Full wwPDB X-ray Structure Validation Report (i)

Aug 21, 2025 – 06:48 PM EDT

PDB ID	:	9D0H / pdb_00009d0h
Title	:	Crystal structure of the wild-type Thermus thermophilus 70S ribosome in complex with C-cresomycin, mRNA, deacylated A-site tRNAphe, aminoacylated P-site fMet-tRNAmet, and deacylated E-site tRNAphe at 2.50A resolution
Authors	:	Aleksandrova, E.V.; Wu, K.J.Y.; Robinson, P.J.; Benedetto, A.E.; Yu, M.; Tresco, B.I.C.; See, D.N.Y.; Jiang, T.; Ramkissoon, A.; Dunand, C.F.; Svetlov, M.S.; Lee, J.; Myers, A.G.; Polikanov, Y.S.
Deposited on	:	2024-08-07
Resolution	:	2.50 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:

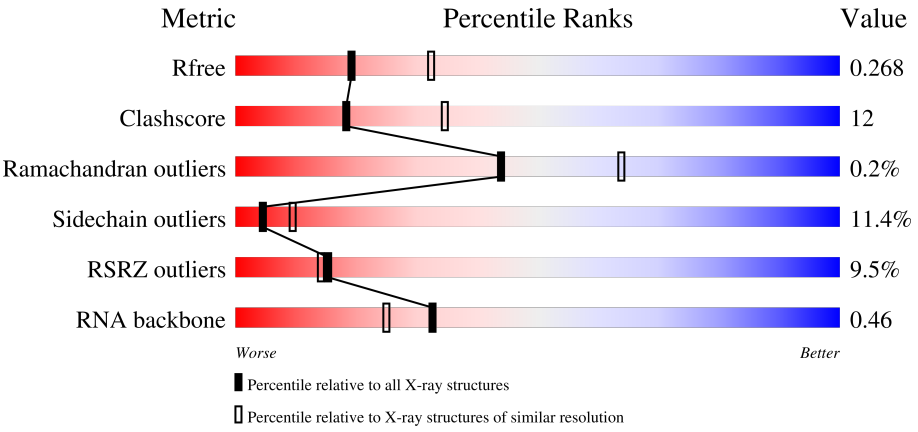
MolProbity	:	4-5-2 with Phenix2.0rc1
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0rc1
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.006 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)

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 2.50 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	5504 (2.50-2.50)
Clashscore	180529	6282 (2.50-2.50)
Ramachandran outliers	177936	6191 (2.50-2.50)
Sidechain outliers	177891	6193 (2.50-2.50)
RSRZ outliers	164620	5504 (2.50-2.50)
RNA backbone	3690	1181 (2.80-2.20)

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

Mol	Chain	Length	Quality of chain
1	1A	2915	4% 64% 27% 7% .
1	2A	2915	4% 52% 35% 9% .

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Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.45.1

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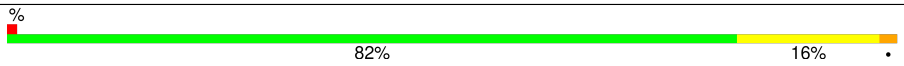
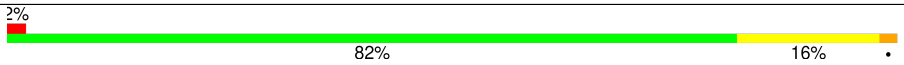
Mol	Chain	Length	Quality of chain
2	1B	121	
2	2B	121	
3	1D	276	
3	2D	276	
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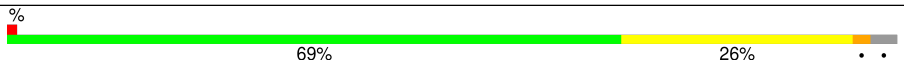
4	2E	206	
5	1F	210	
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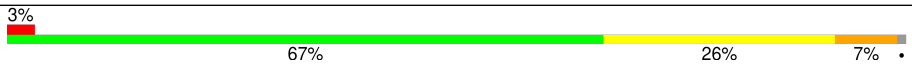
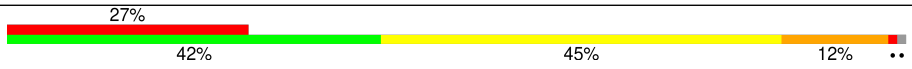
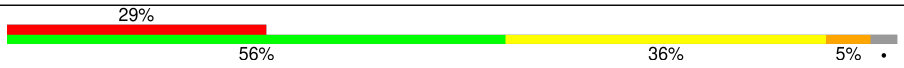
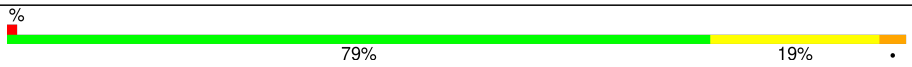
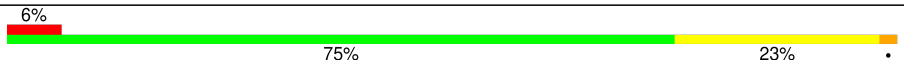
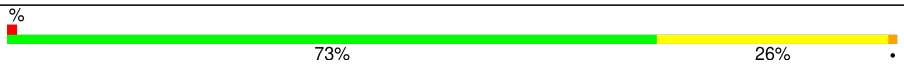
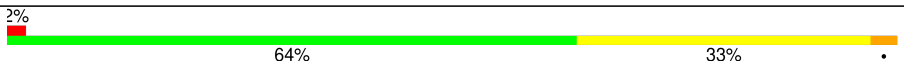
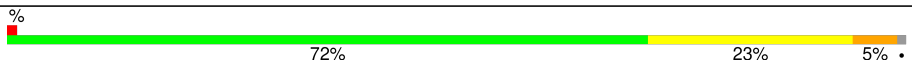
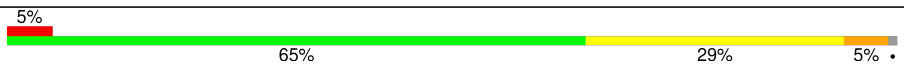
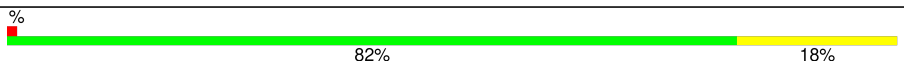
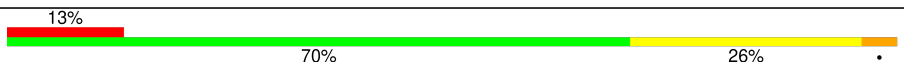
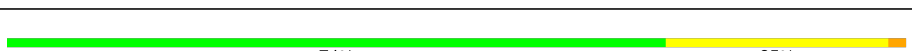
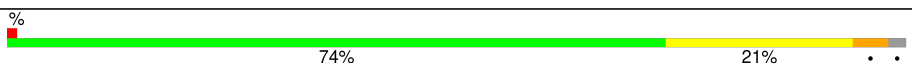
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	

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Mol	Chain	Length	Quality of chain
14	2S	112	23% 45% 49%
15	1T	146	2% 62% 25% 10%
15	2T	146	% 62% 27% 10%
16	1U	118	% 77% 19%
16	2U	118	2% 66% 30%
17	1V	101	84% 15%
17	2V	101	3% 72% 25%
18	1W	113	% 83% 16%
18	2W	113	2% 77% 18%
19	1X	96	3% 83% 14%
19	2X	96	7% 69% 28%
20	1Y	110	3% 67% 27%
20	2Y	110	18% 75% 19%
21	1Z	206	7% 45% 24% 5% 25%
21	2Z	206	31% 35% 35% 7% 22%
22	10	85	2% 80% 8% 9%
22	20	85	18% 48% 36% 6% 9%
23	11	98	% 77% 20%
23	21	98	4% 73% 23%
24	12	72	76% 21%
24	22	72	10% 71% 26%
25	13	60	2% 75% 17% 7%
25	23	60	8% 55% 42%
26	14	71	15% 48% 41% 6%
26	24	71	31% 51% 39% 6%

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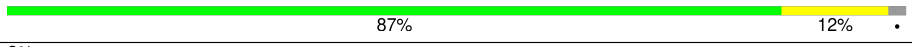
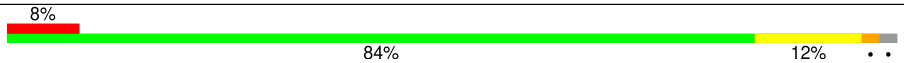
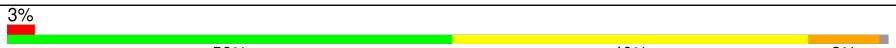
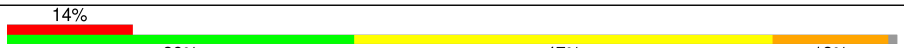
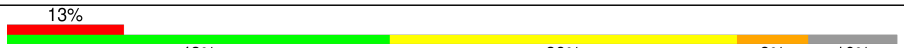
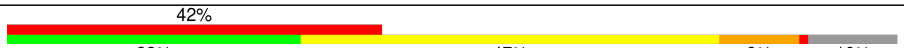
Mol	Chain	Length	Quality of chain
27	15	60	
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
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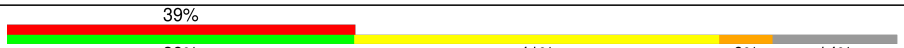
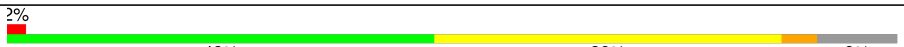
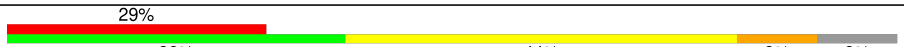
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	

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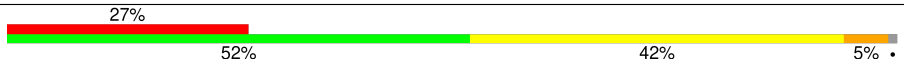
Mol	Chain	Length	Quality of chain
39	2h	138	
40	1i	128	
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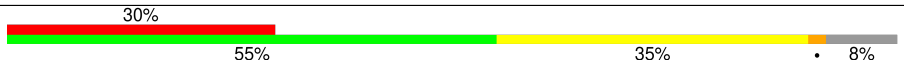
41	1j	105	
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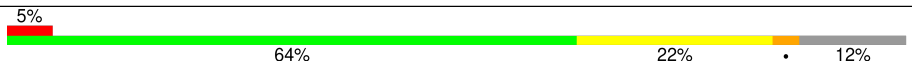
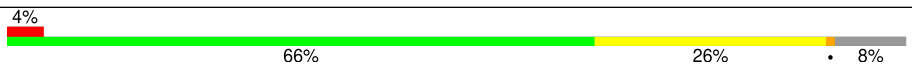
42	1k	129	
42	2k	129	
43	1l	132	
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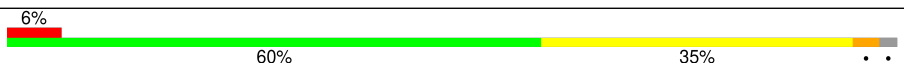
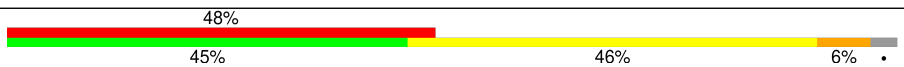
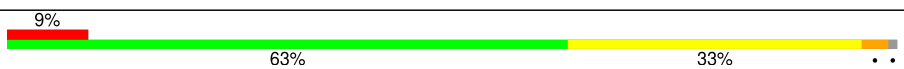
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
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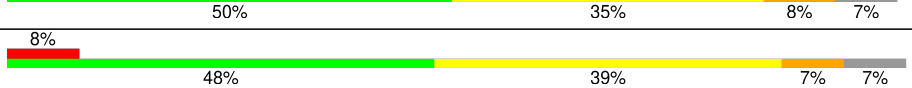
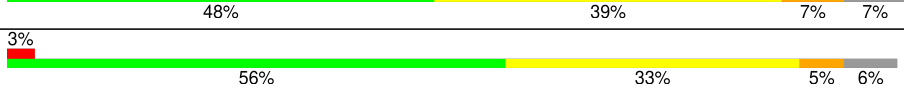
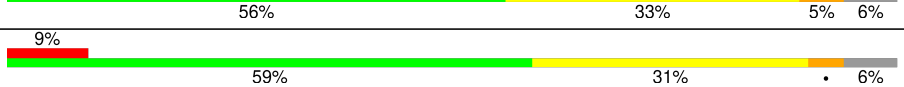
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
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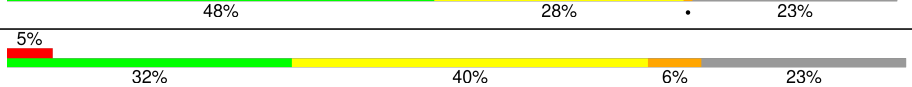
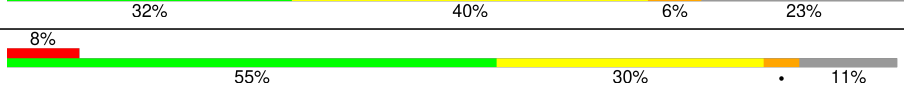
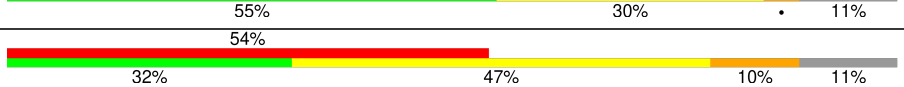
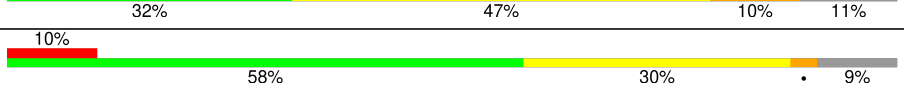
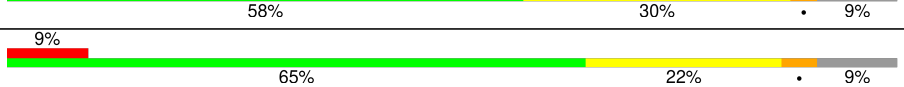
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	

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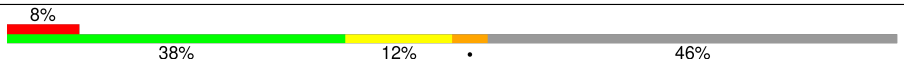
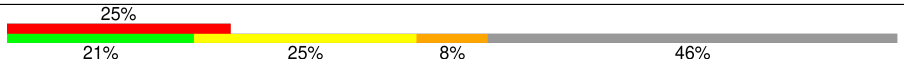
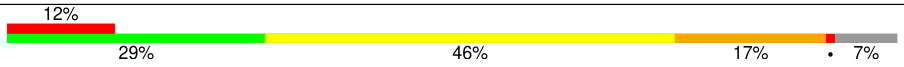
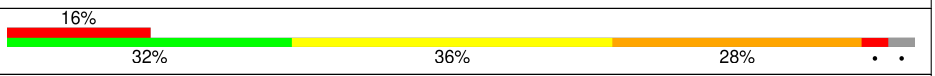
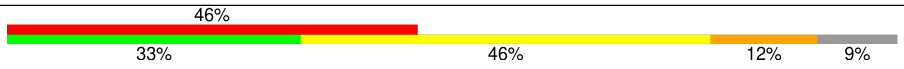
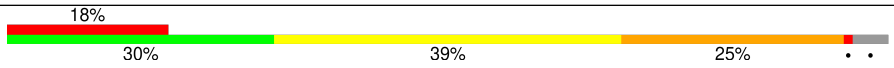
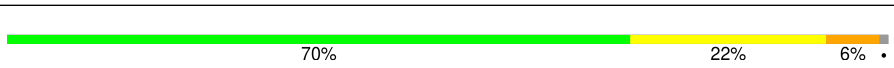
Mol	Chain	Length	Quality of chain
52	1u	27	
52	2u	27	
53	1v	24	
53	2v	24	
54	1w	76	
54	1y	76	
54	2w	76	
54	2y	76	
55	1x	77	
55	2x	77	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
56	MG	1A	3434	-	-	-	X
56	MG	2A	3343	-	-	-	X
56	MG	2A	3363	-	-	-	X
56	MG	2a	1608	-	-	-	X
60	SF4	1d	501	-	-	X	-

2 Entry composition (i)

There are 61 unique types of molecules in this entry. The entry contains 300042 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 23S Ribosomal RNA.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1101	Total	Mg	0	0
			1101	1101		
56	1B	37	Total	Mg	0	0
			37	37		
56	1D	13	Total	Mg	0	0
			13	13		
56	1E	15	Total	Mg	0	0
			15	15		
56	1F	15	Total	Mg	0	0
			15	15		
56	1G	4	Total	Mg	0	0
			4	4		
56	1I	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1N	5	Total Mg 5 5	0	0
56	1O	6	Total Mg 6 6	0	0
56	1P	6	Total Mg 6 6	0	0
56	1Q	6	Total Mg 6 6	0	0
56	1R	5	Total Mg 5 5	0	0
56	1S	3	Total Mg 3 3	0	0
56	1T	3	Total Mg 3 3	0	0
56	1U	10	Total Mg 10 10	0	0
56	1V	6	Total Mg 6 6	0	0
56	1W	7	Total Mg 7 7	0	0
56	1X	6	Total Mg 6 6	0	0
56	1Y	3	Total Mg 3 3	0	0
56	1Z	3	Total Mg 3 3	0	0
56	10	8	Total Mg 8 8	0	0
56	11	6	Total Mg 6 6	0	0
56	12	2	Total Mg 2 2	0	0
56	13	5	Total Mg 5 5	0	0
56	14	2	Total Mg 2 2	0	0
56	15	6	Total Mg 6 6	0	0
56	16	1	Total Mg 1 1	0	0
56	17	4	Total Mg 4 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	18	7	Total Mg 7 7	0	0
56	19	1	Total Mg 1 1	0	0
56	1a	215	Total Mg 215 215	0	0
56	1b	1	Total Mg 1 1	0	0
56	1e	2	Total Mg 2 2	0	0
56	1f	2	Total Mg 2 2	0	0
56	1h	1	Total Mg 1 1	0	0
56	1k	1	Total Mg 1 1	0	0
56	1l	2	Total Mg 2 2	0	0
56	1m	1	Total Mg 1 1	0	0
56	1n	2	Total Mg 2 2	0	0
56	1p	1	Total Mg 1 1	0	0
56	1t	1	Total Mg 1 1	0	0
56	1w	7	Total Mg 7 7	0	0
56	1x	14	Total Mg 14 14	0	0
56	1y	2	Total Mg 2 2	0	0
56	2A	875	Total Mg 875 875	0	0
56	2B	20	Total Mg 20 20	0	0
56	2D	9	Total Mg 9 9	0	0
56	2E	10	Total Mg 10 10	0	0
56	2F	6	Total Mg 6 6	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	2G	1	Total Mg 1 1	0	0
56	2O	1	Total Mg 1 1	0	0
56	2P	1	Total Mg 1 1	0	0
56	2Q	4	Total Mg 4 4	0	0
56	2R	1	Total Mg 1 1	0	0
56	2T	3	Total Mg 3 3	0	0
56	2U	2	Total Mg 2 2	0	0
56	2V	2	Total Mg 2 2	0	0
56	2W	4	Total Mg 4 4	0	0
56	2X	1	Total Mg 1 1	0	0
56	2Z	1	Total Mg 1 1	0	0
56	20	2	Total Mg 2 2	0	0
56	21	3	Total Mg 3 3	0	0
56	23	1	Total Mg 1 1	0	0
56	25	5	Total Mg 5 5	0	0
56	26	1	Total Mg 1 1	0	0
56	27	2	Total Mg 2 2	0	0
56	28	4	Total Mg 4 4	0	0
56	29	1	Total Mg 1 1	0	0
56	2a	241	Total Mg 241 241	0	0
56	2d	1	Total Mg 1 1	0	0

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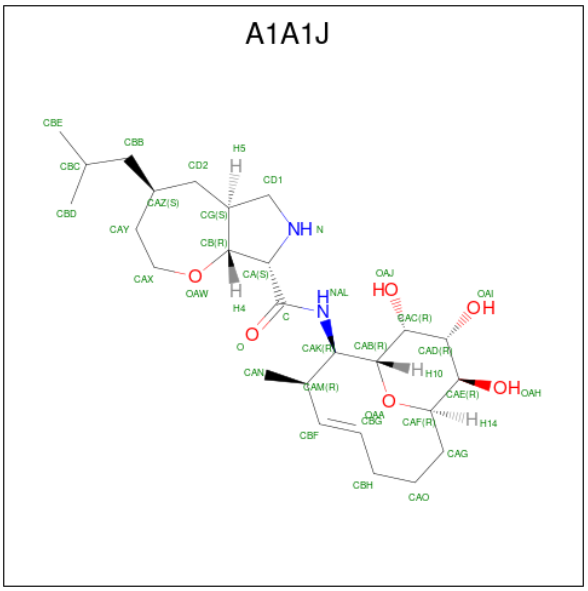
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	2e	1	Total Mg 1 1	0	0
56	2f	1	Total Mg 1 1	0	0
56	2g	1	Total Mg 1 1	0	0
56	2j	1	Total Mg 1 1	0	0
56	2l	4	Total Mg 4 4	0	0
56	2q	3	Total Mg 3 3	0	0
56	2r	2	Total Mg 2 2	0	0
56	2t	1	Total Mg 1 1	0	0
56	2v	4	Total Mg 4 4	0	0
56	2w	7	Total Mg 7 7	0	0
56	2x	7	Total Mg 7 7	0	0
56	2y	7	Total Mg 7 7	0	0

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

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

- Molecule 58 is (4S,5aS,8S,8aR)-4-(2-methylpropyl)-N-[(1R,2R,3R,4Z,9R,10R,11R,12R)-10,11,12-trihydroxy-3-methyl-13-oxabicyclo[7.3.1]tridec-4-en-2-yl]octahydro-2H-oxepino[2,3-c]pyrrole-8-carboxamide (CCD ID: A1A1J) (formula: $C_{26}H_{44}N_2O_6$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1A	1	Total C N O 34 26 2 6	0	0
58	2A	1	Total C N O 34 26 2 6	0	0

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

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

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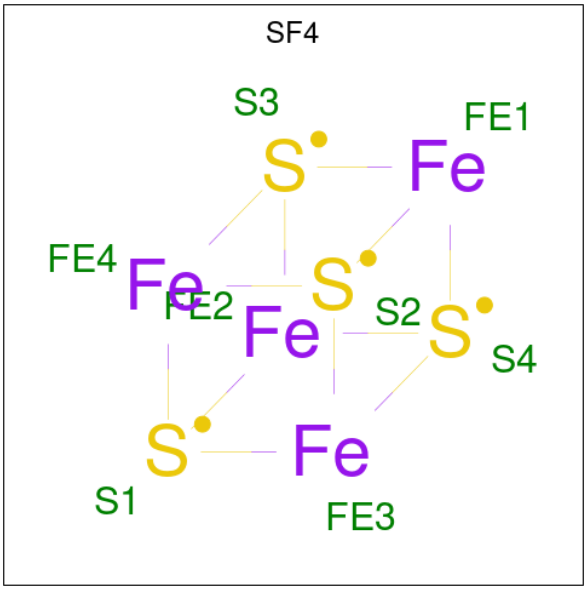
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	29	1	Total Zn 1 1	0	0
59	2n	1	Total Zn 1 1	0	0

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



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

- Molecule 61 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1A	2027	Total O 2027 2027	0	0
61	1B	61	Total O 61 61	0	0
61	1D	29	Total O 29 29	0	0
61	1E	27	Total O 27 27	0	0
61	1F	14	Total O 14 14	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1G	3	Total O 3 3	0	0
61	1H	2	Total O 2 2	0	0
61	1I	1	Total O 1 1	0	0
61	1N	5	Total O 5 5	0	0
61	1O	7	Total O 7 7	0	0
61	1P	19	Total O 19 19	0	0
61	1Q	9	Total O 9 9	0	0
61	1R	15	Total O 15 15	0	0
61	1S	5	Total O 5 5	0	0
61	1T	8	Total O 8 8	0	0
61	1U	10	Total O 10 10	0	0
61	1V	8	Total O 8 8	0	0
61	1W	11	Total O 11 11	0	0
61	1X	4	Total O 4 4	0	0
61	1Y	2	Total O 2 2	0	0
61	1Z	1	Total O 1 1	0	0
61	10	8	Total O 8 8	0	0
61	11	11	Total O 11 11	0	0
61	12	4	Total O 4 4	0	0
61	13	4	Total O 4 4	0	0
61	15	5	Total O 5 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	16	4	Total O 4 4	0	0
61	17	9	Total O 9 9	0	0
61	18	12	Total O 12 12	0	0
61	1a	377	Total O 377 377	0	0
61	1b	1	Total O 1 1	0	0
61	1g	1	Total O 1 1	0	0
61	1i	1	Total O 1 1	0	0
61	1l	8	Total O 8 8	0	0
61	1m	1	Total O 1 1	0	0
61	1o	2	Total O 2 2	0	0
61	1p	1	Total O 1 1	0	0
61	1q	2	Total O 2 2	0	0
61	1u	1	Total O 1 1	0	0
61	1v	3	Total O 3 3	0	0
61	1w	7	Total O 7 7	0	0
61	1x	13	Total O 13 13	0	0
61	1y	2	Total O 2 2	0	0
61	2A	1183	Total O 1183 1183	0	0
61	2B	25	Total O 25 25	0	0
61	2D	18	Total O 18 18	0	0
61	2E	15	Total O 15 15	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2F	12	Total O 12 12	0	0
61	2I	3	Total O 3 3	0	0
61	2N	1	Total O 1 1	0	0
61	2O	1	Total O 1 1	0	0
61	2P	16	Total O 16 16	0	0
61	2Q	1	Total O 1 1	0	0
61	2R	3	Total O 3 3	0	0
61	2T	6	Total O 6 6	0	0
61	2U	4	Total O 4 4	0	0
61	2W	1	Total O 1 1	0	0
61	2X	2	Total O 2 2	0	0
61	2Y	2	Total O 2 2	0	0
61	2Z	1	Total O 1 1	0	0
61	20	3	Total O 3 3	0	0
61	21	9	Total O 9 9	0	0
61	23	2	Total O 2 2	0	0
61	25	1	Total O 1 1	0	0
61	26	1	Total O 1 1	0	0
61	27	5	Total O 5 5	0	0
61	28	3	Total O 3 3	0	0
61	29	1	Total O 1 1	0	0

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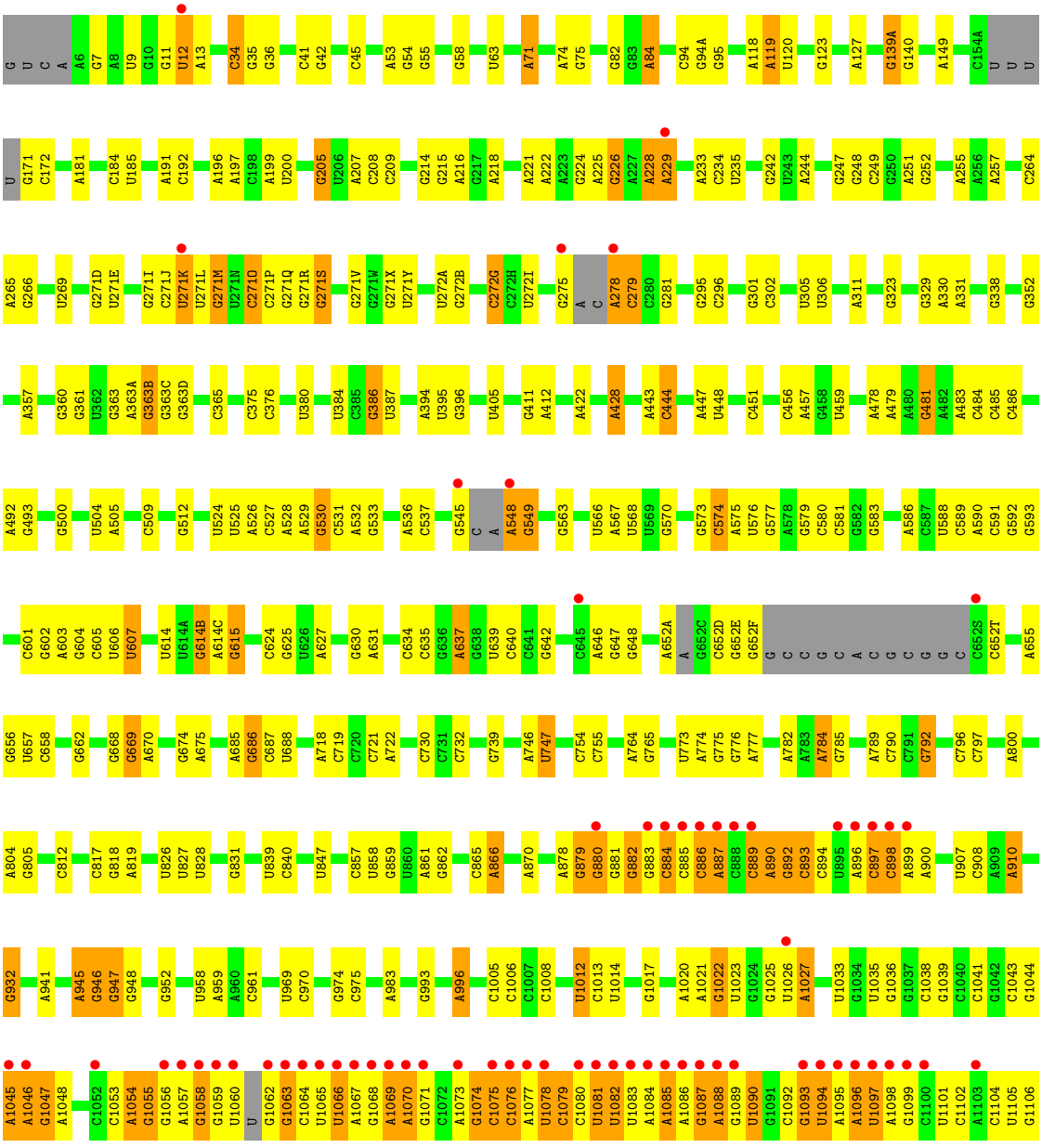
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2a	265	Total O 265 265	0	0
61	2d	1	Total O 1 1	0	0
61	2e	1	Total O 1 1	0	0
61	2i	1	Total O 1 1	0	0
61	2j	3	Total O 3 3	0	0
61	2l	6	Total O 6 6	0	0
61	2p	3	Total O 3 3	0	0
61	2q	1	Total O 1 1	0	0
61	2r	1	Total O 1 1	0	0
61	2t	2	Total O 2 2	0	0
61	2v	2	Total O 2 2	0	0
61	2w	1	Total O 1 1	0	0
61	2x	6	Total O 6 6	0	0
61	2y	6	Total O 6 6	0	0

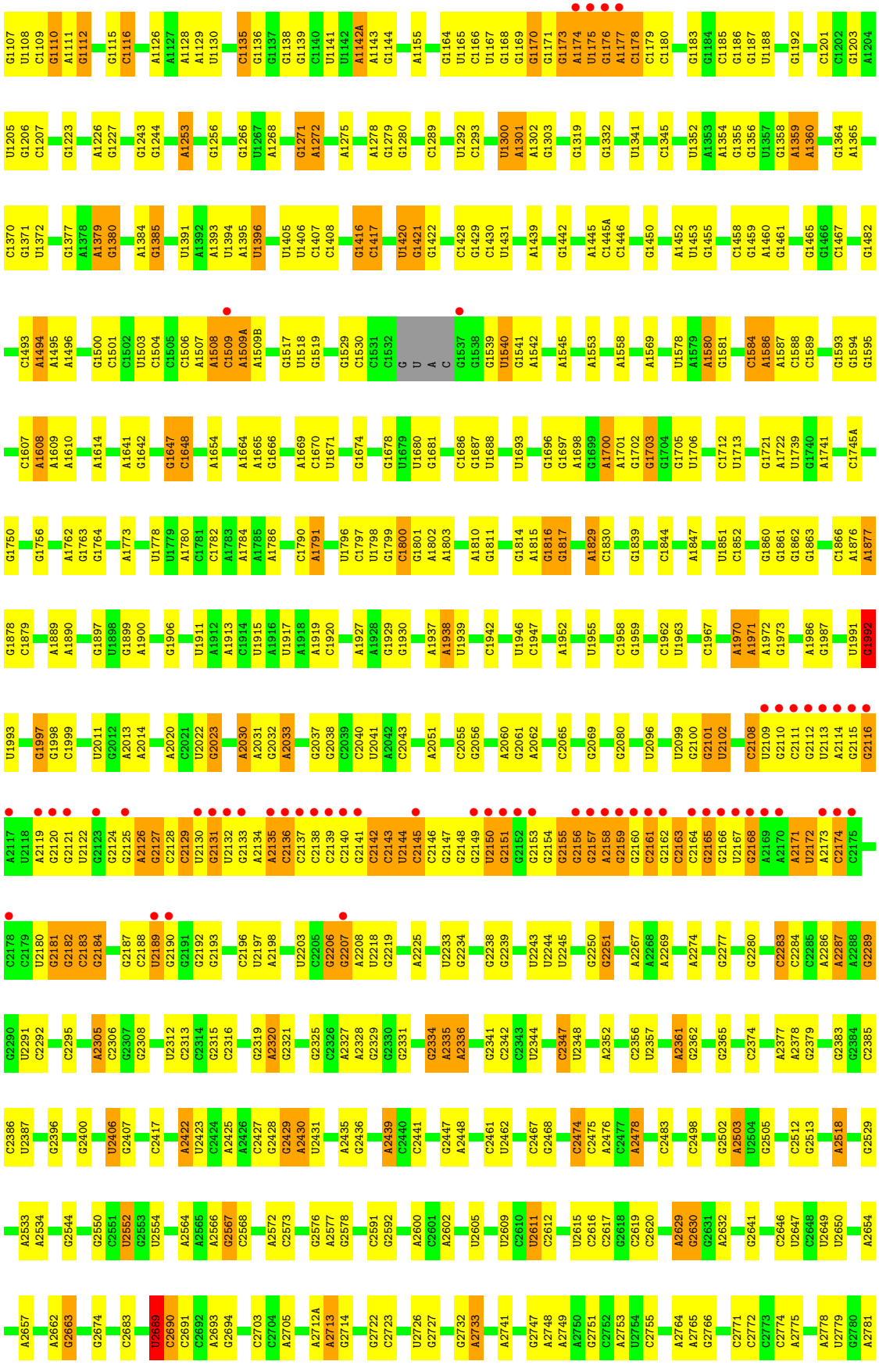
3 Residue-property plots (i)

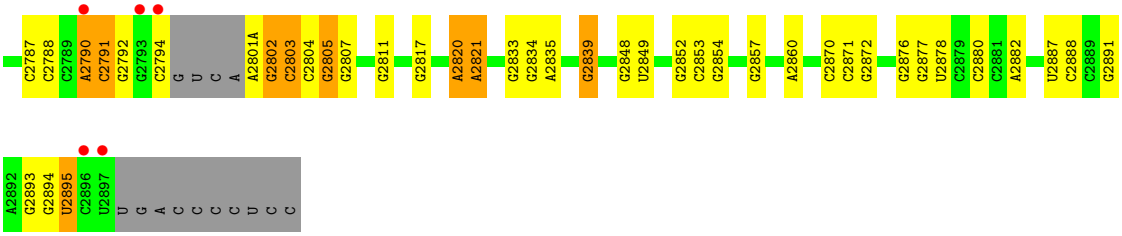
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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: 23S Ribosomal RNA

Chain 1A:

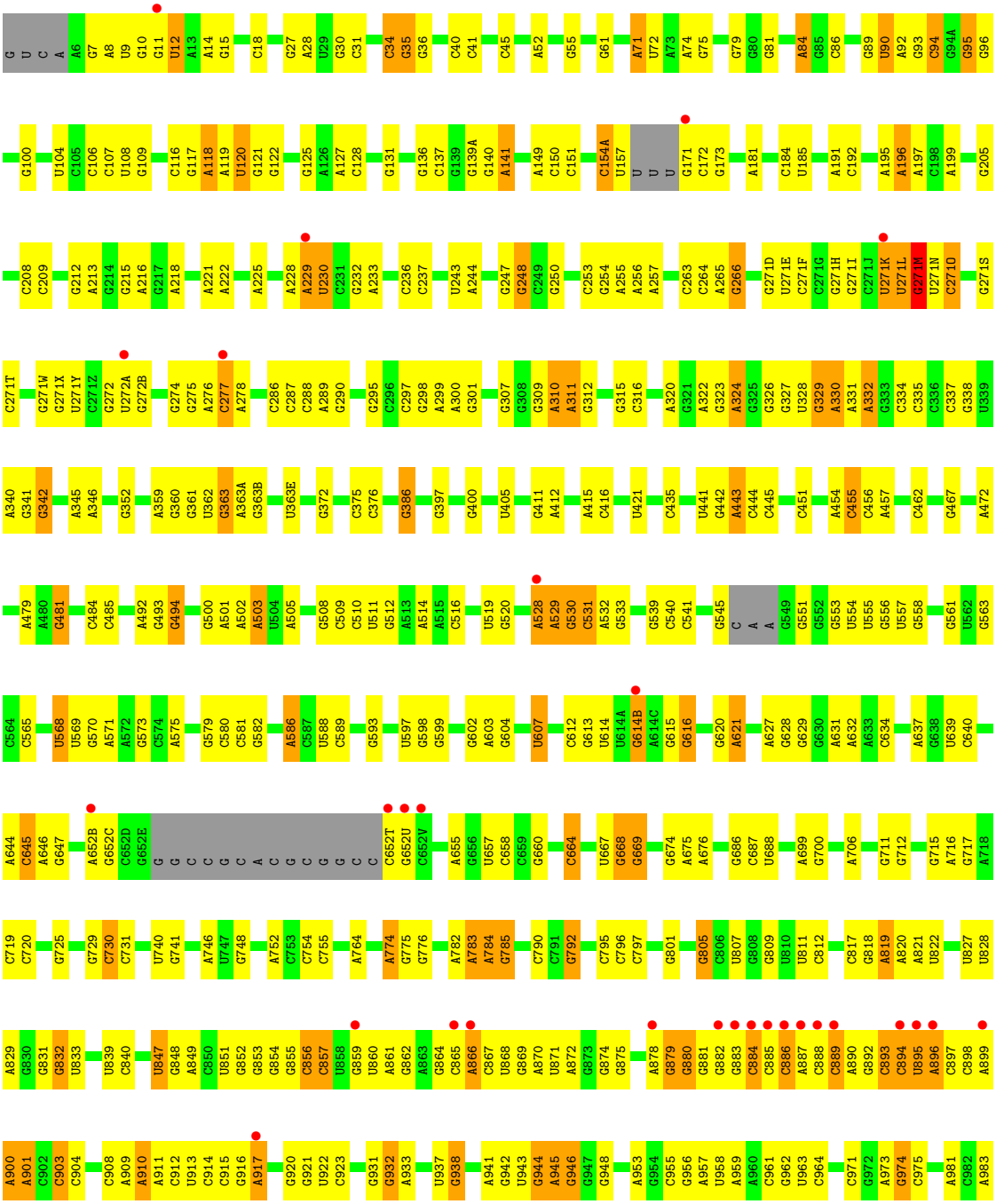


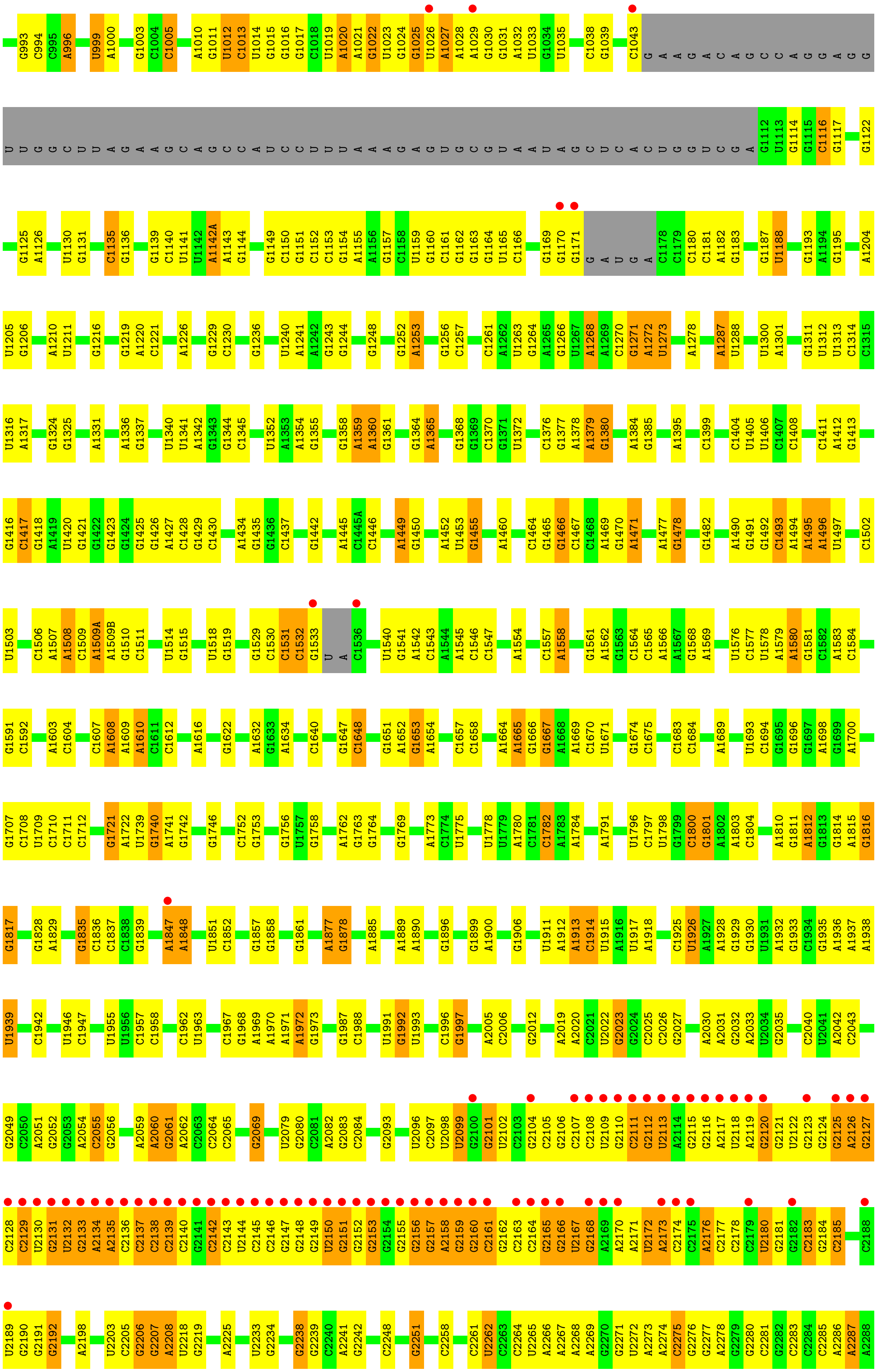

G1107 U1108 C1109 G1110 A1111 G1112 G1115 C1116 A1126 A1127 A1128 A1129 U1130 C1135 G1136 G1137 G1138 G1139 C1140 U1141 U1142 A1142A A1143 G1144 A1155 G1164 U1165 C1166 U1167 G1168 G1169 G1170 G1171 G1173 A1174 U1175 G1176 A1177 C1178 C1179 C1180 G1183 G1184 C1185 G1186 G1187 U1188 G1192 C1201 C1202 G1203 A1204
U1205 G1206 C1207 G1223 A1226 G1227 G1243 G1244 A1253 G1256 G1266 U1267 A1268 G1271 A1272 A1275 A1278 G1279 G1280 C1289 U1292 C1293 U1300 A1301 A1302 G1303 G1319 G1332 U1341 C1345 U1352 A1353 A1354 G1355 G1356 U1357 G1358 A1359 A1360 G1364 A1365
C1370 G1371 U1372 G1377 A1378 A1379 G1380 A1384 G1385 U1391 A1392 A1393 U1394 A1395 U1396 U1405 U1406 C1407 C1408 G1416 C1417 U1420 G1421 G1422 C1428 G1429 C1430 U1431 A1439 G1442 A1445 C1445A C1446 G1450 A1452 U1453 G1455 C1458 G1459 A1460 G1461 G1465 G1466 C1467 G1482
C1493 A1494 A1495 A1496 G1500 C1501 C1502 U1503 C1504 C1505 C1506 A1507 A1508 C1509 A1509A A1509B G1517 U1518 G1519 G1529 C1530 C1531 C1532 G U A C G1537 G1538 G1539 U1540 G1541 A1542 A1545 A1553 A1558 A1569 U1578 A1579 A1580 G1581 C1584 A1586 A1587 C1588 C1589 G1593 G1594 G1595
C1607 A1608 A1609 A1610 A1614 A1641 G1642 G1647 C1648 A1654 A1664 A1665 G1666 A1669 C1670 U1671 G1674 G1678 U1679 U1680 G1681 C1686 G1687 U1688 U1693 G1696 G1697 A1698 G1699 A1700 A1701 G1702 G1703 G1704 G1705 U1706 C1712 U1713 G1721 A1722 U1739 G1740 A1741 C1745A
G1750 C1756 A1762 G1763 G1764 A1773 U1778 U1779 A1780 C1781 C1782 A1783 A1784 A1785 A1786 C1790 A1791 U1796 C1797 U1798 G1799 C1800 G1801 A1802 A1803 A1810 G1811 G1814 A1815 G1816 G1817 A1829 C1830 G1839 C1844 A1847 U1851 C1852 G1860 G1861 G1862 G1863 C1866 A1876 A1877
G1878 C1879 A1889 A1890 G1897 U1898 G1899 A1900 G1906 U1911 A1912 A1913 C1914 A1915 A1916 U1917 A1918 A1919 C1920 A1927 A1928 G1929 G1930 A1937 A1938 U1939 C1942 U1946 C1947 A1952 U1955 C1958 G1959 C1962 U1963 C1967 A1970 A1971 A1972 G1973 A1986 G1987 U1991 G1992
U1993 G1997 G1998 C1999 U2011 G2012 A2013 A2014 A2020 C2021 U2022 G2023 A2030 A2031 G2032 A2033 G2037 G2038 C2039 C2040 U2041 A2042 C2043 A2051 C2055 G2056 A2060 G2061 A2062 C2065 G2069 G2080 U2096 U2099 G2100 G2101 U2102 C2108 U2109 G2110 C2111 G2112 U2113 A2114 G2115 G2116
A2117 U2118 A2119 G2120 G2121 U2122 G2123 G2124 G2125 A2126 G2127 C2128 C2129 U2130 G2131 U2132 G2133 A2134 A2135 C2136 C2137 C2138 C2139 C2140 G2141 C2142 C2143 U2144 C2145 C2146 G2147 G2148 G2149 U2150 G2151 G2152 G2153 G2154 G2155 G2156 G2157 A2158 G2159 G2160 C2161 G2162 C2163 C2164 G2165 G2166 U2167 G2168 A2169 A2170 A2171 U2172 A2173 C2174 C2175
C2178 C2179 U2180 G2181 G2182 C2183 G2184 G2187 C2188 U2189 G2190 G2191 G2192 G2193 C2196 U2197 A2198 U2203 C2205 G2206 G2207 A2208 U2218 G2219 A2225 U2233 G2234 G2238 G2239 U2243 U2244 U2245 G2250 G2251 A2267 A2268 A2269 A2274 G2277 G2280 C2283 C2284 C2285 A2286 A2287 A2288 G2289
G2290 U2291 C2292 C2295 A2305 C2306 G2307 G2308 U2312 C2313 C2314 G2315 C2316 G2319 A2320 G2321 G2325 C2326 A2327 A2328 G2329 G2330 G2331 G2334 A2335 A2336 G2341 C2342 C2343 U2344 C2347 U2348 A2352 C2356 U2357 A2361 G2362 G2365 C2374 A2377 A2378 G2379 G2383 G2384 C2385
C2386 U2387 G2396 G2400 U2406 G2407 C2417 A2422 U2423 C2424 A2425 A2426 C2427 G2428 G2429 A2430 U2431 A2435 G2436 A2439 C2440 C2441 G2447 A2448 C2461 U2462 C2467 G2468 C2474 C2475 A2476 C2477 A2478 C2483 C2498 G2502 A2503 U2504 G2505 C2512 G2513 A2518 G2529
A2533 A2534 G2544 G2550 C2551 U2552 G2553 U2554 A2564 A2565 A2566 G2567 C2568 A2572 C2573 G2576 A2577 G2578 C2591 G2592 A2600 C2601 A2602 U2605 U2609 C2610 U2611 C2612 U2615 C2616 C2617 G2618 C2619 C2620 A2629 G2630 G2631 A2632 G2641 C2646 U2647 C2648 U2649 U2650 A2654
A2657 A2662 G2663 G2674 C2683 U2689 C2690 C2691 C2692 A2693 G2694 C2703 C2704 A2705 A2712A A2713 G2714 G2722 C2723 U2726 G2727 G2732 A2733 A2741 G2747 A2748 A2749 A2750 G2751 C2752 A2753 U2754 C2755 A2764 A2765 G2766 C2771 C2772 C2773 C2774 A2775 A2778 U2779 G2780 A2781



• Molecule 1: 23S Ribosomal RNA

Chain 2A:

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U U G G C U U A G A A G C A G C C A U C C U U U A A A G A G U G C G U A A U A G C U C A C U G G U C G A G1112 U1113 G1114 G1115 C1116 G1117 G1122
G1125 A1126 U1130 G1131 C1135 G1136 G1139 C1140 U1141 U1142 A1142A A1143 G1144 G1149 C1150 G1151 C1152 C1153 G1154 A1155 A1156 G1157 C1158 U1159 G1160 C1161 G1162 C1163 G1164 U1165 C1166 G1169 G1170 G1171 G A U G A C1178 C1179 C1180 C1181 A1182 G1183 G1187 U1188 G1193 A1194 G1195 A1204
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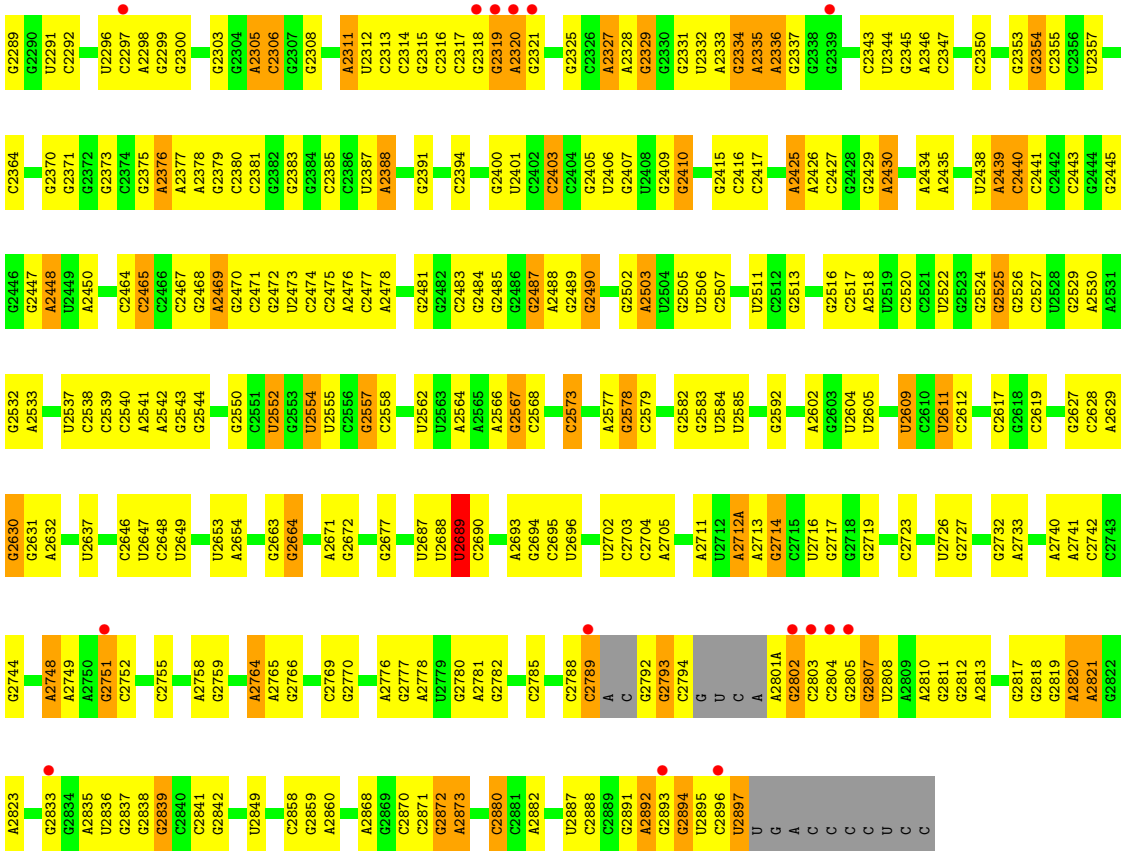
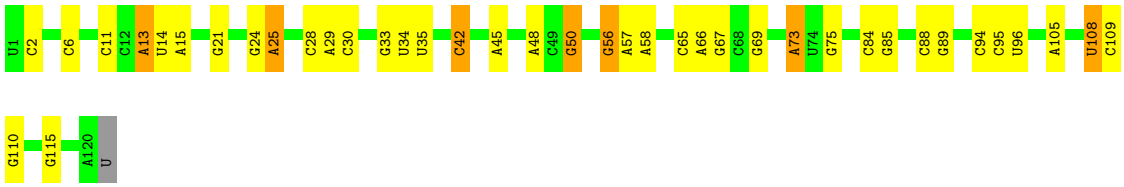


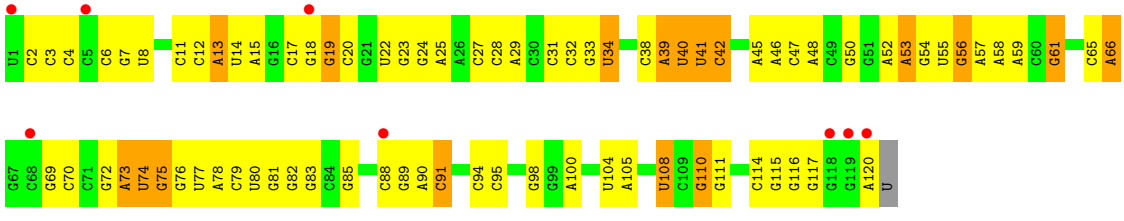
• Molecule 2: 5S Ribosomal RNA

Chain 1B:



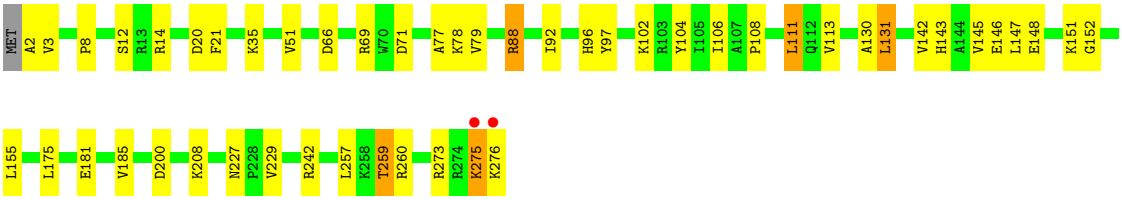
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



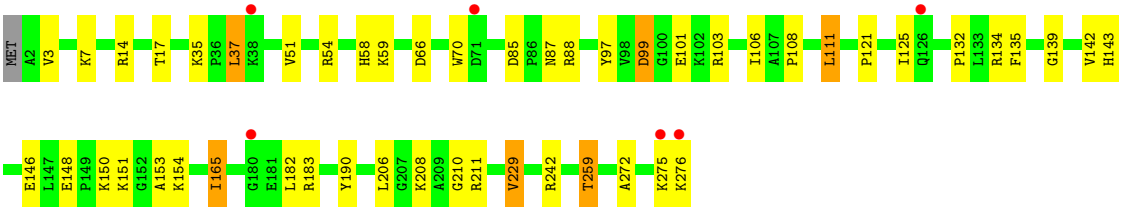
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



• Molecule 3: 50S ribosomal protein L2

Chain 2D:

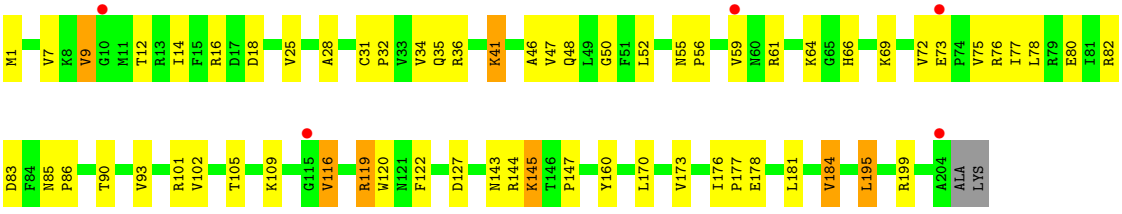


• Molecule 4: 50S ribosomal protein L3

Chain 1E:

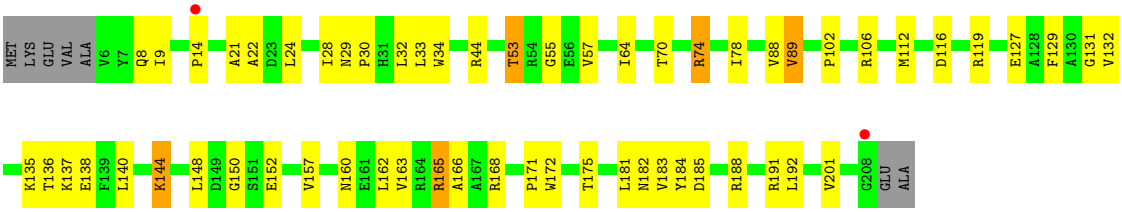
• Molecule 4: 50S ribosomal protein L3

Chain 2E:



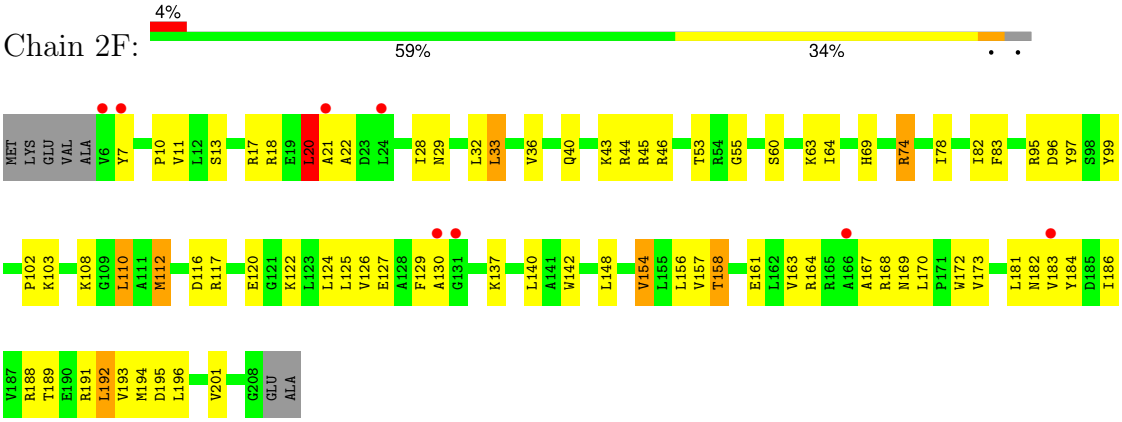
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



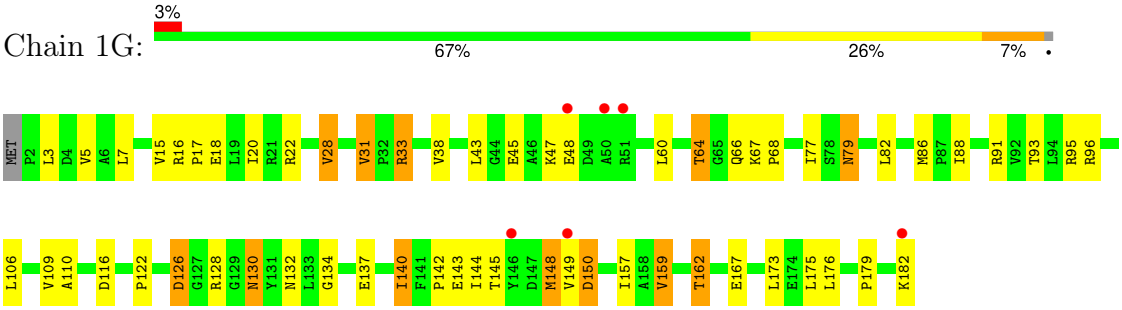
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



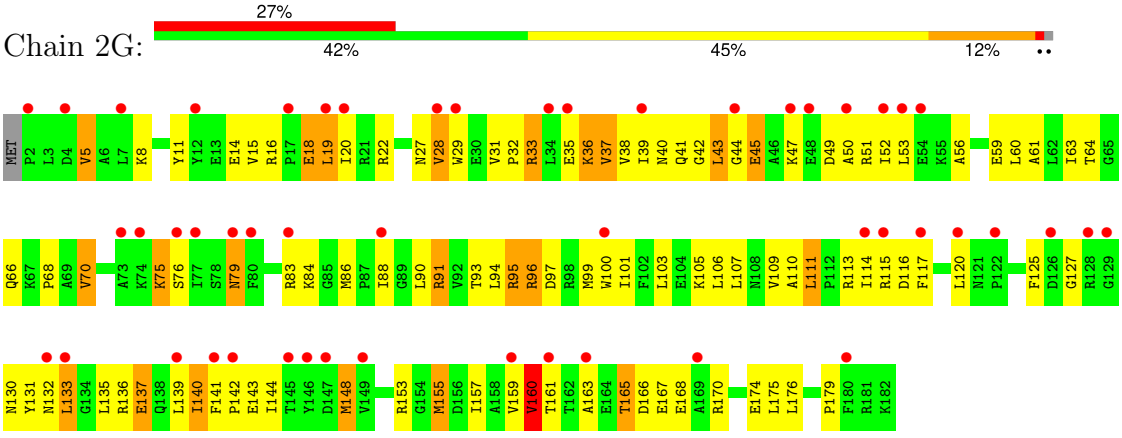
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



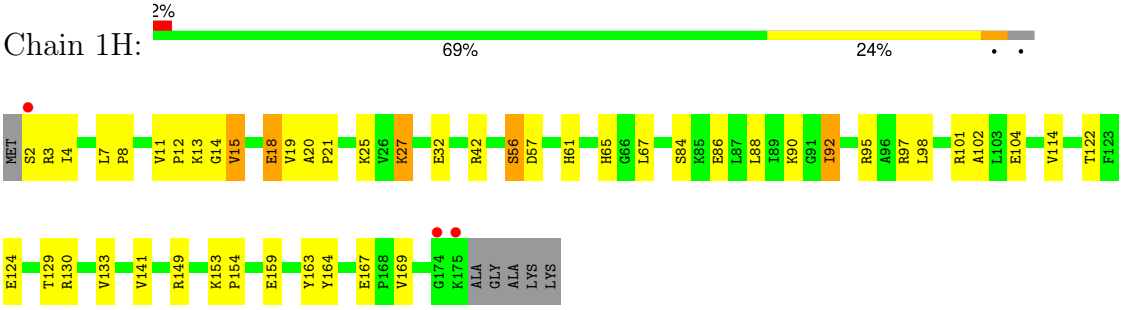
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



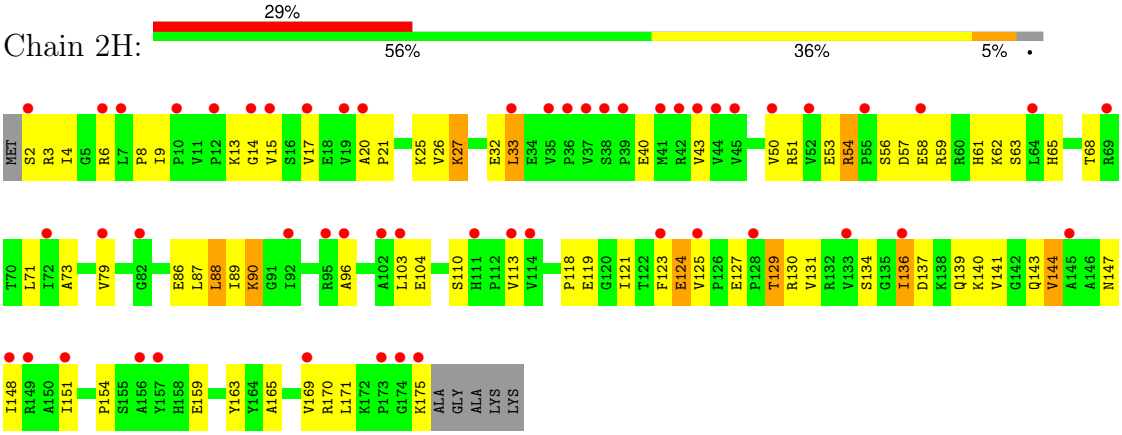
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



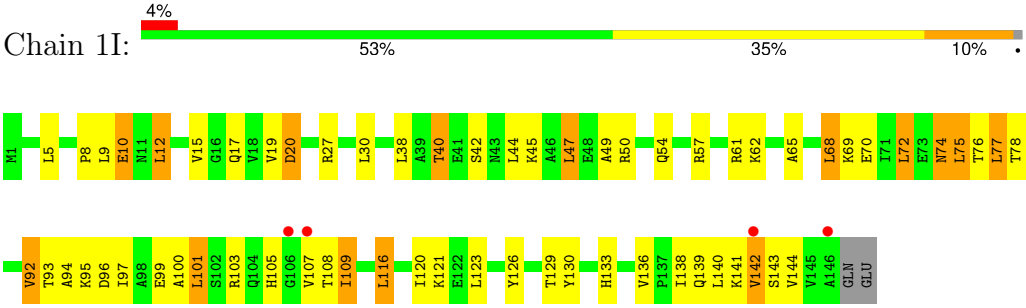
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



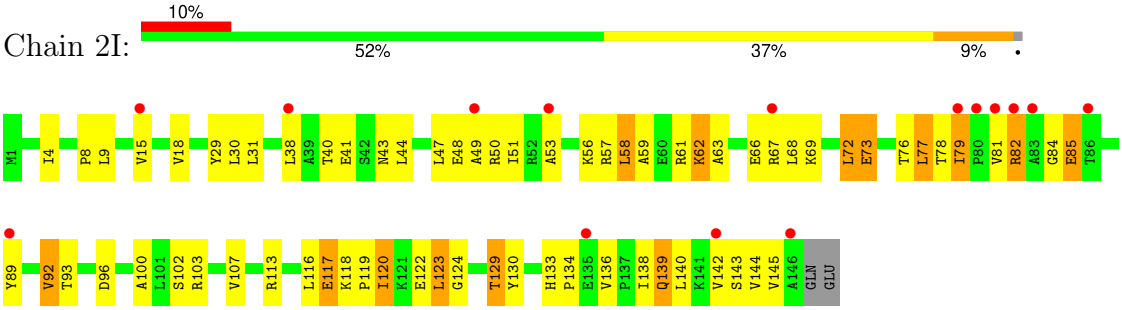
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



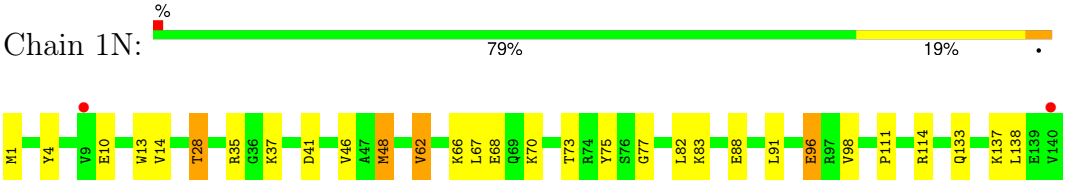
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



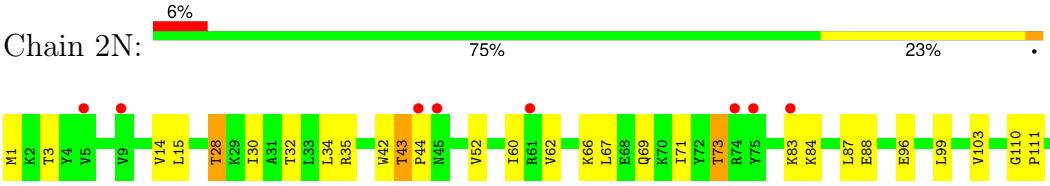
• Molecule 9: 50S ribosomal protein L13

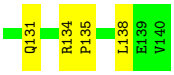
Chain 1N:



• Molecule 9: 50S ribosomal protein L13

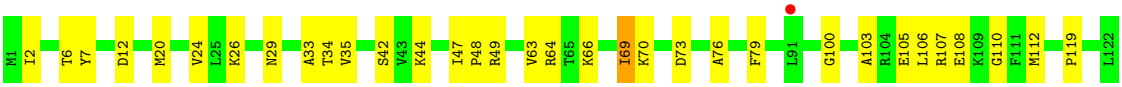
Chain 2N:





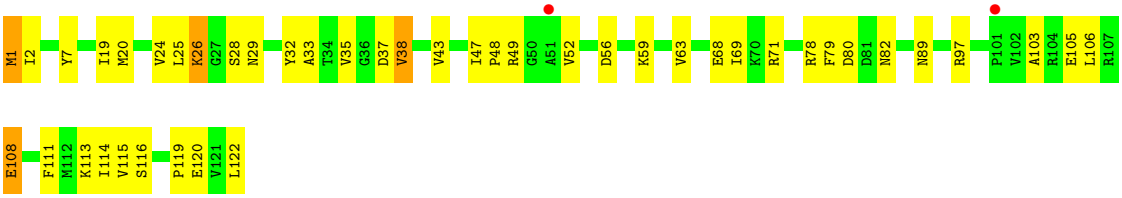
• Molecule 10: 50S ribosomal protein L14

Chain 1O:



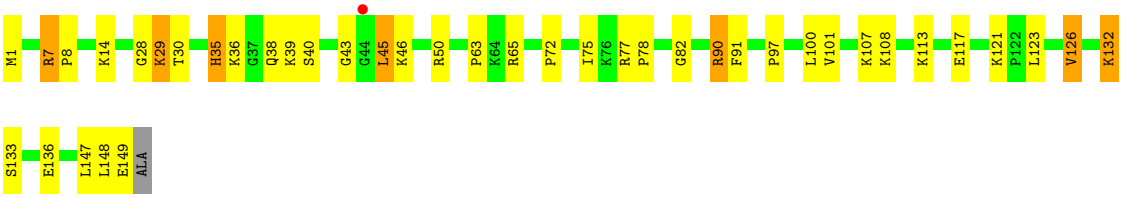
• Molecule 10: 50S ribosomal protein L14

Chain 2O:



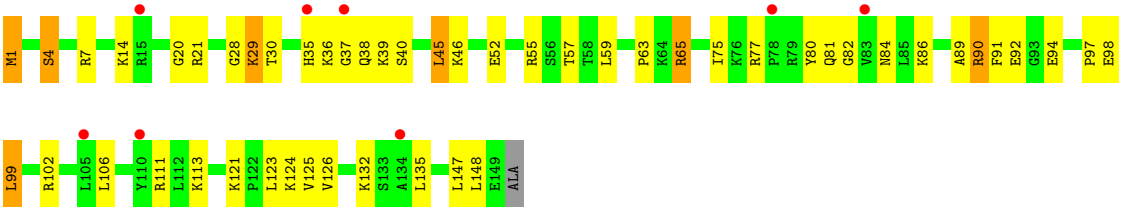
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



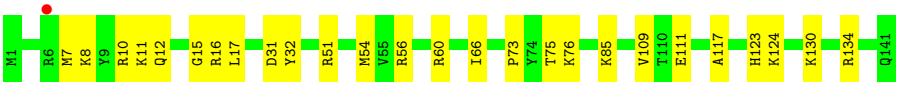
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



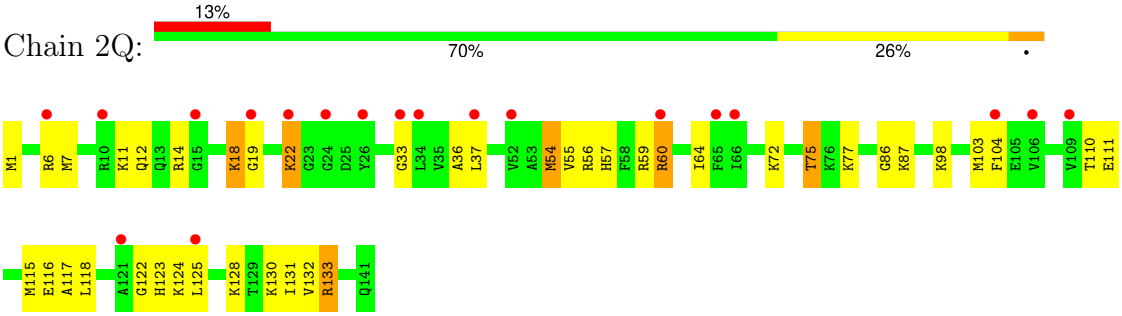
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



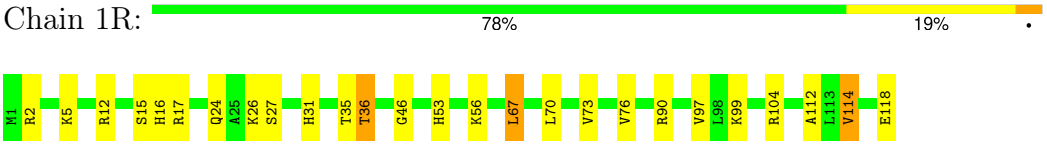
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



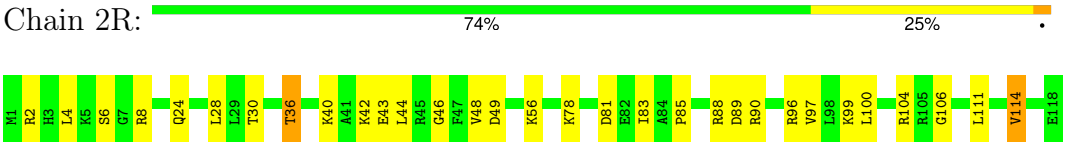
• Molecule 13: 50S ribosomal protein L17

Chain 1R:



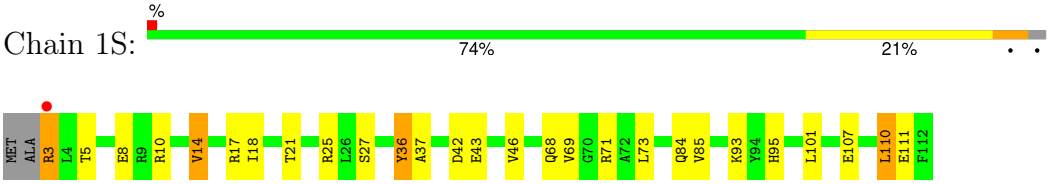
• Molecule 13: 50S ribosomal protein L17

Chain 2R:



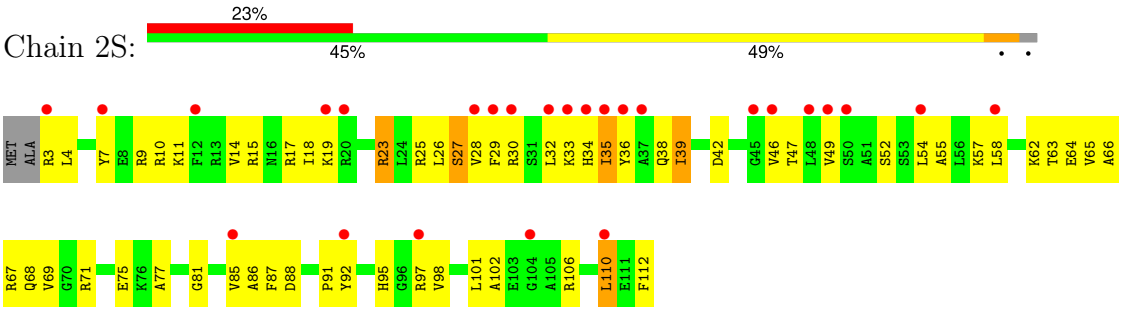
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



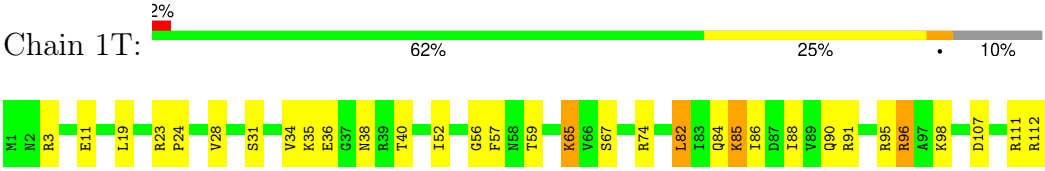
• Molecule 14: 50S ribosomal protein L18

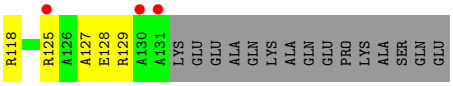
Chain 2S:



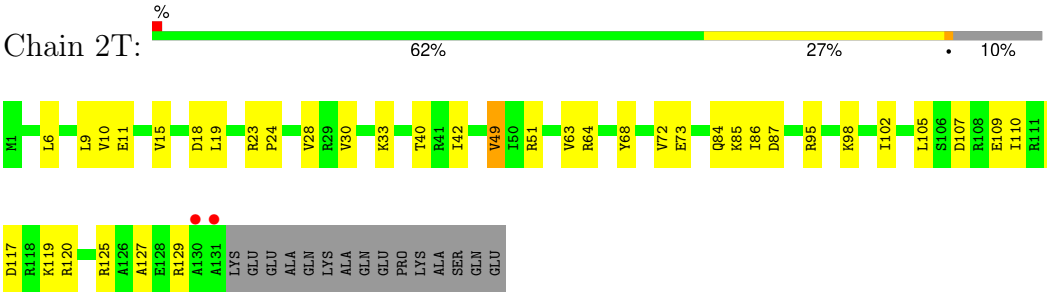
• Molecule 15: 50S ribosomal protein L19

Chain 1T:

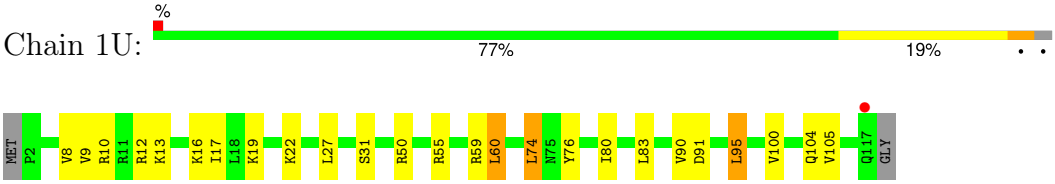




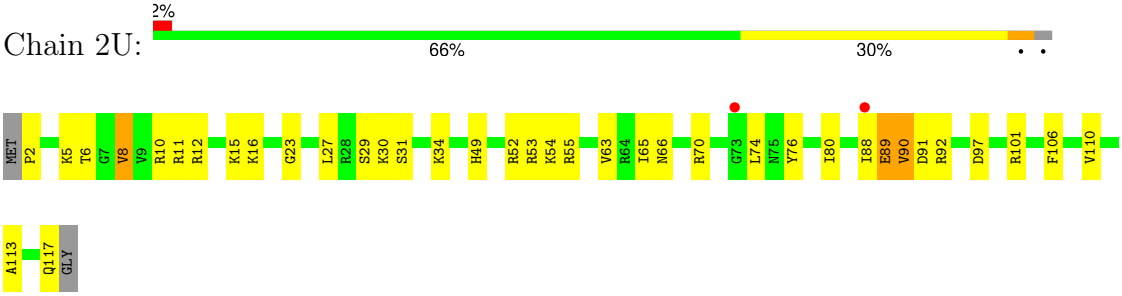
• Molecule 15: 50S ribosomal protein L19



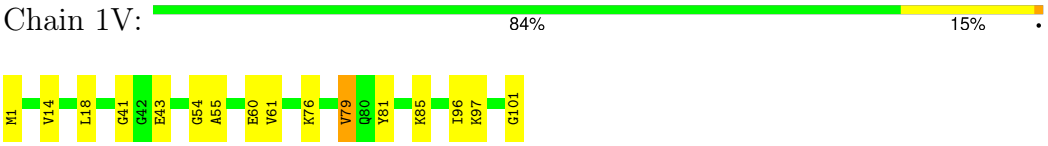
• Molecule 16: 50S ribosomal protein L20



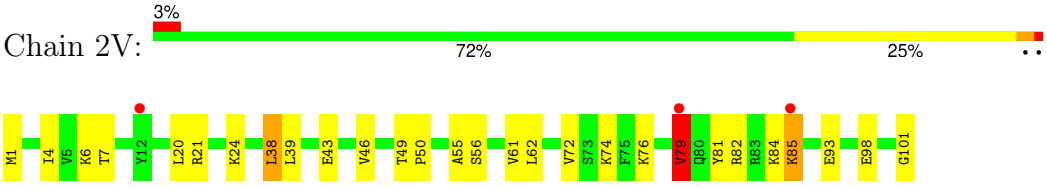
• Molecule 16: 50S ribosomal protein L20



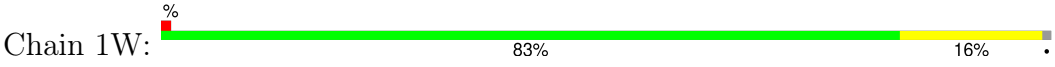
• Molecule 17: 50S ribosomal protein L21

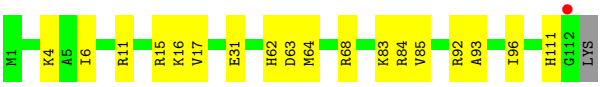


• Molecule 17: 50S ribosomal protein L21



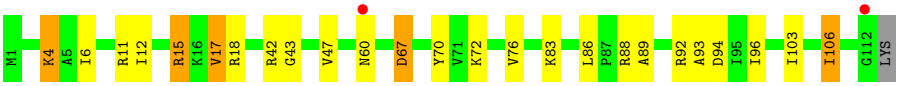
• Molecule 18: 50S ribosomal protein L22





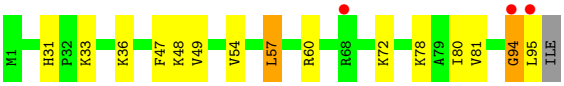
• Molecule 18: 50S ribosomal protein L22

Chain 2W:



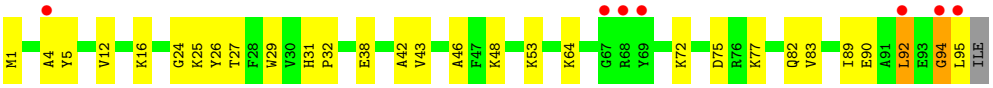
• Molecule 19: 50S ribosomal protein L23

Chain 1X:



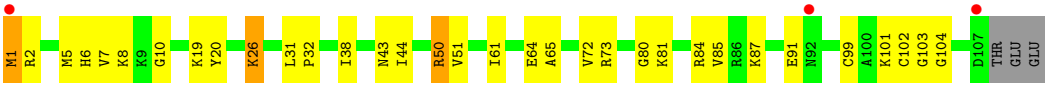
• Molecule 19: 50S ribosomal protein L23

Chain 2X:



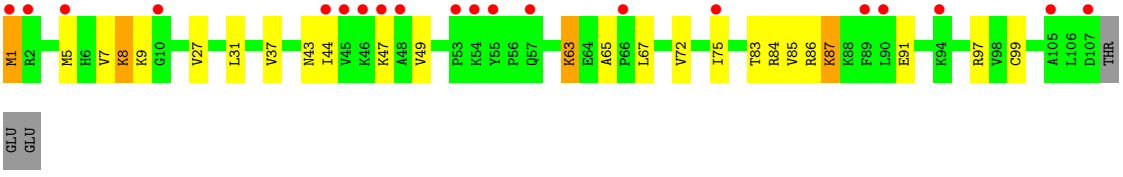
• Molecule 20: 50S ribosomal protein L24

Chain 1Y:



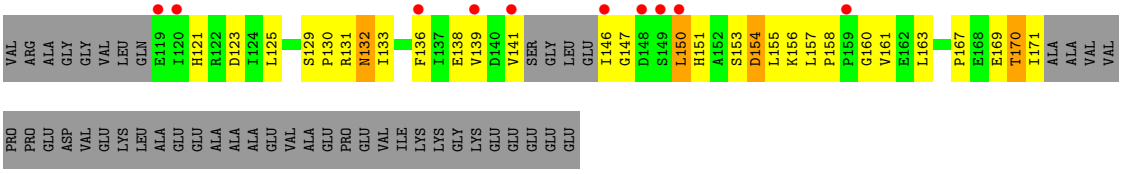
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



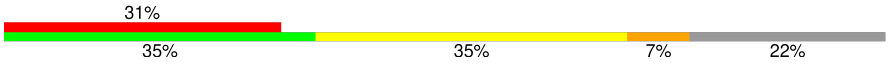
• Molecule 21: 50S ribosomal protein L25

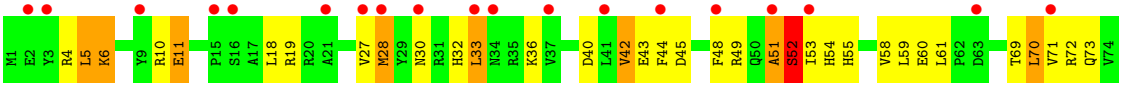
Chain 1Z:

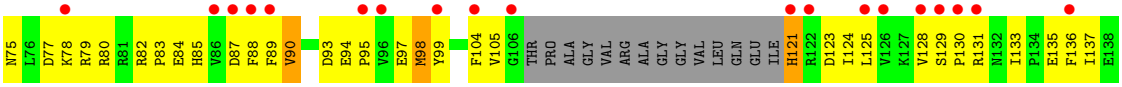


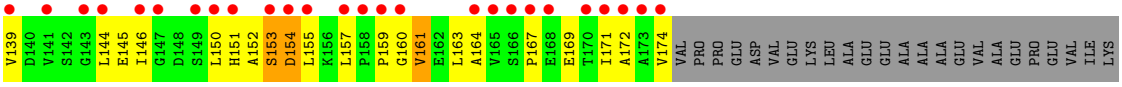
• Molecule 21: 50S ribosomal protein L25

Chain 2Z:



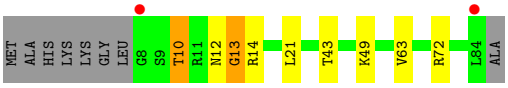






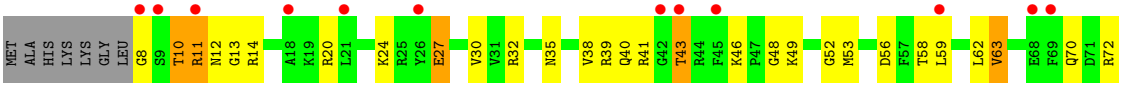
• Molecule 22: 50S ribosomal protein L27

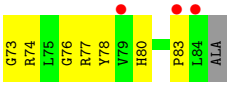
Chain 10:



• Molecule 22: 50S ribosomal protein L27

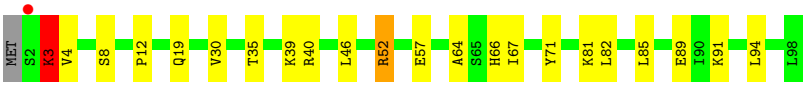
Chain 20:





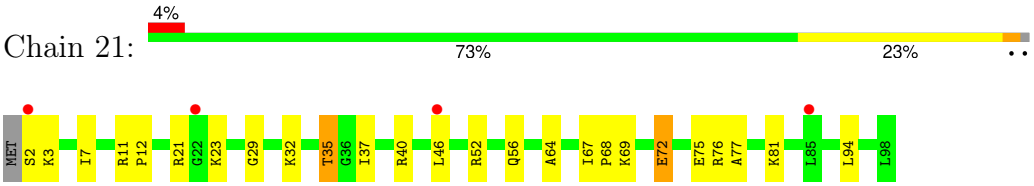
• Molecule 23: 50S ribosomal protein L28

Chain 11:



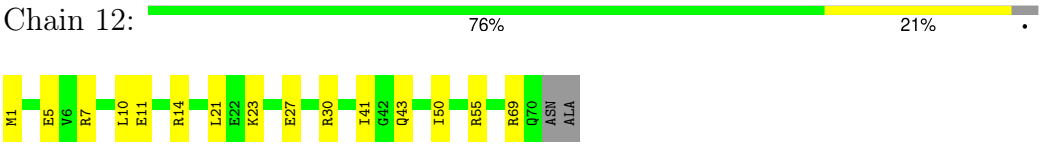
• Molecule 23: 50S ribosomal protein L28

Chain 21:



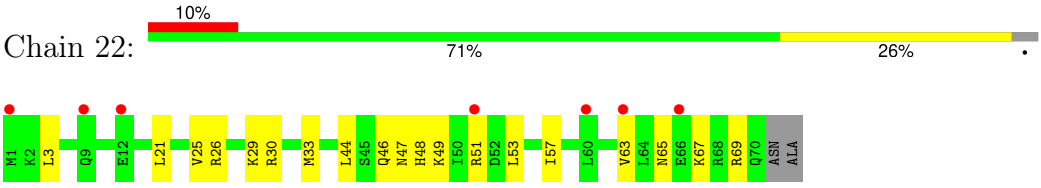
• Molecule 24: 50S ribosomal protein L29

Chain 12:



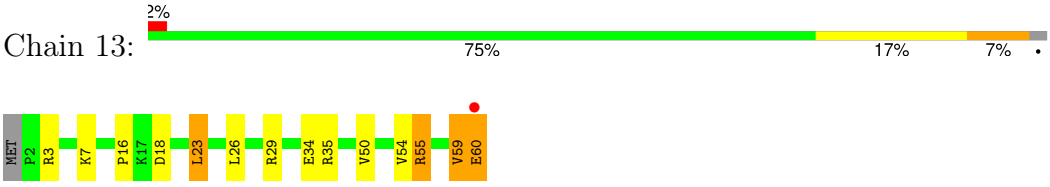
• Molecule 24: 50S ribosomal protein L29

Chain 22:



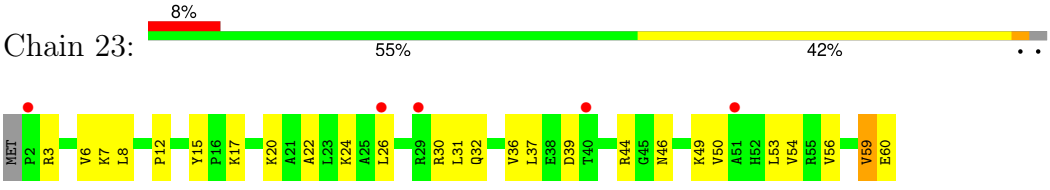
• Molecule 25: 50S ribosomal protein L30

Chain 13:



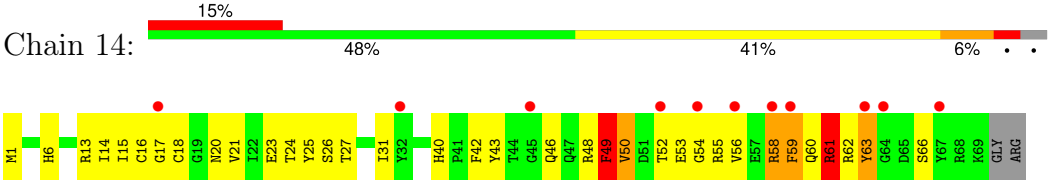
• Molecule 25: 50S ribosomal protein L30

Chain 23:



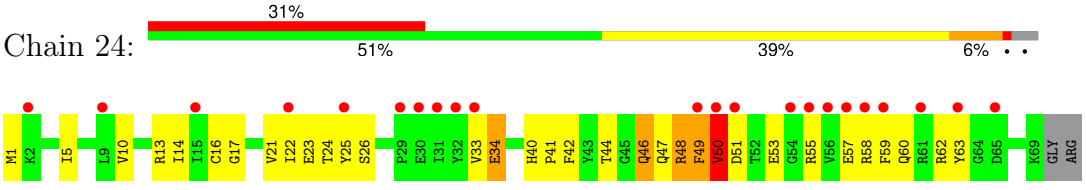
• Molecule 26: 50S ribosomal protein L31

Chain 14:



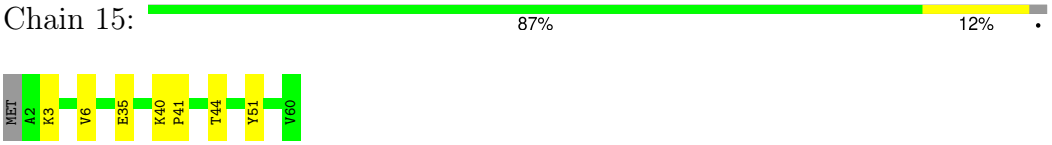
• Molecule 26: 50S ribosomal protein L31

Chain 24:



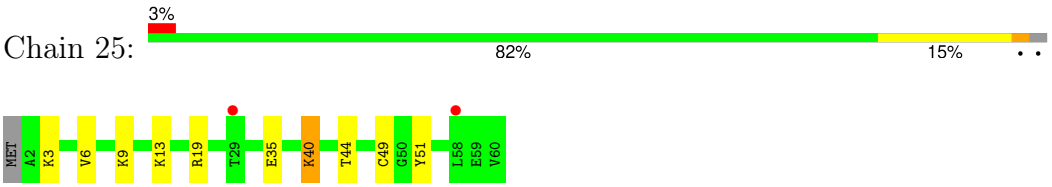
• Molecule 27: 50S ribosomal protein L32

Chain 15:



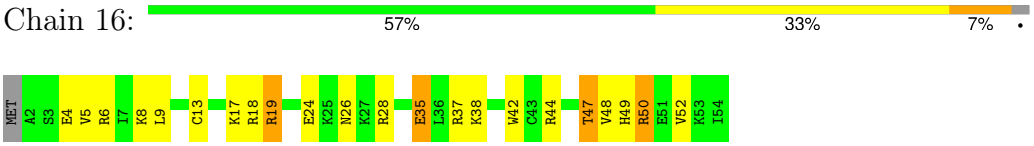
• Molecule 27: 50S ribosomal protein L32

Chain 25:



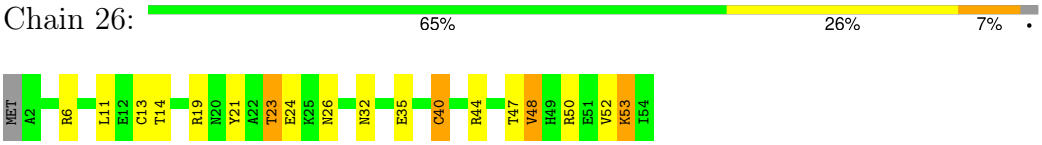
• Molecule 28: 50S ribosomal protein L33

Chain 16:



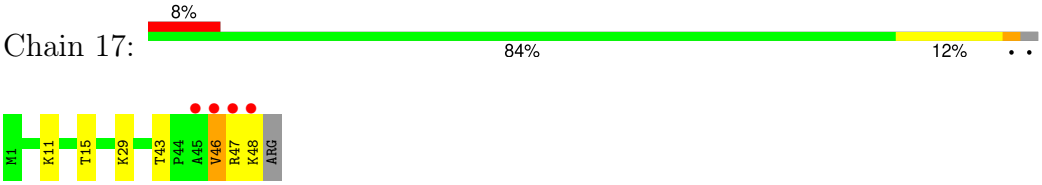
• Molecule 28: 50S ribosomal protein L33

Chain 26:



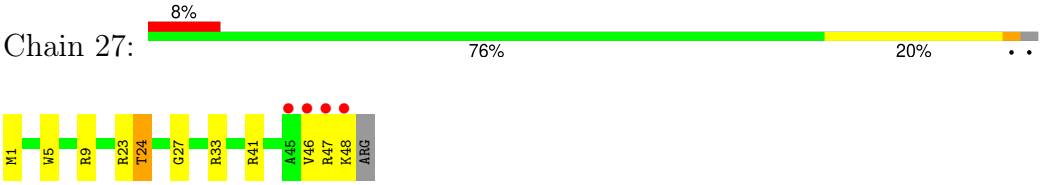
• Molecule 29: 50S ribosomal protein L34

Chain 17:



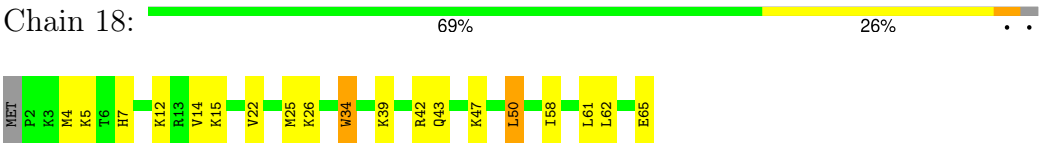
• Molecule 29: 50S ribosomal protein L34

Chain 27:



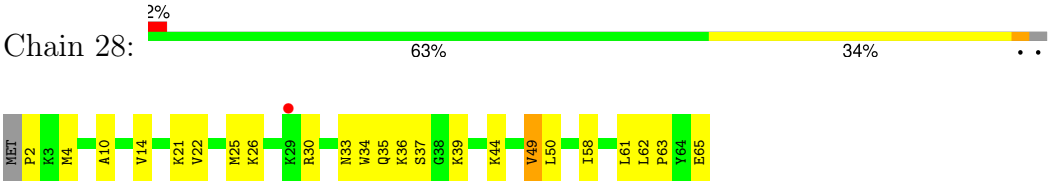
• Molecule 30: 50S ribosomal protein L35

Chain 18:



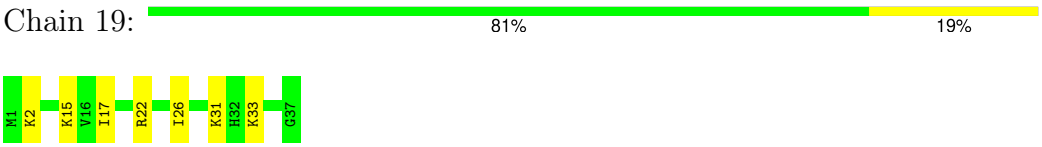
• Molecule 30: 50S ribosomal protein L35

Chain 28:



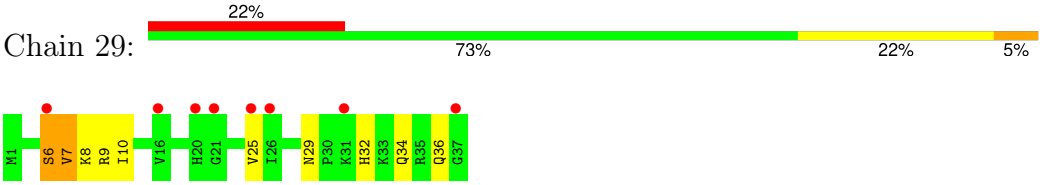
• Molecule 31: 50S ribosomal protein L36

Chain 19:



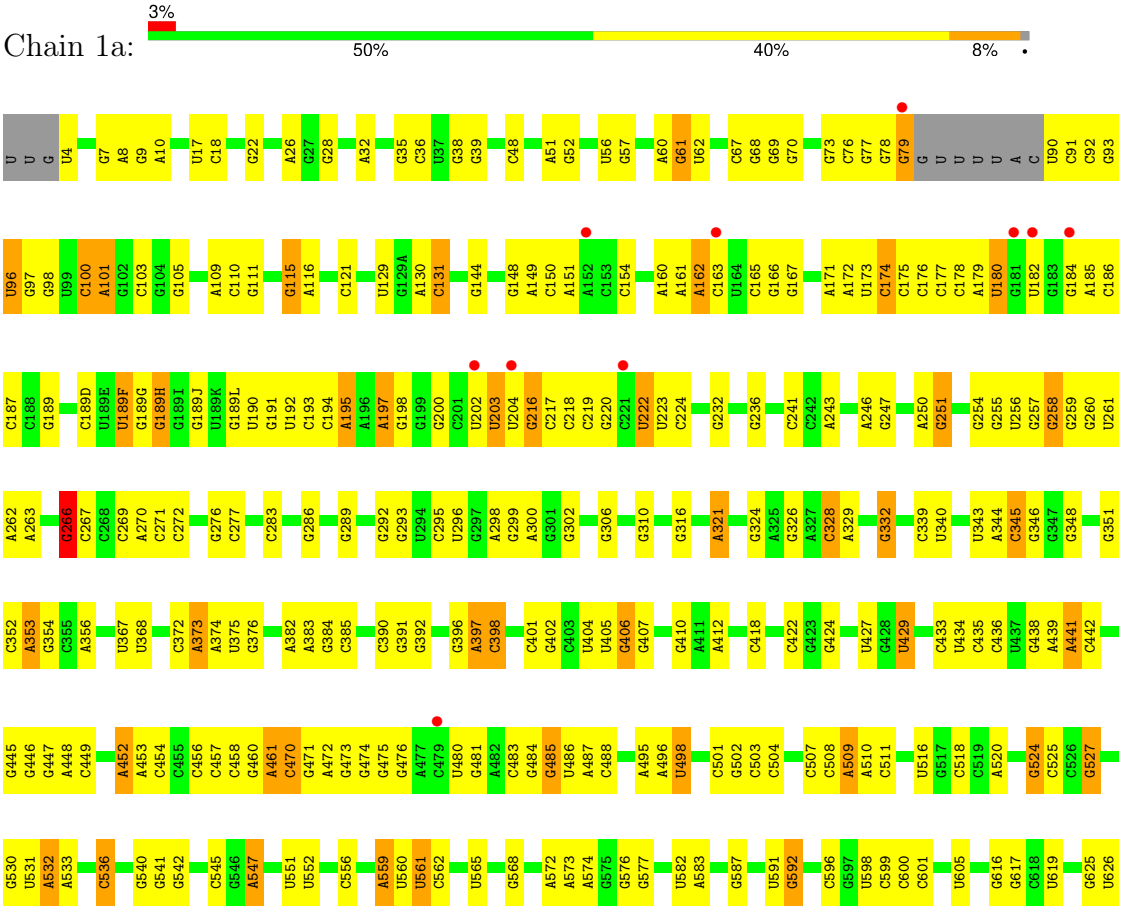
• Molecule 31: 50S ribosomal protein L36

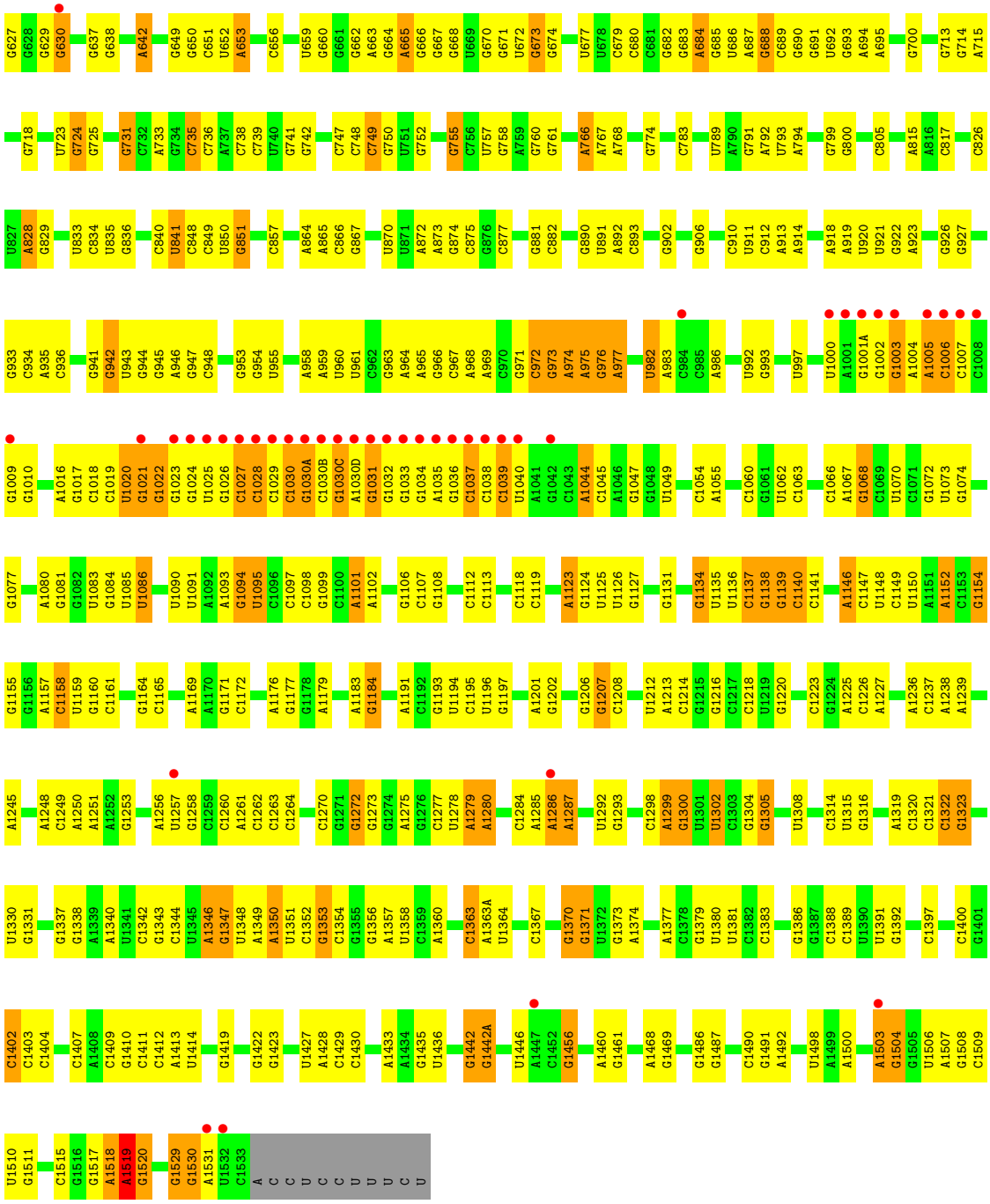
Chain 29:



• Molecule 32: 16S Ribosomal RNA

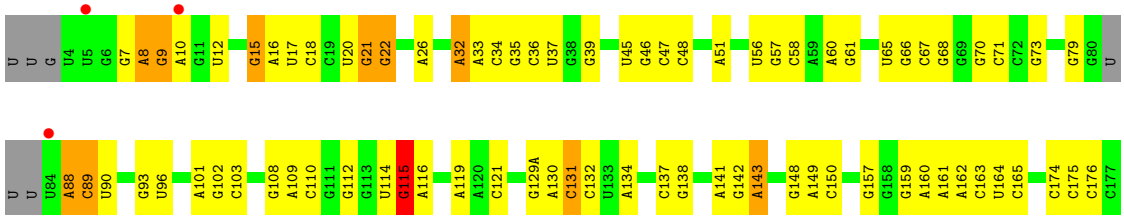
Chain 1a:

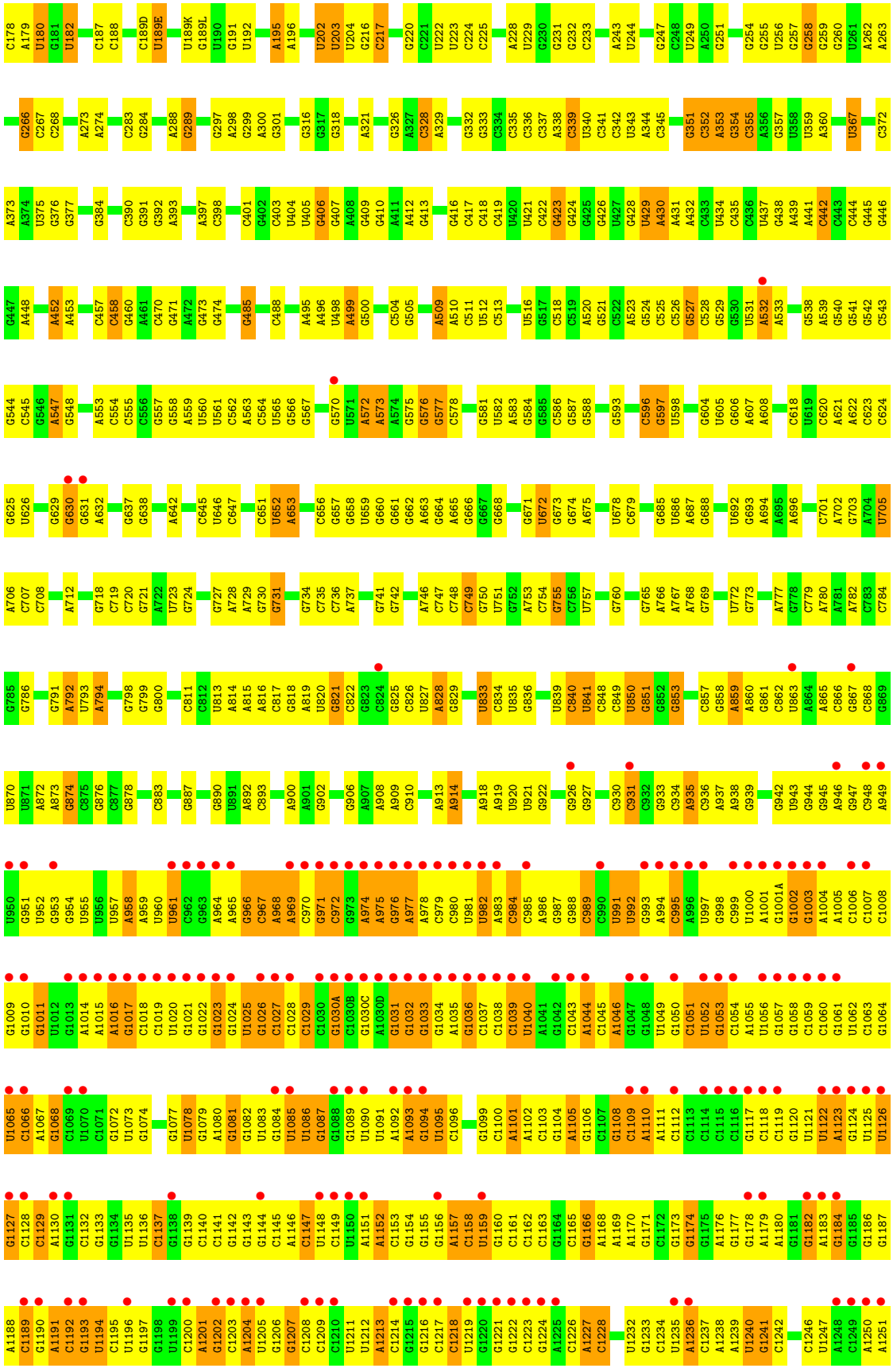


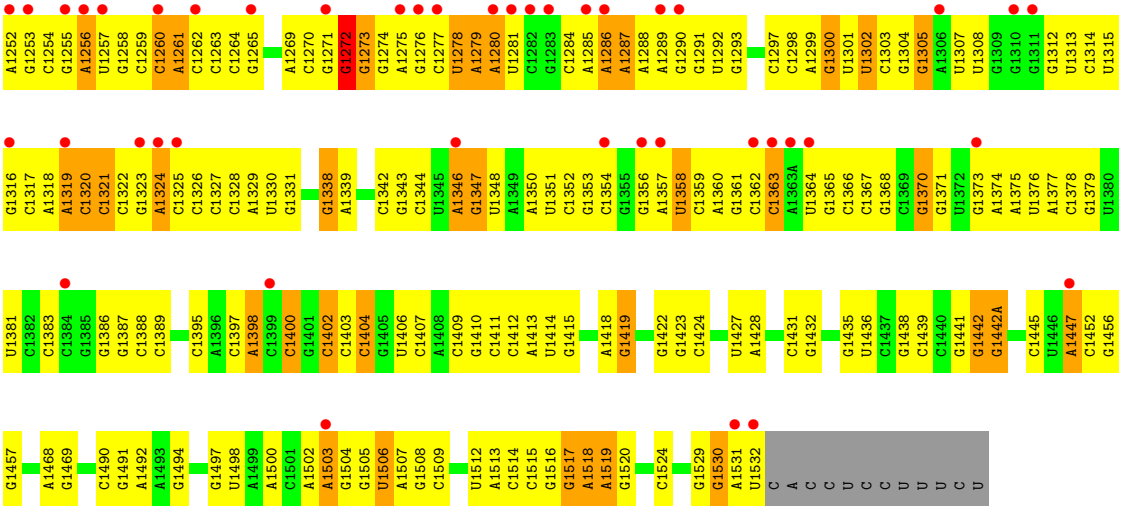


• Molecule 32: 16S Ribosomal RNA

Chain 2a:

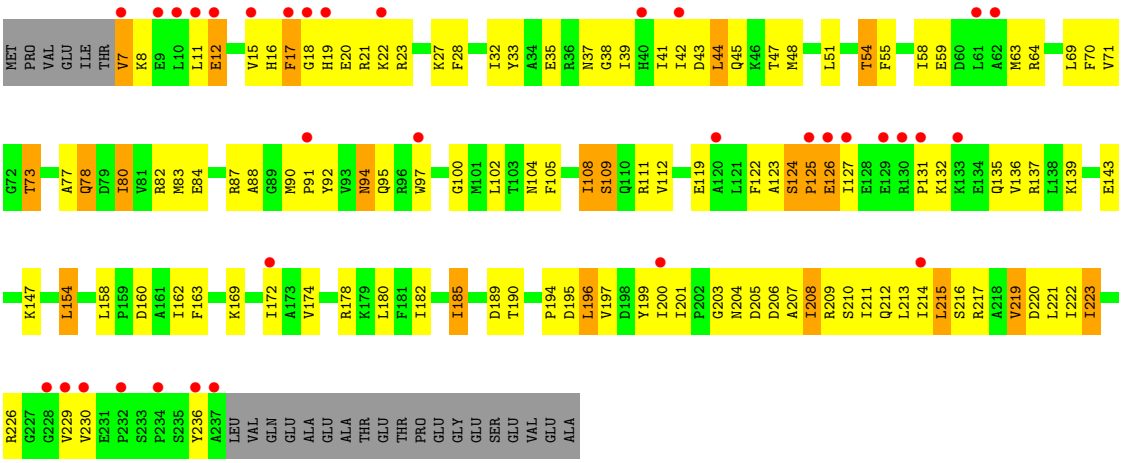






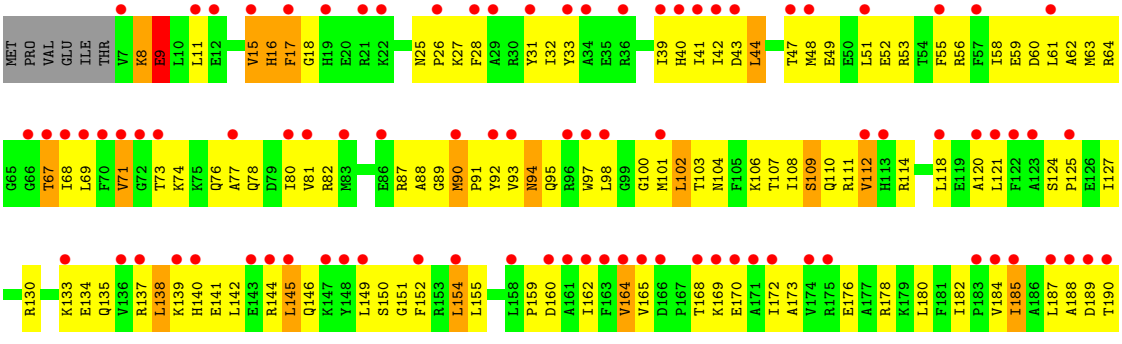
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



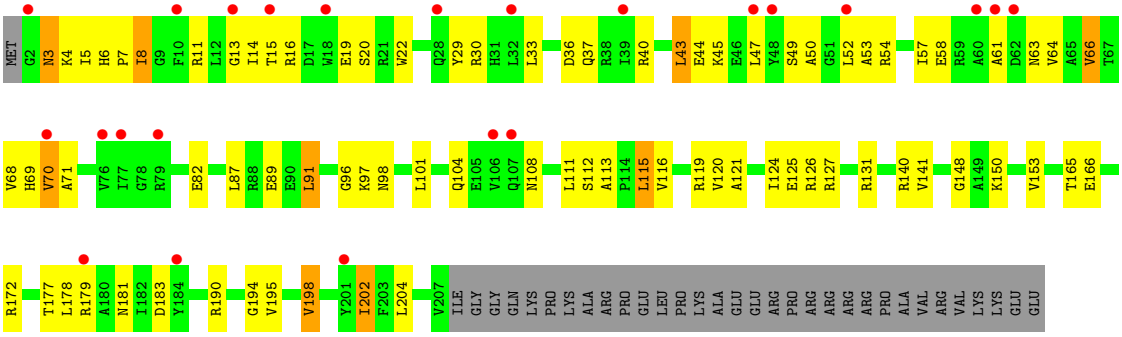
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



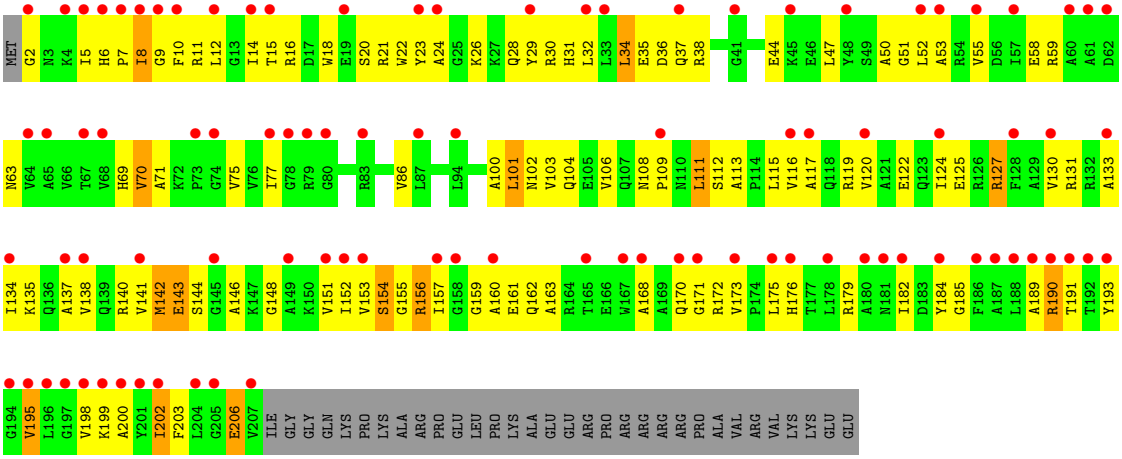
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



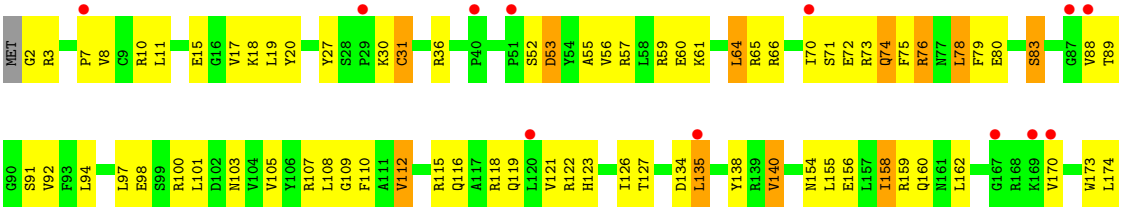
• Molecule 34: 30S ribosomal protein S3

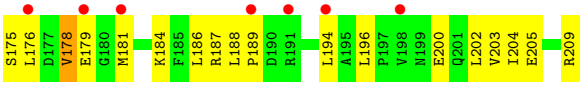
Chain 2c:



• Molecule 35: 30S ribosomal protein S4

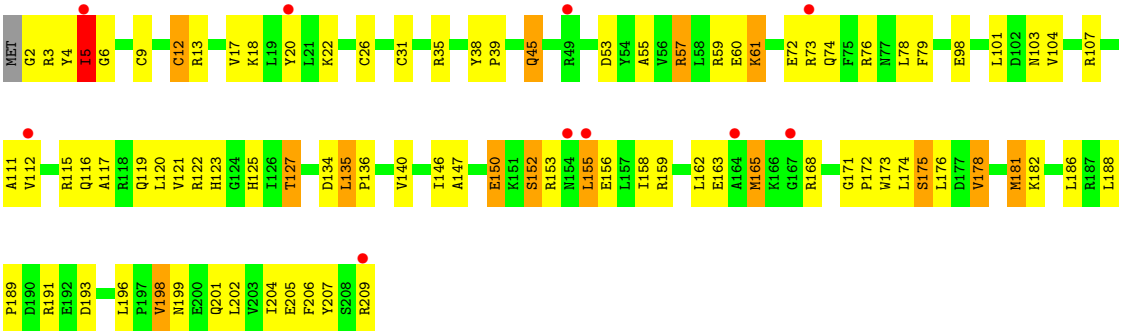
Chain 1d:





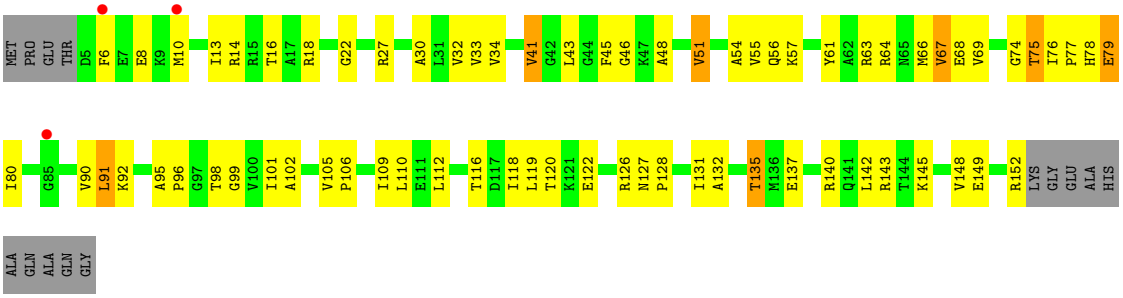
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



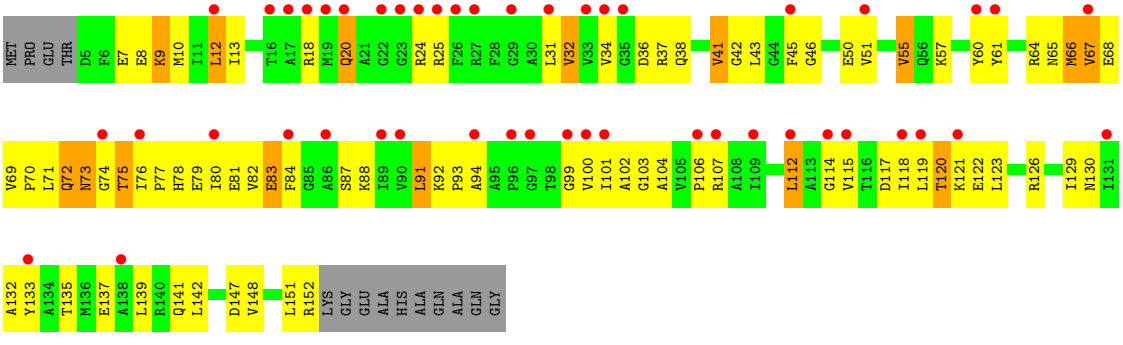
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



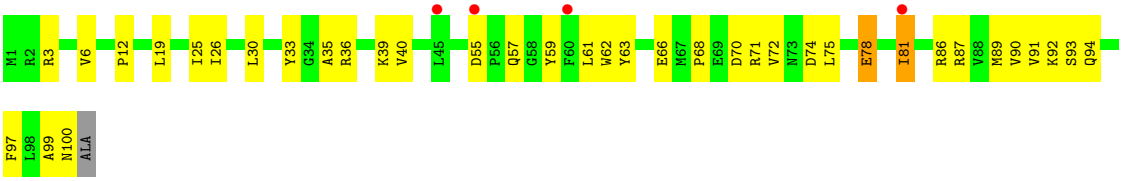
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



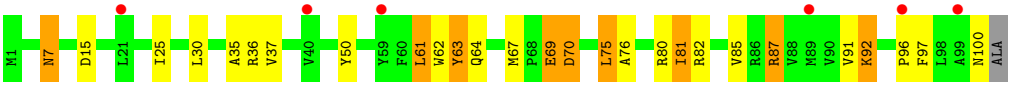
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



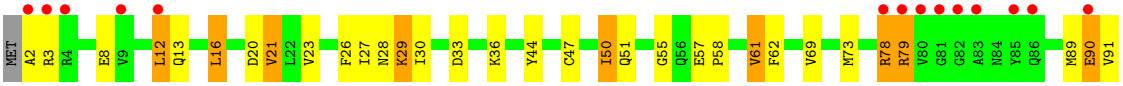
• Molecule 37: 30S ribosomal protein S6

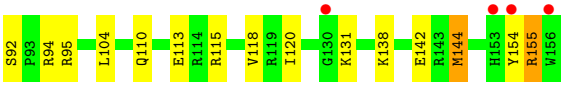
Chain 2f:



• Molecule 38: 30S ribosomal protein S7

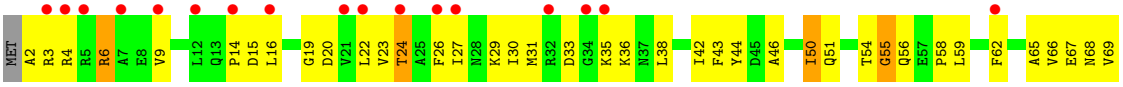
Chain 1g:

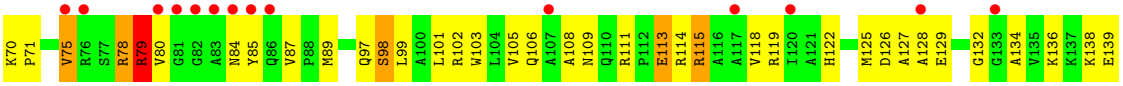


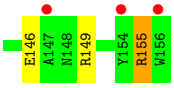


• Molecule 38: 30S ribosomal protein S7

Chain 2g:

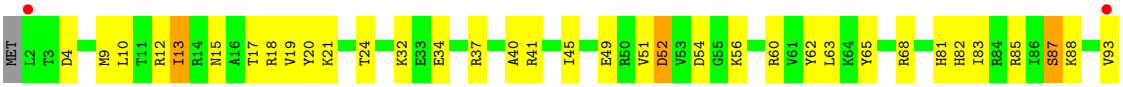






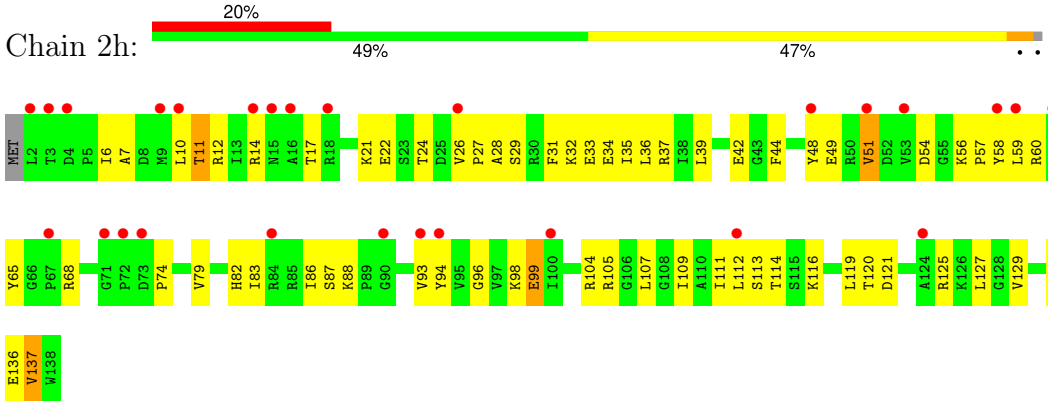
• Molecule 39: 30S ribosomal protein S8

Chain 1h:



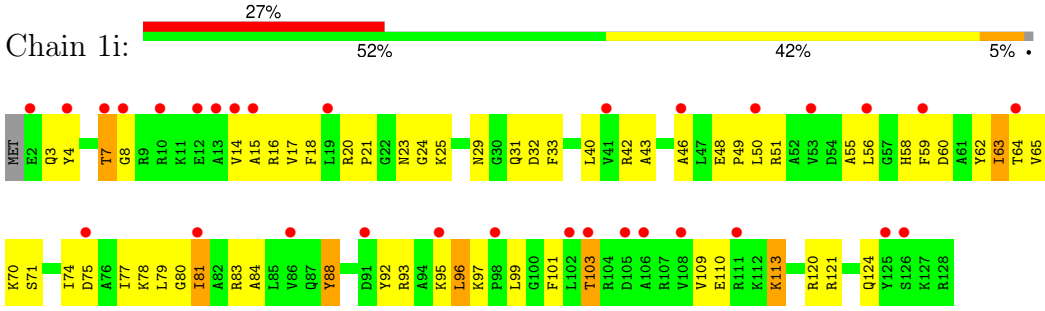
• Molecule 39: 30S ribosomal protein S8

Chain 2h:



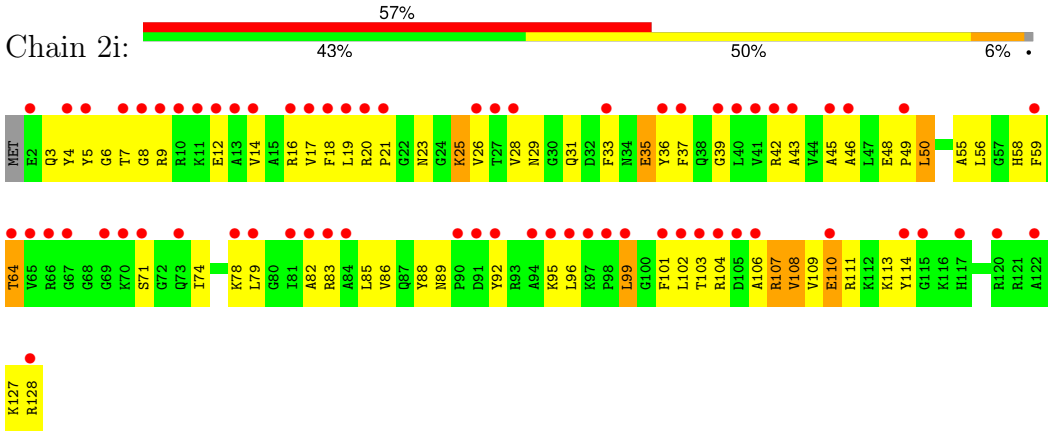
• Molecule 40: 30S ribosomal protein S9

Chain 1i:



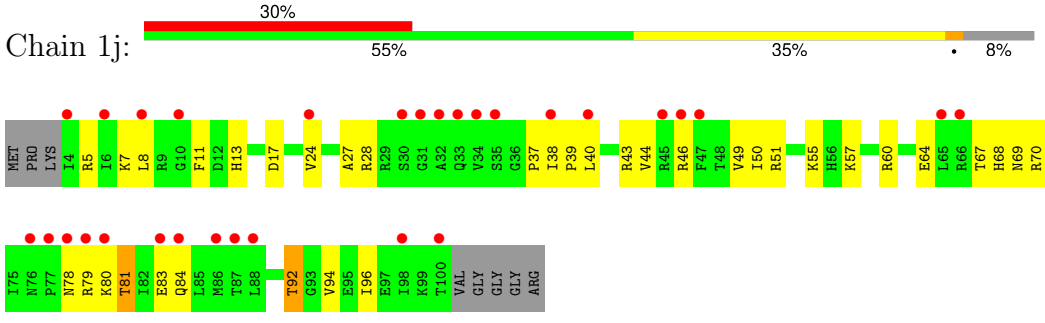
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



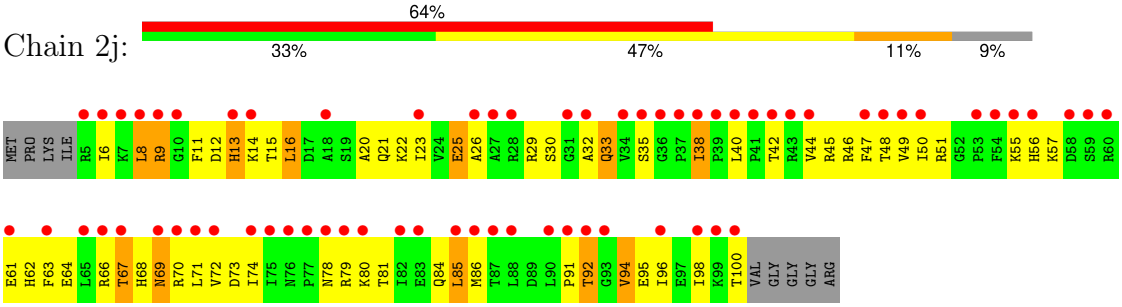
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



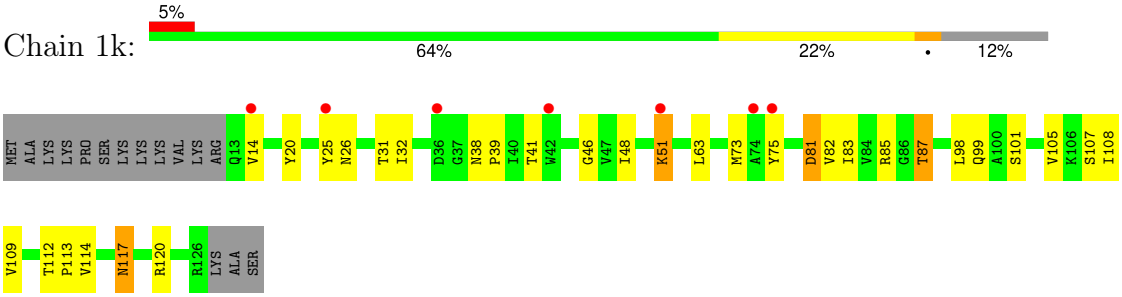
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



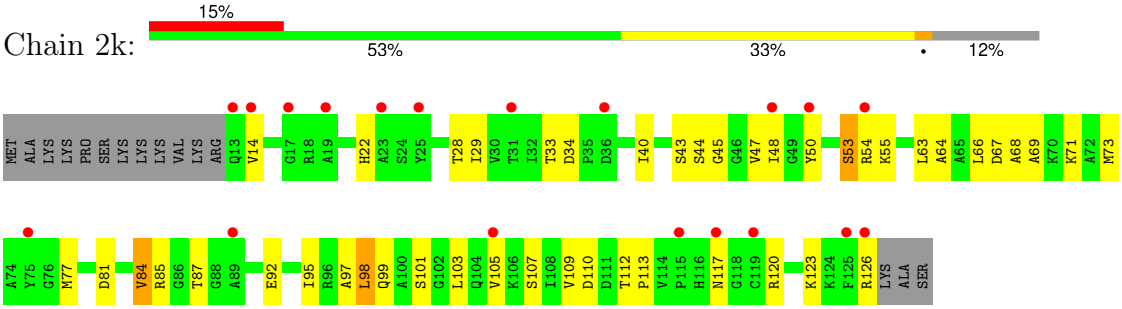
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



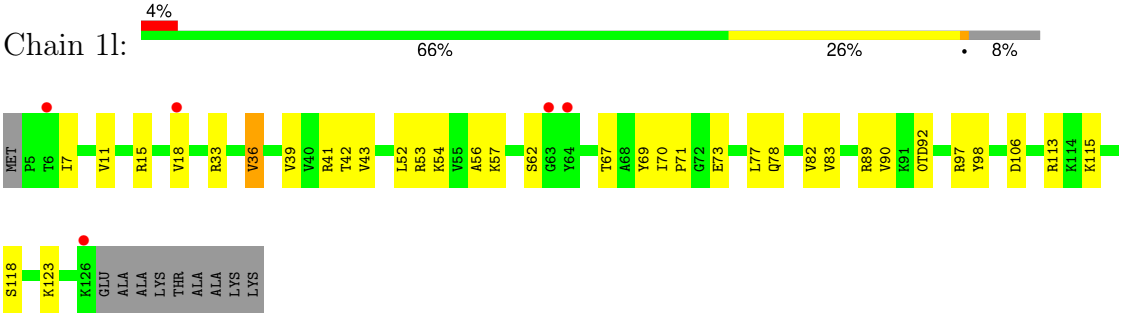
• Molecule 42: 30S ribosomal protein S11

Chain 2k:



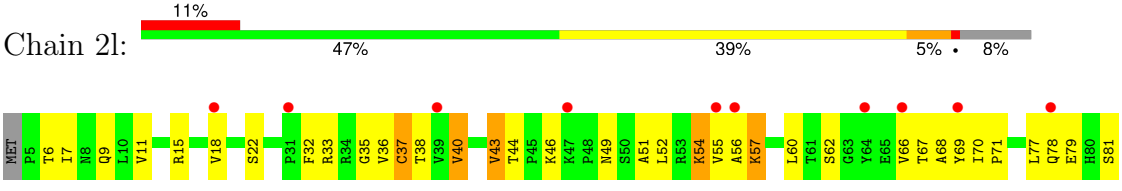
• Molecule 43: 30S ribosomal protein S12

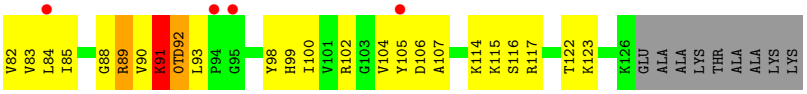
Chain 1l:



• Molecule 43: 30S ribosomal protein S12

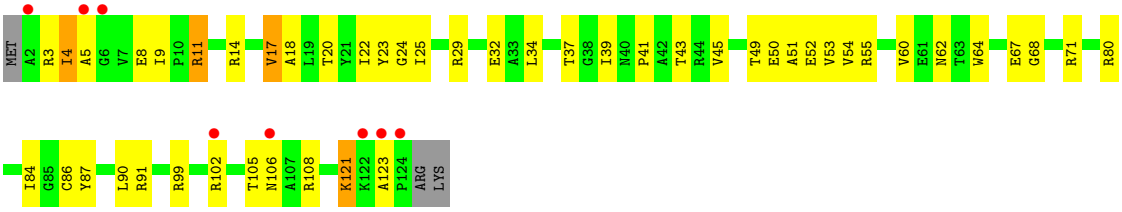
Chain 2l:





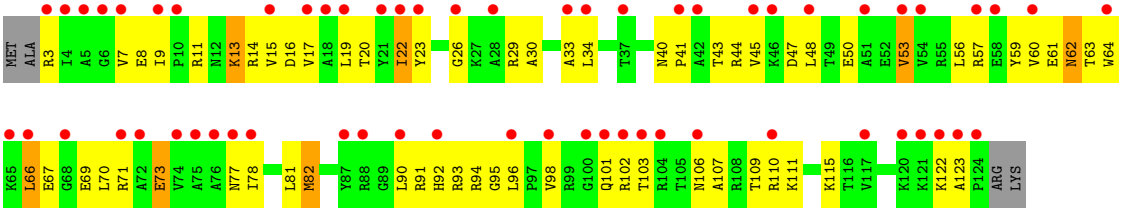
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



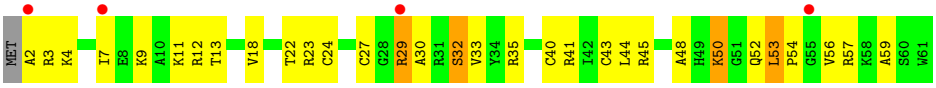
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



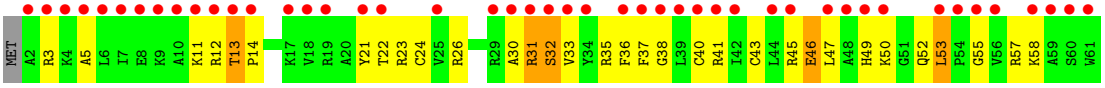
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



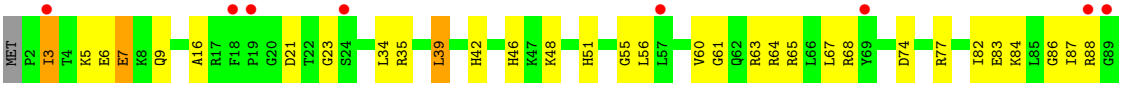
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



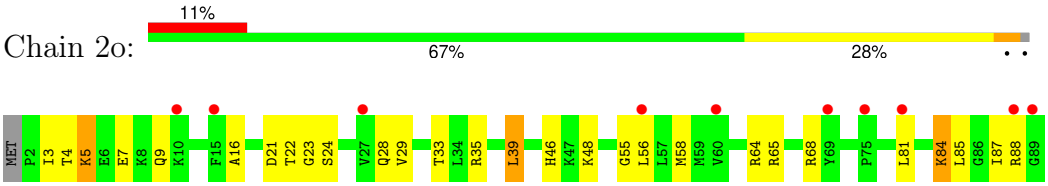
• Molecule 46: 30S ribosomal protein S15

Chain 1o:



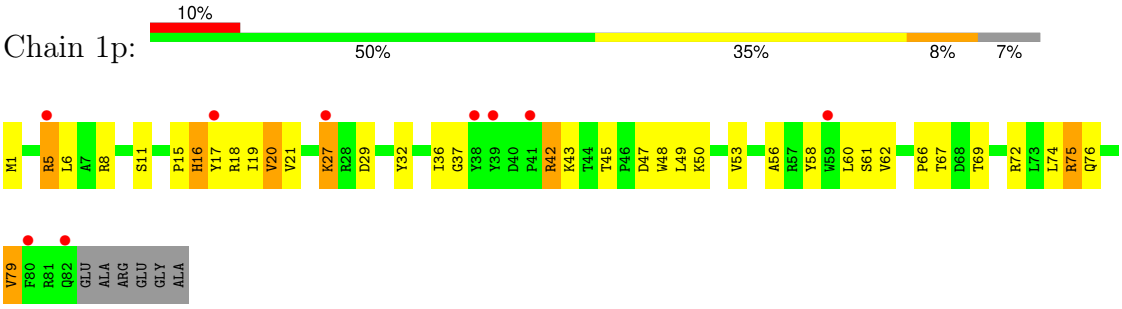
• Molecule 46: 30S ribosomal protein S15

Chain 2o:



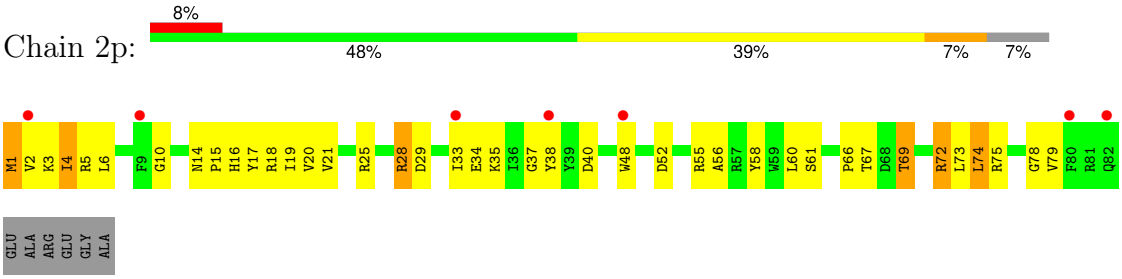
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



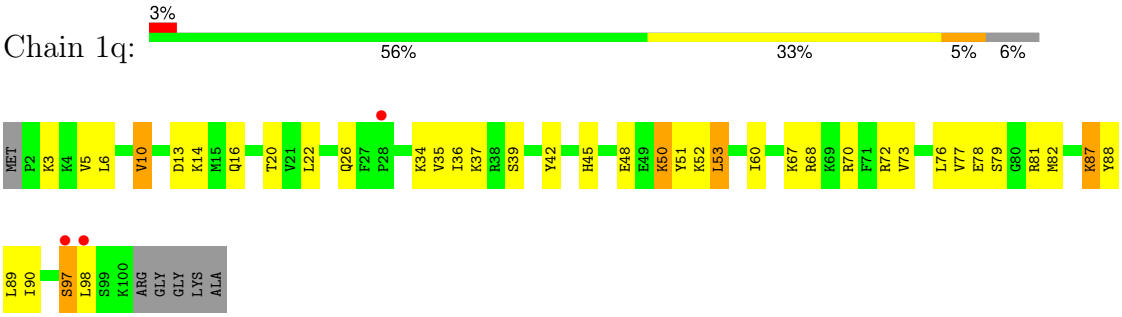
• Molecule 47: 30S ribosomal protein S16

Chain 2p:



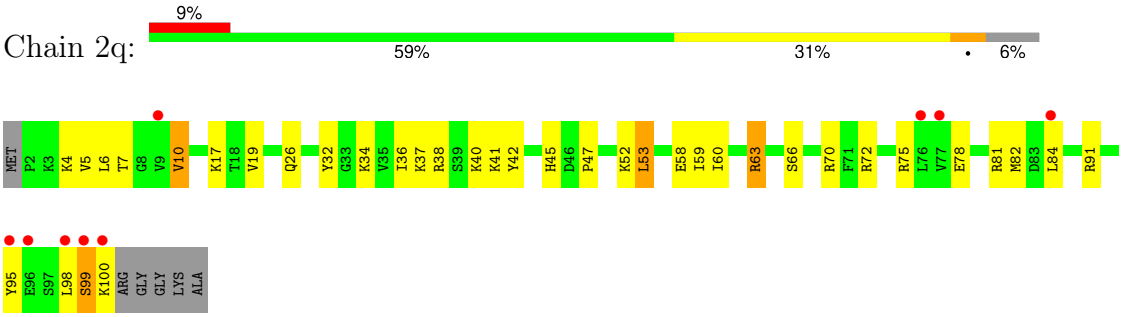
• Molecule 48: 30S ribosomal protein S17

Chain 1q:



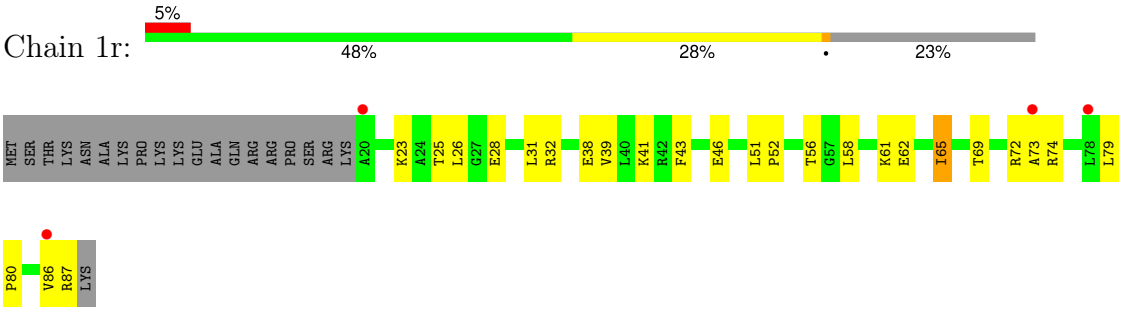
• Molecule 48: 30S ribosomal protein S17

Chain 2q:



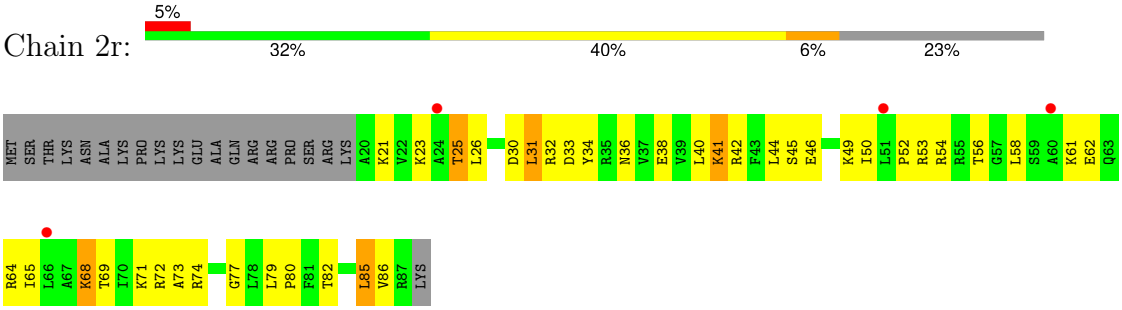
• Molecule 49: 30S ribosomal protein S18

Chain 1r:



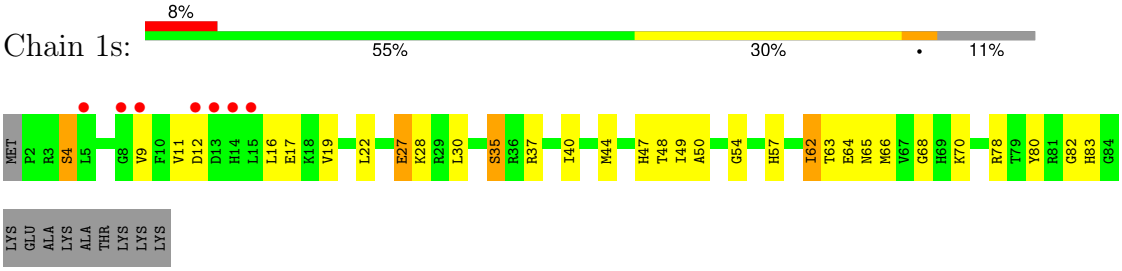
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



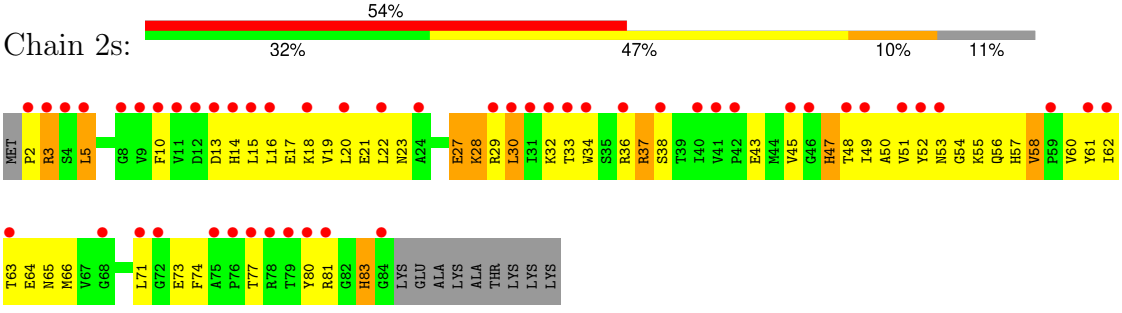
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



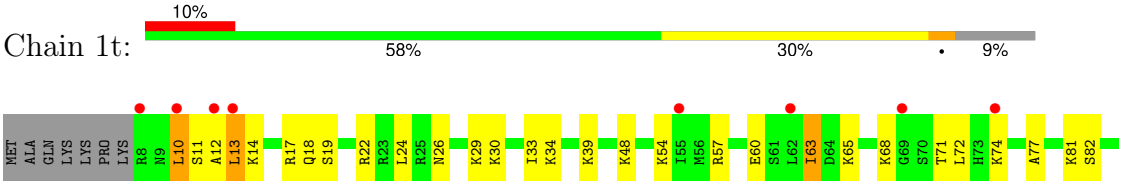
• Molecule 50: 30S ribosomal protein S19

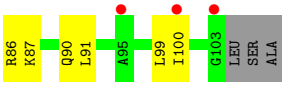
Chain 2s:



• Molecule 51: 30S ribosomal protein S20

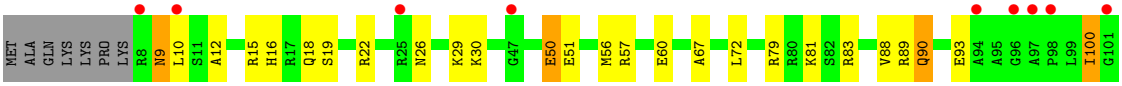
Chain 1t:





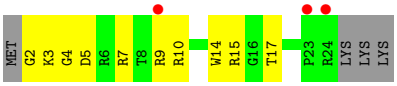
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



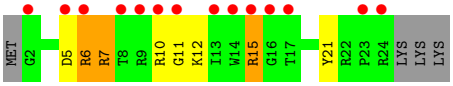
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



• Molecule 52: 30S ribosomal protein Thx

Chain 2u:

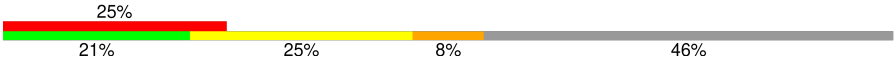


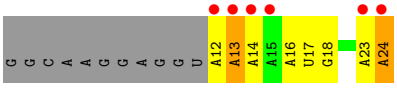
• Molecule 53: MF-mRNA

Chain 1v:

• Molecule 53: MF-mRNA

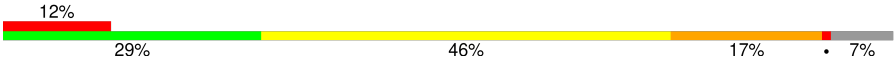
Chain 2v:

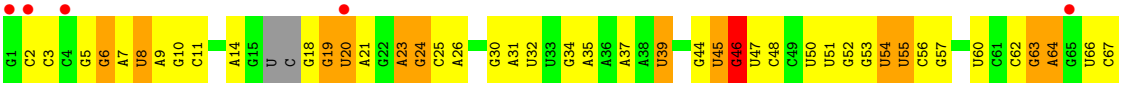


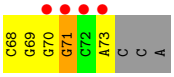


• Molecule 54: A-site and E-site Deacylated tRNAphe

Chain 1w:

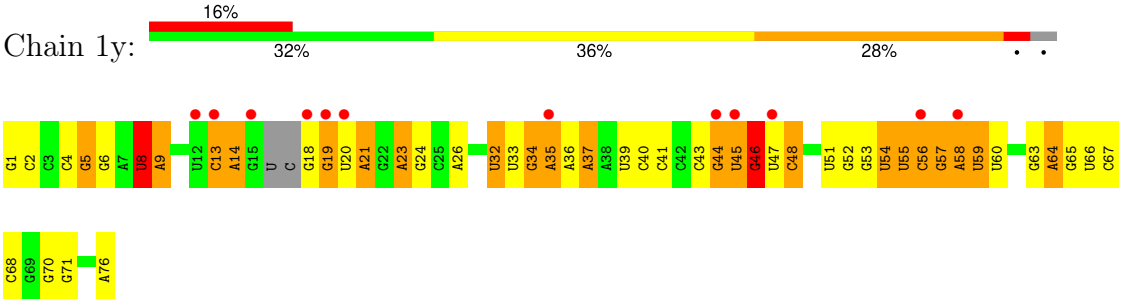






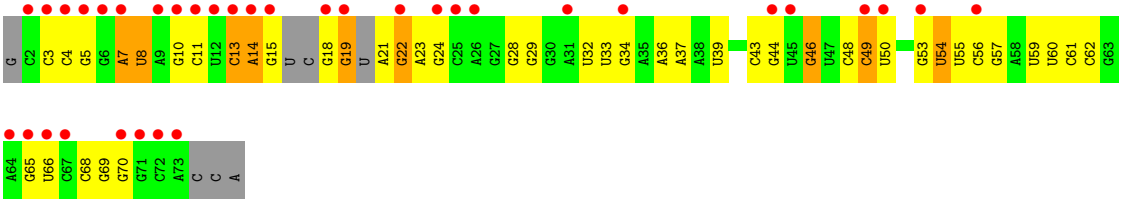
• Molecule 54: A-site and E-site Deacylated tRNAphe

Chain 1y:



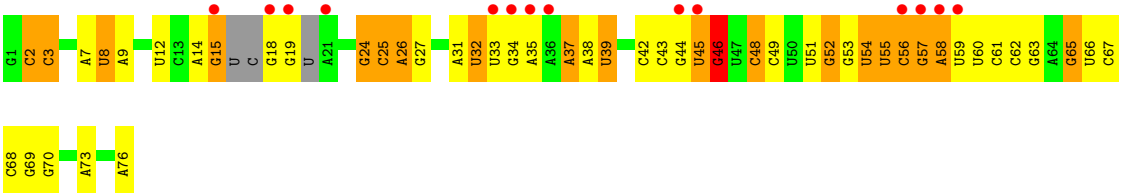
• Molecule 54: A-site and E-site Deacylated tRNAphe

Chain 2w:



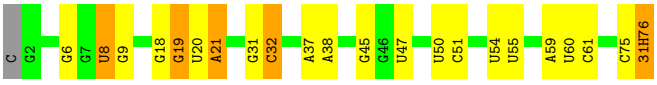
• Molecule 54: A-site and E-site Deacylated tRNAphe

Chain 2y:



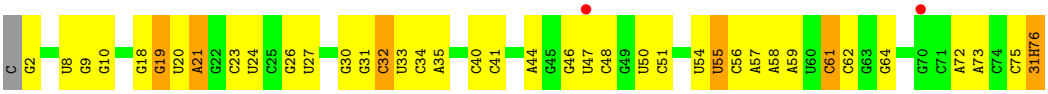
• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 1x:



• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 2x:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	210.31Å 450.93Å 625.88Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	125.54 – 2.50 125.54 – 2.50	Depositor EDS
% Data completeness (in resolution range)	98.6 (125.54-2.50) 98.6 (125.54-2.50)	Depositor EDS
R_{merge}	0.17	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.25 (at 2.52Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.217 , 0.266 0.219 , 0.268	Depositor DCC
R_{free} test set	99943 reflections (4.95%)	wwPDB-VP
Wilson B-factor (Å^2)	53.4	Xtriage
Anisotropy	0.130	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.32 , 56.4	EDS
L-test for twinning[2]	$< \|L\| > = 0.43$, $< L^2 > = 0.25$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	300042	wwPDB-VP
Average B, all atoms (Å^2)	61.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.68% 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

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: OMG, 4SU, 2MG, MG, K, SF4, M2G, ZN, OMC, MA6, 2MA, G7M, OMU, 31H, MIA, 0TD, 5MC, 4OC, A1A1J, 5MU, PSU, UR3

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	1A	0.64	1/69011 (0.0%)	0.82	16/107720 (0.0%)
1	2A	0.47	1/67295 (0.0%)	0.68	4/105042 (0.0%)
2	1B	0.53	0/2882	0.77	0/4494
2	2B	0.47	0/2879	0.63	0/4487
3	1D	0.64	0/2186	0.83	0/2944
3	2D	0.49	0/2186	0.69	0/2944
4	1E	0.64	0/1592	0.86	0/2149
4	2E	0.44	0/1592	0.68	0/2149
5	1F	0.63	0/1619	0.89	2/2193 (0.1%)
5	2F	0.44	0/1615	0.67	0/2188
6	1G	0.47	0/1448	0.68	0/1957
6	2G	0.44	0/1453	0.65	0/1963
7	1H	0.49	0/1356	0.68	0/1834
7	2H	0.42	0/1356	0.57	0/1834
8	1I	0.42	0/1112	0.66	0/1514
8	2I	0.43	0/1079	0.67	0/1475
9	1N	0.62	0/1144	0.79	0/1543
9	2N	0.40	0/1144	0.61	0/1543
10	1O	0.58	0/943	0.79	0/1269
10	2O	0.44	0/943	0.64	0/1269
11	1P	0.63	0/1152	0.88	0/1533
11	2P	0.44	0/1152	0.69	0/1533
12	1Q	0.62	0/1143	0.82	0/1527
12	2Q	0.43	0/1143	0.67	2/1527 (0.1%)
13	1R	0.68	0/982	0.85	1/1312 (0.1%)
13	2R	0.45	0/982	0.70	0/1312
14	1S	0.52	0/883	0.79	0/1176
14	2S	0.47	0/880	0.64	0/1172
15	1T	0.58	0/1105	0.79	0/1477
15	2T	0.42	0/1097	0.63	0/1468
16	1U	0.70	0/977	0.89	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.44	0/977	0.64	0/1301
17	1V	0.62	0/782	0.83	0/1049
17	2V	0.40	0/782	0.59	0/1049
18	1W	0.70	0/897	0.87	0/1205
18	2W	0.48	0/897	0.67	0/1205
19	1X	0.60	0/764	0.80	2/1025 (0.2%)
19	2X	0.47	0/764	0.71	2/1025 (0.2%)
20	1Y	0.66	1/819 (0.1%)	0.82	0/1095
20	2Y	0.42	0/819	0.68	0/1095
21	1Z	0.50	0/1267	0.73	1/1717 (0.1%)
21	2Z	0.48	0/1299	0.65	0/1763
22	10	0.65	0/616	0.87	1/821 (0.1%)
22	20	0.43	0/616	0.62	0/821
23	11	0.56	0/762	0.74	0/1014
23	21	0.47	0/762	0.67	0/1014
24	12	0.56	0/590	0.74	0/781
24	22	0.38	0/590	0.60	0/781
25	13	0.66	0/474	0.83	2/635 (0.3%)
25	23	0.38	0/469	0.62	0/630
26	14	0.50	0/565	0.84	0/761
26	24	0.54	0/545	0.71	0/737
27	15	0.63	0/469	0.88	0/635
27	25	0.46	0/469	0.61	0/635
28	16	0.59	0/460	0.82	0/613
28	26	0.44	0/456	0.65	0/608
29	17	0.74	0/426	0.88	0/561
29	27	0.57	0/426	0.77	0/561
30	18	0.64	0/525	0.83	0/691
30	28	0.46	0/525	0.65	0/691
31	19	0.63	0/310	0.86	0/407
31	29	0.42	0/310	0.72	0/407
32	1a	0.44	1/35795 (0.0%)	0.65	3/55864 (0.0%)
32	2a	0.45	1/35886 (0.0%)	0.64	3/56005 (0.0%)
33	1b	0.44	0/1881	0.72	0/2542
33	2b	0.50	0/1860	0.72	2/2518 (0.1%)
34	1c	0.41	0/1572	0.59	0/2126
34	2c	0.52	0/1566	0.68	0/2119
35	1d	0.41	0/1685	0.63	0/2262
35	2d	0.42	0/1704	0.66	0/2284
36	1e	0.41	0/1145	0.64	0/1543
36	2e	0.49	0/1149	0.68	0/1548
37	1f	0.41	0/823	0.62	0/1115
37	2f	0.43	0/829	0.60	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.38	0/1250	0.61	0/1679
38	2g	0.43	0/1254	0.59	0/1683
39	1h	0.41	0/1108	0.63	0/1494
39	2h	0.38	0/1108	0.64	0/1494
40	1i	0.40	0/1002	0.66	0/1346
40	2i	0.49	0/997	0.69	0/1343
41	1j	0.45	0/722	0.64	0/982
41	2j	0.50	0/727	0.69	0/988
42	1k	0.41	0/844	0.64	0/1145
42	2k	0.41	0/848	0.55	0/1149
43	1l	0.45	0/937	0.72	0/1260
43	2l	0.41	0/937	0.67	0/1260
44	1m	0.44	0/969	0.66	0/1302
44	2m	0.46	0/961	0.66	0/1291
45	1n	0.42	0/501	0.65	0/664
45	2n	0.49	0/501	0.73	0/664
46	1o	0.44	0/739	0.63	0/985
46	2o	0.39	0/739	0.59	0/985
47	1p	0.40	0/697	0.67	0/939
47	2p	0.44	0/693	0.69	0/935
48	1q	0.41	0/836	0.60	0/1117
48	2q	0.40	0/836	0.61	0/1117
49	1r	0.40	0/560	0.67	0/746
49	2r	0.41	0/560	0.63	0/746
50	1s	0.38	0/667	0.64	0/900
50	2s	0.55	0/661	0.80	0/893
51	1t	0.40	0/730	0.69	0/965
51	2t	0.41	0/729	0.66	0/965
52	1u	0.38	0/203	0.60	0/266
52	2u	0.43	0/203	0.60	0/266
53	1v	0.47	0/310	0.58	0/480
53	2v	0.49	0/310	0.53	0/480
54	1w	0.59	2/1537 (0.1%)	0.60	0/2390
54	1y	0.53	2/1606 (0.1%)	0.59	0/2497
54	2w	0.67	2/1487 (0.1%)	0.62	0/2311
54	2y	0.56	2/1583 (0.1%)	0.59	0/2459
55	1x	0.50	1/1700 (0.1%)	0.70	0/2650
55	2x	0.46	1/1700 (0.1%)	0.64	0/2650
All	All	0.52	15/316410 (0.0%)	0.71	41/473717 (0.0%)

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

sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
5	1F	0	1
5	2F	0	1
6	1G	0	2
6	2G	0	2
11	1P	0	3
11	2P	0	1
12	1Q	0	1
17	1V	0	1
21	1Z	0	3
21	2Z	0	1
23	11	0	1
26	14	0	1
33	1b	0	1
33	2b	0	4
34	2c	0	1
38	2g	0	1
44	1m	0	1
44	2m	0	1
50	1s	0	1
All	All	0	28

All (15) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	1Y	80	GLY	C-N	11.08	1.52	1.33
54	2w	8	4SU	O3'-P	5.95	1.62	1.56
55	2x	8	4SU	O3'-P	5.93	1.62	1.56
32	1a	1498	UR3	O3'-P	5.92	1.62	1.56
1	2A	2552	OMU	O3'-P	5.82	1.62	1.56
54	1w	46	G7M	O3'-P	5.66	1.61	1.56
54	2y	46	G7M	O3'-P	5.65	1.61	1.56
54	1y	8	4SU	O3'-P	5.55	1.61	1.56
54	1w	8	4SU	O3'-P	5.52	1.61	1.56
54	1y	46	G7M	O3'-P	5.30	1.61	1.56
55	1x	8	4SU	O3'-P	5.24	1.61	1.56
54	2y	8	4SU	O3'-P	5.24	1.61	1.56
54	2w	46	G7M	O3'-P	5.20	1.61	1.56
1	1A	2033	A	P-OP1	-5.09	1.38	1.49
32	2a	527	G7M	O3'-P	5.07	1.61	1.56

All (41) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1992	G	C2'-C3'-O3'	9.97	124.45	109.50
1	1A	1992	G	P-O3'-C3'	8.29	132.63	120.20
1	2A	1992	G	C2'-C3'-O3'	7.37	120.56	109.50
5	1F	89	VAL	CA-C-N	-6.99	110.76	123.34
5	1F	89	VAL	C-N-CA	-6.99	110.76	123.34
1	1A	2689	U	C2'-C3'-O3'	6.88	119.81	109.50
1	1A	1992	G	O3'-P-O5'	6.86	114.29	104.00
1	2A	2689	U	P-O3'-C3'	6.66	130.19	120.20
32	2a	115	G	P-O3'-C3'	6.52	129.98	120.20
1	1A	2689	U	C4'-C3'-O3'	6.49	119.13	109.40
32	1a	266	G	C2'-C3'-O3'	6.43	119.14	109.50
32	2a	115	G	C4'-C3'-O3'	6.33	118.89	109.40
19	2X	94	GLY	CA-C-N	6.30	133.03	121.70
19	2X	94	GLY	C-N-CA	6.30	133.03	121.70
1	1A	428	A	C5'-C4'-C3'	-6.11	106.84	116.00
1	1A	512	G	O4'-C1'-N9	6.08	117.32	108.20
1	2A	2689	U	C2'-C3'-O3'	5.85	118.28	109.50
1	1A	669	G	OP1-P-OP2	-5.72	102.44	119.60
1	1A	818	G	O3'-P-O5'	5.68	112.52	104.00
32	2a	1272	G	N1-C2-N2	-5.63	99.31	116.20
22	10	13	GLY	N-CA-C	5.56	126.36	113.18
1	1A	946	G	O5'-P-OP1	-5.50	91.51	108.00
33	2b	15	VAL	CA-C-N	5.50	132.04	121.54
33	2b	15	VAL	C-N-CA	5.50	132.04	121.54
1	1A	1272	A	O5'-P-OP2	-5.48	91.56	108.00
21	1Z	53	ILE	N-CA-C	5.46	120.69	109.34
19	1X	94	GLY	CA-C-N	5.36	131.35	121.70
19	1X	94	GLY	C-N-CA	5.36	131.35	121.70
1	2A	271(M)	G	P-O3'-C3'	5.31	126.07	119.70
12	2Q	59	ARG	CA-C-N	5.24	131.56	121.54
12	2Q	59	ARG	C-N-CA	5.24	131.56	121.54
1	1A	226	G	O4'-C1'-N9	5.22	116.03	108.20
1	1A	2727	G	O5'-P-OP2	-5.21	92.36	108.00
32	1a	115	G	C2'-C3'-O3'	5.19	117.28	109.50
1	1A	2362	G	OP1-P-O3'	-5.18	92.46	108.00
25	13	59	VAL	CA-C-N	5.14	130.95	121.70
25	13	59	VAL	C-N-CA	5.14	130.95	121.70
13	1R	104	ARG	CB-CG-CD	-5.13	99.50	111.30
1	1A	444	C	O5'-P-OP1	5.07	123.22	108.00
32	1a	266	G	P-O3'-C3'	5.05	127.78	120.20
1	1A	2848	G	O4'-C1'-N9	5.04	115.76	108.20

There are no chirality outliers.

All (28) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
23	11	3	LYS	Peptide
26	14	61	ARG	Peptide
5	1F	131	GLY	Peptide
6	1G	126	ASP	Peptide
6	1G	95	ARG	Peptide
11	1P	28	GLY	Peptide
11	1P	35	HIS	Peptide
11	1P	43	GLY	Peptide
12	1Q	15	GLY	Peptide
17	1V	54	GLY	Peptide
21	1Z	136	PHE	Peptide
21	1Z	29	TYR	Peptide
21	1Z	52	SER	Peptide
33	1b	126	GLU	Peptide
44	1m	105	THR	Peptide
50	1s	27	GLU	Peptide
5	2F	20	LEU	Peptide
6	2G	160	VAL	Peptide
6	2G	95	ARG	Peptide
11	2P	28	GLY	Peptide
21	2Z	52	SER	Peptide
33	2b	199	TYR	Peptide
33	2b	230	VAL	Peptide
33	2b	231	GLU	Peptide
33	2b	8	LYS	Peptide
34	2c	86	VAL	Peptide
38	2g	79	ARG	Peptide
44	2m	66	LEU	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	1A	61852	0	31189	655	0
1	2A	60322	0	30427	932	0
2	1B	2577	0	1305	25	0
2	2B	2575	0	1303	74	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	1D	2136	0	2218	36	0
3	2D	2136	0	2218	42	0
4	1E	1559	0	1618	35	0
4	2E	1559	0	1618	46	0
5	1F	1584	0	1625	34	0
5	2F	1580	0	1619	68	0
6	1G	1423	0	1436	44	0
6	2G	1428	0	1438	107	0
7	1H	1330	0	1407	32	0
7	2H	1330	0	1407	55	0
8	1I	1097	0	1140	44	0
8	2I	1064	0	1082	47	0
9	1N	1117	0	1184	22	0
9	2N	1117	0	1184	20	0
10	1O	933	0	996	23	0
10	2O	933	0	996	31	0
11	1P	1135	0	1212	36	0
11	2P	1135	0	1212	42	0
12	1Q	1122	0	1179	14	0
12	2Q	1122	0	1179	30	0
13	1R	968	0	1033	17	0
13	2R	968	0	1033	22	0
14	1S	873	0	927	19	0
14	2S	870	0	923	60	0
15	1T	1091	0	1151	25	0
15	2T	1083	0	1136	26	0
16	1U	959	0	1019	15	0
16	2U	959	0	1019	25	0
17	1V	771	0	830	11	0
17	2V	771	0	830	18	0
18	1W	886	0	940	11	0
18	2W	886	0	940	16	0
19	1X	750	0	814	12	0
19	2X	750	0	814	19	0
20	1Y	806	0	881	19	0
20	2Y	806	0	881	18	0
21	1Z	1240	0	1240	42	0
21	2Z	1271	0	1273	77	0
22	10	608	0	622	12	0
22	20	608	0	622	24	0
23	11	755	0	826	17	0
23	21	755	0	826	19	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	12	588	0	643	7	0
24	22	588	0	643	14	0
25	13	469	0	518	9	0
25	23	464	0	514	17	0
26	14	552	0	533	37	0
26	24	532	0	503	25	0
27	15	455	0	465	4	0
27	25	455	0	465	7	0
28	16	453	0	473	16	0
28	26	449	0	469	13	0
29	17	418	0	467	4	0
29	27	418	0	467	6	0
30	18	517	0	582	16	0
30	28	517	0	582	12	0
31	19	307	0	335	5	0
31	29	307	0	335	9	0
32	1a	32246	0	16295	552	0
32	2a	32327	0	16338	809	0
33	1b	1846	0	1867	86	0
33	2b	1825	0	1828	122	0
34	1c	1548	0	1535	56	0
34	2c	1542	0	1517	98	0
35	1d	1655	0	1672	70	1
35	2d	1674	0	1714	63	0
36	1e	1129	0	1185	49	0
36	2e	1133	0	1191	77	0
37	1f	810	0	804	23	0
37	2f	816	0	808	25	1
38	1g	1231	0	1238	32	0
38	2g	1235	0	1249	63	0
39	1h	1088	0	1126	40	0
39	2h	1088	0	1126	51	0
40	1i	983	0	986	50	0
40	2i	978	0	966	75	0
41	1j	709	0	650	35	0
41	2j	714	0	672	53	0
42	1k	829	0	825	16	0
42	2k	833	0	836	29	0
43	1l	932	0	981	22	0
43	2l	932	0	981	39	0
44	1m	958	0	1002	34	0
44	2m	950	0	988	66	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	1n	492	0	529	21	0
45	2n	492	0	529	31	0
46	1o	728	0	760	22	0
46	2o	728	0	760	21	0
47	1p	681	0	697	29	0
47	2p	677	0	686	28	0
48	1q	823	0	891	25	0
48	2q	823	0	891	25	0
49	1r	555	0	618	22	0
49	2r	555	0	618	30	0
50	1s	652	0	662	27	0
50	2s	646	0	644	58	0
51	1t	728	0	798	26	0
51	2t	727	0	796	17	0
52	1u	199	0	208	5	0
52	2u	199	0	208	7	0
53	1v	277	0	140	4	0
53	2v	277	0	140	8	0
54	1w	1530	0	785	31	0
54	1y	1585	0	803	37	0
54	2w	1482	0	754	18	0
54	2y	1565	0	794	36	0
55	1x	1635	0	840	12	0
55	2x	1635	0	840	27	0
56	10	8	0	0	0	0
56	11	6	0	0	0	0
56	12	2	0	0	0	0
56	13	5	0	0	0	0
56	14	2	0	0	0	0
56	15	6	0	0	0	0
56	16	1	0	0	0	0
56	17	4	0	0	0	0
56	18	7	0	0	0	0
56	19	1	0	0	0	0
56	1A	1101	0	0	0	0
56	1B	37	0	0	0	0
56	1D	13	0	0	0	0
56	1E	15	0	0	0	0
56	1F	15	0	0	0	0
56	1G	4	0	0	0	0
56	1I	1	0	0	0	0
56	1N	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	1O	6	0	0	0	0
56	1P	6	0	0	0	0
56	1Q	6	0	0	0	0
56	1R	5	0	0	0	0
56	1S	3	0	0	0	0
56	1T	3	0	0	0	0
56	1U	10	0	0	0	0
56	1V	6	0	0	0	0
56	1W	7	0	0	0	0
56	1X	6	0	0	0	0
56	1Y	3	0	0	0	0
56	1Z	3	0	0	0	0
56	1a	215	0	0	0	0
56	1b	1	0	0	0	0
56	1e	2	0	0	0	0
56	1f	2	0	0	0	0
56	1h	1	0	0	0	0
56	1k	1	0	0	0	0
56	1l	2	0	0	0	0
56	1m	1	0	0	0	0
56	1n	2	0	0	0	0
56	1p	1	0	0	0	0
56	1t	1	0	0	0	0
56	1w	7	0	0	0	0
56	1x	14	0	0	0	0
56	1y	2	0	0	0	0
56	20	2	0	0	0	0
56	21	3	0	0	0	0
56	23	1	0	0	0	0
56	25	5	0	0	0	0
56	26	1	0	0	0	0
56	27	2	0	0	0	0
56	28	4	0	0	0	0
56	29	1	0	0	0	0
56	2A	875	0	0	0	0
56	2B	20	0	0	0	0
56	2D	9	0	0	0	0
56	2E	10	0	0	0	0
56	2F	6	0	0	0	0
56	2G	1	0	0	0	0
56	2O	1	0	0	0	0
56	2P	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	2Q	4	0	0	0	0
56	2R	1	0	0	0	0
56	2T	3	0	0	0	0
56	2U	2	0	0	0	0
56	2V	2	0	0	0	0
56	2W	4	0	0	0	0
56	2X	1	0	0	0	0
56	2Z	1	0	0	0	0
56	2a	241	0	0	0	0
56	2d	1	0	0	0	0
56	2e	1	0	0	0	0
56	2f	1	0	0	0	0
56	2g	1	0	0	0	0
56	2j	1	0	0	0	0
56	2l	4	0	0	0	0
56	2q	3	0	0	0	0
56	2r	2	0	0	0	0
56	2t	1	0	0	0	0
56	2v	4	0	0	0	0
56	2w	7	0	0	0	0
56	2x	7	0	0	0	0
56	2y	7	0	0	0	0
57	1A	1	0	0	0	0
57	2A	1	0	0	0	0
58	1A	34	0	0	1	0
58	2A	34	0	0	2	0
59	14	1	0	0	0	0
59	15	1	0	0	0	0
59	16	1	0	0	0	0
59	19	1	0	0	0	0
59	1Y	1	0	0	0	0
59	1n	1	0	0	0	0
59	24	1	0	0	0	0
59	25	1	0	0	0	0
59	26	1	0	0	0	0
59	29	1	0	0	0	0
59	2Y	1	0	0	0	0
59	2n	1	0	0	0	0
60	1d	8	0	0	2	0
60	2d	8	0	0	0	0
61	10	8	0	0	1	0
61	11	11	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	12	4	0	0	1	0
61	13	4	0	0	0	0
61	15	5	0	0	0	0
61	16	4	0	0	0	0
61	17	9	0	0	0	0
61	18	12	0	0	1	0
61	1A	2027	0	0	63	0
61	1B	61	0	0	5	0
61	1D	29	0	0	0	0
61	1E	27	0	0	3	0
61	1F	14	0	0	0	0
61	1G	3	0	0	0	0
61	1H	2	0	0	0	0
61	1I	1	0	0	0	0
61	1N	5	0	0	0	0
61	1O	7	0	0	0	0
61	1P	19	0	0	1	0
61	1Q	9	0	0	0	0
61	1R	15	0	0	3	0
61	1S	5	0	0	0	0
61	1T	8	0	0	1	0
61	1U	10	0	0	1	0
61	1V	8	0	0	0	0
61	1W	11	0	0	3	0
61	1X	4	0	0	0	0
61	1Y	2	0	0	0	0
61	1Z	1	0	0	0	0
61	1a	377	0	0	25	0
61	1b	1	0	0	0	0
61	1g	1	0	0	0	0
61	1i	1	0	0	0	0
61	1l	8	0	0	1	0
61	1m	1	0	0	0	0
61	1o	2	0	0	0	0
61	1p	1	0	0	0	0
61	1q	2	0	0	0	0
61	1u	1	0	0	1	0
61	1v	3	0	0	0	0
61	1w	7	0	0	1	0
61	1x	13	0	0	0	0
61	1y	2	0	0	0	0
61	20	3	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	21	9	0	0	1	0
61	23	2	0	0	0	0
61	25	1	0	0	0	0
61	26	1	0	0	1	0
61	27	5	0	0	0	0
61	28	3	0	0	1	0
61	29	1	0	0	0	0
61	2A	1183	0	0	78	0
61	2B	25	0	0	3	0
61	2D	18	0	0	0	0
61	2E	15	0	0	2	0
61	2F	12	0	0	0	0
61	2I	3	0	0	1	0
61	2N	1	0	0	0	0
61	2O	1	0	0	0	0
61	2P	16	0	0	1	0
61	2Q	1	0	0	0	0
61	2R	3	0	0	0	0
61	2T	6	0	0	0	0
61	2U	4	0	0	0	0
61	2W	1	0	0	0	0
61	2X	2	0	0	0	0
61	2Y	2	0	0	0	0
61	2Z	1	0	0	0	0
61	2a	265	0	0	22	0
61	2d	1	0	0	0	0
61	2e	1	0	0	0	0
61	2i	1	0	0	0	0
61	2j	3	0	0	0	0
61	2l	6	0	0	0	0
61	2p	3	0	0	0	0
61	2q	1	0	0	1	0
61	2r	1	0	0	0	0
61	2t	2	0	0	0	0
61	2v	2	0	0	0	0
61	2w	1	0	0	0	0
61	2x	6	0	0	2	0
61	2y	6	0	0	1	0
All	All	300042	0	196537	5667	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 12.

All (5667) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1082:U:H3	1:1A:1086:A:N6	1.35	1.25
1:1A:1054:A:N6	1:1A:1105:U:H3	1.51	1.08
35:1d:107:ARG:HH22	35:1d:194:LEU:HD22	1.23	1.02
1:2A:2714:G:OP2	61:2A:3902:HOH:O	1.75	1.02
1:2A:2143:C:N4	1:2A:2148:G:H1	1.58	1.00
1:1A:2447:G:OP2	61:1A:4203:HOH:O	1.77	0.99
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.41	0.98
1:1A:1082:U:O4	1:1A:1086:A:N1	1.97	0.96
40:2i:9:ARG:HG2	40:2i:14:VAL:HG12	1.44	0.96
1:1A:1058:G:H1	1:1A:1080:C:H42	1.09	0.95
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.48	0.94
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.49	0.94
32:2a:1151:A:HO2'	32:2a:1152:A:H8	1.16	0.94
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.02	0.93
1:2A:1604:C:OP2	61:2A:3903:HOH:O	1.85	0.93
22:10:10:THR:HG22	22:10:12:ASN:H	1.34	0.93
32:2a:1256:A:H61	32:2a:1278:U:H1'	1.31	0.93
1:1A:1062:G:H1	1:1A:1077:A:H61	1.14	0.93
1:2A:2314:C:H5'	6:2G:38:VAL:HG21	1.50	0.93
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.48	0.93
54:1w:26:A:H61	54:1w:44:G:H1	1.02	0.92
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.02	0.92
33:2b:185:ILE:HB	33:2b:199:TYR:HB2	1.52	0.92
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.03	0.92
21:1Z:1:MET:SD	21:1Z:1:MET:N	2.44	0.91
1:2A:2807:G:N1	1:2A:2893:G:O6	2.02	0.90
32:2a:953:G:H5'	32:2a:965:A:H61	1.36	0.90
32:2a:1014:A:H4'	50:2s:14:HIS:CE1	2.06	0.90
1:1A:1607:C:O2	61:1A:4204:HOH:O	1.88	0.90
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.52	0.90
1:2A:2711:A:OP2	61:2A:3902:HOH:O	1.88	0.89
1:2A:2712(A):A:OP2	61:2A:3902:HOH:O	1.89	0.89
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.55	0.89
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.54	0.89
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.20	0.89
32:1a:1027:C:C2	32:1a:1034:G:N2	2.40	0.89
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.16	0.89
1:2A:2143:C:H42	1:2A:2148:G:H1	0.89	0.89
26:14:61:ARG:HH21	50:1s:9:VAL:HG11	1.38	0.89
1:1A:2427:C:OP1	61:1A:4205:HOH:O	1.90	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.06	0.88
6:2G:38:VAL:HG12	6:2G:93:THR:HG23	1.55	0.88
54:1w:26:A:N6	54:1w:44:G:H1	1.71	0.88
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.05	0.87
18:1W:92:ARG:NH2	61:1W:301:HOH:O	2.06	0.87
1:2A:963:U:OP2	61:2A:3904:HOH:O	1.92	0.87
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.08	0.87
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.07	0.87
1:2A:2781:A:H5"	1:2A:2782:G:H5'	1.56	0.87
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.39	0.87
1:1A:2100:G:H1	1:1A:2189:U:H3	0.90	0.87
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.09	0.87
1:1A:2099:U:H3	1:1A:2190:G:H1	0.90	0.86
1:2A:1689:A:H62	1:2A:1698:A:H2	1.19	0.86
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.56	0.86
32:2a:944:G:OP1	61:2a:1902:HOH:O	1.92	0.86
32:2a:1286:A:H8	32:2a:1287:A:H4'	1.38	0.86
10:1O:63:VAL:HG12	10:1O:106:LEU:HD11	1.55	0.86
33:2b:91:PRO:HG3	33:2b:154:LEU:HB3	1.57	0.86
1:2A:2592:G:OP1	61:2A:3905:HOH:O	1.93	0.86
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.08	0.86
1:2A:2751:G:H5'	7:2H:2:SER:HA	1.58	0.86
32:2a:1279:A:O2'	32:2a:1281:U:OP2	1.94	0.86
33:1b:21:ARG:HB3	33:1b:39:ILE:HG12	1.56	0.85
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.38	0.85
32:2a:1317:C:O2	50:2s:37:ARG:NH2	2.09	0.85
10:1O:48:PRO:HB3	32:1a:1422:G:H5"	1.57	0.85
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.09	0.85
10:1O:110:GLY:HA2	10:1O:112:MET:HE2	1.57	0.85
1:2A:1670:C:OP1	61:2A:3907:HOH:O	1.95	0.85
1:1A:1055:G:H1	1:1A:1104:C:H42	1.24	0.85
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.12	0.85
40:2i:55:ALA:HA	40:2i:58:HIS:HD2	1.42	0.85
55:1x:75:C:O3'	55:1x:76:31H:P	2.35	0.84
1:2A:962:G:OP1	61:2A:3904:HOH:O	1.95	0.84
2:2B:54:G:H21	6:2G:29:TRP:HE1	1.25	0.84
1:1A:2168:G:N1	1:1A:2171:A:N7	2.25	0.84
26:14:58:ARG:HD3	50:1s:68:GLY:H	1.42	0.84
1:1A:2306:C:O2	61:1A:4207:HOH:O	1.96	0.84
1:2A:948:G:OP1	61:2A:3904:HOH:O	1.94	0.84
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.59	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1204:A:H2	1:2A:1241:A:H62	1.26	0.84
33:1b:100:GLY:O	33:1b:104:ASN:N	2.10	0.84
1:1A:1058:G:H1	1:1A:1080:C:N4	1.75	0.84
32:1a:73:G:H1	32:1a:96:U:H3	1.26	0.83
1:2A:1890:A:OP2	61:2A:3906:HOH:O	1.95	0.83
32:2a:596:C:OP2	61:2a:1903:HOH:O	1.95	0.83
47:2p:1:MET:HE3	47:2p:3:LYS:HD3	1.58	0.83
32:2a:975:A:H4'	32:2a:976:G:H5"	1.58	0.83
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.12	0.83
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.59	0.83
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.60	0.82
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.60	0.82
21:2Z:40:ASP:OD2	21:2Z:43:GLU:N	2.11	0.82
1:1A:1664:A:OP1	61:1A:4206:HOH:O	1.95	0.82
1:2A:2138:C:H42	1:2A:2153:G:H1	1.25	0.82
1:1A:338:G:OP2	61:1A:4210:HOH:O	1.97	0.82
1:1A:1647:G:OP1	61:1A:4208:HOH:O	1.96	0.82
1:1A:1670:C:OP2	61:1A:4209:HOH:O	1.97	0.82
32:1a:700:G:N7	61:1a:1909:HOH:O	2.11	0.82
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	1.60	0.82
4:1E:59:VAL:HG23	4:1E:64:LYS:HE3	1.60	0.82
36:1e:92:LYS:HB3	36:1e:119:LEU:HB2	1.60	0.82
1:2A:1812:A:OP2	61:2A:3908:HOH:O	1.96	0.82
1:2A:1603:A:OP1	61:2A:3903:HOH:O	1.96	0.82
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.27	0.81
1:2A:2808:U:O2	1:2A:2892:A:N6	2.13	0.81
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.59	0.81
44:2m:16:ASP:HB3	44:2m:34:LEU:HD11	1.62	0.81
54:1y:8:4SU:H4'	54:1y:48:C:H4'	1.61	0.81
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.45	0.81
1:2A:297:C:OP2	61:2A:3910:HOH:O	1.98	0.81
1:2A:323:G:HO2'	1:2A:1205:U:H3	1.26	0.81
32:2a:377:G:OP1	47:2p:3:LYS:NZ	2.13	0.81
33:2b:178:ARG:HH22	39:2h:68:ARG:HH12	1.28	0.81
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.16	0.81
32:2a:15:G:H2'	32:2a:16:A:H8	1.44	0.81
26:14:16:CYS:SG	26:14:17:GLY:N	2.54	0.81
1:2A:1011:G:OP2	16:2U:66:ASN:ND2	2.14	0.81
18:2W:4:LYS:HD2	18:2W:6:ILE:HD11	1.63	0.81
32:2a:673:G:H2'	32:2a:674:G:C8	2.15	0.81
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.62	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1187:G:O6	61:2A:3911:HOH:O	1.99	0.80
8:2I:79:ILE:N	8:2I:143:SER:O	2.10	0.80
1:1A:483:A:OP1	20:1Y:50:ARG:NH2	2.14	0.80
1:2A:2430:A:OP2	61:2A:3909:HOH:O	1.97	0.80
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.45	0.80
1:1A:826:U:OP1	61:1A:4205:HOH:O	2.00	0.80
34:2c:7:PRO:O	34:2c:11:ARG:NH1	2.14	0.80
36:2e:75:THR:OG1	36:2e:117:ASP:O	1.99	0.80
32:2a:1090:U:N3	32:2a:1095:U:O4	2.13	0.80
1:1A:847:U:OP2	61:1A:4212:HOH:O	2.00	0.80
32:2a:8:A:H5'	36:2e:101:ILE:HG22	1.62	0.80
32:1a:975:A:HO2'	45:1n:32:SER:HG	1.30	0.79
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.30	0.79
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.15	0.79
1:1A:365:C:OP2	61:1A:4211:HOH:O	1.99	0.79
1:1A:1095:A:H62	1:1A:1097:U:H3	1.31	0.79
1:1A:2131:G:N2	1:1A:2158:A:N1	2.30	0.79
32:1a:964:A:OP1	61:1a:1903:HOH:O	2.00	0.79
8:1I:129:THR:HG22	8:1I:139:GLN:HE22	1.46	0.79
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.62	0.79
21:2Z:30:ASN:HD22	21:2Z:90:VAL:HB	1.47	0.79
1:2A:363:G:H2'	1:2A:363(A):A:H8	1.48	0.79
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.15	0.79
32:2a:572:A:OP1	61:2a:1904:HOH:O	2.00	0.79
32:1a:875:C:H1'	39:1h:15:ASN:HD21	1.46	0.79
1:2A:1395:A:OP1	61:2A:3903:HOH:O	2.00	0.79
6:2G:101:ILE:HG12	26:24:25:TYR:HB2	1.64	0.79
32:1a:148:G:H2'	32:1a:149:A:H8	1.46	0.79
32:2a:1316:G:H22	32:2a:1319:A:H5"	1.48	0.79
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.48	0.79
36:2e:139:LEU:HA	36:2e:142:LEU:HD12	1.63	0.79
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.62	0.78
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.15	0.78
1:1A:1702:G:N7	61:1A:4238:HOH:O	2.16	0.78
2:2B:41:U:H5	6:2G:70:VAL:H	1.30	0.78
37:2f:91:VAL:HG11	49:2r:72:ARG:HH12	1.48	0.78
61:1A:4207:HOH:O	6:1G:45:GLU:OE2	1.99	0.78
2:1B:21:G:N7	61:1B:304:HOH:O	2.16	0.78
32:2a:1029:C:N4	32:2a:1031:G:O6	2.16	0.78
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.64	0.78
11:2P:126:VAL:HG12	11:2P:148:LEU:HD22	1.64	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:582:U:OP1	46:2o:68:ARG:NH2	2.17	0.78
1:1A:2552:OMU:OP2	61:1A:4213:HOH:O	2.00	0.78
32:1a:1314:C:OP2	50:1s:4:SER:OG	2.00	0.78
34:1c:131:ARG:HH11	34:1c:166:GLU:HG3	1.46	0.78
8:2I:40:THR:O	8:2I:44:LEU:HB2	1.83	0.78
40:2i:31:GLN:HE21	40:2i:36:TYR:HD1	1.29	0.78
4:1E:110:GLY:O	61:1R:301:HOH:O	2.01	0.77
1:2A:878:A:N6	1:2A:899:A:O2'	2.16	0.77
32:1a:165:C:H2'	32:1a:166:G:H8	1.49	0.77
6:2G:63:ILE:HD11	6:2G:144:ILE:HG13	1.63	0.77
1:2A:2049:G:OP2	61:2A:3912:HOH:O	2.01	0.77
1:1A:2794:C:H42	1:1A:2802:G:H22	1.29	0.77
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.31	0.77
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.65	0.77
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.18	0.77
32:1a:405:U:O4	35:1d:2:GLY:N	2.18	0.77
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.67	0.77
1:2A:1253:A:OP1	61:2A:3913:HOH:O	2.02	0.77
32:2a:266:G:H5"	32:2a:268:C:H41	1.50	0.77
32:2a:554:C:O2'	61:2a:1905:HOH:O	2.01	0.77
32:1a:642:A:N3	39:1h:113:SER:OG	2.18	0.77
37:1f:100:ASN:HD21	49:1r:23:LYS:HE2	1.50	0.77
55:2x:76:31H:O2'	61:2x:201:HOH:O	2.03	0.77
1:1A:11:G:H2'	1:1A:12:U:H5"	1.65	0.77
1:1A:2243:U:OP1	61:1A:4217:HOH:O	2.03	0.76
1:1A:2136:C:N3	1:1A:2155:G:N2	2.33	0.76
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.66	0.76
1:1A:739:G:OP1	61:1A:4216:HOH:O	2.02	0.76
52:1u:5:ASP:OD1	61:1u:101:HOH:O	2.03	0.76
1:2A:2143:C:N3	1:2A:2148:G:N2	2.28	0.76
32:2a:1128:C:O2	32:2a:1147:C:N4	2.18	0.76
32:2a:1403:C:H2'	32:2a:1404:5MC:HM53	1.67	0.76
50:2s:64:GLU:OE2	50:2s:65:ASN:ND2	2.19	0.76
1:1A:1890:A:OP2	61:1A:4219:HOH:O	2.04	0.76
32:1a:560:U:O2'	32:1a:561:U:OP2	2.03	0.76
1:1A:2136:C:N4	1:1A:2155:G:N1	2.33	0.76
2:2B:79:C:N4	2:2B:98:G:O6	2.17	0.76
32:2a:254:G:OP1	48:2q:66:SER:OG	2.03	0.76
1:2A:1568:G:N7	61:2A:3945:HOH:O	2.19	0.76
32:2a:259:G:OP2	51:2t:83:ARG:NH1	2.19	0.76
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE2	1.67	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:2r:58:LEU:HD23	49:2r:62:GLU:HB3	1.66	0.76
5:1F:165:ARG:HA	5:1F:168:ARG:HD2	1.67	0.75
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.14	0.75
1:2A:1973:G:OP1	61:2A:3915:HOH:O	2.03	0.75
1:1A:1203:G:O6	61:1A:4218:HOH:O	2.04	0.75
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.20	0.75
40:2i:3:GLN:HE21	40:2i:20:ARG:HE	1.32	0.75
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	1.68	0.75
32:2a:1216:G:H5"	45:2n:5:ALA:HB2	1.69	0.75
33:1b:15:VAL:HG13	33:1b:209:ARG:HG3	1.68	0.75
1:2A:1226:A:OP1	17:2V:84:LYS:NZ	2.17	0.75
1:2A:1634:A:OP1	61:2A:3918:HOH:O	2.05	0.75
1:2A:1651:G:OP1	13:2R:40:LYS:NZ	2.20	0.75
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.69	0.75
1:1A:387:U:O4	61:1A:4215:HOH:O	2.01	0.75
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.20	0.75
1:2A:1024:G:OP2	61:2A:3914:HOH:O	2.03	0.75
1:1A:1669:A:OP2	61:1A:4209:HOH:O	2.05	0.75
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.20	0.75
1:2A:1647:G:OP1	61:2A:3916:HOH:O	2.04	0.75
32:2a:1051:C:H2'	32:2a:1052:U:C6	2.21	0.74
32:2a:1189:C:O2'	34:2c:176:HIS:ND1	2.18	0.74
21:2Z:121:HIS:N	21:2Z:171:ILE:O	2.19	0.74
32:2a:1330:U:H4'	44:2m:23:TYR:CZ	2.22	0.74
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	1.69	0.74
44:2m:67:GLU:H	44:2m:70:LEU:HD23	1.51	0.74
44:2m:78:ILE:HA	44:2m:81:LEU:HD12	1.67	0.74
32:2a:1224:G:OP1	61:2a:1906:HOH:O	2.03	0.74
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.67	0.74
38:2g:29:LYS:HB2	38:2g:105:VAL:HG21	1.69	0.74
11:1P:90:ARG:HG2	11:1P:90:ARG:HH11	1.52	0.74
1:2A:2052:G:O2'	61:2A:3919:HOH:O	2.05	0.74
1:1A:1082:U:N3	1:1A:1086:A:N6	2.08	0.74
1:2A:2049:G:N7	61:2A:3943:HOH:O	2.19	0.74
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.23	0.74
1:2A:1023:U:OP2	61:2A:3914:HOH:O	2.06	0.74
2:2B:28:C:N4	2:2B:56:G:O6	2.19	0.74
54:2y:18:G:H22	54:2y:55:PSU:HN3	1.34	0.74
1:2A:886:C:O2'	1:2A:889:C:N4	2.21	0.74
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.21	0.74
1:1A:1054:A:H61	1:1A:1105:U:H3	0.78	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:973:G:OP1	41:1j:57:LYS:NZ	2.17	0.74
32:1a:1386:G:N7	61:1a:1919:HOH:O	2.19	0.74
5:2F:148:LEU:HD21	5:2F:191:ARG:HD2	1.69	0.74
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.53	0.74
32:2a:1305:G:H22	32:2a:1331:G:H1'	1.52	0.74
6:2G:37:VAL:HG13	6:2G:94:LEU:HB2	1.70	0.74
17:2V:55:ALA:HA	17:2V:101:GLY:HA2	1.70	0.74
1:1A:1670:C:OP1	61:1A:4221:HOH:O	2.06	0.73
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.69	0.73
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.21	0.73
21:1Z:53:ILE:HG22	21:1Z:71:VAL:HG12	1.70	0.73
34:2c:179:ARG:NH1	34:2c:206:GLU:OE1	2.20	0.73
1:1A:1043:C:O2	1:1A:1112:G:N2	2.14	0.73
24:12:41:ILE:HG13	24:12:43:GLN:HG3	1.71	0.73
32:1a:78:G:O6	32:1a:92:C:N4	2.20	0.73
41:1j:49:VAL:HG23	45:1n:41:ARG:HB2	1.68	0.73
1:2A:1021:A:H62	1:2A:1141:U:H3	1.35	0.73
1:2A:2135:A:N1	1:2A:2156:G:O2'	2.21	0.73
1:2A:2819:G:N7	61:2A:3949:HOH:O	2.20	0.73
8:2I:123:LEU:HD21	8:2I:145:VAL:HA	1.71	0.73
32:2a:1255:G:N2	32:2a:1259:C:O2	2.17	0.73
42:2k:81:ASP:OD1	42:2k:107:SER:OG	2.05	0.73
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.21	0.73
1:2A:955:C:OP1	12:2Q:87:LYS:NZ	2.20	0.73
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.53	0.73
36:2e:9:LYS:HB2	36:2e:112:LEU:HD11	1.68	0.73
1:2A:854:G:O6	61:2A:3920:HOH:O	2.05	0.73
1:2A:2042:A:OP1	61:2A:3917:HOH:O	2.04	0.73
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.21	0.73
43:2l:117:ARG:NE	43:2l:123:LYS:O	2.20	0.73
1:2A:752:A:H3'	29:27:1:MET:HE1	1.70	0.73
46:2o:87:ILE:HG22	46:2o:88:ARG:H	1.54	0.73
1:2A:880:G:N2	1:2A:898:C:O2	2.20	0.73
1:1A:1023:U:OP2	61:1A:4214:HOH:O	2.07	0.73
1:2A:2314:C:H2'	1:2A:2315:G:H8	1.53	0.73
32:2a:942:G:N2	40:2i:124:GLN:OE1	2.21	0.73
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.22	0.73
1:1A:1494:A:OP1	61:1A:4220:HOH:O	2.06	0.73
1:2A:1313:U:OP1	61:2A:3924:HOH:O	2.07	0.73
42:2k:85:ARG:HD3	42:2k:113:PRO:HD3	1.71	0.73
1:1A:2136:C:N3	1:1A:2155:G:C2	2.57	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:324:G:N7	61:1a:1922:HOH:O	2.22	0.73
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.05	0.73
32:2a:1256:A:OP1	34:2c:26:LYS:NZ	2.21	0.73
1:1A:1075:C:H2'	1:1A:1076:C:H5'	1.68	0.72
28:26:53:LYS:NZ	61:26:201:HOH:O	2.21	0.72
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.21	0.72
54:2w:18:G:O2'	54:2w:57:G:N2	2.22	0.72
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.22	0.72
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.04	0.72
44:2m:90:LEU:HD21	44:2m:94:ARG:HH11	1.54	0.72
50:2s:17:GLU:O	50:2s:21:GLU:N	2.22	0.72
1:2A:568:U:O4	61:2A:3921:HOH:O	2.06	0.72
32:2a:662:G:H2'	32:2a:663:A:C8	2.24	0.72
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.04	0.72
55:2x:75:C:O3'	55:2x:76:31H:P	2.47	0.72
1:1A:2518:A:OP1	61:1A:4222:HOH:O	2.07	0.72
14:2S:10:ARG:NH2	14:2S:91:PRO:O	2.17	0.72
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.71	0.72
33:2b:78:GLN:O	33:2b:94:ASN:ND2	2.22	0.72
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.54	0.72
1:1A:1671:U:O4	61:1A:4209:HOH:O	2.08	0.72
33:1b:122:PHE:HE2	33:1b:139:LYS:HB2	1.54	0.72
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.35	0.72
7:2H:8:PRO:HB3	7:2H:51:ARG:HG2	1.71	0.72
7:2H:88:LEU:HD11	7:2H:165:ALA:HA	1.71	0.72
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.22	0.72
26:14:56:VAL:HB	26:14:60:GLN:HG3	1.71	0.72
32:2a:565:U:OP2	32:2a:566:G:O2'	2.08	0.72
32:2a:1314:C:N4	50:2s:2:PRO:O	2.21	0.72
33:2b:52:GLU:HG2	33:2b:56:ARG:HH12	1.55	0.72
35:2d:4:TYR:O	35:2d:6:GLY:N	2.23	0.72
1:1A:1045:A:OP1	1:1A:1045:A:H4'	1.89	0.72
1:2A:946:G:OP1	61:2A:3923:HOH:O	2.06	0.72
1:2A:792:G:O6	61:2A:3922:HOH:O	2.06	0.72
1:1A:2690:C:OP1	13:1R:17:ARG:NH2	2.22	0.71
34:1c:19:GLU:O	34:1c:40:ARG:NH2	2.23	0.71
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.72	0.71
49:2r:31:LEU:HD23	49:2r:31:LEU:H	1.54	0.71
8:1I:126:TYR:HB2	8:1I:142:VAL:HG23	1.72	0.71
32:1a:1353:G:OP1	52:1u:10:ARG:NH1	2.23	0.71
34:1c:47:LEU:HD22	34:1c:70:VAL:HG21	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:16:LEU:HD22	40:2i:45:ALA:HB2	1.72	0.71
1:1A:2807:G:N1	1:1A:2893:G:O6	2.16	0.71
32:1a:945:G:OP1	61:1a:1904:HOH:O	2.08	0.71
1:2A:2379:G:HO2'	14:2S:17:ARG:HH12	1.36	0.71
21:2Z:5:LEU:HD11	21:2Z:44:PHE:HA	1.72	0.71
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.72	0.71
22:10:10:THR:HA	61:10:203:HOH:O	1.90	0.71
32:1a:1500:A:OP1	61:1a:1905:HOH:O	2.09	0.71
32:2a:547:A:OP1	61:2a:1907:HOH:O	2.08	0.71
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.55	0.71
1:1A:2154:G:C2	1:1A:2155:G:H1'	2.26	0.71
6:1G:66:GLN:HG3	26:14:1:MET:HE1	1.71	0.71
8:1I:77:LEU:HG	8:1I:101:LEU:HD22	1.72	0.71
32:1a:1191:A:OP1	34:1c:4:LYS:NZ	2.22	0.71
32:1a:1337:G:N7	61:1a:1926:HOH:O	2.23	0.71
33:1b:42:ILE:HD12	33:1b:203:GLY:HA2	1.73	0.71
1:2A:1648:C:OP1	61:2A:3916:HOH:O	2.07	0.71
34:2c:6:HIS:HB3	45:2n:49:HIS:CD2	2.26	0.71
21:2Z:97:GLU:HB3	21:2Z:125:LEU:HD21	1.72	0.71
34:2c:113:ALA:HB2	34:2c:202:ILE:HG13	1.72	0.71
26:14:46:GLN:O	26:14:48:ARG:N	2.24	0.71
1:2A:2121:G:H1	1:2A:2177:C:H42	1.38	0.71
2:2B:7:G:H21	14:2S:38:GLN:NE2	1.89	0.71
7:1H:88:LEU:HD23	7:1H:130:ARG:HG3	1.73	0.71
15:1T:84:GLN:HG2	15:1T:85:LYS:HD3	1.72	0.71
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.26	0.71
1:2A:93:G:H2'	1:2A:94:C:C6	2.26	0.71
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.55	0.71
32:2a:1190:G:H5'	34:2c:176:HIS:HE1	1.56	0.71
1:1A:123:G:OP2	61:1A:4223:HOH:O	2.07	0.70
1:1A:1332:G:OP1	61:1A:4227:HOH:O	2.09	0.70
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.23	0.70
28:16:13:CYS:SG	28:16:47:THR:HG21	2.31	0.70
2:2B:31:C:H4'	6:2G:29:TRP:HZ2	1.56	0.70
11:1P:35:HIS:O	61:1P:301:HOH:O	2.09	0.70
1:2A:1693:U:O2'	3:2D:14:ARG:NH2	2.24	0.70
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.25	0.70
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.56	0.70
32:2a:1194:U:H2'	32:2a:1195:C:H6	1.55	0.70
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.09	0.70
36:1e:98:THR:HG22	36:1e:99:GLY:H	1.54	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.27	0.70
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.23	0.70
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.21	0.70
1:1A:602:G:O6	61:1A:4226:HOH:O	2.09	0.70
1:1A:668:G:OP2	61:1A:4224:HOH:O	2.08	0.70
35:1d:107:ARG:NH2	35:1d:194:LEU:HD22	2.02	0.70
32:2a:15:G:H2'	32:2a:16:A:C8	2.26	0.70
32:2a:1108:G:O6	61:2a:1908:HOH:O	2.09	0.70
40:2i:55:ALA:HA	40:2i:58:HIS:CD2	2.25	0.70
40:1i:46:ALA:HA	40:1i:78:LYS:HB2	1.74	0.70
38:2g:115:ARG:HG2	38:2g:118:VAL:HG23	1.72	0.70
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.23	0.70
32:1a:1152:A:OP1	41:1j:68:HIS:ND1	2.24	0.70
50:2s:20:LEU:HA	50:2s:23:ASN:ND2	2.05	0.70
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.73	0.70
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	1.74	0.70
1:2A:2138:C:N4	1:2A:2153:G:H1	1.90	0.70
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.74	0.70
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.74	0.70
41:2j:42:THR:HB	41:2j:68:HIS:HA	1.74	0.70
1:1A:2196:C:OP2	61:1A:4225:HOH:O	2.08	0.70
21:1Z:132:ASN:HD22	21:1Z:160:GLY:HA3	1.57	0.70
12:2Q:122:GLY:HA2	12:2Q:125:LEU:HD12	1.73	0.70
32:2a:297:G:N2	32:2a:300:A:OP2	2.25	0.70
32:2a:1328:C:O2'	44:2m:29:ARG:NE	2.23	0.70
33:2b:121:LEU:HG	33:2b:130:ARG:HH12	1.56	0.70
35:2d:60:GLU:HG3	35:2d:202:LEU:HD12	1.73	0.70
37:1f:61:LEU:HB3	37:1f:63:TYR:HE2	1.55	0.69
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.06	0.69
50:2s:51:VAL:O	50:2s:58:VAL:N	2.24	0.69
1:1A:192:C:OP1	61:1A:4217:HOH:O	2.09	0.69
1:1A:1058:G:N2	1:1A:1081:U:O2	2.25	0.69
1:2A:971:C:OP2	61:2A:3925:HOH:O	2.10	0.69
32:2a:943:U:H1'	40:2i:124:GLN:HE22	1.57	0.69
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	1.74	0.69
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.73	0.69
18:1W:31:GLU:OE1	61:1W:302:HOH:O	2.09	0.69
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.57	0.69
41:2j:51:ARG:O	45:2n:45:ARG:NH1	2.25	0.69
1:2A:994:C:OP2	16:2U:54:LYS:NZ	2.26	0.69
32:2a:504:C:OP1	61:2a:1910:HOH:O	2.10	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:153:ARG:HG2	35:2d:181:MET:HE2	1.73	0.69
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.73	0.69
32:1a:1025:U:O2	32:1a:1036:G:O6	2.09	0.69
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.73	0.69
2:2B:31:C:H4'	6:2G:29:TRP:CZ2	2.27	0.69
33:2b:155:LEU:HD21	33:2b:159:PRO:HD3	1.74	0.69
32:1a:1530:G:OP1	61:1a:1910:HOH:O	2.11	0.69
34:1c:108:ASN:HB3	34:1c:111:LEU:HD12	1.74	0.69
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.26	0.69
16:2U:90:VAL:HG22	17:2V:38:LEU:HD22	1.75	0.69
19:2X:1:MET:HE1	24:22:26:ARG:HH21	1.58	0.69
32:1a:224:C:OP1	51:1t:74:LYS:NZ	2.25	0.69
32:1a:504:C:OP1	61:1a:1907:HOH:O	2.10	0.69
33:1b:174:VAL:O	33:1b:178:ARG:HG2	1.93	0.69
1:2A:2524:G:N7	61:2A:3967:HOH:O	2.25	0.69
5:2F:28:ILE:HG12	5:2F:112:MET:HG2	1.73	0.69
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	1.93	0.69
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	1.75	0.69
26:14:18:CYS:SG	26:14:20:ASN:HB2	2.33	0.69
32:1a:975:A:H4'	32:1a:976:G:H5"	1.75	0.69
6:2G:36:LYS:HE2	6:2G:95:ARG:HH22	1.58	0.69
7:2H:3:ARG:HH21	7:2H:65:HIS:HB3	1.57	0.69
32:2a:768:A:N7	61:2a:1920:HOH:O	2.25	0.69
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.06	0.69
42:2k:98:LEU:O	42:2k:101:SER:OG	2.09	0.69
51:2t:50:GLU:O	51:2t:100:ILE:HD11	1.91	0.69
54:2y:26:A:N1	54:2y:44:G:O6	2.26	0.69
1:1A:1648:C:OP1	61:1A:4208:HOH:O	2.10	0.69
2:1B:25:A:OP1	61:1B:301:HOH:O	2.09	0.69
3:1D:96:HIS:CD2	3:1D:102:LYS:HD3	2.28	0.69
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	1.92	0.69
33:1b:15:VAL:HG21	33:1b:213:LEU:HD22	1.73	0.69
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.26	0.69
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.09	0.69
32:2a:588:G:OP2	61:2a:1909:HOH:O	2.10	0.69
32:2a:598:U:O4	61:2a:1903:HOH:O	2.09	0.69
52:2u:6:ARG:HD3	52:2u:15:ARG:HD2	1.75	0.69
32:1a:1469:G:N7	61:1a:1932:HOH:O	2.25	0.69
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	1.75	0.68
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	1.75	0.68
32:2a:1292:U:H2'	32:2a:1293:G:C8	2.28	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.27	0.68
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.57	0.68
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.75	0.68
1:2A:2218:U:O2	23:21:52:ARG:NH1	2.26	0.68
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.76	0.68
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.26	0.68
32:1a:154:C:H42	32:1a:167:G:H1	1.39	0.68
1:2A:1803:A:O2'	3:2D:259:THR:HG21	1.92	0.68
1:2A:1816:G:O6	3:2D:35:LYS:NZ	2.22	0.68
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	1.73	0.68
25:23:59:VAL:HG12	25:23:60:GLU:H	1.58	0.68
31:29:29:ASN:HD22	31:29:32:HIS:CE1	2.12	0.68
32:2a:431:A:H2'	32:2a:432:A:H8	1.58	0.68
32:2a:664:G:H22	32:2a:741:G:H1	1.39	0.68
32:2a:972:C:O2'	41:2j:55:LYS:O	2.11	0.68
34:1c:11:ARG:NH2	34:1c:177:THR:O	2.27	0.68
1:2A:796:C:H2'	1:2A:797:C:C6	2.28	0.68
1:2A:2131:G:H4'	1:2A:2132:U:H3'	1.75	0.68
11:2P:99:LEU:HD12	11:2P:102:ARG:HH22	1.59	0.68
24:22:65:ASN:OD1	24:22:69:ARG:NH1	2.25	0.68
32:2a:446:G:H1	32:2a:488:C:H42	1.40	0.68
1:1A:2550:G:OP1	61:1A:4209:HOH:O	2.10	0.68
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.76	0.68
1:2A:900:A:H2'	1:2A:901:A:H8	1.58	0.68
1:2A:2242:G:OP1	61:2A:3926:HOH:O	2.11	0.68
41:2j:22:LYS:O	41:2j:26:ALA:N	2.25	0.68
32:1a:533:A:OP1	61:1a:1908:HOH:O	2.10	0.68
32:1a:867:G:O2'	32:1a:873:A:N1	2.26	0.68
33:1b:21:ARG:HA	33:1b:39:ILE:HA	1.75	0.68
1:2A:500:G:N1	1:2A:503:A:OP2	2.26	0.68
2:2B:82:G:N7	61:2B:303:HOH:O	2.27	0.68
33:2b:230:VAL:HG12	33:2b:232:PRO:HD2	1.75	0.68
50:2s:53:ASN:OD1	50:2s:54:GLY:N	2.25	0.68
2:1B:25:A:OP2	61:1B:302:HOH:O	2.11	0.68
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.57	0.68
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.06	0.68
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.76	0.68
49:1r:38:GLU:HA	49:1r:41:LYS:HE2	1.76	0.68
1:2A:832:G:H5'	11:2P:45:LEU:HD11	1.76	0.68
1:2A:2448:A:OP1	61:2A:3927:HOH:O	2.12	0.68
36:2e:43:LEU:O	36:2e:65:ASN:ND2	2.24	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:2r:73:ALA:HB3	49:2r:79:LEU:HD12	1.74	0.68
32:1a:92:C:H2'	32:1a:93:G:H8	1.57	0.68
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.75	0.68
1:2A:89:G:H3'	1:2A:90:U:H5"	1.76	0.68
2:2B:76:G:N7	61:2B:302:HOH:O	2.26	0.68
32:2a:352:C:O2'	32:2a:354:G:OP1	2.11	0.68
54:2y:62:C:H2'	54:2y:63:G:H8	1.57	0.68
6:2G:49:ASP:C	6:2G:51:ARG:H	2.00	0.68
32:2a:1182:G:H4'	32:2a:1183:A:H5"	1.75	0.68
39:2h:51:VAL:HG11	39:2h:60:ARG:HH11	1.59	0.68
36:1e:27:ARG:HH11	36:1e:27:ARG:HB2	1.59	0.68
1:2A:2206:G:H5"	1:2A:2207:G:N7	2.09	0.68
1:2A:2318:G:H21	14:2S:3:ARG:HD3	1.58	0.67
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.29	0.67
32:2a:1517:G:H2'	32:2a:1518:MA6:H8	1.76	0.67
1:1A:1069:A:H5'	1:1A:1070:A:H8	1.58	0.67
35:2d:175:SER:HB3	35:2d:186:LEU:HD21	1.75	0.67
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.28	0.67
50:1s:12:ASP:OD2	50:1s:35:SER:OG	2.11	0.67
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	1.76	0.67
15:1T:65:LYS:HE2	15:1T:67:SER:HB2	1.77	0.67
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.28	0.67
44:2m:94:ARG:NH2	50:2s:81:ARG:HA	2.09	0.67
46:1o:16:ALA:HB1	46:1o:21:ASP:HB3	1.76	0.67
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.30	0.67
33:2b:100:GLY:O	33:2b:104:ASN:N	2.26	0.67
50:2s:20:LEU:HD13	50:2s:23:ASN:HD22	1.57	0.67
1:1A:2206:G:H3'	1:1A:2207:G:N7	2.10	0.67
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.10	0.67
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	1.76	0.67
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.59	0.67
2:2B:75:G:H22	21:2Z:73:GLN:NE2	1.93	0.67
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	1.75	0.67
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.27	0.67
8:2I:69:LYS:HE2	8:2I:138:ILE:HG12	1.74	0.67
32:2a:1347:G:H5"	40:2i:107:ARG:HB3	1.77	0.67
1:1A:278:A:P	1:1A:278:A:H8	2.17	0.67
32:2a:157:G:H1	32:2a:164:U:H3	1.42	0.67
32:2a:1327:C:OP2	52:2u:12:LYS:NZ	2.24	0.67
51:2t:56:MET:HG3	51:2t:88:VAL:HG21	1.76	0.67
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.28	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:805:G:OP1	61:2A:3928:HOH:O	2.12	0.67
1:2A:2151:G:H2'	1:2A:2152:G:H8	1.59	0.67
32:2a:728:A:H2'	32:2a:729:A:C8	2.30	0.67
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.77	0.67
41:2j:47:PHE:HB2	41:2j:63:PHE:HB2	1.77	0.67
48:2q:95:TYR:HA	48:2q:98:LEU:HD12	1.76	0.67
49:2r:38:GLU:OE1	49:2r:41:LYS:NZ	2.21	0.67
48:1q:26:GLN:HG2	48:1q:37:LYS:HG2	1.77	0.67
33:2b:81:VAL:HG12	33:2b:215:LEU:HD12	1.75	0.67
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.77	0.67
54:2y:26:A:N1	54:2y:44:G:C6	2.63	0.67
1:1A:1183:G:O2'	25:13:29:ARG:NH1	2.28	0.66
1:1A:2274:A:OP2	61:1A:4230:HOH:O	2.14	0.66
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.75	0.66
32:1a:1179:A:H4'	40:1i:103:THR:HA	1.76	0.66
34:1c:15:THR:HG21	34:1c:181:ASN:HA	1.77	0.66
18:2W:4:LYS:HG3	18:2W:106:ILE:HG12	1.76	0.66
21:2Z:53:ILE:O	21:2Z:70:LEU:HD21	1.95	0.66
32:2a:1312:G:H5'	50:2s:5:LEU:HD11	1.78	0.66
1:1A:363(A):A:H2'	1:1A:363(B):G:C8	2.31	0.66
1:1A:1039:G:H1	1:1A:1116:C:H42	1.43	0.66
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.28	0.66
32:2a:390:C:O3'	47:2p:28:ARG:NH2	2.29	0.66
33:2b:16:HIS:HB2	33:2b:204:ASN:HD22	1.59	0.66
34:2c:125:GLU:HB2	34:2c:190:ARG:HH21	1.60	0.66
32:1a:664:G:H22	32:1a:741:G:H1	1.43	0.66
32:2a:662:G:O2'	32:2a:836:G:OP1	2.13	0.66
32:2a:1060:C:H41	34:2c:2:GLY:HA3	1.59	0.66
32:2a:1239:A:H62	32:2a:1299:A:N6	1.93	0.66
32:2a:1347:G:C8	40:2i:107:ARG:HB2	2.30	0.66
36:1e:33:VAL:HG13	36:1e:112:LEU:HD22	1.77	0.66
32:2a:954:G:H2'	32:2a:955:U:C6	2.31	0.66
35:2d:112:VAL:HG22	35:2d:116:GLN:HE22	1.60	0.66
1:1A:1816:G:O6	3:1D:35:LYS:NZ	2.27	0.66
54:1w:26:A:N1	54:1w:44:G:N2	2.40	0.66
1:2A:675:A:OP1	5:2F:63:LYS:NZ	2.29	0.66
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.28	0.66
32:2a:67:C:H2'	32:2a:68:G:C8	2.30	0.66
1:1A:548:A:H61	17:1V:18:LEU:HA	1.61	0.66
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.29	0.66
4:1E:9:VAL:HB	15:1T:3:ARG:HG2	1.76	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:822:U:OP2	61:2A:3929:HOH:O	2.13	0.66
33:2b:222:ILE:HG13	33:2b:223:ILE:N	2.10	0.66
40:2i:85:LEU:HB3	40:2i:92:TYR:HD2	1.60	0.66
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.78	0.66
37:1f:89:MET:HE1	49:1r:72:ARG:HB3	1.76	0.66
3:2D:132:PRO:HD3	3:2D:190:TYR:CZ	2.30	0.66
8:2I:62:LYS:HA	8:2I:133:HIS:HE1	1.60	0.66
11:2P:35:HIS:O	61:2P:301:HOH:O	2.13	0.66
4:1E:42:ASP:O	61:1E:401:HOH:O	2.12	0.66
1:2A:1183:G:H5"	25:23:30:ARG:NH2	2.10	0.66
1:2A:2870:C:H2'	1:2A:2871:C:O4'	1.95	0.66
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.77	0.66
8:2I:62:LYS:HA	8:2I:133:HIS:CE1	2.30	0.66
11:2P:89:ALA:HA	11:2P:121:LYS:HD3	1.77	0.66
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.96	0.66
42:2k:54:ARG:NH1	54:2y:39:PSU:O2'	2.28	0.66
1:1A:2722:G:OP2	61:1A:4228:HOH:O	2.12	0.66
46:1o:3:ILE:HG21	46:1o:34:LEU:HD21	1.78	0.66
22:20:10:THR:HG22	22:20:12:ASN:H	1.61	0.66
6:1G:47:LYS:HG3	6:1G:48:GLU:H	1.59	0.66
1:2A:2755:C:OP1	61:2A:3930:HOH:O	2.13	0.66
43:2l:56:ALA:HB2	43:2l:70:ILE:HD11	1.78	0.66
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.59	0.66
1:1A:1518:U:H2'	1:1A:1519:G:O4'	1.96	0.65
20:1Y:10:GLY:O	20:1Y:26:LYS:NZ	2.26	0.65
32:1a:1136:U:H5"	32:1a:1137:C:N3	2.10	0.65
32:2a:1101:A:H8	33:2b:172:ILE:HD13	1.61	0.65
32:2a:1445:C:O2'	32:2a:1447:A:N6	2.29	0.65
1:1A:2428:G:OP1	61:1A:4205:HOH:O	2.14	0.65
32:1a:38:G:H22	32:1a:397:A:H5"	1.61	0.65
32:1a:376:G:O3'	47:1p:5:ARG:NH1	2.29	0.65
1:2A:309:G:N3	1:2A:329:G:O2'	2.29	0.65
1:2A:1359:A:H2	1:2A:1372:U:O4	1.80	0.65
1:2A:2136:C:N4	1:2A:2155:G:H1	1.94	0.65
41:2j:8:LEU:HD21	41:2j:20:ALA:HB2	1.78	0.65
1:1A:1271:G:OP2	61:1A:4208:HOH:O	2.13	0.65
1:2A:1493:C:N4	1:2A:2206:G:O2'	2.29	0.65
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.79	0.65
44:2m:40:ASN:HB3	44:2m:43:THR:HG23	1.78	0.65
54:2y:62:C:H2'	54:2y:63:G:C8	2.31	0.65
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:332:A:O2'	1:2A:334:C:OP2	2.14	0.65
2:2B:54:G:N2	6:2G:29:TRP:HE1	1.93	0.65
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.29	0.65
32:2a:1347:G:H22	32:2a:1373:G:H2'	1.61	0.65
41:2j:6:ILE:HG12	41:2j:98:ILE:HD13	1.79	0.65
1:1A:1877:A:H5"	1:1A:1878:G:OP2	1.97	0.65
1:2A:248:G:OP1	61:2A:3933:HOH:O	2.14	0.65
1:2A:271(O):C:H4'	8:2I:49:ALA:HB1	1.79	0.65
1:2A:2161:C:H2'	1:2A:2162:G:O4'	1.97	0.65
1:2A:2269:A:OP1	61:2A:3931:HOH:O	2.13	0.65
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.91	0.65
32:2a:1084:G:H5'	32:2a:1102:A:OP2	1.96	0.65
33:2b:90:MET:HE2	33:2b:91:PRO:HD3	1.78	0.65
42:2k:73:MET:HA	42:2k:77:MET:H	1.61	0.65
44:2m:3:ARG:HB3	44:2m:9:ILE:H	1.62	0.65
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.29	0.65
7:1H:149:ARG:HH12	7:1H:167:GLU:CD	2.05	0.65
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.11	0.65
36:1e:95:ALA:HB1	36:1e:96:PRO:HD2	1.79	0.65
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.79	0.65
1:1A:1356:G:OP2	61:1A:4229:HOH:O	2.12	0.65
6:2G:44:GLY:N	6:2G:88:ILE:O	2.27	0.65
21:2Z:70:LEU:HD23	21:2Z:71:VAL:H	1.60	0.65
32:2a:1055:A:N7	32:2a:1200:C:N4	2.45	0.65
32:2a:1194:U:H2'	32:2a:1195:C:C6	2.31	0.65
32:2a:1360:A:OP2	45:2n:35:ARG:NH2	2.29	0.65
1:1A:732:C:OP1	61:1A:4234:HOH:O	2.14	0.65
1:1A:1227:G:OP1	61:1A:4231:HOH:O	2.14	0.65
1:2A:1340:U:OP1	19:2X:16:LYS:NZ	2.30	0.65
32:2a:1053:G:H4'	32:2a:1054:C:H3'	1.77	0.65
39:2h:64:LYS:HG2	39:2h:79:VAL:HG21	1.78	0.65
1:1A:2429:G:OP1	61:1A:4205:HOH:O	2.14	0.65
21:2Z:30:ASN:ND2	21:2Z:90:VAL:HB	2.11	0.65
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.12	0.65
1:2A:1025:G:O2'	61:2A:3914:HOH:O	2.12	0.65
1:2A:2291:U:OP1	1:2A:2380:C:O2'	2.16	0.65
32:1a:1112:C:H1'	34:1c:179:ARG:HH11	1.60	0.64
42:1k:81:ASP:HB3	42:1k:107:SER:HB3	1.78	0.64
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.80	0.64
32:2a:1066:C:H2'	32:2a:1067:A:C8	2.32	0.64
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:4:TYR:O	35:2d:4:TYR:CG	2.50	0.64
38:2g:54:THR:O	38:2g:56:GLN:N	2.28	0.64
6:1G:126:ASP:OD2	6:1G:130:ASN:ND2	2.29	0.64
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.63	0.64
1:2A:1506:C:H2'	1:2A:1507:A:H5'	1.80	0.64
32:2a:651:C:N4	32:2a:753:A:OP2	2.28	0.64
32:2a:949:A:H1'	32:2a:1364:U:H3	1.61	0.64
32:2a:1273:G:H3'	32:2a:1274:G:C8	2.31	0.64
1:1A:1973:G:OP1	61:1A:4235:HOH:O	2.15	0.64
32:1a:1086:U:H3	32:1a:1099:G:H22	1.45	0.64
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.14	0.64
1:2A:593:G:H1	1:2A:664:C:H42	1.46	0.64
1:2A:2896:C:H2'	1:2A:2897:U:C6	2.32	0.64
1:1A:1253:A:OP1	61:1A:4233:HOH:O	2.14	0.64
6:1G:150:ASP:N	6:1G:150:ASP:OD1	2.30	0.64
26:14:59:PHE:CD2	50:1s:64:GLU:HB3	2.32	0.64
34:1c:8:ILE:HD12	34:1c:16:ARG:HG3	1.78	0.64
1:2A:1378:A:O2'	1:2A:1380:G:N7	2.28	0.64
4:2E:48:GLN:HE21	4:2E:78:LEU:HD22	1.62	0.64
33:2b:98:LEU:HB2	33:2b:101:MET:HE3	1.79	0.64
34:2c:69:HIS:HA	34:2c:104:GLN:HB3	1.80	0.64
47:2p:28:ARG:NH1	47:2p:29:ASP:OD2	2.30	0.64
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	1.80	0.64
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.33	0.64
1:1A:1058:G:N2	1:1A:1080:C:N3	2.38	0.64
20:1Y:81:LYS:HD3	20:1Y:101:LYS:HD3	1.80	0.64
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.79	0.64
21:2Z:171:ILE:HG13	21:2Z:172:ALA:H	1.63	0.64
33:2b:149:LEU:HD22	33:2b:152:PHE:HD2	1.63	0.64
1:1A:579:G:H2'	1:1A:580:C:C6	2.33	0.64
55:1x:50:U:H2'	55:1x:51:C:C6	2.33	0.64
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.33	0.64
4:2E:50:GLY:HA3	4:2E:75:VAL:HG21	1.78	0.64
34:2c:151:VAL:HG23	34:2c:199:LYS:O	1.97	0.64
51:2t:9:ASN:OD1	51:2t:9:ASN:N	2.30	0.64
1:1A:1176:G:H21	1:1A:1178:C:P	2.21	0.64
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.80	0.64
33:2b:124:SER:HB3	33:2b:125:PRO:HD3	1.79	0.64
1:1A:1379:A:H4'	1:1A:1380:G:OP2	1.98	0.64
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.78	0.64
1:2A:2759:G:OP2	61:2A:3934:HOH:O	2.14	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:78:THR:HA	8:2I:143:SER:HB3	1.80	0.64
1:1A:884:C:H42	1:1A:892:G:H1	1.46	0.64
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.27	0.64
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.63	0.64
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.11	0.64
32:1a:406:G:H21	35:1d:119:GLN:HE22	1.44	0.64
5:2F:110:LEU:HD21	5:2F:181:LEU:HD23	1.80	0.64
32:2a:509:A:N3	32:2a:543:C:O2'	2.27	0.64
33:2b:15:VAL:HG21	33:2b:213:LEU:HD13	1.80	0.64
33:2b:178:ARG:HH22	39:2h:68:ARG:NH1	1.96	0.64
1:1A:271(V):G:O6	61:1A:4232:HOH:O	2.14	0.63
1:1A:2136:C:N4	1:1A:2155:G:C6	2.66	0.63
8:1I:109:ILE:HD12	8:1I:130:TYR:CE2	2.33	0.63
32:1a:1529:G:H4'	32:1a:1530:G:OP2	1.99	0.63
1:2A:883:G:N1	1:2A:894:C:O2	2.31	0.63
5:2F:18:ARG:NH1	5:2F:127:GLU:OE2	2.30	0.63
32:2a:673:G:H5"	37:2f:87:ARG:NH1	2.12	0.63
36:2e:100:VAL:HG23	36:2e:107:ARG:NH1	2.13	0.63
1:1A:1060:U:H3	1:1A:1088:A:H8	1.45	0.63
8:1I:40:THR:O	8:1I:44:LEU:HB2	1.97	0.63
32:1a:953:G:H5'	32:1a:965:A:H61	1.62	0.63
41:1j:27:ALA:HA	41:1j:81:THR:HG21	1.80	0.63
48:1q:22:LEU:HD11	48:1q:39:SER:HB2	1.79	0.63
1:2A:2060:A:N3	61:2A:3984:HOH:O	2.29	0.63
21:2Z:73:GLN:HB3	21:2Z:87:ASP:OD1	1.98	0.63
32:2a:1297:C:O2'	38:2g:114:ARG:NH1	2.30	0.63
5:1F:14:PRO:HD2	5:1F:127:GLU:OE1	1.98	0.63
40:1i:3:GLN:HE21	40:1i:20:ARG:HH21	1.45	0.63
1:2A:597:U:H2'	1:2A:598:G:C8	2.33	0.63
1:2A:1031:G:H5"	31:29:8:LYS:HE3	1.81	0.63
11:2P:90:ARG:HD2	11:2P:91:PHE:CZ	2.34	0.63
32:2a:839:U:H5"	32:2a:840:C:H5	1.63	0.63
38:2g:15:ASP:OD2	38:2g:44:TYR:OH	2.15	0.63
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.30	0.63
1:1A:2142:C:N3	1:1A:2149:G:O6	2.31	0.63
7:1H:11:VAL:HG13	7:1H:15:VAL:HG22	1.79	0.63
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.78	0.63
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.18	0.63
50:1s:27:GLU:N	50:1s:27:GLU:OE1	2.30	0.63
8:2I:82:ARG:HB3	8:2I:89:TYR:CD2	2.34	0.63
21:1Z:156:LYS:HD2	21:1Z:158:PRO:HD3	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:376:G:H5”	47:1p:5:ARG:HB3	1.80	0.63
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.32	0.63
40:2i:26:VAL:HG13	40:2i:61:ALA:HB3	1.78	0.63
1:1A:887:A:H2	1:1A:889:C:H3’	1.62	0.63
24:12:7:ARG:O	24:12:11:GLU:HG3	1.98	0.63
32:2a:685:G:N1	32:2a:686:U:O4	2.32	0.63
4:1E:12:THR:HG22	4:1E:13:ARG:N	2.14	0.63
11:1P:63:PRO:HG2	30:18:25:MET:HB2	1.80	0.63
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.64	0.63
32:1a:625:G:H2’	32:1a:626:U:H6	1.64	0.63
1:2A:2299:G:N1	1:2A:2318:G:N7	2.47	0.63
7:2H:17:VAL:HG22	7:2H:26:VAL:HG22	1.81	0.63
32:2a:148:G:H2’	32:2a:149:A:H8	1.63	0.63
32:1a:1380:U:O2	38:1g:3:ARG:NH1	2.31	0.63
1:2A:1169:G:H1	1:2A:1180:C:H42	1.44	0.63
12:2Q:77:LYS:NZ	12:2Q:86:GLY:O	2.32	0.63
17:2V:62:LEU:HD12	17:2V:93:GLU:HG2	1.81	0.63
32:2a:523:A:H61	43:2l:92:0TD:CG	2.11	0.63
32:2a:588:G:OP2	61:2a:1911:HOH:O	2.15	0.63
32:2a:1020:U:H2’	32:2a:1021:G:C8	2.34	0.63
1:2A:84:A:OP2	20:2Y:8:LYS:NZ	2.21	0.63
2:2B:57:A:N3	6:2G:29:TRP:HB3	2.13	0.63
33:2b:27:LYS:HB2	33:2b:194:PRO:HD2	1.79	0.63
1:1A:1420:U:O2’	1:1A:1421:G:OP1	2.16	0.62
32:1a:258:G:H2’	32:1a:259:G:H8	1.64	0.62
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.30	0.62
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.63	0.62
1:2A:886:C:HO2’	1:2A:889:C:N4	1.97	0.62
1:2A:1116:C:H2’	1:2A:1117:G:C8	2.34	0.62
1:2A:2118:U:OP1	1:2A:2148:G:H4’	1.99	0.62
1:2A:2125:G:N1	1:2A:2172:U:OP1	2.17	0.62
1:2A:2130:U:H2’	1:2A:2158:A:H61	1.63	0.62
6:2G:111:LEU:HD23	6:2G:117:PHE:CZ	2.34	0.62
32:2a:1144:G:N2	32:2a:1146:A:H62	1.97	0.62
33:2b:67:THR:N	33:2b:160:ASP:OD2	2.32	0.62
15:1T:127:ALA:C	15:1T:129:ARG:H	2.06	0.62
34:1c:52:LEU:HD12	34:1c:53:ALA:H	1.65	0.62
44:1m:3:ARG:HG2	44:1m:8:GLU:HA	1.80	0.62
1:2A:2127:G:N2	1:2A:2161:C:C2	2.68	0.62
1:2A:2317:C:N4	1:2A:2318:G:O6	2.33	0.62
6:2G:115:ARG:NH1	6:2G:137:GLU:OE2	2.31	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:57:LYS:HG2	36:2e:61:TYR:CE2	2.30	0.62
38:2g:50:ILE:HD11	38:2g:58:PRO:HA	1.79	0.62
1:1A:2153:G:H2'	1:1A:2154:G:H8	1.63	0.62
1:2A:568:U:H5'	1:2A:945:A:N1	2.14	0.62
1:2A:2817:G:OP1	13:2R:99:LYS:NZ	2.31	0.62
2:2B:14:U:OP2	2:2B:70:C:O2'	2.14	0.62
32:2a:794:A:OP1	61:2a:1912:HOH:O	2.16	0.62
32:2a:935:A:O2'	32:2a:1383:C:N3	2.31	0.62
32:2a:984:C:H2'	32:2a:985:C:C6	2.34	0.62
32:2a:1358:U:OP2	32:2a:1359:C:H5	1.83	0.62
54:2w:33:U:N3	54:2w:36:A:OP2	2.32	0.62
1:1A:422:A:OP2	61:1A:4236:HOH:O	2.15	0.62
1:1A:2503:2MA:H8	58:1A:4103:A1A1J:O	1.98	0.62
33:1b:12:GLU:HB2	33:1b:213:LEU:HD21	1.79	0.62
45:1n:24:CYS:SG	45:1n:40:CYS:N	2.71	0.62
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.00	0.62
7:2H:33:LEU:HD21	7:2H:136:ILE:HB	1.79	0.62
14:2S:62:LYS:HA	14:2S:65:VAL:HG22	1.82	0.62
21:2Z:70:LEU:HD23	21:2Z:71:VAL:N	2.14	0.62
32:2a:1256:A:N6	32:2a:1278:U:H1'	2.08	0.62
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.32	0.62
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.81	0.62
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.00	0.62
51:1t:10:LEU:HD12	51:1t:11:SER:H	1.64	0.62
1:2A:322:A:OP2	5:2F:169:ASN:HB2	1.98	0.62
5:2F:116:ASP:OD2	11:2P:1:MET:N	2.33	0.62
33:2b:80:ILE:HD11	33:2b:212:GLN:HB2	1.80	0.62
44:2m:60:VAL:HA	44:2m:63:THR:HB	1.81	0.62
5:1F:185:ASP:OD1	5:1F:188:ARG:NH1	2.27	0.62
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.35	0.62
8:2I:117:GLU:OE1	8:2I:118:LYS:N	2.25	0.62
21:2Z:52:SER:CB	21:2Z:54:HIS:H	2.13	0.62
33:2b:134:GLU:O	33:2b:138:LEU:HG	1.99	0.62
34:2c:100:ALA:O	34:2c:102:ASN:ND2	2.33	0.62
47:2p:74:LEU:O	47:2p:79:VAL:HG23	2.00	0.62
49:2r:52:PRO:O	49:2r:56:THR:HG23	1.99	0.62
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.30	0.62
32:1a:1036:G:H5"	32:1a:1037:C:C5	2.34	0.62
1:2A:869:G:O3'	12:2Q:6:ARG:NH2	2.32	0.62
1:2A:1271:G:OP2	61:2A:3916:HOH:O	2.16	0.62
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.35	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:4:ARG:NE	21:2Z:60:GLU:OE2	2.24	0.62
1:1A:2791:C:H2'	1:1A:2792:G:H8	1.64	0.62
32:1a:195:A:OP1	51:1t:68:LYS:NZ	2.30	0.62
37:1f:78:GLU:HA	37:1f:81:ILE:HG13	1.80	0.62
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.64	0.62
1:2A:639:U:H2'	1:2A:640:C:C6	2.35	0.62
32:2a:662:G:H2'	32:2a:663:A:H8	1.63	0.62
32:2a:984:C:H2'	32:2a:985:C:H6	1.64	0.62
1:1A:1055:G:H1	1:1A:1104:C:N4	1.95	0.62
1:1A:1094:U:H1'	1:1A:1097:U:C5	2.35	0.62
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.22	0.62
4:1E:29:GLY:HA3	61:1E:402:HOH:O	2.00	0.62
15:1T:98:LYS:NZ	61:1T:301:HOH:O	2.15	0.62
1:2A:900:A:H2'	1:2A:901:A:C8	2.34	0.62
1:2A:1019:U:H2'	1:2A:1020:A:H8	1.64	0.62
6:2G:103:LEU:HA	6:2G:106:LEU:HB3	1.81	0.62
32:2a:692:U:O2'	32:2a:694:A:N7	2.22	0.62
32:2a:876:G:O5'	39:2h:14:ARG:NH1	2.33	0.62
46:2o:4:THR:OG1	46:2o:7:GLU:HG3	1.99	0.62
7:1H:86:GLU:OE2	7:1H:130:ARG:NH1	2.27	0.62
32:1a:92:C:H2'	32:1a:93:G:C8	2.35	0.62
32:1a:456:C:H2'	32:1a:457:C:H6	1.63	0.62
1:2A:730:C:OP1	1:2A:1775:U:O2'	2.16	0.62
1:2A:1003:G:N2	1:2A:1153:C:C2	2.68	0.62
4:2E:46:ALA:HB2	4:2E:82:ARG:HA	1.82	0.62
14:2S:33:LYS:HB3	14:2S:34:HIS:CD2	2.33	0.62
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.34	0.62
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.64	0.62
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.64	0.62
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.81	0.62
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.00	0.62
21:2Z:28:MET:HE1	21:2Z:61:LEU:HD11	1.82	0.61
32:2a:243:A:H4'	32:2a:244:U:H5"	1.82	0.61
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.01	0.61
44:2m:63:THR:HG22	44:2m:64:TRP:CD1	2.35	0.61
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	1.81	0.61
50:2s:19:VAL:O	50:2s:23:ASN:ND2	2.33	0.61
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.36	0.61
8:2I:67:ARG:O	8:2I:68:LEU:HD23	1.98	0.61
32:2a:890:G:O2'	32:2a:906:G:O6	2.18	0.61
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:167:GLU:OE1	6:1G:167:GLU:N	2.26	0.61
17:1V:60:GLU:HB2	17:1V:97:LYS:HE2	1.82	0.61
7:2H:140:LYS:O	7:2H:144:VAL:HG23	2.01	0.61
22:20:32:ARG:H	22:20:35:ASN:ND2	1.98	0.61
41:2j:78:ASN:O	41:2j:80:LYS:N	2.33	0.61
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.82	0.61
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.33	0.61
32:1a:452:A:H4'	47:1p:72:ARG:CZ	2.29	0.61
1:2A:2115:G:H4'	1:2A:2167:U:C4	2.35	0.61
2:2B:46:A:H2'	2:2B:47:C:C6	2.34	0.61
5:2F:20:LEU:HD23	5:2F:21:ALA:H	1.65	0.61
6:2G:39:ILE:HG21	6:2G:155:MET:HE3	1.83	0.61
21:2Z:77:ASP:N	21:2Z:82:ARG:O	2.33	0.61
32:2a:1208:C:H2'	32:2a:1209:C:H6	1.65	0.61
36:2e:78:HIS:CD2	36:2e:142:LEU:HD23	2.35	0.61
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.65	0.61
28:16:44:ARG:HG2	28:16:44:ARG:HH11	1.66	0.61
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.81	0.61
32:2a:646:U:H2'	32:2a:647:C:C6	2.36	0.61
32:2a:1104:G:O3'	33:2b:111:ARG:NH2	2.32	0.61
32:2a:1292:U:H2'	32:2a:1293:G:H8	1.64	0.61
33:2b:8:LYS:NZ	33:2b:217:ARG:HB2	2.16	0.61
34:2c:9:GLY:HA3	45:2n:49:HIS:HA	1.82	0.61
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.32	0.61
54:1y:13:C:H2'	54:1y:14:A:H5"	1.82	0.61
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.81	0.61
32:2a:1239:A:H4'	32:2a:1240:U:H5"	1.80	0.61
33:2b:91:PRO:HA	33:2b:151:GLY:O	2.01	0.61
44:2m:3:ARG:NH2	44:2m:9:ILE:O	2.29	0.61
32:1a:1377:A:HO2'	38:1g:2:ALA:N	1.98	0.61
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.83	0.61
1:2A:307:G:N1	1:2A:310:A:OP2	2.31	0.61
8:2I:57:ARG:HA	8:2I:61:ARG:HH21	1.65	0.61
32:2a:174:C:H2'	32:2a:175:C:H6	1.65	0.61
32:2a:444:C:H2'	32:2a:445:G:H8	1.66	0.61
32:2a:986:A:H1'	50:2s:55:LYS:HA	1.82	0.61
32:2a:1274:G:N2	32:2a:1275:A:N7	2.47	0.61
14:1S:84:GLN:HA	14:1S:111:GLU:HB2	1.81	0.61
32:1a:165:C:H2'	32:1a:166:G:C8	2.35	0.61
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.35	0.61
1:2A:531:C:OP1	1:2A:561:G:N1	2.32	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2615:U:H2'	1:1A:2616:C:H6	1.66	0.61
19:1X:36:LYS:HE2	19:1X:54:VAL:O	2.01	0.61
32:1a:893:C:O2	61:1a:1911:HOH:O	2.13	0.61
39:1h:121:ASP:HB2	39:1h:125:ARG:NH2	2.16	0.61
1:2A:878:A:H61	1:2A:899:A:H1'	1.65	0.61
1:2A:981:A:N1	1:2A:2027:G:O2'	2.33	0.61
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	1.83	0.61
33:2b:188:ALA:HB1	33:2b:192:SER:HB2	1.81	0.61
38:2g:78:ARG:O	38:2g:84:ASN:HA	2.00	0.61
1:1A:34:C:H5"	1:1A:35:G:OP2	2.01	0.61
12:1Q:56:ARG:HB3	12:1Q:56:ARG:HH11	1.66	0.61
34:1c:69:HIS:CD2	34:1c:104:GLN:HG2	2.35	0.61
54:1y:4:C:H2'	54:1y:5:G:O4'	2.01	0.61
32:2a:17:U:H2'	32:2a:18:C:C6	2.36	0.61
32:2a:862:C:H1'	32:2a:874:G:H5"	1.83	0.61
32:2a:1101:A:C8	33:2b:172:ILE:HD13	2.35	0.61
41:2j:44:VAL:HG13	41:2j:66:ARG:HG2	1.82	0.61
48:2q:45:HIS:NE2	48:2q:47:PRO:HG3	2.16	0.61
54:2y:67:C:H2'	54:2y:68:C:H6	1.66	0.61
1:1A:249:C:O2	30:18:12:LYS:NZ	2.33	0.60
1:1A:2794:C:H42	1:1A:2802:G:N2	1.99	0.60
1:2A:565:C:OP1	17:2V:82:ARG:NH2	2.34	0.60
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.18	0.60
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.36	0.60
32:2a:148:G:H2'	32:2a:149:A:C8	2.36	0.60
36:2e:69:VAL:HG12	36:2e:71:LEU:HD21	1.83	0.60
44:2m:3:ARG:NH1	44:2m:8:GLU:OE2	2.34	0.60
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.36	0.60
13:1R:2:ARG:HA	13:1R:5:LYS:HD2	1.82	0.60
40:1i:23:ASN:HB2	40:1i:25:LYS:HE3	1.84	0.60
1:2A:851:U:H5'	25:23:49:LYS:HD2	1.83	0.60
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.36	0.60
21:2Z:93:ASP:HA	21:2Z:131:ARG:HH22	1.65	0.60
23:21:72:GLU:OE2	23:21:76:ARG:NH2	2.33	0.60
39:2h:33:GLU:O	39:2h:36:LEU:N	2.34	0.60
43:2l:40:VAL:HG21	43:2l:78:GLN:HA	1.83	0.60
39:1h:116:LYS:HD2	39:1h:127:LEU:HD23	1.82	0.60
1:2A:1675:C:OP2	61:2A:3936:HOH:O	2.16	0.60
11:2P:29:LYS:HG2	11:2P:30:THR:N	2.16	0.60
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.82	0.60
1:1A:278:A:O2'	1:1A:279:C:OP1	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1032:G:H2'	32:1a:1033:G:O4'	2.01	0.60
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.01	0.60
32:1a:1346:A:H5"	40:1i:120:ARG:HH12	1.65	0.60
51:1t:18:GLN:O	51:1t:22:ARG:HG3	2.01	0.60
11:2P:121:LYS:HB3	11:2P:123:LEU:HD13	1.84	0.60
32:2a:597:G:OP2	61:2a:1903:HOH:O	2.17	0.60
37:2f:36:ARG:NH1	37:2f:37:VAL:O	2.35	0.60
11:1P:39:LYS:HG3	11:1P:45:LEU:HD22	1.82	0.60
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.83	0.60
21:1Z:138:GLU:H	21:1Z:156:LYS:HE3	1.66	0.60
25:13:7:LYS:HG3	25:13:34:GLU:HG3	1.82	0.60
32:1a:17:U:H2'	32:1a:18:C:C6	2.36	0.60
32:1a:562:C:H1'	43:1l:15:ARG:HB3	1.82	0.60
38:1g:78:ARG:HD3	38:1g:79:ARG:H	1.65	0.60
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.32	0.60
1:2A:2134:A:H62	1:2A:2157:G:H4'	1.66	0.60
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.00	0.60
43:2l:70:ILE:HG12	43:2l:100:ILE:HD12	1.82	0.60
1:1A:2741:A:OP1	31:19:22:ARG:NH2	2.29	0.60
1:2A:884:C:H3'	1:2A:885:C:C6	2.36	0.60
4:2E:48:GLN:NE2	4:2E:78:LEU:HD13	2.16	0.60
14:2S:3:ARG:NH1	14:2S:4:LEU:H	2.00	0.60
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.36	0.60
32:2a:1206:G:O2'	34:2c:193:TYR:HA	2.01	0.60
33:2b:218:ALA:O	33:2b:222:ILE:HG23	2.01	0.60
34:2c:127:ARG:NH1	34:2c:190:ARG:HH22	1.99	0.60
50:2s:32:LYS:HD2	50:2s:34:TRP:HZ3	1.66	0.60
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.83	0.60
10:1O:24:VAL:HG13	10:1O:33:ALA:HB2	1.84	0.60
32:1a:1263:C:H2'	32:1a:1264:C:H6	1.67	0.60
32:1a:1346:A:N1	32:1a:1374:A:H5"	2.17	0.60
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.36	0.60
32:2a:1072:G:H2'	32:2a:1073:U:C6	2.37	0.60
32:2a:1168:A:H2'	32:2a:1169:A:C8	2.37	0.60
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.67	0.60
32:1a:62:U:OP1	32:1a:385:C:O2'	2.19	0.60
39:1h:120:THR:H	39:1h:123:GLU:HB2	1.66	0.60
40:1i:3:GLN:NE2	40:1i:20:ARG:HH21	1.99	0.60
54:1y:26:A:N6	54:1y:44:G:N1	2.50	0.60
1:2A:93:G:H2'	1:2A:94:C:H6	1.65	0.60
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.37	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2394:C:N3	54:2y:76:A:O2'	2.31	0.60
32:2a:685:G:C2	32:2a:686:U:C4	2.89	0.60
32:2a:1227:A:C8	50:2s:83:HIS:HB3	2.37	0.60
32:2a:1442:G:O2'	32:2a:1442(A):G:H5'	2.02	0.60
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.83	0.60
54:2y:18:G:O6	54:2y:56:C:N4	2.35	0.60
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.65	0.60
32:1a:974:A:H8	32:1a:974:A:OP1	1.85	0.60
6:2G:11:TYR:HB2	6:2G:176:LEU:HD21	1.84	0.60
32:2a:1109:C:N4	61:2a:1908:HOH:O	2.23	0.60
32:2a:1192:C:H5"	32:2a:1193:G:OP2	2.01	0.60
32:1a:1136:U:H5"	32:1a:1137:C:C4	2.37	0.60
32:1a:1218:C:OP2	45:1n:9:LYS:NZ	2.35	0.60
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.29	0.60
32:2a:1049:U:C5	32:2a:1201:A:H5'	2.37	0.60
1:1A:1187:G:H5"	17:1V:81:TYR:CE1	2.36	0.59
1:1A:1359:A:N6	1:1A:1372:U:H3	2.00	0.59
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.36	0.59
1:1A:1452:A:OP2	61:1A:4237:HOH:O	2.16	0.59
1:1A:2206:G:H5"	1:1A:2207:G:C5	2.37	0.59
15:1T:56:GLY:O	15:1T:59:THR:HG22	2.02	0.59
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.84	0.59
50:1s:49:ILE:HG13	50:1s:62:ILE:HD11	1.83	0.59
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.19	0.59
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.16	0.59
1:2A:2143:C:H2'	1:2A:2144:U:O4'	2.01	0.59
3:2D:206:LEU:HD22	3:2D:211:ARG:HG2	1.84	0.59
6:2G:107:LEU:HD23	6:2G:111:LEU:HD13	1.84	0.59
15:2T:127:ALA:C	15:2T:129:ARG:H	2.09	0.59
32:2a:966:M2G:HM22	55:2x:34:C:H5'	1.84	0.59
32:2a:994:A:O2'	32:2a:995:C:H5'	2.02	0.59
38:2g:46:ALA:O	38:2g:50:ILE:HG23	2.02	0.59
38:2g:67:GLU:HA	38:2g:70:LYS:HD2	1.83	0.59
36:1e:102:ALA:HB1	36:1e:106:PRO:HB2	1.85	0.59
39:1h:87:SER:HB2	39:1h:93:VAL:HB	1.84	0.59
40:1i:56:LEU:H	40:1i:56:LEU:HD12	1.66	0.59
4:2E:127:ASP:OD2	61:2E:401:HOH:O	2.17	0.59
21:2Z:4:ARG:HA	21:2Z:58:VAL:H	1.67	0.59
32:2a:818:G:O2'	32:2a:819:A:H5'	2.03	0.59
33:2b:16:HIS:HB2	33:2b:204:ASN:ND2	2.16	0.59
43:2l:52:LEU:O	43:2l:54:LYS:NZ	2.25	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:2s:28:LYS:HD2	50:2s:28:LYS:N	2.17	0.59
1:1A:2791:C:H2'	1:1A:2792:G:C8	2.37	0.59
38:1g:91:VAL:HG13	38:1g:95:ARG:HG2	1.84	0.59
1:2A:847:U:H5'	1:2A:848:G:OP2	2.01	0.59
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.16	0.59
32:2a:1379:G:O6	38:2g:2:ALA:N	2.35	0.59
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.37	0.59
39:2h:35:ILE:O	39:2h:39:LEU:HD12	2.02	0.59
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.38	0.59
23:11:64:ALA:HA	23:11:67:ILE:HG13	1.84	0.59
32:1a:757:U:H2'	32:1a:758:G:O4'	2.03	0.59
32:1a:1346:A:H5"	40:1i:120:ARG:NH1	2.17	0.59
39:1h:24:THR:HG22	39:1h:63:LEU:HD11	1.85	0.59
1:2A:2439:A:H5'	1:2A:2439:A:C8	2.37	0.59
30:28:33:ASN:HA	30:28:36:LYS:HD2	1.84	0.59
32:2a:328:C:H4'	32:2a:329:A:H5'	1.83	0.59
33:2b:77:ALA:HB2	33:2b:211:ILE:HD13	1.84	0.59
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.38	0.59
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.17	0.59
6:2G:110:ALA:HB1	6:2G:140:ILE:HG22	1.85	0.59
32:2a:742:G:P	46:2o:35:ARG:HH22	2.25	0.59
32:2a:1119:C:H2'	32:2a:1120:G:H8	1.67	0.59
32:2a:1237:C:O2'	32:2a:1300:G:N1	2.35	0.59
33:2b:87:ARG:NH2	33:2b:220:ASP:OD1	2.36	0.59
1:1A:2182:G:H2'	1:1A:2183:C:C6	2.38	0.59
32:1a:605:U:O4	61:1a:1913:HOH:O	2.16	0.59
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.37	0.59
54:1y:18:G:O2'	54:1y:57:G:O6	2.19	0.59
1:2A:1024:G:HO2'	1:2A:1144:G:HO2'	1.47	0.59
12:2Q:55:VAL:HG23	12:2Q:64:ILE:HD12	1.83	0.59
32:2a:554:C:H2'	32:2a:555:C:C6	2.38	0.59
32:2a:1186:G:H4'	40:2i:110:GLU:OE2	2.03	0.59
32:2a:1271:G:N2	32:2a:1272:G:N7	2.51	0.59
33:2b:114:ARG:O	33:2b:118:LEU:N	2.28	0.59
33:2b:223:ILE:HA	33:2b:226:ARG:HG2	1.84	0.59
41:2j:46:ARG:HG2	41:2j:64:GLU:HB3	1.83	0.59
1:1A:1721:G:H1'	1:1A:1741:A:H61	1.66	0.59
8:1I:129:THR:HG22	8:1I:139:GLN:NE2	2.15	0.59
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.16	0.59
50:1s:27:GLU:HG2	50:1s:28:LYS:HG2	1.85	0.59
1:2A:1015:G:O2'	1:2A:1016:G:H5'	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1169:G:N2	1:2A:1181:C:N3	2.51	0.59
1:2A:2281:C:N4	61:2A:3976:HOH:O	2.26	0.59
6:2G:15:VAL:HG21	6:2G:176:LEU:HG	1.85	0.59
7:2H:144:VAL:O	7:2H:148:ILE:HG13	2.03	0.59
32:2a:701:C:O2	32:2a:703:G:N1	2.36	0.59
36:2e:83:GLU:HA	36:2e:88:LYS:HA	1.84	0.59
48:2q:26:GLN:HG2	48:2q:37:LYS:HG2	1.83	0.59
1:1A:9:U:H3	1:1A:2629:A:H2	1.50	0.59
1:1A:2277:G:OP2	22:10:10:THR:HG21	2.02	0.59
1:1A:2751:G:H4'	7:1H:4:ILE:HD11	1.84	0.59
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.67	0.59
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.03	0.59
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.66	0.59
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.21	0.59
55:2x:50:U:H2'	55:2x:51:C:C6	2.36	0.59
1:1A:149:A:OP2	61:1A:4240:HOH:O	2.17	0.59
7:1H:90:LYS:HD2	7:1H:159:GLU:HG2	1.85	0.59
32:1a:269:C:H2'	32:1a:270:A:C8	2.38	0.59
32:1a:1508:G:OP1	61:1a:1905:HOH:O	2.16	0.59
1:2A:956:G:H2'	1:2A:957:A:H2'	1.84	0.59
7:2H:25:LYS:HE3	7:2H:27:LYS:HD2	1.84	0.59
8:2I:77:LEU:HD23	8:2I:78:THR:H	1.68	0.59
26:24:46:GLN:C	26:24:48:ARG:H	2.11	0.59
32:2a:935:A:H61	38:2g:3:ARG:HG3	1.68	0.59
39:2h:49:GLU:HG2	39:2h:62:TYR:HE2	1.68	0.59
1:1A:1429:G:O2'	1:1A:1430:C:H5'	2.02	0.59
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.84	0.59
54:1w:5:G:H2'	54:1w:6:G:H8	1.68	0.59
1:2A:236:C:H2'	1:2A:237:C:C6	2.38	0.59
1:2A:602:G:N2	1:2A:655:A:OP2	2.35	0.59
1:2A:931:G:O2'	25:23:24:LYS:HE2	2.03	0.59
1:2A:2287:A:C8	1:2A:2289:G:C8	2.91	0.59
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.02	0.59
32:2a:539:A:H2'	32:2a:540:G:C8	2.37	0.59
39:2h:51:VAL:HG21	39:2h:60:ARG:HB2	1.84	0.59
1:1A:1364:G:N7	23:11:3:LYS:HE2	2.17	0.58
1:1A:1721:G:H1'	1:1A:1741:A:N6	2.18	0.58
1:1A:1913:A:OP2	61:1A:4239:HOH:O	2.17	0.58
1:2A:555:U:O2'	1:2A:556:G:N7	2.33	0.58
1:2A:893:C:H2'	1:2A:894:C:C5	2.37	0.58
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2318:G:H21	14:2S:3:ARG:CD	2.15	0.58
1:2A:2611:U:H6	1:2A:2611:U:H5'	1.68	0.58
1:2A:2689:U:P	1:2A:2719:G:H22	2.26	0.58
21:2Z:157:LEU:HD21	21:2Z:163:LEU:HB2	1.85	0.58
47:2p:21:VAL:HG23	47:2p:33:ILE:HB	1.85	0.58
2:1B:96:U:O4	61:1B:303:HOH:O	2.15	0.58
32:1a:1367:C:H5'	41:1j:60:ARG:NH1	2.18	0.58
33:1b:78:GLN:NE2	33:1b:94:ASN:O	2.36	0.58
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.85	0.58
44:1m:50:GLU:O	44:1m:54:VAL:HG22	2.02	0.58
54:1w:23:A:H3'	54:1w:24:G:H8	1.67	0.58
1:2A:2387:U:H1'	22:20:41:ARG:HE	1.68	0.58
32:2a:1347:G:H8	40:2i:107:ARG:HB2	1.65	0.58
33:2b:222:ILE:HG13	33:2b:223:ILE:H	1.66	0.58
1:1A:588:U:H2'	1:1A:589:C:C6	2.38	0.58
35:1d:65:ARG:HG3	35:1d:75:PHE:CD1	2.38	0.58
40:1i:17:VAL:HG11	40:1i:80:GLY:C	2.28	0.58
1:2A:1847:A:H3'	1:2A:1848:A:H5'	1.84	0.58
1:2A:2065:C:H4'	1:2A:2251:OMG:HM22	1.85	0.58
1:2A:2131:G:N7	1:2A:2133:G:C2	2.70	0.58
5:2F:181:LEU:HG	5:2F:186:ILE:HD11	1.84	0.58
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.84	0.58
32:2a:1103:C:H2'	32:2a:1104:G:O4'	2.02	0.58
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.38	0.58
40:2i:37:PHE:HB3	40:2i:43:ALA:HB2	1.83	0.58
40:2i:45:ALA:O	40:2i:48:GLU:HB2	2.03	0.58
1:1A:2817:G:OP1	13:1R:99:LYS:NZ	2.35	0.58
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.69	0.58
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.21	0.58
32:1a:1367:C:H5'	41:1j:60:ARG:HH12	1.68	0.58
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.36	0.58
1:2A:397:G:N7	61:2A:4007:HOH:O	2.32	0.58
1:2A:700:G:O2'	1:2A:1632:A:N3	2.33	0.58
1:2A:1187:G:H5'	17:2V:81:TYR:CE1	2.39	0.58
1:2A:2142:C:N4	1:2A:2148:G:O6	2.37	0.58
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.68	0.58
1:2A:2468:G:O2'	1:2A:2481:G:N2	2.31	0.58
32:2a:936:C:H2'	32:2a:937:A:O4'	2.03	0.58
32:2a:971:G:H1'	32:2a:1365:G:O2'	2.03	0.58
34:2c:119:ARG:HE	34:2c:140:ARG:NH2	2.02	0.58
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.39	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:179:A:H2'	32:1a:180:U:C6	2.38	0.58
1:2A:322:A:H5'	1:2A:340:A:H1'	1.84	0.58
1:2A:2627:G:O2'	1:2A:2781:A:N1	2.35	0.58
2:2B:3:C:H2'	2:2B:4:C:C6	2.39	0.58
4:2E:48:GLN:HA	4:2E:80:GLU:HA	1.86	0.58
7:2H:27:LYS:HG3	7:2H:32:GLU:HB3	1.85	0.58
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.86	0.58
21:2Z:130:PRO:O	21:2Z:133:ILE:HG13	2.04	0.58
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.04	0.58
32:2a:1240:U:N3	38:2g:30:ILE:O	2.30	0.58
41:1j:11:PHE:CE1	41:1j:67:THR:HG22	2.38	0.58
1:2A:307:G:H21	1:2A:330:A:H62	1.49	0.58
19:2X:32:PRO:O	19:2X:77:LYS:HE3	2.04	0.58
32:2a:417:C:H2'	32:2a:418:C:H6	1.68	0.58
32:2a:1025:U:H3	32:2a:1036:G:H1	1.51	0.58
33:2b:141:GLU:HG2	33:2b:145:LEU:HD12	1.86	0.58
44:2m:33:ALA:HA	44:2m:59:TYR:CE2	2.39	0.58
54:2y:9:A:H5'	54:2y:46:G7M:N3	2.19	0.58
28:16:6:ARG:HD3	28:16:24:GLU:OE2	2.04	0.58
32:1a:864:A:OP1	61:1a:1914:HOH:O	2.17	0.58
40:1i:80:GLY:O	40:1i:84:ALA:N	2.36	0.58
51:1t:13:LEU:HD12	51:1t:14:LYS:H	1.69	0.58
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.01	0.58
1:2A:1417:C:H42	1:2A:1581:G:H1	1.51	0.58
15:2T:24:PRO:HA	15:2T:49:VAL:HG12	1.85	0.58
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.43	0.58
1:1A:528:A:O2'	1:1A:529:A:H5'	2.03	0.58
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.31	0.58
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.38	0.58
1:1A:1508:A:O2'	1:1A:1509:C:H5"	2.04	0.58
32:1a:625:G:H2'	32:1a:626:U:C6	2.38	0.58
33:1b:20:GLU:HB2	33:1b:190:THR:OG1	2.03	0.58
1:2A:400:G:O6	61:2A:3935:HOH:O	2.14	0.58
1:2A:1478:G:O2'	1:2A:1558:A:N1	2.37	0.58
1:2A:2136:C:O2'	1:2A:2137:C:O5'	2.22	0.58
11:2P:39:LYS:HB2	11:2P:45:LEU:HD13	1.86	0.58
32:2a:429:U:O3'	35:2d:22:LYS:NZ	2.22	0.58
34:2c:179:ARG:NH1	34:2c:206:GLU:HB2	2.19	0.58
35:2d:196:LEU:O	35:2d:198:VAL:N	2.34	0.58
54:1w:5:G:H2'	54:1w:6:G:C8	2.39	0.58
1:2A:2127:G:N1	1:2A:2161:C:C4	2.71	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:203:U:H2'	32:2a:203:U:OP2	2.04	0.58
41:2j:6:ILE:HB	41:2j:72:VAL:HB	1.86	0.58
1:1A:1057:A:C8	1:1A:1086:A:C8	2.92	0.58
32:1a:829:G:O6	61:1a:1912:HOH:O	2.16	0.58
1:2A:973:A:OP2	61:2A:3921:HOH:O	2.17	0.58
8:2I:124:GLY:H	8:2I:144:VAL:HG13	1.69	0.58
10:2O:48:PRO:HB3	32:2a:1422:G:H5"	1.86	0.58
21:2Z:53:ILE:HG22	21:2Z:71:VAL:O	2.04	0.58
26:24:16:CYS:SG	26:24:17:GLY:N	2.77	0.58
32:2a:256:U:OP1	48:2q:17:LYS:NZ	2.36	0.58
32:2a:828:A:H2'	32:2a:829:G:O4'	2.04	0.58
32:2a:1518:MA6:H93	32:2a:1519:MA6:C9	2.32	0.58
35:2d:61:LYS:HD2	35:2d:207:TYR:OH	2.04	0.58
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.39	0.57
1:1A:882:G:H4'	54:1w:19:G:O6	2.04	0.57
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.04	0.57
3:1D:79:VAL:HG12	3:1D:113:VAL:HA	1.86	0.57
17:2V:1:MET:HE2	17:2V:43:GLU:HB2	1.85	0.57
28:26:35:GLU:HG2	28:26:50:ARG:HD3	1.86	0.57
32:2a:859:A:H2'	32:2a:860:A:O4'	2.04	0.57
32:2a:1272:G:N2	32:2a:1273:G:C5	2.72	0.57
33:2b:120:ALA:O	33:2b:125:PRO:HD2	2.03	0.57
40:2i:28:VAL:HG12	40:2i:63:ILE:HB	1.86	0.57
32:1a:1028:C:H2'	32:1a:1029:C:O4'	2.04	0.57
43:1l:7:ILE:O	43:1l:11:VAL:HG23	2.04	0.57
1:2A:276:A:H5"	1:2A:277:C:H5'	1.85	0.57
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.04	0.57
32:2a:719:C:H42	49:2r:71:LYS:HE2	1.68	0.57
32:2a:1089:G:H1	32:2a:1096:C:H42	1.52	0.57
32:2a:1111:A:H2	34:2c:179:ARG:HH21	1.51	0.57
32:2a:1271:G:C2	32:2a:1272:G:N7	2.71	0.57
32:2a:1319:A:H61	32:2a:1361:G:H21	1.52	0.57
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.19	0.57
36:2e:71:LEU:HD13	36:2e:114:GLY:O	2.04	0.57
39:2h:51:VAL:HG11	39:2h:60:ARG:NH1	2.19	0.57
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.85	0.57
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.18	0.57
1:1A:1062:G:H1	1:1A:1077:A:N6	1.95	0.57
1:1A:2753:A:N3	31:19:15:LYS:NZ	2.51	0.57
26:14:15:ILE:HG13	26:14:21:VAL:HG22	1.85	0.57
33:1b:82:ARG:HD2	33:1b:92:TYR:OH	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.38	0.57
40:1i:3:GLN:HE21	40:1i:20:ARG:NH2	2.02	0.57
43:1l:89:ARG:HG2	43:1l:90:VAL:N	2.18	0.57
1:2A:2663:G:H3'	1:2A:2664:G:H8	1.69	0.57
21:2Z:5:LEU:HD23	21:2Z:6:LYS:H	1.69	0.57
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.22	0.57
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.84	0.57
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.86	0.57
32:1a:200:G:H1	32:1a:217:C:H42	1.52	0.57
32:1a:456:C:H2'	32:1a:457:C:C6	2.39	0.57
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.38	0.57
44:1m:80:ARG:NH1	50:1s:65:ASN:O	2.37	0.57
8:2I:63:ALA:O	8:2I:67:ARG:N	2.26	0.57
21:2Z:150:LEU:O	21:2Z:171:ILE:HG12	2.04	0.57
32:2a:735:C:H2'	32:2a:736:C:H6	1.67	0.57
33:2b:71:VAL:HB	33:2b:164:VAL:HG13	1.86	0.57
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.87	0.57
40:2i:79:LEU:HG	40:2i:83:ARG:HD2	1.86	0.57
47:2p:15:PRO:C	47:2p:16:HIS:HD1	2.11	0.57
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.37	0.57
40:1i:96:LEU:HD22	40:1i:101:PHE:HD2	1.70	0.57
54:1w:35:A:OP1	61:1w:201:HOH:O	2.17	0.57
32:2a:21:G:H2'	32:2a:22:G:C8	2.40	0.57
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.23	0.57
32:2a:983:A:O2'	32:2a:1049:U:O2'	2.16	0.57
43:2l:37:CYS:SG	43:2l:81:SER:HB2	2.45	0.57
36:1e:6:PHE:HB3	36:1e:34:VAL:HG22	1.87	0.57
39:1h:51:VAL:HG11	39:1h:60:ARG:NH1	2.20	0.57
44:1m:3:ARG:HG3	44:1m:4:ILE:N	2.20	0.57
1:2A:492:A:H2'	1:2A:493:G:O4'	2.04	0.57
4:2E:1:MET:HB3	4:2E:83:ASP:O	2.03	0.57
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.05	0.57
32:2a:179:A:H2'	32:2a:180:U:C6	2.39	0.57
39:2h:6:ILE:O	39:2h:10:LEU:HG	2.04	0.57
44:2m:29:ARG:HB3	44:2m:64:TRP:CZ3	2.38	0.57
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.40	0.57
8:1I:54:GLN:HG3	8:1I:57:ARG:HH22	1.70	0.57
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.05	0.57
32:1a:38:G:N2	32:1a:397:A:H5"	2.20	0.57
36:1e:142:LEU:O	36:1e:143:ARG:NH1	2.38	0.57
54:1w:66:U:H2'	54:1w:67:C:C6	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:1y:55:PSU:C4	54:1y:57:G:H5'	2.40	0.57
1:2A:540:C:H2'	1:2A:541:C:H6	1.70	0.57
1:2A:731:C:H5"	61:2A:3975:HOH:O	2.04	0.57
32:2a:1095:U:H2'	32:2a:1096:C:C6	2.40	0.57
32:2a:1318:A:O2'	50:2s:37:ARG:HB2	2.05	0.57
35:2d:101:LEU:O	35:2d:104:VAL:HG22	2.05	0.57
55:2x:10:G:N2	55:2x:26:G:H1'	2.20	0.57
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.40	0.57
32:1a:373:A:H2'	32:1a:374:A:H8	1.70	0.57
36:1e:18:ARG:HH11	36:1e:27:ARG:HH12	1.53	0.57
54:1y:36:A:H2'	54:1y:37:MIA:O4'	2.05	0.57
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.23	0.57
6:2G:170:ARG:HH12	6:2G:174:GLU:CD	2.13	0.57
32:2a:1060:C:H4'	41:2j:51:ARG:HB3	1.86	0.57
33:2b:73:THR:HA	33:2b:94:ASN:O	2.04	0.57
33:2b:80:ILE:HD12	33:2b:208:ILE:HG23	1.86	0.57
33:2b:165:VAL:HG23	33:2b:187:LEU:HD22	1.87	0.57
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.40	0.57
54:2w:19:G:N2	54:2w:57:G:H1'	2.19	0.57
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.70	0.57
1:1A:1075:C:C2'	1:1A:1076:C:H5'	2.34	0.57
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.40	0.57
1:2A:1116:C:H2'	1:2A:1117:G:H8	1.68	0.57
5:2F:156:LEU:HD21	5:2F:163:VAL:HG12	1.87	0.57
32:2a:620:C:C2	35:2d:135:LEU:HG	2.39	0.57
32:2a:1359:C:OP1	45:2n:22:THR:OG1	2.22	0.57
1:1A:84:A:H5'	20:1Y:8:LYS:HG2	1.87	0.57
1:1A:2101:G:H2'	1:1A:2102:U:C6	2.39	0.57
1:2A:106:C:H1'	20:2Y:1:MET:HE2	1.87	0.57
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.69	0.57
1:2A:2059:A:O2'	5:2F:69:HIS:HD2	1.88	0.57
1:2A:2306:C:N4	6:2G:42:GLY:O	2.38	0.57
12:2Q:54:MET:HE1	12:2Q:104:PHE:HB3	1.87	0.57
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.05	0.57
33:2b:8:LYS:HZ3	33:2b:217:ARG:HB2	1.68	0.57
33:2b:27:LYS:HD2	33:2b:193:ASP:OD1	2.05	0.57
33:2b:100:GLY:N	33:2b:176:GLU:OE2	2.38	0.57
1:1A:1359:A:N1	1:1A:1372:U:C4	2.73	0.56
1:1A:2080:G:OP1	23:11:35:THR:HG21	2.04	0.56
1:1A:2662:A:H2'	1:1A:2663:G:O4'	2.06	0.56
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.03	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:171:A:H2'	32:1a:172:A:C8	2.39	0.56
34:1c:57:ILE:HG12	34:1c:66:VAL:HG12	1.87	0.56
39:1h:95:VAL:HB	39:1h:99:GLU:HB2	1.87	0.56
42:1k:85:ARG:HD3	42:1k:113:PRO:HD3	1.86	0.56
1:2A:30:G:H2'	1:2A:31:C:C6	2.40	0.56
1:2A:212:G:H2'	1:2A:213:A:O4'	2.05	0.56
1:2A:881:G:C2	1:2A:882:G:H1'	2.40	0.56
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.39	0.56
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.38	0.56
5:2F:137:LYS:HA	5:2F:140:LEU:HD12	1.87	0.56
11:2P:99:LEU:HD12	11:2P:102:ARG:NH2	2.19	0.56
31:29:6:SER:O	31:29:6:SER:OG	2.23	0.56
32:2a:417:C:H2'	32:2a:418:C:C6	2.40	0.56
32:2a:922:G:N3	32:2a:1398:A:H2	2.03	0.56
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.86	0.56
37:2f:82:ARG:HB2	37:2f:85:VAL:HG23	1.87	0.56
40:2i:3:GLN:NE2	40:2i:20:ARG:HH21	2.02	0.56
41:2j:50:ILE:O	45:2n:41:ARG:NH1	2.37	0.56
46:2o:55:GLY:HA2	46:2o:58:MET:HE2	1.87	0.56
1:1A:2478:A:OP2	31:19:2:LYS:NZ	2.36	0.56
4:1E:47:VAL:HG11	4:1E:86:PRO:HD2	1.88	0.56
10:1O:107:ARG:NH2	15:1T:36:GLU:HG2	2.20	0.56
43:1l:56:ALA:HB2	43:1l:70:ILE:HD11	1.87	0.56
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.41	0.56
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.40	0.56
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.40	0.56
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.23	0.56
34:2c:51:GLY:O	34:2c:70:VAL:HG12	2.04	0.56
2:1B:88:C:H2'	2:1B:89:G:O4'	2.05	0.56
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.40	0.56
14:1S:93:LYS:HG2	14:1S:95:HIS:HB2	1.87	0.56
26:14:58:ARG:O	26:14:61:ARG:HB3	2.04	0.56
32:1a:783:C:OP1	32:1a:1515:C:O2'	2.22	0.56
32:1a:1176:A:H2'	32:1a:1177:G:C8	2.41	0.56
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.87	0.56
47:1p:18:ARG:NH1	47:1p:32:TYR:OH	2.38	0.56
1:2A:363:G:H2'	1:2A:363(A):A:C8	2.35	0.56
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.21	0.56
1:2A:2121:G:H1	1:2A:2177:C:N4	2.04	0.56
1:2A:2142:C:H2'	1:2A:2143:C:C6	2.39	0.56
1:2A:2162:G:O2'	1:2A:2172:U:H5'	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2887:U:H2'	1:2A:2888:C:H6	1.69	0.56
32:2a:1221:G:O3'	50:2s:77:THR:OG1	2.22	0.56
32:2a:1287:A:N6	32:2a:1371:G:O4'	2.36	0.56
32:2a:1313:U:OP1	50:2s:5:LEU:HD12	2.04	0.56
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.20	0.56
33:2b:16:HIS:ND1	33:2b:204:ASN:HB3	2.20	0.56
49:2r:33:ASP:O	49:2r:40:LEU:HD11	2.05	0.56
54:2y:65:G:H2'	54:2y:66:U:C6	2.40	0.56
1:1A:55:G:O2'	1:1A:127:A:N1	2.37	0.56
1:1A:1014:U:OP2	61:1A:4241:HOH:O	2.17	0.56
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.41	0.56
32:1a:1456:G:O3'	51:1t:39:LYS:NZ	2.30	0.56
1:2A:882:G:H1	1:2A:894:C:H42	1.52	0.56
1:2A:1359:A:C2	1:2A:1372:U:O4	2.59	0.56
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.41	0.56
1:2A:2472:G:H2'	1:2A:2475:C:N4	2.20	0.56
6:2G:99:MET:O	6:2G:103:LEU:HD12	2.05	0.56
8:2I:77:LEU:HD21	8:2I:100:ALA:HB1	1.87	0.56
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.05	0.56
14:2S:33:LYS:HB3	14:2S:34:HIS:HD2	1.71	0.56
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.87	0.56
28:26:13:CYS:SG	28:26:47:THR:HG21	2.45	0.56
32:2a:1037:C:H2'	32:2a:1038:C:C6	2.41	0.56
32:2a:1272:G:N2	32:2a:1273:G:C8	2.72	0.56
36:2e:99:GLY:O	36:2e:117:ASP:HA	2.06	0.56
50:2s:61:TYR:HE2	50:2s:63:THR:HG22	1.68	0.56
1:1A:2378:A:H2'	14:1S:21:THR:HG21	1.87	0.56
32:1a:262:A:H2'	32:1a:263:A:C8	2.41	0.56
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.06	0.56
1:2A:602:G:O2'	1:2A:655:A:N6	2.38	0.56
1:2A:855:G:O2'	22:20:27:GLU:OE2	2.23	0.56
1:2A:1019:U:H3	1:2A:1142(A):A:N6	2.02	0.56
2:2B:66:A:N6	2:2B:108:U:H3'	2.20	0.56
32:2a:1400:5MC:H5'	53:2v:18:G:C6	2.41	0.56
35:2d:112:VAL:HG22	35:2d:116:GLN:NE2	2.19	0.56
46:2o:33:THR:HG21	46:2o:85:LEU:HD22	1.88	0.56
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.41	0.56
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.88	0.56
1:1A:2124:G:H1	1:1A:2174:C:H42	1.52	0.56
1:1A:2794:C:N4	1:1A:2802:G:H22	2.01	0.56
32:1a:877:C:H5"	39:1h:88:LYS:HD3	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2524:G:O6	61:2A:3932:HOH:O	2.13	0.56
32:2a:1045:C:H2'	32:2a:1046:A:O4'	2.06	0.56
34:2c:20:SER:OG	34:2c:36:ASP:OD2	2.18	0.56
49:2r:25:THR:HG21	49:2r:42:ARG:HH12	1.71	0.56
1:1A:2137:C:H2'	1:1A:2138:C:C6	2.41	0.56
32:1a:382:A:H2'	32:1a:383:A:C8	2.41	0.56
51:1t:13:LEU:HD12	51:1t:14:LYS:N	2.21	0.56
1:2A:125:G:O2'	29:27:48:LYS:HD3	2.05	0.56
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	1.86	0.56
6:2G:113:ARG:NH2	6:2G:139:LEU:O	2.39	0.56
22:20:11:ARG:O	22:20:14:ARG:NH2	2.39	0.56
38:2g:113:GLU:CG	38:2g:119:ARG:HG2	2.36	0.56
3:1D:8:PRO:HB3	3:1D:14:ARG:HG2	1.86	0.56
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.40	0.56
18:1W:4:LYS:HD3	18:1W:6:ILE:HD11	1.86	0.56
21:1Z:138:GLU:H	21:1Z:156:LYS:HZ1	1.53	0.56
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.06	0.56
1:2A:247:G:H4'	1:2A:386:G:C5	2.41	0.56
1:2A:500:G:H22	1:2A:503:A:H5'	1.71	0.56
1:2A:1969:A:O2'	1:2A:1972:A:N3	2.37	0.56
32:2a:1118:C:N3	32:2a:1156:G:N2	2.54	0.56
33:2b:97:TRP:HE1	33:2b:172:ILE:HG22	1.70	0.56
40:2i:111:ARG:HG3	40:2i:113:LYS:HE2	1.88	0.56
43:2l:56:ALA:O	43:2l:68:ALA:N	2.25	0.56
1:1A:1938:A:OP2	61:1A:4242:HOH:O	2.18	0.56
1:1A:2100:G:N2	1:1A:2189:U:O2	2.29	0.56
1:1A:2155:G:H5"	1:1A:2156:G:C8	2.41	0.56
6:1G:126:ASP:CB	6:1G:128:ARG:H	2.18	0.56
49:1r:43:PHE:C	49:1r:51:LEU:HD12	2.31	0.56
1:2A:2579:C:OP1	61:2A:3940:HOH:O	2.18	0.56
1:2A:2839:G:H5'	13:2R:46:GLY:CA	2.36	0.56
8:2I:93:THR:HG22	8:2I:119:PRO:HB3	1.88	0.56
11:2P:39:LYS:HB2	11:2P:45:LEU:HD22	1.87	0.56
12:2Q:118:LEU:HD12	12:2Q:131:ILE:HG23	1.87	0.56
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.21	0.56
33:2b:121:LEU:HD21	33:2b:130:ARG:HH22	1.71	0.56
40:2i:3:GLN:HE21	40:2i:20:ARG:NE	2.00	0.56
32:1a:449:C:O2	47:1p:42:ARG:NH1	2.39	0.56
46:1o:5:LYS:O	46:1o:9:GLN:HG2	2.05	0.56
1:2A:81:G:H21	20:2Y:1:MET:HE1	1.70	0.56
2:2B:77:U:OP1	21:2Z:19:ARG:NH2	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.21	0.56
9:2N:43:THR:HG22	9:2N:44:PRO:HD2	1.88	0.56
32:2a:21:G:O2'	32:2a:914:A:N6	2.39	0.56
33:2b:212:GLN:NE2	33:2b:235:SER:HA	2.20	0.56
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.05	0.56
38:2g:78:ARG:HH21	38:2g:79:ARG:HE	1.54	0.56
44:2m:45:VAL:HA	44:2m:48:LEU:HD12	1.88	0.56
1:1A:1092:C:H2'	1:1A:1093:G:H5'	1.88	0.55
33:1b:84:GLU:O	33:1b:219:VAL:HG21	2.05	0.55
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.41	0.55
1:2A:2375:G:O2'	1:2A:2377:A:N7	2.33	0.55
32:2a:671:G:H2'	32:2a:672:U:O4'	2.07	0.55
32:2a:1264:C:N4	32:2a:1265:G:O6	2.39	0.55
32:2a:1515:C:H2'	32:2a:1516:G:H8	1.71	0.55
1:1A:184:C:H2'	1:1A:185:U:C6	2.41	0.55
1:1A:272(G):C:H42	1:1A:363(C):G:H1	1.54	0.55
1:1A:796:C:H2'	1:1A:797:C:C6	2.42	0.55
1:1A:1185:C:H5"	1:1A:1186:G:OP1	2.06	0.55
1:1A:2099:U:O2	1:1A:2190:G:N2	2.30	0.55
25:13:3:ARG:NE	25:13:60:GLU:OE2	2.38	0.55
32:1a:649:G:H2'	32:1a:650:G:H8	1.71	0.55
32:1a:731:G:OP1	32:1a:766:A:H1'	2.06	0.55
1:2A:1268:A:OP1	61:2A:3938:HOH:O	2.18	0.55
1:2A:1540:U:O2'	1:2A:1541:G:H5'	2.06	0.55
1:2A:2274:A:O2'	1:2A:2276:G:OP1	2.23	0.55
1:2A:2313:C:H4'	6:2G:91:ARG:HG3	1.87	0.55
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.42	0.55
15:2T:18:ASP:OD1	15:2T:18:ASP:N	2.39	0.55
16:2U:90:VAL:HG11	17:2V:4:ILE:HD13	1.88	0.55
30:28:21:LYS:HE2	30:28:49:VAL:HG11	1.88	0.55
32:2a:93:G:H2'	32:2a:96:U:O4'	2.06	0.55
32:2a:407:G:OP1	35:2d:115:ARG:HD3	2.06	0.55
32:2a:1269:A:N1	32:2a:1312:G:O2'	2.26	0.55
36:2e:36:ASP:O	36:2e:38:GLN:N	2.32	0.55
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.88	0.55
1:1A:1059:G:H1	1:1A:1079:C:H42	1.54	0.55
32:1a:271:C:H2'	32:1a:272:C:H6	1.72	0.55
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.39	0.55
40:1i:43:ALA:HA	40:1i:74:ILE:HD13	1.87	0.55
43:1l:70:ILE:HD13	43:1l:77:LEU:HD12	1.88	0.55
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.41	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:897:C:O4'	54:2w:56:C:H5	1.88	0.55
1:2A:1311:G:N2	1:2A:1312:U:O4	2.33	0.55
32:2a:437:U:OP1	35:2d:155:LEU:HD21	2.06	0.55
32:2a:792:A:O2'	32:2a:794:A:N7	2.36	0.55
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.37	0.55
34:2c:108:ASN:HB3	34:2c:111:LEU:HB2	1.87	0.55
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	1.88	0.55
42:2k:98:LEU:C	42:2k:101:SER:HG	2.13	0.55
54:2y:18:G:N2	54:2y:55:PSU:HN3	2.04	0.55
1:1A:886:C:H3'	1:1A:887:A:H5"	1.89	0.55
1:1A:2245:U:O2'	1:1A:2436:G:OP2	2.18	0.55
21:1Z:93:ASP:HB2	21:1Z:131:ARG:HH12	1.70	0.55
32:1a:175:C:H2'	32:1a:176:C:C6	2.41	0.55
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.42	0.55
1:2A:184:C:H2'	1:2A:185:U:C6	2.41	0.55
1:2A:2135:A:C8	1:2A:2136:C:H5	2.25	0.55
1:2A:2280:G:O2'	1:2A:2388:A:N1	2.31	0.55
1:2A:2320:A:H1'	1:2A:2321:G:C2	2.41	0.55
1:2A:2400:G:H2'	1:2A:2401:U:H6	1.70	0.55
1:2A:2705:A:OP2	61:2A:3939:HOH:O	2.18	0.55
4:2E:170:LEU:HD13	4:2E:184:VAL:HG21	1.89	0.55
22:20:38:VAL:HG12	22:20:40:GLN:HG2	1.87	0.55
32:2a:736:C:H2'	32:2a:737:A:C8	2.42	0.55
32:2a:798:G:O6	61:2a:1913:HOH:O	2.16	0.55
32:2a:850:U:H2'	32:2a:851:G:H5"	1.89	0.55
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.40	0.55
17:1V:1:MET:HE2	17:1V:43:GLU:OE1	2.06	0.55
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.22	0.55
31:19:17:ILE:HD13	31:19:26:ILE:HD13	1.88	0.55
32:1a:1095:U:P	32:1a:1108:G:H1	2.28	0.55
54:1y:26:A:N6	54:1y:44:G:H1	2.04	0.55
6:2G:83:ARG:O	6:2G:86:MET:HG3	2.07	0.55
32:2a:419:C:OP1	32:2a:513:C:O2'	2.18	0.55
32:2a:653:A:H5"	32:2a:653:A:N3	2.21	0.55
33:2b:74:LYS:O	33:2b:78:GLN:HG2	2.06	0.55
39:2h:51:VAL:CG2	39:2h:60:ARG:HB2	2.37	0.55
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.07	0.55
1:1A:878:A:H61	1:1A:899:A:C2'	2.19	0.55
1:1A:1506:C:H2'	1:1A:1507:A:C8	2.39	0.55
6:1G:28:VAL:O	6:1G:31:VAL:HG13	2.07	0.55
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:448:A:C4	32:1a:487:A:C2	2.94	0.55
40:1i:50:LEU:HD23	40:1i:81:ILE:HD11	1.89	0.55
47:1p:15:PRO:HD2	47:1p:42:ARG:HD3	1.87	0.55
2:2B:74:U:H2'	2:2B:75:G:H5"	1.88	0.55
32:2a:779:C:H2'	32:2a:780:A:O4'	2.07	0.55
32:2a:985:C:C2	32:2a:1221:G:N2	2.75	0.55
1:1A:642:G:OP1	61:1A:4243:HOH:O	2.18	0.55
1:1A:2140:C:N3	1:1A:2151:G:O6	2.39	0.55
6:1G:122:PRO:HG3	6:1G:182:LYS:H	1.72	0.55
25:13:26:LEU:O	25:13:35:ARG:NE	2.37	0.55
32:1a:4:U:O4	39:1h:105:ARG:HD3	2.07	0.55
32:1a:1343:G:H1'	40:1i:121:ARG:NH1	2.21	0.55
1:2A:271(M):G:O6	61:2A:3941:HOH:O	2.18	0.55
1:2A:1278:A:OP1	13:2R:36:THR:HG23	2.05	0.55
7:2H:3:ARG:NH2	7:2H:65:HIS:HB3	2.21	0.55
11:2P:38:GLN:HG2	11:2P:45:LEU:H	1.72	0.55
47:2p:6:LEU:HD23	47:2p:17:TYR:CG	2.41	0.55
48:2q:4:LYS:HE2	48:2q:6:LEU:HD21	1.89	0.55
1:1A:721:C:H2'	1:1A:722:A:C8	2.42	0.55
1:1A:897:C:N3	1:1A:898:C:N4	2.55	0.55
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.07	0.55
12:1Q:32:TYR:OH	12:1Q:111:GLU:OE2	2.23	0.55
21:1Z:138:GLU:H	21:1Z:156:LYS:CE	2.20	0.55
32:1a:946:A:H2'	32:1a:947:G:C8	2.41	0.55
32:1a:1456:G:O6	51:1t:54:LYS:NZ	2.35	0.55
39:1h:132:GLU:O	39:1h:134:ILE:HG12	2.06	0.55
45:1n:23:ARG:NH1	45:1n:30:ALA:HB2	2.22	0.55
54:1w:18:G:N2	54:1w:57:G:H2'	2.21	0.55
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.07	0.55
1:2A:1021:A:N6	1:2A:1141:U:H3	2.03	0.55
1:2A:1857:G:O2'	1:2A:1885:A:N6	2.40	0.55
32:2a:573:A:N3	32:2a:883:C:O2'	2.38	0.55
32:2a:587:G:N2	32:2a:754:C:OP2	2.36	0.55
32:2a:1338:G:H2'	32:2a:1339:A:C8	2.42	0.55
37:2f:69:GLU:CD	37:2f:69:GLU:H	2.14	0.55
1:1A:2319:G:N1	14:1S:3:ARG:HA	2.22	0.55
1:1A:2615:U:H2'	1:1A:2616:C:C6	2.42	0.55
2:1B:58:A:OP2	61:1B:305:HOH:O	2.18	0.55
17:1V:55:ALA:CA	17:1V:101:GLY:HA2	2.33	0.55
32:1a:184:G:H2'	32:1a:185:A:H8	1.71	0.55
3:2D:70:TRP:CE2	3:2D:150:LYS:HD3	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:56:LYS:HA	8:2I:59:ALA:HB3	1.88	0.55
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.06	0.55
32:2a:1026:G:H5'	32:2a:1027:C:O5'	2.07	0.55
35:2d:117:ALA:O	35:2d:121:VAL:HG23	2.05	0.55
38:2g:20:ASP:HB3	38:2g:23:VAL:HB	1.89	0.55
44:2m:107:ALA:HB3	44:2m:111:LYS:HE2	1.89	0.55
45:2n:21:TYR:HD1	45:2n:22:THR:O	1.89	0.55
26:14:24:THR:OG1	26:14:25:TYR:N	2.39	0.55
40:1i:29:ASN:ND2	40:1i:65:VAL:O	2.34	0.55
2:2B:55:U:H1'	6:2G:29:TRP:HD1	1.72	0.55
4:2E:52:LEU:O	4:2E:76:ARG:N	2.40	0.55
5:2F:129:PHE:HA	5:2F:142:TRP:NE1	2.22	0.55
32:2a:782:A:OP1	61:2a:1912:HOH:O	2.18	0.55
32:2a:935:A:N6	38:2g:3:ARG:HG3	2.22	0.55
1:1A:1455:G:O2'	1:1A:2853:C:OP1	2.15	0.54
1:1A:2111:C:N3	1:1A:2145:C:O2'	2.35	0.54
1:1A:2141:G:O6	1:1A:2150:U:O2	2.26	0.54
6:1G:67:LYS:HE3	6:1G:68:PRO:O	2.07	0.54
15:1T:31:SER:OG	15:1T:85:LYS:HE3	2.07	0.54
32:1a:353:A:H5'	32:1a:353:A:H8	1.73	0.54
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.19	0.54
44:1m:3:ARG:HG3	44:1m:4:ILE:H	1.70	0.54
1:2A:441:U:H2'	1:2A:442:G:C8	2.43	0.54
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.06	0.54
2:2B:94:C:H2'	2:2B:95:C:C6	2.42	0.54
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	1.88	0.54
6:2G:179:PRO:HB2	26:24:42:PHE:HE2	1.72	0.54
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.15	0.54
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.32	0.54
32:2a:952:U:H4'	32:2a:964:A:H61	1.73	0.54
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.71	0.54
32:2a:1261:A:H5'	32:2a:1284:C:OP1	2.06	0.54
32:2a:1305:G:C2	32:2a:1331:G:N3	2.75	0.54
49:2r:33:ASP:OD2	49:2r:36:ASN:HB2	2.06	0.54
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.73	0.54
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.07	0.54
1:1A:2749:A:OP1	7:1H:3:ARG:NH1	2.40	0.54
13:1R:2:ARG:HG2	13:1R:2:ARG:O	2.07	0.54
32:1a:203:U:OP2	32:1a:203:U:H6	1.90	0.54
40:1i:32:ASP:OD1	40:1i:33:PHE:N	2.40	0.54
1:2A:236:C:H2'	1:2A:237:C:H6	1.71	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:964:C:O2'	1:2A:2273:A:H1'	2.07	0.54
5:2F:154:VAL:HG22	5:2F:191:ARG:HB2	1.89	0.54
11:2P:91:PHE:O	11:2P:121:LYS:NZ	2.39	0.54
14:2S:77:ALA:O	14:2S:81:GLY:N	2.35	0.54
28:26:44:ARG:HG2	28:26:44:ARG:HH11	1.72	0.54
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.42	0.54
37:2f:96:PRO:HB3	49:2r:30:ASP:OD2	2.07	0.54
55:2x:23:C:H2'	55:2x:24:U:C6	2.41	0.54
55:2x:61:C:H2'	55:2x:62:C:H6	1.72	0.54
1:1A:2119:A:O2'	1:1A:2120:G:H5'	2.07	0.54
1:1A:2171:A:O2'	1:1A:2172:U:H5"	2.08	0.54
1:1A:2331:G:O2'	22:10:43:THR:HG22	2.07	0.54
26:14:61:ARG:NH2	50:1s:9:VAL:HG11	2.16	0.54
32:1a:1030(C):G:H2'	32:1a:1030(D):A:C8	2.42	0.54
37:1f:68:PRO:HG2	37:1f:71:ARG:HD2	1.89	0.54
1:2A:706:A:OP1	3:2D:7:LYS:NZ	2.39	0.54
26:24:53:GLU:HG2	26:24:55:ARG:H	1.71	0.54
26:24:60:GLN:OE1	26:24:60:GLN:N	2.40	0.54
30:28:30:ARG:O	61:28:201:HOH:O	2.18	0.54
32:2a:1169:A:H2'	32:2a:1170:A:C8	2.42	0.54
32:2a:1313:U:P	50:2s:5:LEU:HD12	2.47	0.54
36:2e:61:TYR:HA	36:2e:64:ARG:HE	1.72	0.54
36:2e:79:GLU:HA	36:2e:91:LEU:O	2.08	0.54
50:2s:20:LEU:HA	50:2s:23:ASN:HD22	1.71	0.54
54:2y:8:4SU:H1'	54:2y:48:C:H1'	1.90	0.54
1:1A:2336:A:H61	22:10:43:THR:CG2	2.21	0.54
2:1B:75:G:H22	21:1Z:73:GLN:NE2	2.05	0.54
6:1G:18:GLU:OE2	6:1G:22:ARG:HD2	2.07	0.54
32:1a:668:G:O2'	46:1o:46:HIS:HB3	2.07	0.54
35:1d:187:ARG:NH1	35:1d:188:LEU:O	2.40	0.54
1:2A:2303:G:O2'	6:2G:132:ASN:HB2	2.06	0.54
8:2I:82:ARG:HB3	8:2I:89:TYR:HD2	1.70	0.54
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.73	0.54
32:2a:1411:C:H2'	32:2a:1412:C:H6	1.72	0.54
44:2m:13:LYS:HA	44:2m:44:ARG:NH1	2.21	0.54
51:2t:16:HIS:O	51:2t:19:SER:OG	2.17	0.54
32:1a:177:C:O2'	32:1a:178:C:H5'	2.08	0.54
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.90	0.54
40:1i:93:ARG:HH11	40:1i:97:LYS:HD2	1.73	0.54
41:1j:7:LYS:HE2	41:1j:40:LEU:HD11	1.89	0.54
41:1j:78:ASN:O	41:1j:80:LYS:N	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	1.89	0.54
1:2A:2887:U:H2'	1:2A:2888:C:C6	2.43	0.54
26:24:46:GLN:O	26:24:48:ARG:N	2.40	0.54
32:2a:9:G:H2'	32:2a:10:A:C8	2.43	0.54
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.42	0.54
32:2a:1051:C:H2'	32:2a:1052:U:H6	1.72	0.54
32:2a:1052:U:H5"	32:2a:1053:G:OP2	2.07	0.54
40:2i:31:GLN:HB3	40:2i:35:GLU:HG2	1.89	0.54
7:1H:101:ARG:NH1	7:1H:122:THR:HG23	2.23	0.54
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.39	0.54
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.22	0.54
1:2A:2320:A:H1'	1:2A:2321:G:N2	2.23	0.54
32:2a:1180:A:H5'	40:2i:103:THR:HG23	1.90	0.54
33:2b:82:ARG:HB2	33:2b:92:TYR:CZ	2.43	0.54
33:2b:104:ASN:O	33:2b:108:ILE:HG12	2.07	0.54
34:2c:119:ARG:HE	34:2c:140:ARG:CZ	2.20	0.54
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.42	0.54
40:2i:16:ARG:HG3	40:2i:64:THR:HG22	1.88	0.54
44:2m:15:VAL:O	44:2m:19:LEU:HG	2.07	0.54
1:1A:897:C:H4'	54:1w:55:PSU:O3'	2.08	0.54
32:1a:222:U:H2'	32:1a:223:U:C6	2.43	0.54
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.90	0.54
1:2A:2525:G:N2	1:2A:2539:C:C2	2.75	0.54
3:2D:85:ASP:OD2	3:2D:88:ARG:NH1	2.40	0.54
21:2Z:79:ARG:HB3	21:2Z:80:ARG:NH1	2.23	0.54
32:2a:141:A:H1'	32:2a:182:U:O2	2.07	0.54
32:2a:975:A:N1	41:2j:48:THR:HB	2.22	0.54
32:2a:1328:C:OP1	52:2u:21:TYR:OH	2.11	0.54
36:2e:8:GLU:HG2	36:2e:34:VAL:HG12	1.89	0.54
36:2e:103:GLY:O	36:2e:106:PRO:HD2	2.08	0.54
1:1A:878:A:N6	1:1A:899:A:O2'	2.41	0.54
1:1A:1025:G:O2'	61:1A:4214:HOH:O	2.01	0.54
1:1A:2417:C:OP1	11:1P:65:ARG:NH2	2.41	0.54
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.08	0.54
34:1c:148:GLY:HA3	34:1c:172:ARG:H	1.73	0.54
35:1d:57:ARG:HD3	35:1d:205:GLU:HB3	1.90	0.54
37:1f:19:LEU:HD11	37:1f:59:TYR:CE1	2.42	0.54
37:1f:100:ASN:ND2	49:1r:23:LYS:HE2	2.20	0.54
38:1g:12:LEU:HD13	38:1g:21:VAL:HB	1.89	0.54
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.42	0.54
41:1j:38:ILE:HD11	41:1j:71:LEU:HB3	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:12:C:H2'	22:20:73:GLY:HA3	1.90	0.54
6:2G:39:ILE:CG2	6:2G:155:MET:HE3	2.37	0.54
32:2a:9:G:H2'	32:2a:10:A:H8	1.72	0.54
32:2a:1145:C:H4'	32:2a:1146:A:H8	1.73	0.54
32:2a:1350:A:C2	32:2a:1351:U:C2	2.96	0.54
33:2b:178:ARG:NH2	39:2h:68:ARG:HH22	2.06	0.54
33:2b:214:ILE:HG22	33:2b:215:LEU:HD23	1.89	0.54
38:2g:102:ARG:O	38:2g:106:GLN:HG3	2.08	0.54
47:2p:15:PRO:O	47:2p:16:HIS:ND1	2.41	0.54
12:1Q:12:GLN:HG3	12:1Q:73:PRO:HD2	1.89	0.54
26:14:63:TYR:HD1	26:14:63:TYR:H	1.55	0.54
32:1a:472:A:OP1	47:1p:75:ARG:NH2	2.39	0.54
32:1a:1414:U:H3	32:1a:1486:G:H1	1.55	0.54
54:1y:63:G:H2'	54:1y:64:A:O4'	2.08	0.54
1:2A:455:C:N3	1:2A:472:A:H2'	2.23	0.54
4:2E:178:GLU:CD	4:2E:178:GLU:H	2.15	0.54
32:2a:60:A:H4'	32:2a:61:G:O5'	2.08	0.54
32:2a:222:U:H2'	32:2a:223:U:C6	2.43	0.54
32:2a:1279:A:OP2	41:2j:9:ARG:NH2	2.41	0.54
33:2b:77:ALA:HA	33:2b:80:ILE:HG22	1.89	0.54
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.73	0.54
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.08	0.54
1:1A:2313:C:H4'	6:1G:91:ARG:HG3	1.90	0.54
10:1O:76:ALA:O	15:1T:74:ARG:NH1	2.40	0.54
19:1X:57:LEU:HD11	19:1X:78:LYS:HE2	1.89	0.54
24:12:1:MET:HE3	24:12:5:GLU:HB3	1.88	0.54
32:1a:1503:A:C2	53:1v:12:A:H2	2.26	0.54
38:1g:78:ARG:HD3	38:1g:79:ARG:HG3	1.89	0.54
45:1n:23:ARG:CZ	45:1n:30:ALA:HB2	2.39	0.54
1:2A:322:A:C5	1:2A:340:A:C2	2.96	0.54
1:2A:531:C:OP1	1:2A:561:G:N2	2.41	0.54
1:2A:2749:A:H1'	7:2H:63:SER:OG	2.08	0.54
25:23:39:ASP:OD1	25:23:44:ARG:NH1	2.41	0.54
1:1A:278:A:H2'	1:1A:279:C:C6	2.44	0.53
1:1A:882:G:H1	1:1A:894:C:H42	1.55	0.53
1:1A:1139:G:OP2	9:1N:70:LYS:NZ	2.41	0.53
32:1a:130:A:O2'	32:1a:131:C:O5'	2.21	0.53
35:1d:184:LYS:HB3	35:1d:186:LEU:HD21	1.90	0.53
36:1e:51:VAL:O	36:1e:55:VAL:HG23	2.08	0.53
48:1q:45:HIS:O	48:1q:73:VAL:HG23	2.07	0.53
1:2A:958:U:OP2	12:2Q:14:ARG:NE	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:3:ARG:HG2	7:2H:6:ARG:HE	1.73	0.53
32:2a:416:G:C5	32:2a:417:C:C4	2.96	0.53
32:2a:839:U:H5"	32:2a:840:C:C5	2.42	0.53
32:2a:951:G:N7	44:2m:102:ARG:NH2	2.56	0.53
33:2b:69:LEU:HD13	33:2b:91:PRO:HB2	1.89	0.53
36:2e:31:LEU:HD22	36:2e:43:LEU:HD11	1.89	0.53
32:1a:532:A:N6	32:1a:1206:G:O2'	2.42	0.53
32:1a:850:U:H2'	32:1a:851:G:H5"	1.90	0.53
32:1a:1518:MA6:O5'	32:1a:1518:MA6:H8	2.08	0.53
38:1g:12:LEU:HD12	38:1g:12:LEU:H	1.72	0.53
40:1i:40:LEU:HD11	40:1i:70:LYS:HD2	1.90	0.53
41:1j:81:THR:HA	41:1j:84:GLN:HB3	1.89	0.53
1:2A:1607:C:N4	1:2A:1622:G:OP2	2.35	0.53
32:2a:12:U:H4'	32:2a:526:C:O2'	2.09	0.53
32:2a:176:C:OP1	51:2t:29:LYS:NZ	2.34	0.53
32:2a:538:G:H5"	43:2l:114:LYS:HB2	1.90	0.53
34:2c:101:LEU:HD13	34:2c:102:ASN:N	2.23	0.53
36:2e:72:GLN:N	36:2e:72:GLN:HE21	2.05	0.53
44:2m:57:ARG:O	44:2m:61:GLU:HB2	2.09	0.53
52:2u:6:ARG:HA	52:2u:11:GLY:HA3	1.90	0.53
1:1A:1053:C:H42	1:1A:1106:G:H1	1.56	0.53
32:1a:28:G:O2'	32:1a:296:U:OP1	2.24	0.53
32:1a:848:C:H2'	32:1a:849:C:H6	1.73	0.53
1:2A:528:A:O2'	1:2A:529:A:H5'	2.09	0.53
1:2A:1243:G:O2'	11:2P:7:ARG:NH2	2.42	0.53
1:2A:1693:U:H1'	3:2D:14:ARG:HH21	1.73	0.53
19:2X:5:TYR:CE2	24:22:30:ARG:HB2	2.43	0.53
1:1A:281:G:H1'	1:1A:360:G:N2	2.23	0.53
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.07	0.53
15:1T:88:ILE:HG13	15:1T:91:ARG:HH12	1.72	0.53
32:1a:328:C:H4'	32:1a:329:A:H5'	1.91	0.53
44:1m:51:ALA:O	44:1m:55:ARG:HB2	2.09	0.53
51:1t:82:SER:O	51:1t:86:ARG:HG3	2.07	0.53
6:2G:79:ASN:OD1	6:2G:79:ASN:N	2.37	0.53
32:2a:1370:G:N7	40:2i:109:VAL:HG11	2.23	0.53
35:2d:176:LEU:HD12	35:2d:182:LYS:O	2.08	0.53
54:2y:67:C:H2'	54:2y:68:C:C6	2.43	0.53
1:1A:1991:U:H2'	1:1A:1992:G:H5"	1.90	0.53
6:1G:77:ILE:HD12	6:1G:82:LEU:HD23	1.90	0.53
32:1a:1083:U:OP1	61:1a:1916:HOH:O	2.19	0.53
47:1p:48:TRP:CE3	47:1p:49:LEU:HB2	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2472:G:N1	1:2A:2477:C:OP1	2.41	0.53
6:2G:97:ASP:HA	6:2G:100:TRP:HD1	1.73	0.53
7:2H:9:ILE:N	7:2H:50:VAL:O	2.41	0.53
7:2H:125:VAL:HG22	7:2H:131:VAL:HG22	1.91	0.53
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.40	0.53
21:2Z:159:PRO:HA	21:2Z:161:VAL:HG12	1.91	0.53
32:2a:224:C:H2'	32:2a:225:C:H6	1.72	0.53
32:2a:1353:G:C2	32:2a:1370:G:C2	2.97	0.53
33:2b:27:LYS:O	33:2b:194:PRO:HG2	2.08	0.53
38:2g:4:ARG:H	38:2g:4:ARG:HD2	1.72	0.53
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.43	0.53
51:2t:26:ASN:O	51:2t:30:LYS:HG3	2.09	0.53
55:2x:58:A:H4'	55:2x:59:A:OP1	2.09	0.53
1:1A:226:G:N2	1:1A:228:A:H62	2.05	0.53
1:1A:630:G:OP1	30:18:47:LYS:NZ	2.30	0.53
1:1A:1006:C:C2	1:1A:1138:G:N2	2.76	0.53
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.09	0.53
32:1a:258:G:H2'	32:1a:259:G:C8	2.44	0.53
32:1a:692:U:O2'	32:1a:694:A:N7	2.33	0.53
1:2A:588:U:H2'	1:2A:589:C:C6	2.43	0.53
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.91	0.53
1:2A:1434:A:H61	1:2A:1558:A:H62	1.55	0.53
1:2A:2805:G:H2'	1:2A:2807:G:H8	1.73	0.53
2:2B:104:U:O2'	21:2Z:72:ARG:HG2	2.08	0.53
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.90	0.53
7:2H:86:GLU:OE2	7:2H:130:ARG:HD2	2.08	0.53
8:2I:58:LEU:O	8:2I:62:LYS:N	2.41	0.53
12:2Q:12:GLN:NE2	12:2Q:72:LYS:HG3	2.22	0.53
13:2R:97:VAL:HG22	13:2R:114:VAL:HG13	1.90	0.53
19:2X:72:LYS:NZ	19:2X:75:ASP:OD1	2.39	0.53
32:2a:1016:A:HO2'	32:2a:1217:C:HO2'	1.57	0.53
36:2e:60:TYR:O	36:2e:64:ARG:HD3	2.09	0.53
1:1A:574:C:N3	4:1E:145:LYS:NZ	2.57	0.53
1:1A:996:A:H4'	16:1U:91:ASP:OD2	2.08	0.53
1:1A:2114:A:H2	1:1A:2168:G:H1'	1.74	0.53
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.15	0.53
15:1T:24:PRO:HD3	15:1T:52:ILE:HD12	1.89	0.53
19:1X:57:LEU:N	19:1X:57:LEU:HD23	2.24	0.53
32:1a:944:G:OP1	61:1a:1915:HOH:O	2.18	0.53
32:1a:1152:A:H5'	41:1j:13:HIS:CG	2.43	0.53
34:1c:20:SER:OG	34:1c:36:ASP:OD2	2.25	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:1n:12:ARG:HG2	45:1n:12:ARG:HH11	1.74	0.53
1:2A:829:A:N7	1:2A:2248:C:H5'	2.23	0.53
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.26	0.53
1:2A:2297:C:H2'	1:2A:2298:A:H8	1.73	0.53
1:2A:2489:G:C2'	1:2A:2490:G:H5'	2.38	0.53
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.36	0.53
32:2a:1030(A):G:N2	32:2a:1030(C):G:H3'	2.22	0.53
34:2c:47:LEU:O	34:2c:51:GLY:N	2.41	0.53
34:2c:71:ALA:CB	34:2c:109:PRO:HB3	2.38	0.53
21:1Z:44:PHE:CZ	21:1Z:86:VAL:HG11	2.44	0.53
32:1a:473:G:H2'	32:1a:474:G:C8	2.44	0.53
39:1h:87:SER:HB2	39:1h:93:VAL:H	1.73	0.53
1:2A:819:A:OP2	1:2A:1187:G:N2	2.29	0.53
1:2A:2483:C:N3	12:2Q:124:LYS:NZ	2.57	0.53
11:2P:84:ASN:HB3	11:2P:86:LYS:HG2	1.90	0.53
38:2g:15:ASP:HB3	38:2g:24:THR:HG23	1.90	0.53
44:2m:73:GLU:O	44:2m:77:ASN:HB2	2.08	0.53
1:1A:1800:C:OP1	3:1D:260:ARG:NH2	2.41	0.53
1:1A:2153:G:H2'	1:1A:2154:G:C8	2.43	0.53
8:1I:8:PRO:O	8:1I:9:LEU:HG	2.09	0.53
24:12:10:LEU:O	24:12:14:ARG:HG3	2.09	0.53
1:2A:2127:G:C2	1:2A:2161:C:N3	2.77	0.53
4:2E:9:VAL:HG13	4:2E:25:VAL:O	2.09	0.53
7:2H:26:VAL:O	7:2H:79:VAL:HG11	2.09	0.53
25:23:6:VAL:HG21	25:23:37:LEU:HD12	1.91	0.53
26:24:14:ILE:HB	26:24:22:ILE:HD13	1.89	0.53
32:2a:1065:U:H3	32:2a:1109:C:C5'	2.22	0.53
32:2a:1165:C:H2'	32:2a:1166:G:O4'	2.09	0.53
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	1.89	0.53
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.24	0.53
34:2c:30:ARG:HH21	45:2n:38:GLY:CA	2.22	0.53
1:1A:226:G:H21	1:1A:228:A:H62	1.57	0.53
1:1A:2439:A:H5'	1:1A:2439:A:C8	2.43	0.53
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.37	0.53
33:1b:219:VAL:HA	33:1b:222:ILE:HG13	1.91	0.53
1:2A:40:C:H2'	1:2A:41:C:C6	2.44	0.53
1:2A:1193:G:OP1	11:2P:14:LYS:NZ	2.27	0.53
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.24	0.53
1:2A:2472:G:H1	1:2A:2477:C:P	2.31	0.53
6:2G:11:TYR:OH	6:2G:16:ARG:HD3	2.09	0.53
26:24:55:ARG:O	26:24:60:GLN:NE2	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:114:U:O2'	32:2a:115:G:H5'	2.09	0.53
32:2a:1237:C:O3'	32:2a:1300:G:N2	2.37	0.53
32:2a:1297:C:P	44:2m:44:ARG:HH22	2.32	0.53
34:2c:156:ARG:HB3	34:2c:160:ALA:O	2.09	0.53
35:2d:74:GLN:O	35:2d:78:LEU:HD13	2.08	0.53
50:2s:51:VAL:HB	50:2s:58:VAL:HG23	1.90	0.53
1:1A:1860:G:H2'	1:1A:1861:G:O4'	2.09	0.52
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.82	0.52
47:1p:19:ILE:HG22	47:1p:36:ILE:HG13	1.90	0.52
47:1p:43:LYS:HA	47:1p:48:TRP:CD1	2.44	0.52
1:2A:323:G:O2'	1:2A:1205:U:N3	2.32	0.52
2:2B:31:C:N4	14:2S:32:LEU:HD22	2.24	0.52
7:2H:154:PRO:HB3	7:2H:163:TYR:CE1	2.44	0.52
8:2I:73:GLU:HA	61:2I:201:HOH:O	2.08	0.52
21:2Z:93:ASP:HA	21:2Z:131:ARG:NH2	2.23	0.52
28:26:11:LEU:HB2	28:26:21:TYR:HB2	1.91	0.52
32:2a:20:U:H2'	32:2a:21:G:O4'	2.09	0.52
32:2a:70:G:H2'	32:2a:71:C:C6	2.44	0.52
36:2e:10:MET:HE2	36:2e:55:VAL:HG21	1.91	0.52
40:2i:127:LYS:O	40:2i:128:ARG:HB3	2.07	0.52
41:2j:40:LEU:HB2	41:2j:69:ASN:HB3	1.91	0.52
43:2l:77:LEU:HD21	43:2l:107:ALA:HB2	1.91	0.52
1:1A:484:C:OP1	20:1Y:51:VAL:HG22	2.09	0.52
35:1d:74:GLN:O	35:1d:78:LEU:HD12	2.09	0.52
38:1g:28:ASN:HD21	38:1g:36:LYS:NZ	2.06	0.52
54:1w:51:U:H2'	54:1w:52:G:H8	1.73	0.52
1:2A:298:G:H5"	1:2A:299:A:OP1	2.09	0.52
1:2A:597:U:H2'	1:2A:598:G:H8	1.72	0.52
1:2A:922:U:H2'	1:2A:923:C:C6	2.44	0.52
4:2E:52:LEU:O	4:2E:76:ARG:HG3	2.08	0.52
6:2G:44:GLY:HA2	6:2G:88:ILE:HB	1.91	0.52
7:2H:121:ILE:HD11	7:2H:140:LYS:HG2	1.89	0.52
12:2Q:57:HIS:CD2	12:2Q:117:ALA:HB2	2.45	0.52
21:2Z:171:ILE:HG13	21:2Z:172:ALA:N	2.23	0.52
32:2a:664:G:N2	32:2a:741:G:H1	2.05	0.52
32:2a:986:A:H2'	32:2a:987:G:O4'	2.10	0.52
32:2a:1135:U:H2'	32:2a:1137:C:C4	2.45	0.52
33:2b:142:LEU:HG	33:2b:146:GLN:HG3	1.91	0.52
36:2e:100:VAL:O	36:2e:107:ARG:NH2	2.40	0.52
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.90	0.52
1:1A:2140:C:O2	1:1A:2151:G:N1	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2206:G:H8	1:1A:2207:G:N7	2.07	0.52
7:1H:97:ARG:NE	7:1H:104:GLU:OE1	2.42	0.52
32:1a:433:C:H2'	32:1a:434:U:C6	2.44	0.52
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.45	0.52
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.44	0.52
40:1i:3:GLN:HG2	40:1i:20:ARG:HE	1.74	0.52
44:1m:84:ILE:HB	50:1s:66:MET:HE2	1.90	0.52
51:1t:26:ASN:OD1	51:1t:71:THR:OG1	2.20	0.52
54:1w:51:U:H2'	54:1w:52:G:C8	2.44	0.52
1:2A:311:A:C6	1:2A:328:U:C4	2.98	0.52
1:2A:884:C:H3'	1:2A:885:C:H6	1.74	0.52
1:2A:894:C:O2'	1:2A:895:U:H5"	2.09	0.52
1:2A:1664:A:H2	10:2O:1:MET:HE1	1.74	0.52
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.09	0.52
2:2B:11:C:H3'	2:2B:12:C:C6	2.44	0.52
15:2T:119:LYS:HB2	32:2a:1442(A):G:N2	2.24	0.52
23:21:64:ALA:HA	23:21:67:ILE:HG13	1.90	0.52
32:2a:7:G:H21	36:2e:121:LYS:HG2	1.74	0.52
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.44	0.52
32:2a:1316:G:H2'	32:2a:1318:A:OP2	2.09	0.52
38:2g:29:LYS:CB	38:2g:105:VAL:HG21	2.39	0.52
42:2k:48:ILE:O	42:2k:50:TYR:N	2.36	0.52
1:1A:271(K):U:O2	8:1I:50:ARG:NE	2.43	0.52
1:1A:2334:G:H4'	1:1A:2335:A:OP2	2.10	0.52
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.39	0.52
1:2A:131:G:OP1	61:2A:3942:HOH:O	2.19	0.52
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.08	0.52
14:2S:87:PHE:CE1	14:2S:102:ALA:HB2	2.45	0.52
32:2a:416:G:H2'	32:2a:417:C:C6	2.44	0.52
32:2a:1212:U:H5"	32:2a:1213:A:O5'	2.09	0.52
32:2a:1258:G:O2'	32:2a:1259:C:H5'	2.10	0.52
32:2a:1381:U:O2'	38:2g:79:ARG:HD3	2.09	0.52
33:2b:150:SER:OG	33:2b:151:GLY:N	2.42	0.52
48:2q:53:LEU:HD23	48:2q:82:MET:HE1	1.91	0.52
1:1A:1341:U:O2	19:1X:80:ILE:HD13	2.09	0.52
32:1a:26:A:O2'	35:1d:209:ARG:NH2	2.41	0.52
32:1a:36:C:OP1	43:1l:123:LYS:NZ	2.33	0.52
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.25	0.52
32:1a:1025:U:C2	32:1a:1036:G:O6	2.63	0.52
33:1b:178:ARG:HH12	39:1h:68:ARG:HH22	1.57	0.52
35:1d:60:GLU:HG3	35:1d:202:LEU:HD12	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:122:GLU:O	36:1e:126:ARG:NH1	2.43	0.52
1:2A:774:A:H2'	1:2A:774:A:N3	2.24	0.52
1:2A:864:G:N2	1:2A:913:U:C2	2.77	0.52
1:2A:909:A:C6	1:2A:912:C:C2	2.97	0.52
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.44	0.52
21:2Z:75:ASN:N	21:2Z:85:HIS:O	2.41	0.52
32:2a:1176:A:H2'	32:2a:1177:G:O4'	2.09	0.52
32:2a:1324:A:H4'	32:2a:1362:C:O3'	2.10	0.52
33:2b:178:ARG:HH21	39:2h:74:PRO:HB3	1.74	0.52
34:2c:117:ALA:HB2	34:2c:200:ALA:HB2	1.91	0.52
37:2f:100:ASN:HD21	49:2r:23:LYS:HE2	1.75	0.52
40:2i:33:PHE:HE2	40:2i:43:ALA:HB1	1.74	0.52
42:2k:48:ILE:H	42:2k:48:ILE:HD12	1.74	0.52
1:1A:1173:G:OP2	1:1A:1173:G:H2'	2.10	0.52
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.44	0.52
1:1A:1359:A:H61	1:1A:1372:U:H3	1.54	0.52
15:1T:90:GLN:HG3	15:1T:91:ARG:N	2.23	0.52
16:1U:74:LEU:HD12	16:1U:74:LEU:H	1.75	0.52
32:1a:933:G:O6	38:1g:3:ARG:NH2	2.43	0.52
32:1a:1017:G:H2'	32:1a:1018:C:C6	2.45	0.52
32:1a:1239:A:C4	32:1a:1298:C:N4	2.78	0.52
36:1e:75:THR:HG23	36:1e:76:ILE:O	2.09	0.52
36:1e:80:ILE:HG23	36:1e:91:LEU:HB2	1.91	0.52
40:1i:17:VAL:HG21	40:1i:81:ILE:HB	1.91	0.52
1:2A:1741:A:H2'	1:2A:1742:G:O4'	2.10	0.52
5:2F:120:GLU:HG3	5:2F:122:LYS:HG2	1.90	0.52
21:2Z:146:ILE:HG12	21:2Z:174:VAL:HG13	1.91	0.52
22:20:78:TYR:HB3	22:20:80:HIS:CE1	2.43	0.52
32:2a:920:U:H2'	32:2a:921:U:C6	2.44	0.52
32:2a:1239:A:H62	32:2a:1299:A:H62	1.58	0.52
33:2b:41:ILE:HG13	33:2b:41:ILE:O	2.09	0.52
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.44	0.52
1:1A:2127:G:C6	1:1A:2162:G:C6	2.98	0.52
7:1H:104:GLU:HG3	7:1H:114:VAL:HG12	1.91	0.52
7:1H:164:TYR:HB2	7:1H:167:GLU:HB2	1.92	0.52
33:1b:27:LYS:HB2	33:1b:194:PRO:HD2	1.92	0.52
33:1b:97:TRP:CZ2	33:1b:102:LEU:HD13	2.44	0.52
35:1d:64:LEU:HD21	35:1d:97:LEU:HD13	1.90	0.52
54:1y:51:U:H2'	54:1y:52:G:H8	1.75	0.52
1:2A:184:C:H2'	1:2A:185:U:H6	1.75	0.52
1:2A:1180:C:H2'	1:2A:1181:C:C6	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:75:G:N2	21:2Z:87:ASP:OD1	2.42	0.52
32:2a:1264:C:H42	32:2a:1271:G:H1	1.56	0.52
37:2f:62:TRP:CH2	37:2f:64:GLN:HB2	2.45	0.52
39:2h:86:ILE:HG21	39:2h:133:LEU:HD22	1.92	0.52
40:2i:99:LEU:HB3	40:2i:101:PHE:CD2	2.45	0.52
41:2j:91:PRO:HB2	41:2j:94:VAL:HG23	1.92	0.52
50:2s:32:LYS:HA	50:2s:50:ALA:HB3	1.91	0.52
1:1A:890:A:H2'	1:1A:892:G:O4'	2.10	0.52
1:1A:1359:A:C2	1:1A:1372:U:O4	2.62	0.52
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.45	0.52
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.45	0.52
6:1G:79:ASN:OD1	6:1G:79:ASN:N	2.37	0.52
32:1a:453:A:C6	32:1a:454:C:C4	2.98	0.52
32:1a:1316:G:N1	32:1a:1319:A:OP2	2.37	0.52
34:1c:96:GLY:O	34:1c:97:LYS:HG3	2.10	0.52
1:2A:915:C:H2'	1:2A:916:G:O4'	2.10	0.52
1:2A:2447:G:N2	1:2A:2450:A:OP2	2.42	0.52
12:2Q:54:MET:HB2	12:2Q:64:ILE:HD13	1.92	0.52
32:2a:26:A:N6	32:2a:558:G:O2'	2.39	0.52
32:2a:189(K):U:H2'	32:2a:189(L):G:H8	1.73	0.52
32:2a:606:G:H5"	32:2a:607:A:H5'	1.92	0.52
32:2a:779:C:O2'	42:2k:120:ARG:HD3	2.09	0.52
32:2a:1091:U:H2'	32:2a:1093:A:OP2	2.10	0.52
32:2a:1246:C:H2'	32:2a:1247:U:H6	1.75	0.52
34:2c:170:GLN:HG2	34:2c:171:GLY:N	2.25	0.52
36:2e:7:GLU:O	36:2e:34:VAL:HA	2.10	0.52
36:2e:60:TYR:CE1	36:2e:64:ARG:HD2	2.45	0.52
38:2g:22:LEU:HD13	38:2g:97:GLN:NE2	2.25	0.52
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.45	0.52
32:1a:748:C:O5'	32:1a:748:C:H6	1.93	0.52
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.45	0.52
33:1b:19:HIS:NE2	33:1b:206:ASP:OD2	2.42	0.52
34:1c:87:LEU:O	34:1c:91:LEU:HB2	2.09	0.52
36:1e:105:VAL:HG21	36:1e:128:PRO:HB3	1.92	0.52
54:1y:1:G:H2'	54:1y:2:C:C6	2.44	0.52
1:2A:660:G:H5'	5:2F:99:TYR:CE1	2.45	0.52
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.26	0.52
1:2A:2567:G:H2'	1:2A:2568:C:C6	2.44	0.52
8:2I:50:ARG:HA	8:2I:53:ALA:HB3	1.92	0.52
14:2S:15:ARG:HB3	14:2S:19:LYS:NZ	2.25	0.52
32:2a:1002:G:C6	32:2a:1003:G:H8	2.28	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1356:G:N2	32:2a:1367:C:C2	2.78	0.52
34:2c:7:PRO:HB2	34:2c:182:ILE:HD11	1.92	0.52
36:2e:20:GLN:OE1	36:2e:25:ARG:NH1	2.43	0.52
51:2t:67:ALA:HA	51:2t:72:LEU:O	2.10	0.52
55:2x:55:PSU:O2'	55:2x:57:A:N7	2.42	0.52
1:1A:886:C:H3'	1:1A:887:A:C5'	2.40	0.52
1:1A:1075:C:O2	1:1A:1076:C:H2'	2.10	0.52
1:1A:1084:A:C2	1:1A:1085:A:C4	2.98	0.52
1:1A:2833:G:H4'	1:1A:2834:G:OP2	2.09	0.52
32:1a:799:G:OP2	61:1a:1918:HOH:O	2.19	0.52
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.33	0.52
41:1j:24:VAL:O	41:1j:28:ARG:N	2.40	0.52
51:1t:60:GLU:HG3	51:1t:81:LYS:HD2	1.92	0.52
1:2A:1365:A:O2'	23:21:11:ARG:NH1	2.42	0.52
1:2A:1399:C:OP1	19:2X:25:LYS:NZ	2.38	0.52
1:2A:2128:C:H2'	1:2A:2129:C:O4'	2.10	0.52
1:2A:2334:G:O6	22:20:74:ARG:NH1	2.39	0.52
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.92	0.52
5:2F:11:VAL:HG22	5:2F:125:LEU:HB2	1.92	0.52
32:2a:1326:C:H2'	32:2a:1327:C:C6	2.45	0.52
32:2a:1348:U:OP2	32:2a:1373:G:N2	2.33	0.52
32:2a:1359:C:H1'	32:2a:1362:C:H41	1.75	0.52
37:2f:61:LEU:HD22	37:2f:63:TYR:CE2	2.45	0.52
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.10	0.52
38:2g:78:ARG:HH21	38:2g:79:ARG:NE	2.08	0.52
50:2s:27:GLU:OE2	50:2s:47:HIS:NE2	2.40	0.52
1:1A:305:U:H2'	1:1A:306:U:C6	2.45	0.51
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.09	0.51
1:1A:625:G:O6	11:1P:107:LYS:NZ	2.43	0.51
1:1A:1094:U:H1'	1:1A:1097:U:C4	2.45	0.51
3:1D:146:GLU:HG2	3:1D:152:GLY:C	2.34	0.51
6:1G:38:VAL:HG22	6:1G:93:THR:HG23	1.91	0.51
26:14:63:TYR:N	26:14:63:TYR:CD1	2.77	0.51
32:1a:841:U:OP2	32:1a:841:U:H6	1.92	0.51
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.40	0.51
32:1a:1004:A:H5"	32:1a:1025:U:H5	1.74	0.51
33:1b:195:ASP:O	39:1h:68:ARG:NH2	2.36	0.51
35:1d:103:ASN:O	35:1d:107:ARG:HG2	2.10	0.51
38:1g:90:GLU:CD	38:1g:90:GLU:H	2.18	0.51
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.45	0.51
1:2A:2124:G:O6	1:2A:2125:G:N2	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2151:G:H2'	1:2A:2152:G:C8	2.42	0.51
1:2A:2628:C:H1'	1:2A:2781:A:H2'	1.92	0.51
6:2G:50:ALA:C	6:2G:52:ILE:H	2.16	0.51
32:2a:509:A:H5"	35:2d:55:ALA:HB2	1.90	0.51
35:2d:9:CYS:O	35:2d:13:ARG:HG3	2.10	0.51
43:2l:89:ARG:HG2	43:2l:90:VAL:N	2.24	0.51
47:2p:5:ARG:HH21	47:2p:28:ARG:HA	1.76	0.51
50:2s:32:LYS:HD2	50:2s:34:TRP:CZ3	2.45	0.51
1:1A:1087:G:H2'	1:1A:1089:G:H8	1.74	0.51
8:1I:101:LEU:HD12	8:1I:107:VAL:HB	1.91	0.51
19:1X:60:ARG:HH22	29:17:47:ARG:HH12	1.58	0.51
32:1a:1095:U:OP1	32:1a:1108:G:N2	2.42	0.51
1:2A:2166:G:O6	1:2A:2171:A:N6	2.33	0.51
1:2A:2677:G:N3	61:2A:4019:HOH:O	2.34	0.51
2:2B:94:C:H2'	2:2B:95:C:H6	1.75	0.51
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.43	0.51
26:24:49:PHE:O	26:24:51:ASP:N	2.43	0.51
32:2a:707:C:H2'	32:2a:708:C:C6	2.46	0.51
35:2d:60:GLU:OE1	35:2d:199:ASN:N	2.38	0.51
38:2g:38:LEU:O	38:2g:42:ILE:HG13	2.11	0.51
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.10	0.51
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.35	0.51
1:1A:2128:C:N4	1:1A:2160:G:N1	2.59	0.51
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.46	0.51
9:1N:13:TRP:CE2	9:1N:133:GLN:HG2	2.45	0.51
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.09	0.51
21:1Z:151:HIS:HB3	21:1Z:169:GLU:O	2.09	0.51
24:12:55:ARG:NH2	61:12:201:HOH:O	2.38	0.51
26:14:55:ARG:N	26:14:56:VAL:HA	2.25	0.51
27:15:40:LYS:HE3	27:15:41:PRO:O	2.11	0.51
35:1d:88:VAL:O	35:1d:92:VAL:HG23	2.10	0.51
36:1e:27:ARG:HB2	36:1e:27:ARG:NH1	2.25	0.51
43:1l:82:VAL:O	43:1l:106:ASP:HB2	2.11	0.51
51:1t:30:LYS:O	51:1t:34:LYS:HG3	2.10	0.51
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.42	0.51
9:2N:67:LEU:HA	9:2N:87:LEU:HD23	1.90	0.51
11:2P:81:GLN:NE2	11:2P:106:LEU:HA	2.25	0.51
12:2Q:14:ARG:HH22	12:2Q:75:THR:HG22	1.73	0.51
19:2X:5:TYR:CZ	24:22:30:ARG:HB2	2.45	0.51
32:2a:645:C:H2'	32:2a:646:U:C6	2.45	0.51
32:2a:1057:G:H5"	34:2c:154:SER:OG	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1059:G:OP2	1:1A:1060:U:H3'	2.10	0.51
15:1T:88:ILE:HG13	15:1T:91:ARG:NH1	2.25	0.51
34:1c:52:LEU:HD12	34:1c:53:ALA:N	2.25	0.51
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.45	0.51
1:2A:2136:C:H42	1:2A:2155:G:H1	1.56	0.51
2:2B:55:U:O3'	6:2G:27:ASN:ND2	2.44	0.51
13:2R:8:ARG:HE	13:2R:43:GLU:HG2	1.75	0.51
21:2Z:150:LEU:H	21:2Z:171:ILE:HD11	1.75	0.51
21:2Z:154:ASP:N	21:2Z:154:ASP:OD1	2.43	0.51
24:22:63:VAL:O	24:22:67:LYS:HG2	2.10	0.51
32:2a:865:A:N3	32:2a:918:A:O2'	2.38	0.51
32:2a:1074:G:H4'	33:2b:103:THR:O	2.10	0.51
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.10	0.51
32:2a:1468:A:H2'	32:2a:1469:G:O4'	2.11	0.51
45:2n:57:ARG:HG2	45:2n:58:LYS:H	1.74	0.51
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.74	0.51
1:1A:1952:A:OP1	10:1O:44:LYS:NZ	2.30	0.51
5:1F:150:GLY:HA2	5:1F:172:TRP:CD2	2.45	0.51
7:1H:98:LEU:HD23	7:1H:102:ALA:O	2.11	0.51
32:1a:176:C:H2'	32:1a:177:C:C6	2.45	0.51
32:1a:955:U:O2'	50:1s:83:HIS:HD2	1.93	0.51
32:1a:1054:C:C5	54:1w:34:G:H1'	2.45	0.51
32:1a:1068:G:H8	32:1a:1068:G:OP2	1.94	0.51
33:1b:21:ARG:O	33:1b:23:ARG:N	2.44	0.51
1:2A:2400:G:H2'	1:2A:2401:U:C6	2.46	0.51
8:2I:82:ARG:CZ	8:2I:82:ARG:H	2.24	0.51
12:2Q:75:THR:OG1	12:2Q:87:LYS:HE3	2.11	0.51
32:2a:828:A:N6	32:2a:858:G:O2'	2.40	0.51
33:2b:89:GLY:O	33:2b:154:LEU:HD21	2.10	0.51
40:2i:18:PHE:HD2	40:2i:62:TYR:HD2	1.59	0.51
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.92	0.51
41:2j:21:GLN:HE22	41:2j:25:GLU:HB2	1.74	0.51
47:2p:58:TYR:O	47:2p:61:SER:OG	2.12	0.51
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.11	0.51
3:1D:92:ILE:HD12	3:1D:104:TYR:CD1	2.46	0.51
32:1a:735:C:H2'	32:1a:736:C:H6	1.75	0.51
32:1a:958:A:C6	32:1a:959:A:N1	2.79	0.51
34:1c:47:LEU:HD13	34:1c:68:VAL:HG11	1.93	0.51
35:1d:156:GLU:O	35:1d:160:GLN:HG3	2.10	0.51
37:1f:6:VAL:HG22	37:1f:90:VAL:HG22	1.92	0.51
55:1x:19:G:H4'	55:1x:20:U:OP2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:462:C:OP2	61:2A:3946:HOH:O	2.19	0.51
1:2A:1434:A:O2'	1:2A:1435:G:H5'	2.11	0.51
1:2A:2261:C:C2'	1:2A:2262:U:H5'	2.41	0.51
1:2A:2469:A:H5"	1:2A:2470:G:OP2	2.11	0.51
1:2A:2872:G:O2'	1:2A:2873:A:H5'	2.11	0.51
14:2S:106:ARG:HE	14:2S:112:PHE:C	2.19	0.51
31:29:10:ILE:HD12	31:29:32:HIS:HA	1.92	0.51
32:2a:1277:C:O2'	32:2a:1279:A:C8	2.61	0.51
34:2c:142:MET:HA	34:2c:146:ALA:HB3	1.93	0.51
40:2i:23:ASN:ND2	40:2i:25:LYS:HE3	2.26	0.51
54:2w:28:G:H2'	54:2w:29:G:O4'	2.11	0.51
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.45	0.51
3:1D:148:GLU:HB2	3:1D:151:LYS:HD2	1.93	0.51
7:1H:101:ARG:HH12	7:1H:122:THR:HG23	1.76	0.51
9:1N:91:LEU:HG	9:1N:98:VAL:HG21	1.92	0.51
21:1Z:1:MET:HG3	21:1Z:56:VAL:H	1.76	0.51
32:1a:1002:G:N2	32:1a:1004:A:O2'	2.44	0.51
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.44	0.51
34:1c:112:SER:OG	34:1c:115:LEU:HG	2.10	0.51
37:1f:86:ARG:O	37:1f:87:ARG:HG2	2.11	0.51
1:2A:855:G:H2'	1:2A:856:C:C6	2.45	0.51
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.45	0.51
6:2G:16:ARG:O	6:2G:20:ILE:HG13	2.10	0.51
17:2V:72:VAL:HB	17:2V:85:LYS:HB3	1.92	0.51
32:2a:16:A:OP1	61:2a:1914:HOH:O	2.19	0.51
32:2a:1319:A:N6	32:2a:1361:G:H21	2.08	0.51
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.46	0.51
32:2a:1356:G:N2	32:2a:1367:C:O2	2.44	0.51
1:1A:524:U:H2'	1:1A:525:U:C6	2.46	0.51
20:1Y:5:MET:HE1	20:1Y:32:PRO:HA	1.92	0.51
26:14:63:TYR:HD1	26:14:63:TYR:N	2.09	0.51
32:1a:262:A:C6	32:1a:263:A:C6	2.98	0.51
32:1a:547:A:OP2	35:1d:2:GLY:HA2	2.10	0.51
36:1e:152:ARG:NH2	39:1h:107:LEU:O	2.44	0.51
38:1g:20:ASP:HB3	38:1g:23:VAL:HG23	1.93	0.51
49:1r:56:THR:HB	49:1r:58:LEU:HD12	1.91	0.51
51:1t:57:ARG:NH1	51:1t:100:ILE:HD12	2.17	0.51
1:2A:854:G:H2'	1:2A:855:G:C8	2.45	0.51
1:2A:861:A:N3	2:2B:79:C:O2'	2.41	0.51
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.45	0.51
1:2A:1665:A:H2'	1:2A:1666:G:O4'	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:121:PRO:HB3	3:2D:135:PHE:CE2	2.46	0.51
7:2H:6:ARG:HH22	7:2H:54:ARG:HH22	1.59	0.51
32:2a:586:C:O2'	32:2a:878:G:H4'	2.10	0.51
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.46	0.51
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.45	0.51
1:1A:2128:C:N3	1:1A:2160:G:N2	2.59	0.51
1:1A:2674:G:H5"	10:1O:26:LYS:NZ	2.26	0.51
10:1O:73:ASP:HB2	15:1T:82:LEU:HD13	1.92	0.51
11:1P:39:LYS:O	11:1P:39:LYS:HG2	2.10	0.51
32:1a:619:U:C2	35:1d:135:LEU:HD22	2.46	0.51
32:1a:750:G:N3	46:1o:23:GLY:HA3	2.26	0.51
32:1a:1503:A:N3	53:1v:13:A:N6	2.59	0.51
34:1c:30:ARG:NH1	45:1n:35:ARG:O	2.44	0.51
54:1w:71:G:H2'	54:1w:71:G:N3	2.26	0.51
1:2A:539:G:H2'	1:2A:540:C:C6	2.46	0.51
1:2A:2064:C:H2'	1:2A:2065:C:C6	2.46	0.51
1:2A:2123:G:H2'	1:2A:2124:G:C8	2.46	0.51
6:2G:33:ARG:O	6:2G:161:THR:HG23	2.11	0.51
21:2Z:95:PRO:HA	21:2Z:129:SER:HA	1.93	0.51
32:2a:1222:G:C6	32:2a:1223:C:C4	2.99	0.51
39:2h:121:ASP:HB2	39:2h:125:ARG:NH2	2.26	0.51
43:2l:88:GLY:O	43:2l:99:HIS:HD2	1.94	0.51
53:2v:12:A:N3	53:2v:12:A:H2'	2.25	0.51
54:2y:24:G:H5'	54:2y:25:C:OP2	2.11	0.51
1:1A:363(C):G:H2'	1:1A:363(D):G:H8	1.75	0.51
27:15:40:LYS:NZ	27:15:44:THR:O	2.38	0.51
30:18:42:ARG:HD2	61:18:206:HOH:O	2.11	0.51
32:1a:103:C:P	51:1t:17:ARG:HH21	2.34	0.51
32:1a:176:C:H2'	32:1a:177:C:H6	1.76	0.51
32:1a:672:U:O2'	32:1a:673:G:O5'	2.25	0.51
32:1a:865:A:H2	32:1a:918:A:H4'	1.75	0.51
32:1a:1263:C:H2'	32:1a:1264:C:C6	2.46	0.51
32:1a:1414:U:O4	61:1a:1920:HOH:O	2.19	0.51
33:1b:47:THR:O	33:1b:51:LEU:N	2.36	0.51
34:1c:124:ILE:O	34:1c:126:ARG:N	2.44	0.51
47:1p:20:VAL:HG21	47:1p:32:TYR:CD2	2.45	0.51
1:2A:667:U:O2	30:28:2:PRO:HD2	2.10	0.51
2:2B:73:A:C4	2:2B:105:A:C2	2.99	0.51
11:2P:20:GLY:O	11:2P:21:ARG:HD3	2.11	0.51
14:2S:34:HIS:O	14:2S:97:ARG:NH2	2.44	0.51
32:2a:431:A:C4	32:2a:432:A:C8	2.99	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:434:U:H2'	32:2a:435:C:C6	2.45	0.51
32:2a:452:A:H4'	47:2p:72:ARG:NH2	2.26	0.51
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.92	0.51
32:2a:959:A:O2'	32:2a:961:U:H5'	2.11	0.51
34:2c:6:HIS:CD2	34:2c:7:PRO:HD2	2.46	0.51
34:2c:111:LEU:HD23	34:2c:202:ILE:HG21	1.92	0.51
39:2h:12:ARG:NH1	39:2h:27:PRO:HD3	2.26	0.51
54:2y:12:U:C2	54:2y:24:G:N2	2.79	0.51
1:1A:1064:C:N3	1:1A:1074:G:O6	2.43	0.50
1:1A:1862:G:O2'	1:1A:1863:G:H5'	2.10	0.50
1:1A:2422:A:O4'	54:1y:76:A:N6	2.43	0.50
21:1Z:59:LEU:HB3	21:1Z:61:LEU:CD1	2.42	0.50
32:1a:396:G:O2'	32:1a:398:C:OP1	2.26	0.50
32:1a:1518:MA6:H93	32:1a:1519:MA6:C9	2.41	0.50
43:1l:54:LYS:HD2	43:1l:54:LYS:N	2.26	0.50
48:1q:76:LEU:HD22	48:1q:77:VAL:H	1.75	0.50
1:2A:287:C:H2'	1:2A:288:C:H6	1.75	0.50
1:2A:2542:A:H4'	1:2A:2543:G:C8	2.46	0.50
20:2Y:43:ASN:CG	20:2Y:65:ALA:HB3	2.36	0.50
26:24:41:PRO:HG3	26:24:49:PHE:CE2	2.47	0.50
32:2a:582:U:C2	32:2a:760:G:C6	2.99	0.50
32:2a:1064:G:O6	32:2a:1191:A:N6	2.44	0.50
38:2g:27:ILE:HA	38:2g:30:ILE:HD13	1.93	0.50
40:2i:89:ASN:O	40:2i:92:TYR:HB2	2.11	0.50
44:2m:19:LEU:HD21	44:2m:56:LEU:HD21	1.93	0.50
54:2y:34:G:H2'	54:2y:35:A:C8	2.46	0.50
1:1A:84:A:H5"	20:1Y:8:LYS:HE3	1.94	0.50
1:1A:118:A:C8	1:1A:119:A:C8	2.99	0.50
1:1A:1093:G:O6	1:1A:1094:U:C4	2.64	0.50
1:1A:1268:A:C2	1:1A:2013:A:C4	2.99	0.50
1:1A:2361:A:OP2	30:18:26:LYS:NZ	2.44	0.50
5:1F:8:GLN:HE22	5:1F:21:ALA:HB2	1.77	0.50
32:1a:1308:U:OP2	44:1m:99:ARG:HD2	2.11	0.50
38:1g:16:LEU:HD23	40:1i:42:ARG:HA	1.93	0.50
1:2A:849:A:H2	25:23:24:LYS:HB3	1.75	0.50
10:2O:119:PRO:HB2	15:2T:68:TYR:CE2	2.46	0.50
17:2V:20:LEU:HD12	17:2V:21:ARG:N	2.27	0.50
19:2X:46:ALA:HB1	24:22:33:MET:HE1	1.93	0.50
22:20:63:VAL:HG21	22:20:83:PRO:HG3	1.93	0.50
23:21:3:LYS:O	23:21:12:PRO:HD3	2.11	0.50
32:2a:67:C:H2'	32:2a:68:G:H8	1.75	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:863:U:H2'	32:2a:865:A:OP2	2.12	0.50
32:2a:1122:U:N3	32:2a:1123:A:N7	2.58	0.50
34:2c:20:SER:HB3	34:2c:22:TRP:NE1	2.26	0.50
35:2d:38:TYR:CE1	35:2d:45:GLN:HG2	2.46	0.50
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.92	0.50
36:2e:102:ALA:HB3	36:2e:107:ARG:HB2	1.94	0.50
38:2g:78:ARG:HE	38:2g:79:ARG:HE	1.58	0.50
1:1A:1022:G:N7	9:1N:66:LYS:HE2	2.26	0.50
1:1A:1223:G:N2	1:1A:1226:A:OP2	2.34	0.50
3:1D:145:VAL:HG12	3:1D:146:GLU:O	2.11	0.50
32:1a:200:G:H1	32:1a:217:C:N4	2.08	0.50
32:1a:236:G:H5"	48:1q:42:TYR:OH	2.11	0.50
32:1a:375:U:OP1	47:1p:69:THR:OG1	2.21	0.50
32:1a:920:U:H2'	32:1a:921:U:C6	2.47	0.50
32:1a:953:G:H2'	32:1a:954:G:O4'	2.10	0.50
32:1a:1370:G:C2	32:1a:1371:G:C8	2.99	0.50
35:1d:112:VAL:HG22	35:1d:116:GLN:HE22	1.76	0.50
1:2A:1032:A:H2	1:2A:1122:G:H22	1.58	0.50
32:2a:429:U:H1'	32:2a:430:A:H5"	1.93	0.50
32:2a:1128:C:O2'	32:2a:1129:C:OP1	2.30	0.50
32:2a:1233:G:H2'	32:2a:1234:C:C6	2.46	0.50
32:2a:1395:C:H3'	61:2a:1922:HOH:O	2.12	0.50
34:2c:122:GLU:HA	34:2c:125:GLU:HG2	1.93	0.50
35:2d:13:ARG:O	35:2d:39:PRO:HA	2.11	0.50
37:2f:91:VAL:HG11	49:2r:72:ARG:NH1	2.23	0.50
40:2i:3:GLN:HE21	40:2i:20:ARG:HH21	1.59	0.50
40:2i:46:ALA:HA	40:2i:78:LYS:HB2	1.93	0.50
40:2i:106:ALA:O	40:2i:108:VAL:HG22	2.11	0.50
44:2m:101:GLN:OE1	44:2m:101:GLN:N	2.44	0.50
1:1A:2154:G:N1	1:1A:2155:G:H1'	2.27	0.50
61:1A:4321:HOH:O	3:1D:14:ARG:HD2	2.10	0.50
32:1a:441:A:H8	32:1a:441:A:OP2	1.93	0.50
37:1f:97:PHE:O	49:1r:31:LEU:HD23	2.11	0.50
54:1w:9:A:O2'	54:1w:10:G:N7	2.44	0.50
1:2A:516:C:OP1	27:25:13:LYS:NZ	2.35	0.50
1:2A:861:A:C2	1:2A:917:A:C4	2.99	0.50
1:2A:1354:A:H2'	1:2A:1355:G:O4'	2.11	0.50
1:2A:2127:G:C6	1:2A:2161:C:N4	2.79	0.50
1:2A:2258:C:O2'	1:2A:2427:C:OP2	2.27	0.50
6:2G:43:LEU:C	6:2G:45:GLU:H	2.20	0.50
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:105:VAL:N	21:2Z:139:VAL:O	2.41	0.50
26:24:13:ARG:HA	26:24:22:ILE:O	2.11	0.50
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.26	0.50
32:2a:674:G:H2'	32:2a:675:A:H8	1.76	0.50
32:2a:858:G:H8	32:2a:858:G:OP2	1.95	0.50
34:2c:20:SER:HB3	34:2c:22:TRP:HE1	1.75	0.50
34:2c:156:ARG:NE	34:2c:160:ALA:O	2.41	0.50
36:2e:68:GLU:HG2	36:2e:70:PRO:HD3	1.93	0.50
42:2k:69:ALA:HB1	42:2k:103:LEU:HD11	1.92	0.50
1:1A:881:G:C2	1:1A:882:G:H1'	2.47	0.50
1:1A:1017:G:N7	61:1A:4291:HOH:O	2.35	0.50
11:1P:121:LYS:HE2	11:1P:123:LEU:HD11	1.92	0.50
20:1Y:102:CYS:SG	20:1Y:104:GLY:N	2.62	0.50
29:17:46:VAL:HG22	29:17:48:LYS:HG3	1.93	0.50
32:1a:192:U:O2'	32:1a:193:C:H5'	2.12	0.50
32:1a:321:A:N7	32:1a:328:C:O2'	2.33	0.50
32:1a:1004:A:H5"	32:1a:1025:U:C5	2.47	0.50
32:1a:1095:U:OP1	32:1a:1108:G:N1	2.40	0.50
32:1a:1140:C:H2'	32:1a:1141:C:C6	2.47	0.50
40:1i:21:PRO:HA	40:1i:59:PHE:HA	1.93	0.50
1:2A:1452:A:OP2	61:2A:3947:HOH:O	2.20	0.50
2:2B:39:A:O2'	2:2B:40:U:H5'	2.12	0.50
16:2U:76:TYR:CZ	16:2U:80:ILE:HG13	2.47	0.50
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.93	0.50
32:2a:1235:U:O2'	32:2a:1305:G:O5'	2.29	0.50
36:2e:72:GLN:C	36:2e:73:ASN:HD22	2.19	0.50
36:2e:122:GLU:HB2	36:2e:126:ARG:HH11	1.77	0.50
40:2i:28:VAL:HA	40:2i:63:ILE:O	2.12	0.50
43:2l:6:THR:N	43:2l:9:GLN:OE1	2.38	0.50
44:2m:62:ASN:ND2	44:2m:62:ASN:H	2.10	0.50
1:1A:1495:A:H2'	1:1A:1496:A:C8	2.47	0.50
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.26	0.50
1:1A:2821:A:OP2	61:1R:301:HOH:O	2.20	0.50
15:1T:96:ARG:HB3	15:1T:96:ARG:CZ	2.42	0.50
23:11:3:LYS:O	23:11:12:PRO:HD3	2.11	0.50
32:1a:404:U:H2'	32:1a:405:U:C6	2.46	0.50
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.42	0.50
32:1a:667:G:H4'	46:1o:51:HIS:ND1	2.26	0.50
1:2A:1667:G:O2'	1:2A:1991:U:O4	2.29	0.50
4:2E:35:GLN:OE1	4:2E:66:HIS:HE1	1.94	0.50
32:2a:56:U:H2'	32:2a:57:G:C8	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:727:G:OP1	32:2a:742:G:N2	2.37	0.50
32:2a:1049:U:H1'	32:2a:1201:A:N7	2.26	0.50
32:2a:1153:C:C4	32:2a:1154:G:N7	2.80	0.50
34:2c:30:ARG:HH21	45:2n:38:GLY:HA3	1.76	0.50
41:2j:13:HIS:CG	41:2j:14:LYS:N	2.80	0.50
41:2j:40:LEU:HD12	41:2j:69:ASN:HD22	1.77	0.50
50:2s:64:GLU:CD	50:2s:64:GLU:H	2.20	0.50
54:2w:8:4SU:HN3	54:2w:14:A:H62	1.59	0.50
1:1A:1066:U:H2'	1:1A:1068:G:OP2	2.12	0.50
1:1A:1540:U:H2'	1:1A:1541:G:O4'	2.12	0.50
1:1A:2591:C:H2'	1:1A:2592:G:H8	1.76	0.50
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.47	0.50
9:1N:73:THR:HB	9:1N:82:LEU:HD11	1.93	0.50
32:1a:453:A:C5	32:1a:454:C:C4	2.99	0.50
32:1a:975:A:H4'	32:1a:976:G:C5'	2.42	0.50
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.94	0.50
35:1d:65:ARG:NH1	35:1d:72:GLU:HB2	2.27	0.50
1:2A:1261:C:OP2	18:2W:83:LYS:NZ	2.40	0.50
1:2A:2112:G:C2	1:2A:2113:U:H1'	2.47	0.50
1:2A:2630:G:H2'	1:2A:2631:G:H8	1.76	0.50
2:2B:3:C:H2'	2:2B:4:C:H6	1.76	0.50
32:2a:841:U:H6	32:2a:841:U:P	2.35	0.50
32:2a:958:A:H2'	32:2a:959:A:C8	2.47	0.50
32:2a:992:U:H3	32:2a:1044:A:H62	1.60	0.50
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.93	0.50
54:2y:42:C:H2'	54:2y:43:C:H6	1.76	0.50
1:1A:218:A:C2	1:1A:235:U:H4'	2.47	0.50
1:1A:2319:G:H1	14:1S:3:ARG:HA	1.76	0.50
3:1D:175:LEU:HD12	3:1D:185:VAL:HG21	1.94	0.50
32:1a:299:G:H2'	32:1a:300:A:C8	2.47	0.50
32:1a:690:G:C6	32:1a:691:G:C6	3.00	0.50
35:1d:53:ASP:HA	35:1d:56:VAL:HG22	1.94	0.50
47:1p:6:LEU:HB3	47:1p:17:TYR:CD1	2.47	0.50
1:2A:1029:A:N1	1:2A:2465:C:O2'	2.41	0.50
1:2A:1946:U:C2	1:2A:1947:C:C5	3.00	0.50
32:2a:341:C:O5'	32:2a:341:C:H6	1.95	0.50
32:2a:828:A:OP1	39:2h:21:LYS:NZ	2.45	0.50
32:2a:1189:C:OP1	34:2c:5:ILE:HD12	2.11	0.50
34:2c:29:TYR:HE1	41:2j:11:PHE:HE2	1.58	0.50
38:2g:14:PRO:HB3	38:2g:19:GLY:O	2.12	0.50
1:1A:548:A:H1'	1:1A:549:G:OP1	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:882:G:H4'	54:1w:19:G:C6	2.47	0.50
1:1A:1416:G:O2'	1:1A:1417:C:OP2	2.27	0.50
1:1A:2065:C:H4'	1:1A:2251:OMG:HM22	1.94	0.50
3:1D:2:ALA:O	3:1D:20:ASP:HB3	2.11	0.50
21:1Z:98:MET:O	21:1Z:125:LEU:HD12	2.12	0.50
32:1a:269:C:H2'	32:1a:270:A:H8	1.75	0.50
32:1a:524:G:H2'	32:1a:525:C:C6	2.46	0.50
32:1a:738:C:H2'	32:1a:739:C:H6	1.77	0.50
32:1a:1272:G:H2'	32:1a:1273:G:O4'	2.12	0.50
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.12	0.50
1:2A:1709:U:H2'	1:2A:1710:C:C6	2.46	0.50
14:2S:36:TYR:OH	14:2S:54:LEU:HD22	2.11	0.50
16:2U:97:ASP:OD1	16:2U:101:ARG:HD2	2.12	0.50
21:2Z:59:LEU:HD12	21:2Z:69:THR:HG21	1.94	0.50
28:26:52:VAL:HG22	28:26:53:LYS:H	1.77	0.50
32:2a:979:C:OP2	32:2a:980:C:N4	2.41	0.50
32:2a:1000:U:H2'	32:2a:1001:A:C8	2.46	0.50
55:2x:27:U:O2	55:2x:44:A:H2	1.95	0.50
1:1A:1020:A:N1	1:1A:1141:U:O2'	2.41	0.49
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.27	0.49
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.47	0.49
32:1a:486:U:H2'	32:1a:487:A:C8	2.47	0.49
32:1a:1047:G:H5"	45:1n:4:LYS:HE3	1.94	0.49
33:1b:102:LEU:HB3	33:1b:180:LEU:HD12	1.94	0.49
34:1c:116:VAL:HG21	34:1c:202:ILE:HD11	1.94	0.49
54:1w:18:G:H4'	54:1w:60:U:C5	2.46	0.49
1:2A:386:G:H5'	61:2A:4832:HOH:O	2.12	0.49
1:2A:912:C:C2	1:2A:913:U:C5	3.00	0.49
1:2A:2025:C:H2'	1:2A:2026:C:C6	2.47	0.49
1:2A:2238:G:H5"	61:2A:3958:HOH:O	2.12	0.49
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.39	0.49
6:2G:68:PRO:HB2	6:2G:90:LEU:HB3	1.94	0.49
21:2Z:155:LEU:HB2	21:2Z:157:LEU:HD12	1.94	0.49
32:2a:37:U:O2'	32:2a:500:G:H4'	2.12	0.49
39:2h:21:LYS:O	39:2h:65:TYR:OH	2.25	0.49
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.26	0.49
1:1A:2811:G:N2	1:1A:2891:G:H1'	2.27	0.49
11:1P:91:PHE:O	11:1P:121:LYS:NZ	2.40	0.49
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.45	0.49
21:1Z:138:GLU:H	21:1Z:156:LYS:NZ	2.09	0.49
32:1a:250:A:H4'	32:1a:251:G:O5'	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:582:U:OP1	46:1o:68:ARG:NH2	2.45	0.49
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.47	0.49
32:1a:1090:U:H2'	32:1a:1091:U:H6	1.77	0.49
32:1a:1351:U:H2'	32:1a:1352:C:H6	1.77	0.49
35:1d:162:LEU:CD1	35:1d:181:MET:HG2	2.42	0.49
40:1i:20:ARG:O	40:1i:60:ASP:N	2.39	0.49
1:2A:86:C:O2'	1:2A:104:U:O2'	2.22	0.49
1:2A:2648:C:H2'	1:2A:2649:U:C6	2.47	0.49
1:2A:2819:G:H2'	1:2A:2821:A:N7	2.27	0.49
2:2B:28:C:N3	2:2B:56:G:N1	2.39	0.49
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	1.93	0.49
6:2G:106:LEU:HG	6:2G:111:LEU:CD1	2.42	0.49
6:2G:127:GLY:H	6:2G:166:ASP:CG	2.19	0.49
9:2N:67:LEU:O	9:2N:88:GLU:HG3	2.12	0.49
23:21:32:LYS:O	61:21:201:HOH:O	2.20	0.49
32:2a:1032:G:H8	32:2a:1032:G:O5'	1.95	0.49
34:2c:8:ILE:C	34:2c:10:PHE:H	2.20	0.49
44:2m:78:ILE:HG23	44:2m:92:HIS:ND1	2.26	0.49
54:2y:14:A:H3'	54:2y:15:G:C8	2.46	0.49
1:1A:1012:U:O4	9:1N:28:THR:HG21	2.13	0.49
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.12	0.49
1:1A:1053:C:N4	1:1A:1106:G:H1	2.09	0.49
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.13	0.49
10:1O:7:TYR:OH	10:1O:44:LYS:HG3	2.12	0.49
32:1a:67:C:H2'	32:1a:68:G:C8	2.47	0.49
32:1a:472:A:P	47:1p:75:ARG:HH22	2.35	0.49
36:1e:98:THR:HG22	36:1e:99:GLY:N	2.26	0.49
37:1f:39:LYS:HE3	37:1f:62:TRP:HZ3	1.75	0.49
46:1o:6:GLU:OE1	46:1o:6:GLU:N	2.45	0.49
1:2A:1272:A:H3'	1:2A:1273:U:H5"	1.94	0.49
1:2A:1968:G:OP1	61:2A:3905:HOH:O	2.20	0.49
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.48	0.49
5:2F:164:ARG:O	5:2F:168:ARG:HB2	2.12	0.49
8:2I:102:SER:OG	8:2I:103:ARG:N	2.45	0.49
25:23:8:LEU:HD23	25:23:30:ARG:O	2.12	0.49
32:2a:406:G:C8	32:2a:495:A:C2	3.00	0.49
32:2a:430:A:OP1	35:2d:9:CYS:HB2	2.12	0.49
35:2d:98:GLU:OE1	35:2d:103:ASN:ND2	2.44	0.49
1:1A:295:G:H4'	20:1Y:1:MET:HE3	1.95	0.49
1:1A:593:G:H4'	30:18:4:MET:HE2	1.95	0.49
1:1A:1062:G:P	1:1A:1070:A:H1'	2.53	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1517:G:C6	1:1A:1518:U:C4	3.00	0.49
1:1A:1946:U:H2'	1:1A:1947:C:C6	2.47	0.49
32:1a:684:A:N6	32:1a:685:G:C6	2.81	0.49
32:1a:1239:A:H62	32:1a:1299:A:N6	2.11	0.49
38:1g:91:VAL:CG1	38:1g:95:ARG:HG2	2.43	0.49
1:2A:10:G:O2'	1:2A:2801(A):A:N7	2.45	0.49
1:2A:571:A:H5'	1:2A:2030:A:N7	2.27	0.49
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.27	0.49
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.41	0.49
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.95	0.49
21:2Z:6:LYS:H	21:2Z:6:LYS:HE2	1.78	0.49
32:2a:448:A:P	32:2a:485:G:H22	2.35	0.49
32:2a:892:A:H2'	32:2a:893:C:C6	2.47	0.49
32:2a:1053:G:N2	32:2a:1058:G:O6	2.45	0.49
33:2b:60:ASP:O	33:2b:64:ARG:HG2	2.12	0.49
34:2c:6:HIS:CG	45:2n:49:HIS:HB3	2.47	0.49
34:2c:155:GLY:O	34:2c:157:ILE:N	2.46	0.49
43:2l:85:ILE:HD12	43:2l:98:TYR:HB3	1.95	0.49
48:2q:32:TYR:O	48:2q:34:LYS:N	2.40	0.49
55:2x:40:C:H2'	55:2x:41:C:H6	1.78	0.49
1:1A:234:C:H2'	1:1A:235:U:H6	1.78	0.49
1:1A:655:A:H2'	1:1A:656:G:O4'	2.12	0.49
1:1A:910:A:N1	1:1A:2277:G:H1'	2.28	0.49
2:1B:66:A:H61	2:1B:109:C:H5'	1.77	0.49
8:1I:75:LEU:O	8:1I:141:LYS:NZ	2.45	0.49
26:14:53:GLU:HB2	26:14:55:ARG:O	2.13	0.49
32:1a:79:G:C6	32:1a:90:U:O2	2.65	0.49
32:1a:339:C:H2'	32:1a:340:U:C6	2.48	0.49
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.95	0.49
1:2A:121:G:H4'	1:2A:149:A:H5'	1.93	0.49
1:2A:699:A:H4'	1:2A:1554:A:N6	2.28	0.49
1:2A:996:A:N6	1:2A:1160:G:C6	2.80	0.49
1:2A:2305:A:H2'	1:2A:2306:C:O4'	2.12	0.49
7:2H:25:LYS:HG2	7:2H:27:LYS:HD3	1.95	0.49
9:2N:35:ARG:O	9:2N:42:TRP:NE1	2.46	0.49
10:2O:120:GLU:HG2	10:2O:122:LEU:HG	1.94	0.49
11:2P:148:LEU:HD23	11:2P:148:LEU:H	1.78	0.49
32:2a:45:U:H2'	32:2a:46:G:C8	2.48	0.49
32:2a:189(K):U:H2'	32:2a:189(L):G:C8	2.48	0.49
32:2a:343:U:O2'	32:2a:344:A:H8	1.96	0.49
32:2a:1265:G:C4	32:2a:1271:G:N2	2.80	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:16:HIS:O	33:2b:18:GLY:N	2.46	0.49
40:2i:7:THR:HB	40:2i:83:ARG:NH1	2.27	0.49
45:2n:43:CYS:HA	45:2n:46:GLU:OE1	2.12	0.49
1:1A:271(D):G:H2'	1:1A:271(E):U:O4'	2.12	0.49
1:1A:952:G:OP1	12:1Q:16:ARG:NH2	2.45	0.49
1:1A:1584:C:O2'	1:1A:1586:A:H5'	2.13	0.49
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.27	0.49
26:14:58:ARG:NH1	50:1s:68:GLY:HA3	2.27	0.49
32:1a:198:G:C6	32:1a:220:G:C2	3.00	0.49
32:1a:1125:U:H4'	41:1j:5:ARG:HH22	1.75	0.49
33:1b:82:ARG:HD2	33:1b:92:TYR:CZ	2.48	0.49
33:1b:95:GLN:OE1	33:1b:147:LYS:HG2	2.12	0.49
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.46	0.49
47:1p:56:ALA:O	47:1p:60:LEU:HB2	2.12	0.49
1:2A:479:A:N3	1:2A:481:G:H5"	2.28	0.49
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.46	0.49
1:2A:1502:C:H2'	1:2A:1503:U:H6	1.76	0.49
1:2A:1531:C:H5"	1:2A:1532:C:OP2	2.12	0.49
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.47	0.49
1:2A:2473:U:O2	1:2A:2473:U:H2'	2.12	0.49
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.12	0.49
2:2B:22:U:H3	2:2B:61:G:H1	1.61	0.49
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.95	0.49
14:2S:66:ALA:O	14:2S:69:VAL:HG12	2.12	0.49
22:20:48:GLY:HA3	22:20:80:HIS:ND1	2.27	0.49
26:24:13:ARG:HG2	26:24:23:GLU:HG2	1.94	0.49
26:24:40:HIS:CD2	26:24:41:PRO:HD2	2.48	0.49
32:2a:1003:G:H2'	32:2a:1004:A:O4'	2.13	0.49
32:2a:1068:G:N7	32:2a:1094:G:C8	2.81	0.49
33:2b:28:PHE:CD1	33:2b:194:PRO:HG3	2.47	0.49
35:2d:31:CYS:O	35:2d:35:ARG:HG3	2.12	0.49
38:2g:69:VAL:HG11	38:2g:134:ALA:HB1	1.95	0.49
44:2m:91:ARG:HH11	44:2m:96:LEU:HD13	1.78	0.49
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.13	0.49
2:1B:66:A:H61	2:1B:108:U:H2'	1.77	0.49
6:1G:67:LYS:H	26:14:6:HIS:CE1	2.30	0.49
32:1a:219:C:H2'	32:1a:220:G:O4'	2.12	0.49
32:1a:828:A:OP1	39:1h:21:LYS:NZ	2.45	0.49
33:1b:73:THR:OG1	33:1b:169:LYS:NZ	2.46	0.49
1:2A:229:A:H5'	1:2A:230:U:OP1	2.12	0.49
1:2A:315:G:H2'	1:2A:316:C:C6	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.48	0.49
5:2F:158:THR:HB	5:2F:195:ASP:HB2	1.94	0.49
7:2H:88:LEU:CD1	7:2H:165:ALA:HA	2.40	0.49
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.27	0.49
32:2a:109:A:H2'	32:2a:326:G:N2	2.27	0.49
32:2a:340:U:H2'	32:2a:341:C:C6	2.48	0.49
32:2a:1206:G:C6	32:2a:1207:2MG:C5	3.01	0.49
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.47	0.49
32:2a:1226:C:OP2	44:2m:91:ARG:NH1	2.38	0.49
36:2e:129:ILE:HG22	36:2e:133:TYR:HE2	1.77	0.49
38:2g:71:PRO:HG3	38:2g:103:TRP:CH2	2.47	0.49
1:1A:271(R):G:H2'	1:1A:271(S):G:H5"	1.95	0.49
1:1A:2572:A:C8	4:1E:144:ARG:HD3	2.48	0.49
8:1I:69:LYS:HA	8:1I:138:ILE:HG12	1.94	0.49
12:1Q:85:LYS:N	12:1Q:85:LYS:HD2	2.27	0.49
32:1a:189:G:C4	32:1a:189(L):G:N2	2.80	0.49
32:1a:1055:A:C5	32:1a:1206:G:C2	3.01	0.49
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.94	0.49
32:1a:1460:A:H2'	32:1a:1461:G:O4'	2.11	0.49
38:1g:58:PRO:O	38:1g:61:VAL:N	2.44	0.49
39:1h:49:GLU:HG2	39:1h:62:TYR:HE2	1.78	0.49
1:2A:586:A:N1	1:2A:809:G:O2'	2.36	0.49
1:2A:644:A:H4'	1:2A:645:C:N4	2.27	0.49
1:2A:1204:A:N6	1:2A:1240:U:H2'	2.28	0.49
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.13	0.49
1:2A:2376:A:N3	14:2S:106:ARG:NH2	2.56	0.49
2:2B:53:A:H2'	2:2B:54:G:O4'	2.13	0.49
3:2D:146:GLU:HA	3:2D:153:ALA:HA	1.94	0.49
12:2Q:33:GLY:O	12:2Q:132:VAL:N	2.41	0.49
32:2a:735:C:H2'	32:2a:736:C:C6	2.48	0.49
32:2a:945:G:C2	32:2a:946:A:C8	3.01	0.49
33:2b:15:VAL:HG12	33:2b:209:ARG:HB3	1.94	0.49
36:2e:71:LEU:C	36:2e:72:GLN:HE21	2.21	0.49
46:2o:29:VAL:HG11	46:2o:81:LEU:HD21	1.94	0.49
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.12	0.49
1:1A:2111:C:N4	1:1A:2144:U:O2'	2.46	0.49
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.27	0.49
26:14:55:ARG:H	26:14:56:VAL:HA	1.78	0.49
32:1a:300:A:H1'	32:1a:565:U:O2	2.13	0.49
32:1a:1146:A:H2'	32:1a:1147:C:O4'	2.12	0.49
36:1e:8:GLU:HG3	36:1e:34:VAL:HG23	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:105:VAL:O	36:1e:109:ILE:HG13	2.13	0.49
38:1g:44:TYR:O	38:1g:47:CYS:HB2	2.13	0.49
39:1h:20:TYR:HA	39:1h:65:TYR:CE1	2.47	0.49
44:1m:121:LYS:NZ	44:1m:121:LYS:HB3	2.28	0.49
51:1t:63:ILE:HG22	51:1t:77:ALA:HB1	1.95	0.49
1:2A:881:G:N2	1:2A:882:G:H1'	2.28	0.49
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.27	0.49
1:2A:2315:G:H2'	1:2A:2316:C:H6	1.77	0.49
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.59	0.49
1:2A:2802:G:H2'	1:2A:2803:C:O4'	2.13	0.49
3:2D:58:HIS:HD1	3:2D:59:LYS:N	2.11	0.49
6:2G:19:LEU:HD12	6:2G:175:LEU:HD12	1.95	0.49
6:2G:28:VAL:O	6:2G:31:VAL:HG12	2.13	0.49
8:2I:72:LEU:CD1	8:2I:138:ILE:HG21	2.43	0.49
8:2I:129:THR:HA	8:2I:138:ILE:O	2.13	0.49
23:21:2:SER:HB3	23:21:46:LEU:HD12	1.94	0.49
28:26:40:CYS:O	28:26:44:ARG:N	2.43	0.49
32:2a:232:G:H1'	32:2a:262:A:N1	2.27	0.49
32:2a:524:G:H2'	32:2a:525:C:C6	2.48	0.49
32:2a:554:C:H2'	32:2a:555:C:H6	1.77	0.49
32:2a:664:G:OP1	49:2r:64:ARG:NE	2.26	0.49
32:2a:1074:G:O2'	32:2a:1101:A:N1	2.43	0.49
33:2b:97:TRP:HH2	33:2b:102:LEU:HD13	1.78	0.49
33:2b:130:ARG:HB2	33:2b:135:GLN:HG3	1.93	0.49
36:2e:57:LYS:CG	36:2e:61:TYR:HE2	2.22	0.49
50:2s:61:TYR:CE2	50:2s:63:THR:HG22	2.47	0.49
1:1A:1458:C:H4'	1:1A:1459:G:O5'	2.13	0.49
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.94	0.49
13:1R:56:LYS:NZ	13:1R:90:ARG:O	2.45	0.49
32:1a:79:G:N2	32:1a:90:U:O2'	2.46	0.49
32:1a:270:A:H2'	32:1a:271:C:C6	2.48	0.49
37:1f:3:ARG:O	37:1f:93:SER:HB2	2.13	0.49
55:1x:31:G:C8	55:1x:32:5MC:HM53	2.47	0.49
1:2A:687:C:H2'	1:2A:688:U:O4'	2.13	0.49
1:2A:856:C:O4'	22:20:27:GLU:HB3	2.13	0.49
12:2Q:19:GLY:HA2	21:2Z:79:ARG:HH12	1.77	0.49
12:2Q:60:ARG:NH1	54:2w:54:5MU:OP2	2.46	0.49
14:2S:29:PHE:O	14:2S:35:ILE:HA	2.13	0.49
26:24:44:THR:C	26:24:46:GLN:H	2.21	0.49
31:29:7:VAL:HG12	31:29:34:GLN:HB3	1.94	0.49
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.38	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1517:G:H2'	32:2a:1518:MA6:C8	2.43	0.49
36:2e:41:VAL:HG12	36:2e:69:VAL:HG21	1.95	0.49
36:2e:77:PRO:HD2	36:2e:142:LEU:HD22	1.95	0.49
45:2n:52:GLN:O	45:2n:53:LEU:HD23	2.13	0.49
54:2y:9:A:H1'	54:2y:45:U:O2	2.13	0.49
1:1A:1039:G:H1	1:1A:1116:C:N4	2.07	0.48
5:1F:160:ASN:ND2	5:1F:163:VAL:HG23	2.28	0.48
32:1a:1005:A:C2	32:1a:1025:U:H1'	2.48	0.48
32:1a:1027:C:N1	32:1a:1034:G:N2	2.56	0.48
34:1c:50:ALA:O	34:1c:71:ALA:HB3	2.13	0.48
44:1m:87:TYR:HA	44:1m:90:LEU:HD12	1.95	0.48
54:1w:19:G:H4'	54:1w:20:U:OP1	2.13	0.48
54:1y:19:G:H4'	54:1y:57:G:H22	1.78	0.48
1:2A:1411:C:H2'	1:2A:1412:A:C8	2.48	0.48
1:2A:1508:A:H4'	1:2A:1509(A):A:C5	2.48	0.48
1:2A:1913:A:N7	32:2a:1494:G:H4'	2.27	0.48
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.48	0.48
1:2A:2882:A:H5'	13:2R:96:ARG:HB2	1.95	0.48
6:2G:59:GLU:O	6:2G:63:ILE:HG12	2.13	0.48
32:2a:625:G:H2'	32:2a:626:U:C6	2.48	0.48
32:2a:718:G:H5'	42:2k:117:ASN:CG	2.39	0.48
32:2a:1056:U:H5'	34:2c:163:ALA:HB2	1.95	0.48
32:2a:1273:G:H5'	32:2a:1274:G:OP2	2.13	0.48
32:2a:1290:G:OP1	38:2g:35:LYS:NZ	2.46	0.48
33:2b:133:LYS:O	33:2b:137:ARG:N	2.42	0.48
41:2j:49:VAL:HG12	41:2j:61:GLU:O	2.13	0.48
47:2p:21:VAL:HG22	47:2p:34:GLU:HB3	1.95	0.48
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.78	0.48
1:1A:2128:C:N4	1:1A:2161:C:N3	2.61	0.48
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.60	0.48
32:1a:738:C:H2'	32:1a:739:C:C6	2.48	0.48
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.12	0.48
1:2A:500:G:N2	1:2A:502:A:H3'	2.28	0.48
1:2A:1204:A:H61	1:2A:1240:U:H2'	1.78	0.48
1:2A:1913:A:H4'	1:2A:1914:C:C5'	2.43	0.48
14:2S:91:PRO:HG2	14:2S:92:TYR:CE1	2.48	0.48
32:2a:376:G:H5"	47:2p:5:ARG:HB2	1.95	0.48
32:2a:1375:A:C6	32:2a:1376:U:C4	3.00	0.48
36:2e:42:GLY:HA2	36:2e:65:ASN:O	2.13	0.48
44:2m:33:ALA:HA	44:2m:59:TYR:HE2	1.76	0.48
50:2s:53:ASN:CG	50:2s:56:GLN:H	2.19	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:7:A:O2'	54:2w:49:C:O4'	2.22	0.48
1:1A:893:C:H2'	1:1A:894:C:C6	2.47	0.48
1:1A:1503:U:H2'	1:1A:1504:C:C6	2.48	0.48
1:1A:1810:A:H2'	1:1A:1811:G:H5'	1.94	0.48
2:1B:42:C:OP1	6:1G:67:LYS:HE2	2.13	0.48
26:14:14:ILE:HA	26:14:31:ILE:O	2.13	0.48
32:1a:79:G:O6	32:1a:90:U:O2	2.31	0.48
32:1a:685:G:O2'	32:1a:686:U:H5'	2.13	0.48
33:1b:55:PHE:CD1	33:1b:221:LEU:HD22	2.48	0.48
34:1c:33:LEU:O	34:1c:37:GLN:HG2	2.13	0.48
42:1k:107:SER:O	42:1k:108:ILE:HG13	2.14	0.48
43:1l:39:VAL:HG11	43:1l:41:ARG:NH1	2.29	0.48
1:2A:817:C:C2	1:2A:818:G:C8	3.01	0.48
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.48	0.48
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.95	0.48
22:20:52:GLY:O	22:20:59:LEU:HA	2.12	0.48
32:2a:257:G:H2'	32:2a:258:G:O4'	2.13	0.48
32:2a:1121:U:C4	32:2a:1122:U:C4	3.00	0.48
33:2b:28:PHE:CD2	33:2b:31:TYR:HB2	2.49	0.48
36:2e:93:PRO:HG2	39:2h:105:ARG:NH2	2.27	0.48
36:2e:137:GLU:O	36:2e:141:GLN:HB2	2.13	0.48
1:1A:185:U:H4'	1:1A:218:A:H4'	1.96	0.48
1:1A:1876:A:H2'	1:1A:1877:A:C8	2.49	0.48
1:1A:2158:A:O2'	1:1A:2159:G:OP2	2.29	0.48
1:1A:2803:C:H2'	1:1A:2804:C:C6	2.49	0.48
16:1U:19:LYS:O	16:1U:22:LYS:HG3	2.13	0.48
25:13:16:PRO:HB2	25:13:18:ASP:OD1	2.14	0.48
32:1a:110:C:H2'	32:1a:111:G:O4'	2.12	0.48
32:1a:540:G:H2'	32:1a:541:G:O4'	2.13	0.48
32:1a:977:A:H1'	32:1a:982:U:O4	2.13	0.48
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.13	0.48
32:1a:1388:C:H2'	32:1a:1389:C:H6	1.76	0.48
34:1c:6:HIS:CD2	34:1c:8:ILE:HB	2.49	0.48
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.13	0.48
1:2A:1670:C:C5	1:2A:1671:U:C4	3.01	0.48
1:2A:2305:A:H1'	6:2G:136:ARG:HG2	1.95	0.48
4:2E:9:VAL:HG22	4:2E:25:VAL:HB	1.95	0.48
8:2I:72:LEU:HD23	8:2I:107:VAL:HG11	1.95	0.48
13:2R:78:LYS:HE2	13:2R:83:ILE:HD11	1.95	0.48
15:2T:64:ARG:HB2	15:2T:73:GLU:HG2	1.94	0.48
21:2Z:44:PHE:O	21:2Z:48:PHE:N	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:21:67:ILE:N	23:21:68:PRO:HD2	2.29	0.48
32:2a:678:U:H2'	32:2a:679:C:C6	2.48	0.48
32:2a:707:C:O2'	32:2a:708:C:H5'	2.13	0.48
32:2a:1438:G:H2'	32:2a:1439:C:C6	2.47	0.48
35:2d:57:ARG:NH1	35:2d:205:GLU:HB3	2.28	0.48
37:2f:91:VAL:HG12	37:2f:92:LYS:O	2.13	0.48
50:2s:53:ASN:OD1	50:2s:55:LYS:N	2.35	0.48
1:1A:247:G:H4'	1:1A:386:G:C5	2.48	0.48
1:1A:747:U:O2	1:1A:2014:A:H1'	2.13	0.48
1:1A:2344:U:OP1	28:16:37:ARG:NH1	2.46	0.48
8:1I:5:LEU:HD12	8:1I:17:GLN:O	2.14	0.48
32:1a:254:G:OP1	48:1q:67:LYS:O	2.31	0.48
32:1a:1216:G:OP1	45:1n:2:ALA:HA	2.13	0.48
32:1a:1280:A:OP1	41:1j:7:LYS:NZ	2.46	0.48
35:1d:154:ASN:HA	35:1d:159:ARG:NH2	2.29	0.48
35:1d:176:LEU:HG	35:1d:178:VAL:HG22	1.95	0.48
1:2A:795:C:H2'	1:2A:796:C:C6	2.49	0.48
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.49	0.48
1:2A:2503:2MA:H8	58:2A:3877:A1A1J:O	2.13	0.48
5:2F:28:ILE:HD13	5:2F:116:ASP:HB2	1.96	0.48
10:2O:63:VAL:HG12	10:2O:106:LEU:HD11	1.96	0.48
32:2a:405:U:O4	35:2d:2:GLY:N	2.47	0.48
32:2a:1263:C:C4	32:2a:1272:G:O6	2.66	0.48
43:2l:38:THR:O	43:2l:79:GLU:HG3	2.13	0.48
43:2l:69:TYR:HD2	43:2l:71:PRO:HD3	1.79	0.48
1:1A:639:U:H2'	1:1A:640:C:C6	2.48	0.48
3:1D:77:ALA:HB2	3:1D:97:TYR:CD1	2.48	0.48
17:1V:1:MET:CE	17:1V:43:GLU:HB2	2.44	0.48
28:16:44:ARG:HG2	28:16:44:ARG:NH1	2.29	0.48
32:1a:473:G:H2'	32:1a:474:G:H8	1.78	0.48
32:1a:760:G:O2'	48:1q:98:LEU:HD23	2.13	0.48
32:1a:1019:C:C4	32:1a:1020:U:C6	3.01	0.48
32:1a:1346:A:OP1	40:1i:120:ARG:NH1	2.35	0.48
33:1b:109:SER:O	33:1b:112:VAL:N	2.37	0.48
47:1p:48:TRP:HE3	47:1p:49:LEU:HB2	1.79	0.48
1:2A:764:A:H5"	3:2D:210:GLY:HA2	1.94	0.48
1:2A:1287:A:H5"	1:2A:1288:U:OP2	2.12	0.48
1:2A:2357:U:OP1	22:20:20:ARG:NE	2.36	0.48
16:2U:88:ILE:HG12	17:2V:49:THR:HG22	1.96	0.48
21:2Z:10:ARG:HG3	21:2Z:36:LYS:HB3	1.95	0.48
32:2a:375:U:OP1	47:2p:69:THR:HG21	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1099:G:OP2	33:2b:144:ARG:NH2	2.46	0.48
32:2a:1289:A:H2'	32:2a:1290:G:H5'	1.95	0.48
40:2i:42:ARG:NH2	40:2i:71:SER:OG	2.46	0.48
1:1A:839:U:H2'	1:1A:840:C:C6	2.48	0.48
1:1A:2143:C:H2'	1:1A:2144:U:O4'	2.13	0.48
2:1B:28:C:OP1	14:1S:36:TYR:OH	2.29	0.48
28:16:18:ARG:HD2	28:16:42:TRP:CD1	2.48	0.48
32:1a:8:A:H5'	36:1e:101:ILE:HG22	1.94	0.48
32:1a:96:U:H2'	32:1a:97:G:H8	1.78	0.48
33:1b:18:GLY:CA	33:1b:42:ILE:HG13	2.43	0.48
33:1b:88:ALA:HB2	33:1b:219:VAL:HG22	1.95	0.48
33:1b:223:ILE:HA	33:1b:226:ARG:HG2	1.94	0.48
1:2A:2489:G:O2'	1:2A:2490:G:H5'	2.14	0.48
1:2A:2516:G:C6	1:2A:2517:C:C4	3.02	0.48
2:2B:11:C:O5'	2:2B:12:C:H5	1.96	0.48
8:2I:4:ILE:HG12	8:2I:18:VAL:HG22	1.96	0.48
32:2a:79:G:H1	32:2a:90:U:H3	1.61	0.48
32:2a:1120:G:C6	32:2a:1121:U:C4	3.02	0.48
32:2a:1321:C:O2'	50:2s:77:THR:HG21	2.13	0.48
41:2j:35:SER:HB3	41:2j:73:ASP:HB2	1.95	0.48
44:2m:26:GLY:H	44:2m:29:ARG:HB2	1.79	0.48
49:2r:56:THR:HB	49:2r:58:LEU:HD12	1.96	0.48
1:1A:528:A:OP2	9:1N:114:ARG:NH1	2.46	0.48
5:1F:64:ILE:HG21	5:1F:78:ILE:CG2	2.44	0.48
21:1Z:151:HIS:ND1	21:1Z:170:THR:HA	2.29	0.48
32:1a:486:U:H2'	32:1a:487:A:H8	1.78	0.48
32:1a:828:A:H2'	32:1a:829:G:O4'	2.14	0.48
32:1a:1123:A:O2'	41:1j:37:PRO:O	2.30	0.48
33:1b:16:HIS:CD2	33:1b:17:PHE:N	2.82	0.48
35:1d:178:VAL:O	35:1d:179:GLU:HB2	2.13	0.48
54:1w:52:G:H2'	54:1w:53:G:O4'	2.14	0.48
1:2A:171:G:H2'	1:2A:172:C:C6	2.48	0.48
1:2A:879:G:C6	1:2A:880:G:C2	3.01	0.48
1:2A:900:A:O2'	1:2A:901:A:OP1	2.29	0.48
1:2A:1180:C:H2'	1:2A:1181:C:H6	1.78	0.48
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.47	0.48
1:2A:2364:C:H4'	22:20:56:ASP:OD1	2.14	0.48
1:2A:2648:C:H2'	1:2A:2649:U:H6	1.78	0.48
1:2A:2820:A:OP2	13:2R:2:ARG:NH2	2.47	0.48
2:2B:24:G:N7	2:2B:56:G:H2'	2.27	0.48
5:2F:32:LEU:HD13	5:2F:112:MET:HE1	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:89:ALA:O	11:2P:121:LYS:NZ	2.45	0.48
13:2R:88:ARG:HG2	13:2R:89:ASP:OD1	2.14	0.48
14:2S:23:ARG:HD2	14:2S:86:ALA:HB2	1.95	0.48
15:2T:42:ILE:HG13	15:2T:84:GLN:NE2	2.29	0.48
18:2W:4:LYS:HB3	18:2W:4:LYS:HE3	1.58	0.48
18:2W:92:ARG:HG2	18:2W:93:ALA:N	2.28	0.48
32:2a:707:C:H2'	32:2a:708:C:H6	1.78	0.48
32:2a:988:G:H2'	32:2a:989:C:O4'	2.14	0.48
32:2a:1328:C:O3'	44:2m:29:ARG:HG3	2.14	0.48
32:2a:1409:C:H2'	32:2a:1410:G:H8	1.78	0.48
33:2b:178:ARG:NH2	39:2h:74:PRO:HB3	2.28	0.48
47:2p:19:ILE:N	47:2p:37:GLY:O	2.47	0.48
1:1A:11:G:H2'	1:1A:12:U:C5'	2.41	0.48
1:1A:234:C:H2'	1:1A:235:U:C6	2.49	0.48
1:1A:279:C:H42	1:1A:361:G:H1	1.61	0.48
1:1A:880:G:H2'	1:1A:881:G:H8	1.79	0.48
1:1A:886:C:N4	1:1A:887:A:H8	2.11	0.48
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.49	0.48
1:1A:1192:G:OP2	61:1A:4245:HOH:O	2.20	0.48
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.30	0.48
18:1W:92:ARG:NH1	61:1W:303:HOH:O	2.46	0.48
32:1a:271:C:H2'	32:1a:272:C:C6	2.48	0.48
32:1a:392:G:OP1	47:1p:8:ARG:NH2	2.46	0.48
51:1t:71:THR:HG22	51:1t:72:LEU:HD13	1.95	0.48
1:2A:1012:U:O4	9:2N:28:THR:HG21	2.14	0.48
1:2A:2273:A:H2'	1:2A:2274:A:H8	1.75	0.48
1:2A:2345:G:H4'	1:2A:2346:A:H5"	1.95	0.48
2:2B:19:G:H2'	2:2B:20:C:O4'	2.14	0.48
4:2E:69:LYS:O	4:2E:69:LYS:HG2	2.12	0.48
5:2F:148:LEU:CD2	5:2F:191:ARG:HD2	2.42	0.48
11:2P:126:VAL:CG1	11:2P:148:LEU:HD22	2.41	0.48
21:2Z:73:GLN:O	21:2Z:87:ASP:N	2.42	0.48
25:23:6:VAL:HA	25:23:56:VAL:HG22	1.94	0.48
30:28:34:TRP:CG	30:28:35:GLN:N	2.81	0.48
32:2a:1081:G:H5'	36:2e:18:ARG:HB3	1.94	0.48
32:2a:1212:U:H5'	32:2a:1213:A:C8	2.49	0.48
35:2d:3:ARG:NH1	35:2d:5:ILE:HG13	2.28	0.48
36:2e:84:PHE:N	36:2e:87:SER:O	2.47	0.48
54:2w:14:A:C2	54:2w:15:G:H1'	2.49	0.48
55:2x:23:C:H2'	55:2x:24:U:H6	1.79	0.48
1:1A:483:A:H5"	20:1Y:50:ARG:HE	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.14	0.48
1:1A:2051:A:H5'	1:1A:2578:G:O4'	2.13	0.48
1:1A:2136:C:C2	1:1A:2155:G:N2	2.82	0.48
5:1F:135:LYS:HB2	5:1F:138:GLU:HG3	1.95	0.48
21:1Z:7:ALA:HB2	21:1Z:59:LEU:HD22	1.96	0.48
32:1a:96:U:H2'	32:1a:97:G:C8	2.48	0.48
32:1a:741:G:H2'	32:1a:742:G:O4'	2.13	0.48
32:1a:1080:A:H5'	36:1e:14:ARG:HH21	1.79	0.48
35:1d:155:LEU:H	35:1d:158:ILE:HD11	1.78	0.48
41:1j:50:ILE:HA	41:1j:60:ARG:HD3	1.95	0.48
44:1m:67:GLU:HG3	44:1m:71:ARG:NH2	2.28	0.48
55:1x:59:A:H2'	55:1x:60:U:H5'	1.96	0.48
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.47	0.48
1:2A:467:G:OP1	29:27:33:ARG:HD2	2.14	0.48
1:2A:646:A:H2'	1:2A:647:G:O4'	2.14	0.48
1:2A:903:C:H2'	1:2A:904:C:C6	2.49	0.48
1:2A:1012:U:C5	9:2N:28:THR:HG21	2.49	0.48
1:2A:2006:C:O2'	1:2A:2823:A:N3	2.43	0.48
1:2A:2145:C:O2'	1:2A:2147:G:N7	2.47	0.48
1:2A:2296:U:H4'	1:2A:2297:C:OP1	2.13	0.48
1:2A:2343:C:O2'	1:2A:2373:G:O2'	2.25	0.48
10:2O:111:PHE:HB3	10:2O:114:ILE:HD12	1.96	0.48
16:2U:106:PHE:O	16:2U:110:VAL:HG23	2.14	0.48
25:23:3:ARG:HH21	25:23:36:VAL:HG11	1.79	0.48
32:2a:540:G:C6	32:2a:541:G:C5	3.01	0.48
32:2a:622:A:C8	32:2a:623:C:C5	3.02	0.48
32:2a:938:A:C6	32:2a:939:G:C5	3.02	0.48
32:2a:1004:A:N3	32:2a:1038:C:C2	2.82	0.48
32:2a:1141:C:C2	32:2a:1142:G:C8	3.02	0.48
34:2c:137:ALA:HA	34:2c:140:ARG:NH2	2.28	0.48
37:2f:100:ASN:ND2	49:2r:23:LYS:HE2	2.29	0.48
50:2s:53:ASN:OD1	50:2s:56:GLN:N	2.41	0.48
1:1A:530:G:N1	1:1A:2023:G:OP1	2.39	0.47
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.48	0.47
2:1B:73:A:N1	21:1Z:34:ASN:ND2	2.62	0.47
5:1F:29:ASN:H	5:1F:112:MET:CE	2.27	0.47
5:1F:144:LYS:HE3	5:1F:144:LYS:HB3	1.57	0.47
12:1Q:16:ARG:HG3	12:1Q:17:LEU:H	1.79	0.47
32:1a:501:C:H2'	32:1a:502:G:C8	2.48	0.47
55:1x:8:4SU:O2	55:1x:21:A:H2	1.97	0.47
1:2A:994:C:O2'	1:2A:996:A:OP1	2.27	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:11:C:OP2	2:2B:12:C:N4	2.43	0.47
2:2B:31:C:H41	14:2S:32:LEU:HD22	1.79	0.47
14:2S:30:ARG:HB2	14:2S:35:ILE:HD12	1.95	0.47
18:2W:18:ARG:HG2	18:2W:76:VAL:HB	1.95	0.47
21:2Z:144:LEU:HG	21:2Z:145:GLU:H	1.79	0.47
32:2a:34:C:H2'	32:2a:35:G:H8	1.78	0.47
32:2a:88:A:H5"	32:2a:89:C:C6	2.49	0.47
32:2a:431:A:H2'	32:2a:432:A:C8	2.45	0.47
32:2a:977:A:H2	32:2a:1224:G:C6	2.32	0.47
32:2a:1055:A:N6	32:2a:1206:G:C5	2.82	0.47
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.13	0.47
34:2c:124:ILE:HG13	34:2c:125:GLU:N	2.29	0.47
37:2f:97:PHE:CD2	49:2r:65:ILE:HD12	2.48	0.47
38:2g:6:ARG:HB2	38:2g:6:ARG:HH11	1.78	0.47
41:2j:8:LEU:HG	41:2j:70:ARG:HB2	1.96	0.47
42:2k:84:VAL:HG12	42:2k:110:ASP:OD1	2.14	0.47
43:2l:92:0TD:O	43:2l:93:LEU:HD23	2.13	0.47
50:2s:50:ALA:HB1	50:2s:57:HIS:HB3	1.95	0.47
55:2x:34:C:C2	55:2x:35:A:C8	3.02	0.47
1:1A:1045:A:H1'	1:1A:1047:G:N3	2.29	0.47
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.49	0.47
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.50	0.47
8:1I:94:ALA:H	8:1I:116:LEU:HD22	1.78	0.47
15:1T:35:LYS:HG3	15:1T:40:THR:HG22	1.96	0.47
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.15	0.47
24:12:23:LYS:O	24:12:27:GLU:HG3	2.14	0.47
32:1a:963:G:H5'	61:1a:2022:HOH:O	2.14	0.47
32:1a:1164:G:H2'	32:1a:1165:C:C6	2.48	0.47
33:1b:97:TRP:HZ2	33:1b:102:LEU:HD13	1.79	0.47
33:1b:119:GLU:O	33:1b:123:ALA:N	2.47	0.47
54:1y:26:A:N1	54:1y:44:G:N2	2.62	0.47
1:2A:607:U:OP1	5:2F:103:LYS:HG3	2.15	0.47
1:2A:1912:A:C8	1:2A:1918:A:C2	3.02	0.47
2:2B:114:C:H2'	2:2B:115:G:C8	2.49	0.47
20:2Y:83:THR:OG1	20:2Y:84:ARG:N	2.46	0.47
32:2a:1010:G:H2'	32:2a:1011:G:H8	1.77	0.47
32:2a:1067:A:O2'	32:2a:1068:G:OP2	2.29	0.47
32:2a:1388:C:H2'	32:2a:1389:C:H6	1.79	0.47
35:2d:20:TYR:CD1	35:2d:26:CYS:HB3	2.49	0.47
36:2e:45:PHE:HD1	36:2e:46:GLY:N	2.11	0.47
41:2j:85:LEU:HD12	41:2j:86:MET:N	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:2k:43:SER:HB3	42:2k:68:ALA:HB2	1.96	0.47
1:1A:208:C:H2'	1:1A:209:C:C6	2.49	0.47
7:1H:7:LEU:HD12	7:1H:8:PRO:HD2	1.95	0.47
8:1I:70:GLU:O	8:1I:74:ASN:HB2	2.14	0.47
32:1a:79:G:O6	32:1a:90:U:C2	2.67	0.47
32:1a:175:C:H2'	32:1a:176:C:H6	1.79	0.47
32:1a:406:G:H21	35:1d:119:GLN:NE2	2.11	0.47
32:1a:530:G:O6	53:1v:21:C:H1'	2.14	0.47
32:1a:1106:G:C6	32:1a:1107:C:C4	3.03	0.47
36:1e:148:VAL:HG11	39:1h:107:LEU:HD22	1.95	0.47
37:1f:12:PRO:HG3	37:1f:57:GLN:O	2.13	0.47
49:1r:73:ALA:HB3	49:1r:79:LEU:HD12	1.96	0.47
54:1w:24:G:C6	54:1w:25:C:C4	3.02	0.47
1:2A:271(D):G:H1	1:2A:271(T):C:H42	1.61	0.47
1:2A:1358:G:OP2	61:2A:3944:HOH:O	2.19	0.47
1:2A:2136:C:H1'	1:2A:2137:C:H5'	1.96	0.47
12:2Q:19:GLY:HA2	21:2Z:79:ARG:NH1	2.29	0.47
14:2S:25:ARG:HD3	14:2S:42:ASP:OD2	2.13	0.47
22:20:46:LYS:HE3	22:20:76:GLY:HA3	1.94	0.47
32:2a:1168:A:C6	32:2a:1169:A:C6	3.02	0.47
32:2a:1320:C:N3	50:2s:36:ARG:NH2	2.62	0.47
32:2a:1364:U:O2'	32:2a:1365:G:H5'	2.15	0.47
33:2b:223:ILE:HG22	33:2b:226:ARG:HD3	1.96	0.47
34:2c:35:GLU:O	34:2c:38:ARG:HB3	2.14	0.47
36:2e:76:ILE:O	36:2e:93:PRO:HB3	2.14	0.47
36:2e:92:LYS:HB3	36:2e:119:LEU:HB2	1.95	0.47
36:2e:102:ALA:HB2	36:2e:120:THR:HG21	1.96	0.47
40:2i:23:ASN:OD1	40:2i:25:LYS:HG2	2.13	0.47
1:1A:71:A:N7	19:1X:31:HIS:HE1	2.12	0.47
1:1A:1069:A:O4'	1:1A:1096:A:O2'	2.29	0.47
2:1B:42:C:O2'	6:1G:66:GLN:HG2	2.13	0.47
5:1F:157:VAL:HG21	5:1F:181:LEU:HD13	1.95	0.47
29:17:11:LYS:HE3	29:17:15:THR:OG1	2.14	0.47
32:1a:148:G:H2'	32:1a:149:A:C8	2.36	0.47
32:1a:374:A:C6	32:1a:375:U:C4	3.03	0.47
32:1a:475:G:O2'	32:1a:476:G:H5'	2.14	0.47
36:1e:137:GLU:HA	36:1e:140:ARG:HH11	1.80	0.47
38:1g:89:MET:SD	38:1g:155:ARG:HB2	2.54	0.47
40:1i:79:LEU:HG	40:1i:83:ARG:HD2	1.96	0.47
46:1o:42:HIS:CE1	46:1o:46:HIS:CD2	3.03	0.47
51:1t:57:ARG:HH12	51:1t:100:ILE:CD1	2.20	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:1y:19:G:C5'	54:1y:57:G:H1	2.27	0.47
1:2A:286:C:H2'	1:2A:287:C:C6	2.49	0.47
1:2A:1140:C:OP2	9:2N:66:LYS:NZ	2.47	0.47
1:2A:1506:C:C2'	1:2A:1507:A:H5'	2.43	0.47
1:2A:2125:G:N3	1:2A:2173:A:N6	2.60	0.47
1:2A:2275:C:H6	1:2A:2275:C:H5'	1.80	0.47
4:2E:102:VAL:HG23	4:2E:170:LEU:HB2	1.95	0.47
6:2G:111:LEU:HD23	6:2G:117:PHE:HZ	1.79	0.47
11:2P:94:GLU:HG3	11:2P:124:LYS:HD2	1.97	0.47
21:2Z:99:TYR:CZ	21:2Z:125:LEU:HD12	2.49	0.47
32:2a:335:C:H2'	32:2a:336:C:C6	2.50	0.47
34:2c:111:LEU:HG	34:2c:144:SER:HB2	1.94	0.47
38:2g:108:ALA:HA	38:2g:111:ARG:HD2	1.96	0.47
38:2g:146:GLU:OE2	38:2g:149:ARG:NE	2.48	0.47
40:2i:85:LEU:HD22	40:2i:92:TYR:HE2	1.79	0.47
55:2x:50:U:H3	55:2x:64:G:H1	1.61	0.47
6:1G:16:ARG:HB2	6:1G:17:PRO:HD3	1.96	0.47
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.76	0.47
11:1P:90:ARG:HG2	11:1P:90:ARG:NH1	2.26	0.47
32:1a:1183:A:O2'	32:1a:1184:G:OP1	2.30	0.47
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.50	0.47
35:1d:122:ARG:NH1	35:1d:134:ASP:OD2	2.48	0.47
42:1k:51:LYS:HA	42:1k:51:LYS:HD2	1.49	0.47
42:1k:87:THR:O	42:1k:87:THR:OG1	2.31	0.47
51:1t:29:LYS:O	51:1t:33:ILE:HG13	2.14	0.47
1:2A:271(S):G:C6	1:2A:271(T):C:C4	3.02	0.47
1:2A:854:G:H2'	1:2A:855:G:H8	1.79	0.47
1:2A:1316:U:H2'	1:2A:1317:A:H8	1.80	0.47
6:2G:40:ASN:HD21	6:2G:42:GLY:HA3	1.79	0.47
9:2N:110:GLY:O	9:2N:114:ARG:HG3	2.14	0.47
32:2a:1318:A:H5"	50:2s:3:ARG:NH2	2.29	0.47
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.50	0.47
33:2b:192:SER:O	33:2b:194:PRO:HD3	2.13	0.47
36:2e:100:VAL:HG12	36:2e:118:ILE:HG22	1.96	0.47
41:2j:8:LEU:HD12	41:2j:16:LEU:HD22	1.95	0.47
41:2j:67:THR:O	41:2j:67:THR:OG1	2.32	0.47
43:2l:7:ILE:O	43:2l:11:VAL:HG23	2.14	0.47
1:1A:2439:A:N6	55:1x:76:31H:OP1	2.48	0.47
6:1G:66:GLN:HG3	26:14:1:MET:CE	2.41	0.47
14:1S:3:ARG:HA	14:1S:3:ARG:HD3	1.72	0.47
32:1a:56:U:H2'	32:1a:57:G:C8	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:266:G:N3	32:1a:266:G:H5"	2.30	0.47
32:1a:406:G:N2	35:1d:119:GLN:HE22	2.11	0.47
33:1b:108:ILE:O	33:1b:111:ARG:HB2	2.15	0.47
43:1l:57:LYS:HG3	43:1l:67:THR:HG22	1.96	0.47
1:2A:921:G:C6	1:2A:922:U:C4	3.03	0.47
1:2A:1005:C:C2	1:2A:1143:A:C5	3.02	0.47
1:2A:1925:C:C2'	1:2A:1926:U:H5'	2.45	0.47
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.14	0.47
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.96	0.47
1:2A:2128:C:H6	1:2A:2128:C:O5'	1.98	0.47
1:2A:2130:U:H2'	1:2A:2158:A:N6	2.29	0.47
1:2A:2379:G:O2'	14:2S:17:ARG:NH2	2.48	0.47
4:2E:77:ILE:HG13	4:2E:195:LEU:HD13	1.95	0.47
10:2O:120:GLU:OE2	10:2O:122:LEU:HD21	2.15	0.47
14:2S:67:ARG:HD3	14:2S:71:ARG:HH11	1.79	0.47
21:2Z:5:LEU:O	21:2Z:59:LEU:HA	2.15	0.47
32:2a:344:A:H5"	32:2a:345:C:H5	1.80	0.47
32:2a:658:G:O4'	46:2o:22:THR:HB	2.14	0.47
32:2a:1064:G:C6	32:2a:1191:A:N6	2.78	0.47
32:2a:1505:G:H4'	32:2a:1506:U:H5"	1.97	0.47
34:2c:162:GLN:NE2	53:2v:24:A:O2'	2.48	0.47
1:1A:242:G:C8	30:18:5:LYS:HG2	2.50	0.47
1:1A:1332:G:OP1	61:1A:4244:HOH:O	2.20	0.47
1:1A:1445(A):C:H2'	1:1A:1446:C:H6	1.80	0.47
1:1A:1797:C:H4'	3:1D:257:LEU:O	2.15	0.47
1:1A:2611:U:H5'	1:1A:2611:U:C6	2.47	0.47
1:1A:2747:G:O6	1:1A:2755:C:H5"	2.15	0.47
1:1A:2751:G:C5	7:1H:2:SER:N	2.83	0.47
6:1G:16:ARG:O	6:1G:20:ILE:HG13	2.15	0.47
6:1G:126:ASP:HB2	6:1G:130:ASN:H	1.80	0.47
9:1N:67:LEU:HB3	9:1N:88:GLU:HG3	1.96	0.47
11:1P:38:GLN:O	11:1P:40:SER:N	2.48	0.47
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.46	0.47
15:1T:112:ARG:HG3	15:1T:115:ARG:NH2	2.30	0.47
22:10:12:ASN:O	22:10:14:ARG:NH1	2.48	0.47
32:1a:7:G:H5'	32:1a:298:A:O4'	2.15	0.47
32:1a:277:C:P	48:1q:68:ARG:HH12	2.38	0.47
32:1a:1060:C:H5"	41:1j:51:ARG:HG2	1.95	0.47
32:1a:1503:A:H8	32:1a:1503:A:OP1	1.98	0.47
33:1b:21:ARG:O	33:1b:23:ARG:HG2	2.15	0.47
33:1b:44:LEU:HA	33:1b:47:THR:OG1	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:1f:100:ASN:C	49:1r:28:GLU:HG3	2.40	0.47
39:1h:13:ILE:O	39:1h:17:THR:HG23	2.15	0.47
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.28	0.47
40:1i:77:ILE:O	40:1i:80:GLY:N	2.48	0.47
48:1q:53:LEU:HD23	48:1q:82:MET:HE1	1.96	0.47
1:2A:855:G:C6	1:2A:856:C:N4	2.83	0.47
1:2A:866:A:C6	1:2A:914:C:C5	3.02	0.47
1:2A:1031:G:N3	31:29:36:GLN:NE2	2.62	0.47
1:2A:1216:G:P	16:2U:12:ARG:HH21	2.36	0.47
1:2A:1340:U:H4'	1:2A:1341:U:OP2	2.15	0.47
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.38	0.47
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.79	0.47
1:2A:2206:G:H5"	1:2A:2207:G:C8	2.49	0.47
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.50	0.47
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.49	0.47
1:2A:2896:C:H2'	1:2A:2897:U:H6	1.74	0.47
2:2B:42:C:O2'	6:2G:66:GLN:HG2	2.15	0.47
2:2B:54:G:H21	6:2G:29:TRP:NE1	2.04	0.47
6:2G:44:GLY:HA2	6:2G:88:ILE:HG22	1.96	0.47
6:2G:45:GLU:H	6:2G:45:GLU:HG2	1.49	0.47
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.40	0.47
11:2P:81:GLN:HE22	11:2P:106:LEU:HA	1.78	0.47
17:2V:76:LYS:HD2	17:2V:81:TYR:CD2	2.50	0.47
18:2W:86:LEU:HD13	18:2W:96:ILE:HD11	1.96	0.47
21:2Z:52:SER:HB3	21:2Z:54:HIS:H	1.80	0.47
23:21:77:ALA:HB2	23:21:94:LEU:HD21	1.96	0.47
32:2a:951:G:N3	32:2a:970:C:O2'	2.41	0.47
32:2a:957:U:H2'	32:2a:958:A:H3'	1.96	0.47
32:2a:1018:C:H2'	32:2a:1019:C:O4'	2.15	0.47
32:2a:1320:C:H1'	50:2s:73:GLU:CB	2.45	0.47
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.50	0.47
33:2b:149:LEU:HD22	33:2b:152:PHE:CD2	2.46	0.47
40:2i:3:GLN:NE2	40:2i:20:ARG:HE	2.06	0.47
40:2i:5:TYR:HD1	40:2i:18:PHE:CE1	2.32	0.47
45:2n:26:ARG:NH2	45:2n:47:LEU:HD21	2.29	0.47
54:2y:66:U:H2'	54:2y:67:C:O4'	2.15	0.47
1:1A:2147:G:H2'	1:1A:2148:G:C4'	2.45	0.47
1:1A:2461:C:H2'	1:1A:2462:U:C6	2.50	0.47
25:13:23:LEU:HD13	25:13:50:VAL:HG11	1.96	0.47
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.48	0.47
33:1b:16:HIS:ND1	33:1b:210:SER:OG	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:68:GLU:HG3	36:1e:69:VAL:H	1.79	0.47
1:2A:71:A:N7	19:2X:31:HIS:HE1	2.12	0.47
28:26:23:THR:OG1	28:26:24:GLU:N	2.47	0.47
32:2a:659:U:C4	32:2a:660:G:N7	2.82	0.47
32:2a:861:G:C5	32:2a:862:C:C5	3.03	0.47
32:2a:949:A:OP1	44:2m:101:GLN:HB3	2.14	0.47
32:2a:953:G:H5'	32:2a:965:A:N6	2.17	0.47
32:2a:1221:G:H4'	50:2s:53:ASN:O	2.15	0.47
33:2b:59:GLU:HG3	33:2b:63:MET:HE2	1.95	0.47
34:2c:6:HIS:HD2	34:2c:7:PRO:HD2	1.79	0.47
38:2g:26:PHE:O	38:2g:30:ILE:HD12	2.15	0.47
46:2o:64:ARG:HD3	46:2o:68:ARG:HH21	1.78	0.47
1:1A:1155:A:OP1	16:1U:55:ARG:HD2	2.15	0.47
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.50	0.47
15:1T:127:ALA:C	15:1T:129:ARG:N	2.71	0.47
32:1a:179:A:H2'	32:1a:180:U:H6	1.77	0.47
32:1a:677:U:H3	32:1a:713:G:H22	1.63	0.47
32:1a:684:A:C6	32:1a:685:G:C6	3.03	0.47
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.44	0.47
32:1a:1118:C:H2'	32:1a:1119:C:C6	2.49	0.47
32:1a:1284:C:H3'	32:1a:1285:A:H8	1.80	0.47
40:1i:55:ALA:HA	40:1i:58:HIS:CD2	2.50	0.47
51:1t:14:LYS:O	51:1t:18:GLN:HG3	2.15	0.47
1:2A:628:G:H2'	1:2A:629:G:C8	2.50	0.47
1:2A:719:C:H2'	1:2A:720:C:C6	2.49	0.47
1:2A:807:U:O2'	1:2A:2060:A:N1	2.48	0.47
1:2A:910:A:H2'	1:2A:911:A:C8	2.50	0.47
1:2A:1937:A:H1'	1:2A:1939:5MU:H71	1.96	0.47
2:2B:57:A:C4	6:2G:29:TRP:HB3	2.49	0.47
4:2E:101:ARG:HA	4:2E:170:LEU:O	2.15	0.47
6:2G:91:ARG:HB3	6:2G:91:ARG:CZ	2.44	0.47
12:2Q:18:LYS:HB2	12:2Q:18:LYS:HE2	1.58	0.47
14:2S:11:LYS:HG2	14:2S:15:ARG:HH12	1.80	0.47
34:2c:152:ILE:HD11	34:2c:199:LYS:NZ	2.30	0.47
42:2k:44:SER:OG	42:2k:47:VAL:HG23	2.15	0.47
44:2m:3:ARG:HH22	44:2m:11:ARG:HE	1.62	0.47
46:2o:39:LEU:HD23	46:2o:39:LEU:HA	1.74	0.47
48:2q:40:LYS:HD3	48:2q:42:TYR:OH	2.14	0.47
51:2t:60:GLU:HG3	51:2t:81:LYS:HD2	1.97	0.47
1:1A:12:U:O2	1:1A:12:U:H2'	2.13	0.47
1:1A:1878:G:H2'	1:1A:1879:C:C6	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2158:A:H1'	1:1A:2159:G:O4'	2.15	0.47
1:1A:2379:G:O2'	14:1S:17:ARG:NH2	2.48	0.47
13:1R:53:HIS:O	13:1R:56:LYS:HB2	2.15	0.47
32:1a:154:C:N4	32:1a:167:G:H1	2.10	0.47
32:1a:445:G:H2'	32:1a:446:G:O4'	2.15	0.47
32:1a:833:U:H2'	32:1a:834:C:H6	1.80	0.47
36:1e:131:ILE:O	36:1e:135:THR:OG1	2.27	0.47
54:1y:23:A:H2'	54:1y:24:G:C8	2.50	0.47
54:1y:56:C:H2'	54:1y:57:G:O4'	2.15	0.47
1:2A:942:G:C6	1:2A:943:U:C4	3.03	0.47
1:2A:2203:U:O2'	1:2A:2205:C:H5'	2.15	0.47
6:2G:22:ARG:NH1	6:2G:175:LEU:HD21	2.30	0.47
6:2G:125:PHE:CE2	6:2G:170:ARG:HD3	2.50	0.47
7:2H:170:ARG:O	7:2H:171:LEU:HD23	2.15	0.47
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	1.97	0.47
14:2S:110:LEU:HD12	14:2S:110:LEU:HA	1.73	0.47
32:2a:422:C:O4'	32:2a:423:G:N1	2.47	0.47
32:2a:1095:U:H2'	32:2a:1096:C:H6	1.79	0.47
32:2a:1111:A:C5	32:2a:1112:C:C5	3.03	0.47
32:2a:1203:C:H2'	32:2a:1204:A:O4'	2.15	0.47
37:2f:25:ILE:HD13	37:2f:82:ARG:HD3	1.97	0.47
49:2r:68:LYS:O	49:2r:72:ARG:HG3	2.15	0.47
1:1A:857:C:N4	1:1A:858:U:O4	2.49	0.46
1:1A:1173:G:H22	1:1A:1177:A:P	2.37	0.46
1:1A:1420:U:HO2'	1:1A:1421:G:P	2.36	0.46
1:1A:2096:U:H3	1:1A:2193:G:H1	1.63	0.46
1:1A:2140:C:N3	1:1A:2151:G:C6	2.83	0.46
1:1A:2705:A:O2'	1:1A:2852:G:OP1	2.23	0.46
5:1F:165:ARG:HA	5:1F:168:ARG:CD	2.41	0.46
18:1W:62:HIS:O	18:1W:64:MET:HG3	2.14	0.46
32:1a:391:G:C6	32:1a:392:G:C5	3.03	0.46
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.14	0.46
38:1g:115:ARG:HG3	38:1g:118:VAL:HG23	1.96	0.46
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.49	0.46
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.79	0.46
1:2A:2540:C:O2'	1:2A:2740:A:N3	2.44	0.46
4:2E:50:GLY:HA2	4:2E:77:ILE:O	2.15	0.46
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	1.97	0.46
11:2P:59:LEU:HD11	30:28:10:ALA:HA	1.97	0.46
22:20:8:GLY:HA2	55:2x:2:G:H5"	1.97	0.46
32:2a:137:C:H2'	32:2a:138:G:C8	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:260:G:H8	32:2a:260:G:O5'	1.98	0.46
32:2a:540:G:C4	32:2a:541:G:C8	3.04	0.46
32:2a:977:A:O2'	32:2a:981:U:N3	2.48	0.46
32:2a:983:A:H3'	32:2a:983:A:N3	2.29	0.46
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.50	0.46
32:2a:1187:G:H4'	40:2i:111:ARG:HH11	1.79	0.46
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.28	0.46
33:2b:188:ALA:HB1	33:2b:192:SER:CB	2.45	0.46
34:2c:12:LEU:HB3	34:2c:18:TRP:CH2	2.50	0.46
40:2i:4:TYR:CE1	40:2i:88:TYR:HA	2.50	0.46
51:2t:89:ARG:HH22	51:2t:103:GLY:HA2	1.79	0.46
1:1A:2512:C:H5"	1:1A:2513:G:OP2	2.16	0.46
20:1Y:43:ASN:OD1	20:1Y:65:ALA:HB3	2.15	0.46
32:1a:217:C:H2'	32:1a:218:C:C6	2.50	0.46
32:1a:373:A:O2'	32:1a:374:A:H5'	2.14	0.46
32:1a:429:U:OP2	35:1d:36:ARG:NH2	2.45	0.46
32:1a:1239:A:H62	32:1a:1299:A:H62	1.62	0.46
48:1q:88:TYR:CD2	48:1q:89:LEU:HD23	2.49	0.46
1:2A:300:A:OP2	20:2Y:86:ARG:NH1	2.45	0.46
1:2A:530:G:O4'	1:2A:530:G:N3	2.49	0.46
1:2A:1835:G:H5"	1:2A:1836:C:OP2	2.15	0.46
1:2A:1877:A:OP2	1:2A:1877:A:H8	1.97	0.46
1:2A:2126:A:H4'	1:2A:2127:G:OP2	2.15	0.46
1:2A:2335:A:C8	1:2A:2337:G:C5	3.04	0.46
6:2G:5:VAL:HG22	6:2G:8:LYS:H	1.79	0.46
8:2I:79:ILE:HG22	8:2I:81:VAL:HG13	1.97	0.46
26:24:34:GLU:HA	44:2m:57:ARG:NH1	2.30	0.46
32:2a:202:U:H3'	32:2a:203:U:C5	2.50	0.46
32:2a:333:G:H4'	51:2t:16:HIS:CE1	2.51	0.46
32:2a:1014:A:H2'	32:2a:1015:A:C8	2.50	0.46
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.49	0.46
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.98	0.46
33:2b:17:PHE:HA	33:2b:44:LEU:HD11	1.97	0.46
34:2c:18:TRP:CD1	45:2n:55:GLY:H	2.33	0.46
41:2j:63:PHE:HE1	45:2n:58:LYS:HG3	1.81	0.46
44:2m:14:ARG:HB2	44:2m:17:VAL:HG22	1.96	0.46
1:1A:1080:C:H5'	1:1A:1081:U:OP2	2.15	0.46
10:1O:7:TYR:HE2	10:1O:20:MET:HE3	1.80	0.46
28:16:8:LYS:HE2	30:18:34:TRP:CZ3	2.50	0.46
32:1a:1044:A:C5	32:1a:1045:C:H1'	2.50	0.46
33:1b:131:PRO:O	33:1b:135:GLN:N	2.36	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:1g:144:MET:HB3	38:1g:144:MET:HE2	1.69	0.46
1:2A:801:G:O6	5:2F:53:THR:OG1	2.31	0.46
1:2A:1470:G:H5"	1:2A:1471:A:OP1	2.15	0.46
1:2A:2127:G:C2	1:2A:2128:C:C5	3.03	0.46
1:2A:2695:C:H2'	1:2A:2696:U:C6	2.49	0.46
5:2F:120:GLU:OE2	5:2F:122:LYS:HG3	2.15	0.46
5:2F:130:ALA:H	5:2F:142:TRP:CD1	2.33	0.46
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.16	0.46
11:2P:132:LYS:HE2	11:2P:132:LYS:HB2	1.69	0.46
15:2T:109:GLU:HG2	15:2T:112:ARG:HH22	1.79	0.46
30:28:22:VAL:HG12	30:28:50:LEU:HD12	1.98	0.46
32:2a:728:A:C2	32:2a:729:A:C5	3.04	0.46
32:2a:814:A:N7	32:2a:816:A:C4	2.84	0.46
32:2a:1159:U:O4'	32:2a:1182:G:N2	2.49	0.46
36:2e:69:VAL:O	36:2e:71:LEU:HG	2.15	0.46
36:2e:102:ALA:H	36:2e:107:ARG:NH2	2.12	0.46
40:2i:5:TYR:HA	40:2i:17:VAL:O	2.14	0.46
46:2o:48:LYS:HA	46:2o:48:LYS:HD3	1.62	0.46
1:1A:302:C:P	20:1Y:73:ARG:HH22	2.39	0.46
1:1A:800:A:H8	1:1A:800:A:OP1	1.99	0.46
1:1A:879:G:H8	1:1A:879:G:O5'	1.98	0.46
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.31	0.46
2:1B:6:C:H42	2:1B:115:G:H1	1.64	0.46
3:1D:147:LEU:HD13	3:1D:155:LEU:HD11	1.98	0.46
16:1U:104:GLN:NE2	16:1U:105:VAL:HG23	2.29	0.46
23:11:94:LEU:HD23	23:11:94:LEU:HA	1.65	0.46
32:1a:100:C:H2'	32:1a:101:A:C8	2.50	0.46
32:1a:1020:U:O2	32:1a:1020:U:H2'	2.14	0.46
32:1a:1027:C:N4	32:1a:1034:G:H1	2.12	0.46
35:1d:94:LEU:HA	35:1d:97:LEU:HD12	1.97	0.46
37:1f:91:VAL:HG11	49:1r:72:ARG:NH1	2.31	0.46
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.80	0.46
1:2A:1170:G:H2'	1:2A:1170:G:N3	2.31	0.46
1:2A:2162:G:H2'	1:2A:2163:C:O4'	2.15	0.46
1:2A:2171:A:H1'	1:2A:2172:U:C6	2.51	0.46
1:2A:2405:G:H5'	11:2P:75:ILE:HD13	1.96	0.46
2:2B:13:A:H2'	2:2B:70:C:O2'	2.15	0.46
9:2N:69:GLN:O	9:2N:71:ILE:HG13	2.15	0.46
10:2O:26:LYS:HD3	10:2O:37:ASP:OD1	2.16	0.46
30:28:4:MET:HE3	30:28:63:PRO:HG3	1.98	0.46
32:2a:1325:C:H2'	32:2a:1326:C:H6	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.97	0.46
44:2m:90:LEU:HD21	44:2m:94:ARG:NH1	2.26	0.46
1:1A:394:A:O2'	1:1A:395:U:H5'	2.15	0.46
1:1A:536:A:H2'	1:1A:537:C:C6	2.50	0.46
1:1A:614:U:H5'	1:1A:614(C):A:N6	2.30	0.46
1:1A:870:A:C2	1:1A:908:C:C2	3.04	0.46
1:1A:1170:G:H8	1:1A:1170:G:H5"	1.80	0.46
1:1A:1460:A:H4'	1:1A:1461:G:OP2	2.16	0.46
1:1A:2518:A:P	61:1A:4222:HOH:O	2.73	0.46
3:1D:131:LEU:N	3:1D:131:LEU:HD12	2.29	0.46
10:1O:49:ARG:HH12	32:1a:1423:G:P	2.39	0.46
32:1a:600:C:H2'	32:1a:601:C:C6	2.51	0.46
35:1d:53:ASP:N	35:1d:53:ASP:OD1	2.47	0.46
37:1f:99:ALA:O	49:1r:28:GLU:HA	2.15	0.46
39:1h:81:HIS:N	39:1h:138:TRP:O	2.48	0.46
54:1y:48:C:OP2	54:1y:48:C:H6	1.98	0.46
1:2A:557:U:H2'	1:2A:558:G:H8	1.81	0.46
1:2A:657:U:H2'	1:2A:658:C:C6	2.50	0.46
1:2A:1464:C:H2'	1:2A:1465:G:H8	1.80	0.46
1:2A:2803:C:H2'	1:2A:2804:C:C6	2.51	0.46
7:2H:89:ILE:O	7:2H:129:THR:HG22	2.16	0.46
14:2S:15:ARG:HB3	14:2S:19:LYS:HZ1	1.80	0.46
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HB2	2.43	0.46
21:2Z:104:PHE:HA	21:2Z:139:VAL:HB	1.97	0.46
32:2a:872:A:O2'	32:2a:873:A:H3'	2.16	0.46
32:2a:1217:C:H2'	32:2a:1218:C:C6	2.51	0.46
32:2a:1277:C:O2'	32:2a:1279:A:H8	1.98	0.46
32:2a:1370:G:C8	40:2i:109:VAL:HG11	2.51	0.46
33:2b:8:LYS:HZ1	33:2b:214:ILE:HA	1.80	0.46
36:2e:79:GLU:OE1	36:2e:79:GLU:N	2.49	0.46
50:2s:48:THR:HA	50:2s:60:VAL:O	2.16	0.46
55:2x:19:G:H4'	55:2x:20:U:OP2	2.15	0.46
54:2y:45:U:H6	54:2y:45:U:OP2	1.99	0.46
1:1A:224:G:H2'	1:1A:225:A:O4'	2.15	0.46
1:1A:255:A:O2'	1:1A:384:U:OP1	2.33	0.46
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	1.96	0.46
1:1A:2189:U:H5'	1:1A:2190:G:OP2	2.16	0.46
1:1A:2619:C:O2'	1:1A:2620:C:H5'	2.14	0.46
3:1D:130:ALA:C	3:1D:131:LEU:HD12	2.41	0.46
6:1G:116:ASP:OD2	44:1m:68:GLY:HA3	2.15	0.46
8:1I:129:THR:CG2	8:1I:139:GLN:HE22	2.23	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1035:A:C4	32:1a:1036:G:N2	2.84	0.46
32:1a:1409:C:N4	61:1a:1938:HOH:O	2.27	0.46
36:1e:30:ALA:O	36:1e:45:PHE:HD1	1.97	0.46
1:2A:820:A:H1'	1:2A:943:U:H1'	1.97	0.46
1:2A:2131:G:C8	1:2A:2133:G:C2	3.03	0.46
1:2A:2516:G:C6	1:2A:2517:C:N4	2.84	0.46
1:2A:2632:A:O2'	1:2A:2811:G:O2'	2.20	0.46
2:2B:53:A:H8	2:2B:53:A:O5'	1.97	0.46
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	1.98	0.46
7:2H:127:GLU:C	7:2H:129:THR:H	2.24	0.46
10:2O:97:ARG:HD3	32:2a:339:C:OP1	2.16	0.46
32:2a:473:G:H2'	32:2a:474:G:H8	1.80	0.46
32:2a:757:U:OP1	32:2a:822:C:O2'	2.31	0.46
32:2a:951:G:OP2	44:2m:102:ARG:NH1	2.49	0.46
32:2a:980:C:H3'	32:2a:981:U:C6	2.51	0.46
32:2a:1423:G:H2'	32:2a:1424:C:C6	2.51	0.46
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.51	0.46
34:2c:23:TYR:CG	34:2c:24:ALA:N	2.83	0.46
36:2e:67:VAL:O	36:2e:69:VAL:HG23	2.15	0.46
39:2h:64:LYS:HD3	39:2h:79:VAL:HG21	1.98	0.46
39:2h:96:GLY:H	39:2h:99:GLU:CD	2.24	0.46
43:2l:82:VAL:O	43:2l:106:ASP:HB2	2.16	0.46
1:1A:2100:G:H2'	1:1A:2101:G:C8	2.51	0.46
5:1F:136:THR:HA	5:1F:166:ALA:O	2.16	0.46
7:1H:7:LEU:HD12	7:1H:8:PRO:CD	2.46	0.46
20:1Y:19:LYS:HE2	20:1Y:20:TYR:CE2	2.50	0.46
32:1a:836:G:OP1	49:1r:61:LYS:NZ	2.39	0.46
32:1a:1239:A:N3	32:1a:1298:C:N4	2.63	0.46
32:1a:1302:U:H5	44:1m:17:VAL:HG21	1.81	0.46
32:1a:1509:C:H2'	32:1a:1510:U:O4'	2.15	0.46
33:1b:48:MET:HA	33:1b:51:LEU:HB2	1.96	0.46
42:1k:108:ILE:O	49:1r:87:ARG:HG3	2.16	0.46
54:1w:18:G:H4'	54:1w:60:U:C6	2.50	0.46
55:1x:50:U:H2'	55:1x:51:C:H6	1.80	0.46
1:2A:271(H):G:H2'	1:2A:271(I):G:H8	1.80	0.46
1:2A:1411:C:H2'	1:2A:1412:A:H8	1.81	0.46
1:2A:2409:G:C6	1:2A:2410:G:C5	3.04	0.46
2:2B:11:C:H3'	2:2B:12:C:H6	1.80	0.46
5:2F:148:LEU:HD11	5:2F:193:VAL:HG11	1.96	0.46
9:2N:111:PRO:HA	9:2N:114:ARG:NH1	2.31	0.46
18:2W:70:TYR:OH	18:2W:72:LYS:HG3	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH1	2.31	0.46
21:2Z:155:LEU:HB2	21:2Z:157:LEU:CD1	2.46	0.46
32:2a:867:G:O2'	32:2a:868:C:H5'	2.15	0.46
32:2a:949:A:N7	44:2m:106:ASN:ND2	2.64	0.46
32:2a:1073:U:H2'	32:2a:1074:G:C8	2.50	0.46
33:2b:109:SER:O	33:2b:112:VAL:HG12	2.16	0.46
33:2b:142:LEU:HD21	33:2b:146:GLN:NE2	2.31	0.46
39:2h:31:PHE:CE2	39:2h:35:ILE:HD11	2.50	0.46
39:2h:56:LYS:HB2	39:2h:58:TYR:CE2	2.51	0.46
1:1A:593:G:C4'	30:18:4:MET:HE2	2.46	0.46
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.51	0.46
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.97	0.46
10:1O:64:ARG:HD2	10:1O:79:PHE:CD1	2.50	0.46
25:13:3:ARG:HB2	25:13:59:VAL:HG23	1.98	0.46
32:1a:679:C:H2'	32:1a:680:C:C6	2.51	0.46
32:1a:834:C:H2'	32:1a:835:U:C6	2.50	0.46
32:1a:972:C:O2'	41:1j:55:LYS:O	2.33	0.46
32:1a:1027:C:C4	32:1a:1034:G:N1	2.77	0.46
33:1b:139:LYS:O	33:1b:143:GLU:HG3	2.16	0.46
36:1e:66:MET:HE3	36:1e:66:MET:HB3	1.74	0.46
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.98	0.46
51:1t:86:ARG:HB3	51:1t:90:GLN:HE22	1.81	0.46
1:2A:375:C:H2'	1:2A:376:C:C6	2.51	0.46
1:2A:896:A:H1'	54:2w:56:C:H5'	1.98	0.46
1:2A:1263:U:C4	1:2A:1264:G:C6	3.04	0.46
1:2A:2159:G:H2'	1:2A:2160:G:H8	1.81	0.46
4:2E:56:PRO:HA	4:2E:59:VAL:HG22	1.98	0.46
5:2F:195:ASP:OD1	5:2F:196:LEU:N	2.49	0.46
7:2H:3:ARG:NH1	7:2H:4:ILE:H	2.13	0.46
7:2H:9:ILE:HG12	7:2H:73:ALA:HB2	1.98	0.46
9:2N:99:LEU:O	9:2N:103:VAL:HG23	2.16	0.46
17:2V:24:LYS:HE2	17:2V:24:LYS:HB3	1.81	0.46
32:2a:583:A:H2'	32:2a:584:G:O4'	2.16	0.46
32:2a:913:A:OP1	43:2l:46:LYS:NZ	2.49	0.46
32:2a:1192:C:N4	32:2a:1193:G:N3	2.64	0.46
35:2d:156:GLU:CD	35:2d:159:ARG:HH21	2.24	0.46
44:2m:90:LEU:CA	44:2m:93:ARG:HH21	2.29	0.46
54:2y:61:C:H2'	54:2y:62:C:C6	2.50	0.46
1:1A:53:A:H2'	1:1A:54:G:O4'	2.16	0.46
1:1A:526:A:H5"	1:1A:527:C:OP1	2.16	0.46
1:1A:568:U:H5'	1:1A:945:A:N6	2.30	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2804:C:H2'	1:1A:2805:G:O4'	2.16	0.46
11:1P:121:LYS:O	11:1P:123:LEU:N	2.48	0.46
14:1S:71:ARG:HH11	14:1S:107:GLU:CD	2.24	0.46
32:1a:67:C:H4'	32:1a:172:A:O4'	2.16	0.46
32:1a:256:U:H2'	32:1a:257:G:O4'	2.16	0.46
32:1a:339:C:H2'	32:1a:340:U:H6	1.81	0.46
32:1a:1085:U:C2	32:1a:1094:G:O6	2.69	0.46
32:1a:1490:C:O2'	32:1a:1491:G:H5'	2.16	0.46
33:1b:80:ILE:O	33:1b:80:ILE:HG12	2.15	0.46
34:1c:121:ALA:O	34:1c:125:GLU:HG3	2.16	0.46
37:1f:30:LEU:O	37:1f:35:ALA:HB3	2.15	0.46
43:1l:97:ARG:HB2	43:1l:98:TYR:CE2	2.50	0.46
49:1r:65:ILE:O	49:1r:69:THR:HG23	2.16	0.46
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.28	0.46
14:2S:4:LEU:HD23	14:2S:4:LEU:HA	1.84	0.46
15:2T:19:LEU:HD22	15:2T:86:ILE:HD12	1.97	0.46
19:2X:12:VAL:HG22	19:2X:29:TRP:CE2	2.51	0.46
35:2d:162:LEU:HA	35:2d:162:LEU:HD23	1.64	0.46
37:2f:7:ASN:OD1	49:2r:34:TYR:HE1	1.99	0.46
1:1A:271(Q):G:H2'	1:1A:271(R):G:C8	2.51	0.46
1:1A:675:A:C8	1:1A:804:A:C6	3.04	0.46
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.51	0.46
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.16	0.46
1:1A:2439:A:H5'	1:1A:2439:A:H8	1.81	0.46
1:1A:2853:C:H2'	1:1A:2854:G:C8	2.51	0.46
6:1G:47:LYS:C	6:1G:86:MET:HE2	2.41	0.46
8:1I:62:LYS:HA	8:1I:133:HIS:HE1	1.81	0.46
8:1I:93:THR:O	8:1I:97:ILE:HG13	2.16	0.46
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.97	0.46
32:1a:975:A:O2'	45:1n:32:SER:OG	2.18	0.46
32:1a:1004:A:H5"	32:1a:1024:G:H22	1.81	0.46
32:1a:1171:G:H2'	32:1a:1172:C:C6	2.51	0.46
32:1a:1349:A:C2	32:1a:1374:A:C4	3.04	0.46
32:1a:1379:G:C4	32:1a:1380:U:C5	3.04	0.46
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.16	0.46
33:1b:15:VAL:HG13	33:1b:209:ARG:CG	2.43	0.46
35:1d:18:LYS:HD3	60:1d:501:SF4:S1	2.56	0.46
35:1d:138:TYR:HE2	35:1d:140:VAL:HA	1.81	0.46
36:1e:68:GLU:HG3	36:1e:69:VAL:N	2.31	0.46
43:1l:89:ARG:HG2	43:1l:90:VAL:H	1.79	0.46
46:1o:87:ILE:HG22	46:1o:88:ARG:N	2.29	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:150:C:H2'	1:2A:151:C:H6	1.79	0.46
1:2A:271(K):U:H4'	1:2A:271(L):U:OP1	2.12	0.46
1:2A:272:G:H4'	1:2A:272(A):U:C5'	2.46	0.46
1:2A:593:G:H1	1:2A:664:C:N4	2.13	0.46
1:2A:889:C:O2	1:2A:890:A:H1'	2.16	0.46
1:2A:892:G:H3'	1:2A:893:C:C5'	2.45	0.46
1:2A:1019:U:H2'	1:2A:1020:A:C8	2.47	0.46
1:2A:1159:U:O2'	1:2A:1160:G:H5'	2.16	0.46
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.16	0.46
1:2A:1545:A:H2'	1:2A:1546:C:O4'	2.16	0.46
1:2A:2507:C:H5"	1:2A:2573:C:N4	2.30	0.46
6:2G:114:ILE:HB	6:2G:117:PHE:HD1	1.81	0.46
11:2P:80:TYR:CD1	11:2P:111:ARG:HB2	2.51	0.46
15:2T:84:GLN:HG2	15:2T:85:LYS:HG2	1.98	0.46
20:2Y:43:ASN:HD22	20:2Y:67:LEU:HD23	1.80	0.46
21:2Z:128:VAL:HG23	21:2Z:160:GLY:O	2.16	0.46
32:2a:553:A:H2'	32:2a:554:C:C6	2.51	0.46
32:2a:598:U:H4'	39:2h:94:TYR:CG	2.51	0.46
32:2a:642:A:N3	39:2h:113:SER:OG	2.46	0.46
32:2a:1083:U:C5	32:2a:1084:G:C6	3.03	0.46
32:2a:1142:G:H3'	32:2a:1143:G:H8	1.81	0.46
32:2a:1146:A:H2'	32:2a:1147:C:O4'	2.16	0.46
32:2a:1323:G:H4'	32:2a:1363:C:N3	2.30	0.46
33:2b:47:THR:HA	33:2b:202:PRO:CG	2.46	0.46
34:2c:119:ARG:HE	34:2c:140:ARG:NH1	2.13	0.46
40:2i:95:LYS:O	40:2i:96:LEU:HD23	2.15	0.46
54:2w:8:4SU:S4	54:2w:14:A:N7	2.89	0.46
1:1A:581:C:H5"	61:1U:304:HOH:O	2.16	0.45
1:1A:969:U:H2'	1:1A:970:C:C6	2.51	0.45
1:1A:1358:G:N2	1:1A:1372:U:C5	2.84	0.45
1:1A:1678:G:H5"	1:1A:1678:G:N3	2.30	0.45
1:1A:2877:G:O2'	1:1A:2878:U:H5'	2.16	0.45
15:1T:127:ALA:O	15:1T:129:ARG:N	2.49	0.45
32:1a:189(D):C:O2	32:1a:189(H):G:C6	2.68	0.45
36:1e:90:VAL:O	36:1e:120:THR:HA	2.16	0.45
1:2A:185:U:H4'	1:2A:218:A:H4'	1.97	0.45
1:2A:2136:C:N4	1:2A:2155:G:N1	2.63	0.45
1:2A:2544:G:H1'	1:2A:2646:C:H4'	1.97	0.45
6:2G:76:SER:N	6:2G:84:LYS:HB2	2.31	0.45
9:2N:131:GLN:O	9:2N:134:ARG:HG3	2.16	0.45
21:2Z:53:ILE:HG22	21:2Z:71:VAL:HG23	1.96	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:423:G:H3'	32:2a:423:G:N3	2.31	0.45
32:2a:840:C:H4'	32:2a:841:U:OP1	2.15	0.45
32:2a:920:U:H2'	32:2a:921:U:H6	1.81	0.45
32:2a:1020:U:H2'	32:2a:1021:G:H8	1.80	0.45
32:2a:1157:A:H4'	32:2a:1158:C:O5'	2.16	0.45
32:2a:1206:G:H1'	34:2c:193:TYR:O	2.16	0.45
32:2a:1263:C:O2	32:2a:1273:G:C2	2.69	0.45
33:2b:33:TYR:HB2	33:2b:43:ASP:HB2	1.99	0.45
34:2c:116:VAL:HG11	34:2c:141:VAL:HG21	1.98	0.45
47:2p:52:ASP:CG	47:2p:55:ARG:HG2	2.41	0.45
54:2y:58:A:O2'	54:2y:60:U:OP2	2.28	0.45
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.16	0.45
1:1A:1292:U:H2'	1:1A:1293:C:H6	1.80	0.45
6:1G:179:PRO:HB2	26:14:42:PHE:HE2	1.81	0.45
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	1.98	0.45
32:1a:1004:A:N6	32:1a:1036:G:N2	2.65	0.45
32:1a:1005:A:H5"	32:1a:1006:C:C5	2.51	0.45
32:1a:1262:C:H2'	32:1a:1263:C:C6	2.51	0.45
39:1h:51:VAL:HG21	39:1h:60:ARG:HB2	1.97	0.45
39:1h:81:HIS:ND1	39:1h:138:TRP:OXT	2.47	0.45
54:1y:8:4SU:O2'	54:1y:21:A:N1	2.48	0.45
1:2A:614(B):G:H2'	5:2F:44:ARG:NH1	2.30	0.45
1:2A:1149:G:H2'	1:2A:1150:C:H6	1.80	0.45
1:2A:2096:U:H2'	1:2A:2097:C:H6	1.81	0.45
1:2A:2161:C:N4	1:2A:2162:G:C6	2.85	0.45
1:2A:2841:C:H2'	1:2A:2842:G:C8	2.51	0.45
7:2H:137:ASP:OD1	7:2H:139:GLN:N	2.50	0.45
16:2U:29:SER:OG	16:2U:30:LYS:NZ	2.49	0.45
21:2Z:153:SER:HB2	21:2Z:167:PRO:O	2.17	0.45
26:24:41:PRO:HG3	26:24:49:PHE:CZ	2.51	0.45
32:2a:34:C:H2'	32:2a:35:G:C8	2.50	0.45
32:2a:232:G:H2'	32:2a:233:C:C6	2.52	0.45
32:2a:570:G:H1'	32:2a:820:U:C4	2.51	0.45
32:2a:861:G:C6	32:2a:862:C:C4	3.04	0.45
32:2a:908:A:H2'	32:2a:909:A:H8	1.80	0.45
32:2a:964:A:N3	32:2a:969:A:O2'	2.31	0.45
32:2a:1189:C:H5"	32:2a:1190:G:OP2	2.16	0.45
32:2a:1441:G:H8	32:2a:1441:G:O5'	2.00	0.45
35:2d:104:VAL:HG21	35:2d:146:ILE:HD13	1.97	0.45
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.52	0.45
22:10:43:THR:O	22:10:43:THR:HG23	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:151:A:N6	32:1a:171:A:C6	2.85	0.45
32:1a:625:G:H4'	47:1p:16:HIS:CD2	2.52	0.45
32:1a:662:G:H2'	32:1a:663:A:C8	2.51	0.45
32:1a:872:A:C4	32:1a:874:G:N7	2.84	0.45
32:1a:1102:A:H5"	32:1a:1102:A:H8	1.80	0.45
32:1a:1304:G:OP2	61:1a:1921:HOH:O	2.21	0.45
32:1a:1442:G:O2'	32:1a:1442(A):G:H5'	2.15	0.45
35:1d:105:VAL:HG13	35:1d:110:PHE:HB2	1.99	0.45
38:1g:13:GLN:HE21	38:1g:13:GLN:HA	1.82	0.45
45:1n:27:CYS:SG	45:1n:29:ARG:HB2	2.56	0.45
46:1o:63:ARG:HG2	46:1o:67:LEU:HD12	1.97	0.45
50:1s:19:VAL:O	50:1s:22:LEU:HB2	2.16	0.45
1:2A:361:G:O2'	1:2A:362:U:H5'	2.16	0.45
1:2A:993:G:C6	1:2A:994:C:C4	3.05	0.45
1:2A:1510:G:H2'	1:2A:1511:C:C6	2.52	0.45
1:2A:1857:G:O6	1:2A:1858:G:N1	2.49	0.45
1:2A:2110:G:H3'	1:2A:2111:C:C5'	2.45	0.45
4:2E:181:LEU:HD23	4:2E:181:LEU:HA	1.75	0.45
5:2F:36:VAL:O	5:2F:40:GLN:HG3	2.16	0.45
5:2F:126:VAL:HG21	5:2F:129:PHE:CZ	2.51	0.45
32:2a:178:C:C2	32:2a:179:A:C8	3.04	0.45
32:2a:607:A:H2'	32:2a:608:A:O4'	2.16	0.45
32:2a:1030(A):G:N3	32:2a:1030(C):G:H8	2.14	0.45
32:2a:1161:C:H2'	32:2a:1162:C:H6	1.80	0.45
32:2a:1388:C:H2'	32:2a:1389:C:C6	2.51	0.45
32:2a:1502:A:C8	32:2a:1505:G:N2	2.84	0.45
33:2b:9:GLU:OE1	33:2b:9:GLU:HA	2.14	0.45
43:2l:43:VAL:HG12	43:2l:44:THR:H	1.81	0.45
46:2o:39:LEU:HD13	46:2o:56:LEU:HB2	1.98	0.45
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.29	0.45
1:1A:2820:A:P	13:1R:2:ARG:HH22	2.40	0.45
4:1E:143:ASN:HD22	4:1E:147:PRO:CD	2.30	0.45
8:1I:5:LEU:HD11	8:1I:19:VAL:HG12	1.99	0.45
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.51	0.45
26:14:26:SER:OG	26:14:27:THR:N	2.49	0.45
32:1a:186:C:H2'	32:1a:187:C:C6	2.51	0.45
32:1a:848:C:H2'	32:1a:849:C:C6	2.52	0.45
32:1a:1206:G:O4'	34:1c:194:GLY:HA2	2.15	0.45
32:1a:1352:C:H2'	32:1a:1353:G:C8	2.51	0.45
33:1b:59:GLU:HG3	33:1b:221:LEU:HD11	1.97	0.45
33:1b:219:VAL:O	33:1b:223:ILE:HG12	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:6:HIS:NE2	34:1c:8:ILE:HB	2.32	0.45
34:1c:69:HIS:HA	34:1c:104:GLN:HB3	1.99	0.45
35:1d:162:LEU:HD13	35:1d:181:MET:HG2	1.97	0.45
1:2A:11:G:O5'	1:2A:11:G:H8	1.99	0.45
1:2A:196:A:N3	1:2A:196:A:H2'	2.32	0.45
1:2A:839:U:H2'	1:2A:840:C:C6	2.51	0.45
1:2A:864:G:C6	1:2A:865:C:N4	2.84	0.45
1:2A:1417:C:N3	1:2A:1581:G:N2	2.47	0.45
1:2A:1987:G:H2'	1:2A:1988:C:H6	1.81	0.45
1:2A:2167:U:O2'	1:2A:2168:G:O4'	2.35	0.45
1:2A:2287:A:H61	1:2A:2344:U:H3	1.64	0.45
1:2A:2540:C:H2'	1:2A:2541:A:O4'	2.17	0.45
1:2A:2792:G:H2'	1:2A:2792:G:N3	2.31	0.45
6:2G:111:LEU:HD21	6:2G:120:LEU:HD11	1.99	0.45
8:2I:140:LEU:HG	8:2I:142:VAL:HG13	1.99	0.45
10:2O:71:ARG:NH2	10:2O:105:GLU:OE1	2.49	0.45
18:2W:67:ASP:OD1	18:2W:67:ASP:N	2.50	0.45
25:23:3:ARG:NH2	25:23:36:VAL:HG11	2.31	0.45
32:2a:316:G:OP2	32:2a:351:G:O2'	2.31	0.45
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.98	0.45
32:2a:1052:U:O2'	32:2a:1055:A:OP2	2.25	0.45
33:2b:170:GLU:HB3	33:2b:173:ALA:HB2	1.98	0.45
39:2h:27:PRO:O	39:2h:32:LYS:HE3	2.17	0.45
44:2m:14:ARG:HB3	44:2m:41:PRO:O	2.16	0.45
44:2m:50:GLU:O	44:2m:53:VAL:HG22	2.16	0.45
50:2s:16:LEU:HD12	50:2s:20:LEU:HD23	1.97	0.45
1:1A:1095:A:C8	1:1A:1096:A:C8	3.05	0.45
1:1A:2305:A:H5"	6:1G:134:GLY:HA3	1.97	0.45
4:1E:50:GLY:HA3	4:1E:75:VAL:HG21	1.97	0.45
11:1P:101:VAL:HG21	11:1P:108:LYS:HG2	1.99	0.45
12:1Q:31:ASP:OD1	12:1Q:134:ARG:NH1	2.45	0.45
32:1a:502:G:H2'	32:1a:503:C:O4'	2.15	0.45
32:1a:724:G:C2	32:1a:725:G:C8	3.05	0.45
32:1a:1350:A:O2'	38:1g:33:ASP:OD1	2.31	0.45
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.47	0.45
35:1d:184:LYS:HB3	35:1d:186:LEU:CD2	2.47	0.45
42:1k:20:TYR:CZ	42:1k:83:ILE:HD12	2.51	0.45
50:1s:63:THR:OG1	50:1s:66:MET:HE3	2.16	0.45
1:2A:557:U:H2'	1:2A:558:G:C8	2.51	0.45
1:2A:1003:G:O2'	1:2A:1010:A:N1	2.48	0.45
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2139:C:H2'	1:2A:2140:C:C6	2.51	0.45
1:2A:2653:U:O2'	7:2H:110:SER:HB3	2.16	0.45
1:2A:2818:G:OP2	13:2R:42:LYS:NZ	2.43	0.45
2:2B:80:U:H2'	2:2B:81:G:N7	2.32	0.45
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.97	0.45
10:2O:111:PHE:O	10:2O:115:VAL:HG23	2.16	0.45
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.15	0.45
28:26:14:THR:OG1	28:26:48:VAL:O	2.22	0.45
32:2a:437:U:O2'	35:2d:125:HIS:HE1	2.00	0.45
32:2a:791:G:H2'	32:2a:792:A:H5'	1.99	0.45
32:2a:1207:2MG:O2'	32:2a:1208:C:H5'	2.17	0.45
32:2a:1207:2MG:C6	32:2a:1208:C:C5	3.04	0.45
32:2a:1342:C:H1'	40:2i:124:GLN:OE1	2.17	0.45
33:2b:48:MET:HA	33:2b:51:LEU:HB2	1.97	0.45
38:2g:75:VAL:HA	38:2g:87:VAL:O	2.17	0.45
38:2g:105:VAL:O	38:2g:109:ASN:ND2	2.47	0.45
44:2m:67:GLU:O	44:2m:71:ARG:NH2	2.49	0.45
1:1A:747:U:H1'	18:1W:92:ARG:HH22	1.81	0.45
1:1A:1354:A:H2'	1:1A:1355:G:O4'	2.17	0.45
2:1B:14:U:O2	2:1B:108:U:H4'	2.16	0.45
3:1D:20:ASP:OD1	3:1D:21:PHE:N	2.49	0.45
6:1G:15:VAL:HG22	6:1G:175:LEU:HB3	1.99	0.45
11:1P:38:GLN:HG2	11:1P:45:LEU:H	1.80	0.45
23:11:19:GLN:HB2	23:11:35:THR:HG22	1.98	0.45
26:14:20:ASN:OD1	26:14:21:VAL:N	2.50	0.45
26:14:59:PHE:CE2	50:1s:64:GLU:HB3	2.50	0.45
32:1a:568:G:O2'	32:1a:574:A:N1	2.47	0.45
32:1a:1003:G:C4	32:1a:1004:A:H2	2.35	0.45
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.50	0.45
33:1b:12:GLU:HB2	33:1b:213:LEU:CD2	2.46	0.45
34:1c:66:VAL:HG23	34:1c:101:LEU:HA	1.97	0.45
49:1r:74:ARG:HG2	49:1r:80:PRO:O	2.16	0.45
1:2A:55:G:O2'	1:2A:127:A:N1	2.41	0.45
1:2A:299:A:N1	1:2A:322:A:O2'	2.45	0.45
1:2A:811:U:H2'	11:2P:21:ARG:HA	1.99	0.45
1:2A:944:G:H5"	1:2A:945:A:O5'	2.16	0.45
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.51	0.45
5:2F:156:LEU:HA	5:2F:193:VAL:HG23	1.98	0.45
6:2G:44:GLY:HA2	6:2G:88:ILE:CB	2.47	0.45
20:2Y:43:ASN:OD1	20:2Y:65:ALA:HB3	2.16	0.45
26:24:22:ILE:O	26:24:24:THR:HG22	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:187:C:O2'	51:2t:89:ARG:HD2	2.15	0.45
32:2a:341:C:H2'	32:2a:342:C:H6	1.81	0.45
32:2a:1524:C:OP1	42:2k:120:ARG:NH1	2.49	0.45
34:2c:38:ARG:HE	34:2c:38:ARG:HB2	1.51	0.45
41:2j:25:GLU:HG3	41:2j:29:ARG:HH21	1.81	0.45
44:2m:20:THR:HG22	44:2m:26:GLY:O	2.17	0.45
50:2s:38:SER:O	50:2s:71:LEU:HD13	2.17	0.45
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.16	0.45
1:1A:457:A:H5'	1:1A:459:U:H1'	1.98	0.45
1:1A:606:U:H4'	1:1A:658:C:H4'	1.99	0.45
1:1A:887:A:C2	1:1A:889:C:H3'	2.49	0.45
1:1A:1012:U:C4	9:1N:28:THR:HG21	2.51	0.45
1:1A:1227:G:OP1	16:1U:13:LYS:HG2	2.17	0.45
1:1A:2127:G:C5	1:1A:2162:G:C2	3.05	0.45
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.17	0.45
8:1I:61:ARG:HD3	8:1I:61:ARG:HA	1.81	0.45
8:1I:93:THR:O	8:1I:96:ASP:HB2	2.16	0.45
32:1a:447:G:H2'	32:1a:485:G:N2	2.32	0.45
32:1a:461:A:O2'	32:1a:470:C:H5'	2.17	0.45
32:1a:1148:U:O4'	40:1i:16:ARG:HD2	2.17	0.45
41:1j:81:THR:C	41:1j:83:GLU:N	2.74	0.45
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.99	0.45
1:2A:8:A:H2'	1:2A:9:U:H6	1.80	0.45
1:2A:229:A:O5'	1:2A:230:U:H5'	2.17	0.45
1:2A:445:C:OP1	16:2U:2:PRO:HA	2.17	0.45
1:2A:1243:G:O2'	11:2P:4:SER:O	2.34	0.45
1:2A:2353:G:H2'	1:2A:2354:G:O4'	2.17	0.45
2:2B:24:G:N3	2:2B:27:C:N4	2.62	0.45
2:2B:33:G:O2'	2:2B:34:U:H5'	2.16	0.45
5:2F:129:PHE:CD2	5:2F:163:VAL:HG21	2.51	0.45
5:2F:172:TRP:CD1	5:2F:172:TRP:H	2.33	0.45
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.97	0.45
32:2a:653:A:OP1	39:2h:56:LYS:NZ	2.22	0.45
32:2a:1320:C:H1'	50:2s:73:GLU:HB2	1.99	0.45
35:2d:79:PHE:HE1	35:2d:204:ILE:HD13	1.82	0.45
36:2e:84:PHE:HD2	36:2e:130:ASN:HB3	1.81	0.45
42:2k:67:ASP:OD1	42:2k:71:LYS:HE3	2.16	0.45
43:2l:84:LEU:HB2	43:2l:105:TYR:CE2	2.51	0.45
45:2n:57:ARG:HG2	45:2n:58:LYS:N	2.32	0.45
53:2v:16:A:H2'	53:2v:17:U:O4'	2.17	0.45
55:2x:27:U:O2	55:2x:44:A:C2	2.70	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:34:C:N4	1:1A:447:A:H61	2.13	0.45
1:1A:271(O):C:H2'	1:1A:271(P):C:C6	2.51	0.45
1:1A:718:A:H2'	1:1A:719:C:O4'	2.16	0.45
1:1A:1712:C:H2'	1:1A:1713:U:O4'	2.17	0.45
1:1A:2689:U:C4	1:1A:2713:A:C2	3.05	0.45
4:1E:60:ASN:OD1	4:1E:63:LEU:HG	2.17	0.45
28:16:19:ARG:NH1	28:16:52:VAL:HG21	2.32	0.45
32:1a:1171:G:H2'	32:1a:1172:C:H6	1.81	0.45
39:1h:87:SER:HA	39:1h:93:VAL:HG23	1.98	0.45
44:1m:9:ILE:HD12	44:1m:18:ALA:HB1	1.97	0.45
49:1r:58:LEU:CD2	49:1r:62:GLU:HB3	2.47	0.45
1:2A:725:G:H8	1:2A:725:G:O5'	2.00	0.45
1:2A:829:A:H5"	1:2A:831:G:N7	2.31	0.45
1:2A:890:A:H2'	1:2A:892:G:H8	1.82	0.45
1:2A:932:G:H4'	1:2A:933:A:O5'	2.17	0.45
1:2A:993:G:C4	1:2A:1162:G:N2	2.85	0.45
1:2A:2484:G:C2	1:2A:2485:G:C8	3.05	0.45
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.50	0.45
6:2G:41:GLN:HE21	6:2G:153:ARG:HB3	1.81	0.45
21:2Z:28:MET:HA	21:2Z:88:PHE:O	2.17	0.45
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.16	0.45
32:2a:273:A:N6	32:2a:274:A:C6	2.85	0.45
32:2a:353:A:H5'	32:2a:353:A:H8	1.82	0.45
32:2a:576:G:OP1	61:2a:1915:HOH:O	2.21	0.45
32:2a:730:G:C5	32:2a:731:G:H1'	2.52	0.45
32:2a:1065:U:H3	32:2a:1109:C:H5'	1.81	0.45
32:2a:1241:G:H2'	32:2a:1242:C:C6	2.51	0.45
35:2d:111:ALA:HB2	35:2d:120:LEU:HD12	1.97	0.45
36:2e:31:LEU:HD23	36:2e:31:LEU:HA	1.83	0.45
39:2h:24:THR:HG22	39:2h:63:LEU:HD11	1.98	0.45
48:2q:10:VAL:HG12	48:2q:53:LEU:HA	1.99	0.45
48:2q:58:GLU:OE2	48:2q:75:ARG:NH2	2.50	0.45
54:2y:33:U:H2'	54:2y:35:A:OP2	2.16	0.45
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.32	0.45
1:1A:1056:G:H5"	1:1A:1057:A:H5'	1.99	0.45
1:1A:1062:G:H5"	1:1A:1070:A:O2'	2.17	0.45
1:1A:1997:G:O2'	1:1A:1998:G:H5'	2.16	0.45
1:1A:2206:G:H5"	1:1A:2207:G:C6	2.52	0.45
14:1S:43:GLU:OE2	22:10:49:LYS:HE3	2.17	0.45
32:1a:35:G:O2'	43:1l:118:SER:O	2.22	0.45
32:1a:1140:C:H2'	32:1a:1141:C:H6	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:31:CYS:HA	60:1d:501:SF4:S3	2.57	0.45
39:1h:4:ASP:CG	39:1h:85:ARG:HH21	2.25	0.45
43:1l:36:VAL:HG22	61:1l:305:HOH:O	2.16	0.45
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.51	0.45
1:2A:2336:A:H61	22:20:43:THR:CG2	2.30	0.45
1:2A:2450:A:H2	61:2x:201:HOH:O	1.99	0.45
5:2F:117:ARG:NH2	5:2F:189:THR:O	2.50	0.45
14:2S:35:ILE:HG23	14:2S:69:VAL:HG11	1.98	0.45
30:28:58:ILE:HA	30:28:61:LEU:HD12	1.99	0.45
32:2a:523:A:N1	43:2l:92:0TD:H6	2.32	0.45
32:2a:1017:G:H8	32:2a:1017:G:OP2	2.00	0.45
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.45	0.45
36:2e:74:GLY:O	36:2e:115:VAL:HA	2.17	0.45
38:2g:23:VAL:HG13	38:2g:43:PHE:CE2	2.52	0.45
43:2l:84:LEU:HB3	43:2l:104:VAL:HG11	1.99	0.45
48:2q:5:VAL:HA	48:2q:59:ILE:O	2.17	0.45
1:1A:82:G:H5"	1:1A:296:C:H5'	1.99	0.45
1:1A:879:G:N2	1:1A:880:G:C2	2.85	0.45
1:1A:1095:A:H2'	1:1A:1096:A:O4'	2.16	0.45
1:1A:1107:G:H2'	1:1A:1108:U:C6	2.52	0.45
1:1A:2168:G:N1	1:1A:2171:A:C8	2.78	0.45
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.17	0.45
11:1P:46:LYS:HE3	11:1P:46:LYS:HB3	1.77	0.45
21:1Z:138:GLU:N	21:1Z:156:LYS:HZ1	2.14	0.45
27:15:35:GLU:HG2	27:15:51:TYR:CG	2.52	0.45
32:1a:109:A:C6	32:1a:326:G:C6	3.05	0.45
32:1a:179:A:C2'	32:1a:180:U:H5'	2.47	0.45
32:1a:665:A:C2	32:1a:733:A:C8	3.04	0.45
32:1a:748:C:H4'	32:1a:749:C:O5'	2.17	0.45
32:1a:1136:U:O5'	32:1a:1136:U:H6	2.00	0.45
32:1a:1207:2MG:C6	32:1a:1208:C:C4	3.05	0.45
32:1a:1503:A:N1	53:1v:12:A:H2	2.15	0.45
33:1b:21:ARG:N	33:1b:39:ILE:HG23	2.32	0.45
33:1b:163:PHE:HD1	33:1b:185:ILE:HD12	1.82	0.45
34:1c:153:VAL:HG22	34:1c:198:VAL:HG13	1.99	0.45
35:1d:118:ARG:O	35:1d:121:VAL:N	2.50	0.45
36:1e:80:ILE:CG2	36:1e:91:LEU:HB2	2.47	0.45
54:1y:59:U:H2'	54:1y:60:U:O4'	2.17	0.45
1:2A:441:U:O2	5:2F:46:ARG:NH2	2.49	0.45
1:2A:484:C:H2'	1:2A:485:C:C6	2.52	0.45
1:2A:660:G:H5'	5:2F:99:TYR:CD1	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:869:G:C4	1:2A:870:A:C8	3.04	0.45
1:2A:897:C:H1'	54:2w:56:C:H41	1.82	0.45
1:2A:900:A:HO2'	1:2A:901:A:P	2.40	0.45
1:2A:1364:G:P	23:21:3:LYS:HG3	2.57	0.45
1:2A:1647:G:H3'	1:2A:1647:G:OP2	2.16	0.45
1:2A:1851:U:H2'	1:2A:1852:C:O4'	2.15	0.45
1:2A:2097:C:H2'	1:2A:2098:U:O4'	2.16	0.45
1:2A:2370:G:H2'	1:2A:2371:G:C8	2.52	0.45
15:2T:109:GLU:HG2	15:2T:112:ARG:NH2	2.32	0.45
18:2W:12:ILE:HG13	18:2W:42:ARG:NH1	2.32	0.45
20:2Y:5:MET:HE2	20:2Y:5:MET:HB2	1.85	0.45
33:2b:47:THR:HA	33:2b:202:PRO:HG2	1.98	0.45
33:2b:114:ARG:HG2	33:2b:141:GLU:OE2	2.17	0.45
34:2c:50:ALA:HB2	34:2c:75:VAL:CB	2.47	0.45
42:2k:66:LEU:HD21	42:2k:97:ALA:HB1	1.99	0.45
54:2w:8:4SU:S4	54:2w:13:C:O2'	2.67	0.45
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.53	0.44
1:1A:2544:G:H1'	1:1A:2646:C:H4'	2.00	0.44
1:1A:2674:G:H5"	10:1O:26:LYS:HZ1	1.81	0.44
61:1A:5097:HOH:O	4:1E:145:LYS:HE2	2.17	0.44
4:1E:56:PRO:HA	4:1E:59:VAL:HG22	1.98	0.44
21:1Z:153:SER:HA	21:1Z:167:PRO:HB3	1.99	0.44
32:1a:356:A:N3	32:1a:368:U:O2'	2.45	0.44
32:1a:673:G:H2'	32:1a:674:G:C8	2.52	0.44
37:1f:19:LEU:HD11	37:1f:59:TYR:CZ	2.53	0.44
41:1j:39:PRO:HA	41:1j:70:ARG:HD3	1.99	0.44
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.71	0.44
1:2A:27:G:O2'	1:2A:28:A:OP2	2.32	0.44
1:2A:900:A:C2'	1:2A:901:A:H8	2.28	0.44
1:2A:2207:G:H3'	1:2A:2208:A:H5"	1.98	0.44
1:2A:2218:U:H4'	1:2A:2219:G:OP2	2.17	0.44
1:2A:2233:U:H2'	1:2A:2234:G:C8	2.52	0.44
1:2A:2526:G:C6	1:2A:2527:C:C4	3.05	0.44
2:2B:83:G:N1	2:2B:94:C:N3	2.57	0.44
8:2I:84:GLY:O	8:2I:85:GLU:HB3	2.17	0.44
11:2P:135:LEU:HD23	11:2P:135:LEU:HA	1.81	0.44
12:2Q:18:LYS:O	12:2Q:98:LYS:NZ	2.39	0.44
19:2X:4:ALA:HB1	19:2X:42:ALA:HA	2.00	0.44
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.52	0.44
32:2a:575:G:O2'	32:2a:821:G:H5'	2.17	0.44
32:2a:840:C:H5"	32:2a:848:C:O2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:976:G:C8	32:2a:1358:U:C2	3.05	0.44
32:2a:1251:A:N1	32:2a:1354:C:O2'	2.37	0.44
32:2a:1367:C:H5"	40:2i:114:TYR:HA	1.99	0.44
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.82	0.44
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.83	0.44
33:2b:180:LEU:O	33:2b:182:ILE:HG13	2.17	0.44
33:2b:187:LEU:HD11	33:2b:203:GLY:HA3	2.00	0.44
34:2c:125:GLU:HB2	34:2c:190:ARG:NH2	2.30	0.44
36:2e:80:ILE:HG13	39:2h:104:ARG:NH2	2.32	0.44
39:2h:17:THR:HG22	39:2h:63:LEU:HD22	1.99	0.44
41:2j:8:LEU:HA	41:2j:96:ILE:HG23	1.99	0.44
41:2j:81:THR:O	41:2j:84:GLN:N	2.50	0.44
1:1A:244:A:C2	1:1A:255:A:C4	3.06	0.44
1:1A:1188:U:C5'	17:1V:79:VAL:HG13	2.47	0.44
1:1A:2748:A:H5'	7:1H:4:ILE:HD13	1.99	0.44
1:1A:2801(A):A:H1'	1:1A:2895:U:H1'	1.99	0.44
5:1F:152:GLU:OE1	5:1F:191:ARG:HD2	2.17	0.44
21:1Z:93:ASP:HB3	21:1Z:131:ARG:HH22	1.82	0.44
32:1a:189(D):C:O2	32:1a:189(H):G:N1	2.50	0.44
32:1a:943:U:H2'	32:1a:944:G:H5'	1.98	0.44
35:1d:107:ARG:C	35:1d:109:GLY:H	2.25	0.44
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.46	0.44
38:1g:50:ILE:HG22	38:1g:58:PRO:HG3	1.98	0.44
47:1p:1:MET:HE2	47:1p:1:MET:HB3	1.91	0.44
49:1r:56:THR:CB	49:1r:58:LEU:HD12	2.47	0.44
1:2A:275:G:H2'	1:2A:276:A:O4'	2.16	0.44
1:2A:289:A:H2'	1:2A:290:G:O4'	2.16	0.44
1:2A:454:A:H4'	1:2A:455:C:OP2	2.17	0.44
1:2A:880:G:C2	1:2A:881:G:C8	3.05	0.44
6:2G:8:LYS:HD3	6:2G:100:TRP:CD1	2.53	0.44
13:2R:100:LEU:HD23	13:2R:100:LEU:HA	1.78	0.44
14:2S:92:TYR:HB3	14:2S:98:VAL:HG21	1.98	0.44
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.81	0.44
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.32	0.44
32:2a:1307:U:H2'	32:2a:1308:U:C6	2.53	0.44
33:2b:141:GLU:O	33:2b:145:LEU:N	2.43	0.44
35:2d:158:ILE:HG22	35:2d:162:LEU:HD12	1.98	0.44
41:2j:48:THR:HG23	41:2j:62:HIS:CE1	2.52	0.44
1:1A:1076:C:H4'	1:1A:1077:A:OP1	2.17	0.44
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.28	0.44
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2406:U:C4	11:1P:72:PRO:HD2	2.52	0.44
3:1D:66:ASP:OD2	3:1D:69:ARG:HG2	2.17	0.44
4:1E:143:ASN:HD22	4:1E:147:PRO:HD3	1.83	0.44
7:1H:92:ILE:HD12	7:1H:92:ILE:HA	1.83	0.44
9:1N:41:ASP:O	9:1N:48:MET:HE1	2.18	0.44
16:1U:16:LYS:HB3	16:1U:16:LYS:HE2	1.76	0.44
26:14:54:GLY:N	26:14:55:ARG:HA	2.32	0.44
28:16:5:VAL:HG21	28:16:28:ARG:HE	1.82	0.44
32:1a:189(F):U:C4	48:1q:72:ARG:NH2	2.85	0.44
32:1a:983:A:H3'	32:1a:983:A:N3	2.33	0.44
33:1b:163:PHE:HA	33:1b:185:ILE:O	2.16	0.44
37:1f:70:ASP:O	37:1f:71:ARG:HG3	2.17	0.44
40:1i:49:PRO:HD3	40:1i:78:LYS:HG3	1.99	0.44
44:1m:60:VAL:C	44:1m:62:ASN:H	2.26	0.44
46:1o:61:GLY:O	46:1o:65:ARG:HG3	2.17	0.44
1:2A:244:A:C2	1:2A:255:A:C4	3.05	0.44
1:2A:639:U:H2'	1:2A:640:C:H6	1.81	0.44
1:2A:1877:A:H5'	1:2A:1878:G:OP2	2.18	0.44
1:2A:2663:G:H3'	1:2A:2664:G:C8	2.50	0.44
5:2F:184:TYR:CZ	5:2F:188:ARG:HD2	2.52	0.44
6:2G:63:ILE:HD12	6:2G:141:PHE:HB3	1.99	0.44
7:2H:58:GLU:O	7:2H:62:LYS:HG3	2.16	0.44
18:2W:43:GLY:O	18:2W:47:VAL:HG23	2.18	0.44
25:23:46:ASN:O	25:23:50:VAL:HG22	2.18	0.44
32:2a:560:U:H5'	32:2a:566:G:N2	2.32	0.44
32:2a:652:U:O2'	32:2a:653:A:O5'	2.36	0.44
32:2a:834:C:H2'	32:2a:835:U:H6	1.82	0.44
32:2a:1080:A:H5"	32:2a:1081:G:OP2	2.18	0.44
32:2a:1163:C:C2	32:2a:1174:G:C2	3.05	0.44
32:2a:1241:G:H2'	32:2a:1242:C:H6	1.81	0.44
33:2b:111:ARG:HD3	33:2b:111:ARG:HA	1.83	0.44
35:2d:57:ARG:H	35:2d:57:ARG:HG2	1.42	0.44
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	1.99	0.44
38:2g:113:GLU:OE2	38:2g:122:HIS:ND1	2.48	0.44
39:2h:33:GLU:HG3	39:2h:59:LEU:HD11	1.99	0.44
39:2h:83:ILE:HB	39:2h:137:VAL:HG13	1.98	0.44
50:2s:52:TYR:HA	50:2s:57:HIS:HA	1.99	0.44
1:1A:2139:C:H2'	1:1A:2140:C:O4'	2.18	0.44
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.44	0.44
8:1I:109:ILE:HD13	8:1I:109:ILE:HA	1.84	0.44
13:1R:31:HIS:HD2	61:1R:315:HOH:O	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:50:VAL:HG11	44:1m:64:TRP:C	2.42	0.44
32:1a:129:U:H5'	48:1q:3:LYS:NZ	2.33	0.44
32:1a:626:U:H2'	32:1a:627:G:H8	1.83	0.44
32:1a:1030:C:N4	32:1a:1030(A):G:N3	2.66	0.44
35:1d:59:ARG:NH1	35:1d:66:ARG:HH12	2.15	0.44
40:1i:81:ILE:O	40:1i:81:ILE:HG12	2.17	0.44
44:1m:29:ARG:HA	44:1m:32:GLU:HB2	1.99	0.44
44:1m:84:ILE:HG13	44:1m:86:CYS:H	1.83	0.44
1:2A:30:G:C5	1:2A:31:C:C4	3.05	0.44
1:2A:614(B):G:H2'	5:2F:44:ARG:HH11	1.82	0.44
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.17	0.44
1:2A:1752:C:H2'	1:2A:1753:G:C8	2.52	0.44
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.18	0.44
1:2A:2125:G:H1'	1:2A:2173:A:N6	2.32	0.44
2:2B:13:A:N1	2:2B:69:G:O2'	2.41	0.44
2:2B:65:C:C2'	2:2B:66:A:H5'	2.48	0.44
5:2F:13:SER:HB2	5:2F:127:GLU:OE1	2.17	0.44
7:2H:87:LEU:N	7:2H:131:VAL:O	2.49	0.44
12:2Q:57:HIS:NE2	12:2Q:116:GLU:HB3	2.33	0.44
32:2a:15:G:C4	32:2a:16:A:C8	3.04	0.44
32:2a:137:C:H2'	32:2a:138:G:H8	1.81	0.44
32:2a:728:A:N1	32:2a:729:A:C6	2.85	0.44
32:2a:1193:G:C6	32:2a:1194:U:C4	3.06	0.44
32:2a:1250:A:N3	32:2a:1370:G:O2'	2.46	0.44
33:2b:16:HIS:CG	33:2b:204:ASN:HB3	2.52	0.44
34:2c:120:VAL:HG13	34:2c:133:ALA:HB1	1.99	0.44
34:2c:127:ARG:HH11	34:2c:190:ARG:HH22	1.62	0.44
35:2d:150:GLU:HA	35:2d:153:ARG:HD2	2.00	0.44
42:2k:48:ILE:HG21	42:2k:63:LEU:HD12	1.99	0.44
1:1A:685:A:H1'	1:1A:688:U:O4	2.18	0.44
1:1A:1680:U:H2'	1:1A:1681:G:O4'	2.17	0.44
9:1N:35:ARG:HD3	9:1N:37:LYS:HD2	2.00	0.44
32:1a:410:G:OP1	35:1d:30:LYS:NZ	2.38	0.44
32:1a:1139:G:H4'	32:1a:1140:C:O5'	2.17	0.44
32:1a:1304:G:OP1	52:1u:2:GLY:N	2.51	0.44
36:1e:77:PRO:HD2	36:1e:142:LEU:HD13	1.98	0.44
41:1j:64:GLU:HG2	45:1n:59:ALA:HB2	1.99	0.44
54:1y:9:A:O3'	54:1y:45:U:O2'	2.35	0.44
1:2A:136:G:O2'	1:2A:137:C:H5'	2.18	0.44
1:2A:195:A:OP1	11:2P:46:LYS:NZ	2.46	0.44
1:2A:372:G:OP2	23:21:69:LYS:HE3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:862:G:O2'	2:2B:78:A:N3	2.49	0.44
1:2A:882:G:H2'	1:2A:883:G:C8	2.52	0.44
1:2A:1013:C:H2'	1:2A:1014:U:H6	1.82	0.44
1:2A:1153:C:H2'	1:2A:1154:G:O4'	2.17	0.44
1:2A:1496:A:N3	1:2A:1577:C:O2'	2.46	0.44
1:2A:2106:G:H2'	1:2A:2107:C:O4'	2.18	0.44
1:2A:2118:U:H6	1:2A:2148:G:HO2'	1.61	0.44
2:2B:15:A:O4'	2:2B:110:G:C8	2.71	0.44
2:2B:33:G:C2	2:2B:50:G:C2	3.05	0.44
3:2D:3:VAL:HG22	3:2D:17:THR:HB	1.99	0.44
6:2G:28:VAL:O	6:2G:31:VAL:N	2.38	0.44
7:2H:9:ILE:HB	7:2H:50:VAL:HB	1.99	0.44
8:2I:72:LEU:HD12	8:2I:138:ILE:HG21	1.99	0.44
10:2O:29:ASN:N	10:2O:29:ASN:OD1	2.50	0.44
13:2R:81:ASP:O	13:2R:85:PRO:HG2	2.17	0.44
18:2W:17:VAL:HG11	18:2W:103:ILE:HD11	1.99	0.44
32:2a:341:C:H2'	32:2a:342:C:C6	2.53	0.44
32:2a:392:G:H2'	32:2a:393:A:H8	1.83	0.44
32:2a:825:G:O2'	32:2a:826:C:H5'	2.17	0.44
32:2a:836:G:C6	32:2a:851:G:C6	3.06	0.44
32:2a:872:A:C4	32:2a:874:G:N7	2.86	0.44
32:2a:1083:U:H5	32:2a:1084:G:C6	2.35	0.44
32:2a:1263:C:N3	32:2a:1272:G:O6	2.50	0.44
32:2a:1315:U:H2'	32:2a:1316:G:O4'	2.16	0.44
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.51	0.44
32:2a:1403:C:H1'	32:2a:1500:A:N1	2.32	0.44
32:2a:1431:C:H2'	32:2a:1432:G:O4'	2.18	0.44
33:2b:88:ALA:CB	33:2b:222:ILE:HD11	2.48	0.44
34:2c:52:LEU:HD12	34:2c:53:ALA:H	1.83	0.44
34:2c:71:ALA:CA	34:2c:106:VAL:HB	2.48	0.44
36:2e:129:ILE:CG2	36:2e:133:TYR:HE2	2.31	0.44
38:2g:79:ARG:HD2	38:2g:80:VAL:HA	1.99	0.44
42:2k:48:ILE:HD11	42:2k:64:ALA:HA	2.00	0.44
1:1A:647:G:H8	1:1A:647:G:O5'	2.00	0.44
1:1A:655:A:H8	1:1A:656:G:C1'	2.31	0.44
1:1A:947:G:H2'	1:1A:948:G:C8	2.53	0.44
15:1T:19:LEU:HD22	15:1T:86:ILE:HG13	1.99	0.44
32:1a:150:C:C2	32:1a:151:A:C8	3.06	0.44
32:1a:345:C:H5'	32:1a:346:G:C5	2.53	0.44
32:1a:509:A:C8	32:1a:509:A:H3'	2.51	0.44
32:1a:1113:C:O2'	34:1c:14:ILE:HD11	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1250:A:H61	32:1a:1354:C:C1'	2.30	0.44
40:1i:24:GLY:HA2	40:1i:59:PHE:O	2.18	0.44
44:1m:3:ARG:HD2	44:1m:9:ILE:HG12	1.99	0.44
46:1o:64:ARG:HD3	46:1o:68:ARG:HH21	1.82	0.44
49:1r:26:LEU:CD2	49:1r:39:VAL:HG13	2.47	0.44
54:1y:45:U:OP2	54:1y:45:U:H6	2.00	0.44
1:2A:208:C:H2'	1:2A:209:C:C6	2.53	0.44
1:2A:764:A:H5"	3:2D:210:GLY:CA	2.48	0.44
1:2A:1316:U:H2'	1:2A:1317:A:C8	2.53	0.44
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.40	0.44
1:2A:1946:U:H2'	1:2A:1947:C:H6	1.81	0.44
1:2A:2171:A:C4	1:2A:2172:U:C4	3.05	0.44
7:2H:6:ARG:NH2	7:2H:54:ARG:HH22	2.15	0.44
7:2H:127:GLU:OE1	7:2H:130:ARG:NE	2.46	0.44
8:2I:48:GLU:HA	8:2I:51:ILE:HG22	1.99	0.44
9:2N:71:ILE:HG21	9:2N:84:LYS:HB3	1.98	0.44
16:2U:66:ASN:OD1	16:2U:70:ARG:NE	2.42	0.44
23:21:52:ARG:HD3	23:21:56:GLN:O	2.18	0.44
32:2a:404:U:O2'	32:2a:405:U:H5'	2.17	0.44
32:2a:499:A:H4'	32:2a:500:G:OP1	2.17	0.44
32:2a:529:G:O6	43:2l:49:ASN:HA	2.17	0.44
32:2a:766:A:H2'	32:2a:767:A:O4'	2.18	0.44
32:2a:1149:C:OP1	40:2i:14:VAL:HG11	2.17	0.44
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.18	0.44
34:2c:152:ILE:HD11	34:2c:199:LYS:HZ3	1.82	0.44
36:2e:148:VAL:HG13	36:2e:152:ARG:CZ	2.48	0.44
39:2h:116:LYS:HG3	39:2h:129:VAL:HG11	1.98	0.44
50:2s:27:GLU:HB3	50:2s:28:LYS:HA	1.99	0.44
1:1A:1054:A:N1	1:1A:1105:U:O2	2.50	0.44
1:1A:1062:G:P	1:1A:1070:A:HO2'	2.40	0.44
1:1A:1359:A:N1	1:1A:1372:U:O4	2.51	0.44
1:1A:1999:C:H4'	1:1A:2723:C:O2	2.18	0.44
1:1A:2386:C:H2'	1:1A:2387:U:C6	2.53	0.44
3:1D:108:PRO:HG2	3:1D:111:LEU:HD13	1.98	0.44
4:1E:93:VAL:HG22	61:1E:402:HOH:O	2.17	0.44
5:1F:9:ILE:HD12	5:1F:22:ALA:CB	2.48	0.44
6:1G:144:ILE:HA	6:1G:148:MET:HE1	2.00	0.44
7:1H:84:SER:HA	7:1H:133:VAL:O	2.18	0.44
7:1H:149:ARG:NH1	7:1H:167:GLU:OE1	2.50	0.44
8:1I:27:ARG:HD3	23:11:71:TYR:CE2	2.53	0.44
24:12:21:LEU:HD23	24:12:21:LEU:HA	1.73	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:53:GLU:HG3	26:14:54:GLY:H	1.83	0.44
32:1a:243:A:C2	32:1a:246:A:C8	3.06	0.44
32:1a:1097:C:HO2'	32:1a:1169:A:HO2'	1.52	0.44
32:1a:1279:A:H5"	32:1a:1280:A:OP1	2.17	0.44
32:1a:1427:U:H2'	32:1a:1428:A:C8	2.53	0.44
33:1b:20:GLU:HG3	33:1b:189:ASP:OD2	2.18	0.44
36:1e:41:VAL:HG23	36:1e:67:VAL:HG13	2.00	0.44
38:1g:29:LYS:HD2	38:1g:29:LYS:HA	1.73	0.44
48:1q:88:TYR:HD2	48:1q:89:LEU:HD23	1.82	0.44
1:2A:275:G:C2	1:2A:276:A:C4	3.06	0.44
1:2A:1693:U:H4'	1:2A:1694:C:OP2	2.17	0.44
1:2A:1710:C:H4'	1:2A:2858:C:O2	2.18	0.44
1:2A:2355:C:O3'	22:20:24:LYS:HD2	2.17	0.44
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.53	0.44
2:2B:38:C:O4'	14:2S:95:HIS:NE2	2.50	0.44
6:2G:83:ARG:H	6:2G:86:MET:HE3	1.82	0.44
6:2G:140:ILE:HD13	6:2G:140:ILE:HA	1.85	0.44
12:2Q:103:MET:CE	12:2Q:125:LEU:HD13	2.47	0.44
15:2T:6:LEU:HD23	15:2T:6:LEU:HA	1.82	0.44
19:2X:92:LEU:O	19:2X:95:LEU:HB2	2.18	0.44
32:2a:160:A:H1'	32:2a:344:A:N7	2.32	0.44
32:2a:705:U:H5"	32:2a:706:A:OP2	2.18	0.44
32:2a:988:G:C1'	32:2a:1014:A:H61	2.31	0.44
32:2a:1261:A:N1	32:2a:1275:A:H1'	2.32	0.44
35:2d:163:GLU:C	35:2d:165:MET:H	2.26	0.44
39:2h:82:HIS:C	39:2h:82:HIS:CD2	2.96	0.44
1:1A:880:G:N2	1:1A:898:C:N3	2.66	0.44
1:1A:1168:G:H2'	1:1A:1169:G:O4'	2.18	0.44
1:1A:1614:A:P	1:1A:1614:A:H8	2.40	0.44
1:1A:1686:C:H2'	1:1A:1687:G:O4'	2.18	0.44
1:1A:2467:C:H4'	12:1Q:123:HIS:CD2	2.53	0.44
21:1Z:59:LEU:HB3	21:1Z:61:LEU:HD11	2.00	0.44
32:1a:261:U:H2'	32:1a:263:A:OP2	2.17	0.44
32:1a:715:A:OP1	32:1a:805:C:O2'	2.24	0.44
32:1a:1098:C:C2	32:1a:1099:G:C8	3.06	0.44
32:1a:1157:A:H4'	32:1a:1158:C:O5'	2.18	0.44
35:1d:194:LEU:HD23	35:1d:196:LEU:HG	2.00	0.44
39:1h:9:MET:O	39:1h:13:ILE:HD12	2.18	0.44
1:2A:540:C:H2'	1:2A:541:C:C6	2.50	0.44
1:2A:908:C:OP1	12:2Q:22:LYS:HE2	2.18	0.44
1:2A:999:U:O2'	1:2A:1000:A:H5'	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2131:G:OP2	1:2A:2131:G:N2	2.44	0.44
1:2A:2268:A:OP1	61:2A:3931:HOH:O	2.21	0.44
3:2D:134:ARG:HG3	3:2D:135:PHE:CD1	2.53	0.44
30:28:26:LYS:HB2	30:28:44:LYS:O	2.18	0.44
32:2a:577:G:H2'	32:2a:578:C:H6	1.83	0.44
32:2a:909:A:H2'	32:2a:910:C:O4'	2.18	0.44
32:2a:1004:A:N6	32:2a:1037:C:O2	2.26	0.44
32:2a:1105:A:N3	32:2a:1106:G:C8	2.86	0.44
34:2c:148:GLY:HA3	34:2c:172:ARG:O	2.18	0.44
41:2j:8:LEU:HB2	41:2j:96:ILE:HG12	2.00	0.44
48:2q:37:LYS:O	48:2q:38:ARG:NH2	2.48	0.44
1:1A:2287:A:O2'	1:1A:2289:G:N7	2.50	0.44
1:1A:2396:G:H1'	23:11:30:VAL:HG12	1.99	0.44
5:1F:64:ILE:HG21	5:1F:78:ILE:HG23	2.00	0.44
6:1G:159:VAL:HG21	6:1G:173:LEU:HD21	1.99	0.44
15:1T:11:GLU:HG2	15:1T:57:PHE:CD2	2.53	0.44
21:1Z:130:PRO:O	21:1Z:133:ILE:HG13	2.18	0.44
21:1Z:132:ASN:N	21:1Z:132:ASN:OD1	2.49	0.44
32:1a:69:G:H2'	32:1a:70:G:C8	2.53	0.44
32:1a:189:G:C6	32:1a:189(L):G:N1	2.86	0.44
32:1a:520:A:N1	32:1a:536:C:H1'	2.33	0.44
32:1a:653:A:OP1	39:1h:56:LYS:NZ	2.50	0.44
32:1a:941:G:C2	32:1a:1343:G:C2	3.06	0.44
32:1a:1298:C:H4'	32:1a:1299:A:C4	2.53	0.44
33:1b:63:MET:HE3	33:1b:63:MET:HB2	1.91	0.44
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.53	0.44
36:1e:46:GLY:O	36:1e:54:ALA:HB1	2.18	0.44
47:1p:60:LEU:HD11	47:1p:66:PRO:HD3	2.00	0.44
1:2A:553:G:O2'	1:2A:554:U:H5'	2.18	0.44
1:2A:852:G:C5	1:2A:853:G:N7	2.86	0.44
1:2A:1412:A:H2'	1:2A:1413:G:H8	1.83	0.44
1:2A:1509(B):A:H2'	1:2A:1510:G:C8	2.53	0.44
1:2A:1707:G:H2'	1:2A:1708:C:C6	2.52	0.44
1:2A:1837:C:OP1	32:2a:784:C:H4'	2.18	0.44
1:2A:2180:U:H2'	1:2A:2181:G:O4'	2.18	0.44
6:2G:63:ILE:HG21	6:2G:141:PHE:CD2	2.53	0.44
6:2G:148:MET:HE3	6:2G:148:MET:HB2	1.78	0.44
10:2O:1:MET:HG2	10:2O:32:TYR:CD1	2.53	0.44
10:2O:25:LEU:HD12	10:2O:38:VAL:HG12	1.99	0.44
21:2Z:5:LEU:HD23	21:2Z:6:LYS:N	2.32	0.44
21:2Z:72:ARG:HD3	21:2Z:89:PHE:HD2	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:57:G:H2'	32:2a:58:C:C6	2.53	0.44
32:2a:748:C:H4'	32:2a:749:C:O5'	2.17	0.44
32:2a:908:A:H2'	32:2a:909:A:C8	2.52	0.44
32:2a:947:G:H2'	32:2a:948:C:C6	2.53	0.44
32:2a:982:U:O2	32:2a:1222:G:N1	2.35	0.44
32:2a:1217:C:O2'	32:2a:1218:C:H5'	2.18	0.44
33:2b:18:GLY:HA2	33:2b:42:ILE:CG1	2.48	0.44
34:2c:31:HIS:HA	34:2c:34:LEU:HB3	2.00	0.44
34:2c:111:LEU:HD21	34:2c:146:ALA:HB2	2.00	0.44
35:2d:119:GLN:HG2	35:2d:123:HIS:CD2	2.53	0.44
35:2d:127:THR:HG23	35:2d:147:ALA:HB3	2.00	0.44
40:2i:7:THR:HB	40:2i:83:ARG:HH11	1.83	0.44
1:1A:251:A:C5	1:1A:252:G:H1'	2.52	0.43
1:1A:1065:U:H5"	1:1A:1066:U:OP2	2.17	0.43
1:1A:2187:G:C6	1:1A:2188:C:C4	3.05	0.43
1:1A:2857:G:N2	1:1A:2860:A:OP2	2.41	0.43
7:1H:27:LYS:HG3	7:1H:32:GLU:HB3	2.00	0.43
9:1N:10:GLU:OE1	9:1N:10:GLU:HA	2.18	0.43
32:1a:165:C:O2'	32:1a:166:G:H5'	2.18	0.43
32:1a:682:G:H2'	32:1a:683:G:O4'	2.18	0.43
32:1a:1134:G:C6	32:1a:1135:U:C2	3.06	0.43
32:1a:1402:4OC:HM42	61:1a:2031:HOH:O	2.17	0.43
35:1d:53:ASP:O	35:1d:57:ARG:HG3	2.17	0.43
45:1n:50:LYS:HB3	45:1n:52:GLN:HG3	1.99	0.43
1:2A:96:G:H4'	24:22:48:HIS:CD2	2.53	0.43
1:2A:1024:G:O2'	1:2A:1144:G:O2'	2.23	0.43
1:2A:2336:A:H61	22:20:43:THR:HG22	1.82	0.43
1:2A:2582:G:C2	1:2A:2583:G:C8	3.06	0.43
15:2T:127:ALA:C	15:2T:129:ARG:N	2.74	0.43
19:2X:24:GLY:O	19:2X:83:VAL:HG22	2.17	0.43
23:21:7:ILE:HG21	23:21:69:LYS:HB3	1.99	0.43
32:2a:255:G:C6	32:2a:256:U:C4	3.06	0.43
32:2a:512:U:H2'	32:2a:513:C:H6	1.83	0.43
32:2a:1015:A:O5'	32:2a:1015:A:H8	2.01	0.43
32:2a:1251:A:H5"	40:2i:12:GLU:OE1	2.18	0.43
34:2c:16:ARG:HD2	34:2c:16:ARG:HA	1.80	0.43
36:2e:94:ALA:HB3	36:2e:117:ASP:C	2.43	0.43
37:2f:30:LEU:HD23	37:2f:75:LEU:HD11	2.00	0.43
38:2g:125:MET:O	38:2g:129:GLU:HG3	2.18	0.43
43:2l:69:TYR:HE2	43:2l:71:PRO:HA	1.83	0.43
44:2m:43:THR:HB	44:2m:48:LEU:HD21	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:271(I):G:N7	1:1A:271(J):C:N4	2.65	0.43
1:1A:479:A:N3	1:1A:481:G:H5"	2.33	0.43
1:1A:1139:G:P	9:1N:70:LYS:HZ1	2.41	0.43
8:1I:79:ILE:HB	8:1I:144:VAL:HG12	2.00	0.43
22:10:10:THR:HG22	22:10:12:ASN:N	2.17	0.43
32:1a:767:A:H2'	32:1a:768:A:O4'	2.18	0.43
32:1a:1084:G:C5	32:1a:1085:U:C4	3.06	0.43
32:1a:1177:G:H8	32:1a:1177:G:O5'	1.99	0.43
33:1b:105:PHE:O	33:1b:109:SER:HB2	2.19	0.43
33:1b:185:ILE:CG2	33:1b:199:TYR:HB2	2.35	0.43
34:1c:6:HIS:CD2	34:1c:7:PRO:HD2	2.52	0.43
36:1e:43:LEU:HD21	36:1e:132:ALA:HB1	2.00	0.43
44:1m:67:GLU:HG3	44:1m:71:ARG:HH21	1.83	0.43
1:2A:484:C:H2'	1:2A:485:C:H6	1.83	0.43
1:2A:579:G:H2'	1:2A:580:C:C6	2.52	0.43
1:2A:1000:A:C5	1:2A:1155:A:C5	3.06	0.43
1:2A:1005:C:C2	1:2A:1143:A:C6	3.06	0.43
1:2A:1810:A:H2'	1:2A:1811:G:O4'	2.18	0.43
1:2A:2052:G:H4'	4:2E:143:ASN:O	2.18	0.43
1:2A:2379:G:HO2'	14:2S:17:ARG:NH1	2.07	0.43
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.53	0.43
6:2G:44:GLY:HA2	6:2G:88:ILE:CG2	2.47	0.43
6:2G:97:ASP:O	6:2G:101:ILE:HD12	2.18	0.43
7:2H:54:ARG:NH2	7:2H:57:ASP:OD2	2.50	0.43
14:2S:52:SER:HB2	14:2S:55:ALA:CB	2.49	0.43
14:2S:68:GLN:HA	14:2S:71:ARG:HD3	2.00	0.43
21:2Z:151:HIS:HD2	21:2Z:169:GLU:C	2.26	0.43
24:22:21:LEU:O	24:22:25:VAL:HG23	2.17	0.43
25:23:12:PRO:HB2	25:23:20:LYS:HG2	1.99	0.43
32:2a:109:A:H5'	32:2a:110:C:H5	1.83	0.43
32:2a:1023:G:C4	32:2a:1024:G:C8	3.06	0.43
32:2a:1030(A):G:N3	32:2a:1030(C):G:C8	2.86	0.43
32:2a:1085:U:O4'	32:2a:1094:G:N1	2.51	0.43
33:2b:102:LEU:O	33:2b:104:ASN:N	2.51	0.43
35:2d:12:CYS:HB3	35:2d:17:VAL:O	2.17	0.43
37:2f:61:LEU:HD22	37:2f:63:TYR:CZ	2.53	0.43
40:2i:18:PHE:O	40:2i:61:ALA:HA	2.17	0.43
44:2m:30:ALA:O	44:2m:34:LEU:HG	2.17	0.43
44:2m:34:LEU:HD13	44:2m:41:PRO:HB3	2.00	0.43
45:2n:13:THR:HA	45:2n:14:PRO:HD3	1.77	0.43
47:2p:40:ASP:O	47:2p:48:TRP:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:2q:63:ARG:O	48:2q:63:ARG:HG3	2.18	0.43
1:1A:1058:G:N1	1:1A:1080:C:N4	2.39	0.43
1:1A:1986:A:O2'	1:1A:1987:G:H5'	2.19	0.43
1:1A:2150:U:H2'	1:1A:2151:G:C8	2.53	0.43
12:1Q:54:MET:HG2	12:1Q:117:ALA:HB1	2.00	0.43
28:16:50:ARG:HE	28:16:50:ARG:HB2	1.78	0.43
32:1a:487:A:H2'	32:1a:488:C:O4'	2.19	0.43
32:1a:551:U:H2'	32:1a:552:U:C6	2.53	0.43
32:1a:688:G:H5'	42:1k:46:GLY:C	2.43	0.43
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.83	0.43
36:1e:79:GLU:HA	36:1e:91:LEU:O	2.18	0.43
46:1o:74:ASP:OD2	46:1o:77:ARG:N	2.43	0.43
47:1p:50:LYS:HA	47:1p:50:LYS:HD2	1.83	0.43
54:1y:32:PSU:N3	54:1y:33:U:H5	2.16	0.43
1:2A:27:G:N2	1:2A:512:G:H1'	2.33	0.43
1:2A:322:A:H5'	1:2A:340:A:C1'	2.49	0.43
1:2A:341:G:H2'	1:2A:342:G:O4'	2.18	0.43
1:2A:871:U:H2'	1:2A:872:A:C8	2.54	0.43
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.54	0.43
1:2A:1721:G:H2'	1:2A:1740:G:O6	2.18	0.43
1:2A:2106:G:C6	1:2A:2184:G:C6	3.06	0.43
7:2H:118:PRO:O	7:2H:121:ILE:HB	2.18	0.43
8:2I:93:THR:H	8:2I:96:ASP:HB2	1.83	0.43
10:2O:79:PHE:CD1	15:2T:72:VAL:HG22	2.53	0.43
11:2P:37:GLY:O	11:2P:40:SER:OG	2.32	0.43
15:2T:9:LEU:HD12	15:2T:9:LEU:HA	1.83	0.43
21:2Z:71:VAL:HA	21:2Z:87:ASP:O	2.19	0.43
21:2Z:125:LEU:CD2	21:2Z:164:ALA:HB3	2.47	0.43
26:24:46:GLN:C	26:24:48:ARG:N	2.75	0.43
32:2a:441:A:H3'	32:2a:442:C:H6	1.83	0.43
32:2a:772:U:H2'	32:2a:773:G:O4'	2.18	0.43
32:2a:1039:C:C2	32:2a:1040:U:H1'	2.53	0.43
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.52	0.43
32:2a:1418:A:H5"	32:2a:1419:G:OP2	2.18	0.43
33:2b:78:GLN:HE22	33:2b:95:GLN:NE2	2.15	0.43
34:2c:124:ILE:HD11	34:2c:189:ALA:HB1	2.00	0.43
34:2c:184:TYR:HA	34:2c:200:ALA:O	2.18	0.43
41:2j:30:SER:O	41:2j:81:THR:OG1	2.28	0.43
45:2n:12:ARG:HH12	45:2n:14:PRO:HA	1.83	0.43
49:2r:44:LEU:HD12	49:2r:79:LEU:HD22	1.99	0.43
50:2s:33:THR:HG21	50:2s:49:ILE:HD11	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:2v:14:A:C2	54:2y:34:G:C2	3.07	0.43
1:1A:492:A:H2'	1:1A:493:G:O4'	2.18	0.43
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.99	0.43
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.18	0.43
1:1A:2439:A:O2'	1:1A:2600:A:OP1	2.31	0.43
1:1A:2849:U:P	15:1T:95:ARG:HH12	2.42	0.43
10:1O:29:ASN:N	10:1O:29:ASN:OD1	2.51	0.43
26:14:49:PHE:HD1	26:14:49:PHE:HA	1.71	0.43
28:16:17:LYS:HE3	28:16:17:LYS:HB3	1.74	0.43
30:18:26:LYS:HE3	30:18:26:LYS:HB3	1.74	0.43
32:1a:418:C:H1'	32:1a:540:G:O2'	2.18	0.43
32:1a:598:U:H2'	32:1a:599:C:C6	2.53	0.43
32:1a:718:G:H5'	42:1k:117:ASN:HB2	2.01	0.43
32:1a:1148:U:OP1	40:1i:7:THR:OG1	2.30	0.43
32:1a:1248:A:C6	32:1a:1249:C:C4	3.06	0.43
32:1a:1410:G:H2'	32:1a:1411:C:H6	1.84	0.43
35:1d:71:SER:OG	35:1d:74:GLN:HB2	2.18	0.43
50:1s:40:ILE:HA	50:1s:44:MET:SD	2.58	0.43
1:2A:530:G:C5	1:2A:2022:U:H5"	2.53	0.43
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.51	0.43
1:2A:2468:G:C2	1:2A:2481:G:N3	2.87	0.43
1:2A:2511:U:OP1	61:2A:3950:HOH:O	2.21	0.43
2:2B:24:G:H4'	2:2B:25:A:C8	2.53	0.43
3:2D:66:ASP:OD2	3:2D:103:ARG:HD3	2.18	0.43
14:2S:26:LEU:HD12	14:2S:39:ILE:HD11	2.01	0.43
16:2U:16:LYS:HE2	16:2U:16:LYS:HB3	1.78	0.43
17:2V:4:ILE:HD12	17:2V:39:LEU:HB3	1.99	0.43
22:20:53:MET:HA	22:20:58:THR:O	2.18	0.43
24:22:46:GLN:O	24:22:49:LYS:HG3	2.18	0.43
27:25:35:GLU:HG2	27:25:51:TYR:CD1	2.52	0.43
28:26:11:LEU:HD23	28:26:11:LEU:HA	1.81	0.43
32:2a:56:U:H2'	32:2a:57:G:H8	1.83	0.43
32:2a:131:C:H2'	32:2a:132:C:C6	2.53	0.43
32:2a:1084:G:OP1	32:2a:1086:U:C2	2.72	0.43
32:2a:1236:A:O2'	32:2a:1304:G:H4'	2.18	0.43
34:2c:131:ARG:HE	34:2c:135:LYS:HZ1	1.67	0.43
48:2q:7:THR:OG1	48:2q:58:GLU:HG2	2.18	0.43
1:1A:191:A:H2'	1:1A:192:C:C6	2.53	0.43
1:1A:576:U:H2'	1:1A:577:G:C8	2.53	0.43
1:1A:590:A:H2'	1:1A:591:C:O4'	2.18	0.43
1:1A:754:C:H2'	1:1A:755:C:C6	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2320:A:H2'	1:1A:2320:A:N3	2.34	0.43
3:1D:2:ALA:N	3:1D:200:ASP:OD2	2.51	0.43
32:1a:241:C:C2	32:1a:286:G:C2	3.06	0.43
32:1a:332:G:OP2	51:1t:10:LEU:HD23	2.18	0.43
32:1a:401:C:P	35:1d:73:ARG:HH21	2.41	0.43
32:1a:435:C:H2'	32:1a:436:C:H6	1.82	0.43
32:1a:626:U:C2	32:1a:627:G:C8	3.06	0.43
32:1a:1025:U:O2	32:1a:1036:G:C6	2.70	0.43
32:1a:1091:U:H2'	32:1a:1093:A:OP2	2.19	0.43
36:1e:57:LYS:HG2	36:1e:61:TYR:CE2	2.52	0.43
40:1i:4:TYR:CD1	40:1i:88:TYR:HA	2.54	0.43
42:1k:99:GLN:HG3	42:1k:105:VAL:HG21	2.00	0.43
46:1o:55:GLY:O	46:1o:56:LEU:C	2.61	0.43
54:1y:40:C:H2'	54:1y:41:C:C6	2.53	0.43
1:2A:11:G:O2'	1:2A:12:U:H5'	2.18	0.43
1:2A:30:G:H2'	1:2A:31:C:H6	1.81	0.43
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.51	0.43
1:2A:1926:U:H2'	1:2A:1928:A:OP2	2.19	0.43
1:2A:2271:G:C6	1:2A:2272:U:C4	3.06	0.43
1:2A:2403:C:N3	1:2A:2415:G:C2	2.86	0.43
5:2F:28:ILE:HA	5:2F:112:MET:HG2	2.00	0.43
10:2O:59:LYS:NZ	10:2O:89:ASN:OD1	2.52	0.43
25:23:22:ALA:O	25:23:26:LEU:HG	2.17	0.43
26:24:13:ARG:HG3	26:24:23:GLU:HA	2.01	0.43
32:2a:438:G:N1	32:2a:495:A:OP2	2.44	0.43
32:2a:631:G:H2'	32:2a:632:A:H8	1.83	0.43
32:2a:834:C:C4	32:2a:835:U:C5	3.07	0.43
32:2a:949:A:H1'	32:2a:1364:U:N3	2.32	0.43
32:2a:991:U:C5	32:2a:1212:U:H1'	2.52	0.43
32:2a:1207:2MG:C6	32:2a:1208:C:C4	3.07	0.43
32:2a:1328:C:O2'	44:2m:29:ARG:NH2	2.51	0.43
36:2e:103:GLY:O	36:2e:104:ALA:C	2.61	0.43
47:2p:25:ARG:HH11	47:2p:25:ARG:HG3	1.83	0.43
50:2s:22:LEU:O	50:2s:27:GLU:HG3	2.17	0.43
1:1A:570:G:H2'	1:1A:2030:A:N7	2.34	0.43
1:1A:634:C:H2'	1:1A:635:C:C6	2.53	0.43
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.53	0.43
1:1A:2037:G:H2'	1:1A:2038:G:C8	2.53	0.43
1:1A:2115:G:H2'	1:1A:2116:G:H5"	1.98	0.43
1:1A:2336:A:H61	22:10:43:THR:HG22	1.82	0.43
6:1G:142:PRO:HB2	26:14:31:ILE:HG21	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:94:ALA:O	8:1I:95:LYS:C	2.60	0.43
14:1S:110:LEU:HA	14:1S:110:LEU:HD12	1.54	0.43
32:1a:295:C:H2'	32:1a:296:U:O4'	2.19	0.43
32:1a:583:A:N6	32:1a:758:G:O2'	2.52	0.43
32:1a:587:G:C2	32:1a:755:G:C5	3.06	0.43
32:1a:942:G:H21	40:1i:124:GLN:NE2	2.17	0.43
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.54	0.43
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.53	0.43
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.54	0.43
32:1a:1519:MA6:H5"	32:1a:1520:G:OP2	2.18	0.43
33:1b:8:LYS:N	33:1b:8:LYS:HD3	2.33	0.43
35:1d:98:GLU:HG3	35:1d:189:PRO:HG2	2.00	0.43
1:2A:676:A:H1'	1:2A:2443:C:H1'	2.01	0.43
1:2A:860:U:H1'	1:2A:2268:A:H5'	2.00	0.43
1:2A:1204:A:N1	1:2A:1241:A:N7	2.67	0.43
1:2A:1591:G:H2'	1:2A:1592:C:H6	1.84	0.43
1:2A:1811:G:H3'	61:2A:3908:HOH:O	2.18	0.43
1:2A:1889:A:N1	1:2A:2234:G:H1'	2.33	0.43
1:2A:2098:U:H2'	1:2A:2099:U:C6	2.53	0.43
1:2A:2143:C:N4	1:2A:2148:G:N1	2.31	0.43
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.16	0.43
1:2A:2472:G:N2	1:2A:2477:C:OP1	2.50	0.43
1:2A:2704:C:H2'	1:2A:2705:A:O4'	2.18	0.43
1:2A:2788:C:N3	1:2A:2789:C:N4	2.67	0.43
2:2B:18:G:C2'	2:2B:19:G:H5'	2.48	0.43
2:2B:72:G:O2'	2:2B:105:A:N6	2.51	0.43
14:2S:3:ARG:HH11	14:2S:3:ARG:HA	1.83	0.43
32:2a:149:A:H2'	32:2a:150:C:C6	2.54	0.43
32:2a:328:C:H4'	32:2a:329:A:C5'	2.46	0.43
32:2a:343:U:O2'	32:2a:344:A:H2'	2.19	0.43
32:2a:403:C:O2'	35:2d:122:ARG:NH2	2.51	0.43
32:2a:541:G:N2	32:2a:542:G:H1'	2.33	0.43
32:2a:755:G:OP2	46:2o:65:ARG:HD2	2.18	0.43
32:2a:1128:C:O2'	32:2a:1147:C:N3	2.36	0.43
32:2a:1305:G:O2'	32:2a:1331:G:N2	2.52	0.43
36:2e:66:MET:HE2	36:2e:66:MET:N	2.34	0.43
43:2l:117:ARG:CZ	43:2l:117:ARG:HB2	2.49	0.43
50:2s:66:MET:HB2	50:2s:74:PHE:CZ	2.54	0.43
54:2w:34:G:H8	54:2w:34:G:OP1	2.01	0.43
1:1A:271(K):U:H1'	8:1I:50:ARG:HH11	1.84	0.43
1:1A:662:G:H5'	11:1P:14:LYS:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1300:U:H4'	1:1A:1301:A:H5"	2.01	0.43
1:1A:1958:C:O2'	1:1A:1959:G:H5'	2.19	0.43
1:1A:2474:C:OP2	1:1A:2475:C:N4	2.42	0.43
1:1A:2779:U:H5'	1:1A:2781:A:O4'	2.19	0.43
5:1F:28:ILE:O	5:1F:30:PRO:HD3	2.18	0.43
8:1I:45:LYS:O	8:1I:49:ALA:N	2.42	0.43
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.53	0.43
13:1R:12:ARG:HB3	13:1R:16:HIS:HB3	2.00	0.43
13:1R:118:GLU:H	13:1R:118:GLU:CD	2.26	0.43
18:1W:83:LYS:O	18:1W:84:ARG:HD3	2.18	0.43
32:1a:255:G:H1'	48:1q:16:GLN:OE1	2.18	0.43
32:1a:1261:A:H3'	32:1a:1262:C:H6	1.84	0.43
32:1a:1284:C:H3'	32:1a:1285:A:C8	2.52	0.43
35:1d:52:SER:H	35:1d:55:ALA:HB3	1.83	0.43
35:1d:107:ARG:HA	35:1d:107:ARG:HD2	1.93	0.43
44:1m:50:GLU:HA	44:1m:53:VAL:HB	1.99	0.43
54:1y:58:A:H4'	54:1y:59:U:OP1	2.19	0.43
1:2A:90:U:H1'	1:2A:92:A:C8	2.53	0.43
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.63	0.43
1:2A:628:G:H2'	1:2A:629:G:H8	1.83	0.43
1:2A:668:G:H5'	1:2A:669:G:OP2	2.18	0.43
1:2A:852:G:H2'	1:2A:853:G:H8	1.83	0.43
1:2A:1425:G:C6	1:2A:1426:G:C6	3.07	0.43
1:2A:1464:C:C2	1:2A:1465:G:C8	3.07	0.43
1:2A:2516:G:O6	1:2A:2517:C:N4	2.52	0.43
9:2N:30:ILE:HG23	9:2N:52:VAL:HG11	2.01	0.43
10:2O:19:ILE:HG22	10:2O:43:VAL:HA	2.01	0.43
13:2R:44:LEU:HD12	13:2R:44:LEU:HA	1.86	0.43
14:2S:35:ILE:CG2	14:2S:69:VAL:HG11	2.49	0.43
21:2Z:98:MET:O	21:2Z:125:LEU:HA	2.19	0.43
32:2a:32:A:C2	32:2a:33:A:C4	3.06	0.43
32:2a:109:A:H5'	32:2a:110:C:C5	2.53	0.43
32:2a:354:G:C2'	32:2a:355:C:H5'	2.48	0.43
32:2a:391:G:C6	32:2a:392:G:C5	3.06	0.43
32:2a:593:G:N2	61:2a:1935:HOH:O	2.36	0.43
32:2a:1024:G:N2	32:2a:1025:U:C5	2.87	0.43
32:2a:1346:A:N1	32:2a:1374:A:H5"	2.33	0.43
40:2i:6:GLY:O	40:2i:17:VAL:HB	2.19	0.43
40:2i:82:ALA:O	40:2i:86:VAL:HG23	2.19	0.43
43:2l:37:CYS:HG	43:2l:81:SER:HB2	1.83	0.43
54:2w:10:G:H2'	54:2w:11:C:C6	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:754:C:H2'	1:1A:755:C:H6	1.83	0.43
1:1A:1179:C:O2'	1:1A:1180:C:H5'	2.18	0.43
1:1A:1364:G:OP2	23:11:3:LYS:HG3	2.18	0.43
1:1A:1697:G:OP2	1:1A:1698:A:O2'	2.32	0.43
1:1A:1750:G:N3	1:1A:2860:A:H2	2.17	0.43
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.82	0.43
14:1S:5:THR:OG1	14:1S:8:GLU:HG3	2.18	0.43
23:11:4:VAL:N	23:11:46:LEU:HD11	2.34	0.43
23:11:8:SER:HB3	23:11:66:HIS:CD2	2.54	0.43
23:11:82:LEU:O	23:11:85:LEU:HD12	2.18	0.43
33:1b:28:PHE:O	33:1b:32:ILE:HG13	2.19	0.43
34:1c:5:ILE:HD12	41:1j:51:ARG:HH12	1.83	0.43
38:1g:138:LYS:HE2	38:1g:142:GLU:CD	2.43	0.43
40:1i:8:GLY:O	40:1i:15:ALA:N	2.52	0.43
44:1m:37:THR:OG1	44:1m:39:ILE:HD12	2.19	0.43
1:2A:243:U:O2'	1:2A:244:A:H5'	2.18	0.43
1:2A:441:U:H2'	1:2A:442:G:H8	1.83	0.43
1:2A:817:C:O2'	1:2A:839:U:H5"	2.19	0.43
1:2A:937:U:H2'	1:2A:938:G:O4'	2.18	0.43
1:2A:1270:C:H5"	1:2A:1271:G:O5'	2.19	0.43
1:2A:1657:C:H2'	1:2A:1658:C:C6	2.54	0.43
1:2A:2530:A:O2'	1:2A:2532:G:OP2	2.34	0.43
8:2I:77:LEU:CD1	8:2I:142:VAL:HG12	2.49	0.43
14:2S:67:ARG:HD3	14:2S:71:ARG:NH1	2.34	0.43
32:2a:217:C:OP2	32:2a:217:C:H6	2.02	0.43
32:2a:228:A:H2'	32:2a:229:U:O4'	2.19	0.43
32:2a:337:C:H2'	32:2a:338:A:C8	2.54	0.43
32:2a:1187:G:H2'	32:2a:1188:A:C8	2.54	0.43
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.54	0.43
32:2a:1347:G:HO2'	32:2a:1373:G:H1	1.63	0.43
33:2b:58:ILE:O	33:2b:62:ALA:N	2.35	0.43
36:2e:93:PRO:HG2	39:2h:105:ARG:HH21	1.84	0.43
1:1A:271(M):G:C8	1:1A:271(O):C:C5	3.06	0.43
1:1A:484:C:H2'	1:1A:485:C:C6	2.54	0.43
1:1A:897:C:O4'	54:1w:56:C:H5	2.02	0.43
1:1A:2196:C:O2'	1:1A:2197:U:H5'	2.18	0.43
30:18:39:LYS:O	30:18:43:GLN:HG3	2.19	0.43
32:1a:520:A:O2'	43:1l:73:GLU:OE2	2.24	0.43
32:1a:935:A:C2	32:1a:936:C:C2	3.07	0.43
32:1a:983:A:H1'	32:1a:1049:U:O2	2.19	0.43
34:1c:204:LEU:HD23	34:1c:204:LEU:HA	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:1g:73:MET:HE3	38:1g:73:MET:HB3	1.82	0.43
1:2A:1021:A:H3'	1:2A:1021:A:C8	2.54	0.43
1:2A:1181:C:H2'	1:2A:1182:A:H8	1.83	0.43
1:2A:1344:G:N2	1:2A:1404:C:H1'	2.33	0.43
1:2A:1455:G:OP2	61:2A:3948:HOH:O	2.20	0.43
1:2A:1607:C:H5"	1:2A:1608:A:H5'	2.01	0.43
1:2A:1652:A:O2'	1:2A:1653:G:H5'	2.19	0.43
1:2A:2464:C:C2	1:2A:2487:G:C2	3.07	0.43
2:2B:48:A:OP1	14:2S:30:ARG:NH2	2.52	0.43
5:2F:40:GLN:NE2	5:2F:182:ASN:HB2	2.34	0.43
5:2F:64:ILE:HG21	5:2F:78:ILE:CG2	2.49	0.43
14:2S:7:TYR:CZ	14:2S:91:PRO:HG3	2.54	0.43
21:2Z:157:LEU:HD21	21:2Z:163:LEU:HD13	2.01	0.43
30:28:62:LEU:HB3	30:28:65:GLU:HG2	2.01	0.43
32:2a:545:C:H5'	35:2d:72:GLU:HB2	2.01	0.43
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.19	0.43
32:2a:1087:G:N2	32:2a:1099:G:H1'	2.34	0.43
32:2a:1147:C:O2	40:2i:16:ARG:NH2	2.52	0.43
32:2a:1206:G:C4	32:2a:1207:2MG:C8	3.06	0.43
32:2a:1253:G:H2'	32:2a:1254:C:C6	2.54	0.43
34:2c:18:TRP:HE3	34:2c:18:TRP:H	1.67	0.43
38:2g:89:MET:SD	38:2g:155:ARG:HB2	2.59	0.43
38:2g:132:GLY:O	38:2g:136:LYS:HG2	2.19	0.43
48:2q:99:SER:HB2	61:2q:301:HOH:O	2.19	0.43
54:2y:51:U:H2'	54:2y:52:G:C8	2.53	0.43
1:1A:784:A:O4'	3:1D:227:ASN:ND2	2.52	0.43
1:1A:1355:G:H2'	1:1A:1356:G:O4'	2.19	0.43
1:1A:1364:G:P	23:11:3:LYS:HG3	2.58	0.43
4:1E:105:THR:HG1	4:1E:199:ARG:NH2	2.14	0.43
8:1I:78:THR:HG22	8:1I:143:SER:OG	2.18	0.43
10:1O:100:GLY:O	10:1O:119:PRO:HD2	2.19	0.43
13:1R:26:LYS:HE2	13:1R:70:LEU:O	2.19	0.43
32:1a:160:A:H1'	32:1a:344:A:C5	2.54	0.43
32:1a:761:G:H4'	48:1q:97:SER:OG	2.19	0.43
32:1a:1245:A:C2	32:1a:1293:G:C2	3.07	0.43
32:1a:1330:U:H2'	32:1a:1331:G:H5'	2.00	0.43
34:1c:112:SER:OG	34:1c:112:SER:O	2.37	0.43
34:1c:113:ALA:N	34:1c:183:ASP:OD2	2.47	0.43
35:1d:155:LEU:HD23	35:1d:155:LEU:HA	1.81	0.43
1:2A:7:G:H2'	1:2A:8:A:O4'	2.19	0.43
1:2A:613:G:H2'	1:2A:614:U:O2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:784:A:C8	1:2A:792:G:C5	3.06	0.43
1:2A:1957:C:H2'	1:2A:1958:C:C6	2.54	0.43
1:2A:2438:U:O2'	1:2A:2440:C:OP1	2.34	0.43
1:2A:2716:U:O2'	1:2A:2717:G:H5'	2.19	0.43
3:2D:139:GLY:N	3:2D:165:ILE:O	2.46	0.43
6:2G:120:LEU:HB3	6:2G:131:TYR:OH	2.19	0.43
6:2G:148:MET:H	6:2G:148:MET:HG3	1.42	0.43
14:2S:57:LYS:HB2	14:2S:57:LYS:HE2	1.82	0.43
21:2Z:80:ARG:HB3	21:2Z:82:ARG:HG3	2.00	0.43
29:27:24:THR:HB	29:27:27:GLY:H	1.83	0.43
32:2a:622:A:C8	32:2a:623:C:C6	3.07	0.43
32:2a:799:G:O6	32:2a:800:G:C2	2.72	0.43
32:2a:930:C:C4	32:2a:931:C:C5	3.07	0.43
32:2a:978:A:O2'	32:2a:1322:C:N3	2.45	0.43
32:2a:1205:U:O2'	34:2c:195:VAL:HG12	2.18	0.43
32:2a:1284:C:H2'	32:2a:1285:A:N7	2.34	0.43
32:2a:1515:C:H2'	32:2a:1516:G:C8	2.51	0.43
35:2d:4:TYR:O	35:2d:4:TYR:CD2	2.72	0.43
35:2d:173:TRP:CD1	35:2d:174:LEU:HG	2.54	0.43
41:2j:33:GLN:O	41:2j:74:ILE:HD12	2.19	0.43
42:2k:45:GLY:O	42:2k:50:TYR:HB2	2.19	0.43
1:1A:94:C:H2'	1:1A:94(A):G:O4'	2.19	0.42
1:1A:614(B):G:N2	5:1F:44:ARG:O	2.51	0.42
1:1A:1069:A:H4'	1:1A:1070:A:H5"	2.01	0.42
1:1A:1107:G:H2'	1:1A:1108:U:H6	1.84	0.42
1:1A:1205:U:H4'	1:1A:1206:G:OP2	2.19	0.42
1:1A:2206:G:OP2	1:1A:2206:G:H4'	2.19	0.42
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.54	0.42
6:1G:33:ARG:HG3	6:1G:162:THR:HG21	2.01	0.42
18:1W:68:ARG:HH11	18:1W:111:HIS:HA	1.84	0.42
18:1W:92:ARG:HG2	18:1W:93:ALA:N	2.32	0.42
21:1Z:156:LYS:CD	21:1Z:158:PRO:HD3	2.48	0.42
25:13:3:ARG:HE	25:13:60:GLU:CD	2.26	0.42
26:14:58:ARG:HD3	50:1s:68:GLY:N	2.22	0.42
28:16:38:LYS:HE3	28:16:38:LYS:HB3	1.66	0.42
32:1a:18:C:H5"	36:1e:127:ASN:ND2	2.33	0.42
32:1a:434:U:H2'	32:1a:435:C:C6	2.53	0.42
32:1a:507:C:OP2	32:1a:508:C:O2'	2.21	0.42
32:1a:799:G:H2'	32:1a:800:G:H5'	2.00	0.42
32:1a:1118:C:H2'	32:1a:1119:C:H6	1.84	0.42
32:1a:1191:A:H5"	34:1c:4:LYS:NZ	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1347:G:N2	32:1a:1373:G:H2'	2.34	0.42
33:1b:124:SER:HA	33:1b:125:PRO:HA	1.59	0.42
33:1b:207:ALA:HB3	33:1b:210:SER:HB2	2.01	0.42
37:1f:26:ILE:O	37:1f:30:LEU:HG	2.19	0.42
40:1i:95:LYS:O	40:1i:96:LEU:HD23	2.19	0.42
1:2A:253:C:H2'	1:2A:254:G:O4'	2.19	0.42
1:2A:519:U:H2'	1:2A:520:G:C8	2.54	0.42
1:2A:699:A:H4'	1:2A:1554:A:H61	1.84	0.42
1:2A:1204:A:H5'	1:2A:1206:G:H1'	2.01	0.42
1:2A:1325:G:OP2	1:2A:1616:A:O2'	2.29	0.42
1:2A:1453:U:O2'	1:2A:1455:G:N7	2.40	0.42
1:2A:1477:A:C2	1:2A:1515:G:C2	3.06	0.42
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.83	0.42
1:2A:2741:A:H2'	1:2A:2742:C:O4'	2.18	0.42
5:2F:7:TYR:H	5:2F:22:ALA:H	1.67	0.42
21:2Z:45:ASP:O	21:2Z:49:ARG:HG3	2.19	0.42
21:2Z:125:LEU:HD23	21:2Z:164:ALA:HB3	2.01	0.42
32:2a:174:C:H2'	32:2a:175:C:C6	2.52	0.42
32:2a:232:G:H2'	32:2a:233:C:H6	1.83	0.42
32:2a:1004:A:C8	32:2a:1025:U:O4	2.73	0.42
32:2a:1124:G:C2	32:2a:1127:G:N2	2.86	0.42
32:2a:1308:U:H5"	44:2m:98:VAL:CG2	2.49	0.42
32:2a:1381:U:H1'	38:2g:79:ARG:HG2	2.01	0.42
32:2a:1402:4OC:H6	32:2a:1402:4OC:O5'	2.19	0.42
43:2l:88:GLY:O	43:2l:99:HIS:CD2	2.72	0.42
49:2r:53:ARG:HA	49:2r:56:THR:OG1	2.17	0.42
1:1A:41:C:H2'	1:1A:42:G:O4'	2.19	0.42
1:1A:264:C:O2'	1:1A:265:A:H2'	2.19	0.42
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.19	0.42
1:1A:2129:C:H1'	1:1A:2160:G:H22	1.84	0.42
1:1A:2283:C:H2'	1:1A:2284:C:O4'	2.19	0.42
1:1A:2356:C:H2'	1:1A:2357:U:O4'	2.18	0.42
6:1G:45:GLU:H	6:1G:45:GLU:CD	2.27	0.42
6:1G:60:LEU:O	6:1G:64:THR:HG23	2.19	0.42
10:1O:49:ARG:NH1	32:1a:1422:G:O3'	2.48	0.42
32:1a:173:U:C2	32:1a:197:A:N1	2.87	0.42
32:1a:481:G:O2'	32:1a:483:C:N4	2.53	0.42
33:1b:21:ARG:CA	33:1b:39:ILE:HA	2.48	0.42
34:1c:119:ARG:HE	34:1c:140:ARG:NH2	2.17	0.42
42:1k:98:LEU:O	42:1k:101:SER:OG	2.35	0.42
43:1l:42:THR:HA	43:1l:53:ARG:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:1x:75:C:C3’	55:1x:76:31H:P	3.07	0.42
1:2A:256:A:C2	1:2A:257:A:C4	3.06	0.42
1:2A:715:G:H2’	1:2A:716:A:O4’	2.19	0.42
1:2A:1465:G:C2	1:2A:1466:G:C4	3.06	0.42
1:2A:2156:G:H2’	1:2A:2157:G:C4	2.53	0.42
1:2A:2314:C:H2’	1:2A:2315:G:C8	2.43	0.42
1:2A:2740:A:C6	1:2A:2764:A:C8	3.07	0.42
20:2Y:31:LEU:HD23	20:2Y:31:LEU:HA	1.77	0.42
32:2a:547:A:H4’	32:2a:548:G:O5’	2.20	0.42
32:2a:974:A:N3	45:2n:31:ARG:NH2	2.67	0.42
32:2a:1154:G:H2’	32:2a:1155:G:H8	1.84	0.42
32:2a:1178:G:H2’	32:2a:1180:A:OP2	2.19	0.42
32:2a:1387:G:H2’	32:2a:1388:C:C6	2.53	0.42
34:2c:59:ARG:NH1	34:2c:63:ASN:O	2.52	0.42
44:2m:78:ILE:HG23	44:2m:92:HIS:HD1	1.84	0.42
54:2w:23:A:H2’	54:2w:24:G:C8	2.54	0.42
54:2y:37:MIA:H2’	54:2y:38:A:C8	2.54	0.42
1:1A:139(A):G:H2’	1:1A:140:G:C8	2.54	0.42
1:1A:674:G:O2’	5:1F:74:ARG:HD3	2.19	0.42
1:1A:1045:A:O2’	1:1A:1047:G:C4	2.58	0.42
1:1A:1096:A:N6	1:1A:1097:U:O2	2.34	0.42
1:1A:1371:G:H2’	1:1A:1372:U:H5	1.84	0.42
1:1A:1786:A:H1’	1:1A:1938:A:N6	2.35	0.42
1:1A:2160:G:C6	1:1A:2161:C:N4	2.87	0.42
1:1A:2180:U:H2’	1:1A:2181:G:O4’	2.20	0.42
3:1D:77:ALA:HA	3:1D:97:TYR:HA	2.01	0.42
6:1G:173:LEU:HA	6:1G:176:LEU:HD12	2.01	0.42
8:1I:10:GLU:H	8:1I:10:GLU:HG3	1.55	0.42
8:1I:77:LEU:HD11	8:1I:100:ALA:HB3	2.01	0.42
8:1I:121:LYS:HE3	8:1I:121:LYS:HB3	1.78	0.42
12:1Q:10:ARG:HH11	12:1Q:11:LYS:HE2	1.84	0.42
21:1Z:31:ARG:NE	21:1Z:94:GLU:OE2	2.49	0.42
21:1Z:98:MET:O	21:1Z:125:LEU:HA	2.20	0.42
32:1a:383:A:OP1	32:1a:454:C:O2’	2.23	0.42
32:1a:865:A:C2	32:1a:918:A:H4’	2.52	0.42
32:1a:1330:U:C2’	32:1a:1331:G:H5’	2.49	0.42
32:1a:1360:A:H8	32:1a:1360:A:OP1	2.02	0.42
33:1b:84:GLU:OE1	33:1b:216:SER:HA	2.19	0.42
51:1t:99:LEU:HA	51:1t:100:ILE:C	2.44	0.42
54:1y:66:U:C4	54:1y:67:C:C4	3.06	0.42
1:2A:120:U:H5”	1:2A:122:G:OP2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:644:A:H4'	1:2A:645:C:C4	2.54	0.42
1:2A:754:C:H2'	1:2A:755:C:C6	2.54	0.42
1:2A:996:A:O3'	16:2U:91:ASP:HB2	2.19	0.42
1:2A:1021:A:H3'	1:2A:1021:A:H8	1.83	0.42
1:2A:1035:U:H5"	7:2H:59:ARG:HD3	2.02	0.42
1:2A:1342:A:OP2	61:2A:3952:HOH:O	2.21	0.42
1:2A:1376:C:O2'	1:2A:1377:G:H5'	2.18	0.42
2:2B:24:G:O2'	2:2B:56:G:N7	2.45	0.42
2:2B:117:G:N7	61:2B:306:HOH:O	2.35	0.42
4:2E:119:ARG:HG2	4:2E:120:TRP:CD1	2.54	0.42
5:2F:193:VAL:HG23	5:2F:193:VAL:O	2.19	0.42
6:2G:43:LEU:HD12	6:2G:45:GLU:HG3	2.01	0.42
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.60	0.42
8:2I:139:GLN:H	8:2I:139:GLN:CD	2.27	0.42
15:2T:105:LEU:HB3	15:2T:110:ILE:HG13	2.00	0.42
32:2a:130:A:O2'	32:2a:131:C:O5'	2.35	0.42
32:2a:994:A:H2'	32:2a:995:C:H6	1.83	0.42
35:2d:191:ARG:HD2	35:2d:191:ARG:HA	1.77	0.42
36:2e:36:ASP:C	36:2e:38:GLN:H	2.25	0.42
41:2j:38:ILE:CG1	41:2j:71:LEU:HB3	2.49	0.42
42:2k:123:LYS:HA	42:2k:126:ARG:HG3	2.01	0.42
44:2m:40:ASN:OD1	44:2m:41:PRO:HD2	2.18	0.42
55:2x:30:G:C2	55:2x:31:G:C8	3.07	0.42
1:1A:1108:U:H2'	1:1A:1109:C:O4'	2.20	0.42
1:1A:1408:C:C2	1:1A:1595:G:N2	2.88	0.42
1:1A:2788:C:C5'	4:1E:61:ARG:HH21	2.33	0.42
4:1E:12:THR:CG2	4:1E:13:ARG:N	2.82	0.42
5:1F:34:TRP:CE2	11:1P:8:PRO:HD3	2.54	0.42
10:1O:34:THR:OG1	10:1O:35:VAL:N	2.53	0.42
16:1U:90:VAL:CG1	16:1U:95:LEU:HD13	2.49	0.42
32:1a:161:A:H2'	32:1a:162:A:O4'	2.18	0.42
32:1a:179:A:C5	32:1a:180:U:C4	3.08	0.42
32:1a:260:G:H2'	32:1a:261:U:C6	2.55	0.42
32:1a:343:U:O2'	32:1a:346:G:O6	2.36	0.42
32:1a:405:U:O2'	32:1a:498:U:H5'	2.18	0.42
32:1a:735:C:H2'	32:1a:736:C:C6	2.53	0.42
32:1a:1072:G:C6	32:1a:1073:U:C4	3.08	0.42
37:1f:33:TYR:CG	37:1f:75:LEU:HB2	2.54	0.42
37:1f:39:LYS:NZ	37:1f:39:LYS:HB3	2.31	0.42
49:1r:58:LEU:HD23	49:1r:62:GLU:HB3	2.01	0.42
54:1y:51:U:H2'	54:1y:52:G:C8	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:415:A:H2'	1:2A:416:C:O4'	2.19	0.42
1:2A:443:A:C5	5:2F:45:ARG:HD2	2.54	0.42
1:2A:868:U:C4	1:2A:869:G:N7	2.87	0.42
1:2A:910:A:N1	1:2A:2277:G:H1'	2.34	0.42
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.20	0.42
1:2A:1229:G:C2	1:2A:1230:C:C2	3.07	0.42
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.19	0.42
1:2A:1814:G:H4'	3:2D:51:VAL:HG21	2.02	0.42
1:2A:2082:A:H2'	1:2A:2083:G:O4'	2.19	0.42
1:2A:2896:C:H2'	1:2A:2897:U:C5	2.55	0.42
4:2E:119:ARG:HG2	4:2E:120:TRP:NE1	2.34	0.42
4:2E:143:ASN:HB2	4:2E:147:PRO:HD2	2.01	0.42
7:2H:123:PHE:C	7:2H:124:GLU:HG3	2.44	0.42
10:2O:113:LYS:HD2	10:2O:113:LYS:HA	1.77	0.42
15:2T:23:ARG:HD2	15:2T:120:ARG:CZ	2.49	0.42
15:2T:51:ARG:HG3	15:2T:98:LYS:CD	2.49	0.42
16:2U:6:THR:HG21	16:2U:10:ARG:CZ	2.49	0.42
16:2U:113:ALA:O	16:2U:117:GLN:HG2	2.19	0.42
19:2X:26:TYR:CE2	19:2X:89:ILE:HG13	2.55	0.42
25:23:6:VAL:HG13	25:23:56:VAL:CG2	2.50	0.42
32:2a:36:C:H2'	32:2a:37:U:O4'	2.20	0.42
32:2a:696:A:N3	32:2a:786:G:O2'	2.42	0.42
32:2a:1016:A:H3'	32:2a:1017:G:H8	1.84	0.42
32:2a:1024:G:O3'	32:2a:1025:U:H4'	2.19	0.42
32:2a:1298:C:C5	38:2g:114:ARG:HD3	2.54	0.42
32:2a:1339:A:H2	55:2x:31:G:H4'	1.84	0.42
32:2a:1530:G:OP1	32:2a:1530:G:H4'	2.18	0.42
33:2b:139:LYS:HE3	33:2b:139:LYS:HB3	1.77	0.42
40:2i:8:GLY:O	40:2i:14:VAL:HA	2.19	0.42
48:2q:81:ARG:HB3	48:2q:84:LEU:HD12	2.00	0.42
1:1A:271(X):G:C2	1:1A:271(Y):U:O4	2.73	0.42
1:1A:865:C:H4'	1:1A:866:A:N7	2.34	0.42
1:1A:1142(A):A:C4	1:1A:1144:G:N7	2.87	0.42
1:1A:1702:G:H2'	1:1A:1703:G:O4'	2.19	0.42
1:1A:2649:U:H2'	1:1A:2650:U:H6	1.81	0.42
1:1A:2771:C:H2'	1:1A:2772:C:H6	1.85	0.42
11:1P:29:LYS:CG	11:1P:30:THR:N	2.82	0.42
11:1P:121:LYS:HB3	11:1P:123:LEU:HD13	2.01	0.42
19:1X:60:ARG:HH22	29:17:47:ARG:NH1	2.18	0.42
21:1Z:146:ILE:HA	21:1Z:147:GLY:HA2	1.73	0.42
30:18:22:VAL:HG12	30:18:50:LEU:HD12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:663:A:H2'	32:1a:664:G:O4'	2.19	0.42
32:1a:692:U:H5	42:1k:26:ASN:OD1	2.02	0.42
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	2.02	0.42
33:1b:73:THR:HB	33:1b:95:GLN:O	2.19	0.42
35:1d:203:VAL:O	35:1d:204:ILE:C	2.59	0.42
36:1e:145:LYS:O	36:1e:149:GLU:HG2	2.19	0.42
47:1p:48:TRP:HH2	47:1p:76:GLN:NE2	2.17	0.42
47:1p:60:LEU:HA	47:1p:60:LEU:HD12	1.55	0.42
54:1w:45:U:H5'	54:1w:46:G7M:OP2	2.20	0.42
55:1x:37:A:C4	55:1x:38:A:C8	3.08	0.42
1:2A:674:G:O2'	5:2F:74:ARG:HD3	2.19	0.42
1:2A:1418:G:H8	1:2A:1418:G:O5'	2.02	0.42
1:2A:2297:C:O2	1:2A:2333:A:N6	2.36	0.42
1:2A:2425:A:H4'	1:2A:2426:A:H5"	2.02	0.42
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.54	0.42
1:2A:2849:U:OP2	15:2T:95:ARG:NH1	2.52	0.42
9:2N:73:THR:HA	9:2N:83:LYS:O	2.18	0.42
26:24:57:GLU:CB	26:24:58:ARG:HA	2.50	0.42
32:2a:401:C:O2'	32:2a:621:A:N3	2.48	0.42
32:2a:532:A:N7	32:2a:1207:2MG:H4'	2.35	0.42
32:2a:561:U:O2'	32:2a:562:C:OP2	2.32	0.42
32:2a:1064:G:OP1	32:2a:1386:G:H4'	2.19	0.42
32:2a:1219:U:O2'	50:2s:34:TRP:HB3	2.19	0.42
32:2a:1223:C:OP2	32:2a:1224:G:H2'	2.20	0.42
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.54	0.42
33:2b:141:GLU:O	33:2b:145:LEU:HB2	2.20	0.42
41:2j:21:GLN:NE2	41:2j:21:GLN:O	2.52	0.42
43:2l:35:GLY:HA3	43:2l:60:LEU:HD23	2.02	0.42
1:1A:637:A:H2'	11:1P:117:GLU:OE1	2.19	0.42
1:1A:1509(A):A:H2'	1:1A:1509(B):A:H5'	2.01	0.42
1:1A:1580:A:OP2	1:1A:1580:A:H8	2.02	0.42
2:1B:24:G:N7	2:1B:56:G:H2'	2.35	0.42
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.55	0.42
11:1P:39:LYS:CG	11:1P:45:LEU:HD22	2.48	0.42
11:1P:45:LEU:HD12	11:1P:45:LEU:HA	1.75	0.42
32:1a:714:G:H2'	32:1a:715:A:C8	2.55	0.42
32:1a:1160:G:C6	32:1a:1161:C:C5	3.08	0.42
32:1a:1321:C:C4	32:1a:1322:C:C4	3.08	0.42
32:1a:1428:A:H2'	32:1a:1429:C:O4'	2.20	0.42
34:1c:120:VAL:HG23	34:1c:198:VAL:HG11	2.01	0.42
42:1k:63:LEU:HA	42:1k:63:LEU:HD23	1.78	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:1p:19:ILE:HB	47:1p:37:GLY:O	2.19	0.42
51:1t:65:LYS:O	51:1t:68:LYS:HB3	2.19	0.42
54:1y:48:C:C2	54:1y:59:U:H1'	2.55	0.42
1:2A:272:G:H4'	1:2A:272(A):U:H5"	2.01	0.42
1:2A:581:C:H2'	1:2A:582:G:C8	2.55	0.42
1:2A:1782:C:H1'	1:2A:2609:U:H5"	2.02	0.42
2:2B:90:A:N7	2:2B:91:C:H1'	2.34	0.42
4:2E:76:ARG:NH1	61:2E:402:HOH:O	2.52	0.42
5:2F:29:ASN:O	5:2F:33:LEU:HD23	2.19	0.42
5:2F:95:ARG:NH1	5:2F:97:TYR:OH	2.53	0.42
6:2G:56:ALA:HA	6:2G:59:GLU:HG2	2.01	0.42
7:2H:56:SER:HB3	7:2H:61:HIS:ND1	2.34	0.42
7:2H:118:PRO:HD2	7:2H:121:ILE:HB	2.01	0.42
10:2O:1:MET:HE3	10:2O:32:TYR:CE1	2.54	0.42
14:2S:35:ILE:HG12	14:2S:101:LEU:CD1	2.49	0.42
16:2U:27:LEU:HB3	16:2U:31:SER:HB3	2.02	0.42
32:2a:428:G:O4'	32:2a:430:A:C8	2.73	0.42
32:2a:849:C:H2'	32:2a:850:U:O4'	2.20	0.42
32:2a:1014:A:OP2	50:2s:18:LYS:NZ	2.41	0.42
32:2a:1081:G:H2'	32:2a:1082:G:O4'	2.20	0.42
34:2c:170:GLN:HG2	34:2c:171:GLY:H	1.84	0.42
39:2h:48:TYR:HA	39:2h:60:ARG:O	2.19	0.42
39:2h:64:LYS:CG	39:2h:79:VAL:HG21	2.48	0.42
47:2p:56:ALA:O	47:2p:60:LEU:HG	2.20	0.42
54:2w:43:C:H2'	54:2w:44:G:C8	2.54	0.42
54:2y:18:G:O6	54:2y:56:C:C4	2.73	0.42
1:1A:784:A:C8	1:1A:792:G:C5	3.08	0.42
1:1A:1080:C:H2'	1:1A:1081:U:O4'	2.20	0.42
1:1A:1810:A:C2'	1:1A:1811:G:H5'	2.50	0.42
1:1A:2291:U:O2'	1:1A:2374:C:O2	2.37	0.42
1:1A:2533:A:H2'	1:1A:2534:A:O4'	2.19	0.42
2:1B:75:G:H22	21:1Z:73:GLN:HE22	1.68	0.42
4:1E:109:LYS:HE2	4:1E:191:PRO:HA	2.01	0.42
6:1G:143:GLU:HA	26:14:31:ILE:HD11	2.02	0.42
8:1I:19:VAL:HG22	8:1I:20:ASP:H	1.84	0.42
26:14:40:HIS:CE1	26:14:42:PHE:HB3	2.54	0.42
32:1a:484:G:H8	32:1a:484:G:OP1	2.03	0.42
32:1a:881:G:H2'	32:1a:882:C:O4'	2.20	0.42
32:1a:1292:U:O2'	32:1a:1293:G:H5'	2.20	0.42
32:1a:1348:U:H4'	40:1i:120:ARG:HD2	2.00	0.42
32:1a:1402:4OC:O5'	32:1a:1402:4OC:H6	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:17:PHE:HA	33:1b:44:LEU:HD21	2.00	0.42
33:1b:178:ARG:NH1	33:1b:196:LEU:O	2.50	0.42
34:1c:53:ALA:HB2	34:1c:115:LEU:HD21	2.01	0.42
34:1c:63:ASN:HB2	34:1c:98:ASN:HB2	2.01	0.42
35:1d:76:ARG:O	35:1d:80:GLU:HG2	2.19	0.42
38:1g:69:VAL:O	38:1g:69:VAL:HG12	2.20	0.42
40:1i:29:ASN:C	40:1i:31:GLN:H	2.28	0.42
44:1m:4:ILE:HA	44:1m:5:ALA:HA	1.88	0.42
1:2A:108:U:H2'	1:2A:109:G:C8	2.55	0.42
1:2A:711:G:H2'	1:2A:712:G:O4'	2.20	0.42
1:2A:879:G:C6	1:2A:899:A:O4'	2.73	0.42
1:2A:1012:U:C4	9:2N:28:THR:HG21	2.54	0.42
1:2A:2203:U:O4'	3:2D:151:LYS:HE2	2.20	0.42
1:2A:2858:C:O5'	1:2A:2858:C:H6	2.02	0.42
5:2F:148:LEU:HD13	5:2F:154:VAL:HG21	2.01	0.42
6:2G:35:GLU:OE2	6:2G:36:LYS:HE3	2.20	0.42
6:2G:106:LEU:O	6:2G:110:ALA:HB3	2.20	0.42
10:2O:49:ARG:NH1	32:2a:1422:G:O3'	2.53	0.42
19:2X:64:LYS:HA	19:2X:64:LYS:HD3	1.79	0.42
20:2Y:7:VAL:CG1	20:2Y:27:VAL:HG21	2.50	0.42
24:22:44:LEU:HD23	24:22:47:ASN:HA	2.02	0.42
32:2a:1010:G:N1	32:2a:1020:U:H1'	2.35	0.42
32:2a:1103:C:C2	32:2a:1104:G:C8	3.08	0.42
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.19	0.42
32:2a:1254:C:O4'	32:2a:1356:G:H5"	2.20	0.42
34:2c:182:ILE:HG22	34:2c:203:PHE:HA	2.02	0.42
36:2e:129:ILE:O	36:2e:132:ALA:HB3	2.20	0.42
39:2h:39:LEU:HB3	39:2h:44:PHE:HB2	2.02	0.42
41:2j:42:THR:CB	41:2j:68:HIS:HA	2.47	0.42
48:2q:45:HIS:CD2	48:2q:47:PRO:HG3	2.54	0.42
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	2.00	0.42
54:2y:55:PSU:N1	54:2y:57:G:H5'	2.35	0.42
1:1A:897:C:C1'	54:1w:56:C:H5	2.33	0.42
1:1A:1062:G:P	1:1A:1070:A:O2'	2.78	0.42
1:1A:1063:G:H2'	1:1A:1064:C:C5	2.55	0.42
1:1A:2124:G:H1	1:1A:2174:C:N4	2.15	0.42
1:1A:2126:A:C2	1:1A:2162:G:N3	2.88	0.42
1:1A:2174:C:H6	1:1A:2174:C:OP2	2.02	0.42
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.19	0.42
2:1B:13:A:N1	2:1B:69:G:O2'	2.48	0.42
2:1B:29:A:H2'	2:1B:30:C:O4'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:99:GLU:O	8:1I:103:ARG:NH1	2.53	0.42
16:1U:76:TYR:CZ	16:1U:80:ILE:HG13	2.54	0.42
17:1V:1:MET:HA	17:1V:41:GLY:O	2.19	0.42
21:1Z:1:MET:HB3	21:1Z:2:GLU:HA	2.02	0.42
26:14:61:ARG:O	26:14:62:ARG:C	2.63	0.42
32:1a:10:A:OP2	36:1e:126:ARG:HD2	2.20	0.42
32:1a:986:A:H1'	50:1s:54:GLY:O	2.20	0.42
32:1a:1001(A):G:C2	32:1a:1002:G:H1'	2.54	0.42
32:1a:1007:C:H6	32:1a:1007:C:O5'	2.03	0.42
32:1a:1388:C:H2'	32:1a:1389:C:C6	2.53	0.42
34:1c:13:GLY:HA3	45:1n:57:ARG:NH1	2.35	0.42
35:1d:20:TYR:CD2	35:1d:20:TYR:N	2.88	0.42
38:1g:94:ARG:HH11	38:1g:94:ARG:HG3	1.85	0.42
38:1g:115:ARG:H	38:1g:115:ARG:HG2	1.74	0.42
40:1i:77:ILE:O	40:1i:79:LEU:N	2.53	0.42
54:1y:9:A:H4'	54:1y:46:G7M:OP2	2.20	0.42
1:2A:127:A:H5"	1:2A:128:C:C6	2.55	0.42
1:2A:320:A:H4'	1:2A:322:A:N7	2.35	0.42
1:2A:783:A:O2'	1:2A:785:G:OP1	2.30	0.42
1:2A:869:G:C6	1:2A:870:A:N7	2.88	0.42
1:2A:1509(B):A:H2'	1:2A:1510:G:H8	1.85	0.42
1:2A:2019:A:O4'	16:2U:34:LYS:HE2	2.20	0.42
1:2A:2135:A:OP1	1:2A:2160:G:H1'	2.20	0.42
1:2A:2155:G:H2'	1:2A:2156:G:H5'	2.01	0.42
7:2H:90:LYS:HE3	7:2H:163:TYR:CD2	2.55	0.42
11:2P:121:LYS:HE2	11:2P:123:LEU:HD11	2.02	0.42
21:2Z:6:LYS:HE2	21:2Z:6:LYS:N	2.34	0.42
21:2Z:51:ALA:O	21:2Z:55:HIS:HD2	2.03	0.42
26:24:14:ILE:O	26:24:21:VAL:HA	2.19	0.42
32:2a:119:A:C8	32:2a:288:A:N1	2.88	0.42
32:2a:452:A:HO2'	32:2a:453:A:H8	1.68	0.42
32:2a:1014:A:H5"	50:2s:14:HIS:CG	2.54	0.42
32:2a:1025:U:O2	32:2a:1026:G:N1	2.52	0.42
32:2a:1033:G:H2'	32:2a:1034:G:C8	2.54	0.42
32:2a:1191:A:H8	32:2a:1191:A:O5'	2.03	0.42
32:2a:1323:G:H4'	32:2a:1363:C:C2	2.54	0.42
32:2a:1406:U:O2	32:2a:1517:G:N2	2.47	0.42
32:2a:1413:A:H2'	32:2a:1414:U:O4'	2.20	0.42
36:2e:41:VAL:HG13	36:2e:67:VAL:HG13	2.02	0.42
41:2j:38:ILE:HG13	41:2j:71:LEU:HB3	2.01	0.42
42:2k:53:SER:O	42:2k:55:LYS:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:3:ARG:NH2	44:2m:11:ARG:HE	2.16	0.42
44:2m:82:MET:HE3	44:2m:93:ARG:N	2.35	0.42
47:2p:4:ILE:O	47:2p:66:PRO:HA	2.20	0.42
49:2r:25:THR:C	49:2r:26:LEU:HD12	2.45	0.42
49:2r:74:ARG:HG2	49:2r:80:PRO:O	2.19	0.42
54:2w:21:A:O2'	54:2w:22:G:OP1	2.34	0.42
55:2x:31:G:C8	55:2x:32:5MC:HM53	2.55	0.42
1:1A:588:U:H2'	1:1A:589:C:H6	1.84	0.42
1:1A:1104:C:H2'	1:1A:1105:U:C6	2.55	0.42
1:1A:2820:A:OP2	13:1R:2:ARG:NH2	2.53	0.42
61:1A:5949:HOH:O	9:1N:28:THR:HG23	2.19	0.42
6:1G:33:ARG:HG3	6:1G:162:THR:CG2	2.50	0.42
6:1G:110:ALA:HA	6:1G:140:ILE:O	2.19	0.42
8:1I:47:LEU:HD23	8:1I:47:LEU:HA	1.77	0.42
8:1I:68:LEU:O	8:1I:72:LEU:HB2	2.20	0.42
32:1a:172:A:N6	32:1a:174:C:O2	2.53	0.42
32:1a:670:G:H2'	32:1a:671:G:O4'	2.20	0.42
33:1b:51:LEU:HD23	33:1b:51:LEU:HA	1.89	0.42
33:1b:211:ILE:O	33:1b:215:LEU:HB2	2.20	0.42
44:1m:49:THR:OG1	44:1m:52:GLU:HG3	2.20	0.42
54:1y:1:G:H2'	54:1y:2:C:H6	1.83	0.42
54:1y:43:C:H2'	54:1y:44:G:C1'	2.49	0.42
1:2A:312:G:H4'	1:2A:331:A:N3	2.35	0.42
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.38	0.42
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.55	0.42
1:2A:1804:C:O5'	1:2A:1804:C:H6	2.01	0.42
1:2A:2533:A:O2'	1:2A:2664:G:H5"	2.20	0.42
1:2A:2584:U:H2'	1:2A:2585:U:H2'	2.02	0.42
1:2A:2820:A:C5	13:2R:4:LEU:HD11	2.54	0.42
6:2G:14:GLU:O	6:2G:18:GLU:HB2	2.20	0.42
16:2U:11:ARG:O	16:2U:15:LYS:HG3	2.19	0.42
20:2Y:37:VAL:HG21	20:2Y:72:VAL:HG21	2.02	0.42
22:20:70:GLN:HG2	22:20:72:ARG:CG	2.50	0.42
32:2a:429:U:C3'	35:2d:22:LYS:HZ1	2.28	0.42
32:2a:1166:G:C2	32:2a:1171:G:C6	3.08	0.42
32:2a:1263:C:H3'	32:2a:1263:C:H6	1.84	0.42
32:2a:1367:C:H5"	40:2i:114:TYR:CB	2.49	0.42
33:2b:51:LEU:O	33:2b:55:PHE:HB2	2.20	0.42
34:2c:138:VAL:O	34:2c:142:MET:HB2	2.20	0.42
39:2h:86:ILE:HD13	39:2h:86:ILE:HA	1.81	0.42
40:2i:3:GLN:HE21	40:2i:20:ARG:NH2	2.17	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2n:36:PHE:HD2	45:2n:37:PHE:CE2	2.38	0.42
54:2y:7:A:H5'	61:2y:203:HOH:O	2.19	0.42
54:2y:66:U:C4	54:2y:67:C:C4	3.07	0.42
1:1A:601:C:O2'	1:1A:605:C:H5"	2.19	0.42
1:1A:817:C:H4'	1:1A:932:G:C5	2.54	0.42
1:1A:1062:G:H22	1:1A:1077:A:N6	2.17	0.42
1:1A:1078:U:H5'	1:1A:1079:C:OP1	2.20	0.42
1:1A:1358:G:O2'	1:1A:1359:A:H5"	2.20	0.42
1:1A:1970:A:H4'	1:1A:1971:A:OP1	2.19	0.42
1:1A:2011:U:OP2	18:1W:16:LYS:NZ	2.51	0.42
1:1A:2147:G:H2'	1:1A:2148:G:H4'	2.01	0.42
1:1A:2156:G:OP2	1:1A:2156:G:H8	2.01	0.42
1:1A:2203:U:H4'	3:1D:151:LYS:HG2	2.02	0.42
4:1E:12:THR:CG2	4:1E:13:ARG:H	2.30	0.42
5:1F:9:ILE:HD12	5:1F:22:ALA:HB3	2.02	0.42
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.72	0.42
7:1H:56:SER:HB3	7:1H:61:HIS:ND1	2.35	0.42
11:1P:77:ARG:HB2	11:1P:78:PRO:HD2	2.01	0.42
11:1P:132:LYS:O	11:1P:136:GLU:HG3	2.20	0.42
14:1S:27:SER:O	14:1S:37:ALA:HA	2.20	0.42
28:16:8:LYS:HE2	30:18:34:TRP:CE3	2.54	0.42
32:1a:375:U:C2	32:1a:376:G:C8	3.07	0.42
32:1a:1342:C:O2'	40:1i:124:GLN:HG3	2.20	0.42
35:1d:8:VAL:O	35:1d:11:LEU:HB2	2.19	0.42
38:1g:51:GLN:O	38:1g:55:GLY:HA2	2.20	0.42
54:1y:19:G:O4'	54:1y:57:G:N1	2.53	0.42
54:1y:34:G:H3'	54:1y:35:A:H8	1.84	0.42
1:2A:72:U:OP2	24:22:29:LYS:NZ	2.48	0.42
1:2A:324:A:N6	1:2A:338:G:O2'	2.52	0.42
1:2A:897:C:H6	1:2A:897:C:O5'	2.03	0.42
1:2A:2577:A:OP1	61:2A:3953:HOH:O	2.22	0.42
3:2D:132:PRO:HG3	3:2D:190:TYR:CE2	2.55	0.42
6:2G:35:GLU:HB3	6:2G:160:VAL:HG23	2.02	0.42
6:2G:95:ARG:O	6:2G:99:MET:HB3	2.19	0.42
7:2H:113:VAL:HG11	7:2H:151:ILE:HG12	2.01	0.42
7:2H:127:GLU:C	7:2H:129:THR:N	2.78	0.42
8:2I:29:TYR:CD2	8:2I:30:LEU:HD23	2.55	0.42
26:24:50:VAL:HG11	44:2m:64:TRP:C	2.45	0.42
28:26:53:LYS:HB3	28:26:53:LYS:HE2	1.78	0.42
32:2a:1272:G:N2	32:2a:1273:G:C4	2.88	0.42
32:2a:1351:U:H4'	38:2g:33:ASP:OD1	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:125:HIS:HD2	35:2d:152:SER:OG	2.03	0.42
43:2l:57:LYS:HA	43:2l:67:THR:HA	2.02	0.42
1:1A:207:A:H2'	1:1A:208:C:O4'	2.19	0.41
1:1A:861:A:H2'	1:1A:862:G:O4'	2.20	0.41
1:1A:958:U:H4'	61:1A:4351:HOH:O	2.19	0.41
1:1A:2352:A:N6	1:1A:2365:G:O2'	2.53	0.41
1:1A:2577:A:OP2	27:15:3:LYS:NZ	2.46	0.41
5:1F:29:ASN:H	5:1F:112:MET:HE3	1.85	0.41
12:1Q:51:ARG:HD3	12:1Q:66:ILE:HD11	2.02	0.41
21:1Z:52:SER:C	21:1Z:54:HIS:N	2.77	0.41
21:1Z:150:LEU:HD12	21:1Z:154:ASP:HB2	2.01	0.41
32:1a:192:U:H2'	32:1a:193:C:H6	1.84	0.41
32:1a:789:U:H2'	32:1a:791:G:OP2	2.20	0.41
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.55	0.41
32:1a:1433:A:C6	32:1a:1468:A:C4	3.08	0.41
34:1c:116:VAL:O	34:1c:120:VAL:HG22	2.20	0.41
43:1l:113:ARG:NE	43:1l:115:LYS:O	2.46	0.41
1:2A:345:A:N3	1:2A:346:A:N6	2.68	0.41
1:2A:514:A:N3	1:2A:581:C:O2'	2.48	0.41
1:2A:620:G:H4'	1:2A:621:A:H5"	2.01	0.41
1:2A:881:G:N3	1:2A:881:G:H2'	2.36	0.41
1:2A:920:G:H2'	1:2A:921:G:H8	1.85	0.41
1:2A:974:G:OP1	1:2A:1187:G:O2'	2.29	0.41
1:2A:1151:G:C2	1:2A:1152:C:C2	3.08	0.41
1:2A:1812:A:H5"	61:2A:3908:HOH:O	2.19	0.41
2:2B:115:G:O4'	14:2S:47:THR:HB	2.19	0.41
6:2G:101:ILE:O	6:2G:105:LYS:HG3	2.20	0.41
8:2I:113:ARG:O	8:2I:130:TYR:CD1	2.73	0.41
10:2O:2:ILE:HB	10:2O:33:ALA:HB3	2.01	0.41
21:2Z:11:GLU:OE1	21:2Z:11:GLU:HA	2.20	0.41
31:29:10:ILE:HG21	31:29:32:HIS:CD2	2.55	0.41
32:2a:473:G:C2	32:2a:474:G:C5	3.08	0.41
32:2a:629:G:H2'	32:2a:630:G:O4'	2.20	0.41
32:2a:693:G:H2'	32:2a:694:A:C8	2.54	0.41
32:2a:811:C:H4'	32:2a:900:A:N6	2.35	0.41
32:2a:954:G:H2'	32:2a:955:U:H6	1.83	0.41
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.55	0.41
32:2a:1055:A:C5	32:2a:1206:G:C2	3.08	0.41
32:2a:1318:A:H1'	50:2s:37:ARG:HE	1.85	0.41
32:2a:1503:A:C2	53:2v:13:A:C5	3.08	0.41
35:2d:134:ASP:O	35:2d:136:PRO:HD3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:12:LEU:HD22	36:2e:12:LEU:HA	1.87	0.41
38:2g:79:ARG:H	38:2g:79:ARG:HG3	1.70	0.41
40:2i:31:GLN:NE2	40:2i:36:TYR:HD1	2.08	0.41
40:2i:48:GLU:N	40:2i:49:PRO:CD	2.83	0.41
41:2j:32:ALA:HA	41:2j:33:GLN:HA	1.73	0.41
1:1A:84:A:OP2	20:1Y:8:LYS:NZ	2.28	0.41
1:1A:1665:A:C2'	1:1A:1666:G:H5'	2.51	0.41
7:1H:159:GLU:HG3	7:1H:169:VAL:HG11	2.02	0.41
11:1P:1:MET:HB2	11:1P:1:MET:HE3	1.60	0.41
11:1P:97:PRO:HD3	11:1P:126:VAL:O	2.20	0.41
23:11:52:ARG:HE	23:11:52:ARG:HB2	1.67	0.41
30:18:62:LEU:HB3	30:18:65:GLU:HG2	2.02	0.41
32:1a:232:G:H1'	32:1a:262:A:N1	2.34	0.41
32:1a:458:C:H2'	32:1a:460:G:O4'	2.20	0.41
32:1a:616:G:C2	32:1a:617:G:N7	2.88	0.41
32:1a:799:G:C2'	32:1a:800:G:H5'	2.50	0.41
32:1a:910:C:P	43:1l:97:ARG:HH22	2.42	0.41
32:1a:1323:G:H4'	32:1a:1363:C:N3	2.34	0.41
32:1a:1360:A:OP2	45:1n:35:ARG:NH2	2.53	0.41
33:1b:55:PHE:HD1	33:1b:221:LEU:HD22	1.84	0.41
34:1c:124:ILE:O	34:1c:127:ARG:N	2.44	0.41
35:1d:155:LEU:O	35:1d:159:ARG:HG3	2.20	0.41
41:1j:5:ARG:HG3	41:1j:71:LEU:HD11	2.02	0.41
43:1l:52:LEU:O	43:1l:54:LYS:NZ	2.40	0.41
1:2A:72:U:OP1	61:2A:3951:HOH:O	2.21	0.41
1:2A:81:G:HO2'	1:2A:295:G:HO2'	1.55	0.41
1:2A:612:C:C2	1:2A:616:G:N2	2.88	0.41
1:2A:797:C:H6	1:2A:797:C:O5'	2.03	0.41
1:2A:848:G:C2	1:2A:933:A:H1'	2.56	0.41
1:2A:909:A:C5	1:2A:912:C:C4	3.08	0.41
1:2A:1324:G:C2	1:2A:1331:A:C2	3.08	0.41
1:2A:1561:G:H2'	1:2A:1562:A:C8	2.54	0.41
1:2A:2184:G:O2'	1:2A:2185:C:H5'	2.20	0.41
1:2A:2265:U:OP2	1:2A:2266:A:O2'	2.32	0.41
1:2A:2525:G:C2	1:2A:2539:C:C2	3.08	0.41
1:2A:2723:C:OP2	4:2E:109:LYS:NZ	2.48	0.41
1:2A:2740:A:C6	1:2A:2741:A:C6	3.08	0.41
2:2B:80:U:OP1	2:2B:80:U:C5'	2.68	0.41
4:2E:16:ARG:NH1	4:2E:173:VAL:HG13	2.35	0.41
7:2H:27:LYS:HB2	7:2H:27:LYS:HE3	1.74	0.41
8:2I:77:LEU:CD2	8:2I:78:THR:H	2.33	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:7:TYR:HE2	10:2O:20:MET:HE3	1.85	0.41
13:2R:104:ARG:HG3	13:2R:111:LEU:HD21	2.02	0.41
21:2Z:72:ARG:HD3	21:2Z:89:PHE:CD2	2.55	0.41
32:2a:232:G:O2'	32:2a:263:A:N1	2.48	0.41
32:2a:289:G:OP2	61:2a:1917:HOH:O	2.22	0.41
32:2a:357:G:OP1	32:2a:367:U:H5"	2.20	0.41
32:2a:407:G:H5"	35:2d:115:ARG:HB3	2.02	0.41
32:2a:458:C:H2'	32:2a:460:G:O4'	2.21	0.41
32:2a:512:U:H2'	32:2a:513:C:C6	2.56	0.41
32:2a:965:A:H4'	32:2a:966:M2G:OP1	2.20	0.41
32:2a:1065:U:H3	32:2a:1109:C:H5"	1.85	0.41
32:2a:1280:A:O2'	32:2a:1281:U:H5'	2.20	0.41
33:2b:82:ARG:HB3	33:2b:94:ASN:OD1	2.20	0.41
36:2e:34:VAL:O	36:2e:41:VAL:HA	2.20	0.41
38:2g:108:ALA:O	38:2g:119:ARG:HD2	2.20	0.41
39:2h:7:ALA:O	39:2h:11:THR:OG1	2.27	0.41
41:2j:6:ILE:N	41:2j:72:VAL:O	2.44	0.41
42:2k:110:ASP:HB3	49:2r:85:LEU:HB3	2.02	0.41
44:2m:67:GLU:N	44:2m:70:LEU:HB3	2.35	0.41
45:2n:23:ARG:CZ	45:2n:30:ALA:HB2	2.50	0.41
48:2q:40:LYS:HE2	48:2q:42:TYR:CE1	2.55	0.41
51:2t:90:GLN:O	51:2t:93:GLU:HG3	2.20	0.41
1:1A:483:A:H5"	20:1Y:50:ARG:NE	2.36	0.41
1:1A:721:C:H2'	1:1A:722:A:H8	1.82	0.41
2:1B:73:A:C4	2:1B:105:A:C2	3.09	0.41
2:1B:94:C:H2'	2:1B:95:C:C6	2.55	0.41
3:1D:275:LYS:HG2	3:1D:276:LYS:HB2	2.01	0.41
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.53	0.41
6:1G:47:LYS:O	6:1G:86:MET:HE2	2.20	0.41
7:1H:56:SER:OG	7:1H:57:ASP:N	2.52	0.41
12:1Q:17:LEU:HD23	12:1Q:17:LEU:HA	1.93	0.41
16:1U:60:LEU:O	16:1U:60:LEU:HG	2.15	0.41
19:1X:47:PHE:O	19:1X:49:VAL:HG13	2.20	0.41
32:1a:60:A:H4'	32:1a:61:G:H5'	2.02	0.41
32:1a:292:G:N7	32:1a:293:G:H1'	2.35	0.41
32:1a:679:C:H2'	32:1a:680:C:H6	1.85	0.41
32:1a:1054:C:P	61:1a:1934:HOH:O	2.78	0.41
32:1a:1179:A:O3'	40:1i:103:THR:HB	2.20	0.41
32:1a:1250:A:H2'	32:1a:1251:A:C8	2.55	0.41
33:1b:54:THR:O	33:1b:58:ILE:HG13	2.21	0.41
34:1c:52:LEU:HD13	34:1c:70:VAL:HG23	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:12:U:O2	1:2A:12:U:H2'	2.19	0.41
1:2A:271(W):G:O6	1:2A:271(X):G:N1	2.53	0.41
1:2A:1721:G:C2	1:2A:1739:U:OP2	2.73	0.41
1:2A:1913:A:C8	32:2a:1494:G:H4'	2.55	0.41
5:2F:137:LYS:H	5:2F:137:LYS:HG2	1.62	0.41
26:24:57:GLU:CB	26:24:58:ARG:HH11	2.33	0.41
32:2a:409:G:H2'	32:2a:410:G:O4'	2.20	0.41
32:2a:453:A:H4'	47:2p:72:ARG:HD2	2.02	0.41
32:2a:668:G:O2'	46:2o:46:HIS:HB3	2.18	0.41
32:2a:834:C:C2	32:2a:853:G:C2	3.08	0.41
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.55	0.41
34:2c:18:TRP:O	34:2c:21:ARG:HD3	2.20	0.41
38:2g:31:MET:SD	38:2g:36:LYS:HB2	2.60	0.41
1:1A:229:A:OP1	1:1A:229:A:C8	2.73	0.41
1:1A:1035:U:H2'	1:1A:1036:G:C8	2.55	0.41
1:1A:1104:C:H2'	1:1A:1105:U:O4'	2.20	0.41
1:1A:1705:G:C6	1:1A:1706:U:C4	3.08	0.41
1:1A:2127:G:C4	1:1A:2162:G:C2	3.08	0.41
1:1A:2171:A:H1'	1:1A:2172:U:O4'	2.20	0.41
6:1G:132:ASN:HA	6:1G:157:ILE:O	2.20	0.41
7:1H:11:VAL:HA	7:1H:12:PRO:HD3	1.93	0.41
10:1O:12:ASP:OD1	10:1O:12:ASP:C	2.64	0.41
32:1a:130:A:N3	32:1a:263:A:O2'	2.45	0.41
32:1a:184:G:H8	32:1a:184:G:O5'	2.02	0.41
32:1a:866:C:C4	32:1a:867:G:H1'	2.55	0.41
32:1a:919:A:O2'	32:1a:920:U:H5'	2.21	0.41
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	2.02	0.41
32:1a:1072:G:H2'	32:1a:1073:U:C6	2.55	0.41
33:1b:201:ILE:HG21	33:1b:214:ILE:HG21	2.01	0.41
35:1d:178:VAL:HG12	35:1d:179:GLU:H	1.85	0.41
42:1k:38:ASN:HA	42:1k:39:PRO:HD3	1.86	0.41
1:2A:95:G:N2	1:2A:96:G:H1'	2.35	0.41
1:2A:116:C:H2'	1:2A:117:G:O4'	2.20	0.41
1:2A:139(A):G:O2'	1:2A:140:G:H5'	2.19	0.41
1:2A:1016:G:C2	1:2A:1017:G:C8	3.09	0.41
1:2A:1803:A:H4'	3:2D:259:THR:CG2	2.50	0.41
1:2A:1857:G:C6	1:2A:1858:G:N1	2.88	0.41
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.50	0.41
1:2A:2785:C:OP1	4:2E:41:LYS:HE3	2.20	0.41
1:2A:2811:G:N2	1:2A:2891:G:H1'	2.35	0.41
2:2B:39:A:C2	2:2B:40:U:C4	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:176:ILE:HB	4:2E:181:LEU:HB2	2.01	0.41
9:2N:34:LEU:HA	9:2N:34:LEU:HD23	1.80	0.41
9:2N:67:LEU:HB3	9:2N:88:GLU:HG2	2.02	0.41
10:2O:106:LEU:HD23	10:2O:106:LEU:HA	1.83	0.41
31:29:7:VAL:HA	31:29:34:GLN:OE1	2.21	0.41
32:2a:191:G:C6	32:2a:192:U:C4	3.09	0.41
32:2a:659:U:C2	32:2a:660:G:C8	3.09	0.41
32:2a:826:C:H2'	32:2a:827:U:C6	2.55	0.41
32:2a:833:U:C2	32:2a:834:C:C5	3.07	0.41
32:2a:892:A:O2'	32:2a:1415:G:H4'	2.21	0.41
32:2a:975:A:C4'	32:2a:976:G:H5"	2.39	0.41
32:2a:1353:G:OP1	52:2u:10:ARG:NH1	2.52	0.41
33:2b:78:GLN:HE22	33:2b:95:GLN:HE22	1.69	0.41
35:2d:45:GLN:HE21	35:2d:45:GLN:HB3	1.65	0.41
36:2e:123:LEU:HD23	36:2e:123:LEU:HA	1.82	0.41
36:2e:152:ARG:HG2	39:2h:42:GLU:O	2.20	0.41
38:2g:79:ARG:CZ	38:2g:80:VAL:HG22	2.50	0.41
38:2g:111:ARG:NH2	38:2g:126:ASP:OD2	2.53	0.41
47:2p:75:ARG:O	47:2p:78:GLY:N	2.46	0.41
54:2y:7:A:H8	54:2y:7:A:OP2	2.02	0.41
1:1A:478:A:N1	1:1A:500:G:H4'	2.35	0.41
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.55	0.41
1:1A:2183:C:H2'	1:1A:2184:G:C8	2.50	0.41
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.56	0.41
4:1E:37:ARG:HA	4:1E:42:ASP:OD2	2.20	0.41
26:14:13:ARG:NH1	26:14:23:GLU:HG2	2.35	0.41
32:1a:591:U:H2'	32:1a:592:G:H8	1.86	0.41
32:1a:659:U:N3	32:1a:660:G:N7	2.69	0.41
32:1a:684:A:N6	32:1a:685:G:O6	2.53	0.41
32:1a:975:A:H5'	32:1a:975:A:H8	1.86	0.41
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.56	0.41
32:1a:1136:U:H5"	32:1a:1137:C:C2	2.56	0.41
33:1b:91:PRO:HG3	33:1b:154:LEU:HB2	2.02	0.41
39:1h:40:ALA:HA	39:1h:45:ILE:HG13	2.02	0.41
55:1x:45:G:H8	55:1x:45:G:O5'	2.03	0.41
54:1y:33:U:H2'	54:1y:34:G:H5"	2.01	0.41
1:2A:96:G:H4'	24:22:48:HIS:NE2	2.35	0.41
1:2A:248:G:H5'	1:2A:250:G:N7	2.35	0.41
1:2A:570:G:H2'	1:2A:2030:A:C5	2.55	0.41
1:2A:631:A:H2'	1:2A:632:A:O4'	2.21	0.41
1:2A:676:A:H2	1:2A:2069:G:N3	2.18	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:821:A:N1	61:2A:4032:HOH:O	2.37	0.41
1:2A:1163:G:C2	1:2A:1164:G:C8	3.08	0.41
1:2A:1508:A:H5'	1:2A:1509(A):A:C8	2.56	0.41
8:2I:8:PRO:C	8:2I:9:LEU:HD12	2.45	0.41
8:2I:43:ASN:ND2	23:21:75:GLU:OE2	2.53	0.41
14:2S:52:SER:HB2	14:2S:55:ALA:H	1.86	0.41
19:2X:90:GLU:C	19:2X:92:LEU:H	2.28	0.41
20:2Y:8:LYS:HB3	20:2Y:8:LYS:HE3	1.85	0.41
32:2a:161:A:H2'	32:2a:162:A:C8	2.55	0.41
32:2a:161:A:H2'	32:2a:162:A:H8	1.85	0.41
32:2a:1327:C:H2'	32:2a:1328:C:H6	1.85	0.41
32:2a:1359:C:H1'	32:2a:1362:C:N4	2.36	0.41
34:2c:156:ARG:HB3	34:2c:156:ARG:HE	1.57	0.41
36:2e:10:MET:HA	36:2e:32:VAL:HG23	2.01	0.41
39:2h:31:PHE:O	39:2h:35:ILE:HG13	2.20	0.41
39:2h:49:GLU:OE2	39:2h:62:TYR:OH	2.22	0.41
43:2l:92:0TD:H4	43:2l:92:0TD:H8	1.76	0.41
45:2n:32:SER:O	45:2n:40:CYS:HA	2.21	0.41
1:1A:485:C:O2'	1:1A:486:C:H5'	2.19	0.41
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.53	0.41
1:1A:1391:U:H2'	1:1A:1393:A:OP2	2.20	0.41
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.56	0.41
1:1A:2790:A:H5"	1:1A:2791:C:H5"	2.03	0.41
7:1H:19:VAL:HG12	7:1H:20:ALA:N	2.35	0.41
32:1a:629:G:H2'	32:1a:630:G:O4'	2.21	0.41
32:1a:1154:G:C4	32:1a:1155:G:C8	3.09	0.41
32:1a:1225:A:H2'	32:1a:1226:C:C5	2.56	0.41
33:1b:70:PHE:O	33:1b:92:TYR:HA	2.20	0.41
33:1b:208:ILE:HD13	33:1b:208:ILE:H	1.85	0.41
34:1c:19:GLU:HG2	34:1c:54:ARG:NH1	2.36	0.41
47:1p:74:LEU:O	47:1p:79:VAL:HG23	2.21	0.41
48:1q:5:VAL:O	48:1q:6:LEU:HD23	2.20	0.41
48:1q:78:GLU:HG2	48:1q:81:ARG:HG2	2.03	0.41
52:1u:2:GLY:C	52:1u:4:GLY:H	2.28	0.41
54:1y:34:G:C2	54:1y:35:A:C4	3.08	0.41
1:2A:263:C:H2'	1:2A:264:C:O4'	2.20	0.41
1:2A:493:G:H2'	1:2A:494:G:O4'	2.19	0.41
1:2A:1160:G:C6	1:2A:1161:C:N3	2.88	0.41
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.20	0.41
1:2A:1557:C:H2'	1:2A:1558:A:C2	2.56	0.41
1:2A:1669:A:H5"	1:2A:2550:G:OP1	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2080:G:N2	1:2A:2241:A:C4	2.89	0.41
1:2A:2297:C:H2'	1:2A:2298:A:C8	2.55	0.41
1:2A:2467:C:H5'	12:2Q:123:HIS:CE1	2.55	0.41
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.55	0.41
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.20	0.41
1:2A:2807:G:C2	1:2A:2808:U:H1'	2.56	0.41
1:2A:2838:G:C6	1:2A:2839:G:C5	3.09	0.41
1:2A:2893:G:H5"	1:2A:2894:G:O4'	2.20	0.41
2:2B:6:C:H2'	2:2B:7:G:O4'	2.20	0.41
4:2E:144:ARG:HG2	4:2E:145:LYS:H	1.86	0.41
6:2G:60:LEU:O	6:2G:60:LEU:HD23	2.21	0.41
8:2I:66:GLU:HA	8:2I:69:LYS:CB	2.51	0.41
10:2O:68:GLU:CB	10:2O:78:ARG:HB2	2.50	0.41
32:2a:114:U:H2'	32:2a:115:G:C8	2.55	0.41
32:2a:164:U:H2'	32:2a:165:C:C6	2.55	0.41
32:2a:390:C:H2'	32:2a:391:G:C8	2.56	0.41
32:2a:751:U:H4'	46:2o:24:SER:HA	2.03	0.41
32:2a:836:G:OP2	49:2r:61:LYS:HE3	2.21	0.41
32:2a:865:A:H5'	32:2a:1078:U:C5	2.55	0.41
32:2a:1057:G:C4	32:2a:1204:A:C2	3.09	0.41
32:2a:1239:A:O2'	38:2g:114:ARG:O	2.36	0.41
32:2a:1338:G:H2'	32:2a:1339:A:H8	1.84	0.41
33:2b:53:ARG:HB3	33:2b:53:ARG:NH1	2.36	0.41
34:2c:134:ILE:HG22	34:2c:168:ALA:HB3	2.02	0.41
34:2c:173:VAL:O	34:2c:175:LEU:HD12	2.21	0.41
35:2d:178:VAL:H	35:2d:178:VAL:HG23	1.57	0.41
39:2h:136:GLU:O	39:2h:136:GLU:HG3	2.20	0.41
47:2p:14:ASN:N	47:2p:15:PRO:HD3	2.35	0.41
50:2s:52:TYR:CD1	50:2s:57:HIS:CD2	3.08	0.41
1:1A:225:A:O2'	1:1A:257:A:H4'	2.20	0.41
1:1A:686:G:H4'	1:1A:687:C:OP2	2.21	0.41
1:1A:1079:C:H2'	1:1A:1080:C:O4'	2.20	0.41
1:1A:1279:G:O2'	1:1A:1280:G:H5'	2.21	0.41
1:1A:1815:A:H8	1:1A:1815:A:OP1	2.04	0.41
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.56	0.41
1:1A:2790:A:H5'	1:1A:2893:G:H21	1.85	0.41
9:1N:73:THR:HA	9:1N:83:LYS:O	2.21	0.41
10:1O:69:ILE:HD11	10:1O:105:GLU:OE2	2.20	0.41
32:1a:1070:U:OP1	36:1e:18:ARG:NH2	2.48	0.41
32:1a:1164:G:H2'	32:1a:1165:C:H6	1.85	0.41
32:1a:1194:U:H2'	32:1a:1195:C:C6	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1220:G:N2	50:1s:54:GLY:O	2.50	0.41
33:1b:21:ARG:HB2	33:1b:38:GLY:O	2.20	0.41
37:1f:36:ARG:NH2	37:1f:66:GLU:OE2	2.54	0.41
41:1j:7:LYS:HE2	41:1j:40:LEU:CD1	2.51	0.41
43:1l:69:TYR:HE2	43:1l:71:PRO:HA	1.85	0.41
45:1n:48:ALA:HB2	45:1n:53:LEU:HD12	2.03	0.41
46:1o:82:ILE:O	46:1o:86:GLY:N	2.52	0.41
50:1s:47:HIS:O	50:1s:62:ILE:HD12	2.21	0.41
1:2A:34:C:O2'	1:2A:35:G:OP1	2.31	0.41
1:2A:332:A:C6	1:2A:335:C:C2	3.09	0.41
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.56	0.41
1:2A:1576:U:H2'	1:2A:1577:C:H6	1.86	0.41
1:2A:1721:G:H8	1:2A:1741:A:H62	1.67	0.41
1:2A:2331:G:C6	1:2A:2332:U:C4	3.09	0.41
2:2B:52:A:N6	14:2S:33:LYS:HG3	2.35	0.41
4:2E:177:PRO:HD2	4:2E:178:GLU:OE1	2.21	0.41
5:2F:120:GLU:HG3	5:2F:122:LYS:CG	2.51	0.41
5:2F:192:LEU:HD13	5:2F:194:MET:HE2	2.02	0.41
6:2G:50:ALA:O	6:2G:52:ILE:N	2.51	0.41
7:2H:3:ARG:HG2	7:2H:6:ARG:HB2	2.02	0.41
11:2P:45:LEU:HD12	11:2P:45:LEU:HA	1.54	0.41
25:23:15:TYR:CE2	25:23:53:LEU:HD21	2.56	0.41
32:2a:520:A:OP2	43:2l:51:ALA:HB1	2.21	0.41
32:2a:540:G:H2'	32:2a:541:G:O4'	2.20	0.41
32:2a:1089:G:H1	32:2a:1096:C:N4	2.17	0.41
33:2b:178:ARG:HH22	39:2h:68:ARG:HH22	1.67	0.41
36:2e:76:ILE:HD12	36:2e:78:HIS:O	2.20	0.41
37:2f:7:ASN:HD22	37:2f:7:ASN:N	2.18	0.41
44:2m:20:THR:C	44:2m:22:ILE:H	2.28	0.41
1:1A:205:G:O6	23:11:39:LYS:NZ	2.46	0.41
1:1A:566:U:H2'	1:1A:567:A:O4'	2.21	0.41
1:1A:773:U:OP1	61:1A:4247:HOH:O	2.22	0.41
1:1A:1027:A:C6	1:1A:1126:A:C4	3.09	0.41
1:1A:2157:G:H4'	1:1A:2158:A:OP1	2.20	0.41
1:1A:2576:G:H1'	61:1A:4416:HOH:O	2.21	0.41
2:1B:11:C:P	22:10:72:ARG:HH21	2.42	0.41
15:1T:113:LYS:O	15:1T:114:LEU:HD23	2.20	0.41
23:11:85:LEU:HD22	23:11:89:GLU:HB3	2.02	0.41
28:16:35:GLU:OE2	28:16:50:ARG:NH1	2.38	0.41
32:1a:198:G:C5	32:1a:220:G:C2	3.08	0.41
32:1a:626:U:H2'	32:1a:627:G:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:651:C:O2'	32:1a:652:U:H5'	2.20	0.41
32:1a:890:G:O2'	32:1a:906:G:O6	2.35	0.41
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.55	0.41
33:1b:55:PHE:HA	33:1b:58:ILE:HD12	2.02	0.41
33:1b:204:ASN:OD1	33:1b:205:ASP:N	2.54	0.41
35:1d:79:PHE:O	35:1d:83:SER:OG	2.39	0.41
39:1h:124:ALA:O	39:1h:128:GLY:N	2.54	0.41
40:1i:48:GLU:N	40:1i:49:PRO:CD	2.84	0.41
42:1k:73:MET:O	42:1k:75:TYR:N	2.54	0.41
44:1m:24:GLY:O	44:1m:25:ILE:HD13	2.21	0.41
49:1r:31:LEU:HD23	49:1r:31:LEU:H	1.85	0.41
54:1w:11:C:H6	54:1w:11:C:O5'	2.04	0.41
1:2A:52:A:C5	1:2A:118:A:C2	3.09	0.41
1:2A:108:U:H2'	1:2A:109:G:H8	1.85	0.41
1:2A:265:A:C8	1:2A:266:G:H1'	2.55	0.41
1:2A:510:C:H2'	1:2A:511:U:O4'	2.20	0.41
1:2A:912:C:N3	1:2A:913:U:C5	2.89	0.41
1:2A:1453:U:H3'	61:2A:3948:HOH:O	2.20	0.41
1:2A:2292:C:H4'	1:2A:2375:G:H4'	2.03	0.41
1:2A:2345:G:N3	1:2A:2381:C:H2'	2.36	0.41
1:2A:2416:C:O2'	1:2A:2417:C:H5'	2.19	0.41
2:2B:6:C:C2	2:2B:116:G:N2	2.89	0.41
3:2D:132:PRO:HD3	3:2D:190:TYR:CE1	2.56	0.41
4:2E:59:VAL:HG23	4:2E:64:LYS:HE3	2.03	0.41
11:2P:52:GLU:OE1	11:2P:55:ARG:NH2	2.46	0.41
17:2V:6:LYS:HG3	17:2V:7:THR:N	2.36	0.41
18:2W:86:LEU:HD23	18:2W:88:ARG:HD3	2.03	0.41
19:2X:12:VAL:HB	19:2X:27:THR:HG22	2.03	0.41
20:2Y:43:ASN:HB2	20:2Y:67:LEU:HD21	2.02	0.41
32:2a:283:C:H2'	32:2a:284:G:O4'	2.21	0.41
32:2a:867:G:N2	32:2a:868:C:C2	2.88	0.41
32:2a:945:G:H2'	32:2a:945:G:N3	2.35	0.41
32:2a:1007:C:C4	32:2a:1008:C:C5	3.09	0.41
32:2a:1326:C:H2'	32:2a:1327:C:H6	1.84	0.41
32:2a:1347:G:O2'	32:2a:1373:G:N1	2.51	0.41
34:2c:159:GLY:HA2	34:2c:193:TYR:CZ	2.56	0.41
35:2d:61:LYS:HD3	35:2d:206:PHE:CE2	2.55	0.41
37:2f:67:MET:HE1	37:2f:75:LEU:HD22	2.03	0.41
38:2g:98:SER:HA	38:2g:101:LEU:HD12	2.03	0.41
43:2l:91:LYS:O	43:2l:91:LYS:HG3	2.19	0.41
44:2m:95:GLY:O	44:2m:110:ARG:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2n:24:CYS:HB2	45:2n:40:CYS:HB3	2.03	0.41
55:2x:76:31H:HE3	55:2x:76:31H:HB3	1.82	0.41
54:2y:2:C:H2'	54:2y:3:C:H6	1.86	0.41
54:2y:31:A:C2	54:2y:32:PSU:H1'	2.56	0.41
1:1A:171:G:O2'	1:1A:172:C:H5'	2.21	0.41
1:1A:375:C:H2'	1:1A:376:C:C6	2.56	0.41
1:1A:624:C:O2'	1:1A:657:U:OP1	2.38	0.41
1:1A:647:G:H2'	1:1A:648:G:O4'	2.21	0.41
1:1A:1379:A:H8	1:1A:1379:A:O5'	2.04	0.41
1:1A:1529:G:H2'	1:1A:1530:C:H6	1.86	0.41
1:1A:2040:C:H2'	1:1A:2041:U:O4'	2.21	0.41
1:1A:2319:G:H22	14:1S:3:ARG:CD	2.34	0.41
1:1A:2328:A:H2'	1:1A:2329:G:H8	1.84	0.41
3:1D:8:PRO:CB	3:1D:14:ARG:HG2	2.50	0.41
4:1E:79:ARG:HD3	4:1E:79:ARG:HA	1.88	0.41
4:1E:181:LEU:HD23	4:1E:181:LEU:HA	1.78	0.41
5:1F:148:LEU:HD23	5:1F:191:ARG:HH11	1.85	0.41
6:1G:60:LEU:HD12	6:1G:60:LEU:HA	1.89	0.41
9:1N:62:VAL:HG22	9:1N:66:LYS:HD2	2.03	0.41
9:1N:111:PRO:HA	9:1N:114:ARG:NH1	2.36	0.41
14:1S:101:LEU:O	14:1S:101:LEU:HD23	2.21	0.41
16:1U:90:VAL:HG12	16:1U:95:LEU:HD13	2.03	0.41
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	2.03	0.41
21:1Z:1:MET:HA	21:1Z:55:HIS:HB3	2.02	0.41
22:10:21:LEU:HD23	22:10:21:LEU:HA	1.86	0.41
30:18:58:ILE:HA	30:18:61:LEU:HD12	2.03	0.41
32:1a:189(F):U:O4	48:1q:72:ARG:NH2	2.54	0.41
32:1a:190:U:H2'	32:1a:191:G:H8	1.85	0.41
32:1a:257:G:C6	32:1a:258:G:C5	3.09	0.41
32:1a:310:G:OP2	47:1p:27:LYS:HE2	2.21	0.41
32:1a:433:C:H2'	32:1a:434:U:H6	1.85	0.41
32:1a:911:U:H2'	32:1a:912:C:C6	2.56	0.41
32:1a:922:G:C6	32:1a:923:A:C6	3.08	0.41
32:1a:947:G:C6	32:1a:948:C:C4	3.08	0.41
32:1a:1033:G:H3'	32:1a:1034:G:H8	1.85	0.41
32:1a:1060:C:OP1	45:1n:45:ARG:NH2	2.40	0.41
33:1b:16:HIS:CD2	33:1b:17:PHE:H	2.38	0.41
33:1b:37:ASN:HD22	33:1b:41:ILE:HD11	1.86	0.41
33:1b:158:LEU:HD13	33:1b:182:ILE:HD11	2.03	0.41
34:1c:43:LEU:O	34:1c:47:LEU:N	2.34	0.41
34:1c:61:ALA:C	34:1c:63:ASN:H	2.29	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:48:ALA:HB3	36:1e:54:ALA:HB2	2.02	0.41
41:1j:40:LEU:HD12	41:1j:69:ASN:HB3	2.02	0.41
41:1j:49:VAL:CG2	45:1n:41:ARG:HB2	2.47	0.41
45:1n:43:CYS:O	45:1n:44:LEU:C	2.64	0.41
46:1o:7:GLU:H	46:1o:7:GLU:HG3	1.51	0.41
54:1w:30:G:O2'	54:1w:31:A:H5'	2.19	0.41
54:1w:63:G:H2'	54:1w:64:A:O4'	2.21	0.41
54:1y:35:A:H5'	54:1y:36:A:OP2	2.21	0.41
1:2A:107:C:H2'	1:2A:108:U:C6	2.55	0.41
1:2A:297:C:OP1	20:2Y:87:LYS:HE3	2.21	0.41
1:2A:326:G:N2	1:2A:337:C:C2	2.89	0.41
1:2A:1229:G:H2'	1:2A:1230:C:C6	2.56	0.41
1:2A:1257:C:H4'	5:2F:83:PHE:CD1	2.55	0.41
1:2A:1360:A:H5"	1:2A:1361:G:OP2	2.20	0.41
1:2A:1434:A:C2'	1:2A:1435:G:H5'	2.51	0.41
1:2A:1540:U:C2'	1:2A:1541:G:H5'	2.51	0.41
1:2A:1612:C:O2'	29:27:5:TRP:O	2.37	0.41
1:2A:1683:C:H2'	1:2A:1684:C:C6	2.55	0.41
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.37	0.41
1:2A:2054:A:OP1	1:2A:2055:C:O2'	2.25	0.41
1:2A:2061:G:O6	58:2A:3877:A1A1J:N	2.54	0.41
1:2A:2139:C:H2'	1:2A:2140:C:H6	1.86	0.41
1:2A:2311:A:O2'	6:2G:88:ILE:HD12	2.21	0.41
1:2A:2522:U:O2'	1:2A:2647:U:OP1	2.25	0.41
1:2A:2812:G:H2'	1:2A:2813:A:C8	2.56	0.41
1:2A:2839:G:O2'	13:2R:49:ASP:OD2	2.32	0.41
3:2D:97:TYR:HB2	3:2D:101:GLU:O	2.20	0.41
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.85	0.41
4:2E:55:ASN:HA	4:2E:56:PRO:HD3	1.95	0.41
4:2E:119:ARG:CD	4:2E:160:TYR:HB2	2.50	0.41
6:2G:15:VAL:HG13	6:2G:175:LEU:CB	2.51	0.41
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.85	0.41
8:2I:58:LEU:O	8:2I:62:LYS:HG3	2.21	0.41
8:2I:123:LEU:HD11	8:2I:145:VAL:C	2.46	0.41
10:2O:43:VAL:HG23	10:2O:56:ASP:O	2.20	0.41
13:2R:56:LYS:NZ	13:2R:90:ARG:O	2.54	0.41
14:2S:3:ARG:NH2	14:2S:4:LEU:O	2.54	0.41
16:2U:8:VAL:O	16:2U:12:ARG:HG3	2.20	0.41
16:2U:89:GLU:HB2	17:2V:50:PRO:CB	2.51	0.41
21:2Z:82:ARG:HA	21:2Z:83:PRO:HD3	1.91	0.41
32:2a:178:C:H2'	32:2a:179:A:H8	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:298:A:H2'	32:2a:299:G:C8	2.55	0.41
32:2a:336:C:H2'	32:2a:337:C:C6	2.56	0.41
32:2a:392:G:H2'	32:2a:393:A:C8	2.56	0.41
32:2a:557:G:N1	32:2a:558:G:C2	2.89	0.41
32:2a:604:G:C6	32:2a:605:U:C4	3.08	0.41
32:2a:791:G:C2'	32:2a:792:A:H5'	2.51	0.41
32:2a:828:A:H5"	32:2a:859:A:C2	2.56	0.41
32:2a:1061:G:O4'	41:2j:56:HIS:CE1	2.74	0.41
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.36	0.41
32:2a:1158:C:C2	32:2a:1160:G:C8	3.09	0.41
32:2a:1183:A:H3'	32:2a:1184:G:C5'	2.51	0.41
32:2a:1216:G:O3'	45:2n:5:ALA:HB1	2.20	0.41
32:2a:1232:U:OP1	40:2i:124:GLN:HG2	2.21	0.41
32:2a:1259:C:C5	32:2a:1260:C:H1'	2.56	0.41
32:2a:1318:A:H5'	50:2s:10:PHE:CE1	2.56	0.41
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.56	0.41
33:2b:31:TYR:O	33:2b:32:ILE:HG13	2.21	0.41
33:2b:40:HIS:HB3	33:2b:190:THR:HG21	2.03	0.41
35:2d:201:GLN:HE21	36:2e:99:GLY:HA2	1.85	0.41
36:2e:147:ASP:OD1	36:2e:147:ASP:N	2.54	0.41
37:2f:63:TYR:CD2	37:2f:63:TYR:N	2.89	0.41
38:2g:6:ARG:H	38:2g:6:ARG:HG3	1.45	0.41
38:2g:78:ARG:NH2	38:2g:79:ARG:HE	2.18	0.41
40:2i:125:TYR:CD2	40:2i:126:SER:N	2.89	0.41
48:2q:99:SER:OG	48:2q:100:LYS:N	2.53	0.41
51:2t:18:GLN:O	51:2t:22:ARG:HG3	2.21	0.41
1:1A:1377:G:H2'	61:1A:5120:HOH:O	2.21	0.41
1:1A:1508:A:H4'	1:1A:1509:C:OP1	2.21	0.41
1:1A:2295:C:OP2	14:1S:10:ARG:HD3	2.21	0.41
2:1B:33:G:C2	2:1B:50:G:C2	3.09	0.41
3:1D:79:VAL:CG1	3:1D:113:VAL:HA	2.50	0.41
4:1E:52:LEU:O	4:1E:76:ARG:HG3	2.20	0.41
4:1E:103:ASP:OD2	4:1E:168:MET:HE3	2.20	0.41
5:1F:184:TYR:CD2	5:1F:188:ARG:HD2	2.56	0.41
8:1I:65:ALA:HB1	8:1I:136:VAL:HG11	2.01	0.41
25:13:55:ARG:C	25:13:55:ARG:HE	2.29	0.41
28:16:35:GLU:HA	28:16:49:HIS:O	2.21	0.41
32:1a:473:G:C2	32:1a:474:G:C5	3.09	0.41
32:1a:826:C:H5'	39:1h:12:ARG:CZ	2.51	0.41
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.21	0.41
40:1i:18:PHE:HB2	40:1i:62:TYR:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:1q:13:ASP:OD1	48:1q:14:LYS:HD3	2.21	0.41
48:1q:87:LYS:HD3	48:1q:87:LYS:HA	1.83	0.41
1:2A:359:A:H2'	1:2A:360:G:O4'	2.21	0.41
1:2A:795:C:O2'	1:2A:796:C:H5'	2.21	0.41
1:2A:857:C:OP2	22:20:77:ARG:NH2	2.55	0.41
1:2A:880:G:H2'	1:2A:881:G:H8	1.85	0.41
1:2A:945:A:C4	1:2A:2448:A:C2	3.09	0.41
1:2A:2403:C:C2	1:2A:2415:G:C2	3.09	0.41
10:2O:105:GLU:O	10:2O:108:GLU:HG2	2.20	0.41
26:24:24:THR:OG1	26:24:25:TYR:N	2.53	0.41
32:2a:457:C:H2'	32:2a:458:C:C6	2.56	0.41
32:2a:637:G:H2'	32:2a:638:G:H8	1.86	0.41
32:2a:815:A:N7	32:2a:1509:C:O2'	2.52	0.41
32:2a:972:C:H4'	41:2j:57:LYS:HB2	2.03	0.41
32:2a:980:C:H3'	32:2a:981:U:H6	1.85	0.41
32:2a:1084:G:C5	32:2a:1085:U:C4	3.08	0.41
32:2a:1291:G:C6	32:2a:1292:U:C4	3.08	0.41
32:2a:1508:G:H2'	32:2a:1509:C:C6	2.56	0.41
32:2a:1519:MA6:C8	32:2a:1520:G:H1'	2.51	0.41
34:2c:140:ARG:HA	34:2c:143:GLU:HB2	2.02	0.41
37:2f:30:LEU:HB3	37:2f:35:ALA:HB3	2.03	0.41
38:2g:99:LEU:HD22	38:2g:103:TRP:CZ2	2.56	0.41
40:2i:99:LEU:HD13	40:2i:99:LEU:HA	1.81	0.41
41:2j:30:SER:OG	41:2j:84:GLN:OE1	2.22	0.41
44:2m:122:LYS:HG3	44:2m:123:ALA:H	1.86	0.41
46:2o:84:LYS:HD3	46:2o:84:LYS:O	2.21	0.41
55:2x:23:C:C2	55:2x:24:U:C5	3.09	0.41
55:2x:30:G:O2'	55:2x:31:G:H5'	2.21	0.41
54:2y:65:G:C2	54:2y:66:U:C4	3.09	0.41
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.56	0.40
1:1A:615:G:H5'	5:1F:182:ASN:CB	2.52	0.40
1:1A:1090:U:N3	1:1A:1102:C:H1'	2.35	0.40
1:1A:1166:C:H2'	1:1A:1167:U:C6	2.56	0.40
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.55	0.40
1:1A:2155:G:C2	1:1A:2156:G:O4'	2.74	0.40
1:1A:2478:A:H5'	31:19:31:LYS:HE2	2.02	0.40
13:1R:67:LEU:HG	13:1R:76:VAL:HG21	2.04	0.40
32:1a:4:U:C4	39:1h:105:ARG:HD3	2.56	0.40
32:1a:652:U:O4	32:1a:752:G:O2'	2.38	0.40
32:1a:1030(C):G:C8	32:1a:1030(D):A:N7	2.89	0.40
32:1a:1433:A:C4	32:1a:1468:A:C2	3.08	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:83:SER:HA	35:1d:89:THR:CG2	2.51	0.40
40:1i:99:LEU:HB3	40:1i:101:PHE:CZ	2.56	0.40
41:1j:38:ILE:CD1	41:1j:71:LEU:HB3	2.49	0.40
49:1r:52:PRO:O	49:1r:56:THR:HG23	2.20	0.40
1:2A:18:C:O2'	16:2U:23:GLY:HA2	2.21	0.40
1:2A:569:U:H5"	61:2A:4429:HOH:O	2.21	0.40
1:2A:1160:G:C6	1:2A:1161:C:C4	3.09	0.40
5:2F:170:LEU:HD22	5:2F:172:TRP:HE1	1.86	0.40
6:2G:75:LYS:HA	6:2G:84:LYS:HG3	2.02	0.40
6:2G:142:PRO:HG2	6:2G:143:GLU:OE1	2.21	0.40
6:2G:144:ILE:HG23	6:2G:148:MET:HE2	2.03	0.40
7:2H:17:VAL:O	7:2H:17:VAL:HG12	2.21	0.40
7:2H:71:LEU:HD23	7:2H:71:LEU:HA	1.86	0.40
7:2H:89:ILE:HD12	7:2H:96:ALA:HB2	2.03	0.40
7:2H:140:LYS:HE3	7:2H:140:LYS:HB2	1.85	0.40
10:2O:47:ILE:HB	10:2O:48:PRO:HD2	2.02	0.40
23:21:94:LEU:HD23	23:21:94:LEU:HA	1.72	0.40
32:2a:102:G:C5	32:2a:103:C:C5	3.09	0.40
32:2a:130:A:H5'	48:2q:63:ARG:HE	1.86	0.40
32:2a:1099:G:C6	32:2a:1100:C:C4	3.09	0.40
32:2a:1126:U:O4	41:2j:71:LEU:HD13	2.20	0.40
32:2a:1191:A:H5"	32:2a:1192:C:OP2	2.21	0.40
32:2a:1291:G:H4'	40:2i:39:GLY:HA3	2.02	0.40
32:2a:1490:C:C2	32:2a:1491:G:C8	3.09	0.40
33:2b:25:ASN:HA	33:2b:26:PRO:HD3	1.86	0.40
34:2c:184:TYR:CG	34:2c:185:GLY:N	2.89	0.40
35:2d:171:GLY:HA2	35:2d:172:PRO:HD3	1.78	0.40
36:2e:102:ALA:HB1	36:2e:106:PRO:HG2	2.02	0.40
42:2k:92:GLU:HA	42:2k:95:ILE:HD12	2.02	0.40
50:2s:27:GLU:CD	50:2s:47:HIS:HE2	2.28	0.40
1:1A:2127:G:C5	1:1A:2162:G:N1	2.89	0.40
1:1A:2135:A:H2'	1:1A:2135:A:N3	2.36	0.40
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.56	0.40
1:1A:2164:C:H2'	1:1A:2165:G:H5'	2.03	0.40
7:1H:18:GLU:OE2	7:1H:25:LYS:HD3	2.21	0.40
12:1Q:60:ARG:NH1	54:1w:54:5MU:OP2	2.54	0.40
16:1U:8:VAL:O	16:1U:12:ARG:HG3	2.21	0.40
32:1a:302:G:O2'	32:1a:556:C:H5"	2.21	0.40
32:1a:382:A:C2	32:1a:383:A:C4	3.10	0.40
32:1a:390:C:H2'	32:1a:391:G:C8	2.56	0.40
32:1a:438:G:H4'	35:1d:123:HIS:ND1	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:833:U:H2'	32:1a:834:C:C6	2.57	0.40
34:1c:47:LEU:CD1	34:1c:68:VAL:HG11	2.51	0.40
36:1e:79:GLU:OE2	39:1h:104:ARG:HA	2.22	0.40
38:1g:61:VAL:HG12	38:1g:62:PHE:N	2.35	0.40
40:1i:110:GLU:CD	40:1i:113:LYS:HZ3	2.29	0.40
41:1j:17:ASP:OD1	41:1j:70:ARG:NE	2.50	0.40
44:1m:11:ARG:HA	44:1m:45:VAL:HB	2.03	0.40
44:1m:20:THR:C	44:1m:22:ILE:H	2.29	0.40
48:1q:48:GLU:HB2	48:1q:50:LYS:HG3	2.03	0.40
48:1q:50:LYS:HE3	48:1q:50:LYS:HB2	1.72	0.40
1:2A:740:U:H2'	1:2A:741:G:C8	2.56	0.40
1:2A:910:A:H2	1:2A:2264:C:O2	2.04	0.40
1:2A:1027:A:C6	1:2A:1126:A:C4	3.09	0.40
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.36	0.40
1:2A:2149:G:H8	1:2A:2149:G:O5'	2.04	0.40
1:2A:2793:G:N2	1:2A:2804:C:H1'	2.36	0.40
1:2A:2820:A:O2'	1:2A:2821:A:OP1	2.37	0.40
61:2A:4012:HOH:O	4:2E:170:LEU:HD21	2.21	0.40
2:2B:23:G:C2	2:2B:24:G:O6	2.75	0.40
2:2B:58:A:C5	2:2B:59:A:C8	3.09	0.40
4:2E:105:THR:OG1	4:2E:199:ARG:NH2	2.54	0.40
6:2G:16:ARG:HD2	6:2G:16:ARG:HA	1.74	0.40
6:2G:31:VAL:HG22	6:2G:32:PRO:HD2	2.02	0.40
6:2G:41:GLN:O	6:2G:43:LEU:N	2.55	0.40
6:2G:96:ARG:O	6:2G:100:TRP:CD1	2.74	0.40
6:2G:133:LEU:HG	6:2G:157:ILE:HB	2.04	0.40
8:2I:134:PRO:C	8:2I:136:VAL:H	2.29	0.40
21:2Z:40:ASP:OD2	21:2Z:42:VAL:HG13	2.21	0.40
27:25:40:LYS:NZ	27:25:44:THR:O	2.53	0.40
32:2a:563:A:N7	32:2a:567:G:H1'	2.36	0.40
32:2a:624:C:H4'	47:2p:10:GLY:O	2.21	0.40
32:2a:673:G:N1	32:2a:674:G:C6	2.89	0.40
32:2a:765:G:N2	32:2a:813:U:H5	2.18	0.40
32:2a:841:U:H6	32:2a:841:U:OP1	2.04	0.40
32:2a:1058:G:O2'	32:2a:1059:C:H5'	2.21	0.40
32:2a:1207:2MG:C5	32:2a:1208:C:C5	3.09	0.40
34:2c:77:ILE:HG23	34:2c:103:VAL:HG11	2.04	0.40
34:2c:112:SER:O	34:2c:116:VAL:HG23	2.21	0.40
36:2e:7:GLU:CD	36:2e:37:ARG:HH21	2.29	0.40
39:2h:34:GLU:OE1	39:2h:37:ARG:NH1	2.50	0.40
40:2i:33:PHE:C	40:2i:33:PHE:CD2	3.00	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:35:SER:CB	41:2j:73:ASP:HB2	2.51	0.40
44:2m:3:ARG:N	44:2m:7:VAL:O	2.55	0.40
44:2m:90:LEU:HA	44:2m:93:ARG:HH21	1.87	0.40
50:2s:13:ASP:HA	50:2s:16:LEU:CB	2.51	0.40
1:1A:831:G:O2'	11:1P:38:GLN:OE1	2.30	0.40
1:1A:1394:U:H6	1:1A:1394:U:H3'	1.85	0.40
1:1A:1529:G:C5	1:1A:1530:C:C5	3.10	0.40
1:1A:1698:A:C8	1:1A:1700:A:O4'	2.74	0.40
2:1B:33:G:O2'	2:1B:34:U:H5'	2.21	0.40
8:1I:30:LEU:HD23	8:1I:30:LEU:HA	1.77	0.40
32:1a:685:G:C2	32:1a:686:U:C4	3.08	0.40
32:1a:688:G:H2'	32:1a:689:C:H6	1.86	0.40
32:1a:841:U:N3	32:1a:848:C:H1'	2.36	0.40
32:1a:935:A:O2'	32:1a:1383:C:N3	2.54	0.40
35:1d:108:LEU:HD23	35:1d:110:PHE:CZ	2.56	0.40
40:1i:17:VAL:HA	40:1i:63:ILE:HG23	2.02	0.40
48:1q:50:LYS:HE3	48:1q:51:TYR:CE2	2.57	0.40
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.56	0.40
1:2A:1000:A:C4	1:2A:1155:A:C6	3.10	0.40
1:2A:1446:C:H42	1:2A:1465:G:H1	1.68	0.40
1:2A:1478:G:N2	1:2A:1514:U:C2	2.89	0.40
1:2A:1557:C:H5"	1:2A:1558:A:OP2	2.21	0.40
1:2A:1564:C:O2'	1:2A:1565:C:H5'	2.22	0.40
1:2A:2051:A:H5'	1:2A:2578:G:O4'	2.20	0.40
1:2A:2138:C:H2'	1:2A:2139:C:O4'	2.22	0.40
1:2A:2143:C:H3'	1:2A:2144:U:C6	2.56	0.40
1:2A:2470:G:C2	1:2A:2471:C:C6	3.09	0.40
1:2A:2671:A:H2'	1:2A:2672:G:O4'	2.22	0.40
1:2A:2776:A:H4'	1:2A:2777:G:H5"	2.03	0.40
2:2B:45:A:C8	6:2G:95:ARG:NE	2.89	0.40
3:2D:106:ILE:HG21	3:2D:106:ILE:HD13	1.75	0.40
5:2F:28:ILE:CD1	5:2F:116:ASP:HB2	2.52	0.40
5:2F:125:LEU:HD23	5:2F:125:LEU:HA	1.88	0.40
12:2Q:36:ALA:HB2	12:2Q:103:MET:SD	2.61	0.40
15:2T:28:VAL:HG12	15:2T:30:VAL:HG23	2.03	0.40
21:2Z:152:ALA:CB	21:2Z:169:GLU:HB3	2.52	0.40
29:27:9:ARG:CZ	29:27:47:ARG:HG3	2.51	0.40
32:2a:142:G:H2'	32:2a:143:A:O4'	2.22	0.40
32:2a:195:A:C6	32:2a:196:A:N1	2.89	0.40
32:2a:359:U:H2'	32:2a:360:A:C8	2.56	0.40
32:2a:584:G:H5'	48:2q:91:ARG:HH22	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:746:A:H2'	32:2a:747:C:C6	2.57	0.40
32:2a:866:C:O4'	32:2a:919:A:H5'	2.20	0.40
32:2a:983:A:H2'	32:2a:1201:A:N6	2.36	0.40
32:2a:985:C:H2'	32:2a:986:A:C8	2.56	0.40
32:2a:1083:U:C5	32:2a:1084:G:C5	3.09	0.40
32:2a:1086:U:H3	32:2a:1099:G:H22	1.67	0.40
32:2a:1187:G:OP1	40:2i:113:LYS:NZ	2.55	0.40
33:2b:74:LYS:NZ	33:2b:205:ASP:O	2.49	0.40
34:2c:18:TRP:NE1	45:2n:55:GLY:H	2.19	0.40
36:2e:78:HIS:HB3	39:2h:107:LEU:HD12	2.02	0.40
41:2j:9:ARG:O	41:2j:16:LEU:HD21	2.20	0.40
42:2k:43:SER:HA	42:2k:47:VAL:HG21	2.01	0.40
42:2k:84:VAL:HG21	42:2k:95:ILE:HD11	2.03	0.40
48:2q:10:VAL:HG21	48:2q:19:VAL:HB	2.02	0.40
49:2r:44:LEU:CD1	49:2r:79:LEU:HD22	2.51	0.40
55:2x:21:A:C5	55:2x:46:G:C5	3.09	0.40
1:1A:674:G:H1'	5:1F:74:ARG:HD3	2.03	0.40
1:1A:899:A:H2'	1:1A:899:A:N3	2.36	0.40
1:1A:1085:A:C6	1:1A:1086:A:C8	3.09	0.40
1:1A:1206:G:C6	1:1A:1207:C:C4	3.10	0.40
1:1A:2774:C:H2'	1:1A:2775:A:O4'	2.21	0.40
4:1E:97:LYS:N	4:1E:100:GLU:OE2	2.41	0.40
4:1E:116:VAL:HG13	4:1E:122:PHE:CB	2.51	0.40
13:1R:35:THR:HA	13:1R:112:ALA:O	2.21	0.40
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.31	0.40
21:1Z:24:LEU:HB3	21:1Z:39:VAL:HG22	2.03	0.40
21:1Z:99:TYR:HB3	21:1Z:123:ASP:OD2	2.20	0.40
32:1a:216:G:H2'	32:1a:217:C:C6	2.57	0.40
32:1a:892:A:H2'	32:1a:893:C:C6	2.55	0.40
32:1a:1030(B):C:O2	32:1a:1030(B):C:H2'	2.20	0.40
32:1a:1137:C:H4'	32:1a:1138:G:C2	2.57	0.40
32:1a:1350:A:C6	32:1a:1351:U:N3	2.90	0.40
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	2.03	0.40
42:1k:32:ILE:HB	42:1k:41:THR:HG22	2.03	0.40
46:1o:42:HIS:CE1	46:1o:46:HIS:HD2	2.40	0.40
47:1p:58:TYR:CD2	47:1p:58:TYR:C	2.99	0.40
48:1q:10:VAL:HA	48:1q:20:THR:O	2.22	0.40
54:1y:67:C:H2'	54:1y:68:C:H6	1.87	0.40
1:2A:191:A:H2'	1:2A:192:C:C6	2.56	0.40
1:2A:271(X):G:C2	1:2A:271(Y):U:O4	2.74	0.40
1:2A:531:C:OP1	1:2A:561:G:C2	2.74	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:699:A:H2'	1:2A:700:G:O4'	2.21	0.40
1:2A:729:G:O5'	3:2D:208:LYS:NZ	2.54	0.40
1:2A:1491:G:H5'	3:2D:99:ASP:OD1	2.21	0.40
1:2A:2051:A:H8	1:2A:2051:A:OP2	2.04	0.40
1:2A:2101:G:H2'	1:2A:2102:U:O4'	2.21	0.40
1:2A:2112:G:N1	1:2A:2113:U:H1'	2.37	0.40
4:2E:31:CYS:HA	4:2E:32:PRO:HD2	1.95	0.40
5:2F:10:PRO:HB3	5:2F:17:ARG:CZ	2.52	0.40
5:2F:124:LEU:HB3	5:2F:193:VAL:HG12	2.03	0.40
6:2G:61:ALA:HA	6:2G:66:GLN:O	2.21	0.40
6:2G:70:VAL:HA	6:2G:90:LEU:HD23	2.03	0.40
6:2G:165:THR:HG23	6:2G:168:GLU:OE2	2.21	0.40
8:2I:82:ARG:HB3	8:2I:89:TYR:CE2	2.56	0.40
12:2Q:11:LYS:HD3	12:2Q:87:LYS:HG2	2.02	0.40
14:2S:52:SER:HB2	14:2S:55:ALA:HB3	2.02	0.40
24:22:3:LEU:HD23	24:22:3:LEU:HA	1.85	0.40
25:23:7:LYS:HE2	25:23:32:GLN:O	2.21	0.40
32:2a:134:A:N6	47:2p:25:ARG:NH1	2.66	0.40
32:2a:179:A:H2'	32:2a:180:U:H6	1.85	0.40
32:2a:202:U:H3'	32:2a:203:U:C6	2.56	0.40
32:2a:224:C:H2'	32:2a:225:C:C6	2.55	0.40
32:2a:637:G:H2'	32:2a:638:G:C8	2.56	0.40
32:2a:645:C:H2'	32:2a:646:U:H6	1.87	0.40
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.13	0.40
32:2a:994:A:H2'	32:2a:995:C:C6	2.57	0.40
32:2a:1055:A:H62	32:2a:1200:C:N4	2.19	0.40
32:2a:1085:U:H5'	32:2a:1094:G:N2	2.35	0.40
32:2a:1397:C:H4'	53:2v:23:A:C2	2.57	0.40
32:2a:1503:A:H2	53:2v:13:A:C5	2.39	0.40
33:2b:42:ILE:HG22	33:2b:43:ASP:O	2.22	0.40
34:2c:8:ILE:C	34:2c:10:PHE:N	2.80	0.40
34:2c:124:ILE:CG2	34:2c:130:VAL:HG13	2.51	0.40
37:2f:50:TYR:CE2	49:2r:77:GLY:HA2	2.56	0.40
38:2g:26:PHE:HA	38:2g:101:LEU:HD22	2.02	0.40
44:2m:92:HIS:HA	44:2m:110:ARG:NH2	2.36	0.40
55:2x:72:A:C6	55:2x:73:A:C6	3.10	0.40
1:1A:1439:A:C2	1:1A:1553:A:C4	3.10	0.40
1:1A:1465:G:O2'	1:1A:1545:A:N1	2.50	0.40
1:1A:1500:G:H2'	1:1A:1501:C:C6	2.56	0.40
1:1A:1829:A:H2'	1:1A:1830:C:H5'	2.04	0.40
1:1A:1844:C:C2	1:1A:1897:G:N2	2.90	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1919:A:O5'	1:1A:1919:A:C8	2.74	0.40
1:1A:2341:G:H2'	1:1A:2342:C:C6	2.56	0.40
1:1A:2342:C:H6	1:1A:2342:C:O5'	2.05	0.40
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.56	0.40
4:1E:101:ARG:HD2	4:1E:169:ASN:OD1	2.22	0.40
7:1H:11:VAL:CG1	7:1H:15:VAL:HG22	2.48	0.40
11:1P:39:LYS:HB2	11:1P:45:LEU:CD1	2.48	0.40
15:1T:125:ARG:O	15:1T:127:ALA:O	2.39	0.40
32:1a:161:A:H2'	32:1a:162:A:C8	2.55	0.40
32:1a:637:G:C2	32:1a:638:G:C4	3.10	0.40
32:1a:874:G:H2'	32:1a:875:C:H6	1.86	0.40
32:1a:1206:G:H2'	32:1a:1207:2MG:O4'	2.21	0.40
32:1a:1356:G:H2'	32:1a:1357:A:H8	1.81	0.40
33:1b:7:VAL:O	33:1b:217:ARG:HD3	2.22	0.40
33:1b:132:LYS:O	33:1b:136:VAL:HG13	2.22	0.40
34:1c:29:TYR:C	34:1c:29:TYR:CD2	3.00	0.40
39:1h:83:ILE:HG13	39:1h:137:VAL:HG22	2.02	0.40
41:1j:7:LYS:C	41:1j:8:LEU:HD23	2.47	0.40
44:1m:29:ARG:HD3	44:1m:64:TRP:CE2	2.56	0.40
1:2A:154(A):C:H42	1:2A:171:G:H1	1.69	0.40
1:2A:531:C:C5	1:2A:2035:G:C2	3.09	0.40
1:2A:920:G:C4	1:2A:921:G:C8	3.10	0.40
1:2A:1576:U:H2'	1:2A:1577:C:C6	2.56	0.40
1:2A:2083:G:H2'	1:2A:2084:C:C6	2.56	0.40
1:2A:2110:G:C6	1:2A:2120:G:C8	3.10	0.40
1:2A:2161:C:N3	1:2A:2162:G:C4	2.89	0.40
1:2A:2191:G:H2'	1:2A:2192:G:O4'	2.20	0.40
1:2A:2286:A:C8	1:2A:2287:A:C6	3.10	0.40
1:2A:2334:G:H4'	1:2A:2335:A:OP2	2.22	0.40
1:2A:2355:C:H1'	22:20:39:ARG:HH21	1.86	0.40
1:2A:2627:G:N3	1:2A:2781:A:H2	2.19	0.40
1:2A:2752:C:OP2	7:2H:4:ILE:HD11	2.21	0.40
1:2A:2859:G:H2'	1:2A:2860:A:C8	2.56	0.40
3:2D:37:LEU:HD13	3:2D:87:ASN:ND2	2.36	0.40
4:2E:18:ASP:OD2	15:2T:33:LYS:HE2	2.21	0.40
7:2H:143:GLN:NE2	7:2H:147:ASN:OD1	2.47	0.40
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	2.04	0.40
11:2P:52:GLU:CD	11:2P:55:ARG:HH21	2.29	0.40
13:2R:28:LEU:HD23	13:2R:48:VAL:HG11	2.02	0.40
14:2S:62:LYS:HB3	14:2S:97:ARG:NE	2.37	0.40
32:2a:70:G:H2'	32:2a:71:C:H6	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:189(D):C:H2'	32:2a:189(E):U:O4'	2.21	0.40
32:2a:1095:U:P	32:2a:1108:G:H1	2.45	0.40
33:2b:106:LYS:O	33:2b:110:GLN:HB2	2.22	0.40
35:2d:155:LEU:HD23	35:2d:155:LEU:HA	1.86	0.40
39:2h:93:VAL:O	39:2h:132:GLU:HA	2.21	0.40
41:2j:12:ASP:O	41:2j:16:LEU:HG	2.21	0.40
41:2j:16:LEU:CD2	41:2j:94:VAL:HG13	2.51	0.40
43:2l:71:PRO:O	43:2l:102:ARG:HD3	2.22	0.40
45:2n:24:CYS:SG	45:2n:40:CYS:N	2.94	0.40
55:2x:40:C:O2'	55:2x:41:C:H5'	2.21	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)
35:1d:27:TYR:OH	37:2f:15:ASP:OD2[2_655]	2.18	0.02

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	262 (96%)	11 (4%)	0	100	100
3	2D	273/276 (99%)	256 (94%)	17 (6%)	0	100	100
4	1E	202/206 (98%)	192 (95%)	9 (4%)	1 (0%)	25	44
4	2E	202/206 (98%)	190 (94%)	12 (6%)	0	100	100
5	1F	201/210 (96%)	196 (98%)	5 (2%)	0	100	100
5	2F	201/210 (96%)	184 (92%)	17 (8%)	0	100	100
6	1G	179/182 (98%)	163 (91%)	15 (8%)	1 (1%)	22	39
6	2G	179/182 (98%)	152 (85%)	26 (14%)	1 (1%)	22	39

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
7	1H	172/180 (96%)	163 (95%)	9 (5%)	0	100	100
7	2H	172/180 (96%)	158 (92%)	14 (8%)	0	100	100
8	1I	144/148 (97%)	122 (85%)	22 (15%)	0	100	100
8	2I	144/148 (97%)	120 (83%)	24 (17%)	0	100	100
9	1N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
9	2N	138/140 (99%)	126 (91%)	11 (8%)	1 (1%)	19	35
10	1O	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
10	2O	120/122 (98%)	111 (92%)	9 (8%)	0	100	100
11	1P	147/150 (98%)	132 (90%)	13 (9%)	2 (1%)	9	17
11	2P	147/150 (98%)	128 (87%)	18 (12%)	1 (1%)	19	35
12	1Q	139/141 (99%)	132 (95%)	7 (5%)	0	100	100
12	2Q	139/141 (99%)	128 (92%)	11 (8%)	0	100	100
13	1R	116/118 (98%)	113 (97%)	3 (3%)	0	100	100
13	2R	116/118 (98%)	109 (94%)	7 (6%)	0	100	100
14	1S	108/112 (96%)	102 (94%)	6 (6%)	0	100	100
14	2S	108/112 (96%)	92 (85%)	16 (15%)	0	100	100
15	1T	129/146 (88%)	121 (94%)	8 (6%)	0	100	100
15	2T	129/146 (88%)	124 (96%)	5 (4%)	0	100	100
16	1U	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
16	2U	114/118 (97%)	109 (96%)	5 (4%)	0	100	100
17	1V	99/101 (98%)	95 (96%)	4 (4%)	0	100	100
17	2V	99/101 (98%)	91 (92%)	7 (7%)	1 (1%)	13	25
18	1W	110/113 (97%)	110 (100%)	0	0	100	100
18	2W	110/113 (97%)	106 (96%)	4 (4%)	0	100	100
19	1X	93/96 (97%)	88 (95%)	5 (5%)	0	100	100
19	2X	93/96 (97%)	84 (90%)	9 (10%)	0	100	100
20	1Y	105/110 (96%)	98 (93%)	7 (7%)	0	100	100
20	2Y	105/110 (96%)	100 (95%)	5 (5%)	0	100	100
21	1Z	148/206 (72%)	132 (89%)	15 (10%)	1 (1%)	19	35
21	2Z	156/206 (76%)	127 (81%)	27 (17%)	2 (1%)	10	19
22	10	75/85 (88%)	71 (95%)	3 (4%)	1 (1%)	10	19

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
22	20	75/85 (88%)	71 (95%)	3 (4%)	1 (1%)	10 19
23	11	95/98 (97%)	90 (95%)	5 (5%)	0	100 100
23	21	95/98 (97%)	90 (95%)	5 (5%)	0	100 100
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100 100
24	22	68/72 (94%)	66 (97%)	2 (3%)	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	50 (88%)	7 (12%)	0	100 100
26	14	67/71 (94%)	53 (79%)	13 (19%)	1 (2%)	8 16
26	24	67/71 (94%)	48 (72%)	17 (25%)	2 (3%)	3 5
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
28	26	51/54 (94%)	47 (92%)	4 (8%)	0	100 100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	61 (98%)	1 (2%)	0	100 100
31	19	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
31	29	35/37 (95%)	33 (94%)	2 (6%)	0	100 100
33	1b	229/256 (90%)	189 (82%)	36 (16%)	4 (2%)	7 14
33	2b	229/256 (90%)	171 (75%)	55 (24%)	3 (1%)	10 19
34	1c	204/239 (85%)	185 (91%)	19 (9%)	0	100 100
34	2c	204/239 (85%)	160 (78%)	44 (22%)	0	100 100
35	1d	206/209 (99%)	185 (90%)	21 (10%)	0	100 100
35	2d	206/209 (99%)	185 (90%)	20 (10%)	1 (0%)	25 44
36	1e	146/162 (90%)	129 (88%)	17 (12%)	0	100 100
36	2e	146/162 (90%)	125 (86%)	21 (14%)	0	100 100
37	1f	98/101 (97%)	90 (92%)	8 (8%)	0	100 100
37	2f	98/101 (97%)	92 (94%)	6 (6%)	0	100 100
38	1g	153/156 (98%)	138 (90%)	15 (10%)	0	100 100
38	2g	153/156 (98%)	134 (88%)	18 (12%)	1 (1%)	19 35

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
39	1h	135/138 (98%)	125 (93%)	10 (7%)	0	100	100
39	2h	135/138 (98%)	119 (88%)	16 (12%)	0	100	100
40	1i	125/128 (98%)	111 (89%)	14 (11%)	0	100	100
40	2i	125/128 (98%)	107 (86%)	18 (14%)	0	100	100
41	1j	95/105 (90%)	82 (86%)	12 (13%)	1 (1%)	12	23
41	2j	94/105 (90%)	77 (82%)	16 (17%)	1 (1%)	12	23
42	1k	112/129 (87%)	104 (93%)	8 (7%)	0	100	100
42	2k	112/129 (87%)	99 (88%)	13 (12%)	0	100	100
43	1l	119/132 (90%)	112 (94%)	7 (6%)	0	100	100
43	2l	119/132 (90%)	102 (86%)	16 (13%)	1 (1%)	16	31
44	1m	121/126 (96%)	107 (88%)	14 (12%)	0	100	100
44	2m	120/126 (95%)	103 (86%)	17 (14%)	0	100	100
45	1n	58/61 (95%)	52 (90%)	6 (10%)	0	100	100
45	2n	58/61 (95%)	47 (81%)	11 (19%)	0	100	100
46	1o	86/89 (97%)	80 (93%)	6 (7%)	0	100	100
46	2o	86/89 (97%)	76 (88%)	10 (12%)	0	100	100
47	1p	80/88 (91%)	72 (90%)	8 (10%)	0	100	100
47	2p	80/88 (91%)	75 (94%)	5 (6%)	0	100	100
48	1q	97/105 (92%)	91 (94%)	6 (6%)	0	100	100
48	2q	97/105 (92%)	87 (90%)	10 (10%)	0	100	100
49	1r	66/88 (75%)	61 (92%)	5 (8%)	0	100	100
49	2r	66/88 (75%)	61 (92%)	5 (8%)	0	100	100
50	1s	81/93 (87%)	72 (89%)	9 (11%)	0	100	100
50	2s	81/93 (87%)	66 (82%)	15 (18%)	0	100	100
51	1t	94/106 (89%)	82 (87%)	12 (13%)	0	100	100
51	2t	94/106 (89%)	79 (84%)	15 (16%)	0	100	100
52	1u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
52	2u	21/27 (78%)	19 (90%)	2 (10%)	0	100	100
All	All	11358/12128 (94%)	10289 (91%)	1041 (9%)	28 (0%)	44	64

All (28) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	1P	36	LYS
21	1Z	53	ILE
41	1j	79	ARG
21	2Z	51	ALA
21	2Z	52	SER
33	2b	9	GLU
33	2b	17	PHE
35	2d	5	ILE
6	1G	96	ARG
22	10	13	GLY
33	1b	17	PHE
33	1b	125	PRO
22	20	13	GLY
41	2j	79	ARG
43	2l	91	LYS
33	1b	22	LYS
9	2N	3	THR
26	24	47	GLN
11	1P	29	LYS
6	2G	96	ARG
4	1E	52	LEU
26	14	49	PHE
33	1b	124	SER
11	2P	36	LYS
26	24	50	VAL
38	2g	55	GLY
17	2V	79	VAL
33	2b	231	GLU

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
3	1D	215/218 (99%)	202 (94%)	13 (6%)	16 33
3	2D	215/218 (99%)	205 (95%)	10 (5%)	22 44
4	1E	164/166 (99%)	157 (96%)	7 (4%)	25 48

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
4	2E	164/166 (99%)	150 (92%)	14 (8%)	8 18
5	1F	160/166 (96%)	140 (88%)	20 (12%)	3 7
5	2F	159/166 (96%)	143 (90%)	16 (10%)	6 12
6	1G	143/156 (92%)	124 (87%)	19 (13%)	3 6
6	2G	143/156 (92%)	114 (80%)	29 (20%)	1 2
7	1H	144/148 (97%)	132 (92%)	12 (8%)	9 19
7	2H	144/148 (97%)	124 (86%)	20 (14%)	3 5
8	1I	113/124 (91%)	89 (79%)	24 (21%)	1 1
8	2I	105/124 (85%)	83 (79%)	22 (21%)	1 1
9	1N	118/119 (99%)	109 (92%)	9 (8%)	11 22
9	2N	118/119 (99%)	108 (92%)	10 (8%)	8 18
10	1O	100/100 (100%)	95 (95%)	5 (5%)	20 41
10	2O	100/100 (100%)	91 (91%)	9 (9%)	8 16
11	1P	115/116 (99%)	105 (91%)	10 (9%)	8 17
11	2P	115/116 (99%)	102 (89%)	13 (11%)	4 9
12	1Q	111/111 (100%)	105 (95%)	6 (5%)	18 37
12	2Q	111/111 (100%)	101 (91%)	10 (9%)	8 16
13	1R	101/101 (100%)	94 (93%)	7 (7%)	13 26
13	2R	101/101 (100%)	96 (95%)	5 (5%)	20 41
14	1S	86/88 (98%)	77 (90%)	9 (10%)	5 11
14	2S	85/88 (97%)	72 (85%)	13 (15%)	2 4
15	1T	115/127 (91%)	103 (90%)	12 (10%)	5 12
15	2T	113/127 (89%)	105 (93%)	8 (7%)	12 25
16	1U	93/94 (99%)	84 (90%)	9 (10%)	6 14
16	2U	93/94 (99%)	85 (91%)	8 (9%)	8 18
17	1V	80/82 (98%)	77 (96%)	3 (4%)	28 53
17	2V	80/82 (98%)	72 (90%)	8 (10%)	6 13
18	1W	90/92 (98%)	85 (94%)	5 (6%)	17 36
18	2W	90/92 (98%)	83 (92%)	7 (8%)	10 21
19	1X	77/78 (99%)	73 (95%)	4 (5%)	19 39
19	2X	77/78 (99%)	73 (95%)	4 (5%)	19 39

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
20	1Y	85/91 (93%)	71 (84%)	14 (16%)	2 3
20	2Y	85/91 (93%)	74 (87%)	11 (13%)	3 7
21	1Z	135/179 (75%)	114 (84%)	21 (16%)	2 4
21	2Z	137/179 (76%)	115 (84%)	22 (16%)	2 3
22	10	61/67 (91%)	59 (97%)	2 (3%)	33 59
22	20	61/67 (91%)	53 (87%)	8 (13%)	3 6
23	11	80/83 (96%)	74 (92%)	6 (8%)	11 23
23	21	80/83 (96%)	75 (94%)	5 (6%)	15 30
24	12	65/67 (97%)	62 (95%)	3 (5%)	23 45
24	22	65/67 (97%)	63 (97%)	2 (3%)	35 62
25	13	51/52 (98%)	47 (92%)	4 (8%)	10 21
25	23	50/52 (96%)	46 (92%)	4 (8%)	10 20
26	14	59/63 (94%)	51 (86%)	8 (14%)	3 6
26	24	53/63 (84%)	40 (76%)	13 (24%)	0 1
27	15	50/52 (96%)	49 (98%)	1 (2%)	50 75
27	25	50/52 (96%)	48 (96%)	2 (4%)	27 51
28	16	51/52 (98%)	44 (86%)	7 (14%)	3 6
28	26	50/52 (96%)	44 (88%)	6 (12%)	4 8
29	17	41/42 (98%)	38 (93%)	3 (7%)	11 24
29	27	41/42 (98%)	37 (90%)	4 (10%)	6 13
30	18	54/55 (98%)	50 (93%)	4 (7%)	11 23
30	28	54/55 (98%)	50 (93%)	4 (7%)	11 23
31	19	34/34 (100%)	33 (97%)	1 (3%)	37 64
31	29	34/34 (100%)	31 (91%)	3 (9%)	8 17
33	1b	192/220 (87%)	157 (82%)	35 (18%)	1 2
33	2b	187/220 (85%)	150 (80%)	37 (20%)	1 2
34	1c	142/188 (76%)	121 (85%)	21 (15%)	2 4
34	2c	140/188 (74%)	117 (84%)	23 (16%)	2 3
35	1d	169/181 (93%)	146 (86%)	23 (14%)	3 6
35	2d	173/181 (96%)	151 (87%)	22 (13%)	3 7
36	1e	113/123 (92%)	99 (88%)	14 (12%)	4 7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
36	2e	114/123 (93%)	92 (81%)	22 (19%)	1 2
37	1f	84/90 (93%)	75 (89%)	9 (11%)	5 11
37	2f	85/90 (94%)	76 (89%)	9 (11%)	5 11
38	1g	119/127 (94%)	99 (83%)	20 (17%)	1 3
38	2g	120/127 (94%)	104 (87%)	16 (13%)	3 6
39	1h	114/119 (96%)	102 (90%)	12 (10%)	5 11
39	2h	114/119 (96%)	96 (84%)	18 (16%)	2 4
40	1i	90/99 (91%)	78 (87%)	12 (13%)	3 6
40	2i	89/99 (90%)	79 (89%)	10 (11%)	5 10
41	1j	66/92 (72%)	59 (89%)	7 (11%)	5 11
41	2j	69/92 (75%)	53 (77%)	16 (23%)	0 1
42	1k	82/99 (83%)	69 (84%)	13 (16%)	2 4
42	2k	83/99 (84%)	74 (89%)	9 (11%)	5 11
43	1l	96/108 (89%)	89 (93%)	7 (7%)	11 24
43	2l	96/108 (89%)	79 (82%)	17 (18%)	1 2
44	1m	93/101 (92%)	85 (91%)	8 (9%)	8 18
44	2m	92/101 (91%)	82 (89%)	10 (11%)	5 10
45	1n	49/50 (98%)	37 (76%)	12 (24%)	0 1
45	2n	49/50 (98%)	40 (82%)	9 (18%)	1 2
46	1o	78/80 (98%)	72 (92%)	6 (8%)	10 22
46	2o	78/80 (98%)	74 (95%)	4 (5%)	20 40
47	1p	69/74 (93%)	54 (78%)	15 (22%)	1 1
47	2p	68/74 (92%)	57 (84%)	11 (16%)	2 3
48	1q	94/97 (97%)	81 (86%)	13 (14%)	3 5
48	2q	94/97 (97%)	85 (90%)	9 (10%)	7 14
49	1r	59/77 (77%)	55 (93%)	4 (7%)	13 27
49	2r	59/77 (77%)	48 (81%)	11 (19%)	1 2
50	1s	69/80 (86%)	61 (88%)	8 (12%)	4 9
50	2s	67/80 (84%)	54 (81%)	13 (19%)	1 2
51	1t	70/82 (85%)	64 (91%)	6 (9%)	8 18
51	2t	70/82 (85%)	64 (91%)	6 (9%)	8 18

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
52	1u	18/22 (82%)	14 (78%)	4 (22%)	1 1
52	2u	18/22 (82%)	15 (83%)	3 (17%)	2 3
All	All	9295/10064 (92%)	8233 (89%)	1062 (11%)	4 9

All (1062) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	71	ASP
3	1D	78	LYS
3	1D	88	ARG
3	1D	106	ILE
3	1D	111	LEU
3	1D	131	LEU
3	1D	142	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
3	1D	275	LYS
4	1E	9	VAL
4	1E	47	VAL
4	1E	72	VAL
4	1E	73	GLU
4	1E	93	VAL
4	1E	116	VAL
4	1E	185	LYS
5	1F	24	LEU
5	1F	32	LEU
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	70	THR
5	1F	74	ARG
5	1F	88	VAL
5	1F	89	VAL
5	1F	106	ARG
5	1F	132	VAL
5	1F	137	LYS
5	1F	140	LEU
5	1F	144	LYS

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Mol	Chain	Res	Type
5	1F	162	LEU
5	1F	165	ARG
5	1F	175	THR
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
6	1G	3	LEU
6	1G	5	VAL
6	1G	7	LEU
6	1G	28	VAL
6	1G	31	VAL
6	1G	33	ARG
6	1G	43	LEU
6	1G	64	THR
6	1G	79	ASN
6	1G	109	VAL
6	1G	130	ASN
6	1G	137	GLU
6	1G	140	ILE
6	1G	145	THR
6	1G	148	MET
6	1G	149	VAL
6	1G	150	ASP
6	1G	159	VAL
6	1G	162	THR
7	1H	15	VAL
7	1H	18	GLU
7	1H	27	LYS
7	1H	42	ARG
7	1H	56	SER
7	1H	67	LEU
7	1H	92	ILE
7	1H	95	ARG
7	1H	124	GLU
7	1H	129	THR
7	1H	141	VAL
7	1H	153	LYS
8	1I	10	GLU
8	1I	12	LEU
8	1I	15	VAL
8	1I	20	ASP
8	1I	40	THR

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Mol	Chain	Res	Type
8	1I	42	SER
8	1I	47	LEU
8	1I	68	LEU
8	1I	72	LEU
8	1I	74	ASN
8	1I	75	LEU
8	1I	76	THR
8	1I	77	LEU
8	1I	85	GLU
8	1I	86	THR
8	1I	87	LYS
8	1I	92	VAL
8	1I	101	LEU
8	1I	108	THR
8	1I	109	ILE
8	1I	116	LEU
8	1I	123	LEU
8	1I	140	LEU
8	1I	142	VAL
9	1N	1	MET
9	1N	14	VAL
9	1N	28	THR
9	1N	48	MET
9	1N	62	VAL
9	1N	68	GLU
9	1N	96	GLU
9	1N	137	LYS
9	1N	138	LEU
10	1O	42	SER
10	1O	47	ILE
10	1O	66	LYS
10	1O	69	ILE
10	1O	108	GLU
11	1P	7	ARG
11	1P	45	LEU
11	1P	75	ILE
11	1P	90	ARG
11	1P	100	LEU
11	1P	126	VAL
11	1P	132	LYS
11	1P	133	SER
11	1P	147	LEU

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Mol	Chain	Res	Type
11	1P	149	GLU
12	1Q	7	MET
12	1Q	8	LYS
12	1Q	75	THR
12	1Q	76	LYS
12	1Q	109	VAL
12	1Q	130	LYS
13	1R	15	SER
13	1R	24	GLN
13	1R	27	SER
13	1R	36	THR
13	1R	67	LEU
13	1R	73	VAL
13	1R	114	VAL
14	1S	3	ARG
14	1S	14	VAL
14	1S	36	TYR
14	1S	46	VAL
14	1S	68	GLN
14	1S	69	VAL
14	1S	73	LEU
14	1S	85	VAL
14	1S	110	LEU
15	1T	23	ARG
15	1T	28	VAL
15	1T	34	VAL
15	1T	38	ASN
15	1T	65	LYS
15	1T	82	LEU
15	1T	85	LYS
15	1T	96	ARG
15	1T	107	ASP
15	1T	111	ARG
15	1T	118	ARG
15	1T	128	GLU
16	1U	9	VAL
16	1U	17	ILE
16	1U	27	LEU
16	1U	31	SER
16	1U	59	ARG
16	1U	60	LEU
16	1U	74	LEU

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Mol	Chain	Res	Type
16	1U	83	LEU
16	1U	95	LEU
17	1V	61	VAL
17	1V	79	VAL
17	1V	85	LYS
18	1W	11	ARG
18	1W	17	VAL
18	1W	63	ASP
18	1W	85	VAL
18	1W	96	ILE
19	1X	48	LYS
19	1X	57	LEU
19	1X	72	LYS
19	1X	81	VAL
20	1Y	1	MET
20	1Y	2	ARG
20	1Y	7	VAL
20	1Y	26	LYS
20	1Y	31	LEU
20	1Y	38	ILE
20	1Y	44	ILE
20	1Y	50	ARG
20	1Y	61	ILE
20	1Y	64	GLU
20	1Y	85	VAL
20	1Y	87	LYS
20	1Y	91	GLU
20	1Y	99	CYS
21	1Z	1	MET
21	1Z	31	ARG
21	1Z	39	VAL
21	1Z	42	VAL
21	1Z	49	ARG
21	1Z	56	VAL
21	1Z	61	LEU
21	1Z	65	GLN
21	1Z	72	ARG
21	1Z	121	HIS
21	1Z	129	SER
21	1Z	132	ASN
21	1Z	141	VAL
21	1Z	150	LEU

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Mol	Chain	Res	Type
21	1Z	154	ASP
21	1Z	155	LEU
21	1Z	157	LEU
21	1Z	161	VAL
21	1Z	163	LEU
21	1Z	170	THR
21	1Z	171	ILE
22	10	10	THR
22	10	63	VAL
23	11	3	LYS
23	11	40	ARG
23	11	52	ARG
23	11	57	GLU
23	11	81	LYS
23	11	91	LYS
24	12	30	ARG
24	12	50	ILE
24	12	69	ARG
25	13	23	LEU
25	13	54	VAL
25	13	55	ARG
25	13	60	GLU
26	14	49	PHE
26	14	50	VAL
26	14	52	THR
26	14	58	ARG
26	14	59	PHE
26	14	61	ARG
26	14	63	TYR
26	14	66	SER
27	15	6	VAL
28	16	4	GLU
28	16	9	LEU
28	16	19	ARG
28	16	35	GLU
28	16	47	THR
28	16	48	VAL
28	16	50	ARG
29	17	29	LYS
29	17	43	THR
29	17	46	VAL
30	18	14	VAL

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Mol	Chain	Res	Type
30	18	15	LYS
30	18	34	TRP
30	18	50	LEU
31	19	33	LYS
33	1b	7	VAL
33	1b	11	LEU
33	1b	12	GLU
33	1b	35	GLU
33	1b	44	LEU
33	1b	45	GLN
33	1b	54	THR
33	1b	64	ARG
33	1b	71	VAL
33	1b	73	THR
33	1b	78	GLN
33	1b	80	ILE
33	1b	83	MET
33	1b	90	MET
33	1b	94	ASN
33	1b	108	ILE
33	1b	109	SER
33	1b	126	GLU
33	1b	127	ILE
33	1b	137	ARG
33	1b	154	LEU
33	1b	160	ASP
33	1b	172	ILE
33	1b	185	ILE
33	1b	196	LEU
33	1b	197	VAL
33	1b	200	ILE
33	1b	208	ILE
33	1b	212	GLN
33	1b	215	LEU
33	1b	219	VAL
33	1b	223	ILE
33	1b	229	VAL
33	1b	230	VAL
33	1b	236	TYR
34	1c	3	ASN
34	1c	8	ILE
34	1c	43	LEU

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Mol	Chain	Res	Type
34	1c	44	GLU
34	1c	45	LYS
34	1c	49	SER
34	1c	64	VAL
34	1c	66	VAL
34	1c	70	VAL
34	1c	82	GLU
34	1c	89	GLU
34	1c	91	LEU
34	1c	115	LEU
34	1c	141	VAL
34	1c	150	LYS
34	1c	165	THR
34	1c	178	LEU
34	1c	190	ARG
34	1c	195	VAL
34	1c	198	VAL
34	1c	202	ILE
35	1d	3	ARG
35	1d	17	VAL
35	1d	19	LEU
35	1d	31	CYS
35	1d	53	ASP
35	1d	64	LEU
35	1d	70	ILE
35	1d	74	GLN
35	1d	76	ARG
35	1d	78	LEU
35	1d	83	SER
35	1d	91	SER
35	1d	100	ARG
35	1d	112	VAL
35	1d	126	ILE
35	1d	127	THR
35	1d	135	LEU
35	1d	140	VAL
35	1d	158	ILE
35	1d	170	VAL
35	1d	175	SER
35	1d	178	VAL
35	1d	200	GLU
36	1e	10	MET

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Mol	Chain	Res	Type
36	1e	13	ILE
36	1e	16	THR
36	1e	32	VAL
36	1e	41	VAL
36	1e	51	VAL
36	1e	56	GLN
36	1e	63	ARG
36	1e	64	ARG
36	1e	67	VAL
36	1e	75	THR
36	1e	79	GLU
36	1e	91	LEU
36	1e	135	THR
37	1f	25	ILE
37	1f	40	VAL
37	1f	55	ASP
37	1f	72	VAL
37	1f	74	ASP
37	1f	78	GLU
37	1f	81	ILE
37	1f	92	LYS
37	1f	94	GLN
38	1g	8	GLU
38	1g	12	LEU
38	1g	16	LEU
38	1g	21	VAL
38	1g	27	ILE
38	1g	29	LYS
38	1g	50	ILE
38	1g	57	GLU
38	1g	61	VAL
38	1g	78	ARG
38	1g	79	ARG
38	1g	90	GLU
38	1g	92	SER
38	1g	104	LEU
38	1g	110	GLN
38	1g	113	GLU
38	1g	120	ILE
38	1g	131	LYS
38	1g	144	MET
38	1g	155	ARG

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Mol	Chain	Res	Type
39	1h	10	LEU
39	1h	13	ILE
39	1h	18	ARG
39	1h	19	VAL
39	1h	32	LYS
39	1h	52	ASP
39	1h	54	ASP
39	1h	82	HIS
39	1h	87	SER
39	1h	99	GLU
39	1h	112	LEU
39	1h	133	LEU
40	1i	7	THR
40	1i	14	VAL
40	1i	63	ILE
40	1i	64	THR
40	1i	75	ASP
40	1i	81	ILE
40	1i	88	TYR
40	1i	92	TYR
40	1i	96	LEU
40	1i	103	THR
40	1i	109	VAL
40	1i	113	LYS
41	1j	43	ARG
41	1j	44	VAL
41	1j	46	ARG
41	1j	72	VAL
41	1j	81	THR
41	1j	92	THR
41	1j	94	VAL
42	1k	14	VAL
42	1k	25	TYR
42	1k	31	THR
42	1k	48	ILE
42	1k	51	LYS
42	1k	81	ASP
42	1k	82	VAL
42	1k	87	THR
42	1k	109	VAL
42	1k	112	THR
42	1k	114	VAL

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Mol	Chain	Res	Type
42	1k	117	ASN
42	1k	120	ARG
43	1l	18	VAL
43	1l	33	ARG
43	1l	36	VAL
43	1l	43	VAL
43	1l	62	SER
43	1l	78	GLN
43	1l	83	VAL
44	1m	4	ILE
44	1m	11	ARG
44	1m	14	ARG
44	1m	17	VAL
44	1m	43	THR
44	1m	102	ARG
44	1m	106	ASN
44	1m	121	LYS
45	1n	3	ARG
45	1n	7	ILE
45	1n	11	LYS
45	1n	13	THR
45	1n	18	VAL
45	1n	22	THR
45	1n	29	ARG
45	1n	32	SER
45	1n	33	VAL
45	1n	50	LYS
45	1n	53	LEU
45	1n	56	VAL
46	1o	3	ILE
46	1o	7	GLU
46	1o	39	LEU
46	1o	48	LYS
46	1o	83	GLU
46	1o	84	LYS
47	1p	5	ARG
47	1p	11	SER
47	1p	16	HIS
47	1p	20	VAL
47	1p	21	VAL
47	1p	27	LYS
47	1p	29	ASP

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Mol	Chain	Res	Type
47	1p	42	ARG
47	1p	45	THR
47	1p	53	VAL
47	1p	61	SER
47	1p	62	VAL
47	1p	67	THR
47	1p	75	ARG
47	1p	79	VAL
48	1q	10	VAL
48	1q	34	LYS
48	1q	35	VAL
48	1q	36	ILE
48	1q	50	LYS
48	1q	52	LYS
48	1q	53	LEU
48	1q	60	ILE
48	1q	70	ARG
48	1q	79	SER
48	1q	87	LYS
48	1q	90	ILE
48	1q	97	SER
49	1r	25	THR
49	1r	46	GLU
49	1r	65	ILE
49	1r	86	VAL
50	1s	4	SER
50	1s	17	GLU
50	1s	30	LEU
50	1s	35	SER
50	1s	37	ARG
50	1s	48	THR
50	1s	62	ILE
50	1s	70	LYS
51	1t	10	LEU
51	1t	13	LEU
51	1t	19	SER
51	1t	24	LEU
51	1t	48	LYS
51	1t	63	ILE
52	1u	7	ARG
52	1u	9	ARG
52	1u	15	ARG

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Mol	Chain	Res	Type
52	1u	17	THR
3	2D	37	LEU
3	2D	99	ASP
3	2D	111	LEU
3	2D	142	VAL
3	2D	165	ILE
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	275	LYS
3	2D	276	LYS
4	2E	7	VAL
4	2E	9	VAL
4	2E	12	THR
4	2E	14	ILE
4	2E	34	VAL
4	2E	41	LYS
4	2E	72	VAL
4	2E	73	GLU
4	2E	90	THR
4	2E	116	VAL
4	2E	119	ARG
4	2E	145	LYS
4	2E	184	VAL
4	2E	195	LEU
5	2F	20	LEU
5	2F	33	LEU
5	2F	43	LYS
5	2F	60	SER
5	2F	74	ARG
5	2F	82	ILE
5	2F	96	ASP
5	2F	108	LYS
5	2F	110	LEU
5	2F	112	MET
5	2F	154	VAL
5	2F	158	THR
5	2F	161	GLU
5	2F	183	VAL
5	2F	192	LEU
5	2F	201	VAL
6	2G	5	VAL

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Mol	Chain	Res	Type
6	2G	18	GLU
6	2G	19	LEU
6	2G	28	VAL
6	2G	33	ARG
6	2G	36	LYS
6	2G	37	VAL
6	2G	43	LEU
6	2G	45	GLU
6	2G	47	LYS
6	2G	53	LEU
6	2G	70	VAL
6	2G	75	LYS
6	2G	79	ASN
6	2G	91	ARG
6	2G	109	VAL
6	2G	111	LEU
6	2G	116	ASP
6	2G	130	ASN
6	2G	133	LEU
6	2G	135	LEU
6	2G	137	GLU
6	2G	140	ILE
6	2G	148	MET
6	2G	155	MET
6	2G	159	VAL
6	2G	160	VAL
6	2G	165	THR
6	2G	167	GLU
7	2H	15	VAL
7	2H	27	LYS
7	2H	33	LEU
7	2H	40	GLU
7	2H	43	VAL
7	2H	53	GLU
7	2H	54	ARG
7	2H	68	THR
7	2H	88	LEU
7	2H	90	LYS
7	2H	103	LEU
7	2H	104	GLU
7	2H	119	GLU
7	2H	124	GLU

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Mol	Chain	Res	Type
7	2H	129	THR
7	2H	134	SER
7	2H	136	ILE
7	2H	141	VAL
7	2H	144	VAL
7	2H	175	LYS
8	2I	15	VAL
8	2I	31	LEU
8	2I	38	LEU
8	2I	41	GLU
8	2I	47	LEU
8	2I	58	LEU
8	2I	62	LYS
8	2I	72	LEU
8	2I	73	GLU
8	2I	76	THR
8	2I	77	LEU
8	2I	79	ILE
8	2I	82	ARG
8	2I	85	GLU
8	2I	92	VAL
8	2I	116	LEU
8	2I	117	GLU
8	2I	120	ILE
8	2I	122	GLU
8	2I	123	LEU
8	2I	129	THR
8	2I	139	GLN
9	2N	1	MET
9	2N	14	VAL
9	2N	28	THR
9	2N	32	THR
9	2N	43	THR
9	2N	60	ILE
9	2N	62	VAL
9	2N	73	THR
9	2N	120	LEU
9	2N	138	LEU
10	2O	1	MET
10	2O	26	LYS
10	2O	28	SER
10	2O	38	VAL

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Mol	Chain	Res	Type
10	2O	52	VAL
10	2O	69	ILE
10	2O	82	ASN
10	2O	108	GLU
10	2O	116	SER
11	2P	1	MET
11	2P	4	SER
11	2P	29	LYS
11	2P	45	LEU
11	2P	57	THR
11	2P	65	ARG
11	2P	77	ARG
11	2P	90	ARG
11	2P	92	GLU
11	2P	98	GLU
11	2P	99	LEU
11	2P	125	VAL
11	2P	147	LEU
12	2Q	1	MET
12	2Q	7	MET
12	2Q	18	LYS
12	2Q	22	LYS
12	2Q	54	MET
12	2Q	56	ARG
12	2Q	60	ARG
12	2Q	75	THR
12	2Q	110	THR
12	2Q	133	ARG
13	2R	6	SER
13	2R	24	GLN
13	2R	30	THR
13	2R	36	THR
13	2R	114	VAL
14	2S	23	ARG
14	2S	27	SER
14	2S	28	VAL
14	2S	35	ILE
14	2S	39	ILE
14	2S	46	VAL
14	2S	49	VAL
14	2S	58	LEU
14	2S	63	THR

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Mol	Chain	Res	Type
14	2S	64	GLU
14	2S	75	GLU
14	2S	85	VAL
14	2S	110	LEU
15	2T	40	THR
15	2T	49	VAL
15	2T	63	VAL
15	2T	87	ASP
15	2T	102	ILE
15	2T	107	ASP
15	2T	115	ARG
15	2T	125	ARG
16	2U	5	LYS
16	2U	8	VAL
16	2U	55	ARG
16	2U	63	VAL
16	2U	65	ILE
16	2U	74	LEU
16	2U	89	GLU
16	2U	90	VAL
17	2V	38	LEU
17	2V	46	VAL
17	2V	56	SER
17	2V	61	VAL
17	2V	74	LYS
17	2V	79	VAL
17	2V	85	LYS
17	2V	98	GLU
18	2W	4	LYS
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	60	ASN
18	2W	67	ASP
18	2W	106	ILE
19	2X	38	GLU
19	2X	43	VAL
19	2X	48	LYS
19	2X	92	LEU
20	2Y	1	MET
20	2Y	8	LYS
20	2Y	9	LYS

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Mol	Chain	Res	Type
20	2Y	47	LYS
20	2Y	49	VAL
20	2Y	63	LYS
20	2Y	75	ILE
20	2Y	85	VAL
20	2Y	87	LYS
20	2Y	91	GLU
20	2Y	99	CYS
21	2Z	5	LEU
21	2Z	6	LYS
21	2Z	11	GLU
21	2Z	18	LEU
21	2Z	27	VAL
21	2Z	28	MET
21	2Z	32	HIS
21	2Z	33	LEU
21	2Z	42	VAL
21	2Z	70	LEU
21	2Z	78	LYS
21	2Z	84	GLU
21	2Z	90	VAL
21	2Z	94	GLU
21	2Z	98	MET
21	2Z	121	HIS
21	2Z	123	ASP
21	2Z	136	PHE
21	2Z	137	ILE
21	2Z	153	SER
21	2Z	154	ASP
21	2Z	161	VAL
22	20	10	THR
22	20	11	ARG
22	20	27	GLU
22	20	30	VAL
22	20	43	THR
22	20	49	LYS
22	20	62	LEU
22	20	63	VAL
23	21	35	THR
23	21	37	ILE
23	21	40	ARG
23	21	72	GLU

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Mol	Chain	Res	Type
23	21	81	LYS
24	22	51	ARG
24	22	53	LEU
25	23	17	LYS
25	23	31	LEU
25	23	54	VAL
25	23	59	VAL
26	24	1	MET
26	24	5	ILE
26	24	10	VAL
26	24	26	SER
26	24	33	VAL
26	24	34	GLU
26	24	46	GLN
26	24	48	ARG
26	24	49	PHE
26	24	50	VAL
26	24	59	PHE
26	24	62	ARG
26	24	63	TYR
27	25	6	VAL
27	25	40	LYS
28	26	19	ARG
28	26	23	THR
28	26	32	ASN
28	26	40	CYS
28	26	48	VAL
28	26	53	LYS
29	27	23	ARG
29	27	24	THR
29	27	41	ARG
29	27	46	VAL
30	28	14	VAL
30	28	37	SER
30	28	39	LYS
30	28	49	VAL
31	29	6	SER
31	29	7	VAL
31	29	9	ARG
33	2b	9	GLU
33	2b	11	LEU
33	2b	16	HIS

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Mol	Chain	Res	Type
33	2b	39	ILE
33	2b	44	LEU
33	2b	49	GLU
33	2b	67	THR
33	2b	68	ILE
33	2b	71	VAL
33	2b	76	GLN
33	2b	90	MET
33	2b	93	VAL
33	2b	94	ASN
33	2b	102	LEU
33	2b	107	THR
33	2b	109	SER
33	2b	112	VAL
33	2b	127	ILE
33	2b	138	LEU
33	2b	140	HIS
33	2b	145	LEU
33	2b	154	LEU
33	2b	164	VAL
33	2b	168	THR
33	2b	169	LYS
33	2b	184	VAL
33	2b	185	ILE
33	2b	189	ASP
33	2b	196	LEU
33	2b	208	ILE
33	2b	212	GLN
33	2b	215	LEU
33	2b	221	LEU
33	2b	223	ILE
33	2b	229	VAL
33	2b	230	VAL
33	2b	235	SER
34	2c	8	ILE
34	2c	14	ILE
34	2c	15	THR
34	2c	28	GLN
34	2c	34	LEU
34	2c	55	VAL
34	2c	70	VAL
34	2c	101	LEU

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Mol	Chain	Res	Type
34	2c	111	LEU
34	2c	115	LEU
34	2c	127	ARG
34	2c	142	MET
34	2c	143	GLU
34	2c	153	VAL
34	2c	154	SER
34	2c	156	ARG
34	2c	161	GLU
34	2c	190	ARG
34	2c	191	THR
34	2c	195	VAL
34	2c	198	VAL
34	2c	202	ILE
34	2c	206	GLU
35	2d	5	ILE
35	2d	12	CYS
35	2d	18	LYS
35	2d	45	GLN
35	2d	53	ASP
35	2d	57	ARG
35	2d	61	LYS
35	2d	76	ARG
35	2d	107	ARG
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	152	SER
35	2d	155	LEU
35	2d	165	MET
35	2d	168	ARG
35	2d	175	SER
35	2d	178	VAL
35	2d	181	MET
35	2d	188	LEU
35	2d	193	ASP
35	2d	198	VAL
36	2e	9	LYS
36	2e	12	LEU
36	2e	13	ILE
36	2e	20	GLN
36	2e	24	ARG

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Mol	Chain	Res	Type
36	2e	32	VAL
36	2e	41	VAL
36	2e	51	VAL
36	2e	55	VAL
36	2e	66	MET
36	2e	67	VAL
36	2e	72	GLN
36	2e	73	ASN
36	2e	75	THR
36	2e	81	GLU
36	2e	82	VAL
36	2e	83	GLU
36	2e	91	LEU
36	2e	112	LEU
36	2e	120	THR
36	2e	135	THR
36	2e	151	LEU
37	2f	7	ASN
37	2f	61	LEU
37	2f	63	TYR
37	2f	69	GLU
37	2f	70	ASP
37	2f	75	LEU
37	2f	81	ILE
37	2f	87	ARG
37	2f	92	LYS
38	2g	6	ARG
38	2g	9	VAL
38	2g	24	THR
38	2g	50	ILE
38	2g	59	LEU
38	2g	66	VAL
38	2g	75	VAL
38	2g	78	ARG
38	2g	79	ARG
38	2g	85	TYR
38	2g	98	SER
38	2g	113	GLU
38	2g	115	ARG
38	2g	138	LYS
38	2g	139	GLU
38	2g	155	ARG

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Mol	Chain	Res	Type
39	2h	11	THR
39	2h	22	GLU
39	2h	26	VAL
39	2h	29	SER
39	2h	51	VAL
39	2h	54	ASP
39	2h	87	SER
39	2h	88	LYS
39	2h	98	LYS
39	2h	99	GLU
39	2h	109	ILE
39	2h	111	ILE
39	2h	112	LEU
39	2h	114	THR
39	2h	119	LEU
39	2h	120	THR
39	2h	127	LEU
39	2h	137	VAL
40	2i	25	LYS
40	2i	29	ASN
40	2i	35	GLU
40	2i	50	LEU
40	2i	64	THR
40	2i	99	LEU
40	2i	102	LEU
40	2i	107	ARG
40	2i	108	VAL
40	2i	110	GLU
41	2j	8	LEU
41	2j	9	ARG
41	2j	13	HIS
41	2j	15	THR
41	2j	16	LEU
41	2j	23	ILE
41	2j	25	GLU
41	2j	33	GLN
41	2j	38	ILE
41	2j	67	THR
41	2j	69	ASN
41	2j	85	LEU
41	2j	92	THR
41	2j	94	VAL

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Mol	Chain	Res	Type
41	2j	95	GLU
41	2j	100	THR
42	2k	14	VAL
42	2k	28	THR
42	2k	33	THR
42	2k	53	SER
42	2k	84	VAL
42	2k	87	THR
42	2k	98	LEU
42	2k	109	VAL
42	2k	112	THR
43	2l	18	VAL
43	2l	22	SER
43	2l	33	ARG
43	2l	36	VAL
43	2l	37	CYS
43	2l	40	VAL
43	2l	43	VAL
43	2l	54	LYS
43	2l	55	VAL
43	2l	57	LYS
43	2l	62	SER
43	2l	66	VAL
43	2l	83	VAL
43	2l	89	ARG
43	2l	91	LYS
43	2l	116	SER
43	2l	122	THR
44	2m	13	LYS
44	2m	22	ILE
44	2m	47	ASP
44	2m	53	VAL
44	2m	62	ASN
44	2m	66	LEU
44	2m	69	GLU
44	2m	73	GLU
44	2m	82	MET
44	2m	103	THR
45	2n	3	ARG
45	2n	11	LYS
45	2n	13	THR
45	2n	31	ARG

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Mol	Chain	Res	Type
45	2n	32	SER
45	2n	33	VAL
45	2n	46	GLU
45	2n	50	LYS
45	2n	53	LEU
46	2o	3	ILE
46	2o	5	LYS
46	2o	39	LEU
46	2o	84	LYS
47	2p	1	MET
47	2p	2	VAL
47	2p	4	ILE
47	2p	20	VAL
47	2p	28	ARG
47	2p	38	TYR
47	2p	67	THR
47	2p	69	THR
47	2p	72	ARG
47	2p	73	LEU
47	2p	74	LEU
48	2q	10	VAL
48	2q	36	ILE
48	2q	41	LYS
48	2q	52	LYS
48	2q	53	LEU
48	2q	60	ILE
48	2q	63	ARG
48	2q	78	GLU
48	2q	99	SER
49	2r	21	LYS
49	2r	25	THR
49	2r	31	LEU
49	2r	41	LYS
49	2r	45	SER
49	2r	46	GLU
49	2r	50	ILE
49	2r	68	LYS
49	2r	82	THR
49	2r	85	LEU
49	2r	86	VAL
50	2s	3	ARG
50	2s	5	LEU

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Mol	Chain	Res	Type
50	2s	15	LEU
50	2s	27	GLU
50	2s	28	LYS
50	2s	30	LEU
50	2s	37	ARG
50	2s	43	GLU
50	2s	45	VAL
50	2s	47	HIS
50	2s	58	VAL
50	2s	80	TYR
50	2s	83	HIS
51	2t	9	ASN
51	2t	50	GLU
51	2t	51	GLU
51	2t	79	ARG
51	2t	90	GLN
51	2t	100	ILE
52	2u	6	ARG
52	2u	7	ARG
52	2u	15	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (154) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	126	GLN
4	1E	48	GLN
4	1E	143	ASN
5	1F	8	GLN
5	1F	69	HIS
5	1F	203	GLN
8	1I	133	HIS
8	1I	139	GLN
9	1N	8	GLN
9	1N	56	ASN
9	1N	69	GLN
10	1O	3	GLN
12	1Q	12	GLN
12	1Q	123	HIS
13	1R	31	HIS
13	1R	71	GLN
14	1S	68	GLN
15	1T	90	GLN

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Mol	Chain	Res	Type
16	1U	72	HIS
16	1U	94	ASN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	92	ASN
21	1Z	32	HIS
21	1Z	34	ASN
21	1Z	73	GLN
24	12	46	GLN
27	15	23	HIS
33	1b	37	ASN
33	1b	45	GLN
33	1b	78	GLN
33	1b	94	ASN
33	1b	212	GLN
34	1c	6	HIS
34	1c	69	HIS
34	1c	162	GLN
35	1d	42	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	119	GLN
35	1d	123	HIS
35	1d	160	GLN
35	1d	201	GLN
36	1e	38	GLN
36	1e	78	HIS
37	1f	13	ASN
37	1f	32	ASN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	122	HIS
39	1h	15	ASN
40	1i	3	GLN
40	1i	31	GLN
40	1i	34	ASN
40	1i	58	HIS
40	1i	89	ASN
40	1i	124	GLN
41	1j	56	HIS

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Mol	Chain	Res	Type
46	1o	46	HIS
46	1o	62	GLN
47	1p	14	ASN
50	1s	23	ASN
50	1s	83	HIS
51	1t	90	GLN
3	2D	87	ASN
3	2D	126	GLN
4	2E	48	GLN
4	2E	66	HIS
4	2E	121	ASN
5	2F	69	HIS
5	2F	75	HIS
5	2F	133	ASN
6	2G	40	ASN
6	2G	41	GLN
6	2G	108	ASN
6	2G	123	ASN
7	2H	74	ASN
8	2I	104	GLN
8	2I	133	HIS
9	2N	8	GLN
9	2N	56	ASN
10	2O	5	GLN
10	2O	90	GLN
12	2Q	12	GLN
12	2Q	13	GLN
12	2Q	123	HIS
14	2S	38	GLN
15	2T	58	ASN
15	2T	84	GLN
16	2U	72	HIS
16	2U	94	ASN
16	2U	104	GLN
19	2X	31	HIS
21	2Z	55	HIS
21	2Z	73	GLN
21	2Z	151	HIS
22	20	35	ASN
24	22	38	GLN
26	24	46	GLN
28	26	20	ASN

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Mol	Chain	Res	Type
33	2b	40	HIS
33	2b	78	GLN
33	2b	135	GLN
33	2b	146	GLN
33	2b	224	GLN
34	2c	28	GLN
34	2c	37	GLN
34	2c	104	GLN
34	2c	108	ASN
34	2c	123	GLN
34	2c	162	GLN
34	2c	170	GLN
35	2d	45	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	160	GLN
36	2e	72	GLN
36	2e	73	ASN
36	2e	127	ASN
36	2e	130	ASN
37	2f	32	ASN
38	2g	28	ASN
38	2g	51	GLN
38	2g	153	HIS
39	2h	15	ASN
39	2h	82	HIS
40	2i	3	GLN
40	2i	31	GLN
40	2i	58	HIS
40	2i	89	ASN
41	2j	21	GLN
41	2j	33	GLN
41	2j	62	HIS
41	2j	68	HIS
41	2j	69	ASN
42	2k	38	ASN
43	2l	49	ASN
43	2l	99	HIS
44	2m	62	ASN
44	2m	77	ASN

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Mol	Chain	Res	Type
45	2n	49	HIS
46	2o	9	GLN
46	2o	62	GLN
47	2p	76	GLN
50	2s	14	HIS
50	2s	23	ASN
50	2s	83	HIS
51	2t	16	HIS
51	2t	75	ASN
51	2t	90	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	451 (15%)	39 (1%)
1	2A	2791/2915 (95%)	496 (17%)	34 (1%)
2	1B	119/121 (98%)	18 (15%)	0
2	2B	118/121 (97%)	28 (23%)	0
32	1a	1497/1521 (98%)	254 (16%)	0
32	2a	1501/1521 (98%)	313 (20%)	0
53	1v	12/24 (50%)	2 (16%)	0
53	2v	12/24 (50%)	2 (16%)	0
54	1w	69/76 (90%)	23 (33%)	0
54	1y	72/76 (94%)	27 (37%)	0
54	2w	66/76 (86%)	22 (33%)	0
54	2y	70/76 (92%)	23 (32%)	0
55	1x	74/77 (96%)	7 (9%)	0
55	2x	74/77 (96%)	8 (10%)	0
All	All	9339/9620 (97%)	1674 (17%)	73 (0%)

All (1674) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	7	G
1	1A	12	U
1	1A	13	A
1	1A	34	C
1	1A	36	G
1	1A	45	C
1	1A	58	G
1	1A	63	U

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Mol	Chain	Res	Type
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	95	G
1	1A	119	A
1	1A	120	U
1	1A	139(A)	G
1	1A	181	A
1	1A	196	A
1	1A	197	A
1	1A	200	U
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	269	U
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(G)	C
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	331	A
1	1A	352	G
1	1A	357	A
1	1A	363	G
1	1A	363(B)	G

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Mol	Chain	Res	Type
1	1A	380	U
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	456	C
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	574	C
1	1A	575	A
1	1A	586	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	646	A
1	1A	652(A)	A
1	1A	652(D)	C
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	670	A

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Mol	Chain	Res	Type
1	1A	686	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	765	G
1	1A	774	A
1	1A	775	G
1	1A	776	G
1	1A	777	A
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	789	A
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	879	G
1	1A	880	G
1	1A	882	G
1	1A	883	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	889	C
1	1A	890	A
1	1A	892	G
1	1A	893	C
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	900	A
1	1A	907	U
1	1A	910	A
1	1A	932	G

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Mol	Chain	Res	Type
1	1A	941	A
1	1A	945	A
1	1A	946	G
1	1A	947	G
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1005	C
1	1A	1008	C
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1038	C
1	1A	1041	C
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1054	A
1	1A	1055	G
1	1A	1058	G
1	1A	1063	G
1	1A	1066	U
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1082	U
1	1A	1083	U
1	1A	1085	A
1	1A	1087	G

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Mol	Chain	Res	Type
1	1A	1088	A
1	1A	1090	U
1	1A	1093	G
1	1A	1094	U
1	1A	1096	A
1	1A	1097	U
1	1A	1098	A
1	1A	1099	G
1	1A	1101	U
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1128	A
1	1A	1129	A
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1142(A)	A
1	1A	1143	A
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1244	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1275	A
1	1A	1289	C
1	1A	1300	U
1	1A	1301	A
1	1A	1302	A
1	1A	1303	G
1	1A	1319	G
1	1A	1345	C

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Mol	Chain	Res	Type
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1422	G
1	1A	1428	C
1	1A	1431	U
1	1A	1445	A
1	1A	1450	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1539	G
1	1A	1540	U
1	1A	1542	A
1	1A	1558	A
1	1A	1569	A
1	1A	1578	U
1	1A	1580	A
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1647	G
1	1A	1648	C
1	1A	1654	A

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Mol	Chain	Res	Type
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1739	U
1	1A	1745(A)	C
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1802	A
1	1A	1816	G
1	1A	1817	G
1	1A	1829	A
1	1A	1839	G
1	1A	1847	A
1	1A	1877	A
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1927	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G

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Mol	Chain	Res	Type
1	1A	2020	A
1	1A	2023	G
1	1A	2030	A
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A
1	1A	2069	G
1	1A	2101	G
1	1A	2102	U
1	1A	2108	C
1	1A	2110	G
1	1A	2112	G
1	1A	2113	U
1	1A	2116	G
1	1A	2121	G
1	1A	2122	U
1	1A	2126	A
1	1A	2127	G
1	1A	2129	C
1	1A	2130	U
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2145	C
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2155	G
1	1A	2156	G
1	1A	2157	G

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Mol	Chain	Res	Type
1	1A	2158	A
1	1A	2159	G
1	1A	2161	C
1	1A	2163	C
1	1A	2165	G
1	1A	2166	G
1	1A	2167	U
1	1A	2168	G
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
1	1A	2181	G
1	1A	2182	G
1	1A	2184	G
1	1A	2189	U
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2219	G
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2267	A
1	1A	2269	A
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2289	G
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2321	G
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2361	A
1	1A	2383	G
1	1A	2385	C

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Mol	Chain	Res	Type
1	1A	2400	G
1	1A	2406	U
1	1A	2407	G
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2468	G
1	1A	2474	C
1	1A	2476	A
1	1A	2478	A
1	1A	2498	C
1	1A	2502	G
1	1A	2505	G
1	1A	2518	A
1	1A	2529	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2632	A
1	1A	2641	G
1	1A	2654	A
1	1A	2657	A
1	1A	2663	G
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2703	C
1	1A	2712(A)	A

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Mol	Chain	Res	Type
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2803	C
1	1A	2805	G
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2839	G
1	1A	2872	G
1	1A	2876	G
1	1A	2880	C
1	1A	2882	A
1	1A	2894	G
1	1A	2895	U
2	1B	2	C
2	1B	13	A
2	1B	15	A
2	1B	25	A
2	1B	35	U
2	1B	42	C
2	1B	45	A
2	1B	48	A
2	1B	50	G
2	1B	56	G
2	1B	57	A
2	1B	65	C
2	1B	67	G
2	1B	73	A
2	1B	84	C
2	1B	85	G
2	1B	108	U
2	1B	110	G
32	1a	9	G

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Mol	Chain	Res	Type
32	1a	22	G
32	1a	32	A
32	1a	39	G
32	1a	48	C
32	1a	51	A
32	1a	52	G
32	1a	61	G
32	1a	76	C
32	1a	77	G
32	1a	79	G
32	1a	91	C
32	1a	96	U
32	1a	98	G
32	1a	100	C
32	1a	101	A
32	1a	105	G
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	162	A
32	1a	163	C
32	1a	174	C
32	1a	180	U
32	1a	182	U
32	1a	189(F)	U
32	1a	189(G)	G
32	1a	189(H)	G
32	1a	189(J)	G
32	1a	194	C
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	222	U
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G

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Mol	Chain	Res	Type
32	1a	267	C
32	1a	283	C
32	1a	289	G
32	1a	306	G
32	1a	316	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	345	C
32	1a	348	G
32	1a	351	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	397	A
32	1a	398	C
32	1a	402	G
32	1a	406	G
32	1a	412	A
32	1a	422	C
32	1a	424	G
32	1a	427	U
32	1a	429	U
32	1a	439	A
32	1a	441	A
32	1a	442	C
32	1a	452	A
32	1a	461	A
32	1a	470	C
32	1a	471	G
32	1a	480	U
32	1a	485	G
32	1a	495	A
32	1a	496	A
32	1a	498	U
32	1a	509	A
32	1a	510	A
32	1a	511	C

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Mol	Chain	Res	Type
32	1a	518	C
32	1a	524	G
32	1a	527	G7M
32	1a	531	U
32	1a	532	A
32	1a	536	C
32	1a	547	A
32	1a	559	A
32	1a	561	U
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	592	G
32	1a	596	C
32	1a	630	G
32	1a	642	A
32	1a	653	A
32	1a	656	C
32	1a	665	A
32	1a	666	G
32	1a	673	G
32	1a	684	A
32	1a	687	A
32	1a	688	G
32	1a	693	G
32	1a	695	A
32	1a	723	U
32	1a	724	G
32	1a	731	G
32	1a	735	C
32	1a	747	C
32	1a	749	C
32	1a	755	G
32	1a	766	A
32	1a	774	G
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	817	C
32	1a	828	A

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Mol	Chain	Res	Type
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	857	C
32	1a	870	U
32	1a	891	U
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	942	G
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	972	C
32	1a	973	G
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	982	U
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	1000	U
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1009	G
32	1a	1010	G
32	1a	1020	U
32	1a	1021	G
32	1a	1022	G
32	1a	1023	G
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1030	C

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Mol	Chain	Res	Type
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1037	C
32	1a	1039	C
32	1a	1044	A
32	1a	1068	G
32	1a	1081	G
32	1a	1086	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1124	G
32	1a	1127	G
32	1a	1131	G
32	1a	1134	G
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1140	C
32	1a	1146	A
32	1a	1152	A
32	1a	1154	G
32	1a	1158	C
32	1a	1159	U
32	1a	1184	G
32	1a	1193	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1212	U
32	1a	1213	A
32	1a	1214	C
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1253	G
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G

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Mol	Chain	Res	Type
32	1a	1260	C
32	1a	1270	C
32	1a	1272	G
32	1a	1275	A
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1320	C
32	1a	1322	C
32	1a	1323	G
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1350	A
32	1a	1353	G
32	1a	1363	C
32	1a	1363(A)	A
32	1a	1364	U
32	1a	1370	G
32	1a	1371	G
32	1a	1397	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1456	G
32	1a	1487	G
32	1a	1492	A
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1519	MA6
32	1a	1520	G
32	1a	1529	G

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Mol	Chain	Res	Type
32	1a	1530	G
53	1v	13	A
53	1v	24	A
54	1w	2	C
54	1w	3	C
54	1w	6	G
54	1w	7	A
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	50	U
54	1w	62	C
54	1w	63	G
54	1w	64	A
54	1w	68	C
54	1w	69	G
54	1w	70	G
54	1w	71	G
54	1w	73	A
55	1x	6	G
55	1x	9	G
55	1x	18	G
55	1x	19	G
55	1x	21	A
55	1x	47	U
55	1x	61	C
54	1y	5	G
54	1y	6	G
54	1y	8	4SU
54	1y	9	A
54	1y	13	C
54	1y	14	A
54	1y	19	G
54	1y	20	U
54	1y	21	A

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Mol	Chain	Res	Type
54	1y	23	A
54	1y	34	G
54	1y	35	A
54	1y	44	G
54	1y	45	U
54	1y	46	G7M
54	1y	47	U
54	1y	48	C
54	1y	53	G
54	1y	54	5MU
54	1y	56	C
54	1y	57	G
54	1y	58	A
54	1y	59	U
54	1y	64	A
54	1y	65	G
54	1y	70	G
54	1y	71	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	35	G
1	2A	36	G
1	2A	45	C
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	79	G
1	2A	84	A
1	2A	90	U
1	2A	94	C
1	2A	95	G
1	2A	100	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	141	A
1	2A	154(A)	C
1	2A	157	U
1	2A	173	G

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Mol	Chain	Res	Type
1	2A	181	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	205	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	232	G
1	2A	233	A
1	2A	248	G
1	2A	266	G
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(B)	G
1	2A	274	G
1	2A	277	C
1	2A	278	A
1	2A	310	A
1	2A	311	A
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	332	A
1	2A	342	G
1	2A	352	G
1	2A	363	G
1	2A	363(B)	G
1	2A	363(E)	U
1	2A	386	G
1	2A	405	U
1	2A	411	G
1	2A	412	A

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Mol	Chain	Res	Type
1	2A	421	U
1	2A	435	C
1	2A	443	A
1	2A	444	C
1	2A	451	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	501	A
1	2A	503	A
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	528	A
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	545	G
1	2A	551	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	599	G
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	621	A
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G

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Mol	Chain	Res	Type
1	2A	664	C
1	2A	668	G
1	2A	669	G
1	2A	686	G
1	2A	717	G
1	2A	730	C
1	2A	774	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	783	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	827	U
1	2A	828	U
1	2A	832	G
1	2A	833	U
1	2A	847	U
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	867	C
1	2A	874	G
1	2A	875	G
1	2A	879	G
1	2A	880	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	900	A
1	2A	901	A

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Mol	Chain	Res	Type
1	2A	903	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	944	G
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	999	U
1	2A	1005	C
1	2A	1012	U
1	2A	1013	C
1	2A	1020	A
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1142(A)	A
1	2A	1157	G
1	2A	1171	G
1	2A	1188	U
1	2A	1195	G
1	2A	1210	A
1	2A	1211	U

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Mol	Chain	Res	Type
1	2A	1219	G
1	2A	1220	A
1	2A	1221	C
1	2A	1236	G
1	2A	1244	G
1	2A	1248	G
1	2A	1252	G
1	2A	1253	A
1	2A	1256	G
1	2A	1268	A
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1314	C
1	2A	1345	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1455	G
1	2A	1460	A
1	2A	1466	G
1	2A	1467	C
1	2A	1471	A

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Mol	Chain	Res	Type
1	2A	1478	G
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1495	A
1	2A	1496	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1648	C
1	2A	1653	G
1	2A	1654	A
1	2A	1665	A
1	2A	1667	G
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1746	G
1	2A	1756	G
1	2A	1758	G

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Mol	Chain	Res	Type
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1817	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1861	G
1	2A	1877	A
1	2A	1878	G
1	2A	1896	G
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1926	U
1	2A	1929	G
1	2A	1930	G
1	2A	1936	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2005	A
1	2A	2020	A

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Mol	Chain	Res	Type
1	2A	2023	G
1	2A	2031	A
1	2A	2032	G
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2069	G
1	2A	2093	G
1	2A	2099	U
1	2A	2101	G
1	2A	2104	G
1	2A	2108	C
1	2A	2109	U
1	2A	2111	C
1	2A	2112	G
1	2A	2113	U
1	2A	2116	G
1	2A	2117	A
1	2A	2120	G
1	2A	2122	U
1	2A	2125	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2142	C
1	2A	2146	C
1	2A	2150	U
1	2A	2151	G
1	2A	2153	G
1	2A	2156	G

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Mol	Chain	Res	Type
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2160	G
1	2A	2161	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2170	A
1	2A	2172	U
1	2A	2173	A
1	2A	2174	C
1	2A	2176	A
1	2A	2178	C
1	2A	2180	U
1	2A	2183	C
1	2A	2185	C
1	2A	2189	U
1	2A	2190	G
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2262	U
1	2A	2267	A
1	2A	2275	C
1	2A	2278	A
1	2A	2283	C
1	2A	2287	A
1	2A	2305	A
1	2A	2306	C
1	2A	2308	G
1	2A	2311	A
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G

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Mol	Chain	Res	Type
1	2A	2327	A
1	2A	2329	G
1	2A	2334	G
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2388	A
1	2A	2391	G
1	2A	2403	C
1	2A	2406	U
1	2A	2407	G
1	2A	2410	G
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2434	A
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2465	C
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2487	G
1	2A	2490	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2513	G
1	2A	2518	A
1	2A	2520	C
1	2A	2525	G
1	2A	2529	G
1	2A	2554	U

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Mol	Chain	Res	Type
1	2A	2555	U
1	2A	2557	G
1	2A	2562	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2619	C
1	2A	2629	A
1	2A	2630	G
1	2A	2654	A
1	2A	2664	G
1	2A	2689	U
1	2A	2690	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2727	G
1	2A	2733	A
1	2A	2744	G
1	2A	2748	A
1	2A	2751	G
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2780	G
1	2A	2789	C
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2807	G
1	2A	2810	A
1	2A	2820	A
1	2A	2821	A

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Mol	Chain	Res	Type
1	2A	2833	G
1	2A	2835	A
1	2A	2839	G
1	2A	2872	G
1	2A	2873	A
1	2A	2880	C
1	2A	2892	A
1	2A	2894	G
1	2A	2895	U
1	2A	2897	U
2	2B	2	C
2	2B	8	U
2	2B	13	A
2	2B	17	C
2	2B	19	G
2	2B	29	A
2	2B	32	C
2	2B	34	U
2	2B	39	A
2	2B	40	U
2	2B	41	U
2	2B	42	C
2	2B	53	A
2	2B	56	G
2	2B	61	G
2	2B	66	A
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	85	G
2	2B	88	C
2	2B	89	G
2	2B	91	C
2	2B	100	A
2	2B	108	U
2	2B	110	G
2	2B	111	G
2	2B	120	A
32	2a	8	A
32	2a	9	G
32	2a	15	G
32	2a	21	G

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Mol	Chain	Res	Type
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	51	A
32	2a	65	U
32	2a	66	G
32	2a	73	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	112	G
32	2a	115	G
32	2a	116	A
32	2a	121	C
32	2a	129(A)	G
32	2a	131	C
32	2a	143	A
32	2a	159	G
32	2a	163	C
32	2a	180	U
32	2a	182	U
32	2a	188	C
32	2a	189(E)	U
32	2a	195	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	217	C
32	2a	220	G
32	2a	231	G
32	2a	247	G
32	2a	249	U
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	301	G
32	2a	318	G

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Mol	Chain	Res	Type
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	339	C
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	355	C
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	458	C
32	2a	470	C
32	2a	471	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	499	A
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	521	G
32	2a	527	G7M
32	2a	528	C
32	2a	531	U

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Mol	Chain	Res	Type
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	581	G
32	2a	596	C
32	2a	597	G
32	2a	618	C
32	2a	630	G
32	2a	652	U
32	2a	653	A
32	2a	657	G
32	2a	661	G
32	2a	665	A
32	2a	666	G
32	2a	672	U
32	2a	687	A
32	2a	688	G
32	2a	702	A
32	2a	705	U
32	2a	712	A
32	2a	720	C
32	2a	721	G
32	2a	723	U
32	2a	724	G
32	2a	731	G
32	2a	734	G
32	2a	749	C
32	2a	755	G
32	2a	777	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	833	U

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Mol	Chain	Res	Type
32	2a	840	C
32	2a	841	U
32	2a	850	U
32	2a	851	G
32	2a	853	G
32	2a	857	C
32	2a	859	A
32	2a	870	U
32	2a	874	G
32	2a	887	G
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	933	G
32	2a	934	C
32	2a	935	A
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	982	U
32	2a	984	C
32	2a	989	C
32	2a	991	U
32	2a	992	U
32	2a	993	G
32	2a	995	C
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1001(A)	G
32	2a	1002	G
32	2a	1003	G

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Mol	Chain	Res	Type
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1017	G
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1032	G
32	2a	1033	G
32	2a	1035	A
32	2a	1036	G
32	2a	1039	C
32	2a	1040	U
32	2a	1043	C
32	2a	1044	A
32	2a	1046	A
32	2a	1050	G
32	2a	1051	C
32	2a	1052	U
32	2a	1053	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1078	U
32	2a	1079	G
32	2a	1081	G
32	2a	1085	U
32	2a	1086	U
32	2a	1087	G
32	2a	1092	A
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U

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Mol	Chain	Res	Type
32	2a	1101	A
32	2a	1105	A
32	2a	1108	G
32	2a	1109	C
32	2a	1110	A
32	2a	1117	G
32	2a	1122	U
32	2a	1123	A
32	2a	1125	U
32	2a	1126	U
32	2a	1127	G
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1133	G
32	2a	1136	U
32	2a	1137	C
32	2a	1139	G
32	2a	1140	C
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1166	G
32	2a	1173	G
32	2a	1174	G
32	2a	1182	G
32	2a	1184	G
32	2a	1189	C
32	2a	1191	A
32	2a	1192	C
32	2a	1193	G
32	2a	1194	U
32	2a	1196	U
32	2a	1197	G
32	2a	1201	A
32	2a	1202	G
32	2a	1204	A
32	2a	1211	U
32	2a	1213	A
32	2a	1214	C

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Mol	Chain	Res	Type
32	2a	1218	C
32	2a	1227	A
32	2a	1228	C
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1261	A
32	2a	1262	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1276	G
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1286	A
32	2a	1287	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1319	A
32	2a	1320	C
32	2a	1321	C
32	2a	1324	A
32	2a	1338	G
32	2a	1346	A
32	2a	1347	G
32	2a	1357	A
32	2a	1358	U
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1378	C
32	2a	1398	A
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G

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Mol	Chain	Res	Type
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1457	G
32	2a	1492	A
32	2a	1497	G
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
53	2v	24	A
54	2w	3	C
54	2w	4	C
54	2w	5	G
54	2w	7	A
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	46	G7M
54	2w	48	C
54	2w	49	C
54	2w	50	U
54	2w	53	G
54	2w	59	U
54	2w	60	U
54	2w	61	C
54	2w	62	C
54	2w	65	G
54	2w	66	U
54	2w	68	C
54	2w	69	G
54	2w	70	G
55	2x	9	G
55	2x	18	G
55	2x	19	G

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Mol	Chain	Res	Type
55	2x	21	A
55	2x	47	U
55	2x	48	C
55	2x	56	C
55	2x	61	C
54	2y	2	C
54	2y	3	C
54	2y	15	G
54	2y	19	G
54	2y	24	G
54	2y	25	C
54	2y	26	A
54	2y	27	G
54	2y	45	U
54	2y	46	G7M
54	2y	48	C
54	2y	49	C
54	2y	52	G
54	2y	53	G
54	2y	54	5MU
54	2y	56	C
54	2y	57	G
54	2y	58	A
54	2y	59	U
54	2y	65	G
54	2y	69	G
54	2y	70	G
54	2y	73	A

All (73) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	199	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	573	G
1	1A	669	G
1	1A	746	A
1	1A	764	A

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Mol	Chain	Res	Type
1	1A	774	A
1	1A	776	G
1	1A	827	U
1	1A	974	G
1	1A	1067	A
1	1A	1128	A
1	1A	1142(A)	A
1	1A	1174	A
1	1A	1176	G
1	1A	1301	A
1	1A	1379	A
1	1A	1420	U
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1762	A
1	1A	1847	A
1	1A	1992	G
1	1A	2134	A
1	1A	2181	G
1	1A	2183	C
1	1A	2250	G
1	1A	2286	A
1	1A	2335	A
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2611	U
1	1A	2689	U
1	2A	196	A
1	2A	215	G
1	2A	228	A
1	2A	266	G
1	2A	271(K)	U
1	2A	271(M)	G
1	2A	277	C
1	2A	310	A
1	2A	528	A
1	2A	746	A
1	2A	774	A
1	2A	827	U
1	2A	856	C

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Mol	Chain	Res	Type
1	2A	900	A
1	2A	1026	U
1	2A	1210	A
1	2A	1301	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1493	C
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1935	G
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2335	A
1	2A	2406	U
1	2A	2439	A
1	2A	2689	U
1	2A	2726	U

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
1	OMC	2A	1920	1	19,22,23	0.77	0	25,31,34	0.80	0
32	G7M	1a	527	32	20,26,27	1.29	2 (10%)	16,39,42	0.39	0
55	5MC	1x	32	55	19,22,23	1.71	3 (15%)	26,32,35	1.62	5 (19%)
1	2MA	1A	2503	56,1	18,25,26	0.93	0	20,37,40	1.96	4 (20%)
32	5MC	2a	967	32	19,22,23	2.06	3 (15%)	26,32,35	1.20	4 (15%)
54	G7M	2w	46	54	20,26,27	1.45	1 (5%)	16,39,42	0.84	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	5MC	1a	967	32	19,22,23	1.63	3 (15%)	26,32,35	1.33	3 (11%)
43	0TD	1l	92	43	8,9,10	4.56	3 (37%)	6,11,13	1.79	2 (33%)
54	4SU	1y	8	54	18,21,22	1.57	6 (33%)	25,30,33	1.41	4 (16%)
54	4SU	2y	8	54	18,21,22	1.58	3 (16%)	25,30,33	2.38	5 (20%)
32	PSU	1a	516	56,32	18,21,22	1.57	3 (16%)	21,30,33	1.94	4 (19%)
32	5MC	2a	1404	32	19,22,23	1.86	3 (15%)	26,32,35	1.52	5 (19%)
1	OMU	1A	2552	56,1	19,22,23	1.24	3 (15%)	25,31,34	2.53	8 (32%)
1	PSU	2A	1917	1	18,21,22	1.34	1 (5%)	21,30,33	1.96	4 (19%)
54	PSU	1w	55	54	18,21,22	1.50	2 (11%)	21,30,33	1.98	3 (14%)
55	5MC	2x	32	55	19,22,23	1.78	3 (15%)	26,32,35	1.35	4 (15%)
54	G7M	1w	46	54	20,26,27	1.41	1 (5%)	16,39,42	0.99	1 (6%)
1	PSU	2A	2605	1	18,21,22	1.27	4 (22%)	21,30,33	2.30	5 (23%)
32	M2G	1a	966	32	20,27,28	1.45	3 (15%)	19,40,43	1.11	3 (15%)
55	31H	2x	76	56	27,34,35	1.09	3 (11%)	22,47,50	2.80	5 (22%)
55	5MU	2x	54	55	19,22,23	1.56	5 (26%)	27,32,35	2.18	8 (29%)
1	5MU	2A	1939	56,1	19,22,23	1.52	5 (26%)	27,32,35	2.68	5 (18%)
54	PSU	2w	32	54	18,21,22	1.39	2 (11%)	21,30,33	2.04	3 (14%)
32	MA6	1a	1518	32	19,26,27	1.03	2 (10%)	18,38,41	2.04	5 (27%)
54	MIA	2y	37	54	17,24,32	0.95	1 (5%)	16,35,47	1.52	2 (12%)
54	4SU	1w	8	54	18,21,22	1.57	4 (22%)	25,30,33	1.91	5 (20%)
54	5MU	2y	54	54	19,22,23	1.64	4 (21%)	27,32,35	2.20	8 (29%)
1	PSU	1A	1917	1	18,21,22	1.33	2 (11%)	21,30,33	2.18	4 (19%)
1	PSU	1A	2605	56,1	18,21,22	1.68	5 (27%)	21,30,33	2.25	5 (23%)
1	5MU	2A	1915	1	19,22,23	1.53	3 (15%)	27,32,35	2.12	7 (25%)
54	PSU	1y	32	54	18,21,22	1.40	2 (11%)	21,30,33	1.88	4 (19%)
32	G7M	2a	527	56,32	20,26,27	1.32	2 (10%)	16,39,42	0.62	0
32	MA6	2a	1518	32	19,26,27	1.03	2 (10%)	18,38,41	1.82	4 (22%)
54	MIA	2w	37	54	19,27,32	1.67	5 (26%)	18,39,47	1.51	4 (22%)
1	2MA	2A	2503	56,1	18,25,26	0.73	0	20,37,40	1.80	4 (20%)
43	0TD	2l	92	43	8,9,10	4.89	2 (25%)	6,11,13	1.10	0
55	PSU	2x	55	55	18,21,22	1.51	3 (16%)	21,30,33	1.87	4 (19%)
1	OMG	1A	2251	56,55,1	19,26,27	1.21	1 (5%)	21,38,41	1.10	2 (9%)
32	5MC	1a	1407	32	19,22,23	2.01	2 (10%)	26,32,35	1.36	3 (11%)
54	MIA	1w	37	54	24,31,32	2.26	3 (12%)	22,44,47	2.96	7 (31%)
1	OMC	1A	1920	1	19,22,23	0.81	1 (5%)	25,31,34	0.94	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
54	PSU	2y	39	54	18,21,22	1.37	2 (11%)	21,30,33	1.99	3 (14%)
54	MIA	1y	37	54	17,24,32	1.15	1 (5%)	16,35,47	1.58	2 (12%)
54	PSU	2y	32	54	18,21,22	1.40	2 (11%)	21,30,33	1.95	3 (14%)
1	5MC	1A	1962	56,1	19,22,23	1.80	3 (15%)	26,32,35	1.19	4 (15%)
1	5MC	2A	1942	1	19,22,23	1.64	3 (15%)	26,32,35	1.15	2 (7%)
32	PSU	2a	516	56,32	18,21,22	1.31	1 (5%)	21,30,33	1.99	4 (19%)
32	4OC	2a	1402	56,32	20,23,24	0.89	1 (5%)	25,32,35	1.10	1 (4%)
54	5MU	2w	54	54	19,22,23	1.36	4 (21%)	27,32,35	1.55	5 (18%)
54	G7M	1y	46	54	20,26,27	1.38	2 (10%)	16,39,42	0.73	0
32	2MG	2a	1207	56,32	18,26,27	0.99	2 (11%)	16,38,41	1.49	4 (25%)
32	2MG	1a	1207	56,32	18,26,27	1.05	1 (5%)	16,38,41	1.86	4 (25%)
55	4SU	2x	8	55	18,21,22	1.91	5 (27%)	25,30,33	1.42	6 (24%)
54	PSU	1w	32	54	18,21,22	1.39	2 (11%)	21,30,33	2.00	3 (14%)
1	OMG	2A	2251	56,55,1	19,26,27	1.09	2 (10%)	21,38,41	1.18	2 (9%)
32	MA6	2a	1519	32	19,26,27	1.04	2 (10%)	18,38,41	1.92	3 (16%)
55	PSU	1x	55	55	18,21,22	1.41	2 (11%)	21,30,33	1.79	4 (19%)
55	31H	1x	76	56	27,34,35	0.95	1 (3%)	22,47,50	2.52	5 (22%)
54	PSU	2y	55	54	18,21,22	1.45	2 (11%)	21,30,33	2.01	3 (14%)
54	G7M	2y	46	54	20,26,27	1.42	1 (5%)	16,39,42	0.79	0
1	5MU	1A	1939	56,1	19,22,23	1.75	6 (31%)	27,32,35	2.59	6 (22%)
54	PSU	2w	55	54	18,21,22	1.50	3 (16%)	21,30,33	1.90	4 (19%)
32	UR3	2a	1498	56,32	19,22,23	1.04	2 (10%)	26,32,35	2.03	4 (15%)
54	PSU	1w	39	54	18,21,22	1.30	2 (11%)	21,30,33	1.90	3 (14%)
32	5MC	1a	1404	32	19,22,23	1.54	3 (15%)	26,32,35	1.59	4 (15%)
54	PSU	2w	39	54	18,21,22	1.39	2 (11%)	21,30,33	2.12	3 (14%)
32	5MC	2a	1407	32	19,22,23	1.33	3 (15%)	26,32,35	1.42	4 (15%)
1	OMU	2A	2552	56,1	19,22,23	1.23	4 (21%)	25,31,34	1.97	5 (20%)
54	5MU	1w	54	54	19,22,23	1.42	5 (26%)	27,32,35	2.16	6 (22%)
54	5MU	1y	54	54	19,22,23	1.59	6 (31%)	27,32,35	1.49	6 (22%)
32	MA6	1a	1519	32	19,26,27	1.04	1 (5%)	18,38,41	1.97	3 (16%)
55	4SU	1x	8	55	18,21,22	2.41	5 (27%)	25,30,33	2.11	9 (36%)
55	5MU	1x	54	55	19,22,23	1.54	5 (26%)	27,32,35	1.89	6 (22%)
1	5MC	1A	1942	1	19,22,23	1.53	3 (15%)	26,32,35	1.96	8 (30%)
1	PSU	2A	1911	1	18,21,22	1.44	2 (11%)	21,30,33	1.88	4 (19%)
32	M2G	2a	966	32	20,27,28	1.41	3 (15%)	19,40,43	1.19	2 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	4OC	1a	1402	32	20,23,24	0.82	0	25,32,35	1.14	2 (8%)
54	4SU	2w	8	54	18,21,22	1.49	4 (22%)	25,30,33	1.99	6 (24%)
54	PSU	1y	55	54	18,21,22	1.46	1 (5%)	21,30,33	1.94	4 (19%)
54	PSU	1y	39	54	18,21,22	1.53	2 (11%)	21,30,33	1.74	4 (19%)
1	PSU	1A	1911	1	18,21,22	1.52	3 (16%)	21,30,33	1.70	3 (14%)
32	UR3	1a	1498	32	19,22,23	0.89	1 (5%)	26,32,35	1.60	4 (15%)
1	5MC	2A	1962	56,1	19,22,23	1.56	2 (10%)	26,32,35	1.44	5 (19%)
32	5MC	2a	1400	32	19,22,23	1.97	2 (10%)	26,32,35	1.31	4 (15%)
32	5MC	1a	1400	32	19,22,23	1.54	3 (15%)	26,32,35	1.25	3 (11%)
1	5MU	1A	1915	1	19,22,23	1.51	4 (21%)	27,32,35	2.19	10 (37%)

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
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	G7M	1a	527	32	-	3/3/25/26	0/3/3/3
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	56,1	-	1/3/25/26	0/3/3/3
32	5MC	2a	967	32	-	1/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	2/3/25/26	0/3/3/3
32	5MC	1a	967	32	-	1/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-
54	4SU	1y	8	54	-	3/7/25/26	0/2/2/2
54	4SU	2y	8	54	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	56,32	-	1/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	56,1	-	0/9/27/28	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	2/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	1/7/25/26	0/2/2/2
54	G7M	1w	46	54	-	1/3/25/26	0/3/3/3
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
55	31H	2x	76	56	-	5/18/40/41	0/3/3/3
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	56,1	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	PSU	2w	32	54	-	2/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
54	MIA	2y	37	54	-	0/3/25/34	0/3/3/3
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
54	5MU	2y	54	54	-	3/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	56,1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
54	PSU	1y	32	54	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	56,32	-	3/3/25/26	0/3/3/3
32	MA6	2a	1518	32	-	1/7/29/30	0/3/3/3
54	MIA	2w	37	54	-	2/7/29/34	0/3/3/3
1	2MA	2A	2503	56,1	-	2/3/25/26	0/3/3/3
43	0TD	2l	92	43	-	2/7/12/14	-
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	56,55,1	-	0/5/27/28	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	3/11/33/34	0/3/3/3
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
54	PSU	2y	39	54	-	0/7/25/26	0/2/2/2
54	MIA	1y	37	54	-	0/3/25/34	0/3/3/3
54	PSU	2y	32	54	-	2/7/25/26	0/2/2/2
1	5MC	1A	1962	56,1	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	56,32	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	56,32	-	2/9/29/30	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
54	G7M	1y	46	54	-	2/3/25/26	0/3/3/3
32	2MG	2a	1207	56,32	-	2/5/27/28	0/3/3/3
32	2MG	1a	1207	56,32	-	2/5/27/28	0/3/3/3
55	4SU	2x	8	55	-	1/7/25/26	0/2/2/2
54	PSU	1w	32	54	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	56,55,1	-	0/5/27/28	0/3/3/3
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
55	31H	1x	76	56	-	6/18/40/41	0/3/3/3
54	PSU	2y	55	54	-	2/7/25/26	0/2/2/2
54	G7M	2y	46	54	-	0/3/25/26	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	5MU	1A	1939	56,1	-	0/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	56,32	-	0/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	56,1	-	0/9/27/28	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
54	5MU	1y	54	54	-	2/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
55	5MU	1x	54	55	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
54	PSU	1y	55	54	-	2/7/25/26	0/2/2/2
54	PSU	1y	39	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	56,1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2

All (222) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-13.36	1.68	1.82
43	1l	92	0TD	CB-SB	-11.95	1.70	1.82
32	2a	967	5MC	C5-C4	7.94	1.50	1.44
32	1a	1407	5MC	C5-C4	7.87	1.50	1.44
32	2a	1400	5MC	C5-C4	7.47	1.49	1.44
54	1w	37	MIA	C2-S10	-7.07	1.69	1.75
54	1w	37	MIA	C13-C14	6.90	1.53	1.32
32	2a	1404	5MC	C5-C4	6.73	1.49	1.44
1	1A	1962	5MC	C5-C4	6.60	1.49	1.44
55	1x	8	4SU	C4-N3	-6.31	1.31	1.37
55	2x	32	5MC	C5-C4	5.90	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	967	5MC	C5-C4	5.80	1.48	1.44
55	1x	32	5MC	C5-C4	5.80	1.48	1.44
1	2A	1942	5MC	C5-C4	5.69	1.48	1.44
1	2A	1962	5MC	C5-C4	5.40	1.48	1.44
1	1A	1942	5MC	C5-C4	5.40	1.48	1.44
32	1a	1400	5MC	C5-C4	5.15	1.48	1.44
54	1y	39	PSU	C6-C5	5.07	1.40	1.35
32	1a	1404	5MC	C5-C4	5.03	1.47	1.44
55	1x	8	4SU	C2-N3	-4.99	1.29	1.38
32	1a	516	PSU	C6-C5	4.98	1.40	1.35
54	1y	55	PSU	C6-C5	4.85	1.40	1.35
54	2w	55	PSU	C6-C5	4.78	1.40	1.35
54	1w	55	PSU	C6-C5	4.74	1.40	1.35
54	1y	32	PSU	C6-C5	4.68	1.40	1.35
54	2w	37	MIA	C2-S10	-4.65	1.71	1.75
55	2x	55	PSU	C6-C5	4.64	1.40	1.35
54	2y	54	5MU	C2-N1	4.61	1.45	1.38
54	2y	8	4SU	C4-S4	-4.59	1.60	1.68
54	1w	32	PSU	C6-C5	4.57	1.40	1.35
54	1y	46	G7M	C5-C4	4.55	1.48	1.39
54	2w	46	G7M	C5-C4	4.48	1.48	1.39
1	1A	2251	OMG	C6-N1	-4.44	1.31	1.37
54	2y	46	G7M	C5-C4	4.42	1.47	1.39
54	1w	8	4SU	C4-S4	-4.40	1.60	1.68
1	2A	1911	PSU	C6-C5	4.37	1.40	1.35
54	1w	46	G7M	C5-C4	4.37	1.47	1.39
55	1x	8	4SU	C4-S4	-4.36	1.61	1.68
54	2y	32	PSU	C6-C5	4.35	1.40	1.35
32	1a	966	M2G	C2-N3	4.33	1.36	1.30
54	2y	55	PSU	C6-C5	4.32	1.40	1.35
54	2w	39	PSU	C6-C5	4.26	1.40	1.35
54	2y	39	PSU	C6-C5	4.23	1.40	1.35
55	2x	8	4SU	C4-N3	-4.18	1.33	1.37
32	2a	966	M2G	C2-N3	4.17	1.36	1.30
1	1A	1911	PSU	C6-C5	4.11	1.39	1.35
1	1A	1939	5MU	C2-N3	-4.11	1.30	1.38
32	2a	1407	5MC	C5-C4	4.09	1.47	1.44
54	2w	32	PSU	C6-C5	4.08	1.39	1.35
32	2a	516	PSU	C6-C5	3.96	1.39	1.35
55	2x	8	4SU	C4-S4	-3.91	1.61	1.68
32	1a	527	G7M	C5-C4	3.87	1.46	1.39
1	2A	1917	PSU	C6-C5	3.82	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1404	5MC	C6-C5	3.68	1.40	1.34
32	2a	527	G7M	C5-C4	3.65	1.46	1.39
54	2w	8	4SU	C4-S4	-3.64	1.62	1.68
1	1A	2605	PSU	C2-N1	-3.60	1.32	1.36
54	1y	8	4SU	C4-S4	-3.57	1.62	1.68
54	1w	39	PSU	C6-C5	3.56	1.39	1.35
55	1x	32	5MC	C6-C5	3.55	1.40	1.34
1	1A	1915	5MU	C2-N1	3.46	1.43	1.38
55	1x	55	PSU	C6-C5	3.45	1.39	1.35
1	1A	1939	5MU	C6-C5	3.41	1.40	1.34
55	2x	8	4SU	C2-N3	-3.38	1.32	1.38
1	2A	1915	5MU	C6-C5	3.37	1.40	1.34
32	1a	966	M2G	C2-N2	3.37	1.41	1.35
55	2x	54	5MU	C4-C5	3.36	1.50	1.44
55	1x	54	5MU	C6-C5	3.34	1.40	1.34
55	2x	32	5MC	C6-C5	3.33	1.40	1.34
54	2w	37	MIA	C6-C5	3.33	1.49	1.44
54	1y	54	5MU	C6-C5	3.30	1.40	1.34
55	1x	54	5MU	C4-N3	-3.27	1.32	1.38
1	1A	1962	5MC	C6-C5	3.23	1.39	1.34
1	2A	1915	5MU	C4-C5	3.20	1.50	1.44
1	2A	1942	5MC	C6-C5	3.19	1.39	1.34
1	1A	2605	PSU	C4-N3	-3.18	1.32	1.38
1	1A	1939	5MU	C4-N3	-3.11	1.33	1.38
54	1w	37	MIA	C6-C5	3.10	1.49	1.44
1	2A	1939	5MU	C6-C5	3.08	1.39	1.34
55	1x	8	4SU	C5-C4	-3.07	1.38	1.42
55	2x	54	5MU	C6-C5	3.05	1.39	1.34
32	1a	967	5MC	C6-C5	3.04	1.39	1.34
1	2A	1962	5MC	C6-N1	-3.03	1.32	1.38
1	2A	2251	OMG	C6-N1	-3.02	1.33	1.37
1	2A	1915	5MU	C2-N1	3.00	1.43	1.38
32	2a	1400	5MC	C6-C5	2.99	1.39	1.34
1	2A	1939	5MU	C4-N3	-2.99	1.33	1.38
1	1A	2552	OMU	C5-C4	-2.97	1.37	1.43
32	2a	1407	5MC	C6-C5	2.96	1.39	1.34
54	2w	54	5MU	C6-C5	2.94	1.39	1.34
54	2y	54	5MU	C6-C5	2.94	1.39	1.34
55	2x	8	4SU	C5-C4	-2.94	1.39	1.42
1	1A	1915	5MU	C6-C5	2.89	1.39	1.34
32	2a	966	M2G	C2-N2	2.87	1.40	1.35
1	2A	1939	5MU	C2-N3	-2.85	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1917	PSU	C6-C5	2.85	1.38	1.35
54	1w	54	5MU	C6-C5	2.84	1.39	1.34
54	2w	8	4SU	C2-N1	2.84	1.42	1.38
1	1A	1911	PSU	C4-N3	-2.83	1.33	1.38
54	1y	54	5MU	C2-N1	2.83	1.42	1.38
32	2a	967	5MC	C6-C5	2.82	1.39	1.34
55	2x	54	5MU	C2-N1	2.80	1.42	1.38
54	1y	54	5MU	C4-N3	-2.80	1.33	1.38
54	1y	37	MIA	C2-N3	2.79	1.36	1.32
32	1a	527	G7M	C6-N1	-2.75	1.33	1.37
32	1a	1400	5MC	C6-C5	2.70	1.39	1.34
32	2a	527	G7M	C6-N1	-2.70	1.33	1.37
43	1l	92	0TD	CB-CG	2.70	1.56	1.52
54	1w	8	4SU	C2-N1	2.70	1.42	1.38
54	1w	54	5MU	C4-C5	2.67	1.49	1.44
1	1A	1917	PSU	C4-N3	-2.67	1.33	1.38
54	2y	55	PSU	C4-N3	-2.66	1.33	1.38
1	1A	1915	5MU	C4-C5	2.66	1.49	1.44
32	1a	1407	5MC	C6-C5	2.65	1.38	1.34
54	2y	54	5MU	O2-C2	2.65	1.27	1.23
1	2A	2552	OMU	C4-N3	-2.64	1.34	1.38
32	1a	1404	5MC	C6-C5	2.62	1.38	1.34
1	2A	2605	PSU	C4-N3	-2.61	1.34	1.38
55	2x	76	31H	C3'-N3'	2.61	1.49	1.45
32	1a	1400	5MC	C6-N1	-2.58	1.33	1.38
32	1a	1519	MA6	C6-C5	-2.58	1.40	1.44
54	2y	8	4SU	C2-N1	2.57	1.42	1.38
32	1a	1404	5MC	C6-N1	-2.56	1.33	1.38
1	2A	1939	5MU	C2-N1	2.56	1.42	1.38
54	2y	37	MIA	C2-N3	2.54	1.36	1.32
54	1y	8	4SU	C4-N3	-2.54	1.35	1.37
55	2x	76	31H	C6-C5	-2.54	1.33	1.43
1	2A	2552	OMU	C2-N3	-2.53	1.33	1.38
55	2x	76	31H	C5-N7	-2.51	1.30	1.39
54	2w	37	MIA	C6-N1	2.51	1.36	1.33
1	1A	1942	5MC	C6-N1	-2.49	1.33	1.38
32	1a	516	PSU	C4-N3	-2.49	1.34	1.38
1	1A	2605	PSU	C6-N1	-2.48	1.32	1.36
55	1x	54	5MU	C2-N1	2.47	1.42	1.38
1	1A	1939	5MU	C6-N1	-2.47	1.33	1.38
54	2w	37	MIA	C2-N3	2.45	1.37	1.34
1	2A	1942	5MC	C6-N1	-2.45	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	54	5MU	C4-C5	2.45	1.48	1.44
55	2x	54	5MU	C4-N3	-2.45	1.34	1.38
54	1w	54	5MU	C2-N1	2.44	1.42	1.38
1	1A	2605	PSU	C2-N3	-2.44	1.33	1.37
32	1a	1207	2MG	C6-N1	-2.44	1.34	1.37
32	1a	1518	MA6	C6-C5	-2.44	1.41	1.44
1	1A	1939	5MU	C4-C5	2.44	1.48	1.44
43	2l	92	0TD	CB-CA	2.42	1.55	1.54
54	1y	8	4SU	C5-C4	-2.40	1.39	1.42
43	1l	92	0TD	CB-CA	2.40	1.55	1.54
54	1y	54	5MU	C4-C5	2.40	1.48	1.44
54	2w	32	PSU	C4-C5	2.38	1.50	1.44
54	1y	8	4SU	C6-C5	2.38	1.40	1.35
54	1y	39	PSU	C4-N3	-2.36	1.34	1.38
1	1A	2552	OMU	C2-N3	-2.35	1.33	1.38
1	1A	1939	5MU	C2-N1	2.35	1.42	1.38
55	1x	76	31H	C6-C5	-2.32	1.34	1.43
32	2a	1518	MA6	C6-C5	-2.31	1.41	1.44
55	1x	55	PSU	C4-N3	-2.30	1.34	1.38
32	2a	1519	MA6	C6-C5	-2.29	1.41	1.44
32	1a	1498	UR3	C6-C5	2.28	1.40	1.35
54	1w	54	5MU	C4-N3	-2.28	1.34	1.38
1	1A	1911	PSU	O4'-C1'	-2.28	1.40	1.43
1	1A	1915	5MU	C4-N3	-2.27	1.34	1.38
54	2w	55	PSU	C4-N3	-2.25	1.34	1.38
55	2x	55	PSU	C4-C5	2.25	1.50	1.44
55	2x	55	PSU	C4-N3	-2.24	1.34	1.38
54	2w	54	5MU	C4-N3	-2.24	1.34	1.38
1	2A	1911	PSU	C4-N3	-2.23	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.23	1.34	1.38
1	2A	2605	PSU	C6-C5	2.22	1.37	1.35
54	1w	8	4SU	C6-C5	2.20	1.40	1.35
32	2a	966	M2G	C6-N1	-2.20	1.34	1.37
32	2a	1402	4OC	C4-N3	2.20	1.36	1.32
55	1x	54	5MU	C2-N3	-2.19	1.34	1.38
54	2w	54	5MU	C2-N3	-2.19	1.34	1.38
54	2w	8	4SU	C6-C5	2.19	1.40	1.35
1	2A	2552	OMU	C6-C5	2.18	1.40	1.35
54	2w	8	4SU	C4-N3	-2.18	1.35	1.37
54	2w	54	5MU	C4-C5	2.17	1.48	1.44
54	1y	54	5MU	C2-N3	-2.16	1.34	1.38
54	1w	55	PSU	C4-C5	2.16	1.50	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	966	M2G	C6-N1	-2.16	1.34	1.37
32	2a	1498	UR3	C6-C5	2.16	1.40	1.35
54	2y	8	4SU	C5-C4	-2.16	1.39	1.42
1	1A	2552	OMU	C6-N1	-2.16	1.32	1.38
55	1x	54	5MU	C4-C5	2.16	1.48	1.44
32	1a	516	PSU	C2-N3	-2.16	1.33	1.37
1	2A	1939	5MU	C6-N1	-2.15	1.34	1.38
1	1A	1920	OMC	C5-C4	-2.14	1.37	1.42
55	1x	32	5MC	C6-N1	-2.14	1.34	1.38
54	1w	39	PSU	C4-N3	-2.14	1.34	1.38
55	2x	32	5MC	C2-N1	2.13	1.44	1.40
32	2a	1519	MA6	C6-N1	2.13	1.35	1.32
55	2x	8	4SU	C6-C5	2.13	1.40	1.35
54	2w	55	PSU	C4-C5	2.13	1.50	1.44
54	2y	32	PSU	C4-C5	2.12	1.50	1.44
1	1A	1942	5MC	C6-C5	2.12	1.38	1.34
54	2w	39	PSU	C4-C5	2.11	1.50	1.44
32	2a	1518	MA6	C6-N1	2.11	1.35	1.32
54	1w	32	PSU	C4-N3	-2.10	1.34	1.38
55	1x	8	4SU	C6-C5	2.10	1.39	1.35
1	2A	2552	OMU	C5-C4	-2.09	1.39	1.43
54	1y	8	4SU	O2-C2	2.09	1.26	1.23
54	1y	54	5MU	O2-C2	2.09	1.26	1.23
32	2a	1498	UR3	C2-N1	2.09	1.41	1.38
54	1w	54	5MU	C2-N3	-2.08	1.34	1.38
55	2x	54	5MU	C6-N1	-2.07	1.34	1.38
32	1a	1518	MA6	C6-N1	2.07	1.35	1.32
54	1w	8	4SU	C5-C4	-2.07	1.40	1.42
1	1A	2605	PSU	C6-C5	2.06	1.37	1.35
32	1a	967	5MC	C6-N1	-2.06	1.34	1.38
1	1A	1962	5MC	C6-N1	-2.05	1.34	1.38
1	2A	2605	PSU	C6-N1	-2.04	1.33	1.36
54	2w	37	MIA	C2-N1	2.04	1.37	1.34
54	1y	32	PSU	C4-C5	2.03	1.50	1.44
1	2A	2605	PSU	C2-N3	-2.03	1.34	1.37
32	2a	1207	2MG	C6-N1	-2.03	1.34	1.37
1	2A	2251	OMG	C2-N1	-2.02	1.32	1.37
54	2y	39	PSU	C4-C5	2.02	1.49	1.44
54	1y	46	G7M	C8-N9	2.01	1.36	1.33
54	1y	8	4SU	C2-N1	2.01	1.41	1.38
32	2a	967	5MC	C6-N1	-2.00	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.00	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1207	2MG	C5-C4	2.00	1.48	1.43

All (333) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	37	MIA	C12-C13-C14	-10.87	107.50	127.01
55	2x	76	31H	C4'-O4'-C1'	-8.74	101.92	109.92
32	2a	1498	UR3	C4-N3-C2	-8.07	118.09	124.58
1	2A	1939	5MU	C5-C4-N3	7.37	121.73	115.32
1	1A	1939	5MU	C5-C4-N3	7.03	121.43	115.32
1	1A	2503	2MA	C2-N3-C4	6.60	120.79	115.46
54	2y	8	4SU	C4-N3-C2	-6.59	121.00	127.31
55	1x	76	31H	N3-C2-N1	-6.58	119.74	128.67
54	2w	39	PSU	N1-C2-N3	6.56	122.09	115.17
54	2y	55	PSU	N1-C2-N3	6.55	122.08	115.17
1	2A	1939	5MU	C4-N3-C2	-6.41	118.94	127.34
1	1A	2605	PSU	N1-C2-N3	6.37	121.89	115.17
1	1A	1917	PSU	N1-C2-N3	6.37	121.89	115.17
1	1A	1939	5MU	C4-N3-C2	-6.34	119.03	127.34
55	2x	76	31H	N3-C2-N1	-6.26	120.18	128.67
54	1y	55	PSU	N1-C2-N3	6.24	121.75	115.17
54	2w	32	PSU	N1-C2-N3	6.24	121.75	115.17
55	2x	55	PSU	N1-C2-N3	6.16	121.66	115.17
1	1A	2552	OMU	O2-C2-N1	-6.13	114.82	122.80
55	2x	76	31H	O4'-C1'-N9	-6.10	100.66	108.75
54	2y	39	PSU	N1-C2-N3	6.07	121.57	115.17
54	1w	32	PSU	N1-C2-N3	6.04	121.54	115.17
1	2A	2605	PSU	N1-C2-N3	6.02	121.51	115.17
54	1w	55	PSU	N1-C2-N3	5.97	121.46	115.17
1	2A	2503	2MA	C2-N3-C4	5.96	120.27	115.46
1	2A	1917	PSU	N1-C2-N3	5.96	121.45	115.17
55	1x	76	31H	C4'-O4'-C1'	-5.95	104.47	109.92
32	2a	516	PSU	N1-C2-N3	5.95	121.44	115.17
54	2y	32	PSU	N1-C2-N3	5.91	121.40	115.17
54	1w	39	PSU	N1-C2-N3	5.91	121.40	115.17
1	2A	1939	5MU	O4-C4-C5	-5.87	118.20	124.92
1	2A	1911	PSU	N1-C2-N3	5.86	121.35	115.17
54	2w	8	4SU	C4-N3-C2	-5.85	121.70	127.31
1	1A	2552	OMU	O4-C4-C5	-5.84	115.08	125.16
54	2w	55	PSU	N1-C2-N3	5.81	121.30	115.17
1	1A	1942	5MC	C5-C6-N1	-5.70	117.12	123.31
1	1A	1915	5MU	N3-C2-N1	5.69	122.30	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2552	OMU	C4-N3-C2	-5.68	119.56	126.61
32	1a	516	PSU	C6-C5-C4	-5.68	114.34	118.17
1	1A	1939	5MU	N3-C2-N1	5.67	122.28	114.89
1	2A	2605	PSU	C4-N3-C2	-5.64	118.60	126.37
55	1x	55	PSU	N1-C2-N3	5.63	121.11	115.17
54	2y	54	5MU	O4-C4-C5	-5.62	118.49	124.92
1	2A	1915	5MU	C5-C4-N3	5.54	120.14	115.32
54	2y	8	4SU	C5-C4-N3	5.53	119.89	114.75
54	2y	8	4SU	C5-C4-S4	-5.52	118.00	124.31
32	1a	1498	UR3	C4-N3-C2	-5.47	120.17	124.58
54	1w	54	5MU	C4-N3-C2	-5.37	120.30	127.34
32	2a	1519	MA6	N3-C2-N1	-5.36	121.39	128.67
1	1A	1911	PSU	N1-C2-N3	5.36	120.82	115.17
54	1y	39	PSU	N1-C2-N3	5.28	120.74	115.17
32	1a	1518	MA6	C2-N1-C6	5.27	122.01	116.84
55	2x	54	5MU	C4-N3-C2	-5.26	120.44	127.34
1	1A	1939	5MU	C5-C6-N1	-5.26	117.60	123.31
54	1w	54	5MU	N3-C2-N1	5.17	121.62	114.89
1	2A	1915	5MU	C4-N3-C2	-5.16	120.58	127.34
55	2x	54	5MU	N3-C2-N1	5.15	121.59	114.89
32	1a	1519	MA6	N3-C2-N1	-5.13	121.71	128.67
1	2A	1939	5MU	C5-C6-N1	-5.12	117.75	123.31
55	1x	8	4SU	O2-C2-N1	5.12	129.46	122.80
32	2a	1518	MA6	N3-C2-N1	-5.11	121.74	128.67
32	1a	1519	MA6	C2-N1-C6	5.04	121.79	116.84
54	1w	8	4SU	C4-N3-C2	-5.03	122.49	127.31
32	1a	1518	MA6	N3-C2-N1	-5.02	121.86	128.67
54	2y	37	MIA	N3-C2-N1	-4.99	121.89	128.67
55	1x	76	31H	CA-N-CN	-4.99	115.14	122.82
1	2A	1939	5MU	N3-C2-N1	4.98	121.37	114.89
1	1A	1915	5MU	C4-N3-C2	-4.97	120.82	127.34
1	1A	2605	PSU	C4-N3-C2	-4.91	119.61	126.37
54	1y	32	PSU	N1-C2-N3	4.87	120.30	115.17
54	1w	8	4SU	C5-C4-N3	4.85	119.26	114.75
54	1w	54	5MU	C5-C4-N3	4.76	119.46	115.32
54	2y	54	5MU	C5-C4-N3	4.73	119.44	115.32
55	1x	54	5MU	N3-C2-N1	4.72	121.04	114.89
32	1a	1404	5MC	C5-C4-N3	-4.72	116.92	121.75
1	1A	1917	PSU	C4-N3-C2	-4.59	120.05	126.37
32	2a	1519	MA6	C2-N1-C6	4.58	121.33	116.84
54	1y	37	MIA	N3-C2-N1	-4.58	122.45	128.67
55	1x	32	5MC	C5-C6-N1	-4.57	118.34	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	2w	39	PSU	C4-N3-C2	-4.55	120.10	126.37
1	2A	2552	OMU	O2-C2-N1	-4.54	116.88	122.80
54	2w	8	4SU	N3-C2-N1	4.53	120.79	114.89
1	2A	2552	OMU	C4-N3-C2	-4.51	121.01	126.61
55	1x	76	31H	O4'-C1'-N9	-4.51	102.77	108.75
1	1A	1917	PSU	O2-C2-N1	-4.50	118.15	122.79
54	2y	54	5MU	C4-N3-C2	-4.48	121.47	127.34
1	2A	1915	5MU	N3-C2-N1	4.47	120.71	114.89
1	2A	2552	OMU	N3-C2-N1	4.38	120.60	114.89
55	1x	8	4SU	C6-C5-C4	-4.38	116.16	119.95
1	2A	1917	PSU	O2-C2-N1	-4.34	118.31	122.79
55	2x	54	5MU	C5-C4-N3	4.34	119.09	115.32
55	1x	32	5MC	C5-C4-N3	-4.32	117.33	121.75
55	1x	8	4SU	S4-C4-N3	-4.30	115.70	120.20
54	2y	39	PSU	O2-C2-N1	-4.29	118.36	122.79
32	2a	1518	MA6	C2-N1-C6	4.25	121.01	116.84
32	1a	1407	5MC	C5-C6-N1	-4.21	118.74	123.31
54	2w	8	4SU	C5-C4-N3	4.18	118.63	114.75
32	1a	967	5MC	C5-C6-N1	-4.16	118.80	123.31
32	1a	1404	5MC	C5-C6-N1	-4.15	118.81	123.31
54	1w	37	MIA	C15-C14-C13	-4.13	110.26	122.66
1	1A	2552	OMU	C5-C4-N3	4.13	120.58	114.80
32	1a	1400	5MC	C5-C6-N1	-4.13	118.83	123.31
55	1x	54	5MU	C4-N3-C2	-4.12	121.93	127.34
1	2A	1915	5MU	O4-C4-C5	-4.11	120.21	124.92
54	2w	32	PSU	C4-N3-C2	-4.11	120.71	126.37
54	1w	54	5MU	O4-C4-C5	-4.08	120.25	124.92
54	2w	32	PSU	O2-C2-N1	-4.08	118.58	122.79
54	2y	32	PSU	O2-C2-N1	-4.08	118.58	122.79
55	1x	54	5MU	C5-C6-N1	-4.05	118.92	123.31
32	2a	516	PSU	C4-N3-C2	-4.04	120.81	126.37
1	2A	1911	PSU	C4-N3-C2	-3.95	120.93	126.37
54	1w	55	PSU	O2-C2-N1	-3.94	118.72	122.79
54	1w	32	PSU	C4-N3-C2	-3.94	120.95	126.37
54	1w	8	4SU	C5-C4-S4	-3.93	119.81	124.31
54	1w	37	MIA	C16-C14-C13	-3.93	110.87	122.66
32	1a	516	PSU	N1-C2-N3	3.92	119.30	115.17
32	1a	1207	2MG	N2-C2-N3	-3.87	115.59	120.51
32	2a	1407	5MC	C5-C4-N3	-3.84	117.82	121.75
32	2a	1404	5MC	C5-C6-N1	-3.83	119.15	123.31
1	2A	2552	OMU	C5-C4-N3	3.83	120.17	114.80
54	2y	8	4SU	N3-C2-N1	3.83	119.87	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1207	2MG	C8-N7-C5	3.82	109.06	102.55
1	1A	2605	PSU	O2-C2-N1	-3.81	118.86	122.79
54	2w	37	MIA	C12-N6-C6	-3.81	119.32	122.85
32	1a	1498	UR3	C6-N1-C2	-3.81	118.69	121.80
1	1A	1915	5MU	O4-C4-C5	-3.78	120.59	124.92
54	2w	54	5MU	O4-C4-C5	-3.78	120.60	124.92
54	2y	39	PSU	C4-N3-C2	-3.77	121.18	126.37
55	1x	54	5MU	C5-C4-N3	3.77	118.60	115.32
1	1A	1942	5MC	C5-C4-N4	-3.75	116.11	121.39
54	1y	32	PSU	O2-C2-N1	-3.74	118.93	122.79
55	2x	32	5MC	C5-C6-N1	-3.74	119.25	123.31
54	1w	54	5MU	C5-C6-N1	-3.72	119.27	123.31
55	2x	54	5MU	C5-C6-N1	-3.70	119.30	123.31
54	2y	54	5MU	N3-C2-N1	3.67	119.67	114.89
54	1w	39	PSU	O2-C2-N1	-3.67	119.01	122.79
1	1A	1915	5MU	C5-C4-N3	3.64	118.49	115.32
54	2w	39	PSU	O2-C2-N1	-3.64	119.03	122.79
54	1y	32	PSU	C6-C5-C4	-3.62	115.73	118.17
1	2A	1917	PSU	C4-N3-C2	-3.62	121.38	126.37
1	2A	2251	OMG	C8-N7-C5	3.62	108.72	102.55
32	1a	1207	2MG	N1-C2-N2	3.62	120.26	116.56
1	1A	2552	OMU	N3-C2-N1	3.60	119.57	114.89
32	2a	1404	5MC	C5-C4-N3	-3.59	118.07	121.75
32	2a	1400	5MC	C5-C6-N1	-3.59	119.41	123.31
55	2x	54	5MU	C5M-C5-C4	3.59	122.61	118.78
54	2w	55	PSU	C4-N3-C2	-3.58	121.44	126.37
54	2y	54	5MU	C1'-N1-C2	3.56	123.98	117.59
54	1y	54	5MU	N3-C2-N1	3.55	119.51	114.89
54	1w	55	PSU	C4-N3-C2	-3.53	121.50	126.37
54	1y	55	PSU	O2-C2-N1	-3.52	119.16	122.79
1	2A	2605	PSU	C5-C6-N1	-3.52	117.26	122.14
54	2w	54	5MU	N3-C2-N1	3.52	119.47	114.89
55	1x	55	PSU	C4-N3-C2	-3.51	121.54	126.37
1	1A	2552	OMU	O4-C4-N3	3.49	124.34	119.27
54	2y	55	PSU	C4-N3-C2	-3.49	121.56	126.37
32	2a	1498	UR3	C3U-N3-C4	3.48	122.69	117.87
54	2w	54	5MU	C5-C4-N3	3.48	118.35	115.32
54	1y	8	4SU	N3-C2-N1	3.47	119.41	114.89
1	1A	1942	5MC	N4-C4-N3	3.45	124.76	118.51
54	2y	32	PSU	C4-N3-C2	-3.45	121.62	126.37
55	1x	8	4SU	O2-C2-N3	-3.45	115.12	121.49
55	2x	55	PSU	C4-N3-C2	-3.45	121.62	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1402	4OC	CM4-N4-C4	-3.42	115.76	122.45
55	2x	8	4SU	C1'-N1-C2	3.40	123.70	117.59
54	1w	39	PSU	C4-N3-C2	-3.39	121.69	126.37
54	1y	8	4SU	C4-N3-C2	-3.38	124.08	127.31
1	2A	1942	5MC	C5-C6-N1	-3.34	119.69	123.31
32	2a	1400	5MC	O2-C2-N3	-3.34	117.06	122.33
54	2y	54	5MU	C1'-N1-C6	-3.32	115.68	121.15
32	1a	1407	5MC	CM5-C5-C6	-3.31	118.37	122.85
54	2y	55	PSU	O2-C2-N1	-3.30	119.38	122.79
54	1w	37	MIA	C2-N1-C6	3.30	123.28	117.42
32	2a	516	PSU	O2-C2-N1	-3.28	119.41	122.79
54	1y	32	PSU	C4-N3-C2	-3.28	121.86	126.37
1	1A	1939	5MU	O4-C4-C5	-3.26	121.18	124.92
55	1x	32	5MC	O2-C2-N3	-3.24	117.22	122.33
32	2a	966	M2G	C8-N7-C5	3.21	108.02	102.55
54	1y	39	PSU	C6-C5-C4	-3.19	116.02	118.17
32	2a	1498	UR3	C5-C4-N3	3.18	119.23	115.04
32	2a	967	5MC	C5-C6-N1	-3.18	119.86	123.31
1	1A	2503	2MA	C4-C5-N7	-3.18	105.98	109.34
1	1A	2251	OMG	C8-N7-C5	3.15	107.91	102.55
1	1A	1942	5MC	O2-C2-N1	-3.14	112.74	118.90
54	1w	8	4SU	N3-C2-N1	3.13	118.96	114.89
1	2A	1962	5MC	C5-C6-N1	-3.11	119.93	123.31
1	2A	1915	5MU	C5-C6-N1	-3.11	119.93	123.31
55	2x	8	4SU	O2-C2-N1	3.09	126.82	122.80
54	1y	37	MIA	C4-C5-N7	-3.08	106.08	109.34
1	2A	1962	5MC	CM5-C5-C6	-3.08	118.68	122.85
32	2a	1207	2MG	C8-N7-C5	3.07	107.78	102.55
32	2a	1404	5MC	N1-C2-N3	3.07	124.12	118.80
54	1y	55	PSU	C4-N3-C2	-3.06	122.15	126.37
54	1w	46	G7M	O6-C6-N1	3.06	124.25	120.62
1	2A	2605	PSU	O2-C2-N1	-3.06	119.63	122.79
55	2x	54	5MU	C5M-C5-C6	-3.05	118.72	122.85
32	1a	1404	5MC	O2-C2-N3	-3.04	117.53	122.33
1	2A	1942	5MC	C5-C4-N3	-3.04	118.64	121.75
32	1a	1402	4OC	C6-C5-C4	3.03	120.65	117.00
55	1x	54	5MU	O4-C4-C5	-3.01	121.47	124.92
32	1a	1519	MA6	C4-C5-N7	-3.00	106.17	109.34
1	1A	1939	5MU	O2-C2-N3	-2.99	115.97	121.49
32	2a	1519	MA6	C4-C5-N7	-2.99	106.18	109.34
54	1w	37	MIA	N3-C2-N1	-2.98	121.57	127.03
43	1l	92	0TD	CSB-SB-CB	-2.98	97.01	102.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	516	PSU	C4-N3-C2	-2.96	122.30	126.37
32	1a	967	5MC	C5-C4-N3	-2.92	118.76	121.75
1	1A	1942	5MC	N1-C2-N3	2.91	123.86	118.80
32	1a	516	PSU	O2-C2-N3	-2.91	116.69	121.86
1	1A	1911	PSU	C4-N3-C2	-2.90	122.38	126.37
1	2A	1962	5MC	C1'-N1-C6	-2.90	116.38	121.15
54	2w	54	5MU	C4-N3-C2	-2.88	123.56	127.34
55	2x	32	5MC	C5-C4-N3	-2.86	118.82	121.75
32	1a	1518	MA6	C1'-N9-C4	-2.86	121.62	126.64
54	1y	54	5MU	C5-C4-N3	2.86	117.81	115.32
1	1A	1915	5MU	C6-N1-C2	-2.85	118.46	121.30
1	1A	1962	5MC	C5-C6-N1	-2.83	120.24	123.31
55	2x	55	PSU	O2-C2-N3	-2.83	116.84	121.86
55	1x	8	4SU	C4-N3-C2	2.78	129.98	127.31
54	2w	55	PSU	O2-C2-N1	-2.78	119.92	122.79
55	1x	76	31H	OCN-CN-N	-2.78	118.15	125.32
54	2w	37	MIA	N3-C2-N1	-2.77	121.96	127.03
1	2A	2503	2MA	O4'-C1'-N9	-2.77	105.08	108.75
54	1w	54	5MU	O2-C2-N1	-2.77	119.20	122.80
54	2w	37	MIA	C2-N1-C6	2.76	122.33	117.42
32	2a	1407	5MC	C5-C6-N1	-2.74	120.34	123.31
54	2y	8	4SU	O2-C2-N1	-2.73	119.25	122.80
32	2a	1404	5MC	O2-C2-N3	-2.73	118.03	122.33
54	1w	32	PSU	O2-C2-N1	-2.72	119.98	122.79
1	1A	1917	PSU	C5-C6-N1	-2.70	118.39	122.14
54	2w	8	4SU	C5-C4-S4	-2.69	121.23	124.31
32	2a	1518	MA6	C4-C5-N7	-2.69	106.50	109.34
32	2a	967	5MC	O2-C2-N3	-2.69	118.10	122.33
55	2x	8	4SU	O2-C2-N3	-2.68	116.55	121.49
54	1y	8	4SU	C5-C4-N3	2.64	117.20	114.75
32	2a	1407	5MC	O2-C2-N3	-2.63	118.18	122.33
55	1x	8	4SU	C5-C4-S4	2.63	127.31	124.31
54	2w	37	MIA	C4-C5-N7	-2.60	106.59	109.34
54	1y	54	5MU	C4-N3-C2	-2.60	123.93	127.34
1	1A	1942	5MC	C4-N3-C2	-2.59	117.21	120.81
1	2A	1962	5MC	C5-C4-N3	-2.58	119.11	121.75
54	1y	39	PSU	C4-N3-C2	-2.58	122.81	126.37
1	1A	1942	5MC	C5-C4-N3	-2.58	119.11	121.75
1	1A	1962	5MC	CM5-C5-C6	-2.57	119.37	122.85
1	2A	1915	5MU	C5M-C5-C4	2.56	121.51	118.78
54	1y	54	5MU	O4-C4-C5	-2.55	122.00	124.92
32	1a	966	M2G	O6-C6-C5	-2.55	119.27	124.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	967	5MC	C5-C4-N3	-2.55	119.14	121.75
54	2w	55	PSU	C6-C5-C4	-2.53	116.47	118.17
55	2x	54	5MU	O4-C4-C5	-2.52	122.03	124.92
54	1w	37	MIA	C4-C5-N7	-2.49	106.70	109.34
54	1w	8	4SU	C1'-N1-C2	2.49	122.06	117.59
32	2a	516	PSU	O4'-C1'-C2'	2.48	108.58	105.15
1	1A	2605	PSU	C5-C6-N1	-2.47	118.71	122.14
54	1y	8	4SU	C6-N1-C2	-2.47	118.00	121.00
54	1y	39	PSU	O2-C2-N3	-2.45	117.52	121.86
55	2x	32	5MC	O2-C2-N3	-2.44	118.49	122.33
32	1a	1407	5MC	C5-C4-N3	-2.42	119.28	121.75
1	1A	1962	5MC	C5-C4-N3	-2.41	119.28	121.75
32	2a	1404	5MC	CM5-C5-C6	-2.41	119.59	122.85
1	1A	1915	5MU	C5M-C5-C4	2.41	121.36	118.78
54	1y	55	PSU	C6-N1-C2	-2.41	120.46	122.69
55	1x	8	4SU	C5-C4-N3	2.41	116.99	114.75
32	1a	1400	5MC	C5-C4-N3	-2.40	119.30	121.75
1	2A	2552	OMU	O4-C4-C5	-2.39	121.05	125.16
1	1A	2605	PSU	O4-C4-C5	-2.38	118.08	124.01
32	1a	1518	MA6	C4-C5-N7	-2.38	106.82	109.34
32	2a	1407	5MC	N4-C4-N3	2.38	122.82	118.51
32	2a	1207	2MG	C5-C6-N1	2.38	118.60	114.07
1	1A	1915	5MU	O2-C2-N3	-2.38	117.11	121.49
54	2w	8	4SU	C6-N1-C2	-2.37	118.11	121.00
55	1x	8	4SU	C1'-N1-C2	2.37	121.85	117.59
32	1a	1400	5MC	O2-C2-N3	-2.34	118.64	122.33
32	1a	966	M2G	C5-C6-N1	2.34	118.53	114.07
43	1l	92	0TD	OD2-CG-CB	2.34	118.21	113.15
55	1x	54	5MU	O2-C2-N1	-2.34	119.75	122.80
32	1a	966	M2G	C8-N7-C5	2.33	106.52	102.55
1	1A	1915	5MU	C5M-C5-C6	-2.32	119.70	122.85
55	2x	76	31H	C3'-N3'-C	-2.32	119.66	123.20
54	1w	37	MIA	C6-C5-C4	-2.32	115.22	117.68
32	2a	966	M2G	C5-C6-N1	2.31	118.47	114.07
54	2y	54	5MU	C5-C6-N1	-2.28	120.84	123.31
55	1x	32	5MC	CM5-C5-C4	-2.28	116.76	120.51
54	2w	8	4SU	C1'-N1-C2	2.27	121.66	117.59
1	1A	2503	2MA	CM2-C2-N1	2.26	120.51	117.13
32	1a	1498	UR3	C3U-N3-C4	2.24	120.98	117.87
55	2x	8	4SU	C6-C5-C4	-2.24	118.01	119.95
1	2A	2503	2MA	C2-N1-C6	2.24	121.54	118.10
32	2a	967	5MC	CM5-C5-C6	-2.23	119.83	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	8	4SU	C6-N1-C2	-2.22	118.30	121.00
1	1A	1942	5MC	CM5-C5-C6	-2.22	119.85	122.85
1	2A	2605	PSU	O4-C4-C5	-2.20	118.55	124.01
1	1A	1915	5MU	C1'-N1-C2	2.19	121.53	117.59
32	1a	967	5MC	N4-C4-N3	2.19	122.47	118.51
1	1A	2552	OMU	O2-C2-N3	2.19	125.52	121.49
55	1x	8	4SU	C6-N1-C2	-2.19	118.34	121.00
55	1x	32	5MC	N1-C2-N3	2.18	122.59	118.80
54	2y	54	5MU	O2-C2-N3	-2.18	117.47	121.49
1	1A	1911	PSU	C6-C5-C4	-2.18	116.71	118.17
1	2A	1911	PSU	O2-C2-N3	-2.17	118.01	121.86
32	2a	1207	2MG	N1-C2-N2	2.17	118.78	116.56
55	1x	55	PSU	O2-C2-N1	-2.16	120.56	122.79
1	1A	1915	5MU	C5-C6-N1	-2.15	120.98	123.31
54	2y	37	MIA	N6-C6-N1	2.13	122.89	118.33
1	1A	2503	2MA	C5-C6-N1	-2.13	118.32	120.84
32	1a	1402	4OC	C5-C6-N1	-2.13	118.38	121.84
32	1a	1518	MA6	C10-N6-C6	2.13	125.27	119.40
55	2x	8	4SU	C5-C4-N3	2.12	116.72	114.75
32	2a	1207	2MG	CM2-N2-C2	-2.11	119.10	123.65
32	1a	1498	UR3	C5-C4-N3	2.11	117.82	115.04
55	2x	76	31H	OCN-CN-N	-2.09	119.92	125.32
32	2a	1518	MA6	C10-N6-C6	2.09	125.16	119.40
1	2A	1915	5MU	O2-C2-N1	-2.09	120.08	122.80
1	2A	1911	PSU	O2-C2-N1	-2.08	120.64	122.79
1	2A	2251	OMG	C5-C6-N1	2.08	118.03	114.07
1	2A	1962	5MC	N4-C4-N3	2.08	122.27	118.51
32	2a	1400	5MC	C5-C4-N3	-2.07	119.63	121.75
54	1y	54	5MU	C1'-N1-C2	2.07	121.31	117.59
1	1A	1962	5MC	O2-C2-N3	-2.07	119.06	122.33
54	1y	54	5MU	C5M-C5-C4	2.07	120.99	118.78
32	1a	1207	2MG	CM2-N2-C2	-2.06	119.21	123.65
55	2x	32	5MC	N4-C4-N3	2.05	122.23	118.51
55	1x	55	PSU	C5-C6-N1	-2.04	119.30	122.14
55	2x	55	PSU	C5-C6-N1	-2.03	119.32	122.14
55	2x	54	5MU	O2-C2-N1	-2.03	120.15	122.80
32	2a	1400	5MC	CM5-C5-C6	-2.03	120.10	122.85
1	2A	2503	2MA	C5-C6-N1	-2.03	118.44	120.84
54	2w	54	5MU	C5M-C5-C4	2.02	120.94	118.78
32	2a	1498	UR3	C6-N1-C2	-2.02	120.15	121.80
1	2A	1917	PSU	O4'-C1'-C2'	2.02	107.95	105.15
1	1A	2552	OMU	C5-C6-N1	-2.02	118.56	121.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2251	OMG	CM2-O2'-C2'	2.01	119.64	114.47
32	1a	1404	5MC	CM5-C5-C6	-2.01	120.13	122.85

There are no chirality outliers.

All (77) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1207	2MG	N1-C2-N2-CM2
32	1a	1207	2MG	N3-C2-N2-CM2
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	O-C-CA-CB
54	1w	37	MIA	C12-C13-C14-C15
54	1w	37	MIA	C12-C13-C14-C16
55	1x	76	31H	C-CA-CB-CG
54	1y	46	G7M	C4'-C5'-O5'-P
32	2a	1207	2MG	N1-C2-N2-CM2
32	2a	1207	2MG	N3-C2-N2-CM2
54	2w	32	PSU	C2'-C1'-C5-C4
54	2w	37	MIA	C5-C6-N6-C12
54	2w	37	MIA	N1-C6-N6-C12
54	2y	54	5MU	O4'-C4'-C5'-O5'
54	2y	55	PSU	C2'-C1'-C5-C4
55	1x	76	31H	C3'-C4'-C5'-O5'
55	2x	76	31H	C3'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	2w	46	G7M	C3'-C4'-C5'-O5'
54	2y	54	5MU	C3'-C4'-C5'-O5'
55	1x	76	31H	CB-CG-SD-CE
55	1x	76	31H	O4'-C4'-C5'-O5'
54	1y	8	4SU	C3'-C4'-C5'-O5'
54	1y	8	4SU	O4'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
54	2w	46	G7M	O4'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
55	2x	76	31H	CB-CG-SD-CE
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1402	4OC	O4'-C4'-C5'-O5'
54	1y	54	5MU	O4'-C4'-C5'-O5'
1	2A	1915	5MU	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	2y	32	PSU	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	1a	527	G7M	O4'-C4'-C5'-O5'
32	1a	1402	4OC	C3'-C4'-C5'-O5'
55	1x	76	31H	N-CA-CB-CG
32	2a	1402	4OC	C3'-C4'-C5'-O5'
43	2l	92	0TD	CG-CB-SB-CSB
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
55	1x	76	31H	C4'-C5'-O5'-P
1	2A	2503	2MA	C3'-C4'-C5'-O5'
32	2a	967	5MC	O4'-C4'-C5'-O5'
54	1w	46	G7M	C4'-C5'-O5'-P
32	1a	516	PSU	O4'-C1'-C5-C4
54	1w	55	PSU	O4'-C1'-C5-C4
54	1y	55	PSU	O4'-C1'-C5-C4
54	2y	55	PSU	O4'-C1'-C5-C4
32	2a	527	G7M	C4'-C5'-O5'-P
54	1w	37	MIA	N6-C12-C13-C14
32	1a	527	G7M	C4'-C5'-O5'-P
32	2a	1519	MA6	C4'-C5'-O5'-P
1	1A	2503	2MA	O4'-C4'-C5'-O5'
54	2y	32	PSU	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C4'-C5'-O5'-P
54	1y	8	4SU	C4'-C5'-O5'-P
55	2x	76	31H	C4'-C5'-O5'-P
32	2a	1518	MA6	O4'-C4'-C5'-O5'
32	1a	1400	5MC	O4'-C4'-C5'-O5'
1	2A	1915	5MU	C3'-C4'-C5'-O5'
54	1w	55	PSU	O4'-C1'-C5-C6
54	1y	55	PSU	O4'-C1'-C5-C6
54	1y	46	G7M	C3'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
54	2w	32	PSU	C2'-C1'-C5-C6
54	1y	54	5MU	C3'-C4'-C5'-O5'
55	2x	8	4SU	C2'-C1'-N1-C2
54	2y	54	5MU	C2'-C1'-N1-C2
1	1A	1920	OMC	C2'-C1'-N1-C2
55	2x	32	5MC	C2'-C1'-N1-C2
55	2x	76	31H	CA-CB-CG-SD
32	1a	967	5MC	O4'-C4'-C5'-O5'

There are no ring outliers.

44 monomers are involved in 75 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
55	1x	32	5MC	1	0
1	1A	2503	2MA	1	0
32	2a	967	5MC	1	0
54	1y	8	4SU	2	0
54	2y	8	4SU	1	0
32	2a	1404	5MC	1	0
1	1A	2552	OMU	1	0
54	1w	55	PSU	1	0
55	2x	32	5MC	1	0
54	1w	46	G7M	1	0
55	2x	76	31H	3	0
1	2A	1939	5MU	2	0
32	1a	1518	MA6	3	0
54	2y	37	MIA	1	0
54	1w	8	4SU	1	0
54	1y	32	PSU	1	0
32	2a	1518	MA6	5	0
1	2A	2503	2MA	1	0
43	2l	92	0TD	4	0
55	2x	55	PSU	1	0
1	1A	2251	OMG	1	0
54	2y	39	PSU	1	0
54	1y	37	MIA	1	0
54	2y	32	PSU	1	0
32	2a	1402	4OC	2	0
54	2w	54	5MU	1	0
54	1y	46	G7M	1	0
32	2a	1207	2MG	7	0
32	1a	1207	2MG	2	0
1	2A	2251	OMG	1	0
32	2a	1519	MA6	3	0
55	1x	76	31H	3	0
54	2y	55	PSU	3	0
54	2y	46	G7M	1	0
54	1w	39	PSU	1	0
1	2A	2552	OMU	1	0
54	1w	54	5MU	1	0
32	1a	1519	MA6	3	0
55	1x	8	4SU	2	0
32	2a	966	M2G	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	1a	1402	4OC	3	0
54	2w	8	4SU	3	0
54	1y	55	PSU	1	0
32	2a	1400	5MC	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2808 ligands modelled in this entry, 2804 are monoatomic - leaving 4 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
60	SF4	2d	302	35	0,12,12	-	-	-		
58	A1A1J	1A	4103	56	34,37,37	1.90	8 (23%)	34,53,53	1.17	2 (5%)
60	SF4	1d	501	35	0,12,12	-	-	-		
58	A1A1J	2A	3877	-	34,37,37	1.26	3 (8%)	34,53,53	1.01	3 (8%)

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
60	SF4	2d	302	35	-	-	0/6/5/5
58	A1A1J	1A	4103	56	-	2/28/71/71	0/3/4/4
60	SF4	1d	501	35	-	-	0/6/5/5
58	A1A1J	2A	3877	-	-	2/28/71/71	0/3/4/4

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	2A	3877	A1A1J	CAM-CBF	-4.68	1.40	1.51
58	1A	4103	A1A1J	CD2-CAZ	-4.56	1.49	1.53
58	1A	4103	A1A1J	CAM-CBF	-4.19	1.41	1.51
58	1A	4103	A1A1J	CAE-CAF	-3.59	1.45	1.53
58	1A	4103	A1A1J	CAY-CAZ	3.51	1.59	1.53
58	2A	3877	A1A1J	CAB-CAK	-3.07	1.49	1.53
58	1A	4103	A1A1J	CG-CB	-2.76	1.49	1.53
58	1A	4103	A1A1J	CAC-CAB	-2.67	1.45	1.52
58	1A	4103	A1A1J	OAA-CAF	-2.24	1.38	1.44
58	2A	3877	A1A1J	CBF-CBG	2.16	1.40	1.31
58	1A	4103	A1A1J	CB-CA	2.16	1.57	1.53

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	1A	4103	A1A1J	OAA-CAF-CAE	-3.15	104.02	109.70
58	1A	4103	A1A1J	CBC-CBB-CAZ	-2.99	110.87	116.68
58	2A	3877	A1A1J	OAA-CAB-CAC	2.77	111.86	107.94
58	2A	3877	A1A1J	CBC-CBB-CAZ	-2.62	111.60	116.68
58	2A	3877	A1A1J	CAD-CAC-CAB	-2.29	104.48	109.68

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
58	1A	4103	A1A1J	O-C-CA-CB
58	2A	3877	A1A1J	O-C-CA-CB
58	1A	4103	A1A1J	NAL-C-CA-CB
58	2A	3877	A1A1J	NAL-C-CA-CB

There are no ring outliers.

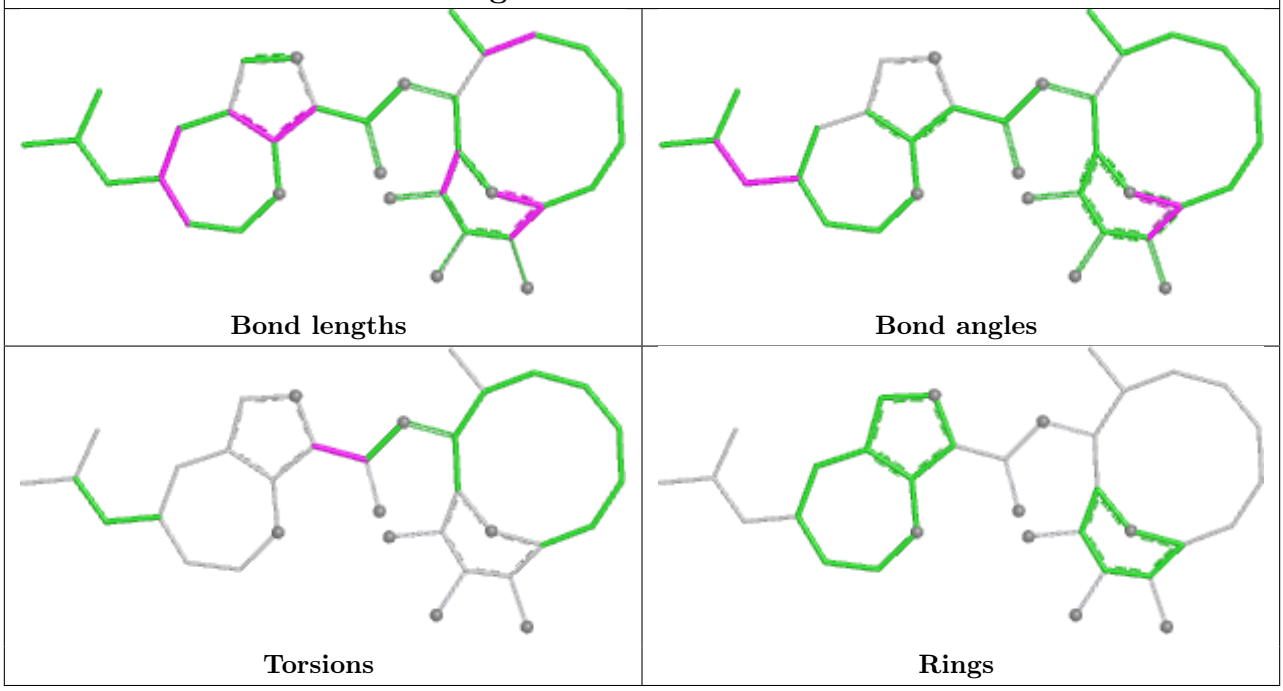
3 monomers are involved in 5 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
58	1A	4103	A1A1J	1	0
60	1d	501	SF4	2	0
58	2A	3877	A1A1J	2	0

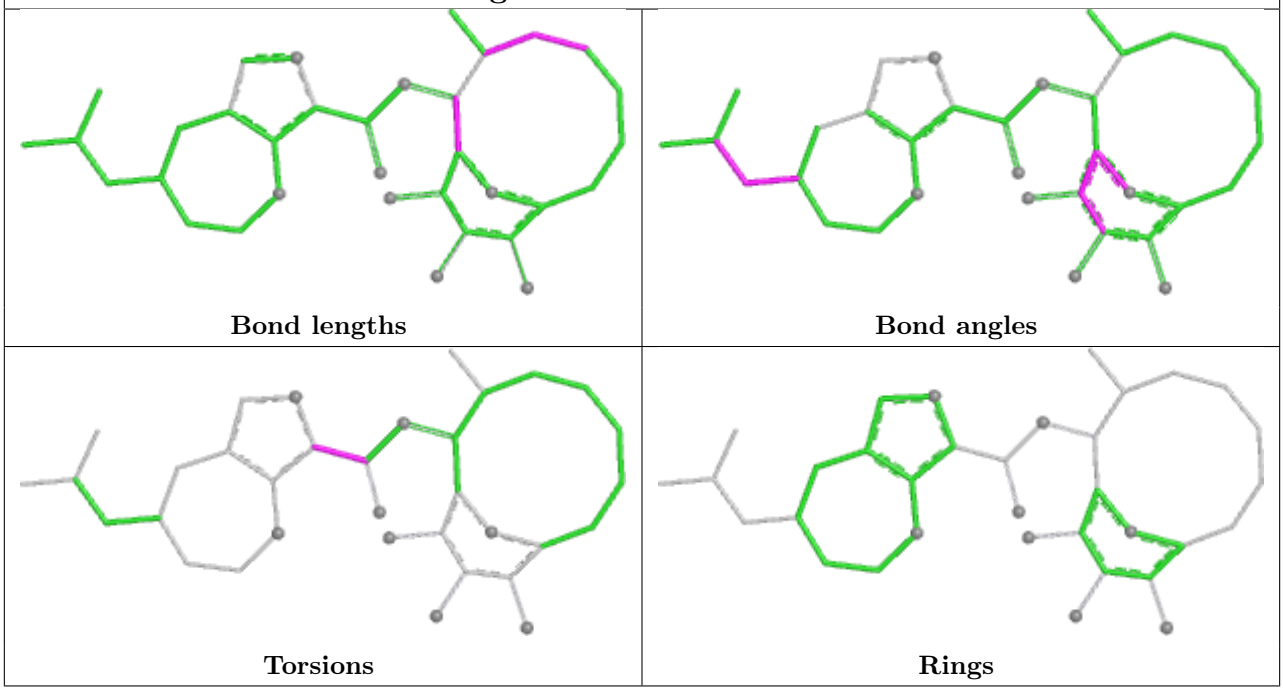
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is

within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

Ligand A1A1J 1A 4103



Ligand A1A1J 2A 3877



5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

The following chains have linkage breaks:

Mol	Chain	Number of breaks
55	2x	1
55	1x	1
7	1H	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	2x	75:C	O3'	76:31H	P	2.47
1	1x	75:C	O3'	76:31H	P	2.35
1	1H	53:GLU	C	54:ARG	N	1.19

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2860/2915 (98%)	-0.60	128 (4%) 39 36	20, 37, 90, 102	0
1	2A	2789/2915 (95%)	0.09	120 (4%) 40 37	35, 61, 90, 102	0
2	1B	120/121 (99%)	-0.38	0 100 100	30, 52, 64, 88	0
2	2B	120/121 (99%)	1.11	8 (6%) 25 23	64, 82, 87, 94	0
3	1D	275/276 (99%)	-0.33	2 (0%) 84 81	21, 38, 50, 78	0
3	2D	275/276 (99%)	0.28	6 (2%) 62 59	36, 54, 65, 82	0
4	1E	204/206 (99%)	-0.32	0 100 100	19, 40, 60, 75	0
4	2E	204/206 (99%)	0.53	5 (2%) 58 55	39, 62, 74, 82	0
5	1F	203/210 (96%)	-0.19	2 (0%) 79 76	20, 42, 67, 82	0
5	2F	203/210 (96%)	0.48	8 (3%) 44 40	38, 68, 78, 81	0
6	1G	181/182 (99%)	0.46	6 (3%) 49 46	40, 59, 73, 81	0
6	2G	181/182 (99%)	1.56	50 (27%) 2 2	71, 80, 85, 88	0
7	1H	174/180 (96%)	0.16	3 (1%) 69 65	38, 53, 65, 72	0
7	2H	174/180 (96%)	1.62	53 (30%) 1 1	73, 82, 91, 94	0
8	1I	146/148 (98%)	0.80	6 (4%) 42 39	47, 73, 80, 84	0
8	2I	146/148 (98%)	1.06	15 (10%) 13 12	52, 74, 82, 91	0
9	1N	140/140 (100%)	-0.29	2 (1%) 73 70	24, 38, 59, 75	0
9	2N	140/140 (100%)	0.82	8 (5%) 30 28	52, 69, 78, 84	0
10	1O	122/122 (100%)	-0.10	1 (0%) 82 79	30, 41, 58, 64	0
10	2O	122/122 (100%)	0.57	2 (1%) 70 67	53, 62, 72, 77	0
11	1P	149/150 (99%)	-0.02	1 (0%) 84 81	21, 47, 65, 72	0
11	2P	149/150 (99%)	0.72	8 (5%) 32 30	45, 68, 82, 89	0
12	1Q	141/141 (100%)	-0.11	1 (0%) 84 81	27, 42, 57, 72	0
12	2Q	141/141 (100%)	1.31	19 (13%) 8 7	59, 72, 80, 84	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.40	0 100 100	25, 35, 46, 55	0
13	2R	118/118 (100%)	0.27	0 100 100	41, 54, 64, 74	0
14	1S	110/112 (98%)	0.16	1 (0%) 81 78	39, 51, 63, 65	0
14	2S	110/112 (98%)	1.45	26 (23%) 2 3	68, 77, 81, 85	0
15	1T	131/146 (89%)	-0.03	3 (2%) 61 58	30, 44, 66, 71	0
15	2T	131/146 (89%)	0.50	2 (1%) 71 68	56, 65, 75, 79	0
16	1U	116/118 (98%)	-0.59	1 (0%) 81 78	22, 30, 43, 64	0
16	2U	116/118 (98%)	0.67	2 (1%) 69 65	46, 66, 78, 83	0
17	1V	101/101 (100%)	-0.46	0 100 100	21, 38, 54, 68	0
17	2V	101/101 (100%)	0.90	3 (2%) 52 49	46, 74, 80, 85	0
18	1W	112/113 (99%)	-0.46	1 (0%) 81 78	23, 31, 49, 73	0
18	2W	112/113 (99%)	0.26	2 (1%) 67 64	39, 53, 69, 83	0
19	1X	95/96 (98%)	-0.12	3 (3%) 50 47	28, 38, 64, 82	0
19	2X	95/96 (98%)	0.72	7 (7%) 22 20	48, 62, 74, 84	0
20	1Y	107/110 (97%)	0.22	3 (2%) 55 51	38, 51, 69, 77	0
20	2Y	107/110 (97%)	1.28	20 (18%) 4 4	59, 73, 83, 87	0
21	1Z	154/206 (74%)	0.65	14 (9%) 16 15	37, 62, 81, 86	0
21	2Z	160/206 (77%)	1.94	64 (40%) 1 1	74, 81, 87, 89	0
22	10	77/85 (90%)	-0.00	2 (2%) 57 54	27, 37, 54, 63	0
22	20	77/85 (90%)	1.35	15 (19%) 4 4	54, 69, 77, 79	0
23	11	97/98 (98%)	0.11	1 (1%) 79 76	28, 45, 68, 74	0
23	21	97/98 (98%)	0.50	4 (4%) 42 39	41, 58, 73, 80	0
24	12	70/72 (97%)	0.17	0 100 100	37, 50, 61, 71	0
24	22	70/72 (97%)	0.83	7 (10%) 14 13	61, 71, 76, 80	0
25	13	59/60 (98%)	-0.35	1 (1%) 69 65	25, 34, 62, 75	0
25	23	59/60 (98%)	0.79	5 (8%) 18 17	61, 69, 79, 84	0
26	14	69/71 (97%)	0.96	11 (15%) 6 6	55, 72, 84, 89	0
26	24	69/71 (97%)	1.82	22 (31%) 1 1	74, 85, 90, 95	0
27	15	59/60 (98%)	-0.53	0 100 100	20, 31, 50, 53	0
27	25	59/60 (98%)	0.29	2 (3%) 48 45	43, 54, 67, 81	0
28	16	53/54 (98%)	-0.16	0 100 100	35, 43, 56, 65	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.69	0 100 100	57, 65, 75, 78	0
29	17	48/49 (97%)	-0.22	4 (8%) 19 18	22, 30, 64, 68	0
29	27	48/49 (97%)	0.24	4 (8%) 19 18	35, 44, 63, 71	0
30	18	64/65 (98%)	-0.47	0 100 100	26, 34, 41, 55	0
30	28	64/65 (98%)	0.65	1 (1%) 70 67	50, 60, 67, 71	0
31	19	37/37 (100%)	-0.29	0 100 100	32, 40, 55, 59	0
31	29	37/37 (100%)	1.50	8 (21%) 3 3	66, 72, 81, 84	0
32	1a	1488/1521 (97%)	0.35	52 (3%) 47 44	38, 70, 91, 104	0
32	2a	1491/1521 (98%)	0.92	218 (14%) 7 7	51, 77, 94, 103	0
33	1b	231/256 (90%)	1.14	34 (14%) 7 7	67, 77, 86, 90	0
33	2b	231/256 (90%)	1.99	107 (46%) 1 1	73, 84, 88, 91	0
34	1c	206/239 (86%)	1.04	23 (11%) 11 11	64, 75, 82, 86	0
34	2c	206/239 (86%)	2.06	94 (45%) 1 1	74, 83, 88, 95	0
35	1d	208/209 (99%)	1.07	19 (9%) 16 15	58, 72, 81, 88	0
35	2d	208/209 (99%)	0.81	10 (4%) 36 34	56, 69, 76, 83	0
36	1e	148/162 (91%)	0.63	3 (2%) 64 62	54, 66, 74, 80	0
36	2e	148/162 (91%)	1.62	47 (31%) 1 1	65, 77, 83, 85	0
37	1f	100/101 (99%)	0.69	4 (4%) 43 39	58, 69, 76, 78	0
37	2f	100/101 (99%)	0.95	6 (6%) 29 27	65, 73, 79, 83	0
38	1g	155/156 (99%)	0.89	18 (11%) 11 10	62, 71, 82, 84	0
38	2g	155/156 (99%)	1.39	34 (21%) 3 3	69, 79, 85, 90	0
39	1h	137/138 (99%)	0.70	2 (1%) 71 68	56, 68, 74, 80	0
39	2h	137/138 (99%)	1.41	28 (20%) 3 3	69, 77, 84, 87	0
40	1i	127/128 (99%)	1.54	34 (26%) 2 2	60, 77, 83, 85	0
40	2i	127/128 (99%)	2.34	73 (57%) 0 0	73, 84, 88, 90	0
41	1j	97/105 (92%)	1.60	31 (31%) 1 1	63, 79, 85, 87	0
41	2j	96/105 (91%)	2.64	67 (69%) 0 0	79, 85, 89, 91	0
42	1k	114/129 (88%)	0.70	7 (6%) 28 26	46, 65, 76, 80	0
42	2k	114/129 (88%)	1.27	19 (16%) 5 5	58, 75, 82, 85	0
43	1l	121/132 (91%)	0.52	5 (4%) 42 39	49, 61, 71, 76	0
43	2l	121/132 (91%)	1.28	14 (11%) 11 10	64, 73, 82, 87	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	123/126 (97%)	0.81	8 (6%) 26 24	59, 71, 77, 79	0
44	2m	122/126 (96%)	2.19	60 (49%) 0 0	74, 82, 86, 87	0
45	1n	60/61 (98%)	1.15	4 (6%) 25 23	66, 72, 79, 84	0
45	2n	60/61 (98%)	2.95	46 (76%) 0 0	76, 85, 89, 91	0
46	1o	88/89 (98%)	0.70	8 (9%) 16 15	49, 66, 73, 78	0
46	2o	88/89 (98%)	1.22	10 (11%) 11 10	63, 76, 82, 86	0
47	1p	82/88 (93%)	1.20	9 (10%) 12 11	62, 72, 77, 85	0
47	2p	82/88 (93%)	1.00	7 (8%) 18 17	59, 67, 76, 78	0
48	1q	99/105 (94%)	0.82	3 (3%) 52 49	56, 67, 77, 79	0
48	2q	99/105 (94%)	1.08	9 (9%) 16 15	65, 74, 81, 82	0
49	1r	68/88 (77%)	0.49	4 (5%) 29 27	57, 67, 77, 79	0
49	2r	68/88 (77%)	0.92	4 (5%) 29 27	66, 74, 79, 83	0
50	1s	83/93 (89%)	0.93	7 (8%) 18 17	67, 74, 81, 84	0
50	2s	83/93 (89%)	2.26	50 (60%) 0 0	78, 85, 90, 94	0
51	1t	96/106 (90%)	0.98	11 (11%) 11 10	59, 71, 78, 81	0
51	2t	96/106 (90%)	0.82	10 (10%) 13 12	60, 71, 80, 82	0
52	1u	23/27 (85%)	1.33	3 (13%) 9 8	66, 69, 74, 78	0
52	2u	23/27 (85%)	2.21	14 (60%) 0 0	77, 82, 85, 87	0
53	1v	13/24 (54%)	1.05	2 (15%) 6 6	52, 69, 83, 94	0
53	2v	13/24 (54%)	2.02	6 (46%) 1 1	75, 84, 94, 99	0
54	1w	64/76 (84%)	1.28	9 (14%) 7 7	71, 91, 99, 102	0
54	1y	67/76 (88%)	1.26	12 (17%) 4 4	39, 89, 96, 98	0
54	2w	62/76 (81%)	2.23	35 (56%) 0 0	83, 97, 101, 106	0
54	2y	66/76 (86%)	1.51	14 (21%) 3 3	60, 95, 98, 101	0
55	1x	71/77 (92%)	0.14	0 100 100	30, 64, 81, 87	0
55	2x	71/77 (92%)	0.97	2 (2%) 55 51	53, 82, 90, 98	0
All	All	20855/21748 (95%)	0.47	1989 (9%) 15 14	19, 66, 88, 106	0

All (1989) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
45	2n	2	ALA	7.9
44	2m	102	ARG	6.7

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Mol	Chain	Res	Type	RSRZ
45	1n	2	ALA	6.7
44	2m	123	ALA	6.6
21	1Z	146	ILE	6.2
38	1g	80	VAL	6.1
21	1Z	141	VAL	5.8
44	1m	124	PRO	5.8
45	2n	34	TYR	5.8
41	2j	37	PRO	5.6
44	2m	6	GLY	5.6
45	2n	39	LEU	5.5
41	2j	40	LEU	5.4
34	2c	2	GLY	5.4
44	2m	124	PRO	5.3
54	1w	73	A	5.2
40	2i	82	ALA	5.1
44	1m	2	ALA	5.1
40	2i	45	ALA	5.1
21	2Z	150	LEU	5.0
1	1A	1096	A	5.0
45	2n	7	ILE	5.0
50	2s	2	PRO	5.0
40	2i	102	LEU	4.9
23	21	2	SER	4.9
41	2j	59	SER	4.9
41	2j	32	ALA	4.9
1	1A	2115	G	4.9
31	29	37	GLY	4.9
38	2g	82	GLY	4.9
41	2j	65	LEU	4.9
40	2i	114	TYR	4.9
32	2a	1149	C	4.9
45	2n	25	VAL	4.8
21	2Z	172	ALA	4.8
22	20	84	LEU	4.8
1	2A	2111	C	4.7
40	2i	96	LEU	4.7
34	2c	8	ILE	4.7
41	2j	41	PRO	4.7
1	2A	2110	G	4.7
33	2b	237	ALA	4.7
1	2A	2134	A	4.7
40	2i	11	LYS	4.7

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Mol	Chain	Res	Type	RSRZ
40	2i	67	GLY	4.7
41	2j	10	GLY	4.7
45	2n	6	LEU	4.6
41	2j	71	LEU	4.6
1	2A	2136	C	4.6
32	1a	1027	C	4.6
54	2w	73	A	4.6
12	2Q	33	GLY	4.6
45	2n	38	GLY	4.6
21	2Z	164	ALA	4.6
32	2a	1033	G	4.6
33	2b	165	VAL	4.5
33	2b	34	ALA	4.5
40	2i	36	TYR	4.5
34	2c	188	LEU	4.5
34	2c	149	ALA	4.5
21	2Z	146	ILE	4.4
38	2g	16	LEU	4.4
40	2i	17	VAL	4.4
41	1j	4	ILE	4.4
33	1b	237	ALA	4.4
1	2A	2155	G	4.4
21	2Z	174	VAL	4.4
7	2H	175	LYS	4.4
32	2a	1219	U	4.4
50	2s	14	HIS	4.4
34	2c	157	ILE	4.4
1	2A	2138	C	4.4
1	1A	1058	G	4.4
38	1g	81	GLY	4.4
1	1A	1094	U	4.4
41	2j	74	ILE	4.3
34	2c	138	VAL	4.3
1	1A	1068	G	4.3
52	2u	14	TRP	4.3
34	1c	2	GLY	4.3
38	1g	85	TYR	4.3
34	2c	182	ILE	4.3
44	2m	122	LYS	4.3
7	2H	52	VAL	4.3
34	2c	198	VAL	4.3
44	2m	4	ILE	4.3

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Mol	Chain	Res	Type	RSRZ
1	2A	883	G	4.3
1	2A	2112	G	4.3
32	1a	1003	G	4.3
33	2b	71	VAL	4.3
45	2n	3	ARG	4.3
1	1A	1081	U	4.2
50	1s	9	VAL	4.2
32	1a	1036	G	4.2
44	2m	72	ALA	4.2
47	2p	82	GLN	4.2
33	2b	236	TYR	4.2
8	2I	82	ARG	4.2
33	2b	123	ALA	4.2
40	1i	67	GLY	4.2
41	2j	91	PRO	4.2
44	2m	78	ILE	4.2
1	1A	1069	A	4.2
34	2c	9	GLY	4.2
1	2A	2154	G	4.2
33	2b	214	ILE	4.2
26	14	56	VAL	4.2
44	1m	122	LYS	4.2
41	1j	77	PRO	4.1
1	2A	2125	G	4.1
26	24	56	VAL	4.1
7	2H	2	SER	4.1
34	2c	5	ILE	4.1
32	1a	1034	G	4.1
1	1A	1057	A	4.1
50	2s	9	VAL	4.1
4	2E	204	ALA	4.1
26	24	32	TYR	4.1
19	1X	94	GLY	4.1
54	2w	15	G	4.1
26	24	9	LEU	4.1
38	2g	5	ARG	4.1
41	2j	63	PHE	4.1
36	2e	22	GLY	4.0
1	2A	2157	G	4.0
6	2G	52	ILE	4.0
32	2a	1030(B)	C	4.0
12	2Q	121	ALA	4.0

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Mol	Chain	Res	Type	RSRZ
7	1H	2	SER	4.0
20	2Y	1	MET	4.0
44	2m	53	VAL	4.0
1	1A	885	C	4.0
1	2A	652(B)	A	4.0
33	2b	185	ILE	4.0
34	2c	152	ILE	4.0
44	2m	54	VAL	4.0
21	2Z	21	ALA	4.0
41	2j	36	GLY	4.0
32	1a	1035	A	4.0
33	2b	200	ILE	4.0
32	1a	1532	U	4.0
45	2n	37	PHE	4.0
38	1g	79	ARG	3.9
38	1g	83	ALA	3.9
54	2w	13	C	3.9
42	2k	13	GLN	3.9
45	2n	13	THR	3.9
21	2Z	141	VAL	3.9
41	2j	55	LYS	3.9
40	2i	2	GLU	3.9
33	2b	152	PHE	3.9
1	2A	2148	G	3.9
32	2a	1036	G	3.9
1	2A	2135	A	3.9
11	2P	15	ARG	3.9
45	2n	58	LYS	3.9
34	2c	195	VAL	3.9
1	2A	2113	U	3.9
50	2s	10	PHE	3.8
1	2A	2145	C	3.8
41	2j	49	VAL	3.8
54	2w	3	C	3.8
32	2a	1150	U	3.8
33	2b	201	ILE	3.8
40	1i	66	ARG	3.8
33	2b	67	THR	3.8
32	1a	1001(A)	G	3.8
45	2n	30	ALA	3.8
54	1w	71	G	3.8
33	2b	101	MET	3.8

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Mol	Chain	Res	Type	RSRZ
33	2b	162	ILE	3.8
50	2s	84	GLY	3.8
40	1i	2	GLU	3.8
1	2A	2137	C	3.8
32	2a	1021	G	3.8
41	2j	35	SER	3.8
19	1X	95	LEU	3.8
34	2c	158	GLY	3.8
34	2c	168	ALA	3.8
34	2c	187	ALA	3.8
6	2G	20	ILE	3.8
34	2c	124	ILE	3.8
44	2m	121	LYS	3.8
38	2g	84	ASN	3.8
32	1a	1033	G	3.8
41	2j	47	PHE	3.7
48	1q	98	LEU	3.7
44	2m	103	THR	3.7
40	2i	91	ASP	3.7
1	2A	2169	A	3.7
1	1A	1064	C	3.7
1	2A	2128	C	3.7
34	2c	189	ALA	3.7
41	2j	75	ILE	3.7
54	2w	72	C	3.7
6	2G	29	TRP	3.7
21	2Z	168	GLU	3.7
44	2m	7	VAL	3.7
44	2m	60	VAL	3.7
32	2a	630	G	3.7
32	2a	1030(A)	G	3.7
45	2n	4	LYS	3.7
54	2w	71	G	3.7
15	1T	130	ALA	3.7
40	1i	15	ALA	3.7
32	1a	1025	U	3.7
33	2b	163	PHE	3.7
32	2a	1018	C	3.7
1	2A	2133	G	3.7
32	2a	1032	G	3.7
41	2j	50	ILE	3.7
50	2s	4	SER	3.6

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Mol	Chain	Res	Type	RSRZ
33	2b	136	VAL	3.6
39	2h	53	VAL	3.6
42	2k	14	VAL	3.6
51	1t	103	GLY	3.6
1	1A	1070	A	3.6
34	2c	201	TYR	3.6
38	2g	85	TYR	3.6
1	2A	2146	C	3.6
32	2a	1034	G	3.6
42	2k	117	ASN	3.6
19	2X	92	LEU	3.6
45	2n	11	LYS	3.6
21	2Z	95	PRO	3.6
40	2i	101	PHE	3.6
35	1d	87	GLY	3.6
1	1A	1098	A	3.6
32	1a	1001	A	3.6
40	2i	19	LEU	3.6
44	2m	90	LEU	3.6
32	2a	1001(A)	G	3.6
41	2j	54	PHE	3.6
33	1b	229	VAL	3.6
34	2c	79	ARG	3.6
35	1d	167	GLY	3.6
50	2s	79	THR	3.6
1	1A	2113	U	3.6
41	1j	32	ALA	3.6
47	1p	82	GLN	3.6
1	1A	548	A	3.6
1	1A	1095	A	3.6
1	2A	2126	A	3.6
1	2A	1536	C	3.6
40	2i	37	PHE	3.6
33	2b	21	ARG	3.6
32	2a	1002	G	3.6
54	2y	19	G	3.6
1	1A	1078	U	3.6
40	2i	5	TYR	3.6
1	1A	2119	A	3.5
1	2A	2117	A	3.5
1	2A	2119	A	3.5
40	1i	102	LEU	3.5

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Mol	Chain	Res	Type	RSRZ
41	2j	27	ALA	3.5
32	2a	1127	G	3.5
33	2b	148	TYR	3.5
50	2s	13	ASP	3.5
33	1b	10	LEU	3.5
53	2v	24	A	3.5
32	2a	1030	C	3.5
40	2i	126	SER	3.5
54	2w	2	C	3.5
21	2Z	71	VAL	3.5
45	2n	18	VAL	3.5
20	2Y	5	MET	3.5
44	2m	28	ALA	3.5
41	2j	38	ILE	3.5
19	2X	69	TYR	3.5
32	2a	1190	G	3.5
52	2u	23	PRO	3.5
6	2G	48	GLU	3.5
33	2b	70	PHE	3.5
34	2c	153	VAL	3.5
1	1A	2138	C	3.5
40	1i	106	ALA	3.5
1	1A	1065	U	3.5
1	2A	2150	U	3.5
40	2i	9	ARG	3.5
40	2i	49	PRO	3.5
1	1A	1059	G	3.5
44	2m	100	GLY	3.5
33	1b	15	VAL	3.5
34	2c	151	VAL	3.5
46	2o	60	VAL	3.5
53	2v	12	A	3.5
1	2A	885	C	3.4
33	2b	11	LEU	3.4
32	2a	1126	U	3.4
33	2b	170	GLU	3.4
45	2n	8	GLU	3.4
38	2g	34	GLY	3.4
40	2i	41	VAL	3.4
36	2e	109	ILE	3.4
41	2j	42	THR	3.4
50	2s	31	ILE	3.4

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Mol	Chain	Res	Type	RSRZ
1	2A	2114	A	3.4
32	1a	1531	A	3.4
32	2a	1001	A	3.4
21	2Z	155	LEU	3.4
1	1A	2145	C	3.4
6	2G	142	PRO	3.4
34	2c	48	TYR	3.4
36	2e	74	GLY	3.4
1	2A	2151	G	3.4
32	2a	973	G	3.4
32	2a	1220	G	3.4
33	2b	161	ALA	3.4
44	2m	5	ALA	3.4
54	1w	1	G	3.4
1	1A	1073	A	3.4
6	1G	51	ARG	3.4
44	1m	102	ARG	3.4
1	2A	2139	C	3.4
32	1a	1029	C	3.4
33	1b	126	GLU	3.4
54	2w	25	C	3.4
3	1D	275	LYS	3.4
6	2G	161	THR	3.4
1	2A	2115	G	3.4
32	2a	1124	G	3.4
41	2j	39	PRO	3.4
32	1a	1447	A	3.4
42	2k	25	TYR	3.4
32	1a	1030	C	3.4
40	2i	39	GLY	3.4
33	2b	7	VAL	3.4
14	2S	32	LEU	3.3
21	2Z	144	LEU	3.3
52	1u	24	ARG	3.3
41	2j	77	PRO	3.3
45	2n	14	PRO	3.3
1	1A	1176	G	3.3
1	2A	1533	G	3.3
32	2a	993	G	3.3
14	2S	7	TYR	3.3
32	2a	1251	A	3.3
26	24	49	PHE	3.3

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Mol	Chain	Res	Type	RSRZ
34	2c	194	GLY	3.3
32	2a	982	U	3.3
8	2I	83	ALA	3.3
40	2i	128	ARG	3.3
41	2j	100	THR	3.3
25	23	2	PRO	3.3
1	1A	1087	G	3.3
1	1A	1077	A	3.3
32	2a	994	A	3.3
33	2b	97	TRP	3.3
7	2H	43	VAL	3.3
14	2S	46	VAL	3.3
1	2A	2109	U	3.3
21	2Z	125	LEU	3.3
22	10	84	LEU	3.3
32	2a	1205	U	3.3
34	2c	52	LEU	3.3
50	2s	77	THR	3.3
54	1w	72	C	3.3
6	2G	2	PRO	3.3
33	1b	9	GLU	3.3
33	2b	17	PHE	3.3
52	2u	13	ILE	3.3
1	1A	1088	A	3.3
1	1A	2159	G	3.3
1	2A	882	G	3.3
1	2A	896	A	3.3
11	2P	83	VAL	3.3
32	2a	983	A	3.3
33	1b	230	VAL	3.3
45	2n	33	VAL	3.3
1	2A	2116	G	3.3
53	1v	12	A	3.3
54	2w	7	A	3.3
8	2I	146	ALA	3.3
34	2c	53	ALA	3.3
36	2e	86	ALA	3.3
40	2i	64	THR	3.3
40	2i	106	ALA	3.3
44	1m	123	ALA	3.3
1	1A	1060	U	3.3
23	11	2	SER	3.3

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Mol	Chain	Res	Type	RSRZ
50	2s	38	SER	3.3
32	1a	1028	C	3.3
34	2c	176	HIS	3.3
40	2i	18	PHE	3.3
12	2Q	15	GLY	3.3
36	2e	99	GLY	3.3
3	2D	276	LYS	3.2
34	2c	55	VAL	3.2
40	2i	14	VAL	3.2
38	1g	156	TRP	3.2
50	2s	32	LYS	3.2
34	2c	192	THR	3.2
41	2j	87	THR	3.2
1	1A	2190	G	3.2
1	2A	2149	G	3.2
1	2A	2156	G	3.2
26	24	29	PRO	3.2
32	1a	1000	U	3.2
32	2a	1061	G	3.2
32	2a	1224	G	3.2
54	2w	45	U	3.2
54	2w	65	G	3.2
21	2Z	121	HIS	3.2
33	2b	122	PHE	3.2
22	20	8	GLY	3.2
29	17	48	LYS	3.2
42	2k	50	TYR	3.2
45	2n	21	TYR	3.2
50	2s	63	THR	3.2
32	2a	1324	A	3.2
1	1A	2152	G	3.2
54	1y	15	G	3.2
1	2A	2174	C	3.2
34	2c	62	ASP	3.2
36	2e	84	PHE	3.2
38	1g	4	ARG	3.2
39	2h	18	ARG	3.2
45	2n	36	PHE	3.2
12	2Q	22	LYS	3.2
22	10	8	GLY	3.2
40	2i	69	GLY	3.2
40	2i	81	ILE	3.2

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Mol	Chain	Res	Type	RSRZ
33	2b	112	VAL	3.2
15	1T	131	ALA	3.2
40	2i	13	ALA	3.2
1	1A	2189	U	3.2
32	2a	949	A	3.2
33	2b	140	HIS	3.2
40	2i	10	ARG	3.2
1	2A	2160	G	3.2
3	1D	276	LYS	3.2
20	2Y	54	LYS	3.2
1	1A	888	C	3.2
21	2Z	106	GLY	3.2
32	2a	1060	C	3.2
54	2w	4	C	3.2
6	2G	139	LEU	3.2
33	2b	196	LEU	3.2
38	2g	12	LEU	3.2
42	1k	14	VAL	3.2
26	14	32	TYR	3.2
41	2j	61	GLU	3.2
45	2n	32	SER	3.2
41	2j	56	HIS	3.2
1	1A	1082	U	3.2
1	2A	2118	U	3.2
33	2b	175	ARG	3.2
32	2a	1030(D)	A	3.2
32	2a	1286	A	3.2
34	2c	41	GLY	3.1
44	2m	68	GLY	3.1
14	2S	35	ILE	3.1
34	2c	196	LEU	3.1
32	2a	1053	G	3.1
32	2a	1222	G	3.1
32	2a	1223	C	3.1
44	2m	98	VAL	3.1
26	24	25	TYR	3.1
33	2b	92	TYR	3.1
38	2g	7	ALA	3.1
44	2m	101	GLN	3.1
32	2a	1020	U	3.1
54	1y	47	U	3.1
55	2x	47	U	3.1

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Mol	Chain	Res	Type	RSRZ
21	2Z	88	PHE	3.1
21	2Z	87	ASP	3.1
1	1A	1086	A	3.1
1	2A	2170	A	3.1
32	2a	1503	A	3.1
44	2m	19	LEU	3.1
7	2H	35	VAL	3.1
40	2i	26	VAL	3.1
51	2t	98	PRO	3.1
1	1A	2162	G	3.1
32	1a	1030(A)	G	3.1
40	2i	125	TYR	3.1
6	2G	115	ARG	3.1
45	2n	12	ARG	3.1
12	2Q	104	PHE	3.1
22	20	45	PHE	3.1
33	1b	172	ILE	3.1
38	1g	82	GLY	3.1
38	2g	81	GLY	3.1
40	2i	79	LEU	3.1
1	1A	896	A	3.1
5	2F	6	VAL	3.1
6	2G	28	VAL	3.1
6	2G	132	ASN	3.1
7	2H	15	VAL	3.1
7	2H	44	VAL	3.1
7	2H	113	VAL	3.1
32	2a	1035	A	3.1
41	2j	76	ASN	3.1
46	1o	19	PRO	3.1
54	2w	26	A	3.1
29	27	45	ALA	3.1
35	1d	179	GLU	3.1
40	2i	92	TYR	3.1
50	2s	80	TYR	3.1
34	2c	199	LYS	3.1
29	17	47	ARG	3.1
52	2u	24	ARG	3.1
1	1A	2110	G	3.1
1	1A	2112	G	3.1
1	2A	2159	G	3.1
54	2y	18	G	3.1

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Mol	Chain	Res	Type	RSRZ
21	2Z	147	GLY	3.1
35	1d	120	LEU	3.1
41	1j	8	LEU	3.1
45	2n	53	LEU	3.1
47	1p	80	PHE	3.1
51	1t	10	LEU	3.1
34	2c	77	ILE	3.1
32	1a	204	U	3.1
40	2i	105	ASP	3.1
54	1y	20	U	3.1
5	1F	14	PRO	3.1
7	2H	128	PRO	3.1
44	2m	15	VAL	3.1
33	2b	77	ALA	3.1
33	2b	120	ALA	3.1
1	1A	899	A	3.1
32	2a	969	A	3.1
14	2S	36	TYR	3.1
20	2Y	55	TYR	3.1
52	2u	15	ARG	3.1
32	2a	1037	C	3.1
32	2a	1116	C	3.1
36	1e	10	MET	3.1
1	2A	2147	G	3.0
6	2G	53	LEU	3.0
21	2Z	157	LEU	3.0
32	1a	1023	G	3.0
32	2a	1117	G	3.0
40	2i	40	LEU	3.0
42	2k	17	GLY	3.0
52	2u	11	GLY	3.0
52	2u	16	GLY	3.0
6	1G	149	VAL	3.0
38	2g	80	VAL	3.0
6	1G	50	ALA	3.0
20	2Y	48	ALA	3.0
41	2j	78	ASN	3.0
51	2t	97	ALA	3.0
50	2s	78	ARG	3.0
1	1A	2114	A	3.0
6	2G	12	TYR	3.0
6	2G	146	TYR	3.0

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Mol	Chain	Res	Type	RSRZ
20	1Y	1	MET	3.0
33	2b	158	LEU	3.0
44	2m	96	LEU	3.0
32	1a	1008	C	3.0
1	2A	2120	G	3.0
42	2k	36	ASP	3.0
33	1b	232	PRO	3.0
52	1u	23	PRO	3.0
3	2D	275	LYS	3.0
45	2n	50	LYS	3.0
6	2G	163	ALA	3.0
34	2c	24	ALA	3.0
44	2m	104	ARG	3.0
33	2b	199	TYR	3.0
32	1a	1286	A	3.0
32	2a	1123	A	3.0
53	1v	13	A	3.0
34	1c	47	LEU	3.0
40	2i	99	LEU	3.0
44	2m	48	LEU	3.0
51	1t	13	LEU	3.0
21	1Z	104	PHE	3.0
35	2d	5	ILE	3.0
36	2e	23	GLY	3.0
1	1A	886	C	3.0
1	1A	2136	C	3.0
1	2A	2143	C	3.0
32	2a	1027	C	3.0
46	2o	10	LYS	3.0
41	2j	58	ASP	3.0
33	1b	7	VAL	3.0
48	2q	9	VAL	3.0
1	2A	2165	G	3.0
21	2Z	51	ALA	3.0
32	1a	1009	G	3.0
39	2h	15	ASN	3.0
1	2A	2130	U	3.0
33	2b	121	LEU	3.0
1	1A	1067	A	3.0
26	14	59	PHE	3.0
32	1a	1005	A	3.0
32	2a	1250	A	3.0

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Mol	Chain	Res	Type	RSRZ
33	2b	172	ILE	3.0
29	27	48	LYS	3.0
50	2s	12	ASP	3.0
7	2H	42	ARG	3.0
8	1I	142	VAL	3.0
31	29	16	VAL	3.0
36	2e	18	ARG	3.0
32	2a	1038	C	3.0
45	2n	22	THR	3.0
1	1A	1097	U	3.0
1	1A	1099	G	3.0
32	2a	1031	G	3.0
42	2k	119	CYS	2.9
14	2S	92	TYR	2.9
41	2j	90	LEU	2.9
33	1b	228	GLY	2.9
41	2j	99	LYS	2.9
7	2H	12	PRO	2.9
32	2a	1447	A	2.9
26	24	57	GLU	2.9
7	2H	17	VAL	2.9
26	24	65	ASP	2.9
33	2b	184	VAL	2.9
40	1i	86	VAL	2.9
40	2i	122	ALA	2.9
45	2n	10	ALA	2.9
32	2a	1043	C	2.9
32	2a	1119	C	2.9
49	2r	66	LEU	2.9
32	2a	953	G	2.9
32	2a	1024	G	2.9
32	2a	1050	G	2.9
32	2a	1356	G	2.9
54	1y	18	G	2.9
4	2E	10	GLY	2.9
26	24	31	ILE	2.9
36	2e	80	ILE	2.9
45	1n	55	GLY	2.9
50	2s	62	ILE	2.9
12	2Q	65	PHE	2.9
40	2i	12	GLU	2.9
45	2n	49	HIS	2.9

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Mol	Chain	Res	Type	RSRZ
8	2I	81	VAL	2.9
21	2Z	96	VAL	2.9
36	2e	33	VAL	2.9
40	1i	14	VAL	2.9
41	2j	34	VAL	2.9
50	1s	13	ASP	2.9
20	2Y	57	GLN	2.9
41	1j	33	GLN	2.9
40	1i	13	ALA	2.9
35	2d	154	ASN	2.9
1	1A	2111	C	2.9
1	1A	2137	C	2.9
1	1A	2164	C	2.9
32	2a	1260	C	2.9
1	1A	1066	U	2.9
32	2a	1148	U	2.9
18	2W	112	GLY	2.9
34	2c	145	GLY	2.9
41	2j	31	GLY	2.9
12	2Q	60	ARG	2.9
33	1b	125	PRO	2.9
1	1A	2141	G	2.9
1	1A	2151	G	2.9
1	1A	2160	G	2.9
32	1a	1032	G	2.9
33	1b	19	HIS	2.9
7	2H	45	VAL	2.9
16	1U	117	GLN	2.9
40	1i	108	VAL	2.9
5	2F	166	ALA	2.9
34	2c	180	ALA	2.9
38	2g	107	ALA	2.9
1	2A	2173	A	2.9
32	2a	1357	A	2.9
42	1k	51	LYS	2.9
20	2Y	90	LEU	2.9
37	2f	21	LEU	2.9
39	2h	2	LEU	2.9
41	2j	8	LEU	2.9
1	2A	2108	C	2.9
32	1a	1257	U	2.9
32	2a	995	C	2.9

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Mol	Chain	Res	Type	RSRZ
32	2a	1196	U	2.9
9	2N	44	PRO	2.9
12	2Q	10	ARG	2.9
26	14	63	TYR	2.9
45	2n	54	PRO	2.9
50	2s	61	TYR	2.9
52	1u	9	ARG	2.9
6	2G	35	GLU	2.9
26	24	30	GLU	2.9
1	2A	652(U)	G	2.9
1	2A	2802	G	2.9
33	2b	29	ALA	2.9
34	2c	167	TRP	2.9
38	2g	83	ALA	2.9
40	1i	103	THR	2.9
40	2i	7	THR	2.9
50	2s	53	ASN	2.9
1	1A	2117	A	2.8
32	2a	1044	A	2.8
32	2a	1092	A	2.8
9	2N	74	ARG	2.8
21	2Z	171	ILE	2.8
21	2Z	129	SER	2.8
34	2c	109	PRO	2.8
36	2e	96	PRO	2.8
36	2e	106	PRO	2.8
40	2i	90	PRO	2.8
32	2a	1028	C	2.8
32	2a	1059	C	2.8
41	1j	86	MET	2.8
33	1b	129	GLU	2.8
54	2y	56	C	2.8
7	2H	169	VAL	2.8
12	2Q	109	VAL	2.8
43	1l	18	VAL	2.8
36	2e	121	LYS	2.8
40	1i	46	ALA	2.8
1	2A	2127	G	2.8
32	1a	1026	G	2.8
33	2b	190	THR	2.8
39	2h	3	THR	2.8
50	2s	33	THR	2.8

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Mol	Chain	Res	Type	RSRZ
34	2c	32	LEU	2.8
54	1y	19	G	2.8
54	2w	6	G	2.8
1	1A	2135	A	2.8
19	2X	68	ARG	2.8
29	27	47	ARG	2.8
32	2a	974	A	2.8
32	2a	1016	A	2.8
33	2b	42	ILE	2.8
34	1c	39	ILE	2.8
34	2c	190	ARG	2.8
50	2s	29	ARG	2.8
53	2v	14	A	2.8
53	2v	15	A	2.8
41	2j	96	ILE	2.8
21	2Z	167	PRO	2.8
26	14	64	GLY	2.8
33	1b	18	GLY	2.8
38	2g	154	TYR	2.8
1	1A	1075	C	2.8
32	2a	962	C	2.8
34	2c	116	VAL	2.8
34	2c	200	ALA	2.8
6	2G	19	LEU	2.8
8	2I	38	LEU	2.8
12	2Q	37	LEU	2.8
33	2b	149	LEU	2.8
47	2p	48	TRP	2.8
41	2j	43	ARG	2.8
1	2A	2153	G	2.8
32	1a	1030(C)	G	2.8
32	2a	1010	G	2.8
41	2j	23	ILE	2.8
54	2w	70	G	2.8
36	2e	19	MET	2.8
34	2c	78	GLY	2.8
34	2c	197	GLY	2.8
38	1g	153	HIS	2.8
32	2a	1225	A	2.8
34	1c	10	PHE	2.8
41	2j	83	GLU	2.8
54	2w	14	A	2.8

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Mol	Chain	Res	Type	RSRZ
54	2w	31	A	2.8
21	2Z	166	SER	2.8
34	2c	29	TYR	2.8
34	2c	184	TYR	2.8
42	1k	75	TYR	2.8
44	2m	23	TYR	2.8
48	2q	95	TYR	2.8
9	1N	9	VAL	2.8
20	2Y	45	VAL	2.8
21	2Z	128	VAL	2.8
43	2l	18	VAL	2.8
1	2A	886	C	2.8
1	2A	2107	C	2.8
8	1I	146	ALA	2.8
32	2a	1019	C	2.8
40	2i	46	ALA	2.8
40	2i	84	ALA	2.8
33	1b	11	LEU	2.8
39	2h	10	LEU	2.8
45	2n	44	LEU	2.8
50	1s	15	LEU	2.8
50	2s	5	LEU	2.8
50	2s	20	LEU	2.8
38	2g	156	TRP	2.8
38	2g	4	ARG	2.8
46	2o	89	GLY	2.8
50	2s	76	PRO	2.8
14	2S	29	PHE	2.8
34	2c	128	PHE	2.8
1	2A	171	G	2.8
32	1a	630	G	2.8
32	1a	1002	G	2.8
32	2a	963	G	2.8
32	2a	1048	G	2.8
32	2a	1202	G	2.8
32	2a	1253	G	2.8
34	2c	4	LYS	2.8
44	2m	120	LYS	2.8
51	1t	74	LYS	2.8
1	2A	271(K)	U	2.8
32	2a	1257	U	2.8
43	1l	64	TYR	2.8

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Mol	Chain	Res	Type	RSRZ
40	2i	43	ALA	2.8
50	2s	24	ALA	2.8
14	2S	48	LEU	2.7
33	2b	118	LEU	2.7
40	1i	91	ASP	2.7
1	2A	2129	C	2.7
1	2A	2164	C	2.7
32	2a	1054	C	2.7
32	2a	1210	C	2.7
44	2m	71	ARG	2.7
45	2n	42	ILE	2.7
33	2b	234	PRO	2.7
5	1F	208	GLY	2.7
26	14	54	GLY	2.7
36	2e	29	GLY	2.7
51	2t	103	GLY	2.7
40	2i	97	LYS	2.7
1	2A	899	A	2.7
1	2A	1171	G	2.7
32	2a	1182	G	2.7
41	2j	44	VAL	2.7
42	2k	75	TYR	2.7
50	2s	11	VAL	2.7
50	2s	52	TYR	2.7
54	2w	5	G	2.7
54	2y	34	G	2.7
7	2H	37	VAL	2.7
29	27	46	VAL	2.7
21	2Z	173	ALA	2.7
33	2b	187	LEU	2.7
44	2m	42	ALA	2.7
45	2n	48	ALA	2.7
37	1f	55	ASP	2.7
41	2j	79	ARG	2.7
42	2k	126	ARG	2.7
47	1p	5	ARG	2.7
52	2u	8	THR	2.7
32	2a	1114	C	2.7
33	2b	183	PRO	2.7
9	2N	83	LYS	2.7
33	2b	66	GLY	2.7
33	2b	86	GLU	2.7

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Mol	Chain	Res	Type	RSRZ
34	2c	19	GLU	2.7
40	2i	70	LYS	2.7
43	2l	47	LYS	2.7
45	2n	55	GLY	2.7
33	1b	17	PHE	2.7
34	2c	186	PHE	2.7
48	2q	99	SER	2.7
21	1Z	105	VAL	2.7
40	2i	65	VAL	2.7
44	2m	87	TYR	2.7
6	2G	128	ARG	2.7
7	2H	20	ALA	2.7
21	2Z	41	LEU	2.7
34	2c	94	LEU	2.7
41	1j	65	LEU	2.7
8	2I	67	ARG	2.7
32	2a	532	A	2.7
32	2a	1125	U	2.7
36	2e	107	ARG	2.7
40	2i	42	ARG	2.7
49	1r	73	ALA	2.7
50	2s	75	ALA	2.7
1	1A	883	G	2.7
1	2A	2166	G	2.7
1	2A	2751	G	2.7
7	2H	41	MET	2.7
6	2G	74	LYS	2.7
34	2c	73	PRO	2.7
34	2c	171	GLY	2.7
40	2i	110	GLU	2.7
41	1j	83	GLU	2.7
1	2A	884	C	2.7
32	2a	1007	C	2.7
7	2H	19	VAL	2.7
21	2Z	86	VAL	2.7
34	2c	207	VAL	2.7
7	2H	103	LEU	2.7
26	24	55	ARG	2.7
34	2c	87	LEU	2.7
36	2e	119	LEU	2.7
43	2l	64	TYR	2.7
50	2s	81	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
45	2n	40	CYS	2.7
1	1A	2109	U	2.7
32	2a	981	U	2.7
54	2y	33	U	2.7
1	2A	229	A	2.7
32	2a	1023	G	2.7
32	2a	1058	G	2.7
32	2a	1094	G	2.7
33	1b	127	ILE	2.7
33	1b	214	ILE	2.7
41	1j	74	ILE	2.7
41	2j	53	PRO	2.7
44	2m	22	ILE	2.7
45	2n	9	LYS	2.7
36	1e	85	GLY	2.7
45	2n	61	TRP	2.7
26	24	59	PHE	2.7
40	1i	59	PHE	2.7
1	1A	897	C	2.7
1	1A	2140	C	2.7
1	2A	2142	C	2.7
1	2A	2789	C	2.7
21	1Z	52	SER	2.7
19	2X	95	LEU	2.6
21	2Z	165	VAL	2.6
26	24	58	ARG	2.6
33	2b	98	LEU	2.6
33	2b	164	VAL	2.6
36	2e	100	VAL	2.6
44	2m	45	VAL	2.6
45	2n	31	ARG	2.6
36	2e	17	ALA	2.6
45	2n	59	ALA	2.6
35	2d	20	TYR	2.6
46	2o	69	TYR	2.6
33	2b	147	LYS	2.6
32	2a	950	U	2.6
32	2a	1235	U	2.6
1	1A	2170	A	2.6
32	1a	1030(D)	A	2.6
32	2a	1004	A	2.6
36	2e	35	GLY	2.6

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Mol	Chain	Res	Type	RSRZ
44	1m	6	GLY	2.6
50	2s	46	GLY	2.6
1	1A	1093	G	2.6
1	2A	2123	G	2.6
21	2Z	136	PHE	2.6
32	1a	1031	G	2.6
54	2w	10	G	2.6
54	2y	44	G	2.6
24	22	51	ARG	2.6
40	2i	20	ARG	2.6
44	2m	88	ARG	2.6
50	2s	3	ARG	2.6
1	2A	2140	C	2.6
14	2S	58	LEU	2.6
21	2Z	149	SER	2.6
32	1a	1037	C	2.6
32	2a	970	C	2.6
32	2a	1115	C	2.6
34	2c	12	LEU	2.6
35	1d	194	LEU	2.6
45	2n	47	LEU	2.6
8	2I	142	VAL	2.6
14	2S	49	VAL	2.6
33	2b	174	VAL	2.6
35	1d	88	VAL	2.6
15	2T	130	ALA	2.6
45	2n	5	ALA	2.6
41	2j	13	HIS	2.6
6	2G	17	PRO	2.6
12	2Q	66	ILE	2.6
42	2k	48	ILE	2.6
1	1A	2897	U	2.6
21	2Z	34	ASN	2.6
32	2a	1065	U	2.6
32	2a	1122	U	2.6
44	2m	58	GLU	2.6
40	2i	73	GLN	2.6
21	1Z	136	PHE	2.6
21	2Z	48	PHE	2.6
32	1a	1503	A	2.6
32	2a	1531	A	2.6
36	2e	45	PHE	2.6

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Mol	Chain	Res	Type	RSRZ
15	1T	125	ARG	2.6
34	1c	79	ARG	2.6
41	1j	45	ARG	2.6
21	2Z	33	LEU	2.6
32	1a	1024	G	2.6
32	2a	971	G	2.6
37	1f	45	LEU	2.6
33	2b	81	VAL	2.6
50	2s	45	VAL	2.6
1	2A	888	C	2.6
32	2a	1039	C	2.6
32	2a	1325	C	2.6
32	2a	1362	C	2.6
36	2e	138	ALA	2.6
49	1r	20	ALA	2.6
21	2Z	159	PRO	2.6
34	2c	202	ILE	2.6
41	2j	48	THR	2.6
41	1j	76	ASN	2.6
8	1I	106	GLY	2.6
38	1g	130	GLY	2.6
32	2a	975	A	2.6
39	2h	9	MET	2.6
53	2v	13	A	2.6
41	2j	80	LYS	2.6
6	2G	50	ALA	2.6
14	2S	34	HIS	2.6
1	1A	1056	G	2.6
1	1A	1063	G	2.6
32	2a	976	G	2.6
32	2a	1184	G	2.6
32	2a	1216	G	2.6
32	2a	1221	G	2.6
33	1b	120	ALA	2.6
54	2w	24	G	2.6
54	2w	44	G	2.6
54	2y	15	G	2.6
54	2y	57	G	2.6
1	1A	898	C	2.6
1	1A	2794	C	2.6
32	2a	1006	C	2.6
32	2a	1118	C	2.6

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Mol	Chain	Res	Type	RSRZ
32	2a	1277	C	2.6
22	20	68	GLU	2.6
33	2b	41	ILE	2.6
39	2h	4	ASP	2.6
39	2h	58	TYR	2.6
7	2H	174	GLY	2.6
32	2a	1040	U	2.6
38	2g	3	ARG	2.6
40	2i	104	ARG	2.6
41	2j	14	LYS	2.5
1	2A	866	A	2.5
32	2a	965	A	2.5
33	2b	93	VAL	2.5
34	2c	68	VAL	2.5
34	2c	141	VAL	2.5
35	1d	170	VAL	2.5
39	1h	93	VAL	2.5
39	2h	61	VAL	2.5
33	2b	218	ALA	2.5
34	2c	60	ALA	2.5
21	1Z	120	ILE	2.5
36	2e	101	ILE	2.5
38	2g	27	ILE	2.5
6	2G	147	ASP	2.5
32	2a	1009	G	2.5
32	2a	1017	G	2.5
32	2a	1311	G	2.5
33	2b	31	TYR	2.5
33	2b	166	ASP	2.5
33	2b	168	THR	2.5
40	1i	64	THR	2.5
42	1k	36	ASP	2.5
1	1A	1052	C	2.5
1	2A	652(V)	C	2.5
1	2A	865	C	2.5
1	2A	2896	C	2.5
19	2X	67	GLY	2.5
32	2a	1128	C	2.5
33	2b	90	MET	2.5
41	2j	86	MET	2.5
45	1n	29	ARG	2.5
14	2S	19	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
33	1b	133	LYS	2.5
41	2j	88	LEU	2.5
50	1s	5	LEU	2.5
34	2c	6	HIS	2.5
7	2H	79	VAL	2.5
24	22	63	VAL	2.5
26	24	33	VAL	2.5
33	2b	197	VAL	2.5
39	2h	51	VAL	2.5
41	2j	72	VAL	2.5
44	2m	117	VAL	2.5
1	1A	229	A	2.5
1	1A	2173	A	2.5
14	2S	37	ALA	2.5
32	2a	1015	A	2.5
33	2b	207	ALA	2.5
54	2w	64	A	2.5
7	2H	39	PRO	2.5
34	2c	7	PRO	2.5
8	1I	79	ILE	2.5
21	2Z	2	GLU	2.5
40	2i	103	THR	2.5
41	1j	100	THR	2.5
52	2u	17	THR	2.5
33	2b	189	ASP	2.5
14	2S	45	GLY	2.5
22	20	26	TYR	2.5
40	2i	62	TYR	2.5
35	2d	73	ARG	2.5
40	2i	66	ARG	2.5
41	1j	79	ARG	2.5
41	2j	9	ARG	2.5
51	2t	8	ARG	2.5
1	1A	275	G	2.5
1	1A	2121	G	2.5
1	2A	2104	G	2.5
1	2A	2321	G	2.5
1	2A	2833	G	2.5
2	2B	119	G	2.5
32	2a	631	G	2.5
32	2a	1310	G	2.5
1	1A	645	C	2.5

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Mol	Chain	Res	Type	RSRZ
1	2A	889	C	2.5
1	2A	894	C	2.5
1	2A	2175	C	2.5
32	1a	1030(B)	C	2.5
50	2s	18	LYS	2.5
21	1Z	150	LEU	2.5
48	2q	98	LEU	2.5
50	2s	22	LEU	2.5
7	2H	111	HIS	2.5
6	2G	159	VAL	2.5
21	2Z	37	VAL	2.5
22	20	79	VAL	2.5
36	2e	51	VAL	2.5
7	2H	96	ALA	2.5
21	2Z	158	PRO	2.5
34	2c	137	ALA	2.5
36	2e	94	ALA	2.5
42	1k	74	ALA	2.5
44	2m	75	ALA	2.5
51	1t	95	ALA	2.5
33	2b	39	ILE	2.5
34	2c	57	ILE	2.5
1	1A	1046	A	2.5
1	2A	2158	A	2.5
32	2a	1280	A	2.5
32	2a	1285	A	2.5
54	2y	36	A	2.5
41	1j	87	THR	2.5
6	2G	44	GLY	2.5
12	2Q	24	GLY	2.5
19	2X	94	GLY	2.5
20	2Y	2	ARG	2.5
36	2e	114	GLY	2.5
42	2k	54	ARG	2.5
17	2V	85	LYS	2.5
21	2Z	99	TYR	2.5
34	2c	45	LYS	2.5
38	1g	154	TYR	2.5
44	2m	106	ASN	2.5
21	2Z	104	PHE	2.5
40	2i	59	PHE	2.5
1	1A	1076	C	2.5

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Mol	Chain	Res	Type	RSRZ
1	2A	2163	C	2.5
1	2A	2803	C	2.5
32	2a	951	G	2.5
32	2a	1003	G	2.5
32	2a	1208	C	2.5
54	1y	56	C	2.5
1	1A	12	U	2.5
32	2a	1532	U	2.5
6	2G	149	VAL	2.5
34	1c	106	VAL	2.5
8	2I	53	ALA	2.5
33	2b	188	ALA	2.5
34	2c	61	ALA	2.5
49	2r	60	ALA	2.5
6	2G	76	SER	2.5
34	2c	134	ILE	2.5
48	2q	96	GLU	2.5
20	2Y	46	LYS	2.5
34	2c	15	THR	2.5
40	2i	83	ARG	2.5
41	2j	7	LYS	2.5
32	2a	1363(A)	A	2.5
43	2l	69	TYR	2.5
46	2o	15	PHE	2.5
33	2b	145	LEU	2.4
34	2c	175	LEU	2.4
39	1h	2	LEU	2.4
50	2s	16	LEU	2.4
1	1A	1080	C	2.4
1	1A	2120	G	2.4
1	2A	859	G	2.4
1	2A	1170	G	2.4
1	2A	2131	G	2.4
1	2A	2189	U	2.4
8	2I	15	VAL	2.4
14	2S	28	VAL	2.4
32	2a	948	C	2.4
32	2a	990	C	2.4
32	2a	1363	C	2.4
34	1c	70	VAL	2.4
36	2e	115	VAL	2.4
38	2g	75	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
54	1y	13	C	2.4
54	2w	67	C	2.4
1	2A	2805	G	2.4
32	2a	1255	G	2.4
33	2b	125	PRO	2.4
44	2m	41	PRO	2.4
7	2H	156	ALA	2.4
37	2f	99	ALA	2.4
44	2m	51	ALA	2.4
33	1b	42	ILE	2.4
41	2j	82	ILE	2.4
44	2m	9	ILE	2.4
45	1n	7	ILE	2.4
36	2e	20	GLN	2.4
3	2D	38	LYS	2.4
35	1d	191	ARG	2.4
36	2e	27	ARG	2.4
48	2q	100	LYS	2.4
34	2c	165	THR	2.4
44	2m	37	THR	2.4
2	2B	120	A	2.4
32	2a	978	A	2.4
34	2c	193	TYR	2.4
40	2i	4	TYR	2.4
41	1j	47	PHE	2.4
46	1o	69	TYR	2.4
48	2q	84	LEU	2.4
54	2y	58	A	2.4
34	2c	120	VAL	2.4
35	2d	112	VAL	2.4
36	2e	34	VAL	2.4
38	2g	21	VAL	2.4
44	2m	10	PRO	2.4
7	2H	58	GLU	2.4
32	2a	1056	U	2.4
54	2w	12	U	2.4
32	2a	1066	C	2.4
32	2a	1209	C	2.4
32	2a	1249	C	2.4
33	2b	68	ILE	2.4
41	1j	98	ILE	2.4
41	2j	70	ARG	2.4

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Mol	Chain	Res	Type	RSRZ
45	2n	17	LYS	2.4
50	2s	49	ILE	2.4
21	2Z	153	SER	2.4
26	14	58	ARG	2.4
40	2i	71	SER	2.4
52	2u	10	ARG	2.4
1	1A	2166	G	2.4
32	1a	1021	G	2.4
32	2a	926	G	2.4
32	2a	1084	G	2.4
32	2a	1373	G	2.4
6	2G	129	GLY	2.4
43	1l	6	THR	2.4
18	2W	60	ASN	2.4
34	2c	10	PHE	2.4
44	2m	34	LEU	2.4
44	2m	21	TYR	2.4
47	1p	39	TYR	2.4
1	1A	2158	A	2.4
32	2a	977	A	2.4
32	2a	1183	A	2.4
20	2Y	53	PRO	2.4
47	2p	2	VAL	2.4
50	2s	42	PRO	2.4
4	2E	73	GLU	2.4
41	2j	18	ALA	2.4
44	2m	46	LYS	2.4
7	2H	136	ILE	2.4
14	2S	20	ARG	2.4
41	2j	60	ARG	2.4
1	2A	2132	U	2.4
1	1A	889	C	2.4
1	1A	2161	C	2.4
32	2a	1192	C	2.4
32	2a	1200	C	2.4
32	2a	1282	C	2.4
7	2H	14	GLY	2.4
22	20	43	THR	2.4
34	2c	80	GLY	2.4
36	2e	97	GLY	2.4
50	1s	8	GLY	2.4
1	1A	2133	G	2.4

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Mol	Chain	Res	Type	RSRZ
12	2Q	34	LEU	2.4
14	2S	54	LEU	2.4
32	2a	1026	G	2.4
36	2e	31	LEU	2.4
50	2s	15	LEU	2.4
51	1t	62	LEU	2.4
51	2t	10	LEU	2.4
54	1w	70	G	2.4
6	2G	80	PHE	2.4
20	1Y	92	ASN	2.4
36	1e	6	PHE	2.4
47	1p	17	TYR	2.4
1	1A	1084	A	2.4
11	2P	78	PRO	2.4
14	2S	33	LYS	2.4
32	2a	1130	A	2.4
33	1b	131	PRO	2.4
35	1d	29	PRO	2.4
21	1Z	139	VAL	2.4
35	1d	198	VAL	2.4
36	2e	90	VAL	2.4
7	2H	6	ARG	2.4
12	2Q	6	ARG	2.4
33	2b	144	ARG	2.4
38	2g	32	ARG	2.4
16	2U	88	ILE	2.4
20	2Y	75	ILE	2.4
44	2m	33	ALA	2.4
1	1A	1175	U	2.4
1	2A	1026	U	2.4
32	1a	1040	U	2.4
3	2D	180	GLY	2.4
26	14	17	GLY	2.4
41	1j	31	GLY	2.4
1	1A	2174	C	2.3
7	2H	7	LEU	2.3
14	2S	110	LEU	2.3
32	2a	824	C	2.3
32	2a	1112	C	2.3
40	1i	19	LEU	2.3
48	2q	76	LEU	2.3
7	2H	123	PHE	2.3

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Mol	Chain	Res	Type	RSRZ
33	2b	19	HIS	2.3
54	2w	11	C	2.3
33	2b	160	ASP	2.3
47	2p	9	PHE	2.3
52	2u	5	ASP	2.3
1	1A	1062	G	2.3
1	1A	2156	G	2.3
1	2A	2319	G	2.3
32	2a	867	G	2.3
32	2a	1030(C)	G	2.3
32	2a	1283	G	2.3
54	2w	34	G	2.3
55	2x	70	G	2.3
9	2N	75	TYR	2.3
37	2f	59	TYR	2.3
6	2G	122	PRO	2.3
33	1b	234	PRO	2.3
39	2h	67	PRO	2.3
4	2E	59	VAL	2.3
12	1Q	6	ARG	2.3
38	2g	9	VAL	2.3
48	2q	77	VAL	2.3
1	2A	887	A	2.3
1	2A	2320	A	2.3
7	2H	72	ILE	2.3
7	2H	92	ILE	2.3
25	23	51	ALA	2.3
32	2a	1110	A	2.3
33	1b	200	ILE	2.3
33	2b	80	ILE	2.3
34	1c	77	ILE	2.3
34	2c	14	ILE	2.3
54	1y	35	A	2.3
1	1A	2167	U	2.3
21	2Z	160	GLY	2.3
27	25	29	THR	2.3
32	2a	961	U	2.3
52	2u	2	GLY	2.3
33	2b	47	THR	2.3
34	2c	191	THR	2.3
33	2b	61	LEU	2.3
33	2b	69	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
33	2b	215	LEU	2.3
41	1j	88	LEU	2.3
33	2b	57	PHE	2.3
42	2k	125	PHE	2.3
1	2A	2297	C	2.3
2	2B	5	C	2.3
32	2a	1214	C	2.3
54	2w	56	C	2.3
33	2b	133	LYS	2.3
6	1G	146	TYR	2.3
17	2V	12	TYR	2.3
42	1k	25	TYR	2.3
33	2b	96	ARG	2.3
40	2i	16	ARG	2.3
45	2n	29	ARG	2.3
52	2u	6	ARG	2.3
1	2A	2100	G	2.3
32	2a	1057	G	2.3
32	2a	1131	G	2.3
32	2a	1276	G	2.3
17	2V	79	VAL	2.3
39	2h	26	VAL	2.3
6	2G	39	ILE	2.3
41	1j	6	ILE	2.3
41	2j	26	ALA	2.3
49	2r	24	ALA	2.3
32	2a	1151	A	2.3
54	2y	21	A	2.3
7	1H	174	GLY	2.3
21	2Z	16	SER	2.3
26	14	45	GLY	2.3
33	2b	192	SER	2.3
34	2c	74	GLY	2.3
41	1j	30	SER	2.3
41	1j	40	LEU	2.3
1	1A	2150	U	2.3
1	2A	2144	U	2.3
32	2a	1070	U	2.3
32	2a	1090	U	2.3
54	2w	66	U	2.3
21	2Z	154	ASP	2.3
33	2b	139	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
41	1j	80	LYS	2.3
1	1A	884	C	2.3
7	2H	55	PRO	2.3
21	2Z	130	PRO	2.3
22	20	11	ARG	2.3
32	2a	1069	C	2.3
25	13	60	GLU	2.3
39	2h	94	TYR	2.3
43	2l	105	TYR	2.3
24	22	9	GLN	2.3
40	2i	28	VAL	2.3
43	2l	66	VAL	2.3
44	2m	17	VAL	2.3
6	2G	114	ILE	2.3
51	1t	55	ILE	2.3
44	1m	5	ALA	2.3
44	2m	18	ALA	2.3
1	1A	1071	G	2.3
1	1A	2149	G	2.3
1	2A	11	G	2.3
2	2B	118	G	2.3
32	1a	79	G	2.3
32	2a	1022	G	2.3
32	2a	1047	G	2.3
54	2w	19	G	2.3
12	2Q	19	GLY	2.3
20	2Y	10	GLY	2.3
21	2Z	143	GLY	2.3
22	20	59	LEU	2.3
34	2c	205	GLY	2.3
51	2t	96	GLY	2.3
32	2a	1346	A	2.3
53	2v	23	A	2.3
54	2w	9	A	2.3
54	2y	35	A	2.3
20	2Y	89	PHE	2.3
35	1d	169	LYS	2.3
32	2a	1000	U	2.3
34	1c	18	TRP	2.3
42	1k	42	TRP	2.3
35	1d	181	MET	2.3
38	1g	78	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
41	2j	5	ARG	2.3
41	2j	28	ARG	2.3
46	1o	88	ARG	2.3
46	2o	88	ARG	2.3
35	1d	7	PRO	2.3
1	2A	1043	C	2.3
7	2H	50	VAL	2.3
32	2a	980	C	2.3
32	2a	999	C	2.3
32	2a	1217	C	2.3
32	2a	1262	C	2.3
33	2b	223	ILE	2.3
34	2c	64	VAL	2.3
40	1i	53	VAL	2.3
41	2j	6	ILE	2.3
42	2k	105	VAL	2.3
50	2s	40	ILE	2.3
50	2s	41	VAL	2.3
54	1w	2	C	2.3
6	2G	169	ALA	2.3
5	2F	24	LEU	2.2
7	2H	82	GLY	2.2
14	2S	104	GLY	2.2
23	21	22	GLY	2.2
34	2c	33	LEU	2.2
34	2c	178	LEU	2.2
40	1i	68	GLY	2.2
44	2m	26	GLY	2.2
50	2s	71	LEU	2.2
1	1A	880	G	2.2
1	1A	2116	G	2.2
1	2A	2141	G	2.2
6	2G	145	THR	2.2
32	1a	1042	G	2.2
32	2a	1089	G	2.2
32	2a	1265	G	2.2
32	2a	1323	G	2.2
38	2g	35	LYS	2.2
48	1q	97	SER	2.2
54	1w	65	G	2.2
33	2b	48	MET	2.2
33	2b	55	PHE	2.2

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Mol	Chain	Res	Type	RSRZ
1	2A	917	A	2.2
32	2a	1289	A	2.2
1	1A	2130	U	2.2
7	2H	95	ARG	2.2
14	2S	30	ARG	2.2
25	23	29	ARG	2.2
32	2a	997	U	2.2
32	2a	1281	U	2.2
38	1g	3	ARG	2.2
40	1i	105	ASP	2.2
52	2u	9	ARG	2.2
33	2b	12	GLU	2.2
38	1g	86	GLN	2.2
7	2H	151	ILE	2.2
9	2N	9	VAL	2.2
11	2P	110	TYR	2.2
21	2Z	53	ILE	2.2
26	24	63	TYR	2.2
31	29	26	ILE	2.2
34	1c	76	VAL	2.2
34	2c	23	TYR	2.2
38	1g	9	VAL	2.2
40	1i	4	TYR	2.2
40	2i	63	ILE	2.2
43	2l	39	VAL	2.2
20	2Y	105	ALA	2.2
22	20	18	ALA	2.2
38	2g	128	ALA	2.2
1	1A	1509	C	2.2
32	1a	1038	C	2.2
32	2a	1203	C	2.2
32	2a	1384	C	2.2
44	2m	92	HIS	2.2
50	1s	14	HIS	2.2
54	1w	4	C	2.2
6	2G	7	LEU	2.2
23	21	46	LEU	2.2
33	2b	51	LEU	2.2
34	2c	204	LEU	2.2
35	1d	176	LEU	2.2
35	2d	167	GLY	2.2
38	1g	12	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
38	2g	133	GLY	2.2
39	2h	71	GLY	2.2
40	1i	8	GLY	2.2
46	1o	57	LEU	2.2
20	2Y	47	LYS	2.2
31	29	31	LYS	2.2
40	2i	95	LYS	2.2
43	1l	126	LYS	2.2
47	1p	27	LYS	2.2
21	2Z	170	THR	2.2
45	2n	60	SER	2.2
7	2H	69	ARG	2.2
34	1c	179	ARG	2.2
36	2e	25	ARG	2.2
40	1i	10	ARG	2.2
44	2m	3	ARG	2.2
45	2n	19	ARG	2.2
1	1A	1089	G	2.2
1	1A	2207	G	2.2
20	1Y	107	ASP	2.2
32	2a	1156	G	2.2
32	2a	1193	G	2.2
32	2a	1316	G	2.2
1	1A	1026	U	2.2
1	1A	1177	A	2.2
20	2Y	66	PRO	2.2
1	2A	272(A)	U	2.2
32	2a	1236	A	2.2
41	2j	69	ASN	2.2
46	2o	75	PRO	2.2
34	2c	37	GLN	2.2
14	2S	85	VAL	2.2
21	2Z	139	VAL	2.2
26	24	50	VAL	2.2
41	1j	34	VAL	2.2
21	2Z	9	TYR	2.2
26	14	67	TYR	2.2
34	1c	48	TYR	2.2
39	2h	48	TYR	2.2
22	20	21	LEU	2.2
25	23	26	LEU	2.2
38	2g	22	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
40	2i	115	GLY	2.2
51	1t	69	GLY	2.2
1	2A	652(T)	C	2.2
32	1a	163	C	2.2
7	2H	38	SER	2.2
31	29	6	SER	2.2
40	2i	27	THR	2.2
41	1j	35	SER	2.2
50	2s	48	THR	2.2
9	2N	61	ARG	2.2
35	2d	49	ARG	2.2
39	2h	14	ARG	2.2
40	1i	111	ARG	2.2
44	2m	57	ARG	2.2
51	2t	25	ARG	2.2
3	2D	71	ASP	2.2
40	2i	98	PRO	2.2
6	2G	54	GLU	2.2
33	1b	12	GLU	2.2
34	2c	170	GLN	2.2
38	2g	86	GLN	2.2
47	1p	59	TRP	2.2
1	1A	1174	A	2.2
1	1A	2123	G	2.2
1	1A	2157	G	2.2
1	1A	2165	G	2.2
1	2A	1029	A	2.2
1	2A	1847	A	2.2
1	2A	2182	G	2.2
2	2B	1	U	2.2
32	2a	1085	U	2.2
54	2w	50	U	2.2
54	2y	45	U	2.2
32	1a	152	A	2.2
32	2a	1306	A	2.2
26	24	22	ILE	2.2
33	2b	211	ILE	2.2
36	2e	76	ILE	2.2
38	2g	120	ILE	2.2
41	1j	24	VAL	2.2
43	2l	55	VAL	2.2
51	1t	100	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
5	2F	21	ALA	2.2
8	2I	89	TYR	2.2
12	2Q	26	TYR	2.2
21	2Z	3	TYR	2.2
34	2c	117	ALA	2.2
42	2k	19	ALA	2.2
6	2G	34	LEU	2.2
36	2e	12	LEU	2.2
44	2m	66	LEU	2.2
4	2E	115	GLY	2.2
34	1c	13	GLY	2.2
45	2n	41	ARG	2.2
1	1A	1100	C	2.2
1	1A	2178	C	2.2
21	2Z	44	PHE	2.2
21	2Z	89	PHE	2.2
46	1o	24	SER	2.2
32	2a	985	C	2.2
32	2a	1189	C	2.2
7	2H	36	PRO	2.2
50	2s	59	PRO	2.2
6	2G	126	ASP	2.2
34	1c	28	GLN	2.2
39	2h	73	ASP	2.2
6	2G	100	TRP	2.2
1	1A	271(K)	U	2.2
7	1H	175	LYS	2.2
8	1I	107	VAL	2.2
32	2a	863	U	2.2
36	2e	89	ILE	2.2
37	1f	81	ILE	2.2
34	2c	130	VAL	2.2
44	2m	74	VAL	2.2
54	1y	12	U	2.2
1	1A	278	A	2.2
1	1A	2790	A	2.2
1	2A	614(B)	G	2.2
1	2A	2318	G	2.2
2	2B	18	G	2.2
6	2G	73	ALA	2.2
8	2I	49	ALA	2.2
15	2T	131	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
21	2Z	151	HIS	2.2
32	2a	10	A	2.2
32	2a	570	G	2.2
32	2a	946	A	2.2
32	2a	1014	A	2.2
32	2a	1252	A	2.2
32	2a	1290	G	2.2
39	2h	124	ALA	2.2
42	2k	23	ALA	2.2
42	2k	89	ALA	2.2
54	2w	18	G	2.2
54	2w	53	G	2.2
6	2G	133	LEU	2.1
10	1O	91	LEU	2.1
33	2b	33	TYR	2.1
34	1c	184	TYR	2.1
36	2e	112	LEU	2.1
41	2j	85	LEU	2.1
43	2l	84	LEU	2.1
21	2Z	28	MET	2.1
31	29	21	GLY	2.1
41	1j	10	GLY	2.1
19	1X	68	ARG	2.1
21	2Z	122	ARG	2.1
33	2b	36	ARG	2.1
51	1t	8	ARG	2.1
8	2I	86	THR	2.1
21	1Z	69	THR	2.1
42	2k	31	THR	2.1
6	2G	180	PHE	2.1
14	2S	12	PHE	2.1
21	1Z	149	SER	2.1
8	2I	80	PRO	2.1
35	1d	51	PRO	2.1
38	2g	14	PRO	2.1
40	1i	98	PRO	2.1
43	2l	94	PRO	2.1
47	1p	41	PRO	2.1
48	1q	28	PRO	2.1
1	1A	2139	C	2.1
21	1Z	119	GLU	2.1
24	22	12	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	931	C	2.1
32	2a	1354	C	2.1
33	2b	43	ASP	2.1
34	1c	107	GLN	2.1
38	1g	90	GLU	2.1
43	2l	78	GLN	2.1
54	2w	49	C	2.1
6	2G	88	ILE	2.1
26	24	15	ILE	2.1
36	2e	131	ILE	2.1
40	1i	95	LYS	2.1
7	2H	125	VAL	2.1
7	2H	133	VAL	2.1
36	2e	67	VAL	2.1
39	2h	93	VAL	2.1
40	1i	41	VAL	2.1
19	2X	4	ALA	2.1
32	2a	1159	U	2.1
24	22	60	LEU	2.1
29	17	45	ALA	2.1
32	1a	182	U	2.1
33	1b	62	ALA	2.1
33	2b	221	LEU	2.1
35	2d	155	LEU	2.1
35	2d	164	ALA	2.1
38	1g	2	ALA	2.1
54	2y	59	U	2.1
37	2f	89	MET	2.1
39	2h	59	LEU	2.1
39	2h	112	LEU	2.1
1	1A	887	A	2.1
1	1A	1085	A	2.1
11	1P	44	GLY	2.1
22	20	42	GLY	2.1
26	24	54	GLY	2.1
32	2a	1256	A	2.1
33	1b	236	TYR	2.1
36	2e	60	TYR	2.1
40	2i	8	GLY	2.1
47	1p	38	TYR	2.1
40	2i	120	ARG	2.1
50	2s	72	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
1	1A	2125	G	2.1
1	2A	2168	G	2.1
38	2g	24	THR	2.1
46	1o	18	PHE	2.1
7	2H	10	PRO	2.1
10	2O	101	PRO	2.1
24	22	66	GLU	2.1
40	1i	12	GLU	2.1
6	2G	47	LYS	2.1
9	2N	45	ASN	2.1
20	2Y	94	LYS	2.1
26	24	51	ASP	2.1
30	28	29	LYS	2.1
33	2b	169	LYS	2.1
34	2c	181	ASN	2.1
40	2i	78	LYS	2.1
41	1j	78	ASN	2.1
44	2m	77	ASN	2.1
50	1s	12	ASP	2.1
1	2A	2161	C	2.1
1	2A	2179	C	2.1
2	2B	68	C	2.1
7	2H	148	ILE	2.1
32	1a	479	C	2.1
32	1a	1006	C	2.1
36	2e	118	ILE	2.1
33	1b	40	HIS	2.1
33	2b	113	HIS	2.1
7	2H	114	VAL	2.1
29	17	46	VAL	2.1
33	2b	230	VAL	2.1
34	2c	173	VAL	2.1
37	2f	40	VAL	2.1
7	2H	64	LEU	2.1
33	1b	61	LEU	2.1
33	1b	97	TRP	2.1
50	2s	34	TRP	2.1
7	2H	145	ALA	2.1
34	2c	65	ALA	2.1
34	2c	160	ALA	2.1
38	2g	117	ALA	2.1
38	2g	147	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
43	2l	56	ALA	2.1
44	2m	76	ALA	2.1
51	2t	94	ALA	2.1
1	1A	895	U	2.1
1	1A	1083	U	2.1
6	2G	83	ARG	2.1
21	2Z	131	ARG	2.1
32	2a	5	U	2.1
32	2a	1052	U	2.1
35	2d	209	ARG	2.1
39	2h	84	ARG	2.1
54	1w	20	U	2.1
16	2U	73	GLY	2.1
33	2b	72	GLY	2.1
34	1c	201	TYR	2.1
36	2e	133	TYR	2.1
40	1i	125	TYR	2.1
1	1A	1103	A	2.1
1	1A	2169	A	2.1
1	2A	878	A	2.1
32	2a	1093	A	2.1
32	2a	1275	A	2.1
54	1y	58	A	2.1
41	2j	67	THR	2.1
41	2j	92	THR	2.1
6	2G	117	PHE	2.1
6	2G	141	PHE	2.1
21	1Z	159	PRO	2.1
33	1b	91	PRO	2.1
35	1d	189	PRO	2.1
36	2e	26	PHE	2.1
37	1f	60	PHE	2.1
37	2f	96	PRO	2.1
39	2h	72	PRO	2.1
1	1A	2168	G	2.1
1	1A	2793	G	2.1
22	20	9	SER	2.1
32	2a	1042	G	2.1
32	2a	1178	G	2.1
32	2a	1215	G	2.1
39	2h	135	CYS	2.1
41	1j	84	GLN	2.1

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Mol	Chain	Res	Type	RSRZ
33	2b	22	LYS	2.1
6	2G	77	ILE	2.1
6	2G	79	ASN	2.1
34	1c	62	ASP	2.1
11	2P	35	HIS	2.1
41	2j	98	ILE	2.1
5	2F	183	VAL	2.1
21	2Z	126	VAL	2.1
33	2b	83	MET	2.1
23	21	85	LEU	2.1
33	2b	154	LEU	2.1
33	2b	229	VAL	2.1
40	1i	56	LEU	2.1
46	2o	56	LEU	2.1
49	1r	78	LEU	2.1
49	1r	86	VAL	2.1
1	1A	652(S)	C	2.1
1	1A	2175	C	2.1
1	2A	2188	C	2.1
5	2F	130	ALA	2.1
7	2H	102	ALA	2.1
32	1a	1007	C	2.1
32	1a	1039	C	2.1
32	2a	972	C	2.1
32	2a	979	C	2.1
33	1b	130	ARG	2.1
34	1c	60	ALA	2.1
34	1c	61	ALA	2.1
34	2c	133	ALA	2.1
38	2g	76	ARG	2.1
40	2i	61	ALA	2.1
41	2j	66	ARG	2.1
5	2F	131	GLY	2.1
18	1W	112	GLY	2.1
32	1a	202	U	2.1
41	2j	93	GLY	2.1
46	1o	89	GLY	2.1
7	2H	157	TYR	2.1
7	2H	173	PRO	2.1
25	23	40	THR	2.1
26	14	52	THR	2.1
33	2b	26	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
38	2g	26	PHE	2.1
42	2k	115	PRO	2.1
43	2l	31	PRO	2.1
6	1G	48	GLU	2.1
32	2a	1179	A	2.1
44	2m	65	LYS	2.1
1	1A	545	G	2.1
1	1A	1537	G	2.1
1	1A	2153	G	2.1
1	2A	2339	G	2.1
32	2a	1013	G	2.1
32	2a	1138	G	2.1
20	2Y	44	ILE	2.1
20	2Y	107	ASP	2.1
21	1Z	148	ASP	2.1
21	2Z	63	ASP	2.1
31	29	20	HIS	2.1
32	1a	181	G	2.1
32	1a	184	G	2.1
35	1d	70	ILE	2.1
40	1i	75	ASP	2.1
40	2i	117	HIS	2.1
54	1y	44	G	2.1
46	1o	3	ILE	2.1
6	2G	120	LEU	2.0
9	1N	140	VAL	2.0
11	2P	105	LEU	2.0
12	2Q	52	VAL	2.0
12	2Q	106	VAL	2.0
21	2Z	27	VAL	2.0
31	29	25	VAL	2.0
33	2b	15	VAL	2.0
35	1d	135	LEU	2.0
40	1i	50	LEU	2.0
41	1j	66	ARG	2.0
44	2m	110	ARG	2.0
50	2s	36	ARG	2.0
10	2O	51	ALA	2.0
11	2P	134	ALA	2.0
39	2h	16	ALA	2.0
40	2i	94	ALA	2.0
1	2A	2804	C	2.0

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Mol	Chain	Res	Type	RSRZ
2	2B	88	C	2.0
11	2P	37	GLY	2.0
32	1a	984	C	2.0
39	2h	90	GLY	2.0
50	2s	8	GLY	2.0
51	2t	101	GLY	2.0
54	1y	45	U	2.0
34	1c	15	THR	2.0
34	2c	67	THR	2.0
35	1d	40	PRO	2.0
36	2e	61	TYR	2.0
6	1G	182	LYS	2.0
22	20	69	PHE	2.0
26	24	2	LYS	2.0
33	1b	22	LYS	2.0
47	2p	80	PHE	2.0
3	2D	126	GLN	2.0
33	2b	143	GLU	2.0
14	2S	50	SER	2.0
40	1i	126	SER	2.0
1	1A	1045	A	2.0
1	2A	528	A	2.0
32	2a	964	A	2.0
32	2a	996	A	2.0
32	2a	1204	A	2.0
32	2a	1248	A	2.0
32	2a	1319	A	2.0
24	22	1	MET	2.0
33	2b	40	HIS	2.0
40	1i	81	ILE	2.0
41	1j	38	ILE	2.0
6	2G	4	ASP	2.0
44	1m	106	ASN	2.0
7	2H	33	LEU	2.0
12	2Q	125	LEU	2.0
26	24	61	ARG	2.0
27	25	58	LEU	2.0
34	1c	32	LEU	2.0
34	1c	52	LEU	2.0
45	2n	45	ARG	2.0
46	2o	81	LEU	2.0
49	2r	51	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
50	2s	30	LEU	2.0
9	2N	5	VAL	2.0
45	2n	56	VAL	2.0
46	2o	27	VAL	2.0
50	2s	51	VAL	2.0
1	1A	2131	G	2.0
1	2A	2152	G	2.0
1	2A	2893	G	2.0
32	2a	1088	G	2.0
32	2a	1144	G	2.0
32	2a	1271	G	2.0
54	2w	22	G	2.0
33	2b	171	ALA	2.0
51	1t	12	ALA	2.0
43	1l	63	GLY	2.0
43	2l	95	GLY	2.0
50	2s	68	GLY	2.0
51	2t	47	GLY	2.0
44	2m	64	TRP	2.0
8	1I	87	LYS	2.0
21	2Z	78	LYS	2.0
1	1A	2132	U	2.0
1	1A	2896	C	2.0
1	2A	277	C	2.0
21	2Z	15	PRO	2.0
22	20	83	PRO	2.0
1	2A	895	U	2.0
32	1a	221	C	2.0
32	2a	84	U	2.0
32	2a	1109	C	2.0
32	2a	1199	U	2.0
32	2a	1364	U	2.0
32	2a	1399	C	2.0
40	2i	21	PRO	2.0
5	2F	7	TYR	2.0
8	2I	135	GLU	2.0
33	2b	28	PHE	2.0
33	2b	73	THR	2.0
36	2e	16	THR	2.0
38	2g	62	PHE	2.0
40	1i	7	THR	2.0
40	2i	33	PHE	2.0

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Mol	Chain	Res	Type	RSRZ
47	2p	38	TYR	2.0
8	2I	79	ILE	2.0
39	2h	100	ILE	2.0
47	2p	33	ILE	2.0
7	2H	149	ARG	2.0
14	1S	3	ARG	2.0
14	2S	3	ARG	2.0
14	2S	97	ARG	2.0
21	2Z	30	ASN	2.0
33	2b	137	ARG	2.0
34	2c	83	ARG	2.0
36	2e	24	ARG	2.0
41	1j	46	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, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	G7M	2w	46	24/25	0.35	0.20	75,97,102,107	0
54	G7M	1w	46	24/25	0.42	0.17	82,93,102,123	0
54	PSU	2y	55	20/21	0.53	0.17	92,98,106,114	0
54	5MU	2y	54	21/22	0.60	0.19	91,96,102,117	0
54	G7M	2y	46	24/25	0.61	0.15	86,94,97,116	0
54	PSU	2w	55	20/21	0.62	0.14	91,95,108,108	0
54	5MU	2w	54	21/22	0.63	0.15	87,91,98,104	0
54	5MU	1y	54	21/22	0.64	0.17	85,90,100,113	0
54	4SU	2w	8	20/21	0.64	0.17	92,97,105,114	0
54	PSU	1y	55	20/21	0.67	0.16	88,94,99,114	0
54	PSU	2y	32	20/21	0.69	0.14	81,87,95,99	0
54	MIA	2y	37	22/30	0.70	0.15	78,88,98,111	0
54	G7M	1y	46	24/25	0.71	0.16	84,91,97,107	0
54	4SU	2y	8	20/21	0.72	0.13	88,94,104,114	0
54	4SU	1y	8	20/21	0.76	0.13	88,92,101,103	0
54	4SU	1w	8	20/21	0.77	0.12	83,89,99,100	0
54	PSU	2w	32	20/21	0.78	0.15	80,89,98,108	0
32	2MG	2a	1207	24/25	0.79	0.16	84,89,92,101	0
54	PSU	1w	55	20/21	0.80	0.12	78,88,91,92	0
55	PSU	2x	55	20/21	0.80	0.13	73,83,89,90	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	PSU	2y	39	20/21	0.81	0.13	78,85,95,106	0
54	MIA	1y	37	22/30	0.83	0.15	76,81,88,96	0
55	4SU	2x	8	20/21	0.83	0.14	86,89,92,93	0
1	5MU	2A	1915	21/22	0.84	0.14	72,78,82,91	0
54	PSU	1y	32	20/21	0.84	0.13	77,83,96,99	0
55	5MU	2x	54	21/22	0.86	0.12	77,85,88,92	0
54	PSU	1y	39	20/21	0.86	0.13	72,80,83,88	0
54	PSU	1w	32	20/21	0.86	0.13	71,75,86,89	0
54	5MU	1w	54	21/22	0.87	0.12	67,82,85,87	0
32	PSU	2a	516	20/21	0.88	0.14	71,78,83,85	0
32	G7M	2a	527	24/25	0.88	0.13	67,73,79,80	0
55	5MC	2x	32	21/22	0.88	0.15	68,77,82,89	0
54	MIA	2w	37	25/30	0.88	0.13	75,83,89,99	0
1	PSU	2A	1917	20/21	0.88	0.12	63,73,81,81	0
32	5MC	2a	1400	21/22	0.88	0.17	75,81,85,89	0
32	5MC	2a	1404	21/22	0.89	0.13	55,65,70,73	0
32	M2G	2a	966	25/26	0.89	0.16	69,76,86,91	0
32	5MC	2a	967	21/22	0.89	0.15	72,76,82,95	0
54	MIA	1w	37	29/30	0.90	0.14	61,70,74,77	0
1	PSU	2A	1911	20/21	0.91	0.12	61,68,71,74	0
54	PSU	2w	39	20/21	0.91	0.11	81,85,91,94	0
55	PSU	1x	55	20/21	0.91	0.10	60,64,77,77	0
32	2MG	1a	1207	24/25	0.91	0.11	69,76,79,81	0
32	MA6	2a	1518	24/25	0.92	0.13	56,71,79,79	0
43	0TD	2l	92	10/11	0.92	0.10	69,73,79,81	0
32	4OC	2a	1402	22/23	0.92	0.13	52,70,77,78	0
55	5MU	1x	54	21/22	0.92	0.10	61,67,71,77	0
54	PSU	1w	39	20/21	0.93	0.09	66,71,79,80	0
1	OMC	2A	1920	21/22	0.93	0.12	61,70,74,78	0
32	5MC	2a	1407	21/22	0.93	0.11	61,65,71,77	0
32	UR3	2a	1498	21/22	0.93	0.13	58,65,70,74	0
32	PSU	1a	516	20/21	0.94	0.10	60,65,70,72	0
32	MA6	2a	1519	24/25	0.94	0.13	54,70,76,79	0
55	31H	2x	76	32/33	0.94	0.11	43,56,66,75	0
1	5MU	1A	1915	21/22	0.94	0.10	50,57,62,66	0
43	0TD	1l	92	10/11	0.94	0.11	60,62,66,84	0
32	M2G	1a	966	25/26	0.95	0.10	48,55,63,71	0
55	5MC	1x	32	21/22	0.95	0.10	55,59,65,73	0
32	5MC	1a	967	21/22	0.95	0.10	52,57,62,72	0
1	5MC	2A	1942	21/22	0.95	0.10	52,64,66,69	0
32	G7M	1a	527	24/25	0.96	0.09	52,59,61,64	0
1	5MC	1A	1942	21/22	0.96	0.08	32,38,41,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	5MC	1a	1400	21/22	0.96	0.10	47,56,60,62	0
32	4OC	1a	1402	22/23	0.96	0.09	44,49,53,61	0
1	5MU	2A	1939	21/22	0.96	0.09	35,44,50,54	0
55	4SU	1x	8	20/21	0.96	0.08	56,64,69,69	0
1	5MC	2A	1962	21/22	0.96	0.09	39,51,61,68	0
1	OMG	2A	2251	24/25	0.96	0.09	43,49,53,61	0
1	PSU	1A	1917	20/21	0.97	0.07	45,56,62,63	0
32	5MC	1a	1404	21/22	0.97	0.09	39,46,49,54	0
32	5MC	1a	1407	21/22	0.97	0.08	38,43,45,49	0
32	MA6	1a	1519	24/25	0.97	0.09	38,45,50,55	0
55	31H	1x	76	32/33	0.97	0.08	21,28,41,52	10
1	2MA	2A	2503	23/24	0.97	0.08	36,41,44,46	0
1	OMU	2A	2552	21/22	0.97	0.09	41,50,53,60	0
1	PSU	2A	2605	20/21	0.97	0.07	35,42,49,53	0
1	5MC	1A	1962	21/22	0.98	0.07	32,38,41,48	0
1	OMG	1A	2251	24/25	0.98	0.05	22,26,29,30	0
1	OMU	1A	2552	21/22	0.98	0.06	25,28,31,35	0
1	PSU	1A	2605	20/21	0.98	0.06	20,24,31,34	0
1	OMC	1A	1920	21/22	0.98	0.07	40,47,50,51	0
1	5MU	1A	1939	21/22	0.98	0.06	20,29,32,32	0
32	UR3	1a	1498	21/22	0.98	0.08	42,46,50,53	0
32	MA6	1a	1518	24/25	0.98	0.08	37,43,48,48	0
1	PSU	1A	1911	20/21	0.98	0.07	38,50,54,54	0
1	2MA	1A	2503	23/24	0.99	0.05	17,22,24,25	0

6.3 Carbohydrates (i)

There are no oligosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2w	105	1/1	0.37	0.18	95,95,95,95	0
56	MG	1A	4009	1/1	0.52	0.14	77,77,77,77	0
56	MG	1A	4037	1/1	0.53	0.16	71,71,71,71	0
56	MG	2w	107	1/1	0.53	0.20	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	1B	230	1/1	0.55	0.21	87,87,87,87	0
56	MG	2A	3499	1/1	0.59	0.24	74,74,74,74	0
56	MG	2a	1608	1/1	0.59	0.40	91,91,91,91	0
56	MG	2A	3375	1/1	0.60	0.26	97,97,97,97	0
56	MG	2A	3746	1/1	0.62	0.23	96,96,96,96	0
56	MG	1A	3795	1/1	0.62	0.23	87,87,87,87	0
56	MG	2a	1751	1/1	0.62	0.17	84,84,84,84	0
56	MG	2A	3342	1/1	0.62	0.31	79,79,79,79	0
56	MG	2A	3643	1/1	0.62	0.32	72,72,72,72	0
56	MG	2a	1624	1/1	0.63	0.31	91,91,91,91	0
56	MG	2A	3110	1/1	0.64	0.30	90,90,90,90	0
56	MG	2A	3645	1/1	0.64	0.20	72,72,72,72	0
56	MG	2A	3228	1/1	0.64	0.25	74,74,74,74	0
56	MG	2A	3287	1/1	0.64	0.20	82,82,82,82	0
56	MG	2a	1685	1/1	0.65	0.33	81,81,81,81	0
56	MG	2A	3363	1/1	0.65	0.41	86,86,86,86	0
56	MG	2A	3683	1/1	0.66	0.23	77,77,77,77	0
56	MG	1A	4090	1/1	0.66	0.25	69,69,69,69	0
56	MG	1A	3805	1/1	0.66	0.26	76,76,76,76	0
56	MG	1W	207	1/1	0.66	0.28	45,45,45,45	0
56	MG	1B	229	1/1	0.67	0.16	74,74,74,74	0
56	MG	1A	4008	1/1	0.68	0.14	73,73,73,73	0
56	MG	2G	201	1/1	0.68	0.24	78,78,78,78	0
56	MG	2A	3666	1/1	0.69	0.26	76,76,76,76	0
56	MG	1A	3360	1/1	0.69	0.22	71,71,71,71	0
56	MG	2a	1610	1/1	0.69	0.33	81,81,81,81	0
56	MG	2A	3224	1/1	0.69	0.26	76,76,76,76	0
56	MG	2y	104	1/1	0.69	0.17	92,92,92,92	0
56	MG	2a	1731	1/1	0.70	0.17	79,79,79,79	0
56	MG	1A	3988	1/1	0.70	0.17	66,66,66,66	0
56	MG	2w	101	1/1	0.70	0.27	86,86,86,86	0
56	MG	2A	3414	1/1	0.70	0.25	71,71,71,71	0
56	MG	2A	3802	1/1	0.70	0.29	92,92,92,92	0
56	MG	1A	4071	1/1	0.70	0.15	56,56,56,56	0
56	MG	1a	1680	1/1	0.71	0.28	74,74,74,74	0
56	MG	2a	1722	1/1	0.71	0.26	82,82,82,82	0
56	MG	2A	3230	1/1	0.71	0.28	68,68,68,68	0
56	MG	2A	3272	1/1	0.71	0.20	84,84,84,84	0
56	MG	2a	1798	1/1	0.71	0.21	82,82,82,82	0
56	MG	2a	1816	1/1	0.71	0.18	83,83,83,83	0
56	MG	2A	3500	1/1	0.71	0.28	77,77,77,77	0
56	MG	1A	3508	1/1	0.71	0.21	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3113	1/1	0.71	0.18	67,67,67,67	0
56	MG	18	107	1/1	0.71	0.22	76,76,76,76	0
56	MG	1a	1767	1/1	0.72	0.18	77,77,77,77	0
56	MG	2a	1629	1/1	0.72	0.28	74,74,74,74	0
56	MG	1w	104	1/1	0.72	0.10	87,87,87,87	0
56	MG	1A	4023	1/1	0.72	0.16	75,75,75,75	0
56	MG	2A	3346	1/1	0.72	0.16	89,89,89,89	0
56	MG	2A	3687	1/1	0.72	0.30	71,71,71,71	0
56	MG	1A	3539	1/1	0.72	0.17	73,73,73,73	0
56	MG	2A	3200	1/1	0.72	0.32	69,69,69,69	0
56	MG	1A	3500	1/1	0.72	0.22	82,82,82,82	0
56	MG	2a	1607	1/1	0.72	0.30	80,80,80,80	0
56	MG	1a	1722	1/1	0.72	0.34	73,73,73,73	0
56	MG	1a	1740	1/1	0.72	0.18	89,89,89,89	0
56	MG	2a	1828	1/1	0.73	0.16	91,91,91,91	0
56	MG	2v	103	1/1	0.73	0.24	88,88,88,88	0
56	MG	1A	3731	1/1	0.73	0.18	70,70,70,70	0
56	MG	1A	3728	1/1	0.73	0.20	67,67,67,67	0
56	MG	1A	4022	1/1	0.73	0.15	76,76,76,76	0
56	MG	2A	3195	1/1	0.73	0.17	70,70,70,70	0
56	MG	2a	1663	1/1	0.74	0.28	67,67,67,67	0
56	MG	2A	3575	1/1	0.74	0.16	56,56,56,56	0
56	MG	2A	3857	1/1	0.74	0.11	77,77,77,77	0
56	MG	2A	3876	1/1	0.74	0.29	84,84,84,84	0
56	MG	1a	1684	1/1	0.74	0.20	70,70,70,70	0
56	MG	1Z	302	1/1	0.74	0.14	76,76,76,76	0
56	MG	1A	3542	1/1	0.74	0.27	63,63,63,63	0
56	MG	1A	3355	1/1	0.74	0.17	60,60,60,60	0
56	MG	2l	204	1/1	0.74	0.14	76,76,76,76	0
56	MG	2a	1619	1/1	0.74	0.17	73,73,73,73	0
56	MG	2a	1622	1/1	0.74	0.18	89,89,89,89	0
56	MG	1w	101	1/1	0.74	0.14	67,67,67,67	0
56	MG	2A	3206	1/1	0.74	0.19	68,68,68,68	0
56	MG	2a	1657	1/1	0.74	0.36	81,81,81,81	0
56	MG	1A	3557	1/1	0.75	0.16	70,70,70,70	0
56	MG	2A	3274	1/1	0.75	0.12	71,71,71,71	0
56	MG	2A	3406	1/1	0.75	0.17	70,70,70,70	0
56	MG	1A	3807	1/1	0.75	0.19	53,53,53,53	0
56	MG	2A	3463	1/1	0.75	0.23	77,77,77,77	0
56	MG	2A	3697	1/1	0.75	0.24	69,69,69,69	0
56	MG	2A	3253	1/1	0.75	0.14	87,87,87,87	0
56	MG	2A	3266	1/1	0.75	0.20	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3353	1/1	0.75	0.33	83,83,83,83	0
56	MG	2w	103	1/1	0.75	0.26	85,85,85,85	0
56	MG	2a	1658	1/1	0.75	0.33	83,83,83,83	0
56	MG	2A	3865	1/1	0.75	0.17	84,84,84,84	0
56	MG	2A	3640	1/1	0.75	0.33	77,77,77,77	0
56	MG	1A	3837	1/1	0.76	0.20	67,67,67,67	0
56	MG	1A	3987	1/1	0.76	0.14	67,67,67,67	0
56	MG	1A	3272	1/1	0.76	0.28	67,67,67,67	0
56	MG	2a	1708	1/1	0.76	0.24	76,76,76,76	0
56	MG	2a	1711	1/1	0.76	0.34	81,81,81,81	0
56	MG	1A	3420	1/1	0.76	0.20	78,78,78,78	0
56	MG	2A	3293	1/1	0.76	0.19	85,85,85,85	0
56	MG	2a	1736	1/1	0.76	0.19	92,92,92,92	0
56	MG	2a	1742	1/1	0.76	0.26	77,77,77,77	0
56	MG	2A	3619	1/1	0.76	0.22	75,75,75,75	0
56	MG	2A	3210	1/1	0.76	0.22	85,85,85,85	0
56	MG	2A	3220	1/1	0.76	0.22	66,66,66,66	0
56	MG	1h	201	1/1	0.76	0.14	74,74,74,74	0
56	MG	2l	202	1/1	0.76	0.33	85,85,85,85	0
56	MG	2A	3355	1/1	0.76	0.22	59,59,59,59	0
56	MG	1A	4088	1/1	0.76	0.25	83,83,83,83	0
56	MG	1a	1662	1/1	0.76	0.21	75,75,75,75	0
56	MG	1A	3270	1/1	0.76	0.17	69,69,69,69	0
56	MG	2a	1632	1/1	0.76	0.24	77,77,77,77	0
56	MG	2a	1637	1/1	0.76	0.28	88,88,88,88	0
56	MG	2A	3739	1/1	0.76	0.18	65,65,65,65	0
56	MG	2A	3851	1/1	0.77	0.21	65,65,65,65	0
56	MG	2A	3536	1/1	0.77	0.40	77,77,77,77	0
56	MG	1U	210	1/1	0.77	0.25	49,49,49,49	0
56	MG	2A	3873	1/1	0.77	0.11	61,61,61,61	0
56	MG	1A	3473	1/1	0.77	0.23	70,70,70,70	0
56	MG	1A	4086	1/1	0.77	0.26	80,80,80,80	0
56	MG	2A	3268	1/1	0.77	0.32	77,77,77,77	0
56	MG	1A	3842	1/1	0.77	0.22	68,68,68,68	0
56	MG	2A	3399	1/1	0.77	0.29	75,75,75,75	0
56	MG	1A	3958	1/1	0.77	0.22	58,58,58,58	0
56	MG	2A	3410	1/1	0.77	0.12	71,71,71,71	0
56	MG	2a	1829	1/1	0.77	0.31	80,80,80,80	0
56	MG	1A	3026	1/1	0.77	0.20	63,63,63,63	0
56	MG	2A	3705	1/1	0.77	0.25	76,76,76,76	0
56	MG	2v	102	1/1	0.77	0.17	78,78,78,78	0
56	MG	1w	106	1/1	0.77	0.14	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	2A	3309	1/1	0.77	0.29	70,70,70,70	0
56	MG	2a	1642	1/1	0.77	0.28	75,75,75,75	0
56	MG	2A	3773	1/1	0.77	0.26	58,58,58,58	0
56	MG	1A	3753	1/1	0.77	0.15	61,61,61,61	0
56	MG	2x	101	1/1	0.77	0.19	68,68,68,68	0
56	MG	2A	3841	1/1	0.77	0.18	80,80,80,80	0
56	MG	1O	206	1/1	0.78	0.25	65,65,65,65	0
56	MG	2A	3205	1/1	0.78	0.39	78,78,78,78	0
56	MG	2a	1741	1/1	0.78	0.26	74,74,74,74	0
56	MG	1A	3434	1/1	0.78	0.40	77,77,77,77	0
56	MG	2A	3755	1/1	0.78	0.20	58,58,58,58	0
56	MG	1a	1744	1/1	0.78	0.38	83,83,83,83	0
56	MG	2a	1626	1/1	0.78	0.23	70,70,70,70	0
56	MG	2a	1817	1/1	0.78	0.21	78,78,78,78	0
56	MG	2A	3083	1/1	0.78	0.25	66,66,66,66	0
56	MG	1A	3714	1/1	0.78	0.15	40,40,40,40	0
56	MG	1a	1776	1/1	0.78	0.13	80,80,80,80	0
56	MG	2A	3297	1/1	0.78	0.19	62,62,62,62	0
56	MG	1A	3531	1/1	0.78	0.12	62,62,62,62	0
56	MG	2A	3312	1/1	0.78	0.27	68,68,68,68	0
56	MG	2a	1660	1/1	0.78	0.19	81,81,81,81	0
56	MG	2A	3335	1/1	0.78	0.23	77,77,77,77	0
56	MG	2E	308	1/1	0.78	0.20	76,76,76,76	0
56	MG	2A	3477	1/1	0.78	0.22	77,77,77,77	0
56	MG	2a	1602	1/1	0.78	0.17	81,81,81,81	0
56	MG	2A	3701	1/1	0.78	0.18	75,75,75,75	0
56	MG	2A	3804	1/1	0.79	0.13	74,74,74,74	0
56	MG	2A	3294	1/1	0.79	0.22	79,79,79,79	0
56	MG	2a	1796	1/1	0.79	0.19	66,66,66,66	0
56	MG	1a	1765	1/1	0.79	0.21	82,82,82,82	0
56	MG	1A	4095	1/1	0.79	0.16	61,61,61,61	0
56	MG	1A	3252	1/1	0.79	0.11	62,62,62,62	0
56	MG	2A	3417	1/1	0.79	0.30	68,68,68,68	0
56	MG	1a	1690	1/1	0.79	0.23	58,58,58,58	0
56	MG	1l	201	1/1	0.79	0.16	80,80,80,80	0
56	MG	2A	3343	1/1	0.79	0.42	86,86,86,86	0
56	MG	2A	3734	1/1	0.79	0.17	67,67,67,67	0
56	MG	2a	1700	1/1	0.79	0.29	75,75,75,75	0
56	MG	1a	1611	1/1	0.79	0.25	69,69,69,69	0
56	MG	1a	1637	1/1	0.79	0.23	75,75,75,75	0
56	MG	1A	3301	1/1	0.79	0.30	72,72,72,72	0
56	MG	2A	3068	1/1	0.79	0.20	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3780	1/1	0.79	0.18	54,54,54,54	0
56	MG	2A	3223	1/1	0.79	0.31	75,75,75,75	0
56	MG	2a	1773	1/1	0.80	0.12	87,87,87,87	0
56	MG	2A	3285	1/1	0.80	0.26	71,71,71,71	0
56	MG	2A	3537	1/1	0.80	0.20	60,60,60,60	0
56	MG	1A	3668	1/1	0.80	0.14	61,61,61,61	0
56	MG	2A	3580	1/1	0.80	0.17	73,73,73,73	0
56	MG	2a	1819	1/1	0.80	0.32	74,74,74,74	0
56	MG	2A	3599	1/1	0.80	0.19	66,66,66,66	0
56	MG	2A	3356	1/1	0.80	0.16	74,74,74,74	0
56	MG	2g	201	1/1	0.80	0.18	79,79,79,79	0
56	MG	2A	3443	1/1	0.80	0.38	65,65,65,65	0
56	MG	2a	1618	1/1	0.80	0.34	77,77,77,77	0
56	MG	2A	3290	1/1	0.80	0.13	70,70,70,70	0
56	MG	2a	1720	1/1	0.80	0.22	79,79,79,79	0
56	MG	1A	3730	1/1	0.80	0.24	71,71,71,71	0
56	MG	2A	3498	1/1	0.80	0.21	72,72,72,72	0
56	MG	1B	222	1/1	0.80	0.18	61,61,61,61	0
56	MG	2A	3264	1/1	0.80	0.23	76,76,76,76	0
56	MG	2A	3516	1/1	0.80	0.30	69,69,69,69	0
56	MG	2A	3533	1/1	0.80	0.22	72,72,72,72	0
56	MG	2A	3203	1/1	0.81	0.24	63,63,63,63	0
56	MG	1A	3418	1/1	0.81	0.29	71,71,71,71	0
56	MG	2a	1698	1/1	0.81	0.29	73,73,73,73	0
56	MG	1A	3027	1/1	0.81	0.18	77,77,77,77	0
56	MG	2A	3374	1/1	0.81	0.29	75,75,75,75	0
56	MG	2A	3588	1/1	0.81	0.25	77,77,77,77	0
56	MG	2a	1713	1/1	0.81	0.14	85,85,85,85	0
56	MG	2A	3862	1/1	0.81	0.25	79,79,79,79	0
56	MG	1x	111	1/1	0.81	0.25	79,79,79,79	0
56	MG	2A	3016	1/1	0.81	0.22	82,82,82,82	0
56	MG	2A	3058	1/1	0.81	0.22	72,72,72,72	0
56	MG	2a	1737	1/1	0.81	0.35	70,70,70,70	0
56	MG	2B	216	1/1	0.81	0.24	79,79,79,79	0
56	MG	1A	3364	1/1	0.81	0.18	55,55,55,55	0
56	MG	2a	1747	1/1	0.81	0.43	71,71,71,71	0
56	MG	1a	1711	1/1	0.81	0.14	71,71,71,71	0
56	MG	25	103	1/1	0.81	0.28	63,63,63,63	0
56	MG	2A	3651	1/1	0.81	0.27	66,66,66,66	0
56	MG	2a	1797	1/1	0.81	0.28	78,78,78,78	0
56	MG	2a	1606	1/1	0.81	0.34	77,77,77,77	0
56	MG	2a	1799	1/1	0.81	0.16	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1801	1/1	0.81	0.41	85,85,85,85	0
56	MG	2a	1806	1/1	0.81	0.28	73,73,73,73	0
56	MG	2a	1815	1/1	0.81	0.37	67,67,67,67	0
56	MG	2A	3310	1/1	0.81	0.19	69,69,69,69	0
56	MG	2A	3678	1/1	0.81	0.16	62,62,62,62	0
56	MG	2A	3421	1/1	0.81	0.24	62,62,62,62	0
56	MG	2a	1617	1/1	0.81	0.22	73,73,73,73	0
56	MG	2A	3101	1/1	0.81	0.25	76,76,76,76	0
56	MG	2A	3449	1/1	0.81	0.28	72,72,72,72	0
56	MG	2j	201	1/1	0.81	0.14	72,72,72,72	0
56	MG	2A	3318	1/1	0.81	0.46	86,86,86,86	0
56	MG	2A	3334	1/1	0.81	0.18	82,82,82,82	0
56	MG	2A	3486	1/1	0.81	0.13	70,70,70,70	0
56	MG	1f	202	1/1	0.81	0.27	76,76,76,76	0
56	MG	1a	1712	1/1	0.81	0.23	68,68,68,68	0
56	MG	2A	3168	1/1	0.81	0.24	71,71,71,71	0
56	MG	2A	3761	1/1	0.81	0.20	64,64,64,64	0
56	MG	1A	3716	1/1	0.81	0.15	65,65,65,65	0
56	MG	1A	3839	1/1	0.81	0.14	40,40,40,40	0
56	MG	2x	102	1/1	0.81	0.28	81,81,81,81	0
56	MG	2x	104	1/1	0.81	0.27	76,76,76,76	0
56	MG	2A	3786	1/1	0.81	0.14	79,79,79,79	0
56	MG	2y	107	1/1	0.81	0.20	87,87,87,87	0
56	MG	1A	4077	1/1	0.82	0.13	56,56,56,56	0
56	MG	2A	3398	1/1	0.82	0.43	63,63,63,63	0
56	MG	1A	3474	1/1	0.82	0.14	70,70,70,70	0
56	MG	2P	201	1/1	0.82	0.22	67,67,67,67	0
56	MG	2A	3655	1/1	0.82	0.19	77,77,77,77	0
56	MG	2a	1601	1/1	0.82	0.16	78,78,78,78	0
56	MG	2a	1766	1/1	0.82	0.11	86,86,86,86	0
56	MG	2A	3276	1/1	0.82	0.31	72,72,72,72	0
56	MG	2a	1790	1/1	0.82	0.22	68,68,68,68	0
56	MG	2a	1795	1/1	0.82	0.27	85,85,85,85	0
56	MG	1A	3535	1/1	0.82	0.14	54,54,54,54	0
56	MG	2A	3412	1/1	0.82	0.14	74,74,74,74	0
56	MG	2A	3115	1/1	0.82	0.20	63,63,63,63	0
56	MG	2A	3690	1/1	0.82	0.14	61,61,61,61	0
56	MG	1a	1642	1/1	0.82	0.34	77,77,77,77	0
56	MG	2A	3292	1/1	0.82	0.10	73,73,73,73	0
56	MG	2a	1809	1/1	0.82	0.19	69,69,69,69	0
56	MG	2A	3175	1/1	0.82	0.32	80,80,80,80	0
56	MG	2A	3717	1/1	0.82	0.14	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3476	1/1	0.82	0.14	61,61,61,61	0
56	MG	1A	3997	1/1	0.82	0.14	55,55,55,55	0
56	MG	1A	3723	1/1	0.82	0.15	61,61,61,61	0
56	MG	1A	3102	1/1	0.82	0.13	73,73,73,73	0
56	MG	1A	3409	1/1	0.82	0.20	61,61,61,61	0
56	MG	2A	3317	1/1	0.82	0.18	72,72,72,72	0
56	MG	1x	101	1/1	0.82	0.11	68,68,68,68	0
56	MG	1A	3632	1/1	0.82	0.22	57,57,57,57	0
56	MG	2A	3793	1/1	0.82	0.14	70,70,70,70	0
56	MG	1A	3865	1/1	0.82	0.13	51,51,51,51	0
56	MG	1A	3906	1/1	0.82	0.19	57,57,57,57	0
56	MG	2A	3829	1/1	0.82	0.15	44,44,44,44	0
56	MG	2A	3064	1/1	0.82	0.15	80,80,80,80	0
56	MG	2w	106	1/1	0.82	0.12	84,84,84,84	0
56	MG	1A	4073	1/1	0.82	0.14	65,65,65,65	0
56	MG	2A	3235	1/1	0.82	0.20	71,71,71,71	0
56	MG	2A	3072	1/1	0.82	0.21	60,60,60,60	0
56	MG	1a	1750	1/1	0.82	0.25	76,76,76,76	0
56	MG	2A	3090	1/1	0.82	0.21	65,65,65,65	0
56	MG	2y	105	1/1	0.82	0.25	89,89,89,89	0
56	MG	2A	3092	1/1	0.82	0.23	67,67,67,67	0
56	MG	2A	3695	1/1	0.83	0.19	60,60,60,60	0
56	MG	1A	3596	1/1	0.83	0.14	55,55,55,55	0
56	MG	1A	3399	1/1	0.83	0.27	67,67,67,67	0
56	MG	2A	3485	1/1	0.83	0.28	72,72,72,72	0
56	MG	1A	3870	1/1	0.83	0.20	62,62,62,62	0
56	MG	2a	1612	1/1	0.83	0.38	75,75,75,75	0
56	MG	1A	4046	1/1	0.83	0.12	39,39,39,39	0
56	MG	1Y	201	1/1	0.83	0.16	62,62,62,62	0
56	MG	1A	4059	1/1	0.83	0.23	62,62,62,62	0
56	MG	2A	3105	1/1	0.83	0.19	77,77,77,77	0
56	MG	2A	3106	1/1	0.83	0.19	79,79,79,79	0
56	MG	2a	1625	1/1	0.83	0.28	79,79,79,79	0
56	MG	2A	3267	1/1	0.83	0.30	72,72,72,72	0
56	MG	1A	3896	1/1	0.83	0.13	41,41,41,41	0
56	MG	2a	1810	1/1	0.83	0.19	79,79,79,79	0
56	MG	2a	1811	1/1	0.83	0.26	71,71,71,71	0
56	MG	1A	3900	1/1	0.83	0.22	65,65,65,65	0
56	MG	2a	1634	1/1	0.83	0.15	94,94,94,94	0
56	MG	2A	3579	1/1	0.83	0.12	64,64,64,64	0
56	MG	1A	3740	1/1	0.83	0.13	52,52,52,52	0
56	MG	2A	3154	1/1	0.83	0.17	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	1A	3436	1/1	0.83	0.17	54,54,54,54	0
56	MG	1A	3691	1/1	0.83	0.18	60,60,60,60	0
56	MG	1A	3466	1/1	0.83	0.14	66,66,66,66	0
56	MG	2a	1664	1/1	0.83	0.25	83,83,83,83	0
56	MG	1A	3327	1/1	0.83	0.30	72,72,72,72	0
56	MG	2A	3202	1/1	0.83	0.26	80,80,80,80	0
56	MG	2A	3650	1/1	0.83	0.19	53,53,53,53	0
56	MG	1B	208	1/1	0.83	0.28	73,73,73,73	0
56	MG	2a	1710	1/1	0.83	0.19	76,76,76,76	0
56	MG	1A	3529	1/1	0.83	0.14	68,68,68,68	0
56	MG	2A	3051	1/1	0.83	0.30	81,81,81,81	0
56	MG	2A	3672	1/1	0.83	0.17	65,65,65,65	0
56	MG	2A	3432	1/1	0.83	0.29	73,73,73,73	0
56	MG	1B	226	1/1	0.83	0.13	65,65,65,65	0
56	MG	21	103	1/1	0.83	0.22	64,64,64,64	0
56	MG	1A	3558	1/1	0.83	0.13	74,74,74,74	0
56	MG	2a	1740	1/1	0.83	0.27	65,65,65,65	0
56	MG	2A	3462	1/1	0.83	0.19	63,63,63,63	0
56	MG	1A	3493	1/1	0.84	0.24	64,64,64,64	0
56	MG	2a	1702	1/1	0.84	0.28	75,75,75,75	0
56	MG	2a	1706	1/1	0.84	0.23	67,67,67,67	0
56	MG	2A	3555	1/1	0.84	0.16	68,68,68,68	0
56	MG	2A	3813	1/1	0.84	0.15	55,55,55,55	0
56	MG	2A	3823	1/1	0.84	0.10	73,73,73,73	0
56	MG	2A	3571	1/1	0.84	0.11	76,76,76,76	0
56	MG	2a	1715	1/1	0.84	0.16	71,71,71,71	0
56	MG	2A	3358	1/1	0.84	0.17	78,78,78,78	0
56	MG	1T	202	1/1	0.84	0.16	68,68,68,68	0
56	MG	2a	1724	1/1	0.84	0.26	79,79,79,79	0
56	MG	2a	1728	1/1	0.84	0.15	71,71,71,71	0
56	MG	1a	1699	1/1	0.84	0.21	71,71,71,71	0
56	MG	2A	3861	1/1	0.84	0.15	59,59,59,59	0
56	MG	2A	3116	1/1	0.84	0.48	80,80,80,80	0
56	MG	2a	1738	1/1	0.84	0.28	60,60,60,60	0
56	MG	2A	3392	1/1	0.84	0.16	77,77,77,77	0
56	MG	2A	3603	1/1	0.84	0.22	64,64,64,64	0
56	MG	2A	3397	1/1	0.84	0.18	78,78,78,78	0
56	MG	2B	208	1/1	0.84	0.27	67,67,67,67	0
56	MG	2B	212	1/1	0.84	0.23	78,78,78,78	0
56	MG	1a	1704	1/1	0.84	0.27	67,67,67,67	0
56	MG	2a	1767	1/1	0.84	0.11	85,85,85,85	0
56	MG	2A	3161	1/1	0.84	0.17	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	2a	1780	1/1	0.84	0.11	84,84,84,84	0
56	MG	2A	3400	1/1	0.84	0.15	72,72,72,72	0
56	MG	1A	3797	1/1	0.84	0.17	57,57,57,57	0
56	MG	1A	3345	1/1	0.84	0.27	65,65,65,65	0
56	MG	2A	3023	1/1	0.84	0.25	75,75,75,75	0
56	MG	2A	3665	1/1	0.84	0.14	63,63,63,63	0
56	MG	1A	3349	1/1	0.84	0.24	61,61,61,61	0
56	MG	2A	3054	1/1	0.84	0.20	65,65,65,65	0
56	MG	1a	1738	1/1	0.84	0.19	66,66,66,66	0
56	MG	2a	1807	1/1	0.84	0.19	76,76,76,76	0
56	MG	1A	3814	1/1	0.84	0.14	43,43,43,43	0
56	MG	1A	3600	1/1	0.84	0.30	71,71,71,71	0
56	MG	2A	3445	1/1	0.84	0.23	62,62,62,62	0
56	MG	2a	1616	1/1	0.84	0.23	69,69,69,69	0
56	MG	1a	1603	1/1	0.84	0.26	67,67,67,67	0
56	MG	1A	3254	1/1	0.84	0.14	63,63,63,63	0
56	MG	2a	1818	1/1	0.84	0.28	58,58,58,58	0
56	MG	1a	1625	1/1	0.84	0.16	63,63,63,63	0
56	MG	2A	3091	1/1	0.84	0.23	84,84,84,84	0
56	MG	2A	3715	1/1	0.84	0.11	56,56,56,56	0
56	MG	2a	1831	1/1	0.84	0.20	73,73,73,73	0
56	MG	2A	3483	1/1	0.84	0.17	67,67,67,67	0
56	MG	2A	3719	1/1	0.84	0.12	54,54,54,54	0
56	MG	2l	201	1/1	0.84	0.17	76,76,76,76	0
56	MG	2A	3323	1/1	0.84	0.15	63,63,63,63	0
56	MG	1A	4060	1/1	0.84	0.22	38,38,38,38	0
56	MG	2A	3743	1/1	0.84	0.21	78,78,78,78	0
56	MG	2A	3745	1/1	0.84	0.13	67,67,67,67	0
56	MG	2a	1641	1/1	0.84	0.18	93,93,93,93	0
56	MG	2w	102	1/1	0.84	0.14	89,89,89,89	0
56	MG	2A	3098	1/1	0.84	0.14	73,73,73,73	0
56	MG	1A	3789	1/1	0.84	0.09	73,73,73,73	0
56	MG	2A	3250	1/1	0.84	0.27	64,64,64,64	0
56	MG	2A	3504	1/1	0.84	0.16	64,64,64,64	0
56	MG	1A	3851	1/1	0.84	0.11	54,54,54,54	0
56	MG	2A	3256	1/1	0.84	0.35	70,70,70,70	0
56	MG	2a	1670	1/1	0.84	0.19	68,68,68,68	0
56	MG	1E	307	1/1	0.84	0.28	51,51,51,51	0
56	MG	2a	1689	1/1	0.84	0.24	78,78,78,78	0
56	MG	2A	3796	1/1	0.84	0.15	59,59,59,59	0
56	MG	1a	1719	1/1	0.85	0.28	71,71,71,71	0
56	MG	2A	3089	1/1	0.85	0.28	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	2A	3377	1/1	0.85	0.33	75,75,75,75	0
56	MG	2A	3621	1/1	0.85	0.25	75,75,75,75	0
56	MG	1A	4029	1/1	0.85	0.12	70,70,70,70	0
56	MG	2A	3395	1/1	0.85	0.22	76,76,76,76	0
56	MG	1a	1737	1/1	0.85	0.17	69,69,69,69	0
56	MG	2B	201	1/1	0.85	0.21	86,86,86,86	0
56	MG	1A	3215	1/1	0.85	0.23	64,64,64,64	0
56	MG	1A	3481	1/1	0.85	0.35	72,72,72,72	0
56	MG	1A	3739	1/1	0.85	0.13	61,61,61,61	0
56	MG	2E	305	1/1	0.85	0.20	70,70,70,70	0
56	MG	1A	3265	1/1	0.85	0.19	68,68,68,68	0
56	MG	1a	1756	1/1	0.85	0.16	81,81,81,81	0
56	MG	1A	3598	1/1	0.85	0.31	63,63,63,63	0
56	MG	2Z	301	1/1	0.85	0.21	71,71,71,71	0
56	MG	1A	3499	1/1	0.85	0.19	73,73,73,73	0
56	MG	1A	3207	1/1	0.85	0.10	63,63,63,63	0
56	MG	2a	1749	1/1	0.85	0.23	73,73,73,73	0
56	MG	1A	3979	1/1	0.85	0.17	72,72,72,72	0
56	MG	2a	1764	1/1	0.85	0.09	92,92,92,92	0
56	MG	2A	3122	1/1	0.85	0.17	77,77,77,77	0
56	MG	2a	1603	1/1	0.85	0.09	63,63,63,63	0
56	MG	2a	1604	1/1	0.85	0.16	79,79,79,79	0
56	MG	2A	3691	1/1	0.85	0.10	78,78,78,78	0
56	MG	1A	3649	1/1	0.85	0.14	67,67,67,67	0
56	MG	1a	1632	1/1	0.85	0.26	72,72,72,72	0
56	MG	2a	1609	1/1	0.85	0.41	78,78,78,78	0
56	MG	1A	3447	1/1	0.85	0.20	43,43,43,43	0
56	MG	1w	102	1/1	0.85	0.19	75,75,75,75	0
56	MG	2a	1615	1/1	0.85	0.34	70,70,70,70	0
56	MG	2A	3182	1/1	0.85	0.28	68,68,68,68	0
56	MG	1A	3454	1/1	0.85	0.15	69,69,69,69	0
56	MG	2A	3314	1/1	0.85	0.16	70,70,70,70	0
56	MG	1a	1648	1/1	0.85	0.21	71,71,71,71	0
56	MG	1w	107	1/1	0.85	0.13	84,84,84,84	0
56	MG	2A	3742	1/1	0.85	0.12	76,76,76,76	0
56	MG	2A	3492	1/1	0.85	0.20	73,73,73,73	0
56	MG	1A	3999	1/1	0.85	0.15	51,51,51,51	0
56	MG	2A	3333	1/1	0.85	0.13	62,62,62,62	0
56	MG	2A	3751	1/1	0.85	0.16	66,66,66,66	0
56	MG	1a	1679	1/1	0.85	0.23	72,72,72,72	0
56	MG	2a	1635	1/1	0.85	0.17	77,77,77,77	0
56	MG	2A	3502	1/1	0.85	0.15	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3763	1/1	0.85	0.22	69,69,69,69	0
56	MG	1A	3412	1/1	0.85	0.14	42,42,42,42	0
56	MG	2a	1649	1/1	0.85	0.17	74,74,74,74	0
56	MG	2a	1650	1/1	0.85	0.21	66,66,66,66	0
56	MG	2a	1653	1/1	0.85	0.19	70,70,70,70	0
56	MG	2A	3339	1/1	0.85	0.15	74,74,74,74	0
56	MG	1A	3415	1/1	0.85	0.17	51,51,51,51	0
56	MG	1A	3329	1/1	0.85	0.19	48,48,48,48	0
56	MG	1A	3475	1/1	0.85	0.26	64,64,64,64	0
56	MG	1a	1702	1/1	0.85	0.25	69,69,69,69	0
56	MG	2a	1669	1/1	0.85	0.11	87,87,87,87	0
56	MG	1B	231	1/1	0.85	0.10	70,70,70,70	0
56	MG	2a	1678	1/1	0.85	0.14	68,68,68,68	0
56	MG	2A	3805	1/1	0.85	0.18	69,69,69,69	0
56	MG	2a	1686	1/1	0.85	0.22	79,79,79,79	0
56	MG	1A	4026	1/1	0.85	0.10	70,70,70,70	0
56	MG	1F	304	1/1	0.85	0.18	48,48,48,48	0
56	MG	2x	106	1/1	0.85	0.19	64,64,64,64	0
56	MG	2A	3359	1/1	0.85	0.24	71,71,71,71	0
56	MG	2A	3238	1/1	0.85	0.17	64,64,64,64	0
56	MG	2a	1704	1/1	0.85	0.17	82,82,82,82	0
56	MG	20	101	1/1	0.86	0.23	80,80,80,80	0
56	MG	2A	3193	1/1	0.86	0.18	74,74,74,74	0
56	MG	2A	3433	1/1	0.86	0.34	61,61,61,61	0
56	MG	1A	3467	1/1	0.86	0.12	58,58,58,58	0
56	MG	10	107	1/1	0.86	0.21	69,69,69,69	0
56	MG	2A	3201	1/1	0.86	0.39	70,70,70,70	0
56	MG	2A	3453	1/1	0.86	0.32	71,71,71,71	0
56	MG	13	103	1/1	0.86	0.17	57,57,57,57	0
56	MG	1A	4039	1/1	0.86	0.16	49,49,49,49	0
56	MG	1A	3990	1/1	0.86	0.13	41,41,41,41	0
56	MG	2A	3721	1/1	0.86	0.14	73,73,73,73	0
56	MG	1A	4054	1/1	0.86	0.21	74,74,74,74	0
56	MG	1A	3376	1/1	0.86	0.16	58,58,58,58	0
56	MG	1a	1627	1/1	0.86	0.21	71,71,71,71	0
56	MG	1a	1631	1/1	0.86	0.18	65,65,65,65	0
56	MG	1a	1745	1/1	0.86	0.11	70,70,70,70	0
56	MG	2a	1772	1/1	0.86	0.10	73,73,73,73	0
56	MG	1A	3333	1/1	0.86	0.14	53,53,53,53	0
56	MG	2A	3747	1/1	0.86	0.14	77,77,77,77	0
56	MG	2a	1787	1/1	0.86	0.15	71,71,71,71	0
56	MG	2A	3344	1/1	0.86	0.28	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	1A	3248	1/1	0.86	0.15	63,63,63,63	0
56	MG	1a	1764	1/1	0.86	0.21	73,73,73,73	0
56	MG	1D	311	1/1	0.86	0.31	73,73,73,73	0
56	MG	2A	3094	1/1	0.86	0.17	56,56,56,56	0
56	MG	2A	3252	1/1	0.86	0.32	79,79,79,79	0
56	MG	1A	3721	1/1	0.86	0.14	55,55,55,55	0
56	MG	2A	3541	1/1	0.86	0.16	69,69,69,69	0
56	MG	1a	1773	1/1	0.86	0.13	95,95,95,95	0
56	MG	2A	3365	1/1	0.86	0.17	70,70,70,70	0
56	MG	2A	3368	1/1	0.86	0.14	83,83,83,83	0
56	MG	2a	1645	1/1	0.86	0.32	67,67,67,67	0
56	MG	2A	3371	1/1	0.86	0.13	69,69,69,69	0
56	MG	2A	3102	1/1	0.86	0.31	79,79,79,79	0
56	MG	1a	1655	1/1	0.86	0.21	73,73,73,73	0
56	MG	2a	1656	1/1	0.86	0.13	75,75,75,75	0
56	MG	2A	3828	1/1	0.86	0.17	73,73,73,73	0
56	MG	2a	1825	1/1	0.86	0.10	73,73,73,73	0
56	MG	2A	3595	1/1	0.86	0.13	70,70,70,70	0
56	MG	1a	1810	1/1	0.86	0.29	60,60,60,60	0
56	MG	2A	3380	1/1	0.86	0.22	65,65,65,65	0
56	MG	2A	3390	1/1	0.86	0.20	76,76,76,76	0
56	MG	1A	3310	1/1	0.86	0.26	54,54,54,54	0
56	MG	1a	1671	1/1	0.86	0.13	65,65,65,65	0
56	MG	1N	205	1/1	0.86	0.27	58,58,58,58	0
56	MG	2a	1679	1/1	0.86	0.24	73,73,73,73	0
56	MG	1A	3518	1/1	0.86	0.13	60,60,60,60	0
56	MG	2A	3277	1/1	0.86	0.18	73,73,73,73	0
56	MG	1a	1683	1/1	0.86	0.10	70,70,70,70	0
56	MG	2a	1691	1/1	0.86	0.29	66,66,66,66	0
56	MG	2A	3140	1/1	0.86	0.15	71,71,71,71	0
56	MG	2B	210	1/1	0.86	0.24	76,76,76,76	0
56	MG	1A	3843	1/1	0.86	0.13	46,46,46,46	0
56	MG	1A	4089	1/1	0.86	0.16	68,68,68,68	0
56	MG	1A	3848	1/1	0.86	0.11	69,69,69,69	0
56	MG	1A	4091	1/1	0.86	0.11	63,63,63,63	0
56	MG	2F	302	1/1	0.86	0.11	49,49,49,49	0
56	MG	2A	3679	1/1	0.86	0.33	79,79,79,79	0
56	MG	1x	108	1/1	0.86	0.21	72,72,72,72	0
56	MG	2Q	202	1/1	0.86	0.19	67,67,67,67	0
56	MG	2y	106	1/1	0.86	0.33	72,72,72,72	0
56	MG	2A	3425	1/1	0.86	0.11	45,45,45,45	0
56	MG	1A	3844	1/1	0.87	0.12	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3271	1/1	0.87	0.13	72,72,72,72	0
56	MG	1F	313	1/1	0.87	0.16	57,57,57,57	0
56	MG	2a	1659	1/1	0.87	0.24	76,76,76,76	0
56	MG	1A	3020	1/1	0.87	0.17	52,52,52,52	0
56	MG	2a	1661	1/1	0.87	0.16	75,75,75,75	0
56	MG	2A	3434	1/1	0.87	0.16	62,62,62,62	0
56	MG	2A	3436	1/1	0.87	0.21	59,59,59,59	0
56	MG	2A	3438	1/1	0.87	0.12	63,63,63,63	0
56	MG	1A	3169	1/1	0.87	0.20	63,63,63,63	0
56	MG	1A	3354	1/1	0.87	0.12	49,49,49,49	0
56	MG	2A	3095	1/1	0.87	0.22	55,55,55,55	0
56	MG	1A	3053	1/1	0.87	0.12	53,53,53,53	0
56	MG	2A	3455	1/1	0.87	0.37	76,76,76,76	0
56	MG	2A	3781	1/1	0.87	0.09	80,80,80,80	0
56	MG	2A	3458	1/1	0.87	0.19	64,64,64,64	0
56	MG	2a	1693	1/1	0.87	0.18	72,72,72,72	0
56	MG	2a	1696	1/1	0.87	0.17	80,80,80,80	0
56	MG	2A	3792	1/1	0.87	0.11	66,66,66,66	0
56	MG	1A	3872	1/1	0.87	0.14	53,53,53,53	0
56	MG	1A	4055	1/1	0.87	0.07	17,17,17,17	0
56	MG	2A	3801	1/1	0.87	0.17	80,80,80,80	0
56	MG	2A	3469	1/1	0.87	0.11	67,67,67,67	0
56	MG	1A	3264	1/1	0.87	0.21	66,66,66,66	0
56	MG	1A	3435	1/1	0.87	0.31	69,69,69,69	0
56	MG	1A	4065	1/1	0.87	0.12	57,57,57,57	0
56	MG	1A	3094	1/1	0.87	0.17	55,55,55,55	0
56	MG	1A	3921	1/1	0.87	0.11	37,37,37,37	0
56	MG	1a	1608	1/1	0.87	0.34	72,72,72,72	0
56	MG	1A	3936	1/1	0.87	0.16	65,65,65,65	0
56	MG	2A	3132	1/1	0.87	0.15	70,70,70,70	0
56	MG	2a	1725	1/1	0.87	0.25	72,72,72,72	0
56	MG	2A	3854	1/1	0.87	0.17	67,67,67,67	0
56	MG	1a	1616	1/1	0.87	0.12	75,75,75,75	0
56	MG	1A	3601	1/1	0.87	0.27	64,64,64,64	0
56	MG	1A	3375	1/1	0.87	0.26	56,56,56,56	0
56	MG	1e	202	1/1	0.87	0.13	69,69,69,69	0
56	MG	2A	3867	1/1	0.87	0.20	62,62,62,62	0
56	MG	1A	3231	1/1	0.87	0.15	52,52,52,52	0
56	MG	1A	3338	1/1	0.87	0.11	59,59,59,59	0
56	MG	2a	1743	1/1	0.87	0.23	73,73,73,73	0
56	MG	1A	3526	1/1	0.87	0.12	71,71,71,71	0
56	MG	2B	207	1/1	0.87	0.15	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1640	1/1	0.87	0.36	68,68,68,68	0
56	MG	2A	3562	1/1	0.87	0.11	58,58,58,58	0
56	MG	2A	3570	1/1	0.87	0.18	64,64,64,64	0
56	MG	2B	213	1/1	0.87	0.32	76,76,76,76	0
56	MG	2a	1768	1/1	0.87	0.13	71,71,71,71	0
56	MG	1A	3701	1/1	0.87	0.08	39,39,39,39	0
56	MG	2B	219	1/1	0.87	0.19	78,78,78,78	0
56	MG	2D	304	1/1	0.87	0.11	67,67,67,67	0
56	MG	1B	203	1/1	0.87	0.28	63,63,63,63	0
56	MG	2A	3347	1/1	0.87	0.14	72,72,72,72	0
56	MG	1w	105	1/1	0.87	0.12	76,76,76,76	0
56	MG	1A	3340	1/1	0.87	0.37	70,70,70,70	0
56	MG	2A	3204	1/1	0.87	0.41	71,71,71,71	0
56	MG	1B	214	1/1	0.87	0.28	70,70,70,70	0
56	MG	2A	3602	1/1	0.87	0.13	67,67,67,67	0
56	MG	1A	4002	1/1	0.87	0.14	38,38,38,38	0
56	MG	2A	3606	1/1	0.87	0.23	72,72,72,72	0
56	MG	1a	1672	1/1	0.87	0.19	68,68,68,68	0
56	MG	26	101	1/1	0.87	0.21	65,65,65,65	0
56	MG	2A	3218	1/1	0.87	0.24	68,68,68,68	0
56	MG	2A	3219	1/1	0.87	0.15	66,66,66,66	0
56	MG	2A	3369	1/1	0.87	0.18	61,61,61,61	0
56	MG	1A	4004	1/1	0.87	0.23	32,32,32,32	0
56	MG	2A	3372	1/1	0.87	0.17	78,78,78,78	0
56	MG	1x	112	1/1	0.87	0.21	73,73,73,73	0
56	MG	2A	3654	1/1	0.87	0.12	77,77,77,77	0
56	MG	2a	1822	1/1	0.87	0.13	67,67,67,67	0
56	MG	2a	1823	1/1	0.87	0.12	78,78,78,78	0
56	MG	1A	3715	1/1	0.87	0.11	60,60,60,60	0
56	MG	2A	3656	1/1	0.87	0.13	60,60,60,60	0
56	MG	2A	3660	1/1	0.87	0.17	61,61,61,61	0
56	MG	2A	3227	1/1	0.87	0.16	59,59,59,59	0
56	MG	2a	1837	1/1	0.87	0.30	68,68,68,68	0
56	MG	1A	3841	1/1	0.87	0.10	47,47,47,47	0
56	MG	2A	3386	1/1	0.87	0.42	74,74,74,74	0
56	MG	2A	3675	1/1	0.87	0.12	52,52,52,52	0
56	MG	2A	3032	1/1	0.87	0.17	67,67,67,67	0
56	MG	2a	1620	1/1	0.87	0.13	82,82,82,82	0
56	MG	2q	202	1/1	0.87	0.14	84,84,84,84	0
56	MG	2a	1621	1/1	0.87	0.19	80,80,80,80	0
56	MG	1A	4010	1/1	0.87	0.15	51,51,51,51	0
56	MG	2A	3236	1/1	0.87	0.27	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1685	1/1	0.87	0.27	64,64,64,64	0
56	MG	1A	3469	1/1	0.87	0.13	65,65,65,65	0
56	MG	1a	1695	1/1	0.87	0.30	67,67,67,67	0
56	MG	2A	3065	1/1	0.87	0.13	73,73,73,73	0
56	MG	1a	1698	1/1	0.87	0.25	66,66,66,66	0
56	MG	2A	3407	1/1	0.87	0.10	80,80,80,80	0
56	MG	2A	3409	1/1	0.87	0.10	63,63,63,63	0
56	MG	2A	3260	1/1	0.87	0.21	70,70,70,70	0
56	MG	1E	302	1/1	0.87	0.27	59,59,59,59	0
56	MG	1A	3471	1/1	0.87	0.13	52,52,52,52	0
56	MG	2A	3415	1/1	0.87	0.26	57,57,57,57	0
56	MG	2A	3732	1/1	0.87	0.23	59,59,59,59	0
56	MG	2A	3086	1/1	0.87	0.18	64,64,64,64	0
56	MG	2A	3056	1/1	0.88	0.29	65,65,65,65	0
56	MG	2A	3254	1/1	0.88	0.15	71,71,71,71	0
56	MG	2A	3255	1/1	0.88	0.12	68,68,68,68	0
56	MG	1A	3361	1/1	0.88	0.16	45,45,45,45	0
56	MG	2A	3426	1/1	0.88	0.18	67,67,67,67	0
56	MG	2A	3427	1/1	0.88	0.20	54,54,54,54	0
56	MG	2A	3063	1/1	0.88	0.20	65,65,65,65	0
56	MG	2A	3263	1/1	0.88	0.13	62,62,62,62	0
56	MG	1A	3823	1/1	0.88	0.16	52,52,52,52	0
56	MG	1A	3334	1/1	0.88	0.13	49,49,49,49	0
56	MG	1A	3602	1/1	0.88	0.23	59,59,59,59	0
56	MG	2a	1682	1/1	0.88	0.11	73,73,73,73	0
56	MG	2a	1684	1/1	0.88	0.25	69,69,69,69	0
56	MG	1A	3608	1/1	0.88	0.21	51,51,51,51	0
56	MG	1I	201	1/1	0.88	0.12	67,67,67,67	0
56	MG	2A	3785	1/1	0.88	0.11	67,67,67,67	0
56	MG	1A	3367	1/1	0.88	0.21	57,57,57,57	0
56	MG	1O	201	1/1	0.88	0.14	66,66,66,66	0
56	MG	2A	3275	1/1	0.88	0.11	65,65,65,65	0
56	MG	1A	3645	1/1	0.88	0.13	55,55,55,55	0
56	MG	1a	1714	1/1	0.88	0.21	62,62,62,62	0
56	MG	1R	205	1/1	0.88	0.22	47,47,47,47	0
56	MG	1A	3443	1/1	0.88	0.13	70,70,70,70	0
56	MG	2A	3289	1/1	0.88	0.16	64,64,64,64	0
56	MG	2A	3478	1/1	0.88	0.22	72,72,72,72	0
56	MG	1a	1723	1/1	0.88	0.45	78,78,78,78	0
56	MG	1a	1725	1/1	0.88	0.15	71,71,71,71	0
56	MG	1a	1728	1/1	0.88	0.13	65,65,65,65	0
56	MG	2A	3489	1/1	0.88	0.25	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3846	1/1	0.88	0.10	59,59,59,59	0
56	MG	2A	3849	1/1	0.88	0.18	77,77,77,77	0
56	MG	1A	3506	1/1	0.88	0.09	46,46,46,46	0
56	MG	2A	3493	1/1	0.88	0.40	63,63,63,63	0
56	MG	2a	1727	1/1	0.88	0.23	76,76,76,76	0
56	MG	2A	3103	1/1	0.88	0.18	59,59,59,59	0
56	MG	2a	1730	1/1	0.88	0.17	77,77,77,77	0
56	MG	2A	3858	1/1	0.88	0.14	75,75,75,75	0
56	MG	2A	3300	1/1	0.88	0.13	68,68,68,68	0
56	MG	2A	3305	1/1	0.88	0.15	70,70,70,70	0
56	MG	1A	3687	1/1	0.88	0.15	64,64,64,64	0
56	MG	1A	3335	1/1	0.88	0.32	62,62,62,62	0
56	MG	2A	3511	1/1	0.88	0.22	58,58,58,58	0
56	MG	1Y	202	1/1	0.88	0.10	75,75,75,75	0
56	MG	1A	3513	1/1	0.88	0.20	60,60,60,60	0
56	MG	2a	1746	1/1	0.88	0.17	69,69,69,69	0
56	MG	2A	3316	1/1	0.88	0.24	79,79,79,79	0
56	MG	1A	3210	1/1	0.88	0.17	66,66,66,66	0
56	MG	2a	1750	1/1	0.88	0.15	85,85,85,85	0
56	MG	1a	1755	1/1	0.88	0.15	77,77,77,77	0
56	MG	2a	1755	1/1	0.88	0.10	85,85,85,85	0
56	MG	2A	3320	1/1	0.88	0.18	73,73,73,73	0
56	MG	1A	3460	1/1	0.88	0.21	64,64,64,64	0
56	MG	2A	3328	1/1	0.88	0.17	69,69,69,69	0
56	MG	2A	3125	1/1	0.88	0.18	62,62,62,62	0
56	MG	1a	1761	1/1	0.88	0.13	66,66,66,66	0
56	MG	2A	3137	1/1	0.88	0.14	55,55,55,55	0
56	MG	2E	307	1/1	0.88	0.18	74,74,74,74	0
56	MG	2a	1783	1/1	0.88	0.12	73,73,73,73	0
56	MG	1A	3465	1/1	0.88	0.14	60,60,60,60	0
56	MG	2A	3145	1/1	0.88	0.21	54,54,54,54	0
56	MG	2A	3146	1/1	0.88	0.30	75,75,75,75	0
56	MG	1A	3530	1/1	0.88	0.21	74,74,74,74	0
56	MG	1a	1605	1/1	0.88	0.14	64,64,64,64	0
56	MG	2V	202	1/1	0.88	0.14	70,70,70,70	0
56	MG	2W	203	1/1	0.88	0.17	65,65,65,65	0
56	MG	1A	4076	1/1	0.88	0.17	60,60,60,60	0
56	MG	1A	3912	1/1	0.88	0.09	43,43,43,43	0
56	MG	1A	3386	1/1	0.88	0.14	66,66,66,66	0
56	MG	2A	3183	1/1	0.88	0.10	56,56,56,56	0
56	MG	2A	3191	1/1	0.88	0.19	65,65,65,65	0
56	MG	1a	1812	1/1	0.88	0.10	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1813	1/1	0.88	0.15	76,76,76,76	0
56	MG	1a	1617	1/1	0.88	0.26	66,66,66,66	0
56	MG	1A	3144	1/1	0.88	0.19	42,42,42,42	0
56	MG	1A	3325	1/1	0.88	0.23	60,60,60,60	0
56	MG	1A	3541	1/1	0.88	0.18	51,51,51,51	0
56	MG	1A	3164	1/1	0.88	0.22	60,60,60,60	0
56	MG	2A	3658	1/1	0.88	0.11	70,70,70,70	0
56	MG	1A	3552	1/1	0.88	0.14	58,58,58,58	0
56	MG	2A	3662	1/1	0.88	0.14	74,74,74,74	0
56	MG	1A	3084	1/1	0.88	0.15	39,39,39,39	0
56	MG	1A	3995	1/1	0.88	0.10	58,58,58,58	0
56	MG	1B	213	1/1	0.88	0.32	68,68,68,68	0
56	MG	2a	1840	1/1	0.88	0.10	75,75,75,75	0
56	MG	2A	3382	1/1	0.88	0.17	71,71,71,71	0
56	MG	1a	1650	1/1	0.88	0.14	65,65,65,65	0
56	MG	1A	3332	1/1	0.88	0.22	55,55,55,55	0
56	MG	1B	215	1/1	0.88	0.10	63,63,63,63	0
56	MG	1a	1663	1/1	0.88	0.14	68,68,68,68	0
56	MG	1A	3570	1/1	0.88	0.36	66,66,66,66	0
56	MG	2r	101	1/1	0.88	0.15	77,77,77,77	0
56	MG	2t	201	1/1	0.88	0.20	59,59,59,59	0
56	MG	2v	101	1/1	0.88	0.15	63,63,63,63	0
56	MG	2A	3008	1/1	0.88	0.20	64,64,64,64	0
56	MG	1A	4001	1/1	0.88	0.14	54,54,54,54	0
56	MG	2v	104	1/1	0.88	0.26	81,81,81,81	0
56	MG	2a	1628	1/1	0.88	0.16	79,79,79,79	0
56	MG	1A	3595	1/1	0.88	0.16	54,54,54,54	0
56	MG	2A	3405	1/1	0.88	0.15	69,69,69,69	0
56	MG	1A	3139	1/1	0.88	0.21	44,44,44,44	0
56	MG	2A	3039	1/1	0.88	0.30	71,71,71,71	0
56	MG	2a	1636	1/1	0.88	0.12	86,86,86,86	0
56	MG	2A	3408	1/1	0.88	0.12	60,60,60,60	0
56	MG	2A	3245	1/1	0.88	0.15	68,68,68,68	0
56	MG	2A	3720	1/1	0.88	0.16	64,64,64,64	0
56	MG	2A	3248	1/1	0.88	0.13	78,78,78,78	0
56	MG	2y	103	1/1	0.88	0.11	73,73,73,73	0
56	MG	1A	3428	1/1	0.88	0.27	70,70,70,70	0
56	MG	2A	3733	1/1	0.88	0.17	71,71,71,71	0
56	MG	1B	235	1/1	0.88	0.15	72,72,72,72	0
56	MG	2A	3736	1/1	0.88	0.10	63,63,63,63	0
56	MG	2A	3419	1/1	0.89	0.22	58,58,58,58	0
56	MG	2A	3420	1/1	0.89	0.20	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3729	1/1	0.89	0.10	75,75,75,75	0
56	MG	2A	3731	1/1	0.89	0.17	67,67,67,67	0
56	MG	1A	4044	1/1	0.89	0.11	48,48,48,48	0
56	MG	2A	3273	1/1	0.89	0.12	63,63,63,63	0
56	MG	1a	1634	1/1	0.89	0.26	74,74,74,74	0
56	MG	1A	3035	1/1	0.89	0.14	53,53,53,53	0
56	MG	2A	3431	1/1	0.89	0.14	70,70,70,70	0
56	MG	2A	3740	1/1	0.89	0.13	64,64,64,64	0
56	MG	2A	3111	1/1	0.89	0.19	69,69,69,69	0
56	MG	2A	3112	1/1	0.89	0.15	49,49,49,49	0
56	MG	2A	3280	1/1	0.89	0.14	69,69,69,69	0
56	MG	1A	4053	1/1	0.89	0.10	51,51,51,51	0
56	MG	2a	1676	1/1	0.89	0.14	69,69,69,69	0
56	MG	1a	1781	1/1	0.89	0.11	70,70,70,70	0
56	MG	2A	3749	1/1	0.89	0.13	44,44,44,44	0
56	MG	1a	1785	1/1	0.89	0.11	67,67,67,67	0
56	MG	2A	3754	1/1	0.89	0.15	52,52,52,52	0
56	MG	1a	1792	1/1	0.89	0.11	69,69,69,69	0
56	MG	2A	3760	1/1	0.89	0.15	75,75,75,75	0
56	MG	1A	3157	1/1	0.89	0.10	39,39,39,39	0
56	MG	2A	3452	1/1	0.89	0.31	67,67,67,67	0
56	MG	1a	1811	1/1	0.89	0.20	84,84,84,84	0
56	MG	1a	1646	1/1	0.89	0.18	67,67,67,67	0
56	MG	2A	3295	1/1	0.89	0.31	70,70,70,70	0
56	MG	1D	313	1/1	0.89	0.14	40,40,40,40	0
56	MG	2A	3298	1/1	0.89	0.34	77,77,77,77	0
56	MG	1a	1649	1/1	0.89	0.25	67,67,67,67	0
56	MG	2A	3471	1/1	0.89	0.11	67,67,67,67	0
56	MG	2a	1707	1/1	0.89	0.19	74,74,74,74	0
56	MG	2A	3475	1/1	0.89	0.14	80,80,80,80	0
56	MG	1A	3074	1/1	0.89	0.27	63,63,63,63	0
56	MG	1A	3336	1/1	0.89	0.30	54,54,54,54	0
56	MG	2A	3479	1/1	0.89	0.35	69,69,69,69	0
56	MG	1E	313	1/1	0.89	0.13	64,64,64,64	0
56	MG	2a	1717	1/1	0.89	0.31	74,74,74,74	0
56	MG	2A	3166	1/1	0.89	0.19	53,53,53,53	0
56	MG	1n	102	1/1	0.89	0.19	64,64,64,64	0
56	MG	2A	3315	1/1	0.89	0.17	69,69,69,69	0
56	MG	2A	3491	1/1	0.89	0.09	59,59,59,59	0
56	MG	2A	3835	1/1	0.89	0.14	77,77,77,77	0
56	MG	1A	3964	1/1	0.89	0.08	53,53,53,53	0
56	MG	2A	3176	1/1	0.89	0.21	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	2A	3494	1/1	0.89	0.12	66,66,66,66	0
56	MG	2A	3178	1/1	0.89	0.14	75,75,75,75	0
56	MG	2A	3319	1/1	0.89	0.14	54,54,54,54	0
56	MG	1a	1666	1/1	0.89	0.13	65,65,65,65	0
56	MG	1w	103	1/1	0.89	0.11	75,75,75,75	0
56	MG	2A	3326	1/1	0.89	0.17	64,64,64,64	0
56	MG	2A	3508	1/1	0.89	0.12	54,54,54,54	0
56	MG	1A	4064	1/1	0.89	0.10	38,38,38,38	0
56	MG	1F	314	1/1	0.89	0.10	58,58,58,58	0
56	MG	1G	202	1/1	0.89	0.19	58,58,58,58	0
56	MG	2A	3197	1/1	0.89	0.28	73,73,73,73	0
56	MG	1A	3294	1/1	0.89	0.10	39,39,39,39	0
56	MG	1a	1681	1/1	0.89	0.15	77,77,77,77	0
56	MG	1x	106	1/1	0.89	0.23	64,64,64,64	0
56	MG	2a	1758	1/1	0.89	0.10	78,78,78,78	0
56	MG	1A	3339	1/1	0.89	0.21	50,50,50,50	0
56	MG	2B	211	1/1	0.89	0.18	62,62,62,62	0
56	MG	1A	4072	1/1	0.89	0.11	24,24,24,24	0
56	MG	1A	3300	1/1	0.89	0.26	57,57,57,57	0
56	MG	1A	3543	1/1	0.89	0.21	45,45,45,45	0
56	MG	2A	3207	1/1	0.89	0.12	68,68,68,68	0
56	MG	1A	3234	1/1	0.89	0.13	57,57,57,57	0
56	MG	2E	303	1/1	0.89	0.22	61,61,61,61	0
56	MG	2A	3584	1/1	0.89	0.12	51,51,51,51	0
56	MG	2A	3586	1/1	0.89	0.14	66,66,66,66	0
56	MG	2A	3215	1/1	0.89	0.21	83,83,83,83	0
56	MG	2A	3591	1/1	0.89	0.10	60,60,60,60	0
56	MG	2F	306	1/1	0.89	0.17	69,69,69,69	0
56	MG	1a	1697	1/1	0.89	0.28	56,56,56,56	0
56	MG	2A	3598	1/1	0.89	0.17	70,70,70,70	0
56	MG	2a	1800	1/1	0.89	0.25	75,75,75,75	0
56	MG	1T	203	1/1	0.89	0.18	48,48,48,48	0
56	MG	2a	1805	1/1	0.89	0.22	72,72,72,72	0
56	MG	2V	201	1/1	0.89	0.32	57,57,57,57	0
56	MG	1U	203	1/1	0.89	0.20	37,37,37,37	0
56	MG	2W	201	1/1	0.89	0.12	65,65,65,65	0
56	MG	1A	4082	1/1	0.89	0.27	68,68,68,68	0
56	MG	2A	3052	1/1	0.89	0.11	52,52,52,52	0
56	MG	2a	1812	1/1	0.89	0.14	75,75,75,75	0
56	MG	2A	3613	1/1	0.89	0.11	40,40,40,40	0
56	MG	20	102	1/1	0.89	0.14	76,76,76,76	0
56	MG	21	102	1/1	0.89	0.39	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3226	1/1	0.89	0.14	56,56,56,56	0
56	MG	2A	3620	1/1	0.89	0.17	64,64,64,64	0
56	MG	1A	4084	1/1	0.89	0.21	64,64,64,64	0
56	MG	28	101	1/1	0.89	0.28	71,71,71,71	0
56	MG	2A	3373	1/1	0.89	0.19	51,51,51,51	0
56	MG	1a	1709	1/1	0.89	0.14	54,54,54,54	0
56	MG	1A	3346	1/1	0.89	0.26	43,43,43,43	0
56	MG	2A	3233	1/1	0.89	0.21	56,56,56,56	0
56	MG	2a	1834	1/1	0.89	0.24	71,71,71,71	0
56	MG	2A	3378	1/1	0.89	0.18	65,65,65,65	0
56	MG	1A	3124	1/1	0.89	0.09	45,45,45,45	0
56	MG	1A	3314	1/1	0.89	0.20	54,54,54,54	0
56	MG	2A	3237	1/1	0.89	0.20	75,75,75,75	0
56	MG	1A	3193	1/1	0.89	0.15	58,58,58,58	0
56	MG	11	105	1/1	0.89	0.11	67,67,67,67	0
56	MG	2a	1613	1/1	0.89	0.22	66,66,66,66	0
56	MG	2A	3247	1/1	0.89	0.20	74,74,74,74	0
56	MG	2A	3396	1/1	0.89	0.11	78,78,78,78	0
56	MG	2r	102	1/1	0.89	0.09	78,78,78,78	0
56	MG	2A	3069	1/1	0.89	0.15	65,65,65,65	0
56	MG	2A	3670	1/1	0.89	0.22	73,73,73,73	0
56	MG	1A	3326	1/1	0.89	0.15	48,48,48,48	0
56	MG	2A	3673	1/1	0.89	0.15	78,78,78,78	0
56	MG	17	104	1/1	0.89	0.14	52,52,52,52	0
56	MG	1A	3852	1/1	0.89	0.10	60,60,60,60	0
56	MG	2A	3403	1/1	0.89	0.13	70,70,70,70	0
56	MG	1A	4101	1/1	0.89	0.29	60,60,60,60	0
56	MG	1A	3859	1/1	0.89	0.10	67,67,67,67	0
56	MG	1A	3197	1/1	0.89	0.43	72,72,72,72	0
56	MG	1A	3867	1/1	0.89	0.11	54,54,54,54	0
56	MG	2a	1631	1/1	0.89	0.12	60,60,60,60	0
56	MG	1A	3362	1/1	0.89	0.18	64,64,64,64	0
56	MG	2x	103	1/1	0.89	0.20	76,76,76,76	0
56	MG	1A	3258	1/1	0.89	0.13	80,80,80,80	0
56	MG	1A	3458	1/1	0.89	0.26	56,56,56,56	0
56	MG	2y	101	1/1	0.89	0.10	77,77,77,77	0
56	MG	1A	3763	1/1	0.89	0.13	52,52,52,52	0
56	MG	1a	1630	1/1	0.89	0.10	61,61,61,61	0
56	MG	2a	1638	1/1	0.89	0.28	67,67,67,67	0
56	MG	2A	3416	1/1	0.89	0.20	50,50,50,50	0
56	MG	1A	3040	1/1	0.89	0.12	62,62,62,62	0
56	MG	2A	3684	1/1	0.90	0.26	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3732	1/1	0.90	0.09	48,48,48,48	0
56	MG	1a	1682	1/1	0.90	0.26	70,70,70,70	0
56	MG	1y	101	1/1	0.90	0.15	48,48,48,48	0
56	MG	2A	3001	1/1	0.90	0.50	71,71,71,71	0
56	MG	2A	3005	1/1	0.90	0.32	77,77,77,77	0
56	MG	2A	3698	1/1	0.90	0.11	71,71,71,71	0
56	MG	2A	3402	1/1	0.90	0.14	80,80,80,80	0
56	MG	2A	3234	1/1	0.90	0.19	65,65,65,65	0
56	MG	2a	1646	1/1	0.90	0.17	63,63,63,63	0
56	MG	2A	3404	1/1	0.90	0.20	75,75,75,75	0
56	MG	1G	204	1/1	0.90	0.08	73,73,73,73	0
56	MG	2a	1652	1/1	0.90	0.11	79,79,79,79	0
56	MG	1A	3890	1/1	0.90	0.13	31,31,31,31	0
56	MG	2a	1654	1/1	0.90	0.14	76,76,76,76	0
56	MG	2A	3017	1/1	0.90	0.17	46,46,46,46	0
56	MG	1N	202	1/1	0.90	0.10	51,51,51,51	0
56	MG	2A	3726	1/1	0.90	0.08	56,56,56,56	0
56	MG	2A	3728	1/1	0.90	0.10	60,60,60,60	0
56	MG	2A	3243	1/1	0.90	0.24	61,61,61,61	0
56	MG	1a	1686	1/1	0.90	0.27	71,71,71,71	0
56	MG	2A	3036	1/1	0.90	0.18	50,50,50,50	0
56	MG	1a	1687	1/1	0.90	0.36	73,73,73,73	0
56	MG	2A	3249	1/1	0.90	0.17	68,68,68,68	0
56	MG	2A	3042	1/1	0.90	0.26	59,59,59,59	0
56	MG	2a	1672	1/1	0.90	0.12	72,72,72,72	0
56	MG	1a	1688	1/1	0.90	0.07	65,65,65,65	0
56	MG	1A	3216	1/1	0.90	0.09	52,52,52,52	0
56	MG	1a	1694	1/1	0.90	0.25	57,57,57,57	0
56	MG	1A	3088	1/1	0.90	0.18	35,35,35,35	0
56	MG	1O	205	1/1	0.90	0.16	69,69,69,69	0
56	MG	2A	3258	1/1	0.90	0.20	59,59,59,59	0
56	MG	1A	3902	1/1	0.90	0.12	32,32,32,32	0
56	MG	1A	3233	1/1	0.90	0.15	54,54,54,54	0
56	MG	1a	1701	1/1	0.90	0.20	62,62,62,62	0
56	MG	2A	3265	1/1	0.90	0.21	69,69,69,69	0
56	MG	1T	201	1/1	0.90	0.17	59,59,59,59	0
56	MG	1A	3907	1/1	0.90	0.16	50,50,50,50	0
56	MG	1a	1708	1/1	0.90	0.42	79,79,79,79	0
56	MG	2A	3440	1/1	0.90	0.24	68,68,68,68	0
56	MG	2A	3441	1/1	0.90	0.28	65,65,65,65	0
56	MG	2A	3073	1/1	0.90	0.11	64,64,64,64	0
56	MG	2A	3080	1/1	0.90	0.14	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3909	1/1	0.90	0.16	40,40,40,40	0
56	MG	1A	3319	1/1	0.90	0.12	59,59,59,59	0
56	MG	1A	3914	1/1	0.90	0.21	54,54,54,54	0
56	MG	1A	3785	1/1	0.90	0.10	40,40,40,40	0
56	MG	1a	1715	1/1	0.90	0.23	55,55,55,55	0
56	MG	2A	3797	1/1	0.90	0.10	64,64,64,64	0
56	MG	2a	1719	1/1	0.90	0.14	74,74,74,74	0
56	MG	2A	3798	1/1	0.90	0.10	71,71,71,71	0
56	MG	1A	3923	1/1	0.90	0.34	64,64,64,64	0
56	MG	2A	3281	1/1	0.90	0.29	73,73,73,73	0
56	MG	2A	3465	1/1	0.90	0.10	66,66,66,66	0
56	MG	1A	3787	1/1	0.90	0.18	67,67,67,67	0
56	MG	2A	3808	1/1	0.90	0.11	62,62,62,62	0
56	MG	2A	3470	1/1	0.90	0.22	70,70,70,70	0
56	MG	2A	3816	1/1	0.90	0.11	65,65,65,65	0
56	MG	2a	1734	1/1	0.90	0.18	65,65,65,65	0
56	MG	1A	3016	1/1	0.90	0.33	56,56,56,56	0
56	MG	2A	3097	1/1	0.90	0.21	70,70,70,70	0
56	MG	1A	3959	1/1	0.90	0.14	58,58,58,58	0
56	MG	1A	3618	1/1	0.90	0.11	35,35,35,35	0
56	MG	1A	4087	1/1	0.90	0.09	47,47,47,47	0
56	MG	14	101	1/1	0.90	0.12	70,70,70,70	0
56	MG	2A	3484	1/1	0.90	0.12	53,53,53,53	0
56	MG	1A	3966	1/1	0.90	0.11	60,60,60,60	0
56	MG	1A	3969	1/1	0.90	0.07	40,40,40,40	0
56	MG	1A	3620	1/1	0.90	0.14	52,52,52,52	0
56	MG	1a	1747	1/1	0.90	0.11	56,56,56,56	0
56	MG	2A	3304	1/1	0.90	0.16	65,65,65,65	0
56	MG	1A	3421	1/1	0.90	0.08	46,46,46,46	0
56	MG	2A	3308	1/1	0.90	0.13	75,75,75,75	0
56	MG	1a	1606	1/1	0.90	0.09	72,72,72,72	0
56	MG	1A	4094	1/1	0.90	0.17	58,58,58,58	0
56	MG	1a	1760	1/1	0.90	0.24	64,64,64,64	0
56	MG	2A	3313	1/1	0.90	0.15	65,65,65,65	0
56	MG	2B	203	1/1	0.90	0.19	80,80,80,80	0
56	MG	2B	205	1/1	0.90	0.11	65,65,65,65	0
56	MG	2a	1777	1/1	0.90	0.08	90,90,90,90	0
56	MG	2a	1778	1/1	0.90	0.17	78,78,78,78	0
56	MG	2a	1779	1/1	0.90	0.10	73,73,73,73	0
56	MG	2A	3119	1/1	0.90	0.21	68,68,68,68	0
56	MG	1A	3422	1/1	0.90	0.23	71,71,71,71	0
56	MG	1A	3813	1/1	0.90	0.16	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4102	1/1	0.90	0.36	65,65,65,65	0
56	MG	1A	3239	1/1	0.90	0.13	52,52,52,52	0
56	MG	2A	3535	1/1	0.90	0.15	70,70,70,70	0
56	MG	2B	215	1/1	0.90	0.24	72,72,72,72	0
56	MG	1a	1768	1/1	0.90	0.15	59,59,59,59	0
56	MG	1A	3369	1/1	0.90	0.25	42,42,42,42	0
56	MG	2B	220	1/1	0.90	0.12	78,78,78,78	0
56	MG	1A	3247	1/1	0.90	0.19	62,62,62,62	0
56	MG	2E	302	1/1	0.90	0.22	66,66,66,66	0
56	MG	2A	3149	1/1	0.90	0.24	46,46,46,46	0
56	MG	2A	3560	1/1	0.90	0.12	56,56,56,56	0
56	MG	1a	1777	1/1	0.90	0.12	75,75,75,75	0
56	MG	2A	3332	1/1	0.90	0.14	64,64,64,64	0
56	MG	2A	3157	1/1	0.90	0.22	56,56,56,56	0
56	MG	1A	3170	1/1	0.90	0.11	53,53,53,53	0
56	MG	2a	1814	1/1	0.90	0.16	72,72,72,72	0
56	MG	1A	3550	1/1	0.90	0.18	61,61,61,61	0
56	MG	2A	3336	1/1	0.90	0.20	63,63,63,63	0
56	MG	1a	1786	1/1	0.90	0.16	58,58,58,58	0
56	MG	2Q	203	1/1	0.90	0.12	57,57,57,57	0
56	MG	2A	3173	1/1	0.90	0.21	79,79,79,79	0
56	MG	2a	1820	1/1	0.90	0.16	76,76,76,76	0
56	MG	2A	3174	1/1	0.90	0.14	66,66,66,66	0
56	MG	1A	3492	1/1	0.90	0.25	58,58,58,58	0
56	MG	2a	1824	1/1	0.90	0.22	74,74,74,74	0
56	MG	1a	1803	1/1	0.90	0.08	81,81,81,81	0
56	MG	2X	101	1/1	0.90	0.09	73,73,73,73	0
56	MG	2A	3597	1/1	0.90	0.13	60,60,60,60	0
56	MG	1a	1636	1/1	0.90	0.23	65,65,65,65	0
56	MG	2a	1832	1/1	0.90	0.15	78,78,78,78	0
56	MG	1A	3295	1/1	0.90	0.11	48,48,48,48	0
56	MG	2a	1835	1/1	0.90	0.13	54,54,54,54	0
56	MG	2a	1836	1/1	0.90	0.32	76,76,76,76	0
56	MG	21	101	1/1	0.90	0.18	79,79,79,79	0
56	MG	2a	1839	1/1	0.90	0.25	62,62,62,62	0
56	MG	1A	3389	1/1	0.90	0.16	54,54,54,54	0
56	MG	2d	301	1/1	0.90	0.25	66,66,66,66	0
56	MG	2A	3190	1/1	0.90	0.14	78,78,78,78	0
56	MG	1A	3717	1/1	0.90	0.14	56,56,56,56	0
56	MG	1A	4016	1/1	0.90	0.09	45,45,45,45	0
56	MG	27	101	1/1	0.90	0.22	68,68,68,68	0
56	MG	2A	3615	1/1	0.90	0.09	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1B	233	1/1	0.90	0.13	52,52,52,52	0
56	MG	2A	3364	1/1	0.90	0.13	66,66,66,66	0
56	MG	1A	3850	1/1	0.90	0.20	51,51,51,51	0
56	MG	2A	3367	1/1	0.90	0.19	73,73,73,73	0
56	MG	1A	3718	1/1	0.90	0.09	72,72,72,72	0
56	MG	1n	101	1/1	0.90	0.14	65,65,65,65	0
56	MG	2A	3648	1/1	0.90	0.21	64,64,64,64	0
56	MG	1A	3569	1/1	0.90	0.38	77,77,77,77	0
56	MG	1t	201	1/1	0.90	0.16	60,60,60,60	0
56	MG	1a	1658	1/1	0.90	0.26	72,72,72,72	0
56	MG	1A	3394	1/1	0.90	0.11	50,50,50,50	0
56	MG	1A	4035	1/1	0.90	0.26	61,61,61,61	0
56	MG	2A	3657	1/1	0.90	0.12	67,67,67,67	0
56	MG	1E	309	1/1	0.90	0.14	51,51,51,51	0
56	MG	1a	1668	1/1	0.90	0.25	61,61,61,61	0
56	MG	1a	1670	1/1	0.90	0.30	71,71,71,71	0
56	MG	2A	3381	1/1	0.90	0.19	69,69,69,69	0
56	MG	1A	3581	1/1	0.90	0.20	39,39,39,39	0
56	MG	2A	3383	1/1	0.90	0.28	56,56,56,56	0
56	MG	1A	3455	1/1	0.90	0.13	56,56,56,56	0
56	MG	1A	4042	1/1	0.90	0.12	44,44,44,44	0
56	MG	2A	3391	1/1	0.90	0.17	66,66,66,66	0
56	MG	1A	3138	1/1	0.90	0.13	48,48,48,48	0
56	MG	2A	3394	1/1	0.90	0.19	58,58,58,58	0
56	MG	1x	110	1/1	0.90	0.15	75,75,75,75	0
56	MG	1A	3981	1/1	0.91	0.09	64,64,64,64	0
56	MG	2A	3225	1/1	0.91	0.34	47,47,47,47	0
56	MG	2A	3345	1/1	0.91	0.16	73,73,73,73	0
56	MG	1A	3818	1/1	0.91	0.10	68,68,68,68	0
56	MG	2A	3767	1/1	0.91	0.16	50,50,50,50	0
56	MG	2A	3770	1/1	0.91	0.11	74,74,74,74	0
56	MG	2A	3075	1/1	0.91	0.17	66,66,66,66	0
56	MG	2A	3349	1/1	0.91	0.10	77,77,77,77	0
56	MG	2a	1665	1/1	0.91	0.10	67,67,67,67	0
56	MG	2a	1666	1/1	0.91	0.21	73,73,73,73	0
56	MG	2a	1667	1/1	0.91	0.14	86,86,86,86	0
56	MG	1a	1669	1/1	0.91	0.27	66,66,66,66	0
56	MG	2A	3354	1/1	0.91	0.10	58,58,58,58	0
56	MG	1A	3061	1/1	0.91	0.11	53,53,53,53	0
56	MG	2A	3791	1/1	0.91	0.12	78,78,78,78	0
56	MG	1a	1783	1/1	0.91	0.09	64,64,64,64	0
56	MG	1A	3832	1/1	0.91	0.11	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3795	1/1	0.91	0.15	58,58,58,58	0
56	MG	2a	1683	1/1	0.91	0.17	63,63,63,63	0
56	MG	2A	3505	1/1	0.91	0.17	61,61,61,61	0
56	MG	1A	3684	1/1	0.91	0.12	51,51,51,51	0
56	MG	2A	3361	1/1	0.91	0.10	61,61,61,61	0
56	MG	2A	3799	1/1	0.91	0.13	65,65,65,65	0
56	MG	2A	3512	1/1	0.91	0.12	70,70,70,70	0
56	MG	1A	3544	1/1	0.91	0.21	43,43,43,43	0
56	MG	2a	1695	1/1	0.91	0.25	63,63,63,63	0
56	MG	2A	3520	1/1	0.91	0.19	56,56,56,56	0
56	MG	2a	1697	1/1	0.91	0.15	63,63,63,63	0
56	MG	2A	3522	1/1	0.91	0.12	64,64,64,64	0
56	MG	2a	1699	1/1	0.91	0.19	78,78,78,78	0
56	MG	1a	1801	1/1	0.91	0.15	61,61,61,61	0
56	MG	2a	1701	1/1	0.91	0.15	51,51,51,51	0
56	MG	1A	4092	1/1	0.91	0.11	64,64,64,64	0
56	MG	2a	1703	1/1	0.91	0.18	72,72,72,72	0
56	MG	2A	3240	1/1	0.91	0.18	63,63,63,63	0
56	MG	2a	1705	1/1	0.91	0.35	71,71,71,71	0
56	MG	2A	3819	1/1	0.91	0.16	63,63,63,63	0
56	MG	1A	3545	1/1	0.91	0.28	56,56,56,56	0
56	MG	1A	3063	1/1	0.91	0.28	57,57,57,57	0
56	MG	2A	3548	1/1	0.91	0.13	55,55,55,55	0
56	MG	2A	3246	1/1	0.91	0.11	65,65,65,65	0
56	MG	2a	1712	1/1	0.91	0.17	75,75,75,75	0
56	MG	2A	3557	1/1	0.91	0.18	43,43,43,43	0
56	MG	1A	3494	1/1	0.91	0.34	64,64,64,64	0
56	MG	1A	3554	1/1	0.91	0.21	56,56,56,56	0
56	MG	1a	1815	1/1	0.91	0.08	69,69,69,69	0
56	MG	11	103	1/1	0.91	0.14	50,50,50,50	0
56	MG	2A	3573	1/1	0.91	0.12	66,66,66,66	0
56	MG	1A	3498	1/1	0.91	0.17	52,52,52,52	0
56	MG	2A	3859	1/1	0.91	0.09	59,59,59,59	0
56	MG	2A	3578	1/1	0.91	0.14	54,54,54,54	0
56	MG	1A	3024	1/1	0.91	0.12	59,59,59,59	0
56	MG	1B	209	1/1	0.91	0.23	63,63,63,63	0
56	MG	2A	3866	1/1	0.91	0.16	58,58,58,58	0
56	MG	2a	1733	1/1	0.91	0.18	79,79,79,79	0
56	MG	1A	3559	1/1	0.91	0.19	60,60,60,60	0
56	MG	1A	3566	1/1	0.91	0.22	46,46,46,46	0
56	MG	2A	3875	1/1	0.91	0.09	52,52,52,52	0
56	MG	2A	3257	1/1	0.91	0.18	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1602	1/1	0.91	0.35	69,69,69,69	0
56	MG	2B	202	1/1	0.91	0.12	67,67,67,67	0
56	MG	1A	4020	1/1	0.91	0.16	49,49,49,49	0
56	MG	2A	3262	1/1	0.91	0.10	54,54,54,54	0
56	MG	1A	3135	1/1	0.91	0.17	52,52,52,52	0
56	MG	1A	3046	1/1	0.91	0.09	34,34,34,34	0
56	MG	1A	3464	1/1	0.91	0.12	42,42,42,42	0
56	MG	2A	3124	1/1	0.91	0.22	63,63,63,63	0
56	MG	2A	3605	1/1	0.91	0.17	68,68,68,68	0
56	MG	2a	1752	1/1	0.91	0.15	63,63,63,63	0
56	MG	1A	3588	1/1	0.91	0.17	67,67,67,67	0
56	MG	2A	3611	1/1	0.91	0.13	62,62,62,62	0
56	MG	2A	3129	1/1	0.91	0.16	69,69,69,69	0
56	MG	2B	217	1/1	0.91	0.12	70,70,70,70	0
56	MG	1A	3510	1/1	0.91	0.10	57,57,57,57	0
56	MG	1a	1707	1/1	0.91	0.14	60,60,60,60	0
56	MG	2A	3401	1/1	0.91	0.15	61,61,61,61	0
56	MG	2E	301	1/1	0.91	0.22	71,71,71,71	0
56	MG	1A	3305	1/1	0.91	0.13	39,39,39,39	0
56	MG	2A	3639	1/1	0.91	0.13	53,53,53,53	0
56	MG	1x	104	1/1	0.91	0.19	64,64,64,64	0
56	MG	1a	1624	1/1	0.91	0.21	66,66,66,66	0
56	MG	1A	3515	1/1	0.91	0.13	61,61,61,61	0
56	MG	2a	1786	1/1	0.91	0.14	61,61,61,61	0
56	MG	2A	3647	1/1	0.91	0.06	49,49,49,49	0
56	MG	1a	1626	1/1	0.91	0.27	63,63,63,63	0
56	MG	2a	1793	1/1	0.91	0.26	82,82,82,82	0
56	MG	2A	3278	1/1	0.91	0.09	59,59,59,59	0
56	MG	2O	201	1/1	0.91	0.18	64,64,64,64	0
56	MG	1A	3744	1/1	0.91	0.07	45,45,45,45	0
56	MG	2A	3160	1/1	0.91	0.12	70,70,70,70	0
56	MG	2A	3283	1/1	0.91	0.21	65,65,65,65	0
56	MG	2T	202	1/1	0.91	0.12	59,59,59,59	0
56	MG	1A	3746	1/1	0.91	0.09	53,53,53,53	0
56	MG	2a	1802	1/1	0.91	0.10	66,66,66,66	0
56	MG	1a	1718	1/1	0.91	0.35	69,69,69,69	0
56	MG	1y	102	1/1	0.91	0.08	81,81,81,81	0
56	MG	1A	3905	1/1	0.91	0.09	50,50,50,50	0
56	MG	2W	204	1/1	0.91	0.13	69,69,69,69	0
56	MG	2A	3003	1/1	0.91	0.35	66,66,66,66	0
56	MG	2A	3418	1/1	0.91	0.33	65,65,65,65	0
56	MG	1A	3748	1/1	0.91	0.12	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3667	1/1	0.91	0.12	66,66,66,66	0
56	MG	2A	3668	1/1	0.91	0.23	75,75,75,75	0
56	MG	2A	3669	1/1	0.91	0.15	55,55,55,55	0
56	MG	1A	3751	1/1	0.91	0.23	60,60,60,60	0
56	MG	2A	3671	1/1	0.91	0.16	60,60,60,60	0
56	MG	2A	3177	1/1	0.91	0.12	64,64,64,64	0
56	MG	2A	3422	1/1	0.91	0.20	51,51,51,51	0
56	MG	2a	1821	1/1	0.91	0.23	67,67,67,67	0
56	MG	1A	3365	1/1	0.91	0.15	58,58,58,58	0
56	MG	2A	3180	1/1	0.91	0.20	53,53,53,53	0
56	MG	2A	3299	1/1	0.91	0.30	71,71,71,71	0
56	MG	1A	3256	1/1	0.91	0.11	30,30,30,30	0
56	MG	2a	1826	1/1	0.91	0.19	74,74,74,74	0
56	MG	2a	1827	1/1	0.91	0.13	74,74,74,74	0
56	MG	2A	3018	1/1	0.91	0.13	56,56,56,56	0
56	MG	2A	3187	1/1	0.91	0.20	59,59,59,59	0
56	MG	2A	3307	1/1	0.91	0.12	53,53,53,53	0
56	MG	1a	1639	1/1	0.91	0.17	61,61,61,61	0
56	MG	2a	1833	1/1	0.91	0.20	73,73,73,73	0
56	MG	2A	3693	1/1	0.91	0.10	65,65,65,65	0
56	MG	2A	3437	1/1	0.91	0.27	62,62,62,62	0
56	MG	2a	1611	1/1	0.91	0.40	69,69,69,69	0
56	MG	2A	3028	1/1	0.91	0.18	55,55,55,55	0
56	MG	2A	3029	1/1	0.91	0.12	72,72,72,72	0
56	MG	2A	3699	1/1	0.91	0.18	71,71,71,71	0
56	MG	2a	1841	1/1	0.91	0.15	64,64,64,64	0
56	MG	2A	3194	1/1	0.91	0.21	69,69,69,69	0
56	MG	1A	3765	1/1	0.91	0.15	53,53,53,53	0
56	MG	2A	3713	1/1	0.91	0.11	48,48,48,48	0
56	MG	2A	3714	1/1	0.91	0.12	57,57,57,57	0
56	MG	1A	3368	1/1	0.91	0.16	64,64,64,64	0
56	MG	2A	3447	1/1	0.91	0.14	51,51,51,51	0
56	MG	2A	3448	1/1	0.91	0.47	69,69,69,69	0
56	MG	1a	1645	1/1	0.91	0.18	63,63,63,63	0
56	MG	1A	3605	1/1	0.91	0.24	59,59,59,59	0
56	MG	2A	3045	1/1	0.91	0.13	73,73,73,73	0
56	MG	1A	3227	1/1	0.91	0.17	52,52,52,52	0
56	MG	2A	3457	1/1	0.91	0.32	69,69,69,69	0
56	MG	1A	3260	1/1	0.91	0.06	37,37,37,37	0
56	MG	1A	3185	1/1	0.91	0.12	68,68,68,68	0
56	MG	2a	1633	1/1	0.91	0.31	70,70,70,70	0
56	MG	1a	1651	1/1	0.91	0.30	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3464	1/1	0.91	0.31	53,53,53,53	0
56	MG	2w	104	1/1	0.91	0.14	68,68,68,68	0
56	MG	1A	3189	1/1	0.91	0.10	45,45,45,45	0
56	MG	2A	3327	1/1	0.91	0.16	65,65,65,65	0
56	MG	2A	3061	1/1	0.91	0.17	61,61,61,61	0
56	MG	2A	3214	1/1	0.91	0.20	73,73,73,73	0
56	MG	1a	1657	1/1	0.91	0.25	63,63,63,63	0
56	MG	2a	1644	1/1	0.91	0.22	70,70,70,70	0
56	MG	1A	3438	1/1	0.91	0.12	59,59,59,59	0
56	MG	1a	1661	1/1	0.91	0.14	62,62,62,62	0
56	MG	1A	3004	1/1	0.91	0.10	28,28,28,28	0
56	MG	2A	3222	1/1	0.91	0.21	62,62,62,62	0
56	MG	2A	3340	1/1	0.91	0.09	74,74,74,74	0
56	MG	2A	3753	1/1	0.91	0.14	55,55,55,55	0
56	MG	1A	3659	1/1	0.91	0.11	51,51,51,51	0
56	MG	2a	1655	1/1	0.91	0.21	71,71,71,71	0
56	MG	1A	3551	1/1	0.92	0.21	57,57,57,57	0
56	MG	1A	3930	1/1	0.92	0.09	28,28,28,28	0
56	MG	1x	107	1/1	0.92	0.19	71,71,71,71	0
56	MG	1B	218	1/1	0.92	0.09	51,51,51,51	0
56	MG	1A	3377	1/1	0.92	0.12	45,45,45,45	0
56	MG	1a	1659	1/1	0.92	0.12	67,67,67,67	0
56	MG	1a	1660	1/1	0.92	0.14	69,69,69,69	0
56	MG	1x	114	1/1	0.92	0.13	57,57,57,57	0
56	MG	1B	223	1/1	0.92	0.11	59,59,59,59	0
56	MG	1B	225	1/1	0.92	0.07	50,50,50,50	0
56	MG	1A	3381	1/1	0.92	0.11	48,48,48,48	0
56	MG	1a	1664	1/1	0.92	0.26	77,77,77,77	0
56	MG	1a	1665	1/1	0.92	0.12	61,61,61,61	0
56	MG	1A	3556	1/1	0.92	0.11	59,59,59,59	0
56	MG	2A	3706	1/1	0.92	0.16	63,63,63,63	0
56	MG	2A	3707	1/1	0.92	0.23	60,60,60,60	0
56	MG	2A	3010	1/1	0.92	0.12	56,56,56,56	0
56	MG	1A	3960	1/1	0.92	0.09	48,48,48,48	0
56	MG	1A	3961	1/1	0.92	0.10	53,53,53,53	0
56	MG	2A	3716	1/1	0.92	0.12	54,54,54,54	0
56	MG	2A	3242	1/1	0.92	0.19	66,66,66,66	0
56	MG	1A	3132	1/1	0.92	0.09	45,45,45,45	0
56	MG	2A	3020	1/1	0.92	0.11	61,61,61,61	0
56	MG	1A	3965	1/1	0.92	0.09	34,34,34,34	0
56	MG	1A	3173	1/1	0.92	0.13	45,45,45,45	0
56	MG	1a	1677	1/1	0.92	0.35	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3031	1/1	0.92	0.15	69,69,69,69	0
56	MG	1D	312	1/1	0.92	0.15	46,46,46,46	0
56	MG	1A	3745	1/1	0.92	0.10	46,46,46,46	0
56	MG	2a	1668	1/1	0.92	0.30	75,75,75,75	0
56	MG	1A	3976	1/1	0.92	0.10	60,60,60,60	0
56	MG	2A	3429	1/1	0.92	0.30	67,67,67,67	0
56	MG	2A	3041	1/1	0.92	0.32	69,69,69,69	0
56	MG	2a	1675	1/1	0.92	0.19	65,65,65,65	0
56	MG	2A	3738	1/1	0.92	0.16	64,64,64,64	0
56	MG	1A	3183	1/1	0.92	0.18	54,54,54,54	0
56	MG	1A	3276	1/1	0.92	0.08	40,40,40,40	0
56	MG	1E	310	1/1	0.92	0.16	66,66,66,66	0
56	MG	1A	3567	1/1	0.92	0.20	40,40,40,40	0
56	MG	2A	3053	1/1	0.92	0.11	69,69,69,69	0
56	MG	1A	3400	1/1	0.92	0.10	66,66,66,66	0
56	MG	1A	3758	1/1	0.92	0.12	38,38,38,38	0
56	MG	2a	1688	1/1	0.92	0.20	56,56,56,56	0
56	MG	1A	3236	1/1	0.92	0.10	58,58,58,58	0
56	MG	2a	1690	1/1	0.92	0.21	70,70,70,70	0
56	MG	1A	3573	1/1	0.92	0.10	50,50,50,50	0
56	MG	2A	3444	1/1	0.92	0.23	84,84,84,84	0
56	MG	2a	1694	1/1	0.92	0.15	70,70,70,70	0
56	MG	1G	203	1/1	0.92	0.08	70,70,70,70	0
56	MG	1A	3776	1/1	0.92	0.09	18,18,18,18	0
56	MG	2A	3756	1/1	0.92	0.12	63,63,63,63	0
56	MG	1A	3411	1/1	0.92	0.11	41,41,41,41	0
56	MG	2A	3066	1/1	0.92	0.36	71,71,71,71	0
56	MG	2A	3451	1/1	0.92	0.29	64,64,64,64	0
56	MG	1A	3585	1/1	0.92	0.12	33,33,33,33	0
56	MG	1A	3487	1/1	0.92	0.09	57,57,57,57	0
56	MG	1A	3590	1/1	0.92	0.18	62,62,62,62	0
56	MG	2A	3456	1/1	0.92	0.32	64,64,64,64	0
56	MG	1A	3593	1/1	0.92	0.12	39,39,39,39	0
56	MG	1A	3803	1/1	0.92	0.10	41,41,41,41	0
56	MG	1A	4012	1/1	0.92	0.07	23,23,23,23	0
56	MG	1S	202	1/1	0.92	0.11	52,52,52,52	0
56	MG	2A	3085	1/1	0.92	0.12	57,57,57,57	0
56	MG	1A	3488	1/1	0.92	0.14	58,58,58,58	0
56	MG	2A	3468	1/1	0.92	0.25	72,72,72,72	0
56	MG	2A	3282	1/1	0.92	0.22	64,64,64,64	0
56	MG	2a	1714	1/1	0.92	0.09	63,63,63,63	0
56	MG	1A	3806	1/1	0.92	0.07	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3089	1/1	0.92	0.11	43,43,43,43	0
56	MG	1A	3413	1/1	0.92	0.13	55,55,55,55	0
56	MG	2A	3476	1/1	0.92	0.08	61,61,61,61	0
56	MG	2A	3288	1/1	0.92	0.12	78,78,78,78	0
56	MG	1U	204	1/1	0.92	0.13	49,49,49,49	0
56	MG	1a	1716	1/1	0.92	0.39	57,57,57,57	0
56	MG	1U	209	1/1	0.92	0.17	58,58,58,58	0
56	MG	2A	3096	1/1	0.92	0.07	48,48,48,48	0
56	MG	2a	1729	1/1	0.92	0.21	79,79,79,79	0
56	MG	1A	3296	1/1	0.92	0.19	64,64,64,64	0
56	MG	1V	206	1/1	0.92	0.07	48,48,48,48	0
56	MG	2A	3487	1/1	0.92	0.11	46,46,46,46	0
56	MG	2A	3826	1/1	0.92	0.10	50,50,50,50	0
56	MG	2A	3296	1/1	0.92	0.22	73,73,73,73	0
56	MG	2A	3490	1/1	0.92	0.08	59,59,59,59	0
56	MG	2A	3830	1/1	0.92	0.13	65,65,65,65	0
56	MG	2A	3833	1/1	0.92	0.12	53,53,53,53	0
56	MG	1A	3080	1/1	0.92	0.09	69,69,69,69	0
56	MG	1A	3821	1/1	0.92	0.15	56,56,56,56	0
56	MG	2A	3844	1/1	0.92	0.10	63,63,63,63	0
56	MG	1A	3059	1/1	0.92	0.32	64,64,64,64	0
56	MG	1a	1729	1/1	0.92	0.18	66,66,66,66	0
56	MG	2a	1748	1/1	0.92	0.20	66,66,66,66	0
56	MG	2A	3496	1/1	0.92	0.14	44,44,44,44	0
56	MG	2A	3303	1/1	0.92	0.34	54,54,54,54	0
56	MG	1A	3829	1/1	0.92	0.09	39,39,39,39	0
56	MG	10	104	1/1	0.92	0.22	67,67,67,67	0
56	MG	1A	4040	1/1	0.92	0.09	43,43,43,43	0
56	MG	2A	3860	1/1	0.92	0.13	66,66,66,66	0
56	MG	2a	1760	1/1	0.92	0.10	83,83,83,83	0
56	MG	1A	3603	1/1	0.92	0.18	48,48,48,48	0
56	MG	1A	3302	1/1	0.92	0.12	46,46,46,46	0
56	MG	2A	3507	1/1	0.92	0.10	65,65,65,65	0
56	MG	11	106	1/1	0.92	0.10	52,52,52,52	0
56	MG	2A	3509	1/1	0.92	0.11	59,59,59,59	0
56	MG	1A	3352	1/1	0.92	0.20	31,31,31,31	0
56	MG	2a	1774	1/1	0.92	0.10	71,71,71,71	0
56	MG	1A	3611	1/1	0.92	0.11	57,57,57,57	0
56	MG	14	102	1/1	0.92	0.13	64,64,64,64	0
56	MG	1a	1758	1/1	0.92	0.06	58,58,58,58	0
56	MG	2A	3521	1/1	0.92	0.10	59,59,59,59	0
56	MG	15	106	1/1	0.92	0.10	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3524	1/1	0.92	0.24	69,69,69,69	0
56	MG	2A	3126	1/1	0.92	0.08	60,60,60,60	0
56	MG	2a	1788	1/1	0.92	0.08	68,68,68,68	0
56	MG	2A	3127	1/1	0.92	0.07	77,77,77,77	0
56	MG	1A	3424	1/1	0.92	0.15	59,59,59,59	0
56	MG	1a	1762	1/1	0.92	0.11	60,60,60,60	0
56	MG	18	106	1/1	0.92	0.10	44,44,44,44	0
56	MG	1A	3509	1/1	0.92	0.11	62,62,62,62	0
56	MG	2A	3142	1/1	0.92	0.23	66,66,66,66	0
56	MG	19	101	1/1	0.92	0.19	55,55,55,55	0
56	MG	2A	3331	1/1	0.92	0.14	70,70,70,70	0
56	MG	2B	218	1/1	0.92	0.14	77,77,77,77	0
56	MG	2A	3561	1/1	0.92	0.12	65,65,65,65	0
56	MG	1A	3626	1/1	0.92	0.11	53,53,53,53	0
56	MG	2A	3564	1/1	0.92	0.14	61,61,61,61	0
56	MG	2D	306	1/1	0.92	0.22	46,46,46,46	0
56	MG	2D	309	1/1	0.92	0.10	61,61,61,61	0
56	MG	2A	3147	1/1	0.92	0.17	60,60,60,60	0
56	MG	1a	1770	1/1	0.92	0.16	66,66,66,66	0
56	MG	2A	3152	1/1	0.92	0.28	53,53,53,53	0
56	MG	2A	3574	1/1	0.92	0.16	56,56,56,56	0
56	MG	1A	3427	1/1	0.92	0.15	61,61,61,61	0
56	MG	2A	3338	1/1	0.92	0.10	62,62,62,62	0
56	MG	2E	309	1/1	0.92	0.10	52,52,52,52	0
56	MG	2A	3155	1/1	0.92	0.12	62,62,62,62	0
56	MG	1a	1604	1/1	0.92	0.22	70,70,70,70	0
56	MG	2A	3341	1/1	0.92	0.13	67,67,67,67	0
56	MG	2A	3159	1/1	0.92	0.17	65,65,65,65	0
56	MG	1A	3250	1/1	0.92	0.24	58,58,58,58	0
56	MG	1A	3431	1/1	0.92	0.12	56,56,56,56	0
56	MG	1A	3105	1/1	0.92	0.31	49,49,49,49	0
56	MG	2T	201	1/1	0.92	0.10	61,61,61,61	0
56	MG	1A	3854	1/1	0.92	0.09	58,58,58,58	0
56	MG	2A	3169	1/1	0.92	0.12	51,51,51,51	0
56	MG	2A	3172	1/1	0.92	0.13	65,65,65,65	0
56	MG	1a	1614	1/1	0.92	0.12	65,65,65,65	0
56	MG	2a	1830	1/1	0.92	0.15	57,57,57,57	0
56	MG	1a	1615	1/1	0.92	0.19	67,67,67,67	0
56	MG	1a	1799	1/1	0.92	0.09	84,84,84,84	0
56	MG	1A	3662	1/1	0.92	0.14	52,52,52,52	0
56	MG	2A	3610	1/1	0.92	0.11	70,70,70,70	0
56	MG	1A	3356	1/1	0.92	0.19	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3311	1/1	0.92	0.13	55,55,55,55	0
56	MG	2A	3360	1/1	0.92	0.27	64,64,64,64	0
56	MG	1A	3869	1/1	0.92	0.15	53,53,53,53	0
56	MG	1A	3121	1/1	0.92	0.10	38,38,38,38	0
56	MG	1A	3689	1/1	0.92	0.09	46,46,46,46	0
56	MG	25	105	1/1	0.92	0.10	68,68,68,68	0
56	MG	2A	3624	1/1	0.92	0.16	57,57,57,57	0
56	MG	2A	3628	1/1	0.92	0.18	47,47,47,47	0
56	MG	2A	3634	1/1	0.92	0.17	44,44,44,44	0
56	MG	28	104	1/1	0.92	0.17	57,57,57,57	0
56	MG	2A	3186	1/1	0.92	0.21	63,63,63,63	0
56	MG	1A	3881	1/1	0.92	0.15	42,42,42,42	0
56	MG	1b	301	1/1	0.92	0.17	70,70,70,70	0
56	MG	1A	3886	1/1	0.92	0.12	40,40,40,40	0
56	MG	2a	1605	1/1	0.92	0.25	59,59,59,59	0
56	MG	2A	3370	1/1	0.92	0.17	52,52,52,52	0
56	MG	1A	3158	1/1	0.92	0.10	54,54,54,54	0
56	MG	1a	1633	1/1	0.92	0.19	58,58,58,58	0
56	MG	1A	3321	1/1	0.92	0.22	34,34,34,34	0
56	MG	1A	3536	1/1	0.92	0.23	40,40,40,40	0
56	MG	2A	3199	1/1	0.92	0.22	66,66,66,66	0
56	MG	1A	3901	1/1	0.92	0.06	35,35,35,35	0
56	MG	1p	101	1/1	0.92	0.08	68,68,68,68	0
56	MG	1A	3257	1/1	0.92	0.10	55,55,55,55	0
56	MG	1A	3163	1/1	0.92	0.15	52,52,52,52	0
56	MG	1A	3259	1/1	0.92	0.21	34,34,34,34	0
56	MG	1a	1643	1/1	0.92	0.15	70,70,70,70	0
56	MG	1A	3041	1/1	0.92	0.14	39,39,39,39	0
56	MG	2A	3388	1/1	0.92	0.14	64,64,64,64	0
56	MG	1A	3463	1/1	0.92	0.36	68,68,68,68	0
56	MG	1A	3331	1/1	0.92	0.09	53,53,53,53	0
56	MG	2A	3213	1/1	0.92	0.09	75,75,75,75	0
56	MG	2A	3393	1/1	0.92	0.12	66,66,66,66	0
56	MG	1A	3726	1/1	0.92	0.09	42,42,42,42	0
56	MG	1A	3130	1/1	0.92	0.10	69,69,69,69	0
56	MG	1x	103	1/1	0.92	0.16	52,52,52,52	0
56	MG	2A	3677	1/1	0.92	0.10	61,61,61,61	0
57	K	1A	3572	1/1	0.92	0.26	69,69,69,69	0
57	K	2A	3466	1/1	0.92	0.18	84,84,84,84	0
56	MG	1a	1700	1/1	0.93	0.28	68,68,68,68	0
56	MG	2a	1647	1/1	0.93	0.18	64,64,64,64	0
56	MG	1S	203	1/1	0.93	0.07	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	1A	3831	1/1	0.93	0.08	40,40,40,40	0
56	MG	1A	3261	1/1	0.93	0.07	32,32,32,32	0
56	MG	1a	1706	1/1	0.93	0.13	64,64,64,64	0
56	MG	2A	3442	1/1	0.93	0.23	60,60,60,60	0
56	MG	2A	3270	1/1	0.93	0.11	58,58,58,58	0
56	MG	2A	3071	1/1	0.93	0.15	66,66,66,66	0
56	MG	1A	3835	1/1	0.93	0.24	62,62,62,62	0
56	MG	1A	3315	1/1	0.93	0.23	51,51,51,51	0
56	MG	1A	4025	1/1	0.93	0.14	49,49,49,49	0
56	MG	1A	3838	1/1	0.93	0.09	48,48,48,48	0
56	MG	1A	4028	1/1	0.93	0.09	55,55,55,55	0
56	MG	1A	3655	1/1	0.93	0.10	63,63,63,63	0
56	MG	1A	3457	1/1	0.93	0.08	63,63,63,63	0
56	MG	1A	3532	1/1	0.93	0.10	67,67,67,67	0
56	MG	1A	3316	1/1	0.93	0.21	57,57,57,57	0
56	MG	1A	3459	1/1	0.93	0.16	38,38,38,38	0
56	MG	1A	3846	1/1	0.93	0.19	56,56,56,56	0
56	MG	2A	3461	1/1	0.93	0.25	50,50,50,50	0
56	MG	1A	3353	1/1	0.93	0.11	56,56,56,56	0
56	MG	2a	1671	1/1	0.93	0.24	57,57,57,57	0
56	MG	11	102	1/1	0.93	0.12	63,63,63,63	0
56	MG	1A	3540	1/1	0.93	0.20	48,48,48,48	0
56	MG	1A	4048	1/1	0.93	0.06	34,34,34,34	0
56	MG	2a	1677	1/1	0.93	0.17	56,56,56,56	0
56	MG	1a	1731	1/1	0.93	0.10	62,62,62,62	0
56	MG	2A	3291	1/1	0.93	0.14	64,64,64,64	0
56	MG	2A	3758	1/1	0.93	0.12	63,63,63,63	0
56	MG	2A	3099	1/1	0.93	0.13	64,64,64,64	0
56	MG	1a	1732	1/1	0.93	0.08	51,51,51,51	0
56	MG	2A	3474	1/1	0.93	0.09	56,56,56,56	0
56	MG	1A	3406	1/1	0.93	0.07	54,54,54,54	0
56	MG	2a	1687	1/1	0.93	0.12	61,61,61,61	0
56	MG	13	102	1/1	0.93	0.12	45,45,45,45	0
56	MG	2A	3771	1/1	0.93	0.11	77,77,77,77	0
56	MG	1A	3408	1/1	0.93	0.10	42,42,42,42	0
56	MG	13	104	1/1	0.93	0.14	55,55,55,55	0
56	MG	2a	1692	1/1	0.93	0.20	69,69,69,69	0
56	MG	2A	3108	1/1	0.93	0.25	55,55,55,55	0
56	MG	2A	3480	1/1	0.93	0.18	67,67,67,67	0
56	MG	2A	3481	1/1	0.93	0.25	74,74,74,74	0
56	MG	1A	3090	1/1	0.93	0.17	47,47,47,47	0
56	MG	1A	4058	1/1	0.93	0.14	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3301	1/1	0.93	0.16	67,67,67,67	0
56	MG	1A	3858	1/1	0.93	0.09	70,70,70,70	0
56	MG	1a	1754	1/1	0.93	0.07	63,63,63,63	0
56	MG	1A	3410	1/1	0.93	0.12	40,40,40,40	0
56	MG	18	104	1/1	0.93	0.08	52,52,52,52	0
56	MG	2A	3118	1/1	0.93	0.21	59,59,59,59	0
56	MG	1A	3861	1/1	0.93	0.10	25,25,25,25	0
56	MG	1A	3127	1/1	0.93	0.29	35,35,35,35	0
56	MG	1A	4069	1/1	0.93	0.07	41,41,41,41	0
56	MG	1a	1601	1/1	0.93	0.10	70,70,70,70	0
56	MG	1A	3546	1/1	0.93	0.25	56,56,56,56	0
56	MG	1A	3868	1/1	0.93	0.09	49,49,49,49	0
56	MG	1A	3549	1/1	0.93	0.18	49,49,49,49	0
56	MG	1A	3050	1/1	0.93	0.14	29,29,29,29	0
56	MG	1A	3470	1/1	0.93	0.21	55,55,55,55	0
56	MG	1a	1772	1/1	0.93	0.12	73,73,73,73	0
56	MG	2A	3141	1/1	0.93	0.20	48,48,48,48	0
56	MG	2A	3322	1/1	0.93	0.11	65,65,65,65	0
56	MG	2a	1718	1/1	0.93	0.26	70,70,70,70	0
56	MG	1A	3191	1/1	0.93	0.17	39,39,39,39	0
56	MG	1a	1609	1/1	0.93	0.09	59,59,59,59	0
56	MG	2a	1721	1/1	0.93	0.15	67,67,67,67	0
56	MG	1A	3414	1/1	0.93	0.26	64,64,64,64	0
56	MG	2A	3515	1/1	0.93	0.08	29,29,29,29	0
56	MG	2A	3843	1/1	0.93	0.13	45,45,45,45	0
56	MG	2a	1726	1/1	0.93	0.41	71,71,71,71	0
56	MG	1A	3100	1/1	0.93	0.13	69,69,69,69	0
56	MG	2A	3329	1/1	0.93	0.17	56,56,56,56	0
56	MG	2A	3330	1/1	0.93	0.10	59,59,59,59	0
56	MG	1a	1782	1/1	0.93	0.11	46,46,46,46	0
56	MG	1A	3891	1/1	0.93	0.09	30,30,30,30	0
56	MG	2A	3525	1/1	0.93	0.09	48,48,48,48	0
56	MG	2A	3153	1/1	0.93	0.21	63,63,63,63	0
56	MG	2a	1735	1/1	0.93	0.22	58,58,58,58	0
56	MG	1A	3416	1/1	0.93	0.15	61,61,61,61	0
56	MG	1A	3899	1/1	0.93	0.11	23,23,23,23	0
56	MG	1a	1618	1/1	0.93	0.14	59,59,59,59	0
56	MG	2A	3540	1/1	0.93	0.11	47,47,47,47	0
56	MG	1a	1621	1/1	0.93	0.11	57,57,57,57	0
56	MG	2A	3543	1/1	0.93	0.08	45,45,45,45	0
56	MG	1a	1623	1/1	0.93	0.41	74,74,74,74	0
56	MG	2a	1744	1/1	0.93	0.26	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1745	1/1	0.93	0.25	66,66,66,66	0
56	MG	2A	3868	1/1	0.93	0.10	64,64,64,64	0
56	MG	2A	3869	1/1	0.93	0.08	58,58,58,58	0
56	MG	2A	3551	1/1	0.93	0.11	57,57,57,57	0
56	MG	2A	3874	1/1	0.93	0.23	68,68,68,68	0
56	MG	1A	3289	1/1	0.93	0.09	52,52,52,52	0
56	MG	2A	3165	1/1	0.93	0.15	63,63,63,63	0
56	MG	1A	3478	1/1	0.93	0.11	53,53,53,53	0
56	MG	2a	1754	1/1	0.93	0.08	70,70,70,70	0
56	MG	1A	3017	1/1	0.93	0.17	67,67,67,67	0
56	MG	1A	3903	1/1	0.93	0.10	50,50,50,50	0
56	MG	1a	1629	1/1	0.93	0.23	53,53,53,53	0
56	MG	2a	1761	1/1	0.93	0.15	69,69,69,69	0
56	MG	2a	1763	1/1	0.93	0.15	78,78,78,78	0
56	MG	1A	3742	1/1	0.93	0.08	47,47,47,47	0
56	MG	1A	3482	1/1	0.93	0.14	45,45,45,45	0
56	MG	1A	3568	1/1	0.93	0.13	37,37,37,37	0
56	MG	2A	3351	1/1	0.93	0.20	63,63,63,63	0
56	MG	2a	1769	1/1	0.93	0.10	56,56,56,56	0
56	MG	2a	1770	1/1	0.93	0.23	66,66,66,66	0
56	MG	1B	202	1/1	0.93	0.16	47,47,47,47	0
56	MG	1A	3165	1/1	0.93	0.16	42,42,42,42	0
56	MG	1B	204	1/1	0.93	0.11	53,53,53,53	0
56	MG	1A	3209	1/1	0.93	0.18	59,59,59,59	0
56	MG	2A	3582	1/1	0.93	0.12	68,68,68,68	0
56	MG	2A	3583	1/1	0.93	0.18	57,57,57,57	0
56	MG	2A	3357	1/1	0.93	0.09	60,60,60,60	0
56	MG	1A	3489	1/1	0.93	0.16	58,58,58,58	0
56	MG	1A	3577	1/1	0.93	0.11	49,49,49,49	0
56	MG	2A	3184	1/1	0.93	0.21	59,59,59,59	0
56	MG	2D	307	1/1	0.93	0.20	58,58,58,58	0
56	MG	2a	1789	1/1	0.93	0.17	58,58,58,58	0
56	MG	1a	1641	1/1	0.93	0.12	55,55,55,55	0
56	MG	2A	3596	1/1	0.93	0.17	47,47,47,47	0
56	MG	2a	1794	1/1	0.93	0.16	60,60,60,60	0
56	MG	1A	3922	1/1	0.93	0.12	33,33,33,33	0
56	MG	2A	3188	1/1	0.93	0.26	65,65,65,65	0
56	MG	1A	3755	1/1	0.93	0.08	34,34,34,34	0
56	MG	2A	3601	1/1	0.93	0.18	76,76,76,76	0
56	MG	1a	1644	1/1	0.93	0.17	67,67,67,67	0
56	MG	1B	216	1/1	0.93	0.08	47,47,47,47	0
56	MG	2A	3604	1/1	0.93	0.17	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2F	303	1/1	0.93	0.11	56,56,56,56	0
56	MG	2a	1803	1/1	0.93	0.21	70,70,70,70	0
56	MG	2F	305	1/1	0.93	0.20	57,57,57,57	0
56	MG	1A	3136	1/1	0.93	0.17	29,29,29,29	0
56	MG	1A	3762	1/1	0.93	0.14	49,49,49,49	0
56	MG	2a	1808	1/1	0.93	0.17	61,61,61,61	0
56	MG	1A	3957	1/1	0.93	0.09	52,52,52,52	0
56	MG	2A	3198	1/1	0.93	0.13	61,61,61,61	0
56	MG	1A	3425	1/1	0.93	0.19	53,53,53,53	0
56	MG	1x	102	1/1	0.93	0.21	61,61,61,61	0
56	MG	1A	3054	1/1	0.93	0.10	51,51,51,51	0
56	MG	2A	3376	1/1	0.93	0.14	71,71,71,71	0
56	MG	1B	228	1/1	0.93	0.07	40,40,40,40	0
56	MG	1A	3767	1/1	0.93	0.11	22,22,22,22	0
56	MG	2A	3627	1/1	0.93	0.16	63,63,63,63	0
56	MG	1A	3496	1/1	0.93	0.15	50,50,50,50	0
56	MG	1A	3962	1/1	0.93	0.07	52,52,52,52	0
56	MG	1B	232	1/1	0.93	0.10	58,58,58,58	0
56	MG	1A	3374	1/1	0.93	0.15	50,50,50,50	0
56	MG	1B	234	1/1	0.93	0.09	57,57,57,57	0
56	MG	2A	3387	1/1	0.93	0.10	58,58,58,58	0
56	MG	2A	3646	1/1	0.93	0.12	52,52,52,52	0
56	MG	2A	3212	1/1	0.93	0.12	62,62,62,62	0
56	MG	1A	3172	1/1	0.93	0.14	58,58,58,58	0
56	MG	2A	3649	1/1	0.93	0.14	50,50,50,50	0
56	MG	1D	305	1/1	0.93	0.08	45,45,45,45	0
56	MG	1A	3219	1/1	0.93	0.09	60,60,60,60	0
56	MG	1A	3968	1/1	0.93	0.11	51,51,51,51	0
56	MG	1A	3793	1/1	0.93	0.07	38,38,38,38	0
56	MG	28	102	1/1	0.93	0.22	55,55,55,55	0
56	MG	2A	3004	1/1	0.93	0.34	61,61,61,61	0
56	MG	1A	3971	1/1	0.93	0.12	38,38,38,38	0
56	MG	2A	3007	1/1	0.93	0.12	57,57,57,57	0
56	MG	1A	3974	1/1	0.93	0.11	57,57,57,57	0
56	MG	2a	1838	1/1	0.93	0.09	85,85,85,85	0
56	MG	2A	3661	1/1	0.93	0.11	63,63,63,63	0
56	MG	1A	3307	1/1	0.93	0.09	50,50,50,50	0
56	MG	2A	3013	1/1	0.93	0.15	55,55,55,55	0
56	MG	1A	3507	1/1	0.93	0.10	59,59,59,59	0
56	MG	2e	201	1/1	0.93	0.11	71,71,71,71	0
56	MG	2f	201	1/1	0.93	0.12	55,55,55,55	0
56	MG	1A	3802	1/1	0.93	0.07	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1678	1/1	0.93	0.10	47,47,47,47	0
56	MG	1F	302	1/1	0.93	0.17	33,33,33,33	0
56	MG	1A	3984	1/1	0.93	0.08	65,65,65,65	0
56	MG	2A	3024	1/1	0.93	0.10	59,59,59,59	0
56	MG	2q	201	1/1	0.93	0.36	74,74,74,74	0
56	MG	1A	3379	1/1	0.93	0.08	45,45,45,45	0
56	MG	2q	203	1/1	0.93	0.11	74,74,74,74	0
56	MG	1A	3804	1/1	0.93	0.07	43,43,43,43	0
56	MG	2A	3674	1/1	0.93	0.24	44,44,44,44	0
56	MG	2A	3030	1/1	0.93	0.24	56,56,56,56	0
56	MG	1A	3058	1/1	0.93	0.09	46,46,46,46	0
56	MG	2A	3411	1/1	0.93	0.22	69,69,69,69	0
56	MG	1A	3441	1/1	0.93	0.24	57,57,57,57	0
56	MG	1A	3382	1/1	0.93	0.29	61,61,61,61	0
56	MG	1A	3444	1/1	0.93	0.24	44,44,44,44	0
56	MG	2A	3686	1/1	0.93	0.16	66,66,66,66	0
56	MG	1A	3516	1/1	0.93	0.17	48,48,48,48	0
56	MG	1A	3817	1/1	0.93	0.08	65,65,65,65	0
56	MG	2A	3044	1/1	0.93	0.10	55,55,55,55	0
56	MG	1a	1689	1/1	0.93	0.24	62,62,62,62	0
56	MG	2A	3046	1/1	0.93	0.13	62,62,62,62	0
56	MG	1A	3182	1/1	0.93	0.25	52,52,52,52	0
56	MG	1a	1691	1/1	0.93	0.27	55,55,55,55	0
56	MG	2A	3424	1/1	0.93	0.34	64,64,64,64	0
56	MG	1a	1693	1/1	0.93	0.36	57,57,57,57	0
56	MG	2x	105	1/1	0.93	0.07	71,71,71,71	0
56	MG	1O	204	1/1	0.93	0.11	53,53,53,53	0
56	MG	2A	3055	1/1	0.93	0.17	61,61,61,61	0
56	MG	2y	102	1/1	0.93	0.20	84,84,84,84	0
56	MG	1A	3523	1/1	0.93	0.13	51,51,51,51	0
56	MG	2a	1639	1/1	0.93	0.21	53,53,53,53	0
56	MG	2a	1640	1/1	0.93	0.29	65,65,65,65	0
56	MG	1A	3452	1/1	0.93	0.10	52,52,52,52	0
56	MG	2A	3059	1/1	0.93	0.10	69,69,69,69	0
56	MG	1A	3827	1/1	0.93	0.09	36,36,36,36	0
56	MG	1A	3527	1/1	0.93	0.11	55,55,55,55	0
59	ZN	24	501	1/1	0.93	0.12	130,130,130,130	0
56	MG	2A	3709	1/1	0.94	0.11	57,57,57,57	0
56	MG	1A	3344	1/1	0.94	0.10	65,65,65,65	0
56	MG	1a	1674	1/1	0.94	0.30	77,77,77,77	0
56	MG	1a	1675	1/1	0.94	0.12	66,66,66,66	0
56	MG	2A	3034	1/1	0.94	0.09	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	1651	1/1	0.94	0.12	59,59,59,59	0
56	MG	2A	3435	1/1	0.94	0.35	69,69,69,69	0
56	MG	1A	3034	1/1	0.94	0.24	35,35,35,35	0
56	MG	1A	3764	1/1	0.94	0.09	20,20,20,20	0
56	MG	1A	3237	1/1	0.94	0.19	31,31,31,31	0
56	MG	2A	3725	1/1	0.94	0.16	57,57,57,57	0
56	MG	2A	3439	1/1	0.94	0.30	70,70,70,70	0
56	MG	2A	3251	1/1	0.94	0.11	72,72,72,72	0
56	MG	1A	3348	1/1	0.94	0.22	44,44,44,44	0
56	MG	2A	3730	1/1	0.94	0.11	59,59,59,59	0
56	MG	1E	304	1/1	0.94	0.14	46,46,46,46	0
56	MG	2a	1662	1/1	0.94	0.09	69,69,69,69	0
56	MG	1A	3772	1/1	0.94	0.11	29,29,29,29	0
56	MG	1A	3015	1/1	0.94	0.14	38,38,38,38	0
56	MG	2A	3048	1/1	0.94	0.17	51,51,51,51	0
56	MG	2A	3050	1/1	0.94	0.10	47,47,47,47	0
56	MG	2A	3737	1/1	0.94	0.13	48,48,48,48	0
56	MG	1A	3781	1/1	0.94	0.10	59,59,59,59	0
56	MG	1A	3967	1/1	0.94	0.08	53,53,53,53	0
56	MG	2A	3261	1/1	0.94	0.10	54,54,54,54	0
56	MG	1A	3241	1/1	0.94	0.08	35,35,35,35	0
56	MG	1A	3246	1/1	0.94	0.26	62,62,62,62	0
56	MG	2A	3744	1/1	0.94	0.15	53,53,53,53	0
56	MG	2A	3454	1/1	0.94	0.27	64,64,64,64	0
56	MG	1F	312	1/1	0.94	0.10	36,36,36,36	0
56	MG	1A	3788	1/1	0.94	0.09	26,26,26,26	0
56	MG	1A	3091	1/1	0.94	0.18	49,49,49,49	0
56	MG	2a	1681	1/1	0.94	0.31	65,65,65,65	0
56	MG	1F	315	1/1	0.94	0.19	55,55,55,55	0
56	MG	2A	3460	1/1	0.94	0.10	64,64,64,64	0
56	MG	1A	3134	1/1	0.94	0.11	39,39,39,39	0
56	MG	2A	3269	1/1	0.94	0.20	54,54,54,54	0
56	MG	1A	3306	1/1	0.94	0.29	54,54,54,54	0
56	MG	1A	3358	1/1	0.94	0.10	59,59,59,59	0
56	MG	1A	3503	1/1	0.94	0.13	29,29,29,29	0
56	MG	1A	3985	1/1	0.94	0.09	67,67,67,67	0
56	MG	1A	3986	1/1	0.94	0.12	69,69,69,69	0
56	MG	1A	3504	1/1	0.94	0.12	42,42,42,42	0
56	MG	2A	3768	1/1	0.94	0.11	68,68,68,68	0
56	MG	1A	3505	1/1	0.94	0.10	44,44,44,44	0
56	MG	2A	3473	1/1	0.94	0.10	44,44,44,44	0
56	MG	1A	3204	1/1	0.94	0.10	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	2A	3774	1/1	0.94	0.18	75,75,75,75	0
56	MG	2A	3776	1/1	0.94	0.07	79,79,79,79	0
56	MG	1A	3994	1/1	0.94	0.08	26,26,26,26	0
56	MG	1A	3309	1/1	0.94	0.09	47,47,47,47	0
56	MG	1S	201	1/1	0.94	0.25	46,46,46,46	0
56	MG	1A	3996	1/1	0.94	0.08	45,45,45,45	0
56	MG	2A	3790	1/1	0.94	0.11	65,65,65,65	0
56	MG	1A	3205	1/1	0.94	0.10	22,22,22,22	0
56	MG	2A	3284	1/1	0.94	0.19	58,58,58,58	0
56	MG	1A	3998	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3087	1/1	0.94	0.09	56,56,56,56	0
56	MG	2A	3088	1/1	0.94	0.17	62,62,62,62	0
56	MG	1A	3808	1/1	0.94	0.05	21,21,21,21	0
56	MG	1A	3363	1/1	0.94	0.10	59,59,59,59	0
56	MG	1A	3253	1/1	0.94	0.17	56,56,56,56	0
56	MG	2A	3800	1/1	0.94	0.10	63,63,63,63	0
56	MG	2A	3488	1/1	0.94	0.08	65,65,65,65	0
56	MG	1A	4003	1/1	0.94	0.09	17,17,17,17	0
56	MG	1a	1717	1/1	0.94	0.29	61,61,61,61	0
56	MG	1A	3815	1/1	0.94	0.06	37,37,37,37	0
56	MG	2A	3806	1/1	0.94	0.11	62,62,62,62	0
56	MG	1A	3816	1/1	0.94	0.14	46,46,46,46	0
56	MG	2A	3810	1/1	0.94	0.07	82,82,82,82	0
56	MG	2A	3811	1/1	0.94	0.10	59,59,59,59	0
56	MG	1A	3615	1/1	0.94	0.09	53,53,53,53	0
56	MG	2a	1723	1/1	0.94	0.11	81,81,81,81	0
56	MG	1W	201	1/1	0.94	0.27	60,60,60,60	0
56	MG	2A	3817	1/1	0.94	0.12	52,52,52,52	0
56	MG	1W	206	1/1	0.94	0.13	29,29,29,29	0
56	MG	1A	3616	1/1	0.94	0.07	25,25,25,25	0
56	MG	1X	106	1/1	0.94	0.09	62,62,62,62	0
56	MG	1A	3819	1/1	0.94	0.12	49,49,49,49	0
56	MG	1A	4014	1/1	0.94	0.08	33,33,33,33	0
56	MG	1Z	301	1/1	0.94	0.13	65,65,65,65	0
56	MG	1A	3820	1/1	0.94	0.08	33,33,33,33	0
56	MG	1A	4017	1/1	0.94	0.09	45,45,45,45	0
56	MG	2A	3836	1/1	0.94	0.08	60,60,60,60	0
56	MG	1a	1741	1/1	0.94	0.12	55,55,55,55	0
56	MG	10	105	1/1	0.94	0.13	68,68,68,68	0
56	MG	2A	3510	1/1	0.94	0.13	43,43,43,43	0
56	MG	1A	3617	1/1	0.94	0.13	44,44,44,44	0
56	MG	2A	3114	1/1	0.94	0.23	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	10	108	1/1	0.94	0.07	42,42,42,42	0
56	MG	1a	1749	1/1	0.94	0.09	64,64,64,64	0
56	MG	2A	3856	1/1	0.94	0.09	62,62,62,62	0
56	MG	2A	3117	1/1	0.94	0.16	53,53,53,53	0
56	MG	1A	3512	1/1	0.94	0.10	46,46,46,46	0
56	MG	1A	3826	1/1	0.94	0.07	35,35,35,35	0
56	MG	1A	3313	1/1	0.94	0.27	56,56,56,56	0
56	MG	2A	3123	1/1	0.94	0.26	59,59,59,59	0
56	MG	2A	3528	1/1	0.94	0.09	52,52,52,52	0
56	MG	2A	3529	1/1	0.94	0.08	44,44,44,44	0
56	MG	1A	3622	1/1	0.94	0.05	30,30,30,30	0
56	MG	12	102	1/1	0.94	0.14	49,49,49,49	0
56	MG	1A	3830	1/1	0.94	0.07	34,34,34,34	0
56	MG	1A	3623	1/1	0.94	0.09	10,10,10,10	0
56	MG	2a	1759	1/1	0.94	0.08	75,75,75,75	0
56	MG	2A	3538	1/1	0.94	0.25	62,62,62,62	0
56	MG	1A	4030	1/1	0.94	0.06	48,48,48,48	0
56	MG	1A	3106	1/1	0.94	0.09	28,28,28,28	0
56	MG	2A	3134	1/1	0.94	0.12	48,48,48,48	0
56	MG	2A	3136	1/1	0.94	0.08	60,60,60,60	0
56	MG	1A	3630	1/1	0.94	0.09	40,40,40,40	0
56	MG	15	102	1/1	0.94	0.14	36,36,36,36	0
56	MG	2B	204	1/1	0.94	0.15	78,78,78,78	0
56	MG	15	104	1/1	0.94	0.12	27,27,27,27	0
56	MG	15	105	1/1	0.94	0.15	43,43,43,43	0
56	MG	2A	3144	1/1	0.94	0.12	43,43,43,43	0
56	MG	2B	209	1/1	0.94	0.19	65,65,65,65	0
56	MG	2a	1775	1/1	0.94	0.08	89,89,89,89	0
56	MG	1A	3440	1/1	0.94	0.18	53,53,53,53	0
56	MG	1A	3208	1/1	0.94	0.11	29,29,29,29	0
56	MG	1A	3521	1/1	0.94	0.33	43,43,43,43	0
56	MG	1A	3652	1/1	0.94	0.07	27,27,27,27	0
56	MG	2a	1782	1/1	0.94	0.06	65,65,65,65	0
56	MG	2B	214	1/1	0.94	0.17	70,70,70,70	0
56	MG	1A	3167	1/1	0.94	0.06	32,32,32,32	0
56	MG	1A	3525	1/1	0.94	0.20	66,66,66,66	0
56	MG	1A	3661	1/1	0.94	0.11	50,50,50,50	0
56	MG	1A	3373	1/1	0.94	0.23	41,41,41,41	0
56	MG	1A	3446	1/1	0.94	0.23	49,49,49,49	0
56	MG	2a	1791	1/1	0.94	0.14	75,75,75,75	0
56	MG	2A	3158	1/1	0.94	0.19	45,45,45,45	0
56	MG	2D	303	1/1	0.94	0.18	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3671	1/1	0.94	0.10	28,28,28,28	0
56	MG	1a	1794	1/1	0.94	0.08	75,75,75,75	0
56	MG	1A	3318	1/1	0.94	0.15	54,54,54,54	0
56	MG	2A	3162	1/1	0.94	0.12	62,62,62,62	0
56	MG	2A	3164	1/1	0.94	0.23	62,62,62,62	0
56	MG	1A	3448	1/1	0.94	0.15	34,34,34,34	0
56	MG	1A	3168	1/1	0.94	0.08	38,38,38,38	0
56	MG	2A	3167	1/1	0.94	0.27	68,68,68,68	0
56	MG	1A	3857	1/1	0.94	0.12	45,45,45,45	0
56	MG	2a	1804	1/1	0.94	0.10	73,73,73,73	0
56	MG	1A	3109	1/1	0.94	0.23	29,29,29,29	0
56	MG	1A	3700	1/1	0.94	0.15	51,51,51,51	0
56	MG	2F	301	1/1	0.94	0.11	72,72,72,72	0
56	MG	1A	3324	1/1	0.94	0.09	50,50,50,50	0
56	MG	1A	3864	1/1	0.94	0.24	35,35,35,35	0
56	MG	1A	3705	1/1	0.94	0.13	59,59,59,59	0
56	MG	1A	3709	1/1	0.94	0.08	46,46,46,46	0
56	MG	1A	4081	1/1	0.94	0.11	48,48,48,48	0
56	MG	2a	1813	1/1	0.94	0.15	64,64,64,64	0
56	MG	1A	3114	1/1	0.94	0.09	40,40,40,40	0
56	MG	1k	201	1/1	0.94	0.22	52,52,52,52	0
56	MG	2Q	201	1/1	0.94	0.08	58,58,58,58	0
56	MG	2A	3181	1/1	0.94	0.19	69,69,69,69	0
56	MG	1A	3380	1/1	0.94	0.10	30,30,30,30	0
56	MG	2R	201	1/1	0.94	0.10	51,51,51,51	0
56	MG	1A	3060	1/1	0.94	0.08	36,36,36,36	0
56	MG	1A	3223	1/1	0.94	0.07	51,51,51,51	0
56	MG	1A	3874	1/1	0.94	0.10	37,37,37,37	0
56	MG	1A	3876	1/1	0.94	0.07	41,41,41,41	0
56	MG	1A	3880	1/1	0.94	0.17	33,33,33,33	0
56	MG	1A	3462	1/1	0.94	0.17	47,47,47,47	0
56	MG	1A	3885	1/1	0.94	0.07	37,37,37,37	0
56	MG	1A	3719	1/1	0.94	0.20	59,59,59,59	0
56	MG	1A	3888	1/1	0.94	0.09	20,20,20,20	0
56	MG	1A	3225	1/1	0.94	0.12	43,43,43,43	0
56	MG	1A	3387	1/1	0.94	0.09	48,48,48,48	0
56	MG	2A	3384	1/1	0.94	0.35	65,65,65,65	0
56	MG	1A	3266	1/1	0.94	0.10	50,50,50,50	0
56	MG	1A	3392	1/1	0.94	0.25	28,28,28,28	0
56	MG	1A	3547	1/1	0.94	0.32	48,48,48,48	0
56	MG	25	104	1/1	0.94	0.09	59,59,59,59	0
56	MG	2A	3389	1/1	0.94	0.11	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1B	207	1/1	0.94	0.21	46,46,46,46	0
56	MG	1x	105	1/1	0.94	0.18	56,56,56,56	0
56	MG	2A	3652	1/1	0.94	0.14	64,64,64,64	0
56	MG	2A	3653	1/1	0.94	0.22	50,50,50,50	0
56	MG	1A	3267	1/1	0.94	0.11	54,54,54,54	0
56	MG	29	101	1/1	0.94	0.26	69,69,69,69	0
56	MG	1A	3143	1/1	0.94	0.06	43,43,43,43	0
56	MG	1B	210	1/1	0.94	0.11	39,39,39,39	0
56	MG	1B	211	1/1	0.94	0.12	53,53,53,53	0
56	MG	1a	1647	1/1	0.94	0.12	60,60,60,60	0
56	MG	2A	3659	1/1	0.94	0.11	74,74,74,74	0
56	MG	2A	3209	1/1	0.94	0.11	47,47,47,47	0
56	MG	1A	3733	1/1	0.94	0.11	52,52,52,52	0
56	MG	2A	3211	1/1	0.94	0.08	55,55,55,55	0
56	MG	1A	3096	1/1	0.94	0.16	43,43,43,43	0
56	MG	1A	3403	1/1	0.94	0.21	33,33,33,33	0
56	MG	1A	3404	1/1	0.94	0.20	53,53,53,53	0
56	MG	1A	3149	1/1	0.94	0.18	31,31,31,31	0
56	MG	2A	3217	1/1	0.94	0.20	57,57,57,57	0
56	MG	1B	221	1/1	0.94	0.05	49,49,49,49	0
56	MG	1A	3283	1/1	0.94	0.17	34,34,34,34	0
56	MG	1A	3152	1/1	0.94	0.10	44,44,44,44	0
56	MG	2A	3221	1/1	0.94	0.31	62,62,62,62	0
56	MG	1A	3477	1/1	0.94	0.08	52,52,52,52	0
56	MG	1A	3562	1/1	0.94	0.11	60,60,60,60	0
56	MG	1A	3290	1/1	0.94	0.06	38,38,38,38	0
56	MG	2A	3011	1/1	0.94	0.17	62,62,62,62	0
56	MG	1A	3927	1/1	0.94	0.06	44,44,44,44	0
56	MG	2A	3680	1/1	0.94	0.15	66,66,66,66	0
56	MG	2A	3014	1/1	0.94	0.12	52,52,52,52	0
56	MG	1A	3479	1/1	0.94	0.10	43,43,43,43	0
56	MG	1A	3934	1/1	0.94	0.07	38,38,38,38	0
56	MG	2a	1630	1/1	0.94	0.22	72,72,72,72	0
56	MG	2A	3231	1/1	0.94	0.15	44,44,44,44	0
56	MG	2A	3688	1/1	0.94	0.09	55,55,55,55	0
56	MG	2A	3232	1/1	0.94	0.20	55,55,55,55	0
56	MG	1A	3291	1/1	0.94	0.21	57,57,57,57	0
56	MG	1a	1667	1/1	0.94	0.17	66,66,66,66	0
56	MG	2A	3022	1/1	0.94	0.12	52,52,52,52	0
56	MG	2A	3423	1/1	0.94	0.29	54,54,54,54	0
56	MG	1A	3948	1/1	0.94	0.09	61,61,61,61	0
56	MG	1A	3952	1/1	0.94	0.09	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3025	1/1	0.94	0.18	67,67,67,67	0
56	MG	1A	3760	1/1	0.94	0.07	38,38,38,38	0
56	MG	1D	302	1/1	0.94	0.20	45,45,45,45	0
56	MG	2A	3430	1/1	0.94	0.21	57,57,57,57	0
56	MG	1A	3696	1/1	0.95	0.07	22,22,22,22	0
56	MG	1a	1673	1/1	0.95	0.19	61,61,61,61	0
56	MG	2A	3711	1/1	0.95	0.13	36,36,36,36	0
56	MG	1A	3323	1/1	0.95	0.09	41,41,41,41	0
56	MG	1A	3833	1/1	0.95	0.08	37,37,37,37	0
56	MG	1a	1676	1/1	0.95	0.16	69,69,69,69	0
56	MG	1A	3834	1/1	0.95	0.18	40,40,40,40	0
56	MG	1A	3553	1/1	0.95	0.08	53,53,53,53	0
56	MG	1A	3490	1/1	0.95	0.21	43,43,43,43	0
56	MG	2A	3239	1/1	0.95	0.13	53,53,53,53	0
56	MG	1A	3707	1/1	0.95	0.06	25,25,25,25	0
56	MG	2A	3723	1/1	0.95	0.18	58,58,58,58	0
56	MG	1A	3491	1/1	0.95	0.10	49,49,49,49	0
56	MG	1N	201	1/1	0.95	0.14	44,44,44,44	0
56	MG	1A	3235	1/1	0.95	0.42	52,52,52,52	0
56	MG	1A	4007	1/1	0.95	0.07	64,64,64,64	0
56	MG	2A	3040	1/1	0.95	0.12	54,54,54,54	0
56	MG	1A	3271	1/1	0.95	0.27	54,54,54,54	0
56	MG	1A	3006	1/1	0.95	0.09	54,54,54,54	0
56	MG	1A	3025	1/1	0.95	0.15	32,32,32,32	0
56	MG	1A	3565	1/1	0.95	0.10	36,36,36,36	0
56	MG	1P	203	1/1	0.95	0.14	28,28,28,28	0
56	MG	2A	3047	1/1	0.95	0.21	64,64,64,64	0
56	MG	1P	205	1/1	0.95	0.19	56,56,56,56	0
56	MG	2A	3450	1/1	0.95	0.23	59,59,59,59	0
56	MG	1P	206	1/1	0.95	0.14	44,44,44,44	0
56	MG	2A	3741	1/1	0.95	0.07	71,71,71,71	0
56	MG	1a	1692	1/1	0.95	0.36	61,61,61,61	0
56	MG	1Q	203	1/1	0.95	0.15	63,63,63,63	0
56	MG	1Q	204	1/1	0.95	0.07	49,49,49,49	0
56	MG	1R	203	1/1	0.95	0.23	38,38,38,38	0
56	MG	1a	1696	1/1	0.95	0.34	54,54,54,54	0
56	MG	1A	3497	1/1	0.95	0.09	49,49,49,49	0
56	MG	1A	3328	1/1	0.95	0.26	56,56,56,56	0
56	MG	2A	3750	1/1	0.95	0.15	66,66,66,66	0
56	MG	2a	1674	1/1	0.95	0.29	74,74,74,74	0
56	MG	2A	3459	1/1	0.95	0.14	50,50,50,50	0
56	MG	1A	3722	1/1	0.95	0.11	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3060	1/1	0.95	0.11	47,47,47,47	0
56	MG	1A	4018	1/1	0.95	0.07	39,39,39,39	0
56	MG	2A	3062	1/1	0.95	0.10	63,63,63,63	0
56	MG	2A	3757	1/1	0.95	0.23	72,72,72,72	0
56	MG	1A	3278	1/1	0.95	0.06	43,43,43,43	0
56	MG	2A	3759	1/1	0.95	0.07	56,56,56,56	0
56	MG	1A	3378	1/1	0.95	0.20	46,46,46,46	0
56	MG	1a	1703	1/1	0.95	0.26	60,60,60,60	0
56	MG	2A	3762	1/1	0.95	0.12	58,58,58,58	0
56	MG	1A	3501	1/1	0.95	0.12	57,57,57,57	0
56	MG	2A	3067	1/1	0.95	0.32	63,63,63,63	0
56	MG	1A	3571	1/1	0.95	0.24	53,53,53,53	0
56	MG	2A	3472	1/1	0.95	0.16	53,53,53,53	0
56	MG	1A	3330	1/1	0.95	0.08	39,39,39,39	0
56	MG	1U	207	1/1	0.95	0.14	36,36,36,36	0
56	MG	1A	3199	1/1	0.95	0.24	37,37,37,37	0
56	MG	1a	1710	1/1	0.95	0.19	55,55,55,55	0
56	MG	2A	3074	1/1	0.95	0.07	58,58,58,58	0
56	MG	2A	3279	1/1	0.95	0.13	61,61,61,61	0
56	MG	2A	3782	1/1	0.95	0.08	64,64,64,64	0
56	MG	1A	3863	1/1	0.95	0.07	53,53,53,53	0
56	MG	2A	3078	1/1	0.95	0.07	53,53,53,53	0
56	MG	1A	3578	1/1	0.95	0.27	43,43,43,43	0
56	MG	2A	3482	1/1	0.95	0.10	53,53,53,53	0
56	MG	1a	1713	1/1	0.95	0.10	39,39,39,39	0
56	MG	1A	4032	1/1	0.95	0.07	45,45,45,45	0
56	MG	1A	3738	1/1	0.95	0.10	59,59,59,59	0
56	MG	1A	3011	1/1	0.95	0.07	42,42,42,42	0
56	MG	1A	3582	1/1	0.95	0.09	34,34,34,34	0
56	MG	1A	3244	1/1	0.95	0.09	48,48,48,48	0
56	MG	1A	4041	1/1	0.95	0.07	33,33,33,33	0
56	MG	1a	1720	1/1	0.95	0.20	62,62,62,62	0
56	MG	1A	3743	1/1	0.95	0.07	57,57,57,57	0
56	MG	1A	3245	1/1	0.95	0.06	43,43,43,43	0
56	MG	1a	1724	1/1	0.95	0.12	70,70,70,70	0
56	MG	1Z	303	1/1	0.95	0.11	58,58,58,58	0
56	MG	1a	1726	1/1	0.95	0.12	55,55,55,55	0
56	MG	1a	1727	1/1	0.95	0.14	61,61,61,61	0
56	MG	10	101	1/1	0.95	0.22	44,44,44,44	0
56	MG	2A	3100	1/1	0.95	0.08	54,54,54,54	0
56	MG	1A	3873	1/1	0.95	0.07	38,38,38,38	0
56	MG	1A	3451	1/1	0.95	0.14	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3302	1/1	0.95	0.12	58,58,58,58	0
56	MG	1A	4051	1/1	0.95	0.07	53,53,53,53	0
56	MG	2A	3820	1/1	0.95	0.11	57,57,57,57	0
56	MG	1a	1736	1/1	0.95	0.09	56,56,56,56	0
56	MG	1A	3292	1/1	0.95	0.07	48,48,48,48	0
56	MG	2A	3107	1/1	0.95	0.11	54,54,54,54	0
56	MG	1A	3747	1/1	0.95	0.07	22,22,22,22	0
56	MG	1A	3594	1/1	0.95	0.19	44,44,44,44	0
56	MG	11	104	1/1	0.95	0.06	36,36,36,36	0
56	MG	2A	3311	1/1	0.95	0.22	57,57,57,57	0
56	MG	2a	1732	1/1	0.95	0.18	72,72,72,72	0
56	MG	1a	1742	1/1	0.95	0.05	46,46,46,46	0
56	MG	2A	3839	1/1	0.95	0.08	64,64,64,64	0
56	MG	2A	3840	1/1	0.95	0.06	28,28,28,28	0
56	MG	1A	3882	1/1	0.95	0.16	30,30,30,30	0
56	MG	1A	3453	1/1	0.95	0.10	32,32,32,32	0
56	MG	1a	1746	1/1	0.95	0.11	68,68,68,68	0
56	MG	12	101	1/1	0.95	0.09	58,58,58,58	0
56	MG	2A	3526	1/1	0.95	0.07	60,60,60,60	0
56	MG	2A	3850	1/1	0.95	0.07	68,68,68,68	0
56	MG	1A	3511	1/1	0.95	0.08	45,45,45,45	0
56	MG	2A	3852	1/1	0.95	0.18	59,59,59,59	0
56	MG	2A	3853	1/1	0.95	0.07	41,41,41,41	0
56	MG	1A	4062	1/1	0.95	0.04	19,19,19,19	0
56	MG	2A	3855	1/1	0.95	0.08	61,61,61,61	0
56	MG	2A	3531	1/1	0.95	0.08	45,45,45,45	0
56	MG	2A	3532	1/1	0.95	0.13	67,67,67,67	0
56	MG	1a	1753	1/1	0.95	0.18	66,66,66,66	0
56	MG	2A	3121	1/1	0.95	0.10	50,50,50,50	0
56	MG	2A	3321	1/1	0.95	0.20	64,64,64,64	0
56	MG	1A	3887	1/1	0.95	0.11	29,29,29,29	0
56	MG	1A	3002	1/1	0.95	0.08	47,47,47,47	0
56	MG	2A	3864	1/1	0.95	0.17	45,45,45,45	0
56	MG	1A	3756	1/1	0.95	0.10	45,45,45,45	0
56	MG	1A	3757	1/1	0.95	0.06	43,43,43,43	0
56	MG	1A	3894	1/1	0.95	0.09	44,44,44,44	0
56	MG	1A	3599	1/1	0.95	0.15	39,39,39,39	0
56	MG	1A	3337	1/1	0.95	0.24	58,58,58,58	0
56	MG	2A	3871	1/1	0.95	0.12	39,39,39,39	0
56	MG	1a	1763	1/1	0.95	0.11	68,68,68,68	0
56	MG	1A	3047	1/1	0.95	0.06	35,35,35,35	0
56	MG	2A	3135	1/1	0.95	0.19	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	16	101	1/1	0.95	0.09	58,58,58,58	0
56	MG	1A	4078	1/1	0.95	0.08	20,20,20,20	0
56	MG	1A	4080	1/1	0.95	0.08	33,33,33,33	0
56	MG	2A	3337	1/1	0.95	0.09	63,63,63,63	0
56	MG	1A	3396	1/1	0.95	0.28	41,41,41,41	0
56	MG	1A	3171	1/1	0.95	0.15	35,35,35,35	0
56	MG	2B	206	1/1	0.95	0.17	70,70,70,70	0
56	MG	2A	3143	1/1	0.95	0.23	52,52,52,52	0
56	MG	1A	4083	1/1	0.95	0.17	44,44,44,44	0
56	MG	2a	1781	1/1	0.95	0.07	60,60,60,60	0
56	MG	1a	1774	1/1	0.95	0.07	67,67,67,67	0
56	MG	1A	3604	1/1	0.95	0.13	56,56,56,56	0
56	MG	1A	3520	1/1	0.95	0.12	32,32,32,32	0
56	MG	1a	1778	1/1	0.95	0.09	63,63,63,63	0
56	MG	2A	3151	1/1	0.95	0.11	52,52,52,52	0
56	MG	1a	1780	1/1	0.95	0.09	64,64,64,64	0
56	MG	2A	3348	1/1	0.95	0.10	69,69,69,69	0
56	MG	1A	3769	1/1	0.95	0.05	21,21,21,21	0
56	MG	2A	3590	1/1	0.95	0.12	78,78,78,78	0
56	MG	2A	3350	1/1	0.95	0.14	60,60,60,60	0
56	MG	2A	3592	1/1	0.95	0.16	56,56,56,56	0
56	MG	1A	3297	1/1	0.95	0.13	65,65,65,65	0
56	MG	2A	3352	1/1	0.95	0.07	69,69,69,69	0
56	MG	1A	3461	1/1	0.95	0.09	54,54,54,54	0
56	MG	1A	3911	1/1	0.95	0.10	60,60,60,60	0
56	MG	1A	3777	1/1	0.95	0.08	63,63,63,63	0
56	MG	2D	308	1/1	0.95	0.09	54,54,54,54	0
56	MG	1a	1787	1/1	0.95	0.09	52,52,52,52	0
56	MG	1A	3779	1/1	0.95	0.06	30,30,30,30	0
56	MG	1A	3915	1/1	0.95	0.08	42,42,42,42	0
56	MG	1a	1797	1/1	0.95	0.08	72,72,72,72	0
56	MG	2E	304	1/1	0.95	0.19	47,47,47,47	0
56	MG	1A	3298	1/1	0.95	0.14	52,52,52,52	0
56	MG	1A	3148	1/1	0.95	0.14	41,41,41,41	0
56	MG	2A	3362	1/1	0.95	0.21	66,66,66,66	0
56	MG	1A	3405	1/1	0.95	0.07	43,43,43,43	0
56	MG	1a	1807	1/1	0.95	0.14	66,66,66,66	0
56	MG	2A	3614	1/1	0.95	0.07	51,51,51,51	0
56	MG	1a	1809	1/1	0.95	0.06	63,63,63,63	0
56	MG	2A	3618	1/1	0.95	0.09	43,43,43,43	0
56	MG	2A	3366	1/1	0.95	0.13	70,70,70,70	0
56	MG	1A	3925	1/1	0.95	0.09	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3170	1/1	0.95	0.09	59,59,59,59	0
56	MG	2A	3171	1/1	0.95	0.13	67,67,67,67	0
56	MG	2A	3625	1/1	0.95	0.10	52,52,52,52	0
56	MG	1A	3528	1/1	0.95	0.09	63,63,63,63	0
56	MG	1a	1620	1/1	0.95	0.06	69,69,69,69	0
56	MG	2Q	204	1/1	0.95	0.12	65,65,65,65	0
56	MG	2A	3629	1/1	0.95	0.12	67,67,67,67	0
56	MG	1A	3928	1/1	0.95	0.07	57,57,57,57	0
56	MG	1B	206	1/1	0.95	0.20	50,50,50,50	0
56	MG	2T	203	1/1	0.95	0.14	60,60,60,60	0
56	MG	1A	3619	1/1	0.95	0.06	37,37,37,37	0
56	MG	1e	201	1/1	0.95	0.27	56,56,56,56	0
56	MG	1A	3931	1/1	0.95	0.07	50,50,50,50	0
56	MG	2W	202	1/1	0.95	0.22	50,50,50,50	0
56	MG	1A	3251	1/1	0.95	0.17	38,38,38,38	0
56	MG	1A	3092	1/1	0.95	0.11	57,57,57,57	0
56	MG	1a	1628	1/1	0.95	0.16	57,57,57,57	0
56	MG	1A	3947	1/1	0.95	0.10	31,31,31,31	0
56	MG	1A	3796	1/1	0.95	0.14	63,63,63,63	0
56	MG	1A	3949	1/1	0.95	0.07	57,57,57,57	0
56	MG	1A	3950	1/1	0.95	0.08	55,55,55,55	0
56	MG	2A	3385	1/1	0.95	0.08	59,59,59,59	0
56	MG	1A	3180	1/1	0.95	0.10	38,38,38,38	0
56	MG	1B	217	1/1	0.95	0.11	48,48,48,48	0
56	MG	1A	3953	1/1	0.95	0.08	82,82,82,82	0
56	MG	1A	3181	1/1	0.95	0.07	36,36,36,36	0
56	MG	1A	3627	1/1	0.95	0.07	27,27,27,27	0
56	MG	1A	3533	1/1	0.95	0.15	52,52,52,52	0
56	MG	1A	3218	1/1	0.95	0.19	38,38,38,38	0
56	MG	1A	3049	1/1	0.95	0.04	20,20,20,20	0
56	MG	1B	227	1/1	0.95	0.07	40,40,40,40	0
56	MG	1A	3220	1/1	0.95	0.10	32,32,32,32	0
56	MG	2l	203	1/1	0.95	0.07	69,69,69,69	0
56	MG	1A	3222	1/1	0.95	0.09	47,47,47,47	0
56	MG	1A	3809	1/1	0.95	0.06	21,21,21,21	0
56	MG	1A	3812	1/1	0.95	0.29	30,30,30,30	0
56	MG	1A	3654	1/1	0.95	0.05	24,24,24,24	0
56	MG	1A	3312	1/1	0.95	0.12	54,54,54,54	0
56	MG	1A	3656	1/1	0.95	0.11	53,53,53,53	0
56	MG	1A	3658	1/1	0.95	0.12	46,46,46,46	0
56	MG	1a	1652	1/1	0.95	0.08	60,60,60,60	0
56	MG	1B	237	1/1	0.95	0.05	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1x	113	1/1	0.95	0.10	70,70,70,70	0
56	MG	1a	1656	1/1	0.95	0.07	54,54,54,54	0
56	MG	1A	3359	1/1	0.95	0.06	56,56,56,56	0
56	MG	1A	3029	1/1	0.95	0.12	35,35,35,35	0
56	MG	1D	308	1/1	0.95	0.09	47,47,47,47	0
56	MG	2A	3682	1/1	0.95	0.09	62,62,62,62	0
56	MG	2A	3216	1/1	0.95	0.10	55,55,55,55	0
56	MG	1A	3977	1/1	0.95	0.08	60,60,60,60	0
56	MG	1A	3184	1/1	0.95	0.07	54,54,54,54	0
56	MG	1A	3980	1/1	0.95	0.07	39,39,39,39	0
56	MG	2A	3006	1/1	0.95	0.21	55,55,55,55	0
56	MG	2A	3689	1/1	0.95	0.13	77,77,77,77	0
56	MG	2a	1623	1/1	0.95	0.09	66,66,66,66	0
56	MG	1A	3262	1/1	0.95	0.17	43,43,43,43	0
56	MG	1A	3022	1/1	0.95	0.14	45,45,45,45	0
56	MG	1A	3679	1/1	0.95	0.04	19,19,19,19	0
56	MG	2a	1627	1/1	0.95	0.07	67,67,67,67	0
56	MG	1A	3825	1/1	0.95	0.06	23,23,23,23	0
56	MG	1A	3187	1/1	0.95	0.10	57,57,57,57	0
56	MG	1A	3486	1/1	0.95	0.09	45,45,45,45	0
56	MG	1A	3083	1/1	0.95	0.20	42,42,42,42	0
56	MG	2A	3700	1/1	0.95	0.08	70,70,70,70	0
56	MG	1A	3104	1/1	0.95	0.16	36,36,36,36	0
56	MG	2A	3229	1/1	0.95	0.12	54,54,54,54	0
56	MG	1F	308	1/1	0.95	0.14	25,25,25,25	0
56	MG	2A	3708	1/1	0.96	0.09	67,67,67,67	0
56	MG	1A	3729	1/1	0.96	0.09	52,52,52,52	0
56	MG	2A	3043	1/1	0.96	0.13	70,70,70,70	0
56	MG	2A	3712	1/1	0.96	0.07	39,39,39,39	0
56	MG	2A	3244	1/1	0.96	0.11	58,58,58,58	0
56	MG	1A	3128	1/1	0.96	0.15	53,53,53,53	0
56	MG	1P	201	1/1	0.96	0.33	32,32,32,32	0
56	MG	1A	3860	1/1	0.96	0.09	24,24,24,24	0
56	MG	1A	3129	1/1	0.96	0.08	37,37,37,37	0
56	MG	1A	3005	1/1	0.96	0.07	48,48,48,48	0
56	MG	2A	3446	1/1	0.96	0.13	51,51,51,51	0
56	MG	2A	3049	1/1	0.96	0.05	31,31,31,31	0
56	MG	1Q	202	1/1	0.96	0.05	42,42,42,42	0
56	MG	1A	3010	1/1	0.96	0.05	35,35,35,35	0
56	MG	1A	3586	1/1	0.96	0.24	34,34,34,34	0
56	MG	1Q	205	1/1	0.96	0.11	47,47,47,47	0
56	MG	1Q	206	1/1	0.96	0.13	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3133	1/1	0.96	0.08	45,45,45,45	0
56	MG	1R	204	1/1	0.96	0.08	30,30,30,30	0
56	MG	2A	3057	1/1	0.96	0.10	71,71,71,71	0
56	MG	1A	3018	1/1	0.96	0.06	39,39,39,39	0
56	MG	1A	4027	1/1	0.96	0.06	56,56,56,56	0
56	MG	1A	3592	1/1	0.96	0.11	54,54,54,54	0
56	MG	1A	3437	1/1	0.96	0.05	44,44,44,44	0
56	MG	1A	3871	1/1	0.96	0.05	22,22,22,22	0
56	MG	1A	3062	1/1	0.96	0.32	56,56,56,56	0
56	MG	1A	3051	1/1	0.96	0.09	25,25,25,25	0
56	MG	1A	3198	1/1	0.96	0.07	51,51,51,51	0
56	MG	1A	4038	1/1	0.96	0.09	45,45,45,45	0
56	MG	1U	205	1/1	0.96	0.14	34,34,34,34	0
56	MG	1A	3442	1/1	0.96	0.07	56,56,56,56	0
56	MG	1A	3877	1/1	0.96	0.12	35,35,35,35	0
56	MG	1A	3878	1/1	0.96	0.12	33,33,33,33	0
56	MG	1V	201	1/1	0.96	0.16	30,30,30,30	0
56	MG	2A	3748	1/1	0.96	0.18	60,60,60,60	0
56	MG	1V	202	1/1	0.96	0.22	33,33,33,33	0
56	MG	1V	204	1/1	0.96	0.21	54,54,54,54	0
56	MG	1A	3371	1/1	0.96	0.14	50,50,50,50	0
56	MG	2A	3076	1/1	0.96	0.13	45,45,45,45	0
56	MG	1a	1721	1/1	0.96	0.20	49,49,49,49	0
56	MG	1A	4043	1/1	0.96	0.06	56,56,56,56	0
56	MG	1A	3750	1/1	0.96	0.06	18,18,18,18	0
56	MG	2A	3084	1/1	0.96	0.11	54,54,54,54	0
56	MG	1A	3093	1/1	0.96	0.13	28,28,28,28	0
56	MG	1X	103	1/1	0.96	0.23	49,49,49,49	0
56	MG	1A	3884	1/1	0.96	0.07	53,53,53,53	0
56	MG	1A	3445	1/1	0.96	0.22	37,37,37,37	0
56	MG	2A	3286	1/1	0.96	0.23	60,60,60,60	0
56	MG	1A	3754	1/1	0.96	0.05	29,29,29,29	0
56	MG	2A	3764	1/1	0.96	0.09	47,47,47,47	0
56	MG	2A	3766	1/1	0.96	0.13	47,47,47,47	0
56	MG	1A	3203	1/1	0.96	0.11	30,30,30,30	0
56	MG	1a	1730	1/1	0.96	0.05	44,44,44,44	0
56	MG	2A	3769	1/1	0.96	0.16	57,57,57,57	0
56	MG	1A	3065	1/1	0.96	0.13	52,52,52,52	0
56	MG	2A	3093	1/1	0.96	0.18	50,50,50,50	0
56	MG	2A	3772	1/1	0.96	0.08	50,50,50,50	0
56	MG	1A	4056	1/1	0.96	0.07	57,57,57,57	0
56	MG	1A	3889	1/1	0.96	0.06	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3775	1/1	0.96	0.05	60,60,60,60	0
56	MG	10	102	1/1	0.96	0.05	42,42,42,42	0
56	MG	1A	3141	1/1	0.96	0.07	18,18,18,18	0
56	MG	1a	1739	1/1	0.96	0.10	59,59,59,59	0
56	MG	2A	3495	1/1	0.96	0.08	66,66,66,66	0
56	MG	2A	3783	1/1	0.96	0.07	36,36,36,36	0
56	MG	2A	3784	1/1	0.96	0.07	69,69,69,69	0
56	MG	1A	3517	1/1	0.96	0.08	55,55,55,55	0
56	MG	2A	3497	1/1	0.96	0.17	43,43,43,43	0
56	MG	2A	3788	1/1	0.96	0.07	59,59,59,59	0
56	MG	2A	3789	1/1	0.96	0.09	69,69,69,69	0
56	MG	1A	3893	1/1	0.96	0.12	56,56,56,56	0
56	MG	1A	3607	1/1	0.96	0.07	54,54,54,54	0
56	MG	1A	3895	1/1	0.96	0.08	22,22,22,22	0
56	MG	1A	3761	1/1	0.96	0.11	49,49,49,49	0
56	MG	1A	3206	1/1	0.96	0.10	36,36,36,36	0
56	MG	1A	3610	1/1	0.96	0.06	35,35,35,35	0
56	MG	1A	3095	1/1	0.96	0.08	55,55,55,55	0
56	MG	1A	3613	1/1	0.96	0.13	41,41,41,41	0
56	MG	2A	3306	1/1	0.96	0.12	57,57,57,57	0
56	MG	2A	3109	1/1	0.96	0.09	45,45,45,45	0
56	MG	1a	1751	1/1	0.96	0.15	43,43,43,43	0
56	MG	1A	3614	1/1	0.96	0.07	27,27,27,27	0
56	MG	2A	3513	1/1	0.96	0.12	37,37,37,37	0
56	MG	1A	3768	1/1	0.96	0.05	26,26,26,26	0
56	MG	1A	4079	1/1	0.96	0.09	32,32,32,32	0
56	MG	2A	3807	1/1	0.96	0.05	56,56,56,56	0
56	MG	1A	3066	1/1	0.96	0.05	25,25,25,25	0
56	MG	2A	3809	1/1	0.96	0.07	58,58,58,58	0
56	MG	1A	3146	1/1	0.96	0.21	34,34,34,34	0
56	MG	1A	3097	1/1	0.96	0.05	35,35,35,35	0
56	MG	2A	3812	1/1	0.96	0.05	40,40,40,40	0
56	MG	1A	3456	1/1	0.96	0.11	45,45,45,45	0
56	MG	2A	3814	1/1	0.96	0.10	48,48,48,48	0
56	MG	1A	3214	1/1	0.96	0.05	39,39,39,39	0
56	MG	1A	3099	1/1	0.96	0.13	48,48,48,48	0
56	MG	2A	3818	1/1	0.96	0.08	52,52,52,52	0
56	MG	1A	3068	1/1	0.96	0.21	59,59,59,59	0
56	MG	1A	3916	1/1	0.96	0.10	35,35,35,35	0
56	MG	17	103	1/1	0.96	0.10	40,40,40,40	0
56	MG	2A	3825	1/1	0.96	0.08	62,62,62,62	0
56	MG	1A	3388	1/1	0.96	0.09	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	18	101	1/1	0.96	0.27	58,58,58,58	0
56	MG	1a	1771	1/1	0.96	0.09	70,70,70,70	0
56	MG	18	102	1/1	0.96	0.16	41,41,41,41	0
56	MG	2A	3831	1/1	0.96	0.07	47,47,47,47	0
56	MG	2A	3128	1/1	0.96	0.18	65,65,65,65	0
56	MG	1A	3625	1/1	0.96	0.09	31,31,31,31	0
56	MG	2A	3539	1/1	0.96	0.06	57,57,57,57	0
56	MG	2a	1739	1/1	0.96	0.24	55,55,55,55	0
56	MG	2A	3837	1/1	0.96	0.07	49,49,49,49	0
56	MG	2A	3130	1/1	0.96	0.07	53,53,53,53	0
56	MG	1A	3155	1/1	0.96	0.07	37,37,37,37	0
56	MG	2A	3133	1/1	0.96	0.16	75,75,75,75	0
56	MG	2A	3842	1/1	0.96	0.06	57,57,57,57	0
56	MG	2A	3544	1/1	0.96	0.06	52,52,52,52	0
56	MG	1A	3924	1/1	0.96	0.07	36,36,36,36	0
56	MG	1A	4093	1/1	0.96	0.15	46,46,46,46	0
56	MG	1A	3071	1/1	0.96	0.08	29,29,29,29	0
56	MG	1A	3275	1/1	0.96	0.08	25,25,25,25	0
56	MG	2A	3138	1/1	0.96	0.17	50,50,50,50	0
56	MG	1A	4096	1/1	0.96	0.10	50,50,50,50	0
56	MG	1A	4098	1/1	0.96	0.06	34,34,34,34	0
56	MG	2a	1753	1/1	0.96	0.07	71,71,71,71	0
56	MG	2A	3563	1/1	0.96	0.07	39,39,39,39	0
56	MG	1A	3103	1/1	0.96	0.05	32,32,32,32	0
56	MG	2A	3567	1/1	0.96	0.11	37,37,37,37	0
56	MG	1A	3643	1/1	0.96	0.14	49,49,49,49	0
56	MG	1B	201	1/1	0.96	0.07	41,41,41,41	0
56	MG	1A	3644	1/1	0.96	0.09	37,37,37,37	0
56	MG	1a	1610	1/1	0.96	0.13	52,52,52,52	0
56	MG	1A	3397	1/1	0.96	0.07	65,65,65,65	0
56	MG	2A	3577	1/1	0.96	0.10	41,41,41,41	0
56	MG	2A	3863	1/1	0.96	0.17	58,58,58,58	0
56	MG	1a	1613	1/1	0.96	0.06	58,58,58,58	0
56	MG	1A	3647	1/1	0.96	0.08	17,17,17,17	0
56	MG	1a	1800	1/1	0.96	0.07	74,74,74,74	0
56	MG	1B	205	1/1	0.96	0.17	54,54,54,54	0
56	MG	1A	3943	1/1	0.96	0.06	62,62,62,62	0
56	MG	1A	3648	1/1	0.96	0.11	56,56,56,56	0
56	MG	2A	3156	1/1	0.96	0.06	55,55,55,55	0
56	MG	2A	3872	1/1	0.96	0.08	50,50,50,50	0
56	MG	1A	3538	1/1	0.96	0.17	41,41,41,41	0
56	MG	1A	3398	1/1	0.96	0.06	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3221	1/1	0.96	0.23	47,47,47,47	0
56	MG	1A	3951	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3468	1/1	0.96	0.14	32,32,32,32	0
56	MG	1a	1814	1/1	0.96	0.14	57,57,57,57	0
56	MG	2a	1784	1/1	0.96	0.15	65,65,65,65	0
56	MG	2a	1785	1/1	0.96	0.06	70,70,70,70	0
56	MG	2A	3163	1/1	0.96	0.14	44,44,44,44	0
56	MG	1A	3042	1/1	0.96	0.13	27,27,27,27	0
56	MG	1A	3401	1/1	0.96	0.26	35,35,35,35	0
56	MG	2A	3600	1/1	0.96	0.05	38,38,38,38	0
56	MG	1A	3075	1/1	0.96	0.05	31,31,31,31	0
56	MG	1A	3660	1/1	0.96	0.08	47,47,47,47	0
56	MG	2a	1792	1/1	0.96	0.07	57,57,57,57	0
56	MG	1f	201	1/1	0.96	0.12	54,54,54,54	0
56	MG	1A	3472	1/1	0.96	0.06	42,42,42,42	0
56	MG	1B	219	1/1	0.96	0.13	44,44,44,44	0
56	MG	1A	3079	1/1	0.96	0.06	24,24,24,24	0
56	MG	2A	3607	1/1	0.96	0.09	61,61,61,61	0
56	MG	2A	3609	1/1	0.96	0.07	57,57,57,57	0
56	MG	1A	3663	1/1	0.96	0.07	29,29,29,29	0
56	MG	1m	3001	1/1	0.96	0.12	64,64,64,64	0
56	MG	1A	3963	1/1	0.96	0.05	35,35,35,35	0
56	MG	1B	224	1/1	0.96	0.12	59,59,59,59	0
56	MG	1a	1635	1/1	0.96	0.08	32,32,32,32	0
56	MG	2A	3616	1/1	0.96	0.13	46,46,46,46	0
56	MG	1A	3667	1/1	0.96	0.05	23,23,23,23	0
56	MG	1A	3108	1/1	0.96	0.28	46,46,46,46	0
56	MG	2A	3179	1/1	0.96	0.09	37,37,37,37	0
56	MG	1A	3548	1/1	0.96	0.08	25,25,25,25	0
56	MG	1A	3822	1/1	0.96	0.23	32,32,32,32	0
56	MG	1A	3341	1/1	0.96	0.06	49,49,49,49	0
56	MG	1A	3342	1/1	0.96	0.21	35,35,35,35	0
56	MG	2A	3379	1/1	0.96	0.05	53,53,53,53	0
56	MG	1A	3343	1/1	0.96	0.21	43,43,43,43	0
56	MG	2A	3631	1/1	0.96	0.07	54,54,54,54	0
56	MG	2A	3185	1/1	0.96	0.08	51,51,51,51	0
56	MG	2A	3635	1/1	0.96	0.17	48,48,48,48	0
56	MG	2A	3636	1/1	0.96	0.07	47,47,47,47	0
56	MG	2A	3637	1/1	0.96	0.07	53,53,53,53	0
56	MG	2A	3638	1/1	0.96	0.08	56,56,56,56	0
56	MG	1A	3972	1/1	0.96	0.07	45,45,45,45	0
56	MG	1A	3229	1/1	0.96	0.20	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3975	1/1	0.96	0.14	61,61,61,61	0
56	MG	2A	3644	1/1	0.96	0.06	42,42,42,42	0
56	MG	1A	3293	1/1	0.96	0.17	33,33,33,33	0
56	MG	1A	3694	1/1	0.96	0.09	30,30,30,30	0
56	MG	2A	3192	1/1	0.96	0.23	71,71,71,71	0
56	MG	1A	3480	1/1	0.96	0.11	64,64,64,64	0
56	MG	1D	303	1/1	0.96	0.16	41,41,41,41	0
56	MG	1A	3555	1/1	0.96	0.06	47,47,47,47	0
56	MG	2A	3196	1/1	0.96	0.07	53,53,53,53	0
56	MG	1D	306	1/1	0.96	0.16	35,35,35,35	0
56	MG	1a	1653	1/1	0.96	0.15	49,49,49,49	0
56	MG	1A	3044	1/1	0.96	0.11	35,35,35,35	0
56	MG	1D	310	1/1	0.96	0.07	28,28,28,28	0
56	MG	2U	202	1/1	0.96	0.10	64,64,64,64	0
56	MG	1A	3982	1/1	0.96	0.09	57,57,57,57	0
56	MG	1A	3983	1/1	0.96	0.12	65,65,65,65	0
56	MG	1A	3702	1/1	0.96	0.07	32,32,32,32	0
56	MG	1E	301	1/1	0.96	0.18	40,40,40,40	0
56	MG	1A	3232	1/1	0.96	0.18	36,36,36,36	0
56	MG	2A	3002	1/1	0.96	0.30	62,62,62,62	0
56	MG	1E	303	1/1	0.96	0.18	40,40,40,40	0
56	MG	2A	3663	1/1	0.96	0.13	68,68,68,68	0
56	MG	1A	3836	1/1	0.96	0.11	49,49,49,49	0
56	MG	1A	3484	1/1	0.96	0.11	43,43,43,43	0
56	MG	1A	3112	1/1	0.96	0.14	31,31,31,31	0
56	MG	1A	3989	1/1	0.96	0.09	24,24,24,24	0
56	MG	1A	3710	1/1	0.96	0.06	34,34,34,34	0
56	MG	23	101	1/1	0.96	0.06	61,61,61,61	0
56	MG	25	101	1/1	0.96	0.13	57,57,57,57	0
56	MG	25	102	1/1	0.96	0.22	49,49,49,49	0
56	MG	1E	315	1/1	0.96	0.11	48,48,48,48	0
56	MG	1A	3082	1/1	0.96	0.17	38,38,38,38	0
56	MG	2A	3012	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3118	1/1	0.96	0.15	30,30,30,30	0
56	MG	1A	3417	1/1	0.96	0.07	34,34,34,34	0
56	MG	2A	3413	1/1	0.96	0.11	42,42,42,42	0
56	MG	2A	3676	1/1	0.96	0.08	70,70,70,70	0
56	MG	1F	310	1/1	0.96	0.07	50,50,50,50	0
56	MG	1F	311	1/1	0.96	0.06	42,42,42,42	0
56	MG	1A	3055	1/1	0.96	0.08	33,33,33,33	0
56	MG	2A	3019	1/1	0.96	0.09	39,39,39,39	0
56	MG	1A	3845	1/1	0.96	0.05	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3122	1/1	0.96	0.25	48,48,48,48	0
56	MG	1A	3847	1/1	0.96	0.07	39,39,39,39	0
56	MG	1A	3019	1/1	0.96	0.21	51,51,51,51	0
56	MG	1A	3357	1/1	0.96	0.13	39,39,39,39	0
56	MG	2A	3026	1/1	0.96	0.11	51,51,51,51	0
56	MG	1A	3126	1/1	0.96	0.20	38,38,38,38	0
56	MG	1A	3087	1/1	0.96	0.20	36,36,36,36	0
56	MG	1A	3853	1/1	0.96	0.09	42,42,42,42	0
56	MG	1A	3575	1/1	0.96	0.09	34,34,34,34	0
56	MG	2A	3694	1/1	0.96	0.07	68,68,68,68	0
56	MG	1N	204	1/1	0.96	0.25	45,45,45,45	0
56	MG	2A	3033	1/1	0.96	0.08	49,49,49,49	0
56	MG	1A	3855	1/1	0.96	0.10	45,45,45,45	0
56	MG	1A	3426	1/1	0.96	0.06	48,48,48,48	0
56	MG	2A	3038	1/1	0.96	0.11	36,36,36,36	0
56	MG	1O	202	1/1	0.96	0.08	49,49,49,49	0
56	MG	2A	3704	1/1	0.96	0.06	31,31,31,31	0
56	MG	1O	203	1/1	0.96	0.12	50,50,50,50	0
56	MG	1A	4013	1/1	0.96	0.06	31,31,31,31	0
56	MG	2A	3241	1/1	0.96	0.19	52,52,52,52	0
59	ZN	2n	501	1/1	0.96	0.07	101,101,101,101	0
56	MG	1a	1619	1/1	0.97	0.15	51,51,51,51	0
56	MG	1a	1802	1/1	0.97	0.05	60,60,60,60	0
56	MG	1A	3131	1/1	0.97	0.08	43,43,43,43	0
56	MG	2a	1643	1/1	0.97	0.10	55,55,55,55	0
56	MG	2A	3517	1/1	0.97	0.21	60,60,60,60	0
56	MG	2A	3519	1/1	0.97	0.11	54,54,54,54	0
56	MG	2A	3324	1/1	0.97	0.08	60,60,60,60	0
56	MG	2A	3325	1/1	0.97	0.06	56,56,56,56	0
56	MG	2a	1648	1/1	0.97	0.10	64,64,64,64	0
56	MG	2A	3765	1/1	0.97	0.09	47,47,47,47	0
56	MG	1a	1806	1/1	0.97	0.06	57,57,57,57	0
56	MG	2A	3523	1/1	0.97	0.11	43,43,43,43	0
56	MG	1A	3973	1/1	0.97	0.12	57,57,57,57	0
56	MG	1a	1622	1/1	0.97	0.06	48,48,48,48	0
56	MG	1A	3711	1/1	0.97	0.07	24,24,24,24	0
56	MG	1A	3713	1/1	0.97	0.07	27,27,27,27	0
56	MG	1A	3212	1/1	0.97	0.10	48,48,48,48	0
56	MG	2A	3530	1/1	0.97	0.08	51,51,51,51	0
56	MG	1A	3579	1/1	0.97	0.08	39,39,39,39	0
56	MG	1A	3978	1/1	0.97	0.08	65,65,65,65	0
56	MG	2A	3148	1/1	0.97	0.22	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3777	1/1	0.97	0.05	59,59,59,59	0
56	MG	2A	3778	1/1	0.97	0.05	59,59,59,59	0
56	MG	2A	3779	1/1	0.97	0.12	63,63,63,63	0
56	MG	1A	3067	1/1	0.97	0.12	34,34,34,34	0
56	MG	2A	3150	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3370	1/1	0.97	0.14	37,37,37,37	0
56	MG	1B	236	1/1	0.97	0.05	38,38,38,38	0
56	MG	1A	3584	1/1	0.97	0.07	40,40,40,40	0
56	MG	1A	3317	1/1	0.97	0.05	36,36,36,36	0
56	MG	1A	3720	1/1	0.97	0.04	13,13,13,13	0
56	MG	2A	3787	1/1	0.97	0.05	47,47,47,47	0
56	MG	2A	3542	1/1	0.97	0.07	65,65,65,65	0
56	MG	2a	1673	1/1	0.97	0.08	62,62,62,62	0
56	MG	1D	304	1/1	0.97	0.08	18,18,18,18	0
56	MG	1A	3439	1/1	0.97	0.18	34,34,34,34	0
56	MG	2A	3545	1/1	0.97	0.07	40,40,40,40	0
56	MG	2A	3546	1/1	0.97	0.05	49,49,49,49	0
56	MG	1A	3372	1/1	0.97	0.14	44,44,44,44	0
56	MG	1l	202	1/1	0.97	0.09	65,65,65,65	0
56	MG	2a	1680	1/1	0.97	0.11	52,52,52,52	0
56	MG	2A	3554	1/1	0.97	0.11	54,54,54,54	0
56	MG	1A	3043	1/1	0.97	0.18	33,33,33,33	0
56	MG	1a	1638	1/1	0.97	0.08	46,46,46,46	0
56	MG	2A	3558	1/1	0.97	0.06	51,51,51,51	0
56	MG	1D	309	1/1	0.97	0.17	47,47,47,47	0
56	MG	1A	3849	1/1	0.97	0.06	56,56,56,56	0
56	MG	1A	3724	1/1	0.97	0.16	44,44,44,44	0
56	MG	2A	3803	1/1	0.97	0.07	62,62,62,62	0
56	MG	1A	3030	1/1	0.97	0.23	27,27,27,27	0
56	MG	1A	3263	1/1	0.97	0.04	49,49,49,49	0
56	MG	1A	3992	1/1	0.97	0.08	22,22,22,22	0
56	MG	2A	3569	1/1	0.97	0.08	37,37,37,37	0
56	MG	1A	3322	1/1	0.97	0.06	52,52,52,52	0
56	MG	1A	3012	1/1	0.97	0.04	26,26,26,26	0
56	MG	1A	3111	1/1	0.97	0.05	41,41,41,41	0
56	MG	1A	3175	1/1	0.97	0.32	32,32,32,32	0
56	MG	1A	3514	1/1	0.97	0.14	29,29,29,29	0
56	MG	1A	3734	1/1	0.97	0.09	47,47,47,47	0
56	MG	1E	311	1/1	0.97	0.07	21,21,21,21	0
56	MG	2A	3815	1/1	0.97	0.07	41,41,41,41	0
56	MG	1A	4000	1/1	0.97	0.05	40,40,40,40	0
56	MG	1A	3735	1/1	0.97	0.04	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3581	1/1	0.97	0.07	33,33,33,33	0
56	MG	1A	3736	1/1	0.97	0.06	29,29,29,29	0
56	MG	1A	3862	1/1	0.97	0.04	33,33,33,33	0
56	MG	1F	306	1/1	0.97	0.11	40,40,40,40	0
56	MG	1x	109	1/1	0.97	0.08	38,38,38,38	0
56	MG	1A	3177	1/1	0.97	0.13	30,30,30,30	0
56	MG	1A	3449	1/1	0.97	0.14	34,34,34,34	0
56	MG	1A	3450	1/1	0.97	0.21	41,41,41,41	0
56	MG	1A	3866	1/1	0.97	0.12	46,46,46,46	0
56	MG	1A	3741	1/1	0.97	0.05	50,50,50,50	0
56	MG	1A	3268	1/1	0.97	0.22	34,34,34,34	0
56	MG	1A	3519	1/1	0.97	0.13	23,23,23,23	0
56	MG	1G	201	1/1	0.97	0.09	40,40,40,40	0
56	MG	2A	3189	1/1	0.97	0.06	55,55,55,55	0
56	MG	2A	3838	1/1	0.97	0.08	65,65,65,65	0
56	MG	1A	3179	1/1	0.97	0.07	18,18,18,18	0
56	MG	1A	3383	1/1	0.97	0.04	43,43,43,43	0
56	MG	1A	3522	1/1	0.97	0.16	40,40,40,40	0
56	MG	1A	3385	1/1	0.97	0.18	34,34,34,34	0
56	MG	1A	3009	1/1	0.97	0.08	20,20,20,20	0
56	MG	1A	3875	1/1	0.97	0.09	32,32,32,32	0
56	MG	2A	3845	1/1	0.97	0.05	45,45,45,45	0
56	MG	1N	203	1/1	0.97	0.05	36,36,36,36	0
56	MG	2A	3847	1/1	0.97	0.07	51,51,51,51	0
56	MG	2A	3848	1/1	0.97	0.09	43,43,43,43	0
56	MG	1A	3113	1/1	0.97	0.15	33,33,33,33	0
56	MG	2A	3608	1/1	0.97	0.08	47,47,47,47	0
56	MG	1A	3273	1/1	0.97	0.09	40,40,40,40	0
56	MG	1A	3274	1/1	0.97	0.15	45,45,45,45	0
56	MG	1A	3879	1/1	0.97	0.21	37,37,37,37	0
56	MG	2A	3612	1/1	0.97	0.07	34,34,34,34	0
56	MG	1A	3076	1/1	0.97	0.07	32,32,32,32	0
56	MG	2A	3015	1/1	0.97	0.15	59,59,59,59	0
56	MG	1A	3115	1/1	0.97	0.06	45,45,45,45	0
56	MG	1A	3116	1/1	0.97	0.07	47,47,47,47	0
56	MG	1A	4031	1/1	0.97	0.08	42,42,42,42	0
56	MG	1A	3883	1/1	0.97	0.18	39,39,39,39	0
56	MG	1A	3281	1/1	0.97	0.10	30,30,30,30	0
56	MG	2A	3208	1/1	0.97	0.06	64,64,64,64	0
56	MG	2A	3622	1/1	0.97	0.08	40,40,40,40	0
56	MG	1P	204	1/1	0.97	0.21	28,28,28,28	0
56	MG	1A	3145	1/1	0.97	0.13	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3534	1/1	0.97	0.10	54,54,54,54	0
56	MG	1A	3285	1/1	0.97	0.20	34,34,34,34	0
56	MG	1A	3286	1/1	0.97	0.14	49,49,49,49	0
56	MG	2A	3027	1/1	0.97	0.07	45,45,45,45	0
56	MG	2A	3870	1/1	0.97	0.13	41,41,41,41	0
56	MG	2A	3632	1/1	0.97	0.11	59,59,59,59	0
56	MG	1A	3537	1/1	0.97	0.18	32,32,32,32	0
56	MG	1A	3287	1/1	0.97	0.18	55,55,55,55	0
56	MG	1A	3288	1/1	0.97	0.11	38,38,38,38	0
56	MG	2a	1757	1/1	0.97	0.06	75,75,75,75	0
56	MG	1A	3892	1/1	0.97	0.08	38,38,38,38	0
56	MG	1A	4045	1/1	0.97	0.11	31,31,31,31	0
56	MG	1A	3077	1/1	0.97	0.21	48,48,48,48	0
56	MG	1A	3638	1/1	0.97	0.06	26,26,26,26	0
56	MG	2A	3641	1/1	0.97	0.14	39,39,39,39	0
56	MG	2A	3642	1/1	0.97	0.10	57,57,57,57	0
56	MG	2a	1765	1/1	0.97	0.09	68,68,68,68	0
56	MG	2A	3035	1/1	0.97	0.06	51,51,51,51	0
56	MG	1A	4049	1/1	0.97	0.05	48,48,48,48	0
56	MG	1A	3078	1/1	0.97	0.14	38,38,38,38	0
56	MG	1A	3770	1/1	0.97	0.05	33,33,33,33	0
56	MG	1A	3897	1/1	0.97	0.10	25,25,25,25	0
56	MG	1A	3190	1/1	0.97	0.16	32,32,32,32	0
56	MG	1A	3774	1/1	0.97	0.09	31,31,31,31	0
56	MG	1A	4057	1/1	0.97	0.09	65,65,65,65	0
56	MG	1A	3775	1/1	0.97	0.05	29,29,29,29	0
56	MG	2a	1776	1/1	0.97	0.10	51,51,51,51	0
56	MG	1A	3407	1/1	0.97	0.05	43,43,43,43	0
56	MG	1A	3048	1/1	0.97	0.20	34,34,34,34	0
56	MG	1a	1705	1/1	0.97	0.07	51,51,51,51	0
56	MG	1A	4061	1/1	0.97	0.04	37,37,37,37	0
56	MG	1A	3123	1/1	0.97	0.16	42,42,42,42	0
56	MG	1A	4063	1/1	0.97	0.06	46,46,46,46	0
56	MG	1A	3195	1/1	0.97	0.23	30,30,30,30	0
56	MG	2D	301	1/1	0.97	0.10	44,44,44,44	0
56	MG	2D	302	1/1	0.97	0.19	51,51,51,51	0
56	MG	1A	3782	1/1	0.97	0.08	35,35,35,35	0
56	MG	1A	4067	1/1	0.97	0.08	43,43,43,43	0
56	MG	1W	202	1/1	0.97	0.12	48,48,48,48	0
56	MG	1A	3651	1/1	0.97	0.05	25,25,25,25	0
56	MG	1A	3910	1/1	0.97	0.15	19,19,19,19	0
56	MG	2A	3664	1/1	0.97	0.05	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3196	1/1	0.97	0.21	34,34,34,34	0
56	MG	1A	3351	1/1	0.97	0.11	41,41,41,41	0
56	MG	1A	3242	1/1	0.97	0.17	32,32,32,32	0
56	MG	1A	3243	1/1	0.97	0.10	41,41,41,41	0
56	MG	1Y	203	1/1	0.97	0.21	48,48,48,48	0
56	MG	2E	306	1/1	0.97	0.06	38,38,38,38	0
56	MG	1A	3036	1/1	0.97	0.07	39,39,39,39	0
56	MG	1A	3917	1/1	0.97	0.14	31,31,31,31	0
56	MG	1A	3920	1/1	0.97	0.08	21,21,21,21	0
56	MG	1A	3125	1/1	0.97	0.10	31,31,31,31	0
56	MG	1A	3001	1/1	0.97	0.07	34,34,34,34	0
56	MG	10	103	1/1	0.97	0.08	39,39,39,39	0
56	MG	2F	304	1/1	0.97	0.10	45,45,45,45	0
56	MG	1A	3798	1/1	0.97	0.06	46,46,46,46	0
56	MG	1A	3801	1/1	0.97	0.10	27,27,27,27	0
56	MG	10	106	1/1	0.97	0.04	42,42,42,42	0
56	MG	1A	4085	1/1	0.97	0.05	38,38,38,38	0
56	MG	1A	3200	1/1	0.97	0.15	40,40,40,40	0
56	MG	2A	3681	1/1	0.97	0.07	46,46,46,46	0
56	MG	2A	3259	1/1	0.97	0.06	63,63,63,63	0
56	MG	11	101	1/1	0.97	0.26	37,37,37,37	0
56	MG	1A	3483	1/1	0.97	0.10	38,38,38,38	0
56	MG	1a	1733	1/1	0.97	0.05	34,34,34,34	0
56	MG	2A	3077	1/1	0.97	0.12	43,43,43,43	0
56	MG	1A	3419	1/1	0.97	0.09	35,35,35,35	0
56	MG	1A	3929	1/1	0.97	0.08	54,54,54,54	0
56	MG	2U	201	1/1	0.97	0.10	59,59,59,59	0
56	MG	2A	3081	1/1	0.97	0.15	53,53,53,53	0
56	MG	2A	3082	1/1	0.97	0.17	58,58,58,58	0
56	MG	2A	3692	1/1	0.97	0.07	43,43,43,43	0
56	MG	1A	3665	1/1	0.97	0.04	22,22,22,22	0
56	MG	1A	3666	1/1	0.97	0.05	26,26,26,26	0
56	MG	1A	3932	1/1	0.97	0.07	46,46,46,46	0
56	MG	2A	3696	1/1	0.97	0.06	53,53,53,53	0
56	MG	1A	3485	1/1	0.97	0.16	34,34,34,34	0
56	MG	1A	3202	1/1	0.97	0.07	40,40,40,40	0
56	MG	1A	3937	1/1	0.97	0.05	60,60,60,60	0
56	MG	1A	3939	1/1	0.97	0.06	40,40,40,40	0
56	MG	13	105	1/1	0.97	0.08	55,55,55,55	0
56	MG	2A	3702	1/1	0.97	0.06	65,65,65,65	0
56	MG	2A	3703	1/1	0.97	0.10	60,60,60,60	0
56	MG	1A	3941	1/1	0.97	0.10	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4099	1/1	0.97	0.05	30,30,30,30	0
56	MG	15	101	1/1	0.97	0.15	26,26,26,26	0
56	MG	1A	4100	1/1	0.97	0.10	53,53,53,53	0
56	MG	1a	1752	1/1	0.97	0.09	54,54,54,54	0
56	MG	1A	3942	1/1	0.97	0.07	37,37,37,37	0
56	MG	1A	3669	1/1	0.97	0.05	42,42,42,42	0
56	MG	1A	3944	1/1	0.97	0.07	50,50,50,50	0
56	MG	27	102	1/1	0.97	0.06	50,50,50,50	0
56	MG	1A	3159	1/1	0.97	0.20	30,30,30,30	0
56	MG	17	101	1/1	0.97	0.15	36,36,36,36	0
56	MG	1a	1759	1/1	0.97	0.13	60,60,60,60	0
56	MG	17	102	1/1	0.97	0.23	33,33,33,33	0
56	MG	1A	3675	1/1	0.97	0.05	29,29,29,29	0
56	MG	2A	3104	1/1	0.97	0.04	34,34,34,34	0
56	MG	1A	3676	1/1	0.97	0.04	32,32,32,32	0
56	MG	1A	3561	1/1	0.97	0.14	27,27,27,27	0
56	MG	2A	3722	1/1	0.97	0.10	44,44,44,44	0
56	MG	1A	3160	1/1	0.97	0.17	34,34,34,34	0
56	MG	2A	3724	1/1	0.97	0.09	47,47,47,47	0
56	MG	18	103	1/1	0.97	0.11	44,44,44,44	0
56	MG	1A	3685	1/1	0.97	0.07	46,46,46,46	0
56	MG	18	105	1/1	0.97	0.13	45,45,45,45	0
56	MG	1A	3686	1/1	0.97	0.06	25,25,25,25	0
56	MG	1A	3955	1/1	0.97	0.07	53,53,53,53	0
56	MG	1A	3956	1/1	0.97	0.04	46,46,46,46	0
56	MG	2a	1614	1/1	0.97	0.13	64,64,64,64	0
56	MG	1A	3423	1/1	0.97	0.21	54,54,54,54	0
56	MG	1B	212	1/1	0.97	0.05	50,50,50,50	0
56	MG	1a	1775	1/1	0.97	0.06	70,70,70,70	0
56	MG	1A	3162	1/1	0.97	0.26	30,30,30,30	0
56	MG	1A	3021	1/1	0.97	0.14	24,24,24,24	0
56	MG	1A	3052	1/1	0.97	0.08	46,46,46,46	0
56	MG	2A	3120	1/1	0.97	0.05	42,42,42,42	0
56	MG	1A	3085	1/1	0.97	0.08	31,31,31,31	0
56	MG	1a	1607	1/1	0.97	0.06	57,57,57,57	0
56	MG	1A	3698	1/1	0.97	0.07	63,63,63,63	0
56	MG	1A	3007	1/1	0.97	0.07	34,34,34,34	0
56	MG	1A	3366	1/1	0.97	0.10	46,46,46,46	0
56	MG	1B	220	1/1	0.97	0.06	36,36,36,36	0
56	MG	1A	3432	1/1	0.97	0.15	54,54,54,54	0
56	MG	2x	107	1/1	0.97	0.08	55,55,55,55	0
56	MG	2A	3503	1/1	0.97	0.08	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	1a	1791	1/1	0.97	0.12	72,72,72,72	0
56	MG	1A	3703	1/1	0.97	0.11	27,27,27,27	0
56	MG	2A	3506	1/1	0.97	0.06	52,52,52,52	0
56	MG	1a	1793	1/1	0.97	0.09	45,45,45,45	0
56	MG	2A	3752	1/1	0.97	0.10	42,42,42,42	0
56	MG	2A	3131	1/1	0.97	0.12	49,49,49,49	0
56	MG	1A	3574	1/1	0.97	0.10	28,28,28,28	0
56	MG	1A	3433	1/1	0.97	0.08	44,44,44,44	0
58	A1A1J	2A	3877	34/34	0.97	0.09	37,42,48,53	0
56	MG	1A	3708	1/1	0.97	0.06	12,12,12,12	0
56	MG	1A	3576	1/1	0.97	0.06	21,21,21,21	0
56	MG	2A	3037	1/1	0.98	0.06	47,47,47,47	0
56	MG	1D	301	1/1	0.98	0.19	32,32,32,32	0
56	MG	1A	3151	1/1	0.98	0.08	36,36,36,36	0
56	MG	1A	3904	1/1	0.98	0.04	19,19,19,19	0
56	MG	1A	3032	1/1	0.98	0.15	20,20,20,20	0
56	MG	2A	3514	1/1	0.98	0.17	48,48,48,48	0
56	MG	1A	3704	1/1	0.98	0.07	22,22,22,22	0
56	MG	1A	4024	1/1	0.98	0.06	46,46,46,46	0
56	MG	1a	1734	1/1	0.98	0.10	32,32,32,32	0
56	MG	1a	1735	1/1	0.98	0.13	46,46,46,46	0
56	MG	1D	307	1/1	0.98	0.12	34,34,34,34	0
56	MG	1A	3612	1/1	0.98	0.10	26,26,26,26	0
56	MG	1A	3908	1/1	0.98	0.08	36,36,36,36	0
56	MG	1A	3706	1/1	0.98	0.09	31,31,31,31	0
56	MG	2a	1716	1/1	0.98	0.06	70,70,70,70	0
56	MG	1A	3269	1/1	0.98	0.09	46,46,46,46	0
56	MG	1A	3201	1/1	0.98	0.14	18,18,18,18	0
56	MG	1A	3153	1/1	0.98	0.05	30,30,30,30	0
56	MG	2A	3527	1/1	0.98	0.10	31,31,31,31	0
56	MG	1A	3176	1/1	0.98	0.16	23,23,23,23	0
56	MG	1A	3154	1/1	0.98	0.13	37,37,37,37	0
56	MG	1A	3712	1/1	0.98	0.04	32,32,32,32	0
56	MG	2D	305	1/1	0.98	0.09	39,39,39,39	0
56	MG	1A	4036	1/1	0.98	0.05	50,50,50,50	0
56	MG	1a	1748	1/1	0.98	0.08	57,57,57,57	0
56	MG	2A	3718	1/1	0.98	0.05	53,53,53,53	0
56	MG	1E	305	1/1	0.98	0.09	30,30,30,30	0
56	MG	2A	3534	1/1	0.98	0.06	36,36,36,36	0
56	MG	1E	306	1/1	0.98	0.13	30,30,30,30	0
56	MG	1A	3056	1/1	0.98	0.12	43,43,43,43	0
56	MG	1E	308	1/1	0.98	0.10	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3918	1/1	0.98	0.05	26,26,26,26	0
56	MG	1A	3156	1/1	0.98	0.23	40,40,40,40	0
56	MG	1A	3033	1/1	0.98	0.29	34,34,34,34	0
56	MG	1E	312	1/1	0.98	0.12	25,25,25,25	0
56	MG	1a	1612	1/1	0.98	0.11	29,29,29,29	0
56	MG	2E	310	1/1	0.98	0.09	64,64,64,64	0
56	MG	1A	3621	1/1	0.98	0.08	21,21,21,21	0
56	MG	1E	314	1/1	0.98	0.14	40,40,40,40	0
56	MG	1A	3320	1/1	0.98	0.12	30,30,30,30	0
56	MG	2A	3070	1/1	0.98	0.06	32,32,32,32	0
56	MG	2A	3547	1/1	0.98	0.04	48,48,48,48	0
56	MG	1F	301	1/1	0.98	0.09	34,34,34,34	0
56	MG	2A	3549	1/1	0.98	0.08	49,49,49,49	0
56	MG	2A	3550	1/1	0.98	0.10	45,45,45,45	0
56	MG	1A	3560	1/1	0.98	0.14	35,35,35,35	0
56	MG	1F	303	1/1	0.98	0.11	28,28,28,28	0
56	MG	1A	3277	1/1	0.98	0.16	36,36,36,36	0
56	MG	1a	1766	1/1	0.98	0.05	65,65,65,65	0
56	MG	1F	305	1/1	0.98	0.14	36,36,36,36	0
56	MG	2A	3559	1/1	0.98	0.06	33,33,33,33	0
56	MG	1A	3926	1/1	0.98	0.10	39,39,39,39	0
56	MG	1a	1769	1/1	0.98	0.08	56,56,56,56	0
56	MG	2A	3079	1/1	0.98	0.08	38,38,38,38	0
56	MG	1F	307	1/1	0.98	0.06	40,40,40,40	0
56	MG	1A	3137	1/1	0.98	0.19	29,29,29,29	0
56	MG	1A	4047	1/1	0.98	0.07	25,25,25,25	0
56	MG	2A	3568	1/1	0.98	0.06	53,53,53,53	0
56	MG	1A	3824	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	3279	1/1	0.98	0.11	32,32,32,32	0
56	MG	1A	4050	1/1	0.98	0.05	47,47,47,47	0
56	MG	2A	3572	1/1	0.98	0.07	46,46,46,46	0
56	MG	1A	3628	1/1	0.98	0.05	29,29,29,29	0
56	MG	1A	3629	1/1	0.98	0.07	28,28,28,28	0
56	MG	1A	3003	1/1	0.98	0.04	27,27,27,27	0
56	MG	2A	3576	1/1	0.98	0.08	46,46,46,46	0
56	MG	1A	3933	1/1	0.98	0.04	41,41,41,41	0
56	MG	1A	3725	1/1	0.98	0.05	39,39,39,39	0
56	MG	1A	3631	1/1	0.98	0.08	52,52,52,52	0
56	MG	1A	3101	1/1	0.98	0.05	44,44,44,44	0
56	MG	1a	1784	1/1	0.98	0.05	73,73,73,73	0
56	MG	1A	3634	1/1	0.98	0.05	45,45,45,45	0
56	MG	1A	3635	1/1	0.98	0.03	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3637	1/1	0.98	0.03	18,18,18,18	0
56	MG	2A	3585	1/1	0.98	0.08	55,55,55,55	0
56	MG	1a	1788	1/1	0.98	0.06	74,74,74,74	0
56	MG	2A	3587	1/1	0.98	0.04	43,43,43,43	0
56	MG	1a	1789	1/1	0.98	0.05	60,60,60,60	0
56	MG	2A	3589	1/1	0.98	0.08	65,65,65,65	0
56	MG	1A	3081	1/1	0.98	0.08	36,36,36,36	0
56	MG	1A	3639	1/1	0.98	0.08	26,26,26,26	0
56	MG	1A	3946	1/1	0.98	0.09	28,28,28,28	0
56	MG	1A	3640	1/1	0.98	0.07	55,55,55,55	0
56	MG	1a	1795	1/1	0.98	0.04	71,71,71,71	0
56	MG	1A	4066	1/1	0.98	0.05	45,45,45,45	0
56	MG	1A	3642	1/1	0.98	0.06	20,20,20,20	0
56	MG	1A	4068	1/1	0.98	0.08	13,13,13,13	0
56	MG	1A	3840	1/1	0.98	0.05	32,32,32,32	0
56	MG	1A	3213	1/1	0.98	0.19	31,31,31,31	0
56	MG	1P	202	1/1	0.98	0.17	29,29,29,29	0
56	MG	1A	3737	1/1	0.98	0.07	21,21,21,21	0
56	MG	1A	3186	1/1	0.98	0.06	37,37,37,37	0
56	MG	1a	1808	1/1	0.98	0.04	59,59,59,59	0
56	MG	1A	4074	1/1	0.98	0.06	41,41,41,41	0
56	MG	1A	3249	1/1	0.98	0.19	34,34,34,34	0
56	MG	1Q	201	1/1	0.98	0.07	26,26,26,26	0
56	MG	2A	3428	1/1	0.98	0.37	60,60,60,60	0
56	MG	1A	3954	1/1	0.98	0.05	45,45,45,45	0
56	MG	1a	1654	1/1	0.98	0.04	53,53,53,53	0
56	MG	1A	3646	1/1	0.98	0.07	20,20,20,20	0
56	MG	1A	3013	1/1	0.98	0.18	26,26,26,26	0
56	MG	1A	3188	1/1	0.98	0.13	36,36,36,36	0
56	MG	1A	3217	1/1	0.98	0.21	37,37,37,37	0
56	MG	1R	201	1/1	0.98	0.21	47,47,47,47	0
56	MG	1R	202	1/1	0.98	0.23	34,34,34,34	0
56	MG	1A	3650	1/1	0.98	0.13	23,23,23,23	0
56	MG	1A	3023	1/1	0.98	0.10	17,17,17,17	0
56	MG	1A	3117	1/1	0.98	0.10	31,31,31,31	0
56	MG	1A	3653	1/1	0.98	0.04	27,27,27,27	0
56	MG	2A	3623	1/1	0.98	0.05	40,40,40,40	0
56	MG	1A	3255	1/1	0.98	0.15	37,37,37,37	0
56	MG	1A	3166	1/1	0.98	0.20	35,35,35,35	0
56	MG	1A	3192	1/1	0.98	0.18	37,37,37,37	0
56	MG	1A	3752	1/1	0.98	0.06	56,56,56,56	0
56	MG	1A	3657	1/1	0.98	0.07	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3630	1/1	0.98	0.06	40,40,40,40	0
56	MG	1A	3429	1/1	0.98	0.21	38,38,38,38	0
56	MG	1A	3430	1/1	0.98	0.05	38,38,38,38	0
56	MG	2A	3633	1/1	0.98	0.03	35,35,35,35	0
56	MG	1A	3970	1/1	0.98	0.06	18,18,18,18	0
56	MG	1U	206	1/1	0.98	0.22	41,41,41,41	0
56	MG	1A	3038	1/1	0.98	0.15	36,36,36,36	0
56	MG	1A	3194	1/1	0.98	0.24	37,37,37,37	0
56	MG	2A	3139	1/1	0.98	0.12	41,41,41,41	0
56	MG	1A	3587	1/1	0.98	0.19	31,31,31,31	0
56	MG	1A	3299	1/1	0.98	0.04	31,31,31,31	0
56	MG	1A	3664	1/1	0.98	0.03	23,23,23,23	0
56	MG	1A	3589	1/1	0.98	0.08	37,37,37,37	0
56	MG	1V	205	1/1	0.98	0.09	37,37,37,37	0
56	MG	2A	3827	1/1	0.98	0.04	70,70,70,70	0
56	MG	1A	3224	1/1	0.98	0.14	34,34,34,34	0
56	MG	1A	3591	1/1	0.98	0.12	43,43,43,43	0
56	MG	1A	3147	1/1	0.98	0.04	29,29,29,29	0
56	MG	1W	204	1/1	0.98	0.07	36,36,36,36	0
56	MG	2A	3832	1/1	0.98	0.05	57,57,57,57	0
56	MG	1W	205	1/1	0.98	0.06	37,37,37,37	0
56	MG	2A	3834	1/1	0.98	0.04	37,37,37,37	0
56	MG	1A	3226	1/1	0.98	0.08	43,43,43,43	0
56	MG	1A	3303	1/1	0.98	0.05	27,27,27,27	0
56	MG	1X	101	1/1	0.98	0.09	32,32,32,32	0
56	MG	1X	102	1/1	0.98	0.07	43,43,43,43	0
56	MG	1A	3673	1/1	0.98	0.09	23,23,23,23	0
56	MG	1X	104	1/1	0.98	0.06	50,50,50,50	0
56	MG	1X	105	1/1	0.98	0.06	29,29,29,29	0
56	MG	1A	3304	1/1	0.98	0.04	37,37,37,37	0
56	MG	1A	3771	1/1	0.98	0.07	20,20,20,20	0
56	MG	1A	3390	1/1	0.98	0.10	42,42,42,42	0
56	MG	1A	3677	1/1	0.98	0.07	22,22,22,22	0
56	MG	1A	3597	1/1	0.98	0.13	32,32,32,32	0
56	MG	1A	3680	1/1	0.98	0.09	21,21,21,21	0
56	MG	1A	3391	1/1	0.98	0.35	33,33,33,33	0
56	MG	1A	3778	1/1	0.98	0.07	18,18,18,18	0
56	MG	1A	3120	1/1	0.98	0.08	43,43,43,43	0
56	MG	1A	3780	1/1	0.98	0.06	39,39,39,39	0
56	MG	1A	3393	1/1	0.98	0.11	26,26,26,26	0
56	MG	1A	3228	1/1	0.98	0.13	41,41,41,41	0
56	MG	1A	3783	1/1	0.98	0.06	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3784	1/1	0.98	0.06	20,20,20,20	0
56	MG	1A	3395	1/1	0.98	0.38	41,41,41,41	0
56	MG	1A	3786	1/1	0.98	0.06	44,44,44,44	0
56	MG	1A	3039	1/1	0.98	0.26	32,32,32,32	0
56	MG	1A	3692	1/1	0.98	0.04	29,29,29,29	0
56	MG	1A	3350	1/1	0.98	0.17	28,28,28,28	0
56	MG	1A	3790	1/1	0.98	0.09	57,57,57,57	0
56	MG	2A	3021	1/1	0.98	0.10	29,29,29,29	0
56	MG	1A	4005	1/1	0.98	0.05	22,22,22,22	0
56	MG	1A	4006	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	3695	1/1	0.98	0.12	25,25,25,25	0
56	MG	13	101	1/1	0.98	0.06	28,28,28,28	0
56	MG	1A	3495	1/1	0.98	0.10	38,38,38,38	0
56	MG	1A	3697	1/1	0.98	0.09	29,29,29,29	0
56	MG	1A	3606	1/1	0.98	0.18	26,26,26,26	0
56	MG	1A	4011	1/1	0.98	0.06	29,29,29,29	0
56	MG	2A	3685	1/1	0.98	0.14	64,64,64,64	0
56	MG	2A	3501	1/1	0.98	0.04	70,70,70,70	0
56	MG	1A	3699	1/1	0.98	0.07	26,26,26,26	0
56	MG	1A	3799	1/1	0.98	0.03	21,21,21,21	0
56	MG	1A	3800	1/1	0.98	0.05	20,20,20,20	0
56	MG	1A	4015	1/1	0.98	0.05	25,25,25,25	0
58	A1A1J	1A	4103	34/34	0.98	0.06	18,23,27,29	0
56	MG	15	103	1/1	0.98	0.18	26,26,26,26	0
59	ZN	14	103	1/1	0.98	0.10	87,87,87,87	0
59	ZN	1n	103	1/1	0.98	0.04	75,75,75,75	0
59	ZN	2Y	501	1/1	0.98	0.04	101,101,101,101	0
56	MG	1A	3308	1/1	0.98	0.04	29,29,29,29	0
59	ZN	29	102	1/1	0.98	0.04	80,80,80,80	0
56	MG	1A	3150	1/1	0.98	0.25	37,37,37,37	0
60	SF4	1d	501	8/8	0.98	0.05	68,75,81,83	0
60	SF4	2d	302	8/8	0.98	0.04	67,74,79,84	0
56	MG	2A	3594	1/1	0.99	0.03	49,49,49,49	0
56	MG	1A	3238	1/1	0.99	0.10	29,29,29,29	0
56	MG	1A	3502	1/1	0.99	0.17	29,29,29,29	0
56	MG	1A	3935	1/1	0.99	0.04	10,10,10,10	0
56	MG	1W	203	1/1	0.99	0.19	31,31,31,31	0
56	MG	1a	1796	1/1	0.99	0.04	53,53,53,53	0
56	MG	1A	3810	1/1	0.99	0.03	41,41,41,41	0
56	MG	1a	1798	1/1	0.99	0.04	52,52,52,52	0
56	MG	1A	3811	1/1	0.99	0.03	22,22,22,22	0
56	MG	1A	3938	1/1	0.99	0.11	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3119	1/1	0.99	0.08	32,32,32,32	0
56	MG	1A	3940	1/1	0.99	0.07	30,30,30,30	0
56	MG	1A	3609	1/1	0.99	0.07	24,24,24,24	0
56	MG	2A	3710	1/1	0.99	0.02	33,33,33,33	0
56	MG	1a	1804	1/1	0.99	0.03	57,57,57,57	0
56	MG	1a	1805	1/1	0.99	0.03	68,68,68,68	0
56	MG	1A	3240	1/1	0.99	0.12	34,34,34,34	0
56	MG	2A	3821	1/1	0.99	0.06	39,39,39,39	0
56	MG	2A	3822	1/1	0.99	0.08	40,40,40,40	0
56	MG	1A	3045	1/1	0.99	0.07	33,33,33,33	0
56	MG	2A	3824	1/1	0.99	0.04	57,57,57,57	0
56	MG	1A	3174	1/1	0.99	0.11	33,33,33,33	0
56	MG	1A	3945	1/1	0.99	0.04	44,44,44,44	0
56	MG	1A	3069	1/1	0.99	0.10	29,29,29,29	0
56	MG	1A	3070	1/1	0.99	0.06	12,12,12,12	0
56	MG	1A	3759	1/1	0.99	0.05	24,24,24,24	0
56	MG	1A	3384	1/1	0.99	0.12	27,27,27,27	0
56	MG	2A	3617	1/1	0.99	0.08	53,53,53,53	0
56	MG	1A	4019	1/1	0.99	0.05	36,36,36,36	0
56	MG	1A	3107	1/1	0.99	0.08	28,28,28,28	0
56	MG	2A	3518	1/1	0.99	0.08	46,46,46,46	0
56	MG	1A	4097	1/1	0.99	0.03	36,36,36,36	0
56	MG	1A	4021	1/1	0.99	0.04	47,47,47,47	0
56	MG	2A	3727	1/1	0.99	0.06	43,43,43,43	0
56	MG	1F	309	1/1	0.99	0.10	27,27,27,27	0
56	MG	1A	3580	1/1	0.99	0.15	38,38,38,38	0
56	MG	1A	3178	1/1	0.99	0.12	30,30,30,30	0
56	MG	2A	3626	1/1	0.99	0.04	43,43,43,43	0
56	MG	1A	3140	1/1	0.99	0.12	32,32,32,32	0
56	MG	1A	3583	1/1	0.99	0.15	34,34,34,34	0
56	MG	1A	3037	1/1	0.99	0.06	19,19,19,19	0
56	MG	2A	3735	1/1	0.99	0.08	49,49,49,49	0
56	MG	1A	3142	1/1	0.99	0.06	44,44,44,44	0
56	MG	1A	3828	1/1	0.99	0.04	31,31,31,31	0
56	MG	1A	3161	1/1	0.99	0.17	27,27,27,27	0
56	MG	2a	1709	1/1	0.99	0.07	70,70,70,70	0
56	MG	28	103	1/1	0.99	0.04	56,56,56,56	0
56	MG	1A	3624	1/1	0.99	0.05	30,30,30,30	0
56	MG	1A	3072	1/1	0.99	0.16	31,31,31,31	0
56	MG	1A	3110	1/1	0.99	0.20	27,27,27,27	0
56	MG	1A	4033	1/1	0.99	0.02	21,21,21,21	0
56	MG	1A	4034	1/1	0.99	0.05	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3773	1/1	0.99	0.04	34,34,34,34	0
56	MG	1A	3073	1/1	0.99	0.05	14,14,14,14	0
56	MG	1a	1743	1/1	0.99	0.09	43,43,43,43	0
56	MG	1A	3057	1/1	0.99	0.04	25,25,25,25	0
56	MG	1A	3670	1/1	0.99	0.06	37,37,37,37	0
56	MG	1A	3898	1/1	0.99	0.04	23,23,23,23	0
56	MG	1A	3280	1/1	0.99	0.06	24,24,24,24	0
56	MG	1A	3672	1/1	0.99	0.04	27,27,27,27	0
56	MG	1A	3230	1/1	0.99	0.20	29,29,29,29	0
56	MG	1A	3674	1/1	0.99	0.08	25,25,25,25	0
56	MG	1A	3282	1/1	0.99	0.27	41,41,41,41	0
56	MG	1A	3727	1/1	0.99	0.06	21,21,21,21	0
56	MG	1A	3098	1/1	0.99	0.12	18,18,18,18	0
56	MG	1A	3633	1/1	0.99	0.06	23,23,23,23	0
56	MG	1A	3678	1/1	0.99	0.06	27,27,27,27	0
56	MG	1A	3524	1/1	0.99	0.16	28,28,28,28	0
56	MG	1a	1757	1/1	0.99	0.06	58,58,58,58	0
56	MG	2A	3552	1/1	0.99	0.08	36,36,36,36	0
56	MG	2A	3553	1/1	0.99	0.09	43,43,43,43	0
56	MG	1A	3284	1/1	0.99	0.20	31,31,31,31	0
56	MG	1A	3682	1/1	0.99	0.03	22,22,22,22	0
56	MG	2A	3556	1/1	0.99	0.06	47,47,47,47	0
56	MG	1A	4052	1/1	0.99	0.05	23,23,23,23	0
56	MG	1A	3683	1/1	0.99	0.02	27,27,27,27	0
56	MG	1A	3636	1/1	0.99	0.04	28,28,28,28	0
56	MG	1A	3913	1/1	0.99	0.05	30,30,30,30	0
56	MG	1A	3791	1/1	0.99	0.03	36,36,36,36	0
56	MG	1A	3792	1/1	0.99	0.03	38,38,38,38	0
56	MG	1A	3086	1/1	0.99	0.20	29,29,29,29	0
56	MG	2A	3467	1/1	0.99	0.11	24,24,24,24	0
56	MG	2A	3565	1/1	0.99	0.05	42,42,42,42	0
56	MG	2A	3566	1/1	0.99	0.07	46,46,46,46	0
56	MG	1A	3794	1/1	0.99	0.07	22,22,22,22	0
56	MG	1A	3064	1/1	0.99	0.09	33,33,33,33	0
56	MG	1A	3856	1/1	0.99	0.07	18,18,18,18	0
56	MG	2A	3009	1/1	0.99	0.04	46,46,46,46	0
56	MG	1A	3402	1/1	0.99	0.04	29,29,29,29	0
56	MG	1A	3688	1/1	0.99	0.07	20,20,20,20	0
56	MG	1A	3211	1/1	0.99	0.04	33,33,33,33	0
56	MG	1A	3991	1/1	0.99	0.10	37,37,37,37	0
56	MG	2a	1756	1/1	0.99	0.05	71,71,71,71	0
56	MG	1A	3690	1/1	0.99	0.06	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1U	201	1/1	0.99	0.04	28,28,28,28	0
56	MG	1U	202	1/1	0.99	0.13	38,38,38,38	0
56	MG	1A	3993	1/1	0.99	0.07	23,23,23,23	0
56	MG	1A	3641	1/1	0.99	0.07	24,24,24,24	0
56	MG	2a	1762	1/1	0.99	0.03	58,58,58,58	0
56	MG	1a	1779	1/1	0.99	0.07	65,65,65,65	0
56	MG	1A	3564	1/1	0.99	0.15	31,31,31,31	0
56	MG	1A	4070	1/1	0.99	0.08	29,29,29,29	0
56	MG	1A	3693	1/1	0.99	0.09	25,25,25,25	0
56	MG	1U	208	1/1	0.99	0.17	35,35,35,35	0
56	MG	2A	3794	1/1	0.99	0.11	51,51,51,51	0
56	MG	1A	3008	1/1	0.99	0.11	27,27,27,27	0
56	MG	1A	3028	1/1	0.99	0.22	27,27,27,27	0
59	ZN	1Y	204	1/1	0.99	0.02	65,65,65,65	0
56	MG	2a	1771	1/1	0.99	0.03	62,62,62,62	0
59	ZN	16	102	1/1	0.99	0.10	57,57,57,57	0
56	MG	1A	3014	1/1	0.99	0.10	29,29,29,29	0
56	MG	1A	4075	1/1	0.99	0.04	34,34,34,34	0
56	MG	1V	203	1/1	0.99	0.09	27,27,27,27	0
59	ZN	25	106	1/1	0.99	0.06	63,63,63,63	0
59	ZN	26	102	1/1	0.99	0.04	65,65,65,65	0
56	MG	1A	3347	1/1	0.99	0.17	30,30,30,30	0
56	MG	1a	1790	1/1	0.99	0.06	55,55,55,55	0
56	MG	1A	3749	1/1	0.99	0.03	43,43,43,43	0
56	MG	2A	3593	1/1	0.99	0.05	38,38,38,38	0
56	MG	1A	3563	1/1	1.00	0.12	26,26,26,26	0
56	MG	1A	3681	1/1	1.00	0.05	25,25,25,25	0
59	ZN	15	107	1/1	1.00	0.03	41,41,41,41	0
56	MG	1A	3766	1/1	1.00	0.06	45,45,45,45	0
59	ZN	19	102	1/1	1.00	0.05	43,43,43,43	0
56	MG	1A	3919	1/1	1.00	0.05	24,24,24,24	0
56	MG	1A	3031	1/1	1.00	0.09	31,31,31,31	0

6.5 Other polymers (i)

There are no such residues in this entry.