57	4 (18%)
22	MIA	1K	37	22	24,31,32	2.55	4 (16%)	26,44,47	2.59	8 (30%)
22	4SU	1K	8	22	18,21,22	1.88	5 (27%)	26,30,33	2.27	5 (19%)
23	4SU	2K	8	23	18,21,22	1.90	2 (11%)	26,30,33	3.22	10 (38%)
23	PSU	2K	56	23	18,21,22	1.06	2 (11%)	22,30,33	1.74	4 (18%)

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
23	7MG	2K	47	23	-	1/7/37/38	0/3/3/3
22	7MG	1K	46	22	-	1/7/37/38	0/3/3/3
22	5MU	1K	54	22	-	0/7/25/26	0/2/2/2
23	7MG	2L	47	23	-	1/7/37/38	0/3/3/3
23	4SU	2L	8	23	-	2/7/25/26	0/2/2/2
22	PSU	1K	55	22	-	2/7/25/26	0/2/2/2
23	OMC	2L	33	23	-	2/9/27/28	0/2/2/2
23	5MU	2L	55	23	-	0/7/25/26	0/2/2/2
23	5MU	2K	55	23	-	0/7/25/26	0/2/2/2
22	PSU	1K	32	22	-	0/7/25/26	0/2/2/2
23	OMC	2K	33	23	-	1/9/27/28	0/2/2/2
23	PSU	2L	56	23	-	1/7/25/26	0/2/2/2
22	PSU	1K	39	22	-	1/7/25/26	0/2/2/2
22	MIA	1K	37	22	-	4/11/33/34	0/3/3/3
22	4SU	1K	8	22	-	0/7/25/26	0/2/2/2
23	4SU	2K	8	23	-	3/7/25/26	0/2/2/2
23	PSU	2K	56	23	-	0/7/25/26	0/2/2/2

All (64) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2L	55	5MU	C2-N1	12.68	1.58	1.38
22	1K	54	5MU	C2-N1	12.62	1.58	1.38
23	2K	55	5MU	C2-N1	12.47	1.58	1.38
22	1K	37	MIA	C13-C14	9.50	1.59	1.32
23	2L	47	7MG	C5-N7	8.93	1.45	1.35
22	1K	46	7MG	C5-N7	8.91	1.45	1.35
23	2K	47	7MG	C4-N9	-8.76	1.27	1.37
23	2K	47	7MG	C5-N7	8.51	1.45	1.35
23	2L	47	7MG	C4-N9	-7.47	1.29	1.37
22	1K	46	7MG	C4-N9	-7.34	1.29	1.37
22	1K	37	MIA	C6-N6	6.37	1.46	1.34
23	2K	55	5MU	C4-N3	-6.19	1.27	1.38
23	2L	55	5MU	C4-N3	-6.19	1.27	1.38
22	1K	54	5MU	C6-N1	6.12	1.48	1.38
22	1K	54	5MU	C2-N3	5.99	1.48	1.38
23	2K	8	4SU	C5-C4	5.96	1.50	1.42
23	2K	55	5MU	C6-N1	5.91	1.48	1.38
22	1K	54	5MU	C4-N3	-5.87	1.27	1.38
23	2L	47	7MG	C4-N3	5.85	1.48	1.34
23	2L	8	4SU	C5-C4	5.81	1.50	1.42
22	1K	46	7MG	C4-N3	5.75	1.47	1.34
23	2L	55	5MU	C2-N3	5.68	1.48	1.38
23	2K	47	7MG	C4-N3	5.60	1.47	1.34
22	1K	8	4SU	C5-C4	5.55	1.49	1.42
23	2L	55	5MU	C6-N1	5.36	1.47	1.38
23	2K	55	5MU	C2-N3	5.30	1.47	1.38
23	2K	55	5MU	C4-C5	5.22	1.53	1.44
23	2L	33	OMC	C2-N3	4.95	1.46	1.36
22	1K	54	5MU	C4-C5	4.87	1.52	1.44
23	2L	55	5MU	C4-C5	4.86	1.52	1.44
22	1K	55	PSU	C6-C5	4.71	1.40	1.35
23	2K	33	OMC	C4-N4	4.63	1.44	1.33
23	2K	47	7MG	C5-C4	-4.51	1.23	1.38
23	2L	33	OMC	C4-N4	4.45	1.44	1.33
23	2K	33	OMC	C2-N3	4.40	1.45	1.36
23	2L	47	7MG	C5-C4	-4.32	1.23	1.38
23	2L	56	PSU	C6-C5	4.31	1.40	1.35
23	2K	8	4SU	C2-N1	4.11	1.45	1.38
22	1K	46	7MG	C5-C4	-3.97	1.25	1.38
22	1K	32	PSU	C6-C5	3.95	1.39	1.35
23	2L	8	4SU	C2-N1	3.79	1.44	1.38
22	1K	8	4SU	C2-N1	3.72	1.44	1.38
23	2K	33	OMC	C5-C4	3.62	1.51	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2L	33	OMC	C5-C4	3.24	1.50	1.42
22	1K	39	PSU	C6-C5	3.13	1.39	1.35
23	2L	47	7MG	C2-N2	3.10	1.41	1.34
23	2K	47	7MG	C2-N2	3.09	1.41	1.34
23	2K	56	PSU	C6-C5	3.08	1.38	1.35
22	1K	46	7MG	C2-N2	2.94	1.41	1.34
22	1K	8	4SU	C6-N1	2.82	1.44	1.38
23	2L	8	4SU	C6-N1	2.82	1.44	1.38
23	2L	8	4SU	C4-N3	2.54	1.40	1.37
23	2L	56	PSU	C2-N1	2.45	1.40	1.36
22	1K	37	MIA	C15-C14	2.31	1.56	1.50
22	1K	39	PSU	C4-C5	-2.28	1.37	1.44
22	1K	8	4SU	C4-N3	2.27	1.40	1.37
23	2L	8	4SU	C2-N3	2.15	1.41	1.38
22	1K	46	7MG	C8-N9	2.13	1.47	1.46
22	1K	37	MIA	C4-N3	-2.12	1.32	1.35
23	2L	47	7MG	C5-C6	2.12	1.49	1.43
23	2K	47	7MG	C8-N9	2.12	1.47	1.46
22	1K	46	7MG	C5-C6	2.03	1.48	1.43
22	1K	8	4SU	C2-N3	2.03	1.41	1.38
23	2K	56	PSU	C4-C5	-2.02	1.38	1.44

All (103) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	2K	55	5MU	C5-C4-N3	11.52	125.15	115.31
23	2L	55	5MU	C5-C4-N3	11.10	124.79	115.31
22	1K	54	5MU	C5-C4-N3	10.77	124.50	115.31
23	2K	8	4SU	C4-N3-C2	-10.74	116.91	127.34
22	1K	37	MIA	C12-C13-C14	-7.83	111.90	127.14
23	2L	8	4SU	C4-N3-C2	-7.69	119.87	127.34
22	1K	8	4SU	C4-N3-C2	-7.48	120.08	127.34
23	2K	55	5MU	C5-C6-N1	-7.26	115.86	123.34
22	1K	46	7MG	C4-C5-N7	7.12	115.42	105.53
23	2L	55	5MU	C4-N3-C2	-6.80	118.55	127.35
23	2L	47	7MG	C4-C5-N7	6.69	114.82	105.53
23	2L	55	5MU	C5-C6-N1	-6.66	116.48	123.34
23	2K	55	5MU	C4-N3-C2	-6.48	118.96	127.35
23	2K	47	7MG	C4-C5-N7	6.39	114.41	105.53
22	1K	46	7MG	CM7-N7-C5	6.38	142.87	126.40
23	2K	47	7MG	C5-C4-N9	6.21	114.41	106.35
22	1K	37	MIA	C5-C6-N1	-6.16	115.70	120.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	1K	46	7MG	C5-C4-N9	6.15	114.33	106.35
23	2K	8	4SU	C5-C4-N3	6.07	120.32	114.69
23	2L	55	5MU	C6-C5-C4	5.99	123.04	118.03
23	2L	47	7MG	CM7-N7-C5	5.87	141.56	126.40
22	1K	54	5MU	C4-N3-C2	-5.78	119.87	127.35
23	2K	8	4SU	C5-C4-S4	-5.58	117.28	124.47
22	1K	8	4SU	C5-C4-N3	5.58	119.86	114.69
23	2K	47	7MG	CM7-N7-C5	5.57	140.78	126.40
23	2L	47	7MG	C5-C4-N9	5.54	113.53	106.35
23	2K	8	4SU	N3-C2-N1	5.51	122.21	114.89
23	2K	55	5MU	C6-C5-C4	5.46	122.59	118.03
22	1K	54	5MU	O4-C4-C5	-5.37	118.68	124.90
23	2L	55	5MU	O4-C4-C5	-5.17	118.91	124.90
23	2K	55	5MU	O4-C4-C5	-5.06	119.03	124.90
22	1K	54	5MU	C5-C6-N1	-5.05	118.15	123.34
22	1K	46	7MG	C6-C5-N7	-4.96	124.12	131.91
23	2L	47	7MG	C5-C6-N1	4.80	119.45	110.99
23	2K	56	PSU	C4-N3-C2	-4.75	119.49	126.34
23	2L	8	4SU	C5-C4-N3	4.70	119.05	114.69
23	2L	56	PSU	C4-N3-C2	-4.67	119.61	126.34
23	2L	47	7MG	C6-C5-N7	-4.59	124.70	131.91
22	1K	46	7MG	C5-C6-N1	4.55	119.01	110.99
22	1K	54	5MU	C6-C5-C4	4.51	121.81	118.03
23	2L	8	4SU	C5-C4-S4	-4.47	118.70	124.47
23	2L	8	4SU	N3-C2-N1	4.39	120.72	114.89
23	2L	55	5MU	C5M-C5-C6	-4.35	117.04	122.85
23	2K	47	7MG	C5-C6-N1	4.30	118.56	110.99
22	1K	8	4SU	C5-C4-S4	-4.25	119.00	124.47
23	2L	47	7MG	C2-N3-C4	4.22	119.81	112.30
22	1K	39	PSU	C4-N3-C2	-4.19	120.30	126.34
23	2L	47	7MG	C5-C4-N3	-4.12	120.29	128.13
22	1K	54	5MU	C5M-C5-C6	-4.09	117.39	122.85
23	2K	55	5MU	C5M-C5-C6	-4.08	117.40	122.85
22	1K	46	7MG	C5-C4-N3	-4.07	120.38	128.13
22	1K	46	7MG	C2-N3-C4	4.03	119.48	112.30
23	2K	56	PSU	N1-C2-N3	4.00	119.66	115.13
23	2L	56	PSU	N1-C2-N3	3.90	119.55	115.13
22	1K	8	4SU	N3-C2-N1	3.83	119.97	114.89
23	2K	8	4SU	C1'-N1-C2	3.67	124.22	117.57
23	2K	47	7MG	C6-C5-N7	-3.63	126.21	131.91
22	1K	37	MIA	C15-C14-C13	-3.61	112.21	122.65
23	2K	47	7MG	N9-C8-N7	-3.59	98.25	103.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	2K	47	7MG	C2-N3-C4	3.58	118.69	112.30
22	1K	32	PSU	C4-N3-C2	-3.57	121.19	126.34
22	1K	37	MIA	C4-C5-N7	-3.52	105.73	109.40
22	1K	37	MIA	C16-C14-C13	-3.48	112.58	122.65
23	2L	33	OMC	C1'-N1-C2	3.45	126.11	118.42
22	1K	55	PSU	C4-N3-C2	-3.43	121.40	126.34
22	1K	55	PSU	N1-C2-N3	3.25	118.81	115.13
23	2L	47	7MG	N9-C8-N7	-3.24	98.75	103.38
22	1K	37	MIA	C12-N6-C6	3.14	127.19	122.55
23	2L	47	7MG	O6-C6-C5	-3.11	119.92	127.54
23	2K	47	7MG	O6-C6-C5	-3.10	119.93	127.54
23	2K	8	4SU	O2-C2-N1	-3.09	118.68	122.79
22	1K	54	5MU	C6-N1-C2	-3.08	118.17	121.30
22	1K	39	PSU	N1-C2-N3	3.06	118.60	115.13
23	2K	8	4SU	C6-C5-C4	2.96	122.52	119.95
23	2L	47	7MG	C2-N1-C6	-2.94	119.75	125.10
22	1K	46	7MG	O6-C6-C5	-2.89	120.45	127.54
23	2L	33	OMC	N4-C4-N3	2.88	123.02	117.97
23	2K	47	7MG	C5-C4-N3	-2.81	122.77	128.13
22	1K	46	7MG	C2-N1-C6	-2.73	120.13	125.10
22	1K	32	PSU	N1-C2-N3	2.67	118.16	115.13
22	1K	37	MIA	C16-C14-C15	-2.62	108.81	114.60
22	1K	55	PSU	C6-N1-C2	-2.59	120.03	122.68
23	2K	56	PSU	O2-C2-N1	-2.59	119.94	122.79
22	1K	55	PSU	O2-C2-N1	-2.59	119.94	122.79
23	2K	8	4SU	C1'-N1-C6	-2.55	115.27	120.84
23	2K	8	4SU	C5-C6-N1	-2.53	117.57	121.81
23	2L	8	4SU	C1'-N1-C2	2.51	122.11	117.57
23	2L	55	5MU	N3-C2-N1	2.50	118.21	114.89
23	2K	33	OMC	O2-C2-N3	-2.50	118.27	122.33
23	2K	47	7MG	N2-C2-N1	2.49	122.00	116.71
23	2K	47	7MG	C2-N1-C6	-2.45	120.63	125.10
22	1K	39	PSU	O4-C4-C5	-2.42	117.72	124.05
22	1K	8	4SU	O2-C2-N1	-2.38	119.63	122.79
23	2L	55	5MU	C6-N1-C2	-2.36	118.91	121.30
23	2L	8	4SU	O2-C2-N1	-2.30	119.72	122.79
22	1K	37	MIA	C2-N1-C6	2.27	121.26	117.19
23	2K	55	5MU	O4-C4-N3	-2.24	115.82	120.12
23	2K	8	4SU	S4-C4-N3	2.23	122.40	120.21
22	1K	32	PSU	C6-N1-C2	-2.19	120.45	122.68
23	2L	33	OMC	C1'-N1-C6	-2.16	116.14	120.84
23	2K	56	PSU	C6-N1-C2	-2.07	120.56	122.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	2L	8	4SU	S4-C4-N3	2.06	122.24	120.21
22	1K	39	PSU	C5-C4-N3	2.04	121.20	116.58

There are no chirality outliers.

All (19) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	2K	8	4SU	O4'-C4'-C5'-O5'
22	1K	37	MIA	N1-C2-S10-C11
22	1K	37	MIA	N3-C2-S10-C11
22	1K	37	MIA	C12-C13-C14-C15
22	1K	37	MIA	C12-C13-C14-C16
23	2K	8	4SU	C3'-C4'-C5'-O5'
23	2L	8	4SU	O4'-C4'-C5'-O5'
23	2K	8	4SU	C4'-C5'-O5'-P
23	2L	8	4SU	C3'-C4'-C5'-O5'
22	1K	39	PSU	O4'-C1'-C5-C4
22	1K	55	PSU	O4'-C1'-C5-C4
23	2K	47	7MG	O4'-C4'-C5'-O5'
23	2L	47	7MG	O4'-C4'-C5'-O5'
22	1K	55	PSU	O4'-C1'-C5-C6
23	2L	33	OMC	C2'-C1'-N1-C2
22	1K	46	7MG	C3'-C4'-C5'-O5'
23	2L	56	PSU	O4'-C4'-C5'-O5'
23	2L	33	OMC	C2'-C1'-N1-C6
23	2K	33	OMC	C2'-C1'-N1-C2

There are no ring outliers.

12 monomers are involved in 25 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	2K	47	7MG	2	0
22	1K	46	7MG	3	0
22	1K	54	5MU	1	0
23	2L	47	7MG	1	0
23	2L	8	4SU	1	0
22	1K	55	PSU	1	0
23	2L	33	OMC	5	0
23	2L	55	5MU	3	0
23	2K	55	5MU	3	0
23	2K	33	OMC	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	1K	37	MIA	3	0
23	2K	8	4SU	2	0

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 1253 ligands modelled in this entry, 1253 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data (i)

6.1 Protein, DNA and RNA chains (i)

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	13	1498/1522 (98%)	0.21	45 (3%)	50	25	73, 122, 204, 309	0
1	1G	1497/1522 (98%)	0.24	74 (4%)	29	13	92, 145, 218, 318	0
2	12	237/256 (92%)	0.20	17 (7%)	15	5	168, 199, 220, 228	0
2	1E	237/256 (92%)	0.13	8 (3%)	45	22	132, 167, 193, 205	0
3	22	206/239 (86%)	0.04	7 (3%)	45	22	161, 182, 205, 218	0
3	2E	205/239 (85%)	-0.02	1 (0%)	91	79	103, 128, 161, 170	0
4	32	208/209 (99%)	0.59	18 (8%)	10	3	122, 144, 165, 174	0
4	3E	208/209 (99%)	0.77	30 (14%)	2	1	102, 129, 151, 165	0
5	42	151/162 (93%)	0.52	18 (11%)	4	1	136, 154, 171, 203	0
5	4E	151/162 (93%)	0.57	19 (12%)	3	1	97, 120, 143, 176	0
6	52	101/101 (100%)	-0.27	0	100	100	106, 127, 147, 161	0
6	5E	101/101 (100%)	-0.07	0	100	100	101, 123, 148, 161	0
7	62	155/156 (99%)	0.92	27 (17%)	1	0	136, 154, 182, 207	0
7	6E	155/156 (99%)	0.49	16 (10%)	6	2	124, 139, 168, 193	0
8	72	138/138 (100%)	1.28	42 (30%)	0	0	130, 158, 174, 179	0
8	7E	138/138 (100%)	0.90	26 (18%)	1	0	105, 129, 141, 149	0
9	82	127/128 (99%)	3.27	75 (59%)	0	0	141, 183, 204, 208	0
9	8E	127/128 (99%)	1.66	45 (35%)	0	0	107, 156, 179, 193	0
10	1A	99/105 (94%)	1.96	39 (39%)	0	0	153, 184, 203, 210	0
10	1I	99/105 (94%)	1.40	32 (32%)	0	0	102, 155, 187, 192	0
11	2A	116/129 (89%)	0.50	11 (9%)	8	2	111, 137, 158, 182	0
11	2I	116/129 (89%)	0.27	8 (6%)	16	6	90, 127, 153, 180	0
12	3A	125/132 (94%)	1.24	35 (28%)	0	0	109, 134, 160, 185	0
12	3I	125/132 (94%)	0.44	11 (8%)	10	3	83, 96, 131, 179	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	4A	117/126 (92%)	1.15	30 (25%) 0 0	140, 184, 206, 216	0
13	4I	118/126 (93%)	0.25	7 (5%) 22 9	101, 139, 159, 170	0
14	5A	58/61 (95%)	4.97	46 (79%) 0 0	164, 179, 194, 201	0
14	5I	60/61 (98%)	1.88	24 (40%) 0 0	106, 118, 137, 147	0
15	6A	88/89 (98%)	0.81	12 (13%) 3 1	118, 139, 155, 159	0
15	6I	88/89 (98%)	1.02	21 (23%) 0 0	98, 125, 142, 154	0
16	7A	84/88 (95%)	1.04	19 (22%) 0 0	113, 132, 150, 174	0
16	7I	84/88 (95%)	3.10	55 (65%) 0 0	122, 135, 169, 187	0
17	8A	100/105 (95%)	1.17	21 (21%) 1 0	118, 138, 153, 176	0
17	8I	100/105 (95%)	0.66	14 (14%) 2 1	108, 127, 140, 145	0
18	9A	72/88 (81%)	0.04	2 (2%) 53 28	116, 142, 178, 198	0
18	9I	72/88 (81%)	0.10	0 100 100	109, 127, 162, 187	0
19	AA	78/93 (83%)	1.25	25 (32%) 0 0	172, 203, 216, 222	0
19	AI	81/93 (87%)	0.47	5 (6%) 20 8	109, 135, 160, 166	0
20	BA	99/106 (93%)	1.63	43 (43%) 0 0	108, 130, 158, 173	0
20	BI	99/106 (93%)	1.35	34 (34%) 0 0	129, 144, 177, 183	0
21	1B	25/27 (92%)	6.10	23 (92%) 0 0	147, 163, 179, 196	0
21	1F	25/27 (92%)	4.77	22 (88%) 0 0	114, 126, 139, 164	0
22	1K	69/76 (90%)	0.12	4 (5%) 23 9	101, 222, 265, 271	0
23	2K	72/77 (93%)	0.05	0 100 100	84, 108, 137, 146	0
23	2L	72/77 (93%)	-0.42	1 (1%) 75 53	96, 136, 166, 170	0
24	1L	76/76 (100%)	0.81	12 (15%) 2 0	147, 264, 289, 295	0
24	3K	76/76 (100%)	-0.06	2 (2%) 56 30	92, 255, 286, 289	0
24	3L	76/76 (100%)	0.49	9 (11%) 4 1	104, 264, 294, 299	0
25	4K	13/27 (48%)	0.92	0 100 100	88, 101, 151, 157	0
25	4L	9/27 (33%)	0.59	0 100 100	121, 154, 165, 175	0
26	14	2909/2917 (99%)	0.21	70 (2%) 59 34	67, 105, 270, 378	0
26	1H	2912/2917 (99%)	0.28	12 (0%) 92 82	56, 91, 253, 353	0
27	16	122/122 (100%)	-0.17	0 100 100	83, 111, 133, 217	0
27	1J	122/122 (100%)	-0.13	1 (0%) 86 70	106, 152, 174, 226	0
28	11	272/276 (98%)	0.50	8 (2%) 51 26	57, 82, 100, 110	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
28	19	273/276 (98%)	0.90	40 (14%)	2	1	67, 94, 110, 125	0
29	21	205/206 (99%)	0.91	27 (13%)	3	1	66, 109, 151, 165	0
29	29	205/206 (99%)	1.30	67 (32%)	0	0	76, 113, 158, 183	0
30	31	202/210 (96%)	0.32	2 (0%)	82	63	60, 94, 130, 150	0
30	39	208/210 (99%)	0.43	14 (6%)	17	7	76, 123, 179, 199	0
31	41	181/182 (99%)	0.31	9 (4%)	28	12	100, 121, 159, 172	0
31	49	181/182 (99%)	1.07	41 (22%)	0	0	148, 169, 198, 209	0
32	51	174/180 (96%)	0.12	5 (2%)	51	26	99, 122, 139, 150	0
32	59	169/180 (93%)	1.64	62 (36%)	0	0	169, 218, 243, 258	0
33	61	146/148 (98%)	-0.02	4 (2%)	54	28	98, 154, 170, 175	0
33	69	146/148 (98%)	0.71	22 (15%)	2	1	102, 146, 170, 175	0
34	15	138/140 (98%)	1.27	35 (25%)	0	0	98, 129, 161, 185	0
34	58	138/140 (98%)	0.79	15 (10%)	5	2	81, 109, 148, 163	0
35	25	122/122 (100%)	0.51	9 (7%)	14	5	85, 107, 125, 135	0
35	68	122/122 (100%)	0.41	3 (2%)	57	32	75, 92, 111, 124	0
36	35	150/150 (100%)	1.13	40 (26%)	0	0	77, 128, 162, 198	0
36	78	150/150 (100%)	0.56	11 (7%)	15	5	64, 98, 124, 176	0
37	45	141/141 (100%)	2.38	78 (55%)	0	0	97, 129, 154, 167	0
37	88	138/141 (97%)	0.52	6 (4%)	35	16	70, 95, 115, 147	0
38	55	117/118 (99%)	0.97	20 (17%)	1	0	77, 97, 113, 133	0
38	98	118/118 (100%)	0.82	13 (11%)	5	2	79, 102, 125, 139	0
39	65	111/112 (99%)	1.38	36 (32%)	0	0	118, 145, 162, 172	0
39	A8	111/112 (99%)	0.36	4 (3%)	42	21	92, 107, 130, 144	0
40	75	137/146 (93%)	0.31	10 (7%)	15	5	96, 115, 173, 208	0
40	B8	137/146 (93%)	0.49	12 (8%)	10	3	86, 111, 170, 202	0
41	85	117/118 (99%)	0.79	17 (14%)	2	1	86, 115, 155, 180	0
41	C8	117/118 (99%)	0.86	19 (16%)	1	0	71, 98, 136, 147	0
42	95	101/101 (100%)	0.51	14 (13%)	2	1	86, 143, 161, 177	0
42	D8	101/101 (100%)	0.31	10 (9%)	7	2	73, 123, 149, 162	0
43	A5	113/113 (100%)	0.42	7 (6%)	20	8	77, 94, 124, 183	0
43	E8	113/113 (100%)	0.38	3 (2%)	54	28	75, 91, 125, 164	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
44	B5	92/96 (95%)	0.68	8 (8%)	10	3	85, 102, 129, 133	0
44	F8	94/96 (97%)	0.29	1 (1%)	80	60	69, 88, 113, 128	0
45	C5	104/110 (94%)	1.29	25 (24%)	0	0	107, 137, 167, 175	0
45	G8	104/110 (94%)	0.30	0	100	100	87, 113, 147, 166	0
46	D5	179/206 (86%)	0.99	35 (19%)	1	0	139, 176, 263, 269	0
46	H8	175/206 (84%)	-0.05	1 (0%)	89	76	97, 139, 228, 236	0
47	E5	76/85 (89%)	1.90	35 (46%)	0	0	85, 111, 130, 169	0
47	I8	80/85 (94%)	1.09	20 (25%)	0	0	71, 90, 122, 131	0
48	F5	97/98 (98%)	1.73	32 (32%)	0	0	79, 102, 146, 163	0
48	J8	97/98 (98%)	1.14	14 (14%)	2	1	69, 91, 145, 176	0
49	G5	66/72 (91%)	0.19	2 (3%)	50	25	101, 121, 141, 167	0
49	K8	67/72 (93%)	0.39	2 (2%)	50	25	76, 96, 119, 154	0
50	H5	59/60 (98%)	1.04	13 (22%)	0	0	97, 126, 167, 182	0
50	L8	57/60 (95%)	0.18	0	100	100	77, 98, 120, 133	0
51	I5	63/71 (88%)	1.49	22 (34%)	0	0	179, 219, 236, 243	0
51	M8	66/71 (92%)	0.45	6 (9%)	9	3	128, 174, 203, 214	0
52	J5	56/60 (93%)	0.38	4 (7%)	16	6	77, 103, 150, 162	0
52	N8	58/60 (96%)	0.93	6 (10%)	6	2	68, 115, 186, 191	0
53	K5	45/54 (83%)	7.07	38 (84%)	0	0	153, 180, 196, 202	0
53	O8	45/54 (83%)	3.61	32 (71%)	0	0	131, 159, 177, 183	0
54	L5	46/49 (93%)	0.72	3 (6%)	18	7	64, 76, 89, 102	0
54	P8	45/49 (91%)	0.14	0	100	100	59, 64, 78, 92	0
55	M5	60/65 (92%)	2.18	36 (60%)	0	0	89, 101, 125, 147	0
55	Q8	61/65 (93%)	1.77	23 (37%)	0	0	74, 91, 117, 128	0
All	All	21042/21688 (97%)	0.57	2139 (10%)	6	2	56, 122, 214, 378	0

All (2139) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
53	K5	42	TRP	19.7
53	K5	51	GLU	19.1
24	3L	17	C	18.5
7	62	81	GLY	16.8
7	62	82	GLY	16.6

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Mol	Chain	Res	Type	RSRZ
53	K5	13	CYS	16.3
39	65	2	ALA	16.2
24	1L	76	A	13.2
8	72	1	MET	13.2
13	4A	102	ARG	12.5
53	K5	12	GLU	12.5
9	82	115	GLY	12.4
48	F5	98	LEU	12.4
53	K5	50	ARG	11.9
14	5A	10	ALA	11.7
53	K5	53	LYS	11.6
53	K5	14	THR	11.6
46	D5	179	ASP	11.6
14	5A	34	TYR	11.4
48	F5	97	LEU	11.4
48	J8	98	LEU	11.3
37	45	1	MET	11.2
21	1B	14	TRP	10.9
14	5A	31	ARG	10.7
53	K5	22	ALA	10.7
10	1A	59	SER	10.5
24	1L	71	G	10.5
10	1A	46	ARG	10.5
21	1F	26	LYS	10.5
7	6E	81	GLY	10.4
14	5A	38	GLY	10.3
53	K5	41	PRO	10.3
21	1F	17	THR	10.3
14	5A	39	LEU	10.2
21	1B	13	ILE	10.1
9	82	123	PRO	10.1
9	82	110	GLU	10.0
53	K5	21	TYR	10.0
9	82	66	ARG	9.9
10	1A	47	PHE	9.8
14	5A	32	SER	9.8
53	K5	49	HIS	9.7
53	K5	24	GLU	9.6
53	K5	39	TYR	9.6
53	K5	9	LEU	9.6
16	7I	32	TYR	9.5
7	62	80	VAL	9.4

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Mol	Chain	Res	Type	RSRZ
53	K5	26	ASN	9.4
9	82	69	GLY	9.3
52	N8	59	GLU	9.3
32	59	169	VAL	9.1
9	82	109	VAL	9.1
24	3L	34	G	9.0
9	82	116	LYS	9.0
53	O8	42	TRP	8.9
32	59	96	ALA	8.8
53	K5	52	VAL	8.8
19	AA	79	THR	8.8
21	1B	26	LYS	8.8
9	82	126	SER	8.7
53	K5	25	LYS	8.7
21	1B	25	LYS	8.7
16	7I	22	THR	8.7
9	82	127	LYS	8.7
21	1B	2	GLY	8.6
32	59	4	ILE	8.6
24	1L	72	C	8.6
10	1A	58	ASP	8.5
51	M8	55	ARG	8.5
9	8E	126	SER	8.5
16	7I	7	ALA	8.5
53	K5	23	THR	8.5
14	5A	35	ARG	8.5
19	AA	78	ARG	8.4
10	1A	55	LYS	8.4
55	Q8	34	TRP	8.3
14	5A	59	ALA	8.3
9	82	114	TYR	8.2
46	D5	178	GLU	8.2
10	1A	54	PHE	8.2
21	1B	24	ARG	8.2
9	82	12	GLU	8.2
11	2A	11	LYS	8.2
26	14	2901	C	8.2
39	A8	2	ALA	8.1
14	5A	36	PHE	8.1
14	5A	37	PHE	8.1
13	4A	101	GLN	8.1
21	1F	16	GLY	8.1

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Mol	Chain	Res	Type	RSRZ
33	69	1	MET	8.1
21	1B	9	ARG	8.0
20	BI	70	SER	8.0
21	1B	6	ARG	8.0
17	8A	101	ARG	8.0
9	82	125	TYR	7.9
36	35	150	ALA	7.9
13	4A	6	GLY	7.9
26	14	2902	C	7.9
32	59	94	TYR	7.9
46	D5	121	HIS	7.9
26	14	2146	C	7.8
35	25	1	MET	7.8
9	82	128	ARG	7.8
53	O8	49	HIS	7.8
9	82	14	VAL	7.8
53	K5	40	CYS	7.7
37	45	91	GLU	7.7
53	O8	25	LYS	7.6
22	1K	17	C	7.5
21	1F	15	ARG	7.5
14	5A	58	LYS	7.5
52	N8	60	VAL	7.5
9	8E	111	ARG	7.5
21	1B	21	TYR	7.5
20	BI	72	LEU	7.4
29	29	150	VAL	7.4
26	14	2147	G	7.4
21	1F	2	GLY	7.4
22	1K	76	A	7.4
10	1A	64	GLU	7.3
9	82	71	SER	7.3
53	K5	20	ASN	7.3
9	82	70	LYS	7.3
21	1B	22	ARG	7.3
14	5A	41	ARG	7.3
16	7I	31	LYS	7.2
9	82	65	VAL	7.2
14	5A	33	VAL	7.2
37	45	104	PHE	7.2
8	7E	1	MET	7.1
32	59	100	GLY	7.1

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Mol	Chain	Res	Type	RSRZ
48	J8	97	LEU	7.1
53	O8	18	ARG	7.1
21	1B	16	GLY	7.1
24	1L	75	C	7.1
29	29	151	TYR	7.1
37	45	65	PHE	7.1
53	K5	19	ARG	7.0
53	O8	53	LYS	7.0
8	72	2	LEU	7.0
16	7I	29	ASP	6.9
54	L5	1	MET	6.9
9	82	106	ALA	6.9
45	C5	59	GLY	6.9
14	5A	61	TRP	6.9
37	45	103	MET	6.9
9	8E	110	GLU	6.8
1	1G	1286	A	6.8
10	1I	64	GLU	6.8
21	1F	14	TRP	6.8
53	O8	20	ASN	6.8
10	1I	5	ARG	6.8
13	4A	103	THR	6.8
51	M8	66	SER	6.7
53	K5	18	ARG	6.7
52	N8	58	LEU	6.7
32	59	132	ARG	6.7
53	K5	11	LEU	6.7
48	J8	92	LYS	6.7
14	5A	30	ALA	6.7
10	1A	69	ASN	6.7
39	65	3	ARG	6.7
9	82	117	HIS	6.7
21	1B	10	ARG	6.6
47	E5	75	LEU	6.6
32	59	95	ARG	6.6
9	82	64	THR	6.6
21	1F	3	LYS	6.6
10	1A	62	HIS	6.6
39	65	5	THR	6.5
9	8E	36	TYR	6.5
36	35	110	TYR	6.5
16	7I	9	PHE	6.5

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Mol	Chain	Res	Type	RSRZ
20	BI	18	GLN	6.5
11	2A	13	GLN	6.5
9	8E	115	GLY	6.5
12	3A	19	ARG	6.5
14	5A	9	LYS	6.5
16	7I	59	TRP	6.5
32	59	115	VAL	6.5
31	49	138	GLN	6.5
21	1F	6	ARG	6.5
38	55	5	LYS	6.4
14	5A	21	TYR	6.4
32	59	107	VAL	6.4
14	5A	4	LYS	6.4
53	O8	44	ARG	6.4
31	49	34	LEU	6.3
9	8E	117	HIS	6.3
33	69	36	ALA	6.3
10	1A	40	LEU	6.3
13	4A	4	ILE	6.3
46	D5	146	ILE	6.3
9	82	113	LYS	6.3
9	82	10	ARG	6.3
9	82	36	TYR	6.3
32	59	155	SER	6.3
29	21	78	LEU	6.3
9	8E	127	LYS	6.3
48	F5	96	LYS	6.2
7	62	79	ARG	6.2
9	82	111	ARG	6.2
16	7I	28	ARG	6.2
51	I5	63	TYR	6.2
37	45	17	LEU	6.2
20	BA	69	GLY	6.2
14	5A	25	VAL	6.2
47	E5	76	GLY	6.2
7	62	41	ARG	6.2
12	3A	28	LYS	6.2
34	15	75	TYR	6.2
21	1B	23	PRO	6.2
9	82	118	LYS	6.2
21	1B	18	TYR	6.1
53	K5	10	LEU	6.1

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Mol	Chain	Res	Type	RSRZ
14	5A	22	THR	6.1
37	45	38	GLU	6.1
55	M5	40	GLU	6.1
13	4A	97	PRO	6.1
24	1L	73	A	6.1
11	2I	11	LYS	6.1
21	1F	18	TYR	6.0
24	3K	17	C	6.0
10	1A	48	THR	6.0
16	7I	27	LYS	6.0
7	6E	83	ALA	6.0
14	5A	23	ARG	6.0
10	1A	65	LEU	6.0
33	69	38	LEU	6.0
12	3A	20	LYS	6.0
53	K5	36	LEU	6.0
46	D5	115	GLY	6.0
12	3I	19	ARG	6.0
16	7I	6	LEU	5.9
26	1H	2477	C	5.9
32	59	89	ILE	5.9
14	5A	29	ARG	5.9
24	1L	17	C	5.9
21	1B	15	ARG	5.9
20	BA	70	SER	5.9
9	82	112	LYS	5.9
53	K5	45	LYS	5.9
53	O8	23	THR	5.9
37	45	66	ILE	5.9
2	1E	14	GLY	5.9
10	1I	66	ARG	5.8
9	8E	8	GLY	5.8
40	B8	106	SER	5.8
9	82	13	ALA	5.8
19	AA	82	GLY	5.8
9	82	7	THR	5.8
37	45	10	ARG	5.8
16	7I	1	MET	5.8
53	O8	9	LEU	5.8
45	C5	46	LYS	5.7
13	4A	99	ARG	5.7
14	5A	55	GLY	5.7

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Mol	Chain	Res	Type	RSRZ
14	5A	19	ARG	5.7
8	7E	2	LEU	5.7
29	29	205	ALA	5.7
9	82	108	VAL	5.7
48	J8	93	GLU	5.7
29	29	117	MET	5.7
13	4A	66	LEU	5.7
39	65	33	LYS	5.6
9	82	120	ARG	5.6
10	1I	46	ARG	5.6
10	1I	60	ARG	5.6
37	45	68	ILE	5.6
16	7I	62	VAL	5.6
7	6E	82	GLY	5.6
16	7I	66	PRO	5.6
11	2A	12	ARG	5.6
33	69	35	LEU	5.6
16	7I	18	ARG	5.6
53	O8	13	CYS	5.6
47	E5	21	LEU	5.6
53	K5	48	VAL	5.6
19	AA	80	TYR	5.6
29	21	205	ALA	5.6
16	7I	65	GLN	5.5
9	82	119	ALA	5.5
34	15	84	LYS	5.5
32	59	103	LEU	5.5
33	69	3	VAL	5.5
40	B8	1	MET	5.5
9	82	121	ARG	5.5
1	13	1286	A	5.5
32	59	90	LYS	5.5
27	1J	88	C	5.5
7	6E	79	ARG	5.5
12	3A	64	TYR	5.4
14	5A	26	ARG	5.4
26	1H	2799	A	5.4
7	62	37	ASN	5.4
1	1G	973	G	5.4
14	5A	60	SER	5.4
14	5A	8	GLU	5.4
38	55	4	LEU	5.4

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Mol	Chain	Res	Type	RSRZ
51	I5	52	THR	5.4
8	7E	3	THR	5.4
31	49	90	LEU	5.4
9	82	37	PHE	5.4
22	1K	73	A	5.4
8	72	3	THR	5.4
9	8E	114	TYR	5.3
47	E5	71	ASP	5.3
10	1A	60	ARG	5.3
45	C5	47	LYS	5.3
21	1B	5	ASP	5.3
2	12	132	LYS	5.3
14	5A	11	LYS	5.3
36	35	65	ARG	5.3
16	7I	12	LYS	5.3
21	1F	22	ARG	5.3
10	1A	57	LYS	5.2
8	72	89	PRO	5.2
9	82	8	GLY	5.2
10	1I	62	HIS	5.2
12	3A	32	PHE	5.2
14	5I	61	TRP	5.2
42	95	74	LYS	5.2
16	7I	30	GLY	5.2
17	8I	36	ILE	5.2
37	45	61	GLY	5.2
26	14	1092	C	5.2
16	7I	17	TYR	5.2
47	I8	43	THR	5.2
10	1A	56	HIS	5.2
7	62	78	ARG	5.2
9	8E	15	ALA	5.2
13	4A	100	GLY	5.1
8	72	133	LEU	5.1
38	55	9	LYS	5.1
53	K5	34	LEU	5.1
34	15	85	ILE	5.1
37	45	90	VAL	5.1
20	BI	15	ARG	5.1
34	58	72	TYR	5.1
9	82	67	GLY	5.1
45	C5	45	VAL	5.1

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Mol	Chain	Res	Type	RSRZ
9	82	42	ARG	5.1
7	62	83	ALA	5.1
10	1I	65	LEU	5.0
29	29	114	ALA	5.1
53	K5	46	HIS	5.0
46	D5	117	LEU	5.0
33	69	2	LYS	5.0
33	69	4	ILE	5.0
48	J8	96	LYS	5.0
53	K5	37	ARG	5.0
37	45	34	LEU	5.0
32	59	164	TYR	5.0
46	D5	119	GLU	5.0
10	1A	67	THR	5.0
32	59	88	LEU	5.0
14	5A	17	LYS	5.0
21	1F	25	LYS	5.0
9	8E	106	ALA	5.0
13	4I	102	ARG	5.0
32	59	99	VAL	4.9
36	35	18	ARG	4.9
21	1B	11	GLY	4.9
55	M5	16	ILE	4.9
16	7I	39	TYR	4.9
34	15	80	GLY	4.9
34	15	108	PRO	4.9
26	14	2119	A	4.9
9	8E	116	LYS	4.9
12	3A	128	ALA	4.9
32	59	92	ILE	4.9
34	58	83	LYS	4.9
21	1B	8	THR	4.9
2	12	133	LYS	4.9
53	O8	14	THR	4.9
12	3A	21	LYS	4.9
53	O8	26	ASN	4.9
53	K5	16	CYS	4.9
9	82	11	LYS	4.9
9	82	15	ALA	4.9
31	49	35	GLU	4.9
10	1A	39	PRO	4.9
31	49	75	LYS	4.8

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Mol	Chain	Res	Type	RSRZ
55	M5	22	VAL	4.8
16	7I	4	ILE	4.8
10	1I	47	PHE	4.8
17	8I	26	GLN	4.8
16	7I	19	ILE	4.8
15	6A	2	PRO	4.8
14	5A	15	LYS	4.8
38	55	8	ARG	4.8
53	O8	50	ARG	4.8
4	32	69	GLY	4.8
10	1A	66	ARG	4.8
16	7I	23	ASP	4.8
34	58	74	ARG	4.8
24	3L	16	U	4.8
9	8E	121	ARG	4.8
29	29	54	GLN	4.8
31	49	92	VAL	4.8
14	5A	7	ILE	4.7
9	82	122	ALA	4.7
48	F5	95	LEU	4.7
34	15	109	LYS	4.7
31	49	39	ILE	4.7
16	7I	10	GLY	4.7
10	1A	49	VAL	4.7
33	69	37	VAL	4.7
24	1L	74	C	4.7
33	69	11	ASN	4.7
14	5I	59	ALA	4.7
1	1G	1224	G	4.7
7	6E	84	ASN	4.7
8	72	90	GLY	4.7
32	59	93	GLY	4.7
33	69	12	LEU	4.7
32	59	170	ARG	4.7
9	8E	124	GLN	4.6
24	1L	1	G	4.6
1	1G	975	A	4.6
45	C5	44	ILE	4.6
14	5A	57	ARG	4.6
16	7I	21	VAL	4.6
16	7I	33	ILE	4.6
37	45	88	GLY	4.6

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Mol	Chain	Res	Type	RSRZ
37	45	32	TYR	4.6
34	15	79	PRO	4.6
29	21	204	ALA	4.6
15	6I	62	GLN	4.6
16	7I	2	VAL	4.6
9	8E	118	LYS	4.6
8	7E	4	ASP	4.6
14	5A	56	VAL	4.6
9	82	107	ARG	4.6
47	E5	39	ARG	4.6
46	D5	172	ALA	4.6
39	65	13	ARG	4.6
9	8E	120	ARG	4.6
17	8A	32	TYR	4.5
53	O8	19	ARG	4.5
9	82	124	GLN	4.5
34	15	73	THR	4.5
42	95	80	GLN	4.5
20	BA	71	THR	4.5
20	BA	83	ARG	4.5
53	O8	22	ALA	4.5
46	D5	168	GLU	4.5
51	I5	10	VAL	4.5
20	BI	68	LYS	4.5
55	Q8	27	THR	4.5
9	8E	119	ALA	4.5
37	45	99	PRO	4.5
9	8E	109	VAL	4.5
45	C5	29	GLU	4.5
16	7I	20	VAL	4.5
44	B5	68	ARG	4.5
29	29	76	ARG	4.5
14	5A	16	PHE	4.5
46	D5	116	VAL	4.5
36	35	35	HIS	4.5
37	45	41	TRP	4.4
21	1F	24	ARG	4.4
37	45	22	LYS	4.4
17	8I	35	VAL	4.4
9	8E	66	ARG	4.4
13	4A	26	GLY	4.4
31	49	36	LYS	4.4

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Mol	Chain	Res	Type	RSRZ
46	D5	151	HIS	4.4
38	98	9	LYS	4.4
40	75	99	LEU	4.4
12	3A	129	ALA	4.4
14	5I	30	ALA	4.4
37	45	33	GLY	4.4
37	45	64	ILE	4.4
10	1A	50	ILE	4.4
21	1B	3	LYS	4.4
32	59	106	THR	4.4
53	O8	15	GLU	4.4
9	82	30	GLY	4.4
47	I8	42	GLY	4.4
51	I5	5	ILE	4.3
16	7I	34	GLU	4.3
16	7I	35	LYS	4.3
26	14	2145	C	4.3
34	58	109	LYS	4.3
14	5I	28	GLY	4.3
32	59	114	VAL	4.3
7	6E	78	ARG	4.3
38	55	69	ASP	4.3
47	E5	22	GLY	4.3
31	41	26	GLN	4.3
37	45	93	TYR	4.3
31	49	139	LEU	4.3
8	7E	5	PRO	4.3
21	1B	17	THR	4.3
19	AI	71	LEU	4.3
10	1I	58	ASP	4.3
8	72	92	ARG	4.3
10	1I	45	ARG	4.3
46	D5	79	ARG	4.3
29	29	141	ILE	4.3
31	49	74	LYS	4.3
42	95	76	LYS	4.3
32	59	105	LEU	4.3
13	4A	7	VAL	4.3
9	82	68	GLY	4.3
14	5I	29	ARG	4.3
47	E5	44	ARG	4.3
16	7A	33	ILE	4.3

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Mol	Chain	Res	Type	RSRZ
53	O8	21	TYR	4.2
9	82	38	GLN	4.2
37	45	60	ARG	4.2
9	82	75	ASP	4.2
42	95	81	TYR	4.2
4	3E	209	ARG	4.2
21	1F	13	ILE	4.2
10	1A	70	ARG	4.2
53	O8	10	LEU	4.2
34	15	74	ARG	4.2
39	65	7	TYR	4.2
32	59	87	LEU	4.2
29	29	77	ILE	4.2
28	19	38	LYS	4.2
32	59	83	TYR	4.2
10	1I	48	THR	4.2
47	E5	42	GLY	4.2
1	1G	1117	G	4.2
10	1A	61	GLU	4.2
16	7A	1	MET	4.2
26	14	2118	U	4.2
14	5I	7	ILE	4.2
1	1G	1250	A	4.2
50	H5	28	LEU	4.2
10	1I	49	VAL	4.2
4	3E	3	ARG	4.1
20	BA	15	ARG	4.1
39	65	37	ALA	4.1
31	41	25	TYR	4.1
51	M8	64	GLY	4.1
17	8A	7	THR	4.1
13	4I	100	GLY	4.1
32	59	131	VAL	4.1
20	BA	72	LEU	4.1
16	7I	14	ASN	4.1
31	49	160	VAL	4.1
8	72	86	ILE	4.1
16	7I	36	ILE	4.1
33	69	21	VAL	4.1
34	15	81	GLY	4.1
37	45	105	GLU	4.1
16	7I	26	ARG	4.1

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Mol	Chain	Res	Type	RSRZ
40	B8	94	ALA	4.1
29	29	115	GLY	4.1
29	29	116	VAL	4.1
47	E5	41	ARG	4.1
20	BA	18	GLN	4.1
1	1G	974	A	4.1
38	55	68	ARG	4.1
8	72	88	LYS	4.1
55	Q8	35	GLN	4.1
8	72	58	TYR	4.1
26	14	1	G	4.1
36	35	16	ARG	4.1
47	E5	24	LYS	4.1
42	95	75	PHE	4.1
7	62	86	GLN	4.1
10	1A	34	VAL	4.1
14	5A	18	VAL	4.1
20	BA	68	LYS	4.1
29	29	149	ARG	4.1
41	C8	28	ARG	4.1
1	1G	1115	C	4.1
29	29	155	LYS	4.1
39	65	17	ARG	4.1
26	14	3	U	4.1
9	82	27	THR	4.1
20	BA	14	LYS	4.1
20	BA	80	ARG	4.1
20	BA	75	ASN	4.1
10	1I	63	PHE	4.0
37	45	69	PHE	4.0
16	7I	64	ALA	4.0
42	95	77	ALA	4.0
19	AA	76	PRO	4.0
10	1I	6	ILE	4.0
55	Q8	3	LYS	4.0
10	1I	71	LEU	4.0
51	I5	31	ILE	4.0
26	14	2144	U	4.0
10	1I	43	ARG	4.0
3	22	177	THR	4.0
20	BI	71	THR	4.0
37	45	6	ARG	4.0

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Mol	Chain	Res	Type	RSRZ
29	29	113	PHE	4.0
29	29	159	HIS	4.0
39	65	14	VAL	4.0
33	69	6	LEU	4.0
8	7E	89	PRO	4.0
48	F5	28	GLY	4.0
36	35	71	VAL	4.0
16	7I	3	LYS	4.0
16	7I	25	ARG	4.0
45	C5	34	LYS	4.0
26	14	2899	G	4.0
9	82	44	VAL	4.0
10	1A	63	PHE	4.0
26	14	2173	A	4.0
47	E5	74	ARG	3.9
8	72	22	GLU	3.9
21	1F	10	ARG	3.9
28	19	5	LYS	3.9
31	41	2	PRO	3.9
47	E5	72	ARG	3.9
10	1A	44	VAL	3.9
18	9A	88	LYS	3.9
46	D5	120	ILE	3.9
10	1A	68	HIS	3.9
8	72	59	LEU	3.9
32	59	129	THR	3.9
8	7E	91	ARG	3.9
13	4A	65	LYS	3.9
39	65	9	ARG	3.9
7	62	85	TYR	3.9
13	4A	98	VAL	3.9
24	3L	20	U	3.9
5	42	126	ARG	3.9
1	1G	1225	A	3.9
19	AA	35	SER	3.9
20	BA	76	ALA	3.9
50	H5	17	LYS	3.9
24	1L	3	C	3.9
46	H8	113	ALA	3.9
26	1H	2117	A	3.9
20	BI	66	ALA	3.9
10	1A	43	ARG	3.8

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Mol	Chain	Res	Type	RSRZ
39	65	10	ARG	3.8
40	B8	99	LEU	3.8
37	45	106	VAL	3.8
51	I5	32	TYR	3.8
55	M5	12	LYS	3.8
55	M5	44	LYS	3.8
29	21	75	VAL	3.8
37	45	12	GLN	3.8
12	3A	69	TYR	3.8
26	14	1093	G	3.8
5	42	130	ASN	3.8
40	75	104	ASN	3.8
9	82	63	ILE	3.8
14	5A	53	LEU	3.8
37	45	130	LYS	3.8
55	Q8	26	LYS	3.8
32	59	168	PRO	3.8
41	85	40	PHE	3.8
7	6E	16	LEU	3.8
16	7I	8	ARG	3.8
13	4A	2	ALA	3.8
53	O8	12	GLU	3.8
19	AA	84	GLY	3.7
55	Q8	57	ARG	3.7
7	62	16	LEU	3.7
4	3E	110	PHE	3.7
51	I5	54	GLY	3.7
17	8I	37	LYS	3.7
20	BA	29	LYS	3.7
32	51	172	LYS	3.7
16	7A	7	ALA	3.7
53	K5	43	CYS	3.7
46	D5	173	ALA	3.7
30	39	97	TYR	3.7
41	C8	56	ASP	3.7
24	3L	18	G	3.7
47	E5	69	PHE	3.7
34	15	48	MET	3.7
15	6I	60	VAL	3.7
47	E5	77	ARG	3.7
53	O8	43	CYS	3.7
9	82	40	LEU	3.7

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Mol	Chain	Res	Type	RSRZ
17	8A	24	GLU	3.7
34	58	84	LYS	3.7
1	13	134	A	3.7
16	7A	59	TRP	3.7
19	AA	53	ASN	3.7
8	7E	92	ARG	3.7
12	3A	5	PRO	3.7
15	6A	31	LEU	3.7
29	29	136	ARG	3.7
3	22	178	LEU	3.7
28	19	212	SER	3.7
34	15	116	LEU	3.7
35	25	33	ALA	3.7
17	8A	71	PHE	3.7
34	15	77	GLY	3.6
48	F5	3	LYS	3.6
51	I5	28	LYS	3.6
1	1G	1287	A	3.6
26	14	2111	C	3.6
39	65	20	ARG	3.6
36	35	149	GLU	3.6
9	8E	128	ARG	3.6
39	65	112	PHE	3.6
8	72	4	ASP	3.6
9	82	32	ASP	3.6
24	1L	70	G	3.6
44	B5	69	TYR	3.6
36	35	62	LEU	3.6
20	BI	79	ARG	3.6
9	8E	75	ASP	3.6
10	1I	61	GLU	3.6
29	29	160	TYR	3.6
36	35	45	LEU	3.6
26	14	1095	A	3.6
9	82	82	ALA	3.6
10	1I	50	ILE	3.6
29	29	59	VAL	3.6
36	35	107	LYS	3.6
34	15	76	SER	3.6
15	6I	48	LYS	3.6
44	B5	33	LYS	3.6
45	C5	48	ALA	3.6

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Mol	Chain	Res	Type	RSRZ
15	6I	65	ARG	3.6
51	I5	24	THR	3.6
7	62	13	GLN	3.6
55	Q8	21	LYS	3.6
55	M5	59	LYS	3.6
31	49	12	TYR	3.6
1	1G	825	G	3.6
1	1G	1249	C	3.6
4	3E	2	GLY	3.6
5	4E	123	LEU	3.6
46	D5	163	LEU	3.6
7	62	2	ALA	3.6
8	72	93	VAL	3.6
13	4A	73	GLU	3.6
53	K5	35	GLU	3.6
12	3I	20	LYS	3.6
29	21	76	ARG	3.6
51	I5	40	HIS	3.6
55	M5	3	LYS	3.6
9	82	102	LEU	3.6
31	49	94	LEU	3.6
9	82	9	ARG	3.6
10	1A	45	ARG	3.6
8	72	136	GLU	3.6
14	5I	2	ALA	3.6
53	K5	30	THR	3.6
2	1E	187	LEU	3.6
28	19	206	LEU	3.6
51	M8	59	PHE	3.6
47	E5	19	LYS	3.6
14	5A	12	ARG	3.5
1	13	230	G	3.5
4	32	209	ARG	3.5
17	8I	32	TYR	3.5
12	3I	91	LYS	3.5
9	82	35	GLU	3.5
15	6I	28	GLN	3.5
20	BA	63	ILE	3.5
7	62	32	ARG	3.5
9	82	72	GLY	3.5
20	BA	13	LEU	3.5
26	14	2170	A	3.5

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Mol	Chain	Res	Type	RSRZ
31	49	157	ILE	3.5
9	8E	125	TYR	3.5
37	45	8	LYS	3.5
38	55	13	HIS	3.5
4	32	83	SER	3.5
16	7A	26	ARG	3.5
47	E5	55	ARG	3.5
20	BI	29	LYS	3.5
20	BA	84	LEU	3.5
21	1B	4	GLY	3.5
9	82	62	TYR	3.5
40	B8	104	ASN	3.5
2	12	197	VAL	3.5
9	8E	7	THR	3.5
21	1F	9	ARG	3.5
53	O8	47	THR	3.5
40	75	6	LEU	3.5
53	K5	44	ARG	3.5
47	I8	46	LYS	3.5
4	3E	96	LEU	3.5
39	65	32	LEU	3.5
2	1E	188	ALA	3.5
36	35	64	LYS	3.5
10	1I	42	THR	3.5
48	J8	95	LEU	3.5
32	59	159	GLU	3.5
34	15	83	LYS	3.5
48	F5	10	LYS	3.5
16	7I	13	HIS	3.5
37	45	7	MET	3.5
10	1I	59	SER	3.5
20	BA	25	ARG	3.5
37	45	14	ARG	3.5
17	8A	4	LYS	3.5
34	58	71	ILE	3.5
39	65	35	ILE	3.5
8	72	84	ARG	3.5
47	E5	73	GLY	3.5
9	8E	112	LYS	3.5
29	21	90	THR	3.5
47	I8	40	GLN	3.5
13	4A	104	ARG	3.5

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Mol	Chain	Res	Type	RSRZ
41	C8	26	GLY	3.5
33	61	117	GLU	3.5
46	D5	176	PRO	3.5
20	BA	23	ARG	3.5
4	3E	137	SER	3.4
17	8A	68	ARG	3.4
52	J5	11	THR	3.4
4	3E	139	ARG	3.4
13	4I	104	ARG	3.4
34	15	72	TYR	3.4
4	32	70	ILE	3.4
17	8A	59	ILE	3.4
48	F5	94	LEU	3.4
8	7E	88	LYS	3.4
16	7I	68	ASP	3.4
16	7A	31	LYS	3.4
16	7A	32	TYR	3.4
33	61	113	ARG	3.4
20	BA	26	ASN	3.4
1	1G	1028(B)	C	3.4
5	42	45	PHE	3.4
2	12	118	LEU	3.4
3	22	206	GLU	3.4
14	5A	6	LEU	3.4
46	D5	9	TYR	3.4
53	O8	52	VAL	3.4
41	C8	29	SER	3.4
51	M8	56	VAL	3.4
9	82	33	PHE	3.4
26	1H	529	A	3.4
45	C5	5	MET	3.4
37	45	11	LYS	3.4
9	82	105	ASP	3.4
12	3A	48	PRO	3.4
15	6A	57	LEU	3.4
20	BA	65	LYS	3.4
19	AA	83	HIS	3.4
14	5A	47	LEU	3.4
20	BI	8	ARG	3.4
29	29	162	ALA	3.4
39	65	6	ALA	3.4
42	95	91	TYR	3.4

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Mol	Chain	Res	Type	RSRZ
45	C5	60	PHE	3.4
37	45	35	VAL	3.4
9	8E	42	ARG	3.4
1	1G	1202	G	3.4
14	5A	13	THR	3.4
48	F5	11	ARG	3.4
34	15	1	MET	3.4
38	55	10	LEU	3.3
1	1G	1251	A	3.3
20	BA	66	ALA	3.3
5	4E	122	GLU	3.3
9	82	73	GLN	3.3
16	7I	37	GLY	3.3
37	45	92	GLY	3.3
2	12	115	LEU	3.3
26	14	2319	G	3.3
4	3E	168	ARG	3.3
36	78	150	ALA	3.3
47	I8	57	PHE	3.3
50	H5	10	LYS	3.3
2	12	152	PHE	3.3
9	82	43	ALA	3.3
41	85	52	ARG	3.3
9	8E	123	PRO	3.3
13	4I	97	PRO	3.3
38	98	69	ASP	3.3
28	19	217	ARG	3.3
43	A5	92	ARG	3.3
35	25	32	TYR	3.3
9	8E	10	ARG	3.3
31	49	37	VAL	3.3
50	H5	12	PRO	3.3
7	62	4	ARG	3.3
31	49	28	VAL	3.3
32	59	37	VAL	3.3
55	M5	4	MET	3.3
26	14	2799	A	3.3
46	D5	118	GLN	3.3
1	1G	1001	G	3.3
24	3L	19	G	3.3
40	75	50	ILE	3.3
26	14	1026	U	3.3

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Mol	Chain	Res	Type	RSRZ
26	14	1537	C	3.3
29	29	154	LYS	3.3
29	29	122	PHE	3.3
41	C8	27	LEU	3.3
1	1G	1223	C	3.3
31	41	23	PHE	3.3
37	45	97	VAL	3.3
19	AA	12	ASP	3.3
20	BA	104	LEU	3.3
34	15	78	TYR	3.3
7	62	36	LYS	3.3
9	82	78	LYS	3.3
26	14	2148	G	3.3
10	1I	98	ILE	3.3
29	29	157	ALA	3.3
9	8E	78	LYS	3.3
13	4A	92	HIS	3.2
37	88	104	PHE	3.2
45	C5	24	VAL	3.2
31	49	155	MET	3.2
38	98	7	GLY	3.2
39	65	4	LEU	3.2
52	J5	2	ALA	3.2
20	BI	23	ARG	3.2
22	1K	75	C	3.2
29	29	75	VAL	3.2
34	15	46	VAL	3.2
9	8E	102	LEU	3.2
14	5A	44	LEU	3.2
9	8E	37	PHE	3.2
19	AA	36	ARG	3.2
20	BA	79	ARG	3.2
37	45	29	PHE	3.2
16	7I	16	HIS	3.2
29	29	163	GLU	3.2
5	4E	11	ILE	3.2
5	4E	89	ILE	3.2
19	AA	69	HIS	3.2
39	65	11	LYS	3.2
32	59	97	ARG	3.2
37	45	73	PRO	3.2
31	49	159	VAL	3.2

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Mol	Chain	Res	Type	RSRZ
41	85	47	TYR	3.2
42	D8	81	TYR	3.2
7	6E	32	ARG	3.2
15	6A	59	MET	3.2
31	49	96	ARG	3.2
42	95	83	ARG	3.2
43	A5	82	LEU	3.2
16	7I	15	PRO	3.2
8	72	17	THR	3.2
12	3A	15	ARG	3.2
29	21	79	ARG	3.2
17	8A	8	GLY	3.2
46	D5	147	GLY	3.2
45	C5	66	PRO	3.2
32	59	153	LYS	3.2
12	3A	16	GLU	3.2
30	39	82	ILE	3.2
38	98	67	LEU	3.2
20	BA	74	LYS	3.2
21	1F	23	PRO	3.2
50	H5	15	TYR	3.2
1	13	1032(A)	G	3.2
9	82	31	GLN	3.2
19	AA	70	LYS	3.2
47	E5	45	PHE	3.2
50	H5	19	GLN	3.2
5	42	24	ARG	3.2
47	I8	41	ARG	3.2
4	3E	135	LEU	3.2
46	D5	76	LEU	3.2
37	45	129	THR	3.2
51	I5	46	GLN	3.2
1	1G	1116	C	3.2
5	4E	81	GLU	3.2
16	7I	38	TYR	3.2
10	1I	57	LYS	3.2
15	6I	31	LEU	3.2
31	49	175	LEU	3.2
13	4A	5	ALA	3.2
13	4A	87	TYR	3.2
36	35	47	ASP	3.2
48	F5	93	GLU	3.2

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Mol	Chain	Res	Type	RSRZ
8	72	55	GLY	3.1
13	4I	96	LEU	3.1
33	61	118	LYS	3.1
29	29	112	GLY	3.1
3	22	10	PHE	3.1
9	8E	9	ARG	3.1
34	15	115	ARG	3.1
9	8E	14	VAL	3.1
20	BA	78	ALA	3.1
33	69	18	VAL	3.1
41	85	6	THR	3.1
20	BI	20	LEU	3.1
26	1H	2116	G	3.1
21	1F	20	LYS	3.1
30	31	40	GLN	3.1
10	1I	40	LEU	3.1
11	2I	12	ARG	3.1
29	29	105	THR	3.1
32	51	171	LEU	3.1
32	59	112	PRO	3.1
41	85	3	ARG	3.1
53	O8	37	ARG	3.1
8	7E	131	GLY	3.1
42	95	70	ILE	3.1
55	Q8	48	PHE	3.1
26	14	2114	A	3.1
26	14	2125	G	3.1
29	29	111	ARG	3.1
32	59	161	GLY	3.1
10	1A	11	PHE	3.1
48	J8	70	VAL	3.1
53	O8	33	LYS	3.1
37	45	80	GLU	3.1
53	O8	48	VAL	3.1
14	5A	54	PRO	3.1
11	2A	126	ARG	3.1
28	19	211	ARG	3.1
2	1E	27	LYS	3.1
19	AA	13	ASP	3.1
15	6I	72	ARG	3.1
34	15	86	PRO	3.1
47	E5	38	VAL	3.1

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Mol	Chain	Res	Type	RSRZ
47	E5	53	MET	3.1
38	55	70	LEU	3.1
46	D5	125	LEU	3.1
51	I5	9	LEU	3.1
48	F5	32	LYS	3.1
34	58	115	ARG	3.1
47	E5	23	VAL	3.1
4	32	19	LEU	3.1
5	42	88	LYS	3.1
8	72	112	LEU	3.1
37	45	98	LYS	3.1
55	Q8	5	LYS	3.1
15	6I	27	VAL	3.1
16	7I	67	THR	3.1
37	45	140	ALA	3.1
9	82	77	ILE	3.1
55	M5	13	ARG	3.1
9	82	28	VAL	3.1
7	62	88	PRO	3.1
10	1A	41	PRO	3.1
51	I5	11	PRO	3.1
1	13	1367	C	3.1
8	7E	93	VAL	3.1
7	62	38	LEU	3.1
20	BA	17	ARG	3.1
20	BA	67	ALA	3.1
7	6E	5	ARG	3.0
8	72	91	ARG	3.0
28	19	37	LEU	3.0
1	1G	1357	A	3.0
34	15	44	PRO	3.0
39	65	87	PHE	3.0
13	4A	88	ARG	3.0
16	7A	64	ALA	3.0
32	59	85	LYS	3.0
1	1G	876	G	3.0
21	1F	4	GLY	3.0
39	65	18	ILE	3.0
47	I8	52	GLY	3.0
14	5I	31	ARG	3.0
26	14	1046	A	3.0
38	55	14	SER	3.0

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Mol	Chain	Res	Type	RSRZ
47	I8	53	MET	3.0
7	62	42	ILE	3.0
19	AA	40	ILE	3.0
55	M5	41	ILE	3.0
7	6E	35	LYS	3.0
29	21	195	LEU	3.0
48	F5	92	LYS	3.0
55	Q8	6	THR	3.0
29	21	4	ILE	3.0
4	3E	93	PHE	3.0
28	19	235	GLY	3.0
34	58	73	THR	3.0
38	55	2	ARG	3.0
20	BA	62	LEU	3.0
37	45	39	PRO	3.0
10	1I	54	PHE	3.0
15	6A	68	ARG	3.0
17	8I	27	PHE	3.0
2	1E	31	TYR	3.0
19	AA	49	ILE	3.0
31	49	161	THR	3.0
26	1H	654(K)	C	3.0
1	1G	1248	A	3.0
4	3E	21	LEU	3.0
9	82	79	LEU	3.0
41	85	20	LEU	3.0
55	Q8	62	LEU	3.0
32	51	3	ARG	3.0
10	1A	10	GLY	3.0
12	3A	68	ALA	3.0
14	5I	32	SER	3.0
39	65	93	LYS	3.0
1	1G	1285	A	3.0
10	1I	55	LYS	3.0
41	C8	34	LYS	3.0
55	M5	26	LYS	3.0
29	29	192	ASN	3.0
8	72	18	ARG	3.0
20	BI	80	ARG	3.0
1	1G	1358	U	3.0
8	72	56	LYS	3.0
47	E5	40	GLN	3.0

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Mol	Chain	Res	Type	RSRZ
26	14	2138	C	3.0
34	15	82	LEU	3.0
14	5I	17	LYS	3.0
20	BI	14	LYS	3.0
29	29	152	LYS	3.0
39	65	57	LYS	3.0
45	C5	63	LYS	3.0
50	H5	20	LYS	3.0
1	13	1354	C	3.0
1	1G	1367	C	3.0
8	72	25	ASP	3.0
10	1A	51	ARG	3.0
13	4A	94	ARG	3.0
16	7A	6	LEU	3.0
29	21	72	VAL	3.0
1	1G	1236	A	3.0
36	35	42	SER	3.0
10	1I	67	THR	3.0
28	19	55	GLY	2.9
30	39	92	PRO	3.0
4	32	122	ARG	2.9
5	42	14	ARG	2.9
41	C8	25	TRP	2.9
36	35	13	ASN	2.9
47	I8	45	PHE	2.9
20	BA	73	HIS	2.9
33	69	16	GLY	2.9
4	3E	138	TYR	2.9
37	45	20	ALA	2.9
46	D5	51	ALA	2.9
48	F5	21	ARG	2.9
20	BI	67	ALA	2.9
26	14	1536	A	2.9
32	59	141	VAL	2.9
42	D8	38	LEU	2.9
45	C5	49	VAL	2.9
49	K8	69	ARG	2.9
8	72	6	ILE	2.9
14	5A	42	ILE	2.9
26	14	2318	G	2.9
29	29	137	HIS	2.9
37	45	37	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
2	12	28	PHE	2.9
14	5I	57	ARG	2.9
15	6I	54	ARG	2.9
36	35	46	LYS	2.9
33	69	34	GLY	2.9
37	45	100	GLY	2.9
5	42	119	LEU	2.9
8	7E	85	ARG	2.9
55	M5	34	TRP	2.9
40	75	98	LYS	2.9
45	C5	64	GLU	2.9
37	45	120	ILE	2.9
32	59	130	ARG	2.9
37	45	5	ARG	2.9
29	29	203	LYS	2.9
1	13	1325	C	2.9
8	7E	90	GLY	2.9
20	BI	17	ARG	2.9
5	42	84	PHE	2.9
36	35	51	PHE	2.9
17	8A	11	VAL	2.9
12	3A	47	LYS	2.9
2	12	40	HIS	2.9
26	14	1661	G	2.9
31	49	27	ASN	2.9
51	I5	7	PRO	2.9
1	13	1032	A	2.9
15	6I	63	ARG	2.9
28	19	39	LYS	2.9
20	BI	16	HIS	2.9
31	49	95	ARG	2.9
55	M5	2	PRO	2.9
1	1G	977	A	2.9
8	7E	133	LEU	2.9
13	4A	105	THR	2.9
20	BI	63	ILE	2.9
55	M5	23	VAL	2.9
51	I5	42	PHE	2.9
9	8E	105	ASP	2.9
33	69	20	ASP	2.9
1	13	311	C	2.9
1	13	229	U	2.9

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Mol	Chain	Res	Type	RSRZ
1	13	111	G	2.9
36	35	38	GLN	2.9
29	29	145	LYS	2.9
55	M5	8	LYS	2.9
8	72	61	VAL	2.8
12	3I	90	VAL	2.8
1	1G	972	C	2.8
10	1A	42	THR	2.8
26	14	2164	C	2.8
29	29	107	THR	2.8
12	3I	17	LYS	2.8
51	I5	30	GLU	2.8
55	M5	21	LYS	2.8
1	1G	1373	G	2.8
28	19	257	LEU	2.8
16	7A	9	PHE	2.8
29	29	156	MET	2.8
20	BA	22	ARG	2.8
30	39	72	ARG	2.8
37	45	40	ALA	2.8
1	1G	1354	C	2.8
12	3A	85	ILE	2.8
39	65	12	PHE	2.8
40	B8	101	PHE	2.8
55	M5	15	LYS	2.8
19	AI	38	SER	2.8
11	2A	25	TYR	2.8
20	BI	9	ASN	2.8
29	29	24	THR	2.8
36	35	30	THR	2.8
30	39	93	LYS	2.8
39	65	91	PRO	2.8
26	14	2713	A	2.8
1	13	112	G	2.8
19	AI	78	ARG	2.8
13	4A	25	ILE	2.8
24	3L	60	U	2.8
46	D5	78	LYS	2.8
29	21	147	PRO	2.8
14	5I	60	SER	2.8
28	19	155	LEU	2.8
1	1G	966	G	2.8

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Mol	Chain	Res	Type	RSRZ
20	BI	106	ALA	2.8
20	BA	81	LYS	2.8
40	75	100	TYR	2.8
42	95	78	LYS	2.8
53	O8	34	LEU	2.8
36	78	30	THR	2.8
1	13	1364	U	2.8
4	3E	111	ALA	2.8
8	72	12	ARG	2.8
11	2I	126	ARG	2.8
28	19	4	LYS	2.8
38	98	17	ARG	2.8
1	13	1033	G	2.8
7	6E	34	GLY	2.8
14	5A	27	CYS	2.8
16	7I	11	SER	2.8
46	D5	141	VAL	2.8
32	59	86	GLU	2.8
38	55	21	TYR	2.8
41	C8	35	ALA	2.8
15	6A	62	GLN	2.8
9	82	74	ILE	2.8
32	59	162	ILE	2.8
12	3A	8	ASN	2.8
14	5I	8	GLU	2.8
16	7I	5	ARG	2.8
8	7E	112	LEU	2.8
9	82	76	ALA	2.8
12	3A	98	TYR	2.8
13	4A	90	LEU	2.8
47	I8	76	GLY	2.8
2	12	135	GLN	2.8
2	12	163	PHE	2.8
8	72	111	ILE	2.8
20	BI	21	LYS	2.8
36	78	64	LYS	2.8
55	Q8	13	ARG	2.8
8	7E	9	MET	2.8
1	1G	1226	C	2.8
28	19	177	LEU	2.8
41	85	56	ASP	2.8
31	49	152	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
39	65	58	LEU	2.8
46	D5	149	SER	2.8
53	O8	40	CYS	2.8
14	5I	37	PHE	2.8
20	BI	38	LYS	2.8
28	19	254	THR	2.8
26	14	2113	U	2.7
4	32	11	LEU	2.7
40	B8	114	LEU	2.7
1	13	609	A	2.7
8	72	131	GLY	2.7
9	8E	122	ALA	2.7
14	5I	3	ARG	2.7
29	21	152	LYS	2.7
53	K5	31	PRO	2.7
41	85	25	TRP	2.7
29	29	51	PHE	2.7
43	A5	81	ALA	2.7
14	5I	22	THR	2.7
40	B8	93	ARG	2.7
19	AI	75	ALA	2.7
5	4E	129	ILE	2.7
29	21	55	ASN	2.7
29	29	143	ASN	2.7
1	1G	1033	G	2.7
16	7A	25	ARG	2.7
20	BI	69	GLY	2.7
29	21	67	PHE	2.7
31	49	89	GLY	2.7
32	59	113	VAL	2.7
8	7E	83	ILE	2.7
26	14	2142	C	2.7
41	C8	37	GLU	2.7
17	8A	37	LYS	2.7
21	1B	12	LYS	2.7
24	3L	35	A	2.7
26	1H	2476	A	2.7
26	14	2112	G	2.7
34	15	117	PHE	2.7
20	BI	33	ILE	2.7
34	15	114	ARG	2.7
36	35	33	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
52	J5	10	LYS	2.7
55	M5	57	ARG	2.7
1	13	43	C	2.7
19	AA	38	SER	2.7
47	E5	57	PHE	2.7
3	22	30	ARG	2.7
54	L5	14	LYS	2.7
7	6E	33	ASP	2.7
30	39	96	ASP	2.7
39	65	19	LYS	2.7
45	C5	23	ARG	2.7
5	42	123	LEU	2.7
55	M5	61	LEU	2.7
1	13	815	A	2.7
29	29	11	MET	2.7
9	8E	65	VAL	2.7
11	2A	118	GLY	2.7
17	8A	38	ARG	2.7
1	13	754	C	2.7
26	14	2161	C	2.7
31	41	34	LEU	2.7
53	O8	36	LEU	2.7
5	4E	88	LYS	2.7
9	8E	101	PHE	2.7
17	8A	69	LYS	2.7
36	35	27	HIS	2.7
55	Q8	28	GLY	2.7
48	F5	5	CYS	2.7
12	3A	7	ILE	2.7
20	BA	12	ALA	2.7
37	45	89	ASN	2.7
38	55	65	LEU	2.7
4	3E	124	GLY	2.7
28	11	210	GLY	2.7
36	35	68	GLN	2.7
5	42	81	GLU	2.7
29	29	167	VAL	2.7
31	49	137	GLU	2.7
55	M5	58	ILE	2.7
20	BA	21	LYS	2.7
29	29	121	ASN	2.7
51	I5	44	THR	2.7

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Mol	Chain	Res	Type	RSRZ
1	13	742	G	2.7
2	12	136	VAL	2.7
9	82	39	GLY	2.7
37	45	30	GLY	2.7
55	Q8	43	GLN	2.7
12	3A	18	VAL	2.7
7	6E	85	TYR	2.6
37	45	74	TYR	2.6
47	E5	18	ALA	2.7
4	3E	201	GLN	2.6
5	42	13	ILE	2.6
17	8I	28	PRO	2.6
29	29	191	PRO	2.6
16	7I	42	ARG	2.6
46	D5	171	ILE	2.6
29	21	52	LEU	2.6
29	29	140	SER	2.6
31	49	135	LEU	2.6
2	12	14	GLY	2.6
45	C5	58	GLY	2.6
3	2E	193	TYR	2.6
8	72	13	ILE	2.6
9	8E	40	LEU	2.6
12	3I	5	PRO	2.6
17	8A	36	ILE	2.6
17	8A	60	ILE	2.6
29	21	187	ALA	2.6
1	1G	879	C	2.6
1	13	1031	G	2.6
20	BA	64	ASP	2.6
26	14	1998	G	2.6
55	M5	35	GLN	2.6
7	62	39	ALA	2.6
10	1I	8	LEU	2.6
31	49	23	PHE	2.6
34	15	37	LYS	2.6
38	98	14	SER	2.6
41	85	29	SER	2.6
8	7E	132	GLU	2.6
34	15	90	MET	2.6
35	68	1	MET	2.6
46	D5	96	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
38	55	71	GLN	2.6
8	72	10	LEU	2.6
15	6I	87	ILE	2.6
19	AA	71	LEU	2.6
39	65	36	TYR	2.6
48	F5	63	ALA	2.6
53	O8	11	LEU	2.6
1	1G	1353	G	2.6
26	14	944	G	2.6
28	19	246	PRO	2.6
53	K5	38	LYS	2.6
29	21	91	VAL	2.6
29	29	119	ARG	2.6
36	35	26	GLY	2.6
15	6A	25	THR	2.6
33	69	5	LEU	2.6
2	12	131	PRO	2.6
29	29	104	VAL	2.6
41	C8	30	LYS	2.6
48	F5	90	ILE	2.6
4	32	68	TYR	2.6
20	BI	59	ALA	2.6
16	7A	69	THR	2.6
20	BI	22	ARG	2.6
8	72	5	PRO	2.6
13	4I	98	VAL	2.6
31	49	15	VAL	2.6
37	45	94	VAL	2.6
39	65	28	VAL	2.6
55	M5	14	VAL	2.6
5	4E	13	ILE	2.6
12	3A	13	LYS	2.6
28	19	147	LEU	2.6
36	35	108	LYS	2.6
45	C5	61	ILE	2.6
17	8I	91	ARG	2.6
17	8I	29	HIS	2.6
29	21	154	LYS	2.6
10	1I	38	ILE	2.6
15	6I	66	LEU	2.6
17	8I	31	LEU	2.6
39	A8	9	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
28	19	247	ALA	2.6
46	D5	169	GLU	2.6
34	15	70	LYS	2.6
46	D5	170	THR	2.6
29	29	132	HIS	2.6
41	85	49	HIS	2.6
40	B8	115	ARG	2.6
26	14	2167	U	2.6
16	7I	61	SER	2.6
28	19	90	ALA	2.6
46	D5	164	ALA	2.6
10	1I	44	VAL	2.6
29	29	133	LYS	2.6
34	15	45	ASN	2.6
41	C8	118	GLY	2.6
5	42	15	ARG	2.6
29	21	199	ARG	2.6
26	14	2	G	2.6
1	1G	1362	C	2.6
42	D8	75	PHE	2.6
11	2I	124	LYS	2.6
32	59	104	GLU	2.6
48	J8	69	LYS	2.6
55	M5	56	GLU	2.6
38	55	17	ARG	2.6
20	BA	16	HIS	2.6
14	5I	10	ALA	2.5
20	BA	27	LYS	2.5
34	58	75	TYR	2.5
55	M5	29	LYS	2.5
1	1G	963	G	2.5
16	7I	53	VAL	2.5
50	H5	9	VAL	2.5
55	M5	30	ARG	2.5
32	59	57	ASP	2.5
34	58	76	SER	2.5
2	1E	11	LEU	2.5
8	72	9	MET	2.5
17	8I	34	LYS	2.5
37	45	63	LYS	2.5
36	78	110	TYR	2.5
29	29	106	GLY	2.5

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Mol	Chain	Res	Type	RSRZ
1	1G	994	A	2.5
38	98	10	LEU	2.5
39	65	73	LEU	2.5
47	E5	59	LEU	2.5
12	3A	23	LYS	2.5
7	6E	86	GLN	2.5
16	7A	63	GLY	2.5
21	1F	11	GLY	2.5
48	F5	62	VAL	2.5
32	59	160	LYS	2.5
55	Q8	61	LEU	2.5
26	14	960	A	2.5
30	39	95	ARG	2.5
37	45	101	ARG	2.5
41	85	2	PRO	2.5
37	45	53	ALA	2.5
55	Q8	7	HIS	2.5
1	1G	1029	G	2.5
48	F5	69	LYS	2.5
41	C8	40	PHE	2.5
21	1F	5	ASP	2.5
9	82	17	VAL	2.5
37	45	96	VAL	2.5
16	7I	60	LEU	2.5
55	M5	27	THR	2.5
9	82	18	PHE	2.5
34	15	51	PHE	2.5
47	I8	39	ARG	2.5
55	M5	46	ARG	2.5
31	49	13	GLU	2.5
43	A5	94	ASP	2.5
14	5I	58	LYS	2.5
36	78	107	LYS	2.5
55	Q8	2	PRO	2.5
35	68	122	LEU	2.5
37	45	125	LEU	2.5
47	I8	59	LEU	2.5
14	5I	13	THR	2.5
33	69	40	THR	2.5
35	25	65	THR	2.5
32	59	41	MET	2.5
4	3E	203	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
8	7E	95	VAL	2.5
36	35	28	GLY	2.5
38	98	15	SER	2.5
38	55	7	GLY	2.5
4	32	76	ARG	2.5
5	42	25	ARG	2.5
15	6A	65	ARG	2.5
48	F5	66	HIS	2.5
50	H5	8	LEU	2.5
8	72	31	PHE	2.5
31	41	27	ASN	2.5
40	75	101	PHE	2.5
1	1G	983	A	2.5
26	14	571	A	2.5
28	19	182	LEU	2.5
36	35	48	PRO	2.5
44	B5	54	VAL	2.5
13	4A	96	LEU	2.5
48	F5	64	ALA	2.5
29	29	120	TRP	2.5
34	15	118	LYS	2.5
47	E5	12	ASN	2.5
28	19	54	ARG	2.5
36	35	50	ARG	2.5
16	7I	49	LEU	2.5
36	35	53	GLY	2.5
45	C5	39	VAL	2.5
1	13	389	A	2.5
37	45	67	ARG	2.5
41	C8	38	THR	2.5
1	1G	1032(B)	G	2.5
11	2I	25	TYR	2.5
12	3A	84	LEU	2.5
17	8I	98	LEU	2.5
37	45	102	VAL	2.5
9	8E	113	LYS	2.5
43	E8	113	LYS	2.5
1	13	1366	C	2.5
1	1G	132	C	2.5
34	58	85	ILE	2.5
43	A5	103	ILE	2.5
4	3E	115	ARG	2.5

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Mol	Chain	Res	Type	RSRZ
3	22	155	GLY	2.5
12	3I	11	VAL	2.5
28	19	18	VAL	2.5
36	35	32	THR	2.5
32	59	157	TYR	2.5
36	35	31	ALA	2.5
43	E8	23	LEU	2.5
10	1A	6	ILE	2.5
51	I5	55	ARG	2.5
52	N8	55	ARG	2.5
1	1G	1369	C	2.4
9	8E	70	LYS	2.4
41	85	30	LYS	2.4
39	65	92	TYR	2.4
8	7E	6	ILE	2.4
32	59	128	PRO	2.4
53	K5	28	ARG	2.4
29	29	127	ASP	2.4
15	6A	5	LYS	2.4
48	F5	8	SER	2.4
24	3K	65	G	2.4
28	19	2	ALA	2.4
40	75	5	ALA	2.4
8	7E	136	GLU	2.4
8	72	87	SER	2.4
48	F5	70	VAL	2.4
13	4A	111	LYS	2.4
26	14	2116	G	2.4
31	49	93	THR	2.4
1	1G	814	A	2.4
1	1G	1363	A	2.4
8	7E	84	ARG	2.4
29	29	129	HIS	2.4
4	32	79	PHE	2.4
28	11	247	ALA	2.4
29	29	204	ALA	2.4
31	49	178	PHE	2.4
47	E5	70	GLN	2.4
26	14	4	C	2.4
1	1G	964	A	2.4
1	1G	969	A	2.4
10	1I	10	GLY	2.4

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Mol	Chain	Res	Type	RSRZ
32	59	35	VAL	2.4
2	1E	152	PHE	2.4
5	4E	45	PHE	2.4
7	62	103	TRP	2.4
9	82	46	ALA	2.4
12	3A	46	LYS	2.4
36	35	29	LYS	2.4
55	M5	24	ALA	2.4
4	3E	5	ILE	2.4
7	6E	80	VAL	2.4
15	6I	67	LEU	2.4
17	8A	6	LEU	2.4
29	29	125	GLY	2.4
8	72	135	CYS	2.4
1	13	262	A	2.4
1	1G	1220	G	2.4
29	29	108	SER	2.4
43	E8	24	ILE	2.4
46	D5	5	LEU	2.4
48	F5	42	GLN	2.4
31	41	75	LYS	2.4
48	F5	36	GLY	2.4
37	45	25	ASP	2.4
46	D5	148	ASP	2.4
5	4E	101	ILE	2.4
9	82	16	ARG	2.4
32	59	84	SER	2.4
1	1G	1289	A	2.4
31	49	3	LEU	2.4
30	39	1	MET	2.4
32	59	125	VAL	2.4
34	58	82	LEU	2.4
35	68	66	LYS	2.4
48	F5	91	LYS	2.4
51	I5	47	GLN	2.4
1	13	1001	G	2.4
40	B8	92	GLY	2.4
37	45	4	PRO	2.4
14	5I	12	ARG	2.4
26	14	1660	C	2.4
29	21	198	VAL	2.4
47	I8	37	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
17	8I	71	PHE	2.4
4	32	77	ASN	2.4
28	19	183	ARG	2.4
4	32	108	LEU	2.4
29	21	167	VAL	2.4
34	58	46	VAL	2.4
32	59	109	PHE	2.4
41	C8	32	PHE	2.4
47	E5	52	GLY	2.4
48	J8	60	PHE	2.4
1	13	135	C	2.4
1	13	307	C	2.4
8	72	85	ARG	2.4
15	6I	68	ARG	2.4
55	M5	47	LYS	2.4
28	11	111	LEU	2.4
1	13	1343	G	2.4
15	6I	58	MET	2.4
37	45	13	GLN	2.4
37	45	15	GLY	2.4
48	F5	20	ARG	2.4
5	4E	128	PRO	2.4
12	3A	94	PRO	2.4
16	7A	34	GLU	2.4
55	M5	54	GLU	2.4
1	13	1362	C	2.4
26	14	2691	C	2.4
41	85	18	LEU	2.4
1	1G	262	A	2.3
9	8E	41	VAL	2.3
16	7I	48	TRP	2.3
37	45	71	ASP	2.3
42	95	84	LYS	2.3
37	45	121	ALA	2.3
31	49	19	LEU	2.3
1	1G	824	C	2.3
1	1G	1320	C	2.3
15	6I	50	HIS	2.3
17	8A	9	VAL	2.3
39	A8	3	ARG	2.3
40	B8	112	ARG	2.3
37	45	19	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
39	65	60	GLY	2.3
37	45	128	LYS	2.3
42	95	93	GLU	2.3
10	1A	37	PRO	2.3
12	3A	100	ILE	2.3
15	6I	34	LEU	2.3
17	8A	22	LEU	2.3
29	29	134	ILE	2.3
33	69	39	ALA	2.3
36	35	105	LEU	2.3
48	J8	90	ILE	2.3
55	M5	50	LEU	2.3
9	82	41	VAL	2.3
16	7A	2	VAL	2.3
11	2A	123	LYS	2.3
19	AA	77	THR	2.3
26	1H	615	G	2.3
53	O8	35	GLU	2.3
5	4E	131	ILE	2.3
10	1A	38	ILE	2.3
20	BI	76	ALA	2.3
32	59	145	ALA	2.3
34	58	114	ARG	2.3
55	Q8	51	ALA	2.3
12	3A	71	PRO	2.3
31	41	160	VAL	2.3
32	59	49	VAL	2.3
32	59	124	GLU	2.3
49	K8	66	GLU	2.3
1	13	309	G	2.3
1	1G	984	C	2.3
1	1G	1321	C	2.3
1	1G	1370	G	2.3
15	6I	64	ARG	2.3
29	29	78	LEU	2.3
33	69	9	LEU	2.3
36	78	45	LEU	2.3
37	45	44	ALA	2.3
9	8E	71	SER	2.3
17	8A	23	VAL	2.3
41	C8	22	LYS	2.3
1	13	1349	A	2.3

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Mol	Chain	Res	Type	RSRZ
5	4E	98	THR	2.3
4	3E	102	ASP	2.3
31	49	11	TYR	2.3
12	3I	45	PRO	2.3
26	14	2000	G	2.3
4	32	14	ARG	2.3
40	75	1	MET	2.3
12	3A	93	LEU	2.3
16	7A	27	LYS	2.3
20	BA	87	LYS	2.3
26	14	764	A	2.3
16	7I	24	ALA	2.3
14	5A	24	CYS	2.3
29	29	142	GLY	2.3
1	1G	1362(A)	C	2.3
36	35	25	SER	2.3
33	69	45	LYS	2.3
55	Q8	4	MET	2.3
1	1G	1348	U	2.3
2	12	33	TYR	2.3
20	BI	75	ASN	2.3
29	29	52	LEU	2.3
29	21	160	TYR	2.3
2	12	70	PHE	2.3
3	22	207	VAL	2.3
4	32	133	VAL	2.3
19	AA	51	VAL	2.3
20	BI	11	SER	2.3
28	19	35	LYS	2.3
38	55	24	GLN	2.3
26	1H	2113	U	2.3
40	B8	50	ILE	2.3
9	82	83	ARG	2.3
46	D5	153	SER	2.3
29	21	141	ILE	2.3
4	3E	68	TYR	2.3
10	1I	72	VAL	2.3
42	D8	77	ALA	2.3
50	H5	21	ALA	2.3
12	3A	17	LYS	2.3
1	1G	781	A	2.3
28	11	206	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
29	29	195	LEU	2.3
31	49	91	ARG	2.3
45	C5	75	ILE	2.3
29	29	135	HIS	2.3
33	69	112	LYS	2.3
28	19	223	GLY	2.3
20	BI	64	ASP	2.3
28	11	254	THR	2.3
13	4A	91	ARG	2.3
15	6I	56	LEU	2.3
16	7I	71	ARG	2.3
20	BA	20	LEU	2.3
28	19	16	MET	2.3
28	19	215	LEU	2.3
31	49	142	PRO	2.3
42	D8	36	PRO	2.3
4	3E	158	ILE	2.3
4	3E	204	ILE	2.3
11	2I	123	LYS	2.3
19	AA	14	HIS	2.3
26	1H	2062	A	2.3
37	45	49	ALA	2.3
42	95	73	SER	2.3
17	8A	43	LEU	2.2
37	45	3	MET	2.2
37	45	75	THR	2.2
41	C8	18	LEU	2.2
49	G5	44	LEU	2.2
49	G5	61	LEU	2.2
26	14	574	C	2.2
42	D8	84	LYS	2.2
51	I5	41	PRO	2.2
55	Q8	23	VAL	2.2
21	1F	19	GLY	2.2
35	25	74	GLY	2.2
26	14	2001	A	2.2
7	62	104	LEU	2.2
12	3I	46	LYS	2.2
48	F5	33	LYS	2.2
2	1E	15	VAL	2.2
1	13	136	C	2.2
5	42	122	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
26	14	2690	C	2.2
46	D5	99	TYR	2.2
53	O8	24	GLU	2.2
53	O8	51	GLU	2.2
5	42	18	ARG	2.2
32	59	158	HIS	2.2
38	98	68	ARG	2.2
28	19	184	LYS	2.2
34	15	104	LYS	2.2
55	Q8	12	LYS	2.2
8	72	54	ASP	2.2
26	14	983	A	2.2
41	C8	90	VAL	2.2
41	85	44	ASN	2.2
20	BI	25	ARG	2.2
26	14	2110	G	2.2
47	I8	26	TYR	2.2
38	98	40	LYS	2.2
26	1H	34	C	2.2
37	88	17	LEU	2.2
5	4E	19	MET	2.2
31	49	70	VAL	2.2
35	25	2	ILE	2.2
47	E5	60	PHE	2.2
4	3E	61	LYS	2.2
19	AA	52	TYR	2.2
26	14	2900	A	2.2
47	E5	25	ARG	2.2
29	21	48	GLN	2.2
32	51	85	LYS	2.2
47	E5	43	THR	2.2
1	1G	1150	U	2.2
26	14	2506	U	2.2
1	13	324	G	2.2
26	14	2002	G	2.2
42	D8	73	SER	2.2
1	1G	1149	C	2.2
28	19	258	LYS	2.2
32	59	91	GLY	2.2
26	1H	1762	A	2.2
31	49	82	LEU	2.2
36	35	106	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
44	B5	92	LEU	2.2
31	41	33	ARG	2.2
1	1G	940	C	2.2
10	1A	53	PRO	2.2
20	BA	59	ALA	2.2
29	21	5	LEU	2.2
1	13	1287	A	2.2
9	8E	11	LYS	2.2
16	7A	28	ARG	2.2
26	14	2712	U	2.2
32	59	123	PHE	2.2
20	BI	55	ILE	2.2
30	39	89	VAL	2.2
36	35	44	GLY	2.2
11	2A	50	TYR	2.2
36	35	81	GLN	2.2
1	13	731	G	2.2
1	13	1356	G	2.2
16	7A	35	LYS	2.2
30	39	51	THR	2.2
2	12	41	ILE	2.2
29	29	25	VAL	2.2
41	85	48	ALA	2.2
47	I8	85	ALA	2.2
10	1A	7	LYS	2.2
13	4A	27	LYS	2.2
36	35	17	LYS	2.2
37	45	18	LYS	2.2
54	L5	2	LYS	2.2
39	65	29	PHE	2.2
8	72	132	GLU	2.2
13	4A	8	GLU	2.2
9	82	93	ARG	2.2
11	2A	120	ARG	2.2
14	5I	34	TYR	2.2
26	14	2689	U	2.2
41	85	46	ALA	2.2
1	1G	1288	A	2.2
26	14	2126	A	2.2
5	4E	82	VAL	2.2
37	45	47	ILE	2.2
43	A5	85	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
4	32	54	TYR	2.2
20	BI	30	LYS	2.2
45	C5	2	ARG	2.2
20	BA	36	LEU	2.2
45	C5	26	LYS	2.2
48	J8	25	LYS	2.2
1	1G	769	G	2.2
36	78	68	GLN	2.2
10	1A	72	VAL	2.2
29	21	171	GLU	2.2
41	85	8	VAL	2.2
55	M5	20	GLY	2.2
5	42	133	TYR	2.1
15	6I	57	LEU	2.1
15	6A	32	LEU	2.1
45	C5	31	LEU	2.1
48	F5	71	TYR	2.1
26	14	2477	C	2.1
37	45	113	GLN	2.1
32	59	55	PRO	2.1
37	88	38	GLU	2.1
46	D5	167	PRO	2.1
4	32	73	ARG	2.1
7	62	31	MET	2.1
12	3I	89	ARG	2.1
17	8A	100	LYS	2.1
1	1G	1511	G	2.1
26	14	575	A	2.1
35	25	34	THR	2.1
42	95	71	LEU	2.1
47	E5	37	LEU	2.1
15	6A	15	PHE	2.1
36	35	23	PRO	2.1
37	45	127	ILE	2.1
39	65	15	ARG	2.1
45	C5	50	ARG	2.1
55	Q8	56	GLU	2.1
1	1G	723	U	2.1
1	1G	1020	U	2.1
5	4E	119	LEU	2.1
8	7E	59	LEU	2.1
28	19	61	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
33	61	116	LEU	2.1
4	32	4	TYR	2.1
30	31	97	TYR	2.1
1	1G	1520	G	2.1
1	1G	1529	G	2.1
11	2I	120	ARG	2.1
26	14	859	G	2.1
48	F5	60	PHE	2.1
12	3A	9	GLN	2.1
38	98	1	MET	2.1
38	55	6	SER	2.1
1	1G	980	C	2.1
4	3E	97	LEU	2.1
8	72	21	LYS	2.1
11	2I	122	LYS	2.1
12	3A	89	ARG	2.1
32	59	30	LYS	2.1
36	78	57	THR	2.1
36	35	55	ARG	2.1
41	C8	15	LYS	2.1
47	I8	77	ARG	2.1
55	M5	17	THR	2.1
19	AA	11	VAL	2.1
20	BA	60	GLU	2.1
28	11	18	VAL	2.1
28	19	64	ILE	2.1
30	39	88	VAL	2.1
36	78	71	VAL	2.1
1	13	1531	A	2.1
24	1L	31	A	2.1
26	14	2052	G	2.1
26	14	2120	G	2.1
29	29	126	PRO	2.1
32	59	71	LEU	2.1
7	62	7	ALA	2.1
7	62	29	LYS	2.1
26	14	2723	C	2.1
30	39	44	ARG	2.1
32	51	170	ARG	2.1
47	E5	20	ARG	2.1
50	H5	18	ASP	2.1
26	14	280	C	2.1

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Mol	Chain	Res	Type	RSRZ
8	7E	24	THR	2.1
28	19	49	ILE	2.1
41	C8	117	GLN	2.1
48	J8	13	ILE	2.1
48	J8	49	VAL	2.1
8	72	27	PRO	2.1
44	F8	2	LYS	2.1
55	M5	36	LYS	2.1
11	2A	75	TYR	2.1
1	13	107	G	2.1
28	19	214	TRP	2.1
51	I5	34	GLU	2.1
55	M5	31	HIS	2.1
8	7E	134	ILE	2.1
12	3A	70	ILE	2.1
20	BA	9	ASN	2.1
23	2L	1	C	2.1
32	59	148	ILE	2.1
4	3E	76	ARG	2.1
4	3E	122	ARG	2.1
21	1F	12	LYS	2.1
21	1B	7	ARG	2.1
29	21	49	LEU	2.1
28	11	53	PHE	2.1
7	62	40	ALA	2.1
38	98	21	TYR	2.1
32	59	81	GLU	2.1
5	4E	31	LEU	2.1
15	6A	66	LEU	2.1
24	3L	6	G	2.1
26	14	530	G	2.1
31	49	177	GLY	2.1
32	59	33	LEU	2.1
35	25	70	LYS	2.1
47	E5	26	TYR	2.1
39	65	43	GLU	2.1
4	32	49	ARG	2.1
20	BI	34	LYS	2.1
44	B5	52	VAL	2.1
47	E5	46	LYS	2.1
52	J5	3	LYS	2.1
12	3A	72	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
29	29	124	GLY	2.1
36	78	106	LEU	2.1
26	14	1301	A	2.1
28	19	161	THR	2.1
1	13	625	G	2.1
4	3E	80	GLU	2.1
28	19	181	GLU	2.1
5	4E	24	ARG	2.1
28	11	35	LYS	2.1
37	45	56	ARG	2.1
45	C5	33	LYS	2.1
5	4E	118	ILE	2.1
8	7E	25	ASP	2.1
50	H5	30	ARG	2.1
47	I8	54	GLY	2.1
55	M5	45	GLY	2.1
1	1G	1235	U	2.1
1	13	1350	A	2.1
43	A5	16	LYS	2.1
9	8E	17	VAL	2.1
14	5I	18	VAL	2.1
28	19	221	VAL	2.1
55	Q8	42	ARG	2.1
4	3E	120	LEU	2.1
20	BA	24	LEU	2.1
34	15	113	GLY	2.1
34	15	120	LEU	2.1
39	A8	112	PHE	2.1
13	4A	67	GLU	2.1
48	F5	23	LYS	2.1
30	39	49	ALA	2.1
34	15	43	THR	2.1
37	45	132	VAL	2.1
1	13	623	C	2.1
7	62	33	ASP	2.1
47	I8	56	ASP	2.1
42	D8	78	LYS	2.0
9	8E	12	GLU	2.0
14	5A	46	GLU	2.0
52	N8	15	ARG	2.0
26	14	352	G	2.0
26	14	573	G	2.0

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Mol	Chain	Res	Type	RSRZ
5	42	17	ALA	2.0
8	72	16	ALA	2.0
48	F5	4	VAL	2.0
13	4I	6	GLY	2.0
34	58	107	LEU	2.0
16	7A	8	ARG	2.0
18	9A	43	PHE	2.0
39	65	27	SER	2.0
42	D8	76	LYS	2.0
42	D8	80	GLN	2.0
1	13	110	C	2.0
1	13	1344	C	2.0
24	1L	56	C	2.0
12	3A	27	LEU	2.0
16	7I	63	GLY	2.0
16	7I	73	LEU	2.0
29	29	138	PRO	2.0
4	3E	84	LYS	2.0
32	59	108	GLY	2.0
37	88	33	GLY	2.0
36	78	79	ARG	2.0
44	B5	28	PHE	2.0
47	I8	44	ARG	2.0
17	8I	24	GLU	2.0
30	39	75	HIS	2.0
1	13	608	A	2.0
14	5I	21	TYR	2.0
48	F5	74	VAL	2.0
11	2A	71	LYS	2.0
29	29	118	LYS	2.0
29	29	147	PRO	2.0
37	88	130	LYS	2.0
38	55	44	LEU	2.0
39	65	26	LEU	2.0
51	I5	49	PHE	2.0
1	13	1361	G	2.0
1	1G	1032(A)	G	2.0
8	72	65	TYR	2.0
15	6I	32	LEU	2.0
19	AA	37	ARG	2.0
19	AA	62	ILE	2.0
35	25	67	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
36	35	148	LEU	2.0
38	55	40	LYS	2.0
48	J8	23	LYS	2.0
40	75	112	ARG	2.0
44	B5	60	ARG	2.0
50	H5	26	LEU	2.0
51	M8	31	ILE	2.0
52	N8	25	LEU	2.0
29	29	148	GLY	2.0
31	49	127	GLY	2.0
1	1G	1066	C	2.0
26	14	1625	C	2.0
38	98	39	PRO	2.0
28	19	17	THR	2.0
1	1G	982	U	2.0
37	45	45	GLN	2.0
2	12	71	VAL	2.0
4	3E	140	VAL	2.0
10	1I	73	ASP	2.0
28	19	51	VAL	2.0
37	88	32	TYR	2.0
12	3I	7	ILE	2.0
19	AI	40	ILE	2.0
47	I8	75	LEU	2.0
1	13	1365	G	2.0
29	29	193	GLY	2.0
14	5I	36	PHE	2.0
1	1G	60	A	2.0
1	1G	1254	C	2.0
9	8E	103	THR	2.0
28	19	253	GLN	2.0
5	42	12	LEU	2.0
7	6E	154	TYR	2.0
12	3A	97	ARG	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
22	PSU	1K	55	20/21	0.78	0.12	153,172,191,191	0
22	4SU	1K	8	20/21	0.80	0.14	184,192,200,205	0
22	7MG	1K	46	24/25	0.87	0.12	175,197,203,209	0
23	4SU	2L	8	20/21	0.88	0.14	128,140,143,147	0
22	PSU	1K	32	20/21	0.89	0.32	113,119,123,123	0
23	PSU	2L	56	20/21	0.90	0.09	128,135,142,148	0
22	5MU	1K	54	21/22	0.93	0.10	142,157,168,172	0
22	PSU	1K	39	20/21	0.94	0.17	96,108,116,119	0
23	4SU	2K	8	20/21	0.94	0.21	100,108,123,123	0
22	MIA	1K	37	29/30	0.94	0.30	89,100,118,123	0
23	5MU	2L	55	21/22	0.95	0.11	138,142,147,151	0
23	7MG	2K	47	24/25	0.95	0.17	110,120,128,137	0
23	7MG	2L	47	24/25	0.95	0.12	140,151,156,161	0
23	PSU	2K	56	20/21	0.96	0.14	109,113,120,127	0
23	OMC	2L	33	21/22	0.96	0.20	124,127,132,137	0
23	5MU	2K	55	21/22	0.97	0.15	99,116,125,136	0
23	OMC	2K	33	21/22	0.98	0.32	88,94,101,106	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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
56	MG	1H	3119	1/1	0.35	0.52	101,101,101,101	0
56	MG	1H	3498	1/1	0.39	0.20	119,119,119,119	0
56	MG	1H	3142	1/1	0.41	0.41	88,88,88,88	0
56	MG	13	1720	1/1	0.43	0.24	104,104,104,104	0
56	MG	13	1750	1/1	0.45	0.35	131,131,131,131	0
56	MG	13	1710	1/1	0.45	0.30	98,98,98,98	0
56	MG	14	3391	1/1	0.46	0.10	124,124,124,124	0
56	MG	13	1739	1/1	0.47	0.20	120,120,120,120	0
56	MG	13	1697	1/1	0.47	0.26	97,97,97,97	0
56	MG	14	3420	1/1	0.48	0.07	130,130,130,130	0
56	MG	1H	3028	1/1	0.49	0.43	115,115,115,115	0
56	MG	1G	1633	1/1	0.49	0.32	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	14	3183	1/1	0.51	0.32	110,110,110,110	0
56	MG	13	1631	1/1	0.51	0.70	102,102,102,102	0
56	MG	1H	3322	1/1	0.51	0.22	96,96,96,96	0
56	MG	14	3307	1/1	0.52	0.25	87,87,87,87	0
56	MG	16	205	1/1	0.53	0.20	91,91,91,91	0
56	MG	14	3020	1/1	0.54	0.51	92,92,92,92	0
56	MG	1H	3154	1/1	0.54	0.22	91,91,91,91	0
56	MG	14	3262	1/1	0.54	0.29	81,81,81,81	0
56	MG	1G	1629	1/1	0.55	0.18	124,124,124,124	0
56	MG	13	1692	1/1	0.56	0.22	102,102,102,102	0
56	MG	13	1683	1/1	0.56	0.28	106,106,106,106	0
56	MG	14	3288	1/1	0.56	0.53	107,107,107,107	0
56	MG	29	302	1/1	0.56	0.35	108,108,108,108	0
56	MG	M5	101	1/1	0.56	0.25	94,94,94,94	0
56	MG	1H	3281	1/1	0.57	0.30	85,85,85,85	0
56	MG	14	3284	1/1	0.57	0.30	100,100,100,100	0
56	MG	1H	3313	1/1	0.57	0.24	93,93,93,93	0
56	MG	1H	3200	1/1	0.57	0.35	104,104,104,104	0
56	MG	13	1658	1/1	0.58	0.44	117,117,117,117	0
56	MG	14	3329	1/1	0.58	0.21	120,120,120,120	0
56	MG	1G	1644	1/1	0.59	0.19	115,115,115,115	0
56	MG	1H	3250	1/1	0.59	0.21	104,104,104,104	0
56	MG	13	1606	1/1	0.60	0.33	115,115,115,115	0
56	MG	1H	3243	1/1	0.60	0.36	93,93,93,93	0
56	MG	13	1745	1/1	0.61	0.39	121,121,121,121	0
56	MG	13	1708	1/1	0.61	0.34	119,119,119,119	0
56	MG	14	3181	1/1	0.61	0.21	100,100,100,100	0
56	MG	14	3295	1/1	0.61	0.62	95,95,95,95	0
56	MG	1H	3309	1/1	0.61	0.45	96,96,96,96	0
56	MG	13	1636	1/1	0.62	0.30	100,100,100,100	0
56	MG	1H	3158	1/1	0.62	0.46	104,104,104,104	0
56	MG	13	1629	1/1	0.62	0.45	106,106,106,106	0
56	MG	14	3025	1/1	0.62	0.17	116,116,116,116	0
56	MG	1H	3255	1/1	0.63	0.45	117,117,117,117	0
56	MG	1H	3270	1/1	0.63	0.48	98,98,98,98	0
56	MG	14	3201	1/1	0.63	0.30	111,111,111,111	0
56	MG	14	3260	1/1	0.63	0.17	119,119,119,119	0
56	MG	1H	3332	1/1	0.63	0.42	90,90,90,90	0
56	MG	1H	3029	1/1	0.63	0.28	110,110,110,110	0
56	MG	13	1717	1/1	0.63	0.28	114,114,114,114	0
56	MG	1H	3328	1/1	0.64	0.54	87,87,87,87	0
56	MG	1G	1670	1/1	0.64	0.40	138,138,138,138	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3272	1/1	0.65	0.27	96,96,96,96	0
56	MG	1H	3337	1/1	0.65	0.42	106,106,106,106	0
56	MG	1H	3395	1/1	0.65	0.17	118,118,118,118	0
56	MG	1H	3431	1/1	0.65	0.11	163,163,163,163	0
56	MG	1H	3148	1/1	0.65	0.18	79,79,79,79	0
56	MG	13	1664	1/1	0.65	0.28	103,103,103,103	0
56	MG	14	3163	1/1	0.65	0.18	105,105,105,105	0
56	MG	14	3150	1/1	0.66	0.33	80,80,80,80	0
56	MG	14	3019	1/1	0.66	0.22	96,96,96,96	0
56	MG	1H	3276	1/1	0.66	0.44	99,99,99,99	0
56	MG	39	303	1/1	0.66	0.66	87,87,87,87	0
56	MG	E5	101	1/1	0.66	0.23	98,98,98,98	0
56	MG	13	1627	1/1	0.66	0.28	101,101,101,101	0
56	MG	1G	1664	1/1	0.67	0.27	116,116,116,116	0
56	MG	1G	1667	1/1	0.67	0.24	119,119,119,119	0
56	MG	1H	3023	1/1	0.67	0.37	100,100,100,100	0
56	MG	14	3026	1/1	0.68	0.39	92,92,92,92	0
56	MG	14	3133	1/1	0.68	0.13	97,97,97,97	0
56	MG	13	1716	1/1	0.68	0.18	111,111,111,111	0
56	MG	14	3312	1/1	0.68	0.12	93,93,93,93	0
56	MG	1G	1645	1/1	0.68	0.31	113,113,113,113	0
56	MG	13	1744	1/1	0.68	0.41	132,132,132,132	0
56	MG	1H	3464	1/1	0.68	0.14	133,133,133,133	0
56	MG	1H	3306	1/1	0.68	0.60	81,81,81,81	0
56	MG	1H	3273	1/1	0.68	0.25	84,84,84,84	0
56	MG	1H	3311	1/1	0.68	0.48	109,109,109,109	0
56	MG	1H	3343	1/1	0.68	0.36	92,92,92,92	0
56	MG	13	1640	1/1	0.69	0.23	94,94,94,94	0
56	MG	1H	3326	1/1	0.69	0.54	117,117,117,117	0
56	MG	14	3235	1/1	0.69	0.14	83,83,83,83	0
56	MG	14	3029	1/1	0.69	0.22	97,97,97,97	0
56	MG	13	1748	1/1	0.69	0.09	140,140,140,140	0
56	MG	1H	3330	1/1	0.69	0.56	104,104,104,104	0
56	MG	14	3286	1/1	0.69	0.15	92,92,92,92	0
56	MG	1G	1642	1/1	0.69	0.22	102,102,102,102	0
56	MG	1H	3087	1/1	0.69	0.18	69,69,69,69	0
56	MG	1H	3135	1/1	0.70	0.26	111,111,111,111	0
56	MG	13	1669	1/1	0.70	0.27	110,110,110,110	0
56	MG	14	3143	1/1	0.70	0.43	100,100,100,100	0
56	MG	1H	3143	1/1	0.70	0.44	99,99,99,99	0
56	MG	1H	3331	1/1	0.70	0.82	106,106,106,106	0
56	MG	2L	102	1/1	0.70	0.26	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3182	1/1	0.70	0.27	98,98,98,98	0
56	MG	13	1749	1/1	0.70	0.23	121,121,121,121	0
56	MG	14	3372	1/1	0.70	0.12	134,134,134,134	0
56	MG	13	1639	1/1	0.70	0.19	109,109,109,109	0
56	MG	14	3403	1/1	0.70	0.09	122,122,122,122	0
56	MG	14	3203	1/1	0.70	0.29	81,81,81,81	0
56	MG	14	3227	1/1	0.70	0.33	97,97,97,97	0
56	MG	13	1714	1/1	0.70	0.22	101,101,101,101	0
56	MG	14	3251	1/1	0.70	0.10	105,105,105,105	0
56	MG	1H	3186	1/1	0.70	0.35	93,93,93,93	0
56	MG	13	1666	1/1	0.71	0.31	105,105,105,105	0
56	MG	14	3319	1/1	0.71	0.29	118,118,118,118	0
56	MG	13	1651	1/1	0.71	0.23	100,100,100,100	0
56	MG	14	3356	1/1	0.71	0.25	118,118,118,118	0
56	MG	14	3272	1/1	0.71	0.32	95,95,95,95	0
56	MG	14	3376	1/1	0.71	0.13	119,119,119,119	0
56	MG	1H	3505	1/1	0.71	0.15	112,112,112,112	0
56	MG	1H	3124	1/1	0.71	0.19	72,72,72,72	0
56	MG	14	3416	1/1	0.71	0.43	126,126,126,126	0
56	MG	13	1675	1/1	0.71	0.19	121,121,121,121	0
56	MG	14	3291	1/1	0.71	0.18	115,115,115,115	0
56	MG	14	3236	1/1	0.71	0.10	99,99,99,99	0
56	MG	14	3297	1/1	0.71	0.24	96,96,96,96	0
56	MG	1H	3157	1/1	0.71	0.51	104,104,104,104	0
56	MG	14	3294	1/1	0.72	0.14	91,91,91,91	0
56	MG	14	3274	1/1	0.72	0.25	122,122,122,122	0
56	MG	1H	3251	1/1	0.72	0.15	93,93,93,93	0
56	MG	13	1688	1/1	0.72	0.33	93,93,93,93	0
56	MG	1H	3266	1/1	0.72	0.58	95,95,95,95	0
56	MG	1H	3179	1/1	0.72	0.40	96,96,96,96	0
56	MG	14	3232	1/1	0.73	0.29	103,103,103,103	0
56	MG	1H	3137	1/1	0.73	0.53	87,87,87,87	0
56	MG	1H	3491	1/1	0.73	0.16	93,93,93,93	0
56	MG	1H	3340	1/1	0.73	0.36	93,93,93,93	0
56	MG	1H	3153	1/1	0.73	0.40	98,98,98,98	0
56	MG	1G	1649	1/1	0.73	0.27	105,105,105,105	0
56	MG	14	3265	1/1	0.73	0.29	88,88,88,88	0
56	MG	13	1718	1/1	0.73	0.41	96,96,96,96	0
56	MG	14	3317	1/1	0.73	0.28	98,98,98,98	0
56	MG	1G	1620	1/1	0.73	0.20	107,107,107,107	0
56	MG	1H	3026	1/1	0.73	0.34	94,94,94,94	0
56	MG	13	1656	1/1	0.74	0.42	103,103,103,103	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3062	1/1	0.74	0.23	101,101,101,101	0
56	MG	14	3418	1/1	0.74	0.07	130,130,130,130	0
56	MG	13	1689	1/1	0.74	0.25	98,98,98,98	0
56	MG	29	301	1/1	0.74	0.64	101,101,101,101	0
56	MG	1G	1643	1/1	0.74	0.30	104,104,104,104	0
56	MG	14	3276	1/1	0.74	1.33	103,103,103,103	0
56	MG	14	3252	1/1	0.74	0.15	105,105,105,105	0
56	MG	14	3030	1/1	0.74	0.22	115,115,115,115	0
56	MG	1H	3106	1/1	0.75	0.34	95,95,95,95	0
56	MG	1H	3415	1/1	0.75	0.07	99,99,99,99	0
56	MG	1H	3428	1/1	0.75	0.06	123,123,123,123	0
56	MG	1H	3265	1/1	0.75	0.27	96,96,96,96	0
56	MG	1H	3296	1/1	0.75	0.21	86,86,86,86	0
56	MG	1H	3169	1/1	0.75	0.25	85,85,85,85	0
56	MG	1H	3346	1/1	0.75	0.61	106,106,106,106	0
56	MG	1H	3504	1/1	0.75	0.11	138,138,138,138	0
56	MG	1J	203	1/1	0.75	0.17	114,114,114,114	0
56	MG	14	3313	1/1	0.75	0.19	124,124,124,124	0
56	MG	14	3315	1/1	0.75	0.13	92,92,92,92	0
56	MG	14	3281	1/1	0.75	0.55	105,105,105,105	0
56	MG	14	3170	1/1	0.75	0.60	77,77,77,77	0
56	MG	14	3285	1/1	0.75	0.30	91,91,91,91	0
56	MG	14	3318	1/1	0.76	0.19	99,99,99,99	0
56	MG	1H	3152	1/1	0.76	0.31	93,93,93,93	0
56	MG	1G	1625	1/1	0.76	0.12	131,131,131,131	0
56	MG	14	3311	1/1	0.76	0.17	89,89,89,89	0
56	MG	14	3368	1/1	0.76	0.11	117,117,117,117	0
56	MG	13	1690	1/1	0.76	0.19	108,108,108,108	0
56	MG	13	1641	1/1	0.76	0.35	88,88,88,88	0
56	MG	32	301	1/1	0.76	0.46	120,120,120,120	0
56	MG	14	3264	1/1	0.76	0.30	89,89,89,89	0
56	MG	14	3158	1/1	0.77	0.15	93,93,93,93	0
56	MG	1H	3189	1/1	0.77	0.30	81,81,81,81	0
56	MG	1H	3407	1/1	0.77	0.07	115,115,115,115	0
56	MG	16	214	1/1	0.77	0.22	109,109,109,109	0
56	MG	1G	1604	1/1	0.77	0.23	142,142,142,142	0
56	MG	13	1685	1/1	0.77	0.17	112,112,112,112	0
56	MG	14	3196	1/1	0.77	0.34	99,99,99,99	0
56	MG	1H	3307	1/1	0.77	0.28	99,99,99,99	0
56	MG	1H	3206	1/1	0.77	0.14	53,53,53,53	0
56	MG	1G	1632	1/1	0.77	0.41	116,116,116,116	0
56	MG	13	1743	1/1	0.77	0.18	108,108,108,108	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3467	1/1	0.77	0.10	106,106,106,106	0
56	MG	1H	3175	1/1	0.77	0.35	93,93,93,93	0
56	MG	14	3237	1/1	0.77	0.24	95,95,95,95	0
56	MG	14	3064	1/1	0.77	0.27	97,97,97,97	0
56	MG	1H	3147	1/1	0.77	0.32	94,94,94,94	0
56	MG	14	3255	1/1	0.77	0.41	99,99,99,99	0
56	MG	1H	3500	1/1	0.77	0.20	122,122,122,122	0
56	MG	13	1721	1/1	0.77	0.64	101,101,101,101	0
56	MG	14	3178	1/1	0.78	0.44	95,95,95,95	0
56	MG	14	3103	1/1	0.78	0.38	90,90,90,90	0
56	MG	39	302	1/1	0.78	0.30	118,118,118,118	0
56	MG	1H	3027	1/1	0.78	0.32	96,96,96,96	0
56	MG	14	3137	1/1	0.78	0.19	80,80,80,80	0
56	MG	13	1693	1/1	0.78	0.21	103,103,103,103	0
56	MG	14	3147	1/1	0.79	0.19	97,97,97,97	0
56	MG	1H	3476	1/1	0.79	0.12	93,93,93,93	0
56	MG	41	202	1/1	0.79	0.29	96,96,96,96	0
56	MG	L8	101	1/1	0.79	0.43	85,85,85,85	0
56	MG	14	3167	1/1	0.79	0.27	110,110,110,110	0
56	MG	13	1702	1/1	0.79	0.23	109,109,109,109	0
56	MG	14	3176	1/1	0.79	0.39	101,101,101,101	0
56	MG	1H	3267	1/1	0.79	0.34	84,84,84,84	0
56	MG	1G	1657	1/1	0.79	0.25	106,106,106,106	0
56	MG	1H	3072	1/1	0.79	0.29	80,80,80,80	0
56	MG	14	3080	1/1	0.79	0.41	88,88,88,88	0
56	MG	1H	3202	1/1	0.79	0.38	93,93,93,93	0
56	MG	1H	3129	1/1	0.79	0.41	90,90,90,90	0
56	MG	14	3275	1/1	0.79	0.27	105,105,105,105	0
56	MG	1H	3230	1/1	0.79	0.24	91,91,91,91	0
56	MG	1G	1640	1/1	0.79	0.49	106,106,106,106	0
56	MG	14	3320	1/1	0.79	0.22	96,96,96,96	0
56	MG	1H	3280	1/1	0.80	0.70	100,100,100,100	0
56	MG	2K	105	1/1	0.80	0.38	107,107,107,107	0
56	MG	14	3270	1/1	0.80	0.20	107,107,107,107	0
56	MG	1H	3132	1/1	0.80	0.18	74,74,74,74	0
56	MG	1H	3305	1/1	0.80	0.61	104,104,104,104	0
56	MG	1H	3074	1/1	0.80	0.41	80,80,80,80	0
56	MG	1H	3013	1/1	0.80	0.41	104,104,104,104	0
56	MG	14	3422	1/1	0.80	0.09	132,132,132,132	0
56	MG	13	1694	1/1	0.80	0.10	121,121,121,121	0
56	MG	1H	3116	1/1	0.80	0.29	70,70,70,70	0
56	MG	14	3117	1/1	0.80	0.45	98,98,98,98	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3254	1/1	0.80	0.17	87,87,87,87	0
56	MG	1H	3034	1/1	0.80	0.34	96,96,96,96	0
56	MG	1H	3249	1/1	0.80	0.42	97,97,97,97	0
56	MG	13	1668	1/1	0.80	0.19	94,94,94,94	0
56	MG	1H	3292	1/1	0.81	0.23	72,72,72,72	0
56	MG	13	1734	1/1	0.81	0.15	133,133,133,133	0
56	MG	16	215	1/1	0.81	0.08	113,113,113,113	0
56	MG	14	3326	1/1	0.81	0.39	117,117,117,117	0
56	MG	1H	3300	1/1	0.81	0.35	87,87,87,87	0
56	MG	14	3280	1/1	0.81	0.31	95,95,95,95	0
56	MG	1G	1659	1/1	0.81	0.29	102,102,102,102	0
56	MG	I8	101	1/1	0.81	0.27	84,84,84,84	0
56	MG	1H	3107	1/1	0.81	0.28	85,85,85,85	0
56	MG	14	3144	1/1	0.81	0.35	93,93,93,93	0
56	MG	1H	3127	1/1	0.81	0.29	92,92,92,92	0
56	MG	14	3405	1/1	0.81	0.22	102,102,102,102	0
56	MG	14	3248	1/1	0.81	0.26	85,85,85,85	0
56	MG	14	3293	1/1	0.81	0.27	95,95,95,95	0
56	MG	1G	1673	1/1	0.81	0.14	108,108,108,108	0
56	MG	13	1684	1/1	0.81	0.33	106,106,106,106	0
56	MG	1H	3479	1/1	0.81	0.16	126,126,126,126	0
56	MG	1J	204	1/1	0.81	0.12	113,113,113,113	0
56	MG	1J	208	1/1	0.81	0.11	121,121,121,121	0
56	MG	1H	3262	1/1	0.81	0.30	89,89,89,89	0
56	MG	1H	3242	1/1	0.81	0.52	105,105,105,105	0
56	MG	1H	3499	1/1	0.81	0.11	110,110,110,110	0
56	MG	1H	3165	1/1	0.81	0.42	95,95,95,95	0
56	MG	1H	3314	1/1	0.81	0.37	76,76,76,76	0
56	MG	1H	3287	1/1	0.81	0.42	92,92,92,92	0
56	MG	14	3162	1/1	0.82	0.19	88,88,88,88	0
56	MG	1G	1628	1/1	0.82	0.21	118,118,118,118	0
56	MG	13	1722	1/1	0.82	0.10	85,85,85,85	0
56	MG	14	3370	1/1	0.82	0.13	110,110,110,110	0
56	MG	14	3169	1/1	0.82	0.29	93,93,93,93	0
56	MG	1H	3372	1/1	0.82	0.10	79,79,79,79	0
56	MG	14	3173	1/1	0.82	0.28	87,87,87,87	0
56	MG	14	3065	1/1	0.82	0.20	87,87,87,87	0
56	MG	1H	3126	1/1	0.82	0.32	79,79,79,79	0
56	MG	14	3261	1/1	0.82	0.34	83,83,83,83	0
56	MG	14	3301	1/1	0.82	0.29	83,83,83,83	0
56	MG	1H	3485	1/1	0.82	0.08	121,121,121,121	0
56	MG	1G	1680	1/1	0.82	0.11	140,140,140,140	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1G	1686	1/1	0.82	0.07	129,129,129,129	0
56	MG	1H	3490	1/1	0.82	0.13	125,125,125,125	0
56	MG	1J	206	1/1	0.82	0.12	123,123,123,123	0
56	MG	13	1695	1/1	0.82	0.15	112,112,112,112	0
56	MG	1H	3254	1/1	0.82	0.37	80,80,80,80	0
56	MG	14	3211	1/1	0.82	0.40	93,93,93,93	0
56	MG	1H	3232	1/1	0.82	0.32	80,80,80,80	0
56	MG	1H	3140	1/1	0.82	0.52	101,101,101,101	0
56	MG	14	3324	1/1	0.82	0.40	96,96,96,96	0
56	MG	2K	106	1/1	0.82	0.42	115,115,115,115	0
56	MG	14	3193	1/1	0.83	0.09	89,89,89,89	0
56	MG	14	3325	1/1	0.83	0.34	89,89,89,89	0
56	MG	1H	3503	1/1	0.83	0.12	116,116,116,116	0
56	MG	1H	3219	1/1	0.83	0.39	65,65,65,65	0
56	MG	14	3330	1/1	0.83	0.20	105,105,105,105	0
56	MG	1H	3111	1/1	0.83	0.43	91,91,91,91	0
56	MG	14	3204	1/1	0.83	0.13	80,80,80,80	0
56	MG	16	201	1/1	0.83	0.23	79,79,79,79	0
56	MG	1H	3128	1/1	0.83	0.21	88,88,88,88	0
56	MG	14	3374	1/1	0.83	0.08	113,113,113,113	0
56	MG	52	201	1/1	0.83	0.12	107,107,107,107	0
56	MG	14	3151	1/1	0.83	0.24	91,91,91,91	0
56	MG	1H	3477	1/1	0.83	0.10	108,108,108,108	0
56	MG	3I	202	1/1	0.83	0.45	101,101,101,101	0
56	MG	1H	3294	1/1	0.83	0.47	100,100,100,100	0
56	MG	1H	3055	1/1	0.83	0.16	82,82,82,82	0
56	MG	1G	1648	1/1	0.83	0.23	100,100,100,100	0
56	MG	14	3253	1/1	0.83	0.29	82,82,82,82	0
56	MG	1H	3193	1/1	0.83	0.36	95,95,95,95	0
56	MG	13	1682	1/1	0.83	0.28	116,116,116,116	0
56	MG	14	3256	1/1	0.83	0.19	97,97,97,97	0
56	MG	14	3175	1/1	0.83	0.38	99,99,99,99	0
56	MG	1H	3168	1/1	0.83	0.30	83,83,83,83	0
56	MG	1G	1663	1/1	0.83	0.21	92,92,92,92	0
56	MG	1G	1623	1/1	0.83	0.24	122,122,122,122	0
56	MG	13	1630	1/1	0.83	0.12	74,74,74,74	0
56	MG	25	201	1/1	0.83	0.43	111,111,111,111	0
56	MG	14	3267	1/1	0.83	0.16	110,110,110,110	0
56	MG	1G	1668	1/1	0.83	0.22	111,111,111,111	0
56	MG	1G	1687	1/1	0.84	0.30	135,135,135,135	0
56	MG	1H	3246	1/1	0.84	0.22	78,78,78,78	0
56	MG	1H	3199	1/1	0.84	0.51	99,99,99,99	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3168	1/1	0.84	0.23	67,67,67,67	0
56	MG	6A	101	1/1	0.84	0.21	138,138,138,138	0
56	MG	1G	1638	1/1	0.84	0.43	95,95,95,95	0
56	MG	2L	103	1/1	0.84	0.28	115,115,115,115	0
56	MG	1H	3081	1/1	0.84	0.25	77,77,77,77	0
56	MG	14	3352	1/1	0.84	0.12	74,74,74,74	0
56	MG	1H	3391	1/1	0.84	0.09	96,96,96,96	0
56	MG	1H	3177	1/1	0.84	0.44	98,98,98,98	0
56	MG	1H	3012	1/1	0.84	0.51	93,93,93,93	0
56	MG	1H	3185	1/1	0.84	0.38	88,88,88,88	0
56	MG	1H	3423	1/1	0.84	0.14	102,102,102,102	0
56	MG	14	3279	1/1	0.84	0.25	87,87,87,87	0
56	MG	14	3185	1/1	0.84	0.21	90,90,90,90	0
56	MG	1H	3283	1/1	0.84	0.38	112,112,112,112	0
56	MG	1H	3285	1/1	0.84	0.39	88,88,88,88	0
56	MG	14	3411	1/1	0.84	0.30	104,104,104,104	0
56	MG	1H	3286	1/1	0.84	0.26	85,85,85,85	0
56	MG	14	3202	1/1	0.84	0.26	100,100,100,100	0
56	MG	1H	3258	1/1	0.84	0.31	93,93,93,93	0
56	MG	14	3104	1/1	0.84	0.27	81,81,81,81	0
56	MG	1H	3288	1/1	0.84	0.28	87,87,87,87	0
56	MG	13	1699	1/1	0.84	0.50	102,102,102,102	0
56	MG	14	3136	1/1	0.84	0.10	112,112,112,112	0
56	MG	1H	3122	1/1	0.84	0.30	94,94,94,94	0
56	MG	14	3142	1/1	0.84	0.46	100,100,100,100	0
56	MG	1G	1669	1/1	0.84	0.28	112,112,112,112	0
56	MG	1H	3190	1/1	0.84	0.17	77,77,77,77	0
56	MG	1H	3487	1/1	0.84	0.29	126,126,126,126	0
56	MG	15	201	1/1	0.84	0.54	102,102,102,102	0
56	MG	13	1687	1/1	0.84	0.28	109,109,109,109	0
56	MG	1G	1684	1/1	0.84	0.12	124,124,124,124	0
56	MG	1H	3342	1/1	0.84	0.17	92,92,92,92	0
56	MG	1H	3344	1/1	0.85	0.42	95,95,95,95	0
56	MG	14	3208	1/1	0.85	0.10	84,84,84,84	0
56	MG	14	3209	1/1	0.85	0.33	71,71,71,71	0
56	MG	1H	3318	1/1	0.85	0.30	87,87,87,87	0
56	MG	1H	3321	1/1	0.85	0.27	99,99,99,99	0
56	MG	1H	3061	1/1	0.85	0.34	85,85,85,85	0
56	MG	1H	3488	1/1	0.85	0.15	114,114,114,114	0
56	MG	P8	101	1/1	0.85	0.41	84,84,84,84	0
56	MG	1G	1602	1/1	0.85	0.39	118,118,118,118	0
56	MG	14	3247	1/1	0.85	0.14	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3489	1/1	0.85	0.12	69,69,69,69	0
56	MG	14	3058	1/1	0.85	0.16	128,128,128,128	0
56	MG	14	3412	1/1	0.85	0.08	108,108,108,108	0
56	MG	1H	3298	1/1	0.85	0.33	92,92,92,92	0
56	MG	1H	3146	1/1	0.85	0.32	83,83,83,83	0
56	MG	14	3068	1/1	0.85	0.39	86,86,86,86	0
56	MG	14	3308	1/1	0.85	0.21	106,106,106,106	0
56	MG	1H	3493	1/1	0.85	0.25	130,130,130,130	0
56	MG	14	3093	1/1	0.85	0.51	103,103,103,103	0
56	MG	13	1704	1/1	0.85	0.69	118,118,118,118	0
56	MG	1H	3182	1/1	0.85	0.36	74,74,74,74	0
56	MG	13	1740	1/1	0.85	0.17	106,106,106,106	0
56	MG	1H	3141	1/1	0.85	0.44	89,89,89,89	0
56	MG	1H	3447	1/1	0.85	0.17	105,105,105,105	0
56	MG	1G	1639	1/1	0.85	0.17	89,89,89,89	0
56	MG	14	3200	1/1	0.85	0.18	85,85,85,85	0
56	MG	1H	3092	1/1	0.85	0.30	70,70,70,70	0
56	MG	1H	3174	1/1	0.85	0.31	78,78,78,78	0
56	MG	1H	3256	1/1	0.85	0.26	88,88,88,88	0
56	MG	1H	3030	1/1	0.86	0.19	79,79,79,79	0
56	MG	14	3197	1/1	0.86	0.50	119,119,119,119	0
56	MG	13	1647	1/1	0.86	0.17	93,93,93,93	0
56	MG	1G	1675	1/1	0.86	0.47	99,99,99,99	0
56	MG	1H	3102	1/1	0.86	0.28	67,67,67,67	0
56	MG	14	3278	1/1	0.86	0.26	85,85,85,85	0
56	MG	1H	3434	1/1	0.86	0.19	130,130,130,130	0
56	MG	1H	3439	1/1	0.86	0.15	92,92,92,92	0
56	MG	1H	3260	1/1	0.86	0.28	76,76,76,76	0
56	MG	1G	1635	1/1	0.86	0.39	118,118,118,118	0
56	MG	14	3148	1/1	0.86	0.11	117,117,117,117	0
56	MG	1H	3339	1/1	0.86	0.33	90,90,90,90	0
56	MG	13	1650	1/1	0.86	0.15	87,87,87,87	0
56	MG	14	3152	1/1	0.86	0.23	80,80,80,80	0
56	MG	1H	3263	1/1	0.86	0.22	106,106,106,106	0
56	MG	16	206	1/1	0.86	0.25	102,102,102,102	0
56	MG	13	1719	1/1	0.86	0.13	95,95,95,95	0
56	MG	13	1663	1/1	0.86	0.16	87,87,87,87	0
56	MG	31	301	1/1	0.86	0.10	92,92,92,92	0
56	MG	1J	202	1/1	0.86	0.12	157,157,157,157	0
56	MG	1H	3317	1/1	0.86	0.79	85,85,85,85	0
56	MG	1H	3290	1/1	0.86	0.49	92,92,92,92	0
56	MG	1J	205	1/1	0.86	0.23	101,101,101,101	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1G	1650	1/1	0.86	0.36	101,101,101,101	0
56	MG	1G	1653	1/1	0.86	0.11	106,106,106,106	0
56	MG	13	1670	1/1	0.86	0.33	88,88,88,88	0
56	MG	13	1605	1/1	0.86	0.18	93,93,93,93	0
56	MG	1H	3178	1/1	0.86	0.27	76,76,76,76	0
56	MG	1G	1603	1/1	0.86	0.17	118,118,118,118	0
56	MG	1H	3007	1/1	0.86	0.33	97,97,97,97	0
56	MG	1G	1615	1/1	0.86	0.23	115,115,115,115	0
56	MG	45	201	1/1	0.86	0.18	113,113,113,113	0
56	MG	C5	201	1/1	0.86	0.23	123,123,123,123	0
56	MG	14	3266	1/1	0.86	0.38	80,80,80,80	0
56	MG	1H	3492	1/1	0.86	0.23	120,120,120,120	0
56	MG	1H	3284	1/1	0.87	0.27	70,70,70,70	0
56	MG	13	1691	1/1	0.87	0.30	95,95,95,95	0
56	MG	14	3337	1/1	0.87	0.12	76,76,76,76	0
56	MG	1H	3478	1/1	0.87	0.09	118,118,118,118	0
56	MG	1H	3222	1/1	0.87	0.30	79,79,79,79	0
56	MG	1H	3480	1/1	0.87	0.14	109,109,109,109	0
56	MG	1H	3223	1/1	0.87	0.18	82,82,82,82	0
56	MG	88	202	1/1	0.87	0.30	77,77,77,77	0
56	MG	14	3283	1/1	0.87	0.21	98,98,98,98	0
56	MG	1H	3155	1/1	0.87	0.17	78,78,78,78	0
56	MG	14	3381	1/1	0.87	0.22	101,101,101,101	0
56	MG	13	1622	1/1	0.87	0.32	102,102,102,102	0
56	MG	14	3398	1/1	0.87	0.06	127,127,127,127	0
56	MG	1H	3083	1/1	0.87	0.32	92,92,92,92	0
56	MG	1H	3399	1/1	0.87	0.09	59,59,59,59	0
56	MG	1H	3323	1/1	0.87	0.11	110,110,110,110	0
56	MG	1H	3086	1/1	0.87	0.39	72,72,72,72	0
56	MG	14	3413	1/1	0.87	0.31	110,110,110,110	0
56	MG	13	1624	1/1	0.87	0.22	95,95,95,95	0
56	MG	14	3249	1/1	0.87	0.27	97,97,97,97	0
56	MG	1H	3494	1/1	0.87	0.36	121,121,121,121	0
56	MG	1G	1665	1/1	0.87	0.30	110,110,110,110	0
56	MG	14	3305	1/1	0.87	0.14	79,79,79,79	0
56	MG	14	3174	1/1	0.87	0.18	93,93,93,93	0
56	MG	14	3066	1/1	0.87	0.30	96,96,96,96	0
56	MG	5E	201	1/1	0.87	0.20	104,104,104,104	0
56	MG	1H	3198	1/1	0.87	0.38	90,90,90,90	0
56	MG	1J	207	1/1	0.87	0.27	147,147,147,147	0
56	MG	1H	3015	1/1	0.87	0.24	71,71,71,71	0
56	MG	1H	3335	1/1	0.87	0.42	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3316	1/1	0.87	0.54	103,103,103,103	0
56	MG	1G	1671	1/1	0.87	0.40	120,120,120,120	0
56	MG	13	1665	1/1	0.87	0.12	91,91,91,91	0
56	MG	14	3123	1/1	0.87	0.16	75,75,75,75	0
56	MG	14	3195	1/1	0.87	0.38	100,100,100,100	0
56	MG	25	202	1/1	0.87	0.33	125,125,125,125	0
56	MG	2K	104	1/1	0.87	0.44	90,90,90,90	0
56	MG	1G	1634	1/1	0.87	0.48	120,120,120,120	0
56	MG	13	1621	1/1	0.87	0.39	115,115,115,115	0
56	MG	14	3328	1/1	0.87	0.12	111,111,111,111	0
57	ZN	G8	202	1/1	0.87	0.31	192,192,192,192	0
56	MG	1H	3282	1/1	0.88	0.15	107,107,107,107	0
56	MG	1G	1679	1/1	0.88	0.09	108,108,108,108	0
56	MG	1H	3144	1/1	0.88	0.23	80,80,80,80	0
56	MG	1G	1682	1/1	0.88	0.09	141,141,141,141	0
56	MG	14	3164	1/1	0.88	0.21	91,91,91,91	0
56	MG	1H	3204	1/1	0.88	0.75	104,104,104,104	0
56	MG	14	3407	1/1	0.88	0.08	116,116,116,116	0
56	MG	13	1680	1/1	0.88	0.19	124,124,124,124	0
56	MG	1G	1652	1/1	0.88	0.26	103,103,103,103	0
56	MG	1H	3381	1/1	0.88	0.09	89,89,89,89	0
56	MG	14	3273	1/1	0.88	0.14	87,87,87,87	0
56	MG	14	3221	1/1	0.88	0.20	87,87,87,87	0
56	MG	1H	3471	1/1	0.88	0.11	128,128,128,128	0
56	MG	13	1652	1/1	0.88	0.23	98,98,98,98	0
56	MG	14	3233	1/1	0.88	0.30	118,118,118,118	0
56	MG	1H	3136	1/1	0.88	0.15	71,71,71,71	0
56	MG	1G	1636	1/1	0.88	0.08	115,115,115,115	0
56	MG	13	1672	1/1	0.88	0.20	100,100,100,100	0
56	MG	14	3282	1/1	0.88	0.31	90,90,90,90	0
56	MG	13	1706	1/1	0.88	0.91	103,103,103,103	0
56	MG	14	3023	1/1	0.88	0.15	86,86,86,86	0
56	MG	13	1654	1/1	0.88	0.28	123,123,123,123	0
56	MG	14	3343	1/1	0.88	0.12	89,89,89,89	0
56	MG	14	3346	1/1	0.88	0.11	92,92,92,92	0
56	MG	1G	1641	1/1	0.88	0.29	90,90,90,90	0
56	MG	49	201	1/1	0.88	0.10	143,143,143,143	0
56	MG	14	3354	1/1	0.88	0.06	126,126,126,126	0
56	MG	14	3187	1/1	0.88	0.36	100,100,100,100	0
56	MG	14	3363	1/1	0.88	0.06	117,117,117,117	0
56	MG	35	201	1/1	0.88	0.21	91,91,91,91	0
56	MG	14	3192	1/1	0.88	0.14	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	45	202	1/1	0.88	0.53	82,82,82,82	0
56	MG	14	3369	1/1	0.88	0.18	105,105,105,105	0
56	MG	13	1679	1/1	0.88	0.18	98,98,98,98	0
56	MG	1H	3295	1/1	0.88	0.50	92,92,92,92	0
56	MG	1H	3118	1/1	0.88	0.30	76,76,76,76	0
56	MG	1H	3345	1/1	0.89	0.31	100,100,100,100	0
56	MG	13	1674	1/1	0.89	0.23	118,118,118,118	0
56	MG	1H	3225	1/1	0.89	0.21	69,69,69,69	0
56	MG	14	3166	1/1	0.89	0.14	106,106,106,106	0
56	MG	1H	3457	1/1	0.89	0.05	113,113,113,113	0
56	MG	14	3125	1/1	0.89	0.27	101,101,101,101	0
56	MG	14	3289	1/1	0.89	0.18	86,86,86,86	0
56	MG	14	3130	1/1	0.89	0.10	71,71,71,71	0
56	MG	13	1752	1/1	0.89	0.51	92,92,92,92	0
56	MG	1G	1647	1/1	0.89	0.32	86,86,86,86	0
56	MG	1H	3031	1/1	0.89	0.33	89,89,89,89	0
56	MG	11	302	1/1	0.89	0.25	66,66,66,66	0
56	MG	1H	3237	1/1	0.89	0.17	70,70,70,70	0
56	MG	14	3177	1/1	0.89	0.32	111,111,111,111	0
56	MG	14	3268	1/1	0.89	0.19	100,100,100,100	0
56	MG	14	3371	1/1	0.89	0.21	101,101,101,101	0
56	MG	14	3231	1/1	0.89	0.21	93,93,93,93	0
56	MG	1H	3104	1/1	0.89	0.22	78,78,78,78	0
56	MG	13	1607	1/1	0.89	0.19	78,78,78,78	0
56	MG	1H	3245	1/1	0.89	0.38	96,96,96,96	0
56	MG	14	3149	1/1	0.89	0.21	79,79,79,79	0
56	MG	1H	3210	1/1	0.89	0.17	69,69,69,69	0
56	MG	14	3277	1/1	0.89	0.20	90,90,90,90	0
56	MG	1H	3502	1/1	0.89	0.29	118,118,118,118	0
56	MG	13	1676	1/1	0.89	0.18	111,111,111,111	0
56	MG	13	1727	1/1	0.89	0.24	121,121,121,121	0
56	MG	14	3250	1/1	0.89	0.23	86,86,86,86	0
57	ZN	C5	202	1/1	0.89	0.11	189,189,189,189	0
56	MG	1G	1656	1/1	0.90	0.30	103,103,103,103	0
56	MG	13	1632	1/1	0.90	0.16	64,64,64,64	0
56	MG	1H	3238	1/1	0.90	0.32	84,84,84,84	0
56	MG	14	3269	1/1	0.90	0.31	102,102,102,102	0
56	MG	1G	1661	1/1	0.90	0.26	105,105,105,105	0
56	MG	14	3355	1/1	0.90	0.18	102,102,102,102	0
56	MG	13	1644	1/1	0.90	0.12	96,96,96,96	0
56	MG	14	3076	1/1	0.90	0.11	93,93,93,93	0
56	MG	1G	1605	1/1	0.90	0.17	98,98,98,98	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3081	1/1	0.90	0.31	90,90,90,90	0
56	MG	1G	1606	1/1	0.90	0.27	129,129,129,129	0
56	MG	1G	1666	1/1	0.90	0.36	89,89,89,89	0
56	MG	13	1646	1/1	0.90	0.24	104,104,104,104	0
56	MG	14	3112	1/1	0.90	0.12	98,98,98,98	0
56	MG	1H	3138	1/1	0.90	0.40	94,94,94,94	0
56	MG	14	3379	1/1	0.90	0.09	77,77,77,77	0
56	MG	1H	3268	1/1	0.90	0.50	125,125,125,125	0
56	MG	14	3383	1/1	0.90	0.16	98,98,98,98	0
56	MG	14	3387	1/1	0.90	0.10	76,76,76,76	0
56	MG	1H	3009	1/1	0.90	0.20	69,69,69,69	0
56	MG	1H	3430	1/1	0.90	0.10	116,116,116,116	0
56	MG	1H	3209	1/1	0.90	0.15	82,82,82,82	0
56	MG	1H	3184	1/1	0.90	0.19	107,107,107,107	0
56	MG	1H	3274	1/1	0.90	0.57	100,100,100,100	0
56	MG	14	3287	1/1	0.90	0.21	95,95,95,95	0
56	MG	1H	3071	1/1	0.90	0.12	94,94,94,94	0
56	MG	14	3217	1/1	0.90	0.80	82,82,82,82	0
56	MG	14	3415	1/1	0.90	0.40	107,107,107,107	0
56	MG	1H	3304	1/1	0.90	0.39	114,114,114,114	0
56	MG	1H	3277	1/1	0.90	0.47	109,109,109,109	0
56	MG	14	3419	1/1	0.90	0.24	112,112,112,112	0
56	MG	1H	3466	1/1	0.90	0.12	94,94,94,94	0
56	MG	1H	3279	1/1	0.90	0.25	80,80,80,80	0
56	MG	14	3296	1/1	0.90	0.20	107,107,107,107	0
56	MG	1H	3469	1/1	0.90	0.07	106,106,106,106	0
56	MG	16	207	1/1	0.90	0.37	84,84,84,84	0
56	MG	14	3303	1/1	0.90	0.11	100,100,100,100	0
56	MG	13	1618	1/1	0.90	0.26	86,86,86,86	0
56	MG	14	3306	1/1	0.90	0.30	93,93,93,93	0
56	MG	1H	3473	1/1	0.90	0.21	127,127,127,127	0
56	MG	1J	209	1/1	0.90	0.07	125,125,125,125	0
56	MG	14	3239	1/1	0.90	0.23	166,166,166,166	0
56	MG	14	3153	1/1	0.90	0.17	70,70,70,70	0
56	MG	1H	3308	1/1	0.90	0.25	90,90,90,90	0
56	MG	14	3161	1/1	0.90	0.20	104,104,104,104	0
56	MG	14	3013	1/1	0.90	0.17	88,88,88,88	0
56	MG	14	3017	1/1	0.90	0.15	91,91,91,91	0
56	MG	13	1696	1/1	0.90	0.29	108,108,108,108	0
56	MG	1H	3077	1/1	0.90	0.25	67,67,67,67	0
56	MG	14	3022	1/1	0.90	0.48	107,107,107,107	0
56	MG	1H	3108	1/1	0.90	0.22	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3366	1/1	0.90	0.12	60,60,60,60	0
56	MG	I8	102	1/1	0.90	0.41	64,64,64,64	0
56	MG	14	3028	1/1	0.90	0.14	98,98,98,98	0
56	MG	13	1707	1/1	0.90	0.25	104,104,104,104	0
56	MG	1H	3316	1/1	0.90	0.57	94,94,94,94	0
56	MG	14	3037	1/1	0.90	0.20	79,79,79,79	0
56	MG	2K	107	1/1	0.91	0.41	106,106,106,106	0
56	MG	14	3388	1/1	0.91	0.12	85,85,85,85	0
56	MG	14	3047	1/1	0.91	0.14	66,66,66,66	0
56	MG	14	3395	1/1	0.91	0.09	96,96,96,96	0
56	MG	14	3396	1/1	0.91	0.16	119,119,119,119	0
56	MG	14	3055	1/1	0.91	0.42	85,85,85,85	0
56	MG	1H	3191	1/1	0.91	0.34	87,87,87,87	0
56	MG	14	3154	1/1	0.91	0.23	86,86,86,86	0
56	MG	1H	3329	1/1	0.91	0.34	99,99,99,99	0
56	MG	14	3207	1/1	0.91	0.14	68,68,68,68	0
56	MG	14	3159	1/1	0.91	0.13	112,112,112,112	0
56	MG	14	3271	1/1	0.91	0.12	87,87,87,87	0
56	MG	13	1637	1/1	0.91	0.26	96,96,96,96	0
56	MG	14	3210	1/1	0.91	0.37	98,98,98,98	0
56	MG	1H	3098	1/1	0.91	0.23	72,72,72,72	0
56	MG	1H	3100	1/1	0.91	0.27	86,86,86,86	0
56	MG	1G	1609	1/1	0.91	0.12	97,97,97,97	0
56	MG	1G	1610	1/1	0.91	0.13	115,115,115,115	0
56	MG	14	3423	1/1	0.91	0.10	133,133,133,133	0
56	MG	14	3424	1/1	0.91	0.43	116,116,116,116	0
56	MG	1G	1688	1/1	0.91	0.13	117,117,117,117	0
56	MG	1H	3334	1/1	0.91	0.50	99,99,99,99	0
56	MG	1H	3312	1/1	0.91	0.37	79,79,79,79	0
56	MG	1G	1655	1/1	0.91	0.21	111,111,111,111	0
56	MG	14	3109	1/1	0.91	0.32	89,89,89,89	0
56	MG	16	204	1/1	0.91	0.40	99,99,99,99	0
56	MG	1H	3181	1/1	0.91	0.35	74,74,74,74	0
56	MG	1H	3426	1/1	0.91	0.13	92,92,92,92	0
56	MG	1H	3133	1/1	0.91	0.14	84,84,84,84	0
56	MG	14	3018	1/1	0.91	0.13	70,70,70,70	0
56	MG	13	1677	1/1	0.91	0.39	98,98,98,98	0
56	MG	14	3360	1/1	0.91	0.06	92,92,92,92	0
56	MG	1H	3241	1/1	0.91	0.21	80,80,80,80	0
56	MG	13	1713	1/1	0.91	0.12	119,119,119,119	0
56	MG	13	1724	1/1	0.91	0.06	102,102,102,102	0
56	MG	13	1662	1/1	0.91	0.11	94,94,94,94	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3448	1/1	0.91	0.14	97,97,97,97	0
56	MG	1H	3211	1/1	0.91	0.14	76,76,76,76	0
56	MG	14	3259	1/1	0.91	0.15	100,100,100,100	0
56	MG	14	3375	1/1	0.91	0.06	102,102,102,102	0
56	MG	1H	3358	1/1	0.91	0.15	76,76,76,76	0
56	MG	14	3302	1/1	0.91	0.19	92,92,92,92	0
56	MG	1H	3496	1/1	0.91	0.04	131,131,131,131	0
56	MG	14	3304	1/1	0.91	0.33	121,121,121,121	0
56	MG	1H	3338	1/1	0.92	0.27	110,110,110,110	0
56	MG	1H	3432	1/1	0.92	0.06	113,113,113,113	0
56	MG	1H	3005	1/1	0.92	0.20	70,70,70,70	0
56	MG	14	3218	1/1	0.92	0.13	75,75,75,75	0
56	MG	1H	3495	1/1	0.92	0.32	91,91,91,91	0
56	MG	1H	3437	1/1	0.92	0.06	109,109,109,109	0
56	MG	1H	3438	1/1	0.92	0.05	82,82,82,82	0
56	MG	14	3380	1/1	0.92	0.09	97,97,97,97	0
56	MG	1H	3149	1/1	0.92	0.54	99,99,99,99	0
56	MG	1G	1611	1/1	0.92	0.18	105,105,105,105	0
56	MG	1G	1613	1/1	0.92	0.22	117,117,117,117	0
56	MG	1H	3291	1/1	0.92	0.29	77,77,77,77	0
56	MG	14	3160	1/1	0.92	0.32	85,85,85,85	0
56	MG	14	3394	1/1	0.92	0.07	93,93,93,93	0
56	MG	14	3039	1/1	0.92	0.26	68,68,68,68	0
56	MG	14	3243	1/1	0.92	0.10	91,91,91,91	0
56	MG	14	3246	1/1	0.92	0.21	75,75,75,75	0
56	MG	1G	1617	1/1	0.92	0.27	110,110,110,110	0
56	MG	14	3053	1/1	0.92	0.17	98,98,98,98	0
56	MG	1H	3501	1/1	0.92	0.17	107,107,107,107	0
56	MG	14	3409	1/1	0.92	0.07	114,114,114,114	0
56	MG	14	3056	1/1	0.92	0.11	92,92,92,92	0
56	MG	13	1711	1/1	0.92	0.63	126,126,126,126	0
56	MG	1H	3194	1/1	0.92	0.20	104,104,104,104	0
56	MG	13	1703	1/1	0.92	0.37	96,96,96,96	0
56	MG	14	3309	1/1	0.92	0.48	87,87,87,87	0
56	MG	1H	3320	1/1	0.92	0.73	106,106,106,106	0
56	MG	1H	3354	1/1	0.92	0.14	64,64,64,64	0
56	MG	1G	1674	1/1	0.92	0.15	111,111,111,111	0
56	MG	14	3258	1/1	0.92	0.13	104,104,104,104	0
56	MG	1H	3278	1/1	0.92	0.29	101,101,101,101	0
56	MG	1H	3297	1/1	0.92	0.10	86,86,86,86	0
56	MG	13	1686	1/1	0.92	0.29	134,134,134,134	0
56	MG	14	3094	1/1	0.92	0.20	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3098	1/1	0.92	0.28	74,74,74,74	0
56	MG	14	3321	1/1	0.92	0.27	99,99,99,99	0
56	MG	14	3102	1/1	0.92	0.36	93,93,93,93	0
56	MG	1H	3097	1/1	0.92	0.20	89,89,89,89	0
56	MG	1H	3041	1/1	0.92	0.33	67,67,67,67	0
56	MG	14	3107	1/1	0.92	0.21	80,80,80,80	0
56	MG	13	1667	1/1	0.92	0.30	147,147,147,147	0
56	MG	11	301	1/1	0.92	0.32	62,62,62,62	0
56	MG	1H	3162	1/1	0.92	0.24	74,74,74,74	0
56	MG	1H	3163	1/1	0.92	0.20	88,88,88,88	0
56	MG	14	3344	1/1	0.92	0.11	82,82,82,82	0
56	MG	1H	3101	1/1	0.92	0.21	49,49,49,49	0
56	MG	78	201	1/1	0.92	0.15	67,67,67,67	0
56	MG	1H	3420	1/1	0.92	0.10	84,84,84,84	0
56	MG	1H	3333	1/1	0.92	0.34	91,91,91,91	0
56	MG	14	3012	1/1	0.92	0.23	94,94,94,94	0
56	MG	14	3140	1/1	0.92	0.34	93,93,93,93	0
56	MG	1H	3056	1/1	0.92	0.30	72,72,72,72	0
56	MG	14	3365	1/1	0.92	0.10	80,80,80,80	0
56	MG	14	3367	1/1	0.92	0.06	111,111,111,111	0
56	MG	1H	3310	1/1	0.92	0.37	96,96,96,96	0
56	MG	1H	3216	1/1	0.92	0.22	77,77,77,77	0
56	MG	1G	1622	1/1	0.93	0.12	89,89,89,89	0
56	MG	1H	3020	1/1	0.93	0.15	90,90,90,90	0
56	MG	14	3341	1/1	0.93	0.07	78,78,78,78	0
56	MG	1H	3374	1/1	0.93	0.16	71,71,71,71	0
56	MG	1H	3375	1/1	0.93	0.18	76,76,76,76	0
56	MG	1H	3378	1/1	0.93	0.09	94,94,94,94	0
56	MG	1H	3166	1/1	0.93	0.17	73,73,73,73	0
56	MG	1H	3167	1/1	0.93	0.15	92,92,92,92	0
56	MG	1H	3049	1/1	0.93	0.33	60,60,60,60	0
56	MG	14	3156	1/1	0.93	0.18	99,99,99,99	0
56	MG	1H	3247	1/1	0.93	0.28	81,81,81,81	0
56	MG	1H	3248	1/1	0.93	0.23	76,76,76,76	0
56	MG	1G	1637	1/1	0.93	0.16	104,104,104,104	0
56	MG	14	3263	1/1	0.93	0.26	88,88,88,88	0
56	MG	1H	3410	1/1	0.93	0.12	73,73,73,73	0
56	MG	14	3024	1/1	0.93	0.28	73,73,73,73	0
56	MG	1H	3319	1/1	0.93	0.27	90,90,90,90	0
56	MG	1H	3417	1/1	0.93	0.12	90,90,90,90	0
56	MG	14	3027	1/1	0.93	0.20	84,84,84,84	0
56	MG	1H	3418	1/1	0.93	0.06	134,134,134,134	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3201	1/1	0.93	0.32	121,121,121,121	0
56	MG	1H	3050	1/1	0.93	0.27	80,80,80,80	0
56	MG	1H	3051	1/1	0.93	0.24	53,53,53,53	0
56	MG	1H	3252	1/1	0.93	0.21	69,69,69,69	0
56	MG	1H	3002	1/1	0.93	0.23	76,76,76,76	0
56	MG	1H	3327	1/1	0.93	0.39	91,91,91,91	0
56	MG	1H	3003	1/1	0.93	0.21	75,75,75,75	0
56	MG	13	1701	1/1	0.93	0.57	103,103,103,103	0
56	MG	1H	3150	1/1	0.93	0.36	86,86,86,86	0
56	MG	14	3063	1/1	0.93	0.18	104,104,104,104	0
56	MG	1H	3293	1/1	0.93	0.17	85,85,85,85	0
56	MG	13	1645	1/1	0.93	0.38	86,86,86,86	0
56	MG	14	3184	1/1	0.93	0.34	94,94,94,94	0
56	MG	1H	3442	1/1	0.93	0.12	57,57,57,57	0
56	MG	14	3186	1/1	0.93	0.21	86,86,86,86	0
56	MG	1H	3217	1/1	0.93	0.12	91,91,91,91	0
56	MG	14	3072	1/1	0.93	0.17	90,90,90,90	0
56	MG	13	1660	1/1	0.93	0.14	94,94,94,94	0
56	MG	14	3078	1/1	0.93	0.11	97,97,97,97	0
56	MG	1G	1660	1/1	0.93	0.43	97,97,97,97	0
56	MG	1H	3264	1/1	0.93	0.29	96,96,96,96	0
56	MG	14	3292	1/1	0.93	0.17	90,90,90,90	0
56	MG	14	3417	1/1	0.93	0.06	148,148,148,148	0
56	MG	14	3083	1/1	0.93	0.26	81,81,81,81	0
56	MG	14	3091	1/1	0.93	0.29	87,87,87,87	0
56	MG	78	202	1/1	0.93	0.20	97,97,97,97	0
56	MG	1H	3458	1/1	0.93	0.13	93,93,93,93	0
56	MG	1H	3461	1/1	0.93	0.08	110,110,110,110	0
56	MG	14	3299	1/1	0.93	0.58	84,84,84,84	0
56	MG	1H	3336	1/1	0.93	0.30	102,102,102,102	0
56	MG	1H	3183	1/1	0.93	0.29	83,83,83,83	0
56	MG	13	1661	1/1	0.93	0.29	91,91,91,91	0
56	MG	1H	3302	1/1	0.93	0.23	90,90,90,90	0
56	MG	1H	3470	1/1	0.93	0.23	99,99,99,99	0
56	MG	14	3213	1/1	0.93	0.17	113,113,113,113	0
56	MG	1H	3303	1/1	0.93	0.30	76,76,76,76	0
56	MG	14	3113	1/1	0.93	0.35	80,80,80,80	0
56	MG	13	1619	1/1	0.93	0.57	103,103,103,103	0
56	MG	14	3224	1/1	0.93	0.09	80,80,80,80	0
56	MG	39	301	1/1	0.93	0.19	111,111,111,111	0
56	MG	1H	3228	1/1	0.93	0.55	94,94,94,94	0
56	MG	14	3229	1/1	0.93	0.20	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1G	1607	1/1	0.93	0.28	98,98,98,98	0
56	MG	1H	3032	1/1	0.93	0.25	78,78,78,78	0
56	MG	14	3132	1/1	0.93	0.22	94,94,94,94	0
56	MG	1H	3231	1/1	0.93	0.49	90,90,90,90	0
56	MG	14	3135	1/1	0.93	0.31	101,101,101,101	0
56	MG	13	1700	1/1	0.93	0.24	109,109,109,109	0
56	MG	1H	3160	1/1	0.93	0.31	84,84,84,84	0
56	MG	1G	1614	1/1	0.93	0.25	140,140,140,140	0
56	MG	1H	3082	1/1	0.93	0.17	77,77,77,77	0
56	MG	1H	3359	1/1	0.93	0.10	83,83,83,83	0
56	MG	1H	3035	1/1	0.93	0.20	55,55,55,55	0
56	MG	14	3146	1/1	0.93	0.19	128,128,128,128	0
56	MG	14	3314	1/1	0.94	0.34	102,102,102,102	0
56	MG	14	3082	1/1	0.94	0.23	71,71,71,71	0
56	MG	13	1626	1/1	0.94	0.20	109,109,109,109	0
56	MG	1G	1654	1/1	0.94	0.38	94,94,94,94	0
56	MG	14	3092	1/1	0.94	0.16	109,109,109,109	0
56	MG	1H	3421	1/1	0.94	0.18	62,62,62,62	0
56	MG	1H	3422	1/1	0.94	0.15	91,91,91,91	0
56	MG	1H	3325	1/1	0.94	0.13	86,86,86,86	0
56	MG	14	3323	1/1	0.94	0.10	101,101,101,101	0
56	MG	16	202	1/1	0.94	0.28	73,73,73,73	0
56	MG	14	3225	1/1	0.94	0.20	65,65,65,65	0
56	MG	1H	3424	1/1	0.94	0.09	119,119,119,119	0
56	MG	1H	3425	1/1	0.94	0.06	95,95,95,95	0
56	MG	14	3106	1/1	0.94	0.20	89,89,89,89	0
56	MG	13	1643	1/1	0.94	0.09	78,78,78,78	0
56	MG	1H	3105	1/1	0.94	0.09	76,76,76,76	0
56	MG	14	3234	1/1	0.94	0.54	98,98,98,98	0
56	MG	16	211	1/1	0.94	0.40	79,79,79,79	0
56	MG	1H	3429	1/1	0.94	0.08	102,102,102,102	0
56	MG	14	3345	1/1	0.94	0.10	84,84,84,84	0
56	MG	1H	3058	1/1	0.94	0.20	107,107,107,107	0
56	MG	14	3350	1/1	0.94	0.08	80,80,80,80	0
56	MG	14	3121	1/1	0.94	0.23	84,84,84,84	0
56	MG	14	3240	1/1	0.94	0.10	76,76,76,76	0
56	MG	14	3241	1/1	0.94	0.31	92,92,92,92	0
56	MG	1H	3188	1/1	0.94	0.51	100,100,100,100	0
56	MG	13	1728	1/1	0.94	0.13	131,131,131,131	0
56	MG	14	3362	1/1	0.94	0.17	101,101,101,101	0
56	MG	14	3127	1/1	0.94	0.06	87,87,87,87	0
56	MG	1H	3024	1/1	0.94	0.23	102,102,102,102	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3067	1/1	0.94	0.16	84,84,84,84	0
56	MG	1H	3112	1/1	0.94	0.14	55,55,55,55	0
56	MG	1H	3113	1/1	0.94	0.14	64,64,64,64	0
56	MG	1H	3441	1/1	0.94	0.10	122,122,122,122	0
56	MG	1H	3068	1/1	0.94	0.27	98,98,98,98	0
56	MG	2K	102	1/1	0.94	0.23	97,97,97,97	0
56	MG	14	3141	1/1	0.94	0.19	80,80,80,80	0
56	MG	1G	1681	1/1	0.94	0.18	133,133,133,133	0
56	MG	J8	101	1/1	0.94	0.27	78,78,78,78	0
56	MG	13	1731	1/1	0.94	0.05	91,91,91,91	0
56	MG	1H	3454	1/1	0.94	0.06	85,85,85,85	0
56	MG	1H	3455	1/1	0.94	0.22	99,99,99,99	0
56	MG	1H	3456	1/1	0.94	0.18	79,79,79,79	0
56	MG	1H	3121	1/1	0.94	0.21	80,80,80,80	0
56	MG	1H	3159	1/1	0.94	0.17	77,77,77,77	0
56	MG	1H	3460	1/1	0.94	0.11	110,110,110,110	0
56	MG	1H	3257	1/1	0.94	0.33	80,80,80,80	0
56	MG	1H	3301	1/1	0.94	0.24	79,79,79,79	0
56	MG	14	3003	1/1	0.94	0.14	73,73,73,73	0
56	MG	14	3006	1/1	0.94	0.21	99,99,99,99	0
56	MG	14	3399	1/1	0.94	0.08	78,78,78,78	0
56	MG	14	3400	1/1	0.94	0.22	95,95,95,95	0
56	MG	14	3401	1/1	0.94	0.06	120,120,120,120	0
56	MG	14	3157	1/1	0.94	0.31	76,76,76,76	0
56	MG	1H	3203	1/1	0.94	0.35	73,73,73,73	0
56	MG	14	3406	1/1	0.94	0.07	99,99,99,99	0
56	MG	1H	3073	1/1	0.94	0.24	88,88,88,88	0
56	MG	1H	3161	1/1	0.94	0.36	82,82,82,82	0
56	MG	14	3410	1/1	0.94	0.30	96,96,96,96	0
56	MG	1H	3208	1/1	0.94	0.09	63,63,63,63	0
56	MG	13	1620	1/1	0.94	0.27	119,119,119,119	0
56	MG	13	1715	1/1	0.94	0.31	108,108,108,108	0
56	MG	1G	1618	1/1	0.94	0.12	104,104,104,104	0
56	MG	1H	3474	1/1	0.94	0.20	124,124,124,124	0
56	MG	1H	3475	1/1	0.94	0.18	76,76,76,76	0
56	MG	1H	3080	1/1	0.94	0.31	86,86,86,86	0
56	MG	13	1615	1/1	0.94	0.24	100,100,100,100	0
56	MG	4K	101	1/1	0.94	0.19	90,90,90,90	0
56	MG	14	3421	1/1	0.94	0.05	130,130,130,130	0
56	MG	13	1741	1/1	0.94	0.08	118,118,118,118	0
56	MG	1H	3220	1/1	0.94	0.29	124,124,124,124	0
56	MG	1H	3482	1/1	0.94	0.10	119,119,119,119	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3425	1/1	0.94	0.28	92,92,92,92	0
56	MG	1H	3483	1/1	0.94	0.07	110,110,110,110	0
56	MG	1H	3221	1/1	0.94	0.38	99,99,99,99	0
56	MG	14	3041	1/1	0.94	0.16	80,80,80,80	0
56	MG	14	3179	1/1	0.94	0.30	96,96,96,96	0
56	MG	14	3290	1/1	0.94	0.26	113,113,113,113	0
56	MG	14	3042	1/1	0.94	0.21	87,87,87,87	0
56	MG	13	1678	1/1	0.94	0.09	111,111,111,111	0
56	MG	14	3052	1/1	0.94	0.21	110,110,110,110	0
56	MG	1J	210	1/1	0.94	0.06	109,109,109,109	0
56	MG	1H	3386	1/1	0.94	0.16	82,82,82,82	0
56	MG	1H	3390	1/1	0.94	0.17	83,83,83,83	0
56	MG	1H	3315	1/1	0.94	0.39	105,105,105,105	0
56	MG	13	1603	1/1	0.94	0.21	97,97,97,97	0
56	MG	14	3190	1/1	0.94	0.22	124,124,124,124	0
56	MG	14	3059	1/1	0.94	0.27	74,74,74,74	0
56	MG	1H	3398	1/1	0.94	0.09	92,92,92,92	0
56	MG	13	1671	1/1	0.94	0.24	102,102,102,102	0
56	MG	1H	3400	1/1	0.94	0.10	61,61,61,61	0
56	MG	1H	3404	1/1	0.94	0.09	62,62,62,62	0
56	MG	1H	3094	1/1	0.94	0.39	79,79,79,79	0
56	MG	14	3071	1/1	0.94	0.12	94,94,94,94	0
56	MG	13	1698	1/1	0.94	0.35	95,95,95,95	0
56	MG	13	1709	1/1	0.94	0.28	141,141,141,141	0
56	MG	1H	3416	1/1	0.94	0.07	78,78,78,78	0
56	MG	13	1613	1/1	0.94	0.18	96,96,96,96	0
56	MG	1H	3053	1/1	0.94	0.17	92,92,92,92	0
56	MG	13	1602	1/1	0.95	0.31	87,87,87,87	0
56	MG	14	3336	1/1	0.95	0.14	88,88,88,88	0
56	MG	1H	3010	1/1	0.95	0.34	83,83,83,83	0
56	MG	14	3340	1/1	0.95	0.34	91,91,91,91	0
56	MG	1G	1616	1/1	0.95	0.18	149,149,149,149	0
56	MG	1H	3011	1/1	0.95	0.51	91,91,91,91	0
56	MG	1H	3419	1/1	0.95	0.16	94,94,94,94	0
56	MG	14	3001	1/1	0.95	0.12	66,66,66,66	0
56	MG	14	3138	1/1	0.95	0.20	73,73,73,73	0
56	MG	14	3139	1/1	0.95	0.19	67,67,67,67	0
56	MG	13	1642	1/1	0.95	0.11	98,98,98,98	0
56	MG	14	3005	1/1	0.95	0.18	66,66,66,66	0
56	MG	1H	3170	1/1	0.95	0.33	100,100,100,100	0
56	MG	14	3007	1/1	0.95	0.23	94,94,94,94	0
56	MG	14	3359	1/1	0.95	0.13	114,114,114,114	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3173	1/1	0.95	0.36	98,98,98,98	0
56	MG	1H	3109	1/1	0.95	0.20	84,84,84,84	0
56	MG	2K	103	1/1	0.95	0.10	98,98,98,98	0
56	MG	14	3364	1/1	0.95	0.07	87,87,87,87	0
56	MG	1H	3176	1/1	0.95	0.30	91,91,91,91	0
56	MG	1G	1630	1/1	0.95	0.47	116,116,116,116	0
56	MG	1G	1631	1/1	0.95	0.23	113,113,113,113	0
56	MG	14	3021	1/1	0.95	0.40	79,79,79,79	0
56	MG	1H	3212	1/1	0.95	0.14	61,61,61,61	0
56	MG	1H	3213	1/1	0.95	0.27	113,113,113,113	0
56	MG	1H	3215	1/1	0.95	0.14	81,81,81,81	0
56	MG	1H	3261	1/1	0.95	0.48	99,99,99,99	0
56	MG	1H	3341	1/1	0.95	0.27	100,100,100,100	0
56	MG	1H	3047	1/1	0.95	0.30	65,65,65,65	0
56	MG	1H	3433	1/1	0.95	0.09	76,76,76,76	0
56	MG	13	1657	1/1	0.95	0.24	104,104,104,104	0
56	MG	1H	3218	1/1	0.95	0.17	78,78,78,78	0
56	MG	13	1726	1/1	0.95	0.12	90,90,90,90	0
56	MG	14	3384	1/1	0.95	0.14	60,60,60,60	0
56	MG	1H	3021	1/1	0.95	0.32	79,79,79,79	0
56	MG	1H	3347	1/1	0.95	0.13	57,57,57,57	0
56	MG	14	3390	1/1	0.95	0.18	94,94,94,94	0
56	MG	1H	3052	1/1	0.95	0.30	80,80,80,80	0
56	MG	14	3393	1/1	0.95	0.14	80,80,80,80	0
56	MG	14	3044	1/1	0.95	0.14	78,78,78,78	0
56	MG	1H	3444	1/1	0.95	0.28	102,102,102,102	0
56	MG	14	3049	1/1	0.95	0.25	87,87,87,87	0
56	MG	13	1673	1/1	0.95	0.28	91,91,91,91	0
56	MG	14	3171	1/1	0.95	0.19	73,73,73,73	0
56	MG	16	208	1/1	0.95	0.55	94,94,94,94	0
56	MG	16	210	1/1	0.95	0.45	107,107,107,107	0
56	MG	1H	3090	1/1	0.95	0.47	91,91,91,91	0
56	MG	16	213	1/1	0.95	0.43	85,85,85,85	0
56	MG	13	1616	1/1	0.95	0.10	82,82,82,82	0
56	MG	14	3060	1/1	0.95	0.27	83,83,83,83	0
56	MG	1H	3367	1/1	0.95	0.13	82,82,82,82	0
56	MG	14	3180	1/1	0.95	0.32	83,83,83,83	0
56	MG	1H	3025	1/1	0.95	0.48	78,78,78,78	0
56	MG	1H	3229	1/1	0.95	0.23	83,83,83,83	0
56	MG	1H	3275	1/1	0.95	0.30	97,97,97,97	0
56	MG	1G	1658	1/1	0.95	0.21	110,110,110,110	0
56	MG	14	3069	1/1	0.95	0.08	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	41	201	1/1	0.95	0.16	89,89,89,89	0
56	MG	1H	3376	1/1	0.95	0.04	96,96,96,96	0
56	MG	14	3074	1/1	0.95	0.13	79,79,79,79	0
56	MG	1H	3095	1/1	0.95	0.43	74,74,74,74	0
56	MG	1G	1662	1/1	0.95	0.16	155,155,155,155	0
56	MG	1H	3463	1/1	0.95	0.04	113,113,113,113	0
56	MG	88	201	1/1	0.95	0.22	95,95,95,95	0
56	MG	14	3298	1/1	0.95	0.42	115,115,115,115	0
56	MG	13	1730	1/1	0.95	0.03	113,113,113,113	0
56	MG	1J	201	1/1	0.95	0.15	123,123,123,123	0
56	MG	G8	201	1/1	0.95	0.11	83,83,83,83	0
56	MG	1H	3384	1/1	0.95	0.07	59,59,59,59	0
56	MG	1H	3385	1/1	0.95	0.14	75,75,75,75	0
56	MG	13	1625	1/1	0.95	0.30	77,77,77,77	0
56	MG	1H	3235	1/1	0.95	0.25	75,75,75,75	0
56	MG	1H	3236	1/1	0.95	0.26	77,77,77,77	0
56	MG	14	3099	1/1	0.95	0.14	106,106,106,106	0
56	MG	14	3100	1/1	0.95	0.12	87,87,87,87	0
56	MG	1G	1672	1/1	0.95	0.26	126,126,126,126	0
56	MG	1H	3099	1/1	0.95	0.33	69,69,69,69	0
56	MG	13	1635	1/1	0.95	0.14	88,88,88,88	0
56	MG	14	3216	1/1	0.95	0.43	111,111,111,111	0
56	MG	1H	3066	1/1	0.95	0.27	71,71,71,71	0
56	MG	1G	1676	1/1	0.95	0.35	121,121,121,121	0
56	MG	14	3219	1/1	0.95	0.20	102,102,102,102	0
56	MG	1H	3196	1/1	0.95	0.70	110,110,110,110	0
56	MG	14	3222	1/1	0.95	0.24	99,99,99,99	0
56	MG	1H	3324	1/1	0.95	0.15	107,107,107,107	0
56	MG	1H	3405	1/1	0.95	0.13	86,86,86,86	0
56	MG	14	3114	1/1	0.95	0.39	97,97,97,97	0
56	MG	13	1653	1/1	0.95	0.21	78,78,78,78	0
56	MG	85	201	1/1	0.95	0.28	93,93,93,93	0
56	MG	1H	3408	1/1	0.95	0.09	87,87,87,87	0
56	MG	1H	3164	1/1	0.95	0.43	102,102,102,102	0
56	MG	1G	1612	1/1	0.95	0.15	110,110,110,110	0
56	MG	14	3126	1/1	0.95	0.29	103,103,103,103	0
57	ZN	5A	101	1/1	0.95	0.13	172,172,172,172	0
56	MG	3I	201	1/1	0.95	0.18	81,81,81,81	0
56	MG	1G	1646	1/1	0.96	0.15	102,102,102,102	0
56	MG	1H	3117	1/1	0.96	0.29	87,87,87,87	0
56	MG	1H	3462	1/1	0.96	0.11	75,75,75,75	0
56	MG	13	1655	1/1	0.96	0.14	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	21	302	1/1	0.96	0.16	82,82,82,82	0
56	MG	14	3242	1/1	0.96	0.16	94,94,94,94	0
56	MG	14	3349	1/1	0.96	0.14	71,71,71,71	0
56	MG	1H	3396	1/1	0.96	0.17	87,87,87,87	0
56	MG	14	3245	1/1	0.96	0.18	71,71,71,71	0
56	MG	1H	3038	1/1	0.96	0.26	58,58,58,58	0
56	MG	14	3031	1/1	0.96	0.29	76,76,76,76	0
56	MG	1H	3214	1/1	0.96	0.13	103,103,103,103	0
56	MG	1H	3180	1/1	0.96	0.17	84,84,84,84	0
56	MG	14	3040	1/1	0.96	0.20	79,79,79,79	0
56	MG	1H	3402	1/1	0.96	0.12	81,81,81,81	0
56	MG	1H	3151	1/1	0.96	0.17	110,110,110,110	0
56	MG	1H	3093	1/1	0.96	0.16	81,81,81,81	0
56	MG	14	3045	1/1	0.96	0.17	70,70,70,70	0
56	MG	1H	3064	1/1	0.96	0.27	76,76,76,76	0
56	MG	1H	3065	1/1	0.96	0.27	71,71,71,71	0
56	MG	14	3050	1/1	0.96	0.13	60,60,60,60	0
56	MG	13	1648	1/1	0.96	0.26	76,76,76,76	0
56	MG	1H	3156	1/1	0.96	0.36	110,110,110,110	0
56	MG	14	3054	1/1	0.96	0.12	93,93,93,93	0
56	MG	14	3373	1/1	0.96	0.08	81,81,81,81	0
56	MG	1H	3187	1/1	0.96	0.24	89,89,89,89	0
56	MG	1H	3042	1/1	0.96	0.19	53,53,53,53	0
56	MG	14	3057	1/1	0.96	0.15	91,91,91,91	0
56	MG	14	3378	1/1	0.96	0.16	101,101,101,101	0
56	MG	1H	3046	1/1	0.96	0.30	72,72,72,72	0
56	MG	1H	3069	1/1	0.96	0.37	89,89,89,89	0
56	MG	13	1612	1/1	0.96	0.27	89,89,89,89	0
56	MG	14	3165	1/1	0.96	0.33	70,70,70,70	0
56	MG	1H	3269	1/1	0.96	0.52	90,90,90,90	0
56	MG	1H	3486	1/1	0.96	0.07	98,98,98,98	0
56	MG	1H	3192	1/1	0.96	0.11	78,78,78,78	0
56	MG	14	3389	1/1	0.96	0.17	72,72,72,72	0
56	MG	13	1609	1/1	0.96	0.19	83,83,83,83	0
56	MG	14	3067	1/1	0.96	0.18	73,73,73,73	0
56	MG	1H	3134	1/1	0.96	0.13	57,57,57,57	0
56	MG	14	3172	1/1	0.96	0.21	107,107,107,107	0
56	MG	13	1751	1/1	0.96	0.16	94,94,94,94	0
56	MG	14	3070	1/1	0.96	0.19	66,66,66,66	0
56	MG	1H	3349	1/1	0.96	0.16	69,69,69,69	0
56	MG	1H	3350	1/1	0.96	0.14	64,64,64,64	0
56	MG	14	3073	1/1	0.96	0.26	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3197	1/1	0.96	0.41	89,89,89,89	0
56	MG	14	3402	1/1	0.96	0.11	99,99,99,99	0
56	MG	1G	1678	1/1	0.96	0.13	108,108,108,108	0
56	MG	14	3404	1/1	0.96	0.08	97,97,97,97	0
56	MG	13	1681	1/1	0.96	0.25	107,107,107,107	0
56	MG	1H	3075	1/1	0.96	0.08	59,59,59,59	0
56	MG	1H	3360	1/1	0.96	0.14	58,58,58,58	0
56	MG	1H	3497	1/1	0.96	0.10	119,119,119,119	0
56	MG	1G	1683	1/1	0.96	0.14	129,129,129,129	0
56	MG	14	3084	1/1	0.96	0.22	78,78,78,78	0
56	MG	14	3086	1/1	0.96	0.28	84,84,84,84	0
56	MG	14	3087	1/1	0.96	0.16	82,82,82,82	0
56	MG	14	3088	1/1	0.96	0.23	66,66,66,66	0
56	MG	14	3090	1/1	0.96	0.20	89,89,89,89	0
56	MG	1G	1619	1/1	0.96	0.21	72,72,72,72	0
56	MG	1H	3363	1/1	0.96	0.21	71,71,71,71	0
56	MG	1H	3364	1/1	0.96	0.12	80,80,80,80	0
56	MG	1H	3436	1/1	0.96	0.10	79,79,79,79	0
56	MG	14	3199	1/1	0.96	0.35	126,126,126,126	0
56	MG	1H	3240	1/1	0.96	0.25	94,94,94,94	0
56	MG	13	1623	1/1	0.96	0.15	84,84,84,84	0
56	MG	1H	3139	1/1	0.96	0.40	79,79,79,79	0
56	MG	13	1628	1/1	0.96	0.35	102,102,102,102	0
56	MG	1H	3244	1/1	0.96	0.20	90,90,90,90	0
56	MG	14	3206	1/1	0.96	0.08	83,83,83,83	0
56	MG	1H	3506	1/1	0.96	0.33	57,57,57,57	0
56	MG	1H	3054	1/1	0.96	0.19	71,71,71,71	0
56	MG	14	3004	1/1	0.96	0.25	64,64,64,64	0
56	MG	14	3108	1/1	0.96	0.15	92,92,92,92	0
56	MG	1H	3377	1/1	0.96	0.17	97,97,97,97	0
56	MG	13	1617	1/1	0.96	0.08	106,106,106,106	0
56	MG	14	3214	1/1	0.96	0.14	70,70,70,70	0
56	MG	1H	3450	1/1	0.96	0.13	66,66,66,66	0
56	MG	14	3009	1/1	0.96	0.24	65,65,65,65	0
56	MG	14	3115	1/1	0.96	0.18	100,100,100,100	0
56	MG	14	3011	1/1	0.96	0.20	61,61,61,61	0
56	MG	14	3220	1/1	0.96	0.32	94,94,94,94	0
56	MG	1H	3451	1/1	0.96	0.11	87,87,87,87	0
56	MG	1H	3033	1/1	0.96	0.59	100,100,100,100	0
56	MG	1H	3057	1/1	0.96	0.19	72,72,72,72	0
56	MG	16	209	1/1	0.96	0.21	88,88,88,88	0
56	MG	14	3226	1/1	0.96	0.21	123,123,123,123	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3114	1/1	0.96	0.42	82,82,82,82	0
56	MG	14	3228	1/1	0.96	0.20	86,86,86,86	0
56	MG	14	3129	1/1	0.96	0.20	78,78,78,78	0
56	MG	2K	101	1/1	0.96	0.22	76,76,76,76	0
56	MG	14	3131	1/1	0.96	0.20	56,56,56,56	0
56	MG	16	212	1/1	0.96	0.43	99,99,99,99	0
56	MG	14	3334	1/1	0.96	0.11	91,91,91,91	0
56	MG	1H	3387	1/1	0.96	0.17	70,70,70,70	0
56	MG	1H	3289	1/1	0.96	0.22	93,93,93,93	0
56	MG	14	3338	1/1	0.96	0.09	68,68,68,68	0
56	MG	14	3353	1/1	0.97	0.15	91,91,91,91	0
56	MG	1H	3115	1/1	0.97	0.34	95,95,95,95	0
56	MG	14	3085	1/1	0.97	0.18	81,81,81,81	0
56	MG	1H	3401	1/1	0.97	0.16	87,87,87,87	0
56	MG	1H	3239	1/1	0.97	0.17	88,88,88,88	0
56	MG	1H	3403	1/1	0.97	0.16	73,73,73,73	0
56	MG	14	3361	1/1	0.97	0.17	86,86,86,86	0
56	MG	14	3089	1/1	0.97	0.21	85,85,85,85	0
56	MG	1H	3008	1/1	0.97	0.41	79,79,79,79	0
56	MG	13	1746	1/1	0.97	0.07	110,110,110,110	0
56	MG	1H	3468	1/1	0.97	0.07	95,95,95,95	0
56	MG	13	1747	1/1	0.97	0.28	103,103,103,103	0
56	MG	14	3015	1/1	0.97	0.08	81,81,81,81	0
56	MG	14	3095	1/1	0.97	0.20	78,78,78,78	0
56	MG	14	3097	1/1	0.97	0.12	69,69,69,69	0
56	MG	13	1608	1/1	0.97	0.20	91,91,91,91	0
56	MG	1H	3120	1/1	0.97	0.13	80,80,80,80	0
56	MG	1H	3413	1/1	0.97	0.15	77,77,77,77	0
56	MG	1H	3348	1/1	0.97	0.14	84,84,84,84	0
56	MG	1H	3096	1/1	0.97	0.17	57,57,57,57	0
56	MG	13	1610	1/1	0.97	0.20	79,79,79,79	0
56	MG	14	3105	1/1	0.97	0.14	74,74,74,74	0
56	MG	1G	1651	1/1	0.97	0.20	138,138,138,138	0
56	MG	13	1659	1/1	0.97	0.31	109,109,109,109	0
56	MG	14	3191	1/1	0.97	0.21	92,92,92,92	0
56	MG	14	3382	1/1	0.97	0.29	86,86,86,86	0
56	MG	1H	3356	1/1	0.97	0.10	58,58,58,58	0
56	MG	13	1649	1/1	0.97	0.27	85,85,85,85	0
56	MG	14	3194	1/1	0.97	0.23	97,97,97,97	0
56	MG	14	3111	1/1	0.97	0.17	72,72,72,72	0
56	MG	1H	3018	1/1	0.97	0.41	79,79,79,79	0
56	MG	1H	3481	1/1	0.97	0.11	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3198	1/1	0.97	0.11	88,88,88,88	0
56	MG	1H	3019	1/1	0.97	0.28	54,54,54,54	0
56	MG	1H	3078	1/1	0.97	0.23	70,70,70,70	0
56	MG	14	3116	1/1	0.97	0.21	73,73,73,73	0
56	MG	1H	3131	1/1	0.97	0.17	56,56,56,56	0
56	MG	14	3397	1/1	0.97	0.13	101,101,101,101	0
56	MG	14	3036	1/1	0.97	0.15	67,67,67,67	0
56	MG	1H	3253	1/1	0.97	0.20	91,91,91,91	0
56	MG	14	3205	1/1	0.97	0.45	72,72,72,72	0
56	MG	14	3124	1/1	0.97	0.26	85,85,85,85	0
56	MG	1H	3103	1/1	0.97	0.15	60,60,60,60	0
56	MG	1H	3369	1/1	0.97	0.15	92,92,92,92	0
56	MG	1H	3371	1/1	0.97	0.08	91,91,91,91	0
56	MG	14	3128	1/1	0.97	0.21	97,97,97,97	0
56	MG	13	1725	1/1	0.97	0.11	102,102,102,102	0
56	MG	1H	3037	1/1	0.97	0.37	76,76,76,76	0
56	MG	14	3300	1/1	0.97	0.15	98,98,98,98	0
56	MG	13	1614	1/1	0.97	0.16	98,98,98,98	0
56	MG	14	3046	1/1	0.97	0.24	88,88,88,88	0
56	MG	1H	3039	1/1	0.97	0.39	55,55,55,55	0
56	MG	14	3134	1/1	0.97	0.10	103,103,103,103	0
56	MG	13	1638	1/1	0.97	0.09	115,115,115,115	0
56	MG	13	1712	1/1	0.97	0.19	99,99,99,99	0
56	MG	1H	3226	1/1	0.97	0.26	88,88,88,88	0
56	MG	1H	3383	1/1	0.97	0.10	67,67,67,67	0
56	MG	14	3223	1/1	0.97	0.82	81,81,81,81	0
56	MG	14	3310	1/1	0.97	0.20	96,96,96,96	0
56	MG	1H	3227	1/1	0.97	0.26	123,123,123,123	0
56	MG	1H	3110	1/1	0.97	0.31	67,67,67,67	0
56	MG	1H	3299	1/1	0.97	0.17	71,71,71,71	0
56	MG	1H	3195	1/1	0.97	0.11	94,94,94,94	0
56	MG	1H	3445	1/1	0.97	0.12	83,83,83,83	0
56	MG	14	3426	1/1	0.97	0.24	67,67,67,67	0
56	MG	1G	1677	1/1	0.97	0.08	91,91,91,91	0
56	MG	14	3230	1/1	0.97	0.27	86,86,86,86	0
56	MG	14	3145	1/1	0.97	0.25	105,105,105,105	0
56	MG	1H	3388	1/1	0.97	0.14	65,65,65,65	0
56	MG	14	3062	1/1	0.97	0.29	85,85,85,85	0
56	MG	1G	1621	1/1	0.97	0.11	88,88,88,88	0
56	MG	14	3322	1/1	0.97	0.14	90,90,90,90	0
56	MG	1H	3088	1/1	0.97	0.33	52,52,52,52	0
56	MG	1H	3449	1/1	0.97	0.15	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1G	1624	1/1	0.97	0.17	93,93,93,93	0
56	MG	14	3238	1/1	0.97	0.16	110,110,110,110	0
56	MG	1H	3089	1/1	0.97	0.28	58,58,58,58	0
56	MG	1G	1626	1/1	0.97	0.27	102,102,102,102	0
56	MG	1G	1627	1/1	0.97	0.23	116,116,116,116	0
56	MG	14	3155	1/1	0.97	0.17	76,76,76,76	0
56	MG	1H	3392	1/1	0.97	0.13	65,65,65,65	0
56	MG	14	3244	1/1	0.97	0.23	99,99,99,99	0
56	MG	1H	3394	1/1	0.97	0.09	62,62,62,62	0
56	MG	16	203	1/1	0.97	0.17	107,107,107,107	0
56	MG	13	1729	1/1	0.97	0.12	109,109,109,109	0
56	MG	1H	3091	1/1	0.97	0.36	70,70,70,70	0
56	MG	2L	101	1/1	0.97	0.18	98,98,98,98	0
56	MG	1H	3397	1/1	0.97	0.15	77,77,77,77	0
56	MG	1H	3171	1/1	0.97	0.51	75,75,75,75	0
56	MG	14	3347	1/1	0.97	0.07	85,85,85,85	0
56	MG	14	3348	1/1	0.97	0.10	71,71,71,71	0
57	ZN	5I	101	1/1	0.97	0.20	114,114,114,114	0
56	MG	1H	3459	1/1	0.97	0.14	81,81,81,81	0
56	MG	14	3002	1/1	0.97	0.24	70,70,70,70	0
56	MG	1H	3172	1/1	0.97	0.26	98,98,98,98	0
56	MG	14	3212	1/1	0.98	0.16	104,104,104,104	0
56	MG	1H	3414	1/1	0.98	0.15	65,65,65,65	0
56	MG	1H	3361	1/1	0.98	0.16	56,56,56,56	0
56	MG	1H	3043	1/1	0.98	0.27	72,72,72,72	0
56	MG	14	3377	1/1	0.98	0.08	82,82,82,82	0
56	MG	1H	3045	1/1	0.98	0.20	63,63,63,63	0
56	MG	21	301	1/1	0.98	0.23	75,75,75,75	0
56	MG	1H	3365	1/1	0.98	0.13	69,69,69,69	0
56	MG	1H	3259	1/1	0.98	0.52	105,105,105,105	0
56	MG	13	1735	1/1	0.98	0.07	96,96,96,96	0
56	MG	1H	3145	1/1	0.98	0.20	57,57,57,57	0
56	MG	13	1737	1/1	0.98	0.14	72,72,72,72	0
56	MG	14	3386	1/1	0.98	0.25	105,105,105,105	0
56	MG	14	3075	1/1	0.98	0.23	81,81,81,81	0
56	MG	1H	3048	1/1	0.98	0.21	65,65,65,65	0
56	MG	14	3008	1/1	0.98	0.25	78,78,78,78	0
56	MG	1H	3373	1/1	0.98	0.12	63,63,63,63	0
56	MG	14	3010	1/1	0.98	0.19	65,65,65,65	0
56	MG	1H	3070	1/1	0.98	0.54	125,125,125,125	0
56	MG	1H	3233	1/1	0.98	0.19	65,65,65,65	0
56	MG	1H	3427	1/1	0.98	0.09	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3234	1/1	0.98	0.29	91,91,91,91	0
56	MG	1H	3484	1/1	0.98	0.09	79,79,79,79	0
56	MG	13	1738	1/1	0.98	0.13	77,77,77,77	0
56	MG	13	1634	1/1	0.98	0.30	85,85,85,85	0
56	MG	1G	1601	1/1	0.98	0.19	109,109,109,109	0
56	MG	1H	3379	1/1	0.98	0.12	74,74,74,74	0
56	MG	13	1604	1/1	0.98	0.27	108,108,108,108	0
56	MG	1H	3207	1/1	0.98	0.18	60,60,60,60	0
56	MG	1H	3271	1/1	0.98	0.46	93,93,93,93	0
56	MG	1H	3125	1/1	0.98	0.16	68,68,68,68	0
56	MG	1H	3014	1/1	0.98	0.42	57,57,57,57	0
56	MG	1G	1608	1/1	0.98	0.14	98,98,98,98	0
56	MG	14	3408	1/1	0.98	0.08	79,79,79,79	0
56	MG	13	1601	1/1	0.98	0.27	74,74,74,74	0
56	MG	1H	3016	1/1	0.98	0.31	66,66,66,66	0
56	MG	1H	3389	1/1	0.98	0.16	69,69,69,69	0
56	MG	14	3101	1/1	0.98	0.15	80,80,80,80	0
56	MG	1H	3001	1/1	0.98	0.29	64,64,64,64	0
56	MG	14	3414	1/1	0.98	0.06	93,93,93,93	0
56	MG	14	3032	1/1	0.98	0.20	52,52,52,52	0
56	MG	14	3033	1/1	0.98	0.18	66,66,66,66	0
56	MG	14	3034	1/1	0.98	0.23	69,69,69,69	0
56	MG	14	3327	1/1	0.98	0.43	117,117,117,117	0
56	MG	1H	3130	1/1	0.98	0.24	78,78,78,78	0
56	MG	13	1742	1/1	0.98	0.10	82,82,82,82	0
56	MG	1H	3446	1/1	0.98	0.12	74,74,74,74	0
56	MG	14	3333	1/1	0.98	0.12	73,73,73,73	0
56	MG	1H	3393	1/1	0.98	0.17	60,60,60,60	0
56	MG	14	3110	1/1	0.98	0.23	61,61,61,61	0
56	MG	13	1705	1/1	0.98	0.14	98,98,98,98	0
56	MG	13	1732	1/1	0.98	0.09	81,81,81,81	0
56	MG	14	3043	1/1	0.98	0.21	101,101,101,101	0
56	MG	1H	3059	1/1	0.98	0.49	92,92,92,92	0
56	MG	1H	3084	1/1	0.98	0.31	61,61,61,61	0
56	MG	1H	3453	1/1	0.98	0.15	70,70,70,70	0
56	MG	14	3188	1/1	0.98	0.31	91,91,91,91	0
56	MG	14	3189	1/1	0.98	0.12	83,83,83,83	0
56	MG	1H	3085	1/1	0.98	0.22	62,62,62,62	0
56	MG	14	3118	1/1	0.98	0.24	71,71,71,71	0
56	MG	14	3119	1/1	0.98	0.32	66,66,66,66	0
56	MG	14	3120	1/1	0.98	0.17	80,80,80,80	0
56	MG	14	3351	1/1	0.98	0.12	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3048	1/1	0.98	0.20	73,73,73,73	0
56	MG	14	3122	1/1	0.98	0.19	68,68,68,68	0
56	MG	1H	3060	1/1	0.98	0.24	74,74,74,74	0
56	MG	1H	3351	1/1	0.98	0.18	65,65,65,65	0
56	MG	14	3051	1/1	0.98	0.20	100,100,100,100	0
56	MG	14	3358	1/1	0.98	0.09	85,85,85,85	0
56	MG	1H	3352	1/1	0.98	0.14	61,61,61,61	0
56	MG	1H	3353	1/1	0.98	0.11	77,77,77,77	0
56	MG	1H	3006	1/1	0.98	0.17	91,91,91,91	0
56	MG	1H	3355	1/1	0.98	0.18	64,64,64,64	0
56	MG	13	1733	1/1	0.98	0.10	102,102,102,102	0
56	MG	1H	3406	1/1	0.98	0.17	77,77,77,77	0
56	MG	1G	1685	1/1	0.98	0.08	112,112,112,112	0
56	MG	1H	3357	1/1	0.98	0.07	57,57,57,57	0
56	MG	1H	3063	1/1	0.98	0.28	83,83,83,83	0
57	ZN	3E	301	1/1	0.98	0.41	115,115,115,115	0
56	MG	14	3061	1/1	0.98	0.15	79,79,79,79	0
56	MG	1H	3465	1/1	0.98	0.10	83,83,83,83	0
56	MG	1H	3224	1/1	0.98	0.28	82,82,82,82	0
56	MG	13	1633	1/1	0.98	0.15	75,75,75,75	0
56	MG	1H	3017	1/1	0.99	0.23	79,79,79,79	0
56	MG	1H	3370	1/1	0.99	0.16	84,84,84,84	0
56	MG	1H	3452	1/1	0.99	0.14	65,65,65,65	0
56	MG	14	3331	1/1	0.99	0.29	112,112,112,112	0
56	MG	14	3332	1/1	0.99	0.12	72,72,72,72	0
56	MG	1H	3044	1/1	0.99	0.20	68,68,68,68	0
56	MG	1H	3036	1/1	0.99	0.46	61,61,61,61	0
56	MG	14	3335	1/1	0.99	0.12	73,73,73,73	0
56	MG	1H	3409	1/1	0.99	0.18	76,76,76,76	0
56	MG	14	3096	1/1	0.99	0.15	77,77,77,77	0
56	MG	13	1611	1/1	0.99	0.18	95,95,95,95	0
56	MG	14	3339	1/1	0.99	0.12	74,74,74,74	0
56	MG	14	3035	1/1	0.99	0.27	79,79,79,79	0
56	MG	1H	3411	1/1	0.99	0.12	80,80,80,80	0
56	MG	14	3342	1/1	0.99	0.12	80,80,80,80	0
56	MG	14	3385	1/1	0.99	0.12	73,73,73,73	0
56	MG	1H	3412	1/1	0.99	0.12	64,64,64,64	0
56	MG	14	3038	1/1	0.99	0.16	72,72,72,72	0
56	MG	13	1723	1/1	0.99	0.14	105,105,105,105	0
56	MG	1H	3435	1/1	0.99	0.16	72,72,72,72	0
56	MG	13	1736	1/1	0.99	0.17	102,102,102,102	0
56	MG	1H	3076	1/1	0.99	0.26	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3392	1/1	0.99	0.08	70,70,70,70	0
56	MG	1H	3205	1/1	0.99	0.23	64,64,64,64	0
56	MG	14	3014	1/1	0.99	0.27	73,73,73,73	0
56	MG	1H	3362	1/1	0.99	0.14	61,61,61,61	0
56	MG	14	3016	1/1	0.99	0.24	71,71,71,71	0
56	MG	14	3077	1/1	0.99	0.28	80,80,80,80	0
56	MG	1H	3440	1/1	0.99	0.10	83,83,83,83	0
56	MG	14	3079	1/1	0.99	0.23	84,84,84,84	0
56	MG	1H	3040	1/1	0.99	0.21	78,78,78,78	0
56	MG	14	3357	1/1	0.99	0.13	80,80,80,80	0
56	MG	1H	3380	1/1	0.99	0.16	61,61,61,61	0
56	MG	1H	3443	1/1	0.99	0.17	76,76,76,76	0
56	MG	14	3215	1/1	0.99	0.15	104,104,104,104	0
56	MG	1H	3004	1/1	0.99	0.30	68,68,68,68	0
56	MG	1H	3382	1/1	0.99	0.10	58,58,58,58	0
56	MG	1H	3123	1/1	0.99	0.24	68,68,68,68	0
56	MG	1H	3472	1/1	0.99	0.08	98,98,98,98	0
56	MG	1H	3079	1/1	0.99	0.33	83,83,83,83	0
56	MG	14	3366	1/1	0.99	0.15	88,88,88,88	0
56	MG	1H	3022	1/1	0.99	0.38	64,64,64,64	0
57	ZN	32	302	1/1	0.99	0.39	131,131,131,131	0
56	MG	1H	3368	1/1	0.99	0.17	79,79,79,79	0
56	MG	14	3257	1/1	0.99	0.20	84,84,84,84	0

6.5 Other polymers (i)

There are no such residues in this entry.