Full wwPDB X-ray Structure Validation Report (i)

Mar 18, 2026 – 01:05 PM UTC

PDB ID	:	8CVK / pdb_00008cvk
Title	:	Crystal structure of the Thermus thermophilus 70S ribosome in complex with mRNA, aminoacylated A-site Phe-NH-tRNAphe, peptidyl P-site fMRC-NH-tRNAmet, and deacylated E-site tRNAphe at 2.50A resolution
Authors	:	Syroegin, E.A.; Aleksandrova, E.V.; Polikanov, Y.S.
Deposited on	:	2022-05-18
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:

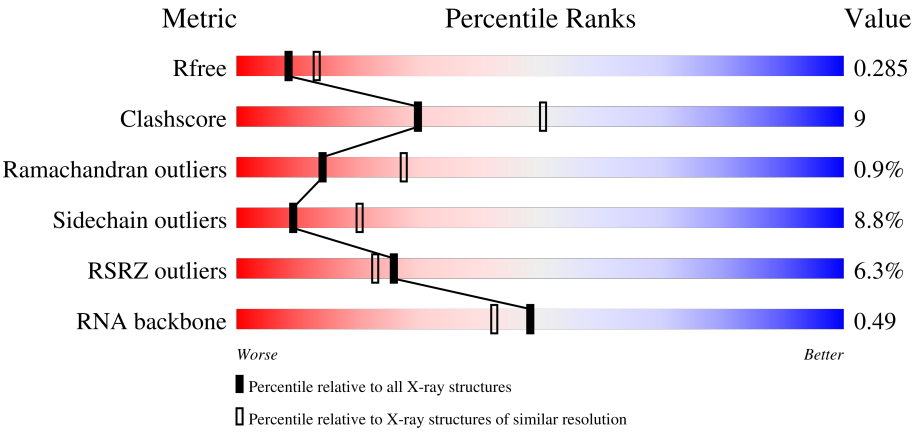
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

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}	180053	5829 (2.50-2.50)
Clashscore	190562	6492 (2.50-2.50)
Ramachandran outliers	187476	6378 (2.50-2.50)
Sidechain outliers	187428	6380 (2.50-2.50)
RSRZ outliers	180081	5833 (2.50-2.50)
RNA backbone	3983	1003 (2.78-2.22)

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	5% 66% 27% 6%
1	2A	2915	4% 58% 31% 7%
2	1B	121	67% 31%
2	2B	121	56% 35% 8%

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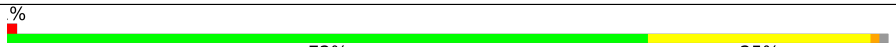
Mol	Chain	Length	Quality of chain
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	
14	2S	112	
15	1T	146	

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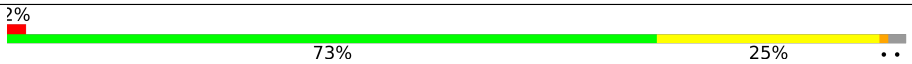
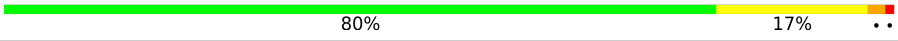
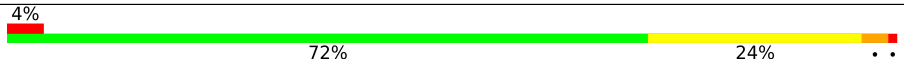
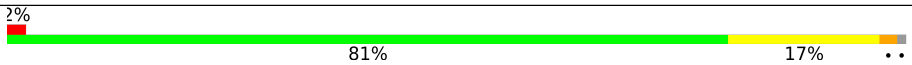
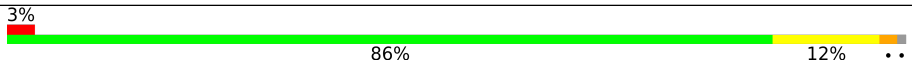
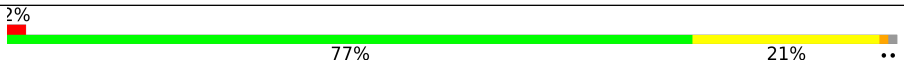
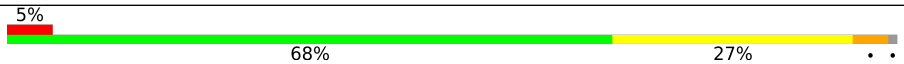
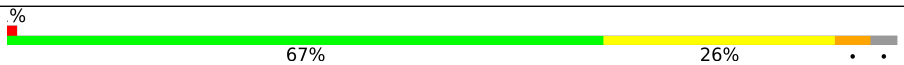
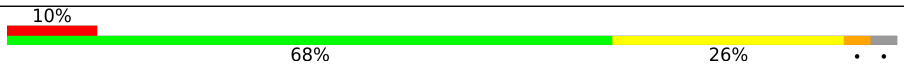
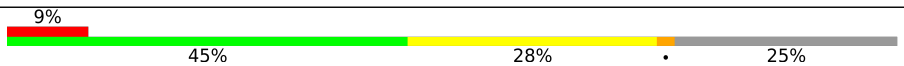
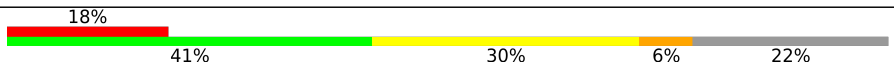
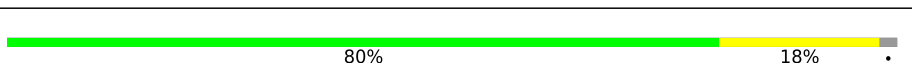
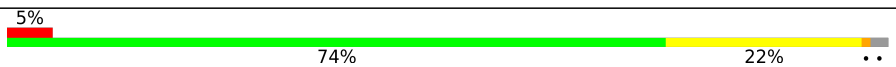
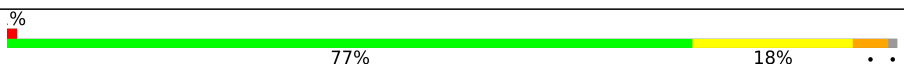
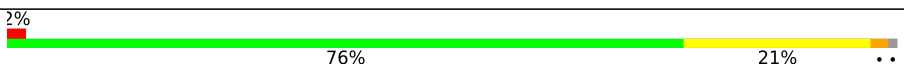
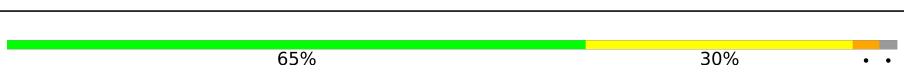
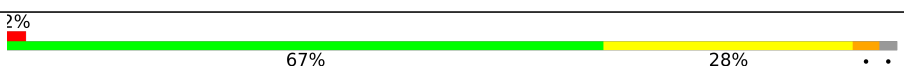
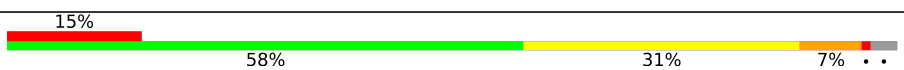
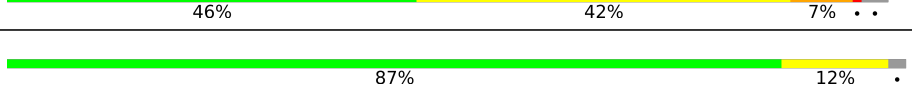
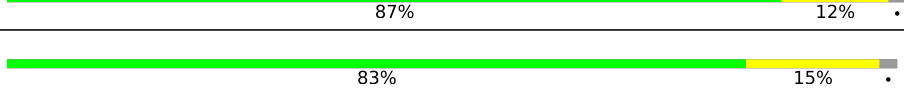
Mol	Chain	Length	Quality of chain
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	
27	25	60	

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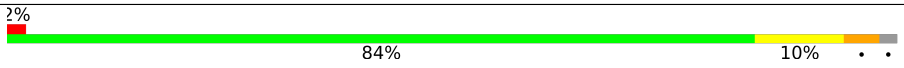
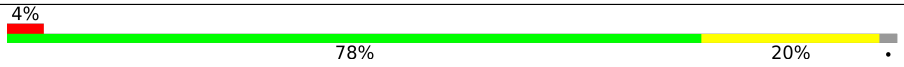
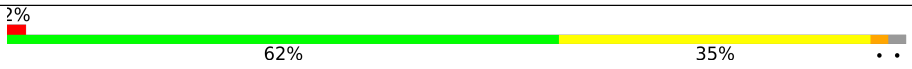
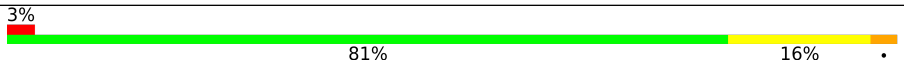
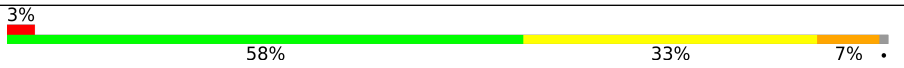
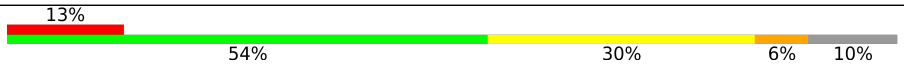
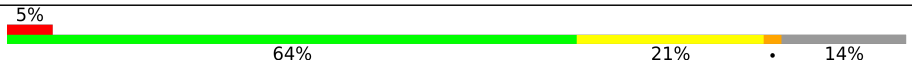
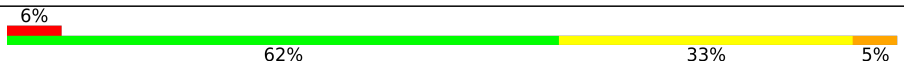
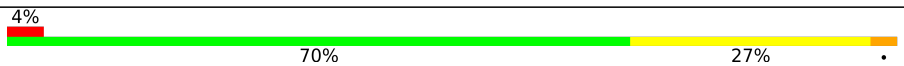
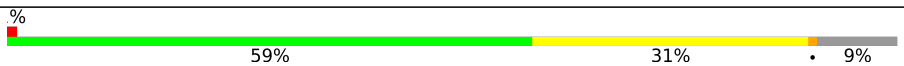
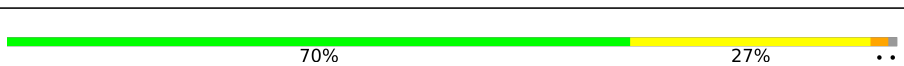
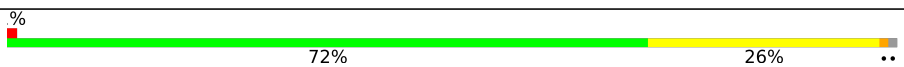
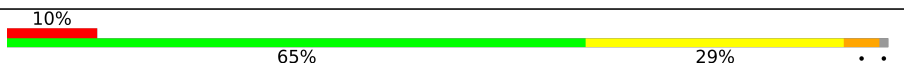
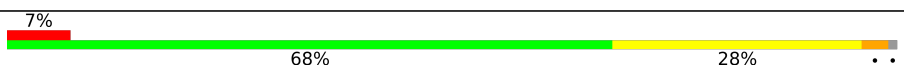
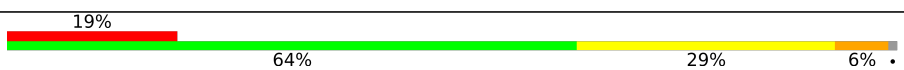
Mol	Chain	Length	Quality of chain
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	
40	1i	128	

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Mol	Chain	Length	Quality of chain
40	2i	128	34% 57% 37% 5%
41	1j	105	15% 58% 29% 6% 8%
41	2j	105	33% 52% 34% 5% 9%
42	1k	129	6% 60% 24% 12%
42	2k	129	8% 72% 13% 12%
43	1l	132	2% 77% 16% 8%
43	2l	132	5% 68% 21% 8%
44	1m	126	8% 67% 26% 5%
44	2m	126	15% 59% 33% 6%
45	1n	61	7% 80% 16%
45	2n	61	48% 67% 31%
46	1o	89	7% 69% 27%
46	2o	89	9% 78% 20%
47	1p	88	11% 60% 33% 7%
47	2p	88	5% 49% 43% 7%
48	1q	105	3% 70% 22% 6%
48	2q	105	5% 70% 23% 6%
49	1r	88	2% 49% 25% 23%
49	2r	88	6% 49% 25% 23%
50	1s	93	6% 59% 27% 11%
50	2s	93	19% 45% 38% 6% 11%
51	1t	106	8% 58% 25% 8% 9%
51	2t	106	7% 63% 26% 9%
52	1u	27	11% 56% 30% 15%
52	2u	27	22% 41% 44% 15%

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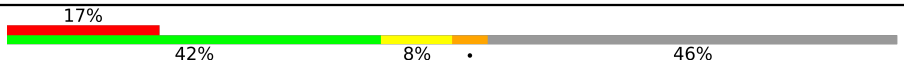
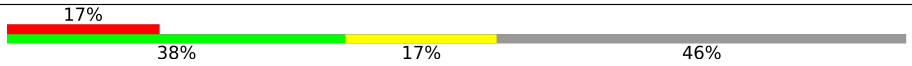
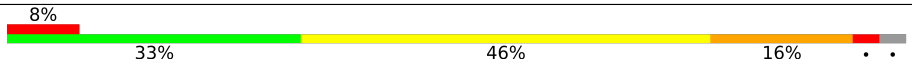
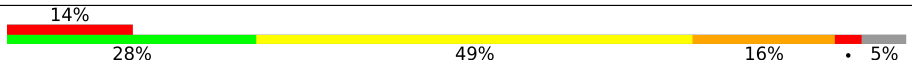
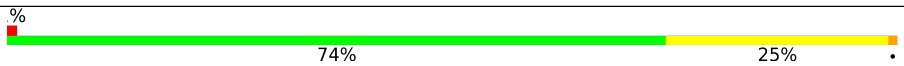
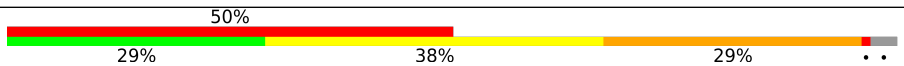
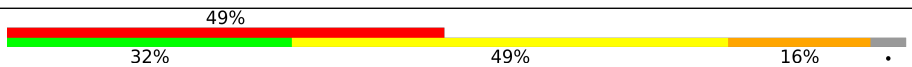
Mol	Chain	Length	Quality of chain
53	1v	24	
53	2v	24	
54	1w	76	
54	2w	76	
55	1x	77	
55	2x	77	
56	1z	3	
56	2z	3	
57	1y	76	
57	2y	76	

2 Entry composition

There are 62 unique types of molecules in this entry. The entry contains 300017 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	202	Total	C	N	O	S	0	0	0
			1583	1009	297	275	2			
5	2F	202	Total	C	N	O	S	0	0	0
			1579	1007	296	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	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			
22	20	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Molecule 54 is a RNA chain called A-site Aminoacyl-tRNA Phe-NH-tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	74	Total	C	N	O	P	S	0	0	0
			1603	722	287	518	74	2			
54	2w	72	Total	C	N	O	P	S	0	0	0
			1555	699	280	502	72	2			

- Molecule 55 is a RNA chain called P-site Peptidyl-tRNA fMRC-NH-tRNAmet RNA-part.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	77	Total	C	N	O	P	S	0	0	0
			1646	734	298	536	77	1			
55	2x	77	Total	C	N	O	P	S	0	0	0
			1646	734	298	536	77	1			

- Molecule 56 is a protein called P-site Peptidyl-tRNA fMRC-NH-tRNAmet Peptide-part.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	1z	3	Total	C	N	O	S	0	0	0
			27	15	6	4	2			
56	2z	3	Total	C	N	O	S	0	0	0
			27	15	6	4	2			

- Molecule 57 is a RNA chain called E-site Deacylated tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
57	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
57	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 58 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1A	1098	Total	Mg	0	0
			1098	1098		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1B	37	Total Mg 37 37	0	0
58	1D	12	Total Mg 12 12	0	0
58	1E	13	Total Mg 13 13	0	0
58	1F	14	Total Mg 14 14	0	0
58	1G	5	Total Mg 5 5	0	0
58	1I	1	Total Mg 1 1	0	0
58	1N	6	Total Mg 6 6	0	0
58	1O	5	Total Mg 5 5	0	0
58	1P	4	Total Mg 4 4	0	0
58	1Q	8	Total Mg 8 8	0	0
58	1R	4	Total Mg 4 4	0	0
58	1S	3	Total Mg 3 3	0	0
58	1T	4	Total Mg 4 4	0	0
58	1U	9	Total Mg 9 9	0	0
58	1V	7	Total Mg 7 7	0	0
58	1W	7	Total Mg 7 7	0	0
58	1X	6	Total Mg 6 6	0	0
58	1Y	5	Total Mg 5 5	0	0
58	1Z	2	Total Mg 2 2	0	0
58	10	9	Total Mg 9 9	0	0
58	11	6	Total Mg 6 6	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	12	3	Total Mg 3 3	0	0
58	13	3	Total Mg 3 3	0	0
58	14	1	Total Mg 1 1	0	0
58	15	7	Total Mg 7 7	0	0
58	16	1	Total Mg 1 1	0	0
58	17	4	Total Mg 4 4	0	0
58	18	9	Total Mg 9 9	0	0
58	19	1	Total Mg 1 1	0	0
58	1a	214	Total Mg 214 214	0	0
58	1b	1	Total Mg 1 1	0	0
58	1d	1	Total Mg 1 1	0	0
58	1e	2	Total Mg 2 2	0	0
58	1f	2	Total Mg 2 2	0	0
58	1k	1	Total Mg 1 1	0	0
58	1l	2	Total Mg 2 2	0	0
58	1m	1	Total Mg 1 1	0	0
58	1n	2	Total Mg 2 2	0	0
58	1t	1	Total Mg 1 1	0	0
58	1v	1	Total Mg 1 1	0	0
58	1w	8	Total Mg 8 8	0	0
58	1x	12	Total Mg 12 12	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	2A	870	Total Mg 870 870	0	0
58	2B	20	Total Mg 20 20	0	0
58	2D	8	Total Mg 8 8	0	0
58	2E	10	Total Mg 10 10	0	0
58	2F	8	Total Mg 8 8	0	0
58	2G	1	Total Mg 1 1	0	0
58	2O	1	Total Mg 1 1	0	0
58	2P	2	Total Mg 2 2	0	0
58	2Q	2	Total Mg 2 2	0	0
58	2R	1	Total Mg 1 1	0	0
58	2T	1	Total Mg 1 1	0	0
58	2U	2	Total Mg 2 2	0	0
58	2V	2	Total Mg 2 2	0	0
58	2W	4	Total Mg 4 4	0	0
58	2X	3	Total Mg 3 3	0	0
58	2Y	1	Total Mg 1 1	0	0
58	2Z	1	Total Mg 1 1	0	0
58	20	2	Total Mg 2 2	0	0
58	23	3	Total Mg 3 3	0	0
58	25	5	Total Mg 5 5	0	0
58	26	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	27	3	Total Mg 3 3	0	0
58	28	3	Total Mg 3 3	0	0
58	29	1	Total Mg 1 1	0	0
58	2a	235	Total Mg 235 235	0	0
58	2d	2	Total Mg 2 2	0	0
58	2e	1	Total Mg 1 1	0	0
58	2f	2	Total Mg 2 2	0	0
58	2g	1	Total Mg 1 1	0	0
58	2i	1	Total Mg 1 1	0	0
58	2j	1	Total Mg 1 1	0	0
58	2k	1	Total Mg 1 1	0	0
58	2l	4	Total Mg 4 4	0	0
58	2n	2	Total Mg 2 2	0	0
58	2q	3	Total Mg 3 3	0	0
58	2r	1	Total Mg 1 1	0	0
58	2t	1	Total Mg 1 1	0	0
58	2v	3	Total Mg 3 3	0	0
58	2w	5	Total Mg 5 5	0	0
58	2x	7	Total Mg 7 7	0	0
58	2y	1	Total Mg 1 1	0	0

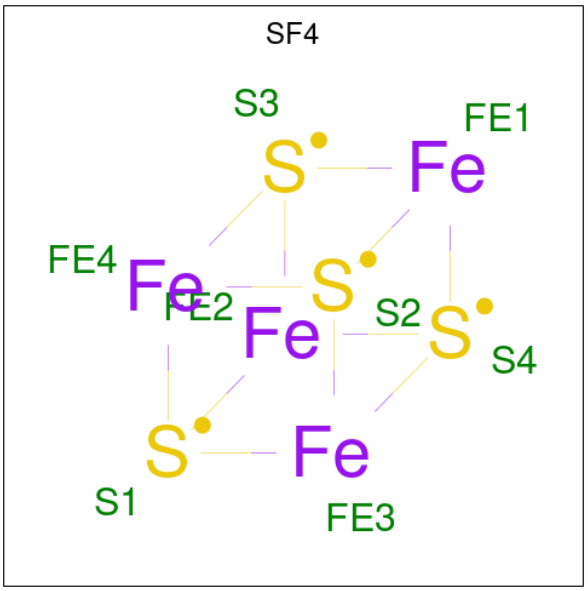
- Molecule 59 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1A	1	Total K 1 1	0	0
59	2A	1	Total K 1 1	0	0

- Molecule 60 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1Y	1	Total Zn 1 1	0	0
60	14	1	Total Zn 1 1	0	0
60	15	1	Total Zn 1 1	0	0
60	16	1	Total Zn 1 1	0	0
60	19	1	Total Zn 1 1	0	0
60	1n	1	Total Zn 1 1	0	0
60	2Y	1	Total Zn 1 1	0	0
60	24	1	Total Zn 1 1	0	0
60	25	1	Total Zn 1 1	0	0
60	26	1	Total Zn 1 1	0	0
60	29	1	Total Zn 1 1	0	0
60	2n	1	Total Zn 1 1	0	0

- Molecule 61 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1d	1	Total Fe S 8 4 4	0	0
61	2d	1	Total Fe S 8 4 4	0	0

- Molecule 62 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1A	1968	Total O 1968 1968	0	0
62	1B	61	Total O 61 61	0	0
62	1D	31	Total O 31 31	0	0
62	1E	29	Total O 29 29	0	0
62	1F	22	Total O 22 22	0	0
62	1G	2	Total O 2 2	0	0
62	1H	2	Total O 2 2	0	0
62	1I	1	Total O 1 1	0	0
62	1N	5	Total O 5 5	0	0
62	1O	6	Total O 6 6	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1P	20	Total O 20 20	0	0
62	1Q	6	Total O 6 6	0	0
62	1R	15	Total O 15 15	0	0
62	1S	5	Total O 5 5	0	0
62	1T	8	Total O 8 8	0	0
62	1U	11	Total O 11 11	0	0
62	1V	7	Total O 7 7	0	0
62	1W	5	Total O 5 5	0	0
62	1X	5	Total O 5 5	0	0
62	1Y	3	Total O 3 3	0	0
62	1Z	1	Total O 1 1	0	0
62	10	14	Total O 14 14	0	0
62	11	10	Total O 10 10	0	0
62	12	3	Total O 3 3	0	0
62	13	5	Total O 5 5	0	0
62	14	1	Total O 1 1	0	0
62	15	7	Total O 7 7	0	0
62	16	3	Total O 3 3	0	0
62	17	10	Total O 10 10	0	0
62	18	10	Total O 10 10	0	0
62	1a	340	Total O 340 340	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1b	1	Total O 1 1	0	0
62	1e	2	Total O 2 2	0	0
62	1f	1	Total O 1 1	0	0
62	1i	1	Total O 1 1	0	0
62	1l	8	Total O 8 8	0	0
62	1m	1	Total O 1 1	0	0
62	1p	1	Total O 1 1	0	0
62	1q	2	Total O 2 2	0	0
62	1u	1	Total O 1 1	0	0
62	1v	4	Total O 4 4	0	0
62	1w	9	Total O 9 9	0	0
62	1x	9	Total O 9 9	0	0
62	1z	1	Total O 1 1	0	0
62	1y	1	Total O 1 1	0	0
62	2A	1091	Total O 1091 1091	0	0
62	2B	23	Total O 23 23	0	0
62	2D	21	Total O 21 21	0	0
62	2E	11	Total O 11 11	0	0
62	2F	13	Total O 13 13	0	0
62	2O	2	Total O 2 2	0	0
62	2P	13	Total O 13 13	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	2Q	1	Total O 1 1	0	0
62	2R	4	Total O 4 4	0	0
62	2T	6	Total O 6 6	0	0
62	2U	3	Total O 3 3	0	0
62	2W	1	Total O 1 1	0	0
62	2X	3	Total O 3 3	0	0
62	2Y	1	Total O 1 1	0	0
62	2Z	1	Total O 1 1	0	0
62	20	4	Total O 4 4	0	0
62	21	9	Total O 9 9	0	0
62	23	2	Total O 2 2	0	0
62	25	1	Total O 1 1	0	0
62	27	4	Total O 4 4	0	0
62	28	3	Total O 3 3	0	0
62	29	1	Total O 1 1	0	0
62	2a	216	Total O 216 216	0	0
62	2d	2	Total O 2 2	0	0
62	2e	1	Total O 1 1	0	0
62	2i	1	Total O 1 1	0	0
62	2j	2	Total O 2 2	0	0
62	2l	6	Total O 6 6	0	0

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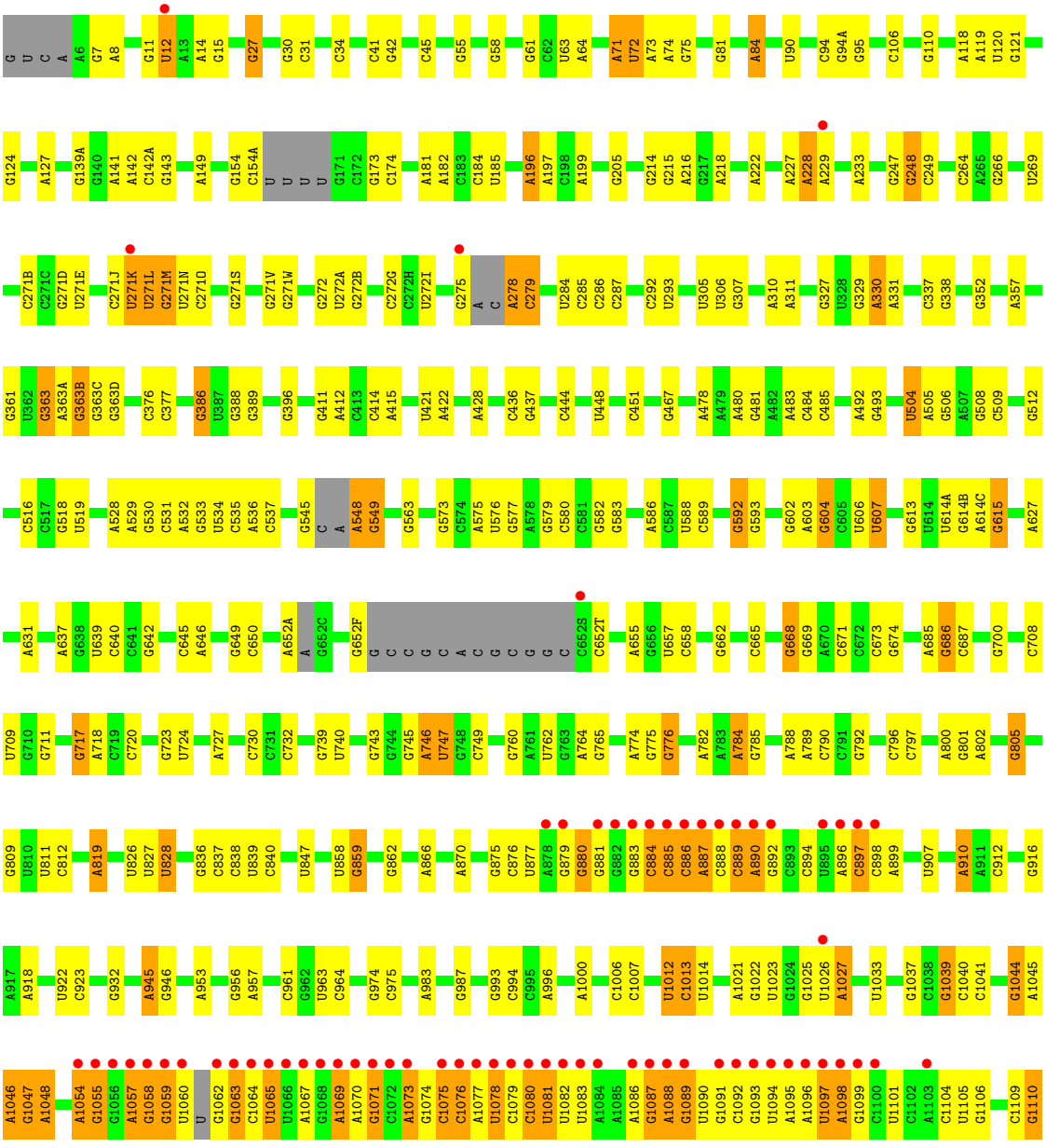
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	2p	1	Total O 1 1	0	0
62	2q	1	Total O 1 1	0	0
62	2r	1	Total O 1 1	0	0
62	2t	1	Total O 1 1	0	0
62	2v	1	Total O 1 1	0	0
62	2w	3	Total O 3 3	0	0
62	2x	4	Total O 4 4	0	0
62	2z	1	Total O 1 1	0	0
62	2y	1	Total O 1 1	0	0

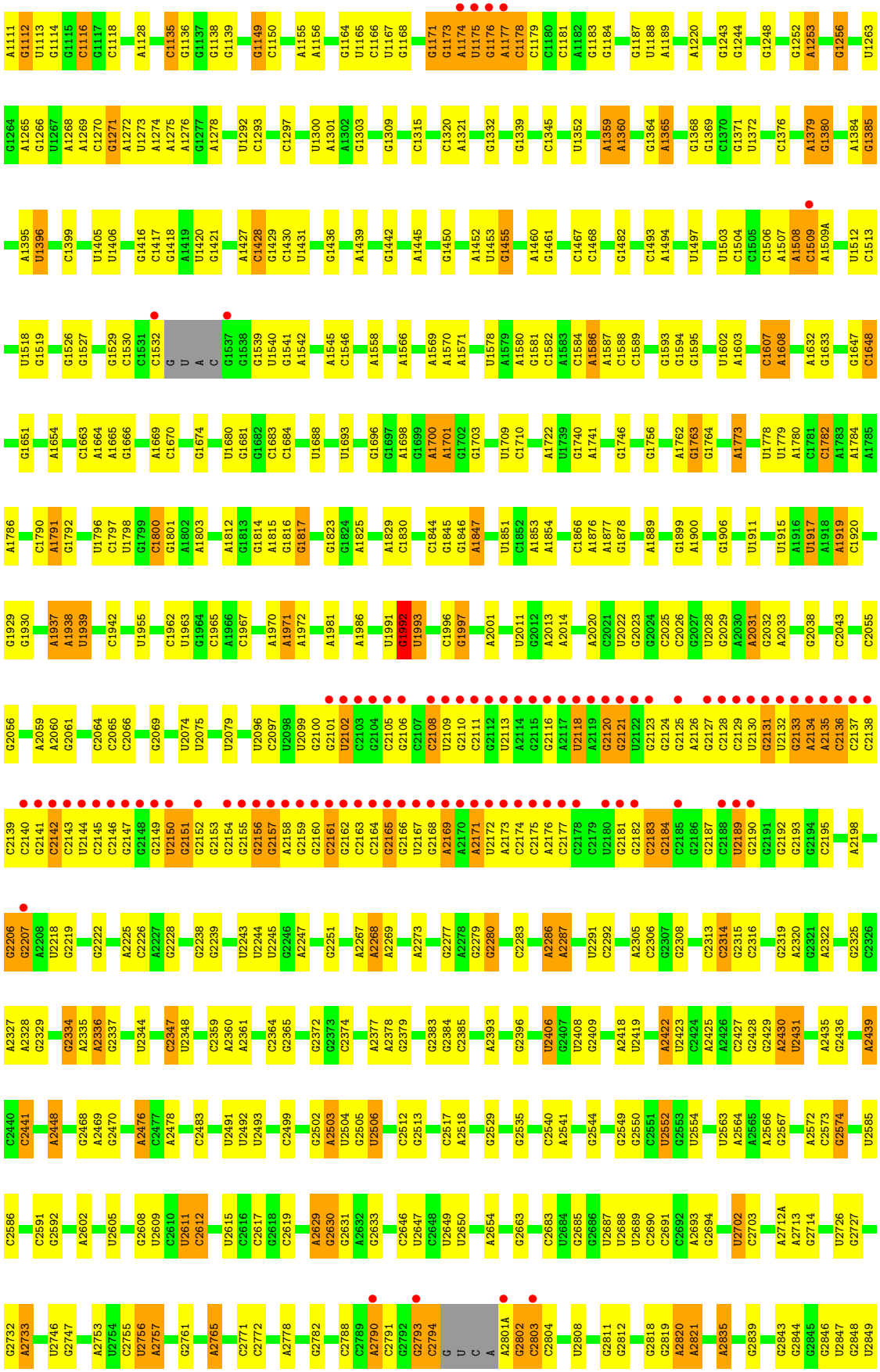
3 Residue-property plots (i)

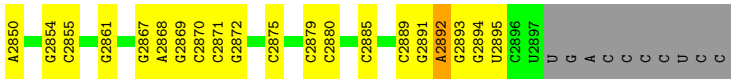
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

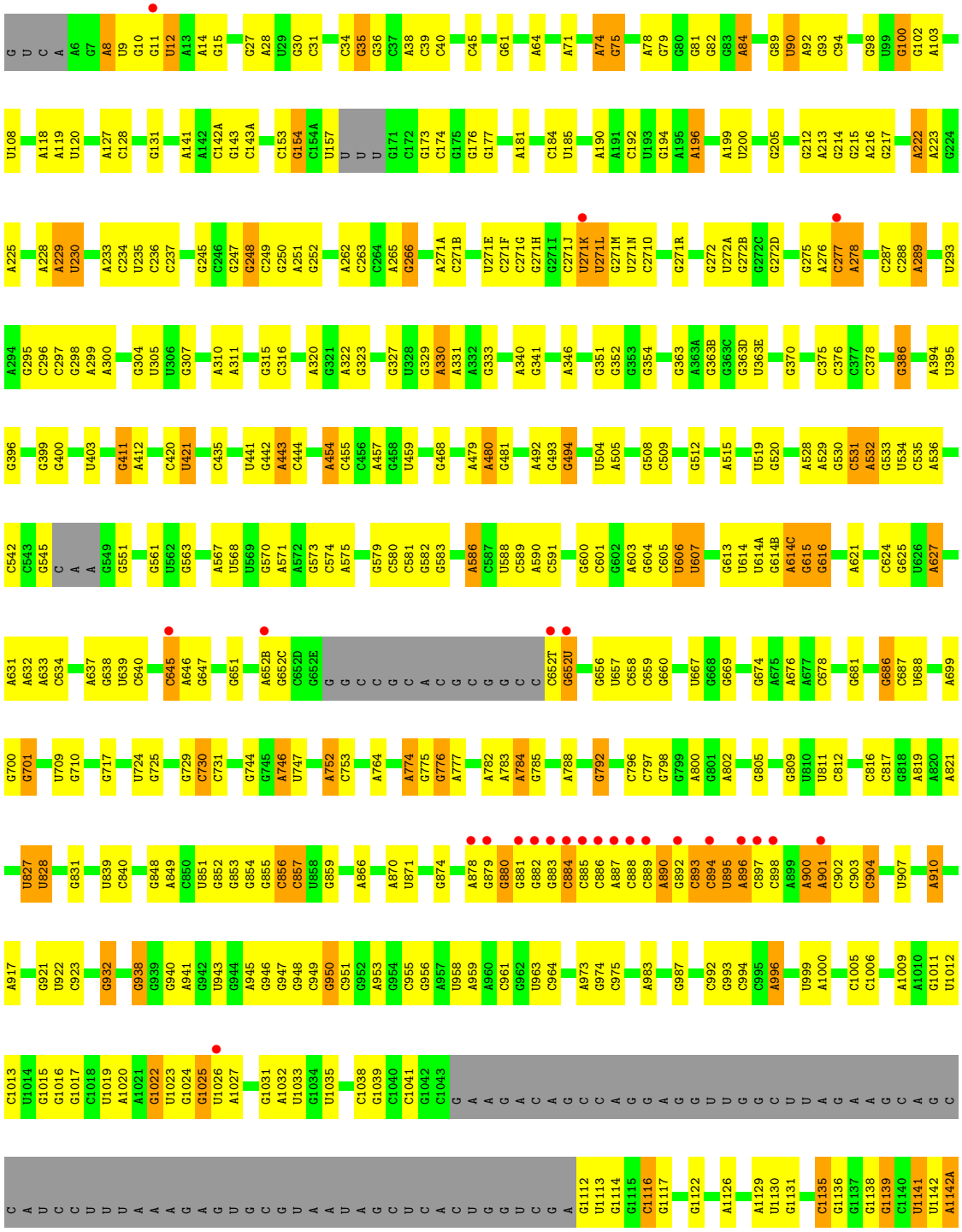


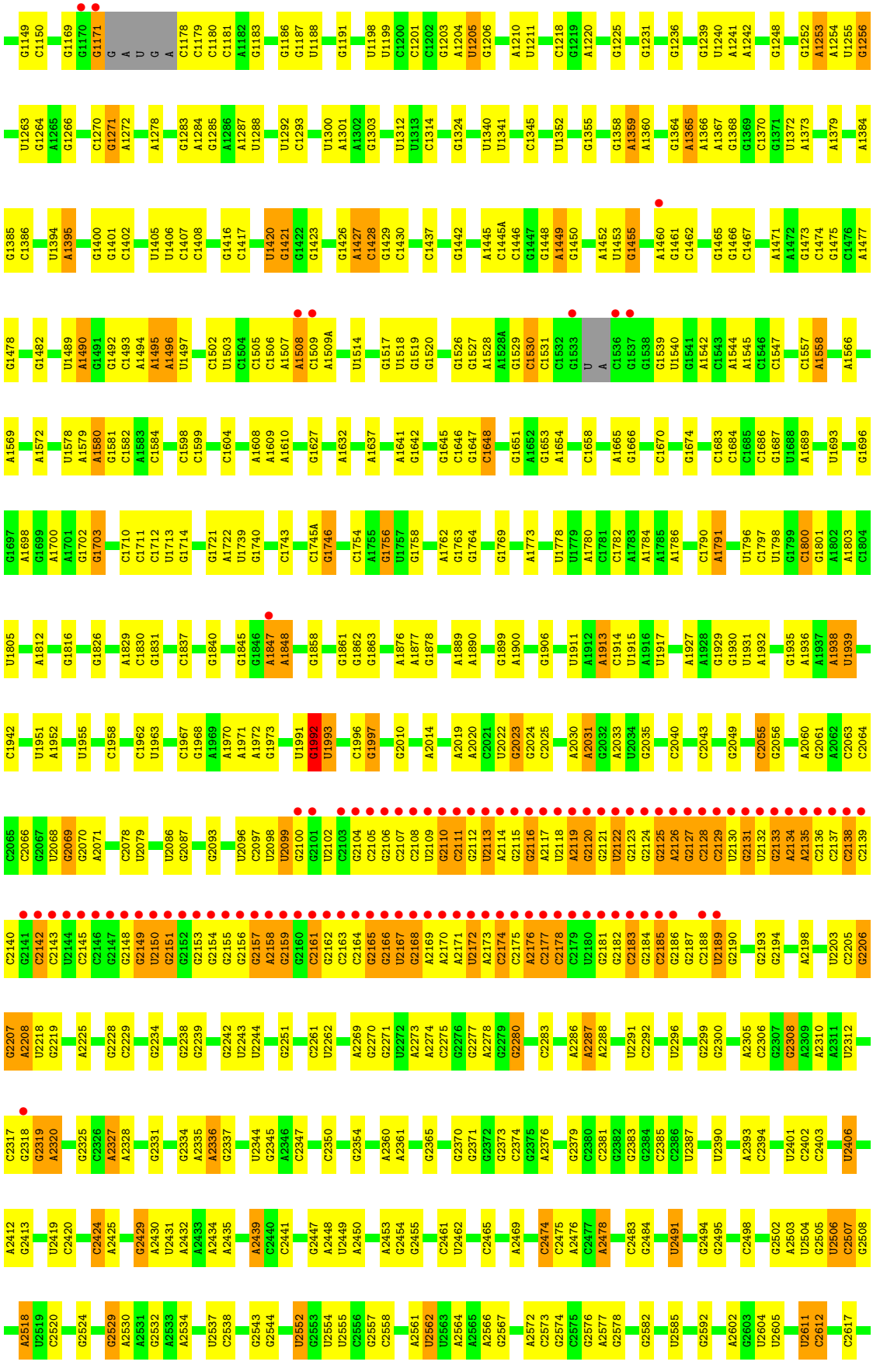


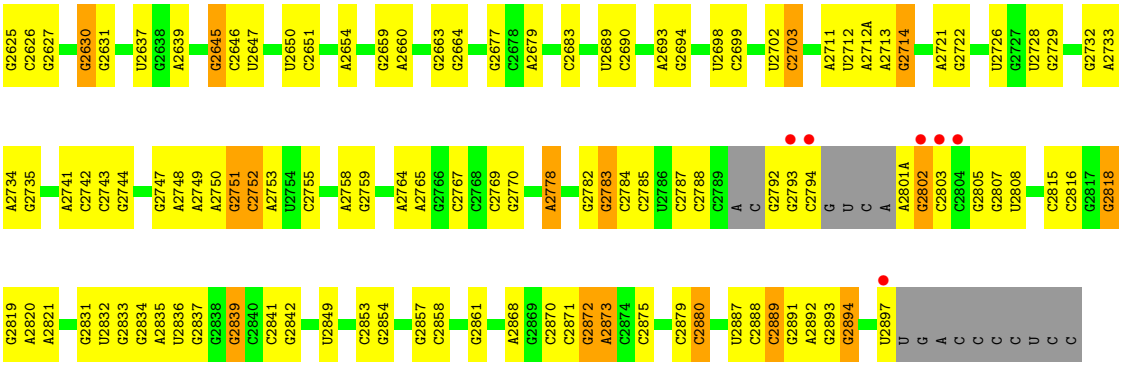


• Molecule 1: 23S Ribosomal RNA

Chain 2A:

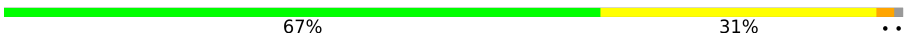






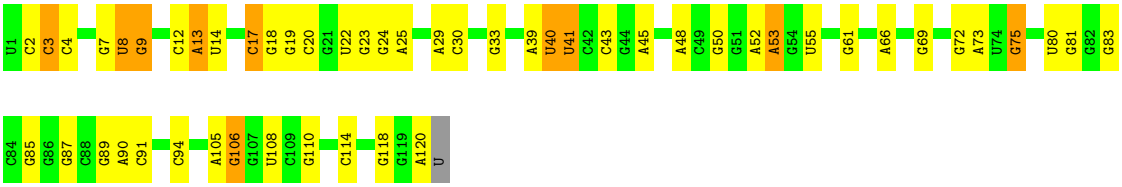
• Molecule 2: 5S Ribosomal RNA

Chain 1B:



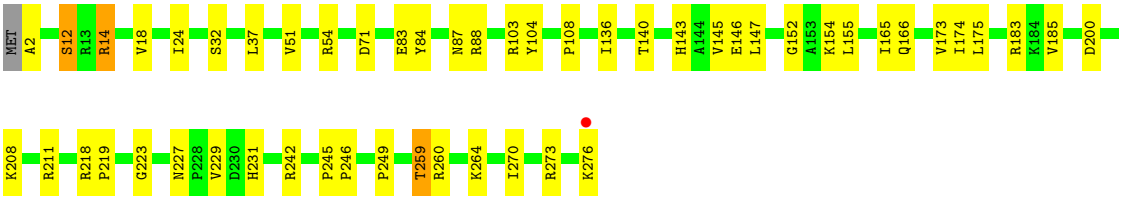
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



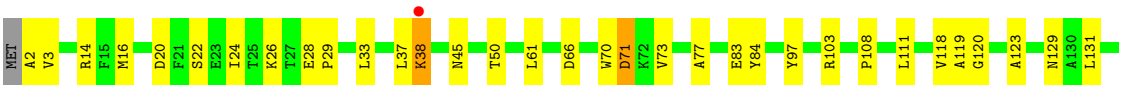
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



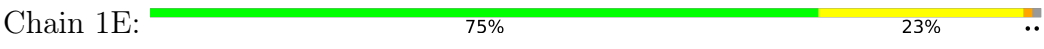
• Molecule 3: 50S ribosomal protein L2

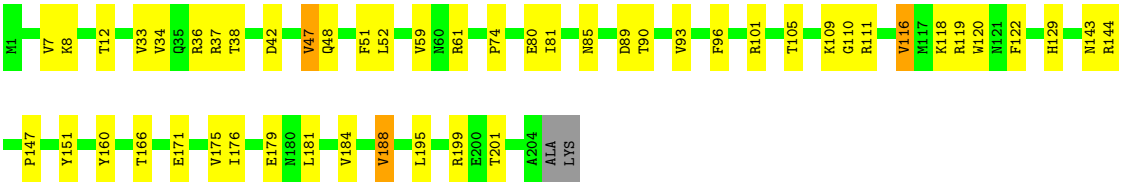
Chain 2D:



• Molecule 4: 50S ribosomal protein L3

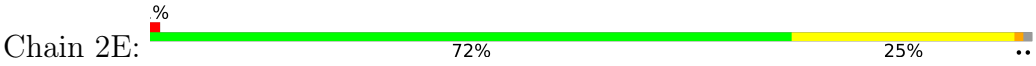
Chain 1E:

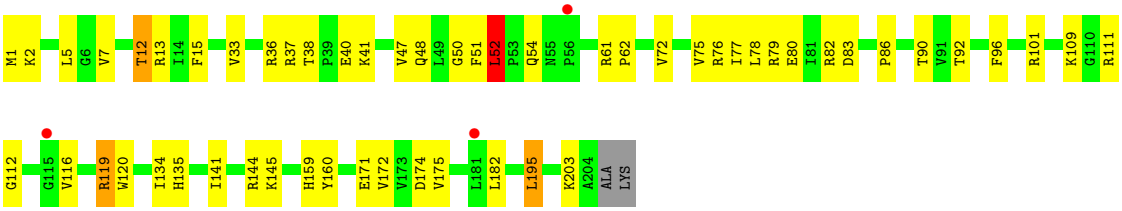




• Molecule 4: 50S ribosomal protein L3

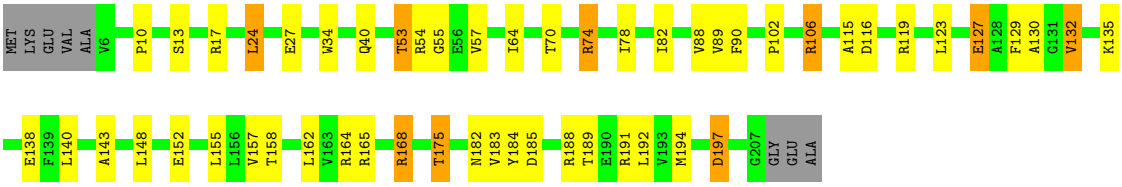
Chain 2E:





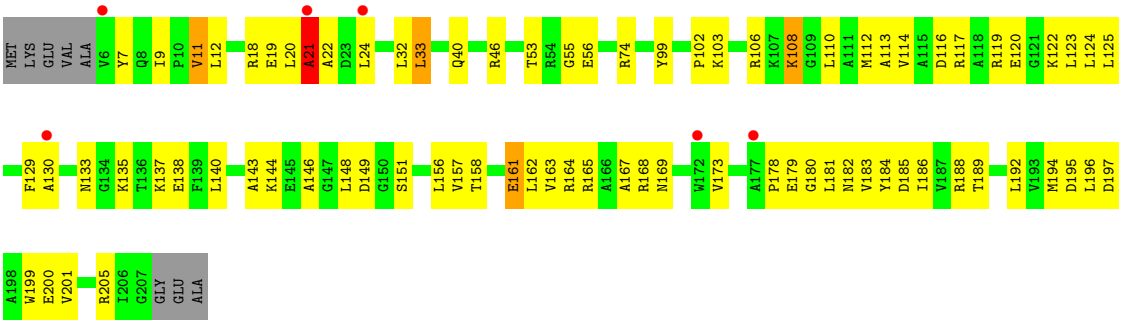
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



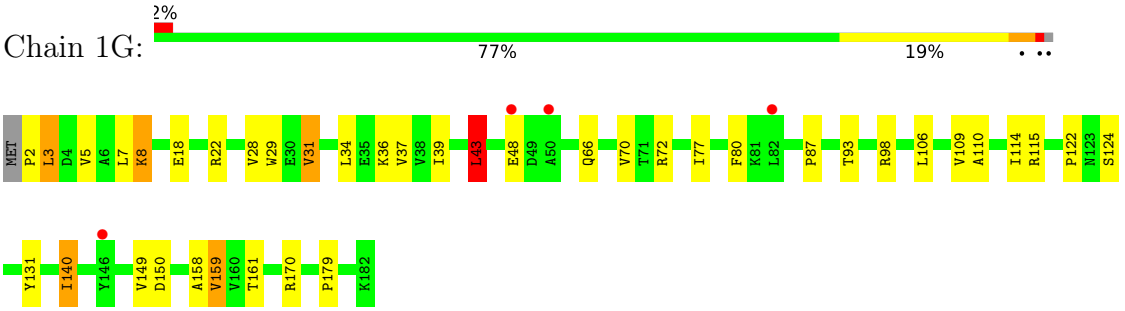
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



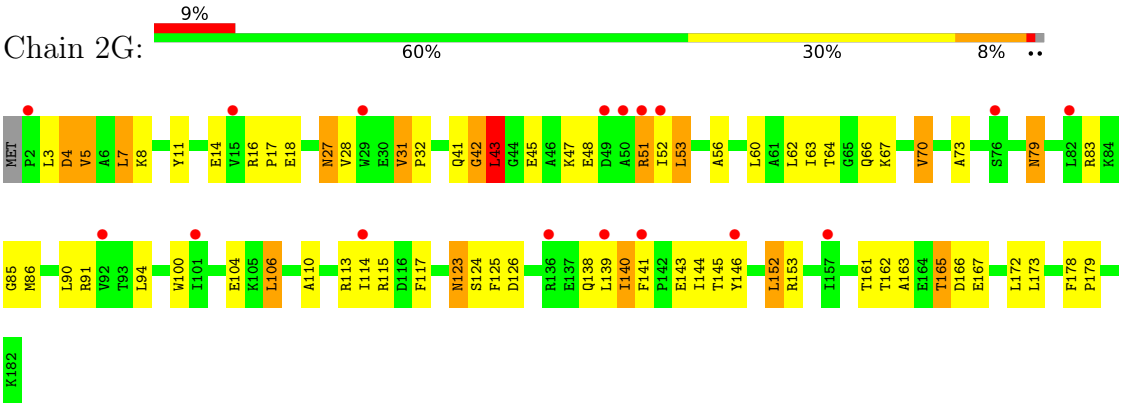
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



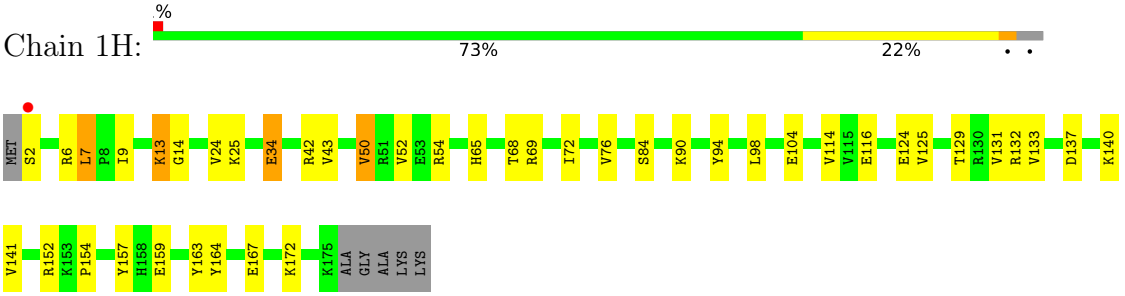
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



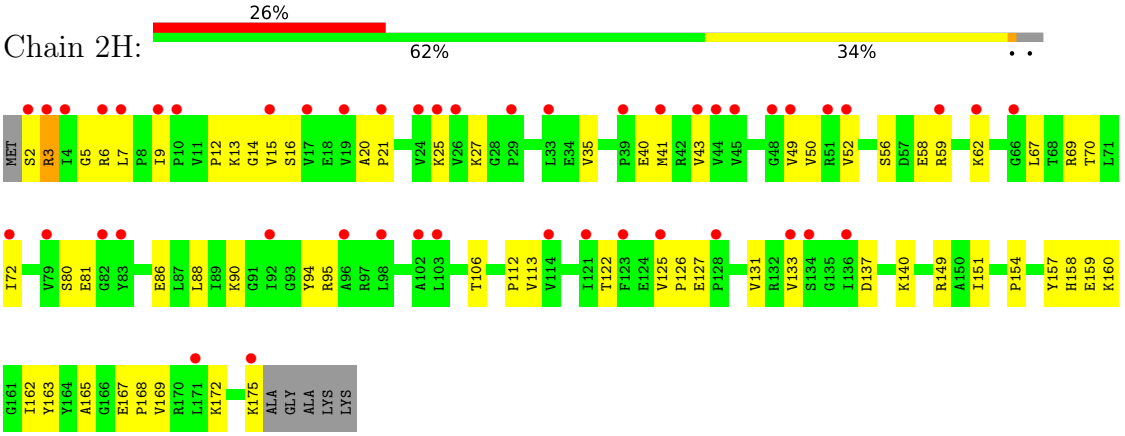
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



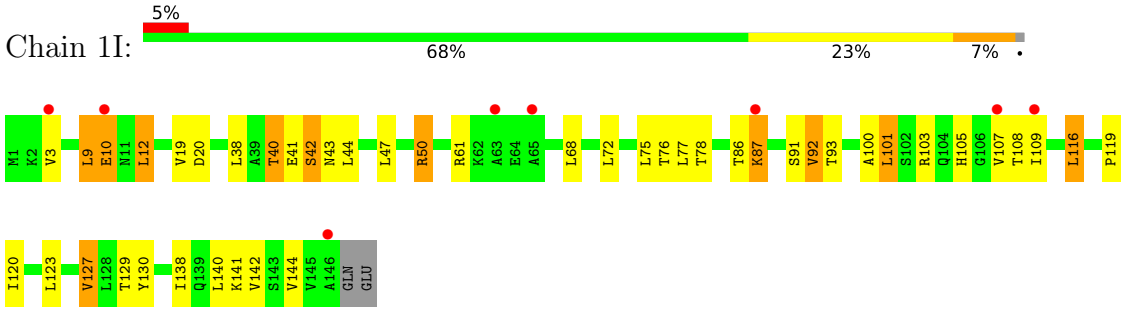
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



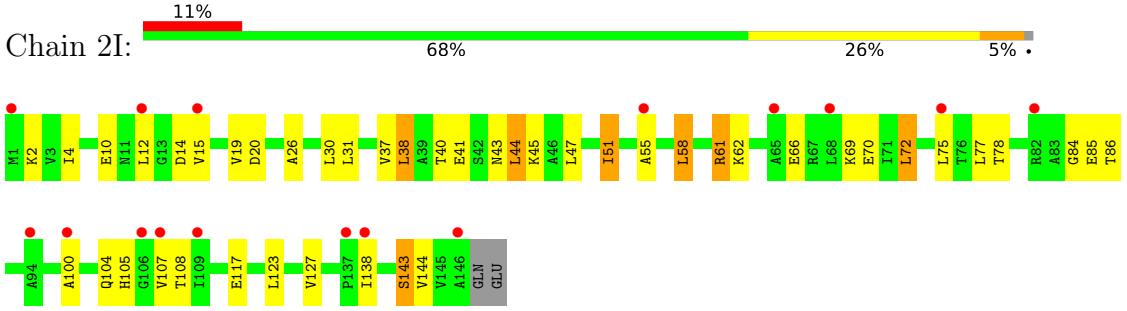
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



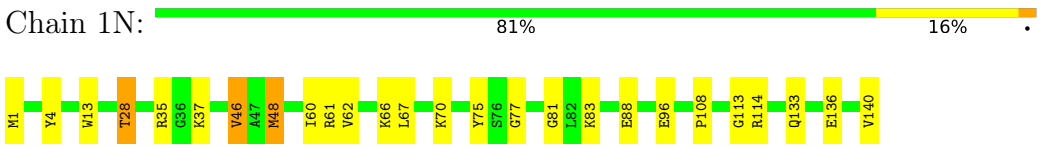
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



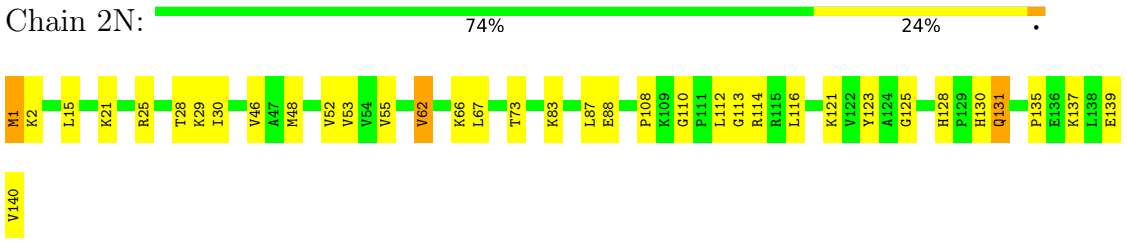
• Molecule 9: 50S ribosomal protein L13

Chain 1N:



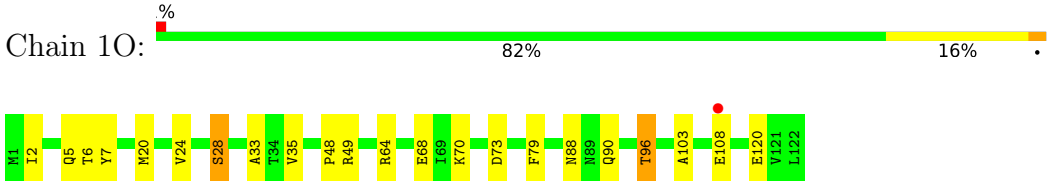
• Molecule 9: 50S ribosomal protein L13

Chain 2N:



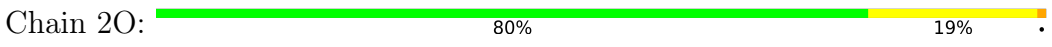
• Molecule 10: 50S ribosomal protein L14

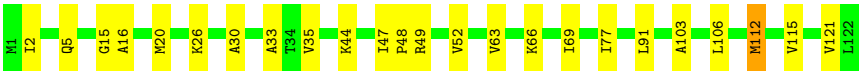
Chain 1O:



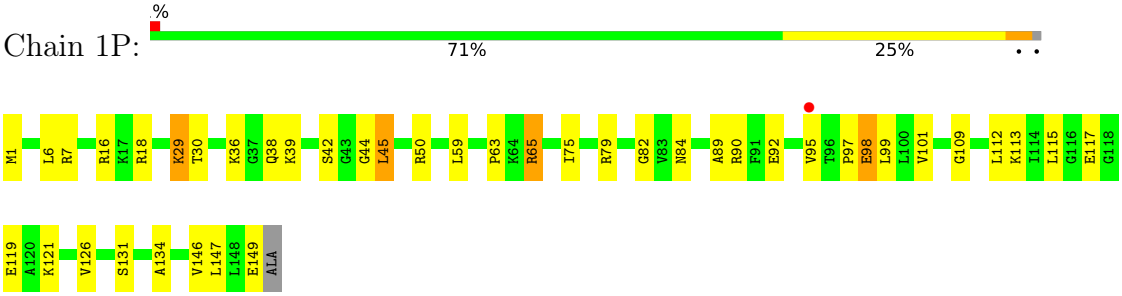
• Molecule 10: 50S ribosomal protein L14

Chain 2O:

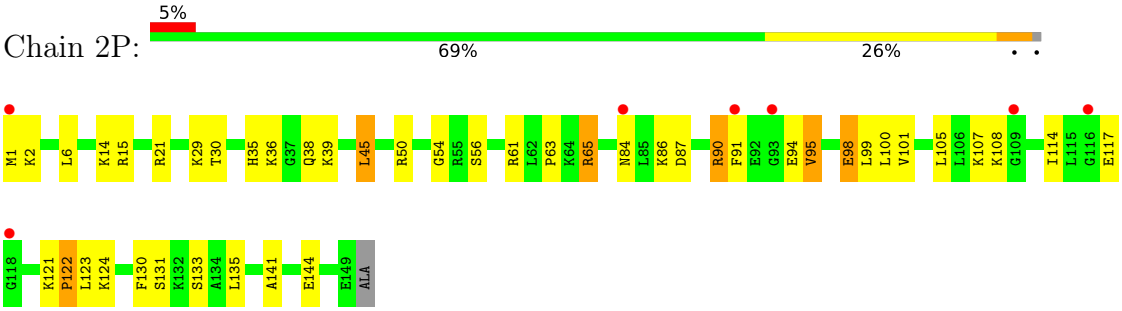




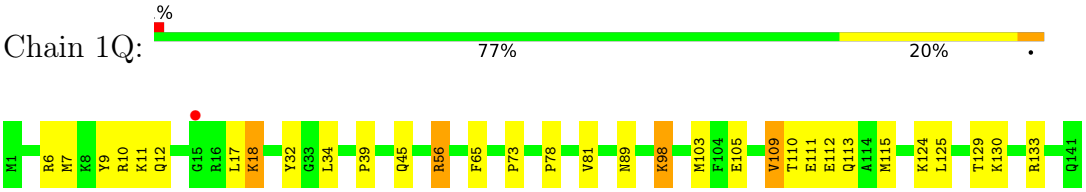
• Molecule 11: 50S ribosomal protein L15



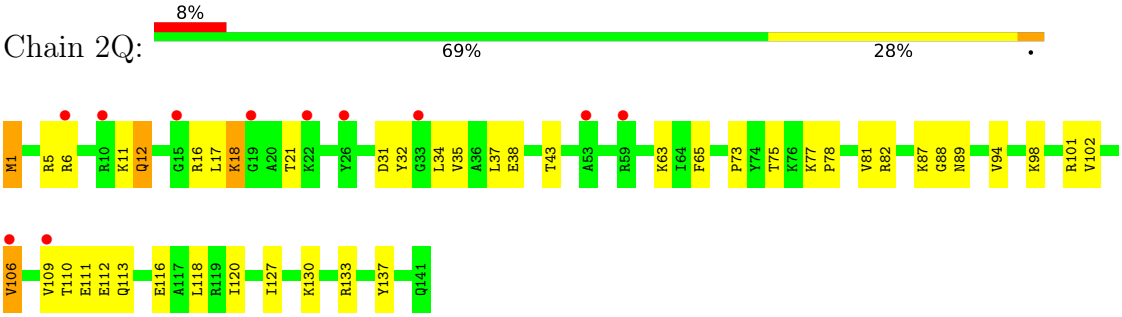
• Molecule 11: 50S ribosomal protein L15



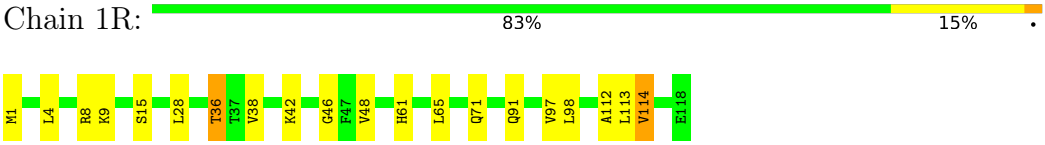
• Molecule 12: 50S ribosomal protein L16



• Molecule 12: 50S ribosomal protein L16

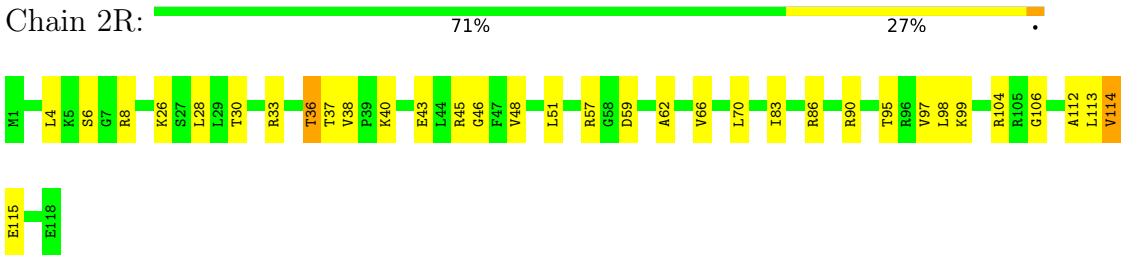


• Molecule 13: 50S ribosomal protein L17



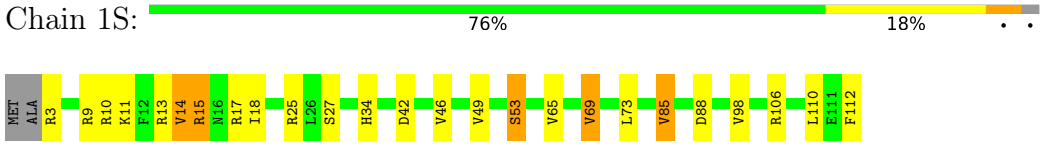
• Molecule 13: 50S ribosomal protein L17

Chain 2R:



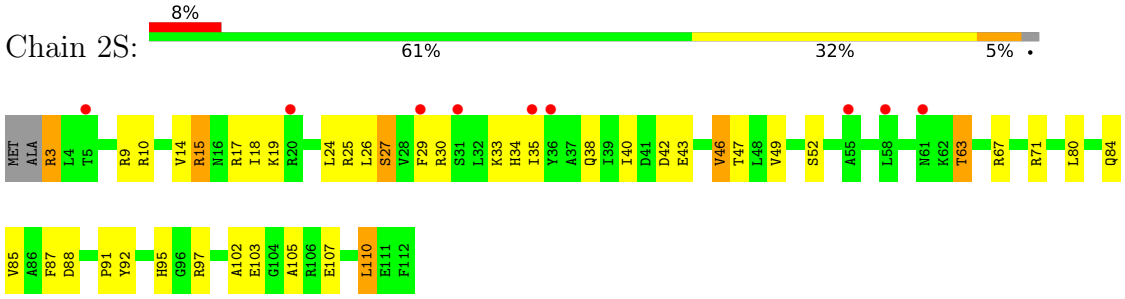
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



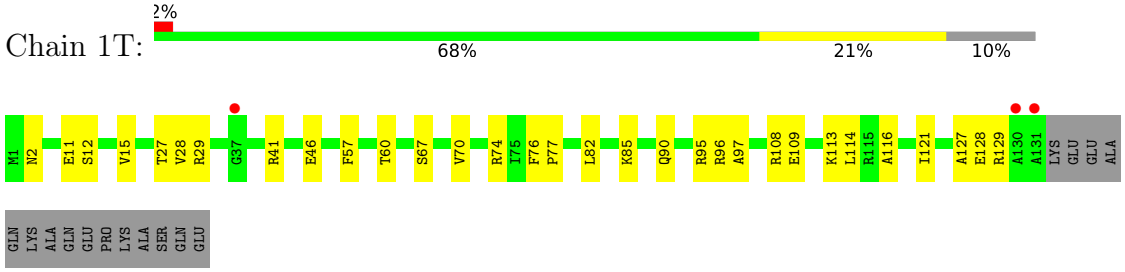
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



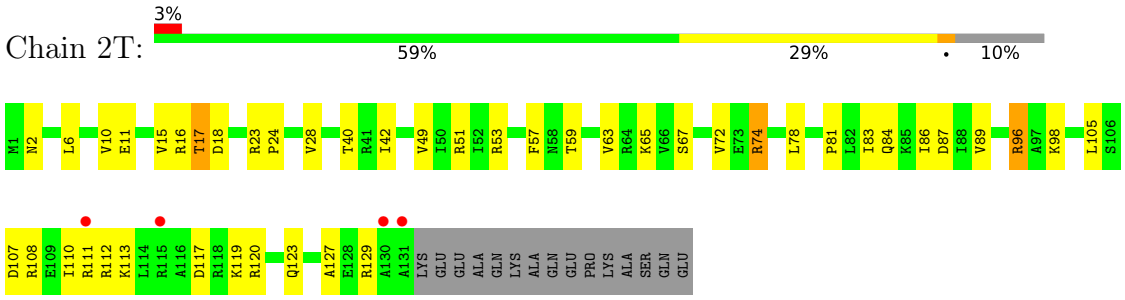
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



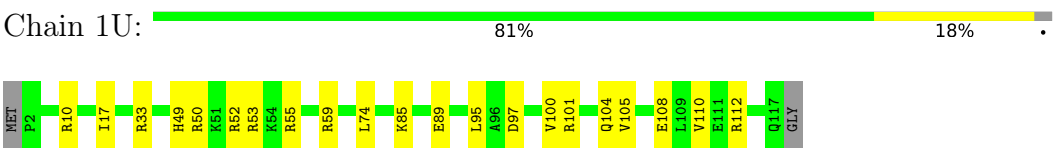
• Molecule 15: 50S ribosomal protein L19

Chain 2T:



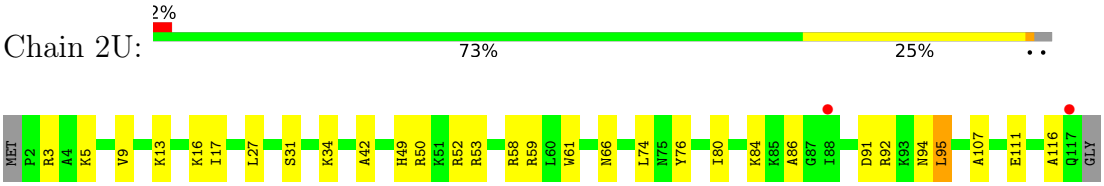
• Molecule 16: 50S ribosomal protein L20

Chain 1U:



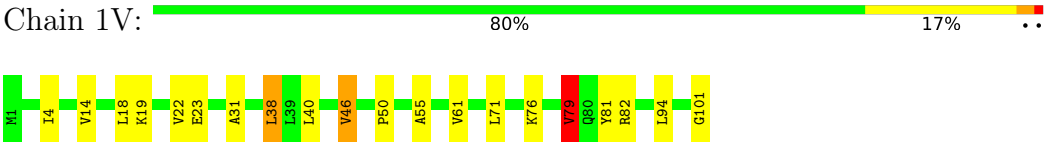
• Molecule 16: 50S ribosomal protein L20

Chain 2U:



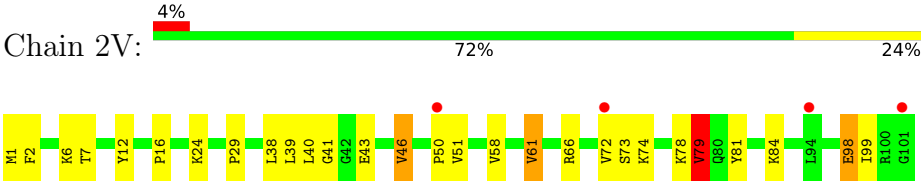
• Molecule 17: 50S ribosomal protein L21

Chain 1V:



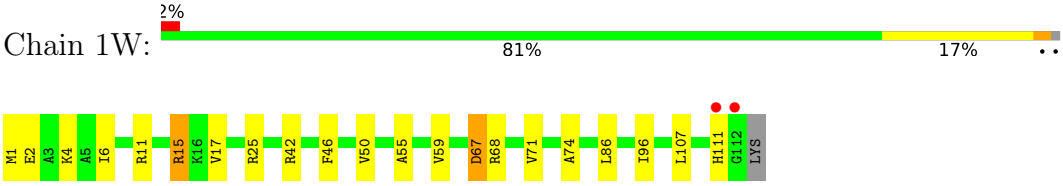
• Molecule 17: 50S ribosomal protein L21

Chain 2V:



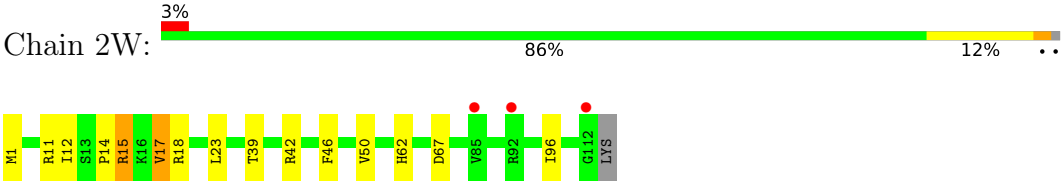
• Molecule 18: 50S ribosomal protein L22

Chain 1W:



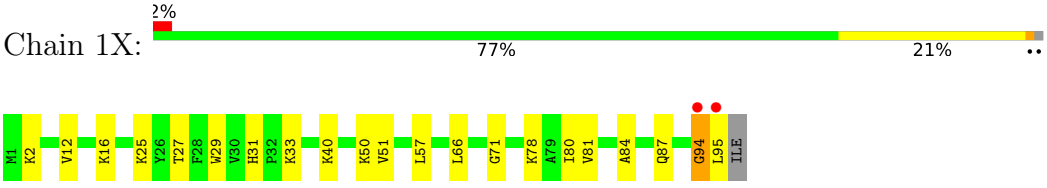
• Molecule 18: 50S ribosomal protein L22

Chain 2W:



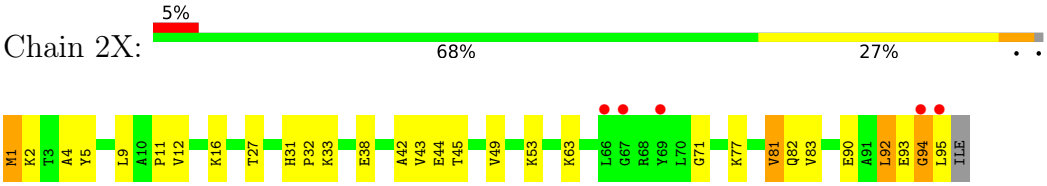
• Molecule 19: 50S ribosomal protein L23

Chain 1X:



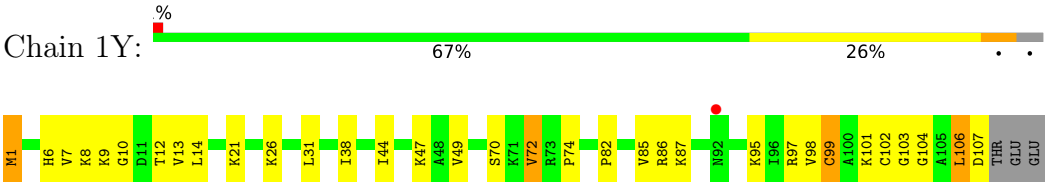
• Molecule 19: 50S ribosomal protein L23

Chain 2X:



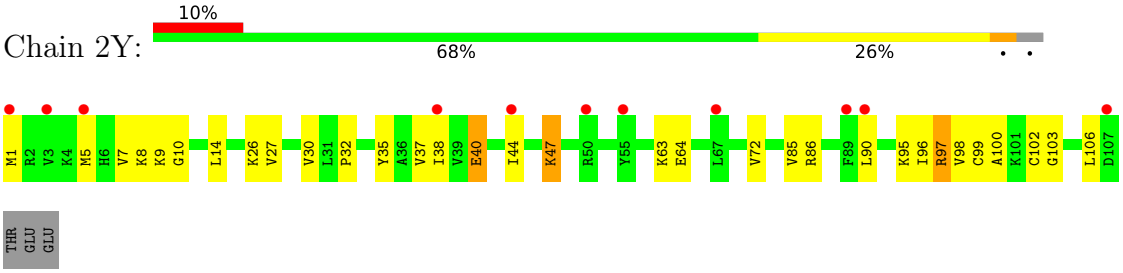
• Molecule 20: 50S ribosomal protein L24

Chain 1Y:



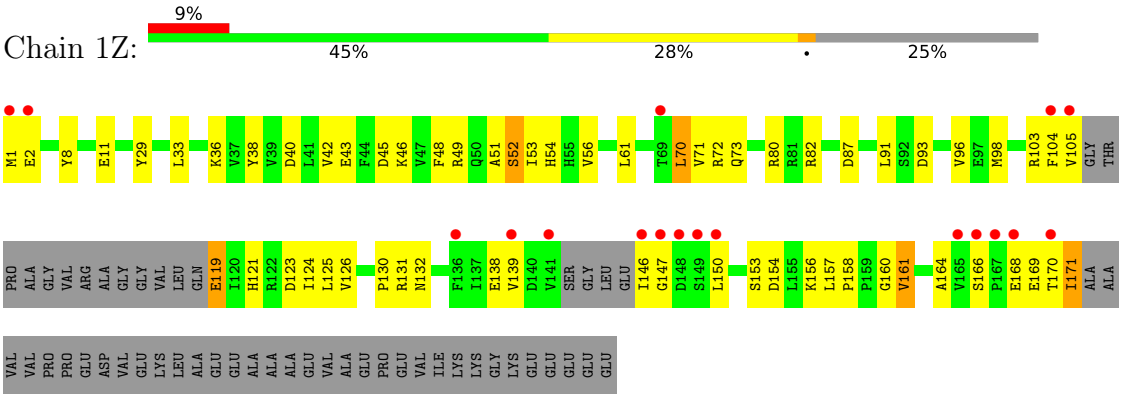
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



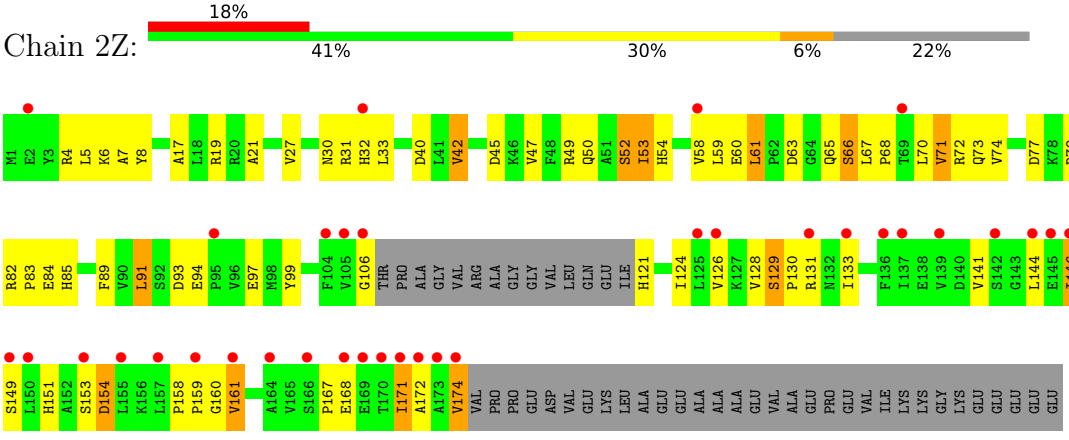
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



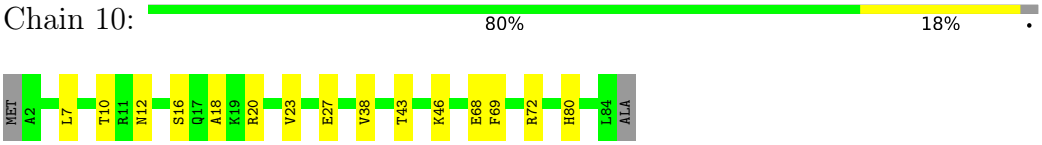
• Molecule 21: 50S ribosomal protein L25

Chain 2Z:



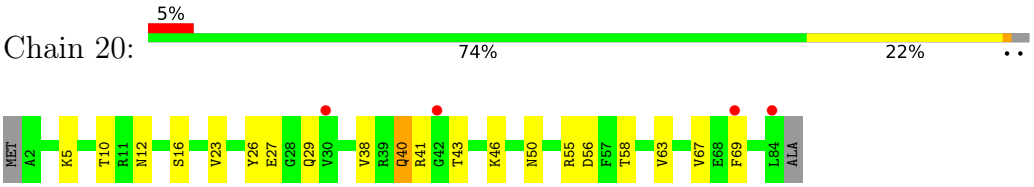
• Molecule 22: 50S ribosomal protein L27

Chain 10:



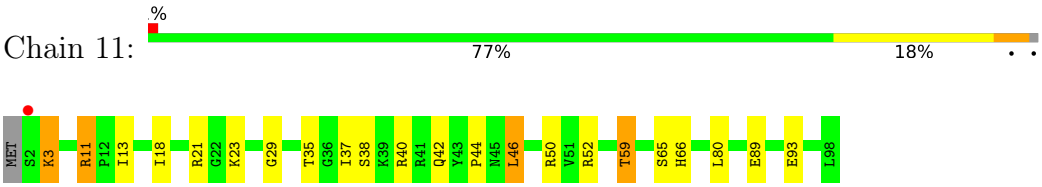
• Molecule 22: 50S ribosomal protein L27

Chain 20:



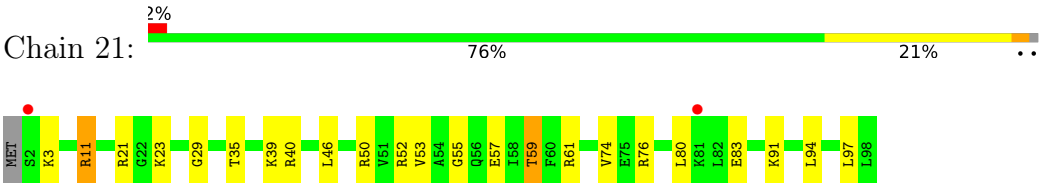
• Molecule 23: 50S ribosomal protein L28

Chain 11:



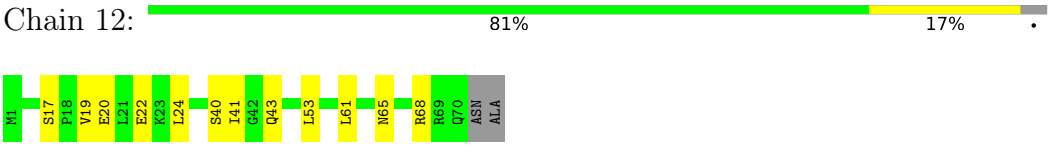
• Molecule 23: 50S ribosomal protein L28

Chain 21:



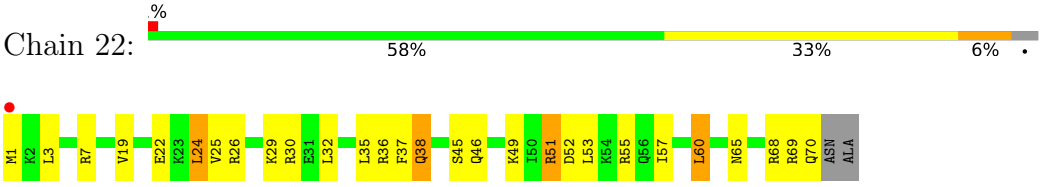
• Molecule 24: 50S ribosomal protein L29

Chain 12:



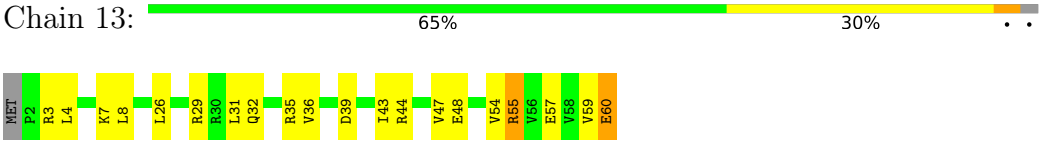
• Molecule 24: 50S ribosomal protein L29

Chain 22:



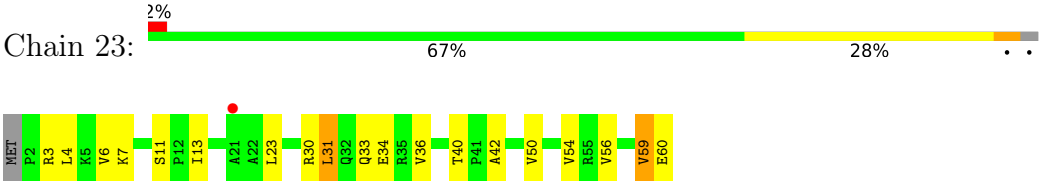
• Molecule 25: 50S ribosomal protein L30

Chain 13:



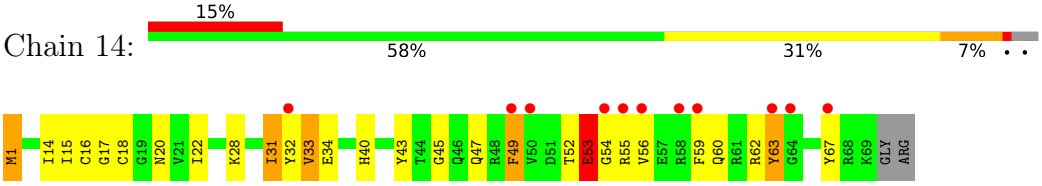
• Molecule 25: 50S ribosomal protein L30

Chain 23:



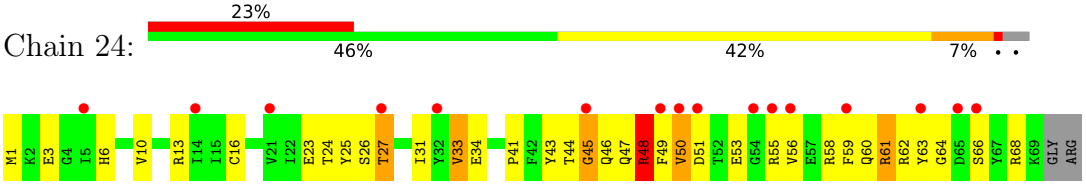
• Molecule 26: 50S ribosomal protein L31

Chain 14:



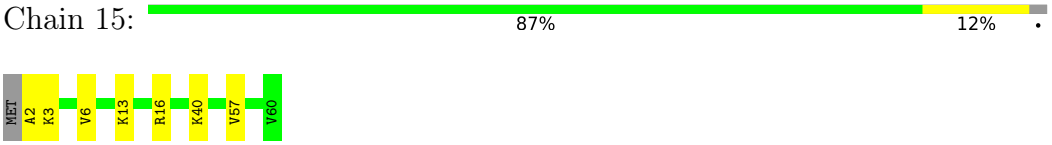
• Molecule 26: 50S ribosomal protein L31

Chain 24:



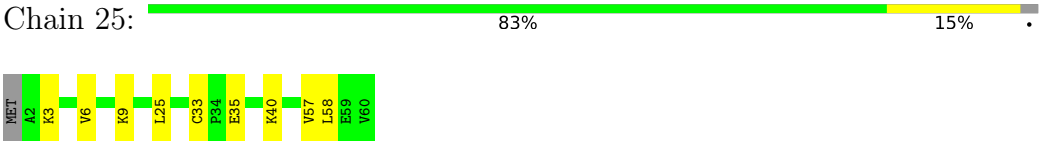
• Molecule 27: 50S ribosomal protein L32

Chain 15:



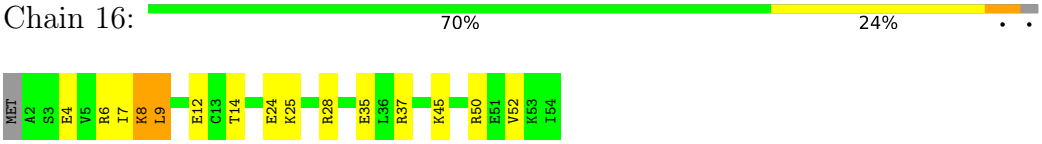
• Molecule 27: 50S ribosomal protein L32

Chain 25:



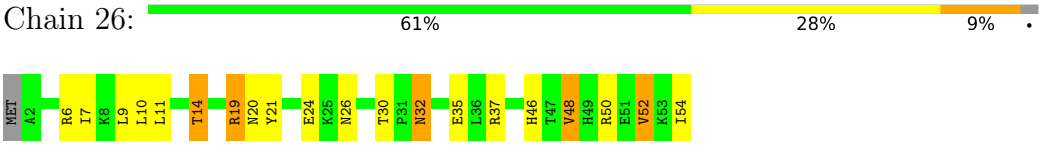
• Molecule 28: 50S ribosomal protein L33

Chain 16:



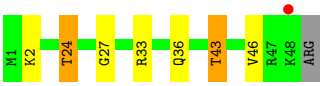
• Molecule 28: 50S ribosomal protein L33

Chain 26:



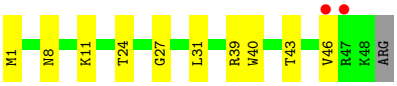
• Molecule 29: 50S ribosomal protein L34

Chain 17:



• Molecule 29: 50S ribosomal protein L34

Chain 27:

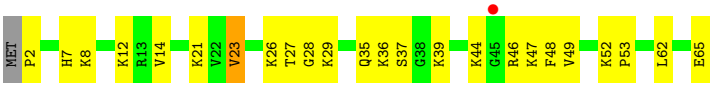


• Molecule 30: 50S ribosomal protein L35

Chain 18:

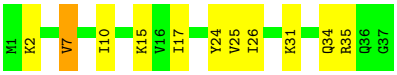
• Molecule 30: 50S ribosomal protein L35

Chain 28:



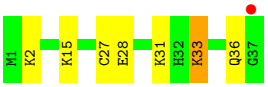
• Molecule 31: 50S ribosomal protein L36

Chain 19:



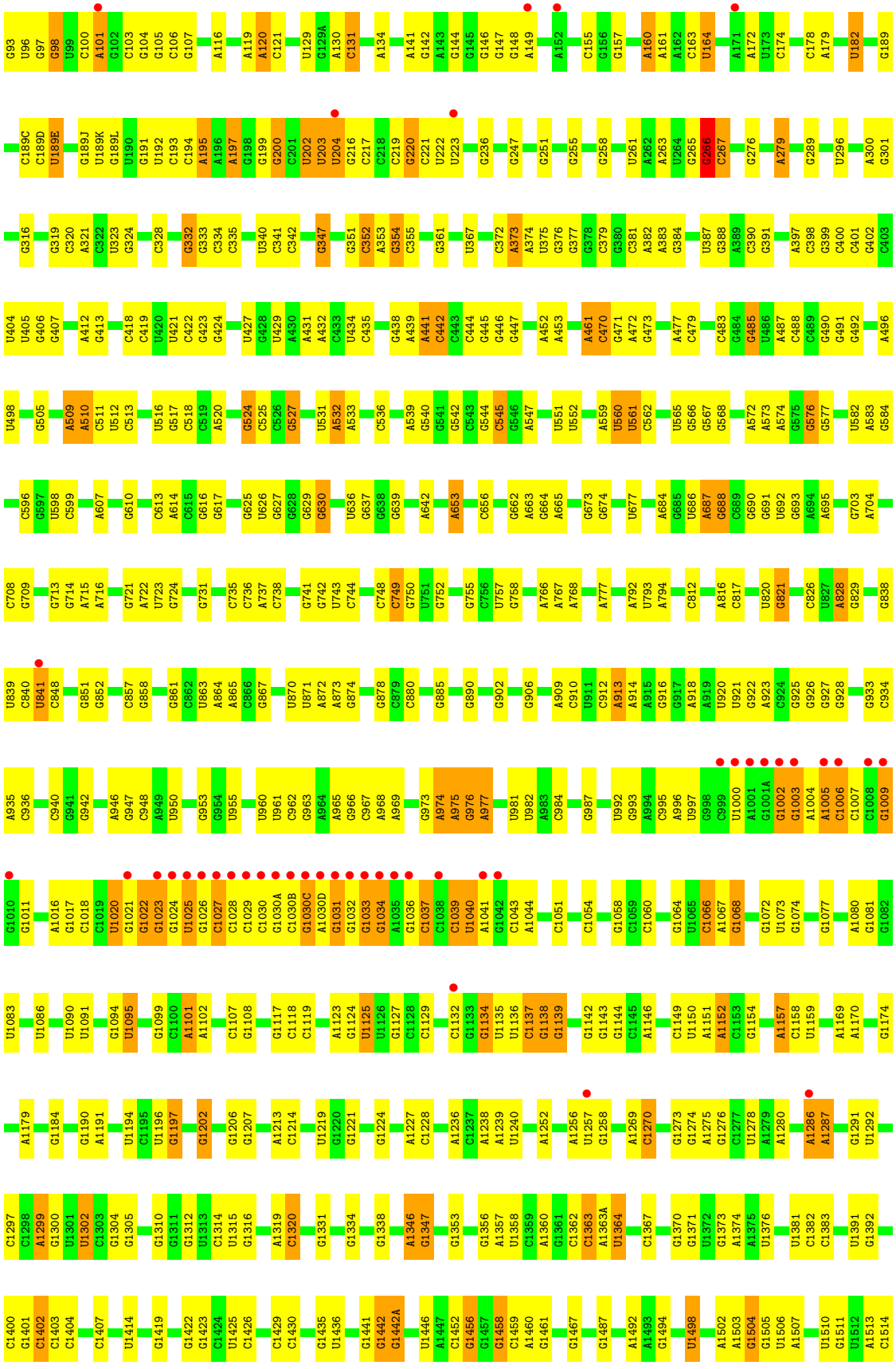
• Molecule 31: 50S ribosomal protein L36

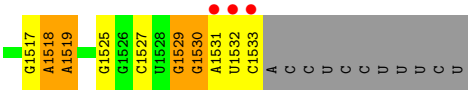
Chain 29:



• Molecule 32: 16S Ribosomal RNA

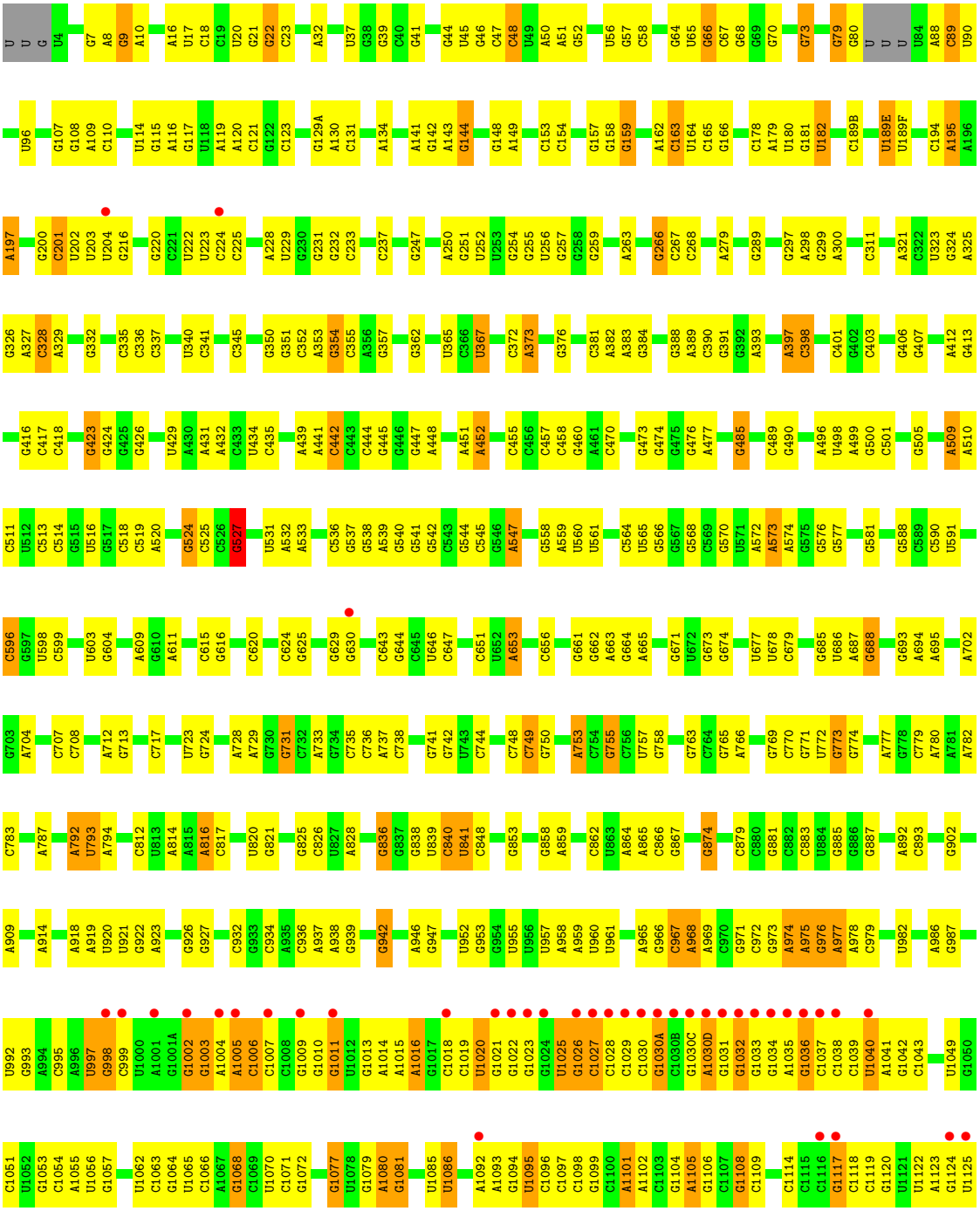
Chain 1a:

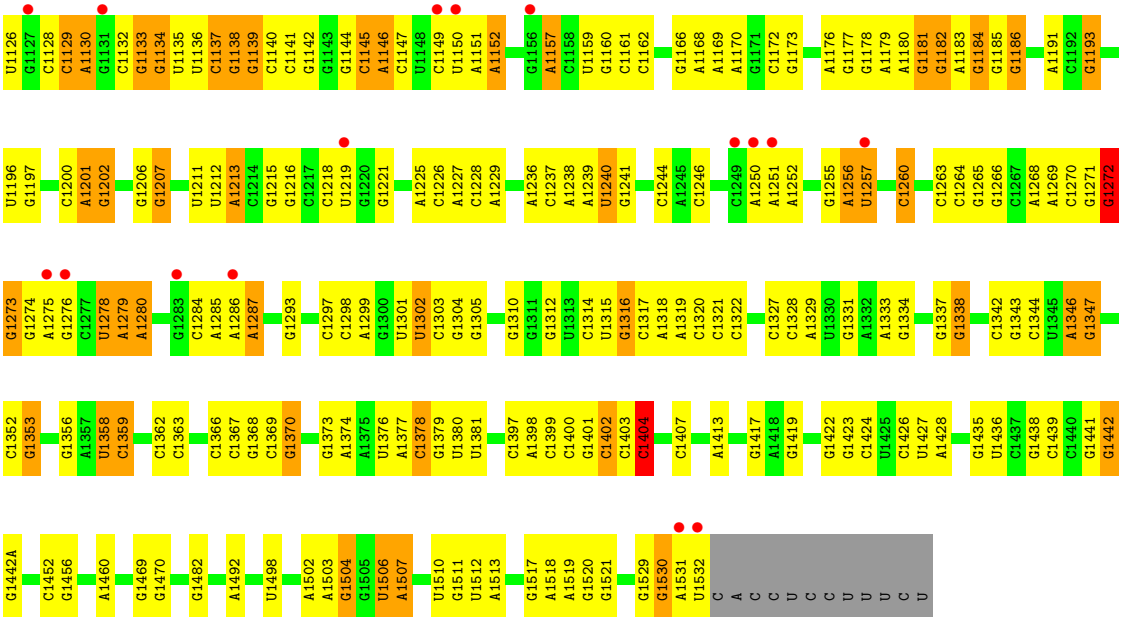

G93 U96 G97 G98 U99 C100 A101 G102 C103 G104 G105 C106 G107 A116 A119 A120 C121 U129 G129A A130 C131 A134 A141 G142 A143 G144 G145 G146 G147 G148 A149 A152 C155 G156 G157 A160 A161 A162 C163 U164 A171 A172 U173 C174 C178 A179 U182 G189
C189C C189D U189E G189J U189K G189L U190 G191 U192 C193 C194 A195 A196 A197 G198 G199 G200 C201 U202 U203 U204 G216 C217 C218 C219 G220 C221 U222 U223 G236 G247 G251 G255 G258 U261 A262 A263 U264 G265 G266 C267 G276 A279 G289 U296 A300 G301
G316 G319 C320 A321 C322 U323 G324 C328 G332 G333 C334 C335 U340 C341 C342 G347 G351 C352 A353 G354 C355 G361 U367 C372 A373 A374 U375 G376 G377 G378 C379 G380 C381 A382 A383 G384 U387 G388 A389 C390 G391 A397 C398 G399 C400 C401 G402 C403
U404 U405 G406 G407 A412 G413 C418 C419 U420 U421 C422 G423 G424 U427 G428 U429 A430 A431 A432 C433 U434 C435 G438 A439 A441 C442 C443 C444 G445 G446 G447 A452 A453 A461 C470 G471 A472 G473 A477 C479 C483 G484 G485 U486 A487 C488 C489 G490 G491 G492 A496
U498 G505 A509 A510 C511 U512 C513 U516 G517 C518 C519 A520 G524 C525 C526 G527 U531 A532 A533 C536 A539 G540 G541 G542 C543 G544 C545 G546 A547 U551 U552 A559 U560 U561 C562 U565 G566 G567 G568 A572 A573 A574 G575 G576 G577 U582 A583 G584
C596 G597 U598 C599 A607 G610 C613 A614 C615 G616 G617 G625 U626 G627 G628 G629 G630 U636 G637 G638 G639 A642 A653 C656 G662 A663 G664 A665 G673 G674 U677 A684 G685 U686 A687 G688 C689 G690 G691 U692 G693 A694 A695 G703 A704
C708 G709 G713 G714 A715 A716 G721 A722 U723 G724 G731 C735 C736 A737 C738 G741 G742 U743 C744 C748 C749 G750 U751 G752 G755 C756 U757 G758 A766 A767 A768 A777 A792 U793 A794 C812 A816 C817 U820 G821 C826 U827 A828 G829 G838
U839 C840 U841 C848 G851 G852 C857 G858 G861 C862 U863 A864 A865 C866 G867 U870 U871 A872 A873 G874 G878 C879 C880 G885 G890 G902 G906 A909 C910 U911 C912 A913 A914 A915 G916 G917 A918 A919 U920 U921 G922 A923 C924 G925 G926 G927 G928 G933 C934
A935 C936 C940 G941 G942 A946 G947 C948 A949 U950 G953 G954 U955 U960 U961 C962 G963 A964 A965 G966 C967 A968 A969 G973 A974 A975 G976 A977 U981 U982 A983 C984 G987 U992 G993 A994 C995 A996 U997 G998 C999 U1000 A1001 G1001A G1002 G1003 A1004 A1005 C1006 C1007 C1008 G1009
G1010 G1011 A1016 G1017 C1018 C1019 U1020 G1021 G1022 G1023 G1024 U1025 G1026 C1027 C1028 C1029 C1030 G1030A C1030B G1030C A1030D G1031 G1032 G1033 G1034 A1035 G1036 C1037 C1038 C1039 U1040 A1041 G1042 C1043 A1044 C1051 C1054 G1058 C1059 C1060 G1064 U1065 C1066 A1067 G1068 G1072 U1073 G1074 G1077 A1080 G1081 G1082
U1083 U1086 U1090 U1091 G1094 U1095 G1099 C1100 A1101 A1102 C1107 G1108 G1117 C1118 C1119 A1123 G1124 U1125 U1126 G1127 C1128 C1129 C1132 G1133 G1134 U1135 U1136 C1137 G1138 G1139 G1142 G1143 G1144 C1145 A1146 C1149 U1150 A1151 A1152 C1153 G1154 A1157 C1158 U1159 A1169 A1170 G1174
A1179 G1184 G1190 A1191 U1194 C1195 U1196 G1197 G1202 G1206 G1207 A1213 C1214 U1219 G1220 G1221 G1224 A1227 C1228 A1236 C1237 A1238 A1239 U1240 A1252 A1256 U1257 G1258 A1269 C1270 G1273 G1274 A1275 G1276 C1277 U1278 A1279 A1280 A1286 A1287 G1291 U1292
C1297 C1298 A1299 G1300 U1301 U1302 C1303 G1304 G1305 G1310 G1311 G1312 U1313 C1314 U1315 G1316 A1319 C1320 G1331 G1334 G1338 A1346 G1347 G1353 G1356 A1357 U1358 C1359 A1360 G1361 C1362 C1363 A1363A U1364 C1367 G1370 G1371 U1372 G1373 A1374 A1375 U1376 U1381 C1382 C1383 U1391 G1392
C1400 G1401 C1402 C1403 C1404 C1407 U1414 G1419 G1422 G1423 C1424 U1425 C1426 C1429 C1430 G1435 U1436 G1441 G1442 G1442A U1446 A1447 C1452 G1456 G1457 G1458 C1459 A1460 G1461 G1467 G1487 A1492 A1493 G1494 U1498 A1502 A1503 G1504 G1505 U1506 A1507 U1510 G1511 U1512 A1513 C1514



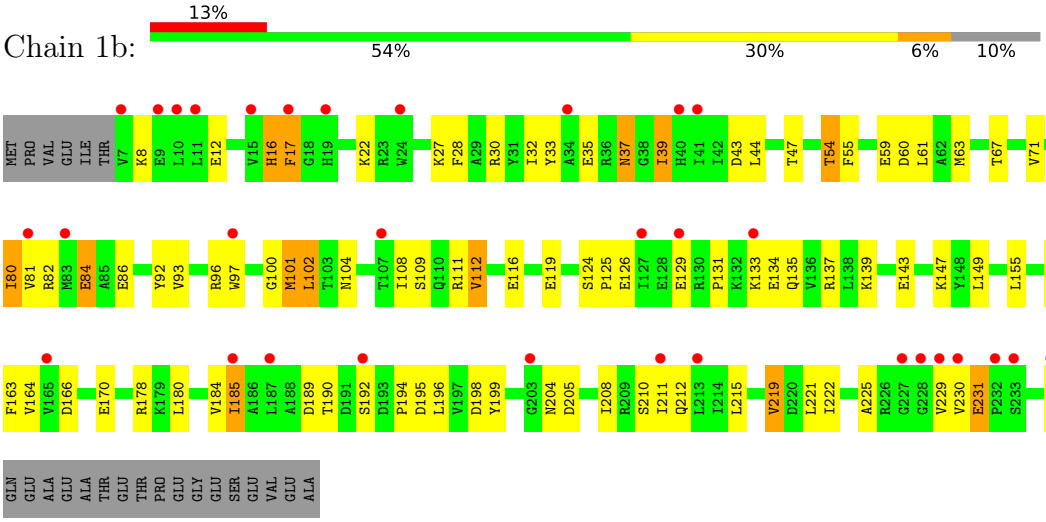
• Molecule 32: 16S Ribosomal RNA

Chain 2a:

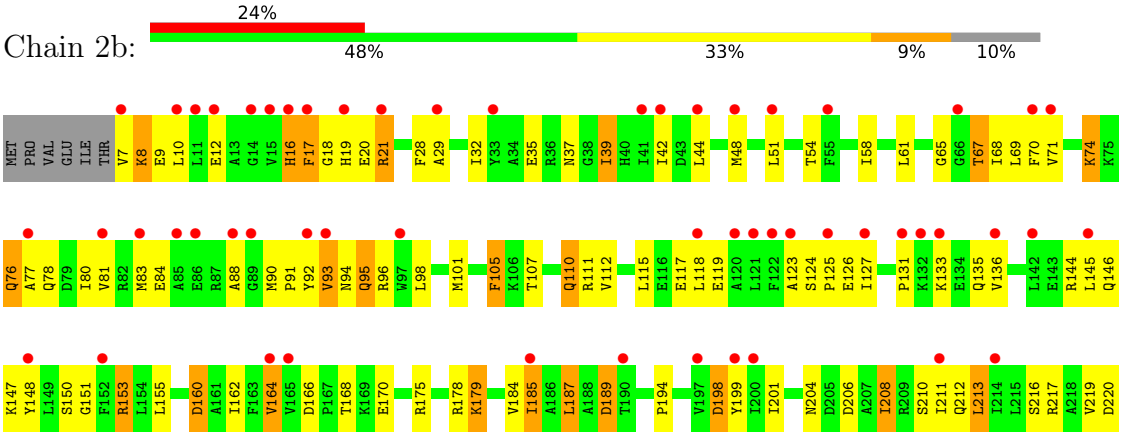


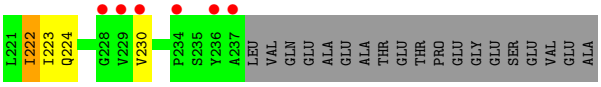


• Molecule 33: 30S ribosomal protein S2



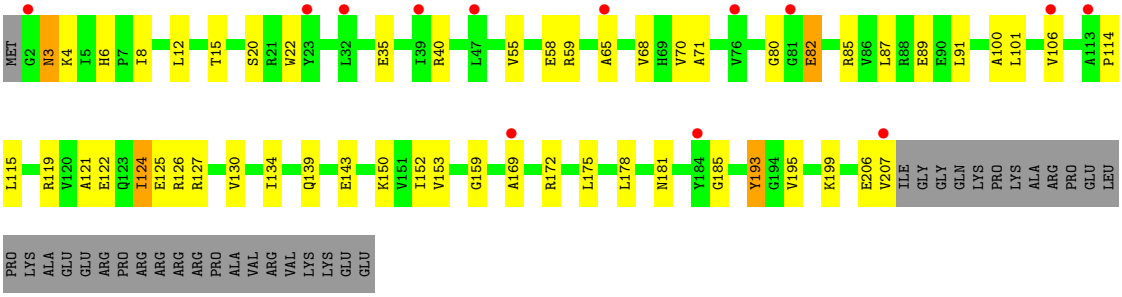
• Molecule 33: 30S ribosomal protein S2





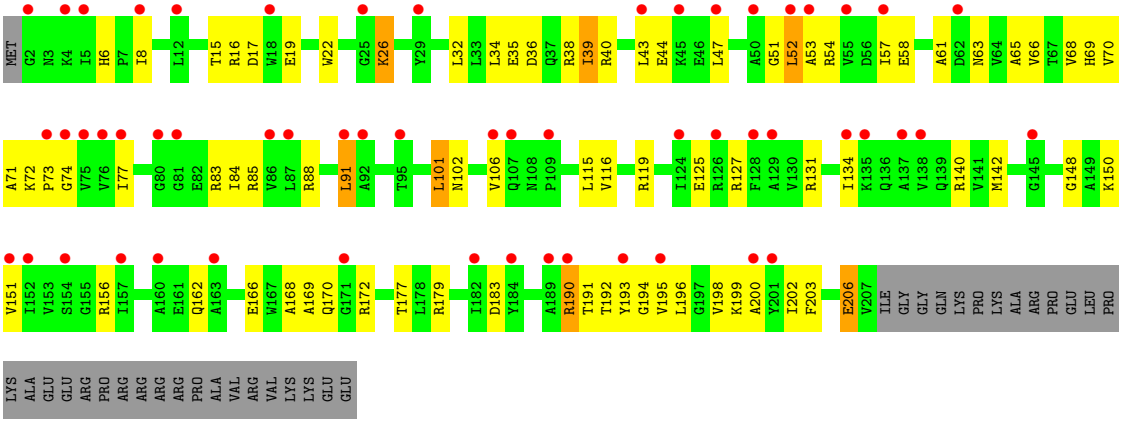
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



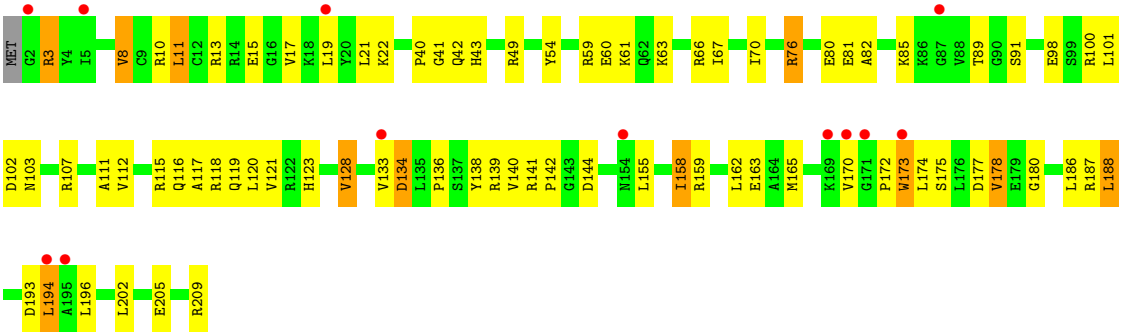
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



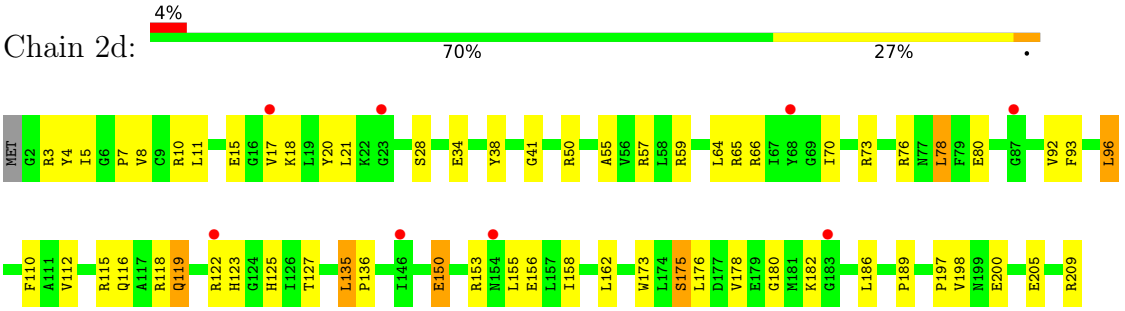
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



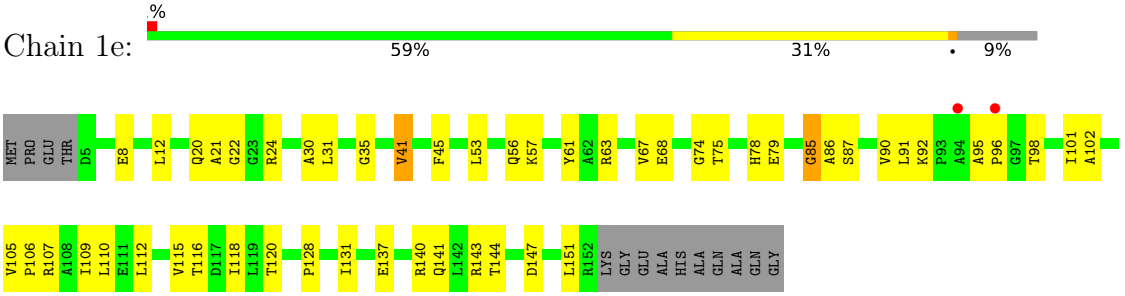
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



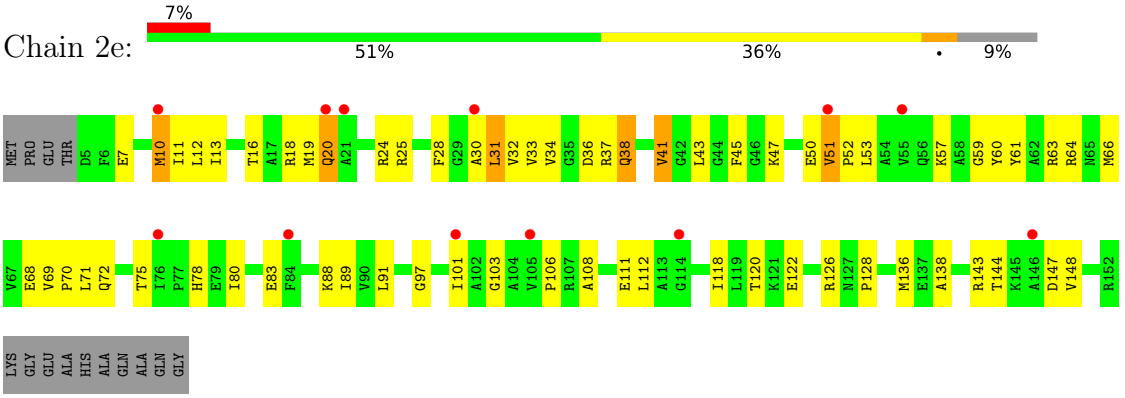
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



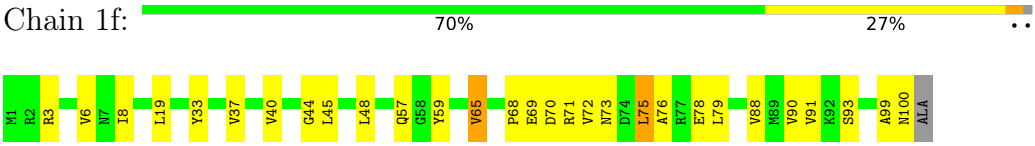
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



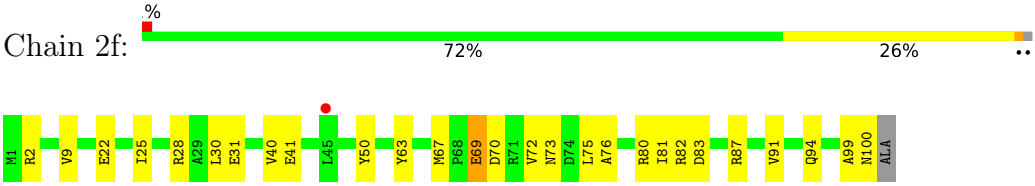
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



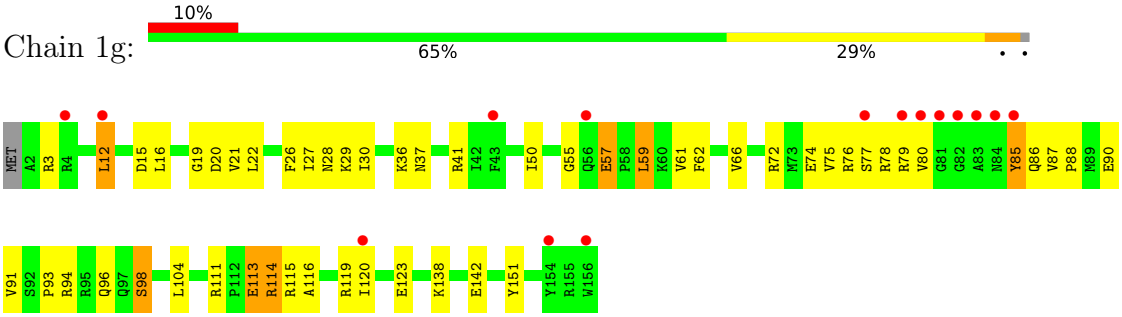
• Molecule 37: 30S ribosomal protein S6

Chain 2f:



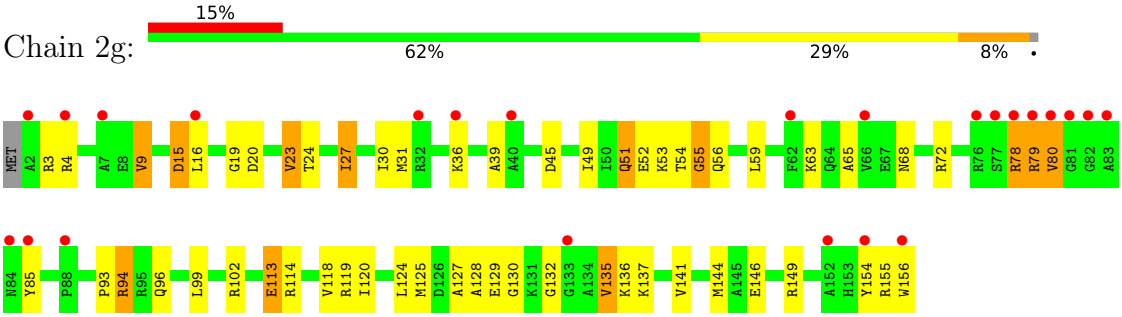
• Molecule 38: 30S ribosomal protein S7

Chain 1g:



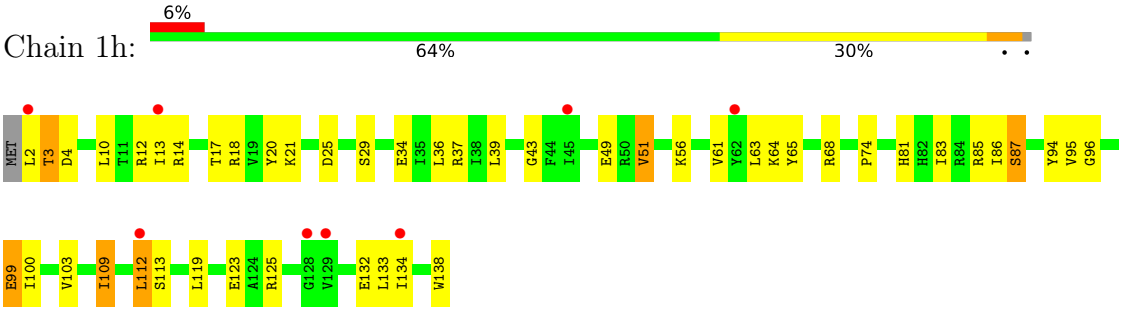
• Molecule 38: 30S ribosomal protein S7

Chain 2g:



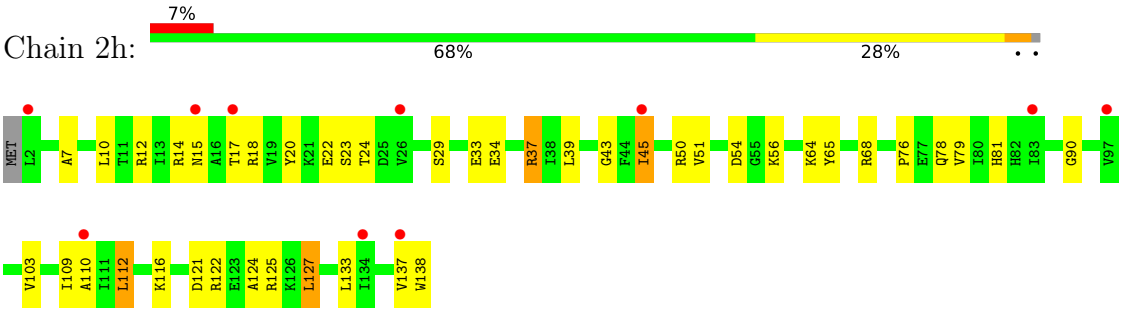
• Molecule 39: 30S ribosomal protein S8

Chain 1h:



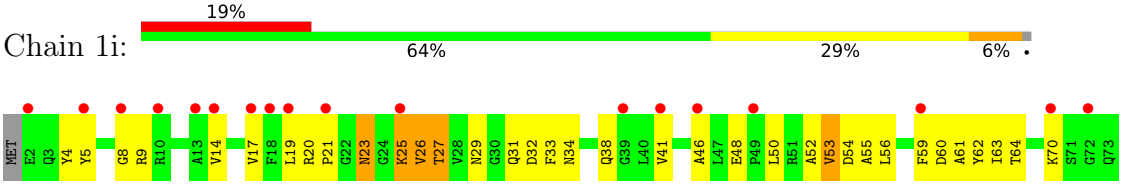
• Molecule 39: 30S ribosomal protein S8

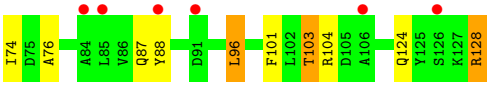
Chain 2h:



• Molecule 40: 30S ribosomal protein S9

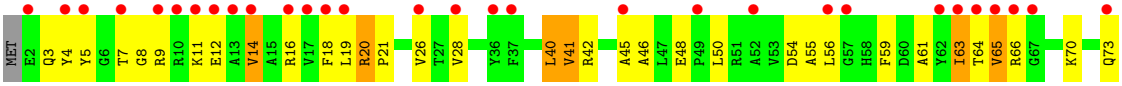
Chain 1i:

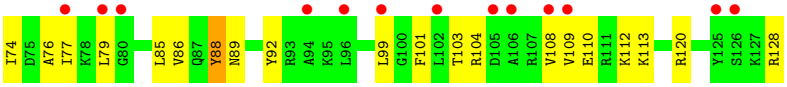




• Molecule 40: 30S ribosomal protein S9

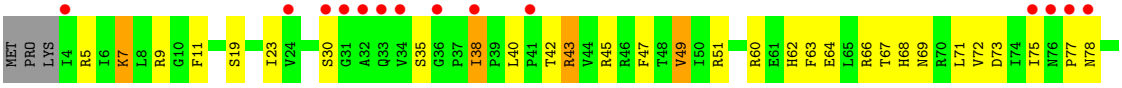
Chain 2i:

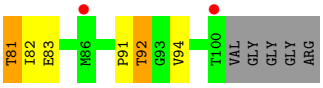




• Molecule 41: 30S ribosomal protein S10

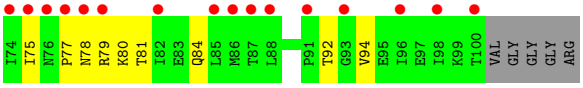
Chain 1j:





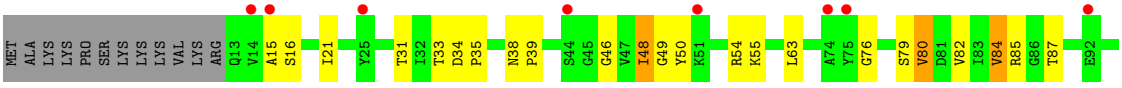
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



• Molecule 42: 30S ribosomal protein S11

Chain 1k:

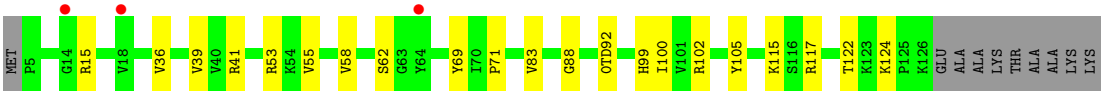


• Molecule 42: 30S ribosomal protein S11

Chain 2k:

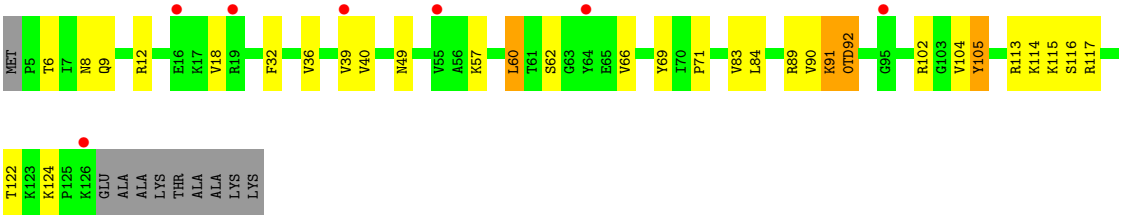
• Molecule 43: 30S ribosomal protein S12

Chain 1l:



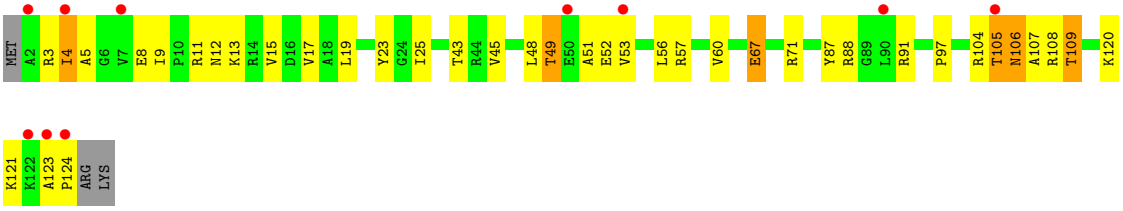
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



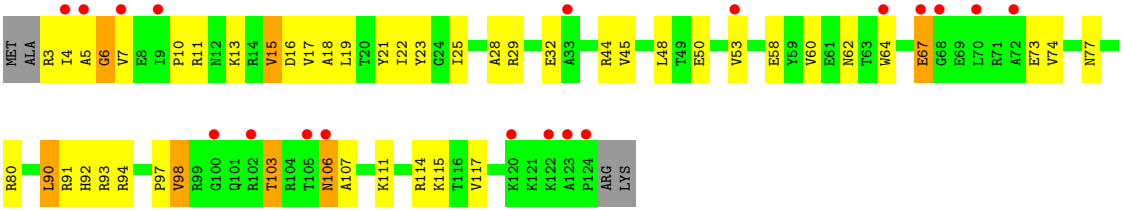
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



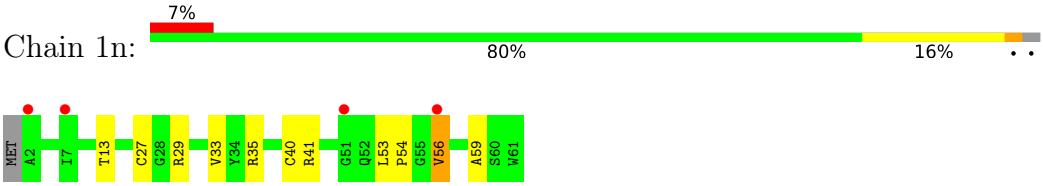
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



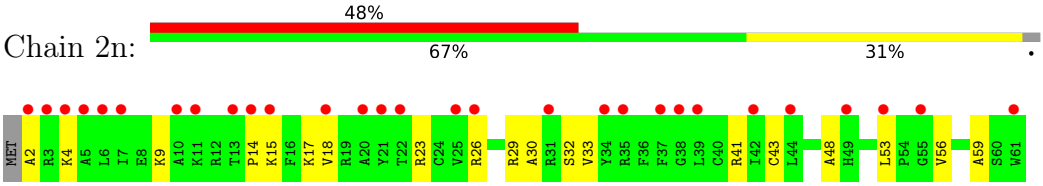
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



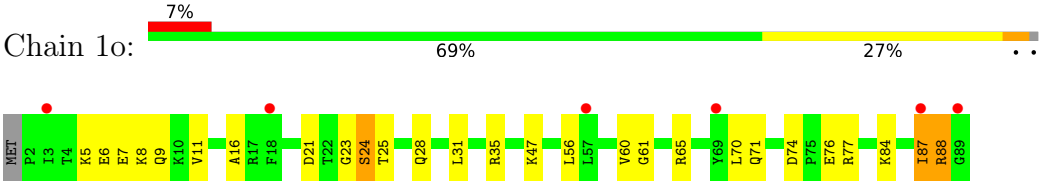
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



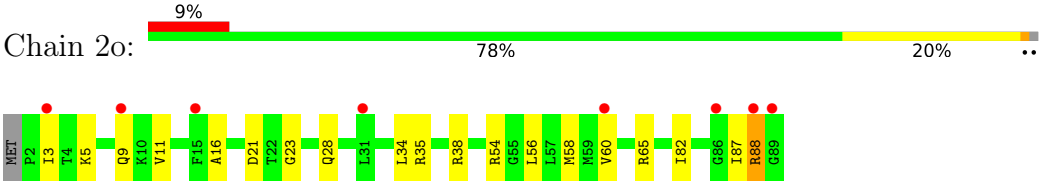
• Molecule 46: 30S ribosomal protein S15

Chain 1o:



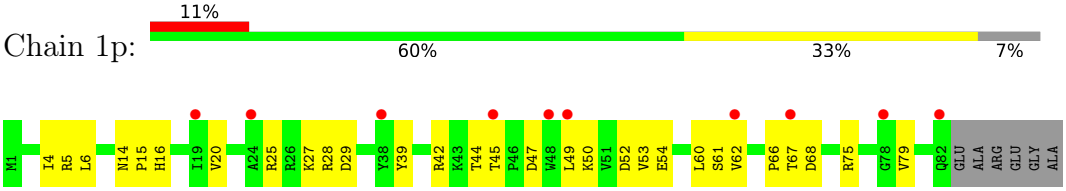
• Molecule 46: 30S ribosomal protein S15

Chain 2o:



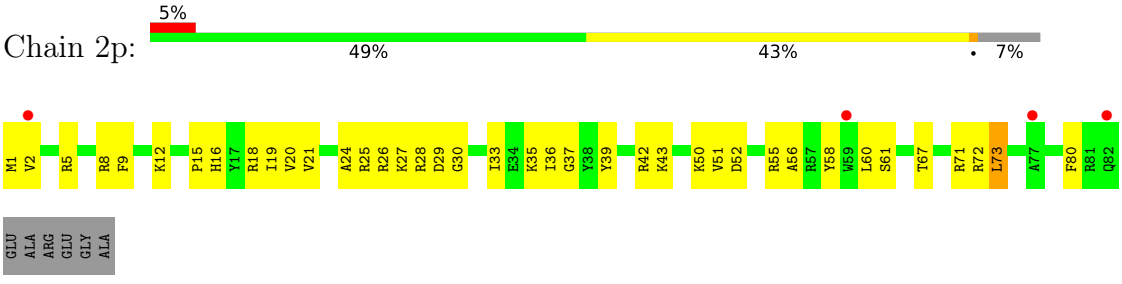
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



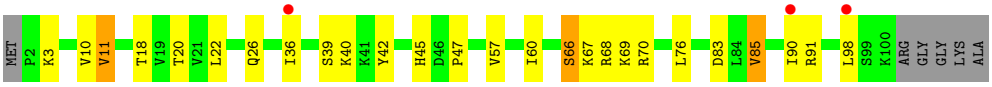
• Molecule 47: 30S ribosomal protein S16

Chain 2p:



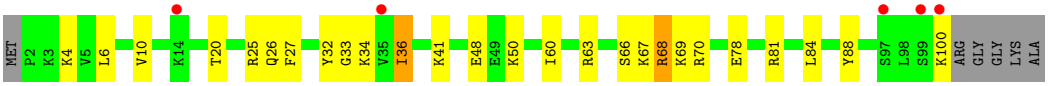
• Molecule 48: 30S ribosomal protein S17

Chain 1q:



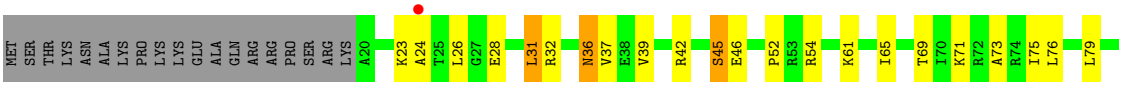
• Molecule 48: 30S ribosomal protein S17

Chain 2q:



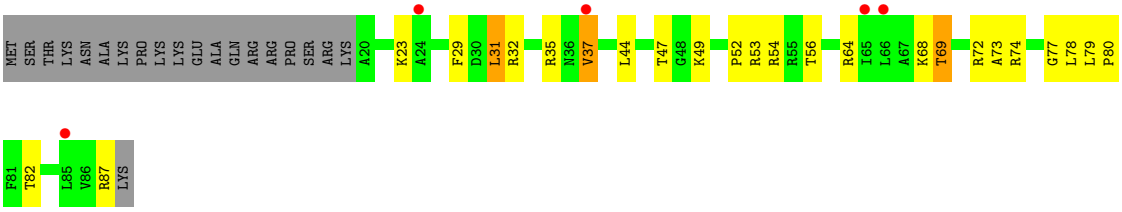
• Molecule 49: 30S ribosomal protein S18

Chain 1r:



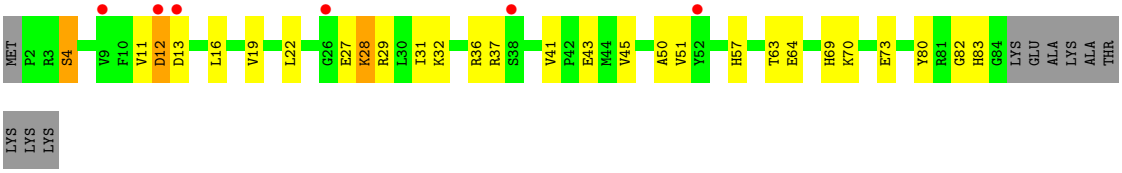
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



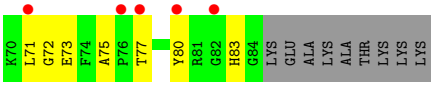
• Molecule 50: 30S ribosomal protein S19

Chain 1s:

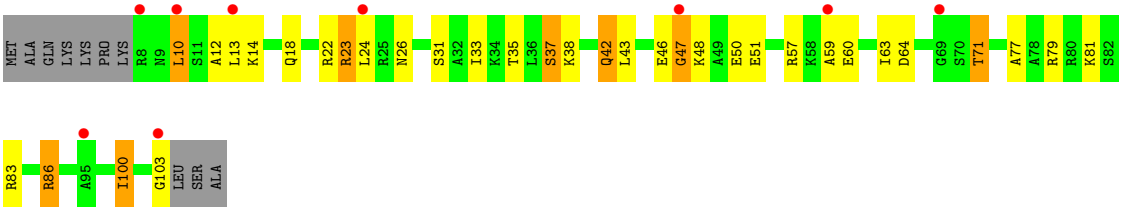


• Molecule 50: 30S ribosomal protein S19

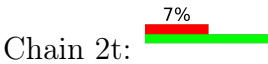
Chain 2s:

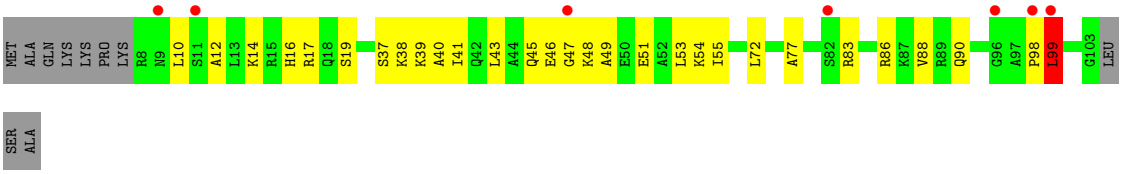


• Molecule 51: 30S ribosomal protein S20

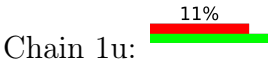


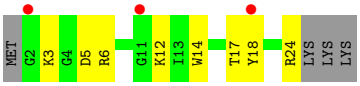
• Molecule 51: 30S ribosomal protein S20



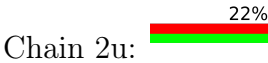


• Molecule 52: 30S ribosomal protein Thx

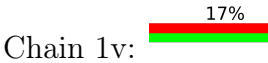


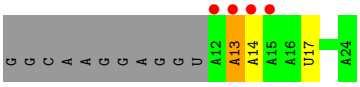


• Molecule 52: 30S ribosomal protein Thx

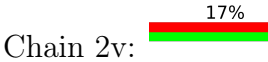


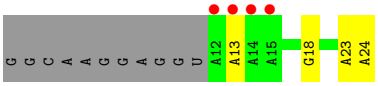
• Molecule 53: MF-mRNA





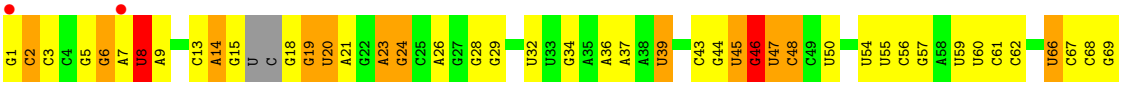
• Molecule 53: MF-mRNA

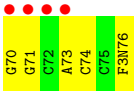




• Molecule 54: A-site Aminoacyl-tRNA Phe-NH-tRNAphe

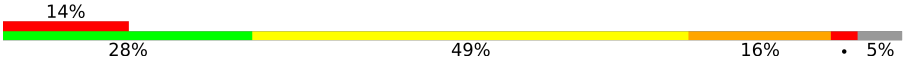
Chain 1w:

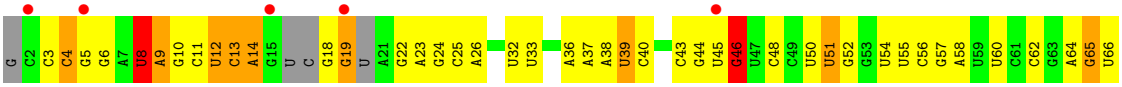


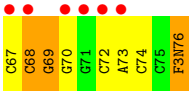


• Molecule 54: A-site Aminoacyl-tRNA Phe-NH-tRNAphe

Chain 2w:

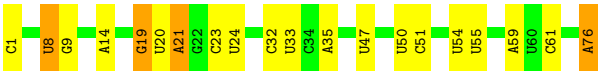






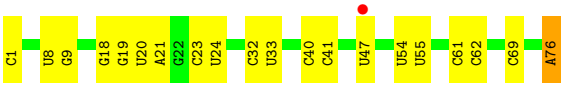
• Molecule 55: P-site Peptidyl-tRNA fMRC-NH-tRNAmet RNA-part

Chain 1x:



• Molecule 55: P-site Peptidyl-tRNA fMRC-NH-tRNAmet RNA-part

Chain 2x:



• Molecule 56: P-site Peptidyl-tRNA fMRC-NH-tRNAmet Peptide-part

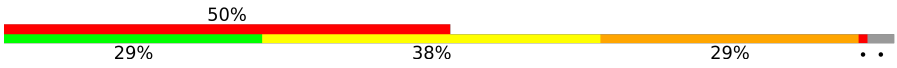
Chain 1z:

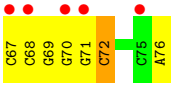
• Molecule 56: P-site Peptidyl-tRNA fMRC-NH-tRNAmet Peptide-part

Chain 2z:

• Molecule 57: E-site Deacylated tRNAphe

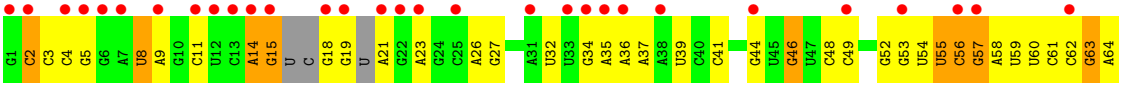
Chain 1y:

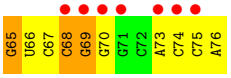




• Molecule 57: E-site Deacylated tRNAphe

Chain 2y:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	210.16Å 452.74Å 623.62Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	128.40 – 2.50 128.40 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.6 (128.40-2.50) 99.6 (128.40-2.50)	Depositor EDS
R_{merge}	0.19	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.20 (at 2.52Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.235 , 0.284 0.237 , 0.285	Depositor DCC
R_{free} test set	101013 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	42.6	Xtriage
Anisotropy	0.175	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 54.7	EDS
L-test for twinning[2]	$< \|L\| > = 0.34$, $< L^2 > = 0.17$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.89	EDS
Total number of atoms	300017	wwPDB-VP
Average B, all atoms (Å^2)	49.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.62% 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: OMC, 4OC, 5MU, G7M, FME, 5MC, SF4, M2G, 2MG, F3N, UR3, MIA, 0TD, PSU, OMG, 2MA, 4SU, MG, OMU, MA6, ZN, 8AN, K

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	0.27	1/69011 (0.0%)	0.47	2/107720 (0.0%)
1	2A	0.21	0/67295	0.41	1/105042 (0.0%)
2	1B	0.21	0/2882	0.40	0/4494
2	2B	0.18	0/2879	0.38	0/4487
3	1D	0.27	0/2186	0.50	0/2944
3	2D	0.22	0/2186	0.45	0/2944
4	1E	0.26	0/1592	0.50	0/2149
4	2E	0.21	0/1592	0.43	0/2149
5	1F	0.25	0/1618	0.48	0/2191
5	2F	0.20	0/1614	0.46	2/2186 (0.1%)
6	1G	0.22	0/1448	0.47	1/1957 (0.1%)
6	2G	0.18	0/1453	0.41	0/1963
7	1H	0.21	0/1356	0.42	0/1834
7	2H	0.19	0/1356	0.37	0/1834
8	1I	0.19	0/1112	0.46	0/1514
8	2I	0.17	0/1079	0.40	0/1475
9	1N	0.24	0/1144	0.45	0/1543
9	2N	0.18	0/1144	0.39	0/1543
10	1O	0.23	0/943	0.47	0/1269
10	2O	0.20	0/943	0.43	0/1269
11	1P	0.25	0/1152	0.54	0/1533
11	2P	0.20	0/1152	0.47	0/1533
12	1Q	0.24	0/1143	0.47	0/1527
12	2Q	0.20	0/1143	0.43	0/1527
13	1R	0.26	0/982	0.47	0/1312
13	2R	0.20	0/982	0.43	0/1312
14	1S	0.23	0/883	0.47	0/1176
14	2S	0.22	0/880	0.46	0/1172
15	1T	0.23	0/1105	0.46	0/1477
15	2T	0.20	0/1097	0.42	0/1468
16	1U	0.26	0/977	0.45	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
16	2U	0.20	0/977	0.39	0/1301
17	1V	0.24	0/782	0.48	0/1049
17	2V	0.18	0/782	0.41	0/1049
18	1W	0.26	0/897	0.44	0/1205
18	2W	0.21	0/897	0.41	0/1205
19	1X	0.25	0/764	0.53	2/1025 (0.2%)
19	2X	0.22	0/764	0.51	2/1025 (0.2%)
20	1Y	0.21	0/819	0.45	0/1095
20	2Y	0.19	0/819	0.42	0/1095
21	1Z	0.21	0/1267	0.48	0/1717
21	2Z	0.20	0/1299	0.42	0/1763
22	10	0.26	0/662	0.49	0/881
22	20	0.21	0/662	0.43	0/881
23	11	0.25	0/762	0.45	0/1014
23	21	0.21	0/762	0.42	0/1014
24	12	0.24	0/590	0.45	0/781
24	22	0.19	0/590	0.37	0/781
25	13	0.26	0/474	0.50	0/635
25	23	0.17	0/469	0.41	0/630
26	14	0.26	0/565	0.58	0/761
26	24	0.21	0/545	0.51	0/737
27	15	0.30	0/469	0.53	0/635
27	25	0.21	0/469	0.48	0/635
28	16	0.26	0/460	0.47	0/613
28	26	0.20	0/456	0.44	0/608
29	17	0.28	0/426	0.53	0/561
29	27	0.25	0/426	0.52	0/561
30	18	0.27	0/525	0.49	0/691
30	28	0.19	0/525	0.39	0/691
31	19	0.24	0/310	0.53	0/407
31	29	0.19	0/310	0.39	0/407
32	1a	0.20	0/35795	0.39	2/55864 (0.0%)
32	2a	0.19	0/35886	0.38	1/56005 (0.0%)
33	1b	0.22	0/1881	0.48	0/2542
33	2b	0.22	0/1860	0.51	1/2518 (0.0%)
34	1c	0.19	0/1572	0.41	0/2126
34	2c	0.21	0/1566	0.43	0/2119
35	1d	0.19	0/1685	0.43	0/2262
35	2d	0.19	0/1704	0.46	0/2284
36	1e	0.21	0/1145	0.51	1/1543 (0.1%)
36	2e	0.21	0/1149	0.49	0/1548
37	1f	0.19	0/823	0.39	0/1115
37	2f	0.18	0/829	0.41	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.19	0/1250	0.41	0/1679
38	2g	0.19	0/1254	0.43	0/1683
39	1h	0.19	0/1108	0.40	0/1494
39	2h	0.18	0/1108	0.41	0/1494
40	1i	0.20	0/1002	0.47	0/1346
40	2i	0.20	0/997	0.49	0/1343
41	1j	0.20	0/722	0.48	1/982 (0.1%)
41	2j	0.22	0/727	0.57	1/988 (0.1%)
42	1k	0.20	0/844	0.43	0/1145
42	2k	0.18	0/848	0.38	0/1149
43	1l	0.21	0/937	0.41	0/1260
43	2l	0.20	0/937	0.43	0/1260
44	1m	0.20	0/969	0.51	0/1302
44	2m	0.19	0/961	0.45	0/1291
45	1n	0.19	0/501	0.42	0/664
45	2n	0.19	0/501	0.41	0/664
46	1o	0.19	0/739	0.37	0/985
46	2o	0.18	0/739	0.41	0/985
47	1p	0.18	0/697	0.43	0/939
47	2p	0.21	0/693	0.48	0/935
48	1q	0.19	0/836	0.42	0/1117
48	2q	0.18	0/836	0.43	0/1117
49	1r	0.20	0/560	0.39	0/746
49	2r	0.17	0/560	0.39	0/746
50	1s	0.18	0/667	0.46	0/900
50	2s	0.23	0/661	0.54	0/893
51	1t	0.20	0/730	0.50	0/965
51	2t	0.21	0/729	0.44	0/965
52	1u	0.19	0/203	0.42	0/266
52	2u	0.20	0/203	0.47	0/266
53	1v	0.21	0/310	0.30	0/480
53	2v	0.20	0/310	0.35	0/480
54	1w	0.30	1/1581 (0.1%)	0.46	0/2458
54	2w	0.30	2/1531 (0.1%)	0.43	0/2379
55	1x	0.27	0/1723	0.41	0/2684
55	2x	0.26	1/1723 (0.1%)	0.40	0/2684
56	1z	0.51	0/16	0.92	0/19
56	2z	0.31	0/16	0.79	0/19
57	1y	0.33	2/1606 (0.1%)	0.41	0/2497
57	2y	0.33	2/1583 (0.1%)	0.45	1/2459 (0.0%)
All	All	0.23	9/316666 (0.0%)	0.43	18/474075 (0.0%)

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	1y	46	G7M	O3'-P	5.74	1.61	1.56
54	1w	46	G7M	O3'-P	5.60	1.61	1.56
54	2w	46	G7M	O3'-P	5.55	1.61	1.56
57	2y	46	G7M	O3'-P	5.50	1.61	1.56
54	2w	8	4SU	O3'-P	5.38	1.61	1.56
57	1y	8	4SU	O3'-P	5.30	1.61	1.56
57	2y	8	4SU	O3'-P	5.30	1.61	1.56
1	1A	2552	OMU	O3'-P	5.27	1.61	1.56
55	2x	8	4SU	O3'-P	5.09	1.61	1.56

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	2j	23	ILE	N-CA-C	-8.03	106.08	113.71
33	2b	222	ILE	N-CA-C	-6.93	106.03	112.96
41	1j	82	ILE	N-CA-C	-6.57	104.46	113.00
1	1A	1992	G	C2'-C3'-O3'	6.55	119.33	109.50
36	1e	109	ILE	N-CA-C	-6.26	106.70	112.96
6	1G	48	GLU	N-CA-C	-6.10	107.06	114.75
19	2X	94	GLY	CA-C-N	5.75	132.04	121.70
19	2X	94	GLY	C-N-CA	5.75	132.04	121.70
5	2F	21	ALA	CA-C-N	5.66	131.89	121.70
5	2F	21	ALA	C-N-CA	5.66	131.89	121.70
32	2a	1272	G	N1-C2-N2	-5.42	99.93	116.20
1	2A	1992	G	C2'-C3'-O3'	5.27	117.41	109.50
32	1a	266	G	C2'-C3'-O3'	5.25	117.38	109.50
19	1X	94	GLY	CA-C-N	5.23	131.11	121.70
19	1X	94	GLY	C-N-CA	5.23	131.11	121.70
57	2y	14	A	C2'-C3'-O3'	5.18	117.27	109.50
1	1A	1992	G	P-O3'-C3'	5.11	127.86	120.20
32	1a	266	G	P-O3'-C3'	5.01	127.72	120.20

There are no chirality outliers.

There are no planarity outliers.

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	31195	583	0
1	2A	60322	0	30426	693	0
2	1B	2577	0	1305	27	0
2	2B	2575	0	1303	35	0
3	1D	2136	0	2218	33	0
3	2D	2136	0	2218	39	0
4	1E	1559	0	1618	28	0
4	2E	1559	0	1618	30	0
5	1F	1583	0	1625	34	0
5	2F	1579	0	1619	55	0
6	1G	1423	0	1436	29	0
6	2G	1428	0	1438	49	0
7	1H	1330	0	1407	24	0
7	2H	1330	0	1407	33	0
8	1I	1097	0	1140	24	0
8	2I	1064	0	1082	19	0
9	1N	1117	0	1184	17	0
9	2N	1117	0	1184	18	0
10	1O	933	0	996	16	0
10	2O	933	0	996	17	0
11	1P	1135	0	1212	30	0
11	2P	1135	0	1212	34	0
12	1Q	1122	0	1179	24	0
12	2Q	1122	0	1179	33	0
13	1R	968	0	1033	14	0
13	2R	968	0	1033	21	0
14	1S	873	0	926	15	0
14	2S	870	0	923	41	0
15	1T	1091	0	1151	15	0
15	2T	1083	0	1136	25	0
16	1U	959	0	1019	17	0
16	2U	959	0	1019	20	0
17	1V	771	0	830	16	0
17	2V	771	0	830	16	0
18	1W	886	0	940	13	0
18	2W	886	0	940	7	0
19	1X	750	0	814	14	0
19	2X	750	0	814	20	0
20	1Y	806	0	881	21	0
20	2Y	806	0	881	16	0
21	1Z	1240	0	1240	38	0
21	2Z	1271	0	1273	47	0
22	10	653	0	673	11	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	20	653	0	674	16	0
23	11	755	0	826	14	0
23	21	755	0	826	18	0
24	12	588	0	643	4	0
24	22	588	0	643	20	0
25	13	469	0	518	16	0
25	23	464	0	514	14	0
26	14	552	0	533	20	0
26	24	532	0	503	22	0
27	15	455	0	465	4	0
27	25	455	0	465	4	0
28	16	453	0	473	6	0
28	26	449	0	469	13	0
29	17	418	0	467	6	0
29	27	418	0	467	6	0
30	18	517	0	582	11	0
30	28	517	0	582	18	0
31	19	307	0	335	6	0
31	29	307	0	335	8	0
32	1a	32246	0	16295	378	0
32	2a	32327	0	16338	480	0
33	1b	1846	0	1867	54	0
33	2b	1825	0	1828	76	0
34	1c	1548	0	1535	33	0
34	2c	1542	0	1517	54	0
35	1d	1655	0	1672	51	0
35	2d	1674	0	1714	42	0
36	1e	1129	0	1185	31	0
36	2e	1133	0	1191	44	0
37	1f	810	0	804	12	0
37	2f	816	0	808	21	0
38	1g	1231	0	1238	32	0
38	2g	1235	0	1248	34	0
39	1h	1088	0	1126	30	0
39	2h	1088	0	1126	23	0
40	1i	983	0	986	29	0
40	2i	978	0	966	43	0
41	1j	709	0	650	21	0
41	2j	714	0	672	27	0
42	1k	829	0	825	20	0
42	2k	833	0	834	9	0
43	1l	932	0	981	8	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	2l	932	0	980	20	0
44	1m	958	0	1002	26	0
44	2m	950	0	988	35	0
45	1n	492	0	529	8	0
45	2n	492	0	529	14	0
46	1o	728	0	760	16	0
46	2o	728	0	760	13	0
47	1p	681	0	697	20	0
47	2p	677	0	686	24	0
48	1q	823	0	891	20	0
48	2q	823	0	891	16	0
49	1r	555	0	618	13	0
49	2r	555	0	618	22	0
50	1s	652	0	662	17	0
50	2s	646	0	644	39	0
51	1t	728	0	798	26	0
51	2t	727	0	796	17	0
52	1u	199	0	208	7	0
52	2u	199	0	208	8	0
53	1v	277	0	140	3	0
53	2v	277	0	140	4	0
54	1w	1603	0	828	26	0
54	2w	1555	0	797	30	0
55	1x	1646	0	839	11	0
55	2x	1646	0	838	11	0
56	1z	27	0	28	0	0
56	2z	27	0	28	0	0
57	1y	1585	0	803	43	0
57	2y	1565	0	793	39	0
58	10	9	0	0	0	0
58	11	6	0	0	0	0
58	12	3	0	0	0	0
58	13	3	0	0	0	0
58	14	1	0	0	0	0
58	15	7	0	0	0	0
58	16	1	0	0	0	0
58	17	4	0	0	0	0
58	18	9	0	0	0	0
58	19	1	0	0	0	0
58	1A	1098	0	0	0	0
58	1B	37	0	0	0	0
58	1D	12	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	1E	13	0	0	0	0
58	1F	14	0	0	0	0
58	1G	5	0	0	0	0
58	1I	1	0	0	0	0
58	1N	6	0	0	0	0
58	1O	5	0	0	0	0
58	1P	4	0	0	0	0
58	1Q	8	0	0	0	0
58	1R	4	0	0	0	0
58	1S	3	0	0	0	0
58	1T	4	0	0	0	0
58	1U	9	0	0	0	0
58	1V	7	0	0	0	0
58	1W	7	0	0	0	0
58	1X	6	0	0	0	0
58	1Y	5	0	0	0	0
58	1Z	2	0	0	0	0
58	1a	214	0	0	0	0
58	1b	1	0	0	0	0
58	1d	1	0	0	0	0
58	1e	2	0	0	0	0
58	1f	2	0	0	0	0
58	1k	1	0	0	0	0
58	1l	2	0	0	0	0
58	1m	1	0	0	0	0
58	1n	2	0	0	0	0
58	1t	1	0	0	0	0
58	1v	1	0	0	0	0
58	1w	8	0	0	0	0
58	1x	12	0	0	0	0
58	20	2	0	0	0	0
58	23	3	0	0	0	0
58	25	5	0	0	0	0
58	26	1	0	0	0	0
58	27	3	0	0	0	0
58	28	3	0	0	0	0
58	29	1	0	0	0	0
58	2A	870	0	0	0	0
58	2B	20	0	0	0	0
58	2D	8	0	0	0	0
58	2E	10	0	0	0	0
58	2F	8	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	2G	1	0	0	0	0
58	2O	1	0	0	0	0
58	2P	2	0	0	0	0
58	2Q	2	0	0	0	0
58	2R	1	0	0	0	0
58	2T	1	0	0	0	0
58	2U	2	0	0	0	0
58	2V	2	0	0	0	0
58	2W	4	0	0	0	0
58	2X	3	0	0	0	0
58	2Y	1	0	0	0	0
58	2Z	1	0	0	0	0
58	2a	235	0	0	0	0
58	2d	2	0	0	0	0
58	2e	1	0	0	0	0
58	2f	2	0	0	0	0
58	2g	1	0	0	0	0
58	2i	1	0	0	0	0
58	2j	1	0	0	0	0
58	2k	1	0	0	0	0
58	2l	4	0	0	0	0
58	2n	2	0	0	0	0
58	2q	3	0	0	0	0
58	2r	1	0	0	0	0
58	2t	1	0	0	0	0
58	2v	3	0	0	0	0
58	2w	5	0	0	0	0
58	2x	7	0	0	0	0
58	2y	1	0	0	0	0
59	1A	1	0	0	0	0
59	2A	1	0	0	0	0
60	14	1	0	0	0	0
60	15	1	0	0	0	0
60	16	1	0	0	0	0
60	19	1	0	0	0	0
60	1Y	1	0	0	0	0
60	1n	1	0	0	0	0
60	24	1	0	0	0	0
60	25	1	0	0	0	0
60	26	1	0	0	0	0
60	29	1	0	0	0	0
60	2Y	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	2n	1	0	0	0	0
61	1d	8	0	0	0	0
61	2d	8	0	0	0	0
62	10	14	0	0	1	0
62	11	10	0	0	0	0
62	12	3	0	0	0	0
62	13	5	0	0	0	0
62	14	1	0	0	0	0
62	15	7	0	0	0	0
62	16	3	0	0	0	0
62	17	10	0	0	1	0
62	18	10	0	0	0	0
62	1A	1968	0	0	96	0
62	1B	61	0	0	4	0
62	1D	31	0	0	1	0
62	1E	29	0	0	0	0
62	1F	22	0	0	1	0
62	1G	2	0	0	0	0
62	1H	2	0	0	0	0
62	1I	1	0	0	0	0
62	1N	5	0	0	1	0
62	1O	6	0	0	0	0
62	1P	20	0	0	2	0
62	1Q	6	0	0	0	0
62	1R	15	0	0	5	0
62	1S	5	0	0	0	0
62	1T	8	0	0	0	0
62	1U	11	0	0	0	0
62	1V	7	0	0	1	0
62	1W	5	0	0	0	0
62	1X	5	0	0	0	0
62	1Y	3	0	0	0	0
62	1Z	1	0	0	0	0
62	1a	340	0	0	24	0
62	1b	1	0	0	1	0
62	1e	2	0	0	0	0
62	1f	1	0	0	0	0
62	1i	1	0	0	0	0
62	1l	8	0	0	0	0
62	1m	1	0	0	1	0
62	1p	1	0	0	0	0
62	1q	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	1u	1	0	0	1	0
62	1v	4	0	0	0	0
62	1w	9	0	0	0	0
62	1x	9	0	0	1	0
62	1y	1	0	0	0	0
62	1z	1	0	0	0	0
62	20	4	0	0	0	0
62	21	9	0	0	0	0
62	23	2	0	0	0	0
62	25	1	0	0	0	0
62	27	4	0	0	0	0
62	28	3	0	0	0	0
62	29	1	0	0	0	0
62	2A	1091	0	0	77	0
62	2B	23	0	0	2	0
62	2D	21	0	0	2	0
62	2E	11	0	0	0	0
62	2F	13	0	0	0	0
62	2O	2	0	0	0	0
62	2P	13	0	0	2	0
62	2Q	1	0	0	0	0
62	2R	4	0	0	0	0
62	2T	6	0	0	0	0
62	2U	3	0	0	0	0
62	2W	1	0	0	0	0
62	2X	3	0	0	0	0
62	2Y	1	0	0	0	0
62	2Z	1	0	0	0	0
62	2a	216	0	0	17	0
62	2d	2	0	0	0	0
62	2e	1	0	0	0	0
62	2i	1	0	0	0	0
62	2j	2	0	0	0	0
62	2l	6	0	0	0	0
62	2p	1	0	0	0	0
62	2q	1	0	0	0	0
62	2r	1	0	0	0	0
62	2t	1	0	0	0	0
62	2v	1	0	0	0	0
62	2w	3	0	0	0	0
62	2x	4	0	0	1	0
62	2y	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
62	2z	1	0	0	0	0
All	All	300017	0	196778	4035	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 9.

All (4035) 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	1.25	1.31
1:2A:2143:C:N4	1:2A:2148:G:H1	1.34	1.22
1:1A:1082:U:O4	1:1A:1086:A:N1	1.89	1.05
1:1A:1054:A:H61	1:1A:1105:U:H3	1.03	1.01
1:2A:2134:A:H62	1:2A:2157:G:H4'	1.27	0.99
54:2w:4:C:H42	54:2w:69:G:H1	1.14	0.95
1:1A:2102:U:H3	1:1A:2187:G:H1	1.14	0.95
10:2O:48:PRO:HB3	32:2a:1422:G:H5"	1.46	0.95
1:1A:1054:A:N6	1:1A:1105:U:H3	1.65	0.94
1:2A:2137:C:N4	1:2A:2154:G:H1	1.66	0.93
1:2A:2099:U:H3	1:2A:2190:G:H1	1.05	0.93
1:2A:2137:C:H42	1:2A:2154:G:H1	1.11	0.92
1:2A:2143:C:N3	1:2A:2148:G:N2	2.16	0.92
1:2A:2138:C:H42	1:2A:2153:G:H1	1.15	0.92
1:1A:2427:C:OP1	62:1A:4203:HOH:O	1.89	0.90
1:2A:2110:G:OP1	1:2A:2118:U:N3	2.04	0.90
32:2a:1086:U:H3	32:2a:1099:G:H22	1.15	0.90
22:10:10:THR:HG22	22:10:12:ASN:H	1.37	0.89
1:1A:1055:G:H1	1:1A:1104:C:H42	1.20	0.89
1:1A:1395:A:OP1	62:1A:4204:HOH:O	1.90	0.89
1:1A:1039:G:H1	1:1A:1116:C:H42	1.21	0.89
1:1A:2100:G:H1	1:1A:2189:U:H3	1.20	0.89
1:1A:1670:C:OP1	62:1A:4205:HOH:O	1.91	0.88
32:1a:1027:C:C2	32:1a:1034:G:N2	2.41	0.88
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.54	0.88
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.06	0.87
54:2w:4:C:N4	54:2w:69:G:H1	1.71	0.87
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.23	0.86
32:2a:1029:C:N3	32:2a:1032:G:N2	2.23	0.86
1:1A:2128:C:N4	1:1A:2160:G:N1	2.24	0.85
1:2A:1604:C:OP2	62:2A:3902:HOH:O	1.94	0.85
1:1A:1603:A:OP1	62:1A:4204:HOH:O	1.92	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.42	0.85
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.09	0.85
22:20:10:THR:HG22	22:20:12:ASN:H	1.41	0.85
15:2T:65:LYS:HE3	15:2T:67:SER:HB2	1.58	0.84
32:2a:1029:C:N4	32:2a:1032:G:N1	2.25	0.84
1:1A:2142:C:N3	1:1A:2149:G:O6	2.11	0.84
1:1A:2128:C:N3	1:1A:2160:G:N2	2.25	0.83
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.11	0.83
32:1a:664:G:H22	32:1a:741:G:H1	1.25	0.83
54:2w:68:C:H2'	54:2w:69:G:H8	1.43	0.83
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.61	0.83
32:2a:544:G:OP1	35:2d:59:ARG:NH2	2.11	0.83
1:1A:2142:C:O2	1:1A:2149:G:N1	2.11	0.83
1:1A:1332:G:OP1	62:1A:4206:HOH:O	1.98	0.82
57:2y:15:G:N1	57:2y:48:C:N3	2.27	0.82
29:17:24:THR:HG22	29:17:27:GLY:H	1.45	0.81
33:1b:30:ARG:HH21	33:1b:194:PRO:HB2	1.46	0.81
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.45	0.81
1:2A:1253:A:OP1	62:2A:3904:HOH:O	1.99	0.81
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.14	0.81
32:1a:78:G:N2	32:1a:91:C:N3	2.29	0.80
32:1a:376:G:H5"	47:1p:5:ARG:HG2	1.61	0.80
32:2a:1033:G:H2'	32:2a:1034:G:H8	1.47	0.80
1:2A:2125:G:N3	1:2A:2173:A:N6	2.30	0.80
57:2y:26:A:N1	57:2y:44:G:O6	2.15	0.80
1:1A:1014:U:OP2	62:1A:4207:HOH:O	2.00	0.80
1:2A:963:U:OP2	62:2A:3903:HOH:O	1.99	0.80
1:1A:1057:A:H61	1:1A:1081:U:H3	1.30	0.79
54:2w:18:G:O2'	54:2w:57:G:N2	2.14	0.79
1:2A:1648:C:OP1	62:2A:3905:HOH:O	2.01	0.79
34:2c:142:MET:HG3	34:2c:170:GLN:HB3	1.63	0.79
1:1A:2136:C:N3	1:1A:2155:G:C2	2.51	0.79
32:1a:1314:C:OP2	50:1s:4:SER:OG	2.00	0.79
1:1A:1065:U:O2	1:1A:1073:A:N6	2.16	0.78
32:2a:1373:G:H5"	38:2g:36:LYS:HB2	1.64	0.78
1:1A:1023:U:OP2	62:1A:4208:HOH:O	2.01	0.78
34:2c:125:GLU:HB2	34:2c:190:ARG:HH21	1.47	0.78
1:2A:2677:G:N3	62:2A:3943:HOH:O	2.16	0.78
1:1A:1058:G:N2	1:1A:1081:U:O2	2.16	0.78
1:2A:1365:A:O2'	23:21:11:ARG:NH1	2.15	0.78
32:1a:78:G:N1	32:1a:91:C:N4	2.31	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.66	0.78
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.66	0.78
1:1A:2099:U:H3	1:1A:2190:G:H1	0.81	0.77
2:1B:103:G:H21	21:1Z:73:GLN:HE22	1.32	0.77
12:2Q:11:LYS:NZ	12:2Q:88:GLY:O	2.15	0.77
1:2A:882:G:H22	1:2A:894:C:H42	1.30	0.77
1:1A:2612:C:OP2	27:15:2:ALA:N	2.18	0.77
1:2A:1647:G:OP1	62:2A:3905:HOH:O	2.02	0.77
1:2A:2319:G:H22	14:2S:3:ARG:HH11	1.33	0.77
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.67	0.77
57:1y:53:G:H1	57:1y:61:C:H42	1.33	0.77
1:2A:400:G:N7	62:2A:3948:HOH:O	2.18	0.77
32:2a:1029:C:N4	32:2a:1032:G:H1	1.82	0.77
5:2F:24:LEU:HD21	5:2F:114:VAL:HG12	1.67	0.77
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.18	0.76
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.49	0.76
32:2a:975:A:H4'	32:2a:976:G:H5"	1.67	0.76
4:1E:119:ARG:HD2	4:1E:160:TYR:HB2	1.68	0.76
26:14:16:CYS:SG	26:14:17:GLY:N	2.58	0.76
1:2A:2660:A:N7	7:2H:175:LYS:NZ	2.33	0.76
32:2a:299:G:O6	62:2a:1902:HOH:O	2.03	0.76
32:2a:1257:U:O4	45:2n:17:LYS:NZ	2.18	0.76
34:2c:151:VAL:HG22	34:2c:200:ALA:HA	1.67	0.76
57:1y:7:A:O2'	57:1y:49:C:OP2	2.01	0.76
1:2A:2759:G:OP2	62:2A:3906:HOH:O	2.02	0.76
1:2A:2138:C:N4	1:2A:2153:G:H1	1.83	0.76
1:1A:668:G:N7	62:1A:4258:HOH:O	2.18	0.76
26:14:56:VAL:HB	26:14:60:GLN:HG3	1.65	0.76
1:2A:792:G:O6	62:2A:3907:HOH:O	2.03	0.76
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.49	0.76
32:2a:1310:G:H5'	44:2m:77:ASN:HD21	1.51	0.76
1:1A:110:G:N7	62:1A:4257:HOH:O	2.18	0.76
1:1A:1062:G:H22	1:1A:1077:A:H61	1.34	0.76
1:1A:1315:C:OP2	62:1A:4206:HOH:O	2.03	0.76
33:2b:54:THR:HG22	33:2b:199:TYR:HB3	1.67	0.76
1:1A:2702:U:OP2	62:1A:4211:HOH:O	2.05	0.75
32:2a:117:G:OP2	62:2a:1903:HOH:O	2.04	0.75
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.65	0.75
1:1A:1602:U:O4	62:1A:4209:HOH:O	2.03	0.75
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.31	0.75
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.49	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:631:A:OP1	11:2P:65:ARG:NH1	2.19	0.75
1:1A:2499:C:OP1	62:1A:4210:HOH:O	2.04	0.75
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.69	0.75
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.19	0.75
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.19	0.74
32:1a:686:U:O2	32:1a:704:A:N6	2.18	0.74
17:1V:55:ALA:HA	17:1V:101:GLY:HA2	1.69	0.74
1:1A:745:G:O6	62:1A:4212:HOH:O	2.05	0.74
1:1A:760:G:OP1	62:1A:4214:HOH:O	2.05	0.74
1:1A:1418:G:OP2	62:1A:4215:HOH:O	2.06	0.74
2:1B:33:G:H5'	6:1G:2:PRO:HD3	1.69	0.74
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.21	0.74
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.15	0.74
3:1D:71:ASP:HB2	3:1D:103:ARG:HH12	1.53	0.74
33:1b:16:HIS:HD2	33:1b:204:ASN:H	1.35	0.74
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.70	0.74
3:1D:2:ALA:N	3:1D:200:ASP:OD2	2.21	0.74
32:2a:1055:A:N7	32:2a:1200:C:N4	2.35	0.74
1:1A:802:A:OP1	62:1A:4213:HOH:O	2.05	0.74
33:1b:82:ARG:NH1	33:1b:92:TYR:OH	2.21	0.74
1:2A:2127:G:C6	1:2A:2161:C:N4	2.56	0.74
32:2a:1274:G:N2	32:2a:1275:A:N7	2.35	0.74
32:1a:544:G:OP1	35:1d:59:ARG:NH2	2.21	0.74
1:1A:279:C:H42	1:1A:361:G:H1	1.34	0.74
32:2a:558:G:OP1	62:2a:1902:HOH:O	2.06	0.73
5:1F:89:VAL:O	62:1F:401:HOH:O	2.06	0.73
1:2A:2431:U:OP1	62:2A:3908:HOH:O	2.05	0.73
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.21	0.73
1:1A:1917:PSU:O2	62:1A:4219:HOH:O	2.07	0.73
32:1a:975:A:H4'	32:1a:976:G:H5"	1.69	0.73
32:2a:588:G:OP2	62:2a:1904:HOH:O	2.05	0.73
1:2A:2104:G:H1	1:2A:2185:C:H42	1.36	0.73
32:2a:157:G:H1	32:2a:164:U:H3	1.36	0.73
32:2a:407:G:OP1	35:2d:115:ARG:NH2	2.21	0.73
57:2y:15:G:N2	57:2y:48:C:H42	1.87	0.72
1:1A:2153:G:H2'	1:1A:2154:G:H8	1.54	0.72
57:1y:22:G:N7	57:1y:46:G7M:N2	2.37	0.72
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.71	0.72
2:1B:66:A:H61	2:1B:109:C:H5'	1.54	0.72
1:1A:2550:G:OP1	62:1A:4216:HOH:O	2.06	0.72
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.53	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2218:U:O2	23:21:52:ARG:NH1	2.23	0.72
1:1A:2615:U:OP1	62:1A:4217:HOH:O	2.06	0.72
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.71	0.72
1:2A:2379:G:HO2'	14:2S:17:ARG:HH12	1.37	0.72
1:1A:1365:A:O2'	23:11:11:ARG:NH1	2.22	0.72
32:2a:1029:C:C4	32:2a:1032:G:N1	2.54	0.72
33:2b:88:ALA:HA	33:2b:223:ILE:HD11	1.71	0.72
57:2y:18:G:N2	57:2y:55:PSU:N3	2.37	0.72
1:2A:2049:G:N7	62:2A:3960:HOH:O	2.22	0.72
1:2A:2122:U:H3	1:2A:2176:A:H61	1.38	0.72
32:2a:1137:C:O2	32:2a:1138:G:N2	2.23	0.72
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.25	0.72
33:1b:163:PHE:HD1	33:1b:185:ILE:HG13	1.55	0.72
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	1.71	0.72
1:1A:1851:U:H4'	57:1y:71:G:H4'	1.71	0.71
42:1k:48:ILE:HD12	42:1k:63:LEU:HB2	1.70	0.71
26:24:53:GLU:HG2	26:24:55:ARG:H	1.53	0.71
1:1A:2517:C:OP1	62:1A:4218:HOH:O	2.06	0.71
1:2A:921:G:O6	62:2A:3910:HOH:O	2.08	0.71
1:1A:1669:A:OP2	62:1A:4216:HOH:O	2.08	0.71
1:2A:320:A:N3	5:2F:169:ASN:ND2	2.37	0.71
1:1A:1183:G:O2'	25:13:29:ARG:NH2	2.23	0.71
1:2A:441:U:O2	5:2F:46:ARG:NH2	2.24	0.71
1:2A:1394:U:OP1	62:2A:3909:HOH:O	2.08	0.71
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.71	0.71
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.72	0.71
44:1m:3:ARG:HG2	44:1m:8:GLU:HA	1.73	0.71
1:2A:1204:A:H2	1:2A:1241:A:H62	1.39	0.71
32:2a:407:G:H5"	35:2d:115:ARG:HB3	1.70	0.71
1:2A:1340:U:OP1	19:2X:16:LYS:NZ	2.23	0.71
1:1A:826:U:OP1	62:1A:4203:HOH:O	2.08	0.71
1:2A:943:U:OP2	62:2A:3914:HOH:O	2.09	0.71
41:2j:47:PHE:N	41:2j:63:PHE:O	2.22	0.71
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.73	0.71
57:1y:8:4SU:O2'	57:1y:21:A:N1	2.22	0.71
1:2A:948:G:OP1	62:2A:3903:HOH:O	2.07	0.71
1:2A:1395:A:OP1	62:2A:3902:HOH:O	2.08	0.71
1:2A:2114:A:H62	1:2A:2115:G:H21	1.36	0.71
1:1A:1468:C:OP1	62:1A:4221:HOH:O	2.08	0.70
1:1A:2843:G:N7	62:1A:4272:HOH:O	2.22	0.70
2:1B:21:G:N7	62:1B:304:HOH:O	2.23	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:574:A:OP2	62:1a:1907:HOH:O	2.09	0.70
6:2G:113:ARG:NH2	6:2G:139:LEU:O	2.23	0.70
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.24	0.70
32:2a:64:G:H4'	32:2a:65:U:H3'	1.73	0.70
33:2b:48:MET:HA	33:2b:51:LEU:HB2	1.72	0.70
54:2w:68:C:H2'	54:2w:69:G:C8	2.25	0.70
1:1A:2105:C:H2'	1:1A:2106:G:H8	1.57	0.70
1:1A:2808:U:O2	1:1A:2892:A:N6	2.20	0.70
45:2n:26:ARG:HD3	45:2n:43:CYS:HB3	1.74	0.70
1:1A:732:C:OP1	62:1A:4220:HOH:O	2.08	0.70
1:2A:1670:C:OP1	62:2A:3911:HOH:O	2.08	0.70
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.56	0.70
35:2d:50:ARG:HH12	36:2e:10:MET:HG3	1.56	0.70
20:1Y:12:THR:OG1	20:1Y:26:LYS:NZ	2.22	0.70
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.74	0.70
1:1A:2821:A:OP2	62:1R:301:HOH:O	2.09	0.70
32:1a:92:C:H2'	32:1a:93:G:C8	2.27	0.70
50:1s:31:ILE:O	50:1s:50:ALA:N	2.23	0.70
1:2A:2518:A:OP2	62:2A:3912:HOH:O	2.09	0.70
1:2A:2879:C:OP2	62:2A:3913:HOH:O	2.09	0.70
33:2b:185:ILE:HB	33:2b:199:TYR:HB2	1.72	0.70
34:2c:53:ALA:HB2	34:2c:115:LEU:HD11	1.74	0.70
50:2s:53:ASN:HD21	50:2s:56:GLN:HB2	1.55	0.70
8:1I:3:VAL:HG12	8:1I:38:LEU:HA	1.73	0.70
1:2A:2166:G:O6	1:2A:2171:A:N6	2.25	0.70
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.73	0.70
13:2R:51:LEU:HD22	13:2R:66:VAL:HG13	1.74	0.70
32:1a:1033:G:H3'	32:1a:1034:G:H8	1.57	0.69
32:1a:1505:G:OP2	62:1a:1905:HOH:O	2.09	0.69
23:21:50:ARG:HG2	23:21:59:THR:HG23	1.73	0.69
1:2A:586:A:OP2	62:2A:3922:HOH:O	2.10	0.69
1:2A:678:C:OP1	62:2A:3915:HOH:O	2.09	0.69
20:2Y:5:MET:HE2	20:2Y:32:PRO:HA	1.73	0.69
37:2f:67:MET:HE1	37:2f:75:LEU:HD22	1.73	0.69
1:2A:1023:U:OP2	62:2A:3920:HOH:O	2.10	0.69
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.27	0.69
24:22:65:ASN:OD1	24:22:69:ARG:NH1	2.24	0.69
21:1Z:132:ASN:HD22	21:1Z:160:GLY:HA3	1.58	0.69
32:1a:1401:G:N7	62:1a:1930:HOH:O	2.24	0.69
1:2A:297:C:OP2	62:2A:3926:HOH:O	2.11	0.69
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.74	0.69
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.26	0.69
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.27	0.69
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.66	0.69
26:24:16:CYS:HA	26:24:33:VAL:HG12	1.73	0.69
32:2a:662:G:O2'	32:2a:836:G:OP1	2.10	0.69
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.56	0.69
23:11:65:SER:HG	23:11:66:HIS:HD1	1.40	0.69
1:2A:248:G:OP1	62:2A:3918:HOH:O	2.10	0.69
6:2G:114:ILE:HB	6:2G:117:PHE:HD1	1.58	0.69
12:2Q:78:PRO:HG2	12:2Q:81:VAL:HG11	1.74	0.69
32:1a:373:A:H2'	32:1a:374:A:H8	1.57	0.69
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.73	0.69
1:2A:2137:C:N3	1:2A:2154:G:N2	2.35	0.69
1:1A:2128:C:N4	1:1A:2160:G:H1	1.89	0.69
1:1A:2344:U:OP1	28:16:37:ARG:NH1	2.24	0.69
5:1F:10:PRO:HB3	5:1F:17:ARG:HH21	1.58	0.69
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.25	0.69
36:1e:8:GLU:OE2	36:1e:63:ARG:NH2	2.26	0.69
1:2A:1973:G:OP1	62:2A:3917:HOH:O	2.10	0.69
1:2A:2127:G:N1	1:2A:2161:C:C4	2.60	0.69
7:2H:149:ARG:NH1	7:2H:167:GLU:OE2	2.26	0.69
44:2m:5:ALA:HB3	44:2m:22:ILE:HD12	1.75	0.69
1:2A:1345:C:OP2	62:2A:3923:HOH:O	2.10	0.69
2:1B:96:U:O4	62:1B:302:HOH:O	2.11	0.69
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.75	0.69
25:13:55:ARG:HH22	25:13:57:GLU:HB2	1.58	0.69
11:1P:39:LYS:HB2	11:1P:45:LEU:HD13	1.75	0.68
31:19:2:LYS:NZ	31:19:31:LYS:O	2.23	0.68
57:1y:37:MIA:H2'	57:1y:38:A:C8	2.29	0.68
1:2A:1271:G:OP2	62:2A:3905:HOH:O	2.10	0.68
36:1e:35:GLY:HA3	36:1e:112:LEU:HB3	1.73	0.68
1:2A:731:C:OP2	62:2A:3928:HOH:O	2.11	0.68
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.25	0.68
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.24	0.68
32:1a:953:G:H5'	32:1a:965:A:H61	1.58	0.68
1:2A:100:G:O2'	24:22:7:ARG:NH2	2.26	0.68
50:2s:19:VAL:O	50:2s:23:ASN:ND2	2.26	0.68
2:1B:25:A:OP1	62:1B:301:HOH:O	2.10	0.68
32:1a:1467:G:O6	62:1a:1906:HOH:O	2.09	0.68
1:2A:1478:G:O2'	1:2A:1558:A:N1	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2R:97:VAL:HG22	13:2R:114:VAL:HG13	1.73	0.68
1:1A:1013:C:OP2	62:1A:4207:HOH:O	2.12	0.68
32:1a:708:C:H2'	32:1a:709:G:H8	1.58	0.68
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.75	0.68
55:2x:76:8AN:O2P	62:2x:201:HOH:O	2.11	0.68
35:1d:15:GLU:OE2	35:1d:59:ARG:NH1	2.27	0.68
52:1u:5:ASP:OD1	62:1u:101:HOH:O	2.11	0.68
1:2A:131:G:OP1	62:2A:3916:HOH:O	2.10	0.68
1:2A:1452:A:OP2	62:2A:3925:HOH:O	2.11	0.68
46:2o:54:ARG:HG2	46:2o:58:MET:HE2	1.74	0.68
33:1b:93:VAL:HG11	33:1b:97:TRP:HD1	1.59	0.68
5:2F:11:VAL:HG13	5:2F:125:LEU:HB2	1.75	0.68
32:2a:909:A:N3	32:2a:1413:A:O2'	2.27	0.68
1:2A:568:U:O4	62:2A:3919:HOH:O	2.10	0.68
32:2a:157:G:N2	32:2a:164:U:O2	2.25	0.68
32:2a:1102:A:O3'	33:2b:96:ARG:NH2	2.26	0.68
42:2k:104:GLN:HG2	42:2k:106:LYS:HG2	1.75	0.68
1:1A:2727:G:O2'	10:1O:70:LYS:NZ	2.26	0.68
1:2A:2576:G:OP1	62:2A:3921:HOH:O	2.10	0.68
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.58	0.68
32:2a:1108:G:O6	62:2a:1906:HOH:O	2.10	0.68
1:1A:2123:G:H2'	1:1A:2124:G:H8	1.57	0.68
1:1A:2134:A:O2'	1:1A:2135:A:OP1	2.11	0.68
32:1a:1083:U:OP1	62:1a:1908:HOH:O	2.10	0.68
32:1a:610:G:OP2	62:1a:1911:HOH:O	2.12	0.67
32:1a:1009:G:O6	32:1a:1020:U:O2	2.12	0.67
1:1A:1648:C:OP1	62:1A:4228:HOH:O	2.13	0.67
1:2A:2592:G:OP1	62:2A:3927:HOH:O	2.11	0.67
32:2a:1030(A):G:N2	32:2a:1030(D):A:OP2	2.26	0.67
32:1a:1224:G:OP1	62:1a:1909:HOH:O	2.11	0.67
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.59	0.67
21:1Z:105:VAL:N	21:1Z:139:VAL:O	2.22	0.67
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.30	0.67
1:1A:73:A:OP1	62:1A:4222:HOH:O	2.10	0.67
1:1A:606:U:OP2	62:1A:4223:HOH:O	2.11	0.67
1:1A:743:G:N7	62:1A:4301:HOH:O	2.28	0.67
44:1m:19:LEU:HD11	44:1m:56:LEU:HD21	1.75	0.67
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.77	0.67
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	1.77	0.67
57:2y:18:G:O6	57:2y:56:C:N4	2.27	0.67
4:1E:110:GLY:O	62:1R:301:HOH:O	2.11	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:48:PRO:HB3	32:1a:1422:G:H5"	1.77	0.67
32:1a:157:G:H1	32:1a:164:U:H3	1.41	0.67
1:2A:1689:A:H62	1:2A:1698:A:H2	1.43	0.67
32:1a:324:G:N7	62:1a:1943:HOH:O	2.28	0.67
44:1m:49:THR:HB	44:1m:52:GLU:H	1.57	0.67
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.12	0.67
32:2a:1226:C:OP2	44:2m:91:ARG:NH1	2.25	0.67
1:1A:307:G:N7	62:1A:4299:HOH:O	2.27	0.67
32:1a:1025:U:O2	32:1a:1036:G:O6	2.12	0.67
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.19	0.67
42:1k:99:GLN:HG2	42:1k:105:VAL:HG21	1.77	0.66
32:2a:56:U:H2'	32:2a:57:G:C8	2.31	0.66
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.76	0.66
1:2A:2114:A:H2	1:2A:2171:A:H61	1.43	0.66
32:2a:953:G:H5'	32:2a:965:A:H61	1.60	0.66
34:2c:162:GLN:NE2	53:2v:24:A:O3'	2.28	0.66
1:1A:2226:C:OP2	62:1A:4227:HOH:O	2.12	0.66
1:2A:1254:A:OP2	62:2A:3931:HOH:O	2.14	0.66
50:2s:30:LEU:HD12	50:2s:31:ILE:H	1.61	0.66
26:14:54:GLY:N	26:14:55:ARG:HA	2.10	0.66
7:2H:90:LYS:HD2	7:2H:159:GLU:HG2	1.78	0.66
24:22:22:GLU:OE2	24:22:68:ARG:NH2	2.28	0.66
26:24:44:THR:O	26:24:46:GLN:N	2.27	0.66
33:2b:67:THR:N	33:2b:160:ASP:OD2	2.29	0.66
33:2b:212:GLN:O	33:2b:216:SER:N	2.24	0.66
1:1A:1055:G:H1	1:1A:1104:C:N4	1.90	0.66
1:2A:1840:G:OP2	62:2A:3930:HOH:O	2.14	0.66
21:2Z:4:ARG:HH21	21:2Z:60:GLU:HG2	1.61	0.66
1:1A:2753:A:N3	31:19:15:LYS:NZ	2.43	0.66
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.61	0.66
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.29	0.66
34:2c:58:GLU:HB2	34:2c:65:ALA:HB3	1.77	0.66
1:1A:1037:G:H1	1:1A:1118:C:H42	1.43	0.66
32:1a:1391:U:O2'	32:1a:1532:U:OP1	2.12	0.66
32:1a:1414:U:O4	62:1a:1912:HOH:O	2.12	0.66
35:1d:100:ARG:NH2	35:1d:102:ASP:OD2	2.28	0.66
37:1f:100:ASN:HB2	49:1r:28:GLU:HA	1.76	0.66
57:2y:14:A:H61	57:2y:21:A:H2	1.42	0.66
1:1A:1253:A:OP1	62:1A:4224:HOH:O	2.12	0.66
38:1g:28:ASN:HD21	38:1g:36:LYS:NZ	1.94	0.66
1:2A:2064:C:OP2	62:2A:3933:HOH:O	2.14	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2166:G:H3'	1:2A:2167:U:H5"	1.78	0.66
32:2a:598:U:O4	62:2a:1905:HOH:O	2.09	0.66
36:2e:144:THR:H	36:2e:147:ASP:HB2	1.61	0.66
52:2u:12:LYS:HB2	52:2u:22:ARG:HD3	1.76	0.66
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.28	0.66
1:2A:245:G:O6	30:28:8:LYS:NZ	2.29	0.66
1:2A:956:G:H5"	12:2Q:77:LYS:HD2	1.76	0.66
1:2A:2135:A:N1	1:2A:2156:G:O2'	2.29	0.66
1:2A:2524:G:N7	62:2A:3989:HOH:O	2.29	0.66
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.78	0.66
32:1a:404:U:OP1	35:1d:118:ARG:NH1	2.29	0.66
32:2a:157:G:H2'	32:2a:158:G:H8	1.61	0.66
32:2a:1134:G:C2	32:2a:1135:U:H1'	2.30	0.66
6:1G:18:GLU:HG3	6:1G:22:ARG:HD2	1.78	0.65
32:1a:79:G:C6	32:1a:90:U:O2	2.48	0.65
1:2A:2100:G:H1	1:2A:2189:U:H3	1.44	0.65
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.78	0.65
16:2U:50:ARG:HH22	17:2V:72:VAL:HG13	1.60	0.65
34:2c:57:ILE:HG12	34:2c:66:VAL:HG22	1.77	0.65
1:1A:762:U:OP1	62:1A:4230:HOH:O	2.13	0.65
1:1A:1647:G:OP1	62:1A:4228:HOH:O	2.13	0.65
1:2A:894:C:O2'	1:2A:895:U:H5"	1.96	0.65
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.31	0.65
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.29	0.65
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.78	0.65
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.31	0.65
33:1b:166:ASP:OD2	62:1b:401:HOH:O	2.14	0.65
1:2A:1627:G:OP1	62:2A:3929:HOH:O	2.13	0.65
1:2A:2127:G:N1	1:2A:2161:C:N4	2.43	0.65
2:2B:72:G:O2'	2:2B:105:A:N6	2.30	0.65
8:2I:31:LEU:HD21	8:2I:38:LEU:HG	1.78	0.65
11:2P:35:HIS:O	62:2P:301:HOH:O	2.14	0.65
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.29	0.65
1:1A:1082:U:N3	1:1A:1086:A:N6	2.05	0.65
1:1A:2765:A:OP2	62:1A:4236:HOH:O	2.14	0.65
41:1j:38:ILE:HG12	41:1j:71:LEU:HB3	1.79	0.65
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.30	0.65
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.61	0.65
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.78	0.65
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.23	0.65
32:2a:473:G:H2'	32:2a:474:G:H8	1.61	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:10:G:O2'	1:2A:2801(A):A:N7	2.28	0.65
36:2e:12:LEU:HB3	36:2e:31:LEU:HB2	1.77	0.65
37:2f:100:ASN:HD21	49:2r:23:LYS:HE3	1.62	0.65
41:2j:38:ILE:HB	41:2j:71:LEU:HB3	1.76	0.65
1:1A:516:C:OP1	27:15:13:LYS:NZ	2.29	0.65
33:1b:185:ILE:HG22	33:1b:199:TYR:HD2	1.61	0.65
1:2A:993:G:OP1	16:2U:50:ARG:NH2	2.30	0.65
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.14	0.65
38:2g:9:VAL:HG23	38:2g:94:ARG:HH21	1.60	0.65
1:1A:512:G:OP2	62:1A:4229:HOH:O	2.13	0.65
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.78	0.65
35:2d:180:GLY:HA3	35:2d:182:LYS:HE3	1.78	0.65
1:1A:2885:C:OP2	62:1A:4233:HOH:O	2.14	0.65
32:1a:1060:C:H5"	41:1j:51:ARG:HG2	1.77	0.65
1:2A:2743:C:OP1	31:29:33:LYS:NZ	2.30	0.65
29:27:24:THR:HG23	29:27:27:GLY:H	1.62	0.65
57:2y:9:A:O2'	57:2y:11:C:N4	2.20	0.65
51:1t:33:ILE:O	51:1t:37:SER:OG	2.15	0.65
1:2A:1455:G:O2'	1:2A:2853:C:OP1	2.11	0.65
2:2B:50:G:OP1	14:2S:63:THR:OG1	2.12	0.65
11:2P:94:GLU:HG3	11:2P:124:LYS:HE2	1.79	0.65
32:2a:8:A:H5'	36:2e:101:ILE:HG22	1.79	0.65
32:1a:684:A:N6	62:1a:1945:HOH:O	2.30	0.65
26:24:58:ARG:HH21	50:2s:69:HIS:CE1	2.15	0.65
32:2a:1025:U:H3	32:2a:1036:G:H1	1.45	0.65
32:2a:1244:C:H42	32:2a:1293:G:H1	1.45	0.65
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.77	0.65
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.62	0.64
54:1w:18:G:H4'	54:1w:60:U:C5	2.32	0.64
2:2B:48:A:H4'	14:2S:95:HIS:HD2	1.62	0.64
32:2a:937:A:OP2	62:2a:1909:HOH:O	2.15	0.64
32:2a:1013:G:N2	32:2a:1016:A:OP2	2.30	0.64
32:2a:1139:G:N2	32:2a:1142:G:O6	2.24	0.64
36:1e:12:LEU:HB3	36:1e:31:LEU:HB3	1.78	0.64
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.79	0.64
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.29	0.64
54:2w:4:C:N3	54:2w:69:G:N2	2.39	0.64
32:1a:656:C:O2'	46:1o:28:GLN:OE1	2.11	0.64
1:2A:1604:C:OP1	62:2A:3909:HOH:O	2.15	0.64
1:2A:2123:G:O6	1:2A:2175:C:N3	2.29	0.64
14:2S:15:ARG:HG2	14:2S:19:LYS:HE3	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1272:G:N2	32:2a:1273:G:C5	2.65	0.64
34:2c:127:ARG:NH2	34:2c:192:THR:OG1	2.28	0.64
1:1A:1253:A:OP1	62:1A:4239:HOH:O	2.15	0.64
1:2A:752:A:H3'	29:27:1:MET:HE1	1.78	0.64
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.33	0.64
32:1a:693:G:OP2	62:1a:1914:HOH:O	2.15	0.64
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.14	0.64
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.33	0.64
32:1a:936:C:O2	32:1a:1382:C:N4	2.29	0.64
7:2H:3:ARG:HG2	7:2H:6:ARG:HE	1.62	0.64
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.79	0.64
1:1A:1800:C:OP1	3:1D:260:ARG:NH2	2.30	0.64
5:1F:116:ASP:OD2	11:1P:1:MET:N	2.23	0.64
32:1a:376:G:O3'	47:1p:5:ARG:NH1	2.31	0.64
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	1.79	0.64
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.80	0.64
1:1A:657:U:O4	62:1A:4238:HOH:O	2.15	0.64
32:1a:642:A:N3	39:1h:113:SER:OG	2.29	0.64
1:2A:531:C:OP1	1:2A:561:G:N1	2.28	0.64
1:2A:882:G:H22	1:2A:894:C:N4	1.96	0.64
1:2A:2394:C:N3	57:2y:76:A:O2'	2.28	0.64
1:1A:1184:G:H5'	25:13:29:ARG:NH2	2.13	0.64
1:1A:2123:G:H2'	1:1A:2124:G:C8	2.33	0.64
1:1A:2322:A:N6	62:1A:4309:HOH:O	2.29	0.64
32:1a:539:A:OP2	43:1l:115:LYS:NZ	2.31	0.64
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.30	0.64
33:1b:60:ASP:HA	33:1b:63:MET:HE3	1.80	0.64
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.33	0.64
1:2A:2853:C:H2'	1:2A:2854:G:H8	1.62	0.64
2:2B:66:A:N6	2:2B:108:U:H3'	2.13	0.64
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	1.79	0.64
41:2j:44:VAL:HG13	41:2j:66:ARG:HG2	1.80	0.64
1:1A:1439:A:OP1	62:1A:4221:HOH:O	2.14	0.64
32:2a:157:G:H2'	32:2a:158:G:C8	2.33	0.64
32:2a:1318:A:H1'	50:2s:37:ARG:HE	1.63	0.64
47:2p:21:VAL:HG23	47:2p:33:ILE:HB	1.79	0.64
1:1A:1452:A:OP2	62:1A:4235:HOH:O	2.14	0.63
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.80	0.63
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.14	0.63
36:2e:83:GLU:HA	36:2e:88:LYS:HA	1.79	0.63
5:1F:13:SER:HA	5:1F:127:GLU:HG3	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:105:VAL:HG21	36:1e:128:PRO:HB3	1.79	0.63
32:2a:651:C:N4	32:2a:753:A:OP2	2.30	0.63
48:2q:81:ARG:HH21	48:2q:84:LEU:HD21	1.62	0.63
38:1g:74:GLU:HG2	38:1g:91:VAL:HG22	1.81	0.63
1:2A:2577:A:OP1	62:2A:3921:HOH:O	2.15	0.63
1:2A:2630:G:H2'	1:2A:2631:G:H8	1.63	0.63
2:2B:13:A:N1	2:2B:69:G:O2'	2.29	0.63
17:2V:50:PRO:HG2	17:2V:51:VAL:HG23	1.80	0.63
21:2Z:53:ILE:HA	21:2Z:71:VAL:HG23	1.80	0.63
21:2Z:154:ASP:OD1	21:2Z:154:ASP:N	2.26	0.63
32:2a:460:G:O6	62:2a:1907:HOH:O	2.13	0.63
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.80	0.63
38:2g:65:ALA:HB1	38:2g:127:ALA:HB3	1.78	0.63
1:1A:271(K):U:O2'	1:1A:271(M):G:N2	2.24	0.63
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.17	0.63
36:1e:91:LEU:HB3	36:1e:118:ILE:HD11	1.81	0.63
13:2R:33:ARG:NH2	13:2R:115:GLU:OE1	2.30	0.63
48:2q:41:LYS:NZ	48:2q:88:TYR:OH	2.32	0.63
1:1A:1651:G:O6	62:1A:4225:HOH:O	2.12	0.63
1:1A:2379:G:O2'	14:1S:17:ARG:NH2	2.32	0.63
32:1a:812:C:O2	62:1a:1910:HOH:O	2.11	0.63
1:2A:2142:C:H2'	1:2A:2143:C:C6	2.33	0.63
1:2A:2360:A:OP2	62:2A:3936:HOH:O	2.16	0.63
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.63	0.63
11:2P:86:LYS:NZ	11:2P:87:ASP:OD1	2.32	0.63
35:2d:8:VAL:HG22	35:2d:21:LEU:HD13	1.79	0.63
36:2e:78:HIS:HE1	36:2e:143:ARG:H	1.47	0.63
50:2s:33:THR:H	50:2s:57:HIS:HE1	1.47	0.63
1:1A:2153:G:H2'	1:1A:2154:G:C8	2.33	0.63
32:1a:1027:C:N4	32:1a:1034:G:H1	1.96	0.63
32:2a:1128:C:O2'	32:2a:1129:C:OP1	2.16	0.63
1:1A:1077:A:H2'	1:1A:1078:U:H4'	1.81	0.63
1:1A:2384:G:O6	62:1A:4231:HOH:O	2.14	0.63
48:1q:22:LEU:HD11	48:1q:39:SER:HB2	1.81	0.63
5:2F:33:LEU:HB3	11:2P:6:LEU:HD21	1.81	0.63
32:1a:78:G:C6	32:1a:91:C:N4	2.67	0.63
32:1a:352:C:O2'	32:1a:354:G:OP1	2.14	0.63
37:1f:8:ILE:HG12	37:1f:88:VAL:HG22	1.81	0.63
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.32	0.63
42:1k:16:SER:HB2	42:1k:79:SER:HB3	1.80	0.63
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.47	0.62
1:2A:89:G:H3'	1:2A:90:U:H5"	1.80	0.62
33:2b:144:ARG:NH2	33:2b:148:TYR:OH	2.32	0.62
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.81	0.62
51:1t:22:ARG:O	51:1t:26:ASN:ND2	2.31	0.62
32:2a:1320:C:N3	50:2s:36:ARG:NH2	2.47	0.62
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.80	0.62
16:1U:104:GLN:HE21	16:1U:105:VAL:HG23	1.64	0.62
1:1A:671:C:N4	62:1A:4325:HOH:O	2.32	0.62
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.33	0.62
32:1a:545:C:OP1	35:1d:61:LYS:NZ	2.32	0.62
32:1a:955:U:O4	62:1a:1913:HOH:O	2.13	0.62
32:1a:1040:U:H2'	32:1a:1041:A:H8	1.63	0.62
1:2A:798:G:N7	62:2A:4004:HOH:O	2.31	0.62
54:2w:72:C:H2'	54:2w:73:A:C8	2.34	0.62
47:1p:15:PRO:O	47:1p:16:HIS:ND1	2.32	0.62
1:2A:2269:A:OP1	62:2A:3937:HOH:O	2.16	0.62
57:2y:9:A:H4'	57:2y:46:G7M:H5'	1.82	0.62
1:1A:1773:A:N1	62:1A:4320:HOH:O	2.31	0.62
1:2A:852:G:H2'	1:2A:853:G:H8	1.64	0.62
1:2A:2127:G:N2	1:2A:2161:C:N3	2.48	0.62
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.35	0.62
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.35	0.62
1:1A:2277:G:OP2	22:10:10:THR:HG21	1.99	0.62
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.47	0.62
1:2A:1445(A):C:H42	1:2A:1466:G:H1	1.46	0.62
1:2A:2319:G:H22	14:2S:3:ARG:NH1	1.98	0.62
38:2g:27:ILE:HG22	38:2g:39:ALA:HB1	1.80	0.62
1:1A:1582:C:O2'	1:1A:1586:A:N3	2.30	0.62
1:1A:2222:G:O6	62:1A:4226:HOH:O	2.12	0.62
1:2A:963:U:OP1	62:2A:3939:HOH:O	2.16	0.62
4:2E:77:ILE:HD13	4:2E:195:LEU:HD22	1.80	0.62
32:2a:1237:C:H42	32:2a:1337:G:H1	1.47	0.62
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.81	0.62
57:2y:26:A:N1	57:2y:44:G:C6	2.67	0.62
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.64	0.62
18:1W:25:ARG:NH2	18:1W:74:ALA:O	2.23	0.62
1:2A:2454:G:O6	62:2A:3934:HOH:O	2.14	0.62
41:2j:33:GLN:HG2	41:2j:34:VAL:H	1.65	0.62
49:2r:37:VAL:HG23	49:2r:78:LEU:HB3	1.81	0.62
1:1A:271(V):G:O6	62:1A:4237:HOH:O	2.14	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:79:G:O6	32:1a:90:U:O2	2.18	0.62
57:1y:51:U:H2'	57:1y:52:G:C8	2.34	0.62
32:2a:1320:C:H1'	50:2s:73:GLU:HG3	1.81	0.62
21:1Z:80:ARG:HB3	21:1Z:82:ARG:HD3	1.82	0.61
7:2H:106:THR:HG22	7:2H:112:PRO:HB3	1.82	0.61
20:2Y:102:CYS:SG	20:2Y:103:GLY:N	2.73	0.61
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.28	0.61
1:1A:1309:G:O6	62:1A:4241:HOH:O	2.16	0.61
34:1c:82:GLU:HG3	34:1c:85:ARG:HH21	1.64	0.61
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.82	0.61
54:1w:26:A:H61	54:1w:44:G:H1	1.48	0.61
1:2A:217:G:OP2	62:2A:3941:HOH:O	2.16	0.61
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.33	0.61
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.36	0.61
3:2D:66:ASP:OD2	3:2D:103:ARG:NH1	2.33	0.61
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.28	0.61
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.81	0.61
1:1A:184:C:H2'	1:1A:185:U:C6	2.35	0.61
1:2A:1446:C:H42	1:2A:1465:G:H1	1.47	0.61
1:2A:2125:G:N1	1:2A:2172:U:OP1	2.32	0.61
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.01	0.61
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.19	0.61
39:2h:34:GLU:OE1	39:2h:37:ARG:NH1	2.33	0.61
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.33	0.61
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.35	0.61
2:2B:75:G:H22	21:2Z:73:GLN:NE2	1.98	0.61
32:2a:664:G:H22	32:2a:741:G:H1	1.47	0.61
35:2d:175:SER:HB3	35:2d:186:LEU:HD11	1.82	0.61
1:2A:2035:G:OP1	62:2A:3938:HOH:O	2.16	0.61
5:2F:180:GLY:O	5:2F:182:ASN:ND2	2.32	0.61
32:2a:259:G:OP2	51:2t:83:ARG:NH1	2.34	0.61
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.65	0.61
32:2a:1119:C:OP2	40:2i:9:ARG:NH2	2.34	0.61
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.34	0.61
21:1Z:139:VAL:HG11	21:1Z:171:ILE:HD11	1.82	0.61
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.83	0.61
1:2A:744:G:OP1	62:2A:3935:HOH:O	2.15	0.61
1:2A:2154:G:N7	1:2A:2156:G:N2	2.48	0.61
11:2P:54:GLY:O	62:2P:302:HOH:O	2.15	0.61
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.82	0.61
32:2a:596:C:OP2	62:2a:1905:HOH:O	2.16	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.83	0.61
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.16	0.61
6:1G:77:ILE:HG22	6:1G:80:PHE:H	1.66	0.61
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.36	0.61
10:2O:77:ILE:HD12	15:2T:74:ARG:HD2	1.83	0.61
1:2A:2646:C:H2'	1:2A:2647:U:O4'	1.99	0.61
6:2G:165:THR:OG1	6:2G:167:GLU:OE1	2.19	0.61
54:2w:18:G:H4'	54:2w:60:U:C5	2.36	0.61
7:1H:9:ILE:HB	7:1H:50:VAL:HG12	1.82	0.61
1:2A:893:C:H5'	1:2A:894:C:C5	2.35	0.61
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.36	0.61
15:2T:16:ARG:NH2	15:2T:18:ASP:OD2	2.34	0.61
28:26:11:LEU:HB2	28:26:21:TYR:HB2	1.81	0.61
1:1A:1060:U:H3	1:1A:1088:A:H8	1.46	0.61
5:1F:157:VAL:HB	5:1F:194:MET:HG2	1.81	0.61
33:1b:230:VAL:HG12	33:1b:231:GLU:H	1.65	0.61
2:2B:55:U:O2'	6:2G:27:ASN:ND2	2.33	0.61
32:2a:17:U:H2'	32:2a:18:C:C6	2.36	0.61
32:2a:73:G:H1	32:2a:96:U:H3	1.49	0.61
32:2a:142:G:H2'	32:2a:143:A:C8	2.36	0.61
6:1G:66:GLN:NE2	6:1G:93:THR:O	2.32	0.60
21:1Z:93:ASP:HB3	21:1Z:131:ARG:HH22	1.66	0.60
40:1i:23:ASN:OD1	40:1i:23:ASN:N	2.34	0.60
1:2A:880:G:N2	1:2A:898:C:O2	2.33	0.60
33:2b:77:ALA:HB2	33:2b:211:ILE:HD13	1.83	0.60
21:1Z:138:GLU:H	21:1Z:156:LYS:HD3	1.66	0.60
33:1b:112:VAL:HG12	33:1b:149:LEU:HD13	1.83	0.60
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.36	0.60
10:2O:20:MET:HE3	10:2O:44:LYS:HE3	1.83	0.60
40:2i:8:GLY:HA2	40:2i:79:LEU:HD23	1.82	0.60
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.35	0.60
1:2A:2495:G:H5"	12:2Q:82:ARG:HG2	1.83	0.60
1:2A:2794:C:N4	1:2A:2802:G:O6	2.35	0.60
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.36	0.60
32:1a:562:C:H1'	43:1l:15:ARG:HB3	1.83	0.60
32:1a:1362:C:OP2	62:1a:1917:HOH:O	2.16	0.60
54:1w:28:G:H2'	54:1w:29:G:H8	1.67	0.60
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.36	0.60
1:2A:2125:G:H1'	1:2A:2173:A:H61	1.67	0.60
35:2d:119:GLN:HG3	35:2d:123:HIS:CD2	2.37	0.60
39:2h:64:LYS:HG2	39:2h:79:VAL:HG21	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:579:G:N7	62:1A:4321:HOH:O	2.31	0.60
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.82	0.60
31:19:25:VAL:HB	31:19:34:GLN:HB2	1.83	0.60
1:2A:249:C:O2	30:28:12:LYS:NZ	2.34	0.60
1:2A:821:A:N1	62:2A:3999:HOH:O	2.30	0.60
26:24:13:ARG:HD3	26:24:23:GLU:HG2	1.83	0.60
33:2b:189:ASP:N	33:2b:189:ASP:OD1	2.32	0.60
35:1d:187:ARG:NH1	35:1d:188:LEU:O	2.35	0.60
1:2A:1993:U:OP2	62:2A:3944:HOH:O	2.17	0.60
1:2A:2306:C:N4	6:2G:42:GLY:O	2.34	0.60
2:2B:43:C:H5"	26:24:1:MET:HG2	1.84	0.60
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.16	0.60
1:1A:2228:G:O6	62:1A:4240:HOH:O	2.15	0.60
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.34	0.60
15:2T:24:PRO:HA	15:2T:49:VAL:HG12	1.83	0.60
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.37	0.60
34:2c:131:ARG:HH21	36:2e:50:GLU:HG3	1.66	0.60
44:2m:13:LYS:O	44:2m:45:VAL:N	2.33	0.60
34:1c:152:ILE:HB	34:1c:199:LYS:HB2	1.83	0.60
1:2A:2123:G:N1	1:2A:2175:C:O2	2.35	0.60
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.66	0.60
8:2I:75:LEU:HD22	8:2I:105:HIS:HD2	1.67	0.60
32:2a:1318:A:OP1	50:2s:3:ARG:NH2	2.34	0.60
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.37	0.60
1:1A:2136:C:N4	1:1A:2155:G:C6	2.70	0.60
5:1F:64:ILE:HG21	5:1F:78:ILE:HG23	1.82	0.60
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.37	0.60
39:1h:10:LEU:HD22	39:1h:83:ILE:HD11	1.83	0.60
40:1i:20:ARG:O	40:1i:60:ASP:N	2.34	0.60
3:2D:28:GLU:OE2	62:2D:5401:HOH:O	2.17	0.60
54:2w:51:U:H2'	54:2w:52:G:C8	2.36	0.60
1:1A:2504:U:OP2	62:1A:4248:HOH:O	2.16	0.60
33:2b:175:ARG:HH12	33:2b:179:LYS:HD2	1.67	0.60
2:1B:23:G:O6	62:1B:303:HOH:O	2.17	0.59
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	1.84	0.59
33:1b:162:ILE:O	33:1b:185:ILE:HG12	2.02	0.59
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.35	0.59
5:2F:133:ASN:N	5:2F:138:GLU:OE1	2.34	0.59
32:2a:979:C:H42	45:2n:18:VAL:HG22	1.65	0.59
34:2c:179:ARG:NH1	34:2c:206:GLU:OE1	2.32	0.59
35:2d:15:GLU:OE2	35:2d:59:ARG:NH1	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2431:U:OP2	62:1A:4242:HOH:O	2.16	0.59
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.37	0.59
32:1a:948:C:OP1	44:1m:109:THR:OG1	2.21	0.59
32:2a:573:A:N3	32:2a:883:C:O2'	2.34	0.59
38:2g:20:ASP:HB3	38:2g:23:VAL:HB	1.83	0.59
1:2A:1426:G:O2'	1:2A:1572:A:N6	2.34	0.59
6:2G:7:LEU:HD13	6:2G:104:GLU:HA	1.82	0.59
32:2a:1040:U:H2'	32:2a:1041:A:H8	1.66	0.59
34:2c:44:GLU:HA	34:2c:52:LEU:HD23	1.84	0.59
57:2y:74:C:H2'	57:2y:75:C:H6	1.67	0.59
21:1Z:91:LEU:HD22	21:1Z:130:PRO:HG3	1.85	0.59
32:1a:21:G:OP1	62:1a:1916:HOH:O	2.16	0.59
40:1i:17:VAL:HG23	40:1i:63:ILE:HG12	1.84	0.59
1:2A:951:C:OP1	62:2A:3940:HOH:O	2.16	0.59
5:2F:108:LYS:HG2	5:2F:112:MET:HE2	1.83	0.59
34:2c:47:LEU:HB2	34:2c:52:LEU:HD22	1.84	0.59
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.36	0.59
21:1Z:126:VAL:HG11	21:1Z:161:VAL:HB	1.83	0.59
32:1a:427:U:OP1	35:1d:13:ARG:NH2	2.33	0.59
40:1i:53:VAL:O	40:1i:55:ALA:N	2.35	0.59
1:2A:947:G:O6	62:2A:3942:HOH:O	2.16	0.59
1:2A:987:G:O2'	1:2A:1000:A:N3	2.33	0.59
1:1A:592:G:N7	62:1A:4326:HOH:O	2.32	0.59
1:1A:1243:G:O2'	11:1P:7:ARG:NH2	2.36	0.59
32:1a:347:G:OP2	62:1a:1918:HOH:O	2.17	0.59
32:1a:973:G:H3'	32:1a:974:A:H5"	1.85	0.59
1:2A:625:G:O6	11:2P:107:LYS:NZ	2.26	0.59
32:2a:67:C:H2'	32:2a:68:G:C8	2.37	0.59
32:2a:1469:G:H2'	32:2a:1470:G:C8	2.37	0.59
41:2j:11:PHE:HE1	41:2j:67:THR:HG22	1.66	0.59
48:2q:67:LYS:O	48:2q:68:ARG:HB2	2.02	0.59
1:1A:593:G:H4'	30:18:4:MET:HE2	1.84	0.59
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.17	0.59
1:1A:1993:U:OP2	62:1A:4251:HOH:O	2.17	0.59
1:1A:2218:U:O4'	23:11:52:ARG:NH2	2.35	0.59
11:1P:29:LYS:HG3	11:1P:30:THR:N	2.18	0.59
26:14:55:ARG:N	26:14:56:VAL:HA	2.17	0.59
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.03	0.59
33:1b:67:THR:N	33:1b:160:ASP:OD1	2.36	0.59
1:2A:1024:G:OP2	62:2A:3920:HOH:O	2.17	0.59
12:2Q:78:PRO:HD3	55:2x:1:C:N3	2.17	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:224:C:H2'	32:2a:225:C:H6	1.67	0.59
32:2a:1263:C:N3	32:2a:1272:G:O6	2.36	0.59
32:2a:1352:C:OP1	52:2u:3:LYS:NZ	2.30	0.59
1:1A:2141:G:O6	1:1A:2150:U:O2	2.21	0.59
32:1a:976:G:N2	32:1a:1363:C:OP2	2.31	0.59
35:1d:98:GLU:OE1	35:1d:103:ASN:ND2	2.35	0.59
57:1y:9:A:H4'	57:1y:46:G7M:OP2	2.02	0.59
1:2A:277:C:H4'	1:2A:278:A:OP2	2.01	0.59
12:2Q:89:ASN:HB2	55:2x:1:C:C4	2.38	0.59
32:2a:1053:G:H4'	32:2a:1054:C:H3'	1.84	0.59
1:1A:363:G:H2'	1:1A:363(A):A:H8	1.66	0.59
1:1A:1041:C:H42	1:1A:1114:G:H1	1.51	0.59
16:1U:89:GLU:HG3	17:1V:50:PRO:HB3	1.85	0.59
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.30	0.59
5:2F:116:ASP:OD1	5:2F:119:ARG:NH2	2.36	0.59
32:2a:56:U:H2'	32:2a:57:G:H8	1.66	0.59
32:2a:839:U:H3'	32:2a:840:C:H5'	1.84	0.59
33:2b:74:LYS:HD2	33:2b:166:ASP:HB3	1.85	0.59
1:1A:1188:U:H4'	17:1V:79:VAL:HG22	1.85	0.59
7:1H:25:LYS:HG3	7:1H:34:GLU:HG3	1.84	0.59
39:1h:81:HIS:N	39:1h:138:TRP:O	2.35	0.59
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.83	0.59
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.84	0.59
8:1I:93:THR:HG22	8:1I:119:PRO:HB3	1.85	0.58
1:2A:1527:G:O2'	1:2A:1544:A:N6	2.26	0.58
32:2a:328:C:H4'	32:2a:329:A:H5'	1.85	0.58
32:2a:771:G:O6	62:2a:1910:HOH:O	2.15	0.58
32:2a:1080:A:OP1	36:2e:47:LYS:HD3	2.03	0.58
46:1o:5:LYS:O	46:1o:9:GLN:HG2	2.03	0.58
1:2A:900:A:O2'	1:2A:901:A:OP1	2.20	0.58
14:2S:105:ALA:HB1	14:2S:110:LEU:HD23	1.83	0.58
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.38	0.58
1:1A:847:U:OP2	62:1A:4243:HOH:O	2.16	0.58
5:2F:123:LEU:HD13	5:2F:192:LEU:HD23	1.85	0.58
8:2I:40:THR:O	8:2I:44:LEU:HB2	2.04	0.58
14:1S:34:HIS:ND1	14:1S:53:SER:HB2	2.19	0.58
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.86	0.58
32:1a:1095:U:P	32:1a:1108:G:H1	2.25	0.58
38:1g:111:ARG:HD2	38:1g:123:GLU:HB2	1.85	0.58
54:1w:13:C:H2'	54:1w:14:A:H5"	1.84	0.58
1:2A:2189:U:H2'	1:2A:2190:G:C8	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:110:GLU:OE2	40:2i:113:LYS:NZ	2.36	0.58
1:1A:2469:A:O3'	12:1Q:56:ARG:NH1	2.36	0.58
1:1A:2794:C:H42	1:1A:2802:G:H22	1.51	0.58
28:16:35:GLU:OE2	28:16:50:ARG:NH1	2.37	0.58
57:1y:53:G:H1	57:1y:61:C:N4	2.01	0.58
32:2a:142:G:H2'	32:2a:143:A:H8	1.67	0.58
32:2a:973:G:H3'	32:2a:974:A:H5"	1.85	0.58
5:1F:197:ASP:N	5:1F:197:ASP:OD1	2.36	0.58
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.84	0.58
5:2F:117:ARG:NH2	5:2F:189:THR:O	2.32	0.58
32:2a:403:C:O2'	35:2d:122:ARG:NH2	2.37	0.58
1:1A:55:G:O2'	1:1A:127:A:N1	2.37	0.58
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.68	0.58
1:1A:2393:A:H5"	11:1P:63:PRO:HB3	1.86	0.58
12:1Q:78:PRO:HG2	12:1Q:81:VAL:HG11	1.84	0.58
12:1Q:110:THR:HG22	12:1Q:112:GLU:H	1.69	0.58
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.02	0.58
32:1a:141:A:H4'	32:1a:182:U:H1'	1.86	0.58
39:1h:86:ILE:HD12	39:1h:133:LEU:HD22	1.84	0.58
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.36	0.58
1:2A:212:G:H2'	1:2A:213:A:O4'	2.03	0.58
1:2A:686:G:N2	1:2A:788:A:H61	2.02	0.58
36:2e:51:VAL:HG13	36:2e:52:PRO:HD3	1.84	0.58
39:2h:110:ALA:HB3	39:2h:121:ASP:HB3	1.85	0.58
1:1A:2544:G:N7	62:1A:4328:HOH:O	2.32	0.58
18:1W:4:LYS:HD2	18:1W:6:ILE:HD11	1.85	0.58
40:1i:27:THR:HG23	40:1i:62:TYR:HA	1.84	0.58
57:1y:38:A:H2'	57:1y:39:PSU:O4'	2.03	0.58
1:2A:900:A:H2'	1:2A:901:A:H8	1.67	0.58
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.86	0.58
1:1A:338:G:OP2	62:1A:4252:HOH:O	2.17	0.58
1:1A:1047:G:H2'	1:1A:1110:G:H1	1.69	0.58
1:1A:1173:G:O2'	1:1A:1174:A:O4'	2.20	0.58
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.03	0.58
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.11	0.58
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.86	0.58
1:1A:467:G:OP1	29:17:33:ARG:NH1	2.37	0.58
1:1A:642:G:OP2	62:1A:4253:HOH:O	2.17	0.58
1:1A:1062:G:H2'	1:1A:1063:G:C8	2.39	0.58
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.39	0.58
1:1A:1784:A:OP2	62:1A:4250:HOH:O	2.17	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:90:LYS:HD2	7:1H:159:GLU:HG2	1.85	0.58
23:11:23:LYS:HB3	23:11:29:GLY:HA3	1.85	0.58
1:2A:955:C:OP1	12:2Q:87:LYS:NZ	2.25	0.58
4:2E:109:LYS:O	4:2E:111:ARG:NH1	2.37	0.58
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.84	0.58
6:2G:83:ARG:N	6:2G:86:MET:SD	2.69	0.58
13:2R:57:ARG:NE	13:2R:59:ASP:OD1	2.35	0.58
21:2Z:72:ARG:HH22	21:2Z:97:GLU:HB2	1.69	0.58
32:2a:1053:G:N7	32:2a:1200:C:H5"	2.19	0.58
32:2a:1521:G:N3	62:2a:1925:HOH:O	2.33	0.58
33:2b:81:VAL:HB	33:2b:94:ASN:HD21	1.68	0.58
36:2e:12:LEU:HD22	36:2e:128:PRO:HB2	1.86	0.58
50:2s:4:SER:HB3	50:2s:7:LYS:HG3	1.86	0.58
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.33	0.57
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.87	0.57
51:1t:42:GLN:NE2	51:1t:46:GLU:OE2	2.37	0.57
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.39	0.57
34:2c:156:ARG:H	34:2c:196:LEU:HD22	1.69	0.57
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.86	0.57
1:2A:90:U:H1'	1:2A:92:A:C8	2.39	0.57
1:2A:2031:A:N3	1:2A:2455:G:O2'	2.32	0.57
22:20:10:THR:HG22	22:20:12:ASN:N	2.17	0.57
34:2c:34:LEU:HD11	34:2c:38:ARG:HH21	1.69	0.57
57:2y:5:G:H1	57:2y:68:C:H42	1.51	0.57
9:1N:46:VAL:HG23	9:1N:48:MET:HG2	1.87	0.57
32:1a:60:A:H4'	32:1a:61:G:H5'	1.85	0.57
32:1a:1108:G:O6	62:1a:1915:HOH:O	2.15	0.57
33:1b:27:LYS:HB3	33:1b:194:PRO:HD2	1.86	0.57
1:2A:2127:G:C2	1:2A:2161:C:N3	2.72	0.57
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.37	0.57
1:1A:2306:C:O2	62:1A:4246:HOH:O	2.16	0.57
18:1W:67:ASP:N	18:1W:67:ASP:OD1	2.37	0.57
34:1c:124:ILE:HG22	34:1c:130:VAL:HG22	1.87	0.57
35:1d:134:ASP:N	35:1d:134:ASP:OD1	2.36	0.57
1:2A:1952:A:OP1	10:2O:44:LYS:NZ	2.34	0.57
7:2H:80:SER:OG	7:2H:81:GLU:OE2	2.16	0.57
7:2H:160:LYS:N	7:2H:163:TYR:OH	2.37	0.57
32:2a:524:G:H2'	32:2a:525:C:C6	2.38	0.57
45:2n:48:ALA:HB2	45:2n:53:LEU:HD12	1.86	0.57
32:1a:129:U:H5'	48:1q:3:LYS:HZ1	1.69	0.57
32:1a:376:G:H1	32:1a:387:U:H3	1.53	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:37:ASN:C	33:1b:39:ILE:H	2.13	0.57
1:2A:1183:G:H5"	25:23:30:ARG:HH22	1.68	0.57
7:2H:113:VAL:HG11	7:2H:151:ILE:HD13	1.87	0.57
54:2w:72:C:H2'	54:2w:73:A:H8	1.68	0.57
1:1A:880:G:H2'	1:1A:881:G:C8	2.40	0.57
1:1A:2790:A:H3'	1:1A:2790:A:N3	2.20	0.57
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.05	0.57
15:1T:127:ALA:C	15:1T:129:ARG:H	2.12	0.57
20:1Y:82:PRO:O	20:1Y:101:LYS:NZ	2.37	0.57
54:1w:5:G:H2'	54:1w:6:G:H8	1.69	0.57
1:2A:247:G:H4'	1:2A:386:G:C5	2.39	0.57
4:2E:7:VAL:HG23	4:2E:51:PHE:HE2	1.69	0.57
26:24:48:ARG:NH2	26:24:51:ASP:O	2.37	0.57
32:2a:624:C:H2'	32:2a:625:G:H8	1.70	0.57
37:2f:50:TYR:CE2	49:2r:77:GLY:HA2	2.40	0.57
51:2t:49:ALA:HB3	51:2t:99:LEU:HD22	1.85	0.57
1:1A:284:U:H2'	1:1A:285:C:C6	2.39	0.57
1:1A:2839:G:N2	13:1R:91:GLN:O	2.33	0.57
22:10:23:VAL:HG22	22:10:38:VAL:HG22	1.85	0.57
46:1o:74:ASP:HB3	46:1o:77:ARG:HB2	1.87	0.57
1:2A:323:G:O2'	1:2A:1205:U:N3	2.33	0.57
1:2A:2439:A:N6	55:2x:76:8AN:O1P	2.38	0.57
3:2D:226:MET:O	62:2D:5402:HOH:O	2.17	0.57
1:1A:2136:C:C2	1:1A:2155:G:N2	2.72	0.57
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.22	0.57
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.51	0.57
36:1e:102:ALA:O	36:1e:107:ARG:NH2	2.37	0.57
1:2A:624:C:O2'	1:2A:657:U:OP1	2.21	0.57
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.39	0.57
36:2e:20:GLN:OE1	36:2e:25:ARG:NH1	2.38	0.57
41:2j:16:LEU:O	41:2j:20:ALA:N	2.31	0.57
1:1A:784:A:N6	3:1D:229:VAL:HG11	2.20	0.57
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.39	0.57
32:2a:197:A:O2'	32:2a:220:G:N2	2.38	0.57
32:2a:1263:C:C4	32:2a:1272:G:O6	2.58	0.57
33:2b:28:PHE:CD1	33:2b:194:PRO:HG3	2.39	0.57
1:1A:1607:C:O2	62:1A:4247:HOH:O	2.16	0.57
4:1E:34:VAL:HB	4:1E:48:GLN:HE21	1.69	0.57
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.10	0.57
21:1Z:156:LYS:HE2	21:1Z:158:PRO:HD3	1.87	0.57
37:1f:3:ARG:HB3	37:1f:93:SER:HB2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:1:MET:SD	12:2Q:1:MET:N	2.75	0.57
32:2a:1026:G:H5'	32:2a:1027:C:O5'	2.04	0.57
1:1A:2096:U:H3	1:1A:2193:G:H1	1.53	0.56
5:1F:123:LEU:HD13	5:1F:192:LEU:HD23	1.85	0.56
31:19:17:ILE:HD13	31:19:26:ILE:HD13	1.86	0.56
1:2A:1324:G:N7	62:2A:4013:HOH:O	2.32	0.56
1:2A:2659:G:OP1	7:2H:158:HIS:NE2	2.38	0.56
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.38	0.56
14:2S:10:ARG:NE	14:2S:91:PRO:O	2.31	0.56
25:23:40:THR:HG22	25:23:42:ALA:H	1.70	0.56
32:2a:390:C:H4'	47:2p:28:ARG:HH21	1.70	0.56
36:2e:68:GLU:HG2	36:2e:70:PRO:HD3	1.87	0.56
39:2h:17:THR:O	39:2h:78:GLN:NE2	2.35	0.56
39:1h:96:GLY:N	39:1h:99:GLU:OE1	2.38	0.56
44:1m:11:ARG:HA	44:1m:45:VAL:HB	1.87	0.56
51:1t:60:GLU:HG3	51:1t:81:LYS:HD2	1.88	0.56
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.05	0.56
10:2O:49:ARG:NH1	32:2a:1422:G:O3'	2.28	0.56
32:2a:1149:C:H2'	32:2a:1150:U:C6	2.39	0.56
33:2b:12:GLU:HA	33:2b:213:LEU:HD11	1.87	0.56
1:1A:674:G:O2'	5:1F:74:ARG:HD3	2.05	0.56
1:1A:739:G:OP1	62:1A:4254:HOH:O	2.17	0.56
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.04	0.56
3:1D:18:VAL:HG12	3:1D:211:ARG:NH2	2.20	0.56
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.05	0.56
14:1S:11:LYS:O	14:1S:15:ARG:HB2	2.05	0.56
22:10:16:SER:OG	62:10:201:HOH:O	2.18	0.56
32:1a:200:G:H1	32:1a:217:C:N4	2.03	0.56
32:1a:1179:A:H4'	40:1i:103:THR:HA	1.87	0.56
32:1a:1239:A:H62	32:1a:1299:A:N6	2.04	0.56
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.20	0.56
33:1b:54:THR:HG23	33:1b:199:TYR:HB3	1.86	0.56
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.05	0.56
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.20	0.56
33:2b:71:VAL:HB	33:2b:164:VAL:HG13	1.87	0.56
47:2p:1:MET:O	47:2p:24:ALA:N	2.38	0.56
1:1A:796:C:H2'	1:1A:797:C:C6	2.40	0.56
1:1A:2105:C:H2'	1:1A:2106:G:C8	2.39	0.56
23:11:18:ILE:HG12	23:11:37:ILE:HG12	1.86	0.56
32:1a:68:G:C2	32:1a:69:G:H1'	2.41	0.56
32:1a:613:C:H2'	32:1a:614:A:H8	1.71	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:1d:8:VAL:HG22	35:1d:21:LEU:HD13	1.88	0.56
35:1d:111:ALA:HB2	35:1d:120:LEU:HD12	1.86	0.56
32:2a:1181:G:O2'	32:2a:1182:G:N7	2.39	0.56
1:1A:899:A:H2'	1:1A:899:A:N3	2.20	0.56
1:1A:2165:G:N1	1:1A:2171:A:H8	2.04	0.56
32:1a:316:G:OP2	32:1a:351:G:O2'	2.20	0.56
32:1a:1191:A:H5"	34:1c:4:LYS:NZ	2.21	0.56
1:2A:1647:G:H3'	1:2A:1647:G:OP2	2.05	0.56
1:2A:2506:U:H1'	54:2w:76:F3N:HD2	1.87	0.56
21:2Z:61:LEU:HB2	21:2Z:65:GLN:HB2	1.87	0.56
33:2b:98:LEU:HB2	33:2b:101:MET:HE3	1.86	0.56
1:1A:422:A:OP2	62:1A:4255:HOH:O	2.18	0.56
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.39	0.56
32:1a:928:G:O2'	32:1a:1533:C:OP1	2.21	0.56
32:1a:1302:U:OP1	44:1m:13:LYS:NZ	2.37	0.56
1:2A:871:U:OP1	12:2Q:5:ARG:HG3	2.06	0.56
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.04	0.56
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.41	0.56
6:2G:3:LEU:O	6:2G:8:LYS:NZ	2.30	0.56
15:2T:83:ILE:HD13	15:2T:86:ILE:HD11	1.88	0.56
21:2Z:93:ASP:HA	21:2Z:131:ARG:HH22	1.71	0.56
25:23:6:VAL:HG22	25:23:56:VAL:HG12	1.88	0.56
32:2a:158:G:H2'	32:2a:159:G:O4'	2.06	0.56
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.40	0.56
44:2m:4:ILE:HG23	44:2m:5:ALA:H	1.71	0.56
57:2y:18:G:N2	57:2y:55:PSU:HN3	2.04	0.56
1:1A:2151:G:H2'	1:1A:2152:G:C8	2.39	0.56
1:1A:2439:A:N6	55:1x:76:8AN:O1P	2.38	0.56
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.39	0.56
38:1g:28:ASN:HD21	38:1g:36:LYS:HZ1	1.51	0.56
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.22	0.56
3:2D:206:LEU:HD22	3:2D:211:ARG:HG2	1.88	0.56
12:2Q:110:THR:HG22	12:2Q:112:GLU:H	1.69	0.56
32:2a:434:U:H2'	32:2a:435:C:H6	1.71	0.56
32:2a:1359:C:H1'	32:2a:1362:C:H41	1.71	0.56
37:2f:28:ARG:HA	37:2f:31:GLU:HG2	1.88	0.56
1:1A:536:A:H2'	1:1A:537:C:C6	2.40	0.56
1:1A:1062:G:H22	1:1A:1077:A:N6	2.01	0.56
11:1P:59:LEU:HD11	30:18:10:ALA:HA	1.87	0.56
32:1a:1202:G:O4'	45:1n:29:ARG:NH1	2.39	0.56
41:1j:49:VAL:HG22	45:1n:41:ARG:HB2	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:120:LYS:HG2	44:1m:121:LYS:H	1.70	0.56
57:1y:37:MIA:H2'	57:1y:38:A:H8	1.69	0.56
1:2A:8:A:H2'	1:2A:9:U:C6	2.40	0.56
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.87	0.56
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.06	0.56
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.21	0.56
1:2A:2453:A:N7	62:2A:4019:HOH:O	2.33	0.56
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.71	0.56
1:1A:2110:G:C2	1:1A:2120:G:H1'	2.41	0.56
32:1a:178:C:H2'	32:1a:179:A:H8	1.69	0.56
32:2a:1030(A):G:N2	32:2a:1030(C):G:H3'	2.21	0.56
47:2p:26:ARG:HG3	47:2p:27:LYS:O	2.06	0.56
54:2w:43:C:H2'	54:2w:44:G:C8	2.41	0.56
1:1A:84:A:H5"	20:1Y:8:LYS:HE3	1.87	0.56
1:1A:1937:A:H1'	1:1A:1939:5MU:H72	1.88	0.56
1:1A:2108:C:H2'	1:1A:2109:U:C6	2.41	0.56
25:13:3:ARG:NE	25:13:60:GLU:OE1	2.34	0.56
32:1a:222:U:H2'	32:1a:223:U:C6	2.41	0.56
1:2A:30:G:H2'	1:2A:31:C:C6	2.40	0.56
7:2H:137:ASP:OD1	7:2H:140:LYS:N	2.31	0.56
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.38	0.56
32:2a:1347:G:N2	32:2a:1374:A:OP2	2.38	0.56
33:2b:16:HIS:HB2	33:2b:204:ASN:HD22	1.71	0.56
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.21	0.55
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.41	0.55
12:1Q:103:MET:HE1	12:1Q:125:LEU:HD13	1.88	0.55
36:1e:85:GLY:O	36:1e:87:SER:N	2.37	0.55
1:2A:800:A:H8	1:2A:800:A:OP1	1.89	0.55
1:2A:1645:G:H5"	1:2A:1646:C:H5'	1.88	0.55
6:2G:63:ILE:HD13	6:2G:143:GLU:HB2	1.87	0.55
12:2Q:110:THR:HB	12:2Q:113:GLN:H	1.71	0.55
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.06	0.55
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.88	0.55
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.88	0.55
33:1b:143:GLU:O	33:1b:147:LYS:N	2.39	0.55
33:1b:195:ASP:O	39:1h:68:ARG:NH2	2.35	0.55
39:1h:49:GLU:HG3	39:1h:51:VAL:HG22	1.88	0.55
1:2A:2135:A:C8	1:2A:2136:C:H5	2.24	0.55
1:2A:2137:C:N4	1:2A:2154:G:N1	2.46	0.55
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.34	0.55
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.34	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:1G:109:VAL:HG11	26:14:14:ILE:HG21	1.88	0.55
1:2A:2193:G:H2'	1:2A:2194:G:H8	1.69	0.55
2:2B:22:U:H2'	2:2B:23:G:C8	2.42	0.55
14:2S:25:ARG:HB3	14:2S:40:ILE:HB	1.87	0.55
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.07	0.55
32:2a:297:G:N2	32:2a:300:A:OP2	2.39	0.55
1:1A:363(A):A:H2'	1:1A:363(B):G:C8	2.41	0.55
1:1A:1171:G:OP2	1:1A:1174:A:N6	2.39	0.55
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.89	0.55
1:2A:1183:G:H5"	25:23:30:ARG:NH2	2.21	0.55
32:2a:1071:C:H2'	32:2a:1072:G:H8	1.72	0.55
40:2i:50:LEU:O	40:2i:54:ASP:N	2.40	0.55
1:1A:272(G):C:H42	1:1A:363(C):G:H1	1.55	0.55
1:1A:642:G:OP1	62:1A:4256:HOH:O	2.18	0.55
12:1Q:32:TYR:OH	12:1Q:111:GLU:OE2	2.17	0.55
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.71	0.55
12:2Q:34:LEU:HB2	12:2Q:118:LEU:HD22	1.88	0.55
39:2h:7:ALA:HA	39:2h:10:LEU:HD12	1.89	0.55
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.87	0.55
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.41	0.55
33:1b:93:VAL:HG11	33:1b:97:TRP:CD1	2.41	0.55
46:1o:8:LYS:HE3	46:1o:31:LEU:HD22	1.89	0.55
47:1p:53:VAL:HG13	47:1p:79:VAL:HG22	1.89	0.55
48:1q:18:THR:OG1	48:1q:69:LYS:NZ	2.35	0.55
57:1y:19:G:H5"	57:1y:57:G:H1	1.72	0.55
1:2A:2819:G:N7	62:2A:4026:HOH:O	2.33	0.55
6:2G:41:GLN:O	6:2G:43:LEU:N	2.39	0.55
9:2N:67:LEU:HB3	9:2N:88:GLU:HG3	1.87	0.55
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.39	0.55
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.88	0.55
21:2Z:106:GLY:HA3	21:2Z:141:VAL:HB	1.88	0.55
32:2a:1005:A:H3'	32:2a:1006:C:C6	2.41	0.55
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.39	0.55
42:2k:79:SER:HB3	42:2k:104:GLN:HB3	1.89	0.55
6:1G:3:LEU:O	6:1G:8:LYS:NZ	2.39	0.55
32:1a:1095:U:OP2	62:1a:1915:HOH:O	2.18	0.55
32:1a:1143:G:H2'	32:1a:1144:G:H8	1.70	0.55
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.42	0.55
1:2A:300:A:P	20:2Y:86:ARG:HH12	2.29	0.55
1:2A:1218:C:H42	1:2A:1231:G:H1	1.52	0.55
1:2A:2171:A:N3	1:2A:2172:U:N3	2.55	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2721:A:OP1	62:2A:3950:HOH:O	2.18	0.55
1:2A:2853:C:H2'	1:2A:2854:G:C8	2.42	0.55
12:2Q:18:LYS:O	12:2Q:98:LYS:NZ	2.22	0.55
1:1A:1670:C:O2	4:1E:129:HIS:NE2	2.32	0.55
34:1c:58:GLU:HG2	41:1j:92:THR:HG21	1.88	0.55
1:2A:615:G:OP1	5:2F:40:GLN:NE2	2.40	0.55
5:2F:113:ALA:HB1	5:2F:186:ILE:HG21	1.88	0.55
19:2X:9:LEU:HA	24:22:36:ARG:HH21	1.72	0.55
33:2b:178:ARG:HH22	39:2h:68:ARG:HH12	1.54	0.55
37:2f:22:GLU:OE2	37:2f:82:ARG:NE	2.40	0.55
1:1A:271(E):U:O4	62:1A:4232:HOH:O	2.14	0.55
32:1a:1023:G:H3'	32:1a:1024:G:H8	1.72	0.55
46:1o:16:ALA:HB1	46:1o:21:ASP:HB3	1.89	0.55
1:2A:468:G:N7	29:27:39:ARG:NH2	2.54	0.55
1:2A:1754:C:OP1	15:2T:96:ARG:NH1	2.40	0.55
1:2A:1837:C:O2'	1:2A:1927:A:N3	2.32	0.55
1:2A:2104:G:H1	1:2A:2185:C:N4	2.03	0.55
1:2A:2127:G:N2	1:2A:2161:C:C2	2.75	0.55
2:2B:53:A:OP1	62:2B:301:HOH:O	2.17	0.55
5:2F:116:ASP:OD2	11:2P:1:MET:N	2.39	0.55
8:2I:66:GLU:O	8:2I:70:GLU:N	2.34	0.55
19:2X:2:LYS:NZ	19:2X:38:GLU:OE2	2.31	0.55
32:2a:728:A:H2'	32:2a:729:A:C8	2.42	0.55
1:1A:2131:G:H5'	1:1A:2133:G:C8	2.41	0.55
10:1O:88:ASN:ND2	10:1O:90:GLN:OE1	2.39	0.55
32:1a:1025:U:C2	32:1a:1036:G:O6	2.59	0.55
57:1y:19:G:N2	57:1y:56:C:N3	2.55	0.55
36:2e:53:LEU:HD12	36:2e:53:LEU:H	1.71	0.55
57:2y:15:G:N2	57:2y:48:C:N4	2.55	0.55
1:1A:1139:G:H5"	9:1N:70:LYS:HZ3	1.72	0.54
26:14:28:LYS:HG2	26:14:31:ILE:HG13	1.89	0.54
54:1w:28:G:H2'	54:1w:29:G:C8	2.42	0.54
1:2A:817:C:O2'	1:2A:839:U:H5"	2.07	0.54
1:2A:851:U:O2'	25:23:42:ALA:O	2.23	0.54
1:2A:922:U:H2'	1:2A:923:C:C6	2.42	0.54
6:2G:32:PRO:HB2	6:2G:172:LEU:HD22	1.89	0.54
16:2U:49:HIS:HA	16:2U:52:ARG:HB2	1.87	0.54
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	1.89	0.54
1:1A:2142:C:N3	1:1A:2149:G:C6	2.75	0.54
36:1e:85:GLY:C	36:1e:87:SER:H	2.15	0.54
1:1A:800:A:H8	1:1A:800:A:OP1	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:49:ARG:NH2	32:1a:1423:G:OP1	2.32	0.54
18:1W:68:ARG:HH11	18:1W:111:HIS:HA	1.72	0.54
32:1a:1136:U:H5"	32:1a:1137:C:C4	2.43	0.54
1:2A:340:A:H2'	1:2A:341:G:O4'	2.07	0.54
1:2A:1278:A:OP1	13:2R:36:THR:HG23	2.06	0.54
4:2E:5:LEU:HD11	4:2E:79:ARG:HB2	1.89	0.54
9:2N:21:LYS:NZ	9:2N:140:VAL:OXT	2.25	0.54
1:1A:2128:C:N4	1:1A:2160:G:C6	2.75	0.54
12:1Q:10:ARG:HH11	12:1Q:11:LYS:HE2	1.72	0.54
32:1a:17:U:H2'	32:1a:18:C:C6	2.42	0.54
40:1i:25:LYS:N	40:1i:60:ASP:OD1	2.40	0.54
32:2a:1003:G:H2'	32:2a:1004:A:O4'	2.07	0.54
32:2a:1506:U:OP1	62:2a:1911:HOH:O	2.19	0.54
33:2b:92:TYR:CE2	33:2b:151:GLY:HA3	2.42	0.54
34:2c:61:ALA:N	34:2c:63:ASN:OD1	2.36	0.54
12:1Q:111:GLU:OE2	12:1Q:133:ARG:NH2	2.28	0.54
20:1Y:86:ARG:HB2	20:1Y:98:VAL:HG23	1.90	0.54
32:1a:78:G:C2	32:1a:91:C:N3	2.76	0.54
32:1a:625:G:H4'	47:1p:16:HIS:CD2	2.43	0.54
32:1a:1036:G:H5"	32:1a:1037:C:C5	2.42	0.54
1:2A:586:A:N1	1:2A:809:G:O2'	2.37	0.54
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.41	0.54
6:2G:48:GLU:O	6:2G:51:ARG:HG3	2.06	0.54
33:2b:70:PHE:HE2	33:2b:90:MET:HB2	1.71	0.54
39:2h:116:LYS:HD3	39:2h:127:LEU:HD12	1.88	0.54
47:2p:58:TYR:O	47:2p:61:SER:OG	2.20	0.54
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.89	0.54
1:1A:2629:A:HO2'	1:1A:2630:G:P	2.31	0.54
13:1R:28:LEU:HD23	13:1R:48:VAL:HG21	1.89	0.54
21:1Z:8:TYR:HB2	21:1Z:38:TYR:CE2	2.43	0.54
32:1a:78:G:N1	32:1a:91:C:C4	2.75	0.54
32:1a:266:G:O2'	32:1a:267:C:OP2	2.18	0.54
36:1e:147:ASP:O	36:1e:151:LEU:HD12	2.08	0.54
50:1s:69:HIS:ND1	50:1s:73:GLU:OE1	2.40	0.54
1:2A:200:U:O2	1:2A:386:G:N2	2.41	0.54
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.38	0.54
5:2F:135:LYS:HB3	5:2F:138:GLU:HG3	1.90	0.54
9:2N:30:ILE:HG23	9:2N:52:VAL:HG11	1.90	0.54
32:2a:603:U:H2'	32:2a:604:G:H8	1.73	0.54
32:2a:1312:G:H5'	50:2s:5:LEU:HD11	1.88	0.54
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:2y:66:U:H2'	57:2y:67:C:O4'	2.08	0.54
30:18:23:VAL:HG11	30:18:47:LYS:HD3	1.90	0.54
32:1a:737:A:H2'	32:1a:738:C:C6	2.43	0.54
32:1a:828:A:H2'	32:1a:829:G:O4'	2.08	0.54
32:1a:863:U:OP1	62:1a:1920:HOH:O	2.18	0.54
33:1b:178:ARG:NH2	39:1h:74:PRO:HB3	2.22	0.54
1:2A:2134:A:H1'	1:2A:2158:A:C6	2.42	0.54
26:24:26:SER:OG	26:24:27:THR:N	2.40	0.54
32:2a:416:G:O6	62:2a:1908:HOH:O	2.14	0.54
32:2a:1403:C:H2'	32:2a:1404:5MC:HM53	1.89	0.54
44:2m:80:ARG:NH2	50:2s:69:HIS:HE1	2.04	0.54
57:2y:65:G:H2'	57:2y:66:U:C6	2.42	0.54
1:1A:249:C:O2	30:18:12:LYS:NZ	2.39	0.54
1:1A:987:G:O2'	1:1A:1000:A:N3	2.40	0.54
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.35	0.54
32:1a:1090:U:H2'	32:1a:1091:U:H6	1.73	0.54
32:1a:1239:A:H62	32:1a:1299:A:H62	1.56	0.54
1:2A:624:C:OP1	62:2A:3947:HOH:O	2.18	0.54
32:2a:1005:A:H5"	32:2a:1006:C:C5	2.42	0.54
36:2e:32:VAL:HG11	36:2e:59:GLY:HA2	1.90	0.54
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.42	0.54
62:1A:5300:HOH:O	11:1P:44:GLY:HA2	2.07	0.54
5:1F:185:ASP:OD1	5:1F:188:ARG:NH1	2.33	0.54
9:1N:62:VAL:HG22	9:1N:66:LYS:HD2	1.89	0.54
1:2A:1179:C:H2'	1:2A:1180:C:H6	1.73	0.54
4:2E:119:ARG:HG2	4:2E:120:TRP:NE1	2.23	0.54
26:24:64:GLY:C	26:24:66:SER:H	2.16	0.54
40:2i:65:VAL:HG21	40:2i:77:ILE:HD11	1.90	0.54
32:1a:130:A:O2'	32:1a:131:C:O5'	2.23	0.54
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.41	0.54
1:2A:1242:A:N1	11:2P:2:LYS:NZ	2.56	0.54
1:2A:2218:U:N3	23:21:55:GLY:O	2.41	0.54
6:2G:5:VAL:HG23	6:2G:7:LEU:H	1.73	0.54
10:2O:112:MET:HA	10:2O:115:VAL:HB	1.89	0.54
32:2a:977:A:O2'	32:2a:979:C:OP2	2.21	0.54
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.22	0.54
32:2a:1380:U:C4	38:2g:3:ARG:HG2	2.43	0.54
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.23	0.53
22:10:27:GLU:HB2	22:10:69:PHE:HD1	1.72	0.53
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.76	0.53
34:1c:15:THR:HG21	34:1c:181:ASN:HA	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:38:A:H2'	1:2A:39:C:C6	2.43	0.53
1:2A:848:G:H2'	1:2A:849:A:C8	2.43	0.53
1:2A:1693:U:O2'	3:2D:14:ARG:NH2	2.39	0.53
17:2V:29:PRO:HA	17:2V:61:VAL:HG22	1.89	0.53
32:2a:88:A:H5"	32:2a:89:C:C6	2.43	0.53
32:2a:1132:C:H2'	32:2a:1133:G:H8	1.74	0.53
32:1a:148:G:H2'	32:1a:149:A:C8	2.43	0.53
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.44	0.53
1:2A:2784:C:H1'	4:2E:37:ARG:HH12	1.74	0.53
5:2F:20:LEU:HG	5:2F:21:ALA:H	1.73	0.53
25:23:23:LEU:HD12	25:23:50:VAL:HG11	1.89	0.53
32:2a:1006:C:H2'	32:2a:1007:C:O4'	2.08	0.53
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.90	0.53
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.90	0.53
19:2X:94:GLY:CA	19:2X:95:LEU:HB2	2.38	0.53
21:2Z:146:ILE:HG23	21:2Z:174:VAL:HG22	1.90	0.53
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.25	0.53
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.74	0.53
40:2i:48:GLU:HG2	40:2i:101:PHE:HZ	1.73	0.53
43:2l:60:LEU:HD11	43:2l:66:VAL:HG22	1.89	0.53
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.44	0.53
1:1A:1187:G:H5"	17:1V:81:TYR:CE1	2.43	0.53
32:1a:431:A:H2'	32:1a:432:A:O4'	2.09	0.53
38:1g:62:PHE:O	38:1g:66:VAL:HG23	2.08	0.53
39:1h:17:THR:HG22	39:1h:63:LEU:HD13	1.89	0.53
54:1w:1:G:O2'	54:1w:2:C:O5'	2.18	0.53
1:2A:1996:C:H4'	1:2A:1997:G:OP1	2.08	0.53
1:2A:2143:C:N4	1:2A:2148:G:N1	2.16	0.53
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.34	0.53
26:24:61:ARG:HA	26:24:61:ARG:HH11	1.73	0.53
32:2a:123:C:OP1	32:2a:311:C:O2'	2.24	0.53
1:1A:1740:G:H2'	1:1A:1741:A:C8	2.43	0.53
11:1P:131:SER:HB2	11:1P:134:ALA:H	1.72	0.53
15:1T:12:SER:HA	15:1T:15:VAL:HG23	1.89	0.53
35:1d:172:PRO:C	35:1d:174:LEU:H	2.17	0.53
1:2A:2168:G:OP2	1:2A:2168:G:N2	2.41	0.53
1:1A:2121:G:H1	1:1A:2177:C:H42	1.55	0.53
1:1A:2422:A:O4'	57:1y:76:A:N6	2.42	0.53
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.44	0.53
18:2W:1:MET:HE2	18:2W:62:HIS:HB3	1.91	0.53
32:2a:130:A:N3	32:2a:263:A:O2'	2.35	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1239:A:H4'	32:2a:1240:U:H5"	1.91	0.53
32:2a:1397:C:OP2	36:2e:24:ARG:NH2	2.42	0.53
1:1A:1156:A:OP1	16:1U:55:ARG:NH1	2.41	0.53
21:1Z:48:PHE:HA	21:1Z:51:ALA:HB3	1.90	0.53
32:1a:946:A:H2'	32:1a:947:G:C8	2.44	0.53
32:1a:1023:G:H3'	32:1a:1024:G:C8	2.44	0.53
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	1.91	0.53
1:2A:827:U:OP1	62:2A:3952:HOH:O	2.19	0.53
1:2A:910:A:N1	1:2A:2277:G:H1'	2.24	0.53
1:2A:2123:G:H2'	1:2A:2124:G:C8	2.43	0.53
1:2A:2126:A:N3	1:2A:2127:G:H1'	2.23	0.53
32:2a:1305:G:O2'	32:2a:1331:G:N2	2.42	0.53
32:1a:636:U:H2'	32:1a:637:G:H8	1.73	0.53
38:1g:78:ARG:HG3	38:1g:79:ARG:H	1.73	0.53
1:2A:994:C:O2'	1:2A:996:A:OP1	2.16	0.53
1:2A:1341:U:OP2	1:2A:1394:U:O2'	2.22	0.53
1:2A:2750:A:O2'	1:2A:2752:C:N4	2.41	0.53
2:2B:118:G:OP2	62:2B:302:HOH:O	2.19	0.53
32:2a:401:C:P	35:2d:73:ARG:HH21	2.31	0.53
57:2y:63:G:H2'	57:2y:64:A:C8	2.44	0.53
10:1O:120:GLU:OE1	15:1T:67:SER:OG	2.20	0.53
32:1a:200:G:H1	32:1a:217:C:H42	1.55	0.53
32:1a:202:U:H3'	32:1a:203:U:C6	2.44	0.53
32:1a:688:G:H5'	42:1k:46:GLY:C	2.34	0.53
32:1a:861:G:HO2'	32:1a:874:G:HO2'	1.55	0.53
1:2A:1453:U:O2'	1:2A:1455:G:N7	2.41	0.53
32:2a:977:A:H2'	32:2a:978:A:H5"	1.90	0.53
33:2b:178:ARG:NH1	33:2b:198:ASP:OD1	2.40	0.53
36:2e:41:VAL:O	36:2e:66:MET:HA	2.08	0.53
1:1A:2820:A:O2'	1:1A:2821:A:OP1	2.26	0.53
7:1H:68:THR:O	7:1H:72:ILE:HG12	2.10	0.53
1:2A:883:G:N2	1:2A:895:U:H1'	2.24	0.53
15:2T:107:ASP:O	15:2T:111:ARG:HG3	2.08	0.53
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.42	0.53
25:23:7:LYS:NZ	25:23:34:GLU:OE1	2.42	0.53
32:2a:646:U:H2'	32:2a:647:C:C6	2.44	0.53
32:2a:957:U:O2'	32:2a:959:A:N7	2.36	0.53
33:2b:28:PHE:HD1	33:2b:194:PRO:HG3	1.73	0.53
37:2f:94:GLN:HE22	49:2r:72:ARG:HH12	1.57	0.53
1:1A:493:G:O6	62:1A:4262:HOH:O	2.19	0.52
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.21	0.52
55:1x:8:4SU:O2	55:1x:21:A:H2	1.92	0.52
1:2A:84:A:N1	1:2A:98:G:O2'	2.36	0.52
1:2A:2262:U:OP2	22:20:16:SER:OG	2.21	0.52
11:2P:29:LYS:HG3	11:2P:30:THR:H	1.74	0.52
21:2Z:47:VAL:HA	21:2Z:50:GLN:HE22	1.74	0.52
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.44	0.52
54:2w:9:A:O2'	54:2w:10:G:N7	2.42	0.52
55:2x:61:C:H2'	55:2x:62:C:H6	1.74	0.52
32:1a:987:G:N2	32:1a:1219:U:O2	2.42	0.52
54:1w:1:G:H2'	54:1w:2:C:C6	2.44	0.52
1:2A:1031:G:H21	31:29:36:GLN:HE22	1.57	0.52
7:2H:9:ILE:HB	7:2H:50:VAL:HG13	1.90	0.52
32:2a:45:U:H2'	32:2a:46:G:C8	2.44	0.52
38:2g:9:VAL:HG23	38:2g:94:ARG:NH2	2.24	0.52
40:2i:9:ARG:O	40:2i:104:ARG:HG3	2.09	0.52
54:2w:51:U:H2'	54:2w:52:G:H8	1.74	0.52
4:1E:7:VAL:HG23	4:1E:51:PHE:CE2	2.44	0.52
4:1E:7:VAL:HG23	4:1E:51:PHE:HE2	1.74	0.52
25:13:44:ARG:O	25:13:48:GLU:HG3	2.09	0.52
32:1a:653:A:OP1	39:1h:56:LYS:NZ	2.42	0.52
32:1a:1152:A:OP1	41:1j:68:HIS:ND1	2.40	0.52
1:2A:938:G:OP2	30:28:52:LYS:NZ	2.28	0.52
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	1.92	0.52
32:2a:560:U:H5'	32:2a:566:G:N2	2.24	0.52
32:2a:952:U:H2'	32:2a:953:G:C8	2.45	0.52
32:2a:1145:C:H4'	32:2a:1146:A:H8	1.73	0.52
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.44	0.52
41:2j:8:LEU:HD23	41:2j:8:LEU:H	1.75	0.52
1:1A:839:U:H2'	1:1A:840:C:C6	2.45	0.52
1:1A:2139:C:H2'	1:1A:2140:C:O4'	2.10	0.52
2:1B:31:C:H4'	6:1G:29:TRP:CH2	2.44	0.52
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.90	0.52
45:1n:27:CYS:SG	45:1n:29:ARG:HB2	2.48	0.52
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.26	0.52
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.21	0.52
11:2P:39:LYS:HB2	11:2P:45:LEU:HD22	1.92	0.52
21:2Z:130:PRO:HA	21:2Z:133:ILE:HG13	1.91	0.52
32:2a:1010:G:N2	32:2a:1020:U:O2'	2.43	0.52
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.44	0.52
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.45	0.52
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.90	0.52
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.74	0.52
8:1I:42:SER:OG	8:1I:43:ASN:N	2.41	0.52
32:1a:438:G:H4'	35:1d:123:HIS:CE1	2.45	0.52
33:1b:101:MET:HA	33:1b:108:ILE:HD12	1.91	0.52
1:2A:1016:G:O6	62:2A:3946:HOH:O	2.17	0.52
1:2A:1283:G:O2'	1:2A:1285:G:N7	2.32	0.52
2:2B:48:A:P	14:2S:30:ARG:HH22	2.32	0.52
2:2B:83:G:H1	2:2B:94:C:H42	1.58	0.52
3:2D:183:ARG:HG3	3:2D:270:ILE:HD13	1.92	0.52
26:24:58:ARG:HD2	50:2s:68:GLY:H	1.73	0.52
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.45	0.52
1:1A:363:G:H2'	1:1A:363(A):A:C8	2.45	0.52
1:1A:414:C:H2'	1:1A:415:A:C8	2.45	0.52
1:1A:604:G:OP2	11:1P:90:ARG:NH2	2.42	0.52
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.42	0.52
39:1h:100:ILE:HB	39:1h:125:ARG:HH12	1.75	0.52
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.45	0.52
1:2A:2130:U:H2'	1:2A:2158:A:H61	1.74	0.52
3:2D:24:ILE:HD13	3:2D:84:TYR:HB2	1.91	0.52
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.92	0.52
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.45	0.52
34:2c:191:THR:OG1	34:2c:194:GLY:O	2.27	0.52
39:2h:33:GLU:OE2	39:2h:50:ARG:NH1	2.43	0.52
57:2y:34:G:H2'	57:2y:35:A:C8	2.45	0.52
1:1A:592:G:O6	62:1A:4249:HOH:O	2.16	0.52
1:1A:1740:G:H2'	1:1A:1741:A:H8	1.74	0.52
5:1F:129:PHE:HB3	5:1F:132:VAL:HG13	1.90	0.52
7:1H:6:ARG:HH22	7:1H:54:ARG:HH22	1.58	0.52
7:1H:94:TYR:HE2	7:1H:152:ARG:HG2	1.74	0.52
11:1P:89:ALA:O	11:1P:121:LYS:NZ	2.39	0.52
32:1a:1027:C:C4	32:1a:1034:G:N1	2.77	0.52
32:1a:1118:C:H2'	32:1a:1119:C:C6	2.45	0.52
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.44	0.52
38:1g:15:ASP:O	38:1g:19:GLY:HA2	2.10	0.52
38:1g:94:ARG:O	38:1g:98:SER:OG	2.28	0.52
1:2A:2816:C:O3'	13:2R:99:LYS:NZ	2.43	0.52
25:23:30:ARG:HB2	25:23:33:GLN:HB2	1.92	0.52
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.24	0.52
32:2a:232:G:H2'	32:2a:233:C:C6	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1469:G:H2'	32:2a:1470:G:H8	1.73	0.52
35:2d:65:ARG:NH1	35:2d:70:ILE:O	2.43	0.52
54:1w:45:U:H5'	54:1w:46:G7M:OP2	2.10	0.52
1:2A:2728:U:H2'	1:2A:2729:G:C8	2.44	0.52
6:2G:41:GLN:HB3	6:2G:43:LEU:HD22	1.92	0.52
13:2R:83:ILE:HA	13:2R:86:ARG:HD3	1.92	0.52
17:2V:6:LYS:HB2	17:2V:38:LEU:HD11	1.92	0.52
19:2X:5:TYR:CZ	24:22:30:ARG:HB2	2.44	0.52
19:2X:31:HIS:CD2	19:2X:33:LYS:H	2.28	0.52
38:2g:59:LEU:O	38:2g:63:LYS:HB2	2.09	0.52
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.92	0.52
1:1A:615:G:OP1	5:1F:40:GLN:NE2	2.41	0.52
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.45	0.52
32:1a:57:G:H2'	32:1a:58:C:C6	2.45	0.52
32:1a:1009:G:O6	32:1a:1020:U:C2	2.62	0.52
35:1d:128:VAL:HB	35:1d:133:VAL:HG21	1.92	0.52
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.25	0.52
6:2G:70:VAL:HA	6:2G:90:LEU:HD23	1.92	0.52
14:2S:26:LEU:HD13	14:2S:85:VAL:HG11	1.92	0.52
32:2a:254:G:OP1	48:2q:66:SER:OG	2.28	0.52
32:2a:299:G:H2'	32:2a:300:A:C8	2.45	0.52
32:2a:527:G7M:O6	43:2l:49:ASN:ND2	2.43	0.52
32:2a:1010:G:H2'	32:2a:1011:G:H8	1.75	0.52
32:2a:1271:G:C2	32:2a:1272:G:N7	2.78	0.52
40:2i:70:LYS:O	40:2i:74:ILE:HG13	2.10	0.52
41:2j:45:ARG:O	41:2j:65:LEU:N	2.41	0.52
1:1A:483:A:O2'	20:1Y:49:VAL:O	2.26	0.52
1:1A:1012:U:C5	9:1N:28:THR:HG21	2.45	0.52
3:1D:227:ASN:OD1	62:1D:401:HOH:O	2.19	0.52
30:18:26:LYS:HG2	30:18:46:ARG:O	2.10	0.52
33:1b:59:GLU:HG2	33:1b:225:ALA:HB2	1.92	0.52
40:1i:4:TYR:CG	40:1i:88:TYR:HB2	2.45	0.52
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.75	0.52
1:2A:1400:G:H2'	1:2A:1401:G:C8	2.45	0.52
5:2F:143:ALA:HB1	5:2F:148:LEU:HB2	1.91	0.52
32:2a:224:C:H2'	32:2a:225:C:C6	2.44	0.52
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.92	0.52
32:2a:1302:U:OP2	44:2m:21:TYR:OH	2.23	0.52
32:2a:1327:C:H2'	32:2a:1328:C:C6	2.45	0.52
35:2d:57:ARG:NH1	35:2d:205:GLU:HB3	2.24	0.52
36:2e:36:ASP:O	36:2e:38:GLN:N	2.35	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.44	0.51
3:1D:183:ARG:HG3	3:1D:270:ILE:HD13	1.92	0.51
34:1c:172:ARG:NH2	34:1c:206:GLU:OE2	2.43	0.51
1:2A:36:G:OP1	62:2A:3951:HOH:O	2.19	0.51
1:2A:2474:C:H5"	1:2A:2475:C:OP2	2.11	0.51
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.45	0.51
9:2N:29:LYS:HD2	9:2N:140:VAL:HB	1.92	0.51
21:2Z:7:ALA:HB2	21:2Z:59:LEU:HB3	1.92	0.51
21:2Z:151:HIS:HD2	21:2Z:168:GLU:C	2.18	0.51
32:2a:1027:C:C4	32:2a:1034:G:O6	2.63	0.51
39:2h:14:ARG:O	39:2h:18:ARG:HD2	2.10	0.51
40:2i:4:TYR:HB2	40:2i:19:LEU:HB2	1.92	0.51
42:2k:18:ARG:NH2	42:2k:35:PRO:O	2.25	0.51
1:1A:1070:A:N6	1:1A:1097:U:H4'	2.25	0.51
1:1A:1633:G:O6	62:1A:4234:HOH:O	2.14	0.51
12:1Q:34:LEU:HD21	12:1Q:129:THR:HG21	1.91	0.51
17:1V:40:LEU:HB2	17:1V:46:VAL:HG13	1.92	0.51
24:12:22:GLU:OE2	24:12:68:ARG:NH2	2.43	0.51
32:1a:79:G:O6	32:1a:90:U:C2	2.63	0.51
1:2A:639:U:H2'	1:2A:640:C:C6	2.44	0.51
1:2A:2154:G:H2'	1:2A:2155:G:C8	2.45	0.51
21:2Z:77:ASP:CG	21:2Z:80:ARG:HH11	2.17	0.51
32:2a:222:U:H2'	32:2a:223:U:C6	2.45	0.51
32:2a:1018:C:H2'	32:2a:1019:C:O4'	2.10	0.51
32:2a:1280:A:H5'	41:2j:40:LEU:HD22	1.91	0.51
32:2a:1320:C:N3	50:2s:72:GLY:HA3	2.25	0.51
34:2c:34:LEU:HD11	34:2c:38:ARG:NH2	2.26	0.51
1:1A:528:A:O2'	1:1A:529:A:H5'	2.10	0.51
1:1A:922:U:H2'	1:1A:923:C:C6	2.46	0.51
1:1A:2079:U:OP1	23:11:21:ARG:NH2	2.40	0.51
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.10	0.51
44:1m:15:VAL:HG11	44:1m:48:LEU:HD21	1.92	0.51
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	1.90	0.51
1:2A:2336:A:H61	22:20:43:THR:CG2	2.23	0.51
32:2a:881:G:P	43:2l:12:ARG:HH22	2.33	0.51
32:2a:1152:A:H5'	41:2j:13:HIS:HD2	1.75	0.51
32:2a:1216:G:OP1	45:2n:2:ALA:HA	2.10	0.51
1:1A:1971:A:OP1	62:1A:4263:HOH:O	2.19	0.51
32:1a:1040:U:H2'	32:1a:1041:A:C8	2.42	0.51
51:1t:83:ARG:HA	51:1t:86:ARG:NH1	2.24	0.51
1:2A:1225:G:H4'	17:2V:84:LYS:HG2	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1847:A:H3'	1:2A:1848:A:H5'	1.91	0.51
1:2A:2138:C:N3	1:2A:2153:G:N2	2.47	0.51
12:2Q:31:ASP:N	12:2Q:106:VAL:O	2.41	0.51
21:2Z:79:ARG:HD2	21:2Z:80:ARG:NH2	2.26	0.51
1:1A:1062:G:H8	1:1A:1070:A:H4'	1.76	0.51
1:1A:1176:G:N2	1:1A:1178:C:OP2	2.31	0.51
1:1A:1782:C:O2	1:1A:2608:G:O2'	2.26	0.51
1:1A:2470:G:P	12:1Q:56:ARG:HH12	2.33	0.51
4:1E:176:ILE:HB	4:1E:181:LEU:HB2	1.92	0.51
32:1a:576:G:O6	32:1a:880:C:O2'	2.28	0.51
32:1a:1135:U:O2'	32:1a:1138:G:O6	2.23	0.51
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.93	0.51
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.45	0.51
54:1w:18:G:O2'	54:1w:57:G:N2	2.33	0.51
57:1y:46:G7M:H3'	57:1y:47:U:H5"	1.91	0.51
1:2A:323:G:H2'	5:2F:169:ASN:OD1	2.09	0.51
1:2A:2177:C:H2'	1:2A:2178:C:O4'	2.11	0.51
28:26:6:ARG:HH11	28:26:26:ASN:HB2	1.75	0.51
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.10	0.51
38:2g:78:ARG:HE	38:2g:79:ARG:HG3	1.76	0.51
40:2i:128:ARG:NH2	55:2x:33:U:OP2	2.42	0.51
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.74	0.51
57:2y:4:C:H2'	57:2y:5:G:H5'	1.92	0.51
1:1A:613:G:N2	1:1A:614(C):A:O2'	2.44	0.51
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.46	0.51
1:1A:1184:G:H5'	25:13:29:ARG:HH21	1.75	0.51
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.76	0.51
5:1F:165:ARG:HA	5:1F:168:ARG:HD2	1.92	0.51
7:1H:164:TYR:HB2	7:1H:167:GLU:HB2	1.93	0.51
32:1a:510:A:OP2	35:1d:49:ARG:NH1	2.44	0.51
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.11	0.51
4:2E:15:PHE:CD1	15:2T:81:PRO:HD2	2.46	0.51
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.11	0.51
20:2Y:86:ARG:HE	20:2Y:100:ALA:HA	1.76	0.51
20:2Y:97:ARG:HB2	20:2Y:106:LEU:HB2	1.91	0.51
38:2g:23:VAL:O	38:2g:27:ILE:HG13	2.10	0.51
1:1A:271(L):U:OP1	8:1I:50:ARG:NH1	2.44	0.51
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.10	0.51
32:1a:532:A:N6	32:1a:1206:G:O2'	2.43	0.51
32:1a:940:C:OP1	38:1g:29:LYS:NZ	2.44	0.51
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:992:C:OP1	17:2V:74:LYS:NZ	2.37	0.51
1:2A:2308:G:H3'	1:2A:2310:A:OP2	2.11	0.51
15:2T:127:ALA:C	15:2T:129:ARG:H	2.19	0.51
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.92	0.51
32:2a:109:A:H5'	32:2a:110:C:C5	2.45	0.51
32:2a:1161:C:H2'	32:2a:1162:C:H6	1.75	0.51
32:2a:1193:G:O2'	36:2e:25:ARG:NH2	2.44	0.51
33:2b:80:ILE:HG21	33:2b:211:ILE:HG21	1.93	0.51
1:1A:880:G:H2'	1:1A:881:G:H8	1.74	0.51
1:1A:2552:OMU:O5'	1:1A:2552:OMU:H6	2.11	0.51
12:1Q:78:PRO:HD3	55:1x:1:C:N3	2.26	0.51
26:14:59:PHE:CD2	50:1s:64:GLU:HB3	2.46	0.51
32:1a:189(D):C:H2'	32:1a:189(E):U:O4'	2.11	0.51
32:1a:399:G:H2'	32:1a:400:C:C6	2.46	0.51
32:1a:613:C:H2'	32:1a:614:A:C8	2.46	0.51
2:2B:48:A:OP1	14:2S:30:ARG:NH2	2.44	0.51
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.91	0.51
32:2a:1040:U:H2'	32:2a:1041:A:C8	2.45	0.51
35:2d:64:LEU:HB2	35:2d:198:VAL:HG11	1.92	0.51
40:2i:9:ARG:HG2	40:2i:14:VAL:HA	1.91	0.51
44:2m:107:ALA:HB3	44:2m:111:LYS:HG3	1.92	0.51
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.76	0.51
3:1D:147:LEU:HD13	3:1D:155:LEU:HD11	1.93	0.51
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.46	0.51
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.11	0.51
33:1b:163:PHE:CD1	33:1b:185:ILE:HG13	2.41	0.51
36:1e:95:ALA:HB1	36:1e:96:PRO:HD2	1.93	0.51
5:2F:7:TYR:O	5:2F:22:ALA:N	2.40	0.51
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.41	0.51
30:28:26:LYS:HB2	30:28:44:LYS:O	2.11	0.51
32:2a:1114:C:H42	32:2a:1186:G:H1	1.59	0.51
50:2s:64:GLU:OE2	50:2s:65:ASN:ND2	2.44	0.51
1:1A:64:A:O3'	19:1X:71:GLY:HA3	2.11	0.51
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.46	0.51
1:1A:579:G:H2'	1:1A:580:C:C6	2.45	0.51
1:1A:2011:U:OP1	18:1W:42:ARG:NH1	2.43	0.51
2:1B:103:G:H21	21:1Z:73:GLN:NE2	2.03	0.51
53:1v:14:A:N1	57:1y:34:G:N2	2.59	0.51
1:2A:1366:A:H2'	1:2A:1367:A:O4'	2.10	0.51
1:2A:1951:U:OP1	62:2A:3953:HOH:O	2.19	0.51
9:2N:110:GLY:O	9:2N:114:ARG:HG3	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:77:ASP:N	21:2Z:82:ARG:O	2.43	0.51
32:2a:473:G:H2'	32:2a:474:G:C8	2.46	0.51
36:2e:60:TYR:OH	36:2e:64:ARG:NH1	2.44	0.51
39:2h:43:GLY:O	39:2h:64:LYS:NZ	2.30	0.51
40:2i:40:LEU:HD13	40:2i:74:ILE:HD11	1.93	0.51
1:1A:897:C:H5'	54:1w:56:C:OP1	2.11	0.50
1:1A:2155:G:H2'	1:1A:2155:G:N3	2.27	0.50
1:1A:2630:G:H2'	1:1A:2631:G:C8	2.46	0.50
32:1a:1334:G:OP2	62:1a:1921:HOH:O	2.19	0.50
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.76	0.50
1:2A:1826:G:H4'	3:2D:242:ARG:CZ	2.41	0.50
6:2G:73:ALA:HB3	6:2G:85:GLY:H	1.75	0.50
10:2O:2:ILE:O	10:2O:33:ALA:N	2.44	0.50
21:2Z:93:ASP:HA	21:2Z:131:ARG:HH12	1.76	0.50
26:24:24:THR:OG1	26:24:25:TYR:N	2.43	0.50
38:2g:146:GLU:OE2	38:2g:149:ARG:NE	2.44	0.50
1:1A:1058:G:H4'	1:1A:1058:G:OP1	2.12	0.50
5:1F:143:ALA:HB1	5:1F:148:LEU:HB2	1.93	0.50
15:1T:27:THR:HB	15:1T:90:GLN:HB3	1.92	0.50
28:16:6:ARG:HD3	28:16:24:GLU:OE2	2.11	0.50
35:1d:81:GLU:OE1	35:1d:139:ARG:NH2	2.39	0.50
1:2A:2371:G:O2'	28:26:46:HIS:ND1	2.41	0.50
8:2I:2:LYS:HA	8:2I:20:ASP:HA	1.94	0.50
32:2a:134:A:H61	47:2p:25:ARG:HH12	1.58	0.50
32:2a:1014:A:C2	32:2a:1219:U:H1'	2.46	0.50
36:2e:11:ILE:HD11	36:2e:108:ALA:HB3	1.93	0.50
38:2g:54:THR:O	38:2g:56:GLN:N	2.42	0.50
51:2t:98:PRO:O	51:2t:99:LEU:HB2	2.10	0.50
54:2w:4:C:N4	54:2w:69:G:N1	2.38	0.50
32:1a:1006:C:H2'	32:1a:1007:C:C6	2.45	0.50
32:1a:1025:U:O2	32:1a:1036:G:C6	2.64	0.50
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.46	0.50
1:2A:93:G:H2'	1:2A:94:C:C6	2.46	0.50
1:2A:796:C:H2'	1:2A:797:C:C6	2.46	0.50
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.47	0.50
1:2A:1991:U:H2'	1:2A:1992:G:H5"	1.92	0.50
4:2E:1:MET:HB3	4:2E:83:ASP:O	2.11	0.50
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.12	0.50
33:2b:16:HIS:O	33:2b:18:GLY:N	2.44	0.50
33:2b:81:VAL:HB	33:2b:94:ASN:ND2	2.26	0.50
47:2p:19:ILE:HD13	47:2p:51:VAL:HG22	1.91	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1853:A:H2'	1:1A:1854:A:C8	2.46	0.50
1:1A:2280:G:N7	62:1A:4344:HOH:O	2.35	0.50
1:1A:2336:A:H61	22:10:43:THR:HG22	1.76	0.50
2:1B:14:U:OP2	2:1B:70:C:O2'	2.30	0.50
55:1x:76:8AN:O2P	62:1x:201:HOH:O	2.20	0.50
1:2A:884:C:H3'	1:2A:885:C:H6	1.76	0.50
1:2A:2712:U:OP1	1:2A:2714:G:H4'	2.11	0.50
19:2X:5:TYR:OH	24:22:30:ARG:NH1	2.44	0.50
32:2a:441:A:H3'	32:2a:442:C:C6	2.47	0.50
46:2o:11:VAL:HG21	46:2o:34:LEU:HD22	1.93	0.50
49:2r:31:LEU:HD23	49:2r:31:LEU:H	1.76	0.50
1:1A:11:G:H2'	1:1A:12:U:H5'	1.92	0.50
1:1A:576:U:H2'	1:1A:577:G:C8	2.46	0.50
1:1A:1007:C:OP2	62:1A:4264:HOH:O	2.19	0.50
1:1A:1178:C:H2'	1:1A:1179:C:H6	1.77	0.50
1:1A:1680:U:O2'	1:1A:1763:G:N7	2.40	0.50
5:1F:24:LEU:HB3	5:1F:115:ALA:HB2	1.93	0.50
8:1I:140:LEU:HG	8:1I:142:VAL:HG13	1.92	0.50
32:1a:195:A:H1'	32:1a:222:U:O2'	2.11	0.50
35:1d:118:ARG:HG3	35:1d:136:PRO:HB3	1.93	0.50
37:1f:76:ALA:HA	37:1f:79:LEU:HD12	1.94	0.50
40:1i:32:ASP:OD1	40:1i:33:PHE:N	2.45	0.50
41:1j:64:GLU:OE2	41:1j:66:ARG:NE	2.43	0.50
1:2A:2148:G:H2'	1:2A:2149:G:C8	2.46	0.50
20:2Y:5:MET:HE1	20:2Y:35:TYR:HA	1.93	0.50
21:2Z:126:VAL:HB	21:2Z:161:VAL:HG23	1.94	0.50
32:2a:143:A:HO2'	32:2a:144:G:P	2.35	0.50
32:2a:163:C:H2'	32:2a:164:U:C6	2.46	0.50
32:2a:194:C:H2'	32:2a:195:A:H5"	1.94	0.50
32:2a:737:A:H2'	32:2a:738:C:C6	2.46	0.50
44:2m:15:VAL:O	44:2m:19:LEU:HG	2.12	0.50
57:2y:14:A:O2'	57:2y:15:G:O5'	2.29	0.50
1:1A:657:U:H2'	1:1A:658:C:C6	2.47	0.50
1:1A:2206:G:H8	1:1A:2207:G:N7	2.09	0.50
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.47	0.50
32:1a:21:G:H2'	32:1a:22:G:C8	2.46	0.50
47:1p:28:ARG:NH1	47:1p:29:ASP:OD2	2.35	0.50
49:1r:26:LEU:HD21	49:1r:42:ARG:HD3	1.94	0.50
1:2A:614:U:H5'	1:2A:614(C):A:N6	2.26	0.50
1:2A:884:C:H3'	1:2A:885:C:C6	2.47	0.50
32:2a:953:G:H5'	32:2a:965:A:N6	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:976:G:OP2	32:2a:1358:U:O2'	2.30	0.50
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.11	0.50
41:2j:46:ARG:HA	41:2j:64:GLU:HA	1.93	0.50
1:1A:1168:G:H1	1:1A:1181:C:H42	1.59	0.50
2:1B:14:U:O2	2:1B:108:U:H4'	2.11	0.50
35:1d:10:ARG:HB2	35:1d:40:PRO:HG3	1.94	0.50
44:1m:104:ARG:NH2	62:1m:3101:HOH:O	2.42	0.50
51:1t:57:ARG:NH1	51:1t:100:ILE:HD12	2.24	0.50
57:1y:71:G:H2'	57:1y:72:C:H6	1.76	0.50
6:2G:138:GLN:OE1	6:2G:153:ARG:N	2.41	0.50
8:2I:47:LEU:O	8:2I:51:ILE:HB	2.12	0.50
26:24:46:GLN:C	26:24:48:ARG:H	2.19	0.50
32:2a:16:A:N3	32:2a:1080:A:O2'	2.43	0.50
32:2a:266:G:H5"	32:2a:268:C:H41	1.77	0.50
41:2j:16:LEU:HD23	41:2j:94:VAL:HG22	1.92	0.50
51:2t:86:ARG:O	51:2t:90:GLN:HB2	2.10	0.50
1:1A:71:A:N7	19:1X:31:HIS:HE1	2.10	0.50
1:1A:247:G:H4'	1:1A:386:G:C5	2.47	0.50
1:1A:271(K):U:HO2'	1:1A:271(M):G:H22	1.53	0.50
1:1A:1025:G:O2'	62:1A:4208:HOH:O	2.07	0.50
1:1A:1541:G:H3'	1:1A:1542:A:H2'	1.94	0.50
22:10:43:THR:OG1	22:10:46:LYS:HD3	2.12	0.50
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.41	0.50
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.47	0.50
33:1b:204:ASN:OD1	33:1b:205:ASP:N	2.45	0.50
42:1k:80:VAL:HG23	42:1k:105:VAL:HA	1.93	0.50
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.11	0.50
1:2A:271(K):U:H4'	1:2A:271(L):U:OP1	2.10	0.50
1:2A:298:G:H5"	1:2A:299:A:OP1	2.11	0.50
1:2A:330:A:HO2'	1:2A:331:A:H8	1.56	0.50
1:2A:1035:U:H5"	7:2H:59:ARG:HD3	1.93	0.50
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.45	0.50
1:2A:1845:G:OP1	3:2D:258:LYS:NZ	2.41	0.50
1:2A:1968:G:OP1	62:2A:3949:HOH:O	2.18	0.50
18:2W:46:PHE:O	18:2W:50:VAL:HG23	2.12	0.50
32:2a:141:A:H1'	32:2a:182:U:O2	2.12	0.50
40:2i:40:LEU:O	40:2i:42:ARG:N	2.45	0.50
1:1A:801:G:O6	5:1F:53:THR:OG1	2.29	0.50
7:1H:7:LEU:HD23	7:1H:69:ARG:NH2	2.26	0.50
32:1a:203:U:O2	32:1a:216:G:N1	2.45	0.50
32:1a:461:A:O2'	32:1a:470:C:H5'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:185:ILE:HG22	33:1b:199:TYR:CD2	2.46	0.50
1:2A:234:C:H2'	1:2A:235:U:C6	2.46	0.50
32:2a:397:A:H3'	32:2a:397:A:N3	2.26	0.50
32:2a:1015:A:H2'	32:2a:1016:A:C8	2.46	0.50
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.26	0.50
40:2i:8:GLY:HA3	40:2i:76:ALA:O	2.12	0.50
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.12	0.50
7:1H:9:ILE:HD11	7:1H:69:ARG:HG2	1.94	0.49
19:1X:12:VAL:HG22	19:1X:29:TRP:CE2	2.47	0.49
32:1a:912:C:O2'	32:1a:913:A:H5'	2.11	0.49
32:1a:1292:U:H5'	40:1i:38:GLN:OE1	2.12	0.49
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.94	0.49
1:2A:1009:A:O4'	16:2U:59:ARG:HD2	2.12	0.49
1:2A:1754:C:OP2	15:2T:113:LYS:NZ	2.32	0.49
1:2A:2166:G:N7	1:2A:2167:U:H2'	2.27	0.49
1:2A:2478:A:OP2	31:29:2:LYS:NZ	2.40	0.49
2:2B:29:A:H2'	2:2B:30:C:C6	2.47	0.49
16:2U:107:ALA:O	16:2U:111:GLU:HG2	2.12	0.49
36:2e:80:ILE:HG21	36:2e:138:ALA:HB1	1.94	0.49
38:2g:93:PRO:HA	38:2g:96:GLN:HB2	1.92	0.49
50:2s:64:GLU:H	50:2s:64:GLU:CD	2.20	0.49
1:1A:740:U:OP2	62:1A:4250:HOH:O	2.18	0.49
1:1A:859:G:O2'	1:1A:916:G:O6	2.27	0.49
1:1A:2137:C:H2'	1:1A:2138:C:C6	2.47	0.49
2:1B:11:C:OP2	22:10:72:ARG:NH2	2.39	0.49
6:1G:18:GLU:OE2	6:1G:22:ARG:NH1	2.41	0.49
15:1T:11:GLU:HG2	15:1T:57:PHE:CD2	2.46	0.49
32:1a:1143:G:H2'	32:1a:1144:G:C8	2.48	0.49
36:1e:20:GLN:NE2	36:1e:21:ALA:O	2.46	0.49
57:1y:5:G:H1'	57:1y:69:G:N2	2.26	0.49
1:2A:1169:G:N2	1:2A:1181:C:N3	2.59	0.49
1:2A:2319:G:N2	14:2S:3:ARG:HH11	2.07	0.49
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE2	1.92	0.49
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.27	0.49
32:2a:952:U:H2'	32:2a:953:G:H8	1.77	0.49
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.47	0.49
4:1E:179:GLU:HB2	4:1E:181:LEU:HG	1.94	0.49
22:10:18:ALA:HB3	22:10:20:ARG:NH1	2.27	0.49
32:1a:925:G:H1'	32:1a:1502:A:C4	2.47	0.49
54:1w:5:G:H2'	54:1w:6:G:C8	2.46	0.49
1:2A:27:G:N2	1:2A:512:G:H1'	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:84:A:H5'	20:2Y:8:LYS:HG2	1.92	0.49
9:2N:1:MET:HE1	16:2U:94:ASN:ND2	2.27	0.49
21:2Z:158:PRO:O	21:2Z:161:VAL:HG12	2.12	0.49
26:24:60:GLN:O	26:24:62:ARG:NH2	2.45	0.49
34:2c:83:ARG:C	34:2c:85:ARG:H	2.20	0.49
38:2g:130:GLY:O	38:2g:135:VAL:HG11	2.12	0.49
44:2m:91:ARG:NE	44:2m:97:PRO:O	2.46	0.49
1:1A:776:G:OP1	62:1A:4265:HOH:O	2.19	0.49
5:1F:34:TRP:HA	11:1P:6:LEU:HD13	1.94	0.49
21:1Z:48:PHE:HE1	21:1Z:71:VAL:HG11	1.76	0.49
23:11:89:GLU:O	23:11:93:GLU:HG2	2.12	0.49
32:1a:864:A:H2'	32:1a:865:A:C8	2.47	0.49
32:1a:935:A:O2'	32:1a:1383:C:N3	2.44	0.49
57:1y:36:A:C2	57:1y:37:MIA:H1'	2.48	0.49
1:2A:492:A:H2'	1:2A:493:G:O4'	2.11	0.49
1:2A:1372:U:H2'	1:2A:1373:A:O4'	2.13	0.49
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.12	0.49
2:2B:105:A:H5'	2:2B:106:G:OP2	2.12	0.49
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.94	0.49
20:2Y:8:LYS:HD3	20:2Y:97:ARG:NH1	2.26	0.49
22:20:27:GLU:HB2	22:20:69:PHE:HD1	1.77	0.49
32:2a:417:C:H2'	32:2a:418:C:H6	1.78	0.49
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.23	0.49
33:2b:21:ARG:HA	33:2b:39:ILE:HA	1.94	0.49
34:2c:101:LEU:HD13	34:2c:102:ASN:H	1.77	0.49
40:2i:18:PHE:HB3	40:2i:20:ARG:HD2	1.94	0.49
47:2p:15:PRO:HD2	47:2p:42:ARG:CD	2.43	0.49
1:1A:588:U:H2'	1:1A:589:C:C6	2.47	0.49
21:1Z:29:TYR:OH	21:1Z:87:ASP:OD2	2.15	0.49
32:1a:453:A:O2'	47:1p:68:ASP:O	2.30	0.49
32:1a:551:U:H2'	32:1a:552:U:C6	2.48	0.49
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.27	0.49
38:1g:72:ARG:NH1	38:1g:142:GLU:OE2	2.46	0.49
57:1y:51:U:H2'	57:1y:52:G:H8	1.73	0.49
1:2A:686:G:H21	1:2A:788:A:H61	1.60	0.49
1:2A:907:U:O2'	12:2Q:101:ARG:NH2	2.27	0.49
1:2A:1287:A:O4'	13:2R:104:ARG:HD3	2.13	0.49
10:2O:16:ALA:HB2	10:2O:52:VAL:HG21	1.94	0.49
43:2l:69:TYR:HE2	43:2l:71:PRO:HA	1.77	0.49
47:2p:28:ARG:HG2	47:2p:29:ASP:OD1	2.13	0.49
54:2w:19:G:H1	54:2w:56:C:H42	1.60	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:639:U:H2'	1:1A:640:C:C6	2.48	0.49
12:1Q:12:GLN:NE2	12:1Q:73:PRO:HD2	2.28	0.49
32:1a:1003:G:H2'	32:1a:1004:A:N3	2.27	0.49
36:1e:67:VAL:HG23	36:1e:140:ARG:HG2	1.95	0.49
42:1k:95:ILE:O	42:1k:99:GLN:HG3	2.13	0.49
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.13	0.49
11:2P:84:ASN:OD1	11:2P:117:GLU:N	2.44	0.49
21:2Z:128:VAL:HG22	21:2Z:129:SER:H	1.78	0.49
30:28:28:GLY:O	30:28:36:LYS:NZ	2.40	0.49
32:2a:7:G:O2'	36:2e:120:THR:O	2.29	0.49
32:2a:1135:U:H2'	32:2a:1137:C:N3	2.27	0.49
32:2a:1151:A:H5"	41:2j:41:PRO:HA	1.93	0.49
36:2e:34:VAL:HG11	36:2e:63:ARG:HG3	1.95	0.49
57:2y:15:G:O6	57:2y:48:C:O2	2.31	0.49
1:1A:687:C:H5"	29:17:2:LYS:HE2	1.94	0.49
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.48	0.49
1:1A:2746:U:OP2	62:1A:4261:HOH:O	2.19	0.49
32:1a:263:A:OP1	51:1t:79:ARG:NH1	2.45	0.49
32:1a:677:U:H3	32:1a:713:G:H22	1.61	0.49
32:1a:1436:U:OP1	51:1t:23:ARG:NH2	2.45	0.49
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.95	0.49
38:1g:86:GLN:NE2	57:1y:31:A:N3	2.60	0.49
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.24	0.49
1:2A:881:G:C6	1:2A:882:G:H1'	2.48	0.49
1:2A:1641:A:H2'	1:2A:1642:G:O4'	2.13	0.49
4:2E:112:GLY:O	4:2E:159:HIS:HA	2.13	0.49
32:2a:448:A:P	32:2a:485:G:H22	2.35	0.49
32:2a:974:A:P	45:2n:29:ARG:HH21	2.36	0.49
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.27	0.49
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.12	0.49
7:1H:164:TYR:N	7:1H:167:GLU:OE1	2.42	0.49
32:1a:341:C:H2'	32:1a:342:C:H6	1.78	0.49
32:1a:1320:C:OP1	50:1s:70:LYS:NZ	2.40	0.49
39:1h:112:LEU:HA	39:1h:134:ILE:HG12	1.95	0.49
1:2A:2096:U:H2'	1:2A:2097:C:C6	2.47	0.49
1:2A:2625:G:O6	62:2A:3954:HOH:O	2.19	0.49
3:2D:71:ASP:HB2	3:2D:103:ARG:HH12	1.78	0.49
32:2a:1027:C:C2	32:2a:1034:G:N1	2.75	0.49
35:2d:150:GLU:HA	35:2d:153:ARG:HG3	1.94	0.49
57:2y:62:C:H2'	57:2y:63:G:C8	2.47	0.49
1:1A:2001:A:OP1	13:1R:9:LYS:NZ	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:101:LEU:HD22	8:1I:107:VAL:HB	1.93	0.49
32:1a:421:U:O4	34:1c:127:ARG:NH2	2.34	0.49
32:1a:673:G:H2'	32:1a:674:G:C8	2.48	0.49
33:1b:131:PRO:O	33:1b:135:GLN:N	2.45	0.49
36:1e:101:ILE:O	36:1e:120:THR:OG1	2.25	0.49
42:1k:21:ILE:HB	42:1k:84:VAL:HG13	1.93	0.49
1:2A:93:G:H2'	1:2A:94:C:H6	1.78	0.49
1:2A:378:C:N4	62:2A:4090:HOH:O	2.42	0.49
1:2A:2318:G:H21	14:2S:3:ARG:HD3	1.78	0.49
7:2H:94:TYR:CE2	7:2H:160:LYS:HG3	2.48	0.49
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.78	0.49
32:2a:995:C:O2	45:2n:4:LYS:NZ	2.39	0.49
32:2a:1002:G:N1	32:2a:1003:G:H8	2.11	0.49
32:2a:1271:G:C2	32:2a:1272:G:C8	3.01	0.49
40:2i:18:PHE:O	40:2i:61:ALA:HA	2.13	0.49
1:1A:2099:U:O2	1:1A:2190:G:N2	2.40	0.49
1:1A:2572:A:C8	4:1E:144:ARG:HD3	2.48	0.49
1:1A:2818:G:O2'	1:1A:2819:G:H5'	2.13	0.49
8:1I:76:THR:HG22	8:1I:141:LYS:HB2	1.94	0.49
32:1a:1236:A:H4'	32:1a:1304:G:H4'	1.94	0.49
45:1n:53:LEU:O	45:1n:56:VAL:HG23	2.13	0.49
57:1y:24:G:H2'	57:1y:25:C:O4'	2.13	0.49
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.13	0.49
1:2A:854:G:H2'	1:2A:855:G:H8	1.78	0.49
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.56	0.49
1:2A:2162:G:O2'	1:2A:2172:U:H5'	2.13	0.49
1:2A:2506:U:O2'	54:2w:76:F3N:H4'	2.12	0.49
2:2B:87:G:N2	2:2B:90:A:OP2	2.43	0.49
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.48	0.49
13:2R:36:THR:HG22	13:2R:37:THR:H	1.78	0.49
32:2a:266:G:O3'	48:2q:67:LYS:HB2	2.13	0.49
32:2a:974:A:H8	32:2a:974:A:OP1	1.96	0.49
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.48	0.49
32:2a:1026:G:O6	32:2a:1036:G:N2	2.46	0.49
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.43	0.49
1:1A:1688:U:H1'	1:1A:1701:A:C6	2.48	0.48
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.48	0.48
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.28	0.48
19:1X:50:LYS:N	19:1X:87:GLN:OE1	2.38	0.48
32:1a:78:G:N2	32:1a:91:C:C2	2.81	0.48
32:1a:1136:U:H5"	32:1a:1137:C:N3	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:155:LEU:HD11	33:1b:159:PRO:HG3	1.94	0.48
40:1i:5:TYR:N	40:1i:87:GLN:OE1	2.44	0.48
55:1x:50:U:H2'	55:1x:51:C:C6	2.47	0.48
1:2A:1005:C:H2'	1:2A:1006:C:C6	2.47	0.48
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.95	0.48
3:2D:118:VAL:N	3:2D:129:ASN:OD1	2.44	0.48
5:2F:184:TYR:O	5:2F:188:ARG:HG3	2.13	0.48
11:2P:14:LYS:HG2	11:2P:15:ARG:H	1.77	0.48
16:2U:27:LEU:HB3	16:2U:31:SER:HB3	1.95	0.48
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.93	0.48
33:2b:8:LYS:HB3	33:2b:217:ARG:HG3	1.95	0.48
34:2c:54:ARG:O	34:2c:69:HIS:ND1	2.45	0.48
36:2e:57:LYS:HG2	36:2e:61:TYR:CE2	2.48	0.48
41:2j:65:LEU:HD22	45:2n:56:VAL:HG22	1.95	0.48
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.43	0.48
10:1O:7:TYR:HE2	10:1O:20:MET:HE3	1.78	0.48
32:1a:1228:C:P	44:1m:108:ARG:HH22	2.35	0.48
35:1d:60:GLU:OE2	35:1d:63:LYS:NZ	2.37	0.48
39:1h:43:GLY:O	39:1h:64:LYS:NZ	2.40	0.48
1:2A:307:G:H21	1:2A:330:A:H62	1.60	0.48
1:2A:883:G:H22	1:2A:895:U:H1'	1.77	0.48
1:2A:973:A:OP2	62:2A:3919:HOH:O	2.19	0.48
1:2A:2207:G:H3'	1:2A:2208:A:H5'	1.95	0.48
8:2I:55:ALA:HA	8:2I:58:LEU:HB3	1.96	0.48
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	1.94	0.48
32:2a:179:A:H2'	32:2a:180:U:C6	2.48	0.48
32:2a:673:G:H2'	32:2a:674:G:C8	2.48	0.48
32:2a:1145:C:H4'	32:2a:1146:A:C8	2.48	0.48
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.81	0.48
40:2i:73:GLN:HA	40:2i:76:ALA:HB3	1.95	0.48
42:2k:108:ILE:HB	49:2r:87:ARG:HD2	1.94	0.48
4:1E:105:THR:OG1	4:1E:166:THR:OG1	2.22	0.48
14:1S:85:VAL:HG11	14:1S:110:LEU:HD23	1.95	0.48
17:1V:14:VAL:HG12	17:1V:18:LEU:HD23	1.95	0.48
20:1Y:87:LYS:HB3	20:1Y:95:LYS:HD3	1.95	0.48
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.40	0.48
32:1a:871:U:OP1	62:1a:1919:HOH:O	2.18	0.48
36:1e:137:GLU:HG3	36:1e:141:GLN:HE21	1.77	0.48
2:2B:3:C:H2'	2:2B:4:C:C6	2.48	0.48
3:2D:73:VAL:HG13	3:2D:120:GLY:HA3	1.95	0.48
11:2P:124:LYS:HG3	11:2P:144:GLU:HB3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:2S:34:HIS:O	14:2S:97:ARG:NH2	2.46	0.48
24:22:24:LEU:HD23	24:22:60:LEU:HD21	1.96	0.48
29:27:8:ASN:HB3	29:27:11:LYS:HB3	1.95	0.48
32:2a:357:G:OP1	32:2a:367:U:H5"	2.11	0.48
32:2a:757:U:H2'	32:2a:758:G:O4'	2.13	0.48
32:2a:765:G:N1	32:2a:812:C:O2'	2.41	0.48
32:2a:1278:U:H5'	32:2a:1279:A:OP1	2.12	0.48
51:2t:16:HIS:O	51:2t:19:SER:OG	2.24	0.48
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.48	0.48
21:1Z:93:ASP:CB	21:1Z:131:ARG:HH22	2.26	0.48
32:1a:191:G:H1'	51:1t:103:GLY:HA2	1.95	0.48
32:1a:204:U:P	32:1a:204:U:H3'	2.53	0.48
32:1a:447:G:H2'	32:1a:485:G:N2	2.28	0.48
35:1d:172:PRO:O	35:1d:174:LEU:N	2.46	0.48
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.94	0.48
44:1m:49:THR:HG22	44:1m:51:ALA:H	1.78	0.48
1:2A:322:A:OP1	5:2F:168:ARG:HD2	2.13	0.48
32:2a:417:C:H2'	32:2a:418:C:C6	2.49	0.48
32:2a:457:C:H2'	32:2a:458:C:C6	2.49	0.48
44:2m:25:ILE:HD11	44:2m:60:VAL:HG11	1.94	0.48
1:1A:278:A:O2'	1:1A:279:C:OP1	2.24	0.48
1:1A:1063:G:H2'	1:1A:1064:C:H5	1.79	0.48
8:1I:40:THR:O	8:1I:44:LEU:HB2	2.13	0.48
32:1a:404:U:P	35:1d:118:ARG:HH12	2.36	0.48
32:1a:1456:G:N2	51:1t:51:GLU:OE2	2.43	0.48
40:1i:96:LEU:HD13	40:1i:101:PHE:HD2	1.79	0.48
1:2A:370:G:OP1	1:2A:403:U:N3	2.33	0.48
1:2A:816:C:O2'	1:2A:932:G:O6	2.29	0.48
1:2A:1198:U:H2'	1:2A:1199:U:C6	2.48	0.48
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.13	0.48
1:2A:2749:A:O2'	7:2H:62:LYS:HE3	2.14	0.48
1:2A:2839:G:H5'	13:2R:46:GLY:CA	2.44	0.48
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.48	0.48
12:2Q:81:VAL:HG12	22:20:5:LYS:HD3	1.94	0.48
32:2a:590:C:H2'	32:2a:591:U:H6	1.78	0.48
32:1a:1458:G:OP1	51:1t:35:THR:OG1	2.29	0.48
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.31	0.48
38:1g:12:LEU:HD12	38:1g:12:LEU:H	1.77	0.48
39:1h:14:ARG:O	39:1h:18:ARG:HD2	2.14	0.48
1:2A:2118:U:N3	1:2A:2149:G:H1'	2.29	0.48
3:2D:123:ALA:HB3	3:2D:131:LEU:HG	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:137:LYS:HA	5:2F:140:LEU:HD12	1.95	0.48
22:20:38:VAL:HG12	22:20:40:GLN:HG2	1.95	0.48
32:2a:755:G:OP2	46:2o:65:ARG:HD2	2.14	0.48
32:2a:1212:U:H5'	32:2a:1213:A:C8	2.48	0.48
32:2a:1456:G:H22	51:2t:51:GLU:HG3	1.77	0.48
48:2q:4:LYS:HE2	48:2q:6:LEU:HD21	1.95	0.48
54:2w:33:U:N3	54:2w:36:A:OP2	2.29	0.48
3:1D:37:LEU:HD13	3:1D:87:ASN:ND2	2.28	0.48
32:1a:757:U:H2'	32:1a:758:G:O4'	2.13	0.48
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.28	0.48
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.30	0.48
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.32	0.48
38:1g:37:ASN:O	38:1g:41:ARG:HD3	2.13	0.48
41:1j:7:LYS:HE3	41:1j:9:ARG:HH22	1.78	0.48
48:1q:11:VAL:HG23	48:1q:20:THR:HG22	1.96	0.48
1:2A:81:G:H21	20:2Y:1:MET:HE2	1.78	0.48
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.48	0.48
1:2A:900:A:HO2'	1:2A:901:A:P	2.35	0.48
1:2A:2063:C:H5"	62:2A:4042:HOH:O	2.13	0.48
1:2A:2126:A:N7	1:2A:2163:C:O2'	2.42	0.48
4:2E:48:GLN:HE21	4:2E:78:LEU:HD22	1.79	0.48
6:2G:146:TYR:HB3	44:2m:11:ARG:HH22	1.79	0.48
9:2N:108:PRO:O	9:2N:113:GLY:HA3	2.14	0.48
14:2S:10:ARG:HG2	14:2S:91:PRO:HA	1.95	0.48
23:21:76:ARG:HB2	23:21:97:LEU:HD13	1.94	0.48
32:2a:1002:G:C2	32:2a:1003:G:H8	2.32	0.48
32:2a:1101:A:H4'	32:2a:1102:A:O5'	2.14	0.48
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.28	0.48
35:2d:173:TRP:CG	35:2d:189:PRO:HB3	2.48	0.48
1:1A:1173:G:H22	1:1A:1177:A:P	2.37	0.48
1:1A:2138:C:N3	1:1A:2153:G:O6	2.47	0.48
11:1P:89:ALA:HA	11:1P:121:LYS:HD3	1.95	0.48
32:1a:377:G:OP1	47:1p:5:ARG:HD2	2.13	0.48
32:1a:509:A:H5'	35:1d:54:TYR:HD2	1.78	0.48
32:1a:865:A:H2	32:1a:918:A:H4'	1.78	0.48
32:1a:1320:C:O2	50:1s:36:ARG:NH2	2.47	0.48
41:1j:11:PHE:HA	41:1j:66:ARG:O	2.14	0.48
1:2A:192:C:O2'	1:2A:802:A:N3	2.45	0.48
1:2A:2747:G:O6	1:2A:2755:C:H5"	2.14	0.48
2:2B:41:U:H5	6:2G:70:VAL:H	1.61	0.48
4:2E:174:ASP:OD1	4:2E:175:VAL:N	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.49	0.48
7:2H:154:PRO:HB3	7:2H:163:TYR:CE1	2.49	0.48
17:2V:58:VAL:HB	17:2V:98:GLU:HG3	1.94	0.48
23:21:59:THR:O	23:21:91:LYS:NZ	2.46	0.48
26:24:41:PRO:HG3	26:24:49:PHE:CZ	2.49	0.48
32:2a:1263:C:H3'	32:2a:1263:C:H6	1.78	0.48
32:2a:1530:G:OP1	32:2a:1530:G:H4'	2.14	0.48
1:1A:912:C:OP1	12:1Q:9:TYR:OH	2.30	0.48
1:1A:1059:G:OP2	1:1A:1060:U:H3'	2.14	0.48
1:1A:1069:A:H4'	1:1A:1070:A:H5"	1.95	0.48
1:1A:1632:A:N6	62:1A:4386:HOH:O	2.39	0.48
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	1.95	0.48
24:12:41:ILE:HG13	24:12:43:GLN:HG3	1.96	0.48
32:1a:418:C:H2'	32:1a:419:C:C6	2.49	0.48
39:1h:119:LEU:HD22	39:1h:123:GLU:HB3	1.96	0.48
57:1y:19:G:C5'	57:1y:57:G:H1	2.25	0.48
1:2A:839:U:H2'	1:2A:840:C:C6	2.48	0.48
1:2A:2098:U:H2'	1:2A:2099:U:O4'	2.14	0.48
4:2E:12:THR:HG22	4:2E:13:ARG:H	1.78	0.48
4:2E:48:GLN:HA	4:2E:80:GLU:HA	1.95	0.48
4:2E:54:GLN:HB2	4:2E:76:ARG:HG2	1.96	0.48
15:2T:59:THR:HG23	15:2T:78:LEU:HB3	1.95	0.48
32:2a:792:A:H4'	32:2a:793:U:H5"	1.96	0.48
50:2s:33:THR:HG21	50:2s:49:ILE:HD11	1.96	0.48
1:1A:1069:A:O4'	1:1A:1096:A:O2'	2.32	0.48
1:1A:1846:G:H5"	1:1A:1847:A:OP2	2.13	0.48
1:1A:2128:C:C4	1:1A:2160:G:N1	2.76	0.48
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.49	0.48
1:1A:2544:G:H1'	1:1A:2646:C:H4'	1.96	0.48
19:1X:57:LEU:HD11	19:1X:78:LYS:HE2	1.94	0.48
32:1a:487:A:H2'	32:1a:488:C:O4'	2.14	0.48
36:1e:30:ALA:O	36:1e:45:PHE:HD1	1.97	0.48
42:1k:34:ASP:HB2	42:1k:35:PRO:HD2	1.96	0.48
50:1s:22:LEU:HD13	50:1s:29:ARG:H	1.77	0.48
1:2A:621:A:OP2	11:2P:108:LYS:NZ	2.37	0.48
2:2B:24:G:H4'	2:2B:25:A:C8	2.49	0.48
12:2Q:38:GLU:HB2	12:2Q:127:ILE:HB	1.96	0.48
21:2Z:31:ARG:HG3	21:2Z:32:HIS:CD2	2.48	0.48
26:24:53:GLU:OE1	26:24:53:GLU:N	2.46	0.48
32:2a:1265:G:C4	32:2a:1271:G:N2	2.81	0.48
32:2a:1338:G:H21	55:2x:41:C:H1'	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:28:VAL:HG13	40:2i:63:ILE:HB	1.95	0.48
46:2o:87:ILE:HG22	46:2o:88:ARG:N	2.29	0.48
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.29	0.48
1:1A:284:U:H2'	1:1A:285:C:H6	1.77	0.47
1:1A:1570:A:H2'	1:1A:1571:A:C8	2.49	0.47
1:1A:2811:G:N2	1:1A:2891:G:H1'	2.28	0.47
7:1H:52:VAL:HG12	7:1H:65:HIS:CD2	2.49	0.47
32:1a:1027:C:N3	32:1a:1034:G:N2	2.50	0.47
33:1b:134:GLU:HA	33:1b:137:ARG:HE	1.79	0.47
35:1d:8:VAL:HG12	35:1d:22:LYS:HE2	1.94	0.47
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.14	0.47
57:1y:21:A:H1'	57:1y:48:C:N4	2.29	0.47
1:2A:35:G:H1'	1:2A:454:A:C4	2.49	0.47
1:2A:307:G:N1	1:2A:310:A:OP2	2.43	0.47
1:2A:774:A:H2'	1:2A:774:A:N3	2.29	0.47
2:2B:83:G:H1	2:2B:94:C:N4	2.12	0.47
14:2S:29:PHE:O	14:2S:35:ILE:HA	2.14	0.47
32:2a:1184:G:H2'	32:2a:1185:G:H8	1.78	0.47
32:2a:1228:C:H2'	32:2a:1229:A:H8	1.79	0.47
32:2a:1337:G:H5"	32:2a:1338:G:OP1	2.14	0.47
32:2a:1427:U:H2'	32:2a:1428:A:H8	1.79	0.47
50:2s:36:ARG:NH1	50:2s:75:ALA:O	2.47	0.47
1:1A:956:G:H2'	1:1A:957:A:H2'	1.96	0.47
1:1A:1364:G:P	23:11:3:LYS:HG3	2.54	0.47
1:1A:2793:G:H2'	1:1A:2794:C:H5	1.79	0.47
3:1D:83:GLU:OE1	3:1D:104:TYR:OH	2.25	0.47
12:1Q:18:LYS:HE2	12:1Q:18:LYS:HB2	1.58	0.47
14:1S:27:SER:HA	14:1S:88:ASP:HB3	1.96	0.47
32:1a:100:C:H2'	32:1a:101:A:C8	2.50	0.47
32:1a:193:C:H2'	32:1a:194:C:C6	2.49	0.47
32:1a:219:C:H2'	32:1a:220:G:O4'	2.14	0.47
32:1a:520:A:N1	32:1a:536:C:H1'	2.29	0.47
32:1a:1107:C:OP1	34:1c:172:ARG:HB2	2.14	0.47
40:1i:70:LYS:O	40:1i:74:ILE:HG13	2.14	0.47
1:2A:1011:G:OP2	16:2U:66:ASN:ND2	2.43	0.47
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.24	0.47
6:2G:67:LYS:H	26:24:6:HIS:CE1	2.31	0.47
7:2H:125:VAL:HG22	7:2H:131:VAL:HG13	1.96	0.47
8:2I:37:VAL:HG12	8:2I:38:LEU:HD12	1.96	0.47
32:2a:770:C:OP1	62:2a:1912:HOH:O	2.20	0.47
32:2a:1070:U:H2'	32:2a:1071:C:C6	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1273:G:C6	32:2a:1274:G:C4	3.02	0.47
33:2b:71:VAL:HA	33:2b:93:VAL:HG23	1.94	0.47
39:2h:20:TYR:HA	39:2h:65:TYR:CZ	2.49	0.47
1:1A:1075:C:H2'	1:1A:1076:C:H5'	1.95	0.47
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	1.96	0.47
25:13:4:LEU:O	25:13:36:VAL:HA	2.15	0.47
32:1a:626:U:C2	32:1a:627:G:C8	3.02	0.47
32:1a:662:G:H2'	32:1a:663:A:C8	2.48	0.47
32:1a:715:A:H2'	32:1a:716:A:C8	2.49	0.47
35:1d:173:TRP:O	35:1d:186:LEU:HB2	2.13	0.47
36:1e:41:VAL:HG23	36:1e:67:VAL:HG12	1.96	0.47
47:1p:39:TYR:CD1	47:1p:49:LEU:HD23	2.48	0.47
1:2A:883:G:N2	1:2A:895:U:O2	2.48	0.47
1:2A:1359:A:H2	1:2A:1372:U:O4	1.97	0.47
1:2A:2156:G:H2'	1:2A:2157:G:N1	2.30	0.47
1:2A:2206:G:H3'	1:2A:2207:G:N7	2.29	0.47
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.44	0.47
6:2G:63:ILE:HD11	6:2G:144:ILE:HG13	1.96	0.47
8:2I:4:ILE:HD11	8:2I:44:LEU:HD13	1.96	0.47
32:2a:922:G:O2'	32:2a:1398:A:N1	2.41	0.47
32:2a:1305:G:H5'	52:2u:4:GLY:HA3	1.96	0.47
33:2b:29:ALA:HA	33:2b:32:ILE:HD12	1.96	0.47
34:2c:71:ALA:HB2	34:2c:106:VAL:HB	1.97	0.47
50:2s:30:LEU:HD13	50:2s:48:THR:OG1	2.14	0.47
1:1A:30:G:H2'	1:1A:31:C:C6	2.49	0.47
1:1A:1048:A:OP2	1:1A:1109:C:N4	2.34	0.47
8:1I:87:LYS:O	8:1I:87:LYS:HD2	2.14	0.47
17:1V:31:ALA:O	17:1V:61:VAL:HG12	2.14	0.47
32:1a:189(K):U:H2'	32:1a:189(L):G:C8	2.49	0.47
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.50	0.47
35:1d:3:ARG:HD3	35:1d:118:ARG:NH1	2.29	0.47
40:1i:52:ALA:HB2	40:1i:101:PHE:HE2	1.79	0.47
57:1y:6:G:O6	57:1y:7:A:N6	2.48	0.47
1:2A:1805:U:O2	3:2D:50:THR:HB	2.15	0.47
1:2A:2818:G:OP1	1:2A:2837:G:O2'	2.27	0.47
1:2A:2887:U:H2'	1:2A:2888:C:O4'	2.14	0.47
32:2a:1029:C:N4	32:2a:1032:G:C6	2.81	0.47
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	1.95	0.47
35:2d:11:LEU:HD23	35:2d:66:ARG:HD3	1.95	0.47
43:2l:117:ARG:NH2	43:2l:124:LYS:HB2	2.28	0.47
48:2q:48:GLU:OE1	48:2q:50:LYS:HD2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:305:U:H2'	1:1A:306:U:C6	2.50	0.47
1:1A:918:A:N3	2:1B:80:U:O2'	2.45	0.47
1:1A:1139:G:OP2	9:1N:70:LYS:NZ	2.45	0.47
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.13	0.47
8:1I:100:ALA:HA	8:1I:103:ARG:NH1	2.29	0.47
32:1a:767:A:H2'	32:1a:768:A:O4'	2.14	0.47
34:1c:6:HIS:CD2	34:1c:8:ILE:HB	2.49	0.47
41:1j:45:ARG:HG2	41:1j:47:PHE:CZ	2.49	0.47
1:2A:127:A:H5"	1:2A:128:C:C6	2.50	0.47
1:2A:296:C:O3'	20:2Y:95:LYS:NZ	2.46	0.47
1:2A:724:U:H2'	1:2A:725:G:O4'	2.14	0.47
1:2A:2741:A:H2'	1:2A:2742:C:O4'	2.15	0.47
15:2T:108:ARG:HD3	15:2T:112:ARG:HH12	1.78	0.47
25:23:59:VAL:HG12	25:23:60:GLU:H	1.79	0.47
32:2a:165:C:H2'	32:2a:166:G:H8	1.78	0.47
32:2a:611:A:H2	32:2a:629:G:H22	1.62	0.47
32:2a:1178:G:N2	32:2a:1180:A:H3'	2.29	0.47
1:1A:1779:U:H2'	62:1A:4651:HOH:O	2.15	0.47
7:1H:24:VAL:HG21	7:1H:72:ILE:HD12	1.97	0.47
26:14:14:ILE:HB	26:14:22:ILE:HB	1.96	0.47
32:1a:58:C:O2'	32:1a:388:G:N7	2.38	0.47
32:1a:1513:A:H2'	32:1a:1514:C:C6	2.50	0.47
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.58	0.47
1:2A:2552:OMU:H6	1:2A:2552:OMU:O5'	2.15	0.47
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.15	0.47
12:2Q:32:TYR:OH	12:2Q:111:GLU:OE2	2.27	0.47
21:2Z:52:SER:C	21:2Z:54:HIS:H	2.23	0.47
32:2a:237:C:H5"	48:2q:25:ARG:CZ	2.45	0.47
32:2a:570:G:H1'	32:2a:820:U:C4	2.50	0.47
32:2a:976:G:H5'	32:2a:1358:U:O2'	2.14	0.47
34:2c:19:GLU:HB3	34:2c:40:ARG:NH2	2.29	0.47
36:2e:28:PHE:O	36:2e:47:LYS:HA	2.15	0.47
38:2g:15:ASP:OD1	38:2g:19:GLY:N	2.47	0.47
1:1A:708:C:H2'	1:1A:709:U:C6	2.49	0.47
1:1A:2854:G:H2'	1:1A:2855:C:C6	2.49	0.47
5:1F:10:PRO:HB3	5:1F:17:ARG:NH2	2.28	0.47
9:1N:108:PRO:O	9:1N:113:GLY:HA3	2.15	0.47
19:1X:84:ALA:HB3	19:1X:87:GLN:HG3	1.96	0.47
21:1Z:146:ILE:HA	21:1Z:147:GLY:HA2	1.59	0.47
31:19:24:TYR:CE1	31:19:35:ARG:HB2	2.50	0.47
32:1a:67:C:H2'	32:1a:68:G:C8	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:236:G:OP1	48:1q:40:LYS:NZ	2.43	0.47
32:1a:490:G:H2'	32:1a:491:G:H8	1.79	0.47
32:1a:598:U:H2'	32:1a:599:C:H6	1.79	0.47
32:1a:743:U:H2'	32:1a:744:C:C6	2.50	0.47
32:1a:1064:G:O2'	32:1a:1190:G:N2	2.48	0.47
32:1a:1291:G:O2'	40:1i:38:GLN:OE1	2.27	0.47
33:1b:100:GLY:O	33:1b:104:ASN:N	2.36	0.47
50:1s:27:GLU:HB2	50:1s:28:LYS:HB3	1.97	0.47
1:2A:141:A:C8	1:2A:1408:C:O2'	2.68	0.47
1:2A:2158:A:H2	1:2A:2159:G:C4	2.32	0.47
6:2G:16:ARG:NE	6:2G:31:VAL:HG11	2.30	0.47
6:2G:124:SER:O	6:2G:124:SER:OG	2.33	0.47
9:2N:55:VAL:HB	9:2N:125:GLY:O	2.14	0.47
12:2Q:116:GLU:O	12:2Q:120:ILE:HG13	2.15	0.47
18:2W:23:LEU:HD21	27:25:25:LEU:HB2	1.96	0.47
19:2X:43:VAL:HG21	19:2X:81:VAL:HG11	1.96	0.47
28:26:32:ASN:OD1	28:26:32:ASN:N	2.33	0.47
32:2a:130:A:H1'	32:2a:263:A:O2'	2.14	0.47
32:2a:376:G:H5"	47:2p:5:ARG:HB2	1.95	0.47
32:2a:603:U:H2'	32:2a:604:G:C8	2.49	0.47
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.15	0.47
33:2b:126:GLU:H	33:2b:126:GLU:CD	2.22	0.47
40:2i:88:TYR:C	40:2i:88:TYR:CD2	2.93	0.47
43:2l:6:THR:HG23	43:2l:9:GLN:OE1	2.15	0.47
57:2y:9:A:H5'	57:2y:46:G7M:N3	2.30	0.47
1:1A:910:A:N1	1:1A:2277:G:H1'	2.29	0.47
1:1A:2111:C:N3	1:1A:2145:C:O2'	2.40	0.47
3:1D:218:ARG:HB3	3:1D:219:PRO:HD2	1.95	0.47
26:14:15:ILE:HD12	26:14:32:TYR:CE1	2.49	0.47
32:1a:45:U:H2'	32:1a:46:G:C8	2.49	0.47
32:1a:560:U:H5'	32:1a:566:G:N2	2.29	0.47
32:1a:920:U:H2'	32:1a:921:U:C6	2.50	0.47
32:1a:1142:G:H2'	32:1a:1143:G:O4'	2.15	0.47
33:1b:55:PHE:CD1	33:1b:221:LEU:HD22	2.50	0.47
34:1c:71:ALA:HA	34:1c:106:VAL:HG21	1.97	0.47
35:1d:162:LEU:O	35:1d:165:MET:HB2	2.14	0.47
1:2A:493:G:H2'	1:2A:494:G:O4'	2.15	0.47
1:2A:1364:G:P	23:21:3:LYS:HG3	2.55	0.47
1:2A:2299:G:H2'	1:2A:2300:G:C8	2.46	0.47
1:2A:2564:A:C2	1:2A:2647:U:H4'	2.50	0.47
18:2W:12:ILE:HD13	18:2W:17:VAL:HG13	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:2Y:40:GLU:HA	20:2Y:64:GLU:OE2	2.15	0.47
32:2a:354:G:N2	32:2a:388:G:O2'	2.31	0.47
32:2a:407:G:O4'	35:2d:119:GLN:NE2	2.48	0.47
32:2a:814:A:H2'	32:2a:816:A:H5"	1.95	0.47
32:2a:1297:C:OP2	44:2m:44:ARG:NH2	2.47	0.47
33:2b:124:SER:HB3	33:2b:125:PRO:HD3	1.96	0.47
35:2d:78:LEU:HB3	35:2d:93:PHE:HE1	1.78	0.47
40:2i:45:ALA:O	40:2i:48:GLU:HB2	2.14	0.47
1:1A:1681:G:HO2'	1:1A:1762:A:HO2'	1.59	0.47
4:1E:37:ARG:HA	4:1E:42:ASP:OD2	2.15	0.47
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.55	0.47
32:1a:60:A:N1	32:1a:107:G:O2'	2.45	0.47
32:1a:567:G:N3	62:1a:1957:HOH:O	2.36	0.47
34:1c:6:HIS:HD2	34:1c:8:ILE:N	2.13	0.47
35:1d:82:ALA:O	35:1d:89:THR:HG22	2.15	0.47
57:1y:8:4SU:H4'	57:1y:48:C:H4'	1.96	0.47
1:2A:271(R):G:OP1	23:21:76:ARG:NE	2.38	0.47
1:2A:1713:U:H2'	1:2A:1714:G:H8	1.80	0.47
1:2A:1862:G:H2'	1:2A:1863:G:H8	1.80	0.47
1:2A:2365:G:OP1	22:20:55:ARG:N	2.47	0.47
14:2S:87:PHE:CZ	14:2S:102:ALA:HB2	2.50	0.47
32:2a:7:G:H5'	32:2a:298:A:O4'	2.14	0.47
37:2f:100:ASN:ND2	49:2r:23:LYS:HE3	2.26	0.47
40:2i:11:LYS:HA	40:2i:108:VAL:HG12	1.97	0.47
50:2s:53:ASN:OD1	50:2s:54:GLY:N	2.48	0.47
1:1A:583:G:OP2	16:1U:10:ARG:HD2	2.15	0.47
26:14:53:GLU:HB2	26:14:55:ARG:O	2.15	0.47
32:1a:1460:A:H2'	32:1a:1461:G:O4'	2.15	0.47
32:1a:1498:UR3:O2'	53:1v:17:U:OP1	2.31	0.47
35:1d:159:ARG:O	35:1d:163:GLU:HG3	2.15	0.47
42:1k:48:ILE:O	42:1k:50:TYR:N	2.46	0.47
57:1y:67:C:H2'	57:1y:68:C:C6	2.50	0.47
1:2A:2106:G:H2'	1:2A:2107:C:O4'	2.15	0.47
8:2I:72:LEU:HD23	8:2I:75:LEU:HD11	1.97	0.47
32:2a:390:C:H2'	32:2a:391:G:C8	2.49	0.47
32:2a:393:A:OP2	47:2p:12:LYS:HD3	2.15	0.47
32:2a:590:C:H2'	32:2a:591:U:C6	2.50	0.47
32:2a:735:C:H2'	32:2a:736:C:H6	1.80	0.47
32:2a:918:A:H2'	32:2a:919:A:C8	2.50	0.47
32:2a:986:A:H2'	32:2a:987:G:O4'	2.15	0.47
32:2a:1010:G:N2	32:2a:1020:U:HO2'	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1346:A:H5"	40:2i:120:ARG:HH22	1.79	0.47
38:2g:113:GLU:HG3	38:2g:118:VAL:HG12	1.97	0.47
40:2i:26:VAL:HG13	40:2i:61:ALA:HB3	1.96	0.47
54:2w:67:C:H2'	54:2w:68:C:C6	2.50	0.47
57:2y:14:A:O2'	57:2y:15:G:O4'	2.32	0.47
1:1A:1062:G:C8	1:1A:1070:A:H4'	2.50	0.46
5:1F:89:VAL:HG12	5:1F:90:PHE:CD2	2.50	0.46
7:1H:72:ILE:O	7:1H:76:VAL:HG23	2.15	0.46
9:1N:67:LEU:O	9:1N:88:GLU:HG3	2.14	0.46
13:1R:15:SER:HB3	62:1R:310:HOH:O	2.15	0.46
32:1a:434:U:H2'	32:1a:435:C:O4'	2.15	0.46
33:1b:80:ILE:O	33:1b:84:GLU:HG2	2.15	0.46
35:1d:178:VAL:C	35:1d:180:GLY:H	2.22	0.46
36:1e:110:LEU:HB3	36:1e:115:VAL:HB	1.96	0.46
39:1h:4:ASP:CG	39:1h:85:ARG:HH21	2.23	0.46
51:1t:77:ALA:O	51:1t:81:LYS:HG3	2.14	0.46
1:2A:2122:U:H3	1:2A:2176:A:N6	2.07	0.46
1:2A:2650:U:H2'	1:2A:2651:C:H6	1.80	0.46
32:2a:939:G:H1	32:2a:1344:C:H42	1.63	0.46
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.98	0.46
34:2c:119:ARG:HD3	34:2c:140:ARG:HH22	1.80	0.46
1:1A:271(K):U:HO2'	1:1A:271(M):G:N2	2.12	0.46
1:1A:886:C:H3'	1:1A:887:A:H5"	1.97	0.46
1:1A:1991:U:H2'	1:1A:1992:G:H5"	1.97	0.46
1:1A:2875:C:O2'	15:1T:2:ASN:OD1	2.31	0.46
21:1Z:1:MET:HA	21:1Z:2:GLU:HA	1.63	0.46
30:18:26:LYS:HD2	30:18:48:PHE:CD2	2.50	0.46
32:1a:381:C:H2'	32:1a:382:A:O4'	2.15	0.46
32:1a:977:A:H1'	32:1a:982:U:O4	2.15	0.46
36:1e:57:LYS:HG2	36:1e:61:TYR:CE2	2.51	0.46
38:1g:78:ARG:HG3	38:1g:80:VAL:HG23	1.96	0.46
39:1h:100:ILE:HB	39:1h:125:ARG:NH1	2.30	0.46
54:1w:46:G7M:H5"	54:1w:46:G7M:H8	1.98	0.46
1:2A:142(A):C:H2'	1:2A:143:G:O4'	2.15	0.46
1:2A:2079:U:O3'	23:21:35:THR:OG1	2.32	0.46
1:2A:2124:G:O6	1:2A:2173:A:N6	2.48	0.46
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.51	0.46
11:2P:29:LYS:HG3	11:2P:30:THR:N	2.29	0.46
15:2T:42:ILE:HG13	15:2T:84:GLN:HE22	1.80	0.46
21:2Z:17:ALA:O	21:2Z:21:ALA:N	2.32	0.46
24:22:25:VAL:HG13	24:22:57:ILE:HG23	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:119:A:H4'	32:2a:120:A:C8	2.50	0.46
32:2a:1080:A:H5"	32:2a:1081:G:OP2	2.15	0.46
36:2e:43:LEU:HB2	36:2e:136:MET:HE2	1.96	0.46
41:2j:13:HIS:HB3	41:2j:68:HIS:CE1	2.50	0.46
48:2q:78:GLU:OE1	48:2q:81:ARG:NH1	2.48	0.46
1:1A:602:G:O6	62:1A:4245:HOH:O	2.16	0.46
1:1A:662:G:H5"	11:1P:16:ARG:HG3	1.97	0.46
1:1A:1075:C:C2'	1:1A:1076:C:H5'	2.45	0.46
1:1A:1105:U:O5'	1:1A:1105:U:H6	1.98	0.46
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.49	0.46
1:1A:1587:A:H2'	1:1A:1588:C:H6	1.79	0.46
1:1A:2175:C:H2'	1:1A:2176:A:O4'	2.15	0.46
1:1A:2633:G:H5"	1:1A:2812:G:H5'	1.97	0.46
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.79	0.46
1:1A:2849:U:H4'	1:1A:2868:A:C2	2.50	0.46
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	1.98	0.46
32:1a:96:U:H2'	32:1a:97:G:C8	2.50	0.46
32:1a:741:G:H2'	32:1a:742:G:O4'	2.15	0.46
33:1b:139:LYS:O	33:1b:143:GLU:HG3	2.15	0.46
38:1g:22:LEU:HG	38:1g:62:PHE:HE2	1.80	0.46
57:1y:12:U:C4	57:1y:13:C:C4	3.04	0.46
1:2A:143:G:H2'	1:2A:143(A):C:C6	2.50	0.46
1:2A:658:C:H2'	1:2A:659:C:C6	2.50	0.46
1:2A:848:G:H2'	1:2A:849:A:H8	1.80	0.46
1:2A:1031:G:N2	31:29:36:GLN:HE22	2.13	0.46
1:2A:1263:U:C4	1:2A:1264:G:C6	3.02	0.46
1:2A:2243:U:H2'	1:2A:2244:U:C6	2.50	0.46
11:2P:63:PRO:HD3	30:28:27:THR:HG22	1.97	0.46
32:2a:266:G:H2'	32:2a:266:G:N3	2.29	0.46
32:2a:862:C:H1'	32:2a:874:G:H5"	1.96	0.46
32:2a:1206:G:O2'	34:2c:193:TYR:HA	2.15	0.46
32:2a:1314:C:H2'	32:2a:1315:U:H6	1.80	0.46
32:2a:1327:C:H2'	32:2a:1328:C:H6	1.79	0.46
33:2b:133:LYS:HA	33:2b:136:VAL:HB	1.97	0.46
34:2c:125:GLU:HB2	34:2c:190:ARG:NH2	2.24	0.46
39:2h:112:LEU:HD11	39:2h:124:ALA:HB2	1.98	0.46
40:2i:4:TYR:CE1	40:2i:88:TYR:HA	2.50	0.46
45:2n:23:ARG:NH1	45:2n:30:ALA:HB2	2.30	0.46
6:1G:98:ARG:NE	26:14:1:MET:HE3	2.30	0.46
7:1H:52:VAL:HG12	7:1H:65:HIS:HD2	1.80	0.46
21:1Z:73:GLN:HB3	21:1Z:87:ASP:HB2	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:56:U:H2'	32:1a:57:G:C8	2.51	0.46
32:1a:616:G:OP2	35:1d:141:ARG:NH2	2.45	0.46
32:1a:1197:G:OP2	62:1a:1922:HOH:O	2.20	0.46
1:2A:2010:G:H5"	18:2W:42:ARG:HB2	1.97	0.46
1:2A:2317:C:H2'	1:2A:2318:G:H5'	1.97	0.46
1:2A:2507:C:H2'	1:2A:2508:G:O4'	2.16	0.46
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.50	0.46
7:2H:88:LEU:HD11	7:2H:165:ALA:HA	1.97	0.46
12:2Q:35:VAL:HG22	12:2Q:102:VAL:HG22	1.96	0.46
28:26:19:ARG:NH1	28:26:52:VAL:HG21	2.30	0.46
32:2a:1169:A:H2'	32:2a:1170:A:O4'	2.15	0.46
32:2a:1256:A:O3'	32:2a:1257:U:H4'	2.15	0.46
32:2a:1314:C:H2'	32:2a:1315:U:C6	2.51	0.46
43:2l:104:VAL:HG12	43:2l:105:TYR:CG	2.51	0.46
51:2t:39:LYS:O	51:2t:43:LEU:HG	2.16	0.46
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.51	0.46
1:1A:2319:G:N2	14:1S:3:ARG:HA	2.30	0.46
18:1W:46:PHE:O	18:1W:50:VAL:HG23	2.15	0.46
20:1Y:8:LYS:HD3	20:1Y:97:ARG:NH1	2.30	0.46
32:1a:69:G:H2'	32:1a:70:G:C8	2.51	0.46
32:1a:332:G:H2'	32:1a:333:G:H8	1.81	0.46
32:1a:565:U:H3'	32:1a:566:G:H2'	1.97	0.46
32:1a:955:U:O2'	50:1s:83:HIS:HD2	1.99	0.46
32:1a:1347:G:O2'	32:1a:1373:G:O6	2.20	0.46
34:1c:139:GLN:O	34:1c:143:GLU:HG3	2.16	0.46
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.97	0.46
51:1t:26:ASN:OD1	51:1t:71:THR:OG1	2.21	0.46
54:1w:60:U:H5"	54:1w:61:C:H5	1.80	0.46
1:2A:571:A:O2'	17:2V:78:LYS:HE2	2.16	0.46
1:2A:700:G:O2'	1:2A:1632:A:N3	2.30	0.46
1:2A:964:C:O2'	1:2A:2273:A:N3	2.35	0.46
1:2A:1112:G:H2'	1:2A:1113:U:O4'	2.16	0.46
1:2A:1292:U:H2'	1:2A:1293:C:C6	2.50	0.46
1:2A:1580:A:H8	1:2A:1580:A:OP2	1.99	0.46
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.31	0.46
1:2A:2107:C:N3	1:2A:2182:G:O6	2.48	0.46
1:2A:2207:G:H3'	1:2A:2208:A:C5'	2.46	0.46
5:2F:32:LEU:HD22	5:2F:112:MET:HE1	1.98	0.46
32:2a:109:A:C6	32:2a:326:G:C6	3.03	0.46
32:2a:955:U:O2'	50:2s:83:HIS:HD2	1.97	0.46
36:2e:31:LEU:HD22	36:2e:43:LEU:HD11	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:14:VAL:HG23	40:2i:66:ARG:HG2	1.98	0.46
41:2j:8:LEU:HG	41:2j:16:LEU:HD22	1.96	0.46
43:2l:89:ARG:NH2	43:2l:91:LYS:HA	2.30	0.46
1:1A:484:C:H2'	1:1A:485:C:C6	2.51	0.46
1:1A:2161:C:O2'	1:1A:2162:G:H8	1.98	0.46
3:1D:166:GLN:HB2	3:1D:174:ILE:HG22	1.98	0.46
8:1I:12:LEU:HD22	8:1I:19:VAL:HG21	1.96	0.46
12:1Q:89:ASN:HB2	55:1x:1:C:N3	2.30	0.46
32:1a:255:G:P	48:1q:69:LYS:HZ3	2.38	0.46
32:1a:300:A:H2'	32:1a:301:G:O4'	2.16	0.46
44:1m:67:GLU:HG3	44:1m:71:ARG:HH21	1.80	0.46
1:2A:590:A:H2'	1:2A:591:C:C6	2.50	0.46
1:2A:1270:C:H5"	1:2A:1271:G:O5'	2.16	0.46
1:2A:2166:G:H3'	1:2A:2167:U:C5'	2.45	0.46
1:2A:2831:G:OP1	1:2A:2834:G:H4'	2.15	0.46
6:2G:4:ASP:HA	6:2G:8:LYS:NZ	2.30	0.46
32:2a:547:A:H5'	62:2a:1952:HOH:O	2.15	0.46
32:2a:677:U:H3	32:2a:713:G:H22	1.63	0.46
32:2a:1005:A:H5"	32:2a:1006:C:H5	1.78	0.46
32:2a:1117:G:H5'	32:2a:1118:C:OP2	2.15	0.46
32:2a:1129:C:H4'	32:2a:1130:A:H5'	1.98	0.46
32:2a:1183:A:O2'	32:2a:1184:G:OP1	2.33	0.46
32:2a:1264:C:C4	32:2a:1272:G:O6	2.69	0.46
35:2d:123:HIS:HB2	35:2d:125:HIS:CE1	2.51	0.46
36:2e:91:LEU:HD13	36:2e:120:THR:HG22	1.96	0.46
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.43	0.46
48:2q:10:VAL:HA	48:2q:20:THR:O	2.16	0.46
49:2r:47:THR:OG1	49:2r:49:LYS:HE3	2.16	0.46
50:2s:42:PRO:C	50:2s:44:MET:H	2.23	0.46
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.16	0.46
1:1A:1063:G:H2'	1:1A:1064:C:C5	2.51	0.46
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.51	0.46
1:1A:2110:G:H5"	1:1A:2145:C:H41	1.81	0.46
1:1A:2147:G:H3'	1:1A:2147:G:N3	2.31	0.46
42:1k:33:THR:HA	42:1k:39:PRO:HA	1.98	0.46
1:2A:902:C:H2'	1:2A:903:C:C6	2.51	0.46
1:2A:2722:G:H5'	13:2R:4:LEU:HD12	1.98	0.46
22:20:29:GLN:O	22:20:67:VAL:HG23	2.16	0.46
24:22:1:MET:N	24:22:52:ASP:OD1	2.43	0.46
32:2a:620:C:C2	35:2d:135:LEU:HG	2.51	0.46
32:2a:662:G:H2'	32:2a:663:A:C8	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1239:A:H62	32:2a:1299:A:H61	1.63	0.46
32:2a:1244:C:N4	32:2a:1293:G:H1	2.12	0.46
36:2e:52:PRO:HG2	36:2e:53:LEU:HD12	1.97	0.46
37:2f:76:ALA:HB1	37:2f:80:ARG:HH22	1.80	0.46
1:1A:185:U:H4'	1:1A:218:A:H4'	1.97	0.46
1:1A:492:A:H2'	1:1A:493:G:O4'	2.15	0.46
1:1A:1062:G:N2	1:1A:1077:A:H61	2.08	0.46
1:1A:1095:A:N6	1:1A:1097:U:O2	2.32	0.46
1:1A:1503:U:H2'	1:1A:1504:C:C6	2.50	0.46
2:1B:66:A:N6	2:1B:109:C:H5'	2.28	0.46
16:1U:85:LYS:HE2	16:1U:85:LYS:HB3	1.67	0.46
1:2A:589:C:H2'	1:2A:590:A:C8	2.51	0.46
1:2A:1683:C:H2'	1:2A:1684:C:C6	2.51	0.46
1:2A:2529:G:O6	31:29:31:LYS:NZ	2.48	0.46
24:22:32:LEU:HA	24:22:53:LEU:HD13	1.98	0.46
32:2a:772:U:H2'	32:2a:773:G:O4'	2.16	0.46
32:2a:1381:U:O2	38:2g:79:ARG:HB3	2.16	0.46
33:2b:162:ILE:O	33:2b:185:ILE:HD13	2.16	0.46
51:2t:54:LYS:HB3	51:2t:54:LYS:HE2	1.65	0.46
1:1A:271(D):G:H2'	1:1A:271(E):U:C6	2.51	0.46
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.16	0.46
1:1A:838:C:O2'	1:1A:839:U:H5'	2.16	0.46
1:1A:1166:C:H2'	1:1A:1167:U:C6	2.51	0.46
1:1A:1339:G:H5"	19:1X:16:LYS:HD3	1.98	0.46
1:1A:2099:U:O4	1:1A:2190:G:O6	2.34	0.46
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.15	0.46
6:1G:114:ILE:HA	6:1G:140:ILE:HD11	1.97	0.46
11:1P:84:ASN:OD1	11:1P:115:LEU:HB2	2.15	0.46
11:1P:119:GLU:OE1	25:23:3:ARG:NH1	2.49	0.46
15:1T:74:ARG:HG2	15:1T:76:PHE:CZ	2.51	0.46
17:1V:22:VAL:HG23	17:1V:23:GLU:O	2.15	0.46
32:1a:857:C:H2'	32:1a:858:G:O4'	2.16	0.46
35:1d:3:ARG:HH11	35:1d:118:ARG:NH1	2.14	0.46
44:1m:105:THR:HB	44:1m:106:ASN:H	1.53	0.46
57:1y:71:G:O2'	57:1y:72:C:H5'	2.15	0.46
32:2a:44:G:H2'	32:2a:45:U:O4'	2.16	0.46
32:2a:1051:C:H42	32:2a:1207:2MG:HN1	1.64	0.46
33:2b:110:GLN:OE1	33:2b:111:ARG:NH1	2.49	0.46
34:2c:183:ASP:N	34:2c:202:ILE:O	2.40	0.46
37:2f:41:GLU:CD	49:2r:35:ARG:HH22	2.24	0.46
44:2m:10:PRO:HD2	44:2m:18:ALA:HB1	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:9:PHE:N	47:2p:16:HIS:O	2.49	0.46
54:2w:44:G:H2'	54:2w:45:U:H5'	1.97	0.46
57:2y:14:A:N6	57:2y:21:A:H2	2.11	0.46
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.16	0.46
1:1A:2136:C:N4	1:1A:2155:G:N1	2.63	0.46
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.51	0.46
1:1A:2183:C:H2'	1:1A:2184:G:C8	2.48	0.46
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.51	0.46
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.15	0.46
14:1S:65:VAL:O	14:1S:69:VAL:HG12	2.16	0.46
16:1U:97:ASP:OD1	16:1U:101:ARG:HD2	2.16	0.46
32:1a:236:G:H5"	48:1q:42:TYR:OH	2.15	0.46
38:1g:78:ARG:HA	38:1g:78:ARG:HD2	1.76	0.46
42:1k:96:ARG:HH11	42:1k:96:ARG:HB2	1.80	0.46
43:1l:117:ARG:NH2	43:1l:124:LYS:HB2	2.30	0.46
51:1t:64:ASP:OD1	51:1t:81:LYS:HD3	2.16	0.46
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.16	0.46
1:2A:61:G:OP1	24:22:51:ARG:NH2	2.49	0.46
1:2A:190:A:OP2	23:21:39:LYS:HE3	2.16	0.46
1:2A:881:G:H2'	1:2A:881:G:N3	2.30	0.46
1:2A:2193:G:H2'	1:2A:2194:G:C8	2.50	0.46
13:2R:59:ASP:OD2	13:2R:62:ALA:N	2.48	0.46
21:2Z:67:LEU:HD12	21:2Z:68:PRO:HD2	1.97	0.46
21:2Z:153:SER:N	21:2Z:167:PRO:O	2.49	0.46
26:24:45:GLY:C	26:24:47:GLN:H	2.22	0.46
32:2a:66:G:H8	32:2a:66:G:OP1	1.99	0.46
32:2a:489:C:H2'	32:2a:490:G:H8	1.81	0.46
32:2a:501:C:OP2	43:2l:124:LYS:NZ	2.30	0.46
32:2a:664:G:N2	32:2a:741:G:H1	2.12	0.46
32:2a:866:C:C4	32:2a:867:G:H1'	2.50	0.46
32:2a:942:G:C2	32:2a:1342:C:C2	3.04	0.46
32:2a:1049:U:C6	32:2a:1201:A:H5'	2.50	0.46
33:2b:16:HIS:C	33:2b:18:GLY:H	2.24	0.46
33:2b:95:GLN:HG2	33:2b:147:LYS:O	2.16	0.46
34:2c:148:GLY:HA3	34:2c:172:ARG:O	2.16	0.46
44:2m:80:ARG:HH22	50:2s:69:HIS:HE1	1.64	0.46
55:2x:61:C:H2'	55:2x:62:C:C6	2.50	0.46
1:1A:586:A:N1	1:1A:809:G:O2'	2.42	0.45
1:1A:1044:G:H5'	1:1A:1045:A:OP2	2.16	0.45
1:1A:1359:A:H2	1:1A:1372:U:O4	1.98	0.45
1:1A:1427:A:H4'	1:1A:1428:C:O4'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:1U:49:HIS:HA	16:1U:52:ARG:HB2	1.97	0.45
32:1a:22:G:H4'	32:1a:885:G:C8	2.51	0.45
32:1a:79:G:H1'	32:1a:91:C:O2	2.16	0.45
32:1a:878:G:O4'	39:1h:3:THR:HG21	2.16	0.45
34:1c:159:GLY:HA2	34:1c:193:TYR:CD1	2.51	0.45
46:1o:7:GLU:O	46:1o:11:VAL:HG23	2.15	0.45
1:2A:75:G:H4'	24:22:55:ARG:NH1	2.30	0.45
1:2A:881:G:C5	1:2A:897:C:N3	2.84	0.45
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.51	0.45
1:2A:1710:C:H4'	1:2A:2858:C:O2	2.16	0.45
1:2A:2118:U:OP1	1:2A:2148:G:H4'	2.16	0.45
1:2A:2401:U:H2'	1:2A:2402:C:O4'	2.16	0.45
1:2A:2637:U:OP1	4:2E:82:ARG:NH1	2.49	0.45
1:2A:2650:U:H2'	1:2A:2651:C:C6	2.51	0.45
5:2F:11:VAL:HG22	5:2F:125:LEU:HD13	1.97	0.45
5:2F:156:LEU:HD21	5:2F:163:VAL:HG12	1.98	0.45
6:2G:7:LEU:HD22	6:2G:104:GLU:N	2.29	0.45
8:2I:61:ARG:HD3	8:2I:61:ARG:HA	1.62	0.45
10:2O:112:MET:HE2	10:2O:112:MET:HB2	1.69	0.45
21:2Z:97:GLU:HA	21:2Z:126:VAL:O	2.16	0.45
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.51	0.45
33:2b:119:GLU:CD	33:2b:153:ARG:HH22	2.24	0.45
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.16	0.45
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.31	0.45
12:1Q:12:GLN:HE21	12:1Q:73:PRO:HD2	1.80	0.45
32:1a:922:G:H4'	36:1e:20:GLN:HA	1.99	0.45
32:1a:1376:U:OP1	38:1g:98:SER:HB3	2.16	0.45
33:1b:16:HIS:CG	33:1b:17:PHE:H	2.33	0.45
42:1k:82:VAL:N	42:1k:107:SER:O	2.41	0.45
43:1l:117:ARG:HB3	43:1l:122:THR:HB	1.98	0.45
50:1s:16:LEU:O	50:1s:19:VAL:HG12	2.16	0.45
54:1w:26:A:N6	54:1w:44:G:H1	2.12	0.45
1:2A:652(T):C:H2'	1:2A:652(U):G:C8	2.52	0.45
1:2A:709:U:H2'	1:2A:710:G:C8	2.52	0.45
1:2A:2572:A:C8	4:2E:144:ARG:HD3	2.51	0.45
10:2O:15:GLY:O	10:2O:47:ILE:HG12	2.16	0.45
19:2X:94:GLY:N	19:2X:95:LEU:HB2	2.31	0.45
26:24:50:VAL:HG11	44:2m:64:TRP:C	2.41	0.45
32:2a:1003:G:N2	32:2a:1025:U:O4	2.49	0.45
34:2c:58:GLU:HB3	41:2j:92:THR:CG2	2.42	0.45
39:2h:103:VAL:HG21	39:2h:109:ILE:O	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:2q:32:TYR:O	48:2q:34:LYS:N	2.50	0.45
52:2u:3:LYS:HB3	52:2u:14:TRP:CD1	2.51	0.45
1:1A:1091:G:H2'	1:1A:1092:C:O4'	2.16	0.45
1:1A:2245:U:O2'	1:1A:2436:G:OP2	2.32	0.45
1:1A:2619:C:H4'	4:1E:151:TYR:O	2.16	0.45
1:1A:2803:C:H2'	1:1A:2804:C:C6	2.52	0.45
21:1Z:121:HIS:NE2	21:1Z:169:GLU:OE2	2.41	0.45
32:1a:202:U:H3'	32:1a:203:U:C5	2.51	0.45
52:1u:12:LYS:HB3	52:1u:17:THR:O	2.16	0.45
1:2A:1790:C:H5"	1:2A:1791:A:OP1	2.17	0.45
1:2A:2066:C:H5"	62:2A:4303:HOH:O	2.16	0.45
1:2A:2134:A:OP2	1:2A:2157:G:N2	2.43	0.45
1:2A:2753:A:N3	31:29:15:LYS:NZ	2.64	0.45
4:2E:48:GLN:NE2	4:2E:78:LEU:HD13	2.31	0.45
5:2F:178:PRO:HB2	5:2F:201:VAL:HG21	1.98	0.45
32:2a:1029:C:C2	32:2a:1032:G:N2	2.74	0.45
32:2a:1122:U:C4	32:2a:1123:A:N7	2.85	0.45
32:2a:1347:G:O2'	32:2a:1373:G:O6	2.31	0.45
35:2d:3:ARG:HD3	35:2d:118:ARG:NE	2.31	0.45
43:2l:89:ARG:HH21	43:2l:91:LYS:HA	1.80	0.45
1:1A:887:A:H1'	1:1A:889:C:OP2	2.17	0.45
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.52	0.45
2:1B:103:G:N2	21:1Z:73:GLN:HE22	2.07	0.45
4:1E:96:PHE:O	4:1E:175:VAL:HG21	2.16	0.45
5:1F:164:ARG:HD2	5:1F:175:THR:HG23	1.99	0.45
7:1H:125:VAL:HG22	7:1H:131:VAL:HG22	1.99	0.45
32:1a:119:A:H4'	32:1a:120:A:C8	2.51	0.45
32:1a:192:U:H4'	51:1t:57:ARG:HD3	1.98	0.45
32:1a:265:G:H2'	32:1a:267:C:H5	1.82	0.45
35:1d:112:VAL:HG12	35:1d:116:GLN:NE2	2.32	0.45
37:1f:6:VAL:HG22	37:1f:90:VAL:HG22	1.99	0.45
38:1g:26:PHE:O	38:1g:30:ILE:HG13	2.16	0.45
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.52	0.45
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.30	0.45
1:2A:2131:G:N2	1:2A:2158:A:H62	2.14	0.45
5:2F:161:GLU:O	5:2F:165:ARG:HG3	2.16	0.45
21:2Z:40:ASP:OD2	21:2Z:42:VAL:HG13	2.16	0.45
25:23:4:LEU:O	25:23:36:VAL:HA	2.16	0.45
32:2a:1240:U:OP1	38:2g:119:ARG:NH2	2.37	0.45
32:2a:1256:A:H61	32:2a:1278:U:H2'	1.81	0.45
33:2b:44:LEU:H	33:2b:44:LEU:HD12	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:2l:8:ASN:O	43:2l:12:ARG:HG3	2.16	0.45
50:2s:51:VAL:O	50:2s:58:VAL:N	2.49	0.45
1:1A:327:G:N2	20:1Y:70:SER:OG	2.50	0.45
1:1A:436:C:H2'	1:1A:437:G:C8	2.51	0.45
1:1A:749:C:H4'	1:1A:1271:G:N3	2.31	0.45
1:1A:1064:C:H2'	1:1A:1065:U:H5'	1.98	0.45
1:1A:1545:A:H2'	1:1A:1546:C:O4'	2.17	0.45
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.17	0.45
32:1a:160:A:H2'	32:1a:161:A:O4'	2.17	0.45
32:1a:202:U:H5"	32:1a:203:U:C5	2.51	0.45
35:1d:67:ILE:HD13	35:1d:196:LEU:HD22	1.99	0.45
1:2A:900:A:H2'	1:2A:901:A:C8	2.50	0.45
14:2S:71:ARG:NH1	14:2S:107:GLU:OE1	2.49	0.45
32:2a:542:G:H5'	35:2d:41:GLY:HA3	1.99	0.45
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.98	0.45
33:2b:71:VAL:HG12	33:2b:170:GLU:HG2	1.99	0.45
33:2b:198:ASP:OD1	33:2b:198:ASP:N	2.50	0.45
38:2g:59:LEU:O	38:2g:63:LYS:HE3	2.17	0.45
49:2r:44:LEU:HD11	49:2r:79:LEU:HD22	1.99	0.45
50:2s:27:GLU:H	50:2s:27:GLU:HG3	1.41	0.45
1:1A:528:A:OP2	9:1N:114:ARG:NH1	2.49	0.45
1:1A:774:A:N3	1:1A:774:A:H2'	2.32	0.45
1:1A:2629:A:H1'	1:1A:2630:G:C5'	2.47	0.45
1:1A:2801(A):A:H1'	1:1A:2895:U:H1'	1.99	0.45
21:1Z:45:ASP:OD1	21:1Z:49:ARG:NH2	2.43	0.45
32:1a:472:A:H2'	32:1a:473:G:O4'	2.17	0.45
32:1a:890:G:O2'	32:1a:906:G:O6	2.33	0.45
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.16	0.45
38:1g:93:PRO:HA	38:1g:96:GLN:HG3	1.99	0.45
39:1h:13:ILE:HD11	39:1h:61:VAL:HG11	1.99	0.45
57:1y:26:A:N6	57:1y:44:G:N1	2.63	0.45
57:1y:67:C:H2'	57:1y:68:C:H6	1.82	0.45
1:2A:2156:G:O5'	1:2A:2156:G:H8	1.99	0.45
1:2A:2419:U:H2'	1:2A:2420:C:C6	2.52	0.45
1:2A:2732:G:OP1	4:2E:203:LYS:NZ	2.40	0.45
7:2H:35:VAL:HG21	7:2H:72:ILE:HD13	1.98	0.45
11:2P:95:VAL:HG12	11:2P:100:LEU:HD21	1.99	0.45
15:2T:17:THR:O	15:2T:17:THR:OG1	2.23	0.45
20:2Y:97:ARG:NH1	20:2Y:106:LEU:O	2.49	0.45
23:21:23:LYS:HB2	57:2y:74:C:H4'	1.99	0.45
32:2a:9:G:H2'	32:2a:10:A:H8	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:4:TYR:OH	35:2d:7:PRO:O	2.26	0.45
42:2k:98:LEU:HD23	42:2k:98:LEU:HA	1.82	0.45
55:2x:40:C:H5"	57:2y:36:A:OP1	2.17	0.45
1:1A:272:G:N7	1:1A:421:U:H2'	2.32	0.45
1:1A:518:G:H2'	1:1A:519:U:C6	2.51	0.45
1:1A:1268:A:C2	1:1A:2013:A:C4	3.05	0.45
1:1A:2820:A:C8	4:1E:109:LYS:HE2	2.52	0.45
8:1I:72:LEU:HD21	8:1I:107:VAL:HG11	1.98	0.45
8:1I:87:LYS:H	8:1I:87:LYS:HG3	1.55	0.45
14:1S:106:ARG:NE	14:1S:112:PHE:OXT	2.40	0.45
20:1Y:44:ILE:H	20:1Y:44:ILE:HD12	1.82	0.45
21:1Z:70:LEU:HD23	21:1Z:70:LEU:HA	1.84	0.45
32:1a:404:U:H2'	32:1a:405:U:C6	2.51	0.45
32:1a:444:C:H2'	32:1a:445:G:H8	1.82	0.45
32:1a:1269:A:H5"	32:1a:1270:C:OP2	2.17	0.45
48:1q:45:HIS:CE1	48:1q:47:PRO:HG3	2.52	0.45
1:2A:297:C:H2'	1:2A:298:G:O4'	2.17	0.45
1:2A:667:U:O2	30:28:2:PRO:HD2	2.16	0.45
1:2A:1187:G:H5'	17:2V:81:TYR:CE1	2.52	0.45
1:2A:1830:C:H2'	1:2A:1831:G:H8	1.81	0.45
1:2A:2119:A:N1	1:2A:2170:A:H2'	2.32	0.45
1:2A:2318:G:H21	14:2S:3:ARG:CD	2.29	0.45
2:2B:105:A:P	21:2Z:72:ARG:HE	2.39	0.45
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.98	0.45
10:2O:77:ILE:HB	15:2T:74:ARG:HH11	1.81	0.45
11:2P:121:LYS:HE2	11:2P:123:LEU:HD11	1.97	0.45
16:2U:9:VAL:O	16:2U:13:LYS:HG3	2.16	0.45
32:2a:434:U:H2'	32:2a:435:C:C6	2.50	0.45
34:2c:6:HIS:CD2	34:2c:8:ILE:H	2.34	0.45
34:2c:131:ARG:HD3	34:2c:166:GLU:OE1	2.17	0.45
1:1A:582:G:H2'	1:1A:583:G:C8	2.51	0.45
1:1A:1263:U:OP1	27:15:16:ARG:NH1	2.49	0.45
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.52	0.45
1:1A:1815:A:H8	1:1A:1815:A:OP1	1.99	0.45
1:1A:2064:C:H2'	1:1A:2065:C:C6	2.51	0.45
1:1A:2848:G:C8	15:1T:97:ALA:HB2	2.52	0.45
1:1A:2850:A:N7	1:1A:2868:A:O2'	2.48	0.45
4:1E:119:ARG:HG2	4:1E:120:TRP:NE1	2.32	0.45
6:1G:72:ARG:HH12	6:1G:87:PRO:HG3	1.81	0.45
8:1I:116:LEU:HD11	8:1I:119:PRO:HA	1.99	0.45
9:1N:35:ARG:HD3	9:1N:37:LYS:HD2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:1Y:87:LYS:HD2	20:1Y:95:LYS:HD3	1.98	0.45
32:1a:202:U:H5"	32:1a:203:U:H5	1.82	0.45
32:1a:690:G:H2'	32:1a:691:G:O4'	2.17	0.45
42:1k:34:ASP:OD2	42:1k:38:ASN:HB2	2.17	0.45
55:1x:23:C:H2'	55:1x:24:U:C6	2.52	0.45
1:2A:776:G:H4'	1:2A:777:A:O5'	2.17	0.45
22:20:23:VAL:HG22	22:20:38:VAL:HG22	1.99	0.45
32:2a:335:C:H2'	32:2a:336:C:C6	2.52	0.45
32:2a:779:C:H2'	32:2a:780:A:O4'	2.17	0.45
32:2a:1004:A:N6	32:2a:1037:C:O2	2.38	0.45
32:2a:1252:A:H61	32:2a:1285:A:H61	1.63	0.45
38:2g:80:VAL:HG21	38:2g:154:TYR:CD2	2.52	0.45
44:2m:50:GLU:HA	44:2m:53:VAL:HG22	1.99	0.45
46:2o:87:ILE:HG22	46:2o:88:ARG:H	1.82	0.45
57:2y:18:G:N2	57:2y:55:PSU:C4	2.85	0.45
1:1A:81:G:H21	20:1Y:1:MET:HE2	1.82	0.45
1:1A:870:A:P	12:1Q:6:ARG:HH21	2.40	0.45
1:1A:2286:A:H4'	1:1A:2287:A:O4'	2.16	0.45
32:1a:28:G:O2'	32:1a:296:U:OP1	2.31	0.45
32:1a:445:G:H2'	32:1a:446:G:O4'	2.17	0.45
32:1a:517:G:H22	32:1a:533:A:P	2.40	0.45
32:1a:922:G:C6	32:1a:923:A:C6	3.05	0.45
32:1a:984:C:H42	32:1a:1221:G:H1	1.65	0.45
32:1a:995:C:O2'	32:1a:996:A:H5'	2.17	0.45
32:1a:1027:C:N4	32:1a:1034:G:N1	2.62	0.45
32:1a:1291:G:OP1	38:1g:37:ASN:ND2	2.48	0.45
32:1a:1373:G:H5"	38:1g:36:LYS:HD2	1.99	0.45
34:1c:65:ALA:HA	34:1c:100:ALA:HB3	1.99	0.45
35:1d:3:ARG:HD3	35:1d:118:ARG:HD3	1.99	0.45
46:1o:6:GLU:OE1	46:1o:6:GLU:N	2.47	0.45
54:1w:2:C:H2'	54:1w:3:C:C6	2.51	0.45
54:1w:47:U:H2'	54:1w:47:U:O2	2.17	0.45
1:2A:236:C:H2'	1:2A:237:C:H6	1.81	0.45
1:2A:333:G:N7	62:2A:4039:HOH:O	2.36	0.45
1:2A:903:C:H2'	1:2A:904:C:C6	2.52	0.45
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.50	0.45
4:2E:50:GLY:HA3	4:2E:75:VAL:HG21	1.98	0.45
5:2F:178:PRO:HG2	5:2F:179:GLU:OE2	2.16	0.45
30:28:23:VAL:HG11	30:28:47:LYS:HD3	1.99	0.45
32:2a:565:U:OP2	32:2a:566:G:O2'	2.32	0.45
32:2a:748:C:H1'	32:2a:749:C:OP2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1342:C:H2'	32:2a:1343:G:H8	1.81	0.45
32:2a:1423:G:H2'	32:2a:1424:C:C6	2.51	0.45
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.41	0.45
1:1A:7:G:H2'	1:1A:8:A:O4'	2.17	0.45
1:1A:1274:A:N3	1:1A:1297:C:H1'	2.32	0.45
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.17	0.45
7:1H:84:SER:OG	7:1H:132:ARG:NH1	2.49	0.45
10:1O:24:VAL:HG13	10:1O:33:ALA:HB2	1.99	0.45
32:1a:134:A:H61	47:1p:25:ARG:HH12	1.64	0.45
41:1j:19:SER:OG	41:1j:91:PRO:HD2	2.17	0.45
46:1o:84:LYS:O	46:1o:84:LYS:HD3	2.17	0.45
1:2A:1019:U:H3	1:2A:1142(A):A:N6	2.08	0.45
1:2A:1489:U:O2'	1:2A:1490:A:H8	2.00	0.45
1:2A:2286:A:H4'	1:2A:2287:A:O4'	2.17	0.45
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.32	0.45
1:2A:2815:C:H2'	1:2A:2816:C:C6	2.53	0.45
5:2F:53:THR:HG22	5:2F:56:GLU:HG3	1.99	0.45
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.54	0.45
28:26:6:ARG:NE	28:26:24:GLU:OE2	2.43	0.45
32:2a:178:C:H2'	32:2a:179:A:H8	1.82	0.45
32:2a:373:A:O2'	32:2a:451:A:N7	2.50	0.45
32:2a:397:A:H5'	32:2a:398:C:OP1	2.17	0.45
32:2a:452:A:H4'	47:2p:72:ARG:HH21	1.82	0.45
32:2a:1168:A:H2'	32:2a:1169:A:C8	2.52	0.45
34:2c:88:ARG:HA	34:2c:91:LEU:HD12	1.98	0.45
36:2e:91:LEU:HD12	36:2e:118:ILE:HD13	1.99	0.45
41:2j:62:HIS:HB3	45:2n:59:ALA:HB3	1.99	0.45
50:2s:36:ARG:HD3	50:2s:52:TYR:O	2.17	0.45
1:1A:1183:G:H4'	25:13:29:ARG:HH12	1.83	0.44
1:1A:1371:G:O6	62:1A:4268:HOH:O	2.20	0.44
1:1A:2506:U:C2	1:1A:2585:U:O4	2.70	0.44
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.17	0.44
4:1E:47:VAL:HG23	4:1E:81:ILE:HB	1.97	0.44
5:1F:129:PHE:HB3	5:1F:132:VAL:CG1	2.47	0.44
7:1H:137:ASP:HB3	7:1H:140:LYS:HB3	1.99	0.44
16:1U:55:ARG:O	16:1U:59:ARG:HG3	2.16	0.44
32:1a:266:G:O3'	48:1q:67:LYS:HB2	2.17	0.44
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.16	0.44
33:1b:102:LEU:HB3	33:1b:180:LEU:HD13	1.99	0.44
43:1l:88:GLY:O	43:1l:99:HIS:HD2	2.00	0.44
49:1r:65:ILE:O	49:1r:69:THR:HG23	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.41	0.44
1:2A:2070:G:H2'	1:2A:2071:A:C8	2.52	0.44
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.99	0.44
26:24:13:ARG:HG2	26:24:23:GLU:HA	1.99	0.44
32:2a:79:G:H1	32:2a:90:U:H3	1.65	0.44
32:2a:148:G:H2'	32:2a:149:A:H8	1.81	0.44
32:2a:362:G:N2	32:2a:365:U:OP2	2.49	0.44
32:2a:1002:G:C2	32:2a:1003:G:C8	3.05	0.44
32:2a:1168:A:C6	32:2a:1169:A:C6	3.05	0.44
32:2a:1250:A:N3	32:2a:1370:G:O2'	2.44	0.44
38:2g:16:LEU:HD22	40:2i:42:ARG:HA	1.99	0.44
55:2x:23:C:H2'	55:2x:24:U:C6	2.52	0.44
1:1A:330:A:HO2'	1:1A:331:A:H8	1.64	0.44
1:1A:836:G:C5	1:1A:837:C:C4	3.06	0.44
1:1A:884:C:H42	1:1A:892:G:H1	1.64	0.44
1:1A:2136:C:N3	1:1A:2155:G:N2	2.65	0.44
10:1O:96:THR:HG21	32:1a:340:U:OP1	2.18	0.44
17:1V:4:ILE:HG22	17:1V:38:LEU:HD12	1.99	0.44
17:1V:55:ALA:CA	17:1V:101:GLY:HA2	2.45	0.44
32:1a:442:C:H42	32:1a:492:G:H1	1.66	0.44
32:1a:737:A:H2'	32:1a:738:C:H6	1.81	0.44
32:1a:867:G:O2'	32:1a:873:A:N1	2.48	0.44
34:1c:114:PRO:HA	34:1c:185:GLY:HA3	1.98	0.44
34:1c:134:ILE:HD11	34:1c:153:VAL:HB	2.00	0.44
37:1f:48:LEU:HG	37:1f:57:GLN:HA	2.00	0.44
50:1s:45:VAL:HG13	50:1s:63:THR:HA	1.99	0.44
1:2A:27:G:O2'	1:2A:28:A:OP2	2.31	0.44
1:2A:184:C:H2'	1:2A:185:U:C6	2.52	0.44
1:2A:600:G:H2'	1:2A:601:C:C6	2.51	0.44
1:2A:1651:G:OP1	13:2R:40:LYS:NZ	2.50	0.44
3:2D:2:ALA:N	3:2D:20:ASP:OD2	2.50	0.44
5:2F:103:LYS:HA	5:2F:106:ARG:HD3	1.99	0.44
12:2Q:63:LYS:HG2	12:2Q:65:PHE:CE2	2.52	0.44
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.17	0.44
32:2a:109:A:H5'	32:2a:110:C:H5	1.83	0.44
32:2a:355:C:H1'	32:2a:388:G:H1'	1.99	0.44
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.52	0.44
32:2a:1077:G:H2'	32:2a:1079:G:N7	2.32	0.44
32:2a:1321:C:O5'	32:2a:1321:C:H6	2.00	0.44
35:2d:112:VAL:HG22	35:2d:116:GLN:NE2	2.32	0.44
36:2e:37:ARG:HG2	36:2e:111:GLU:O	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:2y:2:C:H2'	57:2y:3:C:O4'	2.18	0.44
1:1A:1006:C:C2	1:1A:1138:G:N2	2.85	0.44
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.32	0.44
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.53	0.44
1:1A:1529:G:H2'	1:1A:1530:C:O4'	2.16	0.44
1:1A:2176:A:H2'	1:1A:2177:C:C6	2.52	0.44
1:1A:2359:C:H2'	1:1A:2360:A:O4'	2.18	0.44
1:1A:2563:U:O2'	10:1O:28:SER:HB2	2.18	0.44
6:1G:124:SER:HB2	6:1G:131:TYR:CE1	2.53	0.44
11:1P:29:LYS:HG3	11:1P:30:THR:H	1.82	0.44
32:1a:1004:A:H5"	32:1a:1025:U:C5	2.52	0.44
32:1a:1005:A:OP2	32:1a:1024:G:N2	2.50	0.44
38:1g:75:VAL:HA	38:1g:88:PRO:HA	2.00	0.44
39:1h:36:LEU:HD23	39:1h:39:LEU:HD12	1.99	0.44
40:1i:34:ASN:HD22	40:1i:34:ASN:N	2.15	0.44
1:2A:31:C:H5"	1:2A:1239:G:OP1	2.18	0.44
1:2A:74:A:H4'	1:2A:75:G:O5'	2.18	0.44
1:2A:153:C:H2'	1:2A:154:G:O4'	2.18	0.44
1:2A:236:C:H2'	1:2A:237:C:C6	2.52	0.44
1:2A:480:A:OP2	20:2Y:47:LYS:NZ	2.31	0.44
1:2A:579:G:H2'	1:2A:580:C:C6	2.53	0.44
1:2A:687:C:H2'	1:2A:688:U:O4'	2.16	0.44
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.82	0.44
1:2A:1255:U:O5'	1:2A:1256:G:H5"	2.17	0.44
1:2A:1448:G:H1'	1:2A:1528:A:N1	2.32	0.44
1:2A:2113:U:H3	1:2A:2169:A:H62	1.63	0.44
7:2H:3:ARG:NH2	7:2H:5:GLY:H	2.14	0.44
30:28:52:LYS:N	30:28:53:PRO:HD2	2.33	0.44
32:2a:1260:C:P	32:2a:1284:C:H4'	2.58	0.44
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.21	0.44
33:2b:19:HIS:CE1	33:2b:206:ASP:HB2	2.53	0.44
34:2c:156:ARG:N	34:2c:196:LEU:HD22	2.30	0.44
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.18	0.44
1:1A:388:G:O2'	1:1A:389:G:N7	2.46	0.44
1:1A:414:C:H2'	1:1A:415:A:H8	1.81	0.44
1:1A:593:G:C4'	30:18:4:MET:HE2	2.46	0.44
21:1Z:48:PHE:CE1	21:1Z:71:VAL:HG11	2.52	0.44
21:1Z:91:LEU:HD21	21:1Z:96:VAL:HG21	1.99	0.44
32:1a:373:A:H2'	32:1a:374:A:C8	2.46	0.44
37:1f:99:ALA:HB1	49:1r:23:LYS:NZ	2.32	0.44
55:1x:33:U:O2'	55:1x:35:A:N7	2.49	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.53	0.44
15:2T:105:LEU:HB2	15:2T:110:ILE:HG13	1.98	0.44
21:2Z:27:VAL:HG12	21:2Z:85:HIS:HE1	1.82	0.44
32:2a:499:A:H4'	32:2a:500:G:OP1	2.17	0.44
32:2a:1184:G:H2'	32:2a:1185:G:C8	2.52	0.44
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.18	0.44
34:2c:39:ILE:O	34:2c:43:LEU:HG	2.18	0.44
37:2f:2:ARG:HE	37:2f:69:GLU:HG2	1.82	0.44
40:2i:88:TYR:C	40:2i:88:TYR:HD2	2.25	0.44
47:2p:27:LYS:HG3	47:2p:30:GLY:HA3	2.00	0.44
51:2t:10:LEU:HG	51:2t:12:ALA:H	1.83	0.44
54:2w:23:A:H2'	54:2w:24:G:C8	2.52	0.44
1:1A:121:G:H4'	1:1A:149:A:H5'	1.98	0.44
1:1A:310:A:OP2	20:1Y:21:LYS:NZ	2.49	0.44
1:1A:1580:A:OP2	1:1A:1580:A:H8	2.01	0.44
1:1A:2038:G:O6	62:1A:4267:HOH:O	2.20	0.44
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.18	0.44
1:1A:2835:A:N6	1:1A:2879:C:OP2	2.49	0.44
3:1D:140:THR:HB	3:1D:165:ILE:HD12	1.99	0.44
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.70	0.44
22:10:68:GLU:HB3	22:10:80:HIS:HB2	1.99	0.44
32:1a:1017:G:H2'	32:1a:1018:C:C6	2.53	0.44
32:1a:1364:U:C6	52:1u:14:TRP:HH2	2.35	0.44
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.17	0.44
1:2A:1406:U:H2'	1:2A:1407:C:C6	2.52	0.44
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.16	0.44
32:2a:1333:A:H2'	32:2a:1334:G:O4'	2.18	0.44
34:2c:72:LYS:C	34:2c:74:GLY:H	2.26	0.44
54:2w:8:4SU:S4	54:2w:14:A:N7	2.91	0.44
1:1A:1095:A:N6	1:1A:1096:A:H62	2.13	0.44
8:1I:9:LEU:HD23	8:1I:9:LEU:HA	1.75	0.44
20:1Y:13:VAL:HG12	20:1Y:74:PRO:HA	2.00	0.44
24:12:17:SER:OG	24:12:20:GLU:OE1	2.31	0.44
25:13:39:ASP:OD1	25:13:44:ARG:HD2	2.18	0.44
32:1a:26:A:O2'	35:1d:209:ARG:NH2	2.48	0.44
36:1e:137:GLU:HA	36:1e:140:ARG:HH11	1.81	0.44
1:2A:570:G:H2'	1:2A:2030:A:C5	2.52	0.44
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.18	0.44
1:2A:2758:A:C4	7:2H:67:LEU:HD21	2.53	0.44
17:2V:40:LEU:HD12	17:2V:46:VAL:HG11	1.99	0.44
32:2a:8:A:C6	35:2d:209:ARG:HB2	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:194:C:C2'	32:2a:195:A:H5"	2.47	0.44
32:2a:653:A:C8	39:2h:56:LYS:HG2	2.52	0.44
42:2k:48:ILE:O	42:2k:50:TYR:N	2.44	0.44
49:2r:52:PRO:O	49:2r:56:THR:HG23	2.18	0.44
52:2u:17:THR:O	52:2u:22:ARG:NH1	2.50	0.44
57:2y:35:A:O5'	57:2y:35:A:H8	2.01	0.44
1:1A:548:A:H61	17:1V:18:LEU:HA	1.83	0.44
21:1Z:45:ASP:O	21:1Z:49:ARG:HB2	2.17	0.44
25:13:55:ARG:NH2	25:13:57:GLU:HB2	2.28	0.44
38:1g:85:TYR:HB2	38:1g:86:GLN:H	1.69	0.44
1:2A:580:C:H2'	1:2A:581:C:C6	2.52	0.44
1:2A:2808:U:H5"	1:2A:2891:G:O6	2.18	0.44
32:2a:23:C:OP2	32:2a:561:U:N3	2.47	0.44
32:2a:324:G:N1	32:2a:327:A:OP2	2.50	0.44
33:2b:110:GLN:O	33:2b:110:GLN:HG2	2.17	0.44
34:2c:83:ARG:O	34:2c:85:ARG:N	2.50	0.44
35:2d:200:GLU:OE1	35:2d:200:GLU:N	2.45	0.44
37:2f:99:ALA:HB3	49:2r:29:PHE:CE1	2.53	0.44
44:2m:73:GLU:O	44:2m:77:ASN:HB2	2.17	0.44
54:2w:45:U:H5"	54:2w:46:G7M:OP2	2.17	0.44
57:2y:55:PSU:N1	57:2y:57:G:H5"	2.33	0.44
1:1A:686:G:N2	1:1A:788:A:H61	2.16	0.44
1:1A:1800:C:OP1	3:1D:264:LYS:NZ	2.44	0.44
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.99	0.44
62:1A:4709:HOH:O	29:17:43:THR:HB	2.18	0.44
9:1N:75:TYR:HA	9:1N:81:GLY:O	2.18	0.44
12:1Q:130:LYS:HB3	12:1Q:130:LYS:HE2	1.73	0.44
13:1R:98:LEU:HB2	13:1R:113:LEU:HD11	1.98	0.44
32:1a:7:G:O2'	36:1e:120:THR:O	2.36	0.44
32:1a:1425:U:H2'	32:1a:1426:C:C6	2.53	0.44
33:1b:116:GLU:HA	33:1b:119:GLU:HB2	2.00	0.44
40:1i:21:PRO:HA	40:1i:59:PHE:HA	2.00	0.44
1:2A:250:G:H2'	1:2A:251:A:C8	2.53	0.44
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.53	0.44
1:2A:1203:G:OP2	1:2A:1204:A:O2'	2.31	0.44
1:2A:1359:A:C2	1:2A:1372:U:O4	2.70	0.44
1:2A:2751:G:C8	7:2H:2:SER:HA	2.53	0.44
2:2B:9:G:OP1	14:2S:15:ARG:HD3	2.17	0.44
7:2H:86:GLU:HA	7:2H:131:VAL:O	2.17	0.44
8:2I:77:LEU:O	8:2I:143:SER:OG	2.30	0.44
12:2Q:43:THR:HA	12:2Q:94:VAL:HG12	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2Z:31:ARG:HD2	21:2Z:94:GLU:OE2	2.18	0.44
28:26:10:LEU:HB2	28:26:52:VAL:HG13	2.00	0.44
30:28:21:LYS:HD3	30:28:49:VAL:HG11	1.99	0.44
32:2a:23:C:H5	32:2a:561:U:O4	2.01	0.44
32:2a:107:G:H2'	32:2a:108:G:O4'	2.18	0.44
32:2a:340:U:H2'	32:2a:341:C:C6	2.52	0.44
32:2a:423:G:H3'	32:2a:423:G:N3	2.33	0.44
32:2a:1033:G:H2'	32:2a:1034:G:C8	2.38	0.44
32:2a:1144:G:N2	32:2a:1146:A:H62	2.15	0.44
32:2a:1304:G:C6	32:2a:1305:G:N1	2.85	0.44
32:2a:1441:G:H8	32:2a:1441:G:O5'	2.01	0.44
33:2b:76:GLN:C	33:2b:78:GLN:H	2.26	0.44
41:2j:7:LYS:HD3	41:2j:71:LEU:HD12	1.99	0.44
1:1A:2161:C:O2'	1:1A:2162:G:H5"	2.18	0.44
2:1B:13:A:N1	2:1B:69:G:O2'	2.48	0.44
5:1F:152:GLU:OE1	5:1F:191:ARG:HD2	2.17	0.44
21:1Z:70:LEU:HD11	21:1Z:98:MET:HE3	2.00	0.44
32:1a:539:A:H2'	32:1a:540:G:C8	2.53	0.44
32:1a:629:G:H2'	32:1a:630:G:O4'	2.18	0.44
32:1a:736:C:H2'	32:1a:737:A:C8	2.53	0.44
32:1a:933:G:O6	38:1g:3:ARG:NH2	2.50	0.44
32:1a:1054:C:C5	54:1w:34:G:H1'	2.53	0.44
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.51	0.44
33:1b:163:PHE:HA	33:1b:185:ILE:O	2.18	0.44
40:1i:8:GLY:HA3	40:1i:76:ALA:O	2.17	0.44
1:2A:394:A:C6	1:2A:395:U:C4	3.06	0.44
1:2A:613:G:O2'	1:2A:614(C):A:N1	2.46	0.44
1:2A:660:G:H5'	5:2F:99:TYR:CE1	2.53	0.44
1:2A:764:A:H5"	3:2D:210:GLY:HA2	1.99	0.44
1:2A:1405:U:H2'	1:2A:1406:U:H6	1.81	0.44
1:2A:1798:U:H5'	3:2D:259:THR:CG2	2.48	0.44
1:2A:2078:C:C4	1:2A:2079:U:C4	3.06	0.44
1:2A:2158:A:O2'	1:2A:2159:G:OP2	2.32	0.44
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.99	0.44
9:2N:62:VAL:CG1	9:2N:66:LYS:HB2	2.47	0.44
19:2X:32:PRO:O	19:2X:77:LYS:HE3	2.18	0.44
32:2a:143:A:O2'	32:2a:144:G:OP2	2.28	0.44
32:2a:537:G:H5"	43:2l:113:ARG:NH1	2.33	0.44
32:2a:826:C:H4'	39:2h:12:ARG:HG2	2.00	0.44
32:2a:1157:A:H61	32:2a:1178:G:H21	1.66	0.44
41:2j:25:GLU:O	41:2j:29:ARG:HG2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:534:U:H2'	1:1A:535:C:C6	2.53	0.43
1:1A:1792:G:O2'	1:1A:1830:C:OP1	2.35	0.43
1:1A:2128:C:N4	1:1A:2161:C:N3	2.66	0.43
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.53	0.43
18:1W:86:LEU:HD22	18:1W:96:ILE:HD11	2.00	0.43
26:14:40:HIS:HB3	26:14:43:TYR:HD2	1.82	0.43
1:2A:1287:A:C5	1:2A:1288:U:C4	3.06	0.43
1:2A:1598:C:H2'	1:2A:1599:C:H6	1.83	0.43
1:2A:2142:C:C4	1:2A:2143:C:N4	2.86	0.43
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.53	0.43
1:2A:2832:U:OP2	62:2A:3955:HOH:O	2.20	0.43
1:2A:2875:C:O2'	15:2T:2:ASN:OD1	2.22	0.43
1:2A:2893:G:H5"	1:2A:2894:G:O4'	2.18	0.43
3:2D:71:ASP:CB	3:2D:103:ARG:HH12	2.31	0.43
5:2F:181:LEU:HD11	5:2F:186:ILE:HD11	2.00	0.43
8:2I:84:GLY:C	8:2I:86:THR:H	2.26	0.43
10:2O:26:LYS:O	10:2O:30:ALA:HB2	2.17	0.43
14:2S:24:LEU:HD23	14:2S:24:LEU:HA	1.86	0.43
25:23:13:ILE:H	25:23:13:ILE:HG13	1.59	0.43
32:2a:598:U:H2'	32:2a:599:C:H6	1.82	0.43
32:2a:946:A:H2'	32:2a:947:G:C8	2.53	0.43
32:2a:1027:C:O2'	32:2a:1034:G:N2	2.51	0.43
33:2b:84:GLU:HB3	33:2b:219:VAL:HG21	2.00	0.43
35:2d:10:ARG:HG3	35:2d:11:LEU:HD12	2.00	0.43
35:2d:76:ARG:O	35:2d:80:GLU:HG2	2.18	0.43
35:2d:92:VAL:O	35:2d:96:LEU:HD22	2.18	0.43
49:2r:68:LYS:HE2	49:2r:68:LYS:HB2	1.86	0.43
1:1A:337:C:H2'	1:1A:338:G:O4'	2.18	0.43
1:1A:700:G:O2'	1:1A:1632:A:N3	2.47	0.43
1:1A:2136:C:C4	1:1A:2155:G:N1	2.86	0.43
4:1E:47:VAL:O	4:1E:80:GLU:HA	2.18	0.43
32:1a:193:C:H2'	32:1a:194:C:H6	1.83	0.43
35:1d:11:LEU:HG	35:1d:66:ARG:HD3	2.00	0.43
37:1f:44:GLY:HA2	37:1f:59:TYR:CE2	2.53	0.43
1:2A:890:A:H2'	1:2A:892:G:H8	1.82	0.43
1:2A:1248:G:C5	16:2U:3:ARG:HB2	2.52	0.43
3:2D:38:LYS:C	3:2D:38:LYS:HD3	2.43	0.43
6:2G:8:LYS:HD3	6:2G:100:TRP:CD1	2.53	0.43
7:2H:25:LYS:HE2	7:2H:27:LYS:HE3	1.99	0.43
7:2H:40:GLU:O	7:2H:41:MET:HE2	2.17	0.43
15:2T:51:ARG:HG3	15:2T:98:LYS:HD2	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:4:ALA:HB1	19:2X:42:ALA:HA	1.99	0.43
32:2a:48:C:H5"	32:2a:365:U:O4	2.17	0.43
32:2a:1369:C:H2'	32:2a:1370:G:O4'	2.18	0.43
32:2a:1512:U:H2'	32:2a:1513:A:H8	1.81	0.43
39:2h:121:ASP:HB2	39:2h:125:ARG:NH2	2.33	0.43
44:2m:3:ARG:N	44:2m:7:VAL:O	2.51	0.43
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.17	0.43
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.53	0.43
12:1Q:17:LEU:HD22	12:1Q:39:PRO:HB2	2.00	0.43
16:1U:104:GLN:NE2	16:1U:105:VAL:HG23	2.32	0.43
17:1V:19:LYS:HA	17:1V:94:LEU:O	2.17	0.43
25:13:26:LEU:O	25:13:35:ARG:NE	2.38	0.43
32:1a:735:C:H2'	32:1a:736:C:C6	2.53	0.43
33:1b:133:LYS:O	33:1b:137:ARG:HG3	2.17	0.43
38:1g:57:GLU:OE1	38:1g:59:LEU:HB3	2.17	0.43
47:1p:4:ILE:HB	47:1p:66:PRO:HA	2.00	0.43
48:1q:57:VAL:HG12	48:1q:76:LEU:HA	1.99	0.43
51:1t:83:ARG:HG2	51:1t:86:ARG:HH12	1.82	0.43
54:1w:19:G:H4'	54:1w:20:U:OP1	2.18	0.43
1:2A:108:U:OP1	1:2A:293:U:O2'	2.36	0.43
1:2A:271(A):A:N1	1:2A:272(D):G:O2'	2.44	0.43
1:2A:582:G:H2'	1:2A:583:G:C8	2.54	0.43
1:2A:1756:G:H4'	1:2A:1758:G:O4'	2.18	0.43
1:2A:2127:G:C2	1:2A:2161:C:C4	3.07	0.43
1:2A:2402:C:H1'	1:2A:2403:C:H5	1.83	0.43
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.84	0.43
9:2N:62:VAL:HG11	9:2N:66:LYS:HB2	2.00	0.43
33:2b:54:THR:O	33:2b:58:ILE:HG13	2.18	0.43
1:1A:72:U:H5'	24:12:61:LEU:HD12	2.00	0.43
1:1A:1512:U:H2'	1:1A:1513:C:C6	2.53	0.43
2:1B:119:G:O6	2:1B:120:A:N6	2.51	0.43
6:1G:34:LEU:HD23	6:1G:161:THR:HG22	2.00	0.43
6:1G:179:PRO:HG3	26:14:43:TYR:CZ	2.53	0.43
15:1T:29:ARG:HG3	15:1T:46:GLU:HB2	1.99	0.43
17:1V:82:ARG:NE	62:1V:301:HOH:O	2.45	0.43
32:1a:708:C:H2'	32:1a:709:G:C8	2.46	0.43
32:1a:962:C:H2'	32:1a:963:G:O4'	2.19	0.43
34:1c:121:ALA:O	34:1c:125:GLU:HG3	2.19	0.43
35:1d:142:PRO:HG3	35:1d:187:ARG:HA	2.00	0.43
37:1f:68:PRO:HG3	37:1f:71:ARG:CZ	2.49	0.43
40:1i:9:ARG:HG3	40:1i:14:VAL:HG12	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.34	0.43
52:1u:3:LYS:HD3	52:1u:14:TRP:CD1	2.53	0.43
1:2A:519:U:H2'	1:2A:520:G:H8	1.83	0.43
1:2A:940:G:N3	1:2A:1191:G:H4'	2.33	0.43
6:2G:16:ARG:HB2	6:2G:17:PRO:HD3	2.00	0.43
6:2G:63:ILE:HD12	6:2G:141:PHE:HB3	2.00	0.43
8:2I:75:LEU:HD13	8:2I:105:HIS:CD2	2.53	0.43
11:2P:98:GLU:HG3	11:2P:99:LEU:N	2.34	0.43
16:2U:92:ARG:HA	16:2U:95:LEU:HB2	2.00	0.43
25:23:11:SER:HA	25:23:31:LEU:HD21	2.00	0.43
32:2a:8:A:N6	35:2d:205:GLU:O	2.48	0.43
32:2a:520:A:N1	32:2a:536:C:H1'	2.32	0.43
32:2a:615:C:H2'	32:2a:616:G:O4'	2.18	0.43
32:2a:678:U:H2'	32:2a:679:C:C6	2.53	0.43
35:2d:110:PHE:N	35:2d:110:PHE:CD1	2.86	0.43
37:2f:25:ILE:HD13	37:2f:82:ARG:HD2	1.99	0.43
37:2f:83:ASP:N	37:2f:83:ASP:OD1	2.50	0.43
40:2i:14:VAL:CG2	40:2i:66:ARG:HG2	2.49	0.43
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.54	0.43
44:2m:92:HIS:CE1	44:2m:98:VAL:HG21	2.54	0.43
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.53	0.43
1:1A:2418:A:H2'	1:1A:2419:U:C6	2.53	0.43
21:1Z:93:ASP:HA	21:1Z:131:ARG:HH12	1.83	0.43
41:1j:43:ARG:HB3	41:1j:67:THR:OG1	2.19	0.43
1:2A:614:U:H2'	1:2A:614(A):U:O4'	2.18	0.43
6:2G:16:ARG:HE	6:2G:31:VAL:HG11	1.82	0.43
6:2G:123:ASN:OD1	6:2G:123:ASN:N	2.51	0.43
11:2P:45:LEU:HD12	11:2P:45:LEU:HA	1.82	0.43
32:2a:674:G:N2	32:2a:717:C:O2	2.51	0.43
32:2a:1004:A:N3	32:2a:1038:C:C2	2.87	0.43
32:2a:1104:G:O3'	33:2b:111:ARG:NH2	2.51	0.43
32:2a:1426:C:H2'	32:2a:1427:U:H6	1.83	0.43
34:2c:101:LEU:HD13	34:2c:102:ASN:N	2.33	0.43
41:2j:49:VAL:HG13	41:2j:61:GLU:HB3	2.01	0.43
1:1A:746:A:H2'	1:1A:2612:C:H5"	1.99	0.43
1:1A:890:A:H2'	1:1A:892:G:O4'	2.19	0.43
5:1F:155:LEU:HB2	5:1F:189:THR:HG21	2.01	0.43
13:1R:38:VAL:HG22	13:1R:112:ALA:HB2	1.99	0.43
13:1R:61:HIS:O	13:1R:65:LEU:HG	2.18	0.43
15:1T:116:ALA:HB1	15:1T:121:ILE:HD11	1.99	0.43
32:1a:401:C:H2'	32:1a:402:G:C8	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:816:A:OP2	32:1a:1527:C:H5'	2.19	0.43
32:1a:942:G:H21	40:1i:124:GLN:NE2	2.16	0.43
33:1b:60:ASP:O	33:1b:63:MET:HB2	2.19	0.43
44:1m:49:THR:O	44:1m:53:VAL:N	2.48	0.43
48:1q:83:ASP:OD1	48:1q:83:ASP:N	2.45	0.43
1:2A:1171:G:H22	1:2A:1178:C:H42	1.66	0.43
1:2A:1473:G:C2	1:2A:1474:C:C2	3.06	0.43
1:2A:1502:C:H2'	1:2A:1503:U:C6	2.53	0.43
1:2A:1702:G:H2'	1:2A:1703:G:O4'	2.17	0.43
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.34	0.43
1:2A:2203:U:H2'	1:2A:2205:C:C6	2.54	0.43
1:2A:2529:G:H5"	1:2A:2530:A:H5"	1.99	0.43
2:2B:14:U:H1'	2:2B:108:U:O2'	2.19	0.43
6:2G:106:LEU:O	6:2G:110:ALA:HB3	2.18	0.43
9:2N:112:LEU:O	9:2N:116:LEU:HG	2.18	0.43
28:26:14:THR:OG1	28:26:48:VAL:HG13	2.18	0.43
32:2a:200:G:H2'	32:2a:201:C:O4'	2.19	0.43
32:2a:1117:G:N2	32:2a:1180:A:O2'	2.52	0.43
32:2a:1438:G:H2'	32:2a:1439:C:C6	2.54	0.43
33:2b:187:LEU:HA	33:2b:201:ILE:HB	2.01	0.43
37:2f:9:VAL:HB	37:2f:87:ARG:HB2	1.99	0.43
37:2f:76:ALA:HB1	37:2f:80:ARG:NH2	2.34	0.43
40:2i:5:TYR:OH	40:2i:16:ARG:HG2	2.18	0.43
49:2r:73:ALA:HB3	49:2r:79:LEU:HD12	2.00	0.43
50:2s:49:ILE:HD13	50:2s:71:LEU:HD22	1.99	0.43
51:2t:72:LEU:HD23	51:2t:77:ALA:HB2	2.01	0.43
1:1A:271(B):C:H42	1:1A:271(V):G:H1	1.66	0.43
1:1A:613:G:O2'	1:1A:614(C):A:N1	2.51	0.43
1:1A:1762:A:H2'	62:1A:5727:HOH:O	2.18	0.43
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.54	0.43
1:1A:2100:G:H2'	1:1A:2101:G:C8	2.54	0.43
1:1A:2563:U:H4'	10:1O:28:SER:HA	2.01	0.43
1:1A:2771:C:H2'	1:1A:2772:C:H6	1.83	0.43
4:1E:36:ARG:NH1	4:1E:85:ASN:OD1	2.51	0.43
7:1H:24:VAL:HG11	7:1H:43:VAL:HG11	2.01	0.43
28:16:9:LEU:HD21	28:16:25:LYS:HB3	2.00	0.43
32:1a:197:A:C6	32:1a:221:C:H4'	2.53	0.43
32:1a:1273:G:C2	32:1a:1274:G:H1'	2.54	0.43
32:1a:1286:A:H2'	32:1a:1287:A:H4'	2.01	0.43
34:1c:12:LEU:HD23	34:1c:12:LEU:HA	1.85	0.43
45:1n:33:VAL:HA	45:1n:40:CYS:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:323:G:H1'	1:2A:1205:U:O2	2.17	0.43
1:2A:601:C:O2	1:2A:605:C:H4'	2.19	0.43
1:2A:947:G:H2'	1:2A:948:G:C8	2.54	0.43
32:2a:841:U:C5	32:2a:848:C:H1'	2.54	0.43
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.54	0.43
33:2b:74:LYS:HB3	33:2b:74:LYS:HE2	1.70	0.43
34:2c:39:ILE:H	34:2c:39:ILE:HG13	1.41	0.43
34:2c:70:VAL:HG23	34:2c:73:PRO:HG3	2.01	0.43
39:2h:81:HIS:N	39:2h:138:TRP:O	2.52	0.43
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	2.01	0.43
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.53	0.43
46:2o:34:LEU:HD11	46:2o:38:ARG:HE	1.84	0.43
1:1A:1155:A:P	16:1U:55:ARG:HD2	2.59	0.43
1:1A:1508:A:O2'	1:1A:1509:C:H5"	2.18	0.43
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.18	0.43
1:1A:2130:U:O2'	1:1A:2131:G:N2	2.52	0.43
1:1A:2291:U:O2'	1:1A:2374:C:O2	2.35	0.43
1:1A:2846:G:H2'	1:1A:2847:U:O4'	2.18	0.43
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	2.01	0.43
10:1O:64:ARG:HD2	10:1O:79:PHE:CD1	2.53	0.43
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.19	0.43
21:1Z:103:ARG:O	21:1Z:139:VAL:N	2.50	0.43
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.51	0.43
39:1h:20:TYR:HA	39:1h:65:TYR:CZ	2.54	0.43
44:1m:4:ILE:HA	44:1m:5:ALA:HA	1.88	0.43
1:2A:196:A:N3	1:2A:196:A:H2'	2.34	0.43
1:2A:531:C:H4'	1:2A:532:A:H5"	2.00	0.43
1:2A:1637:A:H4'	1:2A:2711:A:O2'	2.19	0.43
1:2A:1812:A:O2'	3:2D:45:ASN:N	2.47	0.43
1:2A:2162:G:H4'	1:2A:2172:U:H2'	2.01	0.43
1:2A:2626:C:H2'	1:2A:2627:G:O4'	2.19	0.43
4:2E:36:ARG:HG2	4:2E:47:VAL:HG12	2.00	0.43
32:2a:148:G:H2'	32:2a:149:A:C8	2.54	0.43
32:2a:685:G:C2	32:2a:686:U:C4	3.07	0.43
32:2a:881:G:OP2	43:2l:12:ARG:NH2	2.52	0.43
32:2a:1134:G:H2'	32:2a:1135:U:O4'	2.19	0.43
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.53	0.43
38:2g:99:LEU:HD23	38:2g:102:ARG:HH12	1.83	0.43
39:2h:90:GLY:O	48:2q:34:LYS:HE2	2.18	0.43
1:1A:27:G:N2	1:1A:512:G:H1'	2.34	0.43
1:1A:1265:A:OP2	62:1A:4217:HOH:O	2.21	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1815:A:P	3:1D:54:ARG:HH22	2.42	0.43
4:1E:119:ARG:HG2	4:1E:120:TRP:CE2	2.54	0.43
6:1G:149:VAL:HG22	6:1G:150:ASP:H	1.84	0.43
11:1P:42:SER:O	62:1P:301:HOH:O	2.21	0.43
13:1R:71:GLN:NE2	62:1R:307:HOH:O	2.52	0.43
23:11:44:PRO:HB2	23:11:46:LEU:HD12	2.01	0.43
32:1a:542:G:H5'	35:1d:41:GLY:HA3	2.01	0.43
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.48	0.43
32:1a:1086:U:H3	32:1a:1099:G:H22	1.67	0.43
32:1a:1507:A:OP2	53:1v:13:A:N6	2.52	0.43
33:1b:28:PHE:O	33:1b:32:ILE:HG13	2.19	0.43
34:1c:6:HIS:NE2	34:1c:8:ILE:HB	2.34	0.43
39:1h:2:LEU:HD12	39:1h:3:THR:H	1.83	0.43
46:1o:61:GLY:O	46:1o:65:ARG:HG3	2.18	0.43
1:2A:271(G):C:H2'	1:2A:271(H):G:C8	2.54	0.43
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.19	0.43
1:2A:700:G:H2'	1:2A:701:G:O4'	2.19	0.43
1:2A:2219:G:H8	1:2A:2219:G:O5'	2.02	0.43
3:2D:70:TRP:HB3	3:2D:190:TYR:CZ	2.54	0.43
6:2G:114:ILE:HD12	6:2G:117:PHE:CE1	2.54	0.43
12:2Q:137:TYR:CE1	21:2Z:83:PRO:HG3	2.54	0.43
14:2S:67:ARG:HH22	14:2S:103:GLU:HB2	1.84	0.43
18:2W:14:PRO:O	18:2W:18:ARG:HG3	2.19	0.43
21:2Z:5:LEU:O	21:2Z:59:LEU:HA	2.19	0.43
32:2a:323:U:H2'	32:2a:324:G:O4'	2.19	0.43
32:2a:693:G:C6	32:2a:694:A:C6	3.06	0.43
32:2a:1317:C:O2	50:2s:37:ARG:NH2	2.52	0.43
38:2g:125:MET:O	38:2g:129:GLU:HG3	2.18	0.43
49:2r:74:ARG:HG2	49:2r:80:PRO:O	2.19	0.43
1:1A:604:G:P	11:1P:90:ARG:HH21	2.42	0.43
1:1A:1080:C:H5'	1:1A:1081:U:OP2	2.19	0.43
1:1A:1176:G:H21	1:1A:1178:C:P	2.40	0.43
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.54	0.43
1:1A:2441:C:OP2	1:1A:2586:C:O2'	2.33	0.43
1:1A:2782:G:N2	62:1A:4498:HOH:O	2.51	0.43
18:1W:71:VAL:HA	18:1W:107:LEU:HD23	2.01	0.43
32:1a:838:G:H2'	32:1a:839:U:H2'	2.00	0.43
32:1a:1032:G:H2'	32:1a:1033:G:H8	1.84	0.43
32:1a:1039:C:H2'	32:1a:1040:U:C5	2.54	0.43
32:1a:1129:C:O2'	32:1a:1139:G:N7	2.46	0.43
41:1j:81:THR:C	41:1j:83:GLU:N	2.75	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:1q:11:VAL:HG12	48:1q:85:VAL:HG13	2.01	0.43
54:1w:48:C:C2	54:1w:59:U:H1'	2.54	0.43
1:2A:11:G:C2'	1:2A:12:U:H5'	2.49	0.43
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.17	0.43
2:2B:39:A:O2'	2:2B:40:U:H5'	2.19	0.43
3:2D:26:LYS:HB3	3:2D:83:GLU:HG2	2.00	0.43
6:2G:179:PRO:HG3	26:24:43:TYR:CZ	2.54	0.43
7:2H:157:TYR:CE1	7:2H:172:LYS:HG3	2.53	0.43
14:2S:25:ARG:HD3	14:2S:42:ASP:OD2	2.18	0.43
14:2S:25:ARG:NH1	14:2S:40:ILE:HG21	2.34	0.43
16:2U:58:ARG:HA	16:2U:61:TRP:CE3	2.54	0.43
30:28:29:LYS:HD2	30:28:44:LYS:HB3	2.00	0.43
32:2a:64:G:C4'	32:2a:65:U:H3'	2.47	0.43
32:2a:624:C:H2'	32:2a:625:G:C8	2.52	0.43
32:2a:688:G:O2'	32:2a:704:A:N1	2.42	0.43
32:2a:731:G:OP1	32:2a:766:A:H1'	2.19	0.43
32:2a:1101:A:H62	33:2b:175:ARG:HH21	1.65	0.43
32:2a:1373:G:OP1	38:2g:36:LYS:HE2	2.19	0.43
54:2w:12:U:H2'	54:2w:13:C:O4'	2.18	0.43
1:1A:747:U:O2	1:1A:2014:A:H1'	2.18	0.42
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.52	0.42
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.84	0.42
8:1I:38:LEU:HG	8:1I:40:THR:HG22	2.01	0.42
9:1N:60:ILE:HG13	9:1N:61:ARG:H	1.84	0.42
25:13:7:LYS:HE3	25:13:32:GLN:NE2	2.34	0.42
32:1a:103:C:O2'	32:1a:172:A:N1	2.50	0.42
32:1a:963:G:H5'	62:1a:1992:HOH:O	2.18	0.42
32:1a:1068:G:H8	32:1a:1068:G:OP2	2.02	0.42
32:1a:1117:G:H5"	40:1i:104:ARG:NH1	2.34	0.42
35:1d:42:GLN:HB3	35:1d:43:HIS:CD2	2.54	0.42
49:1r:24:ALA:C	49:1r:26:LEU:H	2.27	0.42
54:1w:43:C:H2'	54:1w:44:G:C8	2.54	0.42
1:2A:81:G:HO2'	1:2A:295:G:HO2'	1.64	0.42
1:2A:534:U:H5'	16:2U:42:ALA:HB1	2.00	0.42
1:2A:605:C:H2'	1:2A:606:U:O4'	2.19	0.42
1:2A:2128:C:H2'	1:2A:2129:C:O4'	2.19	0.42
1:2A:2165:G:H2'	1:2A:2166:G:H5"	2.01	0.42
2:2B:8:U:O3'	14:2S:25:ARG:NH2	2.48	0.42
2:2B:80:U:H2'	2:2B:81:G:C8	2.54	0.42
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	2.00	0.42
12:2Q:16:ARG:HG2	12:2Q:18:LYS:HE2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:2:PHE:CZ	17:2V:41:GLY:HA3	2.54	0.42
21:2Z:30:ASN:HA	21:2Z:89:PHE:HE1	1.83	0.42
21:2Z:159:PRO:HA	21:2Z:160:GLY:HA2	1.60	0.42
32:2a:114:U:H2'	32:2a:115:G:C8	2.54	0.42
32:2a:181:G:H4'	32:2a:182:U:H5'	2.01	0.42
32:2a:838:G:H1	32:2a:848:C:H42	1.66	0.42
32:2a:997:U:H2'	32:2a:998:G:O4'	2.19	0.42
32:2a:1256:A:OP1	34:2c:26:LYS:NZ	2.48	0.42
33:2b:51:LEU:HD23	33:2b:201:ILE:HD12	2.00	0.42
1:1A:106:C:H1'	20:1Y:1:MET:HE2	2.01	0.42
1:1A:1665:A:H2'	1:1A:1666:G:O4'	2.18	0.42
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.18	0.42
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	2.00	0.42
5:1F:182:ASN:HD21	5:1F:185:ASP:CG	2.26	0.42
6:1G:28:VAL:O	6:1G:31:VAL:HG13	2.20	0.42
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.19	0.42
32:1a:750:G:N3	46:1o:23:GLY:HA3	2.34	0.42
32:1a:865:A:N3	32:1a:918:A:O2'	2.42	0.42
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	2.01	0.42
39:1h:94:TYR:CE1	39:1h:132:GLU:HB2	2.54	0.42
57:1y:57:G:H2'	57:1y:58:A:H5'	2.00	0.42
57:1y:59:U:H2'	57:1y:60:U:O4'	2.20	0.42
1:2A:747:U:O2	1:2A:2014:A:H1'	2.19	0.42
1:2A:1141:U:H5"	9:2N:25:ARG:HH21	1.84	0.42
1:2A:1502:C:H2'	1:2A:1503:U:H6	1.83	0.42
1:2A:1913:A:N6	54:2w:38:A:H5'	2.34	0.42
5:2F:119:ARG:CZ	5:2F:119:ARG:HB3	2.49	0.42
6:2G:115:ARG:HH12	44:2m:6:GLY:C	2.27	0.42
7:2H:149:ARG:HA	7:2H:162:ILE:HG21	2.01	0.42
32:2a:37:U:O2'	32:2a:500:G:H4'	2.19	0.42
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.54	0.42
32:2a:782:A:H2'	32:2a:783:C:O4'	2.19	0.42
32:2a:1068:G:H8	32:2a:1068:G:OP2	2.03	0.42
32:2a:1316:G:H22	32:2a:1319:A:C5'	2.31	0.42
51:2t:41:ILE:HD13	51:2t:88:VAL:HG23	2.01	0.42
1:1A:602:G:O2'	1:1A:655:A:N6	2.53	0.42
1:1A:1269:A:H2'	1:1A:1270:C:C6	2.54	0.42
1:1A:2118:U:O4	1:1A:2149:G:H1'	2.19	0.42
2:1B:4:C:H2'	2:1B:5:C:O4'	2.19	0.42
5:1F:135:LYS:HB2	5:1F:138:GLU:HG3	2.01	0.42
32:1a:617:G:H4'	47:1p:44:THR:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:820:U:H4'	32:1a:821:G:OP2	2.17	0.42
1:2A:39:C:H2'	1:2A:40:C:C6	2.54	0.42
1:2A:64:A:O3'	19:2X:71:GLY:HA3	2.19	0.42
1:2A:251:A:C5	1:2A:252:G:H1'	2.54	0.42
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	2.02	0.42
1:2A:1312:U:OP2	19:2X:63:LYS:HD2	2.19	0.42
1:2A:1889:A:N1	1:2A:2234:G:H1'	2.34	0.42
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.34	0.42
1:2A:2345:G:N3	1:2A:2381:C:H2'	2.34	0.42
1:2A:2743:C:H2'	1:2A:2744:G:O4'	2.18	0.42
2:2B:19:G:H2'	2:2B:20:C:O4'	2.19	0.42
6:2G:14:GLU:C	6:2G:17:PRO:HD2	2.44	0.42
8:2I:26:ALA:HA	8:2I:30:LEU:HB2	2.02	0.42
12:2Q:75:THR:HG21	12:2Q:87:LYS:HE3	2.01	0.42
19:2X:1:MET:HE1	24:22:26:ARG:HB2	2.01	0.42
21:2Z:77:ASP:OD1	21:2Z:80:ARG:NH1	2.51	0.42
32:2a:58:C:O2'	32:2a:388:G:N7	2.45	0.42
32:2a:643:C:H2'	32:2a:644:G:H8	1.84	0.42
32:2a:825:G:H2'	32:2a:826:C:H6	1.83	0.42
32:2a:1005:A:H3'	32:2a:1006:C:H6	1.82	0.42
33:2b:111:ARG:HD3	33:2b:111:ARG:HA	1.79	0.42
39:2h:20:TYR:CE1	39:2h:76:PRO:HG2	2.54	0.42
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.52	0.42
1:1A:94:C:H2'	1:1A:94(A):G:O4'	2.20	0.42
1:1A:1071:G:H4'	1:1A:1089:G:OP2	2.19	0.42
1:1A:2130:U:O5'	1:1A:2130:U:H6	2.03	0.42
1:1A:2611:U:C4	27:15:3:LYS:HG2	2.55	0.42
32:1a:1102:A:O3'	33:1b:96:ARG:NH2	2.45	0.42
34:1c:87:LEU:O	34:1c:91:LEU:N	2.35	0.42
36:1e:24:ARG:H	36:1e:24:ARG:HG2	1.62	0.42
36:1e:79:GLU:HB3	36:1e:92:LYS:HG3	2.00	0.42
57:1y:19:G:C6	57:1y:56:C:N4	2.88	0.42
1:2A:194:G:N7	62:2A:4047:HOH:O	2.37	0.42
1:2A:252:G:OP1	11:2P:50:ARG:NH1	2.51	0.42
1:2A:272:G:H4'	1:2A:272(A):U:H5"	2.00	0.42
1:2A:632:A:H2'	1:2A:633:A:C8	2.54	0.42
1:2A:856:C:O4'	22:20:27:GLU:HB3	2.19	0.42
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.57	0.42
13:2R:38:VAL:HG22	13:2R:112:ALA:HB2	2.02	0.42
19:2X:44:GLU:HG2	19:2X:49:VAL:O	2.19	0.42
24:22:38:GLN:HE21	24:22:38:GLN:HB3	1.69	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:28:8:LYS:HB3	30:28:12:LYS:HE3	2.02	0.42
32:2a:509:A:H5"	35:2d:55:ALA:HB2	2.00	0.42
32:2a:936:C:H2'	32:2a:937:A:O4'	2.19	0.42
32:2a:1265:G:C6	32:2a:1266:G:C5	3.07	0.42
34:2c:16:ARG:HD2	34:2c:17:ASP:H	1.85	0.42
34:2c:195:VAL:C	34:2c:196:LEU:HD23	2.44	0.42
50:2s:47:HIS:HB3	50:2s:62:ILE:HD13	1.99	0.42
1:1A:819:A:C4	1:1A:1189:A:C2	3.07	0.42
1:1A:1256:G:H1'	5:1F:82:ILE:HD11	2.01	0.42
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.67	0.42
2:1B:9:G:OP1	14:1S:15:ARG:HD3	2.20	0.42
9:1N:28:THR:HG23	62:1N:304:HOH:O	2.19	0.42
11:1P:97:PRO:HG3	11:1P:112:LEU:HD23	2.01	0.42
18:1W:4:LYS:HB3	18:1W:4:LYS:HE2	1.92	0.42
21:1Z:125:LEU:C	21:1Z:164:ALA:HB3	2.44	0.42
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.19	0.42
35:1d:76:ARG:NE	35:1d:80:GLU:OE2	2.46	0.42
41:1j:47:PHE:N	41:1j:63:PHE:O	2.52	0.42
47:1p:14:ASN:HA	47:1p:42:ARG:NH2	2.33	0.42
49:1r:73:ALA:HB3	49:1r:79:LEU:HD12	2.02	0.42
57:1y:20:U:O3'	57:1y:21:A:H4'	2.19	0.42
1:2A:1475:G:C2	1:2A:1517:G:C2	3.08	0.42
6:2G:173:LEU:HB3	6:2G:178:PHE:CD1	2.55	0.42
11:2P:121:LYS:O	11:2P:123:LEU:N	2.52	0.42
12:2Q:109:VAL:HG22	12:2Q:110:THR:H	1.84	0.42
32:2a:921:U:O2'	36:2e:19:MET:O	2.30	0.42
32:2a:1268:A:H2'	32:2a:1269:A:C8	2.54	0.42
33:2b:8:LYS:O	33:2b:8:LYS:HG2	2.19	0.42
35:2d:155:LEU:HA	35:2d:155:LEU:HD23	1.80	0.42
49:2r:32:ARG:HA	49:2r:69:THR:HG21	2.02	0.42
57:2y:63:G:H2'	57:2y:64:A:H8	1.82	0.42
1:1A:184:C:H2'	1:1A:185:U:H6	1.84	0.42
1:1A:504:U:H5'	1:1A:506:G:OP2	2.20	0.42
1:1A:708:C:H2'	1:1A:709:U:H6	1.84	0.42
1:1A:1041:C:N4	1:1A:1114:G:H1	2.15	0.42
1:1A:1076:C:O2'	1:1A:1077:A:N7	2.51	0.42
1:1A:2110:G:H5"	1:1A:2145:C:N4	2.34	0.42
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.54	0.42
2:1B:35:U:H2'	2:1B:36:C:O4'	2.19	0.42
4:1E:8:LYS:NZ	4:1E:188:VAL:O	2.53	0.42
6:1G:131:TYR:HB3	6:1G:159:VAL:CG1	2.47	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:79:ARG:NH1	11:1P:109:GLY:O	2.46	0.42
12:1Q:65:PHE:HB2	12:1Q:105:GLU:HB2	2.00	0.42
21:1Z:104:PHE:CE1	21:1Z:119:GLU:HG2	2.55	0.42
32:1a:691:G:H2'	32:1a:692:U:C6	2.54	0.42
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.54	0.42
32:1a:1239:A:O2'	38:1g:114:ARG:O	2.32	0.42
32:1a:1367:C:H5'	41:1j:60:ARG:NH1	2.35	0.42
1:2A:11:G:O5'	1:2A:11:G:H8	2.03	0.42
1:2A:176:G:O2'	1:2A:177:G:H5'	2.20	0.42
1:2A:363(D):G:H2'	1:2A:363(E):U:O4'	2.20	0.42
1:2A:616:G:H4'	5:2F:205:ARG:HH21	1.85	0.42
1:2A:811:U:H2'	11:2P:21:ARG:HA	2.00	0.42
1:2A:827:U:O2'	1:2A:2068:U:C2	2.65	0.42
1:2A:1129:A:N6	1:2A:2491:U:OP1	2.50	0.42
1:2A:2336:A:H61	22:20:43:THR:HG21	1.83	0.42
1:2A:2432:A:H5"	62:2A:4819:HOH:O	2.18	0.42
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.19	0.42
5:2F:119:ARG:HG2	5:2F:119:ARG:O	2.20	0.42
13:2R:26:LYS:HE2	13:2R:70:LEU:O	2.20	0.42
14:2S:80:LEU:HA	14:2S:80:LEU:HD23	1.77	0.42
32:2a:195:A:H1'	32:2a:222:U:O2'	2.20	0.42
32:2a:737:A:H4'	37:2f:72:VAL:HG11	2.01	0.42
32:2a:1025:U:N3	32:2a:1036:G:N1	2.66	0.42
32:2a:1237:C:N4	32:2a:1337:G:H1	2.15	0.42
35:2d:176:LEU:HD12	35:2d:182:LYS:O	2.19	0.42
37:2f:2:ARG:HG3	37:2f:69:GLU:HG2	2.02	0.42
1:1A:723:G:H2'	1:1A:724:U:O4'	2.20	0.42
1:1A:747:U:O2'	62:1A:4260:HOH:O	2.19	0.42
1:1A:1155:A:OP1	16:1U:55:ARG:HD2	2.20	0.42
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.02	0.42
1:1A:1938:A:OP2	62:1A:4269:HOH:O	2.21	0.42
1:1A:2059:A:H2'	1:1A:2503:2MA:HM23	2.02	0.42
1:1A:2167:U:O2	1:1A:2167:U:H2'	2.18	0.42
1:1A:2540:C:H2'	1:1A:2541:A:O4'	2.19	0.42
1:1A:2572:A:O5'	1:1A:2574:G:H4'	2.19	0.42
2:1B:57:A:H1'	6:1G:29:TRP:HB2	2.02	0.42
32:1a:319:G:H2'	32:1a:320:C:O4'	2.19	0.42
32:1a:1346:A:N1	32:1a:1374:A:H5"	2.34	0.42
32:1a:1525:G:P	42:1k:120:ARG:HH22	2.41	0.42
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.20	0.42
33:1b:155:LEU:HD12	33:1b:155:LEU:HA	1.89	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.46	0.42
57:1y:19:G:N1	57:1y:56:C:N4	2.66	0.42
1:2A:674:G:H1'	5:2F:74:ARG:HD3	2.02	0.42
1:2A:2185:C:H2'	1:2A:2186:G:O4'	2.19	0.42
1:2A:2261:C:C2	1:2A:2280:G:N2	2.88	0.42
5:2F:12:LEU:HD12	5:2F:124:LEU:HD21	2.02	0.42
6:2G:3:LEU:HD13	26:24:25:TYR:CZ	2.55	0.42
19:2X:90:GLU:C	19:2X:92:LEU:H	2.28	0.42
24:22:46:GLN:HB2	24:22:49:LYS:HD2	2.01	0.42
24:22:51:ARG:HE	24:22:51:ARG:HB2	1.49	0.42
32:2a:431:A:H2'	32:2a:432:A:H8	1.85	0.42
32:2a:757:U:O2'	32:2a:879:C:O2	2.36	0.42
32:2a:1370:G:C8	40:2i:109:VAL:HG11	2.55	0.42
54:2w:39:PSU:H2'	54:2w:40:C:H6	1.85	0.42
57:2y:64:A:H2'	57:2y:65:G:H5'	2.01	0.42
1:1A:64:A:C5	19:1X:66:LEU:HD13	2.55	0.42
1:1A:227:A:H4'	1:1A:228:A:O4'	2.19	0.42
1:1A:1062:G:P	1:1A:1070:A:H1'	2.60	0.42
1:1A:1791:A:OP2	1:1A:1791:A:H8	2.03	0.42
1:1A:2138:C:O2	1:1A:2153:G:N1	2.51	0.42
4:1E:111:ARG:HG2	4:1E:118:LYS:HD3	2.02	0.42
5:1F:132:VAL:HA	5:1F:138:GLU:HB3	2.01	0.42
6:1G:98:ARG:CZ	26:14:1:MET:HE3	2.50	0.42
7:1H:157:TYR:CE1	7:1H:172:LYS:HG3	2.55	0.42
17:1V:71:LEU:HA	17:1V:71:LEU:HD23	1.79	0.42
32:1a:146:G:C2	32:1a:147:G:C4	3.08	0.42
32:1a:472:A:OP2	47:1p:75:ARG:NH2	2.48	0.42
32:1a:714:G:H2'	32:1a:715:A:C8	2.54	0.42
32:1a:909:A:H2'	32:1a:910:C:O4'	2.20	0.42
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.20	0.42
39:1h:103:VAL:HG21	39:1h:109:ILE:O	2.20	0.42
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.84	0.42
1:2A:222:A:H3'	1:2A:421:U:H5'	2.01	0.42
1:2A:852:G:H2'	1:2A:853:G:C8	2.48	0.42
1:2A:1745(A):C:H5'	1:2A:1746:G:OP2	2.20	0.42
1:2A:2130:U:O2	1:2A:2134:A:O2'	2.37	0.42
5:2F:197:ASP:O	5:2F:200:GLU:HB3	2.20	0.42
8:2I:58:LEU:HG	8:2I:62:LYS:HD2	2.02	0.42
10:2O:5:GLN:HE21	10:2O:5:GLN:HB3	1.66	0.42
28:26:14:THR:OG1	28:26:48:VAL:O	2.36	0.42
32:2a:382:A:H2'	32:2a:383:A:C8	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1356:G:N2	32:2a:1367:C:C2	2.88	0.42
37:2f:99:ALA:HB1	49:2r:23:LYS:NZ	2.35	0.42
48:2q:81:ARG:HA	48:2q:81:ARG:HD2	1.82	0.42
51:2t:40:ALA:HB2	51:2t:55:ILE:HG22	2.02	0.42
57:2y:14:A:H2'	57:2y:15:G:C8	2.54	0.42
1:1A:2101:G:H2'	1:1A:2102:U:C6	2.55	0.42
1:1A:2124:G:C6	1:1A:2125:G:C2	3.08	0.42
1:1A:2163:C:H5"	1:1A:2164:C:OP2	2.20	0.42
3:1D:71:ASP:CB	3:1D:103:ARG:HH12	2.27	0.42
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	2.02	0.42
7:1H:154:PRO:HB3	7:1H:163:TYR:CE1	2.55	0.42
20:1Y:102:CYS:SG	20:1Y:104:GLY:N	2.84	0.42
25:13:3:ARG:HB2	25:13:59:VAL:HG23	2.00	0.42
32:1a:276:G:O2'	48:1q:68:ARG:NH1	2.53	0.42
32:1a:826:C:H5'	39:1h:12:ARG:CZ	2.50	0.42
35:1d:107:ARG:NH2	35:1d:194:LEU:HG	2.35	0.42
41:1j:62:HIS:HB3	45:1n:59:ALA:HB3	2.02	0.42
44:1m:3:ARG:NH2	44:1m:9:ILE:O	2.50	0.42
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	2.02	0.42
48:1q:26:GLN:HE21	48:1q:26:GLN:HB2	1.60	0.42
49:1r:36:ASN:HB3	49:1r:39:VAL:HB	2.02	0.42
1:2A:81:G:H2'	1:2A:82:G:O4'	2.20	0.42
1:2A:289:A:H61	1:2A:351:G:H1'	1.85	0.42
1:2A:2483:C:H2'	1:2A:2484:G:O4'	2.20	0.42
3:2D:33:LEU:HA	3:2D:33:LEU:HD23	1.85	0.42
5:2F:129:PHE:CD2	5:2F:163:VAL:HG21	2.55	0.42
5:2F:144:LYS:C	5:2F:146:ALA:H	2.28	0.42
5:2F:164:ARG:O	5:2F:168:ARG:HB2	2.19	0.42
6:2G:53:LEU:HD12	6:2G:56:ALA:HB2	2.02	0.42
6:2G:152:LEU:H	6:2G:152:LEU:HD12	1.85	0.42
8:2I:69:LYS:HG3	8:2I:138:ILE:HG12	2.01	0.42
10:2O:49:ARG:NH2	32:2a:1423:G:OP1	2.33	0.42
32:2a:707:C:H2'	32:2a:708:C:C6	2.55	0.42
32:2a:864:A:C6	32:2a:865:A:C6	3.07	0.42
32:2a:1266:G:N2	32:2a:1268:A:H3'	2.34	0.42
34:2c:83:ARG:C	34:2c:85:ARG:N	2.78	0.42
42:2k:27:ASN:OD1	42:2k:28:THR:N	2.52	0.42
43:2l:90:VAL:O	43:2l:92:0TD:N	2.53	0.42
45:2n:4:LYS:HE2	45:2n:4:LYS:HB3	1.70	0.42
47:2p:15:PRO:HD2	47:2p:42:ARG:HD3	2.02	0.42
50:2s:27:GLU:HA	50:2s:28:LYS:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.85	0.42
1:1A:2408:U:H2'	1:1A:2409:G:C8	2.55	0.42
4:1E:101:ARG:CZ	4:1E:171:GLU:HB2	2.50	0.42
12:1Q:109:VAL:HG13	12:1Q:113:GLN:HB2	2.02	0.42
28:16:12:GLU:OE1	28:16:52:VAL:HG11	2.19	0.42
32:1a:841:U:H3'	32:1a:848:C:O4'	2.20	0.42
32:1a:1030(B):C:H2'	32:1a:1030(C):G:H5'	2.02	0.42
38:1g:113:GLU:HB2	38:1g:119:ARG:HG2	2.02	0.42
39:1h:87:SER:HB2	39:1h:133:LEU:O	2.20	0.42
57:1y:21:A:N6	57:1y:46:G7M:H1'	2.35	0.42
1:2A:699:A:H2'	1:2A:700:G:O4'	2.20	0.42
1:2A:1658:C:OP1	4:2E:135:HIS:NE2	2.50	0.42
1:2A:2163:C:OP1	1:2A:2165:G:N2	2.51	0.42
1:2A:2360:A:H2'	1:2A:2361:A:O4'	2.19	0.42
1:2A:2412:A:H2'	1:2A:2413:G:O4'	2.20	0.42
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.54	0.42
1:2A:2792:G:H2'	1:2A:2792:G:N3	2.34	0.42
32:2a:519:C:H2'	32:2a:520:A:O4'	2.20	0.42
32:2a:923:A:O2'	32:2a:1399:C:OP2	2.32	0.42
32:2a:1507:A:OP2	53:2v:13:A:N6	2.52	0.42
38:2g:120:ILE:O	38:2g:124:LEU:HB2	2.20	0.42
44:2m:48:LEU:HD23	44:2m:48:LEU:HA	1.81	0.42
51:2t:37:SER:O	51:2t:41:ILE:HG12	2.20	0.42
1:1A:673:C:OP1	5:1F:54:ARG:NH1	2.50	0.41
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.55	0.41
1:1A:1252:G:N3	16:1U:33:ARG:HG2	2.35	0.41
1:1A:2025:C:H2'	1:1A:2026:C:C6	2.55	0.41
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.55	0.41
1:1A:2470:G:O6	1:1A:2476:A:O2'	2.29	0.41
1:1A:2512:C:H2'	1:1A:2513:G:O4'	2.20	0.41
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.55	0.41
12:1Q:45:GLN:OE1	12:1Q:45:GLN:N	2.44	0.41
32:1a:279:A:C5	48:1q:98:LEU:HD23	2.55	0.41
32:1a:323:U:H2'	32:1a:324:G:O4'	2.20	0.41
32:1a:375:U:O2'	47:1p:6:LEU:O	2.37	0.41
32:1a:377:G:P	47:1p:5:ARG:HH11	2.42	0.41
32:1a:390:C:H2'	32:1a:391:G:C8	2.55	0.41
32:1a:1134:G:N3	32:1a:1134:G:H2'	2.35	0.41
32:1a:1157:A:H4'	32:1a:1158:C:O5'	2.20	0.41
34:1c:124:ILE:H	34:1c:124:ILE:HG12	1.73	0.41
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:4:TYR:O	40:1i:19:LEU:HB2	2.20	0.41
1:2A:535:C:H2'	1:2A:536:A:C8	2.55	0.41
1:2A:601:C:O2'	1:2A:605:C:H5"	2.20	0.41
1:2A:797:C:H6	1:2A:797:C:O5'	2.03	0.41
1:2A:893:C:H2'	1:2A:894:C:C4	2.55	0.41
1:2A:896:A:H4'	1:2A:897:C:OP1	2.19	0.41
1:2A:1186:G:H2'	1:2A:1187:G:O4'	2.20	0.41
1:2A:1401:G:H2'	1:2A:1402:C:C6	2.55	0.41
1:2A:1665:A:H2'	1:2A:1666:G:O4'	2.20	0.41
1:2A:2242:G:OP1	62:2A:3957:HOH:O	2.22	0.41
1:2A:2273:A:O2'	1:2A:2274:A:H5'	2.20	0.41
1:2A:2393:A:H5"	11:2P:63:PRO:HB3	2.02	0.41
1:2A:2424:C:O2	1:2A:2429:G:O2'	2.28	0.41
3:2D:118:VAL:HG22	3:2D:119:ALA:H	1.85	0.41
3:2D:143:HIS:HD2	3:2D:196:VAL:HG22	1.85	0.41
3:2D:206:LEU:HA	3:2D:211:ARG:NH1	2.34	0.41
17:2V:1:MET:HB3	17:2V:99:ILE:HD12	2.02	0.41
24:22:51:ARG:HG3	24:22:55:ARG:NH2	2.34	0.41
32:2a:16:A:O2'	36:2e:16:THR:HB	2.20	0.41
32:2a:162:A:H3'	32:2a:163:C:C5'	2.50	0.41
32:2a:336:C:H2'	32:2a:337:C:C6	2.55	0.41
32:2a:826:C:O2	39:2h:15:ASN:ND2	2.53	0.41
32:2a:1030(A):G:N3	32:2a:1030(C):G:H8	2.18	0.41
32:2a:1056:U:H2'	32:2a:1057:G:H8	1.85	0.41
32:2a:1070:U:H2'	32:2a:1071:C:H6	1.85	0.41
32:2a:1329:A:P	44:2m:28:ALA:HB3	2.60	0.41
34:2c:35:GLU:O	34:2c:39:ILE:HG13	2.20	0.41
34:2c:134:ILE:HG22	34:2c:168:ALA:HB3	2.02	0.41
34:2c:148:GLY:O	34:2c:203:PHE:N	2.48	0.41
1:1A:885:C:H5'	1:1A:886:C:OP2	2.20	0.41
1:1A:1526:G:C6	1:1A:1527:G:C2	3.08	0.41
6:1G:106:LEU:HD12	6:1G:110:ALA:HB3	2.00	0.41
8:1I:72:LEU:HB2	8:1I:138:ILE:HG21	2.01	0.41
9:1N:13:TRP:CE2	9:1N:133:GLN:HG2	2.55	0.41
18:1W:1:MET:HE3	18:1W:2:GLU:H	1.84	0.41
32:1a:947:G:H2'	32:1a:948:C:O4'	2.20	0.41
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.50	0.41
41:1j:30:SER:OG	41:1j:81:THR:OG1	2.15	0.41
44:1m:23:TYR:CE2	44:1m:71:ARG:HG3	2.55	0.41
48:1q:90:ILE:HD13	48:1q:90:ILE:HA	1.88	0.41
49:1r:32:ARG:HA	49:1r:69:THR:HG21	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:1t:13:LEU:HD12	51:1t:14:LYS:N	2.35	0.41
54:1w:66:U:C4	54:1w:67:C:N4	2.88	0.41
57:1y:12:U:H2'	57:1y:13:C:O4'	2.20	0.41
1:2A:315:G:H2'	1:2A:316:C:C6	2.56	0.41
1:2A:567:A:OP2	11:2P:29:LYS:NZ	2.51	0.41
1:2A:1686:C:H2'	1:2A:1687:G:O4'	2.19	0.41
1:2A:1803:A:H4'	3:2D:259:THR:HG23	2.02	0.41
1:2A:2663:G:C2	1:2A:2664:G:H1'	2.54	0.41
6:2G:51:ARG:H	6:2G:51:ARG:HD2	1.86	0.41
7:2H:140:LYS:HB2	7:2H:140:LYS:HE3	1.76	0.41
29:27:31:LEU:HA	29:27:31:LEU:HD23	1.81	0.41
32:2a:153:C:H2'	32:2a:154:C:C6	2.55	0.41
32:2a:256:U:H2'	32:2a:257:G:C8	2.55	0.41
32:2a:1071:C:H2'	32:2a:1072:G:C8	2.55	0.41
32:2a:1275:A:H2'	32:2a:1276:G:O4'	2.20	0.41
36:2e:30:ALA:O	36:2e:45:PHE:HA	2.20	0.41
1:1A:717:G:H2'	1:1A:718:A:O4'	2.20	0.41
1:1A:1149:G:H2'	1:1A:1150:C:C6	2.55	0.41
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.20	0.41
1:1A:2629:A:H1'	1:1A:2630:G:H5"	2.01	0.41
8:1I:127:VAL:HA	8:1I:140:LEU:O	2.20	0.41
21:1Z:98:MET:HE3	21:1Z:98:MET:HB2	1.90	0.41
23:11:65:SER:OG	23:11:66:HIS:ND1	2.33	0.41
31:19:7:VAL:HG12	31:19:34:GLN:HB3	2.01	0.41
32:1a:664:G:N2	32:1a:741:G:H1	2.03	0.41
32:1a:721:G:H4'	32:1a:722:A:O4'	2.20	0.41
32:1a:1310:G:OP2	44:1m:88:ARG:NH2	2.42	0.41
32:1a:1441:G:H21	32:1a:1460:A:H62	1.67	0.41
35:1d:202:LEU:HA	35:1d:205:GLU:HB2	2.01	0.41
42:1k:55:LYS:HB2	42:1k:55:LYS:HE3	1.87	0.41
42:1k:122:LYS:HE3	42:1k:122:LYS:HB2	1.92	0.41
49:1r:85:LEU:HD22	49:1r:87:ARG:NH1	2.35	0.41
1:2A:515:A:H1'	1:2A:581:C:H1'	2.02	0.41
1:2A:996:A:H4'	16:2U:91:ASP:OD2	2.19	0.41
1:2A:1830:C:OP2	62:2A:3961:HOH:O	2.22	0.41
1:2A:2024:G:H2'	1:2A:2025:C:C6	2.55	0.41
1:2A:2102:U:O2	1:2A:2187:G:O6	2.38	0.41
1:2A:2387:U:H4'	22:20:41:ARG:NH2	2.36	0.41
1:2A:2888:C:H2'	1:2A:2889:C:C6	2.55	0.41
5:2F:18:ARG:O	5:2F:19:GLU:HG2	2.21	0.41
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:79:ASN:N	6:2G:79:ASN:OD1	2.52	0.41
7:2H:94:TYR:HE2	7:2H:160:LYS:HG3	1.84	0.41
13:2R:28:LEU:HD23	13:2R:48:VAL:HG21	2.02	0.41
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.20	0.41
15:2T:15:VAL:HG22	15:2T:57:PHE:HB2	2.02	0.41
32:2a:1144:G:C2'	32:2a:1145:C:H5'	2.50	0.41
32:2a:1297:C:H4'	32:2a:1298:C:H5'	2.03	0.41
33:2b:81:VAL:HG12	33:2b:92:TYR:HB2	2.02	0.41
33:2b:91:PRO:HG2	33:2b:155:LEU:HB2	2.02	0.41
35:2d:18:LYS:HD3	35:2d:20:TYR:OH	2.20	0.41
38:2g:78:ARG:HE	38:2g:79:ARG:NE	2.18	0.41
40:2i:3:GLN:HG2	40:2i:20:ARG:CG	2.50	0.41
41:2j:78:ASN:O	41:2j:80:LYS:N	2.54	0.41
47:2p:37:GLY:HA3	47:2p:50:LYS:O	2.21	0.41
50:2s:36:ARG:HA	50:2s:71:LEU:HB2	2.02	0.41
51:2t:53:LEU:HD11	51:2t:98:PRO:HB2	2.02	0.41
1:1A:548:A:N1	17:1V:18:LEU:HD12	2.36	0.41
1:1A:727:A:OP1	1:1A:1431:U:O2'	2.35	0.41
1:1A:858:U:O2	1:1A:2268:A:H2'	2.20	0.41
1:1A:1174:A:H1'	1:1A:1175:U:O5'	2.20	0.41
1:1A:2319:G:H22	14:1S:3:ARG:HD3	1.85	0.41
1:1A:2756:U:H1'	1:1A:2757:A:H5"	2.02	0.41
3:1D:173:VAL:HG22	3:1D:185:VAL:O	2.21	0.41
5:1F:106:ARG:H	5:1F:106:ARG:HG2	1.62	0.41
20:1Y:85:VAL:HG13	20:1Y:97:ARG:HB3	2.01	0.41
28:16:8:LYS:HD3	30:18:34:TRP:CD2	2.55	0.41
32:1a:598:U:H2'	32:1a:599:C:C6	2.55	0.41
32:1a:987:G:N2	32:1a:1219:U:C2	2.88	0.41
32:1a:1442:G:O2'	32:1a:1442(A):G:H5'	2.21	0.41
34:1c:150:LYS:HG3	34:1c:169:ALA:HB2	2.03	0.41
38:1g:151:TYR:OH	42:1k:54:ARG:HG2	2.21	0.41
39:1h:13:ILE:O	39:1h:17:THR:HG23	2.21	0.41
52:1u:18:TYR:CD2	52:1u:24:ARG:HD3	2.56	0.41
57:1y:57:G:C2'	57:1y:58:A:H5'	2.50	0.41
1:2A:681:G:OP2	62:2A:3959:HOH:O	2.22	0.41
1:2A:746:A:H2'	1:2A:2612:C:H5"	2.02	0.41
1:2A:870:A:P	12:2Q:6:ARG:HH21	2.43	0.41
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.37	0.41
1:2A:1830:C:H2'	1:2A:1831:G:C8	2.55	0.41
1:2A:1913:A:C6	54:2w:38:A:H5'	2.55	0.41
1:2A:2270:G:H2'	1:2A:2271:G:O4'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2370:G:C6	1:2A:2371:G:C6	3.08	0.41
1:2A:2373:G:H2'	1:2A:2374:C:C6	2.55	0.41
1:2A:2390:U:P	30:28:35:GLN:HE22	2.44	0.41
1:2A:2734:A:H2'	1:2A:2735:G:O4'	2.21	0.41
2:2B:17:C:H2'	2:2B:18:G:O4'	2.19	0.41
3:2D:77:ALA:HA	3:2D:97:TYR:HA	2.03	0.41
4:2E:2:LYS:HE3	4:2E:96:PHE:HE1	1.85	0.41
8:2I:78:THR:O	8:2I:104:GLN:NE2	2.52	0.41
16:2U:86:ALA:HB2	16:2U:116:ALA:HB2	2.02	0.41
21:2Z:4:ARG:NH2	21:2Z:66:SER:OG	2.35	0.41
21:2Z:67:LEU:HD12	21:2Z:67:LEU:HA	1.71	0.41
22:20:56:ASP:OD1	22:20:58:THR:OG1	2.32	0.41
32:2a:513:C:H2'	32:2a:514:C:O4'	2.21	0.41
32:2a:609:A:H5'	47:2p:18:ARG:HH22	1.85	0.41
32:2a:1144:G:H2'	32:2a:1145:C:H5'	2.01	0.41
32:2a:1320:C:C2	50:2s:72:GLY:HA3	2.56	0.41
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	2.02	0.41
33:2b:146:GLN:O	33:2b:150:SER:HB3	2.20	0.41
34:2c:47:LEU:HD22	34:2c:68:VAL:HG11	2.02	0.41
44:2m:16:ASP:OD1	44:2m:16:ASP:N	2.54	0.41
48:2q:27:PHE:CE1	48:2q:36:ILE:HD11	2.56	0.41
57:2y:62:C:H2'	57:2y:63:G:H8	1.85	0.41
1:1A:248:G:OP1	62:1A:4271:HOH:O	2.22	0.41
1:1A:1098:A:N3	1:1A:1098:A:H2'	2.35	0.41
1:1A:1825:A:OP1	3:1D:249:PRO:HD3	2.21	0.41
1:1A:2790:A:H5'	1:1A:2893:G:H21	1.86	0.41
6:1G:114:ILE:HG13	6:1G:140:ILE:HG12	2.03	0.41
6:1G:122:PRO:HB3	6:1G:170:ARG:HH12	1.86	0.41
21:1Z:40:ASP:OD2	21:1Z:43:GLU:HG3	2.21	0.41
23:11:13:ILE:HD11	23:11:42:GLN:OE1	2.21	0.41
23:11:65:SER:HG	23:11:66:HIS:CE1	2.37	0.41
25:13:8:LEU:HG	25:13:31:LEU:HD23	2.02	0.41
26:14:53:GLU:CG	26:14:54:GLY:H	2.33	0.41
35:1d:117:ALA:O	35:1d:121:VAL:HG23	2.20	0.41
35:1d:158:ILE:O	35:1d:162:LEU:HG	2.20	0.41
36:1e:90:VAL:O	36:1e:120:THR:HA	2.20	0.41
42:1k:99:GLN:NE2	42:1k:108:ILE:HD11	2.36	0.41
47:1p:50:LYS:HD2	47:1p:50:LYS:HA	1.95	0.41
50:1s:12:ASP:OD1	50:1s:37:ARG:NH2	2.54	0.41
55:1x:19:G:H4'	55:1x:20:U:OP2	2.20	0.41
57:1y:55:PSU:H6	57:1y:55:PSU:O5'	2.04	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:262:A:H2'	1:2A:263:C:O4'	2.20	0.41
1:2A:656:G:H2'	1:2A:657:U:O4'	2.20	0.41
1:2A:1581:G:H2'	1:2A:1582:C:O4'	2.20	0.41
1:2A:2206:G:OP2	1:2A:2206:G:H4'	2.18	0.41
1:2A:2420:C:H5'	28:26:54:ILE:HD11	2.02	0.41
1:2A:2645:G:N2	1:2A:2767:C:OP2	2.53	0.41
1:2A:2728:U:H2'	1:2A:2729:G:H8	1.84	0.41
2:2B:52:A:N6	14:2S:33:LYS:HG2	2.36	0.41
2:2B:114:C:H4'	14:2S:46:VAL:HG22	2.01	0.41
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.85	0.41
32:2a:1417:G:C6	32:2a:1482:G:C6	3.08	0.41
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.36	0.41
40:2i:3:GLN:HG2	40:2i:20:ARG:HG2	2.03	0.41
40:2i:50:LEU:HB2	40:2i:55:ALA:O	2.20	0.41
46:2o:82:ILE:HD12	46:2o:88:ARG:HB2	2.03	0.41
1:1A:181:A:H5"	29:17:36:GLN:NE2	2.36	0.41
1:1A:548:A:H1'	1:1A:549:G:OP1	2.20	0.41
1:1A:649:G:H2'	1:1A:650:C:C6	2.55	0.41
1:1A:1364:G:OP2	23:11:3:LYS:HG3	2.20	0.41
1:1A:1594:G:H2'	1:1A:1595:G:O4'	2.20	0.41
1:1A:1919:A:H8	1:1A:1919:A:O5'	2.03	0.41
1:1A:2029:G:H2'	1:1A:2031:A:OP1	2.20	0.41
1:1A:2145:C:O2'	1:1A:2147:G:N7	2.54	0.41
2:1B:88:C:H2'	2:1B:89:G:O4'	2.20	0.41
3:1D:223:GLY:HA3	3:1D:231:HIS:CE1	2.56	0.41
18:1W:55:ALA:O	18:1W:59:VAL:HG22	2.20	0.41
25:13:7:LYS:HE3	25:13:32:GLN:HE21	1.86	0.41
32:1a:1299:A:H2'	32:1a:1299:A:N3	2.35	0.41
33:1b:44:LEU:HA	33:1b:47:THR:OG1	2.21	0.41
33:1b:82:ARG:NH1	33:1b:86:GLU:OE2	2.54	0.41
35:1d:173:TRP:CD1	35:1d:173:TRP:N	2.88	0.41
49:1r:45:SER:OG	49:1r:46:GLU:N	2.53	0.41
55:1x:23:C:H2'	55:1x:24:U:H6	1.85	0.41
1:2A:921:G:H2'	1:2A:922:U:C6	2.56	0.41
1:2A:1027:A:C6	1:2A:1126:A:C4	3.09	0.41
1:2A:2155:G:N7	1:2A:2156:G:H1'	2.35	0.41
1:2A:2447:G:N2	1:2A:2450:A:OP2	2.54	0.41
1:2A:2857:G:N1	1:2A:2861:G:C6	2.89	0.41
4:2E:52:LEU:O	4:2E:76:ARG:N	2.46	0.41
10:2O:63:VAL:HA	10:2O:106:LEU:HD11	2.02	0.41
11:2P:6:LEU:HA	11:2P:6:LEU:HD23	1.70	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:250:A:C8	32:2a:252:U:C4	3.09	0.41
32:2a:325:A:H2'	32:2a:326:G:O4'	2.20	0.41
32:2a:447:G:O6	32:2a:485:G:O2'	2.32	0.41
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.56	0.41
33:2b:212:GLN:HG3	33:2b:216:SER:OG	2.20	0.41
38:2g:45:ASP:O	38:2g:49:ILE:HG12	2.20	0.41
41:2j:21:GLN:HE22	41:2j:25:GLU:HG2	1.85	0.41
41:2j:55:LYS:HE3	41:2j:56:HIS:NE2	2.36	0.41
47:2p:55:ARG:HD2	47:2p:55:ARG:HA	1.88	0.41
1:1A:142(A):C:H2'	1:1A:143:G:O4'	2.20	0.41
1:1A:1683:C:H2'	1:1A:1684:C:C6	2.56	0.41
1:1A:1844:C:H2'	1:1A:1845:G:H8	1.85	0.41
3:1D:146:GLU:HG2	3:1D:152:GLY:C	2.46	0.41
6:1G:37:VAL:HA	6:1G:158:ALA:O	2.20	0.41
7:1H:42:ARG:HE	7:1H:42:ARG:HB2	1.75	0.41
10:1O:73:ASP:HB2	15:1T:82:LEU:HD13	2.03	0.41
15:1T:108:ARG:HG3	15:1T:109:GLU:N	2.35	0.41
29:17:24:THR:HG23	62:17:202:HOH:O	2.19	0.41
32:1a:189:G:C6	32:1a:189(L):G:N1	2.89	0.41
32:1a:265:G:H2'	32:1a:267:C:C5	2.56	0.41
35:1d:155:LEU:HB3	35:1d:158:ILE:HD11	2.03	0.41
1:2A:223:A:O2'	1:2A:420:C:O2	2.37	0.41
1:2A:304:G:H2'	1:2A:305:U:C6	2.55	0.41
1:2A:645:C:H5"	1:2A:646:A:OP2	2.21	0.41
1:2A:1358:G:O2'	1:2A:1373:A:N6	2.50	0.41
1:2A:1530:C:H42	1:2A:1539:G:H1	1.69	0.41
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.55	0.41
1:2A:2116:G:O6	1:2A:2162:G:H5"	2.20	0.41
1:2A:2344:U:OP2	28:26:37:ARG:HD3	2.21	0.41
1:2A:2782:G:OP2	62:2A:3956:HOH:O	2.21	0.41
1:2A:2872:G:O2'	1:2A:2873:A:H5'	2.20	0.41
5:2F:149:ASP:OD1	5:2F:151:SER:N	2.42	0.41
11:2P:122:PRO:HB3	11:2P:141:ALA:O	2.21	0.41
12:2Q:16:ARG:HG3	12:2Q:17:LEU:H	1.86	0.41
21:2Z:63:ASP:OD1	21:2Z:65:GLN:HG3	2.21	0.41
23:21:53:VAL:HG22	23:21:74:VAL:HG13	2.02	0.41
25:23:11:SER:OG	25:23:13:ILE:HG13	2.20	0.41
31:29:27:CYS:SG	31:29:28:GLU:N	2.94	0.41
32:2a:22:G:H5'	32:2a:885:G:OP2	2.21	0.41
32:2a:255:G:OP1	48:2q:69:LYS:NZ	2.51	0.41
32:2a:1097:C:H2'	32:2a:1098:C:H6	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1299:A:OP2	62:2a:1913:HOH:O	2.22	0.41
32:2a:1378:C:N3	32:2a:1379:G:H1'	2.36	0.41
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	2.03	0.41
35:2d:118:ARG:O	35:2d:122:ARG:N	2.45	0.41
36:2e:72:GLN:O	36:2e:75:THR:HG22	2.21	0.41
37:2f:91:VAL:HG11	49:2r:72:ARG:HH12	1.85	0.41
39:2h:23:SER:OG	39:2h:24:THR:N	2.54	0.41
39:2h:39:LEU:HB2	39:2h:45:ILE:HD11	2.02	0.41
43:2l:117:ARG:HB3	43:2l:122:THR:HB	2.02	0.41
51:2t:14:LYS:HA	51:2t:17:ARG:HG2	2.02	0.41
54:2w:10:G:H2'	54:2w:11:C:H6	1.85	0.41
54:2w:65:G:C6	54:2w:66:U:C4	3.08	0.41
1:1A:945:A:C2	1:1A:2448:A:C4	3.09	0.41
1:1A:1082:U:C4	1:1A:1086:A:N1	2.78	0.41
1:1A:2364:C:H2'	1:1A:2365:G:O4'	2.21	0.41
1:1A:2848:G:H1'	1:1A:2867:G:N2	2.35	0.41
1:1A:2889:C:H2'	1:1A:2891:G:O4'	2.20	0.41
8:1I:68:LEU:O	8:1I:72:LEU:HG	2.20	0.41
9:1N:4:TYR:CE2	16:1U:100:VAL:HG11	2.56	0.41
13:1R:1:MET:HE3	13:1R:1:MET:HB2	1.93	0.41
32:1a:261:U:H2'	32:1a:263:A:OP2	2.21	0.41
32:1a:512:U:H2'	32:1a:513:C:C6	2.56	0.41
32:1a:582:U:C2	32:1a:583:A:C8	3.09	0.41
32:1a:1058:G:OP1	34:1c:199:LYS:HE3	2.20	0.41
33:1b:189:ASP:O	33:1b:192:SER:OG	2.34	0.41
37:1f:69:GLU:OE1	37:1f:69:GLU:N	2.35	0.41
40:1i:96:LEU:HD13	40:1i:101:PHE:CD2	2.56	0.41
48:1q:10:VAL:HA	48:1q:20:THR:O	2.21	0.41
49:1r:71:LYS:O	49:1r:75:ILE:HG13	2.21	0.41
1:2A:459:U:H4'	29:27:40:TRP:CZ3	2.56	0.41
1:2A:627:A:N7	11:2P:84:ASN:ND2	2.69	0.41
1:2A:1032:A:H2	1:2A:1122:G:H22	1.68	0.41
1:2A:1171:G:H8	1:2A:1171:G:O5'	2.03	0.41
1:2A:2128:C:H4'	1:2A:2174:C:H4'	2.03	0.41
1:2A:2532:G:N2	1:2A:2663:G:O2'	2.54	0.41
1:2A:2783:G:H2'	1:2A:2784:C:H6	1.85	0.41
9:2N:67:LEU:HA	9:2N:87:LEU:HD23	2.03	0.41
20:2Y:7:VAL:CG1	20:2Y:27:VAL:HG21	2.50	0.41
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NE	2.53	0.41
32:2a:661:G:H1	32:2a:744:C:H42	1.69	0.41
32:2a:976:G:OP1	45:2n:32:SER:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:16:HIS:CG	33:2b:204:ASN:HB3	2.55	0.41
33:2b:178:ARG:HH22	39:2h:68:ARG:NH1	2.17	0.41
33:2b:208:ILE:HA	33:2b:211:ILE:HD12	2.02	0.41
35:2d:17:VAL:HG11	35:2d:197:PRO:HG3	2.02	0.41
36:2e:89:ILE:HD12	36:2e:89:ILE:HA	1.92	0.41
42:2k:21:ILE:HD12	42:2k:84:VAL:HG22	2.01	0.41
52:2u:9:ARG:O	52:2u:13:ILE:HG13	2.21	0.41
1:1A:124:G:OP1	1:1A:1376:C:O2'	2.26	0.41
1:1A:711:G:H1	1:1A:720:C:H42	1.67	0.41
1:1A:862:G:O2'	2:1B:78:A:N3	2.54	0.41
1:1A:1698:A:C8	1:1A:1700:A:O4'	2.73	0.41
1:1A:2313:C:C2'	1:1A:2314:C:H5'	2.51	0.41
1:1A:2328:A:H2'	1:1A:2329:G:H8	1.80	0.41
1:1A:2335:A:C8	1:1A:2337:G:C5	3.09	0.41
1:1A:2747:G:O6	1:1A:2755:C:H5"	2.21	0.41
1:1A:2820:A:C5	13:1R:4:LEU:HD11	2.56	0.41
2:1B:11:C:H3'	2:1B:12:C:C6	2.56	0.41
3:1D:24:ILE:HD13	3:1D:84:TYR:HB2	2.03	0.41
3:1D:145:VAL:HG12	3:1D:146:GLU:O	2.20	0.41
6:1G:77:ILE:HG21	6:1G:80:PHE:CD2	2.56	0.41
11:1P:126:VAL:HA	11:1P:146:VAL:HB	2.01	0.41
15:1T:113:LYS:O	15:1T:114:LEU:HD23	2.21	0.41
18:1W:68:ARG:NH1	18:1W:111:HIS:HA	2.36	0.41
20:1Y:106:LEU:O	20:1Y:107:ASP:HB2	2.21	0.41
26:14:15:ILE:O	26:14:33:VAL:N	2.38	0.41
26:14:34:GLU:HB2	44:1m:57:ARG:CZ	2.51	0.41
26:14:43:TYR:O	26:14:45:GLY:N	2.54	0.41
32:1a:23:C:OP2	32:1a:561:U:N3	2.42	0.41
32:1a:197:A:N6	32:1a:221:C:H4'	2.36	0.41
32:1a:199:G:H2'	32:1a:200:G:H8	1.86	0.41
32:1a:509:A:O2'	32:1a:510:A:OP1	2.27	0.41
32:1a:584:G:H5'	48:1q:91:ARG:HH21	1.86	0.41
32:1a:948:C:P	44:1m:109:THR:HG1	2.40	0.41
32:1a:1169:A:H2'	32:1a:1170:A:C8	2.56	0.41
32:1a:1286:A:C8	32:1a:1287:A:H4'	2.56	0.41
32:1a:1360:A:OP2	45:1n:35:ARG:NH2	2.53	0.41
32:1a:1402:4OC:H6	32:1a:1402:4OC:O5'	2.21	0.41
33:1b:37:ASN:C	33:1b:39:ILE:N	2.79	0.41
33:1b:71:VAL:HG11	33:1b:170:GLU:HG2	2.02	0.41
34:1c:40:ARG:HG2	34:1c:55:VAL:HG11	2.03	0.41
38:1g:16:LEU:HD12	40:1i:41:VAL:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.45	0.41
41:1j:92:THR:O	41:1j:94:VAL:N	2.53	0.41
49:1r:31:LEU:H	49:1r:31:LEU:HD23	1.86	0.41
49:1r:52:PRO:HB2	49:1r:54:ARG:HG2	2.01	0.41
51:1t:18:GLN:O	51:1t:22:ARG:HG3	2.20	0.41
51:1t:50:GLU:HA	51:1t:100:ILE:HG12	2.02	0.41
52:1u:6:ARG:O	52:1u:12:LYS:HE2	2.21	0.41
57:1y:68:C:C2	57:1y:69:G:C8	3.08	0.41
1:2A:103:A:H5'	24:22:3:LEU:HD21	2.02	0.41
1:2A:271(A):A:H8	1:2A:271(B):C:C6	2.38	0.41
1:2A:278:A:OP2	1:2A:278:A:H8	2.04	0.41
1:2A:411:G:OP2	1:2A:2406:U:O2'	2.37	0.41
1:2A:676:A:H2	1:2A:2069:G:N3	2.19	0.41
1:2A:729:G:C6	3:2D:208:LYS:HB2	2.56	0.41
1:2A:730:C:H2'	1:2A:731:C:H6	1.85	0.41
1:2A:857:C:H1'	22:20:26:TYR:CE1	2.56	0.41
1:2A:902:C:H2'	1:2A:903:C:H6	1.84	0.41
1:2A:1252:G:C2	1:2A:1253:A:C2	3.09	0.41
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.21	0.41
1:2A:1506:C:H2'	1:2A:1507:A:H5'	2.03	0.41
1:2A:1529:G:C6	1:2A:1530:C:N4	2.89	0.41
1:2A:1797:C:H4'	3:2D:257:LEU:O	2.20	0.41
1:2A:2055:C:H2'	1:2A:2504:U:H4'	2.03	0.41
1:2A:2108:C:H2'	1:2A:2109:U:C6	2.56	0.41
1:2A:2120:G:H2'	1:2A:2121:G:C8	2.56	0.41
2:2B:48:A:H4'	14:2S:95:HIS:CD2	2.48	0.41
5:2F:120:GLU:HG3	5:2F:122:LYS:HG2	2.02	0.41
7:2H:7:LEU:HD23	7:2H:69:ARG:NH2	2.35	0.41
7:2H:167:GLU:HA	7:2H:168:PRO:HD3	1.93	0.41
8:2I:77:LEU:HD21	8:2I:100:ALA:HB3	2.03	0.41
9:2N:53:VAL:HA	9:2N:121:LYS:O	2.21	0.41
11:2P:90:ARG:HD2	11:2P:91:PHE:CE2	2.56	0.41
13:2R:8:ARG:HE	13:2R:43:GLU:HG2	1.86	0.41
13:2R:98:LEU:HB2	13:2R:113:LEU:HD11	2.03	0.41
14:2S:30:ARG:HH21	14:2S:92:TYR:HB3	1.85	0.41
16:2U:16:LYS:HB3	16:2U:16:LYS:HE2	1.90	0.41
19:2X:11:PRO:HD3	24:22:37:PHE:CD2	2.56	0.41
19:2X:12:VAL:HG21	19:2X:27:THR:HG22	2.02	0.41
28:26:35:GLU:HG3	28:26:50:ARG:HD3	2.03	0.41
32:2a:403:C:N4	62:2a:1952:HOH:O	2.49	0.41
32:2a:537:G:H2'	32:2a:538:G:C8	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:858:G:H8	32:2a:858:G:OP2	2.03	0.41
32:2a:892:A:H2'	32:2a:893:C:C6	2.56	0.41
32:2a:1013:G:O2'	32:2a:1015:A:N7	2.31	0.41
32:2a:1015:A:O2'	32:2a:1219:U:H5'	2.20	0.41
32:2a:1095:U:H2'	32:2a:1096:C:O4'	2.20	0.41
32:2a:1180:A:OP1	40:2i:103:THR:OG1	2.39	0.41
33:2b:105:PHE:O	33:2b:107:THR:N	2.54	0.41
33:2b:131:PRO:O	33:2b:135:GLN:HG3	2.21	0.41
33:2b:145:LEU:HD23	33:2b:145:LEU:HA	1.90	0.41
34:2c:51:GLY:O	34:2c:70:VAL:HG12	2.21	0.41
36:2e:103:GLY:O	36:2e:106:PRO:HD2	2.20	0.41
44:2m:60:VAL:HG13	44:2m:64:TRP:CZ3	2.56	0.41
44:2m:90:LEU:HD23	44:2m:93:ARG:HE	1.84	0.41
47:2p:60:LEU:HD21	47:2p:80:PHE:HE1	1.86	0.41
50:2s:40:ILE:HB	50:2s:67:VAL:O	2.21	0.41
51:2t:38:LYS:HE2	51:2t:38:LYS:HB3	1.85	0.41
53:2v:23:A:H4'	53:2v:24:A:C5'	2.51	0.41
57:2y:55:PSU:HN1	57:2y:57:G:H5"	1.86	0.41
1:1A:286:C:H2'	1:1A:287:C:C6	2.56	0.41
1:1A:593:G:C2	1:1A:665:C:C2	3.09	0.41
1:1A:964:C:O2'	1:1A:2273:A:N3	2.51	0.41
1:1A:1057:A:N6	1:1A:1081:U:H3	2.08	0.41
1:1A:1396:U:H6	1:1A:1396:U:H2'	1.70	0.41
1:1A:1823:G:OP1	3:1D:54:ARG:NH1	2.54	0.41
4:1E:59:VAL:HG21	4:1E:74:PRO:HB3	2.02	0.41
4:1E:143:ASN:HD22	4:1E:147:PRO:HD3	1.86	0.41
11:1P:18:ARG:NE	62:1P:304:HOH:O	2.54	0.41
16:1U:108:GLU:O	16:1U:112:ARG:HG2	2.20	0.41
25:13:43:ILE:O	25:13:47:VAL:HG23	2.21	0.41
32:1a:872:A:C8	32:1a:874:G:C8	3.09	0.41
32:1a:947:G:H4'	44:1m:109:THR:HG23	2.03	0.41
33:1b:84:GLU:O	33:1b:219:VAL:HG21	2.22	0.41
33:1b:184:VAL:O	33:1b:198:ASP:N	2.44	0.41
34:1c:122:GLU:O	34:1c:126:ARG:HD2	2.21	0.41
40:1i:29:ASN:C	40:1i:31:GLN:H	2.28	0.41
42:1k:85:ARG:HD3	42:1k:113:PRO:HD3	2.01	0.41
44:1m:91:ARG:NE	44:1m:97:PRO:O	2.45	0.41
54:1w:23:A:H3'	54:1w:24:G:H8	1.86	0.41
1:2A:287:C:H2'	1:2A:288:C:H6	1.86	0.41
1:2A:375:C:H2'	1:2A:376:C:C6	2.56	0.41
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1355:G:P	3:2D:38:LYS:HE2	2.61	0.41
1:2A:2335:A:C8	1:2A:2337:G:C5	3.09	0.41
1:2A:2412:A:C2	1:2A:2413:G:H1'	2.56	0.41
1:2A:2698:U:H2'	1:2A:2699:C:C6	2.56	0.41
1:2A:2841:C:H2'	1:2A:2842:G:C8	2.56	0.41
2:2B:66:A:H61	2:2B:108:U:H3'	1.85	0.41
4:2E:172:VAL:HG22	4:2E:182:LEU:HD11	2.03	0.41
30:28:26:LYS:HG2	30:28:46:ARG:O	2.19	0.41
32:2a:664:G:P	49:2r:64:ARG:HH21	2.44	0.41
32:2a:1042:G:H2'	32:2a:1043:C:O4'	2.21	0.41
32:2a:1172:C:H2'	32:2a:1173:G:C8	2.56	0.41
34:2c:151:VAL:HG13	34:2c:199:LYS:O	2.21	0.41
36:2e:33:VAL:HG13	36:2e:112:LEU:HD12	2.03	0.41
36:2e:37:ARG:C	36:2e:38:GLN:HE21	2.28	0.41
38:2g:31:MET:HB2	38:2g:39:ALA:HB2	2.02	0.41
38:2g:132:GLY:O	38:2g:136:LYS:HG2	2.20	0.41
43:2l:69:TYR:CE2	43:2l:71:PRO:HA	2.56	0.41
47:2p:71:ARG:HG3	47:2p:80:PHE:CZ	2.56	0.41
49:2r:73:ALA:HB1	49:2r:78:LEU:HB2	2.03	0.41
57:2y:3:C:H2'	57:2y:4:C:C6	2.56	0.41
1:1A:292:C:H2'	1:1A:293:U:C6	2.56	0.40
1:1A:478:A:C6	1:1A:480:A:C6	3.09	0.40
1:1A:784:A:C6	3:1D:229:VAL:HG11	2.56	0.40
1:1A:828:U:C5	1:1A:2247:A:H4'	2.56	0.40
1:1A:1027:A:N3	62:1A:4360:HOH:O	2.37	0.40
11:1P:98:GLU:HG3	11:1P:99:LEU:N	2.36	0.40
19:1X:27:THR:OG1	19:1X:80:ILE:HG12	2.20	0.40
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.33	0.40
32:1a:477:A:H2'	32:1a:479:C:C6	2.56	0.40
32:1a:687:A:H4'	32:1a:688:G:O5'	2.21	0.40
32:1a:748:C:H4'	32:1a:749:C:O5'	2.22	0.40
34:1c:35:GLU:HG2	34:1c:59:ARG:HH22	1.86	0.40
38:1g:15:ASP:OD1	38:1g:20:ASP:N	2.52	0.40
51:1t:59:ALA:O	51:1t:63:ILE:HG13	2.21	0.40
51:1t:100:ILE:HG12	51:1t:100:ILE:H	1.44	0.40
54:1w:70:G:H2'	54:1w:71:G:O4'	2.21	0.40
1:2A:265:A:H1'	1:2A:266:G:O4'	2.21	0.40
1:2A:287:C:H2'	1:2A:288:C:C6	2.56	0.40
1:2A:949:C:H2'	1:2A:950:G:C8	2.55	0.40
1:2A:2561:A:H2'	1:2A:2562:U:O4'	2.20	0.40
1:2A:2785:C:OP1	4:2E:41:LYS:HE3	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:2N:137:LYS:HE2	9:2N:139:GLU:OE2	2.21	0.40
11:2P:56:SER:OG	11:2P:61:ARG:HD2	2.22	0.40
12:2Q:12:GLN:NE2	12:2Q:73:PRO:HD2	2.37	0.40
14:2S:67:ARG:O	14:2S:71:ARG:HG3	2.21	0.40
32:2a:538:G:H5"	43:2l:114:LYS:HB2	2.03	0.40
32:2a:1225:A:OP1	44:2m:103:THR:OG1	2.27	0.40
32:2a:1401:G:OP1	53:2v:18:G:O2'	2.30	0.40
35:2d:118:ARG:HG3	35:2d:136:PRO:HB3	2.03	0.40
44:2m:114:ARG:H	44:2m:114:ARG:HG2	1.67	0.40
47:2p:36:ILE:HD12	47:2p:56:ALA:HB2	2.04	0.40
49:2r:53:ARG:HA	49:2r:56:THR:OG1	2.21	0.40
54:2w:25:C:H2'	54:2w:26:A:C8	2.55	0.40
1:1A:141:A:C6	1:1A:142:A:N1	2.89	0.40
1:1A:484:C:H2'	1:1A:485:C:H6	1.86	0.40
1:1A:2794:C:N4	1:1A:2802:G:H22	2.17	0.40
7:1H:104:GLU:HB2	7:1H:114:VAL:HG12	2.03	0.40
14:1S:25:ARG:HG3	14:1S:88:ASP:HB2	2.02	0.40
21:1Z:166:SER:C	21:1Z:168:GLU:H	2.29	0.40
32:1a:106:C:O2'	32:1a:379:C:H5"	2.21	0.40
32:1a:524:G:H2'	32:1a:525:C:C6	2.56	0.40
32:1a:1459:C:OP1	51:1t:31:SER:OG	2.39	0.40
35:1d:116:GLN:O	35:1d:120:LEU:N	2.53	0.40
39:1h:95:VAL:HB	39:1h:99:GLU:HB2	2.03	0.40
41:1j:75:ILE:O	41:1j:77:PRO:HD3	2.20	0.40
57:1y:18:G:N1	57:1y:55:PSU:H1'	2.36	0.40
1:2A:234:C:H2'	1:2A:235:U:H6	1.86	0.40
1:2A:275:G:H2'	1:2A:276:A:O4'	2.21	0.40
1:2A:646:A:H2'	1:2A:647:G:O4'	2.21	0.40
1:2A:828:U:H4'	1:2A:831:G:N1	2.36	0.40
1:2A:2130:U:H2'	1:2A:2158:A:N6	2.34	0.40
12:2Q:37:LEU:HD11	12:2Q:130:LYS:HB2	2.02	0.40
15:2T:119:LYS:O	15:2T:123:GLN:HG3	2.21	0.40
16:2U:76:TYR:CE2	16:2U:80:ILE:HG13	2.56	0.40
22:20:50:ASN:HB3	22:20:63:VAL:HG22	2.02	0.40
30:28:62:LEU:HB3	30:28:65:GLU:HG2	2.03	0.40
32:2a:228:A:H2'	32:2a:229:U:O4'	2.22	0.40
32:2a:920:U:H2'	32:2a:921:U:C6	2.56	0.40
32:2a:1202:G:O4'	45:2n:29:ARG:NH1	2.54	0.40
38:2g:78:ARG:HG3	38:2g:156:TRP:HZ3	1.86	0.40
42:2k:117:ASN:HD22	42:2k:117:ASN:N	2.19	0.40
1:1A:1359:A:C2	1:1A:1372:U:O4	2.74	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1368:G:C2	1:1A:1369:G:C8	3.09	0.40
1:1A:1986:A:OP1	62:1A:4273:HOH:O	2.22	0.40
1:1A:2406:U:H2'	1:1A:2406:U:H6	1.62	0.40
2:1B:41:U:H5	6:1G:70:VAL:N	2.20	0.40
3:1D:245:PRO:HA	3:1D:246:PRO:HD3	1.99	0.40
30:18:23:VAL:HG13	30:18:47:LYS:HB3	2.04	0.40
32:1a:49:U:C2	32:1a:361:G:N2	2.90	0.40
32:1a:334:C:H2'	32:1a:335:C:C6	2.57	0.40
32:1a:418:C:H1'	32:1a:540:G:O2'	2.20	0.40
32:1a:977:A:O2'	32:1a:981:U:N3	2.46	0.40
44:1m:25:ILE:HD11	44:1m:60:VAL:HG13	2.04	0.40
50:1s:11:VAL:HG12	50:1s:13:ASP:H	1.85	0.40
1:2A:229:A:H5'	1:2A:230:U:OP1	2.22	0.40
1:2A:304:G:H2'	1:2A:305:U:H6	1.86	0.40
1:2A:797:C:H2'	1:2A:798:G:O4'	2.22	0.40
1:2A:1138:G:H5"	1:2A:1139:G:OP2	2.21	0.40
1:2A:1427:A:H4'	1:2A:1428:C:O5'	2.21	0.40
1:2A:2449:U:H3'	62:2A:4097:HOH:O	2.20	0.40
1:2A:2611:U:H6	1:2A:2611:U:H5'	1.86	0.40
11:2P:114:ILE:HD12	11:2P:130:PHE:CE1	2.56	0.40
15:2T:23:ARG:HD3	15:2T:120:ARG:CZ	2.51	0.40
32:2a:444:C:H2'	32:2a:445:G:H8	1.87	0.40
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.57	0.40
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.48	0.40
33:2b:96:ARG:HG2	33:2b:98:LEU:HD12	2.02	0.40
34:2c:88:ARG:HA	34:2c:91:LEU:CD1	2.52	0.40
44:2m:29:ARG:HD3	44:2m:64:TRP:CE2	2.57	0.40
57:2y:5:G:H1	57:2y:68:C:N4	2.17	0.40
1:1A:196:A:N3	1:1A:196:A:H2'	2.37	0.40
1:1A:376:C:H2'	1:1A:377:C:C6	2.56	0.40
1:1A:606:U:H4'	1:1A:658:C:H4'	2.02	0.40
1:1A:2066:C:H5"	62:1A:4989:HOH:O	2.21	0.40
1:1A:2844:G:O6	62:1A:4266:HOH:O	2.20	0.40
6:1G:43:LEU:HD12	6:1G:43:LEU:HA	1.94	0.40
7:1H:84:SER:HA	7:1H:133:VAL:O	2.22	0.40
11:1P:84:ASN:HB3	11:1P:117:GLU:O	2.21	0.40
13:1R:4:LEU:O	62:1R:303:HOH:O	2.20	0.40
19:1X:40:LYS:HG3	19:1X:51:VAL:HB	2.04	0.40
26:14:18:CYS:SG	26:14:20:ASN:HB2	2.62	0.40
32:1a:97:G:H2'	32:1a:98:G:O4'	2.21	0.40
32:1a:148:G:H2'	32:1a:149:A:H8	1.84	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:441:A:H5'	32:1a:442:C:OP2	2.22	0.40
32:1a:582:U:H2'	32:1a:583:A:H8	1.87	0.40
32:1a:1072:G:C6	32:1a:1073:U:C4	3.10	0.40
32:1a:1151:A:O2'	32:1a:1152:A:H8	2.04	0.40
34:1c:178:LEU:HA	34:1c:178:LEU:HD23	1.87	0.40
37:1f:33:TYR:CD2	37:1f:75:LEU:HD23	2.56	0.40
42:1k:15:ALA:HA	42:1k:76:GLY:O	2.21	0.40
46:1o:24:SER:OG	46:1o:25:THR:N	2.53	0.40
47:1p:49:LEU:HD13	47:1p:50:LYS:N	2.35	0.40
1:2A:638:G:C5	1:2A:651:G:C2	3.09	0.40
1:2A:2169:A:H2'	1:2A:2170:A:C8	2.56	0.40
1:2A:2406:U:H6	1:2A:2406:U:H2'	1.73	0.40
3:2D:211:ARG:O	3:2D:215:LEU:HG	2.20	0.40
5:2F:196:LEU:HA	5:2F:199:TRP:HB3	2.04	0.40
6:2G:66:GLN:OE1	6:2G:94:LEU:HD23	2.21	0.40
12:2Q:78:PRO:HD3	55:2x:1:C:C2	2.57	0.40
21:2Z:6:LYS:HD2	21:2Z:8:TYR:OH	2.20	0.40
21:2Z:91:LEU:H	21:2Z:91:LEU:HD22	1.85	0.40
23:21:50:ARG:HD2	23:21:57:GLU:OE2	2.21	0.40
23:21:94:LEU:HD23	23:21:94:LEU:HA	1.96	0.40
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.56	0.40
32:2a:1367:C:P	40:2i:112:LYS:HZ1	2.44	0.40
33:2b:76:GLN:HE21	33:2b:76:GLN:HB3	1.77	0.40
34:2c:22:TRP:CH2	34:2c:32:LEU:HB3	2.56	0.40
38:2g:137:LYS:O	38:2g:141:VAL:HG23	2.21	0.40
44:2m:29:ARG:HD3	44:2m:64:TRP:CD2	2.57	0.40
1:1A:41:C:H2'	1:1A:42:G:O4'	2.22	0.40
1:1A:196:A:O2'	1:1A:805:G:O6	2.25	0.40
1:1A:271(W):G:O6	62:1A:4270:HOH:O	2.22	0.40
1:1A:436:C:H2'	1:1A:437:G:H8	1.85	0.40
1:1A:875:G:H2'	1:1A:876:C:O4'	2.22	0.40
1:1A:2028:U:H2'	1:1A:2029:G:O4'	2.21	0.40
1:1A:2169:A:H1'	57:1y:56:C:H5'	2.04	0.40
2:1B:78:A:C2	2:1B:100:A:C4	3.09	0.40
4:1E:101:ARG:HB2	4:1E:201:THR:HG21	2.03	0.40
11:1P:6:LEU:HD23	11:1P:6:LEU:HA	1.89	0.40
12:1Q:81:VAL:HB	22:10:7:LEU:HD21	2.03	0.40
32:1a:104:G:C2	32:1a:105:G:C8	3.09	0.40
32:1a:1316:G:N1	32:1a:1319:A:OP2	2.47	0.40
34:1c:20:SER:OG	34:1c:40:ARG:NH2	2.49	0.40
44:1m:123:ALA:HA	44:1m:124:PRO:HD3	1.89	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:1o:47:LYS:HE3	46:1o:47:LYS:HB2	1.96	0.40
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.56	0.40
1:2A:532:A:OP1	1:2A:561:G:N2	2.53	0.40
1:2A:958:U:O2	2:2B:90:A:O2'	2.38	0.40
1:2A:1031:G:H21	31:29:36:GLN:NE2	2.19	0.40
1:2A:1248:G:C2	16:2U:3:ARG:HD2	2.56	0.40
1:2A:1462:C:H4'	1:2A:2703:C:H5'	2.03	0.40
1:2A:2019:A:O4'	16:2U:34:LYS:HE2	2.22	0.40
1:2A:2162:G:H2'	1:2A:2163:C:O4'	2.21	0.40
1:2A:2228:G:C6	1:2A:2229:C:C4	3.09	0.40
1:2A:2331:G:O2'	1:2A:2336:A:N1	2.48	0.40
1:2A:2639:A:C2	1:2A:2778:A:C8	3.10	0.40
17:2V:24:LYS:HE2	17:2V:24:LYS:HB3	1.87	0.40
21:2Z:146:ILE:HG12	21:2Z:174:VAL:HG13	2.03	0.40
27:25:33:CYS:HB2	27:25:40:LYS:HD3	2.03	0.40
30:28:26:LYS:HD3	30:28:48:PHE:HB3	2.04	0.40
32:2a:20:U:H2'	32:2a:21:G:O4'	2.21	0.40
32:2a:540:G:C6	32:2a:541:G:C5	3.09	0.40
32:2a:978:A:O2'	32:2a:1322:C:N3	2.48	0.40
32:2a:1221:G:H4'	50:2s:53:ASN:O	2.21	0.40
32:2a:1376:U:H2'	32:2a:1377:A:H8	1.86	0.40
36:2e:7:GLU:O	36:2e:34:VAL:HA	2.22	0.40
41:2j:49:VAL:O	41:2j:61:GLU:N	2.53	0.40
46:2o:56:LEU:O	46:2o:60:VAL:HG22	2.20	0.40
47:2p:39:TYR:CG	47:2p:73:LEU:HD21	2.56	0.40
57:2y:68:C:H2'	57:2y:69:G:H5"	2.02	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	257 (94%)	16 (6%)	0	100	100
3	2D	273/276 (99%)	253 (93%)	19 (7%)	1 (0%)	30	49
4	1E	202/206 (98%)	187 (93%)	14 (7%)	1 (0%)	24	43
4	2E	202/206 (98%)	189 (94%)	12 (6%)	1 (0%)	24	43
5	1F	200/210 (95%)	192 (96%)	7 (4%)	1 (0%)	24	43
5	2F	200/210 (95%)	185 (92%)	13 (6%)	2 (1%)	12	24
6	1G	179/182 (98%)	159 (89%)	19 (11%)	1 (1%)	21	38
6	2G	179/182 (98%)	150 (84%)	25 (14%)	4 (2%)	5	9
7	1H	172/180 (96%)	164 (95%)	8 (5%)	0	100	100
7	2H	172/180 (96%)	160 (93%)	10 (6%)	2 (1%)	10	20
8	1I	144/148 (97%)	131 (91%)	12 (8%)	1 (1%)	18	34
8	2I	144/148 (97%)	127 (88%)	16 (11%)	1 (1%)	18	34
9	1N	138/140 (99%)	133 (96%)	5 (4%)	0	100	100
9	2N	138/140 (99%)	128 (93%)	9 (6%)	1 (1%)	18	34
10	1O	120/122 (98%)	113 (94%)	6 (5%)	1 (1%)	16	31
10	2O	120/122 (98%)	112 (93%)	8 (7%)	0	100	100
11	1P	147/150 (98%)	136 (92%)	8 (5%)	3 (2%)	6	10
11	2P	147/150 (98%)	131 (89%)	13 (9%)	3 (2%)	6	10
12	1Q	139/141 (99%)	134 (96%)	5 (4%)	0	100	100
12	2Q	139/141 (99%)	130 (94%)	9 (6%)	0	100	100
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
13	2R	116/118 (98%)	111 (96%)	4 (3%)	1 (1%)	14	27
14	1S	108/112 (96%)	103 (95%)	5 (5%)	0	100	100
14	2S	108/112 (96%)	99 (92%)	8 (7%)	1 (1%)	14	27
15	1T	129/146 (88%)	120 (93%)	9 (7%)	0	100	100
15	2T	129/146 (88%)	119 (92%)	10 (8%)	0	100	100
16	1U	114/118 (97%)	111 (97%)	3 (3%)	0	100	100
16	2U	114/118 (97%)	114 (100%)	0	0	100	100
17	1V	99/101 (98%)	94 (95%)	4 (4%)	1 (1%)	12	24
17	2V	99/101 (98%)	91 (92%)	7 (7%)	1 (1%)	12	24
18	1W	110/113 (97%)	109 (99%)	1 (1%)	0	100	100
18	2W	110/113 (97%)	108 (98%)	2 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
19	1X	93/96 (97%)	87 (94%)	5 (5%)	1 (1%)	11 22
19	2X	93/96 (97%)	87 (94%)	5 (5%)	1 (1%)	11 22
20	1Y	105/110 (96%)	97 (92%)	8 (8%)	0	100 100
20	2Y	105/110 (96%)	94 (90%)	11 (10%)	0	100 100
21	1Z	148/206 (72%)	129 (87%)	17 (12%)	2 (1%)	9 17
21	2Z	156/206 (76%)	124 (80%)	28 (18%)	4 (3%)	4 7
22	10	81/85 (95%)	79 (98%)	2 (2%)	0	100 100
22	20	81/85 (95%)	80 (99%)	1 (1%)	0	100 100
23	11	95/98 (97%)	90 (95%)	4 (4%)	1 (1%)	11 22
23	21	95/98 (97%)	93 (98%)	2 (2%)	0	100 100
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100 100
24	22	68/72 (94%)	68 (100%)	0	0	100 100
25	13	57/60 (95%)	57 (100%)	0	0	100 100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100 100
26	14	67/71 (94%)	54 (81%)	8 (12%)	5 (8%)	1 0
26	24	67/71 (94%)	50 (75%)	15 (22%)	2 (3%)	3 5
27	15	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
28	16	51/54 (94%)	51 (100%)	0	0	100 100
28	26	51/54 (94%)	48 (94%)	3 (6%)	0	100 100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
30	18	62/65 (95%)	61 (98%)	1 (2%)	0	100 100
30	28	62/65 (95%)	61 (98%)	1 (2%)	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	35 (100%)	0	0	100 100
33	1b	229/256 (90%)	195 (85%)	25 (11%)	9 (4%)	2 3
33	2b	229/256 (90%)	178 (78%)	42 (18%)	9 (4%)	2 3
34	1c	204/239 (85%)	192 (94%)	11 (5%)	1 (0%)	24 43
34	2c	204/239 (85%)	170 (83%)	32 (16%)	2 (1%)	12 24
35	1d	206/209 (99%)	192 (93%)	13 (6%)	1 (0%)	24 43

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
35	2d	206/209 (99%)	186 (90%)	20 (10%)	0	100 100
36	1e	146/162 (90%)	129 (88%)	15 (10%)	2 (1%)	9 17
36	2e	146/162 (90%)	131 (90%)	13 (9%)	2 (1%)	9 17
37	1f	98/101 (97%)	94 (96%)	4 (4%)	0	100 100
37	2f	98/101 (97%)	95 (97%)	3 (3%)	0	100 100
38	1g	153/156 (98%)	132 (86%)	20 (13%)	1 (1%)	18 34
38	2g	153/156 (98%)	133 (87%)	17 (11%)	3 (2%)	6 10
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100 100
39	2h	135/138 (98%)	124 (92%)	11 (8%)	0	100 100
40	1i	125/128 (98%)	107 (86%)	17 (14%)	1 (1%)	16 31
40	2i	125/128 (98%)	105 (84%)	19 (15%)	1 (1%)	16 31
41	1j	95/105 (90%)	84 (88%)	10 (10%)	1 (1%)	11 22
41	2j	94/105 (90%)	77 (82%)	14 (15%)	3 (3%)	3 4
42	1k	112/129 (87%)	103 (92%)	8 (7%)	1 (1%)	14 27
42	2k	112/129 (87%)	104 (93%)	7 (6%)	1 (1%)	14 27
43	1l	119/132 (90%)	113 (95%)	5 (4%)	1 (1%)	16 31
43	2l	119/132 (90%)	112 (94%)	5 (4%)	2 (2%)	7 13
44	1m	121/126 (96%)	104 (86%)	15 (12%)	2 (2%)	7 13
44	2m	120/126 (95%)	106 (88%)	11 (9%)	3 (2%)	4 7
45	1n	58/61 (95%)	54 (93%)	4 (7%)	0	100 100
45	2n	58/61 (95%)	54 (93%)	3 (5%)	1 (2%)	7 13
46	1o	86/89 (97%)	82 (95%)	3 (4%)	1 (1%)	10 20
46	2o	86/89 (97%)	84 (98%)	1 (1%)	1 (1%)	10 20
47	1p	80/88 (91%)	77 (96%)	2 (2%)	1 (1%)	9 18
47	2p	80/88 (91%)	73 (91%)	6 (8%)	1 (1%)	9 18
48	1q	97/105 (92%)	90 (93%)	7 (7%)	0	100 100
48	2q	97/105 (92%)	90 (93%)	5 (5%)	2 (2%)	5 9
49	1r	66/88 (75%)	62 (94%)	4 (6%)	0	100 100
49	2r	66/88 (75%)	64 (97%)	2 (3%)	0	100 100
50	1s	81/93 (87%)	74 (91%)	7 (9%)	0	100 100
50	2s	81/93 (87%)	69 (85%)	12 (15%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
51	1t	94/106 (89%)	81 (86%)	12 (13%)	1 (1%)	11 22
51	2t	94/106 (89%)	85 (90%)	8 (8%)	1 (1%)	11 22
52	1u	21/27 (78%)	20 (95%)	1 (5%)	0	100 100
52	2u	21/27 (78%)	19 (90%)	2 (10%)	0	100 100
56	1z	1/3 (33%)	0	1 (100%)	0	100 100
56	2z	1/3 (33%)	1 (100%)	0	0	100 100
All	All	11370/12134 (94%)	10433 (92%)	839 (7%)	98 (1%)	14 27

All (98) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	1P	29	LYS
21	1Z	53	ILE
23	11	3	LYS
26	14	53	GLU
26	14	62	ARG
33	1b	22	LYS
35	1d	173	TRP
40	1i	54	ASP
44	1m	67	GLU
44	1m	107	ALA
5	2F	130	ALA
6	2G	126	ASP
26	24	45	GLY
33	2b	17	PHE
43	2l	91	LYS
44	2m	67	GLU
44	2m	106	ASN
46	2o	88	ARG
33	1b	17	PHE
36	1e	85	GLY
5	2F	21	ALA
6	2G	42	GLY
6	2G	43	LEU
6	2G	52	ILE
33	2b	21	ARG
33	2b	123	ALA
38	2g	55	GLY
38	2g	80	VAL
47	2p	52	ASP

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Mol	Chain	Res	Type
48	2q	68	ARG
4	1E	52	LEU
21	1Z	52	SER
26	14	47	GLN
33	1b	126	GLU
38	1g	55	GLY
41	1j	78	ASN
47	1p	52	ASP
9	2N	2	LYS
11	2P	36	LYS
17	2V	79	VAL
21	2Z	52	SER
33	2b	20	GLU
33	2b	74	LYS
34	2c	177	THR
36	2e	97	GLY
51	2t	99	LEU
5	1F	130	ALA
8	1I	10	GLU
10	1O	5	GLN
26	14	63	TYR
33	1b	8	LYS
33	1b	129	GLU
36	1e	86	ALA
43	1l	105	TYR
4	2E	52	LEU
11	2P	45	LEU
33	2b	105	PHE
38	2g	4	ARG
41	2j	75	ILE
41	2j	79	ARG
42	2k	117	ASN
43	2l	105	TYR
48	2q	33	GLY
11	1P	45	LEU
19	1X	2	LYS
26	14	49	PHE
33	1b	124	SER
33	1b	231	GLU
34	1c	80	GLY
46	1o	88	ARG
7	2H	12	PRO

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Mol	Chain	Res	Type
7	2H	126	PRO
8	2I	10	GLU
14	2S	84	GLN
26	24	48	ARG
33	2b	153	ARG
33	2b	213	LEU
44	2m	6	GLY
45	2n	14	PRO
6	1G	43	LEU
11	1P	36	LYS
17	1V	79	VAL
33	1b	16	HIS
51	1t	47	GLY
13	2R	45	ARG
19	2X	93	GLU
21	2Z	146	ILE
33	2b	65	GLY
36	2e	69	VAL
11	2P	122	PRO
41	2j	77	PRO
33	1b	125	PRO
21	2Z	53	ILE
42	1k	49	GLY
3	2D	29	PRO
21	2Z	147	GLY
34	2c	84	ILE
40	2i	41	VAL

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%)	205 (95%)	10 (5%)	23 47
3	2D	215/218 (99%)	202 (94%)	13 (6%)	17 36
4	1E	164/166 (99%)	153 (93%)	11 (7%)	15 31

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
4	2E	164/166 (99%)	150 (92%)	14 (8%)	10 22
5	1F	160/166 (96%)	143 (89%)	17 (11%)	6 14
5	2F	159/166 (96%)	149 (94%)	10 (6%)	16 34
6	1G	143/156 (92%)	132 (92%)	11 (8%)	12 25
6	2G	143/156 (92%)	120 (84%)	23 (16%)	2 4
7	1H	144/148 (97%)	134 (93%)	10 (7%)	14 30
7	2H	144/148 (97%)	131 (91%)	13 (9%)	9 19
8	1I	113/124 (91%)	92 (81%)	21 (19%)	1 3
8	2I	105/124 (85%)	84 (80%)	21 (20%)	1 2
9	1N	118/119 (99%)	111 (94%)	7 (6%)	18 37
9	2N	118/119 (99%)	110 (93%)	8 (7%)	14 31
10	1O	100/100 (100%)	97 (97%)	3 (3%)	36 64
10	2O	100/100 (100%)	96 (96%)	4 (4%)	28 54
11	1P	115/116 (99%)	107 (93%)	8 (7%)	14 29
11	2P	115/116 (99%)	106 (92%)	9 (8%)	11 24
12	1Q	111/111 (100%)	105 (95%)	6 (5%)	20 41
12	2Q	111/111 (100%)	106 (96%)	5 (4%)	24 49
13	1R	101/101 (100%)	97 (96%)	4 (4%)	28 54
13	2R	101/101 (100%)	96 (95%)	5 (5%)	22 44
14	1S	86/88 (98%)	76 (88%)	10 (12%)	5 11
14	2S	85/88 (97%)	76 (89%)	9 (11%)	6 14
15	1T	115/127 (91%)	109 (95%)	6 (5%)	21 42
15	2T	113/127 (89%)	104 (92%)	9 (8%)	11 24
16	1U	93/94 (99%)	89 (96%)	4 (4%)	26 51
16	2U	93/94 (99%)	88 (95%)	5 (5%)	20 41
17	1V	80/82 (98%)	77 (96%)	3 (4%)	29 56
17	2V	80/82 (98%)	71 (89%)	9 (11%)	5 12
18	1W	90/92 (98%)	86 (96%)	4 (4%)	25 50
18	2W	90/92 (98%)	84 (93%)	6 (7%)	15 31
19	1X	77/78 (99%)	76 (99%)	1 (1%)	61 82
19	2X	77/78 (99%)	72 (94%)	5 (6%)	15 32

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
20	1Y	85/91 (93%)	76 (89%)	9 (11%)	6 14
20	2Y	85/91 (93%)	71 (84%)	14 (16%)	2 4
21	1Z	135/179 (75%)	119 (88%)	16 (12%)	5 11
21	2Z	137/179 (76%)	121 (88%)	16 (12%)	5 11
22	10	65/67 (97%)	65 (100%)	0	100 100
22	20	65/67 (97%)	63 (97%)	2 (3%)	35 62
23	11	80/83 (96%)	73 (91%)	7 (9%)	9 20
23	21	80/83 (96%)	74 (92%)	6 (8%)	12 26
24	12	65/67 (97%)	60 (92%)	5 (8%)	12 25
24	22	65/67 (97%)	57 (88%)	8 (12%)	4 10
25	13	51/52 (98%)	48 (94%)	3 (6%)	18 37
25	23	50/52 (96%)	47 (94%)	3 (6%)	17 36
26	14	59/63 (94%)	51 (86%)	8 (14%)	3 8
26	24	53/63 (84%)	40 (76%)	13 (24%)	1 1
27	15	50/52 (96%)	47 (94%)	3 (6%)	17 36
27	25	50/52 (96%)	46 (92%)	4 (8%)	11 24
28	16	51/52 (98%)	44 (86%)	7 (14%)	3 7
28	26	50/52 (96%)	41 (82%)	9 (18%)	2 3
29	17	41/42 (98%)	38 (93%)	3 (7%)	13 27
29	27	41/42 (98%)	39 (95%)	2 (5%)	22 45
30	18	54/55 (98%)	51 (94%)	3 (6%)	19 39
30	28	54/55 (98%)	51 (94%)	3 (6%)	19 39
31	19	34/34 (100%)	32 (94%)	2 (6%)	18 37
31	29	34/34 (100%)	33 (97%)	1 (3%)	37 65
33	1b	192/220 (87%)	165 (86%)	27 (14%)	3 7
33	2b	187/220 (85%)	156 (83%)	31 (17%)	2 4
34	1c	142/188 (76%)	129 (91%)	13 (9%)	8 19
34	2c	140/188 (74%)	129 (92%)	11 (8%)	11 24
35	1d	169/181 (93%)	148 (88%)	21 (12%)	4 9
35	2d	173/181 (96%)	159 (92%)	14 (8%)	11 23
36	1e	113/123 (92%)	106 (94%)	7 (6%)	16 34

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
36	2e	114/123 (93%)	104 (91%)	10 (9%)	9 20
37	1f	84/90 (93%)	74 (88%)	10 (12%)	5 11
37	2f	85/90 (94%)	80 (94%)	5 (6%)	18 37
38	1g	119/127 (94%)	100 (84%)	19 (16%)	2 5
38	2g	120/127 (94%)	101 (84%)	19 (16%)	2 5
39	1h	114/119 (96%)	106 (93%)	8 (7%)	14 29
39	2h	114/119 (96%)	103 (90%)	11 (10%)	8 17
40	1i	90/99 (91%)	80 (89%)	10 (11%)	6 12
40	2i	89/99 (90%)	78 (88%)	11 (12%)	4 9
41	1j	66/92 (72%)	56 (85%)	10 (15%)	3 5
41	2j	69/92 (75%)	61 (88%)	8 (12%)	5 11
42	1k	82/99 (83%)	71 (87%)	11 (13%)	4 8
42	2k	83/99 (84%)	73 (88%)	10 (12%)	5 10
43	1l	96/108 (89%)	90 (94%)	6 (6%)	16 34
43	2l	96/108 (89%)	87 (91%)	9 (9%)	8 18
44	1m	93/101 (92%)	85 (91%)	8 (9%)	10 21
44	2m	92/101 (91%)	82 (89%)	10 (11%)	6 13
45	1n	49/50 (98%)	47 (96%)	2 (4%)	27 53
45	2n	49/50 (98%)	46 (94%)	3 (6%)	17 35
46	1o	78/80 (98%)	74 (95%)	4 (5%)	21 43
46	2o	78/80 (98%)	77 (99%)	1 (1%)	61 82
47	1p	69/74 (93%)	61 (88%)	8 (12%)	5 11
47	2p	68/74 (92%)	63 (93%)	5 (7%)	13 27
48	1q	94/97 (97%)	89 (95%)	5 (5%)	20 42
48	2q	94/97 (97%)	89 (95%)	5 (5%)	20 42
49	1r	59/77 (77%)	52 (88%)	7 (12%)	5 11
49	2r	59/77 (77%)	55 (93%)	4 (7%)	14 31
50	1s	69/80 (86%)	63 (91%)	6 (9%)	9 21
50	2s	67/80 (84%)	59 (88%)	8 (12%)	5 11
51	1t	70/82 (85%)	60 (86%)	10 (14%)	3 6
51	2t	70/82 (85%)	67 (96%)	3 (4%)	26 51

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
52	1u	18/22 (82%)	18 (100%)	0	100 100
52	2u	18/22 (82%)	17 (94%)	1 (6%)	19 39
56	1z	2/2 (100%)	2 (100%)	0	100 100
56	2z	2/2 (100%)	2 (100%)	0	100 100
All	All	9307/10068 (92%)	8485 (91%)	822 (9%)	9 20

All (822) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	12	SER
3	1D	14	ARG
3	1D	32	SER
3	1D	136	ILE
3	1D	154	LYS
3	1D	175	LEU
3	1D	242	ARG
3	1D	259	THR
3	1D	273	ARG
3	1D	276	LYS
4	1E	12	THR
4	1E	33	VAL
4	1E	38	THR
4	1E	47	VAL
4	1E	89	ASP
4	1E	90	THR
4	1E	93	VAL
4	1E	116	VAL
4	1E	184	VAL
4	1E	188	VAL
4	1E	195	LEU
5	1F	24	LEU
5	1F	27	GLU
5	1F	53	THR
5	1F	57	VAL
5	1F	70	THR
5	1F	74	ARG
5	1F	88	VAL
5	1F	106	ARG
5	1F	127	GLU
5	1F	132	VAL
5	1F	140	LEU

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Mol	Chain	Res	Type
5	1F	158	THR
5	1F	162	LEU
5	1F	168	ARG
5	1F	175	THR
5	1F	183	VAL
5	1F	197	ASP
6	1G	3	LEU
6	1G	5	VAL
6	1G	7	LEU
6	1G	8	LYS
6	1G	31	VAL
6	1G	36	LYS
6	1G	39	ILE
6	1G	43	LEU
6	1G	115	ARG
6	1G	140	ILE
6	1G	159	VAL
7	1H	2	SER
7	1H	7	LEU
7	1H	13	LYS
7	1H	34	GLU
7	1H	50	VAL
7	1H	98	LEU
7	1H	116	GLU
7	1H	124	GLU
7	1H	129	THR
7	1H	141	VAL
8	1I	9	LEU
8	1I	10	GLU
8	1I	12	LEU
8	1I	20	ASP
8	1I	40	THR
8	1I	41	GLU
8	1I	42	SER
8	1I	47	LEU
8	1I	50	ARG
8	1I	61	ARG
8	1I	78	THR
8	1I	86	THR
8	1I	87	LYS
8	1I	91	SER
8	1I	92	VAL

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Mol	Chain	Res	Type
8	1I	101	LEU
8	1I	108	THR
8	1I	116	LEU
8	1I	123	LEU
8	1I	127	VAL
8	1I	129	THR
9	1N	1	MET
9	1N	28	THR
9	1N	46	VAL
9	1N	48	MET
9	1N	83	LYS
9	1N	136	GLU
9	1N	140	VAL
10	1O	28	SER
10	1O	96	THR
10	1O	108	GLU
11	1P	65	ARG
11	1P	75	ILE
11	1P	92	GLU
11	1P	95	VAL
11	1P	98	GLU
11	1P	101	VAL
11	1P	147	LEU
11	1P	149	GLU
12	1Q	7	MET
12	1Q	18	LYS
12	1Q	56	ARG
12	1Q	98	LYS
12	1Q	109	VAL
12	1Q	115	MET
13	1R	8	ARG
13	1R	36	THR
13	1R	42	LYS
13	1R	114	VAL
14	1S	13	ARG
14	1S	14	VAL
14	1S	15	ARG
14	1S	46	VAL
14	1S	49	VAL
14	1S	53	SER
14	1S	69	VAL
14	1S	73	LEU

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Mol	Chain	Res	Type
14	1S	85	VAL
14	1S	98	VAL
15	1T	28	VAL
15	1T	41	ARG
15	1T	70	VAL
15	1T	85	LYS
15	1T	96	ARG
15	1T	128	GLU
16	1U	17	ILE
16	1U	74	LEU
16	1U	95	LEU
16	1U	110	VAL
17	1V	38	LEU
17	1V	46	VAL
17	1V	79	VAL
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
18	1W	67	ASP
19	1X	81	VAL
20	1Y	1	MET
20	1Y	7	VAL
20	1Y	14	LEU
20	1Y	31	LEU
20	1Y	38	ILE
20	1Y	47	LYS
20	1Y	72	VAL
20	1Y	99	CYS
20	1Y	106	LEU
21	1Z	33	LEU
21	1Z	42	VAL
21	1Z	46	LYS
21	1Z	56	VAL
21	1Z	61	LEU
21	1Z	70	LEU
21	1Z	119	GLU
21	1Z	123	ASP
21	1Z	124	ILE
21	1Z	150	LEU
21	1Z	153	SER
21	1Z	154	ASP
21	1Z	157	LEU

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Mol	Chain	Res	Type
21	1Z	161	VAL
21	1Z	170	THR
21	1Z	171	ILE
23	11	11	ARG
23	11	35	THR
23	11	38	SER
23	11	40	ARG
23	11	46	LEU
23	11	59	THR
23	11	80	LEU
24	12	19	VAL
24	12	24	LEU
24	12	40	SER
24	12	53	LEU
24	12	65	ASN
25	13	54	VAL
25	13	55	ARG
25	13	60	GLU
26	14	1	MET
26	14	31	ILE
26	14	33	VAL
26	14	49	PHE
26	14	52	THR
26	14	53	GLU
26	14	63	TYR
26	14	67	TYR
27	15	6	VAL
27	15	40	LYS
27	15	57	VAL
28	16	4	GLU
28	16	7	ILE
28	16	8	LYS
28	16	9	LEU
28	16	14	THR
28	16	28	ARG
28	16	45	LYS
29	17	24	THR
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	23	VAL
30	18	43	GLN

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Mol	Chain	Res	Type
31	19	7	VAL
31	19	10	ILE
33	1b	12	GLU
33	1b	35	GLU
33	1b	37	ASN
33	1b	39	ILE
33	1b	54	THR
33	1b	61	LEU
33	1b	76	GLN
33	1b	80	ILE
33	1b	81	VAL
33	1b	84	GLU
33	1b	101	MET
33	1b	102	LEU
33	1b	111	ARG
33	1b	112	VAL
33	1b	160	ASP
33	1b	162	ILE
33	1b	164	VAL
33	1b	185	ILE
33	1b	190	THR
33	1b	196	LEU
33	1b	208	ILE
33	1b	212	GLN
33	1b	215	LEU
33	1b	219	VAL
33	1b	222	ILE
33	1b	229	VAL
33	1b	236	TYR
34	1c	3	ASN
34	1c	68	VAL
34	1c	70	VAL
34	1c	82	GLU
34	1c	89	GLU
34	1c	101	LEU
34	1c	115	LEU
34	1c	119	ARG
34	1c	124	ILE
34	1c	175	LEU
34	1c	193	TYR
34	1c	195	VAL
34	1c	207	VAL

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Mol	Chain	Res	Type
35	1d	3	ARG
35	1d	8	VAL
35	1d	11	LEU
35	1d	17	VAL
35	1d	19	LEU
35	1d	70	ILE
35	1d	76	ARG
35	1d	85	LYS
35	1d	91	SER
35	1d	128	VAL
35	1d	134	ASP
35	1d	140	VAL
35	1d	144	ASP
35	1d	158	ILE
35	1d	170	VAL
35	1d	175	SER
35	1d	177	ASP
35	1d	178	VAL
35	1d	188	LEU
35	1d	193	ASP
35	1d	194	LEU
36	1e	41	VAL
36	1e	53	LEU
36	1e	56	GLN
36	1e	68	GLU
36	1e	75	THR
36	1e	98	THR
36	1e	131	ILE
37	1f	19	LEU
37	1f	40	VAL
37	1f	45	LEU
37	1f	65	VAL
37	1f	70	ASP
37	1f	72	VAL
37	1f	73	ASN
37	1f	75	LEU
37	1f	78	GLU
37	1f	91	VAL
38	1g	12	LEU
38	1g	21	VAL
38	1g	27	ILE
38	1g	50	ILE

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Mol	Chain	Res	Type
38	1g	57	GLU
38	1g	59	LEU
38	1g	61	VAL
38	1g	76	ARG
38	1g	77	SER
38	1g	85	TYR
38	1g	87	VAL
38	1g	90	GLU
38	1g	98	SER
38	1g	104	LEU
38	1g	113	GLU
38	1g	114	ARG
38	1g	115	ARG
38	1g	120	ILE
38	1g	138	LYS
39	1h	3	THR
39	1h	25	ASP
39	1h	29	SER
39	1h	51	VAL
39	1h	87	SER
39	1h	99	GLU
39	1h	109	ILE
39	1h	112	LEU
40	1i	23	ASN
40	1i	25	LYS
40	1i	26	VAL
40	1i	27	THR
40	1i	48	GLU
40	1i	53	VAL
40	1i	64	THR
40	1i	96	LEU
40	1i	103	THR
40	1i	128	ARG
41	1j	7	LYS
41	1j	23	ILE
41	1j	35	SER
41	1j	38	ILE
41	1j	42	THR
41	1j	43	ARG
41	1j	49	VAL
41	1j	72	VAL
41	1j	81	THR

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Mol	Chain	Res	Type
41	1j	92	THR
42	1k	31	THR
42	1k	48	ILE
42	1k	80	VAL
42	1k	84	VAL
42	1k	87	THR
42	1k	96	ARG
42	1k	104	GLN
42	1k	109	VAL
42	1k	114	VAL
42	1k	117	ASN
42	1k	122	LYS
43	1l	36	VAL
43	1l	55	VAL
43	1l	58	VAL
43	1l	62	SER
43	1l	83	VAL
43	1l	100	ILE
44	1m	4	ILE
44	1m	12	ASN
44	1m	17	VAL
44	1m	43	THR
44	1m	49	THR
44	1m	105	THR
44	1m	106	ASN
44	1m	109	THR
45	1n	13	THR
45	1n	56	VAL
46	1o	24	SER
46	1o	71	GLN
46	1o	76	GLU
46	1o	87	ILE
47	1p	20	VAL
47	1p	27	LYS
47	1p	45	THR
47	1p	54	GLU
47	1p	60	LEU
47	1p	61	SER
47	1p	62	VAL
47	1p	67	THR
48	1q	11	VAL
48	1q	36	ILE

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Mol	Chain	Res	Type
48	1q	60	ILE
48	1q	66	SER
48	1q	85	VAL
49	1r	31	LEU
49	1r	36	ASN
49	1r	37	VAL
49	1r	45	SER
49	1r	61	LYS
49	1r	76	LEU
49	1r	86	VAL
50	1s	4	SER
50	1s	12	ASP
50	1s	28	LYS
50	1s	41	VAL
50	1s	43	GLU
50	1s	51	VAL
51	1t	10	LEU
51	1t	23	ARG
51	1t	24	LEU
51	1t	37	SER
51	1t	38	LYS
51	1t	42	GLN
51	1t	43	LEU
51	1t	71	THR
51	1t	86	ARG
51	1t	100	ILE
3	2D	3	VAL
3	2D	16	MET
3	2D	22	SER
3	2D	37	LEU
3	2D	38	LYS
3	2D	61	LEU
3	2D	71	ASP
3	2D	154	LYS
3	2D	171	ASP
3	2D	173	VAL
3	2D	204	ILE
3	2D	229	VAL
3	2D	242	ARG
4	2E	12	THR
4	2E	33	VAL
4	2E	38	THR

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Mol	Chain	Res	Type
4	2E	40	GLU
4	2E	52	LEU
4	2E	72	VAL
4	2E	90	THR
4	2E	92	THR
4	2E	116	VAL
4	2E	119	ARG
4	2E	134	ILE
4	2E	141	ILE
4	2E	145	LYS
4	2E	195	LEU
5	2F	9	ILE
5	2F	11	VAL
5	2F	33	LEU
5	2F	108	LYS
5	2F	110	LEU
5	2F	158	THR
5	2F	161	GLU
5	2F	162	LEU
5	2F	183	VAL
5	2F	195	ASP
6	2G	4	ASP
6	2G	5	VAL
6	2G	7	LEU
6	2G	18	GLU
6	2G	27	ASN
6	2G	28	VAL
6	2G	31	VAL
6	2G	43	LEU
6	2G	45	GLU
6	2G	51	ARG
6	2G	53	LEU
6	2G	60	LEU
6	2G	62	LEU
6	2G	70	VAL
6	2G	79	ASN
6	2G	91	ARG
6	2G	106	LEU
6	2G	123	ASN
6	2G	140	ILE
6	2G	145	THR
6	2G	152	LEU

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Mol	Chain	Res	Type
6	2G	162	THR
6	2G	165	THR
7	2H	3	ARG
7	2H	15	VAL
7	2H	16	SER
7	2H	43	VAL
7	2H	49	VAL
7	2H	52	VAL
7	2H	56	SER
7	2H	58	GLU
7	2H	70	THR
7	2H	95	ARG
7	2H	122	THR
7	2H	127	GLU
7	2H	133	VAL
8	2I	12	LEU
8	2I	14	ASP
8	2I	15	VAL
8	2I	19	VAL
8	2I	38	LEU
8	2I	41	GLU
8	2I	43	ASN
8	2I	44	LEU
8	2I	45	LYS
8	2I	51	ILE
8	2I	58	LEU
8	2I	61	ARG
8	2I	72	LEU
8	2I	85	GLU
8	2I	107	VAL
8	2I	108	THR
8	2I	117	GLU
8	2I	123	LEU
8	2I	127	VAL
8	2I	143	SER
8	2I	144	VAL
9	2N	1	MET
9	2N	28	THR
9	2N	46	VAL
9	2N	48	MET
9	2N	62	VAL
9	2N	73	THR

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Mol	Chain	Res	Type
9	2N	83	LYS
9	2N	131	GLN
10	2O	66	LYS
10	2O	69	ILE
10	2O	91	LEU
10	2O	112	MET
11	2P	65	ARG
11	2P	90	ARG
11	2P	95	VAL
11	2P	98	GLU
11	2P	101	VAL
11	2P	105	LEU
11	2P	131	SER
11	2P	133	SER
11	2P	135	LEU
12	2Q	1	MET
12	2Q	12	GLN
12	2Q	18	LYS
12	2Q	21	THR
12	2Q	106	VAL
13	2R	6	SER
13	2R	30	THR
13	2R	36	THR
13	2R	95	THR
13	2R	114	VAL
14	2S	3	ARG
14	2S	15	ARG
14	2S	27	SER
14	2S	43	GLU
14	2S	46	VAL
14	2S	49	VAL
14	2S	52	SER
14	2S	63	THR
14	2S	110	LEU
15	2T	17	THR
15	2T	28	VAL
15	2T	40	THR
15	2T	63	VAL
15	2T	72	VAL
15	2T	74	ARG
15	2T	87	ASP
15	2T	89	VAL

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Mol	Chain	Res	Type
15	2T	96	ARG
16	2U	5	LYS
16	2U	17	ILE
16	2U	74	LEU
16	2U	84	LYS
16	2U	95	LEU
17	2V	7	THR
17	2V	12	TYR
17	2V	39	LEU
17	2V	46	VAL
17	2V	61	VAL
17	2V	66	ARG
17	2V	73	SER
17	2V	79	VAL
17	2V	98	GLU
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	39	THR
18	2W	67	ASP
18	2W	96	ILE
19	2X	1	MET
19	2X	45	THR
19	2X	81	VAL
19	2X	83	VAL
19	2X	92	LEU
20	2Y	14	LEU
20	2Y	26	LYS
20	2Y	30	VAL
20	2Y	37	VAL
20	2Y	38	ILE
20	2Y	40	GLU
20	2Y	47	LYS
20	2Y	72	VAL
20	2Y	85	VAL
20	2Y	90	LEU
20	2Y	96	ILE
20	2Y	97	ARG
20	2Y	98	VAL
20	2Y	99	CYS
21	2Z	33	LEU
21	2Z	42	VAL

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Mol	Chain	Res	Type
21	2Z	61	LEU
21	2Z	66	SER
21	2Z	70	LEU
21	2Z	71	VAL
21	2Z	74	VAL
21	2Z	91	LEU
21	2Z	121	HIS
21	2Z	129	SER
21	2Z	144	LEU
21	2Z	149	SER
21	2Z	154	ASP
21	2Z	161	VAL
21	2Z	171	ILE
21	2Z	174	VAL
22	20	40	GLN
22	20	46	LYS
23	21	11	ARG
23	21	40	ARG
23	21	46	LEU
23	21	59	THR
23	21	80	LEU
23	21	83	GLU
24	22	19	VAL
24	22	24	LEU
24	22	35	LEU
24	22	38	GLN
24	22	45	SER
24	22	51	ARG
24	22	60	LEU
24	22	70	GLN
25	23	31	LEU
25	23	54	VAL
25	23	59	VAL
26	24	3	GLU
26	24	10	VAL
26	24	27	THR
26	24	31	ILE
26	24	33	VAL
26	24	34	GLU
26	24	48	ARG
26	24	50	VAL
26	24	56	VAL

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Mol	Chain	Res	Type
26	24	59	PHE
26	24	61	ARG
26	24	63	TYR
26	24	68	ARG
27	25	6	VAL
27	25	35	GLU
27	25	57	VAL
27	25	58	LEU
28	26	7	ILE
28	26	9	LEU
28	26	14	THR
28	26	19	ARG
28	26	20	ASN
28	26	30	THR
28	26	32	ASN
28	26	48	VAL
28	26	52	VAL
29	27	43	THR
29	27	46	VAL
30	28	14	VAL
30	28	23	VAL
30	28	37	SER
31	29	33	LYS
33	2b	7	VAL
33	2b	8	LYS
33	2b	9	GLU
33	2b	10	LEU
33	2b	16	HIS
33	2b	35	GLU
33	2b	37	ASN
33	2b	39	ILE
33	2b	67	THR
33	2b	68	ILE
33	2b	76	GLN
33	2b	83	MET
33	2b	93	VAL
33	2b	95	GLN
33	2b	110	GLN
33	2b	112	VAL
33	2b	115	LEU
33	2b	117	GLU
33	2b	118	LEU

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Mol	Chain	Res	Type
33	2b	127	ILE
33	2b	160	ASP
33	2b	164	VAL
33	2b	168	THR
33	2b	179	LYS
33	2b	185	ILE
33	2b	187	LEU
33	2b	189	ASP
33	2b	198	ASP
33	2b	208	ILE
33	2b	224	GLN
33	2b	230	VAL
34	2c	15	THR
34	2c	26	LYS
34	2c	39	ILE
34	2c	52	LEU
34	2c	77	ILE
34	2c	91	LEU
34	2c	101	LEU
34	2c	116	VAL
34	2c	190	ARG
34	2c	198	VAL
34	2c	206	GLU
35	2d	5	ILE
35	2d	28	SER
35	2d	34	GLU
35	2d	78	LEU
35	2d	96	LEU
35	2d	119	GLN
35	2d	127	THR
35	2d	135	LEU
35	2d	150	GLU
35	2d	156	GLU
35	2d	158	ILE
35	2d	162	LEU
35	2d	175	SER
35	2d	178	VAL
36	2e	10	MET
36	2e	13	ILE
36	2e	18	ARG
36	2e	20	GLN
36	2e	31	LEU

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Mol	Chain	Res	Type
36	2e	38	GLN
36	2e	41	VAL
36	2e	51	VAL
36	2e	71	LEU
36	2e	148	VAL
37	2f	30	LEU
37	2f	40	VAL
37	2f	63	TYR
37	2f	69	GLU
37	2f	81	ILE
38	2g	9	VAL
38	2g	15	ASP
38	2g	23	VAL
38	2g	24	THR
38	2g	27	ILE
38	2g	30	ILE
38	2g	51	GLN
38	2g	52	GLU
38	2g	53	LYS
38	2g	72	ARG
38	2g	78	ARG
38	2g	79	ARG
38	2g	85	TYR
38	2g	94	ARG
38	2g	113	GLU
38	2g	114	ARG
38	2g	135	VAL
38	2g	144	MET
38	2g	155	ARG
39	2h	22	GLU
39	2h	29	SER
39	2h	37	ARG
39	2h	45	ILE
39	2h	51	VAL
39	2h	54	ASP
39	2h	112	LEU
39	2h	122	ARG
39	2h	127	LEU
39	2h	133	LEU
39	2h	137	VAL
40	2i	7	THR
40	2i	12	GLU

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Mol	Chain	Res	Type
40	2i	14	VAL
40	2i	20	ARG
40	2i	40	LEU
40	2i	41	VAL
40	2i	63	ILE
40	2i	65	VAL
40	2i	86	VAL
40	2i	88	TYR
40	2i	89	ASN
41	2j	21	GLN
41	2j	23	ILE
41	2j	42	THR
41	2j	49	VAL
41	2j	62	HIS
41	2j	71	LEU
41	2j	81	THR
41	2j	84	GLN
42	2k	14	VAL
42	2k	48	ILE
42	2k	53	SER
42	2k	62	GLN
42	2k	79	SER
42	2k	81	ASP
42	2k	98	LEU
42	2k	103	LEU
42	2k	105	VAL
42	2k	125	PHE
43	2l	18	VAL
43	2l	36	VAL
43	2l	39	VAL
43	2l	40	VAL
43	2l	57	LYS
43	2l	60	LEU
43	2l	62	SER
43	2l	83	VAL
43	2l	116	SER
44	2m	15	VAL
44	2m	17	VAL
44	2m	32	GLU
44	2m	74	VAL
44	2m	90	LEU
44	2m	94	ARG

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Mol	Chain	Res	Type
44	2m	98	VAL
44	2m	103	THR
44	2m	106	ASN
44	2m	117	VAL
45	2n	9	LYS
45	2n	15	LYS
45	2n	33	VAL
46	2o	3	ILE
47	2p	2	VAL
47	2p	20	VAL
47	2p	43	LYS
47	2p	67	THR
47	2p	73	LEU
48	2q	26	GLN
48	2q	36	ILE
48	2q	60	ILE
48	2q	63	ARG
48	2q	100	LYS
49	2r	31	LEU
49	2r	37	VAL
49	2r	69	THR
49	2r	82	THR
50	2s	27	GLU
50	2s	37	ARG
50	2s	45	VAL
50	2s	47	HIS
50	2s	48	THR
50	2s	51	VAL
50	2s	57	HIS
50	2s	77	THR
51	2t	45	GLN
51	2t	46	GLU
51	2t	99	LEU
52	2u	6	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (135) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	166	GLN
4	1E	48	GLN
5	1F	8	GLN
5	1F	69	HIS

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Mol	Chain	Res	Type
5	1F	203	GLN
6	1G	26	GLN
6	1G	132	ASN
8	1I	105	HIS
9	1N	8	GLN
9	1N	56	ASN
9	1N	69	GLN
9	1N	94	HIS
9	1N	133	GLN
12	1Q	12	GLN
12	1Q	57	HIS
12	1Q	113	GLN
12	1Q	123	HIS
13	1R	71	GLN
15	1T	84	GLN
15	1T	90	GLN
16	1U	94	ASN
16	1U	104	GLN
18	1W	111	HIS
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
21	1Z	54	HIS
21	1Z	73	GLN
21	1Z	132	ASN
25	13	32	GLN
27	15	4	HIS
28	16	20	ASN
33	1b	16	HIS
33	1b	78	GLN
33	1b	140	HIS
33	1b	212	GLN
34	1c	6	HIS
34	1c	69	HIS
34	1c	162	GLN
34	1c	170	GLN
34	1c	181	ASN
35	1d	77	ASN
35	1d	116	GLN
35	1d	123	HIS
35	1d	125	HIS
36	1e	38	GLN

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Mol	Chain	Res	Type
36	1e	56	GLN
36	1e	78	HIS
37	1f	57	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	64	GLN
38	1g	86	GLN
40	1i	31	GLN
40	1i	34	ASN
40	1i	124	GLN
41	1j	56	HIS
41	1j	62	HIS
42	1k	104	GLN
43	1l	99	HIS
44	1m	77	ASN
48	1q	16	GLN
48	1q	26	GLN
49	1r	63	GLN
50	1s	83	HIS
51	1t	16	HIS
4	2E	48	GLN
4	2E	143	ASN
5	2F	133	ASN
5	2F	203	GLN
7	2H	111	HIS
10	2O	5	GLN
11	2P	70	GLN
12	2Q	12	GLN
12	2Q	57	HIS
14	2S	38	GLN
14	2S	68	GLN
15	2T	43	GLN
15	2T	84	GLN
15	2T	90	GLN
16	2U	94	ASN
18	2W	62	HIS
19	2X	31	HIS
21	2Z	121	HIS
21	2Z	151	HIS
22	20	12	ASN
22	20	35	ASN

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Mol	Chain	Res	Type
24	22	38	GLN
24	22	43	GLN
25	23	32	GLN
28	26	20	ASN
30	28	35	GLN
33	2b	95	GLN
33	2b	135	GLN
33	2b	140	HIS
34	2c	6	HIS
34	2c	139	GLN
34	2c	162	GLN
35	2d	116	GLN
35	2d	119	GLN
35	2d	160	GLN
35	2d	199	ASN
36	2e	38	GLN
36	2e	78	HIS
37	2f	73	ASN
37	2f	100	ASN
38	2g	28	ASN
38	2g	56	GLN
40	2i	31	GLN
40	2i	34	ASN
40	2i	89	ASN
41	2j	13	HIS
41	2j	62	HIS
41	2j	84	GLN
42	2k	22	HIS
42	2k	116	HIS
42	2k	117	ASN
43	2l	99	HIS
44	2m	77	ASN
44	2m	92	HIS
45	2n	49	HIS
46	2o	9	GLN
46	2o	50	HIS
46	2o	62	GLN
47	2p	13	HIS
47	2p	16	HIS
48	2q	93	GLN
49	2r	63	GLN
50	2s	47	HIS

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Mol	Chain	Res	Type
50	2s	57	HIS
50	2s	65	ASN
50	2s	69	HIS
50	2s	83	HIS
51	2t	75	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	444 (15%)	30 (1%)
1	2A	2791/2915 (95%)	459 (16%)	25 (0%)
2	1B	119/121 (98%)	10 (8%)	0
2	2B	118/121 (97%)	21 (17%)	0
32	1a	1497/1521 (98%)	242 (16%)	0
32	2a	1501/1521 (98%)	276 (18%)	0
53	1v	12/24 (50%)	1 (8%)	0
53	2v	12/24 (50%)	0	0
54	1w	71/76 (93%)	24 (33%)	0
54	2w	68/76 (89%)	23 (33%)	0
55	1x	75/77 (97%)	7 (9%)	0
55	2x	75/77 (97%)	7 (9%)	0
57	1y	72/76 (94%)	27 (37%)	0
57	2y	70/76 (92%)	22 (31%)	0
All	All	9345/9620 (97%)	1563 (16%)	55 (0%)

All (1563) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	14	A
1	1A	15	G
1	1A	27	G
1	1A	34	C
1	1A	45	C
1	1A	58	G
1	1A	61	G
1	1A	63	U
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G

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Mol	Chain	Res	Type
1	1A	84	A
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	139(A)	G
1	1A	154	G
1	1A	154(A)	C
1	1A	173	G
1	1A	174	C
1	1A	182	A
1	1A	196	A
1	1A	197	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	222	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	264	C
1	1A	269	U
1	1A	271(J)	C
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	352	G
1	1A	357	A

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Mol	Chain	Res	Type
1	1A	363	G
1	1A	363(B)	G
1	1A	386	G
1	1A	396	G
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	481	G
1	1A	504	U
1	1A	505	A
1	1A	508	G
1	1A	509	C
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(A)	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(A)	A
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	668	G
1	1A	669	G
1	1A	686	G
1	1A	717	G

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Mol	Chain	Res	Type
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	765	G
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	789	A
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	811	U
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	877	U
1	1A	879	G
1	1A	880	G
1	1A	883	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	894	C
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A

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Mol	Chain	Res	Type
1	1A	961	C
1	1A	963	U
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1039	G
1	1A	1040	C
1	1A	1044	G
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A
1	1A	1055	G
1	1A	1057	A
1	1A	1058	G
1	1A	1059	G
1	1A	1063	G
1	1A	1065	U
1	1A	1069	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	1080	C
1	1A	1081	U
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1093	G
1	1A	1094	U

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Mol	Chain	Res	Type
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	1116	C
1	1A	1128	A
1	1A	1135	C
1	1A	1136	G
1	1A	1149	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	1220	A
1	1A	1244	G
1	1A	1248	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1276	A
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1320	C
1	1A	1321	A
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1396	U

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Mol	Chain	Res	Type
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1436	G
1	1A	1445	A
1	1A	1450	G
1	1A	1455	G
1	1A	1460	A
1	1A	1461	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1497	U
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1532	C
1	1A	1539	G
1	1A	1540	U
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1607	C
1	1A	1608	A
1	1A	1648	C
1	1A	1654	A
1	1A	1664	A
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1746	G
1	1A	1756	G

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Mol	Chain	Res	Type
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	1812	A
1	1A	1816	G
1	1A	1817	G
1	1A	1829	A
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1919	A
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1981	A
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G

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Mol	Chain	Res	Type
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2097	C
1	1A	2102	U
1	1A	2108	C
1	1A	2113	U
1	1A	2116	G
1	1A	2118	U
1	1A	2120	G
1	1A	2121	G
1	1A	2126	A
1	1A	2127	G
1	1A	2129	C
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	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2161	C
1	1A	2165	G
1	1A	2166	G
1	1A	2168	G
1	1A	2169	A
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

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Mol	Chain	Res	Type
1	1A	2189	U
1	1A	2192	G
1	1A	2195	C
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2219	G
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2267	A
1	1A	2268	A
1	1A	2269	A
1	1A	2279	G
1	1A	2280	G
1	1A	2283	C
1	1A	2286	A
1	1A	2287	A
1	1A	2305	A
1	1A	2308	G
1	1A	2314	C
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2361	A
1	1A	2372	G
1	1A	2383	G
1	1A	2385	C
1	1A	2396	G
1	1A	2406	U
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2428	G
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C

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Mol	Chain	Res	Type
1	1A	2448	A
1	1A	2468	G
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2549	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2574	G
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2663	G
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2702	U
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2757	A
1	1A	2761	G
1	1A	2765	A
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G

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Mol	Chain	Res	Type
1	1A	2794	C
1	1A	2802	G
1	1A	2803	C
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2861	G
1	1A	2872	G
1	1A	2880	C
1	1A	2892	A
1	1A	2894	G
2	1B	2	C
2	1B	12	C
2	1B	13	A
2	1B	15	A
2	1B	45	A
2	1B	56	G
2	1B	67	G
2	1B	73	A
2	1B	85	G
2	1B	110	G
32	1a	5	U
32	1a	6	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	77	G
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	101	A
32	1a	116	A
32	1a	120	A
32	1a	121	C
32	1a	131	C
32	1a	142	G
32	1a	144	G

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Mol	Chain	Res	Type
32	1a	155	C
32	1a	160	A
32	1a	163	C
32	1a	164	U
32	1a	174	C
32	1a	182	U
32	1a	189(C)	C
32	1a	189(E)	U
32	1a	189(J)	G
32	1a	195	A
32	1a	197	A
32	1a	200	G
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	220	G
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	279	A
32	1a	289	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	347	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	355	C
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	383	A
32	1a	384	G
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C

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Mol	Chain	Res	Type
32	1a	423	G
32	1a	424	G
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	483	C
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	524	G
32	1a	527	G7M
32	1a	531	U
32	1a	532	A
32	1a	545	C
32	1a	547	A
32	1a	559	A
32	1a	560	U
32	1a	561	U
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	630	G
32	1a	639	G
32	1a	653	A
32	1a	665	A
32	1a	687	A
32	1a	688	G
32	1a	695	A

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Mol	Chain	Res	Type
32	1a	703	G
32	1a	723	U
32	1a	724	G
32	1a	731	G
32	1a	749	C
32	1a	752	G
32	1a	755	G
32	1a	766	A
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	852	G
32	1a	870	U
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	916	G
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	950	U
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	1000	U
32	1a	1002	G
32	1a	1003	G

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Mol	Chain	Res	Type
32	1a	1005	A
32	1a	1006	C
32	1a	1009	G
32	1a	1011	G
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1033	G
32	1a	1034	G
32	1a	1037	C
32	1a	1039	C
32	1a	1040	U
32	1a	1043	C
32	1a	1044	A
32	1a	1051	C
32	1a	1066	C
32	1a	1068	G
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1124	G
32	1a	1125	U
32	1a	1127	G
32	1a	1132	C
32	1a	1134	G
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1154	G

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Mol	Chain	Res	Type
32	1a	1157	A
32	1a	1159	U
32	1a	1174	G
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1213	A
32	1a	1214	C
32	1a	1227	A
32	1a	1238	A
32	1a	1252	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1270	C
32	1a	1275	A
32	1a	1276	G
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1297	C
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1312	G
32	1a	1320	C
32	1a	1338	G
32	1a	1346	A
32	1a	1347	G
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	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1452	C

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Mol	Chain	Res	Type
32	1a	1456	G
32	1a	1458	G
32	1a	1487	G
32	1a	1492	A
32	1a	1494	G
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
54	1w	2	C
54	1w	6	G
54	1w	7	A
54	1w	8	4SU
54	1w	9	A
54	1w	14	A
54	1w	15	G
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	36	A
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	66	U
54	1w	68	C
54	1w	69	G
54	1w	73	A
54	1w	74	C
55	1x	9	G
55	1x	14	A
55	1x	19	G
55	1x	21	A
55	1x	47	U
55	1x	59	A

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Mol	Chain	Res	Type
55	1x	61	C
57	1y	5	G
57	1y	6	G
57	1y	9	A
57	1y	14	A
57	1y	19	G
57	1y	20	U
57	1y	21	A
57	1y	27	G
57	1y	35	A
57	1y	36	A
57	1y	40	C
57	1y	44	G
57	1y	45	U
57	1y	46	G7M
57	1y	47	U
57	1y	48	C
57	1y	49	C
57	1y	56	C
57	1y	57	G
57	1y	58	A
57	1y	59	U
57	1y	60	U
57	1y	61	C
57	1y	65	G
57	1y	66	U
57	1y	70	G
57	1y	72	C
1	2A	8	A
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	78	A
1	2A	79	G
1	2A	84	A
1	2A	90	U

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Mol	Chain	Res	Type
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	154	G
1	2A	157	U
1	2A	173	G
1	2A	174	C
1	2A	181	A
1	2A	196	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	271(J)	C
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	277	C
1	2A	278	A
1	2A	289	A
1	2A	311	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	346	A
1	2A	352	G
1	2A	354	G
1	2A	363	G
1	2A	363(B)	G
1	2A	386	G

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Mol	Chain	Res	Type
1	2A	396	G
1	2A	399	G
1	2A	411	G
1	2A	412	A
1	2A	421	U
1	2A	435	C
1	2A	442	G
1	2A	443	A
1	2A	444	C
1	2A	454	A
1	2A	455	C
1	2A	457	A
1	2A	479	A
1	2A	480	A
1	2A	481	G
1	2A	494	G
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	542	C
1	2A	545	G
1	2A	551	G
1	2A	563	G
1	2A	573	G
1	2A	574	C
1	2A	575	A
1	2A	586	A
1	2A	588	U
1	2A	603	A
1	2A	604	G
1	2A	606	U
1	2A	607	U
1	2A	614(B)	G
1	2A	614(C)	A
1	2A	615	G
1	2A	616	G

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Mol	Chain	Res	Type
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
1	2A	652(U)	G
1	2A	669	G
1	2A	686	G
1	2A	701	G
1	2A	717	G
1	2A	730	C
1	2A	752	A
1	2A	753	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	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	827	U
1	2A	828	U
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	874	G
1	2A	878	A
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	890	A
1	2A	893	C
1	2A	894	C

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Mol	Chain	Res	Type
1	2A	895	U
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	904	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	950	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	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1020	A
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1041	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	1141	U
1	2A	1142	U
1	2A	1171	G
1	2A	1205	U

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Mol	Chain	Res	Type
1	2A	1206	G
1	2A	1210	A
1	2A	1211	U
1	2A	1220	A
1	2A	1236	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1284	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	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	1379	A
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1395	A
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	1461	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A

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Mol	Chain	Res	Type
1	2A	1493	C
1	2A	1494	A
1	2A	1495	A
1	2A	1496	A
1	2A	1497	U
1	2A	1505	C
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1514	U
1	2A	1520	G
1	2A	1526	G
1	2A	1531	C
1	2A	1542	A
1	2A	1545	A
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	1584	C
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1648	C
1	2A	1654	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1739	U
1	2A	1740	G
1	2A	1743	C
1	2A	1746	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A

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Mol	Chain	Res	Type
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1816	G
1	2A	1829	A
1	2A	1847	A
1	2A	1848	A
1	2A	1858	G
1	2A	1861	G
1	2A	1876	A
1	2A	1877	A
1	2A	1878	G
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1931	U
1	2A	1932	A
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	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G

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Mol	Chain	Res	Type
1	2A	2069	G
1	2A	2093	G
1	2A	2099	U
1	2A	2110	G
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	2128	C
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	2138	C
1	2A	2139	C
1	2A	2140	C
1	2A	2142	C
1	2A	2145	C
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2157	G
1	2A	2158	A
1	2A	2159	G
1	2A	2161	C
1	2A	2164	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2172	U
1	2A	2174	C
1	2A	2176	A
1	2A	2177	C

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Mol	Chain	Res	Type
1	2A	2178	C
1	2A	2181	G
1	2A	2183	C
1	2A	2185	C
1	2A	2188	C
1	2A	2189	U
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	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2288	A
1	2A	2305	A
1	2A	2308	G
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2327	A
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	2406	U
1	2A	2424	C
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2434	A
1	2A	2435	A
1	2A	2439	A

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Mol	Chain	Res	Type
1	2A	2441	C
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	2491	U
1	2A	2494	G
1	2A	2498	C
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2507	C
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2534	A
1	2A	2554	U
1	2A	2555	U
1	2A	2562	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2574	G
1	2A	2578	G
1	2A	2582	G
1	2A	2585	U
1	2A	2602	A
1	2A	2611	U
1	2A	2612	C
1	2A	2630	G
1	2A	2645	G
1	2A	2654	A
1	2A	2679	A
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

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Mol	Chain	Res	Type
1	2A	2726	U
1	2A	2733	A
1	2A	2748	A
1	2A	2751	G
1	2A	2752	C
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A
1	2A	2783	G
1	2A	2793	G
1	2A	2802	G
1	2A	2803	C
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2839	G
1	2A	2872	G
1	2A	2873	A
1	2A	2880	C
1	2A	2889	C
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	3	C
2	2B	8	U
2	2B	9	G
2	2B	12	C
2	2B	13	A
2	2B	17	C
2	2B	33	G
2	2B	40	U
2	2B	41	U
2	2B	45	A
2	2B	53	A
2	2B	61	G
2	2B	73	A
2	2B	75	G
2	2B	85	G
2	2B	89	G

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Mol	Chain	Res	Type
2	2B	91	C
2	2B	106	G
2	2B	110	G
2	2B	120	A
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	41	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	52	G
32	2a	66	G
32	2a	70	G
32	2a	73	G
32	2a	79	G
32	2a	80	G
32	2a	89	C
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	144	G
32	2a	159	G
32	2a	163	C
32	2a	182	U
32	2a	189(B)	C
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	195	A
32	2a	197	A
32	2a	201	C
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	266	G
32	2a	267	C

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Mol	Chain	Res	Type
32	2a	279	A
32	2a	289	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	345	C
32	2a	350	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	381	C
32	2a	384	G
32	2a	389	A
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	455	C
32	2a	470	C
32	2a	476	G
32	2a	477	A
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	524	G
32	2a	527	G7M

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Mol	Chain	Res	Type
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	545	C
32	2a	547	A
32	2a	559	A
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	574	A
32	2a	576	G
32	2a	577	G
32	2a	581	G
32	2a	596	C
32	2a	630	G
32	2a	653	A
32	2a	665	A
32	2a	671	G
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	702	A
32	2a	712	A
32	2a	723	U
32	2a	724	G
32	2a	731	G
32	2a	733	A
32	2a	749	C
32	2a	753	A
32	2a	755	G
32	2a	763	G
32	2a	773	G
32	2a	774	G
32	2a	777	A
32	2a	787	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	816	A
32	2a	817	C
32	2a	821	G

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Mol	Chain	Res	Type
32	2a	828	A
32	2a	836	G
32	2a	840	C
32	2a	841	U
32	2a	853	G
32	2a	859	A
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	932	C
32	2a	934	C
32	2a	938	A
32	2a	942	G
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	992	U
32	2a	993	G
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1002	G
32	2a	1003	G
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1020	U
32	2a	1021	G

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Mol	Chain	Res	Type
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	1030	C
32	2a	1030(A)	G
32	2a	1030(D)	A
32	2a	1031	G
32	2a	1032	G
32	2a	1035	A
32	2a	1036	G
32	2a	1039	C
32	2a	1040	U
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1080	A
32	2a	1081	G
32	2a	1085	U
32	2a	1086	U
32	2a	1092	A
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1105	A
32	2a	1108	G
32	2a	1109	C
32	2a	1117	G
32	2a	1124	G
32	2a	1125	U
32	2a	1126	U
32	2a	1129	C
32	2a	1130	A
32	2a	1133	G
32	2a	1134	G
32	2a	1136	U
32	2a	1137	C

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Mol	Chain	Res	Type
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1141	C
32	2a	1145	C
32	2a	1146	A
32	2a	1152	A
32	2a	1157	A
32	2a	1159	U
32	2a	1160	G
32	2a	1181	G
32	2a	1182	G
32	2a	1184	G
32	2a	1186	G
32	2a	1191	A
32	2a	1193	G
32	2a	1196	U
32	2a	1197	G
32	2a	1201	A
32	2a	1202	G
32	2a	1211	U
32	2a	1213	A
32	2a	1215	G
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1246	C
32	2a	1255	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1287	A
32	2a	1302	U
32	2a	1303	C

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Mol	Chain	Res	Type
32	2a	1316	G
32	2a	1338	G
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1358	U
32	2a	1359	C
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1378	C
32	2a	1404	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1452	C
32	2a	1460	A
32	2a	1492	A
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
54	2w	3	C
54	2w	4	C
54	2w	5	G
54	2w	6	G
54	2w	8	4SU
54	2w	9	A
54	2w	12	U
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	50	U

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Mol	Chain	Res	Type
54	2w	51	U
54	2w	58	A
54	2w	62	C
54	2w	64	A
54	2w	65	G
54	2w	68	C
54	2w	69	G
54	2w	70	G
54	2w	74	C
55	2x	9	G
55	2x	18	G
55	2x	19	G
55	2x	20	U
55	2x	21	A
55	2x	47	U
55	2x	69	C
57	2y	2	C
57	2y	8	4SU
57	2y	15	G
57	2y	19	G
57	2y	23	A
57	2y	27	G
57	2y	41	C
57	2y	49	C
57	2y	52	G
57	2y	53	G
57	2y	56	C
57	2y	57	G
57	2y	58	A
57	2y	59	U
57	2y	60	U
57	2y	61	C
57	2y	63	G
57	2y	65	G
57	2y	68	C
57	2y	69	G
57	2y	70	G
57	2y	73	A

All (55) RNA pucker outliers are listed below:

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Mol	Chain	Res	Type

Mol	Chain	Res	Type
1	1A	90	U
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	685	A
1	1A	746	A
1	1A	974	G
1	1A	1047	G
1	1A	1067	A
1	1A	1174	A
1	1A	1176	G
1	1A	1275	A
1	1A	1379	A
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1663	C
1	1A	1992	G
1	1A	2126	A
1	1A	2134	A
1	1A	2183	C
1	1A	2238	G
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2629	A
1	1A	2689	U
1	1A	2756	U
1	2A	196	A
1	2A	228	A
1	2A	229	A
1	2A	266	G
1	2A	271(K)	U
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A
1	2A	746	A
1	2A	752	A
1	2A	827	U

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Mol	Chain	Res	Type
1	2A	856	C
1	2A	900	A
1	2A	1142(A)	A
1	2A	1210	A
1	2A	1420	U
1	2A	1442	G
1	2A	1530	C
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	2689	U

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

90 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	$\#\|Z\| > 2$
32	5MC	2a	1407	32	19,22,23	1.65	3 (15%)	26,32,35	1.18	2 (7%)
55	PSU	2x	55	55	18,21,22	1.39	2 (11%)	21,30,33	2.01	4 (19%)
32	PSU	1a	516	32	18,21,22	1.37	2 (11%)	21,30,33	2.08	5 (23%)
1	5MC	1A	1942	1	19,22,23	1.63	3 (15%)	26,32,35	1.22	3 (11%)
57	5MU	2y	54	57	19,22,23	1.41	5 (26%)	27,32,35	1.78	5 (18%)
57	PSU	1y	39	57	18,21,22	1.43	2 (11%)	21,30,33	1.94	4 (19%)
1	5MU	1A	1939	1	19,22,23	1.49	6 (31%)	27,32,35	2.21	6 (22%)
54	PSU	1w	39	54	18,21,22	1.31	2 (11%)	21,30,33	2.24	5 (23%)
54	PSU	1w	32	54	18,21,22	1.38	3 (16%)	21,30,33	1.89	4 (19%)
54	5MU	2w	54	54	19,22,23	1.35	4 (21%)	27,32,35	1.83	6 (22%)
1	PSU	2A	2605	1	18,21,22	1.41	3 (16%)	21,30,33	2.07	4 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
57	4SU	1y	8	57	18,21,22	1.75	4 (22%)	25,30,33	2.18	5 (20%)
1	5MU	2A	1915	1	19,22,23	1.46	5 (26%)	27,32,35	2.09	7 (25%)
55	4SU	2x	8	55,58	18,21,22	2.10	6 (33%)	25,30,33	1.56	5 (20%)
32	M2G	2a	966	32	24,27,28	1.30	4 (16%)	33,40,43	1.83	6 (18%)
57	MIA	2y	37	57	21,24,32	1.59	3 (14%)	30,35,47	2.05	8 (26%)
54	MIA	2w	37	54	24,27,32	2.09	6 (25%)	32,39,47	2.79	12 (37%)
32	PSU	2a	516	32	18,21,22	1.35	2 (11%)	21,30,33	2.00	3 (14%)
54	PSU	1w	55	54	18,21,22	1.44	2 (11%)	21,30,33	2.04	4 (19%)
57	PSU	2y	32	57	18,21,22	1.37	2 (11%)	21,30,33	2.00	3 (14%)
54	4SU	1w	8	54	18,21,22	1.93	5 (27%)	25,30,33	1.89	5 (20%)
56	FME	1z	1	56	8,9,10	1.03	0	8,9,11	1.85	3 (37%)
57	PSU	2y	39	57	18,21,22	1.31	2 (11%)	21,30,33	2.13	3 (14%)
57	PSU	2y	55	57	18,21,22	1.36	2 (11%)	21,30,33	2.01	4 (19%)
57	PSU	1y	55	57	18,21,22	1.39	2 (11%)	21,30,33	2.07	3 (14%)
54	5MU	1w	54	54	19,22,23	1.29	5 (26%)	27,32,35	2.13	6 (22%)
1	5MC	1A	1962	1	19,22,23	1.78	3 (15%)	26,32,35	1.20	3 (11%)
32	5MC	1a	1407	32	19,22,23	1.69	2 (10%)	26,32,35	1.16	3 (11%)
55	8AN	1x	76	56,55,58	21,24,25	1.52	3 (14%)	26,35,38	2.52	11 (42%)
32	MA6	2a	1519	32	23,26,27	0.47	0	33,38,41	2.18	9 (27%)
1	5MU	2A	1939	1,58	19,22,23	1.39	5 (26%)	27,32,35	2.45	6 (22%)
1	5MU	1A	1915	1	19,22,23	1.38	5 (26%)	27,32,35	2.14	8 (29%)
1	PSU	1A	2605	1,58	18,21,22	1.41	2 (11%)	21,30,33	2.08	4 (19%)
32	2MG	2a	1207	32	23,26,27	1.23	4 (17%)	33,38,41	2.28	9 (27%)
57	MIA	1y	37	57	21,24,32	1.61	4 (19%)	30,35,47	2.09	7 (23%)
1	OMU	2A	2552	1,58	19,22,23	1.16	2 (10%)	25,31,34	1.91	6 (24%)
55	5MU	1x	54	55	19,22,23	1.36	4 (21%)	27,32,35	2.06	6 (22%)
32	4OC	1a	1402	32	20,23,24	0.75	0	25,32,35	1.04	1 (4%)
1	PSU	2A	1911	1	18,21,22	1.32	2 (11%)	21,30,33	2.18	4 (19%)
32	MA6	1a	1519	32	23,26,27	0.44	0	33,38,41	2.15	10 (30%)
55	5MC	1x	32	55	19,22,23	1.67	3 (15%)	26,32,35	1.34	3 (11%)
1	OMG	2A	2251	1,55	23,26,27	1.23	3 (13%)	32,38,41	1.96	6 (18%)
32	G7M	1a	527	58,32	23,26,27	1.54	3 (13%)	34,39,42	1.77	5 (14%)
1	2MA	2A	2503	1,58	22,25,26	1.45	4 (18%)	32,37,40	2.40	9 (28%)
57	4SU	2y	8	57	18,21,22	1.84	4 (22%)	25,30,33	2.30	4 (16%)
32	M2G	1a	966	32	24,27,28	1.28	3 (12%)	33,40,43	1.87	5 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	MA6	2a	1518	32	23,26,27	0.45	0	33,38,41	2.05	9 (27%)
32	UR3	2a	1498	32	19,22,23	1.05	2 (10%)	26,32,35	1.69	2 (7%)
57	G7M	2y	46	57	23,26,27	1.57	3 (13%)	34,39,42	1.89	4 (11%)
32	5MC	2a	967	58,32	19,22,23	1.63	2 (10%)	26,32,35	1.10	2 (7%)
43	0TD	1l	92	43	8,9,10	4.50	1 (12%)	6,11,13	6.99	3 (50%)
54	4SU	2w	8	54	18,21,22	1.77	4 (22%)	25,30,33	2.46	5 (20%)
1	OMU	1A	2552	1,58	19,22,23	1.23	2 (10%)	25,31,34	1.79	6 (24%)
54	PSU	2w	55	54	18,21,22	1.38	2 (11%)	21,30,33	1.99	3 (14%)
1	5MC	2A	1942	1	19,22,23	1.69	3 (15%)	26,32,35	1.17	3 (11%)
54	F3N	1w	76	1,54	33,36,37	1.45	4 (12%)	41,51,54	1.79	10 (24%)
55	5MU	2x	54	55	19,22,23	1.38	5 (26%)	27,32,35	2.28	6 (22%)
57	PSU	1y	32	57	18,21,22	1.35	2 (11%)	21,30,33	1.95	4 (19%)
1	5MC	2A	1962	1,58	19,22,23	1.60	3 (15%)	26,32,35	1.14	2 (7%)
32	5MC	2a	1404	32	19,22,23	1.64	3 (15%)	26,32,35	1.18	3 (11%)
57	5MU	1y	54	57	19,22,23	1.42	4 (21%)	27,32,35	2.03	7 (25%)
54	F3N	2w	76	1,54	33,36,37	1.44	4 (12%)	41,51,54	1.74	9 (21%)
54	PSU	2w	39	54	18,21,22	1.32	2 (11%)	21,30,33	2.12	5 (23%)
32	4OC	2a	1402	58,32	20,23,24	0.75	0	25,32,35	1.00	3 (12%)
57	G7M	1y	46	57	23,26,27	1.50	4 (17%)	34,39,42	1.81	5 (14%)
55	5MC	2x	32	55	19,22,23	1.72	3 (15%)	26,32,35	1.29	4 (15%)
32	2MG	1a	1207	32	23,26,27	1.23	2 (8%)	33,38,41	2.27	8 (24%)
32	5MC	1a	967	32	19,22,23	1.66	3 (15%)	26,32,35	1.09	3 (11%)
32	MA6	1a	1518	32	23,26,27	0.41	0	33,38,41	2.08	9 (27%)
32	5MC	1a	1404	32	19,22,23	1.74	3 (15%)	26,32,35	1.21	2 (7%)
43	0TD	2l	92	43	8,9,10	4.54	1 (12%)	6,11,13	4.13	3 (50%)
1	PSU	1A	1911	1	18,21,22	1.35	2 (11%)	21,30,33	2.09	4 (19%)
55	8AN	2x	76	56,55,58	21,24,25	1.42	3 (14%)	26,35,38	2.50	11 (42%)
1	2MA	1A	2503	1,58	22,25,26	1.52	4 (18%)	32,37,40	2.22	8 (25%)
32	5MC	2a	1400	32	19,22,23	1.75	3 (15%)	26,32,35	1.20	3 (11%)
1	OMC	1A	1920	1	19,22,23	0.82	0	25,31,34	1.00	1 (4%)
32	G7M	2a	527	58,32	23,26,27	1.45	4 (17%)	34,39,42	1.59	4 (11%)
55	4SU	1x	8	55	18,21,22	2.14	5 (27%)	25,30,33	1.62	6 (24%)
1	OMG	1A	2251	1,55,58	23,26,27	1.23	3 (13%)	32,38,41	1.97	6 (18%)
54	G7M	1w	46	54	23,26,27	1.52	4 (17%)	34,39,42	1.66	4 (11%)
56	FME	2z	1	56	8,9,10	1.00	0	8,9,11	1.68	2 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
55	PSU	1x	55	55	18,21,22	1.38	2 (11%)	21,30,33	2.06	3 (14%)
54	PSU	2w	32	54	18,21,22	1.37	2 (11%)	21,30,33	1.93	3 (14%)
32	UR3	1a	1498	32	19,22,23	0.99	1 (5%)	26,32,35	1.85	3 (11%)
54	MIA	1w	37	54	28,31,32	2.27	6 (21%)	38,44,47	2.83	13 (34%)
32	5MC	1a	1400	32	19,22,23	1.65	3 (15%)	26,32,35	1.15	2 (7%)
54	G7M	2w	46	54	23,26,27	1.47	2 (8%)	34,39,42	1.68	5 (14%)
1	PSU	2A	1917	1	18,21,22	1.35	2 (11%)	21,30,33	2.04	4 (19%)
1	OMC	2A	1920	1	19,22,23	0.80	0	25,31,34	0.84	0
1	PSU	1A	1917	1	18,21,22	1.39	4 (22%)	21,30,33	2.25	4 (19%)

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
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
57	5MU	2y	54	57	-	0/7/25/26	0/2/2/2
57	PSU	1y	39	57	-	1/7/25/26	0/2/2/2
1	5MU	1A	1939	1	-	0/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
54	PSU	1w	32	54	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
57	4SU	1y	8	57	-	1/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	55,58	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
57	MIA	2y	37	57	-	0/7/25/34	0/3/3/3
54	MIA	2w	37	54	-	0/11/29/34	0/3/3/3
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
57	PSU	2y	32	57	-	0/7/25/26	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
56	FME	1z	1	56	-	4/7/9/11	-
57	PSU	2y	39	57	-	0/7/25/26	0/2/2/2
57	PSU	2y	55	57	-	1/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	PSU	1y	55	57	-	2/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
55	8AN	1x	76	56,55,58	-	3/7/25/26	0/3/3/3
32	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3
1	5MU	2A	1939	1,58	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	1/7/25/26	0/2/2/2
1	PSU	1A	2605	1,58	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/9/27/28	0/3/3/3
57	MIA	1y	37	57	-	1/7/25/34	0/3/3/3
1	OMU	2A	2552	1,58	-	0/9/27/28	0/2/2/2
55	5MU	1x	54	55	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/11/29/30	0/3/3/3
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	1,55	-	0/9/27/28	0/3/3/3
32	G7M	1a	527	58,32	-	3/7/25/26	0/3/3/3
1	2MA	2A	2503	1,58	-	2/7/25/26	0/3/3/3
57	4SU	2y	8	57	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
57	G7M	2y	46	57	-	2/7/25/26	0/3/3/3
32	5MC	2a	967	58,32	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	2/7/12/14	-
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	1,58	-	0/9/27/28	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
54	F3N	1w	76	1,54	-	0/19/37/38	0/4/4/4
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
57	PSU	1y	32	57	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	1,58	-	2/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
57	5MU	1y	54	57	-	0/7/25/26	0/2/2/2
54	F3N	2w	76	1,54	-	2/19/37/38	0/4/4/4
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	58,32	-	0/9/29/30	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	G7M	1y	46	57	-	1/7/25/26	0/3/3/3
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	2/9/27/28	0/3/3/3
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	1/7/12/14	-
1	PSU	1A	1911	1	-	1/7/25/26	0/2/2/2
55	8AN	2x	76	56,55,58	-	3/7/25/26	0/3/3/3
1	2MA	1A	2503	1,58	-	1/7/25/26	0/3/3/3
32	5MC	2a	1400	32	-	2/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	1/9/27/28	0/2/2/2
32	G7M	2a	527	58,32	-	3/7/25/26	0/3/3/3
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	1,55,58	-	1/9/27/28	0/3/3/3
54	G7M	1w	46	54	-	1/7/25/26	0/3/3/3
56	FME	2z	1	56	-	4/7/9/11	-
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	1/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	5/15/33/34	0/3/3/3
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	1/7/25/26	0/3/3/3
1	PSU	2A	1917	1	-	1/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2

All (253) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.46	1.69	1.82
43	1l	92	0TD	CB-SB	-12.24	1.69	1.82
54	2w	37	MIA	C2-S10	-6.74	1.70	1.75
54	1w	37	MIA	C13-C14	6.64	1.52	1.32
54	1w	37	MIA	C2-S10	-6.54	1.70	1.75
1	1A	1962	5MC	C5-C4	6.50	1.49	1.44
32	2a	1400	5MC	C5-C4	6.43	1.49	1.44
55	2x	32	5MC	C5-C4	6.37	1.48	1.44
32	1a	1407	5MC	C5-C4	6.29	1.48	1.44
32	1a	1404	5MC	C5-C4	6.15	1.48	1.44
1	2A	1942	5MC	C5-C4	6.10	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1407	5MC	C5-C4	6.08	1.48	1.44
32	1a	967	5MC	C5-C4	6.07	1.48	1.44
32	1a	1400	5MC	C5-C4	5.96	1.48	1.44
55	1x	32	5MC	C5-C4	5.94	1.48	1.44
32	2a	967	5MC	C5-C4	5.91	1.48	1.44
32	2a	1404	5MC	C5-C4	5.83	1.48	1.44
1	1A	1942	5MC	C5-C4	5.81	1.48	1.44
1	2A	1962	5MC	C5-C4	5.59	1.48	1.44
57	2y	8	4SU	C4-S4	-5.13	1.59	1.68
54	2w	37	MIA	C5-C4	5.11	1.48	1.39
57	1y	37	MIA	C5-C4	5.03	1.48	1.39
54	2w	8	4SU	C4-S4	-5.02	1.59	1.68
57	2y	37	MIA	C5-C4	4.97	1.48	1.39
55	1x	8	4SU	C4-N3	-4.97	1.32	1.37
54	1w	37	MIA	C5-C4	4.91	1.47	1.39
54	1w	8	4SU	C4-S4	-4.90	1.60	1.68
32	1a	527	G7M	C5-N7	-4.85	1.33	1.39
55	2x	8	4SU	C4-S4	-4.77	1.60	1.68
55	2x	8	4SU	C4-N3	-4.70	1.32	1.37
1	1A	2503	2MA	C5-C4	4.67	1.47	1.39
54	1w	46	G7M	C5-N7	-4.65	1.33	1.39
54	2w	76	F3N	CB-CG	-4.58	1.40	1.51
57	1y	8	4SU	C4-S4	-4.55	1.60	1.68
54	1w	76	F3N	CB-CG	-4.50	1.40	1.51
57	2y	46	G7M	C5-N7	-4.37	1.34	1.39
54	2w	46	G7M	C5-N7	-4.37	1.34	1.39
1	2A	2503	2MA	C5-C4	4.31	1.46	1.39
55	1x	8	4SU	C4-S4	-4.27	1.61	1.68
57	1y	39	PSU	C6-C5	4.14	1.39	1.35
54	1w	55	PSU	C6-C5	4.09	1.39	1.35
57	1y	46	G7M	C5-N7	-4.09	1.34	1.39
32	2a	527	G7M	C5-N7	-4.08	1.34	1.39
55	1x	8	4SU	C2-N3	-3.98	1.31	1.38
54	1w	76	F3N	C5-N7	-3.93	1.31	1.39
57	2y	32	PSU	C6-C5	3.90	1.39	1.35
54	2w	76	F3N	C5-N7	-3.88	1.32	1.39
57	1y	55	PSU	C6-C5	3.87	1.39	1.35
55	2x	76	8AN	C5-N7	-3.85	1.32	1.39
54	2w	55	PSU	C6-C5	3.82	1.39	1.35
57	2y	46	G7M	C5-C4	3.78	1.47	1.38
32	2a	516	PSU	C6-C5	3.74	1.39	1.35
55	1x	55	PSU	C6-C5	3.73	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	76	8AN	C5-N7	-3.72	1.32	1.39
57	1y	32	PSU	C6-C5	3.72	1.39	1.35
54	2w	32	PSU	C6-C5	3.70	1.39	1.35
57	2y	39	PSU	C6-C5	3.70	1.39	1.35
54	2w	39	PSU	C6-C5	3.69	1.39	1.35
55	2x	55	PSU	C6-C5	3.66	1.39	1.35
54	1w	8	4SU	C4-N3	-3.60	1.33	1.37
57	1y	46	G7M	C5-C4	3.58	1.47	1.38
1	1A	2605	PSU	C6-C5	3.51	1.39	1.35
32	1a	527	G7M	C5-C4	3.49	1.47	1.38
54	1w	32	PSU	C6-C5	3.44	1.39	1.35
1	2A	1917	PSU	C6-C5	3.41	1.39	1.35
1	1A	1911	PSU	C6-C5	3.35	1.39	1.35
1	1A	1917	PSU	C6-C5	3.35	1.39	1.35
55	1x	76	8AN	C5-C4	-3.34	1.33	1.39
55	2x	8	4SU	C5-C4	-3.32	1.38	1.42
54	2w	46	G7M	C5-C4	3.29	1.46	1.38
57	2y	55	PSU	C6-C5	3.28	1.38	1.35
55	1x	8	4SU	C5-C4	-3.28	1.38	1.42
1	2A	2605	PSU	C6-C5	3.27	1.38	1.35
54	1w	46	G7M	C5-C4	3.26	1.46	1.38
32	2a	966	M2G	C5-C4	3.24	1.47	1.38
1	2A	1911	PSU	C6-C5	3.20	1.38	1.35
32	2a	527	G7M	C5-C4	3.18	1.46	1.38
32	1a	1207	2MG	C5-C4	3.17	1.47	1.38
32	1a	516	PSU	C6-C5	3.15	1.38	1.35
55	2x	76	8AN	C5-C4	-3.15	1.33	1.39
1	1A	2251	OMG	C5-C4	3.14	1.47	1.38
32	2a	1207	2MG	C5-C4	3.11	1.47	1.38
54	2w	76	F3N	C5-C4	-3.09	1.33	1.39
32	1a	966	M2G	C5-C4	3.08	1.47	1.38
54	1w	8	4SU	C5-C4	-3.04	1.38	1.42
1	2A	2251	OMG	C5-C4	3.03	1.47	1.38
55	2x	8	4SU	C2-N3	-3.03	1.32	1.38
54	1w	39	PSU	C6-C5	3.02	1.38	1.35
1	2A	1942	5MC	C6-C5	3.01	1.39	1.34
54	2w	8	4SU	C4-N3	-2.99	1.34	1.37
1	2A	1915	5MU	C6-C5	2.98	1.39	1.34
32	2a	1404	5MC	C6-C5	2.98	1.39	1.34
54	1w	76	F3N	C5-C4	-2.98	1.33	1.39
57	2y	37	MIA	C5-C6	2.96	1.49	1.41
57	2y	8	4SU	C4-N3	-2.94	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	1y	54	5MU	C6-C5	2.94	1.39	1.34
57	1y	37	MIA	C5-C6	2.93	1.49	1.41
1	1A	1939	5MU	C6-C5	2.92	1.39	1.34
54	2w	37	MIA	C5-C6	2.92	1.48	1.41
1	2A	1939	5MU	C6-C5	2.89	1.39	1.34
1	1A	1962	5MC	C6-C5	2.89	1.39	1.34
55	1x	54	5MU	C6-C5	2.86	1.39	1.34
57	2y	54	5MU	C6-C5	2.85	1.39	1.34
32	1a	1407	5MC	C6-C5	2.83	1.39	1.34
32	1a	966	M2G	C2-N2	2.82	1.40	1.35
32	1a	1404	5MC	C6-C5	2.82	1.39	1.34
55	2x	54	5MU	C6-C5	2.81	1.39	1.34
32	2a	1400	5MC	C6-C5	2.80	1.39	1.34
32	2a	967	5MC	C6-C5	2.79	1.39	1.34
1	1A	2605	PSU	C4-N3	-2.78	1.33	1.38
1	2A	1962	5MC	C6-C5	2.76	1.39	1.34
1	1A	1939	5MU	C4-C5	2.76	1.49	1.44
32	1a	1400	5MC	C6-C5	2.75	1.39	1.34
57	1y	8	4SU	C4-N3	-2.75	1.34	1.37
1	1A	2552	OMU	C4-N3	-2.74	1.33	1.38
54	1w	32	PSU	C4-N3	-2.74	1.33	1.38
54	1w	37	MIA	C5-C6	2.70	1.48	1.41
1	1A	1915	5MU	C6-C5	2.69	1.39	1.34
57	1y	8	4SU	C5-C4	-2.66	1.39	1.42
1	1A	2503	2MA	C5-C6	2.66	1.48	1.41
54	2w	54	5MU	C6-C5	2.65	1.38	1.34
1	2A	1915	5MU	C4-C5	2.65	1.49	1.44
1	1A	1942	5MC	C6-C5	2.65	1.38	1.34
1	1A	1915	5MU	C4-C5	2.64	1.49	1.44
57	1y	8	4SU	C2-N1	2.64	1.42	1.38
1	2A	1939	5MU	C4-N3	-2.63	1.33	1.38
1	1A	1939	5MU	C4-N3	-2.63	1.33	1.38
55	2x	76	8AN	C5-C6	-2.63	1.33	1.41
1	1A	1917	PSU	C4-N3	-2.62	1.33	1.38
32	1a	516	PSU	C4-N3	-2.62	1.34	1.38
1	1A	1962	5MC	C6-N1	-2.61	1.33	1.38
32	2a	1407	5MC	C6-C5	2.61	1.38	1.34
1	2A	2503	2MA	C5-C6	2.61	1.48	1.41
1	2A	2605	PSU	C4-N3	-2.60	1.34	1.38
1	2A	2605	PSU	C2-N3	-2.59	1.33	1.37
32	1a	967	5MC	C6-C5	2.58	1.38	1.34
57	2y	8	4SU	C2-N1	2.57	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1911	PSU	C4-N3	-2.57	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.56	1.34	1.38
1	2A	2251	OMG	C6-N1	-2.56	1.34	1.38
32	2a	966	M2G	C2-N2	2.55	1.39	1.35
57	1y	54	5MU	C4-C5	2.55	1.49	1.44
57	1y	54	5MU	C2-N1	2.55	1.42	1.38
54	2w	8	4SU	C5-C4	-2.55	1.39	1.42
1	2A	1915	5MU	C2-N1	2.54	1.42	1.38
54	2w	76	F3N	C5-C6	-2.54	1.33	1.41
1	2A	1911	PSU	C4-N3	-2.54	1.34	1.38
1	2A	1939	5MU	C2-N1	2.54	1.42	1.38
55	1x	54	5MU	C4-N3	-2.54	1.34	1.38
55	2x	32	5MC	C6-C5	2.54	1.38	1.34
57	2y	54	5MU	C4-N3	-2.54	1.34	1.38
55	1x	76	8AN	C5-C6	-2.53	1.33	1.41
54	1w	76	F3N	C5-C6	-2.53	1.33	1.41
54	1w	8	4SU	C2-N1	2.53	1.42	1.38
1	1A	2251	OMG	C5-N7	-2.53	1.34	1.39
1	1A	2503	2MA	C8-N7	2.53	1.36	1.31
55	1x	32	5MC	C6-C5	2.52	1.38	1.34
55	2x	55	PSU	C4-N3	-2.51	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.51	1.33	1.38
54	1w	39	PSU	C4-N3	-2.50	1.34	1.38
55	1x	32	5MC	C6-N1	-2.50	1.33	1.38
32	2a	1207	2MG	C6-N1	-2.50	1.34	1.38
54	1w	54	5MU	C6-C5	2.47	1.38	1.34
54	2w	55	PSU	C4-N3	-2.46	1.34	1.38
32	1a	966	M2G	C6-N1	-2.46	1.34	1.38
1	1A	1939	5MU	C2-N1	2.45	1.42	1.38
1	1A	1939	5MU	C2-N3	-2.45	1.33	1.38
32	2a	966	M2G	C6-N1	-2.44	1.34	1.38
55	2x	32	5MC	C6-N1	-2.44	1.33	1.38
1	1A	2503	2MA	C5-N7	-2.43	1.34	1.39
54	1w	37	MIA	C8-N7	2.42	1.36	1.31
57	2y	8	4SU	C5-C4	-2.42	1.39	1.42
57	1y	37	MIA	C8-N7	2.42	1.36	1.31
55	2x	54	5MU	C4-N3	-2.41	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.41	1.34	1.38
57	2y	37	MIA	C8-N7	2.40	1.36	1.31
1	1A	1915	5MU	C2-N1	2.39	1.42	1.38
57	2y	46	G7M	C6-N1	-2.39	1.34	1.38
57	1y	39	PSU	C4-N3	-2.38	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	54	5MU	C2-N1	2.38	1.42	1.38
55	2x	54	5MU	C4-C5	2.38	1.48	1.44
57	2y	39	PSU	C4-N3	-2.37	1.34	1.38
54	2w	37	MIA	C2-N3	2.37	1.37	1.34
57	1y	32	PSU	C4-N3	-2.37	1.34	1.38
32	2a	527	G7M	C6-N1	-2.36	1.34	1.38
54	2w	54	5MU	C4-N3	-2.36	1.34	1.38
1	2A	2552	OMU	C5-C4	2.35	1.48	1.43
57	2y	54	5MU	C2-N1	2.35	1.42	1.38
32	1a	1400	5MC	C6-N1	-2.34	1.34	1.38
55	1x	8	4SU	O2-C2	2.34	1.27	1.23
57	1y	55	PSU	C4-N3	-2.34	1.34	1.38
55	2x	54	5MU	C2-N1	2.33	1.42	1.38
1	2A	2503	2MA	C5-N7	-2.33	1.34	1.39
54	1w	8	4SU	C2-N3	-2.33	1.33	1.38
32	2a	1400	5MC	C6-N1	-2.33	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.33	1.34	1.38
57	2y	55	PSU	C4-N3	-2.32	1.34	1.38
57	1y	54	5MU	C4-N3	-2.31	1.34	1.38
57	2y	54	5MU	C2-N3	-2.30	1.34	1.38
1	1A	1942	5MC	C6-N1	-2.30	1.34	1.38
54	2w	37	MIA	C5-N7	-2.29	1.34	1.39
54	1w	55	PSU	C4-N3	-2.28	1.34	1.38
54	1w	37	MIA	C5-N7	-2.27	1.34	1.39
1	2A	1962	5MC	C6-N1	-2.27	1.34	1.38
57	2y	32	PSU	C4-N3	-2.26	1.34	1.38
32	2a	516	PSU	C4-N3	-2.26	1.34	1.38
1	2A	2503	2MA	C8-N7	2.25	1.36	1.31
1	2A	2251	OMG	C5-N7	-2.25	1.34	1.39
54	2w	32	PSU	C4-N3	-2.24	1.34	1.38
54	1w	46	G7M	C6-N1	-2.24	1.34	1.38
1	2A	1939	5MU	C6-N1	-2.23	1.34	1.38
57	2y	54	5MU	C4-C5	2.23	1.48	1.44
1	1A	1915	5MU	C4-N3	-2.22	1.34	1.38
54	1w	54	5MU	C2-N1	2.21	1.41	1.38
32	2a	1404	5MC	C6-N1	-2.20	1.34	1.38
32	1a	1207	2MG	C6-N1	-2.19	1.34	1.38
1	1A	1915	5MU	C6-N1	-2.18	1.34	1.38
54	2w	39	PSU	C4-N3	-2.18	1.34	1.38
55	1x	54	5MU	C6-N1	-2.17	1.34	1.38
57	1y	37	MIA	C5-N7	-2.17	1.35	1.39
1	2A	2552	OMU	C4-N3	-2.17	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	54	5MU	C4-C5	2.16	1.48	1.44
32	1a	527	G7M	C6-N1	-2.15	1.34	1.38
54	1w	54	5MU	C4-N3	-2.15	1.34	1.38
1	2A	1915	5MU	C6-N1	-2.14	1.34	1.38
54	2w	37	MIA	C8-N7	2.13	1.35	1.31
55	2x	8	4SU	O2-C2	2.13	1.26	1.23
57	1y	46	G7M	C5-C6	2.12	1.49	1.43
1	1A	1939	5MU	C6-N1	-2.12	1.34	1.38
32	1a	967	5MC	C6-N1	-2.10	1.34	1.38
54	2w	54	5MU	C4-C5	2.10	1.48	1.44
32	2a	1498	UR3	C2-N1	2.09	1.41	1.38
55	2x	8	4SU	C2-N1	2.08	1.41	1.38
32	2a	1498	UR3	C6-C5	2.08	1.39	1.35
54	1w	46	G7M	C4-N9	-2.08	1.32	1.38
55	1x	55	PSU	C4-N3	-2.07	1.35	1.38
54	2w	8	4SU	C2-N1	2.07	1.41	1.38
1	1A	2552	OMU	C5-C4	2.07	1.48	1.43
32	1a	1498	UR3	C2-N1	2.06	1.41	1.38
54	1w	54	5MU	C4-C5	2.06	1.48	1.44
32	2a	966	M2G	C5-N7	-2.06	1.34	1.39
1	2A	1939	5MU	C4-C5	2.06	1.48	1.44
32	2a	527	G7M	C5-C6	2.05	1.48	1.43
57	1y	46	G7M	C6-N1	-2.05	1.35	1.38
55	2x	54	5MU	C6-N1	-2.05	1.34	1.38
32	2a	1207	2MG	C5-N7	-2.05	1.35	1.39
1	1A	1917	PSU	C2-N3	-2.04	1.34	1.37
1	1A	1917	PSU	C2-N1	-2.04	1.34	1.36
1	1A	2251	OMG	C6-N1	-2.03	1.35	1.38
54	1w	32	PSU	C2-N3	-2.01	1.34	1.37
32	2a	1207	2MG	C4-N9	-2.01	1.32	1.38
1	2A	1942	5MC	C6-N1	-2.01	1.34	1.38
54	1w	54	5MU	C6-N1	-2.01	1.34	1.38

All (450) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-16.61	72.51	102.36
54	2w	37	MIA	C5-C4-N3	-9.32	117.36	127.18
54	1w	37	MIA	C12-C13-C14	-9.27	110.37	127.01
43	2l	92	0TD	CSB-SB-CB	-9.13	85.95	102.36
1	2A	2503	2MA	C5-C4-N3	-8.24	118.50	127.18
54	2w	37	MIA	N3-C4-N9	7.84	136.94	126.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2503	2MA	C5-C4-N3	-7.78	118.98	127.18
54	2w	8	4SU	C4-N3-C2	-7.65	119.98	127.31
32	1a	1498	UR3	C4-N3-C2	-7.48	118.56	124.58
54	1w	37	MIA	C5-C4-N3	-7.47	119.31	127.18
32	1a	1207	2MG	C2-N3-C4	7.15	120.95	112.00
1	1A	1917	PSU	N1-C2-N3	6.94	122.48	115.17
54	1w	39	PSU	N1-C2-N3	6.80	122.34	115.17
32	2a	1498	UR3	C4-N3-C2	-6.80	119.11	124.58
1	2A	1911	PSU	N1-C2-N3	6.67	122.20	115.17
32	2a	1207	2MG	C2-N3-C4	6.67	120.34	112.00
57	2y	8	4SU	C4-N3-C2	-6.65	120.94	127.31
1	2A	2503	2MA	N3-C4-N9	6.57	135.33	126.99
57	2y	39	PSU	N1-C2-N3	6.45	121.97	115.17
1	2A	1917	PSU	N1-C2-N3	6.44	121.96	115.17
54	2w	39	PSU	N1-C2-N3	6.42	121.94	115.17
1	1A	1911	PSU	N1-C2-N3	6.38	121.90	115.17
55	1x	55	PSU	N1-C2-N3	6.34	121.86	115.17
1	1A	2605	PSU	N1-C2-N3	6.33	121.85	115.17
57	1y	37	MIA	C5-C4-N3	-6.32	118.02	126.72
57	2y	46	G7M	N9-C4-N3	6.31	138.57	125.95
1	2A	2605	PSU	N1-C2-N3	6.28	121.80	115.17
57	1y	55	PSU	N1-C2-N3	6.27	121.78	115.17
32	1a	516	PSU	N1-C2-N3	6.25	121.76	115.17
54	2w	8	4SU	C5-C4-N3	6.24	120.56	114.75
57	2y	32	PSU	N1-C2-N3	6.23	121.75	115.17
54	2w	55	PSU	N1-C2-N3	6.21	121.72	115.17
57	2y	8	4SU	C5-C4-N3	6.20	120.52	114.75
32	2a	516	PSU	N1-C2-N3	6.15	121.65	115.17
55	2x	55	PSU	N1-C2-N3	6.14	121.65	115.17
57	1y	39	PSU	N1-C2-N3	6.12	121.62	115.17
32	1a	966	M2G	C5-C4-N3	-6.02	118.80	128.39
1	1A	2251	OMG	C5-C4-N3	-6.01	118.83	128.39
54	1w	55	PSU	N1-C2-N3	6.00	121.50	115.17
32	2a	966	M2G	C5-C4-N3	-5.99	118.85	128.39
54	2w	32	PSU	N1-C2-N3	5.98	121.47	115.17
1	1A	2503	2MA	N3-C4-N9	5.97	134.57	126.99
54	1w	32	PSU	N1-C2-N3	5.97	121.46	115.17
1	2A	1939	5MU	C4-N3-C2	-5.90	119.61	127.34
1	2A	2251	OMG	C5-C4-N3	-5.89	119.01	128.39
57	2y	37	MIA	C5-C4-N3	-5.89	118.61	126.72
54	1w	37	MIA	N3-C4-N9	5.88	134.46	126.99
57	2y	55	PSU	N1-C2-N3	5.84	121.33	115.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	1y	8	4SU	C4-N3-C2	-5.82	121.74	127.31
32	1a	1207	2MG	C5-C4-N3	-5.81	119.14	128.39
54	2w	76	F3N	N1-C2-N3	-5.79	119.82	128.58
55	1x	76	8AN	N1-C2-N3	-5.77	119.84	128.58
55	2x	76	8AN	N1-C2-N3	-5.77	119.85	128.58
57	1y	46	G7M	N9-C4-N3	5.75	137.44	125.95
57	1y	32	PSU	N1-C2-N3	5.74	121.23	115.17
32	2a	1207	2MG	C5-C4-N3	-5.73	119.27	128.39
54	1w	76	F3N	N1-C2-N3	-5.71	119.94	128.58
1	2A	1939	5MU	O4-C4-C5	-5.68	118.42	124.92
32	1a	527	G7M	N9-C4-N3	5.67	137.29	125.95
57	2y	46	G7M	C5-C4-N3	-5.67	117.44	128.15
55	2x	54	5MU	C4-N3-C2	-5.67	119.91	127.34
57	1y	46	G7M	C5-C4-N3	-5.57	117.63	128.15
55	2x	54	5MU	N3-C2-N1	5.52	122.08	114.89
1	1A	1939	5MU	C4-N3-C2	-5.42	120.23	127.34
1	2A	1939	5MU	N3-C2-N1	5.38	121.89	114.89
32	1a	527	G7M	C5-C4-N3	-5.37	118.00	128.15
57	1y	8	4SU	C5-C4-N3	5.33	119.71	114.75
1	1A	1939	5MU	C5-C4-N3	5.25	119.89	115.32
55	2x	76	8AN	O4'-C1'-N9	5.21	118.09	108.09
1	2A	1939	5MU	C5-C4-N3	5.18	119.83	115.32
55	1x	76	8AN	C5-C4-N3	-5.16	119.61	126.72
57	1y	46	G7M	C2-N3-C4	5.16	121.19	112.30
32	1a	1518	MA6	N1-C2-N3	-5.15	120.79	128.58
32	2a	1518	MA6	N1-C2-N3	-5.13	120.82	128.58
54	1w	54	5MU	C4-N3-C2	-5.10	120.65	127.34
1	1A	1915	5MU	C4-N3-C2	-5.08	120.67	127.34
1	2A	1915	5MU	C4-N3-C2	-5.07	120.69	127.34
54	1w	8	4SU	C5-C4-N3	5.07	119.47	114.75
54	2w	46	G7M	N9-C4-N3	5.06	136.08	125.95
32	2a	1519	MA6	N1-C2-N3	-5.05	120.94	128.58
55	2x	76	8AN	C5-C4-N3	-5.05	119.77	126.72
54	1w	54	5MU	O4-C4-C5	-5.04	119.15	124.92
54	1w	76	F3N	C5-C4-N3	-5.01	119.81	126.72
32	2a	527	G7M	N9-C4-N3	5.01	135.97	125.95
54	2w	76	F3N	C5-C4-N3	-4.99	119.85	126.72
55	1x	54	5MU	N3-C2-N1	4.99	121.39	114.89
1	1A	2251	OMG	C2-N3-C4	4.97	120.86	112.30
54	1w	46	G7M	N9-C4-N3	4.97	135.89	125.95
54	2w	37	MIA	C12-N6-C6	-4.96	118.25	122.85
1	1A	2552	OMU	N3-C2-N1	4.95	121.34	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	1x	76	8AN	O4'-C1'-N9	4.94	117.59	108.09
32	1a	1519	MA6	N1-C2-N3	-4.93	121.12	128.58
1	2A	1915	5MU	N3-C2-N1	4.92	121.30	114.89
1	2A	2552	OMU	N3-C2-N1	4.91	121.28	114.89
57	1y	54	5MU	N3-C2-N1	4.90	121.28	114.89
57	2y	46	G7M	C2-N3-C4	4.89	120.72	112.30
55	1x	54	5MU	C4-N3-C2	-4.88	120.94	127.34
1	1A	1915	5MU	N3-C2-N1	4.85	121.20	114.89
54	1w	46	G7M	C5-C4-N3	-4.83	119.02	128.15
57	1y	37	MIA	N3-C4-N9	4.82	135.37	127.17
1	1A	1939	5MU	N3-C2-N1	4.80	121.14	114.89
32	2a	527	G7M	C5-C4-N3	-4.79	119.10	128.15
54	2w	46	G7M	C5-C4-N3	-4.77	119.13	128.15
57	1y	54	5MU	C4-N3-C2	-4.77	121.09	127.34
1	2A	2251	OMG	N9-C4-N3	4.77	135.48	125.95
54	1w	39	PSU	C4-N3-C2	-4.76	119.82	126.37
32	1a	1519	MA6	C5-C4-N3	-4.75	120.17	126.72
54	1w	8	4SU	C4-N3-C2	-4.71	122.80	127.31
54	1w	54	5MU	N3-C2-N1	4.65	120.95	114.89
57	2y	37	MIA	N3-C4-N9	4.65	135.08	127.17
1	2A	2251	OMG	C2-N3-C4	4.64	120.29	112.30
32	1a	966	M2G	C2-N3-C4	4.63	121.07	112.51
32	2a	966	M2G	N9-C4-N3	4.62	135.19	125.95
54	1w	54	5MU	C5-C4-N3	4.59	119.31	115.32
32	2a	1519	MA6	C5-C4-N3	-4.57	120.42	126.72
55	2x	54	5MU	C5-C4-N3	4.57	119.30	115.32
1	1A	1917	PSU	C4-N3-C2	-4.53	120.13	126.37
55	2x	54	5MU	O4-C4-C5	-4.51	119.76	124.92
1	1A	1917	PSU	O2-C2-N1	-4.51	118.14	122.79
1	2A	1911	PSU	C4-N3-C2	-4.49	120.18	126.37
1	2A	2552	OMU	C4-N3-C2	-4.48	121.05	126.61
54	1w	37	MIA	C15-C14-C13	-4.48	109.21	122.66
54	2w	8	4SU	N3-C2-N1	4.47	120.71	114.89
1	1A	1939	5MU	C5-C6-N1	-4.47	118.46	123.31
54	2w	39	PSU	C4-N3-C2	-4.46	120.23	126.37
54	2w	46	G7M	C2-N3-C4	4.44	119.95	112.30
1	1A	2251	OMG	N9-C4-N3	4.43	134.82	125.95
1	1A	2605	PSU	C4-N3-C2	-4.42	120.29	126.37
32	2a	527	G7M	C2-N3-C4	4.41	119.89	112.30
32	1a	527	G7M	C2-N3-C4	4.40	119.88	112.30
32	2a	1518	MA6	C5-C4-N3	-4.40	120.66	126.72
1	1A	1915	5MU	C5-C4-N3	4.38	119.13	115.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1911	PSU	C4-N3-C2	-4.38	120.34	126.37
1	2A	1915	5MU	C5-C4-N3	4.36	119.11	115.32
1	2A	2605	PSU	C4-N3-C2	-4.35	120.37	126.37
57	1y	55	PSU	O2-C2-N1	-4.34	118.31	122.79
57	2y	39	PSU	C4-N3-C2	-4.33	120.41	126.37
54	2w	8	4SU	C5-C4-S4	-4.32	119.37	124.31
57	1y	54	5MU	C5-C4-N3	4.29	119.06	115.32
1	2A	2552	OMU	O2-C2-N1	-4.29	117.22	122.80
32	1a	1519	MA6	C4-C5-N7	-4.28	105.69	110.58
55	1x	54	5MU	O4-C4-C5	-4.27	120.03	124.92
55	1x	55	PSU	O2-C2-N1	-4.27	118.39	122.79
54	1w	39	PSU	O2-C2-N1	-4.26	118.39	122.79
32	2a	1519	MA6	C4-C5-N7	-4.26	105.71	110.58
1	1A	2552	OMU	C4-N3-C2	-4.26	121.32	126.61
1	2A	1911	PSU	O2-C2-N1	-4.25	118.41	122.79
57	1y	8	4SU	C5-C4-S4	-4.24	119.47	124.31
54	1w	46	G7M	C2-N3-C4	4.23	119.59	112.30
32	1a	516	PSU	C4-N3-C2	-4.20	120.59	126.37
32	2a	966	M2G	C2-N3-C4	4.19	120.25	112.51
54	1w	55	PSU	O2-C2-N1	-4.19	118.47	122.79
55	2x	55	PSU	C4-N3-C2	-4.17	120.62	126.37
54	2w	54	5MU	O4-C4-C5	-4.17	120.15	124.92
32	2a	1518	MA6	C2-N1-C6	4.16	121.99	111.83
1	1A	1915	5MU	O4-C4-C5	-4.14	120.18	124.92
32	2a	1519	MA6	C5-N7-C8	4.13	109.95	103.45
32	1a	1518	MA6	C5-C4-N3	-4.12	121.05	126.72
32	1a	1518	MA6	C2-N1-C6	4.11	121.88	111.83
57	2y	54	5MU	C5-C4-N3	4.10	118.88	115.32
1	2A	1939	5MU	C5-C6-N1	-4.09	118.87	123.31
54	2w	54	5MU	C5-C4-N3	4.08	118.87	115.32
55	1x	8	4SU	O2-C2-N1	4.08	128.11	122.80
1	2A	1917	PSU	C4-N3-C2	-4.06	120.78	126.37
57	2y	8	4SU	C5-C4-S4	-4.05	119.67	124.31
54	1w	37	MIA	C11-S10-C2	-4.05	99.21	102.25
32	1a	1519	MA6	C5-N7-C8	4.04	109.81	103.45
55	1x	54	5MU	C5-C4-N3	4.03	118.83	115.32
32	2a	516	PSU	C4-N3-C2	-4.02	120.83	126.37
32	1a	1518	MA6	C5-N7-C8	4.02	109.77	103.45
55	2x	32	5MC	C5-C6-N1	-4.00	118.97	123.31
54	2w	54	5MU	C4-N3-C2	-4.00	122.10	127.34
57	2y	39	PSU	O2-C2-N1	-3.99	118.67	122.79
57	2y	54	5MU	O4-C4-C5	-3.97	120.37	124.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	2w	54	5MU	N3-C2-N1	3.97	120.05	114.89
32	1a	966	M2G	N9-C4-N3	3.95	133.85	125.95
57	2y	54	5MU	N3-C2-N1	3.95	120.03	114.89
57	1y	37	MIA	C2-N3-C4	3.95	121.47	111.83
32	1a	1207	2MG	C6-C5-N7	3.93	137.44	130.29
1	2A	1915	5MU	O4-C4-C5	-3.91	120.44	124.92
57	2y	55	PSU	O2-C2-N1	-3.91	118.76	122.79
57	1y	32	PSU	O2-C2-N1	-3.90	118.77	122.79
32	1a	1519	MA6	C2-N1-C6	3.87	121.29	111.83
57	2y	32	PSU	C4-N3-C2	-3.87	121.04	126.37
32	2a	1207	2MG	N1-C2-N2	3.87	120.51	116.56
57	1y	54	5MU	O4-C4-C5	-3.87	120.50	124.92
32	2a	1400	5MC	C5-C6-N1	-3.86	119.12	123.31
55	2x	8	4SU	C5-C4-N3	3.85	118.33	114.75
55	1x	55	PSU	C4-N3-C2	-3.84	121.08	126.37
54	1w	37	MIA	C6-C5-N7	3.84	136.61	132.43
54	2w	55	PSU	C4-N3-C2	-3.83	121.09	126.37
32	2a	1519	MA6	C2-N1-C6	3.83	121.18	111.83
32	1a	1207	2MG	N9-C4-N3	3.82	133.60	125.95
54	1w	32	PSU	C4-N3-C2	-3.82	121.11	126.37
1	1A	1911	PSU	O2-C2-N1	-3.81	118.86	122.79
32	2a	1207	2MG	C6-C5-N7	3.81	137.22	130.29
55	2x	54	5MU	C5-C6-N1	-3.81	119.18	123.31
1	2A	1917	PSU	O2-C2-N1	-3.80	118.87	122.79
32	2a	1407	5MC	C5-C6-N1	-3.79	119.19	123.31
54	1w	37	MIA	C16-C14-C13	-3.79	111.28	122.66
54	2w	32	PSU	C4-N3-C2	-3.79	121.15	126.37
32	1a	1518	MA6	N9-C8-N7	-3.78	108.57	113.94
57	2y	54	5MU	C4-N3-C2	-3.78	122.39	127.34
1	1A	1939	5MU	O4-C4-C5	-3.77	120.60	124.92
54	2w	39	PSU	O2-C2-N1	-3.77	118.90	122.79
55	1x	8	4SU	C6-C5-C4	-3.76	116.69	119.95
32	2a	1207	2MG	N2-C2-N3	-3.74	115.75	120.51
32	2a	1518	MA6	C5-N7-C8	3.74	109.33	103.45
57	1y	39	PSU	C4-N3-C2	-3.74	121.22	126.37
32	2a	516	PSU	O2-C2-N1	-3.73	118.94	122.79
57	2y	8	4SU	N3-C2-N1	3.72	119.74	114.89
57	2y	37	MIA	C2-N3-C4	3.72	120.92	111.83
57	1y	55	PSU	C4-N3-C2	-3.72	121.24	126.37
54	2w	55	PSU	O2-C2-N1	-3.72	118.95	122.79
1	1A	1962	5MC	C5-C6-N1	-3.72	119.28	123.31
57	2y	55	PSU	C4-N3-C2	-3.71	121.26	126.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2503	2MA	C4-C5-N7	-3.68	106.37	110.58
57	1y	37	MIA	C4-C5-N7	-3.68	106.38	110.58
32	1a	1518	MA6	C4-C5-N7	-3.68	106.38	110.58
57	1y	32	PSU	C4-N3-C2	-3.68	121.31	126.37
32	2a	1519	MA6	C2-N3-C4	3.67	120.80	111.83
57	1y	8	4SU	C1'-N1-C2	3.67	124.19	117.59
32	1a	1400	5MC	C5-C6-N1	-3.66	119.34	123.31
57	2y	32	PSU	O2-C2-N1	-3.66	119.02	122.79
32	2a	1518	MA6	C4-C5-N7	-3.65	106.41	110.58
57	2y	37	MIA	C4-C5-N7	-3.64	106.42	110.58
32	1a	1519	MA6	C2-N3-C4	3.62	120.66	111.83
56	2z	1	FME	CA-N-CN	-3.60	117.29	122.82
32	2a	1207	2MG	N9-C4-N3	3.59	133.13	125.95
57	1y	37	MIA	N3-C2-N1	-3.58	123.17	128.58
32	1a	966	M2G	C6-C5-N7	3.55	136.76	130.29
56	1z	1	FME	CA-N-CN	-3.55	117.36	122.82
54	2w	32	PSU	O2-C2-N1	-3.55	119.13	122.79
32	2a	1519	MA6	N9-C8-N7	-3.55	108.91	113.94
54	1w	55	PSU	C4-N3-C2	-3.52	121.52	126.37
32	2a	1404	5MC	C5-C6-N1	-3.52	119.49	123.31
1	2A	1915	5MU	C5-C6-N1	-3.51	119.50	123.31
32	1a	1498	UR3	C5-C4-N3	3.51	119.67	115.04
32	2a	1518	MA6	C2-N3-C4	3.50	120.38	111.83
57	1y	8	4SU	N3-C2-N1	3.49	119.44	114.89
54	1w	76	F3N	N9-C8-N7	-3.49	108.99	113.94
32	1a	516	PSU	O2-C2-N1	-3.48	119.20	122.79
55	2x	76	8AN	N9-C8-N7	-3.47	109.01	113.94
32	1a	1518	MA6	C2-N3-C4	3.46	120.27	111.83
57	2y	37	MIA	N3-C2-N1	-3.43	123.39	128.58
54	1w	76	F3N	C2-N3-C4	3.42	120.17	111.83
55	1x	76	8AN	C2-N3-C4	3.41	120.16	111.83
54	2w	37	MIA	C4-C5-N7	-3.41	106.69	110.58
55	1x	76	8AN	N9-C8-N7	-3.41	109.11	113.94
55	2x	76	8AN	C2-N3-C4	3.40	120.14	111.83
54	2w	76	F3N	N9-C8-N7	-3.40	109.11	113.94
54	2w	76	F3N	C2-N3-C4	3.39	120.11	111.83
55	2x	8	4SU	C1'-N1-C2	3.39	123.68	117.59
32	1a	1404	5MC	C5-C4-N3	-3.38	118.29	121.75
54	2w	37	MIA	C2-N3-C4	3.37	121.12	112.29
54	1w	37	MIA	C4-C5-N7	-3.37	106.73	110.58
1	2A	2503	2MA	N6-C6-N1	3.36	121.56	117.03
32	1a	1519	MA6	N9-C8-N7	-3.36	109.17	113.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2503	2MA	C4-C5-N7	-3.31	106.79	110.58
32	2a	1518	MA6	N9-C8-N7	-3.30	109.25	113.94
43	2l	92	0TD	OD2-CG-CB	3.29	120.27	113.15
55	2x	76	8AN	C4'-O4'-C1'	-3.29	102.19	109.47
54	1w	8	4SU	C5-C4-S4	-3.29	120.55	124.31
55	1x	54	5MU	C5-C6-N1	-3.28	119.75	123.31
55	1x	76	8AN	C4'-O4'-C1'	-3.28	102.23	109.47
32	1a	1404	5MC	C5-C6-N1	-3.26	119.78	123.31
55	1x	32	5MC	C5-C6-N1	-3.25	119.79	123.31
32	2a	1207	2MG	C4-C5-N7	-3.22	105.57	110.67
55	2x	8	4SU	C6-C5-C4	-3.22	117.17	119.95
57	2y	55	PSU	C6-C5-C4	-3.21	116.01	118.17
55	1x	32	5MC	C5-C4-N3	-3.21	118.47	121.75
54	1w	37	MIA	C2-N3-C4	3.19	120.65	112.29
1	2A	2503	2MA	C4-N9-C8	3.19	109.08	105.74
43	1l	92	0TD	OD2-CG-CB	3.18	120.03	113.15
54	1w	8	4SU	N3-C2-N1	3.18	119.03	114.89
1	1A	2552	OMU	O2-C2-N1	-3.18	118.66	122.80
55	1x	54	5MU	O2-C2-N1	-3.15	118.69	122.80
1	1A	2251	OMG	C6-C5-N7	3.15	136.01	130.29
32	1a	1407	5MC	C5-C6-N1	-3.14	119.91	123.31
1	1A	2503	2MA	N6-C6-N1	3.13	121.26	117.03
1	2A	1942	5MC	C5-C6-N1	-3.13	119.91	123.31
54	1w	76	F3N	C5-N7-C8	3.13	108.37	103.45
54	1w	54	5MU	C5-C6-N1	-3.12	119.92	123.31
32	1a	1207	2MG	C4-C5-N7	-3.11	105.74	110.67
32	1a	1207	2MG	N1-C2-N2	3.08	119.71	116.56
32	2a	967	5MC	C5-C6-N1	-3.07	119.97	123.31
1	1A	2605	PSU	O2-C2-N1	-3.05	119.64	122.79
1	2A	2605	PSU	O2-C2-N1	-3.04	119.65	122.79
54	2w	76	F3N	C5-N7-C8	3.04	108.22	103.45
1	1A	1915	5MU	C5M-C5-C4	3.03	122.02	118.78
32	2a	966	M2G	C6-C5-N7	3.01	135.77	130.29
55	2x	76	8AN	C5-N7-C8	3.01	108.17	103.45
1	1A	1942	5MC	C5-C4-N3	-3.00	118.68	121.75
1	2A	1939	5MU	O2-C2-N1	-3.00	118.89	122.80
1	2A	2251	OMG	C6-C5-N7	3.00	135.74	130.29
1	2A	1942	5MC	C5-C4-N3	-2.99	118.69	121.75
32	1a	967	5MC	C5-C6-N1	-2.99	120.07	123.31
55	1x	76	8AN	C5-N7-C8	2.98	108.13	103.45
1	1A	1962	5MC	C5-C4-N3	-2.96	118.72	121.75
55	2x	54	5MU	O2-C2-N1	-2.96	118.95	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1498	UR3	C5-C4-N3	2.95	118.93	115.04
32	2a	967	5MC	C5-C4-N3	-2.92	118.76	121.75
1	2A	2503	2MA	C5-N7-C8	2.91	108.03	103.45
32	1a	966	M2G	C4-C5-N7	-2.91	106.06	110.67
1	1A	1915	5MU	C5-C6-N1	-2.90	120.17	123.31
54	2w	46	G7M	O6-C6-C5	-2.88	121.59	128.01
32	1a	1407	5MC	C5-C4-N3	-2.87	118.81	121.75
55	1x	76	8AN	C5-C4-N9	2.87	108.94	105.81
55	1x	8	4SU	C5-C4-N3	2.87	117.42	114.75
54	1w	8	4SU	C1'-N1-C2	2.86	122.72	117.59
1	1A	2503	2MA	C2-N1-C6	2.85	122.49	118.10
54	1w	55	PSU	C6-C5-C4	-2.82	116.27	118.17
1	1A	1915	5MU	O2-C2-N1	-2.81	119.14	122.80
32	2a	1407	5MC	C5-C4-N3	-2.80	118.89	121.75
32	1a	1402	4OC	C6-C5-C4	2.80	120.37	117.00
57	1y	39	PSU	O2-C2-N1	-2.79	119.91	122.79
57	1y	54	5MU	C5-C6-N1	-2.79	120.29	123.31
1	1A	1942	5MC	C5-C6-N1	-2.78	120.29	123.31
55	2x	32	5MC	C5-C4-N3	-2.78	118.90	121.75
1	2A	1962	5MC	C5-C4-N3	-2.78	118.91	121.75
32	2a	1404	5MC	C5-C4-N3	-2.77	118.91	121.75
54	2w	37	MIA	C5-N7-C8	2.76	107.80	103.45
32	2a	1518	MA6	N3-C4-N9	2.76	131.86	127.17
1	2A	1962	5MC	C5-C6-N1	-2.75	120.33	123.31
1	2A	2552	OMU	C5-C4-N3	2.74	118.64	114.80
1	2A	2552	OMU	O4-C4-C5	-2.74	120.43	125.16
32	1a	527	G7M	O6-C6-C5	-2.73	121.91	128.01
55	2x	76	8AN	C5-C4-N9	2.73	108.78	105.81
32	1a	1518	MA6	N3-C4-N9	2.70	131.76	127.17
55	2x	55	PSU	O2-C2-N1	-2.70	120.01	122.79
54	1w	54	5MU	O2-C2-N1	-2.69	119.29	122.80
57	1y	37	MIA	C5-N7-C8	2.67	107.64	103.45
57	2y	37	MIA	C5-N7-C8	2.66	107.64	103.45
55	1x	8	4SU	C1'-N1-C2	2.66	122.37	117.59
54	1w	37	MIA	C2-N1-C6	2.65	122.58	117.54
32	1a	1400	5MC	C5-C4-N3	-2.65	119.04	121.75
1	1A	2552	OMU	C5-C4-N3	2.63	118.49	114.80
54	2w	76	F3N	C5-C4-N9	2.63	108.68	105.81
56	1z	1	FME	CB-CA-N	2.62	115.29	110.52
1	1A	2552	OMU	O4-C4-C5	-2.62	120.65	125.16
54	1w	76	F3N	C5-C4-N9	2.61	108.66	105.81
57	2y	37	MIA	C4-N9-C8	2.59	108.46	105.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	2w	8	4SU	O2-C2-N1	-2.59	119.43	122.80
54	1w	37	MIA	C4-N9-C8	2.59	108.45	105.74
32	1a	1519	MA6	N3-C4-N9	2.58	131.56	127.17
54	2w	37	MIA	C4-N9-C8	2.57	108.44	105.74
54	1w	76	F3N	N3-C4-N9	2.56	131.53	127.17
1	1A	2251	OMG	C4-C5-N7	-2.56	106.62	110.67
56	1z	1	FME	CG-CB-CA	-2.55	105.07	112.87
32	1a	516	PSU	O4'-C1'-C2'	2.54	108.67	105.15
54	1w	32	PSU	O2-C2-N1	-2.54	120.17	122.79
1	2A	2605	PSU	C5-C6-N1	-2.54	118.62	122.14
32	2a	1519	MA6	N3-C4-N9	2.54	131.48	127.17
1	2A	2503	2MA	N9-C8-N7	-2.54	110.34	113.94
54	2w	76	F3N	N3-C4-N9	2.53	131.47	127.17
55	1x	76	8AN	C6-C5-C4	2.53	120.63	117.18
55	1x	76	8AN	N3-C4-N9	2.52	131.46	127.17
55	2x	76	8AN	N3-C4-N9	2.52	131.45	127.17
32	2a	1400	5MC	C5-C4-N3	-2.51	119.18	121.75
54	1w	46	G7M	O6-C6-C5	-2.51	122.41	128.01
32	1a	1207	2MG	N2-C2-N3	-2.49	117.34	120.51
57	2y	54	5MU	C5-C6-N1	-2.49	120.61	123.31
54	1w	37	MIA	C5-N7-C8	2.48	107.35	103.45
1	1A	2503	2MA	C4-N9-C8	2.48	108.34	105.74
32	2a	966	M2G	C4-C5-N7	-2.48	106.75	110.67
1	1A	2552	OMU	C2'-C1'-N1	-2.47	109.55	114.24
55	2x	8	4SU	O2-C2-N1	2.47	126.01	122.80
54	2w	54	5MU	C5-C6-N1	-2.46	120.64	123.31
54	2w	37	MIA	C6-C5-N7	2.46	135.12	132.43
1	2A	2251	OMG	O6-C6-C5	-2.46	120.05	126.53
54	1w	39	PSU	C5-C6-N1	-2.45	118.74	122.14
54	1w	37	MIA	N3-C2-N1	-2.44	122.54	127.00
1	1A	2605	PSU	C5-C6-N1	-2.44	118.75	122.14
1	2A	2552	OMU	C2'-C1'-N1	-2.44	109.62	114.24
32	1a	516	PSU	C5-C6-N1	-2.43	118.77	122.14
56	2z	1	FME	CB-CA-N	2.42	114.93	110.52
55	2x	55	PSU	C6-C5-C4	-2.42	116.54	118.17
57	1y	46	G7M	O6-C6-C5	-2.40	122.65	128.01
1	1A	1911	PSU	C5-C6-N1	-2.40	118.81	122.14
55	1x	32	5MC	O2-C2-N3	-2.39	118.56	122.33
1	1A	2251	OMG	O6-C6-C5	-2.37	120.26	126.53
32	1a	1519	MA6	C4-C5-C6	2.36	118.35	115.91
32	2a	1207	2MG	CM2-N2-C2	-2.35	118.61	123.65
32	1a	967	5MC	C5-C4-N3	-2.34	119.36	121.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2503	2MA	C5-N7-C8	2.34	107.12	103.45
43	2l	92	0TD	OD1-CG-CB	-2.32	117.57	122.44
54	2w	37	MIA	C1'-N9-C8	-2.32	121.95	127.09
32	1a	1498	UR3	C3U-N3-C4	2.31	121.08	117.87
57	1y	32	PSU	C6-C5-C4	-2.29	116.63	118.17
1	1A	1915	5MU	C5M-C5-C6	-2.28	119.76	122.85
57	1y	54	5MU	C5M-C5-C4	2.28	121.22	118.78
1	1A	1962	5MC	CM5-C5-C6	-2.28	119.76	122.85
1	2A	1915	5MU	O2-C2-N1	-2.28	119.83	122.80
55	1x	8	4SU	O2-C2-N3	-2.28	117.29	121.49
32	2a	1518	MA6	C4-C5-C6	2.27	118.25	115.91
1	2A	1911	PSU	C5-C6-N1	-2.26	119.00	122.14
57	2y	46	G7M	O6-C6-C5	-2.25	122.98	128.01
32	1a	1519	MA6	C5-C4-N9	2.25	108.27	105.81
1	2A	2251	OMG	C4-C5-N7	-2.25	107.11	110.67
55	1x	76	8AN	C4-C5-N7	-2.25	108.01	110.58
1	1A	1917	PSU	C5-C6-N1	-2.25	119.02	122.14
32	1a	1518	MA6	C4-N9-C8	2.24	108.09	105.74
55	2x	76	8AN	C6-C5-C4	2.24	120.24	117.18
54	2w	37	MIA	C2-N1-C6	2.24	121.79	117.54
1	2A	2503	2MA	C2-N1-C6	2.22	121.52	118.10
55	2x	76	8AN	C4-C5-N7	-2.22	108.05	110.58
55	1x	8	4SU	S4-C4-N3	-2.21	117.89	120.20
57	1y	46	G7M	C5-C6-N1	2.20	116.40	111.84
1	1A	2503	2MA	C6-C5-N7	2.19	136.32	132.09
54	1w	76	F3N	C4-C5-N7	-2.19	108.08	110.58
54	2w	76	F3N	C6-C5-C4	2.18	120.16	117.18
1	1A	1920	OMC	O2-C2-N3	-2.18	118.89	122.33
54	2w	76	F3N	C4-C5-N7	-2.17	108.10	110.58
54	2w	37	MIA	C11-S10-C2	-2.17	100.62	102.25
1	2A	1942	5MC	O2-C2-N3	-2.15	118.94	122.33
1	1A	1942	5MC	CM5-C5-C6	-2.14	119.95	122.85
55	2x	32	5MC	O2-C2-N3	-2.14	118.96	122.33
1	2A	2503	2MA	C6-C5-N7	2.14	136.21	132.09
55	2x	32	5MC	CM5-C5-C6	-2.14	119.96	122.85
54	1w	32	PSU	C5-C6-N1	-2.13	119.18	122.14
32	2a	1404	5MC	O2-C2-N3	-2.13	118.97	122.33
1	2A	1917	PSU	C5-C6-N1	-2.12	119.19	122.14
32	2a	1400	5MC	O2-C2-N3	-2.12	118.99	122.33
54	2w	39	PSU	C5-C6-N1	-2.11	119.20	122.14
54	2w	46	G7M	C5-C6-N1	2.11	116.20	111.84
57	1y	39	PSU	O4'-C1'-C2'	2.10	108.06	105.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1519	MA6	C5-C4-N9	2.10	108.10	105.81
54	1w	76	F3N	O2'-C2'-C3'	-2.10	106.03	111.16
1	2A	1915	5MU	C5M-C5-C4	2.10	121.02	118.78
32	1a	1407	5MC	O2-C2-N3	-2.07	119.06	122.33
57	1y	54	5MU	O2-C2-N1	-2.07	120.10	122.80
32	2a	1402	4OC	CM4-N4-C4	-2.06	118.43	122.45
32	1a	1207	2MG	C8-N7-C5	2.06	107.93	104.26
32	2a	1207	2MG	C8-N7-C5	2.05	107.92	104.26
32	2a	1402	4OC	O2-C2-N3	-2.05	119.10	122.33
55	2x	8	4SU	O2-C2-N3	-2.05	117.70	121.49
43	1l	92	0TD	OD1-CG-CB	-2.05	118.15	122.44
32	2a	1402	4OC	C6-C5-C4	2.05	119.47	117.00
54	1w	39	PSU	O4'-C1'-C2'	2.04	107.98	105.15
54	2w	39	PSU	O4'-C1'-C2'	2.04	107.98	105.15
54	2w	54	5MU	C5M-C5-C4	2.04	120.96	118.78
32	2a	966	M2G	O6-C6-C5	-2.04	121.16	126.53
32	2a	527	G7M	O6-C6-C5	-2.03	123.48	128.01
57	2y	37	MIA	C6-C5-N7	2.03	136.00	132.09
32	1a	527	G7M	C5-C6-N1	2.02	116.02	111.84
57	1y	37	MIA	C6-C5-N7	2.02	135.98	132.09
54	2w	37	MIA	N3-C2-N1	-2.02	123.32	127.00
1	1A	1939	5MU	O2-C2-N1	-2.01	120.18	122.80
32	1a	967	5MC	O2-C2-N3	-2.01	119.16	122.33
54	1w	76	F3N	C6-C5-C4	2.01	119.92	117.18

There are no chirality outliers.

All (65) 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
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB
57	1y	46	G7M	C4'-C5'-O5'-P
32	2a	1519	MA6	O4'-C4'-C5'-O5'
55	2x	76	8AN	C3'-C4'-C5'-O5'
54	1w	37	MIA	C12-C13-C14-C15
54	1w	37	MIA	C12-C13-C14-C16
56	1z	1	FME	O1-CN-N-CA
56	2z	1	FME	O1-CN-N-CA
56	2z	1	FME	O-C-CA-CB
55	1x	76	8AN	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
32	1a	1519	MA6	O4'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
55	2x	76	8AN	O4'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
55	1x	76	8AN	O4'-C4'-C5'-O5'
57	2y	46	G7M	O4'-C1'-N9-C4
56	1z	1	FME	N-CA-CB-CG
32	2a	527	G7M	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	1w	37	MIA	C5-C6-N6-C12
32	1a	527	G7M	O4'-C4'-C5'-O5'
57	2y	46	G7M	O4'-C1'-N9-C8
56	2z	1	FME	N-CA-CB-CG
54	1w	37	MIA	N1-C6-N6-C12
54	1w	46	G7M	C4'-C5'-O5'-P
56	1z	1	FME	CB-CG-SD-CE
32	2a	1404	5MC	O4'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
1	1A	1915	5MU	O4'-C4'-C5'-O5'
56	2z	1	FME	CB-CG-SD-CE
32	2a	1400	5MC	O4'-C4'-C5'-O5'
54	2w	76	F3N	N-CA-CB-CG
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	2a	527	G7M	C4'-C5'-O5'-P
1	1A	1911	PSU	O4'-C1'-C5-C4
57	1y	55	PSU	O4'-C1'-C5-C4
55	2x	76	8AN	C4'-C5'-O5'-P
32	1a	1519	MA6	C4'-C5'-O5'-P
54	1w	37	MIA	N6-C12-C13-C14
1	2A	1917	PSU	O4'-C4'-C5'-O5'
54	2w	46	G7M	C4'-C5'-O5'-P
32	1a	1400	5MC	O4'-C4'-C5'-O5'
57	1y	39	PSU	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C4'-C5'-O5'-P
54	2w	76	F3N	C-CA-CB-CG
1	1A	2251	OMG	C1'-C2'-O2'-CM2
54	2w	32	PSU	O4'-C4'-C5'-O5'
57	1y	55	PSU	O4'-C1'-C5-C6
57	2y	55	PSU	O4'-C1'-C5-C6
55	1x	76	8AN	C4'-C5'-O5'-P
1	2A	1962	5MC	C2'-C1'-N1-C6

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Mol	Chain	Res	Type	Atoms
56	1z	1	FME	C-CA-CB-CG
1	2A	1962	5MC	O4'-C1'-N1-C6
43	2l	92	0TD	CG-CB-SB-CSB
1	2A	2503	2MA	C3'-C4'-C5'-O5'
57	1y	8	4SU	C2'-C1'-N1-C2
32	2a	1400	5MC	C3'-C4'-C5'-O5'
32	1a	527	G7M	C4'-C5'-O5'-P
1	1A	1920	OMC	C2'-C1'-N1-C2
1	1A	2503	2MA	O4'-C4'-C5'-O5'
57	1y	37	MIA	C3'-C4'-C5'-O5'

There are no ring outliers.

33 monomers are involved in 49 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
57	1y	39	PSU	1	0
1	1A	1939	5MU	1	0
54	1w	39	PSU	1	0
57	1y	8	4SU	2	0
54	1w	8	4SU	1	0
57	2y	55	PSU	5	0
57	1y	55	PSU	2	0
55	1x	76	8AN	2	0
1	2A	1939	5MU	1	0
32	2a	1207	2MG	1	0
57	1y	37	MIA	3	0
1	2A	2552	OMU	1	0
32	1a	1402	4OC	2	0
32	1a	1519	MA6	1	0
57	2y	46	G7M	2	0
32	2a	967	5MC	1	0
54	2w	8	4SU	1	0
1	1A	2552	OMU	1	0
32	2a	1404	5MC	1	0
54	2w	76	F3N	2	0
54	2w	39	PSU	1	0
32	2a	1402	4OC	1	0
57	1y	46	G7M	4	0
32	1a	1518	MA6	1	0
43	2l	92	0TD	1	0
55	2x	76	8AN	2	0
1	1A	2503	2MA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	2a	527	G7M	1	0
55	1x	8	4SU	1	0
54	1w	46	G7M	2	0
32	1a	1498	UR3	1	0
54	2w	46	G7M	1	0
1	1A	1917	PSU	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2784 ligands modelled in this entry, 2782 are monoatomic - leaving 2 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	$\#\|Z\| > 2$
61	SF4	2d	303	35	0,12,12	-	-	-		
61	SF4	1d	302	35	0,12,12	-	-	-		

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
61	SF4	2d	303	35	-	-	0/6/5/5
61	SF4	1d	302	35	-	-	0/6/5/5

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 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%)	-0.44	158 (5%) 30 27	14, 30, 79, 88	0
1	2A	2789/2915 (95%)	0.02	128 (4%) 37 33	26, 48, 76, 86	0
2	1B	120/121 (99%)	-0.34	0 100 100	24, 42, 54, 75	0
2	2B	120/121 (99%)	0.50	0 100 100	47, 60, 68, 72	0
3	1D	275/276 (99%)	-0.11	1 (0%) 88 86	14, 31, 43, 63	0
3	2D	275/276 (99%)	0.21	3 (1%) 78 75	25, 41, 51, 68	0
4	1E	204/206 (99%)	-0.01	0 100 100	14, 35, 54, 63	0
4	2E	204/206 (99%)	0.50	3 (1%) 72 68	29, 49, 60, 66	0
5	1F	202/210 (96%)	0.03	0 100 100	14, 37, 56, 68	0
5	2F	202/210 (96%)	0.64	6 (2%) 52 48	28, 54, 64, 68	0
6	1G	181/182 (99%)	0.52	4 (2%) 62 58	33, 49, 61, 71	0
6	2G	181/182 (99%)	1.19	17 (9%) 14 12	50, 61, 68, 73	0
7	1H	174/180 (96%)	0.47	1 (0%) 85 83	33, 47, 55, 60	0
7	2H	174/180 (96%)	1.54	47 (27%) 1 1	56, 67, 73, 75	0
8	1I	146/148 (98%)	0.86	8 (5%) 30 27	37, 59, 66, 69	0
8	2I	146/148 (98%)	1.19	16 (10%) 10 8	44, 60, 68, 71	0
9	1N	140/140 (100%)	0.03	0 100 100	19, 34, 50, 59	0
9	2N	140/140 (100%)	0.67	0 100 100	38, 53, 63, 72	0
10	1O	122/122 (100%)	0.01	1 (0%) 82 80	24, 35, 49, 55	0
10	2O	122/122 (100%)	0.53	0 100 100	37, 48, 60, 63	0
11	1P	149/150 (99%)	0.11	1 (0%) 84 81	15, 39, 58, 64	0
11	2P	149/150 (99%)	0.74	7 (4%) 36 32	28, 54, 67, 71	0
12	1Q	141/141 (100%)	0.02	1 (0%) 84 81	19, 35, 47, 60	0
12	2Q	141/141 (100%)	0.82	11 (7%) 19 17	35, 52, 62, 67	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.16	0 100 100	22, 31, 39, 48	0
13	2R	118/118 (100%)	0.26	0 100 100	34, 44, 53, 60	0
14	1S	110/112 (98%)	0.22	0 100 100	30, 40, 51, 54	0
14	2S	110/112 (98%)	1.06	9 (8%) 17 15	47, 56, 63, 68	0
15	1T	131/146 (89%)	0.19	3 (2%) 61 57	27, 39, 57, 65	0
15	2T	131/146 (89%)	0.56	4 (3%) 51 47	39, 51, 61, 65	0
16	1U	116/118 (98%)	-0.28	0 100 100	17, 26, 42, 51	0
16	2U	116/118 (98%)	0.58	2 (1%) 69 65	35, 50, 61, 66	0
17	1V	101/101 (100%)	-0.11	0 100 100	19, 36, 50, 57	0
17	2V	101/101 (100%)	0.93	4 (3%) 42 38	36, 57, 63, 71	0
18	1W	112/113 (99%)	-0.24	2 (1%) 67 64	17, 27, 43, 67	0
18	2W	112/113 (99%)	0.36	3 (2%) 56 51	30, 41, 56, 82	0
19	1X	95/96 (98%)	0.04	2 (2%) 63 59	21, 31, 51, 68	0
19	2X	95/96 (98%)	0.75	5 (5%) 32 28	36, 49, 61, 71	0
20	1Y	107/110 (97%)	0.36	1 (0%) 81 78	28, 43, 57, 66	0
20	2Y	107/110 (97%)	1.11	11 (10%) 12 10	48, 59, 67, 72	0
21	1Z	154/206 (74%)	0.88	18 (11%) 9 7	35, 52, 69, 72	0
21	2Z	160/206 (77%)	1.51	37 (23%) 2 1	47, 64, 72, 75	0
22	10	83/85 (97%)	-0.10	0 100 100	20, 30, 41, 53	0
22	20	83/85 (97%)	0.69	4 (4%) 35 31	34, 50, 58, 64	0
23	11	97/98 (98%)	0.11	1 (1%) 79 76	21, 38, 58, 62	0
23	21	97/98 (98%)	0.52	2 (2%) 63 59	32, 45, 60, 66	0
24	12	70/72 (97%)	0.16	0 100 100	27, 39, 52, 63	0
24	22	70/72 (97%)	0.86	1 (1%) 73 70	47, 56, 63, 66	0
25	13	59/60 (98%)	-0.03	0 100 100	17, 31, 52, 60	0
25	23	59/60 (98%)	0.64	1 (1%) 69 65	43, 54, 63, 66	0
26	14	69/71 (97%)	1.00	11 (15%) 5 4	42, 60, 71, 75	0
26	24	69/71 (97%)	1.47	16 (23%) 2 1	60, 67, 73, 79	0
27	15	59/60 (98%)	-0.00	0 100 100	15, 30, 57, 62	0
27	25	59/60 (98%)	0.40	0 100 100	27, 43, 61, 65	0
28	16	53/54 (98%)	-0.12	0 100 100	26, 35, 44, 50	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.50	0 100 100	39, 49, 55, 58	0
29	17	48/49 (97%)	-0.32	1 (2%) 63 59	15, 21, 43, 50	0
29	27	48/49 (97%)	0.12	2 (4%) 40 36	27, 35, 55, 61	0
30	18	64/65 (98%)	-0.16	0 100 100	21, 27, 35, 46	0
30	28	64/65 (98%)	0.49	1 (1%) 70 67	38, 45, 51, 54	0
31	19	37/37 (100%)	-0.10	0 100 100	26, 34, 42, 50	0
31	29	37/37 (100%)	0.92	1 (2%) 56 51	45, 55, 60, 62	0
32	1a	1488/1521 (97%)	0.34	50 (3%) 48 43	27, 55, 75, 87	0
32	2a	1491/1521 (98%)	0.56	56 (3%) 44 39	40, 62, 76, 87	0
33	1b	231/256 (90%)	1.19	33 (14%) 6 5	50, 63, 70, 78	0
33	2b	231/256 (90%)	1.56	61 (26%) 1 1	58, 67, 72, 77	0
34	1c	206/239 (86%)	0.96	13 (6%) 26 23	49, 58, 66, 73	0
34	2c	206/239 (86%)	1.57	56 (27%) 1 1	59, 66, 72, 76	0
35	1d	208/209 (99%)	0.83	12 (5%) 29 25	43, 57, 64, 67	0
35	2d	208/209 (99%)	0.82	8 (3%) 44 39	47, 57, 64, 72	0
36	1e	148/162 (91%)	0.65	2 (1%) 73 70	40, 53, 60, 64	0
36	2e	148/162 (91%)	1.08	12 (8%) 18 15	50, 60, 65, 68	0
37	1f	100/101 (99%)	0.57	0 100 100	46, 55, 61, 62	0
37	2f	100/101 (99%)	0.75	1 (1%) 79 76	47, 56, 62, 64	0
38	1g	155/156 (99%)	0.98	15 (9%) 13 11	49, 58, 68, 76	0
38	2g	155/156 (99%)	1.33	24 (15%) 5 4	54, 65, 70, 76	0
39	1h	137/138 (99%)	0.87	8 (5%) 29 25	45, 55, 61, 63	0
39	2h	137/138 (99%)	1.09	10 (7%) 21 19	51, 61, 66, 71	0
40	1i	127/128 (99%)	1.36	24 (18%) 3 2	44, 63, 69, 71	0
40	2i	127/128 (99%)	1.75	43 (33%) 1 1	57, 67, 72, 73	0
41	1j	97/105 (92%)	1.29	16 (16%) 4 3	45, 62, 69, 73	0
41	2j	96/105 (91%)	1.80	35 (36%) 1 1	58, 68, 72, 73	0
42	1k	114/129 (88%)	0.81	8 (7%) 22 20	32, 54, 62, 69	0
42	2k	114/129 (88%)	1.13	10 (8%) 15 14	48, 60, 66, 70	0
43	1l	121/132 (91%)	0.42	3 (2%) 58 54	33, 44, 54, 60	0
43	2l	121/132 (91%)	0.76	7 (5%) 29 25	44, 53, 61, 67	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	123/126 (97%)	0.96	10 (8%) 18 15	46, 57, 63, 68	0
44	2m	122/126 (96%)	1.43	19 (15%) 5 4	56, 64, 69, 72	0
45	1n	60/61 (98%)	1.05	4 (6%) 24 21	50, 55, 62, 62	0
45	2n	60/61 (98%)	2.12	29 (48%) 0 0	60, 67, 70, 73	0
46	1o	88/89 (98%)	0.91	6 (6%) 23 20	40, 53, 62, 68	0
46	2o	88/89 (98%)	1.10	8 (9%) 15 13	48, 58, 64, 67	0
47	1p	82/88 (93%)	1.23	10 (12%) 8 7	46, 58, 64, 69	0
47	2p	82/88 (93%)	0.86	4 (4%) 35 31	49, 57, 64, 67	0
48	1q	99/105 (94%)	0.92	3 (3%) 52 48	43, 54, 63, 67	0
48	2q	99/105 (94%)	0.99	5 (5%) 33 29	51, 57, 64, 68	0
49	1r	68/88 (77%)	0.59	2 (2%) 53 49	46, 54, 63, 66	0
49	2r	68/88 (77%)	0.85	5 (7%) 20 18	49, 57, 65, 69	0
50	1s	83/93 (89%)	1.05	6 (7%) 21 19	49, 58, 66, 70	0
50	2s	83/93 (89%)	1.44	18 (21%) 2 2	60, 66, 71, 73	0
51	1t	96/106 (90%)	1.10	9 (9%) 14 12	50, 58, 65, 73	0
51	2t	96/106 (90%)	1.01	7 (7%) 21 19	46, 57, 68, 75	0
52	1u	23/27 (85%)	1.32	3 (13%) 7 6	50, 54, 58, 60	0
52	2u	23/27 (85%)	1.81	6 (26%) 1 1	62, 65, 69, 73	0
53	1v	13/24 (54%)	0.78	4 (30%) 1 1	38, 42, 76, 78	0
53	2v	13/24 (54%)	1.16	4 (30%) 1 1	52, 59, 79, 87	0
54	1w	66/76 (86%)	1.04	6 (9%) 15 13	22, 68, 79, 83	0
54	2w	64/76 (84%)	1.26	11 (17%) 4 3	37, 75, 81, 85	0
55	1x	72/77 (93%)	0.23	0 100 100	19, 51, 68, 75	0
55	2x	72/77 (93%)	0.49	1 (1%) 73 70	35, 61, 70, 80	0
56	1z	2/3 (66%)	-0.60	0 100 100	18, 18, 18, 19	0
56	2z	2/3 (66%)	-0.73	0 100 100	31, 31, 31, 32	0
57	1y	67/76 (88%)	2.15	38 (56%) 0 0	54, 80, 85, 86	0
57	2y	66/76 (86%)	2.09	37 (56%) 0 0	62, 82, 86, 87	0
All	All	20875/21754 (95%)	0.43	1317 (6%) 26 23	14, 52, 72, 88	0

All (1317) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
45	1n	2	ALA	6.3
21	1Z	141	VAL	6.2
38	2g	80	VAL	6.1
1	2A	2146	C	5.8
1	2A	883	G	5.5
1	2A	2115	G	5.5
1	1A	2115	G	5.5
44	2m	124	PRO	5.4
44	2m	123	ALA	5.3
40	2i	14	VAL	5.3
1	2A	2111	C	5.2
45	2n	2	ALA	5.2
38	1g	81	GLY	5.2
40	2i	10	ARG	5.1
1	1A	2112	G	5.1
18	2W	112	GLY	5.0
38	2g	82	GLY	5.0
40	2i	102	LEU	5.0
1	1A	885	C	4.9
54	2w	71	G	4.9
1	2A	2147	G	4.9
1	2A	2112	G	4.9
1	1A	2113	U	4.7
1	1A	2174	C	4.7
26	24	51	ASP	4.7
44	1m	124	PRO	4.6
1	1A	2145	C	4.6
34	2c	2	GLY	4.6
1	1A	1064	C	4.5
26	24	50	VAL	4.5
44	1m	123	ALA	4.5
1	2A	884	C	4.5
1	2A	2113	U	4.5
1	1A	2111	C	4.4
1	1A	1078	U	4.4
1	2A	885	C	4.3
41	2j	40	LEU	4.3
1	2A	2174	C	4.3
1	2A	2125	G	4.3
1	2A	2145	C	4.2
1	1A	2114	A	4.2
1	2A	2168	G	4.2
32	2a	1033	G	4.2

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Mol	Chain	Res	Type	RSRZ
1	1A	1066	U	4.2
1	2A	2117	A	4.2
50	2s	45	VAL	4.2
1	1A	2129	C	4.2
57	1y	19	G	4.2
1	1A	2160	G	4.1
1	2A	2155	G	4.1
1	2A	896	A	4.1
33	2b	165	VAL	4.1
1	1A	2130	U	4.1
1	2A	2154	G	4.1
45	2n	25	VAL	4.1
1	2A	2109	U	4.1
1	2A	2116	G	4.1
41	2j	34	VAL	4.1
1	2A	2169	A	4.1
1	1A	2189	U	4.0
1	1A	1086	A	4.0
1	2A	2142	C	4.0
1	1A	2117	A	4.0
1	2A	2126	A	4.0
1	1A	2146	C	4.0
54	2w	72	C	4.0
1	1A	2133	G	4.0
1	2A	2104	G	4.0
1	2A	2158	A	4.0
1	1A	898	C	4.0
1	2A	2143	C	4.0
33	2b	7	VAL	4.0
44	2m	102	ARG	4.0
1	1A	1058	G	3.9
21	2Z	171	ILE	3.9
32	1a	1035	A	3.9
38	2g	156	TRP	3.9
21	2Z	147	GLY	3.9
1	2A	2127	G	3.9
1	1A	2108	C	3.9
33	1b	229	VAL	3.9
32	1a	1257	U	3.9
1	2A	882	G	3.9
7	2H	17	VAL	3.9
38	1g	80	VAL	3.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2143	C	3.9
40	2i	67	GLY	3.9
21	1Z	146	ILE	3.9
21	2Z	166	SER	3.8
38	1g	85	TYR	3.8
1	1A	886	C	3.8
1	2A	2181	G	3.8
32	1a	1036	G	3.8
26	14	54	GLY	3.8
44	2m	100	GLY	3.8
41	2j	65	LEU	3.8
38	2g	83	ALA	3.8
26	14	64	GLY	3.8
1	2A	2149	G	3.8
53	2v	13	A	3.8
38	1g	84	ASN	3.8
1	1A	882	G	3.8
21	2Z	174	VAL	3.7
1	2A	888	C	3.7
1	2A	2108	C	3.7
8	2I	146	ALA	3.7
1	1A	884	C	3.7
1	2A	2139	C	3.7
1	2A	2144	U	3.7
42	2k	117	ASN	3.7
38	2g	154	TYR	3.7
54	1w	72	C	3.7
41	2j	74	ILE	3.7
51	1t	95	ALA	3.6
34	1c	81	GLY	3.6
1	1A	1087	G	3.6
1	2A	1533	G	3.6
1	2A	2160	G	3.6
32	2a	1031	G	3.6
57	2y	57	G	3.6
3	1D	276	LYS	3.6
21	2Z	172	ALA	3.6
33	1b	228	GLY	3.6
1	1A	2161	C	3.6
1	1A	2178	C	3.6
32	1a	1028	C	3.6
7	2H	6	ARG	3.6

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Mol	Chain	Res	Type	RSRZ
41	2j	75	ILE	3.6
1	1A	1065	U	3.6
1	2A	2167	U	3.6
1	1A	2162	G	3.6
1	1A	2165	G	3.6
33	1b	7	VAL	3.6
53	2v	12	A	3.6
57	1y	35	A	3.6
45	2n	53	LEU	3.6
1	2A	2128	C	3.6
1	1A	2109	U	3.6
1	2A	2100	G	3.6
1	2A	2123	G	3.6
1	2A	2159	G	3.6
32	1a	1003	G	3.6
1	1A	1057	A	3.6
32	2a	1030(B)	C	3.5
1	1A	1094	U	3.5
1	2A	2130	U	3.5
21	1Z	105	VAL	3.5
34	2c	75	VAL	3.5
42	1k	14	VAL	3.5
23	11	2	SER	3.5
1	1A	1063	G	3.5
1	1A	1089	G	3.5
52	1u	2	GLY	3.5
1	2A	2119	A	3.5
57	1y	20	U	3.5
1	2A	2110	G	3.5
32	1a	1034	G	3.5
40	2i	9	ARG	3.5
45	2n	5	ALA	3.5
1	1A	1095	A	3.5
38	1g	79	ARG	3.5
45	2n	3	ARG	3.5
32	2a	1249	C	3.5
15	1T	130	ALA	3.5
1	1A	1096	A	3.4
1	1A	2171	A	3.4
1	1A	2173	A	3.4
1	1A	2120	G	3.4
1	1A	2175	C	3.4

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Mol	Chain	Res	Type	RSRZ
1	2A	2118	U	3.4
1	2A	2804	C	3.4
21	2Z	146	ILE	3.4
38	1g	4	ARG	3.4
1	1A	2159	G	3.4
1	1A	2166	G	3.4
1	2A	2120	G	3.4
57	2y	18	G	3.4
21	2Z	149	SER	3.4
32	1a	1532	U	3.4
55	2x	47	U	3.4
1	2A	2135	A	3.4
33	1b	230	VAL	3.4
40	1i	19	LEU	3.4
51	1t	10	LEU	3.4
45	2n	55	GLY	3.4
1	2A	2133	G	3.4
1	2A	2162	G	3.4
32	2a	1032	G	3.4
54	1w	70	G	3.4
1	1A	1076	C	3.4
41	1j	76	ASN	3.4
1	2A	2114	A	3.4
34	2c	12	LEU	3.4
7	2H	39	PRO	3.4
19	1X	94	GLY	3.4
1	1A	1059	G	3.3
1	1A	2116	G	3.3
32	1a	1030(A)	G	3.3
33	2b	17	PHE	3.3
1	2A	898	C	3.3
1	1A	2188	C	3.3
1	2A	2129	C	3.3
1	2A	2175	C	3.3
33	1b	232	PRO	3.3
21	2Z	170	THR	3.3
40	2i	66	ARG	3.3
1	1A	896	A	3.3
44	1m	2	ALA	3.3
1	1A	2110	G	3.3
32	2a	1030	C	3.3
41	2j	41	PRO	3.3

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Mol	Chain	Res	Type	RSRZ
50	1s	9	VAL	3.3
12	2Q	33	GLY	3.3
43	1l	14	GLY	3.3
14	2S	55	ALA	3.3
34	2c	189	ALA	3.3
1	2A	2170	A	3.3
26	14	63	TYR	3.3
1	1A	1081	U	3.3
1	2A	2189	U	3.3
7	2H	19	VAL	3.3
40	1i	2	GLU	3.3
1	2A	2188	C	3.3
45	2n	38	GLY	3.3
45	2n	7	ILE	3.3
1	1A	1069	A	3.2
50	2s	2	PRO	3.2
51	1t	47	GLY	3.2
1	1A	1075	C	3.2
1	2A	2136	C	3.2
1	2A	2138	C	3.2
1	2A	2802	G	3.2
32	1a	1038	C	3.2
33	2b	237	ALA	3.2
57	2y	34	G	3.2
44	2m	105	THR	3.2
21	2Z	173	ALA	3.2
32	1a	1027	C	3.2
1	2A	2101	G	3.2
32	2a	1030(A)	G	3.2
32	2a	1034	G	3.2
41	1j	33	GLN	3.2
1	2A	2134	A	3.2
41	1j	78	ASN	3.2
1	1A	1082	U	3.2
7	2H	24	VAL	3.2
41	2j	44	VAL	3.2
46	2o	86	GLY	3.2
15	1T	131	ALA	3.2
1	2A	2803	C	3.2
26	24	49	PHE	3.2
40	2i	126	SER	3.2
54	2w	70	G	3.2

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Mol	Chain	Res	Type	RSRZ
38	1g	83	ALA	3.1
1	1A	2136	C	3.1
1	1A	2140	C	3.1
1	2A	1536	C	3.1
6	2G	49	ASP	3.1
20	2Y	1	MET	3.1
21	1Z	1	MET	3.1
45	2n	6	LEU	3.1
1	2A	2106	G	3.1
32	1a	1009	G	3.1
57	1y	57	G	3.1
1	1A	2169	A	3.1
6	1G	146	TYR	3.1
32	1a	1030(D)	A	3.1
33	1b	81	VAL	3.1
44	2m	68	GLY	3.1
54	2w	73	A	3.1
1	1A	1097	U	3.1
57	2y	33	U	3.1
1	2A	2183	C	3.1
1	1A	2141	G	3.1
1	1A	2207	G	3.1
32	2a	1117	G	3.1
34	2c	77	ILE	3.1
45	2n	34	TYR	3.1
57	1y	27	G	3.1
1	1A	2170	A	3.1
19	2X	95	LEU	3.1
21	2Z	155	LEU	3.1
1	2A	2137	C	3.1
4	2E	115	GLY	3.1
52	2u	2	GLY	3.1
26	14	56	VAL	3.1
33	2b	230	VAL	3.1
33	2b	33	TYR	3.1
34	2c	201	TYR	3.1
1	1A	1077	A	3.1
1	1A	2119	A	3.1
1	1A	2147	G	3.1
1	2A	2148	G	3.1
33	1b	237	ALA	3.1
45	2n	20	ALA	3.1

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Mol	Chain	Res	Type	RSRZ
54	1w	73	A	3.1
1	1A	2172	U	3.1
7	2H	10	PRO	3.1
34	2c	80	GLY	3.1
1	2A	2105	C	3.1
1	1A	2135	A	3.0
41	1j	77	PRO	3.0
57	1y	15	G	3.0
57	2y	19	G	3.0
21	2Z	157	LEU	3.0
50	2s	71	LEU	3.0
52	2u	5	ASP	3.0
44	2m	106	ASN	3.0
18	1W	112	GLY	3.0
44	2m	7	VAL	3.0
1	1A	2138	C	3.0
1	2A	2179	C	3.0
32	2a	1004	A	3.0
32	2a	1150	U	3.0
19	1X	95	LEU	3.0
21	2Z	150	LEU	3.0
33	1b	10	LEU	3.0
33	2b	10	LEU	3.0
1	1A	1093	G	3.0
38	2g	84	ASN	3.0
7	2H	45	VAL	3.0
33	1b	41	ILE	3.0
35	1d	5	ILE	3.0
32	2a	1038	C	3.0
40	2i	56	LEU	3.0
1	1A	879	G	3.0
1	1A	2104	G	3.0
1	2A	2165	G	3.0
32	1a	1001(A)	G	3.0
32	1a	1032	G	3.0
32	2a	1021	G	3.0
32	2a	1036	G	3.0
48	1q	36	ILE	3.0
41	2j	77	PRO	3.0
42	2k	75	TYR	3.0
20	2Y	90	LEU	3.0
52	2u	24	ARG	3.0

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Mol	Chain	Res	Type	RSRZ
1	1A	887	A	3.0
1	1A	1084	A	3.0
57	1y	38	A	3.0
7	1H	2	SER	3.0
38	2g	81	GLY	3.0
40	2i	65	VAL	2.9
46	2o	3	ILE	2.9
50	2s	11	VAL	2.9
1	1A	1176	G	2.9
1	2A	2166	G	2.9
1	2A	2186	G	2.9
57	1y	18	G	2.9
5	2F	130	ALA	2.9
44	2m	72	ALA	2.9
26	14	58	ARG	2.9
34	2c	109	PRO	2.9
40	1i	49	PRO	2.9
6	2G	139	LEU	2.9
26	24	63	TYR	2.9
1	1A	2132	U	2.9
32	1a	1000	U	2.9
1	1A	2790	A	2.9
6	2G	76	SER	2.9
32	2a	1030(D)	A	2.9
34	2c	154	SER	2.9
47	2p	82	GLN	2.9
41	2j	38	ILE	2.9
40	2i	13	ALA	2.9
1	2A	2156	G	2.9
1	2A	2184	G	2.9
7	2H	21	PRO	2.9
44	2m	122	LYS	2.9
1	1A	2122	U	2.9
1	1A	2167	U	2.9
32	2a	1149	C	2.9
53	1v	13	A	2.9
33	2b	81	VAL	2.9
34	2c	53	ALA	2.9
40	2i	11	LYS	2.9
41	2j	32	ALA	2.9
7	2H	98	LEU	2.9
34	2c	87	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2101	G	2.9
1	1A	2121	G	2.9
33	1b	17	PHE	2.9
33	2b	86	GLU	2.9
32	1a	1533	C	2.9
43	2l	126	LYS	2.9
7	2H	102	ALA	2.9
33	2b	123	ALA	2.9
5	2F	24	LEU	2.9
39	1h	112	LEU	2.9
1	1A	1062	G	2.9
1	1A	1099	G	2.9
1	2A	879	G	2.9
1	2A	2124	G	2.9
21	1Z	104	PHE	2.9
32	2a	1002	G	2.9
38	2g	85	TYR	2.9
57	2y	22	G	2.9
11	2P	109	GLY	2.9
15	1T	37	GLY	2.9
38	1g	82	GLY	2.9
8	1I	109	ILE	2.8
20	2Y	44	ILE	2.8
33	2b	200	ILE	2.8
34	2c	124	ILE	2.8
41	1j	4	ILE	2.8
32	1a	1025	U	2.8
26	24	56	VAL	2.8
1	1A	888	C	2.8
1	1A	2103	C	2.8
32	2a	1035	A	2.8
32	2a	1286	A	2.8
33	2b	120	ALA	2.8
44	2m	33	ALA	2.8
53	1v	12	A	2.8
57	1y	58	A	2.8
21	1Z	2	GLU	2.8
33	2b	66	GLY	2.8
34	2c	74	GLY	2.8
1	1A	1068	G	2.8
1	2A	881	G	2.8
1	2A	1170	G	2.8

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Mol	Chain	Res	Type	RSRZ
7	2H	72	ILE	2.8
32	1a	1023	G	2.8
54	1w	71	G	2.8
33	2b	136	VAL	2.8
38	2g	66	VAL	2.8
21	2Z	159	PRO	2.8
32	1a	1029	C	2.8
1	1A	1098	A	2.8
46	1o	57	LEU	2.8
57	2y	36	A	2.8
33	2b	122	PHE	2.8
38	1g	43	PHE	2.8
41	2j	35	SER	2.8
7	2H	15	VAL	2.8
21	1Z	139	VAL	2.8
21	2Z	105	VAL	2.8
57	1y	24	G	2.8
1	2A	2122	U	2.8
1	1A	2105	C	2.8
1	2A	894	C	2.8
57	2y	4	C	2.8
1	2A	887	A	2.8
6	1G	48	GLU	2.8
40	2i	2	GLU	2.8
7	2H	48	GLY	2.8
8	2I	106	GLY	2.8
41	1j	36	GLY	2.8
16	2U	88	ILE	2.8
39	2h	83	ILE	2.8
1	1A	2118	U	2.8
1	2A	2150	U	2.8
32	2a	1257	U	2.8
33	2b	121	LEU	2.8
1	2A	1171	G	2.8
32	1a	1033	G	2.8
57	1y	34	G	2.8
21	2Z	2	GLU	2.8
1	1A	1073	A	2.8
32	2a	1029	C	2.8
38	2g	32	ARG	2.8
21	2Z	148	ASP	2.8
26	24	65	ASP	2.8

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Mol	Chain	Res	Type	RSRZ
41	2j	10	GLY	2.7
6	2G	114	ILE	2.7
33	2b	127	ILE	2.7
33	1b	165	VAL	2.7
40	1i	17	VAL	2.7
40	2i	28	VAL	2.7
45	1n	56	VAL	2.7
46	2o	60	VAL	2.7
49	2r	85	LEU	2.7
33	2b	29	ALA	2.7
1	1A	1175	U	2.7
57	1y	51	U	2.7
1	1A	1055	G	2.7
32	2a	1283	G	2.7
1	1A	2185	C	2.7
40	2i	105	ASP	2.7
46	2o	89	GLY	2.7
23	21	2	SER	2.7
26	14	50	VAL	2.7
42	1k	25	TYR	2.7
46	1o	69	TYR	2.7
39	1h	2	LEU	2.7
51	1t	13	LEU	2.7
1	1A	1091	G	2.7
1	1A	2156	G	2.7
1	1A	2168	G	2.7
1	2A	2153	G	2.7
1	1A	1532	C	2.7
1	2A	2107	C	2.7
20	2Y	89	PHE	2.7
21	2Z	136	PHE	2.7
57	1y	56	C	2.7
57	2y	38	A	2.7
33	2b	42	ILE	2.7
57	2y	56	C	2.7
7	2H	2	SER	2.7
7	2H	171	LEU	2.7
8	1I	87	LYS	2.7
45	2n	18	VAL	2.7
33	2b	83	MET	2.7
40	2i	79	LEU	2.7
41	2j	71	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
48	1q	98	LEU	2.7
38	2g	79	ARG	2.7
33	2b	185	ILE	2.7
34	2c	157	ILE	2.7
40	2i	63	ILE	2.7
51	2t	98	PRO	2.7
1	1A	1056	G	2.7
1	1A	1070	A	2.7
1	1A	2123	G	2.7
1	1A	2148	G	2.7
1	1A	1072	C	2.7
32	1a	1001	A	2.7
57	1y	36	A	2.7
57	1y	67	C	2.7
14	2S	20	ARG	2.7
38	2g	76	ARG	2.7
41	2j	59	SER	2.7
43	2l	55	VAL	2.7
47	1p	62	VAL	2.7
8	1I	65	ALA	2.7
33	2b	12	GLU	2.7
45	2n	13	THR	2.7
1	1A	2144	U	2.7
1	2A	1026	U	2.7
21	1Z	147	GLY	2.6
26	14	59	PHE	2.6
40	2i	49	PRO	2.6
41	1j	75	ILE	2.6
42	2k	125	PHE	2.6
33	2b	48	MET	2.6
1	1A	890	A	2.6
1	1A	1509	C	2.6
1	2A	886	C	2.6
5	2F	6	VAL	2.6
7	2H	43	VAL	2.6
7	2H	49	VAL	2.6
21	2Z	144	LEU	2.6
33	1b	187	LEU	2.6
43	1l	18	VAL	2.6
57	2y	21	A	2.6
1	2A	892	G	2.6
32	1a	1021	G	2.6

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Mol	Chain	Res	Type	RSRZ
8	1I	63	ALA	2.6
40	1i	106	ALA	2.6
40	2i	4	TYR	2.6
45	2n	10	ALA	2.6
47	2p	77	ALA	2.6
49	2r	24	ALA	2.6
3	2D	275	LYS	2.6
35	2d	183	GLY	2.6
11	2P	84	ASN	2.6
40	2i	19	LEU	2.6
33	1b	15	VAL	2.6
57	2y	35	A	2.6
57	2y	73	A	2.6
1	2A	652(T)	C	2.6
38	2g	2	ALA	2.6
45	2n	22	THR	2.6
1	1A	2125	G	2.6
1	2A	2152	G	2.6
26	14	32	TYR	2.6
32	1a	1030(C)	G	2.6
34	2c	193	TYR	2.6
40	2i	125	TYR	2.6
42	1k	75	TYR	2.6
44	2m	64	TRP	2.6
44	1m	122	LYS	2.6
12	2Q	15	GLY	2.6
36	2e	114	GLY	2.6
1	2A	2180	U	2.6
32	2a	1040	U	2.6
57	1y	47	U	2.6
40	1i	59	PHE	2.6
46	1o	18	PHE	2.6
33	1b	129	GLU	2.6
33	1b	213	LEU	2.6
34	1c	32	LEU	2.6
34	2c	52	LEU	2.6
49	2r	66	LEU	2.6
18	2W	85	VAL	2.6
34	1c	76	VAL	2.6
42	2k	47	VAL	2.6
36	2e	21	ALA	2.6
57	2y	14	A	2.6

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Mol	Chain	Res	Type	RSRZ
1	1A	1100	C	2.6
32	1a	1008	C	2.6
32	2a	1027	C	2.6
32	2a	1024	G	2.6
32	2a	1026	G	2.6
32	2a	1124	G	2.6
7	2H	29	PRO	2.6
19	2X	94	GLY	2.6
26	24	54	GLY	2.6
33	1b	203	GLY	2.6
35	2d	23	GLY	2.6
45	2n	14	PRO	2.6
6	2G	52	ILE	2.6
41	2j	85	LEU	2.6
47	1p	49	LEU	2.6
7	2H	52	VAL	2.6
41	1j	24	VAL	2.6
47	1p	45	THR	2.6
40	1i	25	LYS	2.6
50	2s	32	LYS	2.6
1	2A	2171	A	2.6
33	2b	236	TYR	2.6
1	1A	2164	C	2.5
1	2A	1509	C	2.5
29	27	47	ARG	2.5
40	1i	10	ARG	2.5
57	2y	13	C	2.5
11	2P	116	GLY	2.5
41	1j	86	MET	2.5
50	1s	13	ASP	2.5
1	2A	2157	G	2.5
54	2w	5	G	2.5
57	2y	44	G	2.5
1	1A	271(K)	U	2.5
1	1A	895	U	2.5
21	1Z	150	LEU	2.5
22	20	84	LEU	2.5
7	2H	125	VAL	2.5
34	2c	86	VAL	2.5
39	2h	15	ASN	2.5
39	2h	26	VAL	2.5
44	2m	53	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
34	2c	129	ALA	2.5
38	2g	152	ALA	2.5
46	2o	88	ARG	2.5
1	2A	2176	A	2.5
54	1w	7	A	2.5
17	2V	50	PRO	2.5
1	2A	889	C	2.5
26	24	45	GLY	2.5
33	2b	131	PRO	2.5
6	2G	29	TRP	2.5
32	1a	1030	C	2.5
45	1n	51	GLY	2.5
57	2y	2	C	2.5
26	24	59	PHE	2.5
1	1A	2181	G	2.5
1	2A	2793	G	2.5
32	2a	1127	G	2.5
33	2b	142	LEU	2.5
54	2w	15	G	2.5
57	1y	5	G	2.5
57	2y	1	G	2.5
36	2e	20	GLN	2.5
7	2H	175	LYS	2.5
33	2b	93	VAL	2.5
42	1k	51	LYS	2.5
6	1G	50	ALA	2.5
8	2I	94	ALA	2.5
42	1k	74	ALA	2.5
21	2Z	142	SER	2.5
38	2g	77	SER	2.5
50	2s	77	THR	2.5
1	1A	2158	A	2.5
1	2A	1847	A	2.5
11	2P	118	GLY	2.5
51	2t	47	GLY	2.5
33	2b	41	ILE	2.5
7	2H	114	VAL	2.5
21	2Z	161	VAL	2.5
32	2a	1532	U	2.5
1	2A	2182	G	2.5
1	2A	2318	G	2.5
32	1a	1002	G	2.5

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Mol	Chain	Res	Type	RSRZ
32	2a	630	G	2.5
7	2H	51	ARG	2.5
34	2c	171	GLY	2.5
32	1a	152	A	2.5
32	1a	1041	A	2.5
32	1a	1531	A	2.5
32	2a	1250	A	2.5
3	2D	276	LYS	2.5
48	2q	14	LYS	2.5
7	2H	123	PHE	2.5
11	2P	91	PHE	2.5
36	2e	84	PHE	2.5
40	2i	18	PHE	2.5
47	1p	82	GLN	2.5
57	2y	25	C	2.5
32	2a	1125	U	2.5
57	1y	59	U	2.5
34	2c	92	ALA	2.5
35	1d	195	ALA	2.5
41	1j	32	ALA	2.5
1	1A	1071	G	2.5
7	2H	41	MET	2.5
40	2i	7	THR	2.5
33	2b	228	GLY	2.4
6	2G	146	TYR	2.4
26	24	32	TYR	2.4
45	2n	4	LYS	2.4
45	2n	21	TYR	2.4
19	2X	66	LEU	2.4
33	1b	11	LEU	2.4
34	1c	47	LEU	2.4
38	2g	16	LEU	2.4
1	2A	901	A	2.4
1	2A	2173	A	2.4
33	1b	40	HIS	2.4
41	2j	13	HIS	2.4
45	2n	49	HIS	2.4
53	1v	14	A	2.4
34	2c	190	ARG	2.4
45	2n	61	TRP	2.4
1	1A	2803	C	2.4
1	2A	2177	C	2.4

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Mol	Chain	Res	Type	RSRZ
12	2Q	109	VAL	2.4
32	2a	1037	C	2.4
33	2b	164	VAL	2.4
33	2b	197	VAL	2.4
34	2c	151	VAL	2.4
34	2c	195	VAL	2.4
57	1y	4	C	2.4
57	1y	75	C	2.4
15	2T	130	ALA	2.4
32	1a	204	U	2.4
36	2e	30	ALA	2.4
47	1p	24	ALA	2.4
39	2h	17	THR	2.4
21	2Z	153	SER	2.4
1	2A	2121	G	2.4
1	2A	2131	G	2.4
40	1i	8	GLY	2.4
41	1j	31	GLY	2.4
33	1b	185	ILE	2.4
35	2d	146	ILE	2.4
40	2i	99	LEU	2.4
52	1u	18	TYR	2.4
7	2H	59	ARG	2.4
57	2y	7	A	2.4
7	2H	133	VAL	2.4
47	2p	2	VAL	2.4
8	2I	1	MET	2.4
1	1A	897	C	2.4
1	1A	2142	C	2.4
1	2A	2103	C	2.4
54	2w	67	C	2.4
57	1y	48	C	2.4
57	2y	49	C	2.4
57	2y	68	C	2.4
1	1A	1026	U	2.4
1	1A	1060	U	2.4
1	1A	1083	U	2.4
1	2A	2172	U	2.4
32	2a	1219	U	2.4
7	2H	128	PRO	2.4
3	2D	38	LYS	2.4
33	1b	133	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
7	2H	9	ILE	2.4
1	1A	2106	G	2.4
4	2E	181	LEU	2.4
32	1a	66	G	2.4
12	2Q	59	ARG	2.4
41	2j	5	ARG	2.4
7	2H	83	TYR	2.4
33	1b	236	TYR	2.4
21	1Z	165	VAL	2.4
21	2Z	126	VAL	2.4
1	1A	1088	A	2.4
14	2S	61	ASN	2.4
35	2d	154	ASN	2.4
33	1b	97	TRP	2.4
49	1r	24	ALA	2.4
1	1A	2102	U	2.4
1	1A	2137	C	2.4
21	2Z	95	PRO	2.4
33	2b	132	LYS	2.4
40	2i	12	GLU	2.4
40	2i	57	GLY	2.4
40	2i	80	GLY	2.4
41	2j	36	GLY	2.4
8	2I	109	ILE	2.4
34	1c	39	ILE	2.4
18	2W	92	ARG	2.4
33	2b	11	LEU	2.4
33	2b	16	HIS	2.4
34	2c	43	LEU	2.4
39	2h	2	LEU	2.4
52	2u	22	ARG	2.4
1	1A	2127	G	2.4
34	2c	184	TYR	2.4
6	2G	15	VAL	2.4
17	2V	72	VAL	2.4
35	1d	154	ASN	2.4
8	2I	55	ALA	2.4
12	2Q	53	ALA	2.4
29	17	48	LYS	2.4
32	2a	1001	A	2.4
43	2l	16	GLU	2.4
40	1i	126	SER	2.3

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Mol	Chain	Res	Type	RSRZ
1	1A	2180	U	2.3
1	2A	897	C	2.3
1	2A	2164	C	2.3
11	2P	93	GLY	2.3
32	1a	1132	C	2.3
32	2a	999	C	2.3
6	2G	51	ARG	2.3
7	2H	103	LEU	2.3
8	2I	138	ILE	2.3
15	2T	115	ARG	2.3
41	2j	88	LEU	2.3
44	2m	9	ILE	2.3
45	2n	35	ARG	2.3
21	2Z	125	LEU	2.3
45	2n	42	ILE	2.3
6	2G	141	PHE	2.3
45	2n	37	PHE	2.3
50	1s	52	TYR	2.3
50	2s	10	PHE	2.3
39	2h	137	VAL	2.3
40	2i	108	VAL	2.3
45	2n	15	LYS	2.3
1	1A	1537	G	2.3
1	1A	2149	G	2.3
57	1y	52	G	2.3
57	2y	71	G	2.3
15	2T	131	ALA	2.3
44	2m	67	GLU	2.3
40	2i	64	THR	2.3
52	2u	17	THR	2.3
1	1A	878	A	2.3
32	2a	1531	A	2.3
34	2c	18	TRP	2.3
47	1p	48	TRP	2.3
53	2v	15	A	2.3
7	2H	82	GLY	2.3
19	2X	67	GLY	2.3
35	2d	87	GLY	2.3
38	2g	133	GLY	2.3
41	2j	93	GLY	2.3
21	2Z	133	ILE	2.3
36	2e	101	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
1	2A	2161	C	2.3
32	2a	1018	C	2.3
21	2Z	104	PHE	2.3
22	20	69	PHE	2.3
23	21	81	LYS	2.3
34	2c	76	VAL	2.3
40	1i	41	VAL	2.3
44	1m	53	VAL	2.3
50	2s	9	VAL	2.3
21	2Z	145	GLU	2.3
25	23	21	ALA	2.3
33	2b	88	ALA	2.3
42	2k	74	ALA	2.3
1	1A	275	G	2.3
1	1A	2182	G	2.3
21	2Z	131	ARG	2.3
32	2a	1009	G	2.3
41	2j	67	THR	2.3
1	1A	1067	A	2.3
1	1A	2134	A	2.3
1	2A	878	A	2.3
8	2I	75	LEU	2.3
33	2b	118	LEU	2.3
33	2b	145	LEU	2.3
35	1d	19	LEU	2.3
35	1d	194	LEU	2.3
40	1i	85	LEU	2.3
42	2k	95	ILE	2.3
44	2m	4	ILE	2.3
51	1t	24	LEU	2.3
1	1A	12	U	2.3
1	1A	2150	U	2.3
34	2c	62	ASP	2.3
1	1A	1092	C	2.3
32	1a	1006	C	2.3
33	2b	133	LYS	2.3
7	2H	26	VAL	2.3
7	2H	44	VAL	2.3
20	2Y	55	TYR	2.3
22	20	30	VAL	2.3
33	1b	9	GLU	2.3
36	2e	105	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
40	2i	17	VAL	2.3
40	2i	109	VAL	2.3
48	2q	35	VAL	2.3
6	2G	2	PRO	2.3
20	1Y	92	ASN	2.3
21	1Z	167	PRO	2.3
33	1b	34	ALA	2.3
33	2b	234	PRO	2.3
34	1c	169	ALA	2.3
34	2c	137	ALA	2.3
39	2h	110	ALA	2.3
40	1i	21	PRO	2.3
26	24	55	ARG	2.3
21	2Z	69	THR	2.3
12	1Q	15	GLY	2.3
21	1Z	166	SER	2.3
26	24	66	SER	2.3
33	1b	19	HIS	2.3
43	2l	95	GLY	2.3
46	1o	89	GLY	2.3
47	1p	78	GLY	2.3
1	1A	2131	G	2.3
1	1A	2154	G	2.3
7	2H	136	ILE	2.3
26	24	14	ILE	2.3
32	1a	1024	G	2.3
32	2a	1022	G	2.3
33	1b	233	SER	2.3
33	2b	44	LEU	2.3
33	2b	211	ILE	2.3
36	2e	76	ILE	2.3
38	1g	12	LEU	2.3
54	1w	1	G	2.3
1	1A	1054	A	2.3
53	2v	14	A	2.3
57	2y	12	U	2.3
1	2A	2185	C	2.3
21	1Z	168	GLU	2.3
32	1a	1030(B)	C	2.3
44	1m	50	GLU	2.3
33	2b	71	VAL	2.3
34	2c	55	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
34	2c	106	VAL	2.3
40	1i	14	VAL	2.3
7	2H	96	ALA	2.2
14	2S	36	TYR	2.3
33	2b	148	TYR	2.3
33	2b	199	TYR	2.3
38	2g	4	ARG	2.3
40	2i	36	TYR	2.3
41	2j	20	ALA	2.2
43	2l	64	TYR	2.3
50	2s	80	TYR	2.3
34	1c	2	GLY	2.2
34	2c	81	GLY	2.2
38	1g	56	GLN	2.2
6	2G	157	ILE	2.2
17	2V	94	LEU	2.2
26	24	5	ILE	2.2
33	2b	214	ILE	2.2
34	2c	47	LEU	2.2
40	2i	96	LEU	2.2
45	2n	39	LEU	2.2
46	1o	3	ILE	2.2
46	1o	87	ILE	2.2
50	2s	15	LEU	2.2
33	2b	97	TRP	2.2
1	2A	11	G	2.2
57	2y	5	G	2.2
57	2y	6	G	2.2
57	1y	12	U	2.2
8	1I	10	GLU	2.2
42	1k	92	GLU	2.2
51	1t	8	ARG	2.2
32	2a	1028	C	2.2
54	2w	68	C	2.2
8	1I	146	ALA	2.2
33	2b	85	ALA	2.2
34	2c	50	ALA	2.2
40	2i	45	ALA	2.2
43	1l	64	TYR	2.2
21	1Z	170	THR	2.2
26	24	27	THR	2.2
31	29	37	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
33	2b	14	GLY	2.2
45	2n	11	LYS	2.2
48	2q	100	LYS	2.2
50	2s	68	GLY	2.2
8	2I	68	LEU	2.2
44	1m	90	LEU	2.2
45	2n	44	LEU	2.2
35	1d	173	TRP	2.2
21	2Z	168	GLU	2.2
21	2Z	169	GLU	2.2
57	1y	21	A	2.2
57	1y	26	A	2.2
1	2A	2132	U	2.2
1	1A	883	G	2.2
1	1A	892	G	2.2
1	1A	2157	G	2.2
8	2I	82	ARG	2.2
32	1a	1042	G	2.2
32	2a	1023	G	2.2
32	2a	1276	G	2.2
34	2c	126	ARG	2.2
57	1y	44	G	2.2
57	2y	69	G	2.2
33	2b	55	PHE	2.2
33	2b	152	PHE	2.2
38	2g	62	PHE	2.2
34	1c	106	VAL	2.2
35	2d	17	VAL	2.2
1	1A	2128	C	2.2
34	2c	163	ALA	2.2
40	2i	52	ALA	2.2
57	1y	68	C	2.2
12	2Q	22	LYS	2.2
40	1i	5	TYR	2.2
8	2I	12	LEU	2.2
22	20	42	GLY	2.2
34	2c	145	GLY	2.2
35	1d	2	GLY	2.2
40	1i	39	GLY	2.2
50	1s	26	GLY	2.2
52	1u	11	GLY	2.2
39	1h	13	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
39	2h	134	ILE	2.2
41	2j	96	ILE	2.2
7	2H	134	SER	2.2
1	1A	229	A	2.2
57	2y	9	A	2.2
41	2j	37	PRO	2.2
34	2c	138	VAL	2.2
57	1y	70	G	2.2
57	2y	15	G	2.2
33	2b	77	ALA	2.2
1	1A	1079	C	2.2
1	1A	1080	C	2.2
1	1A	2177	C	2.2
1	2A	2163	C	2.2
7	2H	66	GLY	2.2
26	14	67	TYR	2.2
32	1a	999	C	2.2
33	2b	89	GLY	2.2
40	1i	88	TYR	2.2
40	2i	62	TYR	2.2
42	2k	25	TYR	2.2
51	1t	69	GLY	2.2
51	2t	99	LEU	2.2
54	2w	2	C	2.2
57	1y	49	C	2.2
33	1b	127	ILE	2.2
34	2c	134	ILE	2.2
40	2i	77	ILE	2.2
45	1n	7	ILE	2.2
21	1Z	149	SER	2.2
51	2t	11	SER	2.2
20	2Y	107	ASP	2.2
21	1Z	148	ASP	2.2
1	2A	652(B)	A	2.1
1	2A	2897	U	2.2
6	2G	92	VAL	2.1
32	1a	149	A	2.1
32	1a	841	U	2.2
32	1a	1005	A	2.1
32	2a	204	U	2.2
34	2c	4	LYS	2.2
34	2c	128	PHE	2.2

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Mol	Chain	Res	Type	RSRZ
34	2c	135	LYS	2.2
38	2g	36	LYS	2.2
40	1i	70	LYS	2.2
43	2l	39	VAL	2.1
49	1r	86	VAL	2.1
53	1v	15	A	2.1
57	2y	23	A	2.1
5	2F	177	ALA	2.1
33	1b	83	MET	2.1
38	2g	7	ALA	2.1
40	1i	46	ALA	2.1
41	2j	76	ASN	2.1
41	2j	78	ASN	2.1
51	2t	9	ASN	2.1
1	1A	2152	G	2.1
1	1A	2155	G	2.1
1	2A	1537	G	2.1
6	1G	82	LEU	2.1
6	2G	82	LEU	2.1
32	1a	1010	G	2.1
32	2a	1131	G	2.1
40	1i	72	GLY	2.1
44	2m	70	LEU	2.1
46	2o	31	LEU	2.1
51	1t	103	GLY	2.1
57	1y	53	G	2.1
57	2y	53	G	2.1
33	1b	211	ILE	2.1
34	2c	8	ILE	2.1
34	2c	57	ILE	2.1
42	2k	29	ILE	2.1
1	1A	2163	C	2.1
32	2a	224	C	2.1
57	2y	62	C	2.1
57	2y	74	C	2.1
7	2H	3	ARG	2.1
33	2b	21	ARG	2.1
35	2d	122	ARG	2.1
42	1k	44	SER	2.1
38	2g	88	PRO	2.1
50	2s	76	PRO	2.1
11	2P	1	MET	2.1

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Mol	Chain	Res	Type	RSRZ
18	1W	111	HIS	2.1
34	1c	207	VAL	2.1
36	2e	51	VAL	2.1
40	2i	26	VAL	2.1
50	2s	41	VAL	2.1
16	2U	117	GLN	2.1
36	2e	10	MET	2.1
57	1y	33	U	2.1
21	2Z	164	ALA	2.1
32	2a	1275	A	2.1
34	1c	113	ALA	2.1
34	2c	200	ALA	2.1
40	2i	94	ALA	2.1
12	2Q	19	GLY	2.1
14	2S	5	THR	2.1
33	1b	107	THR	2.1
33	2b	190	THR	2.1
34	2c	25	GLY	2.1
34	2c	91	LEU	2.1
37	2f	45	LEU	2.1
39	1h	128	GLY	2.1
41	2j	87	THR	2.1
6	2G	101	ILE	2.1
7	2H	92	ILE	2.1
14	2S	35	ILE	2.1
21	2Z	137	ILE	2.1
41	2j	6	ILE	2.1
47	1p	19	ILE	2.1
49	2r	65	ILE	2.1
50	2s	31	ILE	2.1
1	1A	2190	G	2.1
1	2A	2141	G	2.1
10	1O	108	GLU	2.1
38	1g	154	TYR	2.1
32	1a	1031	G	2.1
1	1A	652(S)	C	2.1
1	1A	889	C	2.1
1	2A	2794	C	2.1
32	2a	1007	C	2.1
50	1s	12	ASP	2.1
51	2t	82	SER	2.1
57	2y	75	C	2.1

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Mol	Chain	Res	Type	RSRZ
7	2H	62	LYS	2.1
41	1j	41	PRO	2.1
14	2S	29	PHE	2.1
40	2i	37	PHE	2.1
41	2j	86	MET	2.1
8	2I	15	VAL	2.1
35	1d	133	VAL	2.1
36	2e	55	VAL	2.1
5	2F	21	ALA	2.1
33	1b	24	TRP	2.1
38	1g	156	TRP	2.1
32	1a	65	U	2.1
51	1t	59	ALA	2.1
54	2w	45	U	2.1
1	1A	1177	A	2.1
1	2A	1460	A	2.1
20	2Y	67	LEU	2.1
32	1a	171	A	2.1
32	1a	1286	A	2.1
32	2a	1005	A	2.1
32	2a	1092	A	2.1
33	2b	51	LEU	2.1
57	2y	31	A	2.1
21	1Z	69	THR	2.1
35	1d	87	GLY	2.1
12	2Q	6	ARG	2.1
26	14	55	ARG	2.1
41	2j	79	ARG	2.1
34	2c	182	ILE	2.1
34	1c	23	TYR	2.1
34	1c	184	TYR	2.1
34	2c	29	TYR	2.1
52	2u	21	TYR	2.1
34	2c	45	LYS	2.1
35	1d	169	LYS	2.1
1	1A	881	G	2.1
1	2A	2151	G	2.1
32	1a	1026	G	2.1
32	2a	1156	G	2.1
54	2w	19	G	2.1
57	1y	63	G	2.1
1	2A	2178	C	2.1

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Mol	Chain	Res	Type	RSRZ
4	2E	56	PRO	2.1
32	2a	1116	C	2.1
20	2Y	5	MET	2.1
8	1I	3	VAL	2.1
21	2Z	58	VAL	2.1
26	14	49	PHE	2.1
34	2c	107	GLN	2.1
46	2o	9	GLN	2.1
33	2b	15	VAL	2.1
33	2b	229	VAL	2.1
35	1d	170	VAL	2.1
39	2h	97	VAL	2.1
41	1j	34	VAL	2.1
42	2k	14	VAL	2.1
46	2o	15	PHE	2.1
8	2I	65	ALA	2.1
34	2c	160	ALA	2.1
36	2e	146	ALA	2.1
38	2g	40	ALA	2.1
40	1i	84	ALA	2.1
40	2i	106	ALA	2.1
42	1k	15	ALA	2.1
32	1a	223	U	2.1
17	2V	101	GLY	2.1
30	28	45	GLY	2.1
40	2i	16	ARG	2.1
45	2n	26	ARG	2.1
50	2s	82	GLY	2.1
51	2t	96	GLY	2.1
41	1j	100	THR	2.1
44	1m	105	THR	2.1
1	1A	1103	A	2.1
1	2A	1508	A	2.1
32	2a	1251	A	2.1
38	1g	120	ILE	2.1
41	2j	98	ILE	2.1
39	1h	62	TYR	2.1
40	1i	91	ASP	2.1
40	2i	5	TYR	2.1
47	1p	38	TYR	2.1
14	2S	31	SER	2.1
38	1g	77	SER	2.1

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Mol	Chain	Res	Type	RSRZ
42	2k	101	SER	2.1
48	2q	99	SER	2.1
50	1s	38	SER	2.1
34	2c	73	PRO	2.1
24	22	1	MET	2.1
1	1A	2793	G	2.0
1	2A	277	C	2.1
33	2b	19	HIS	2.1
41	2j	62	HIS	2.1
32	1a	78	G	2.0
32	2a	998	G	2.0
32	2a	1011	G	2.0
32	2a	1030(C)	G	2.0
57	1y	13	C	2.1
57	1y	22	G	2.0
57	1y	71	G	2.0
7	2H	79	VAL	2.0
33	2b	70	PHE	2.0
39	1h	129	VAL	2.0
40	1i	18	PHE	2.0
44	1m	7	VAL	2.0
49	2r	37	VAL	2.0
6	2G	50	ALA	2.0
8	2I	100	ALA	2.0
12	2Q	10	ARG	2.0
15	2T	111	ARG	2.0
20	2Y	50	ARG	2.0
34	1c	65	ALA	2.0
38	2g	78	ARG	2.0
40	1i	13	ALA	2.0
45	2n	31	ARG	2.0
1	2A	271(K)	U	2.0
5	2F	172	TRP	2.0
21	2Z	106	GLY	2.0
33	1b	227	GLY	2.0
35	1d	171	GLY	2.0
7	2H	4	ILE	2.0
7	2H	121	ILE	2.0
20	2Y	38	ILE	2.0
34	2c	5	ILE	2.0
34	2c	95	THR	2.0
39	1h	45	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
41	1j	38	ILE	2.0
41	2j	100	THR	2.0
44	1m	4	ILE	2.0
44	2m	120	LYS	2.0
1	1A	1174	A	2.0
57	1y	23	A	2.0
35	2d	68	TYR	2.0
50	2s	13	ASP	2.0
8	2I	137	PRO	2.0
36	1e	96	PRO	2.0
41	1j	30	SER	2.0
41	2j	91	PRO	2.0
40	2i	73	GLN	2.0
1	2A	645	C	2.0
6	2G	136	ARG	2.0
8	1I	107	VAL	2.0
8	2I	107	VAL	2.0
11	1P	95	VAL	2.0
12	2Q	106	VAL	2.0
20	2Y	3	VAL	2.0
21	1Z	136	PHE	2.0
21	2Z	139	VAL	2.0
26	24	21	VAL	2.0
29	27	46	VAL	2.0
43	2l	19	ARG	2.0
57	1y	25	C	2.0
57	2y	11	C	2.0
1	2A	652(U)	G	2.0
32	1a	77	G	2.0
36	1e	94	ALA	2.0
44	2m	5	ALA	2.0
57	2y	70	G	2.0
7	2H	7	LEU	2.0
7	2H	33	LEU	2.0
14	2S	58	LEU	2.0
50	2s	16	LEU	2.0
7	2H	25	LYS	2.0
50	2s	7	LYS	2.0
34	2c	152	ILE	2.0
39	1h	134	ILE	2.0
39	2h	45	ILE	2.0
41	2j	82	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
47	1p	67	THR	2.0
48	1q	90	ILE	2.0
47	2p	59	TRP	2.0
1	1A	2176	A	2.0
1	1A	2801(A)	A	2.0
32	1a	101	A	2.0
33	2b	125	PRO	2.0
57	1y	7	A	2.0
12	2Q	26	TYR	2.0
19	2X	69	TYR	2.0
21	2Z	32	HIS	2.0
33	1b	192	SER	2.0
33	2b	92	TYR	2.0
48	2q	97	SER	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
57	4SU	2y	8	20/21	0.54	0.21	76,88,95,107	0
57	G7M	2y	46	24/25	0.56	0.18	76,84,87,99	0
57	PSU	1y	55	20/21	0.59	0.18	79,84,91,100	0
54	G7M	2w	46	24/25	0.61	0.18	64,76,88,99	0
57	G7M	1y	46	24/25	0.65	0.17	64,78,86,92	0
57	5MU	1y	54	21/22	0.65	0.15	74,80,86,95	0
57	MIA	2y	37	22/30	0.67	0.17	71,77,91,104	0
57	4SU	1y	8	20/21	0.67	0.16	76,80,94,101	0
57	MIA	1y	37	22/30	0.67	0.21	69,78,88,96	0
57	PSU	1y	39	20/21	0.69	0.18	70,81,84,85	0
57	5MU	2y	54	21/22	0.70	0.17	67,76,83,95	0
54	G7M	1w	46	24/25	0.73	0.16	66,70,84,96	0
57	PSU	2y	39	20/21	0.73	0.15	74,80,87,90	0
57	PSU	2y	55	20/21	0.74	0.16	74,80,85,87	0
57	PSU	2y	32	20/21	0.75	0.16	73,79,83,89	0
57	PSU	1y	32	20/21	0.76	0.15	70,76,88,96	0
54	4SU	2w	8	20/21	0.86	0.13	67,74,82,83	0
54	PSU	2w	55	20/21	0.86	0.12	58,68,76,77	0
54	5MU	2w	54	21/22	0.88	0.12	56,63,68,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	4SU	1w	8	20/21	0.88	0.14	56,70,78,81	0
55	5MU	2x	54	21/22	0.89	0.14	59,65,69,71	0
54	MIA	2w	37	25/30	0.89	0.14	52,60,67,87	0
54	PSU	2w	32	20/21	0.90	0.13	52,65,81,85	0
1	5MU	2A	1915	21/22	0.90	0.12	50,58,62,64	0
55	4SU	2x	8	20/21	0.90	0.12	57,62,65,71	0
55	PSU	2x	55	20/21	0.91	0.11	55,59,68,73	0
32	2MG	2a	1207	24/25	0.91	0.12	59,68,70,71	0
55	5MC	2x	32	21/22	0.91	0.13	51,58,64,70	0
43	0TD	2l	92	10/11	0.91	0.13	47,51,57,72	0
32	M2G	2a	966	25/26	0.92	0.14	45,56,64,76	0
55	PSU	1x	55	20/21	0.92	0.11	45,51,64,67	0
54	PSU	1w	32	20/21	0.93	0.11	46,52,59,63	0
32	G7M	2a	527	24/25	0.93	0.12	47,53,58,61	0
32	2MG	1a	1207	24/25	0.93	0.10	48,56,59,63	0
43	0TD	1l	92	10/11	0.93	0.10	39,42,47,58	0
32	5MC	2a	1400	21/22	0.93	0.12	48,55,60,63	0
1	PSU	2A	1911	20/21	0.93	0.10	42,50,54,57	0
54	PSU	1w	55	20/21	0.93	0.10	40,60,66,67	0
55	5MU	1x	54	21/22	0.93	0.11	52,56,62,68	0
54	MIA	1w	37	29/30	0.94	0.12	35,44,52,76	0
1	5MC	2A	1942	21/22	0.94	0.11	44,49,56,57	0
54	PSU	2w	39	20/21	0.94	0.10	47,62,68,68	0
32	4OC	2a	1402	22/23	0.94	0.10	47,50,54,56	0
55	4SU	1x	8	20/21	0.94	0.10	49,54,59,60	0
1	PSU	2A	1917	20/21	0.94	0.09	43,55,58,58	0
32	5MC	2a	967	21/22	0.94	0.11	51,56,64,66	0
1	OMC	2A	1920	21/22	0.94	0.10	48,51,56,63	0
56	FME	2z	1	10/11	0.94	0.10	29,35,42,48	0
1	5MU	1A	1915	21/22	0.95	0.09	34,41,45,50	0
32	5MC	2a	1404	21/22	0.95	0.10	42,48,51,52	0
32	5MC	2a	1407	21/22	0.95	0.10	36,43,50,52	0
55	5MC	1x	32	21/22	0.95	0.11	34,42,49,55	0
32	5MC	1a	1400	21/22	0.95	0.11	36,43,46,48	0
32	G7M	1a	527	24/25	0.95	0.09	33,39,46,48	0
32	PSU	2a	516	20/21	0.95	0.09	47,58,63,64	0
32	M2G	1a	966	25/26	0.96	0.09	33,42,46,50	0
1	PSU	1A	1917	20/21	0.96	0.08	33,39,43,45	0
1	5MC	1A	1942	21/22	0.96	0.09	29,36,40,47	0
32	4OC	1a	1402	22/23	0.96	0.10	30,38,42,46	0
32	5MC	1a	1407	21/22	0.96	0.08	27,35,39,42	0
54	PSU	1w	39	20/21	0.96	0.09	30,52,60,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	MA6	1a	1519	24/25	0.96	0.10	31,36,42,49	0
32	PSU	1a	516	20/21	0.96	0.08	38,46,50,50	0
1	5MC	2A	1962	21/22	0.96	0.09	24,38,43,48	0
54	5MU	1w	54	21/22	0.96	0.10	34,50,54,57	0
32	UR3	2a	1498	21/22	0.96	0.10	46,49,53,53	0
32	MA6	2a	1518	24/25	0.96	0.10	42,48,53,53	0
32	MA6	2a	1519	24/25	0.96	0.11	42,50,53,55	0
54	F3N	2w	76	33/34	0.96	0.09	26,33,36,38	0
56	FME	1z	1	10/11	0.96	0.09	19,23,25,35	0
1	PSU	1A	1911	20/21	0.96	0.09	33,42,46,48	0
55	8AN	1x	76	22/23	0.97	0.07	14,18,23,33	0
32	5MC	1a	1404	21/22	0.97	0.10	26,32,38,39	0
1	OMU	2A	2552	21/22	0.97	0.09	27,36,43,46	0
55	8AN	2x	76	22/23	0.97	0.09	24,35,41,42	0
1	PSU	2A	2605	20/21	0.97	0.07	24,30,35,35	0
32	5MC	1a	967	21/22	0.97	0.09	37,43,48,53	0
32	UR3	1a	1498	21/22	0.97	0.09	29,35,39,40	0
1	5MU	1A	1939	21/22	0.98	0.06	15,22,28,30	0
1	OMC	1A	1920	21/22	0.98	0.07	26,39,44,47	0
1	5MC	1A	1962	21/22	0.98	0.07	23,28,32,36	0
32	MA6	1a	1518	24/25	0.98	0.09	28,35,37,41	0
1	OMG	1A	2251	24/25	0.98	0.06	15,20,22,24	0
1	2MA	1A	2503	23/24	0.98	0.06	12,14,17,18	0
1	5MU	2A	1939	21/22	0.98	0.07	24,30,34,35	0
1	OMU	1A	2552	21/22	0.98	0.06	17,24,27,28	0
54	F3N	1w	76	33/34	0.98	0.08	13,19,21,25	0
1	PSU	1A	2605	20/21	0.98	0.06	15,20,24,24	0
1	OMG	2A	2251	24/25	0.98	0.08	25,32,38,43	0
1	2MA	2A	2503	23/24	0.98	0.07	23,29,32,34	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
58	MG	1B	229	1/1	0.49	0.18	66,66,66,66	0
58	MG	2B	220	1/1	0.59	0.22	77,77,77,77	0
58	MG	1a	1766	1/1	0.63	0.22	68,68,68,68	0
58	MG	1A	3798	1/1	0.67	0.21	67,67,67,67	0
58	MG	2v	101	1/1	0.67	0.23	75,75,75,75	0
58	MG	1Y	203	1/1	0.68	0.13	66,66,66,66	0
58	MG	2a	1811	1/1	0.68	0.18	69,69,69,69	0
58	MG	1A	3903	1/1	0.68	0.23	66,66,66,66	0
58	MG	1A	4030	1/1	0.69	0.18	50,50,50,50	0
58	MG	2A	3829	1/1	0.70	0.12	31,31,31,31	0
58	MG	1B	230	1/1	0.71	0.23	75,75,75,75	0
58	MG	2a	1741	1/1	0.71	0.17	69,69,69,69	0
58	MG	2A	3646	1/1	0.72	0.20	43,43,43,43	0
58	MG	2a	1781	1/1	0.72	0.18	56,56,56,56	0
58	MG	1A	3855	1/1	0.72	0.14	51,51,51,51	0
58	MG	2A	3051	1/1	0.72	0.21	65,65,65,65	0
58	MG	1A	3995	1/1	0.73	0.11	27,27,27,27	0
58	MG	1A	3414	1/1	0.73	0.28	68,68,68,68	0
58	MG	1A	4072	1/1	0.73	0.18	47,47,47,47	0
58	MG	2a	1826	1/1	0.73	0.25	59,59,59,59	0
58	MG	1A	4090	1/1	0.73	0.23	81,81,81,81	0
58	MG	10	107	1/1	0.74	0.23	54,54,54,54	0
58	MG	2a	1773	1/1	0.74	0.17	59,59,59,59	0
58	MG	2A	3788	1/1	0.74	0.21	60,60,60,60	0
58	MG	2A	3562	1/1	0.74	0.17	44,44,44,44	0
58	MG	2A	3579	1/1	0.74	0.23	54,54,54,54	0
58	MG	2a	1626	1/1	0.74	0.24	65,65,65,65	0
58	MG	1a	1744	1/1	0.75	0.18	64,64,64,64	0
58	MG	1A	3981	1/1	0.75	0.12	54,54,54,54	0
58	MG	1A	3796	1/1	0.75	0.11	44,44,44,44	0
58	MG	1A	4002	1/1	0.75	0.15	41,41,41,41	0
58	MG	1E	311	1/1	0.75	0.17	54,54,54,54	0
58	MG	1U	209	1/1	0.75	0.35	59,59,59,59	0
58	MG	1A	3713	1/1	0.75	0.15	34,34,34,34	0
58	MG	1A	3949	1/1	0.75	0.16	36,36,36,36	0
58	MG	1a	1782	1/1	0.76	0.12	57,57,57,57	0
58	MG	2A	3682	1/1	0.76	0.17	57,57,57,57	0
58	MG	2B	211	1/1	0.77	0.30	77,77,77,77	0
58	MG	1A	3074	1/1	0.77	0.18	54,54,54,54	0
58	MG	2a	1611	1/1	0.77	0.19	64,64,64,64	0
58	MG	2A	3605	1/1	0.77	0.13	34,34,34,34	0
58	MG	1A	3617	1/1	0.77	0.13	26,26,26,26	0
58	MG	2A	3667	1/1	0.77	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
58	MG	1A	4032	1/1	0.77	0.15	57,57,57,57	0
58	MG	1A	4055	1/1	0.77	0.23	61,61,61,61	0
58	MG	1a	1737	1/1	0.77	0.23	68,68,68,68	0
58	MG	2A	3843	1/1	0.77	0.20	54,54,54,54	0
58	MG	18	107	1/1	0.78	0.19	55,55,55,55	0
58	MG	1A	4025	1/1	0.78	0.15	59,59,59,59	0
58	MG	2A	3393	1/1	0.78	0.13	59,59,59,59	0
58	MG	1A	3691	1/1	0.78	0.12	40,40,40,40	0
58	MG	2A	3734	1/1	0.78	0.17	47,47,47,47	0
58	MG	1A	3673	1/1	0.78	0.10	33,33,33,33	0
58	MG	2A	3165	1/1	0.79	0.39	62,62,62,62	0
58	MG	2a	1622	1/1	0.79	0.16	76,76,76,76	0
58	MG	2A	3357	1/1	0.79	0.18	58,58,58,58	0
58	MG	1A	3861	1/1	0.79	0.16	65,65,65,65	0
58	MG	1a	1745	1/1	0.79	0.16	54,54,54,54	0
58	MG	1A	3960	1/1	0.79	0.21	52,52,52,52	0
58	MG	2a	1803	1/1	0.79	0.15	65,65,65,65	0
58	MG	1A	3766	1/1	0.79	0.10	19,19,19,19	0
58	MG	2a	1814	1/1	0.79	0.14	61,61,61,61	0
58	MG	1A	3988	1/1	0.79	0.14	56,56,56,56	0
58	MG	2A	3660	1/1	0.79	0.15	66,66,66,66	0
58	MG	1A	4017	1/1	0.80	0.08	38,38,38,38	0
58	MG	1a	1805	1/1	0.80	0.15	56,56,56,56	0
58	MG	1A	4033	1/1	0.80	0.12	42,42,42,42	0
58	MG	2A	3801	1/1	0.80	0.14	57,57,57,57	0
58	MG	2A	3593	1/1	0.80	0.20	65,65,65,65	0
58	MG	2a	1796	1/1	0.80	0.15	64,64,64,64	0
58	MG	2A	3105	1/1	0.80	0.16	65,65,65,65	0
58	MG	1A	3651	1/1	0.80	0.14	63,63,63,63	0
58	MG	2A	3283	1/1	0.80	0.17	49,49,49,49	0
58	MG	2Q	202	1/1	0.80	0.17	52,52,52,52	0
58	MG	1A	3932	1/1	0.80	0.08	22,22,22,22	0
58	MG	2x	104	1/1	0.80	0.21	61,61,61,61	0
58	MG	2A	3313	1/1	0.81	0.16	61,61,61,61	0
58	MG	25	102	1/1	0.81	0.19	57,57,57,57	0
58	MG	2A	3317	1/1	0.81	0.13	57,57,57,57	0
58	MG	1A	3167	1/1	0.81	0.12	49,49,49,49	0
58	MG	2A	3718	1/1	0.81	0.15	57,57,57,57	0
58	MG	1A	3360	1/1	0.81	0.22	65,65,65,65	0
58	MG	2A	3747	1/1	0.81	0.14	57,57,57,57	0
58	MG	2A	3761	1/1	0.81	0.17	62,62,62,62	0
58	MG	2a	1792	1/1	0.81	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
58	MG	1A	3103	1/1	0.81	0.12	53,53,53,53	0
58	MG	1A	3532	1/1	0.81	0.10	37,37,37,37	0
58	MG	1A	3851	1/1	0.81	0.13	59,59,59,59	0
58	MG	1A	3966	1/1	0.81	0.10	43,43,43,43	0
58	MG	2A	3865	1/1	0.81	0.19	52,52,52,52	0
58	MG	2n	102	1/1	0.81	0.31	70,70,70,70	0
58	MG	2A	3624	1/1	0.81	0.16	62,62,62,62	0
58	MG	1A	3698	1/1	0.81	0.10	22,22,22,22	0
58	MG	2D	304	1/1	0.82	0.17	53,53,53,53	0
58	MG	1A	4039	1/1	0.82	0.10	45,45,45,45	0
58	MG	1A	3810	1/1	0.82	0.14	46,46,46,46	0
58	MG	1A	4024	1/1	0.82	0.15	47,47,47,47	0
58	MG	2A	3191	1/1	0.82	0.24	69,69,69,69	0
58	MG	2A	3247	1/1	0.82	0.23	68,68,68,68	0
58	MG	2a	1650	1/1	0.82	0.24	60,60,60,60	0
58	MG	1A	4081	1/1	0.82	0.15	27,27,27,27	0
58	MG	1A	3646	1/1	0.82	0.11	35,35,35,35	0
58	MG	1A	4092	1/1	0.82	0.13	41,41,41,41	0
58	MG	2A	3342	1/1	0.82	0.25	70,70,70,70	0
58	MG	1A	3542	1/1	0.82	0.29	63,63,63,63	0
58	MG	1A	3954	1/1	0.82	0.11	61,61,61,61	0
58	MG	2A	3481	1/1	0.82	0.17	54,54,54,54	0
58	MG	2A	3486	1/1	0.82	0.14	56,56,56,56	0
58	MG	2a	1819	1/1	0.82	0.23	68,68,68,68	0
58	MG	1E	301	1/1	0.82	0.19	55,55,55,55	0
58	MG	2A	3572	1/1	0.82	0.11	30,30,30,30	0
58	MG	1a	1793	1/1	0.82	0.16	71,71,71,71	0
58	MG	1A	3306	1/1	0.82	0.35	59,59,59,59	0
58	MG	2A	3796	1/1	0.83	0.16	52,52,52,52	0
58	MG	1A	3720	1/1	0.83	0.12	51,51,51,51	0
58	MG	2A	3355	1/1	0.83	0.19	61,61,61,61	0
58	MG	1A	3755	1/1	0.83	0.15	57,57,57,57	0
58	MG	2A	3854	1/1	0.83	0.14	59,59,59,59	0
58	MG	2A	3855	1/1	0.83	0.17	71,71,71,71	0
58	MG	1A	3312	1/1	0.83	0.14	58,58,58,58	0
58	MG	2A	3423	1/1	0.83	0.13	49,49,49,49	0
58	MG	2A	3429	1/1	0.83	0.17	56,56,56,56	0
58	MG	2A	3473	1/1	0.83	0.18	66,66,66,66	0
58	MG	1A	3991	1/1	0.83	0.10	29,29,29,29	0
58	MG	1a	1770	1/1	0.83	0.12	72,72,72,72	0
58	MG	2A	3506	1/1	0.83	0.18	53,53,53,53	0
58	MG	1A	3862	1/1	0.83	0.11	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1785	1/1	0.83	0.12	40,40,40,40	0
58	MG	2a	1628	1/1	0.83	0.14	57,57,57,57	0
58	MG	1A	3886	1/1	0.83	0.17	25,25,25,25	0
58	MG	2a	1722	1/1	0.83	0.14	66,66,66,66	0
58	MG	1A	3891	1/1	0.83	0.13	22,22,22,22	0
58	MG	1a	1811	1/1	0.83	0.20	63,63,63,63	0
58	MG	2A	3611	1/1	0.83	0.19	63,63,63,63	0
58	MG	1A	3769	1/1	0.83	0.12	15,15,15,15	0
58	MG	1A	3780	1/1	0.83	0.11	18,18,18,18	0
58	MG	1R	204	1/1	0.83	0.19	42,42,42,42	0
58	MG	1A	3667	1/1	0.83	0.08	18,18,18,18	0
58	MG	2A	3246	1/1	0.83	0.17	64,64,64,64	0
58	MG	1A	3467	1/1	0.83	0.23	60,60,60,60	0
58	MG	1A	3959	1/1	0.83	0.11	48,48,48,48	0
58	MG	2A	3285	1/1	0.83	0.27	61,61,61,61	0
58	MG	1A	3716	1/1	0.83	0.17	38,38,38,38	0
58	MG	1a	1623	1/1	0.83	0.12	49,49,49,49	0
58	MG	1a	1759	1/1	0.84	0.22	62,62,62,62	0
58	MG	2A	3250	1/1	0.84	0.22	63,63,63,63	0
58	MG	2B	215	1/1	0.84	0.22	56,56,56,56	0
58	MG	2A	3268	1/1	0.84	0.10	65,65,65,65	0
58	MG	2A	3603	1/1	0.84	0.17	55,55,55,55	0
58	MG	1A	3899	1/1	0.84	0.15	40,40,40,40	0
58	MG	1A	4064	1/1	0.84	0.12	36,36,36,36	0
58	MG	2A	3619	1/1	0.84	0.13	47,47,47,47	0
58	MG	2A	3298	1/1	0.84	0.24	53,53,53,53	0
58	MG	1A	3069	1/1	0.84	0.18	55,55,55,55	0
58	MG	1A	3922	1/1	0.84	0.09	20,20,20,20	0
58	MG	1A	3872	1/1	0.84	0.09	40,40,40,40	0
58	MG	2a	1680	1/1	0.84	0.22	54,54,54,54	0
58	MG	2a	1701	1/1	0.84	0.27	58,58,58,58	0
58	MG	1A	3131	1/1	0.84	0.10	41,41,41,41	0
58	MG	2A	3704	1/1	0.84	0.15	69,69,69,69	0
58	MG	2a	1772	1/1	0.84	0.12	55,55,55,55	0
58	MG	18	109	1/1	0.84	0.19	58,58,58,58	0
58	MG	1x	104	1/1	0.84	0.10	59,59,59,59	0
58	MG	1A	3887	1/1	0.84	0.12	54,54,54,54	0
58	MG	2A	3104	1/1	0.84	0.13	52,52,52,52	0
58	MG	2A	3764	1/1	0.84	0.17	51,51,51,51	0
58	MG	2A	3438	1/1	0.84	0.20	55,55,55,55	0
58	MG	1a	1685	1/1	0.84	0.11	57,57,57,57	0
58	MG	2A	3112	1/1	0.84	0.12	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3080	1/1	0.84	0.18	52,52,52,52	0
58	MG	1A	4040	1/1	0.84	0.12	37,37,37,37	0
58	MG	2A	3512	1/1	0.84	0.10	45,45,45,45	0
58	MG	2w	105	1/1	0.84	0.13	60,60,60,60	0
58	MG	1E	309	1/1	0.84	0.09	19,19,19,19	0
58	MG	1a	1761	1/1	0.85	0.14	50,50,50,50	0
58	MG	2A	3795	1/1	0.85	0.12	39,39,39,39	0
58	MG	1A	3405	1/1	0.85	0.18	52,52,52,52	0
58	MG	2A	3799	1/1	0.85	0.12	55,55,55,55	0
58	MG	2A	3365	1/1	0.85	0.13	64,64,64,64	0
58	MG	1A	4010	1/1	0.85	0.14	53,53,53,53	0
58	MG	1B	213	1/1	0.85	0.15	63,63,63,63	0
58	MG	1A	4011	1/1	0.85	0.07	25,25,25,25	0
58	MG	1A	3778	1/1	0.85	0.09	18,18,18,18	0
58	MG	2A	3443	1/1	0.85	0.18	58,58,58,58	0
58	MG	2B	203	1/1	0.85	0.16	63,63,63,63	0
58	MG	1B	233	1/1	0.85	0.10	41,41,41,41	0
58	MG	1A	3938	1/1	0.85	0.13	54,54,54,54	0
58	MG	1A	3948	1/1	0.85	0.10	25,25,25,25	0
58	MG	1A	4026	1/1	0.85	0.09	49,49,49,49	0
58	MG	2A	3511	1/1	0.85	0.11	63,63,63,63	0
58	MG	2A	3096	1/1	0.85	0.14	49,49,49,49	0
58	MG	2A	3519	1/1	0.85	0.18	52,52,52,52	0
58	MG	2a	1617	1/1	0.85	0.13	54,54,54,54	0
58	MG	1A	3538	1/1	0.85	0.16	40,40,40,40	0
58	MG	1A	3876	1/1	0.85	0.16	42,42,42,42	0
58	MG	1A	3885	1/1	0.85	0.13	26,26,26,26	0
58	MG	2A	3128	1/1	0.85	0.23	63,63,63,63	0
58	MG	2a	1662	1/1	0.85	0.24	55,55,55,55	0
58	MG	2A	3136	1/1	0.85	0.12	50,50,50,50	0
58	MG	1Z	301	1/1	0.85	0.12	59,59,59,59	0
58	MG	1A	3343	1/1	0.85	0.26	49,49,49,49	0
58	MG	2A	3212	1/1	0.85	0.29	64,64,64,64	0
58	MG	2A	3621	1/1	0.85	0.16	46,46,46,46	0
58	MG	1A	3565	1/1	0.85	0.20	57,57,57,57	0
58	MG	1A	4041	1/1	0.85	0.13	30,30,30,30	0
58	MG	2a	1788	1/1	0.85	0.23	57,57,57,57	0
58	MG	1A	4043	1/1	0.85	0.14	42,42,42,42	0
58	MG	1A	3742	1/1	0.85	0.09	32,32,32,32	0
58	MG	1a	1716	1/1	0.85	0.25	59,59,59,59	0
58	MG	1A	3173	1/1	0.85	0.15	57,57,57,57	0
58	MG	2A	3710	1/1	0.85	0.19	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1816	1/1	0.85	0.16	56,56,56,56	0
58	MG	1a	1740	1/1	0.85	0.13	64,64,64,64	0
58	MG	2A	3719	1/1	0.85	0.14	43,43,43,43	0
58	MG	1A	3697	1/1	0.85	0.13	26,26,26,26	0
58	MG	2q	203	1/1	0.85	0.15	66,66,66,66	0
58	MG	1A	3915	1/1	0.85	0.11	47,47,47,47	0
58	MG	1A	4089	1/1	0.85	0.11	45,45,45,45	0
58	MG	2A	3351	1/1	0.85	0.28	66,66,66,66	0
58	MG	1a	1750	1/1	0.86	0.21	69,69,69,69	0
58	MG	1A	3998	1/1	0.86	0.10	43,43,43,43	0
58	MG	2A	3860	1/1	0.86	0.21	68,68,68,68	0
58	MG	1A	3399	1/1	0.86	0.16	61,61,61,61	0
58	MG	2A	3583	1/1	0.86	0.13	41,41,41,41	0
58	MG	2B	206	1/1	0.86	0.21	57,57,57,57	0
58	MG	1P	204	1/1	0.86	0.20	46,46,46,46	0
58	MG	1Q	207	1/1	0.86	0.12	39,39,39,39	0
58	MG	1A	3627	1/1	0.86	0.12	59,59,59,59	0
58	MG	2A	3302	1/1	0.86	0.11	48,48,48,48	0
58	MG	2A	3618	1/1	0.86	0.11	27,27,27,27	0
58	MG	2A	3310	1/1	0.86	0.12	57,57,57,57	0
58	MG	2a	1604	1/1	0.86	0.19	62,62,62,62	0
58	MG	2a	1606	1/1	0.86	0.16	56,56,56,56	0
58	MG	1A	3435	1/1	0.86	0.16	43,43,43,43	0
58	MG	1A	3184	1/1	0.86	0.17	47,47,47,47	0
58	MG	2a	1619	1/1	0.86	0.12	54,54,54,54	0
58	MG	2a	1621	1/1	0.86	0.25	58,58,58,58	0
58	MG	2A	3634	1/1	0.86	0.12	48,48,48,48	0
58	MG	1A	4078	1/1	0.86	0.13	45,45,45,45	0
58	MG	1A	4021	1/1	0.86	0.13	65,65,65,65	0
58	MG	2a	1644	1/1	0.86	0.21	57,57,57,57	0
58	MG	18	106	1/1	0.86	0.11	47,47,47,47	0
58	MG	1A	3663	1/1	0.86	0.11	40,40,40,40	0
58	MG	2a	1666	1/1	0.86	0.13	60,60,60,60	0
58	MG	2A	3687	1/1	0.86	0.12	53,53,53,53	0
58	MG	1A	3475	1/1	0.86	0.17	52,52,52,52	0
58	MG	2A	3369	1/1	0.86	0.09	69,69,69,69	0
58	MG	2A	3383	1/1	0.86	0.14	61,61,61,61	0
58	MG	2a	1757	1/1	0.86	0.09	79,79,79,79	0
58	MG	1A	3727	1/1	0.86	0.10	39,39,39,39	0
58	MG	2A	3733	1/1	0.86	0.13	51,51,51,51	0
58	MG	1a	1672	1/1	0.86	0.18	55,55,55,55	0
58	MG	1A	3730	1/1	0.86	0.19	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3750	1/1	0.86	0.13	33,33,33,33	0
58	MG	2A	3123	1/1	0.86	0.28	68,68,68,68	0
58	MG	1a	1713	1/1	0.86	0.18	57,57,57,57	0
58	MG	1A	3841	1/1	0.86	0.14	67,67,67,67	0
58	MG	2A	3789	1/1	0.86	0.10	33,33,33,33	0
58	MG	1A	3846	1/1	0.86	0.11	46,46,46,46	0
58	MG	1A	3740	1/1	0.86	0.15	61,61,61,61	0
58	MG	2a	1820	1/1	0.86	0.22	55,55,55,55	0
58	MG	2A	3204	1/1	0.86	0.20	66,66,66,66	0
58	MG	2a	1828	1/1	0.86	0.19	54,54,54,54	0
58	MG	2a	1829	1/1	0.86	0.13	53,53,53,53	0
58	MG	2a	1832	1/1	0.86	0.13	64,64,64,64	0
58	MG	2g	201	1/1	0.86	0.10	64,64,64,64	0
58	MG	1B	236	1/1	0.86	0.11	34,34,34,34	0
58	MG	2A	3223	1/1	0.86	0.13	55,55,55,55	0
58	MG	2A	3835	1/1	0.86	0.11	63,63,63,63	0
58	MG	2w	102	1/1	0.86	0.37	57,57,57,57	0
58	MG	2A	3841	1/1	0.86	0.15	64,64,64,64	0
58	MG	1A	3604	1/1	0.86	0.13	42,42,42,42	0
58	MG	1A	4047	1/1	0.87	0.10	32,32,32,32	0
58	MG	2A	3224	1/1	0.87	0.12	52,52,52,52	0
58	MG	1O	203	1/1	0.87	0.13	55,55,55,55	0
58	MG	1A	3577	1/1	0.87	0.14	41,41,41,41	0
58	MG	1A	3602	1/1	0.87	0.13	52,52,52,52	0
58	MG	1a	1764	1/1	0.87	0.15	61,61,61,61	0
58	MG	2E	310	1/1	0.87	0.13	52,52,52,52	0
58	MG	1A	4065	1/1	0.87	0.12	48,48,48,48	0
58	MG	2U	202	1/1	0.87	0.09	45,45,45,45	0
58	MG	1A	3252	1/1	0.87	0.13	51,51,51,51	0
58	MG	29	101	1/1	0.87	0.20	60,60,60,60	0
58	MG	2A	3288	1/1	0.87	0.14	61,61,61,61	0
58	MG	2a	1605	1/1	0.87	0.20	59,59,59,59	0
58	MG	2A	3292	1/1	0.87	0.28	53,53,53,53	0
58	MG	1A	3951	1/1	0.87	0.22	62,62,62,62	0
58	MG	1A	3677	1/1	0.87	0.09	28,28,28,28	0
58	MG	1A	3733	1/1	0.87	0.12	49,49,49,49	0
58	MG	1A	3734	1/1	0.87	0.15	48,48,48,48	0
58	MG	1A	3824	1/1	0.87	0.12	55,55,55,55	0
58	MG	2A	3673	1/1	0.87	0.10	61,61,61,61	0
58	MG	1x	102	1/1	0.87	0.13	52,52,52,52	0
58	MG	2a	1642	1/1	0.87	0.20	54,54,54,54	0
58	MG	1A	4097	1/1	0.87	0.10	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1646	1/1	0.87	0.26	66,66,66,66	0
58	MG	2A	3002	1/1	0.87	0.16	45,45,45,45	0
58	MG	2a	1655	1/1	0.87	0.17	53,53,53,53	0
58	MG	1A	3978	1/1	0.87	0.15	64,64,64,64	0
58	MG	2A	3711	1/1	0.87	0.29	63,63,63,63	0
58	MG	2A	3717	1/1	0.87	0.18	47,47,47,47	0
58	MG	2A	3090	1/1	0.87	0.17	61,61,61,61	0
58	MG	2A	3368	1/1	0.87	0.10	59,59,59,59	0
58	MG	2A	3723	1/1	0.87	0.11	58,58,58,58	0
58	MG	2a	1752	1/1	0.87	0.11	69,69,69,69	0
58	MG	2A	3091	1/1	0.87	0.11	58,58,58,58	0
58	MG	1B	226	1/1	0.87	0.12	54,54,54,54	0
58	MG	2A	3390	1/1	0.87	0.16	57,57,57,57	0
58	MG	2a	1780	1/1	0.87	0.13	49,49,49,49	0
58	MG	1A	3536	1/1	0.87	0.13	55,55,55,55	0
58	MG	2A	3399	1/1	0.87	0.09	58,58,58,58	0
58	MG	1a	1692	1/1	0.87	0.25	50,50,50,50	0
58	MG	2A	3768	1/1	0.87	0.18	42,42,42,42	0
58	MG	1a	1696	1/1	0.87	0.25	57,57,57,57	0
58	MG	1a	1709	1/1	0.87	0.11	55,55,55,55	0
58	MG	1A	3987	1/1	0.87	0.17	58,58,58,58	0
58	MG	2A	3453	1/1	0.87	0.18	60,60,60,60	0
58	MG	2A	3798	1/1	0.87	0.14	54,54,54,54	0
58	MG	1A	3254	1/1	0.87	0.11	63,63,63,63	0
58	MG	2A	3152	1/1	0.87	0.18	56,56,56,56	0
58	MG	2A	3802	1/1	0.87	0.11	58,58,58,58	0
58	MG	2A	3823	1/1	0.87	0.10	67,67,67,67	0
58	MG	2A	3162	1/1	0.87	0.25	63,63,63,63	0
58	MG	2a	1833	1/1	0.87	0.10	65,65,65,65	0
58	MG	1a	1734	1/1	0.87	0.13	39,39,39,39	0
58	MG	2A	3187	1/1	0.87	0.13	61,61,61,61	0
58	MG	1A	3745	1/1	0.87	0.09	47,47,47,47	0
58	MG	2A	3513	1/1	0.87	0.11	44,44,44,44	0
58	MG	1A	3006	1/1	0.87	0.12	48,48,48,48	0
58	MG	2A	3527	1/1	0.87	0.14	64,64,64,64	0
58	MG	1A	3211	1/1	0.87	0.10	59,59,59,59	0
58	MG	2A	3585	1/1	0.88	0.18	64,64,64,64	0
58	MG	1x	112	1/1	0.88	0.19	53,53,53,53	0
58	MG	2A	3595	1/1	0.88	0.18	73,73,73,73	0
58	MG	1A	3648	1/1	0.88	0.07	13,13,13,13	0
58	MG	2A	3308	1/1	0.88	0.17	62,62,62,62	0
58	MG	1A	3898	1/1	0.88	0.13	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	4054	1/1	0.88	0.12	42,42,42,42	0
58	MG	1D	312	1/1	0.88	0.15	29,29,29,29	0
58	MG	2A	3334	1/1	0.88	0.16	50,50,50,50	0
58	MG	2A	3336	1/1	0.88	0.10	44,44,44,44	0
58	MG	2A	3630	1/1	0.88	0.14	50,50,50,50	0
58	MG	1A	3473	1/1	0.88	0.13	54,54,54,54	0
58	MG	27	101	1/1	0.88	0.12	44,44,44,44	0
58	MG	1A	3902	1/1	0.88	0.08	13,13,13,13	0
58	MG	2A	3649	1/1	0.88	0.11	35,35,35,35	0
58	MG	1A	3217	1/1	0.88	0.13	49,49,49,49	0
58	MG	1a	1725	1/1	0.88	0.10	56,56,56,56	0
58	MG	2A	3360	1/1	0.88	0.14	61,61,61,61	0
58	MG	2A	3680	1/1	0.88	0.13	51,51,51,51	0
58	MG	1A	3980	1/1	0.88	0.12	48,48,48,48	0
58	MG	2A	3684	1/1	0.88	0.11	53,53,53,53	0
58	MG	1A	3543	1/1	0.88	0.23	58,58,58,58	0
58	MG	2A	3703	1/1	0.88	0.21	63,63,63,63	0
58	MG	1A	4080	1/1	0.88	0.09	29,29,29,29	0
58	MG	2a	1637	1/1	0.88	0.20	61,61,61,61	0
58	MG	2A	3708	1/1	0.88	0.09	21,21,21,21	0
58	MG	2A	3382	1/1	0.88	0.18	58,58,58,58	0
58	MG	1A	4028	1/1	0.88	0.10	46,46,46,46	0
58	MG	1T	204	1/1	0.88	0.10	40,40,40,40	0
58	MG	2A	3392	1/1	0.88	0.21	59,59,59,59	0
58	MG	2a	1657	1/1	0.88	0.11	68,68,68,68	0
58	MG	1A	3875	1/1	0.88	0.15	44,44,44,44	0
58	MG	1Y	201	1/1	0.88	0.09	37,37,37,37	0
58	MG	2A	3421	1/1	0.88	0.30	65,65,65,65	0
58	MG	1A	3836	1/1	0.88	0.16	48,48,48,48	0
58	MG	2a	1709	1/1	0.88	0.24	56,56,56,56	0
58	MG	2A	3745	1/1	0.88	0.16	67,67,67,67	0
58	MG	2a	1729	1/1	0.88	0.14	55,55,55,55	0
58	MG	1A	3877	1/1	0.88	0.12	24,24,24,24	0
58	MG	2a	1748	1/1	0.88	0.13	58,58,58,58	0
58	MG	2a	1751	1/1	0.88	0.15	66,66,66,66	0
58	MG	2A	3205	1/1	0.88	0.11	52,52,52,52	0
58	MG	2A	3753	1/1	0.88	0.10	37,37,37,37	0
58	MG	2a	1758	1/1	0.88	0.12	62,62,62,62	0
58	MG	2a	1767	1/1	0.88	0.09	73,73,73,73	0
58	MG	2A	3759	1/1	0.88	0.11	51,51,51,51	0
58	MG	1A	3319	1/1	0.88	0.15	50,50,50,50	0
58	MG	2A	3215	1/1	0.88	0.13	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3205	1/1	0.88	0.08	48,48,48,48	0
58	MG	1A	3784	1/1	0.88	0.09	34,34,34,34	0
58	MG	2a	1790	1/1	0.88	0.18	59,59,59,59	0
58	MG	2A	3242	1/1	0.88	0.13	61,61,61,61	0
58	MG	2A	3793	1/1	0.88	0.12	47,47,47,47	0
58	MG	2A	3491	1/1	0.88	0.19	54,54,54,54	0
58	MG	1B	227	1/1	0.88	0.11	41,41,41,41	0
58	MG	1a	1602	1/1	0.88	0.14	59,59,59,59	0
58	MG	1a	1622	1/1	0.88	0.24	54,54,54,54	0
58	MG	2A	3251	1/1	0.88	0.15	61,61,61,61	0
58	MG	2A	3514	1/1	0.88	0.13	34,34,34,34	0
58	MG	2A	3804	1/1	0.88	0.17	66,66,66,66	0
58	MG	2a	1827	1/1	0.88	0.21	65,65,65,65	0
58	MG	2A	3811	1/1	0.88	0.14	42,42,42,42	0
58	MG	2A	3813	1/1	0.88	0.11	52,52,52,52	0
58	MG	1A	4042	1/1	0.88	0.10	32,32,32,32	0
58	MG	2A	3824	1/1	0.88	0.10	52,52,52,52	0
58	MG	1a	1812	1/1	0.88	0.16	47,47,47,47	0
58	MG	2A	3536	1/1	0.88	0.11	55,55,55,55	0
58	MG	1w	106	1/1	0.88	0.15	56,56,56,56	0
58	MG	1a	1668	1/1	0.88	0.21	61,61,61,61	0
58	MG	2A	3851	1/1	0.88	0.10	43,43,43,43	0
58	MG	2A	3290	1/1	0.88	0.13	62,62,62,62	0
58	MG	1a	1671	1/1	0.88	0.11	52,52,52,52	0
58	MG	1A	3465	1/1	0.89	0.19	53,53,53,53	0
58	MG	1a	1754	1/1	0.89	0.09	42,42,42,42	0
58	MG	1A	4091	1/1	0.89	0.14	59,59,59,59	0
58	MG	1A	3175	1/1	0.89	0.15	50,50,50,50	0
58	MG	1A	3774	1/1	0.89	0.09	17,17,17,17	0
58	MG	2A	3856	1/1	0.89	0.11	50,50,50,50	0
58	MG	15	107	1/1	0.89	0.10	46,46,46,46	0
58	MG	2A	3863	1/1	0.89	0.09	54,54,54,54	0
58	MG	1B	207	1/1	0.89	0.12	45,45,45,45	0
58	MG	2A	3871	1/1	0.89	0.17	51,51,51,51	0
58	MG	2A	3565	1/1	0.89	0.10	34,34,34,34	0
58	MG	1A	3775	1/1	0.89	0.11	39,39,39,39	0
58	MG	2B	207	1/1	0.89	0.11	57,57,57,57	0
58	MG	2A	3253	1/1	0.89	0.16	67,67,67,67	0
58	MG	2B	212	1/1	0.89	0.22	59,59,59,59	0
58	MG	2B	213	1/1	0.89	0.21	49,49,49,49	0
58	MG	1B	224	1/1	0.89	0.09	53,53,53,53	0
58	MG	2A	3269	1/1	0.89	0.14	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3587	1/1	0.89	0.13	47,47,47,47	0
58	MG	2A	3279	1/1	0.89	0.09	45,45,45,45	0
58	MG	2P	201	1/1	0.89	0.15	53,53,53,53	0
58	MG	1A	3567	1/1	0.89	0.25	55,55,55,55	0
58	MG	1a	1802	1/1	0.89	0.08	58,58,58,58	0
58	MG	2A	3286	1/1	0.89	0.10	55,55,55,55	0
58	MG	1A	3395	1/1	0.89	0.24	26,26,26,26	0
58	MG	28	101	1/1	0.89	0.24	53,53,53,53	0
58	MG	2A	3289	1/1	0.89	0.15	42,42,42,42	0
58	MG	1A	3590	1/1	0.89	0.10	43,43,43,43	0
58	MG	1a	1625	1/1	0.89	0.18	55,55,55,55	0
58	MG	2A	3293	1/1	0.89	0.12	50,50,50,50	0
58	MG	2a	1607	1/1	0.89	0.15	56,56,56,56	0
58	MG	2A	3629	1/1	0.89	0.15	56,56,56,56	0
58	MG	2A	3294	1/1	0.89	0.21	54,54,54,54	0
58	MG	1a	1636	1/1	0.89	0.22	67,67,67,67	0
58	MG	1w	108	1/1	0.89	0.11	67,67,67,67	0
58	MG	2A	3306	1/1	0.89	0.13	49,49,49,49	0
58	MG	1A	3999	1/1	0.89	0.14	45,45,45,45	0
58	MG	1B	231	1/1	0.89	0.12	68,68,68,68	0
58	MG	2a	1632	1/1	0.89	0.11	52,52,52,52	0
58	MG	1A	4001	1/1	0.89	0.09	33,33,33,33	0
58	MG	2A	3679	1/1	0.89	0.10	43,43,43,43	0
58	MG	1a	1679	1/1	0.89	0.17	57,57,57,57	0
58	MG	2A	3322	1/1	0.89	0.13	53,53,53,53	0
58	MG	2a	1649	1/1	0.89	0.14	55,55,55,55	0
58	MG	2A	3008	1/1	0.89	0.11	53,53,53,53	0
58	MG	2A	3031	1/1	0.89	0.12	59,59,59,59	0
58	MG	2A	3693	1/1	0.89	0.11	52,52,52,52	0
58	MG	2A	3701	1/1	0.89	0.11	53,53,53,53	0
58	MG	2A	3340	1/1	0.89	0.09	49,49,49,49	0
58	MG	2a	1678	1/1	0.89	0.32	61,61,61,61	0
58	MG	2A	3032	1/1	0.89	0.10	50,50,50,50	0
58	MG	2A	3045	1/1	0.89	0.12	51,51,51,51	0
58	MG	2A	3709	1/1	0.89	0.17	66,66,66,66	0
58	MG	2A	3352	1/1	0.89	0.19	49,49,49,49	0
58	MG	1a	1681	1/1	0.89	0.16	56,56,56,56	0
58	MG	2a	1735	1/1	0.89	0.27	56,56,56,56	0
58	MG	2A	3356	1/1	0.89	0.28	57,57,57,57	0
58	MG	2a	1747	1/1	0.89	0.11	52,52,52,52	0
58	MG	2A	3058	1/1	0.89	0.19	55,55,55,55	0
58	MG	1A	4044	1/1	0.89	0.10	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3720	1/1	0.89	0.17	58,58,58,58	0
58	MG	2A	3722	1/1	0.89	0.10	51,51,51,51	0
58	MG	1A	3208	1/1	0.89	0.10	44,44,44,44	0
58	MG	1A	4009	1/1	0.89	0.10	59,59,59,59	0
58	MG	2A	3100	1/1	0.89	0.17	53,53,53,53	0
58	MG	1a	1704	1/1	0.89	0.16	60,60,60,60	0
58	MG	1a	1705	1/1	0.89	0.16	57,57,57,57	0
58	MG	1a	1706	1/1	0.89	0.12	54,54,54,54	0
58	MG	1A	3001	1/1	0.89	0.11	37,37,37,37	0
58	MG	1A	3805	1/1	0.89	0.09	12,12,12,12	0
58	MG	1A	3259	1/1	0.89	0.11	59,59,59,59	0
58	MG	2A	3409	1/1	0.89	0.13	56,56,56,56	0
58	MG	1a	1717	1/1	0.89	0.10	46,46,46,46	0
58	MG	1A	3816	1/1	0.89	0.10	49,49,49,49	0
58	MG	1A	4022	1/1	0.89	0.10	60,60,60,60	0
58	MG	2A	3166	1/1	0.89	0.16	56,56,56,56	0
58	MG	2a	1817	1/1	0.89	0.13	60,60,60,60	0
58	MG	2A	3173	1/1	0.89	0.23	61,61,61,61	0
58	MG	2A	3185	1/1	0.89	0.13	49,49,49,49	0
58	MG	2A	3467	1/1	0.89	0.10	47,47,47,47	0
58	MG	1A	3822	1/1	0.89	0.13	64,64,64,64	0
58	MG	2A	3800	1/1	0.89	0.09	68,68,68,68	0
58	MG	2A	3479	1/1	0.89	0.19	63,63,63,63	0
58	MG	1S	203	1/1	0.89	0.09	55,55,55,55	0
58	MG	2A	3803	1/1	0.89	0.13	73,73,73,73	0
58	MG	2A	3195	1/1	0.89	0.15	65,65,65,65	0
58	MG	2l	204	1/1	0.89	0.08	54,54,54,54	0
58	MG	2A	3487	1/1	0.89	0.23	58,58,58,58	0
58	MG	1A	3353	1/1	0.89	0.14	61,61,61,61	0
58	MG	2A	3492	1/1	0.89	0.13	51,51,51,51	0
58	MG	2v	103	1/1	0.89	0.28	50,50,50,50	0
58	MG	2A	3498	1/1	0.89	0.17	65,65,65,65	0
58	MG	1A	3454	1/1	0.89	0.12	48,48,48,48	0
58	MG	1a	1746	1/1	0.89	0.13	53,53,53,53	0
58	MG	1A	3956	1/1	0.90	0.09	54,54,54,54	0
58	MG	1a	1620	1/1	0.90	0.11	46,46,46,46	0
58	MG	2B	218	1/1	0.90	0.12	65,65,65,65	0
58	MG	1A	4056	1/1	0.90	0.07	12,12,12,12	0
58	MG	1A	3363	1/1	0.90	0.14	51,51,51,51	0
58	MG	2D	308	1/1	0.90	0.09	48,48,48,48	0
58	MG	1A	3821	1/1	0.90	0.12	60,60,60,60	0
58	MG	2F	305	1/1	0.90	0.12	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3681	1/1	0.90	0.06	15,15,15,15	0
58	MG	1a	1643	1/1	0.90	0.17	55,55,55,55	0
58	MG	1a	1658	1/1	0.90	0.16	55,55,55,55	0
58	MG	2W	201	1/1	0.90	0.12	50,50,50,50	0
58	MG	23	103	1/1	0.90	0.08	41,41,41,41	0
58	MG	2A	3651	1/1	0.90	0.16	38,38,38,38	0
58	MG	25	105	1/1	0.90	0.15	61,61,61,61	0
58	MG	2A	3343	1/1	0.90	0.17	57,57,57,57	0
58	MG	2A	3344	1/1	0.90	0.14	65,65,65,65	0
58	MG	2A	3670	1/1	0.90	0.11	59,59,59,59	0
58	MG	2a	1603	1/1	0.90	0.19	57,57,57,57	0
58	MG	2A	3345	1/1	0.90	0.12	53,53,53,53	0
58	MG	2A	3350	1/1	0.90	0.09	57,57,57,57	0
58	MG	1A	3272	1/1	0.90	0.12	37,37,37,37	0
58	MG	2A	3681	1/1	0.90	0.14	55,55,55,55	0
58	MG	1a	1669	1/1	0.90	0.24	57,57,57,57	0
58	MG	2a	1612	1/1	0.90	0.10	46,46,46,46	0
58	MG	2A	3353	1/1	0.90	0.11	60,60,60,60	0
58	MG	1A	3301	1/1	0.90	0.29	54,54,54,54	0
58	MG	1A	3548	1/1	0.90	0.21	52,52,52,52	0
58	MG	1A	3842	1/1	0.90	0.13	24,24,24,24	0
58	MG	1A	3704	1/1	0.90	0.07	19,19,19,19	0
58	MG	1A	3989	1/1	0.90	0.18	46,46,46,46	0
58	MG	1A	3172	1/1	0.90	0.11	37,37,37,37	0
58	MG	2a	1633	1/1	0.90	0.34	56,56,56,56	0
58	MG	1A	3410	1/1	0.90	0.14	49,49,49,49	0
58	MG	1A	3996	1/1	0.90	0.11	46,46,46,46	0
58	MG	1B	208	1/1	0.90	0.18	64,64,64,64	0
58	MG	1A	3997	1/1	0.90	0.08	42,42,42,42	0
58	MG	1A	3413	1/1	0.90	0.13	52,52,52,52	0
58	MG	2A	3171	1/1	0.90	0.13	62,62,62,62	0
58	MG	2A	3397	1/1	0.90	0.09	57,57,57,57	0
58	MG	1A	3721	1/1	0.90	0.17	50,50,50,50	0
58	MG	1a	1715	1/1	0.90	0.16	46,46,46,46	0
58	MG	2a	1663	1/1	0.90	0.18	61,61,61,61	0
58	MG	1A	3587	1/1	0.90	0.08	48,48,48,48	0
58	MG	1A	3019	1/1	0.90	0.16	36,36,36,36	0
58	MG	2A	3737	1/1	0.90	0.07	54,54,54,54	0
58	MG	2a	1687	1/1	0.90	0.17	52,52,52,52	0
58	MG	1A	3595	1/1	0.90	0.09	33,33,33,33	0
58	MG	2a	1704	1/1	0.90	0.21	60,60,60,60	0
58	MG	2a	1705	1/1	0.90	0.15	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1706	1/1	0.90	0.14	48,48,48,48	0
58	MG	2a	1707	1/1	0.90	0.16	58,58,58,58	0
58	MG	1A	3427	1/1	0.90	0.17	54,54,54,54	0
58	MG	2a	1712	1/1	0.90	0.10	61,61,61,61	0
58	MG	2a	1719	1/1	0.90	0.23	59,59,59,59	0
58	MG	1A	3318	1/1	0.90	0.15	45,45,45,45	0
58	MG	1A	4012	1/1	0.90	0.06	14,14,14,14	0
58	MG	2a	1733	1/1	0.90	0.18	54,54,54,54	0
58	MG	2A	3458	1/1	0.90	0.12	55,55,55,55	0
58	MG	2a	1738	1/1	0.90	0.23	62,62,62,62	0
58	MG	1B	237	1/1	0.90	0.08	36,36,36,36	0
58	MG	2A	3469	1/1	0.90	0.12	61,61,61,61	0
58	MG	2A	3220	1/1	0.90	0.10	51,51,51,51	0
58	MG	2a	1749	1/1	0.90	0.16	65,65,65,65	0
58	MG	1A	3608	1/1	0.90	0.10	51,51,51,51	0
58	MG	1A	3616	1/1	0.90	0.10	44,44,44,44	0
58	MG	2a	1756	1/1	0.90	0.17	65,65,65,65	0
58	MG	1A	3888	1/1	0.90	0.10	24,24,24,24	0
58	MG	1A	3020	1/1	0.90	0.16	37,37,37,37	0
58	MG	1G	204	1/1	0.90	0.07	48,48,48,48	0
58	MG	1A	3624	1/1	0.90	0.11	9,9,9,9	0
58	MG	2A	3497	1/1	0.90	0.09	42,42,42,42	0
58	MG	1A	3337	1/1	0.90	0.14	49,49,49,49	0
58	MG	2A	3252	1/1	0.90	0.14	57,57,57,57	0
58	MG	1A	3631	1/1	0.90	0.07	31,31,31,31	0
58	MG	1A	3633	1/1	0.90	0.13	53,53,53,53	0
58	MG	1A	3910	1/1	0.90	0.13	46,46,46,46	0
58	MG	2a	1795	1/1	0.90	0.10	54,54,54,54	0
58	MG	2A	3278	1/1	0.90	0.09	46,46,46,46	0
58	MG	2a	1800	1/1	0.90	0.15	61,61,61,61	0
58	MG	2A	3812	1/1	0.90	0.08	24,24,24,24	0
58	MG	2A	3517	1/1	0.90	0.15	51,51,51,51	0
58	MG	2A	3816	1/1	0.90	0.10	53,53,53,53	0
58	MG	1A	3914	1/1	0.90	0.08	48,48,48,48	0
58	MG	2A	3280	1/1	0.90	0.24	57,57,57,57	0
58	MG	1A	3637	1/1	0.90	0.09	38,38,38,38	0
58	MG	1A	3339	1/1	0.90	0.12	45,45,45,45	0
58	MG	1A	3150	1/1	0.90	0.17	29,29,29,29	0
58	MG	1a	1810	1/1	0.90	0.18	45,45,45,45	0
58	MG	2A	3575	1/1	0.90	0.12	52,52,52,52	0
58	MG	1A	3187	1/1	0.90	0.19	62,62,62,62	0
58	MG	2a	1830	1/1	0.90	0.16	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3509	1/1	0.90	0.11	55,55,55,55	0
58	MG	1b	301	1/1	0.90	0.09	58,58,58,58	0
58	MG	2a	1835	1/1	0.90	0.18	51,51,51,51	0
58	MG	1v	101	1/1	0.90	0.27	64,64,64,64	0
58	MG	11	104	1/1	0.90	0.08	31,31,31,31	0
58	MG	2A	3295	1/1	0.90	0.16	57,57,57,57	0
58	MG	2q	201	1/1	0.90	0.24	56,56,56,56	0
58	MG	1A	3804	1/1	0.90	0.12	21,21,21,21	0
58	MG	1A	3355	1/1	0.90	0.15	54,54,54,54	0
58	MG	2A	3606	1/1	0.90	0.14	64,64,64,64	0
58	MG	2A	3608	1/1	0.90	0.11	48,48,48,48	0
58	MG	1A	4048	1/1	0.90	0.10	19,19,19,19	0
58	MG	1A	3026	1/1	0.90	0.15	57,57,57,57	0
58	MG	2x	105	1/1	0.90	0.08	39,39,39,39	0
58	MG	2y	101	1/1	0.90	0.09	58,58,58,58	0
58	MG	1A	3718	1/1	0.91	0.08	38,38,38,38	0
58	MG	2A	3442	1/1	0.91	0.11	55,55,55,55	0
58	MG	1A	3719	1/1	0.91	0.11	50,50,50,50	0
58	MG	2A	3449	1/1	0.91	0.18	45,45,45,45	0
58	MG	1a	1662	1/1	0.91	0.08	50,50,50,50	0
58	MG	1A	3983	1/1	0.91	0.09	56,56,56,56	0
58	MG	2A	3462	1/1	0.91	0.23	44,44,44,44	0
58	MG	1A	3843	1/1	0.91	0.07	29,29,29,29	0
58	MG	2A	3124	1/1	0.91	0.17	44,44,44,44	0
58	MG	1A	3404	1/1	0.91	0.09	41,41,41,41	0
58	MG	1A	3477	1/1	0.91	0.08	40,40,40,40	0
58	MG	1a	1675	1/1	0.91	0.10	52,52,52,52	0
58	MG	1a	1676	1/1	0.91	0.08	49,49,49,49	0
58	MG	1A	3854	1/1	0.91	0.09	36,36,36,36	0
58	MG	2A	3490	1/1	0.91	0.17	69,69,69,69	0
58	MG	1a	1680	1/1	0.91	0.14	44,44,44,44	0
58	MG	1A	3725	1/1	0.91	0.12	51,51,51,51	0
58	MG	1a	1682	1/1	0.91	0.10	55,55,55,55	0
58	MG	2A	3175	1/1	0.91	0.10	42,42,42,42	0
58	MG	2A	3178	1/1	0.91	0.07	41,41,41,41	0
58	MG	2A	3508	1/1	0.91	0.14	51,51,51,51	0
58	MG	1A	3857	1/1	0.91	0.09	44,44,44,44	0
58	MG	1a	1690	1/1	0.91	0.25	45,45,45,45	0
58	MG	2A	3190	1/1	0.91	0.19	62,62,62,62	0
58	MG	1a	1691	1/1	0.91	0.24	57,57,57,57	0
58	MG	1A	3506	1/1	0.91	0.10	28,28,28,28	0
58	MG	2E	301	1/1	0.91	0.14	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2E	306	1/1	0.91	0.08	29,29,29,29	0
58	MG	2A	3198	1/1	0.91	0.13	52,52,52,52	0
58	MG	2F	304	1/1	0.91	0.12	41,41,41,41	0
58	MG	2A	3524	1/1	0.91	0.12	41,41,41,41	0
58	MG	2A	3201	1/1	0.91	0.17	55,55,55,55	0
58	MG	2A	3203	1/1	0.91	0.17	57,57,57,57	0
58	MG	2A	3552	1/1	0.91	0.10	36,36,36,36	0
58	MG	1A	3507	1/1	0.91	0.08	39,39,39,39	0
58	MG	1a	1700	1/1	0.91	0.20	56,56,56,56	0
58	MG	2A	3568	1/1	0.91	0.08	37,37,37,37	0
58	MG	1a	1701	1/1	0.91	0.18	53,53,53,53	0
58	MG	26	101	1/1	0.91	0.12	53,53,53,53	0
58	MG	1A	3201	1/1	0.91	0.09	39,39,39,39	0
58	MG	1A	3510	1/1	0.91	0.09	38,38,38,38	0
58	MG	2A	3221	1/1	0.91	0.14	42,42,42,42	0
58	MG	2a	1601	1/1	0.91	0.14	59,59,59,59	0
58	MG	1A	3529	1/1	0.91	0.11	54,54,54,54	0
58	MG	1A	4005	1/1	0.91	0.06	14,14,14,14	0
58	MG	1A	3210	1/1	0.91	0.08	46,46,46,46	0
58	MG	1A	3884	1/1	0.91	0.11	38,38,38,38	0
58	MG	2A	3600	1/1	0.91	0.10	49,49,49,49	0
58	MG	1A	3257	1/1	0.91	0.17	39,39,39,39	0
58	MG	1A	3749	1/1	0.91	0.09	15,15,15,15	0
58	MG	1A	3315	1/1	0.91	0.15	53,53,53,53	0
58	MG	2a	1618	1/1	0.91	0.28	63,63,63,63	0
58	MG	1A	3540	1/1	0.91	0.17	43,43,43,43	0
58	MG	2A	3610	1/1	0.91	0.15	53,53,53,53	0
58	MG	1A	3417	1/1	0.91	0.21	52,52,52,52	0
58	MG	2a	1625	1/1	0.91	0.12	50,50,50,50	0
58	MG	2A	3612	1/1	0.91	0.08	51,51,51,51	0
58	MG	2A	3617	1/1	0.91	0.09	23,23,23,23	0
58	MG	2a	1630	1/1	0.91	0.23	56,56,56,56	0
58	MG	2A	3254	1/1	0.91	0.18	61,61,61,61	0
58	MG	2A	3259	1/1	0.91	0.12	39,39,39,39	0
58	MG	1A	3662	1/1	0.91	0.07	28,28,28,28	0
58	MG	2a	1641	1/1	0.91	0.09	54,54,54,54	0
58	MG	1a	1741	1/1	0.91	0.15	46,46,46,46	0
58	MG	2A	3627	1/1	0.91	0.09	53,53,53,53	0
58	MG	1A	3359	1/1	0.91	0.09	48,48,48,48	0
58	MG	1O	202	1/1	0.91	0.19	49,49,49,49	0
58	MG	1A	3777	1/1	0.91	0.06	18,18,18,18	0
58	MG	1A	3229	1/1	0.91	0.10	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1656	1/1	0.91	0.22	56,56,56,56	0
58	MG	2A	3647	1/1	0.91	0.11	34,34,34,34	0
58	MG	2a	1658	1/1	0.91	0.09	67,67,67,67	0
58	MG	1Q	205	1/1	0.91	0.11	58,58,58,58	0
58	MG	2A	3650	1/1	0.91	0.10	51,51,51,51	0
58	MG	1A	4029	1/1	0.91	0.06	40,40,40,40	0
58	MG	2a	1674	1/1	0.91	0.11	51,51,51,51	0
58	MG	1A	3779	1/1	0.91	0.09	59,59,59,59	0
58	MG	2A	3663	1/1	0.91	0.11	51,51,51,51	0
58	MG	1A	3671	1/1	0.91	0.07	38,38,38,38	0
58	MG	2a	1688	1/1	0.91	0.11	60,60,60,60	0
58	MG	1A	3549	1/1	0.91	0.23	50,50,50,50	0
58	MG	1A	3794	1/1	0.91	0.07	39,39,39,39	0
58	MG	2A	3676	1/1	0.91	0.09	42,42,42,42	0
58	MG	1a	1781	1/1	0.91	0.10	39,39,39,39	0
58	MG	1W	202	1/1	0.91	0.17	44,44,44,44	0
58	MG	1W	207	1/1	0.91	0.09	26,26,26,26	0
58	MG	1A	3924	1/1	0.91	0.22	31,31,31,31	0
58	MG	2a	1713	1/1	0.91	0.11	58,58,58,58	0
58	MG	1a	1799	1/1	0.91	0.12	68,68,68,68	0
58	MG	2a	1721	1/1	0.91	0.24	67,67,67,67	0
58	MG	1a	1801	1/1	0.91	0.09	46,46,46,46	0
58	MG	2A	3688	1/1	0.91	0.20	49,49,49,49	0
58	MG	2A	3307	1/1	0.91	0.14	51,51,51,51	0
58	MG	1A	3929	1/1	0.91	0.11	41,41,41,41	0
58	MG	1A	3674	1/1	0.91	0.07	26,26,26,26	0
58	MG	10	102	1/1	0.91	0.11	40,40,40,40	0
58	MG	2A	3705	1/1	0.91	0.08	46,46,46,46	0
58	MG	1A	3936	1/1	0.91	0.07	32,32,32,32	0
58	MG	1A	3440	1/1	0.91	0.14	42,42,42,42	0
58	MG	2A	3327	1/1	0.91	0.21	65,65,65,65	0
58	MG	1A	3265	1/1	0.91	0.11	55,55,55,55	0
58	MG	2A	3716	1/1	0.91	0.08	29,29,29,29	0
58	MG	18	101	1/1	0.91	0.14	40,40,40,40	0
58	MG	1A	3569	1/1	0.91	0.10	47,47,47,47	0
58	MG	2a	1759	1/1	0.91	0.10	65,65,65,65	0
58	MG	1A	3457	1/1	0.91	0.12	59,59,59,59	0
58	MG	1A	3373	1/1	0.91	0.15	43,43,43,43	0
58	MG	1A	3466	1/1	0.91	0.14	60,60,60,60	0
58	MG	1x	109	1/1	0.91	0.08	63,63,63,63	0
58	MG	2A	3728	1/1	0.91	0.08	36,36,36,36	0
58	MG	2a	1786	1/1	0.91	0.17	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3729	1/1	0.91	0.08	47,47,47,47	0
58	MG	2A	3731	1/1	0.91	0.08	48,48,48,48	0
58	MG	1a	1603	1/1	0.91	0.14	51,51,51,51	0
58	MG	1a	1609	1/1	0.91	0.12	40,40,40,40	0
58	MG	2A	3003	1/1	0.91	0.25	52,52,52,52	0
58	MG	2A	3739	1/1	0.91	0.11	49,49,49,49	0
58	MG	2A	3740	1/1	0.91	0.10	45,45,45,45	0
58	MG	2a	1808	1/1	0.91	0.14	53,53,53,53	0
58	MG	2A	3742	1/1	0.91	0.09	53,53,53,53	0
58	MG	2A	3005	1/1	0.91	0.17	56,56,56,56	0
58	MG	1A	3705	1/1	0.91	0.09	18,18,18,18	0
58	MG	2A	3011	1/1	0.91	0.09	41,41,41,41	0
58	MG	2A	3017	1/1	0.91	0.16	40,40,40,40	0
58	MG	2A	3758	1/1	0.91	0.15	55,55,55,55	0
58	MG	2a	1823	1/1	0.91	0.18	59,59,59,59	0
58	MG	1A	3335	1/1	0.91	0.09	52,52,52,52	0
58	MG	2A	3364	1/1	0.91	0.13	54,54,54,54	0
58	MG	2A	3763	1/1	0.91	0.07	41,41,41,41	0
58	MG	1A	4067	1/1	0.91	0.10	38,38,38,38	0
58	MG	2A	3037	1/1	0.91	0.13	53,53,53,53	0
58	MG	2A	3043	1/1	0.91	0.19	51,51,51,51	0
58	MG	1A	3826	1/1	0.91	0.08	34,34,34,34	0
58	MG	1a	1627	1/1	0.91	0.20	52,52,52,52	0
58	MG	1a	1629	1/1	0.91	0.16	50,50,50,50	0
58	MG	2i	201	1/1	0.91	0.20	57,57,57,57	0
58	MG	2j	201	1/1	0.91	0.17	57,57,57,57	0
58	MG	2A	3066	1/1	0.91	0.12	54,54,54,54	0
58	MG	2A	3067	1/1	0.91	0.17	58,58,58,58	0
58	MG	2A	3082	1/1	0.91	0.15	53,53,53,53	0
58	MG	1A	3248	1/1	0.91	0.12	43,43,43,43	0
58	MG	2A	3408	1/1	0.91	0.12	53,53,53,53	0
58	MG	1a	1638	1/1	0.91	0.15	47,47,47,47	0
58	MG	2A	3415	1/1	0.91	0.18	47,47,47,47	0
58	MG	2w	104	1/1	0.91	0.18	65,65,65,65	0
58	MG	1a	1641	1/1	0.91	0.16	47,47,47,47	0
58	MG	2x	101	1/1	0.91	0.17	51,51,51,51	0
58	MG	2A	3097	1/1	0.91	0.16	53,53,53,53	0
58	MG	2A	3426	1/1	0.91	0.17	51,51,51,51	0
58	MG	2A	3098	1/1	0.91	0.09	38,38,38,38	0
58	MG	1A	3746	1/1	0.92	0.08	42,42,42,42	0
58	MG	1A	3092	1/1	0.92	0.10	47,47,47,47	0
58	MG	1A	3880	1/1	0.92	0.17	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3518	1/1	0.92	0.09	47,47,47,47	0
58	MG	1A	3765	1/1	0.92	0.12	40,40,40,40	0
58	MG	2A	3192	1/1	0.92	0.08	48,48,48,48	0
58	MG	1F	305	1/1	0.92	0.08	36,36,36,36	0
58	MG	2A	3501	1/1	0.92	0.21	52,52,52,52	0
58	MG	1A	3528	1/1	0.92	0.17	57,57,57,57	0
58	MG	2A	3199	1/1	0.92	0.10	45,45,45,45	0
58	MG	2B	205	1/1	0.92	0.09	46,46,46,46	0
58	MG	1A	4014	1/1	0.92	0.10	33,33,33,33	0
58	MG	1A	3096	1/1	0.92	0.11	45,45,45,45	0
58	MG	1A	4018	1/1	0.92	0.09	37,37,37,37	0
58	MG	1A	3771	1/1	0.92	0.06	20,20,20,20	0
58	MG	2A	3209	1/1	0.92	0.09	47,47,47,47	0
58	MG	1A	3655	1/1	0.92	0.09	26,26,26,26	0
58	MG	2A	3520	1/1	0.92	0.12	33,33,33,33	0
58	MG	2A	3522	1/1	0.92	0.11	52,52,52,52	0
58	MG	2A	3214	1/1	0.92	0.24	65,65,65,65	0
58	MG	2A	3525	1/1	0.92	0.09	51,51,51,51	0
58	MG	1R	202	1/1	0.92	0.08	26,26,26,26	0
58	MG	2A	3218	1/1	0.92	0.14	45,45,45,45	0
58	MG	2E	307	1/1	0.92	0.10	53,53,53,53	0
58	MG	2A	3541	1/1	0.92	0.11	51,51,51,51	0
58	MG	2A	3547	1/1	0.92	0.09	42,42,42,42	0
58	MG	1a	1749	1/1	0.92	0.09	44,44,44,44	0
58	MG	2A	3560	1/1	0.92	0.11	37,37,37,37	0
58	MG	1A	4023	1/1	0.92	0.08	34,34,34,34	0
58	MG	1A	3326	1/1	0.92	0.15	43,43,43,43	0
58	MG	1a	1755	1/1	0.92	0.17	58,58,58,58	0
58	MG	2W	204	1/1	0.92	0.12	53,53,53,53	0
58	MG	2Z	301	1/1	0.92	0.12	64,64,64,64	0
58	MG	2A	3226	1/1	0.92	0.13	55,55,55,55	0
58	MG	2A	3240	1/1	0.92	0.14	51,51,51,51	0
58	MG	2A	3577	1/1	0.92	0.06	25,25,25,25	0
58	MG	1T	202	1/1	0.92	0.10	50,50,50,50	0
58	MG	1a	1760	1/1	0.92	0.09	62,62,62,62	0
58	MG	1A	3332	1/1	0.92	0.16	57,57,57,57	0
58	MG	1A	3334	1/1	0.92	0.10	47,47,47,47	0
58	MG	1V	202	1/1	0.92	0.22	33,33,33,33	0
58	MG	2A	3594	1/1	0.92	0.08	53,53,53,53	0
58	MG	1A	3040	1/1	0.92	0.13	43,43,43,43	0
58	MG	1A	3191	1/1	0.92	0.09	38,38,38,38	0
58	MG	1A	3420	1/1	0.92	0.09	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	4031	1/1	0.92	0.08	41,41,41,41	0
58	MG	1a	1791	1/1	0.92	0.10	54,54,54,54	0
58	MG	1A	3787	1/1	0.92	0.11	21,21,21,21	0
58	MG	2a	1613	1/1	0.92	0.13	62,62,62,62	0
58	MG	2a	1616	1/1	0.92	0.08	59,59,59,59	0
58	MG	1A	3226	1/1	0.92	0.10	38,38,38,38	0
58	MG	1A	3923	1/1	0.92	0.09	25,25,25,25	0
58	MG	1A	3342	1/1	0.92	0.09	43,43,43,43	0
58	MG	1A	3689	1/1	0.92	0.11	53,53,53,53	0
58	MG	1A	3296	1/1	0.92	0.09	46,46,46,46	0
58	MG	1A	3446	1/1	0.92	0.13	52,52,52,52	0
58	MG	1A	3344	1/1	0.92	0.12	38,38,38,38	0
58	MG	2a	1627	1/1	0.92	0.09	53,53,53,53	0
58	MG	1a	1813	1/1	0.92	0.15	53,53,53,53	0
58	MG	1A	4045	1/1	0.92	0.07	32,32,32,32	0
58	MG	2A	3291	1/1	0.92	0.25	54,54,54,54	0
58	MG	1d	301	1/1	0.92	0.23	51,51,51,51	0
58	MG	2A	3633	1/1	0.92	0.09	32,32,32,32	0
58	MG	2a	1638	1/1	0.92	0.12	38,38,38,38	0
58	MG	1f	202	1/1	0.92	0.15	58,58,58,58	0
58	MG	1n	101	1/1	0.92	0.20	53,53,53,53	0
58	MG	1a	1601	1/1	0.92	0.12	49,49,49,49	0
58	MG	1w	103	1/1	0.92	0.16	65,65,65,65	0
58	MG	2A	3299	1/1	0.92	0.20	60,60,60,60	0
58	MG	1A	3455	1/1	0.92	0.08	36,36,36,36	0
58	MG	2A	3305	1/1	0.92	0.18	58,58,58,58	0
58	MG	2A	3662	1/1	0.92	0.08	53,53,53,53	0
58	MG	1A	3297	1/1	0.92	0.10	51,51,51,51	0
58	MG	1A	3199	1/1	0.92	0.07	36,36,36,36	0
58	MG	2a	1659	1/1	0.92	0.12	69,69,69,69	0
58	MG	2a	1660	1/1	0.92	0.22	55,55,55,55	0
58	MG	1a	1610	1/1	0.92	0.18	49,49,49,49	0
58	MG	1x	108	1/1	0.92	0.07	16,16,16,16	0
58	MG	2A	3312	1/1	0.92	0.16	36,36,36,36	0
58	MG	2a	1667	1/1	0.92	0.17	70,70,70,70	0
58	MG	2a	1673	1/1	0.92	0.11	48,48,48,48	0
58	MG	1a	1613	1/1	0.92	0.08	56,56,56,56	0
58	MG	1A	3952	1/1	0.92	0.06	43,43,43,43	0
58	MG	2A	3318	1/1	0.92	0.09	44,44,44,44	0
58	MG	2a	1684	1/1	0.92	0.13	60,60,60,60	0
58	MG	2A	3319	1/1	0.92	0.14	59,59,59,59	0
58	MG	1A	3591	1/1	0.92	0.07	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3686	1/1	0.92	0.13	46,46,46,46	0
58	MG	2A	3325	1/1	0.92	0.12	52,52,52,52	0
58	MG	1A	3238	1/1	0.92	0.11	59,59,59,59	0
58	MG	2A	3691	1/1	0.92	0.20	51,51,51,51	0
58	MG	1A	3833	1/1	0.92	0.09	33,33,33,33	0
58	MG	2A	3694	1/1	0.92	0.13	40,40,40,40	0
58	MG	1A	3601	1/1	0.92	0.28	57,57,57,57	0
58	MG	2A	3339	1/1	0.92	0.11	52,52,52,52	0
58	MG	1a	1628	1/1	0.92	0.15	39,39,39,39	0
58	MG	1A	4071	1/1	0.92	0.12	47,47,47,47	0
58	MG	2A	3023	1/1	0.92	0.10	57,57,57,57	0
58	MG	2a	1723	1/1	0.92	0.17	59,59,59,59	0
58	MG	2a	1724	1/1	0.92	0.31	60,60,60,60	0
58	MG	2a	1725	1/1	0.92	0.35	68,68,68,68	0
58	MG	1a	1630	1/1	0.92	0.25	59,59,59,59	0
58	MG	2a	1732	1/1	0.92	0.14	62,62,62,62	0
58	MG	1A	3961	1/1	0.92	0.11	51,51,51,51	0
58	MG	1A	3965	1/1	0.92	0.08	30,30,30,30	0
58	MG	1A	3837	1/1	0.92	0.14	42,42,42,42	0
58	MG	1A	3967	1/1	0.92	0.07	25,25,25,25	0
58	MG	2a	1742	1/1	0.92	0.12	47,47,47,47	0
58	MG	2A	3047	1/1	0.92	0.07	40,40,40,40	0
58	MG	2A	3354	1/1	0.92	0.20	61,61,61,61	0
58	MG	1a	1645	1/1	0.92	0.09	51,51,51,51	0
58	MG	2a	1750	1/1	0.92	0.09	51,51,51,51	0
58	MG	2A	3055	1/1	0.92	0.23	57,57,57,57	0
58	MG	1A	4088	1/1	0.92	0.12	49,49,49,49	0
58	MG	2A	3358	1/1	0.92	0.11	48,48,48,48	0
58	MG	2A	3059	1/1	0.92	0.10	56,56,56,56	0
58	MG	2A	3060	1/1	0.92	0.16	49,49,49,49	0
58	MG	2A	3732	1/1	0.92	0.12	55,55,55,55	0
58	MG	2a	1763	1/1	0.92	0.10	48,48,48,48	0
58	MG	1A	3974	1/1	0.92	0.21	51,51,51,51	0
58	MG	2A	3366	1/1	0.92	0.29	43,43,43,43	0
58	MG	1A	3118	1/1	0.92	0.13	37,37,37,37	0
58	MG	2a	1777	1/1	0.92	0.13	56,56,56,56	0
58	MG	2A	3080	1/1	0.92	0.10	43,43,43,43	0
58	MG	2A	3372	1/1	0.92	0.09	43,43,43,43	0
58	MG	1A	3469	1/1	0.92	0.13	51,51,51,51	0
58	MG	1A	3313	1/1	0.92	0.10	36,36,36,36	0
58	MG	2A	3386	1/1	0.92	0.10	51,51,51,51	0
58	MG	2a	1791	1/1	0.92	0.17	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3982	1/1	0.92	0.09	31,31,31,31	0
58	MG	2a	1793	1/1	0.92	0.13	53,53,53,53	0
58	MG	2A	3751	1/1	0.92	0.11	47,47,47,47	0
58	MG	1B	206	1/1	0.92	0.10	40,40,40,40	0
58	MG	2A	3756	1/1	0.92	0.08	37,37,37,37	0
58	MG	1A	3844	1/1	0.92	0.12	45,45,45,45	0
58	MG	2a	1805	1/1	0.92	0.11	56,56,56,56	0
58	MG	1A	3125	1/1	0.92	0.08	31,31,31,31	0
58	MG	2a	1809	1/1	0.92	0.23	43,43,43,43	0
58	MG	2A	3760	1/1	0.92	0.08	48,48,48,48	0
58	MG	2a	1813	1/1	0.92	0.09	42,42,42,42	0
58	MG	1B	210	1/1	0.92	0.10	50,50,50,50	0
58	MG	2A	3405	1/1	0.92	0.07	63,63,63,63	0
58	MG	2A	3407	1/1	0.92	0.09	58,58,58,58	0
58	MG	2a	1818	1/1	0.92	0.13	54,54,54,54	0
58	MG	2A	3101	1/1	0.92	0.13	53,53,53,53	0
58	MG	1A	3376	1/1	0.92	0.10	27,27,27,27	0
58	MG	1B	222	1/1	0.92	0.09	40,40,40,40	0
58	MG	2a	1824	1/1	0.92	0.15	49,49,49,49	0
58	MG	2A	3790	1/1	0.92	0.10	59,59,59,59	0
58	MG	2A	3417	1/1	0.92	0.14	34,34,34,34	0
58	MG	1B	223	1/1	0.92	0.12	41,41,41,41	0
58	MG	2A	3115	1/1	0.92	0.17	46,46,46,46	0
58	MG	1A	3618	1/1	0.92	0.11	48,48,48,48	0
58	MG	1A	3498	1/1	0.92	0.10	44,44,44,44	0
58	MG	2A	3125	1/1	0.92	0.06	41,41,41,41	0
58	MG	2a	1834	1/1	0.92	0.19	52,52,52,52	0
58	MG	2A	3439	1/1	0.92	0.10	41,41,41,41	0
58	MG	1A	3735	1/1	0.92	0.15	63,63,63,63	0
58	MG	1a	1693	1/1	0.92	0.15	46,46,46,46	0
58	MG	1A	3378	1/1	0.92	0.09	36,36,36,36	0
58	MG	2l	201	1/1	0.92	0.14	61,61,61,61	0
58	MG	2A	3155	1/1	0.92	0.19	44,44,44,44	0
58	MG	2A	3457	1/1	0.92	0.14	44,44,44,44	0
58	MG	2A	3159	1/1	0.92	0.08	46,46,46,46	0
58	MG	2q	202	1/1	0.92	0.08	55,55,55,55	0
58	MG	1A	3316	1/1	0.92	0.17	45,45,45,45	0
58	MG	2A	3817	1/1	0.92	0.09	26,26,26,26	0
58	MG	2A	3818	1/1	0.92	0.10	34,34,34,34	0
58	MG	1A	3869	1/1	0.92	0.11	39,39,39,39	0
58	MG	1a	1703	1/1	0.92	0.10	45,45,45,45	0
58	MG	2A	3825	1/1	0.92	0.08	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3744	1/1	0.92	0.15	37,37,37,37	0
58	MG	2A	3830	1/1	0.92	0.09	49,49,49,49	0
58	MG	1B	235	1/1	0.92	0.10	57,57,57,57	0
58	MG	1A	3396	1/1	0.92	0.11	48,48,48,48	0
58	MG	1A	3992	1/1	0.93	0.14	35,35,35,35	0
58	MG	1a	1695	1/1	0.93	0.22	56,56,56,56	0
58	MG	2A	3113	1/1	0.93	0.14	54,54,54,54	0
58	MG	2A	3419	1/1	0.93	0.22	44,44,44,44	0
58	MG	1B	234	1/1	0.93	0.09	46,46,46,46	0
58	MG	2A	3122	1/1	0.93	0.07	43,43,43,43	0
58	MG	2A	3424	1/1	0.93	0.13	51,51,51,51	0
58	MG	1a	1697	1/1	0.93	0.14	46,46,46,46	0
58	MG	2A	3427	1/1	0.93	0.29	53,53,53,53	0
58	MG	2A	3428	1/1	0.93	0.21	48,48,48,48	0
58	MG	1a	1698	1/1	0.93	0.22	45,45,45,45	0
58	MG	2A	3431	1/1	0.93	0.23	55,55,55,55	0
58	MG	2A	3434	1/1	0.93	0.14	50,50,50,50	0
58	MG	2A	3436	1/1	0.93	0.09	46,46,46,46	0
58	MG	1a	1699	1/1	0.93	0.20	49,49,49,49	0
58	MG	2A	3126	1/1	0.93	0.07	39,39,39,39	0
58	MG	2A	3852	1/1	0.93	0.11	52,52,52,52	0
58	MG	2A	3441	1/1	0.93	0.26	50,50,50,50	0
58	MG	1A	3849	1/1	0.93	0.20	58,58,58,58	0
58	MG	2A	3129	1/1	0.93	0.12	50,50,50,50	0
58	MG	2A	3132	1/1	0.93	0.08	61,61,61,61	0
58	MG	2A	3861	1/1	0.93	0.09	37,37,37,37	0
58	MG	1A	3731	1/1	0.93	0.09	41,41,41,41	0
58	MG	2A	3146	1/1	0.93	0.09	41,41,41,41	0
58	MG	2A	3866	1/1	0.93	0.10	64,64,64,64	0
58	MG	2A	3867	1/1	0.93	0.15	46,46,46,46	0
58	MG	2A	3870	1/1	0.93	0.09	50,50,50,50	0
58	MG	1A	3325	1/1	0.93	0.11	46,46,46,46	0
58	MG	2A	3460	1/1	0.93	0.17	51,51,51,51	0
58	MG	1D	311	1/1	0.93	0.12	35,35,35,35	0
58	MG	2A	3156	1/1	0.93	0.08	26,26,26,26	0
58	MG	2A	3468	1/1	0.93	0.12	50,50,50,50	0
58	MG	2B	209	1/1	0.93	0.12	49,49,49,49	0
58	MG	2B	210	1/1	0.93	0.18	67,67,67,67	0
58	MG	1A	3082	1/1	0.93	0.12	37,37,37,37	0
58	MG	1A	3629	1/1	0.93	0.07	27,27,27,27	0
58	MG	2A	3474	1/1	0.93	0.14	44,44,44,44	0
58	MG	1A	3739	1/1	0.93	0.04	12,12,12,12	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1710	1/1	0.93	0.13	50,50,50,50	0
58	MG	2A	3167	1/1	0.93	0.14	38,38,38,38	0
58	MG	2D	302	1/1	0.93	0.21	52,52,52,52	0
58	MG	1A	3361	1/1	0.93	0.09	41,41,41,41	0
58	MG	2A	3489	1/1	0.93	0.16	58,58,58,58	0
58	MG	1E	313	1/1	0.93	0.06	40,40,40,40	0
58	MG	1A	3866	1/1	0.93	0.10	37,37,37,37	0
58	MG	1F	311	1/1	0.93	0.13	46,46,46,46	0
58	MG	1a	1722	1/1	0.93	0.18	58,58,58,58	0
58	MG	2F	301	1/1	0.93	0.11	40,40,40,40	0
58	MG	1a	1723	1/1	0.93	0.14	55,55,55,55	0
58	MG	1F	312	1/1	0.93	0.18	29,29,29,29	0
58	MG	1a	1726	1/1	0.93	0.13	46,46,46,46	0
58	MG	1a	1729	1/1	0.93	0.12	45,45,45,45	0
58	MG	2R	201	1/1	0.93	0.09	43,43,43,43	0
58	MG	2A	3510	1/1	0.93	0.09	36,36,36,36	0
58	MG	2A	3193	1/1	0.93	0.25	58,58,58,58	0
58	MG	1G	202	1/1	0.93	0.09	44,44,44,44	0
58	MG	2X	101	1/1	0.93	0.11	62,62,62,62	0
58	MG	2Y	201	1/1	0.93	0.12	47,47,47,47	0
58	MG	1A	3741	1/1	0.93	0.08	44,44,44,44	0
58	MG	20	102	1/1	0.93	0.13	50,50,50,50	0
58	MG	23	101	1/1	0.93	0.15	63,63,63,63	0
58	MG	1N	202	1/1	0.93	0.09	38,38,38,38	0
58	MG	25	101	1/1	0.93	0.19	57,57,57,57	0
58	MG	2A	3200	1/1	0.93	0.08	42,42,42,42	0
58	MG	25	103	1/1	0.93	0.07	39,39,39,39	0
58	MG	1A	3871	1/1	0.93	0.11	47,47,47,47	0
58	MG	1A	3362	1/1	0.93	0.12	53,53,53,53	0
58	MG	1A	3873	1/1	0.93	0.09	40,40,40,40	0
58	MG	27	103	1/1	0.93	0.13	40,40,40,40	0
58	MG	1A	3531	1/1	0.93	0.09	33,33,33,33	0
58	MG	2A	3208	1/1	0.93	0.08	48,48,48,48	0
58	MG	1A	4015	1/1	0.93	0.10	23,23,23,23	0
58	MG	2A	3532	1/1	0.93	0.10	27,27,27,27	0
58	MG	1A	3638	1/1	0.93	0.05	19,19,19,19	0
58	MG	1a	1753	1/1	0.93	0.16	53,53,53,53	0
58	MG	2A	3542	1/1	0.93	0.12	44,44,44,44	0
58	MG	2A	3546	1/1	0.93	0.13	45,45,45,45	0
58	MG	2a	1609	1/1	0.93	0.17	51,51,51,51	0
58	MG	1A	3644	1/1	0.93	0.07	32,32,32,32	0
58	MG	2A	3550	1/1	0.93	0.10	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3302	1/1	0.93	0.18	49,49,49,49	0
58	MG	1T	201	1/1	0.93	0.13	54,54,54,54	0
58	MG	1A	3365	1/1	0.93	0.18	52,52,52,52	0
58	MG	1A	3763	1/1	0.93	0.16	50,50,50,50	0
58	MG	2A	3566	1/1	0.93	0.09	54,54,54,54	0
58	MG	1a	1763	1/1	0.93	0.09	58,58,58,58	0
58	MG	1A	3764	1/1	0.93	0.10	44,44,44,44	0
58	MG	2a	1623	1/1	0.93	0.12	48,48,48,48	0
58	MG	2A	3228	1/1	0.93	0.09	50,50,50,50	0
58	MG	1A	3249	1/1	0.93	0.15	51,51,51,51	0
58	MG	1a	1769	1/1	0.93	0.07	45,45,45,45	0
58	MG	2A	3580	1/1	0.93	0.10	32,32,32,32	0
58	MG	2A	3245	1/1	0.93	0.11	58,58,58,58	0
58	MG	2A	3584	1/1	0.93	0.09	49,49,49,49	0
58	MG	1V	204	1/1	0.93	0.07	40,40,40,40	0
58	MG	2a	1634	1/1	0.93	0.11	68,68,68,68	0
58	MG	1a	1773	1/1	0.93	0.10	58,58,58,58	0
58	MG	2A	3248	1/1	0.93	0.11	68,68,68,68	0
58	MG	2A	3249	1/1	0.93	0.14	64,64,64,64	0
58	MG	1a	1775	1/1	0.93	0.08	65,65,65,65	0
58	MG	2a	1643	1/1	0.93	0.12	60,60,60,60	0
58	MG	1A	3654	1/1	0.93	0.06	21,21,21,21	0
58	MG	1A	3267	1/1	0.93	0.15	44,44,44,44	0
58	MG	2a	1647	1/1	0.93	0.07	40,40,40,40	0
58	MG	1A	3661	1/1	0.93	0.10	38,38,38,38	0
58	MG	1A	3456	1/1	0.93	0.18	41,41,41,41	0
58	MG	2a	1654	1/1	0.93	0.10	45,45,45,45	0
58	MG	2A	3607	1/1	0.93	0.11	46,46,46,46	0
58	MG	2A	3255	1/1	0.93	0.14	51,51,51,51	0
58	MG	2A	3258	1/1	0.93	0.07	38,38,38,38	0
58	MG	1A	3900	1/1	0.93	0.07	19,19,19,19	0
58	MG	2A	3260	1/1	0.93	0.07	45,45,45,45	0
58	MG	2A	3267	1/1	0.93	0.11	49,49,49,49	0
58	MG	1A	3271	1/1	0.93	0.15	51,51,51,51	0
58	MG	1A	3384	1/1	0.93	0.21	37,37,37,37	0
58	MG	2a	1665	1/1	0.93	0.19	54,54,54,54	0
58	MG	2A	3274	1/1	0.93	0.20	49,49,49,49	0
58	MG	2A	3623	1/1	0.93	0.10	39,39,39,39	0
58	MG	2A	3275	1/1	0.93	0.08	47,47,47,47	0
58	MG	2A	3626	1/1	0.93	0.14	57,57,57,57	0
58	MG	1A	3385	1/1	0.93	0.15	45,45,45,45	0
58	MG	1A	3912	1/1	0.93	0.08	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3551	1/1	0.93	0.19	55,55,55,55	0
58	MG	2a	1686	1/1	0.93	0.10	52,52,52,52	0
58	MG	1A	3338	1/1	0.93	0.11	45,45,45,45	0
58	MG	1A	3919	1/1	0.93	0.12	22,22,22,22	0
58	MG	2a	1689	1/1	0.93	0.17	60,60,60,60	0
58	MG	2a	1698	1/1	0.93	0.09	61,61,61,61	0
58	MG	2A	3635	1/1	0.93	0.09	37,37,37,37	0
58	MG	2a	1703	1/1	0.93	0.10	55,55,55,55	0
58	MG	1A	3139	1/1	0.93	0.13	50,50,50,50	0
58	MG	1A	3294	1/1	0.93	0.11	38,38,38,38	0
58	MG	2A	3648	1/1	0.93	0.13	47,47,47,47	0
58	MG	1A	3791	1/1	0.93	0.07	50,50,50,50	0
58	MG	1A	3926	1/1	0.93	0.08	26,26,26,26	0
58	MG	2a	1711	1/1	0.93	0.17	53,53,53,53	0
58	MG	1l	201	1/1	0.93	0.10	62,62,62,62	0
58	MG	2A	3656	1/1	0.93	0.13	54,54,54,54	0
58	MG	2a	1714	1/1	0.93	0.08	47,47,47,47	0
58	MG	2A	3659	1/1	0.93	0.08	47,47,47,47	0
58	MG	2a	1720	1/1	0.93	0.11	51,51,51,51	0
58	MG	1a	1606	1/1	0.93	0.12	47,47,47,47	0
58	MG	1n	102	1/1	0.93	0.08	44,44,44,44	0
58	MG	1A	3792	1/1	0.93	0.07	29,29,29,29	0
58	MG	1w	102	1/1	0.93	0.09	50,50,50,50	0
58	MG	2A	3296	1/1	0.93	0.07	43,43,43,43	0
58	MG	1A	3684	1/1	0.93	0.05	14,14,14,14	0
58	MG	1A	3123	1/1	0.93	0.17	33,33,33,33	0
58	MG	2A	3677	1/1	0.93	0.09	56,56,56,56	0
58	MG	2A	3300	1/1	0.93	0.07	59,59,59,59	0
58	MG	1a	1615	1/1	0.93	0.09	47,47,47,47	0
58	MG	1a	1616	1/1	0.93	0.20	61,61,61,61	0
58	MG	1x	103	1/1	0.93	0.12	53,53,53,53	0
58	MG	2a	1746	1/1	0.93	0.24	51,51,51,51	0
58	MG	2A	3683	1/1	0.93	0.13	56,56,56,56	0
58	MG	1A	3062	1/1	0.93	0.07	36,36,36,36	0
58	MG	1x	106	1/1	0.93	0.16	50,50,50,50	0
58	MG	1A	3943	1/1	0.93	0.08	51,51,51,51	0
58	MG	1A	3947	1/1	0.93	0.06	46,46,46,46	0
58	MG	1a	1624	1/1	0.93	0.16	49,49,49,49	0
58	MG	2a	1753	1/1	0.93	0.08	58,58,58,58	0
58	MG	2A	3315	1/1	0.93	0.11	62,62,62,62	0
58	MG	2A	3316	1/1	0.93	0.13	58,58,58,58	0
58	MG	1A	3802	1/1	0.93	0.07	14,14,14,14	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3702	1/1	0.93	0.10	51,51,51,51	0
58	MG	1A	3694	1/1	0.93	0.06	20,20,20,20	0
58	MG	2a	1765	1/1	0.93	0.09	61,61,61,61	0
58	MG	2A	3004	1/1	0.93	0.11	35,35,35,35	0
58	MG	1A	3950	1/1	0.93	0.08	41,41,41,41	0
58	MG	2A	3706	1/1	0.93	0.12	51,51,51,51	0
58	MG	2A	3006	1/1	0.93	0.16	47,47,47,47	0
58	MG	2A	3326	1/1	0.93	0.08	49,49,49,49	0
58	MG	1A	3479	1/1	0.93	0.07	49,49,49,49	0
58	MG	1A	3807	1/1	0.93	0.08	35,35,35,35	0
58	MG	2a	1787	1/1	0.93	0.11	57,57,57,57	0
58	MG	1A	3481	1/1	0.93	0.11	41,41,41,41	0
58	MG	2A	3020	1/1	0.93	0.11	55,55,55,55	0
58	MG	1A	3486	1/1	0.93	0.17	35,35,35,35	0
58	MG	2A	3341	1/1	0.93	0.21	62,62,62,62	0
58	MG	2A	3024	1/1	0.93	0.07	42,42,42,42	0
58	MG	2a	1794	1/1	0.93	0.11	54,54,54,54	0
58	MG	2A	3029	1/1	0.93	0.16	54,54,54,54	0
58	MG	1A	3599	1/1	0.93	0.15	45,45,45,45	0
58	MG	2a	1797	1/1	0.93	0.14	49,49,49,49	0
58	MG	2a	1798	1/1	0.93	0.14	47,47,47,47	0
58	MG	2A	3724	1/1	0.93	0.10	35,35,35,35	0
58	MG	2a	1801	1/1	0.93	0.11	57,57,57,57	0
58	MG	1A	3709	1/1	0.93	0.08	21,21,21,21	0
58	MG	2a	1804	1/1	0.93	0.15	51,51,51,51	0
58	MG	2A	3348	1/1	0.93	0.13	46,46,46,46	0
58	MG	2A	3034	1/1	0.93	0.10	34,34,34,34	0
58	MG	1A	3711	1/1	0.93	0.07	34,34,34,34	0
58	MG	1A	4095	1/1	0.93	0.22	49,49,49,49	0
58	MG	1a	1660	1/1	0.93	0.07	48,48,48,48	0
58	MG	1A	3490	1/1	0.93	0.10	39,39,39,39	0
58	MG	1A	3493	1/1	0.93	0.08	37,37,37,37	0
58	MG	2A	3052	1/1	0.93	0.06	39,39,39,39	0
58	MG	1A	3346	1/1	0.93	0.13	49,49,49,49	0
58	MG	1A	3606	1/1	0.93	0.08	29,29,29,29	0
58	MG	1A	3976	1/1	0.93	0.09	47,47,47,47	0
58	MG	1A	3840	1/1	0.93	0.09	34,34,34,34	0
58	MG	2A	3064	1/1	0.93	0.09	56,56,56,56	0
58	MG	1A	3500	1/1	0.93	0.22	46,46,46,46	0
58	MG	2A	3367	1/1	0.93	0.10	52,52,52,52	0
58	MG	2A	3757	1/1	0.93	0.10	46,46,46,46	0
58	MG	1A	3612	1/1	0.93	0.10	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3071	1/1	0.93	0.13	44,44,44,44	0
58	MG	2A	3074	1/1	0.93	0.09	53,53,53,53	0
58	MG	2A	3380	1/1	0.93	0.19	43,43,43,43	0
58	MG	2A	3381	1/1	0.93	0.23	54,54,54,54	0
58	MG	1A	3412	1/1	0.93	0.24	51,51,51,51	0
58	MG	1B	225	1/1	0.93	0.07	41,41,41,41	0
58	MG	2A	3773	1/1	0.93	0.10	44,44,44,44	0
58	MG	2A	3781	1/1	0.93	0.10	62,62,62,62	0
58	MG	2A	3783	1/1	0.93	0.08	54,54,54,54	0
58	MG	2A	3784	1/1	0.93	0.10	43,43,43,43	0
58	MG	2n	101	1/1	0.93	0.13	61,61,61,61	0
58	MG	1A	3322	1/1	0.93	0.10	51,51,51,51	0
58	MG	2A	3389	1/1	0.93	0.08	53,53,53,53	0
58	MG	1a	1683	1/1	0.93	0.17	59,59,59,59	0
58	MG	2A	3095	1/1	0.93	0.09	36,36,36,36	0
58	MG	2A	3794	1/1	0.93	0.09	30,30,30,30	0
58	MG	1A	3845	1/1	0.93	0.14	51,51,51,51	0
58	MG	1a	1687	1/1	0.93	0.07	49,49,49,49	0
58	MG	2A	3398	1/1	0.93	0.13	48,48,48,48	0
58	MG	1a	1689	1/1	0.93	0.22	51,51,51,51	0
58	MG	2A	3400	1/1	0.93	0.10	60,60,60,60	0
58	MG	1A	3323	1/1	0.93	0.10	32,32,32,32	0
58	MG	1A	3847	1/1	0.93	0.07	35,35,35,35	0
58	MG	2x	107	1/1	0.93	0.13	32,32,32,32	0
58	MG	1A	3848	1/1	0.93	0.06	27,27,27,27	0
58	MG	1A	3497	1/1	0.94	0.11	36,36,36,36	0
58	MG	1A	3770	1/1	0.94	0.09	34,34,34,34	0
58	MG	2A	3416	1/1	0.94	0.20	48,48,48,48	0
58	MG	2A	3821	1/1	0.94	0.06	31,31,31,31	0
58	MG	1A	3398	1/1	0.94	0.16	49,49,49,49	0
58	MG	1A	3641	1/1	0.94	0.08	45,45,45,45	0
58	MG	1a	1684	1/1	0.94	0.21	51,51,51,51	0
58	MG	2A	3110	1/1	0.94	0.07	44,44,44,44	0
58	MG	1A	3499	1/1	0.94	0.11	39,39,39,39	0
58	MG	2A	3833	1/1	0.94	0.07	31,31,31,31	0
58	MG	1A	4094	1/1	0.94	0.09	38,38,38,38	0
58	MG	2A	3839	1/1	0.94	0.09	52,52,52,52	0
58	MG	1A	3931	1/1	0.94	0.08	48,48,48,48	0
58	MG	2A	3121	1/1	0.94	0.10	66,66,66,66	0
58	MG	2A	3844	1/1	0.94	0.06	33,33,33,33	0
58	MG	2A	3845	1/1	0.94	0.09	39,39,39,39	0
58	MG	2A	3847	1/1	0.94	0.12	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	4096	1/1	0.94	0.09	52,52,52,52	0
58	MG	1A	3268	1/1	0.94	0.07	37,37,37,37	0
58	MG	1B	201	1/1	0.94	0.12	30,30,30,30	0
58	MG	1B	204	1/1	0.94	0.18	48,48,48,48	0
58	MG	1a	1694	1/1	0.94	0.18	47,47,47,47	0
58	MG	1A	3933	1/1	0.94	0.07	39,39,39,39	0
58	MG	2A	3440	1/1	0.94	0.22	43,43,43,43	0
58	MG	1A	3647	1/1	0.94	0.09	41,41,41,41	0
58	MG	2A	3131	1/1	0.94	0.08	48,48,48,48	0
58	MG	1A	3501	1/1	0.94	0.14	59,59,59,59	0
58	MG	2A	3445	1/1	0.94	0.17	49,49,49,49	0
58	MG	2A	3868	1/1	0.94	0.07	40,40,40,40	0
58	MG	1A	3939	1/1	0.94	0.07	51,51,51,51	0
58	MG	2A	3450	1/1	0.94	0.17	56,56,56,56	0
58	MG	2A	3141	1/1	0.94	0.12	52,52,52,52	0
58	MG	2A	3145	1/1	0.94	0.20	58,58,58,58	0
58	MG	1B	212	1/1	0.94	0.10	51,51,51,51	0
58	MG	2A	3147	1/1	0.94	0.20	36,36,36,36	0
58	MG	2B	208	1/1	0.94	0.09	43,43,43,43	0
58	MG	2A	3149	1/1	0.94	0.12	49,49,49,49	0
58	MG	2A	3150	1/1	0.94	0.12	41,41,41,41	0
58	MG	1A	3063	1/1	0.94	0.10	37,37,37,37	0
58	MG	1B	215	1/1	0.94	0.07	39,39,39,39	0
58	MG	1a	1702	1/1	0.94	0.13	41,41,41,41	0
58	MG	1B	219	1/1	0.94	0.12	34,34,34,34	0
58	MG	1A	3140	1/1	0.94	0.05	21,21,21,21	0
58	MG	2B	219	1/1	0.94	0.13	52,52,52,52	0
58	MG	1A	3785	1/1	0.94	0.09	26,26,26,26	0
58	MG	2A	3483	1/1	0.94	0.10	41,41,41,41	0
58	MG	1A	3406	1/1	0.94	0.08	45,45,45,45	0
58	MG	2D	306	1/1	0.94	0.21	29,29,29,29	0
58	MG	1a	1707	1/1	0.94	0.08	32,32,32,32	0
58	MG	2A	3169	1/1	0.94	0.08	44,44,44,44	0
58	MG	2E	303	1/1	0.94	0.19	59,59,59,59	0
58	MG	1A	3789	1/1	0.94	0.08	38,38,38,38	0
58	MG	1A	3407	1/1	0.94	0.08	34,34,34,34	0
58	MG	2E	308	1/1	0.94	0.08	33,33,33,33	0
58	MG	1A	3273	1/1	0.94	0.11	54,54,54,54	0
58	MG	2A	3493	1/1	0.94	0.11	55,55,55,55	0
58	MG	2F	302	1/1	0.94	0.16	53,53,53,53	0
58	MG	2F	303	1/1	0.94	0.08	48,48,48,48	0
58	MG	1A	3520	1/1	0.94	0.16	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3182	1/1	0.94	0.13	44,44,44,44	0
58	MG	2O	201	1/1	0.94	0.12	45,45,45,45	0
58	MG	2A	3500	1/1	0.94	0.13	46,46,46,46	0
58	MG	1A	3666	1/1	0.94	0.07	24,24,24,24	0
58	MG	1A	3524	1/1	0.94	0.08	41,41,41,41	0
58	MG	2T	201	1/1	0.94	0.08	52,52,52,52	0
58	MG	1a	1720	1/1	0.94	0.13	53,53,53,53	0
58	MG	2V	202	1/1	0.94	0.13	60,60,60,60	0
58	MG	1A	3668	1/1	0.94	0.05	18,18,18,18	0
58	MG	1A	3670	1/1	0.94	0.08	48,48,48,48	0
58	MG	1a	1724	1/1	0.94	0.13	50,50,50,50	0
58	MG	1A	3525	1/1	0.94	0.09	59,59,59,59	0
58	MG	2A	3197	1/1	0.94	0.14	52,52,52,52	0
58	MG	1A	3141	1/1	0.94	0.21	20,20,20,20	0
58	MG	1A	3231	1/1	0.94	0.10	19,19,19,19	0
58	MG	1a	1730	1/1	0.94	0.08	40,40,40,40	0
58	MG	1a	1731	1/1	0.94	0.06	54,54,54,54	0
58	MG	2A	3202	1/1	0.94	0.06	34,34,34,34	0
58	MG	1a	1732	1/1	0.94	0.07	43,43,43,43	0
58	MG	1A	3968	1/1	0.94	0.09	55,55,55,55	0
58	MG	1A	3970	1/1	0.94	0.06	39,39,39,39	0
58	MG	1A	3971	1/1	0.94	0.10	16,16,16,16	0
58	MG	27	102	1/1	0.94	0.09	36,36,36,36	0
58	MG	2A	3537	1/1	0.94	0.08	24,24,24,24	0
58	MG	2A	3539	1/1	0.94	0.08	46,46,46,46	0
58	MG	1A	3235	1/1	0.94	0.09	46,46,46,46	0
58	MG	2A	3211	1/1	0.94	0.08	51,51,51,51	0
58	MG	2a	1602	1/1	0.94	0.16	60,60,60,60	0
58	MG	1A	3817	1/1	0.94	0.15	41,41,41,41	0
58	MG	1E	312	1/1	0.94	0.10	28,28,28,28	0
58	MG	2A	3548	1/1	0.94	0.07	38,38,38,38	0
58	MG	1A	3236	1/1	0.94	0.08	48,48,48,48	0
58	MG	2A	3551	1/1	0.94	0.09	39,39,39,39	0
58	MG	2a	1608	1/1	0.94	0.15	57,57,57,57	0
58	MG	2A	3217	1/1	0.94	0.06	36,36,36,36	0
58	MG	1A	3122	1/1	0.94	0.06	30,30,30,30	0
58	MG	1A	3425	1/1	0.94	0.06	41,41,41,41	0
58	MG	2A	3564	1/1	0.94	0.06	17,17,17,17	0
58	MG	1A	3350	1/1	0.94	0.13	31,31,31,31	0
58	MG	2A	3222	1/1	0.94	0.20	50,50,50,50	0
58	MG	1A	3433	1/1	0.94	0.08	54,54,54,54	0
58	MG	1A	3986	1/1	0.94	0.07	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3573	1/1	0.94	0.08	36,36,36,36	0
58	MG	1A	3696	1/1	0.94	0.08	28,28,28,28	0
58	MG	1N	204	1/1	0.94	0.07	43,43,43,43	0
58	MG	2A	3578	1/1	0.94	0.13	62,62,62,62	0
58	MG	2A	3230	1/1	0.94	0.09	41,41,41,41	0
58	MG	2A	3231	1/1	0.94	0.24	47,47,47,47	0
58	MG	2A	3234	1/1	0.94	0.15	33,33,33,33	0
58	MG	2A	3237	1/1	0.94	0.14	54,54,54,54	0
58	MG	2A	3239	1/1	0.94	0.16	41,41,41,41	0
58	MG	2A	3586	1/1	0.94	0.11	21,21,21,21	0
58	MG	1A	3352	1/1	0.94	0.24	50,50,50,50	0
58	MG	2a	1636	1/1	0.94	0.09	70,70,70,70	0
58	MG	1A	3438	1/1	0.94	0.12	27,27,27,27	0
58	MG	1O	204	1/1	0.94	0.09	49,49,49,49	0
58	MG	2a	1640	1/1	0.94	0.14	48,48,48,48	0
58	MG	1A	3990	1/1	0.94	0.07	20,20,20,20	0
58	MG	2A	3597	1/1	0.94	0.16	43,43,43,43	0
58	MG	1a	1767	1/1	0.94	0.13	47,47,47,47	0
58	MG	1A	3701	1/1	0.94	0.09	21,21,21,21	0
58	MG	1A	3240	1/1	0.94	0.11	20,20,20,20	0
58	MG	1A	3441	1/1	0.94	0.12	37,37,37,37	0
58	MG	1A	3706	1/1	0.94	0.07	17,17,17,17	0
58	MG	1a	1776	1/1	0.94	0.13	52,52,52,52	0
58	MG	1a	1777	1/1	0.94	0.10	63,63,63,63	0
58	MG	1a	1780	1/1	0.94	0.07	63,63,63,63	0
58	MG	1A	3708	1/1	0.94	0.06	22,22,22,22	0
58	MG	2A	3615	1/1	0.94	0.08	44,44,44,44	0
58	MG	1A	3443	1/1	0.94	0.08	51,51,51,51	0
58	MG	1a	1784	1/1	0.94	0.07	47,47,47,47	0
58	MG	1A	3566	1/1	0.94	0.17	46,46,46,46	0
58	MG	2A	3263	1/1	0.94	0.10	58,58,58,58	0
58	MG	2A	3265	1/1	0.94	0.12	53,53,53,53	0
58	MG	1a	1787	1/1	0.94	0.09	61,61,61,61	0
58	MG	1A	3354	1/1	0.94	0.12	49,49,49,49	0
58	MG	1a	1792	1/1	0.94	0.11	42,42,42,42	0
58	MG	2A	3270	1/1	0.94	0.07	71,71,71,71	0
58	MG	2A	3272	1/1	0.94	0.10	62,62,62,62	0
58	MG	1U	204	1/1	0.94	0.18	42,42,42,42	0
58	MG	1a	1796	1/1	0.94	0.07	46,46,46,46	0
58	MG	1a	1798	1/1	0.94	0.07	65,65,65,65	0
58	MG	2A	3641	1/1	0.94	0.08	35,35,35,35	0
58	MG	2A	3642	1/1	0.94	0.07	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3715	1/1	0.94	0.09	33,33,33,33	0
58	MG	1A	3850	1/1	0.94	0.07	31,31,31,31	0
58	MG	2a	1692	1/1	0.94	0.17	48,48,48,48	0
58	MG	2a	1695	1/1	0.94	0.15	57,57,57,57	0
58	MG	2A	3282	1/1	0.94	0.10	51,51,51,51	0
58	MG	1A	4007	1/1	0.94	0.09	60,60,60,60	0
58	MG	1W	201	1/1	0.94	0.09	37,37,37,37	0
58	MG	1A	3447	1/1	0.94	0.13	29,29,29,29	0
58	MG	1A	3452	1/1	0.94	0.20	41,41,41,41	0
58	MG	1A	3310	1/1	0.94	0.23	48,48,48,48	0
58	MG	1A	3856	1/1	0.94	0.13	44,44,44,44	0
58	MG	1A	3589	1/1	0.94	0.07	37,37,37,37	0
58	MG	2a	1710	1/1	0.94	0.15	56,56,56,56	0
58	MG	1Z	302	1/1	0.94	0.07	37,37,37,37	0
58	MG	1f	201	1/1	0.94	0.14	42,42,42,42	0
58	MG	2A	3669	1/1	0.94	0.07	27,27,27,27	0
58	MG	1A	3860	1/1	0.94	0.07	29,29,29,29	0
58	MG	2a	1715	1/1	0.94	0.09	54,54,54,54	0
58	MG	10	103	1/1	0.94	0.09	38,38,38,38	0
58	MG	1A	3247	1/1	0.94	0.07	32,32,32,32	0
58	MG	2A	3297	1/1	0.94	0.14	48,48,48,48	0
58	MG	10	108	1/1	0.94	0.12	42,42,42,42	0
58	MG	1A	3722	1/1	0.94	0.04	10,10,10,10	0
58	MG	1w	101	1/1	0.94	0.31	67,67,67,67	0
58	MG	2A	3301	1/1	0.94	0.12	56,56,56,56	0
58	MG	2a	1727	1/1	0.94	0.17	57,57,57,57	0
58	MG	14	101	1/1	0.94	0.06	51,51,51,51	0
58	MG	2A	3304	1/1	0.94	0.10	44,44,44,44	0
58	MG	1A	3198	1/1	0.94	0.21	41,41,41,41	0
58	MG	17	104	1/1	0.94	0.05	36,36,36,36	0
58	MG	1A	3726	1/1	0.94	0.14	40,40,40,40	0
58	MG	2a	1739	1/1	0.94	0.18	50,50,50,50	0
58	MG	1x	101	1/1	0.94	0.23	56,56,56,56	0
58	MG	1A	3314	1/1	0.94	0.22	50,50,50,50	0
58	MG	2a	1743	1/1	0.94	0.24	43,43,43,43	0
58	MG	1A	3597	1/1	0.94	0.12	46,46,46,46	0
58	MG	2A	3698	1/1	0.94	0.08	55,55,55,55	0
58	MG	2A	3700	1/1	0.94	0.09	34,34,34,34	0
58	MG	1A	3461	1/1	0.94	0.08	49,49,49,49	0
58	MG	1x	105	1/1	0.94	0.13	53,53,53,53	0
58	MG	1A	3463	1/1	0.94	0.13	51,51,51,51	0
58	MG	1A	3464	1/1	0.94	0.17	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3603	1/1	0.94	0.13	46,46,46,46	0
58	MG	1a	1605	1/1	0.94	0.07	42,42,42,42	0
58	MG	2A	3001	1/1	0.94	0.23	51,51,51,51	0
58	MG	1A	3878	1/1	0.94	0.13	20,20,20,20	0
58	MG	1A	3152	1/1	0.94	0.21	39,39,39,39	0
58	MG	2a	1760	1/1	0.94	0.08	56,56,56,56	0
58	MG	1A	3250	1/1	0.94	0.08	50,50,50,50	0
58	MG	2A	3331	1/1	0.94	0.11	53,53,53,53	0
58	MG	1A	3162	1/1	0.94	0.06	39,39,39,39	0
58	MG	2a	1770	1/1	0.94	0.09	61,61,61,61	0
58	MG	2A	3335	1/1	0.94	0.13	44,44,44,44	0
58	MG	1A	4038	1/1	0.94	0.08	35,35,35,35	0
58	MG	2A	3007	1/1	0.94	0.16	46,46,46,46	0
58	MG	2a	1778	1/1	0.94	0.12	39,39,39,39	0
58	MG	1A	3372	1/1	0.94	0.18	31,31,31,31	0
58	MG	1A	3613	1/1	0.94	0.08	16,16,16,16	0
58	MG	2a	1782	1/1	0.94	0.19	53,53,53,53	0
58	MG	2A	3015	1/1	0.94	0.09	36,36,36,36	0
58	MG	2A	3726	1/1	0.94	0.17	53,53,53,53	0
58	MG	2A	3016	1/1	0.94	0.09	53,53,53,53	0
58	MG	1a	1621	1/1	0.94	0.08	40,40,40,40	0
58	MG	1A	3016	1/1	0.94	0.09	41,41,41,41	0
58	MG	2A	3346	1/1	0.94	0.13	56,56,56,56	0
58	MG	1A	3889	1/1	0.94	0.06	39,39,39,39	0
58	MG	2A	3349	1/1	0.94	0.14	46,46,46,46	0
58	MG	1A	3168	1/1	0.94	0.13	47,47,47,47	0
58	MG	2A	3025	1/1	0.94	0.09	39,39,39,39	0
58	MG	1A	3894	1/1	0.94	0.09	17,17,17,17	0
58	MG	2A	3741	1/1	0.94	0.14	40,40,40,40	0
58	MG	1A	3895	1/1	0.94	0.08	19,19,19,19	0
58	MG	1A	3004	1/1	0.94	0.06	14,14,14,14	0
58	MG	1A	3753	1/1	0.94	0.18	47,47,47,47	0
58	MG	2A	3749	1/1	0.94	0.08	46,46,46,46	0
58	MG	1A	4050	1/1	0.94	0.06	34,34,34,34	0
58	MG	1A	4052	1/1	0.94	0.10	42,42,42,42	0
58	MG	1A	3754	1/1	0.94	0.10	49,49,49,49	0
58	MG	1a	1639	1/1	0.94	0.17	50,50,50,50	0
58	MG	2a	1812	1/1	0.94	0.12	50,50,50,50	0
58	MG	1A	3901	1/1	0.94	0.05	28,28,28,28	0
58	MG	1A	3002	1/1	0.94	0.09	48,48,48,48	0
58	MG	1A	3757	1/1	0.94	0.08	32,32,32,32	0
58	MG	1a	1647	1/1	0.94	0.08	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1657	1/1	0.94	0.24	49,49,49,49	0
58	MG	1A	3905	1/1	0.94	0.08	24,24,24,24	0
58	MG	2A	3063	1/1	0.94	0.10	50,50,50,50	0
58	MG	2a	1822	1/1	0.94	0.11	48,48,48,48	0
58	MG	2A	3373	1/1	0.94	0.23	66,66,66,66	0
58	MG	2A	3771	1/1	0.94	0.12	50,50,50,50	0
58	MG	2A	3374	1/1	0.94	0.20	45,45,45,45	0
58	MG	2A	3775	1/1	0.94	0.07	40,40,40,40	0
58	MG	2A	3776	1/1	0.94	0.14	65,65,65,65	0
58	MG	2A	3375	1/1	0.94	0.08	43,43,43,43	0
58	MG	2A	3377	1/1	0.94	0.17	49,49,49,49	0
58	MG	1A	3760	1/1	0.94	0.09	47,47,47,47	0
58	MG	2A	3785	1/1	0.94	0.07	31,31,31,31	0
58	MG	2A	3065	1/1	0.94	0.19	51,51,51,51	0
58	MG	1A	3266	1/1	0.94	0.14	46,46,46,46	0
58	MG	2f	202	1/1	0.94	0.12	51,51,51,51	0
58	MG	1a	1664	1/1	0.94	0.12	45,45,45,45	0
58	MG	2A	3791	1/1	0.94	0.09	63,63,63,63	0
58	MG	2A	3792	1/1	0.94	0.11	45,45,45,45	0
58	MG	2A	3068	1/1	0.94	0.07	37,37,37,37	0
58	MG	2A	3387	1/1	0.94	0.14	55,55,55,55	0
58	MG	1A	3392	1/1	0.94	0.12	17,17,17,17	0
58	MG	2A	3073	1/1	0.94	0.08	39,39,39,39	0
58	MG	1A	3215	1/1	0.94	0.08	28,28,28,28	0
58	MG	1A	4079	1/1	0.94	0.07	30,30,30,30	0
58	MG	1A	3918	1/1	0.94	0.12	23,23,23,23	0
58	MG	2t	201	1/1	0.94	0.12	44,44,44,44	0
58	MG	2A	3088	1/1	0.94	0.12	47,47,47,47	0
58	MG	1a	1674	1/1	0.94	0.23	57,57,57,57	0
58	MG	1A	3333	1/1	0.94	0.10	43,43,43,43	0
58	MG	2A	3403	1/1	0.94	0.10	58,58,58,58	0
58	MG	2A	3805	1/1	0.94	0.09	48,48,48,48	0
58	MG	2A	3808	1/1	0.94	0.07	45,45,45,45	0
58	MG	2A	3809	1/1	0.94	0.08	46,46,46,46	0
58	MG	1A	4086	1/1	0.94	0.18	52,52,52,52	0
58	MG	1a	1678	1/1	0.94	0.19	40,40,40,40	0
58	MG	1A	4087	1/1	0.94	0.09	36,36,36,36	0
58	MG	2A	3114	1/1	0.95	0.28	61,61,61,61	0
58	MG	2A	3406	1/1	0.95	0.09	32,32,32,32	0
58	MG	1A	3491	1/1	0.95	0.06	35,35,35,35	0
58	MG	2A	3120	1/1	0.95	0.14	38,38,38,38	0
58	MG	1A	3772	1/1	0.95	0.05	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3414	1/1	0.95	0.11	49,49,49,49	0
58	MG	1A	3934	1/1	0.95	0.07	37,37,37,37	0
58	MG	1A	3773	1/1	0.95	0.07	23,23,23,23	0
58	MG	2A	3806	1/1	0.95	0.08	37,37,37,37	0
58	MG	1A	3284	1/1	0.95	0.15	21,21,21,21	0
58	MG	2A	3418	1/1	0.95	0.12	43,43,43,43	0
58	MG	1B	211	1/1	0.95	0.12	32,32,32,32	0
58	MG	2A	3420	1/1	0.95	0.19	43,43,43,43	0
58	MG	1A	3634	1/1	0.95	0.07	19,19,19,19	0
58	MG	1A	3942	1/1	0.95	0.05	30,30,30,30	0
58	MG	1B	214	1/1	0.95	0.09	45,45,45,45	0
58	MG	2A	3425	1/1	0.95	0.22	51,51,51,51	0
58	MG	1A	3776	1/1	0.95	0.08	22,22,22,22	0
58	MG	1A	3946	1/1	0.95	0.09	46,46,46,46	0
58	MG	2A	3133	1/1	0.95	0.09	32,32,32,32	0
58	MG	1B	221	1/1	0.95	0.05	45,45,45,45	0
58	MG	2A	3430	1/1	0.95	0.14	44,44,44,44	0
58	MG	2A	3140	1/1	0.95	0.12	34,34,34,34	0
58	MG	2A	3832	1/1	0.95	0.08	47,47,47,47	0
58	MG	2A	3432	1/1	0.95	0.11	48,48,48,48	0
58	MG	2A	3433	1/1	0.95	0.26	51,51,51,51	0
58	MG	2A	3836	1/1	0.95	0.06	50,50,50,50	0
58	MG	1A	3154	1/1	0.95	0.21	34,34,34,34	0
58	MG	1A	3340	1/1	0.95	0.06	32,32,32,32	0
58	MG	2A	3437	1/1	0.95	0.13	41,41,41,41	0
58	MG	1A	3411	1/1	0.95	0.09	34,34,34,34	0
58	MG	1A	3643	1/1	0.95	0.07	17,17,17,17	0
58	MG	1A	3243	1/1	0.95	0.12	36,36,36,36	0
58	MG	1A	3156	1/1	0.95	0.11	38,38,38,38	0
58	MG	2A	3151	1/1	0.95	0.18	46,46,46,46	0
58	MG	1B	228	1/1	0.95	0.08	33,33,33,33	0
58	MG	1A	3505	1/1	0.95	0.11	36,36,36,36	0
58	MG	2A	3446	1/1	0.95	0.29	55,55,55,55	0
58	MG	2A	3858	1/1	0.95	0.14	51,51,51,51	0
58	MG	2A	3448	1/1	0.95	0.21	35,35,35,35	0
58	MG	1A	3298	1/1	0.95	0.07	41,41,41,41	0
58	MG	2A	3158	1/1	0.95	0.05	64,64,64,64	0
58	MG	1A	3300	1/1	0.95	0.16	40,40,40,40	0
58	MG	2A	3454	1/1	0.95	0.18	46,46,46,46	0
58	MG	2A	3455	1/1	0.95	0.25	47,47,47,47	0
58	MG	1A	3419	1/1	0.95	0.07	55,55,55,55	0
58	MG	2A	3163	1/1	0.95	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
58	MG	2A	3459	1/1	0.95	0.11	28,28,28,28	0
58	MG	2B	202	1/1	0.95	0.07	52,52,52,52	0
58	MG	1A	3793	1/1	0.95	0.06	30,30,30,30	0
58	MG	2A	3461	1/1	0.95	0.07	52,52,52,52	0
58	MG	1A	3962	1/1	0.95	0.07	38,38,38,38	0
58	MG	2A	3463	1/1	0.95	0.24	44,44,44,44	0
58	MG	1A	3027	1/1	0.95	0.12	59,59,59,59	0
58	MG	1A	3657	1/1	0.95	0.10	51,51,51,51	0
58	MG	2A	3170	1/1	0.95	0.07	53,53,53,53	0
58	MG	2A	3472	1/1	0.95	0.09	52,52,52,52	0
58	MG	1A	3658	1/1	0.95	0.14	44,44,44,44	0
58	MG	1A	3800	1/1	0.95	0.07	37,37,37,37	0
58	MG	2B	214	1/1	0.95	0.06	41,41,41,41	0
58	MG	2A	3476	1/1	0.95	0.16	60,60,60,60	0
58	MG	2B	217	1/1	0.95	0.11	43,43,43,43	0
58	MG	2A	3477	1/1	0.95	0.18	57,57,57,57	0
58	MG	2A	3174	1/1	0.95	0.14	53,53,53,53	0
58	MG	1A	3512	1/1	0.95	0.07	35,35,35,35	0
58	MG	2A	3482	1/1	0.95	0.09	34,34,34,34	0
58	MG	2A	3176	1/1	0.95	0.09	50,50,50,50	0
58	MG	1A	3513	1/1	0.95	0.07	40,40,40,40	0
58	MG	1A	3514	1/1	0.95	0.09	17,17,17,17	0
58	MG	2A	3488	1/1	0.95	0.08	43,43,43,43	0
58	MG	2E	302	1/1	0.95	0.13	55,55,55,55	0
58	MG	1A	3806	1/1	0.95	0.06	30,30,30,30	0
58	MG	1A	3517	1/1	0.95	0.07	48,48,48,48	0
58	MG	1a	1736	1/1	0.95	0.06	46,46,46,46	0
58	MG	1A	3421	1/1	0.95	0.17	39,39,39,39	0
58	MG	1a	1738	1/1	0.95	0.10	46,46,46,46	0
58	MG	2A	3495	1/1	0.95	0.11	46,46,46,46	0
58	MG	1F	306	1/1	0.95	0.05	25,25,25,25	0
58	MG	1A	3811	1/1	0.95	0.04	14,14,14,14	0
58	MG	2A	3499	1/1	0.95	0.15	47,47,47,47	0
58	MG	1a	1742	1/1	0.95	0.06	38,38,38,38	0
58	MG	1A	3084	1/1	0.95	0.06	21,21,21,21	0
58	MG	1F	313	1/1	0.95	0.07	32,32,32,32	0
58	MG	2P	202	1/1	0.95	0.06	44,44,44,44	0
58	MG	2Q	201	1/1	0.95	0.05	45,45,45,45	0
58	MG	1A	3522	1/1	0.95	0.16	25,25,25,25	0
58	MG	1A	3985	1/1	0.95	0.04	33,33,33,33	0
58	MG	1A	3024	1/1	0.95	0.11	36,36,36,36	0
58	MG	2U	201	1/1	0.95	0.13	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3430	1/1	0.95	0.08	39,39,39,39	0
58	MG	1O	201	1/1	0.95	0.12	55,55,55,55	0
58	MG	1A	3527	1/1	0.95	0.10	62,62,62,62	0
58	MG	2A	3515	1/1	0.95	0.11	40,40,40,40	0
58	MG	1A	3676	1/1	0.95	0.06	25,25,25,25	0
58	MG	2A	3518	1/1	0.95	0.08	17,17,17,17	0
58	MG	1A	3044	1/1	0.95	0.13	33,33,33,33	0
58	MG	20	101	1/1	0.95	0.10	45,45,45,45	0
58	MG	1O	205	1/1	0.95	0.15	47,47,47,47	0
58	MG	1A	3434	1/1	0.95	0.07	36,36,36,36	0
58	MG	2A	3523	1/1	0.95	0.10	49,49,49,49	0
58	MG	1A	3682	1/1	0.95	0.10	17,17,17,17	0
58	MG	1A	3838	1/1	0.95	0.12	53,53,53,53	0
58	MG	2A	3526	1/1	0.95	0.06	26,26,26,26	0
58	MG	2A	3216	1/1	0.95	0.12	37,37,37,37	0
58	MG	2A	3529	1/1	0.95	0.07	50,50,50,50	0
58	MG	2A	3531	1/1	0.95	0.14	54,54,54,54	0
58	MG	1Q	208	1/1	0.95	0.14	34,34,34,34	0
58	MG	2A	3533	1/1	0.95	0.05	40,40,40,40	0
58	MG	2A	3534	1/1	0.95	0.07	29,29,29,29	0
58	MG	28	102	1/1	0.95	0.22	54,54,54,54	0
58	MG	28	103	1/1	0.95	0.12	45,45,45,45	0
58	MG	2A	3535	1/1	0.95	0.10	41,41,41,41	0
58	MG	1A	3530	1/1	0.95	0.05	34,34,34,34	0
58	MG	2A	3219	1/1	0.95	0.12	43,43,43,43	0
58	MG	1A	3133	1/1	0.95	0.09	55,55,55,55	0
58	MG	2A	3540	1/1	0.95	0.12	47,47,47,47	0
58	MG	1a	1771	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3256	1/1	0.95	0.08	45,45,45,45	0
58	MG	2A	3543	1/1	0.95	0.11	47,47,47,47	0
58	MG	1a	1774	1/1	0.95	0.07	59,59,59,59	0
58	MG	1A	3692	1/1	0.95	0.05	21,21,21,21	0
58	MG	2a	1610	1/1	0.95	0.22	53,53,53,53	0
58	MG	1A	4000	1/1	0.95	0.05	39,39,39,39	0
58	MG	2A	3227	1/1	0.95	0.11	54,54,54,54	0
58	MG	1A	3693	1/1	0.95	0.17	50,50,50,50	0
58	MG	2a	1614	1/1	0.95	0.23	61,61,61,61	0
58	MG	1A	3097	1/1	0.95	0.10	34,34,34,34	0
58	MG	1A	4003	1/1	0.95	0.09	7,7,7,7	0
58	MG	2A	3232	1/1	0.95	0.25	39,39,39,39	0
58	MG	1A	4004	1/1	0.95	0.13	16,16,16,16	0
58	MG	2a	1620	1/1	0.95	0.08	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3235	1/1	0.95	0.07	41,41,41,41	0
58	MG	1A	3099	1/1	0.95	0.07	16,16,16,16	0
58	MG	1V	205	1/1	0.95	0.07	34,34,34,34	0
58	MG	2A	3571	1/1	0.95	0.07	36,36,36,36	0
58	MG	1a	1786	1/1	0.95	0.10	46,46,46,46	0
58	MG	2A	3241	1/1	0.95	0.19	40,40,40,40	0
58	MG	1A	3262	1/1	0.95	0.08	27,27,27,27	0
58	MG	2a	1629	1/1	0.95	0.17	58,58,58,58	0
58	MG	2A	3244	1/1	0.95	0.16	41,41,41,41	0
58	MG	1A	3541	1/1	0.95	0.12	44,44,44,44	0
58	MG	1A	3700	1/1	0.95	0.09	54,54,54,54	0
58	MG	1X	106	1/1	0.95	0.12	50,50,50,50	0
58	MG	2A	3581	1/1	0.95	0.09	40,40,40,40	0
58	MG	1a	1794	1/1	0.95	0.06	56,56,56,56	0
58	MG	1A	3445	1/1	0.95	0.08	23,23,23,23	0
58	MG	1A	3703	1/1	0.95	0.11	41,41,41,41	0
58	MG	1A	3853	1/1	0.95	0.10	43,43,43,43	0
58	MG	1A	3317	1/1	0.95	0.06	21,21,21,21	0
58	MG	2A	3589	1/1	0.95	0.09	42,42,42,42	0
58	MG	1A	3227	1/1	0.95	0.07	30,30,30,30	0
58	MG	1a	1803	1/1	0.95	0.10	52,52,52,52	0
58	MG	1A	3451	1/1	0.95	0.06	27,27,27,27	0
58	MG	1a	1808	1/1	0.95	0.07	48,48,48,48	0
58	MG	10	105	1/1	0.95	0.11	47,47,47,47	0
58	MG	2a	1651	1/1	0.95	0.08	46,46,46,46	0
58	MG	2a	1653	1/1	0.95	0.14	47,47,47,47	0
58	MG	1A	3707	1/1	0.95	0.13	35,35,35,35	0
58	MG	2A	3262	1/1	0.95	0.06	42,42,42,42	0
58	MG	1A	3367	1/1	0.95	0.12	35,35,35,35	0
58	MG	11	101	1/1	0.95	0.16	29,29,29,29	0
58	MG	2A	3266	1/1	0.95	0.07	42,42,42,42	0
58	MG	11	103	1/1	0.95	0.06	26,26,26,26	0
58	MG	1A	3552	1/1	0.95	0.09	51,51,51,51	0
58	MG	11	105	1/1	0.95	0.07	53,53,53,53	0
58	MG	2A	3613	1/1	0.95	0.11	44,44,44,44	0
58	MG	12	102	1/1	0.95	0.08	46,46,46,46	0
58	MG	1A	3556	1/1	0.95	0.08	39,39,39,39	0
58	MG	15	105	1/1	0.95	0.08	21,21,21,21	0
58	MG	2a	1668	1/1	0.95	0.08	59,59,59,59	0
58	MG	2a	1669	1/1	0.95	0.19	59,59,59,59	0
58	MG	1A	3557	1/1	0.95	0.12	28,28,28,28	0
58	MG	2A	3276	1/1	0.95	0.07	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1676	1/1	0.95	0.10	47,47,47,47	0
58	MG	1t	201	1/1	0.95	0.12	42,42,42,42	0
58	MG	1A	3867	1/1	0.95	0.18	37,37,37,37	0
58	MG	2a	1681	1/1	0.95	0.15	51,51,51,51	0
58	MG	2a	1682	1/1	0.95	0.09	42,42,42,42	0
58	MG	2A	3625	1/1	0.95	0.06	39,39,39,39	0
58	MG	2a	1685	1/1	0.95	0.08	52,52,52,52	0
58	MG	1A	4027	1/1	0.95	0.06	25,25,25,25	0
58	MG	2A	3281	1/1	0.95	0.10	54,54,54,54	0
58	MG	1A	3562	1/1	0.95	0.11	19,19,19,19	0
58	MG	1A	3370	1/1	0.95	0.11	41,41,41,41	0
58	MG	2a	1691	1/1	0.95	0.12	51,51,51,51	0
58	MG	1w	104	1/1	0.95	0.21	47,47,47,47	0
58	MG	2a	1694	1/1	0.95	0.20	48,48,48,48	0
58	MG	1w	105	1/1	0.95	0.20	52,52,52,52	0
58	MG	2A	3287	1/1	0.95	0.06	57,57,57,57	0
58	MG	2A	3636	1/1	0.95	0.06	48,48,48,48	0
58	MG	2A	3638	1/1	0.95	0.07	36,36,36,36	0
58	MG	2A	3639	1/1	0.95	0.10	38,38,38,38	0
58	MG	1A	3186	1/1	0.95	0.07	55,55,55,55	0
58	MG	1w	107	1/1	0.95	0.15	40,40,40,40	0
58	MG	2A	3645	1/1	0.95	0.08	39,39,39,39	0
58	MG	1A	3320	1/1	0.95	0.12	25,25,25,25	0
58	MG	1A	3375	1/1	0.95	0.12	40,40,40,40	0
58	MG	1A	3458	1/1	0.95	0.10	43,43,43,43	0
58	MG	1a	1604	1/1	0.95	0.07	53,53,53,53	0
58	MG	1A	4036	1/1	0.95	0.08	41,41,41,41	0
58	MG	1A	3582	1/1	0.95	0.14	26,26,26,26	0
58	MG	2A	3653	1/1	0.95	0.12	55,55,55,55	0
58	MG	2a	1717	1/1	0.95	0.15	57,57,57,57	0
58	MG	1a	1607	1/1	0.95	0.17	52,52,52,52	0
58	MG	1A	3460	1/1	0.95	0.07	46,46,46,46	0
58	MG	1A	3045	1/1	0.95	0.07	26,26,26,26	0
58	MG	1x	110	1/1	0.95	0.09	58,58,58,58	0
58	MG	1x	111	1/1	0.95	0.10	46,46,46,46	0
58	MG	2A	3666	1/1	0.95	0.07	45,45,45,45	0
58	MG	1a	1612	1/1	0.95	0.06	51,51,51,51	0
58	MG	1A	3882	1/1	0.95	0.09	23,23,23,23	0
58	MG	1A	3462	1/1	0.95	0.10	42,42,42,42	0
58	MG	1A	3233	1/1	0.95	0.12	35,35,35,35	0
58	MG	1a	1617	1/1	0.95	0.10	37,37,37,37	0
58	MG	2a	1734	1/1	0.95	0.08	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3382	1/1	0.95	0.07	41,41,41,41	0
58	MG	2a	1737	1/1	0.95	0.12	42,42,42,42	0
58	MG	1A	3117	1/1	0.95	0.12	27,27,27,27	0
58	MG	1A	4046	1/1	0.95	0.11	27,27,27,27	0
58	MG	1A	3196	1/1	0.95	0.24	25,25,25,25	0
58	MG	1A	3388	1/1	0.95	0.11	57,57,57,57	0
58	MG	2A	3314	1/1	0.95	0.08	45,45,45,45	0
58	MG	2A	3012	1/1	0.95	0.07	36,36,36,36	0
58	MG	2A	3685	1/1	0.95	0.12	36,36,36,36	0
58	MG	1A	3327	1/1	0.95	0.16	35,35,35,35	0
58	MG	1A	3892	1/1	0.95	0.04	14,14,14,14	0
58	MG	1A	3472	1/1	0.95	0.09	49,49,49,49	0
58	MG	1A	3329	1/1	0.95	0.13	47,47,47,47	0
58	MG	2A	3692	1/1	0.95	0.08	49,49,49,49	0
58	MG	2A	3320	1/1	0.95	0.11	48,48,48,48	0
58	MG	2a	1755	1/1	0.95	0.11	46,46,46,46	0
58	MG	2A	3321	1/1	0.95	0.09	58,58,58,58	0
58	MG	2A	3697	1/1	0.95	0.09	53,53,53,53	0
58	MG	1A	3605	1/1	0.95	0.07	38,38,38,38	0
58	MG	2A	3699	1/1	0.95	0.10	43,43,43,43	0
58	MG	2A	3323	1/1	0.95	0.12	53,53,53,53	0
58	MG	2a	1761	1/1	0.95	0.10	43,43,43,43	0
58	MG	1a	1633	1/1	0.95	0.15	46,46,46,46	0
58	MG	1a	1635	1/1	0.95	0.17	49,49,49,49	0
58	MG	2A	3027	1/1	0.95	0.08	33,33,33,33	0
58	MG	2a	1768	1/1	0.95	0.10	44,44,44,44	0
58	MG	2A	3329	1/1	0.95	0.07	42,42,42,42	0
58	MG	2A	3330	1/1	0.95	0.06	44,44,44,44	0
58	MG	1A	4058	1/1	0.95	0.15	43,43,43,43	0
58	MG	2a	1775	1/1	0.95	0.18	51,51,51,51	0
58	MG	1A	4059	1/1	0.95	0.07	43,43,43,43	0
58	MG	1A	3050	1/1	0.95	0.09	28,28,28,28	0
58	MG	2a	1779	1/1	0.95	0.07	44,44,44,44	0
58	MG	2A	3033	1/1	0.95	0.05	29,29,29,29	0
58	MG	1a	1640	1/1	0.95	0.20	53,53,53,53	0
58	MG	2A	3712	1/1	0.95	0.11	52,52,52,52	0
58	MG	2a	1784	1/1	0.95	0.14	57,57,57,57	0
58	MG	2A	3713	1/1	0.95	0.21	52,52,52,52	0
58	MG	2A	3715	1/1	0.95	0.09	30,30,30,30	0
58	MG	1A	3476	1/1	0.95	0.11	43,43,43,43	0
58	MG	2a	1789	1/1	0.95	0.13	53,53,53,53	0
58	MG	2A	3040	1/1	0.95	0.13	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1642	1/1	0.95	0.17	53,53,53,53	0
58	MG	1A	3611	1/1	0.95	0.07	24,24,24,24	0
58	MG	1A	4068	1/1	0.95	0.10	10,10,10,10	0
58	MG	2A	3049	1/1	0.95	0.06	40,40,40,40	0
58	MG	2A	3050	1/1	0.95	0.09	21,21,21,21	0
58	MG	2A	3347	1/1	0.95	0.07	57,57,57,57	0
58	MG	1a	1646	1/1	0.95	0.08	45,45,45,45	0
58	MG	1A	3747	1/1	0.95	0.07	36,36,36,36	0
58	MG	2A	3054	1/1	0.95	0.10	49,49,49,49	0
58	MG	1a	1649	1/1	0.95	0.18	55,55,55,55	0
58	MG	2A	3056	1/1	0.95	0.08	33,33,33,33	0
58	MG	1a	1650	1/1	0.95	0.12	49,49,49,49	0
58	MG	1A	3276	1/1	0.95	0.08	20,20,20,20	0
58	MG	2A	3736	1/1	0.95	0.08	47,47,47,47	0
58	MG	1A	4076	1/1	0.95	0.04	25,25,25,25	0
58	MG	2A	3738	1/1	0.95	0.08	33,33,33,33	0
58	MG	1A	4077	1/1	0.95	0.09	51,51,51,51	0
58	MG	1a	1661	1/1	0.95	0.14	55,55,55,55	0
58	MG	1A	3277	1/1	0.95	0.04	33,33,33,33	0
58	MG	1a	1663	1/1	0.95	0.24	57,57,57,57	0
58	MG	1A	3906	1/1	0.95	0.11	38,38,38,38	0
58	MG	1a	1667	1/1	0.95	0.16	52,52,52,52	0
58	MG	2A	3070	1/1	0.95	0.08	45,45,45,45	0
58	MG	1A	3615	1/1	0.95	0.10	19,19,19,19	0
58	MG	2a	1821	1/1	0.95	0.14	59,59,59,59	0
58	MG	1A	3403	1/1	0.95	0.09	24,24,24,24	0
58	MG	1A	4085	1/1	0.95	0.13	48,48,48,48	0
58	MG	2A	3755	1/1	0.95	0.17	41,41,41,41	0
58	MG	2a	1825	1/1	0.95	0.14	51,51,51,51	0
58	MG	2A	3371	1/1	0.95	0.10	40,40,40,40	0
58	MG	1A	3279	1/1	0.95	0.10	40,40,40,40	0
58	MG	2A	3081	1/1	0.95	0.11	40,40,40,40	0
58	MG	1A	3487	1/1	0.95	0.11	33,33,33,33	0
58	MG	2A	3085	1/1	0.95	0.08	41,41,41,41	0
58	MG	1A	3762	1/1	0.95	0.05	16,16,16,16	0
58	MG	1A	3622	1/1	0.95	0.08	17,17,17,17	0
58	MG	1A	3488	1/1	0.95	0.06	39,39,39,39	0
58	MG	2A	3765	1/1	0.95	0.06	40,40,40,40	0
58	MG	1A	3626	1/1	0.95	0.06	23,23,23,23	0
58	MG	2A	3769	1/1	0.95	0.08	46,46,46,46	0
58	MG	1A	3489	1/1	0.95	0.07	38,38,38,38	0
58	MG	2A	3384	1/1	0.95	0.16	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2k	201	1/1	0.95	0.10	48,48,48,48	0
58	MG	2A	3774	1/1	0.95	0.06	43,43,43,43	0
58	MG	1A	4093	1/1	0.95	0.08	46,46,46,46	0
58	MG	1A	3767	1/1	0.95	0.06	40,40,40,40	0
58	MG	2A	3780	1/1	0.95	0.07	45,45,45,45	0
58	MG	2A	3388	1/1	0.95	0.09	53,53,53,53	0
58	MG	1A	3927	1/1	0.95	0.08	59,59,59,59	0
58	MG	1A	3928	1/1	0.95	0.09	23,23,23,23	0
58	MG	2A	3391	1/1	0.95	0.10	48,48,48,48	0
58	MG	2A	3103	1/1	0.95	0.06	23,23,23,23	0
58	MG	2v	102	1/1	0.95	0.20	57,57,57,57	0
58	MG	1A	3628	1/1	0.95	0.09	20,20,20,20	0
58	MG	2A	3395	1/1	0.95	0.16	44,44,44,44	0
58	MG	2w	103	1/1	0.95	0.07	54,54,54,54	0
58	MG	2A	3396	1/1	0.95	0.09	52,52,52,52	0
58	MG	1a	1686	1/1	0.95	0.19	53,53,53,53	0
58	MG	2A	3106	1/1	0.95	0.07	42,42,42,42	0
58	MG	2x	103	1/1	0.95	0.12	50,50,50,50	0
58	MG	1A	4099	1/1	0.95	0.19	47,47,47,47	0
58	MG	1A	3280	1/1	0.95	0.12	28,28,28,28	0
58	MG	1B	202	1/1	0.95	0.07	36,36,36,36	0
58	MG	2A	3797	1/1	0.95	0.06	50,50,50,50	0
58	MG	1a	1795	1/1	0.96	0.06	38,38,38,38	0
58	MG	2A	3857	1/1	0.96	0.11	51,51,51,51	0
58	MG	1A	4035	1/1	0.96	0.05	40,40,40,40	0
58	MG	2A	3859	1/1	0.96	0.05	36,36,36,36	0
58	MG	1a	1797	1/1	0.96	0.07	44,44,44,44	0
58	MG	1A	3341	1/1	0.96	0.17	49,49,49,49	0
58	MG	2A	3862	1/1	0.96	0.12	37,37,37,37	0
58	MG	2A	3502	1/1	0.96	0.17	46,46,46,46	0
58	MG	1A	3737	1/1	0.96	0.07	35,35,35,35	0
58	MG	11	106	1/1	0.96	0.06	36,36,36,36	0
58	MG	2A	3509	1/1	0.96	0.09	47,47,47,47	0
58	MG	12	101	1/1	0.96	0.06	44,44,44,44	0
58	MG	2A	3869	1/1	0.96	0.06	53,53,53,53	0
58	MG	2A	3229	1/1	0.96	0.19	41,41,41,41	0
58	MG	1A	3502	1/1	0.96	0.20	44,44,44,44	0
58	MG	2B	201	1/1	0.96	0.14	59,59,59,59	0
58	MG	12	103	1/1	0.96	0.05	34,34,34,34	0
58	MG	1a	1807	1/1	0.96	0.05	51,51,51,51	0
58	MG	1A	3614	1/1	0.96	0.06	31,31,31,31	0
58	MG	2A	3516	1/1	0.96	0.07	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	15	101	1/1	0.96	0.15	15,15,15,15	0
58	MG	2A	3236	1/1	0.96	0.09	45,45,45,45	0
58	MG	15	102	1/1	0.96	0.15	31,31,31,31	0
58	MG	2A	3238	1/1	0.96	0.18	44,44,44,44	0
58	MG	1A	3105	1/1	0.96	0.07	21,21,21,21	0
58	MG	1A	3220	1/1	0.96	0.08	45,45,45,45	0
58	MG	17	103	1/1	0.96	0.08	25,25,25,25	0
58	MG	1A	3423	1/1	0.96	0.05	36,36,36,36	0
58	MG	1A	3508	1/1	0.96	0.07	41,41,41,41	0
58	MG	2B	216	1/1	0.96	0.09	42,42,42,42	0
58	MG	18	103	1/1	0.96	0.06	33,33,33,33	0
58	MG	1k	201	1/1	0.96	0.16	38,38,38,38	0
58	MG	18	105	1/1	0.96	0.11	42,42,42,42	0
58	MG	1A	3890	1/1	0.96	0.05	24,24,24,24	0
58	MG	1A	3620	1/1	0.96	0.07	24,24,24,24	0
58	MG	18	108	1/1	0.96	0.06	33,33,33,33	0
58	MG	1A	3221	1/1	0.96	0.15	28,28,28,28	0
58	MG	2D	307	1/1	0.96	0.09	46,46,46,46	0
58	MG	1A	3222	1/1	0.96	0.13	36,36,36,36	0
58	MG	1A	3751	1/1	0.96	0.05	15,15,15,15	0
58	MG	1A	3897	1/1	0.96	0.05	28,28,28,28	0
58	MG	1A	3752	1/1	0.96	0.05	13,13,13,13	0
58	MG	2E	305	1/1	0.96	0.05	43,43,43,43	0
58	MG	2A	3256	1/1	0.96	0.06	39,39,39,39	0
58	MG	1A	3223	1/1	0.96	0.06	30,30,30,30	0
58	MG	1A	3113	1/1	0.96	0.13	32,32,32,32	0
58	MG	1A	4057	1/1	0.96	0.11	46,46,46,46	0
58	MG	1A	3116	1/1	0.96	0.04	26,26,26,26	0
58	MG	1A	3158	1/1	0.96	0.14	31,31,31,31	0
58	MG	2A	3549	1/1	0.96	0.09	36,36,36,36	0
58	MG	1A	4060	1/1	0.96	0.07	41,41,41,41	0
58	MG	1A	4062	1/1	0.96	0.04	28,28,28,28	0
58	MG	2F	306	1/1	0.96	0.11	40,40,40,40	0
58	MG	2F	308	1/1	0.96	0.16	43,43,43,43	0
58	MG	1A	3758	1/1	0.96	0.08	44,44,44,44	0
58	MG	2A	3554	1/1	0.96	0.07	32,32,32,32	0
58	MG	2A	3555	1/1	0.96	0.08	34,34,34,34	0
58	MG	2A	3559	1/1	0.96	0.07	53,53,53,53	0
58	MG	1A	3904	1/1	0.96	0.06	26,26,26,26	0
58	MG	1A	3437	1/1	0.96	0.06	32,32,32,32	0
58	MG	1x	107	1/1	0.96	0.07	40,40,40,40	0
58	MG	1a	1619	1/1	0.96	0.06	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3632	1/1	0.96	0.09	38,38,38,38	0
58	MG	1A	4069	1/1	0.96	0.07	36,36,36,36	0
58	MG	2A	3569	1/1	0.96	0.06	51,51,51,51	0
58	MG	1A	3907	1/1	0.96	0.05	25,25,25,25	0
58	MG	2A	3277	1/1	0.96	0.15	43,43,43,43	0
58	MG	1A	3908	1/1	0.96	0.05	28,28,28,28	0
58	MG	1A	4074	1/1	0.96	0.06	42,42,42,42	0
58	MG	1A	3909	1/1	0.96	0.07	40,40,40,40	0
58	MG	1a	1626	1/1	0.96	0.13	53,53,53,53	0
58	MG	1A	3083	1/1	0.96	0.31	39,39,39,39	0
58	MG	1A	3911	1/1	0.96	0.12	29,29,29,29	0
58	MG	1A	3356	1/1	0.96	0.12	53,53,53,53	0
58	MG	1A	3232	1/1	0.96	0.12	20,20,20,20	0
58	MG	1a	1631	1/1	0.96	0.17	38,38,38,38	0
58	MG	1A	3013	1/1	0.96	0.09	18,18,18,18	0
58	MG	1A	4084	1/1	0.96	0.07	38,38,38,38	0
58	MG	2A	3013	1/1	0.96	0.06	35,35,35,35	0
58	MG	2A	3588	1/1	0.96	0.10	45,45,45,45	0
58	MG	1A	3526	1/1	0.96	0.13	40,40,40,40	0
58	MG	2A	3590	1/1	0.96	0.13	52,52,52,52	0
58	MG	1A	3642	1/1	0.96	0.06	22,22,22,22	0
58	MG	1A	3444	1/1	0.96	0.08	30,30,30,30	0
58	MG	2A	3019	1/1	0.96	0.12	28,28,28,28	0
58	MG	2A	3596	1/1	0.96	0.09	46,46,46,46	0
58	MG	1A	3091	1/1	0.96	0.08	26,26,26,26	0
58	MG	2A	3022	1/1	0.96	0.10	39,39,39,39	0
58	MG	1A	3066	1/1	0.96	0.10	39,39,39,39	0
58	MG	1A	3309	1/1	0.96	0.14	42,42,42,42	0
58	MG	1A	3364	1/1	0.96	0.06	34,34,34,34	0
58	MG	1A	3124	1/1	0.96	0.08	30,30,30,30	0
58	MG	1A	3534	1/1	0.96	0.17	23,23,23,23	0
58	MG	2A	3609	1/1	0.96	0.09	41,41,41,41	0
58	MG	2A	3030	1/1	0.96	0.09	33,33,33,33	0
58	MG	1A	3095	1/1	0.96	0.05	34,34,34,34	0
58	MG	1a	1648	1/1	0.96	0.09	44,44,44,44	0
58	MG	1A	3537	1/1	0.96	0.17	40,40,40,40	0
58	MG	1A	3368	1/1	0.96	0.08	46,46,46,46	0
58	MG	2a	1615	1/1	0.96	0.13	49,49,49,49	0
58	MG	2A	3035	1/1	0.96	0.07	36,36,36,36	0
58	MG	2A	3309	1/1	0.96	0.08	56,56,56,56	0
58	MG	2A	3036	1/1	0.96	0.04	26,26,26,26	0
58	MG	2A	3311	1/1	0.96	0.09	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3622	1/1	0.96	0.10	28,28,28,28	0
58	MG	1a	1656	1/1	0.96	0.10	44,44,44,44	0
58	MG	1A	3660	1/1	0.96	0.08	33,33,33,33	0
58	MG	2A	3042	1/1	0.96	0.15	42,42,42,42	0
58	MG	1A	4098	1/1	0.96	0.05	39,39,39,39	0
58	MG	2A	3044	1/1	0.96	0.15	51,51,51,51	0
58	MG	1A	3783	1/1	0.96	0.06	54,54,54,54	0
58	MG	2A	3046	1/1	0.96	0.07	62,62,62,62	0
58	MG	2A	3631	1/1	0.96	0.05	32,32,32,32	0
58	MG	2A	3632	1/1	0.96	0.06	42,42,42,42	0
58	MG	2a	1631	1/1	0.96	0.05	43,43,43,43	0
58	MG	1A	3539	1/1	0.96	0.16	37,37,37,37	0
58	MG	1A	3183	1/1	0.96	0.10	30,30,30,30	0
58	MG	1B	203	1/1	0.96	0.06	31,31,31,31	0
58	MG	2a	1635	1/1	0.96	0.11	52,52,52,52	0
58	MG	1A	3941	1/1	0.96	0.06	27,27,27,27	0
58	MG	1A	3129	1/1	0.96	0.06	23,23,23,23	0
58	MG	2A	3053	1/1	0.96	0.12	56,56,56,56	0
58	MG	2a	1639	1/1	0.96	0.21	49,49,49,49	0
58	MG	1A	3665	1/1	0.96	0.07	24,24,24,24	0
58	MG	1A	3185	1/1	0.96	0.16	39,39,39,39	0
58	MG	2A	3643	1/1	0.96	0.06	34,34,34,34	0
58	MG	2A	3644	1/1	0.96	0.13	28,28,28,28	0
58	MG	2A	3328	1/1	0.96	0.14	41,41,41,41	0
58	MG	1A	3048	1/1	0.96	0.07	19,19,19,19	0
58	MG	1A	3544	1/1	0.96	0.15	40,40,40,40	0
58	MG	2a	1648	1/1	0.96	0.09	50,50,50,50	0
58	MG	1A	3669	1/1	0.96	0.03	13,13,13,13	0
58	MG	1A	3795	1/1	0.96	0.06	37,37,37,37	0
58	MG	1A	3132	1/1	0.96	0.05	29,29,29,29	0
58	MG	2a	1652	1/1	0.96	0.06	64,64,64,64	0
58	MG	1A	3042	1/1	0.96	0.16	21,21,21,21	0
58	MG	2A	3652	1/1	0.96	0.05	38,38,38,38	0
58	MG	2A	3337	1/1	0.96	0.15	57,57,57,57	0
58	MG	1A	3550	1/1	0.96	0.06	39,39,39,39	0
58	MG	2A	3658	1/1	0.96	0.08	44,44,44,44	0
58	MG	1A	3380	1/1	0.96	0.12	31,31,31,31	0
58	MG	1A	3957	1/1	0.96	0.11	38,38,38,38	0
58	MG	2A	3661	1/1	0.96	0.13	37,37,37,37	0
58	MG	1A	3253	1/1	0.96	0.13	25,25,25,25	0
58	MG	1A	3553	1/1	0.96	0.08	44,44,44,44	0
58	MG	2a	1664	1/1	0.96	0.06	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3665	1/1	0.96	0.06	41,41,41,41	0
58	MG	1A	3678	1/1	0.96	0.04	32,32,32,32	0
58	MG	1A	3554	1/1	0.96	0.06	51,51,51,51	0
58	MG	1A	3963	1/1	0.96	0.05	36,36,36,36	0
58	MG	2A	3078	1/1	0.96	0.07	19,19,19,19	0
58	MG	2a	1670	1/1	0.96	0.13	32,32,32,32	0
58	MG	2a	1671	1/1	0.96	0.13	50,50,50,50	0
58	MG	2A	3079	1/1	0.96	0.06	43,43,43,43	0
58	MG	2A	3675	1/1	0.96	0.09	43,43,43,43	0
58	MG	2a	1675	1/1	0.96	0.12	42,42,42,42	0
58	MG	1A	3808	1/1	0.96	0.09	53,53,53,53	0
58	MG	1A	3809	1/1	0.96	0.04	40,40,40,40	0
58	MG	2a	1679	1/1	0.96	0.05	38,38,38,38	0
58	MG	1A	3555	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3192	1/1	0.96	0.07	30,30,30,30	0
58	MG	2A	3086	1/1	0.96	0.12	34,34,34,34	0
58	MG	1A	3815	1/1	0.96	0.23	16,16,16,16	0
58	MG	1A	3686	1/1	0.96	0.11	42,42,42,42	0
58	MG	1A	3687	1/1	0.96	0.08	51,51,51,51	0
58	MG	2A	3094	1/1	0.96	0.06	33,33,33,33	0
58	MG	1A	3820	1/1	0.96	0.06	48,48,48,48	0
58	MG	2A	3359	1/1	0.96	0.08	44,44,44,44	0
58	MG	2a	1690	1/1	0.96	0.13	50,50,50,50	0
58	MG	1A	3977	1/1	0.96	0.07	48,48,48,48	0
58	MG	2A	3361	1/1	0.96	0.08	44,44,44,44	0
58	MG	1D	302	1/1	0.96	0.07	33,33,33,33	0
58	MG	1A	3195	1/1	0.96	0.15	27,27,27,27	0
58	MG	2a	1697	1/1	0.96	0.22	49,49,49,49	0
58	MG	1A	3979	1/1	0.96	0.08	52,52,52,52	0
58	MG	1A	3135	1/1	0.96	0.07	28,28,28,28	0
58	MG	2a	1702	1/1	0.96	0.15	50,50,50,50	0
58	MG	2A	3102	1/1	0.96	0.10	45,45,45,45	0
58	MG	1A	3564	1/1	0.96	0.15	29,29,29,29	0
58	MG	2A	3370	1/1	0.96	0.12	41,41,41,41	0
58	MG	1A	3324	1/1	0.96	0.08	28,28,28,28	0
58	MG	1A	3827	1/1	0.96	0.08	25,25,25,25	0
58	MG	1A	3831	1/1	0.96	0.05	17,17,17,17	0
58	MG	2A	3107	1/1	0.96	0.14	43,43,43,43	0
58	MG	2A	3108	1/1	0.96	0.06	38,38,38,38	0
58	MG	2A	3109	1/1	0.96	0.08	60,60,60,60	0
58	MG	2A	3707	1/1	0.96	0.11	57,57,57,57	0
58	MG	2A	3378	1/1	0.96	0.07	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3379	1/1	0.96	0.22	57,57,57,57	0
58	MG	1A	3394	1/1	0.96	0.21	33,33,33,33	0
58	MG	1A	3835	1/1	0.96	0.08	43,43,43,43	0
58	MG	1F	308	1/1	0.96	0.12	20,20,20,20	0
58	MG	1a	1708	1/1	0.96	0.06	39,39,39,39	0
58	MG	1A	3258	1/1	0.96	0.06	39,39,39,39	0
58	MG	2A	3117	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3118	1/1	0.96	0.10	42,42,42,42	0
58	MG	1A	3197	1/1	0.96	0.19	26,26,26,26	0
58	MG	2a	1726	1/1	0.96	0.12	43,43,43,43	0
58	MG	1a	1712	1/1	0.96	0.19	51,51,51,51	0
58	MG	2a	1728	1/1	0.96	0.08	47,47,47,47	0
58	MG	1A	3573	1/1	0.96	0.14	53,53,53,53	0
58	MG	1a	1714	1/1	0.96	0.08	28,28,28,28	0
58	MG	1F	314	1/1	0.96	0.15	43,43,43,43	0
58	MG	1G	201	1/1	0.96	0.09	38,38,38,38	0
58	MG	1A	3839	1/1	0.96	0.07	42,42,42,42	0
58	MG	2a	1736	1/1	0.96	0.12	45,45,45,45	0
58	MG	2A	3727	1/1	0.96	0.08	23,23,23,23	0
58	MG	2A	3127	1/1	0.96	0.14	41,41,41,41	0
58	MG	1a	1719	1/1	0.96	0.08	28,28,28,28	0
58	MG	2a	1740	1/1	0.96	0.22	29,29,29,29	0
58	MG	1G	203	1/1	0.96	0.07	57,57,57,57	0
58	MG	1a	1721	1/1	0.96	0.12	48,48,48,48	0
58	MG	1A	3699	1/1	0.96	0.04	17,17,17,17	0
58	MG	2a	1744	1/1	0.96	0.17	48,48,48,48	0
58	MG	2A	3402	1/1	0.96	0.11	46,46,46,46	0
58	MG	1A	3993	1/1	0.96	0.08	18,18,18,18	0
58	MG	2A	3404	1/1	0.96	0.06	51,51,51,51	0
58	MG	2A	3134	1/1	0.96	0.05	32,32,32,32	0
58	MG	1A	3575	1/1	0.96	0.07	41,41,41,41	0
58	MG	1N	205	1/1	0.96	0.06	41,41,41,41	0
58	MG	1A	3576	1/1	0.96	0.09	41,41,41,41	0
58	MG	2A	3142	1/1	0.96	0.12	42,42,42,42	0
58	MG	2A	3743	1/1	0.96	0.09	46,46,46,46	0
58	MG	2A	3410	1/1	0.96	0.13	31,31,31,31	0
58	MG	2A	3411	1/1	0.96	0.12	52,52,52,52	0
58	MG	2A	3748	1/1	0.96	0.06	53,53,53,53	0
58	MG	2A	3412	1/1	0.96	0.19	44,44,44,44	0
58	MG	2A	3413	1/1	0.96	0.12	33,33,33,33	0
58	MG	1a	1727	1/1	0.96	0.14	48,48,48,48	0
58	MG	2A	3752	1/1	0.96	0.09	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1728	1/1	0.96	0.09	51,51,51,51	0
58	MG	2a	1766	1/1	0.96	0.06	46,46,46,46	0
58	MG	1A	3702	1/1	0.96	0.05	35,35,35,35	0
58	MG	1A	3138	1/1	0.96	0.08	31,31,31,31	0
58	MG	1A	3578	1/1	0.96	0.23	36,36,36,36	0
58	MG	1A	3581	1/1	0.96	0.12	30,30,30,30	0
58	MG	1A	3264	1/1	0.96	0.06	41,41,41,41	0
58	MG	1Q	202	1/1	0.96	0.14	21,21,21,21	0
58	MG	1A	3584	1/1	0.96	0.07	36,36,36,36	0
58	MG	2A	3762	1/1	0.96	0.09	41,41,41,41	0
58	MG	1A	3330	1/1	0.96	0.07	32,32,32,32	0
58	MG	1a	1739	1/1	0.96	0.08	38,38,38,38	0
58	MG	2A	3160	1/1	0.96	0.08	53,53,53,53	0
58	MG	1A	3331	1/1	0.96	0.07	34,34,34,34	0
58	MG	1R	201	1/1	0.96	0.11	35,35,35,35	0
58	MG	2A	3770	1/1	0.96	0.07	44,44,44,44	0
58	MG	2A	3164	1/1	0.96	0.04	24,24,24,24	0
58	MG	2A	3772	1/1	0.96	0.07	49,49,49,49	0
58	MG	1A	3057	1/1	0.96	0.10	36,36,36,36	0
58	MG	1A	3712	1/1	0.96	0.07	22,22,22,22	0
58	MG	1S	201	1/1	0.96	0.11	33,33,33,33	0
58	MG	2A	3168	1/1	0.96	0.09	43,43,43,43	0
58	MG	2A	3778	1/1	0.96	0.11	52,52,52,52	0
58	MG	1S	202	1/1	0.96	0.07	37,37,37,37	0
58	MG	1a	1747	1/1	0.96	0.04	49,49,49,49	0
58	MG	2A	3782	1/1	0.96	0.07	43,43,43,43	0
58	MG	1a	1748	1/1	0.96	0.05	43,43,43,43	0
58	MG	2A	3172	1/1	0.96	0.06	47,47,47,47	0
58	MG	1A	3100	1/1	0.96	0.09	38,38,38,38	0
58	MG	2A	3787	1/1	0.96	0.07	44,44,44,44	0
58	MG	1A	3101	1/1	0.96	0.10	51,51,51,51	0
58	MG	1A	3596	1/1	0.96	0.08	32,32,32,32	0
58	MG	1T	203	1/1	0.96	0.08	35,35,35,35	0
58	MG	1A	3143	1/1	0.96	0.07	36,36,36,36	0
58	MG	2A	3179	1/1	0.96	0.19	50,50,50,50	0
58	MG	2a	1810	1/1	0.96	0.13	41,41,41,41	0
58	MG	2A	3181	1/1	0.96	0.05	37,37,37,37	0
58	MG	1U	203	1/1	0.96	0.12	30,30,30,30	0
58	MG	2A	3183	1/1	0.96	0.09	40,40,40,40	0
58	MG	1A	3336	1/1	0.96	0.16	41,41,41,41	0
58	MG	2A	3451	1/1	0.96	0.14	42,42,42,42	0
58	MG	2A	3452	1/1	0.96	0.14	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3600	1/1	0.96	0.14	25,25,25,25	0
58	MG	2A	3189	1/1	0.96	0.09	62,62,62,62	0
58	MG	1A	4016	1/1	0.96	0.04	36,36,36,36	0
58	MG	1A	3146	1/1	0.96	0.07	35,35,35,35	0
58	MG	1A	3863	1/1	0.96	0.05	12,12,12,12	0
58	MG	1V	206	1/1	0.96	0.07	45,45,45,45	0
58	MG	2A	3194	1/1	0.96	0.06	49,49,49,49	0
58	MG	1a	1768	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3807	1/1	0.96	0.04	37,37,37,37	0
58	MG	2A	3196	1/1	0.96	0.16	41,41,41,41	0
58	MG	1A	4019	1/1	0.96	0.04	40,40,40,40	0
58	MG	2A	3810	1/1	0.96	0.05	49,49,49,49	0
58	MG	2A	3464	1/1	0.96	0.10	49,49,49,49	0
58	MG	2a	1831	1/1	0.96	0.10	57,57,57,57	0
58	MG	1A	3864	1/1	0.96	0.09	16,16,16,16	0
58	MG	1W	203	1/1	0.96	0.09	45,45,45,45	0
58	MG	2A	3815	1/1	0.96	0.06	28,28,28,28	0
58	MG	1W	205	1/1	0.96	0.09	36,36,36,36	0
58	MG	2d	301	1/1	0.96	0.22	54,54,54,54	0
58	MG	2e	201	1/1	0.96	0.05	60,60,60,60	0
58	MG	2A	3470	1/1	0.96	0.08	41,41,41,41	0
58	MG	1A	3015	1/1	0.96	0.08	26,26,26,26	0
58	MG	2A	3819	1/1	0.96	0.09	42,42,42,42	0
58	MG	1X	102	1/1	0.96	0.05	28,28,28,28	0
58	MG	1A	3723	1/1	0.96	0.08	47,47,47,47	0
58	MG	2A	3475	1/1	0.96	0.11	37,37,37,37	0
58	MG	1A	3868	1/1	0.96	0.11	40,40,40,40	0
58	MG	2A	3826	1/1	0.96	0.05	54,54,54,54	0
58	MG	2A	3827	1/1	0.96	0.09	53,53,53,53	0
58	MG	2A	3828	1/1	0.96	0.10	50,50,50,50	0
58	MG	1a	1779	1/1	0.96	0.06	46,46,46,46	0
58	MG	2A	3206	1/1	0.96	0.12	47,47,47,47	0
58	MG	2A	3480	1/1	0.96	0.12	40,40,40,40	0
58	MG	1Y	202	1/1	0.96	0.05	32,32,32,32	0
58	MG	1A	3494	1/1	0.96	0.10	46,46,46,46	0
58	MG	2A	3210	1/1	0.96	0.07	46,46,46,46	0
58	MG	2w	101	1/1	0.96	0.14	46,46,46,46	0
58	MG	1A	3495	1/1	0.96	0.16	32,32,32,32	0
58	MG	1A	3151	1/1	0.96	0.05	30,30,30,30	0
58	MG	2A	3213	1/1	0.96	0.07	50,50,50,50	0
58	MG	10	101	1/1	0.96	0.09	31,31,31,31	0
58	MG	1A	3415	1/1	0.96	0.12	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3607	1/1	0.96	0.09	40,40,40,40	0
58	MG	1A	3732	1/1	0.96	0.10	50,50,50,50	0
58	MG	1A	3275	1/1	0.96	0.10	44,44,44,44	0
58	MG	1A	3418	1/1	0.96	0.05	27,27,27,27	0
58	MG	1A	3879	1/1	0.96	0.05	32,32,32,32	0
60	ZN	2n	103	1/1	0.96	0.06	82,82,82,82	0
58	MG	1A	3964	1/1	0.97	0.04	38,38,38,38	0
58	MG	2D	301	1/1	0.97	0.13	39,39,39,39	0
58	MG	2A	3582	1/1	0.97	0.04	23,23,23,23	0
58	MG	2D	303	1/1	0.97	0.14	34,34,34,34	0
58	MG	1a	1677	1/1	0.97	0.18	43,43,43,43	0
58	MG	1A	3246	1/1	0.97	0.11	39,39,39,39	0
58	MG	1A	3803	1/1	0.97	0.08	18,18,18,18	0
58	MG	1A	3659	1/1	0.97	0.07	25,25,25,25	0
58	MG	2A	3062	1/1	0.97	0.05	35,35,35,35	0
58	MG	1A	3176	1/1	0.97	0.05	30,30,30,30	0
58	MG	1A	3969	1/1	0.97	0.07	38,38,38,38	0
58	MG	1A	3328	1/1	0.97	0.10	45,45,45,45	0
58	MG	2A	3591	1/1	0.97	0.05	32,32,32,32	0
58	MG	1A	3181	1/1	0.97	0.09	15,15,15,15	0
58	MG	1A	3972	1/1	0.97	0.07	26,26,26,26	0
58	MG	1A	3973	1/1	0.97	0.04	35,35,35,35	0
58	MG	2A	3069	1/1	0.97	0.07	25,25,25,25	0
58	MG	1E	305	1/1	0.97	0.11	22,22,22,22	0
58	MG	2A	3599	1/1	0.97	0.05	36,36,36,36	0
58	MG	1E	306	1/1	0.97	0.21	42,42,42,42	0
58	MG	2A	3602	1/1	0.97	0.06	44,44,44,44	0
58	MG	2A	3072	1/1	0.97	0.08	45,45,45,45	0
58	MG	2F	307	1/1	0.97	0.18	44,44,44,44	0
58	MG	2A	3604	1/1	0.97	0.10	47,47,47,47	0
58	MG	2G	201	1/1	0.97	0.06	51,51,51,51	0
58	MG	1A	3089	1/1	0.97	0.10	37,37,37,37	0
58	MG	1A	3422	1/1	0.97	0.08	34,34,34,34	0
58	MG	2A	3077	1/1	0.97	0.06	36,36,36,36	0
58	MG	1A	3126	1/1	0.97	0.11	20,20,20,20	0
58	MG	1A	3424	1/1	0.97	0.06	44,44,44,44	0
58	MG	1F	303	1/1	0.97	0.09	20,20,20,20	0
58	MG	1A	3533	1/1	0.97	0.07	29,29,29,29	0
58	MG	1A	3058	1/1	0.97	0.10	16,16,16,16	0
58	MG	2A	3333	1/1	0.97	0.06	58,58,58,58	0
58	MG	2V	201	1/1	0.97	0.21	42,42,42,42	0
58	MG	2A	3083	1/1	0.97	0.07	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3616	1/1	0.97	0.12	43,43,43,43	0
58	MG	2W	203	1/1	0.97	0.07	39,39,39,39	0
58	MG	1F	307	1/1	0.97	0.05	33,33,33,33	0
58	MG	1A	3130	1/1	0.97	0.16	31,31,31,31	0
58	MG	1F	310	1/1	0.97	0.08	33,33,33,33	0
58	MG	2A	3620	1/1	0.97	0.05	39,39,39,39	0
58	MG	2A	3338	1/1	0.97	0.07	68,68,68,68	0
58	MG	2A	3089	1/1	0.97	0.12	41,41,41,41	0
58	MG	1A	3819	1/1	0.97	0.05	28,28,28,28	0
58	MG	23	102	1/1	0.97	0.06	33,33,33,33	0
58	MG	1A	3429	1/1	0.97	0.06	22,22,22,22	0
58	MG	1A	3984	1/1	0.97	0.05	42,42,42,42	0
58	MG	1A	3061	1/1	0.97	0.04	25,25,25,25	0
58	MG	1A	3431	1/1	0.97	0.04	35,35,35,35	0
58	MG	2A	3628	1/1	0.97	0.06	30,30,30,30	0
58	MG	1A	3189	1/1	0.97	0.09	37,37,37,37	0
58	MG	1A	3093	1/1	0.97	0.05	37,37,37,37	0
58	MG	2A	3099	1/1	0.97	0.04	37,37,37,37	0
58	MG	1A	3012	1/1	0.97	0.06	21,21,21,21	0
58	MG	1I	201	1/1	0.97	0.05	42,42,42,42	0
58	MG	1N	201	1/1	0.97	0.15	41,41,41,41	0
58	MG	1A	3436	1/1	0.97	0.17	41,41,41,41	0
58	MG	1a	1711	1/1	0.97	0.08	38,38,38,38	0
58	MG	2A	3637	1/1	0.97	0.11	49,49,49,49	0
58	MG	1A	3832	1/1	0.97	0.06	29,29,29,29	0
58	MG	1A	3193	1/1	0.97	0.18	30,30,30,30	0
58	MG	1N	206	1/1	0.97	0.06	32,32,32,32	0
58	MG	1A	3546	1/1	0.97	0.14	34,34,34,34	0
58	MG	1A	3685	1/1	0.97	0.06	22,22,22,22	0
58	MG	1A	3260	1/1	0.97	0.12	18,18,18,18	0
58	MG	1A	3439	1/1	0.97	0.05	39,39,39,39	0
58	MG	1A	3688	1/1	0.97	0.05	20,20,20,20	0
58	MG	1A	3261	1/1	0.97	0.04	17,17,17,17	0
58	MG	2A	3363	1/1	0.97	0.07	48,48,48,48	0
58	MG	1A	3690	1/1	0.97	0.09	18,18,18,18	0
58	MG	1Q	203	1/1	0.97	0.06	24,24,24,24	0
58	MG	1A	3134	1/1	0.97	0.09	33,33,33,33	0
58	MG	1Q	206	1/1	0.97	0.07	37,37,37,37	0
58	MG	1A	3442	1/1	0.97	0.05	37,37,37,37	0
58	MG	2A	3655	1/1	0.97	0.07	34,34,34,34	0
58	MG	1A	3263	1/1	0.97	0.06	32,32,32,32	0
58	MG	1A	3017	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
58	MG	1A	3695	1/1	0.97	0.04	23,23,23,23	0
58	MG	1A	3064	1/1	0.97	0.10	34,34,34,34	0
58	MG	1A	4008	1/1	0.97	0.06	46,46,46,46	0
58	MG	1A	3345	1/1	0.97	0.08	50,50,50,50	0
58	MG	2a	1624	1/1	0.97	0.16	52,52,52,52	0
58	MG	1a	1733	1/1	0.97	0.07	25,25,25,25	0
58	MG	1A	3005	1/1	0.97	0.06	35,35,35,35	0
58	MG	2A	3130	1/1	0.97	0.08	41,41,41,41	0
58	MG	1A	3559	1/1	0.97	0.08	37,37,37,37	0
58	MG	2A	3668	1/1	0.97	0.10	43,43,43,43	0
58	MG	1A	3450	1/1	0.97	0.30	32,32,32,32	0
58	MG	1A	4013	1/1	0.97	0.05	22,22,22,22	0
58	MG	2A	3672	1/1	0.97	0.06	43,43,43,43	0
58	MG	1A	3563	1/1	0.97	0.11	23,23,23,23	0
58	MG	2A	3135	1/1	0.97	0.05	25,25,25,25	0
58	MG	1U	201	1/1	0.97	0.06	27,27,27,27	0
58	MG	2A	3385	1/1	0.97	0.06	46,46,46,46	0
58	MG	2A	3137	1/1	0.97	0.12	33,33,33,33	0
58	MG	2A	3139	1/1	0.97	0.11	50,50,50,50	0
58	MG	1U	202	1/1	0.97	0.23	36,36,36,36	0
58	MG	1A	3347	1/1	0.97	0.07	33,33,33,33	0
58	MG	1a	1743	1/1	0.97	0.09	35,35,35,35	0
58	MG	2A	3143	1/1	0.97	0.14	31,31,31,31	0
58	MG	2A	3144	1/1	0.97	0.12	40,40,40,40	0
58	MG	1A	3349	1/1	0.97	0.08	30,30,30,30	0
58	MG	2a	1645	1/1	0.97	0.19	54,54,54,54	0
58	MG	2A	3394	1/1	0.97	0.10	59,59,59,59	0
58	MG	1U	205	1/1	0.97	0.09	27,27,27,27	0
58	MG	2A	3689	1/1	0.97	0.11	45,45,45,45	0
58	MG	2A	3690	1/1	0.97	0.09	53,53,53,53	0
58	MG	1A	3067	1/1	0.97	0.10	30,30,30,30	0
58	MG	2A	3148	1/1	0.97	0.05	25,25,25,25	0
58	MG	1V	201	1/1	0.97	0.22	25,25,25,25	0
58	MG	1A	3200	1/1	0.97	0.11	20,20,20,20	0
58	MG	2A	3696	1/1	0.97	0.10	22,22,22,22	0
58	MG	1A	3858	1/1	0.97	0.07	25,25,25,25	0
58	MG	2A	3401	1/1	0.97	0.07	43,43,43,43	0
58	MG	1A	4020	1/1	0.97	0.08	37,37,37,37	0
58	MG	2A	3154	1/1	0.97	0.11	44,44,44,44	0
58	MG	1A	3859	1/1	0.97	0.08	14,14,14,14	0
58	MG	1V	207	1/1	0.97	0.06	48,48,48,48	0
58	MG	2a	1661	1/1	0.97	0.06	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3047	1/1	0.97	0.07	25,25,25,25	0
58	MG	1a	1757	1/1	0.97	0.06	42,42,42,42	0
58	MG	1a	1758	1/1	0.97	0.07	44,44,44,44	0
58	MG	2A	3161	1/1	0.97	0.11	32,32,32,32	0
58	MG	1A	3570	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3203	1/1	0.97	0.05	34,34,34,34	0
58	MG	1A	3204	1/1	0.97	0.05	20,20,20,20	0
58	MG	1W	206	1/1	0.97	0.09	20,20,20,20	0
58	MG	1A	3710	1/1	0.97	0.05	9,9,9,9	0
58	MG	1A	3459	1/1	0.97	0.06	43,43,43,43	0
58	MG	2a	1672	1/1	0.97	0.06	49,49,49,49	0
58	MG	1X	103	1/1	0.97	0.07	39,39,39,39	0
58	MG	1X	104	1/1	0.97	0.11	32,32,32,32	0
58	MG	1A	3274	1/1	0.97	0.15	29,29,29,29	0
58	MG	1A	3357	1/1	0.97	0.17	40,40,40,40	0
58	MG	2a	1677	1/1	0.97	0.08	35,35,35,35	0
58	MG	1A	3142	1/1	0.97	0.08	27,27,27,27	0
58	MG	1a	1772	1/1	0.97	0.07	58,58,58,58	0
58	MG	1A	3102	1/1	0.97	0.06	41,41,41,41	0
58	MG	2A	3721	1/1	0.97	0.04	38,38,38,38	0
58	MG	1A	3209	1/1	0.97	0.07	24,24,24,24	0
58	MG	2a	1683	1/1	0.97	0.06	43,43,43,43	0
58	MG	1A	3585	1/1	0.97	0.08	21,21,21,21	0
58	MG	1A	3586	1/1	0.97	0.12	26,26,26,26	0
58	MG	2A	3725	1/1	0.97	0.07	36,36,36,36	0
58	MG	1A	3278	1/1	0.97	0.12	39,39,39,39	0
58	MG	1A	3144	1/1	0.97	0.06	24,24,24,24	0
58	MG	1A	3145	1/1	0.97	0.07	9,9,9,9	0
58	MG	1A	3212	1/1	0.97	0.09	26,26,26,26	0
58	MG	2A	3730	1/1	0.97	0.06	35,35,35,35	0
58	MG	1A	3593	1/1	0.97	0.07	31,31,31,31	0
58	MG	2A	3186	1/1	0.97	0.05	33,33,33,33	0
58	MG	10	109	1/1	0.97	0.04	31,31,31,31	0
58	MG	1A	3881	1/1	0.97	0.10	31,31,31,31	0
58	MG	2A	3435	1/1	0.97	0.25	47,47,47,47	0
58	MG	2a	1699	1/1	0.97	0.10	47,47,47,47	0
58	MG	11	102	1/1	0.97	0.09	32,32,32,32	0
58	MG	1A	3594	1/1	0.97	0.15	34,34,34,34	0
58	MG	1A	3728	1/1	0.97	0.04	29,29,29,29	0
58	MG	1A	3470	1/1	0.97	0.10	29,29,29,29	0
58	MG	1A	3471	1/1	0.97	0.07	24,24,24,24	0
58	MG	1A	3292	1/1	0.97	0.06	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3293	1/1	0.97	0.14	26,26,26,26	0
58	MG	2a	1708	1/1	0.97	0.14	55,55,55,55	0
58	MG	1A	4049	1/1	0.97	0.04	27,27,27,27	0
58	MG	2A	3746	1/1	0.97	0.07	32,32,32,32	0
58	MG	13	102	1/1	0.97	0.14	49,49,49,49	0
58	MG	1A	3474	1/1	0.97	0.10	37,37,37,37	0
58	MG	1A	4051	1/1	0.97	0.10	36,36,36,36	0
58	MG	1a	1800	1/1	0.97	0.10	44,44,44,44	0
58	MG	1A	3029	1/1	0.97	0.04	33,33,33,33	0
58	MG	2a	1716	1/1	0.97	0.18	51,51,51,51	0
58	MG	15	103	1/1	0.97	0.16	28,28,28,28	0
58	MG	2a	1718	1/1	0.97	0.08	51,51,51,51	0
58	MG	1A	4053	1/1	0.97	0.07	25,25,25,25	0
58	MG	2A	3754	1/1	0.97	0.06	43,43,43,43	0
58	MG	1A	3295	1/1	0.97	0.05	27,27,27,27	0
58	MG	1a	1806	1/1	0.97	0.07	47,47,47,47	0
58	MG	2A	3207	1/1	0.97	0.04	36,36,36,36	0
58	MG	2A	3456	1/1	0.97	0.06	43,43,43,43	0
58	MG	16	101	1/1	0.97	0.06	46,46,46,46	0
58	MG	17	101	1/1	0.97	0.05	22,22,22,22	0
58	MG	1A	3738	1/1	0.97	0.05	23,23,23,23	0
58	MG	1A	3216	1/1	0.97	0.12	38,38,38,38	0
58	MG	1A	3478	1/1	0.97	0.06	42,42,42,42	0
58	MG	2a	1730	1/1	0.97	0.17	41,41,41,41	0
58	MG	18	102	1/1	0.97	0.17	36,36,36,36	0
58	MG	1a	1814	1/1	0.97	0.04	41,41,41,41	0
58	MG	2A	3766	1/1	0.97	0.05	35,35,35,35	0
58	MG	2A	3767	1/1	0.97	0.09	33,33,33,33	0
58	MG	1A	3374	1/1	0.97	0.17	41,41,41,41	0
58	MG	1A	3480	1/1	0.97	0.04	33,33,33,33	0
58	MG	1e	201	1/1	0.97	0.12	59,59,59,59	0
58	MG	1e	202	1/1	0.97	0.07	42,42,42,42	0
58	MG	1A	3076	1/1	0.97	0.05	15,15,15,15	0
58	MG	1A	4061	1/1	0.97	0.12	41,41,41,41	0
58	MG	1A	3106	1/1	0.97	0.07	39,39,39,39	0
58	MG	1A	3609	1/1	0.97	0.06	34,34,34,34	0
58	MG	1l	202	1/1	0.97	0.10	49,49,49,49	0
58	MG	2a	1745	1/1	0.97	0.17	55,55,55,55	0
58	MG	1m	3001	1/1	0.97	0.04	51,51,51,51	0
58	MG	2A	3225	1/1	0.97	0.14	37,37,37,37	0
58	MG	2A	3478	1/1	0.97	0.05	17,17,17,17	0
58	MG	1A	3610	1/1	0.97	0.05	19,19,19,19	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3110	1/1	0.97	0.06	22,22,22,22	0
58	MG	1A	3379	1/1	0.97	0.22	27,27,27,27	0
58	MG	1A	3077	1/1	0.97	0.15	32,32,32,32	0
58	MG	2A	3786	1/1	0.97	0.08	50,50,50,50	0
58	MG	2a	1754	1/1	0.97	0.10	53,53,53,53	0
58	MG	1A	3381	1/1	0.97	0.05	36,36,36,36	0
58	MG	2A	3484	1/1	0.97	0.05	49,49,49,49	0
58	MG	2A	3485	1/1	0.97	0.05	28,28,28,28	0
58	MG	1A	3115	1/1	0.97	0.06	25,25,25,25	0
58	MG	1A	4073	1/1	0.97	0.04	12,12,12,12	0
58	MG	1a	1608	1/1	0.97	0.04	48,48,48,48	0
58	MG	1A	3492	1/1	0.97	0.07	43,43,43,43	0
58	MG	2a	1762	1/1	0.97	0.05	35,35,35,35	0
58	MG	1A	3756	1/1	0.97	0.10	30,30,30,30	0
58	MG	1A	3304	1/1	0.97	0.04	16,16,16,16	0
58	MG	1A	3305	1/1	0.97	0.12	39,39,39,39	0
58	MG	1a	1614	1/1	0.97	0.12	47,47,47,47	0
58	MG	2A	3494	1/1	0.97	0.07	39,39,39,39	0
58	MG	2a	1769	1/1	0.97	0.08	56,56,56,56	0
58	MG	1A	3759	1/1	0.97	0.04	31,31,31,31	0
58	MG	2A	3496	1/1	0.97	0.15	32,32,32,32	0
58	MG	1A	3913	1/1	0.97	0.14	14,14,14,14	0
58	MG	1A	3224	1/1	0.97	0.05	31,31,31,31	0
58	MG	1A	4083	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3621	1/1	0.97	0.07	36,36,36,36	0
58	MG	1A	3917	1/1	0.97	0.06	29,29,29,29	0
58	MG	1A	3496	1/1	0.97	0.12	30,30,30,30	0
58	MG	2A	3504	1/1	0.97	0.14	31,31,31,31	0
58	MG	1A	3623	1/1	0.97	0.04	19,19,19,19	0
58	MG	2a	1783	1/1	0.97	0.06	46,46,46,46	0
58	MG	2A	3507	1/1	0.97	0.06	56,56,56,56	0
58	MG	1A	3389	1/1	0.97	0.18	39,39,39,39	0
58	MG	1A	3391	1/1	0.97	0.13	15,15,15,15	0
58	MG	1A	3308	1/1	0.97	0.04	18,18,18,18	0
58	MG	1A	3393	1/1	0.97	0.06	40,40,40,40	0
58	MG	2A	3814	1/1	0.97	0.07	44,44,44,44	0
58	MG	1A	3157	1/1	0.97	0.12	39,39,39,39	0
58	MG	1A	3049	1/1	0.97	0.03	11,11,11,11	0
58	MG	1A	3311	1/1	0.97	0.08	35,35,35,35	0
58	MG	1A	3930	1/1	0.97	0.05	38,38,38,38	0
58	MG	2A	3257	1/1	0.97	0.09	40,40,40,40	0
58	MG	2A	3820	1/1	0.97	0.05	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1632	1/1	0.97	0.11	43,43,43,43	0
58	MG	2A	3822	1/1	0.97	0.06	30,30,30,30	0
58	MG	1A	3160	1/1	0.97	0.16	25,25,25,25	0
58	MG	1a	1634	1/1	0.97	0.14	21,21,21,21	0
58	MG	2a	1802	1/1	0.97	0.16	52,52,52,52	0
58	MG	2A	3261	1/1	0.97	0.17	52,52,52,52	0
58	MG	1A	3161	1/1	0.97	0.06	28,28,28,28	0
58	MG	1A	3635	1/1	0.97	0.05	41,41,41,41	0
58	MG	2a	1806	1/1	0.97	0.17	38,38,38,38	0
58	MG	2a	1807	1/1	0.97	0.12	44,44,44,44	0
58	MG	2A	3264	1/1	0.97	0.17	45,45,45,45	0
58	MG	1A	3036	1/1	0.97	0.06	30,30,30,30	0
58	MG	2A	3014	1/1	0.97	0.09	29,29,29,29	0
58	MG	2A	3831	1/1	0.97	0.05	32,32,32,32	0
58	MG	1A	3166	1/1	0.97	0.15	23,23,23,23	0
58	MG	1A	3640	1/1	0.97	0.04	14,14,14,14	0
58	MG	2A	3530	1/1	0.97	0.06	25,25,25,25	0
58	MG	2a	1815	1/1	0.97	0.09	59,59,59,59	0
58	MG	1A	3234	1/1	0.97	0.15	37,37,37,37	0
58	MG	2A	3018	1/1	0.97	0.07	37,37,37,37	0
58	MG	2A	3840	1/1	0.97	0.09	21,21,21,21	0
58	MG	2A	3271	1/1	0.97	0.16	54,54,54,54	0
58	MG	1A	3511	1/1	0.97	0.07	40,40,40,40	0
58	MG	2A	3273	1/1	0.97	0.07	51,51,51,51	0
58	MG	1A	3781	1/1	0.97	0.05	20,20,20,20	0
58	MG	2A	3846	1/1	0.97	0.04	28,28,28,28	0
58	MG	1a	1644	1/1	0.97	0.09	52,52,52,52	0
58	MG	2A	3848	1/1	0.97	0.07	53,53,53,53	0
58	MG	2A	3849	1/1	0.97	0.12	42,42,42,42	0
58	MG	1A	3052	1/1	0.97	0.12	19,19,19,19	0
58	MG	1A	3944	1/1	0.97	0.05	33,33,33,33	0
58	MG	1A	3119	1/1	0.97	0.11	22,22,22,22	0
58	MG	1A	3645	1/1	0.97	0.06	37,37,37,37	0
58	MG	2A	3028	1/1	0.97	0.08	43,43,43,43	0
58	MG	2A	3544	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3786	1/1	0.97	0.02	14,14,14,14	0
58	MG	1A	3011	1/1	0.97	0.07	28,28,28,28	0
58	MG	1a	1654	1/1	0.97	0.13	55,55,55,55	0
58	MG	2A	3284	1/1	0.97	0.09	40,40,40,40	0
58	MG	1A	3239	1/1	0.97	0.27	27,27,27,27	0
58	MG	1A	3790	1/1	0.97	0.07	18,18,18,18	0
58	MG	2A	3864	1/1	0.97	0.06	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1B	216	1/1	0.97	0.04	52,52,52,52	0
58	MG	1a	1659	1/1	0.97	0.05	44,44,44,44	0
58	MG	1B	218	1/1	0.97	0.05	27,27,27,27	0
58	MG	2A	3556	1/1	0.97	0.10	25,25,25,25	0
58	MG	2l	202	1/1	0.97	0.13	53,53,53,53	0
58	MG	2l	203	1/1	0.97	0.08	54,54,54,54	0
58	MG	1A	3086	1/1	0.97	0.10	27,27,27,27	0
58	MG	2A	3038	1/1	0.97	0.06	35,35,35,35	0
58	MG	2A	3561	1/1	0.97	0.07	27,27,27,27	0
58	MG	1A	3649	1/1	0.97	0.07	10,10,10,10	0
58	MG	2A	3563	1/1	0.97	0.07	45,45,45,45	0
58	MG	1A	3955	1/1	0.97	0.05	59,59,59,59	0
58	MG	2B	204	1/1	0.97	0.06	55,55,55,55	0
58	MG	1A	3650	1/1	0.97	0.08	34,34,34,34	0
58	MG	1a	1665	1/1	0.97	0.14	48,48,48,48	0
58	MG	1a	1666	1/1	0.97	0.11	44,44,44,44	0
58	MG	1A	3241	1/1	0.97	0.05	31,31,31,31	0
58	MG	2A	3570	1/1	0.97	0.04	25,25,25,25	0
58	MG	1A	3958	1/1	0.97	0.04	30,30,30,30	0
58	MG	2A	3048	1/1	0.97	0.17	49,49,49,49	0
58	MG	1A	3653	1/1	0.97	0.06	25,25,25,25	0
58	MG	2A	3574	1/1	0.97	0.06	30,30,30,30	0
58	MG	2x	102	1/1	0.97	0.10	46,46,46,46	0
58	MG	1a	1670	1/1	0.97	0.18	55,55,55,55	0
58	MG	2A	3576	1/1	0.97	0.06	38,38,38,38	0
58	MG	1A	3088	1/1	0.97	0.12	25,25,25,25	0
58	MG	2x	106	1/1	0.97	0.12	40,40,40,40	0
58	MG	1A	3797	1/1	0.97	0.03	14,14,14,14	0
58	MG	1A	3523	1/1	0.97	0.07	23,23,23,23	0
60	ZN	2Y	202	1/1	0.97	0.05	81,81,81,81	0
60	ZN	24	501	1/1	0.97	0.09	89,89,89,89	0
58	MG	1A	3245	1/1	0.97	0.11	34,34,34,34	0
58	MG	1A	3127	1/1	0.98	0.14	19,19,19,19	0
58	MG	1A	3782	1/1	0.98	0.04	31,31,31,31	0
58	MG	1A	3182	1/1	0.98	0.05	21,21,21,21	0
58	MG	18	104	1/1	0.98	0.11	31,31,31,31	0
58	MG	1A	3652	1/1	0.98	0.07	17,17,17,17	0
58	MG	1A	3128	1/1	0.98	0.18	25,25,25,25	0
58	MG	1A	3059	1/1	0.98	0.04	31,31,31,31	0
58	MG	1A	3060	1/1	0.98	0.07	38,38,38,38	0
58	MG	1A	3935	1/1	0.98	0.03	25,25,25,25	0
58	MG	19	101	1/1	0.98	0.23	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3788	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3937	1/1	0.98	0.03	10,10,10,10	0
58	MG	1A	3656	1/1	0.98	0.05	27,27,27,27	0
58	MG	1A	3022	1/1	0.98	0.06	31,31,31,31	0
58	MG	1A	3094	1/1	0.98	0.06	20,20,20,20	0
58	MG	1A	3426	1/1	0.98	0.06	26,26,26,26	0
58	MG	1A	3255	1/1	0.98	0.04	39,39,39,39	0
58	MG	1A	3188	1/1	0.98	0.03	24,24,24,24	0
58	MG	1A	3945	1/1	0.98	0.06	45,45,45,45	0
58	MG	1A	3039	1/1	0.98	0.13	24,24,24,24	0
58	MG	2A	3444	1/1	0.98	0.09	37,37,37,37	0
58	MG	1a	1611	1/1	0.98	0.07	16,16,16,16	0
58	MG	1A	3018	1/1	0.98	0.12	20,20,20,20	0
58	MG	2A	3447	1/1	0.98	0.08	42,42,42,42	0
58	MG	1A	3432	1/1	0.98	0.04	35,35,35,35	0
58	MG	1B	205	1/1	0.98	0.05	38,38,38,38	0
58	MG	1A	3041	1/1	0.98	0.04	25,25,25,25	0
58	MG	1A	3799	1/1	0.98	0.07	41,41,41,41	0
58	MG	1A	3136	1/1	0.98	0.18	21,21,21,21	0
58	MG	1a	1618	1/1	0.98	0.06	27,27,27,27	0
58	MG	1B	209	1/1	0.98	0.04	31,31,31,31	0
58	MG	1A	3801	1/1	0.98	0.07	40,40,40,40	0
58	MG	1A	3953	1/1	0.98	0.03	42,42,42,42	0
58	MG	1A	3194	1/1	0.98	0.06	37,37,37,37	0
58	MG	1A	3137	1/1	0.98	0.03	32,32,32,32	0
58	MG	1A	3098	1/1	0.98	0.04	27,27,27,27	0
58	MG	1A	3025	1/1	0.98	0.10	22,22,22,22	0
58	MG	1A	3672	1/1	0.98	0.08	35,35,35,35	0
58	MG	1B	217	1/1	0.98	0.05	37,37,37,37	0
58	MG	1A	3545	1/1	0.98	0.08	19,19,19,19	0
58	MG	1A	3014	1/1	0.98	0.04	19,19,19,19	0
58	MG	2A	3466	1/1	0.98	0.08	15,15,15,15	0
58	MG	1B	220	1/1	0.98	0.04	26,26,26,26	0
58	MG	1A	3547	1/1	0.98	0.05	35,35,35,35	0
58	MG	1A	3008	1/1	0.98	0.06	21,21,21,21	0
58	MG	2A	3233	1/1	0.98	0.16	34,34,34,34	0
58	MG	1A	3071	1/1	0.98	0.03	9,9,9,9	0
58	MG	1A	3812	1/1	0.98	0.05	14,14,14,14	0
58	MG	1A	3813	1/1	0.98	0.04	39,39,39,39	0
58	MG	1A	3814	1/1	0.98	0.04	18,18,18,18	0
58	MG	1a	1637	1/1	0.98	0.07	38,38,38,38	0
58	MG	2A	3735	1/1	0.98	0.04	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3679	1/1	0.98	0.05	13,13,13,13	0
58	MG	1A	3028	1/1	0.98	0.05	26,26,26,26	0
58	MG	1A	3270	1/1	0.98	0.14	27,27,27,27	0
58	MG	2A	3009	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3243	1/1	0.98	0.06	39,39,39,39	0
58	MG	2A	3010	1/1	0.98	0.09	38,38,38,38	0
58	MG	1A	3202	1/1	0.98	0.09	21,21,21,21	0
58	MG	1A	3351	1/1	0.98	0.09	34,34,34,34	0
58	MG	2A	3744	1/1	0.98	0.08	23,23,23,23	0
58	MG	1B	232	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3104	1/1	0.98	0.09	23,23,23,23	0
58	MG	1A	3075	1/1	0.98	0.04	27,27,27,27	0
58	MG	1A	3823	1/1	0.98	0.04	15,15,15,15	0
58	MG	1A	3975	1/1	0.98	0.08	36,36,36,36	0
58	MG	1A	3448	1/1	0.98	0.16	21,21,21,21	0
58	MG	1D	301	1/1	0.98	0.06	20,20,20,20	0
58	MG	1A	3825	1/1	0.98	0.14	24,24,24,24	0
58	MG	2A	3021	1/1	0.98	0.05	16,16,16,16	0
58	MG	1a	1652	1/1	0.98	0.08	33,33,33,33	0
58	MG	1a	1653	1/1	0.98	0.04	39,39,39,39	0
58	MG	1D	303	1/1	0.98	0.05	32,32,32,32	0
58	MG	1a	1655	1/1	0.98	0.05	38,38,38,38	0
58	MG	2A	3026	1/1	0.98	0.06	33,33,33,33	0
58	MG	1D	304	1/1	0.98	0.06	14,14,14,14	0
58	MG	1D	305	1/1	0.98	0.05	25,25,25,25	0
58	MG	1D	307	1/1	0.98	0.08	26,26,26,26	0
58	MG	1D	309	1/1	0.98	0.04	31,31,31,31	0
58	MG	2A	3503	1/1	0.98	0.14	42,42,42,42	0
58	MG	1D	310	1/1	0.98	0.12	20,20,20,20	0
58	MG	2A	3505	1/1	0.98	0.06	55,55,55,55	0
58	MG	1A	3449	1/1	0.98	0.12	27,27,27,27	0
58	MG	1A	3021	1/1	0.98	0.07	12,12,12,12	0
58	MG	1A	3828	1/1	0.98	0.03	14,14,14,14	0
58	MG	1E	302	1/1	0.98	0.08	32,32,32,32	0
58	MG	1E	304	1/1	0.98	0.05	20,20,20,20	0
58	MG	1A	3830	1/1	0.98	0.06	21,21,21,21	0
58	MG	1A	3206	1/1	0.98	0.10	12,12,12,12	0
58	MG	1E	307	1/1	0.98	0.04	25,25,25,25	0
58	MG	2A	3041	1/1	0.98	0.08	48,48,48,48	0
58	MG	1E	308	1/1	0.98	0.06	35,35,35,35	0
58	MG	1A	3148	1/1	0.98	0.07	24,24,24,24	0
58	MG	2A	3777	1/1	0.98	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
58	MG	1A	3453	1/1	0.98	0.07	25,25,25,25	0
58	MG	2A	3779	1/1	0.98	0.03	38,38,38,38	0
58	MG	1A	3834	1/1	0.98	0.04	20,20,20,20	0
58	MG	2a	1693	1/1	0.98	0.09	44,44,44,44	0
58	MG	1a	1673	1/1	0.98	0.07	39,39,39,39	0
58	MG	1A	3149	1/1	0.98	0.15	20,20,20,20	0
58	MG	2a	1696	1/1	0.98	0.09	40,40,40,40	0
58	MG	2A	3521	1/1	0.98	0.05	34,34,34,34	0
58	MG	1F	301	1/1	0.98	0.05	25,25,25,25	0
58	MG	1A	3358	1/1	0.98	0.05	34,34,34,34	0
58	MG	2a	1700	1/1	0.98	0.11	26,26,26,26	0
58	MG	1F	304	1/1	0.98	0.09	22,22,22,22	0
58	MG	1A	3107	1/1	0.98	0.07	29,29,29,29	0
58	MG	1A	3109	1/1	0.98	0.09	28,28,28,28	0
58	MG	1A	3030	1/1	0.98	0.20	18,18,18,18	0
58	MG	2A	3528	1/1	0.98	0.05	39,39,39,39	0
58	MG	1A	3281	1/1	0.98	0.06	14,14,14,14	0
58	MG	1A	3574	1/1	0.98	0.13	24,24,24,24	0
58	MG	1A	3283	1/1	0.98	0.24	28,28,28,28	0
58	MG	1A	3994	1/1	0.98	0.05	24,24,24,24	0
58	MG	1A	3213	1/1	0.98	0.09	33,33,33,33	0
58	MG	1A	3286	1/1	0.98	0.20	26,26,26,26	0
58	MG	2A	3061	1/1	0.98	0.04	34,34,34,34	0
58	MG	1A	3366	1/1	0.98	0.16	24,24,24,24	0
58	MG	1A	3579	1/1	0.98	0.15	40,40,40,40	0
58	MG	2A	3538	1/1	0.98	0.08	38,38,38,38	0
58	MG	1A	3287	1/1	0.98	0.07	28,28,28,28	0
58	MG	1A	3288	1/1	0.98	0.07	25,25,25,25	0
58	MG	1G	205	1/1	0.98	0.09	41,41,41,41	0
58	MG	1A	3583	1/1	0.98	0.40	32,32,32,32	0
58	MG	1A	3289	1/1	0.98	0.07	31,31,31,31	0
58	MG	1A	3371	1/1	0.98	0.04	28,28,28,28	0
58	MG	2A	3545	1/1	0.98	0.05	36,36,36,36	0
58	MG	1N	203	1/1	0.98	0.05	33,33,33,33	0
58	MG	1A	3852	1/1	0.98	0.06	41,41,41,41	0
58	MG	1A	3468	1/1	0.98	0.05	26,26,26,26	0
58	MG	1A	3290	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3291	1/1	0.98	0.07	41,41,41,41	0
58	MG	2A	3075	1/1	0.98	0.09	38,38,38,38	0
58	MG	1A	3714	1/1	0.98	0.04	26,26,26,26	0
58	MG	2A	3553	1/1	0.98	0.08	39,39,39,39	0
58	MG	1A	3214	1/1	0.98	0.12	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3153	1/1	0.98	0.10	27,27,27,27	0
58	MG	1A	3717	1/1	0.98	0.03	28,28,28,28	0
58	MG	2A	3557	1/1	0.98	0.09	29,29,29,29	0
58	MG	2A	3558	1/1	0.98	0.10	44,44,44,44	0
58	MG	1P	202	1/1	0.98	0.06	20,20,20,20	0
58	MG	1P	203	1/1	0.98	0.14	24,24,24,24	0
58	MG	1A	3111	1/1	0.98	0.20	21,21,21,21	0
58	MG	2A	3084	1/1	0.98	0.07	38,38,38,38	0
58	MG	1Q	201	1/1	0.98	0.22	33,33,33,33	0
58	MG	1A	3377	1/1	0.98	0.11	34,34,34,34	0
58	MG	2A	3087	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3155	1/1	0.98	0.07	24,24,24,24	0
58	MG	1Q	204	1/1	0.98	0.06	35,35,35,35	0
58	MG	1A	3219	1/1	0.98	0.11	25,25,25,25	0
58	MG	1A	3112	1/1	0.98	0.04	29,29,29,29	0
58	MG	2A	3324	1/1	0.98	0.05	33,33,33,33	0
58	MG	2A	3093	1/1	0.98	0.09	37,37,37,37	0
58	MG	1A	3598	1/1	0.98	0.11	17,17,17,17	0
58	MG	1A	3724	1/1	0.98	0.04	18,18,18,18	0
58	MG	2A	3837	1/1	0.98	0.05	41,41,41,41	0
58	MG	2A	3838	1/1	0.98	0.05	53,53,53,53	0
58	MG	1A	3032	1/1	0.98	0.07	17,17,17,17	0
58	MG	1A	3081	1/1	0.98	0.08	31,31,31,31	0
58	MG	1A	3870	1/1	0.98	0.09	43,43,43,43	0
58	MG	2A	3842	1/1	0.98	0.04	39,39,39,39	0
58	MG	1A	3383	1/1	0.98	0.07	19,19,19,19	0
58	MG	2A	3332	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3159	1/1	0.98	0.05	32,32,32,32	0
58	MG	1A	3482	1/1	0.98	0.05	35,35,35,35	0
58	MG	1A	3874	1/1	0.98	0.08	20,20,20,20	0
58	MG	1A	3484	1/1	0.98	0.05	27,27,27,27	0
58	MG	2a	1764	1/1	0.98	0.06	53,53,53,53	0
58	MG	1A	3485	1/1	0.98	0.13	40,40,40,40	0
58	MG	2A	3850	1/1	0.98	0.07	37,37,37,37	0
58	MG	1A	3033	1/1	0.98	0.19	25,25,25,25	0
58	MG	1A	3386	1/1	0.98	0.07	28,28,28,28	0
58	MG	2A	3853	1/1	0.98	0.04	47,47,47,47	0
58	MG	1A	3387	1/1	0.98	0.06	46,46,46,46	0
58	MG	2a	1771	1/1	0.98	0.11	45,45,45,45	0
58	MG	1A	3736	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3225	1/1	0.98	0.08	27,27,27,27	0
58	MG	2a	1774	1/1	0.98	0.05	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	4034	1/1	0.98	0.03	13,13,13,13	0
58	MG	2a	1776	1/1	0.98	0.04	39,39,39,39	0
58	MG	2A	3111	1/1	0.98	0.10	35,35,35,35	0
58	MG	2A	3592	1/1	0.98	0.07	32,32,32,32	0
58	MG	1U	206	1/1	0.98	0.18	30,30,30,30	0
58	MG	1U	207	1/1	0.98	0.16	27,27,27,27	0
58	MG	1U	208	1/1	0.98	0.11	28,28,28,28	0
58	MG	1a	1735	1/1	0.98	0.09	37,37,37,37	0
58	MG	1A	3053	1/1	0.98	0.05	31,31,31,31	0
58	MG	1A	3883	1/1	0.98	0.09	26,26,26,26	0
58	MG	2a	1785	1/1	0.98	0.09	42,42,42,42	0
58	MG	2A	3119	1/1	0.98	0.04	26,26,26,26	0
58	MG	2A	3601	1/1	0.98	0.05	33,33,33,33	0
58	MG	1A	4037	1/1	0.98	0.06	33,33,33,33	0
58	MG	1A	3390	1/1	0.98	0.14	21,21,21,21	0
58	MG	1A	3054	1/1	0.98	0.08	41,41,41,41	0
58	MG	1A	3307	1/1	0.98	0.06	27,27,27,27	0
58	MG	1A	3163	1/1	0.98	0.11	25,25,25,25	0
58	MG	1A	3743	1/1	0.98	0.04	45,45,45,45	0
58	MG	1A	3230	1/1	0.98	0.08	25,25,25,25	0
58	MG	1A	3085	1/1	0.98	0.17	25,25,25,25	0
58	MG	1W	204	1/1	0.98	0.07	22,22,22,22	0
58	MG	1A	3121	1/1	0.98	0.09	27,27,27,27	0
58	MG	2A	3362	1/1	0.98	0.09	48,48,48,48	0
58	MG	2a	1799	1/1	0.98	0.07	46,46,46,46	0
58	MG	1A	3397	1/1	0.98	0.06	45,45,45,45	0
58	MG	2A	3614	1/1	0.98	0.07	49,49,49,49	0
58	MG	1A	3893	1/1	0.98	0.06	26,26,26,26	0
58	MG	1X	101	1/1	0.98	0.16	28,28,28,28	0
58	MG	1a	1751	1/1	0.98	0.17	34,34,34,34	0
58	MG	1a	1752	1/1	0.98	0.04	41,41,41,41	0
58	MG	1A	3619	1/1	0.98	0.09	35,35,35,35	0
58	MG	1A	3055	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	3169	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3138	1/1	0.98	0.04	29,29,29,29	0
58	MG	1X	105	1/1	0.98	0.07	35,35,35,35	0
58	MG	1A	3400	1/1	0.98	0.08	22,22,22,22	0
58	MG	1A	3402	1/1	0.98	0.19	25,25,25,25	0
58	MG	1A	3503	1/1	0.98	0.15	26,26,26,26	0
58	MG	2A	3376	1/1	0.98	0.06	29,29,29,29	0
58	MG	1A	3625	1/1	0.98	0.09	27,27,27,27	0
58	MG	1Y	204	1/1	0.98	0.17	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2D	305	1/1	0.98	0.03	21,21,21,21	0
58	MG	1A	3504	1/1	0.98	0.07	24,24,24,24	0
58	MG	1a	1765	1/1	0.98	0.05	44,44,44,44	0
58	MG	1A	3170	1/1	0.98	0.06	26,26,26,26	0
58	MG	1A	3171	1/1	0.98	0.04	22,22,22,22	0
58	MG	1A	3237	1/1	0.98	0.16	33,33,33,33	0
58	MG	1A	3087	1/1	0.98	0.07	20,20,20,20	0
58	MG	2E	304	1/1	0.98	0.10	34,34,34,34	0
58	MG	1A	3034	1/1	0.98	0.13	21,21,21,21	0
58	MG	10	106	1/1	0.98	0.05	31,31,31,31	0
58	MG	2A	3153	1/1	0.98	0.08	37,37,37,37	0
58	MG	1A	3408	1/1	0.98	0.05	36,36,36,36	0
58	MG	1A	3409	1/1	0.98	0.06	35,35,35,35	0
58	MG	1A	4063	1/1	0.98	0.03	14,14,14,14	0
58	MG	2A	3157	1/1	0.98	0.06	46,46,46,46	0
58	MG	1A	3035	1/1	0.98	0.04	35,35,35,35	0
58	MG	1A	3636	1/1	0.98	0.04	23,23,23,23	0
58	MG	1A	4066	1/1	0.98	0.06	32,32,32,32	0
58	MG	1a	1778	1/1	0.98	0.05	39,39,39,39	0
58	MG	1A	3090	1/1	0.98	0.12	34,34,34,34	0
58	MG	2d	302	1/1	0.98	0.04	52,52,52,52	0
58	MG	1A	3321	1/1	0.98	0.19	22,22,22,22	0
58	MG	2f	201	1/1	0.98	0.11	39,39,39,39	0
58	MG	1A	3515	1/1	0.98	0.03	37,37,37,37	0
58	MG	1A	4070	1/1	0.98	0.05	19,19,19,19	0
58	MG	1a	1783	1/1	0.98	0.04	54,54,54,54	0
58	MG	1A	3516	1/1	0.98	0.09	44,44,44,44	0
58	MG	2A	3654	1/1	0.98	0.16	35,35,35,35	0
58	MG	1A	3242	1/1	0.98	0.07	16,16,16,16	0
58	MG	13	101	1/1	0.98	0.10	32,32,32,32	0
58	MG	2A	3657	1/1	0.98	0.13	53,53,53,53	0
58	MG	1A	3177	1/1	0.98	0.20	24,24,24,24	0
58	MG	1a	1790	1/1	0.98	0.04	43,43,43,43	0
58	MG	13	103	1/1	0.98	0.06	35,35,35,35	0
58	MG	1A	3519	1/1	0.98	0.11	21,21,21,21	0
58	MG	1A	4075	1/1	0.98	0.06	24,24,24,24	0
58	MG	2W	202	1/1	0.98	0.12	31,31,31,31	0
58	MG	2r	101	1/1	0.98	0.05	44,44,44,44	0
58	MG	1A	3921	1/1	0.98	0.03	22,22,22,22	0
58	MG	2A	3664	1/1	0.98	0.04	37,37,37,37	0
58	MG	1A	3244	1/1	0.98	0.10	21,21,21,21	0
58	MG	2X	102	1/1	0.98	0.03	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2X	103	1/1	0.98	0.10	40,40,40,40	0
58	MG	15	104	1/1	0.98	0.16	24,24,24,24	0
58	MG	1A	3521	1/1	0.98	0.14	19,19,19,19	0
58	MG	15	106	1/1	0.98	0.15	39,39,39,39	0
58	MG	1A	3416	1/1	0.98	0.15	29,29,29,29	0
58	MG	1A	3925	1/1	0.98	0.07	40,40,40,40	0
58	MG	2A	3184	1/1	0.98	0.08	31,31,31,31	0
58	MG	1A	3179	1/1	0.98	0.03	17,17,17,17	0
58	MG	2A	3674	1/1	0.98	0.04	36,36,36,36	0
58	MG	17	102	1/1	0.98	0.07	17,17,17,17	0
58	MG	1A	4082	1/1	0.98	0.06	18,18,18,18	0
58	MG	25	104	1/1	0.98	0.05	49,49,49,49	0
58	MG	2A	3188	1/1	0.98	0.04	32,32,32,32	0
59	K	1A	3568	1/1	0.98	0.09	37,37,37,37	0
59	K	2A	3465	1/1	0.98	0.05	50,50,50,50	0
60	ZN	14	102	1/1	0.98	0.06	81,81,81,81	0
60	ZN	1n	103	1/1	0.98	0.03	51,51,51,51	0
58	MG	1a	1804	1/1	0.98	0.05	58,58,58,58	0
58	MG	2A	3422	1/1	0.98	0.07	32,32,32,32	0
60	ZN	25	106	1/1	0.98	0.04	73,73,73,73	0
60	ZN	29	102	1/1	0.98	0.04	56,56,56,56	0
58	MG	1A	3180	1/1	0.98	0.03	20,20,20,20	0
58	MG	1A	3114	1/1	0.99	0.09	20,20,20,20	0
58	MG	1A	3299	1/1	0.99	0.07	27,27,27,27	0
58	MG	2A	3640	1/1	0.99	0.12	33,33,33,33	0
58	MG	1A	3207	1/1	0.99	0.04	24,24,24,24	0
58	MG	1A	3079	1/1	0.99	0.08	19,19,19,19	0
58	MG	1A	3675	1/1	0.99	0.02	15,15,15,15	0
58	MG	1A	3729	1/1	0.99	0.08	15,15,15,15	0
58	MG	1F	309	1/1	0.99	0.11	19,19,19,19	0
58	MG	1A	3031	1/1	0.99	0.13	21,21,21,21	0
58	MG	1A	3303	1/1	0.99	0.04	18,18,18,18	0
58	MG	1A	3580	1/1	0.99	0.07	30,30,30,30	0
58	MG	1A	3269	1/1	0.99	0.10	24,24,24,24	0
58	MG	1A	3680	1/1	0.99	0.05	20,20,20,20	0
58	MG	1Y	205	1/1	0.99	0.03	49,49,49,49	0
58	MG	1A	3038	1/1	0.99	0.09	16,16,16,16	0
58	MG	1a	1789	1/1	0.99	0.02	34,34,34,34	0
58	MG	1A	3630	1/1	0.99	0.05	20,20,20,20	0
58	MG	1A	3683	1/1	0.99	0.08	20,20,20,20	0
58	MG	2A	3471	1/1	0.99	0.12	30,30,30,30	0
58	MG	1A	3916	1/1	0.99	0.05	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3065	1/1	0.99	0.10	30,30,30,30	0
58	MG	10	104	1/1	0.99	0.10	29,29,29,29	0
58	MG	1A	3046	1/1	0.99	0.05	23,23,23,23	0
58	MG	2A	3567	1/1	0.99	0.06	36,36,36,36	0
58	MG	2A	3116	1/1	0.99	0.10	41,41,41,41	0
58	MG	1A	3120	1/1	0.99	0.09	28,28,28,28	0
58	MG	1A	3920	1/1	0.99	0.04	18,18,18,18	0
58	MG	1A	3056	1/1	0.99	0.04	23,23,23,23	0
58	MG	1A	3068	1/1	0.99	0.04	22,22,22,22	0
58	MG	1a	1718	1/1	0.99	0.08	28,28,28,28	0
58	MG	1A	3588	1/1	0.99	0.05	21,21,21,21	0
58	MG	1A	3164	1/1	0.99	0.03	17,17,17,17	0
58	MG	1A	3190	1/1	0.99	0.12	27,27,27,27	0
58	MG	2A	3671	1/1	0.99	0.03	41,41,41,41	0
58	MG	2A	3303	1/1	0.99	0.15	34,34,34,34	0
58	MG	1A	3639	1/1	0.99	0.03	21,21,21,21	0
58	MG	2A	3039	1/1	0.99	0.03	16,16,16,16	0
58	MG	1A	3348	1/1	0.99	0.20	26,26,26,26	0
58	MG	1A	3865	1/1	0.99	0.07	31,31,31,31	0
58	MG	1A	3748	1/1	0.99	0.04	41,41,41,41	0
58	MG	2A	3678	1/1	0.99	0.05	37,37,37,37	0
58	MG	1P	201	1/1	0.99	0.05	19,19,19,19	0
58	MG	1a	1809	1/1	0.99	0.10	34,34,34,34	0
58	MG	1A	3592	1/1	0.99	0.05	37,37,37,37	0
58	MG	1A	3750	1/1	0.99	0.03	13,13,13,13	0
58	MG	1a	1651	1/1	0.99	0.06	36,36,36,36	0
58	MG	1A	3218	1/1	0.99	0.11	28,28,28,28	0
58	MG	1A	3165	1/1	0.99	0.06	14,14,14,14	0
58	MG	1A	3023	1/1	0.99	0.04	9,9,9,9	0
58	MG	1A	3070	1/1	0.99	0.09	18,18,18,18	0
58	MG	1A	3428	1/1	0.99	0.07	21,21,21,21	0
58	MG	1A	3282	1/1	0.99	0.09	22,22,22,22	0
58	MG	2a	1731	1/1	0.99	0.07	52,52,52,52	0
58	MG	1A	3251	1/1	0.99	0.08	25,25,25,25	0
58	MG	1A	3003	1/1	0.99	0.08	19,19,19,19	0
58	MG	1A	3940	1/1	0.99	0.03	23,23,23,23	0
58	MG	2A	3057	1/1	0.99	0.09	45,45,45,45	0
58	MG	2A	3598	1/1	0.99	0.08	32,32,32,32	0
58	MG	2A	3695	1/1	0.99	0.06	49,49,49,49	0
58	MG	1A	3285	1/1	0.99	0.14	23,23,23,23	0
58	MG	1A	3818	1/1	0.99	0.05	23,23,23,23	0
58	MG	1R	203	1/1	0.99	0.04	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3072	1/1	0.99	0.13	27,27,27,27	0
58	MG	1A	3147	1/1	0.99	0.04	29,29,29,29	0
58	MG	1A	3073	1/1	0.99	0.04	15,15,15,15	0
58	MG	1A	3108	1/1	0.99	0.03	19,19,19,19	0
58	MG	1A	3009	1/1	0.99	0.05	15,15,15,15	0
58	MG	1A	3558	1/1	0.99	0.05	18,18,18,18	0
58	MG	1D	306	1/1	0.99	0.04	24,24,24,24	0
58	MG	1A	3228	1/1	0.99	0.04	38,38,38,38	0
58	MG	1D	308	1/1	0.99	0.07	34,34,34,34	0
58	MG	1A	3768	1/1	0.99	0.04	29,29,29,29	0
58	MG	1A	3560	1/1	0.99	0.08	23,23,23,23	0
58	MG	1A	3174	1/1	0.99	0.11	9,9,9,9	0
58	MG	2E	309	1/1	0.99	0.06	23,23,23,23	0
58	MG	1A	3829	1/1	0.99	0.03	25,25,25,25	0
58	MG	1A	3401	1/1	0.99	0.05	19,19,19,19	0
58	MG	1a	1756	1/1	0.99	0.08	45,45,45,45	0
58	MG	2A	3714	1/1	0.99	0.05	20,20,20,20	0
58	MG	2A	3076	1/1	0.99	0.12	29,29,29,29	0
58	MG	1A	3010	1/1	0.99	0.07	25,25,25,25	0
58	MG	1E	303	1/1	0.99	0.13	21,21,21,21	0
58	MG	1A	3051	1/1	0.99	0.08	17,17,17,17	0
58	MG	1A	3043	1/1	0.99	0.13	24,24,24,24	0
58	MG	1A	3664	1/1	0.99	0.05	32,32,32,32	0
58	MG	1a	1762	1/1	0.99	0.03	34,34,34,34	0
58	MG	1V	203	1/1	0.99	0.08	24,24,24,24	0
58	MG	1A	3483	1/1	0.99	0.04	32,32,32,32	0
58	MG	1A	3896	1/1	0.99	0.04	37,37,37,37	0
58	MG	1A	3178	1/1	0.99	0.13	18,18,18,18	0
58	MG	1E	310	1/1	0.99	0.08	18,18,18,18	0
58	MG	1a	1688	1/1	0.99	0.15	31,31,31,31	0
58	MG	1A	3078	1/1	0.99	0.03	23,23,23,23	0
58	MG	2A	3177	1/1	0.99	0.05	28,28,28,28	0
60	ZN	1Y	206	1/1	0.99	0.02	52,52,52,52	0
58	MG	1A	3571	1/1	0.99	0.07	19,19,19,19	0
60	ZN	15	108	1/1	0.99	0.04	60,60,60,60	0
60	ZN	16	102	1/1	0.99	0.03	37,37,37,37	0
58	MG	1A	3572	1/1	0.99	0.03	11,11,11,11	0
58	MG	2A	3180	1/1	0.99	0.06	45,45,45,45	0
58	MG	2A	3092	1/1	0.99	0.03	27,27,27,27	0
58	MG	1A	3369	1/1	0.99	0.12	28,28,28,28	0
60	ZN	26	102	1/1	0.99	0.04	52,52,52,52	0
58	MG	1F	302	1/1	0.99	0.12	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3834	1/1	0.99	0.04	25,25,25,25	0
61	SF4	1d	302	8/8	0.99	0.05	51,52,59,61	0
61	SF4	2d	303	8/8	0.99	0.04	52,61,73,73	0
58	MG	1A	3037	1/1	1.00	0.07	16,16,16,16	0
58	MG	1a	1788	1/1	1.00	0.01	37,37,37,37	0
58	MG	1A	3561	1/1	1.00	0.12	25,25,25,25	0
58	MG	1A	3007	1/1	1.00	0.06	30,30,30,30	0
58	MG	1A	3535	1/1	1.00	0.06	26,26,26,26	0
58	MG	1A	4006	1/1	1.00	0.03	25,25,25,25	0
60	ZN	19	102	1/1	1.00	0.04	36,36,36,36	0
58	MG	1A	3761	1/1	1.00	0.08	14,14,14,14	0

6.5 Other polymers (i)

There are no such residues in this entry.