



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 4, 2026 – 05:38 AM EDT

PDB ID : 4Y4P / pdb_00004y4p
Title : Crystal structure of the Thermus thermophilus 70S ribosome with rRNA modifications and bound to mRNA and A-, P- and E-site tRNAs at 2.5Å resolution
Authors : Polikanov, Y.S.; Melnikov, S.V.; Soll, D.; Steitz, T.A.
Deposited on : 2015-02-10
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 ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.50

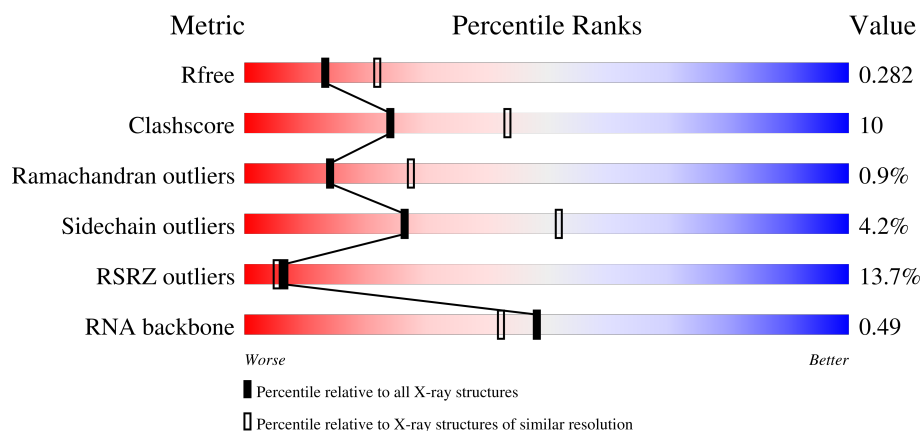
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.50 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1A	2915	5% 65% 27% 6%
1	2A	2915	3% 53% 34% 9%
2	1B	121	% 71% 25%
2	2B	121	12% 36% 45% 17%

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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	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	
52	2u	27	

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

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	PSU	2y	55	-	-	X	-

2 Entry composition

There are 60 unique types of molecules in this entry. The entry contains 300910 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	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 mRNA.

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

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	74	Total	C	N	O	P	S	0	0	0
			1592	713	285	518	74	2			
54	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
54	2w	72	Total	C	N	O	P	S	0	0	0
			1544	690	278	502	72	2			
54	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 55 is a RNA chain called P-site tRNA.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	76	Total	C	N	O	P	S	0	0	0
			1625	725	294	529	76	1			
55	2x	76	Total	C	N	O	P	S	0	0	0
			1625	725	294	529	76	1			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1141	Total	Mg	0	0
			1141	1141		
56	1B	37	Total	Mg	0	0
			37	37		
56	1D	12	Total	Mg	0	0
			12	12		
56	1E	11	Total	Mg	0	0
			11	11		
56	1F	8	Total	Mg	0	0
			8	8		
56	1G	5	Total	Mg	0	0
			5	5		
56	1I	1	Total	Mg	0	0
			1	1		
56	1N	6	Total	Mg	0	0
			6	6		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1O	7	Total 7	Mg 7	0	0
56	1P	4	Total 4	Mg 4	0	0
56	1Q	6	Total 6	Mg 6	0	0
56	1R	3	Total 3	Mg 3	0	0
56	1S	3	Total 3	Mg 3	0	0
56	1T	2	Total 2	Mg 2	0	0
56	1U	8	Total 8	Mg 8	0	0
56	1V	3	Total 3	Mg 3	0	0
56	1W	5	Total 5	Mg 5	0	0
56	1X	6	Total 6	Mg 6	0	0
56	1Y	3	Total 3	Mg 3	0	0
56	1Z	3	Total 3	Mg 3	0	0
56	10	6	Total 6	Mg 6	0	0
56	11	3	Total 3	Mg 3	0	0
56	12	1	Total 1	Mg 1	0	0
56	13	3	Total 3	Mg 3	0	0
56	15	2	Total 2	Mg 2	0	0
56	16	3	Total 3	Mg 3	0	0
56	17	1	Total 1	Mg 1	0	0
56	18	3	Total 3	Mg 3	0	0
56	19	2	Total 2	Mg 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1a	229	Total 229	Mg 229	0	0
56	1b	2	Total 2	Mg 2	0	0
56	1d	1	Total 1	Mg 1	0	0
56	1e	1	Total 1	Mg 1	0	0
56	1f	2	Total 2	Mg 2	0	0
56	1l	3	Total 3	Mg 3	0	0
56	1n	2	Total 2	Mg 2	0	0
56	1s	1	Total 1	Mg 1	0	0
56	1t	1	Total 1	Mg 1	0	0
56	1v	1	Total 1	Mg 1	0	0
56	1w	11	Total 11	Mg 11	0	0
56	1x	16	Total 16	Mg 16	0	0
56	1y	4	Total 4	Mg 4	0	0
56	2A	909	Total 909	Mg 909	0	0
56	2B	21	Total 21	Mg 21	0	0
56	2D	5	Total 5	Mg 5	0	0
56	2E	9	Total 9	Mg 9	0	0
56	2F	4	Total 4	Mg 4	0	0
56	2G	1	Total 1	Mg 1	0	0
56	2N	1	Total 1	Mg 1	0	0
56	2O	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2P	1	Total 1	Mg 1	0	0
56	2Q	3	Total 3	Mg 3	0	0
56	2R	1	Total 1	Mg 1	0	0
56	2T	3	Total 3	Mg 3	0	0
56	2U	4	Total 4	Mg 4	0	0
56	2V	1	Total 1	Mg 1	0	0
56	2W	3	Total 3	Mg 3	0	0
56	2X	3	Total 3	Mg 3	0	0
56	2Y	1	Total 1	Mg 1	0	0
56	2Z	1	Total 1	Mg 1	0	0
56	20	3	Total 3	Mg 3	0	0
56	23	2	Total 2	Mg 2	0	0
56	25	4	Total 4	Mg 4	0	0
56	27	1	Total 1	Mg 1	0	0
56	28	2	Total 2	Mg 2	0	0
56	2a	244	Total 244	Mg 244	0	0
56	2d	1	Total 1	Mg 1	0	0
56	2e	1	Total 1	Mg 1	0	0
56	2f	1	Total 1	Mg 1	0	0
56	2g	1	Total 1	Mg 1	0	0
56	2i	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2j	2	Total	Mg	0	0
			2	2		
56	2l	2	Total	Mg	0	0
			2	2		
56	2n	1	Total	Mg	0	0
			1	1		
56	2q	2	Total	Mg	0	0
			2	2		
56	2r	2	Total	Mg	0	0
			2	2		
56	2t	1	Total	Mg	0	0
			1	1		
56	2v	2	Total	Mg	0	0
			2	2		
56	2w	8	Total	Mg	0	0
			8	8		
56	2x	5	Total	Mg	0	0
			5	5		
56	2y	7	Total	Mg	0	0
			7	7		

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

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

- Molecule 58 is ZINC ION (CCD ID: ZN) (formula: Zn).

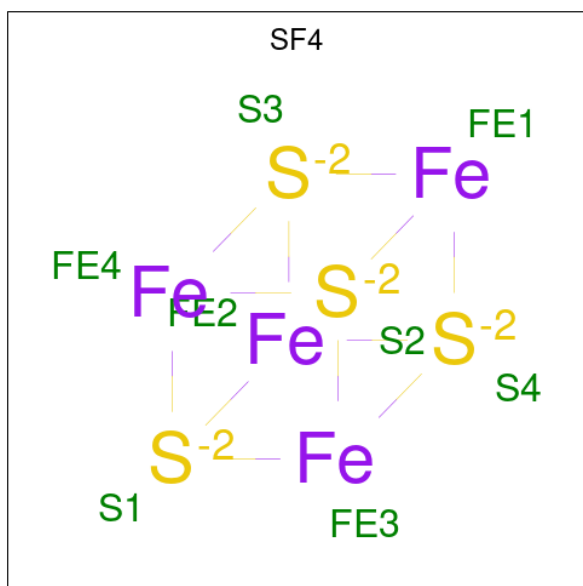
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1Y	1	Total	Zn	0	0
			1	1		
58	14	1	Total	Zn	0	0
			1	1		
58	15	1	Total	Zn	0	0
			1	1		
58	16	1	Total	Zn	0	0
			1	1		
58	19	1	Total	Zn	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1n	1	Total	Zn	0	0
			1	1		
58	2Y	1	Total	Zn	0	0
			1	1		
58	24	1	Total	Zn	0	0
			1	1		
58	25	1	Total	Zn	0	0
			1	1		
58	26	1	Total	Zn	0	0
			1	1		
58	29	1	Total	Zn	0	0
			1	1		
58	2n	1	Total	Zn	0	0
			1	1		

- Molecule 59 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
59	1d	1	Total	Fe	S	0	0
			8	4	4		
59	2d	1	Total	Fe	S	0	0
			8	4	4		

- Molecule 60 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	1A	2238	Total 2238	O 2238	0	0
60	1B	68	Total 68	O 68	0	0
60	1D	28	Total 28	O 28	0	0
60	1E	28	Total 28	O 28	0	0
60	1F	13	Total 13	O 13	0	0
60	1G	7	Total 7	O 7	0	0
60	1H	2	Total 2	O 2	0	0
60	1I	3	Total 3	O 3	0	0
60	1N	7	Total 7	O 7	0	0
60	1O	8	Total 8	O 8	0	0
60	1P	23	Total 23	O 23	0	0
60	1Q	14	Total 14	O 14	0	0
60	1R	14	Total 14	O 14	0	0
60	1S	5	Total 5	O 5	0	0
60	1T	8	Total 8	O 8	0	0
60	1U	11	Total 11	O 11	0	0
60	1V	9	Total 9	O 9	0	0
60	1W	6	Total 6	O 6	0	0
60	1X	8	Total 8	O 8	0	0
60	1Y	4	Total 4	O 4	0	0
60	1Z	1	Total 1	O 1	0	0
60	10	12	Total 12	O 12	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	11	10	Total 10	O 10	0	0
60	12	4	Total 4	O 4	0	0
60	13	6	Total 6	O 6	0	0
60	14	1	Total 1	O 1	0	0
60	15	6	Total 6	O 6	0	0
60	16	3	Total 3	O 3	0	0
60	17	9	Total 9	O 9	0	0
60	18	13	Total 13	O 13	0	0
60	1a	438	Total 438	O 438	0	0
60	1b	1	Total 1	O 1	0	0
60	1d	1	Total 1	O 1	0	0
60	1e	1	Total 1	O 1	0	0
60	1f	1	Total 1	O 1	0	0
60	1g	1	Total 1	O 1	0	0
60	1i	1	Total 1	O 1	0	0
60	1l	8	Total 8	O 8	0	0
60	1m	2	Total 2	O 2	0	0
60	1o	1	Total 1	O 1	0	0
60	1p	1	Total 1	O 1	0	0
60	1q	4	Total 4	O 4	0	0
60	1u	1	Total 1	O 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	1v	5	Total 5	O 5	0	0
60	1w	21	Total 21	O 21	0	0
60	1x	15	Total 15	O 15	0	0
60	1y	1	Total 1	O 1	0	0
60	2A	1389	Total 1389	O 1389	0	0
60	2B	26	Total 26	O 26	0	0
60	2D	28	Total 28	O 28	0	0
60	2E	16	Total 16	O 16	0	0
60	2F	16	Total 16	O 16	0	0
60	2H	1	Total 1	O 1	0	0
60	2I	4	Total 4	O 4	0	0
60	2N	1	Total 1	O 1	0	0
60	2P	14	Total 14	O 14	0	0
60	2Q	2	Total 2	O 2	0	0
60	2R	2	Total 2	O 2	0	0
60	2T	6	Total 6	O 6	0	0
60	2U	2	Total 2	O 2	0	0
60	2V	2	Total 2	O 2	0	0
60	2W	2	Total 2	O 2	0	0
60	2X	5	Total 5	O 5	0	0
60	2Y	1	Total 1	O 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	2Z	2	Total 2	O 2	0	0
60	20	7	Total 7	O 7	0	0
60	21	12	Total 12	O 12	0	0
60	22	1	Total 1	O 1	0	0
60	23	1	Total 1	O 1	0	0
60	25	4	Total 4	O 4	0	0
60	26	1	Total 1	O 1	0	0
60	27	4	Total 4	O 4	0	0
60	28	6	Total 6	O 6	0	0
60	29	1	Total 1	O 1	0	0
60	2a	377	Total 377	O 377	0	0
60	2d	1	Total 1	O 1	0	0
60	2e	2	Total 2	O 2	0	0
60	2g	1	Total 1	O 1	0	0
60	2i	1	Total 1	O 1	0	0
60	2j	4	Total 4	O 4	0	0
60	2l	5	Total 5	O 5	0	0
60	2o	1	Total 1	O 1	0	0
60	2p	2	Total 2	O 2	0	0
60	2q	1	Total 1	O 1	0	0
60	2r	1	Total 1	O 1	0	0

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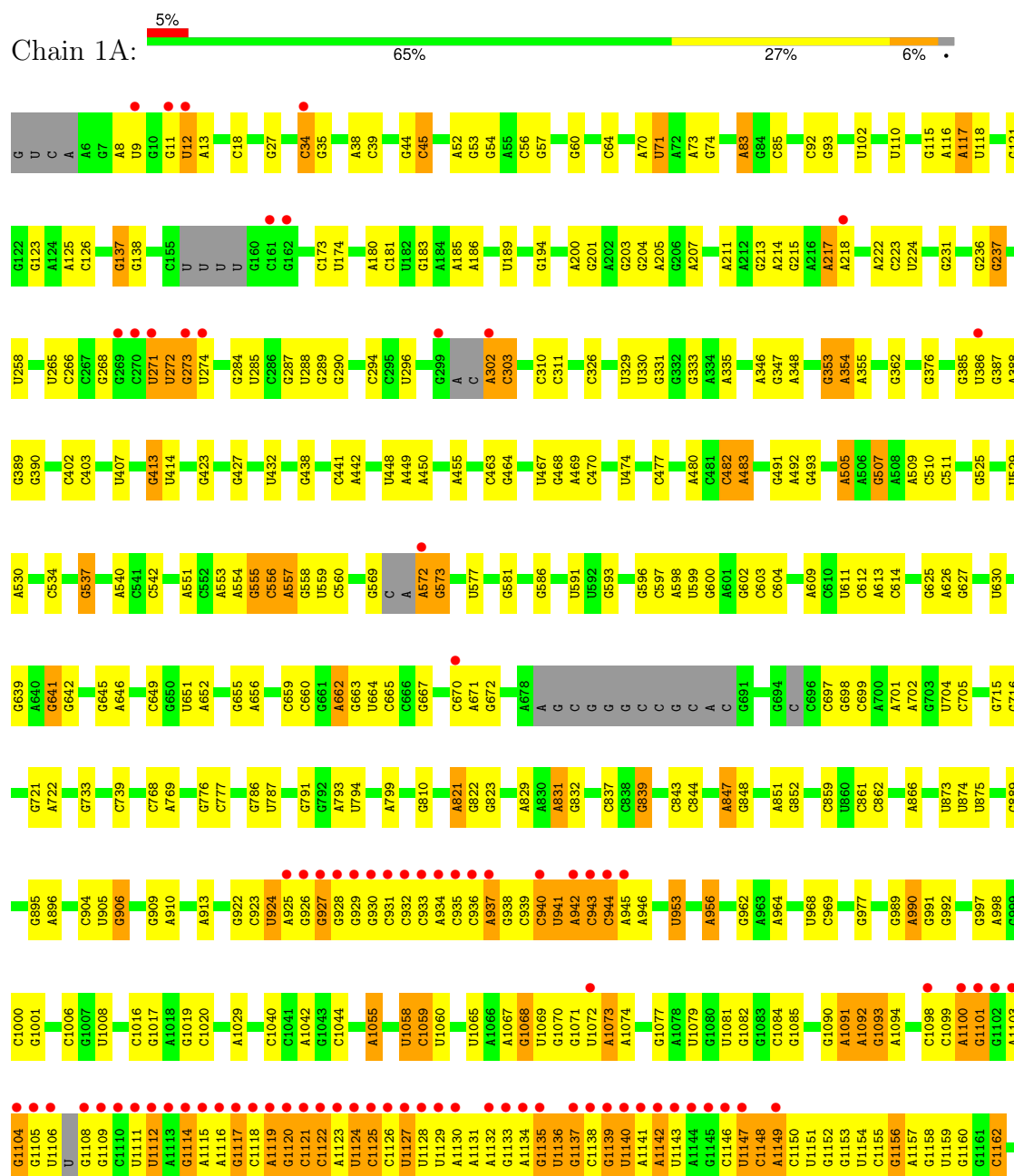
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	2t	4	Total 4	O 4	0	0
60	2u	1	Total 1	O 1	0	0
60	2v	1	Total 1	O 1	0	0
60	2w	2	Total 2	O 2	0	0
60	2x	7	Total 7	O 7	0	0
60	2y	19	Total 19	O 19	0	0

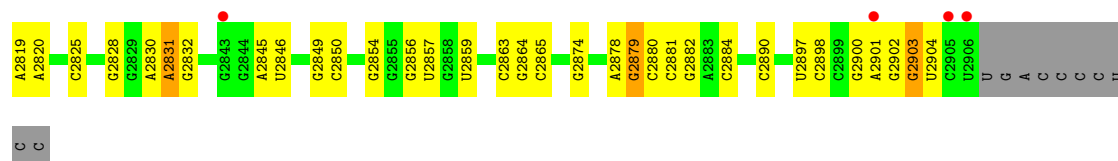
3 Residue-property plots [i](#)

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

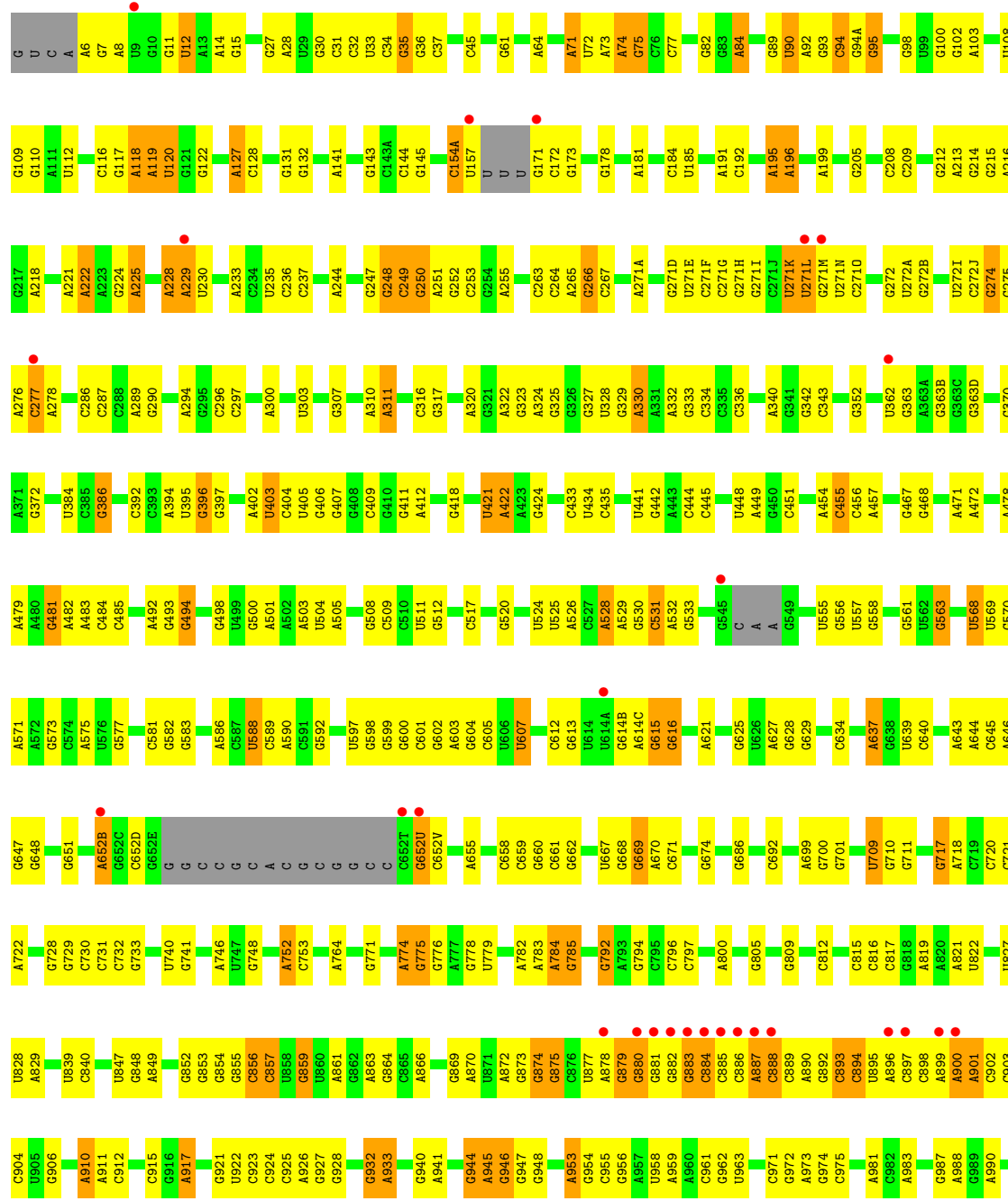


A2726	G2603	G2452	A2340	G2231	C2160	G2071	A1958	A1833	U1739	G1538	G1475	A1320	G1171
G2727	G2604	C2453	G2341	A2237	C2161	C2072	A1959	A1834	U1740	A1589	C1476	A1321	C1180
G2735	A2614	G2457	G2346	A2245	G2163	A2073	A1960	A1846	G1742	A1592	C1477	G1322	G1181
C2736	G2615	A2460	A2347	G2246	C2164	G2077	U1961	G1848	G1743	C1593	C1478	G1323	C1182
U2739	U2616	G2467	A2348	G2260	U2166	G2078	C1964	G1848	A1747	C1594	A1491	A1324	A1188
U2740	G2617	G2467	G2359	G2251	C2167	A2081	U1977	G1857	G1750	A1605	U1338	U1339	G1195
G2742	G2619	C2473	C2362	U2255	G2171	A2082	U1977	G1858	G1750	A1613	C1343	C1343	A1201
G2743	G2620	U2474	A2362	U2256	U2172	G2083	C1984	A1860	U1756	A1496	G1497	A1202	A1202
A2746	U2621	C2475	C2367	G2262	G2173	A2084	U1985	C1861	C1757	A1616	U1346	U1347	G1210
G2759	G2622	C2476	C2368	G2263	G2174	G2091	C1989	G1874	C1758	U1625	A1347	A1348	U1211
G2760	G2624	C2486	U2369	G2264	U2175	U2108	G1990	A1878	U1760	A1627	G1349	G1349	U1212
G2764	C2629	A2488	C2371	G2264	G2176	G2109	U1992	U1882	U1765	G1628	C1361	C1361	U1213
G2765	G2638	A2488	A2372	G2265	G2177	G2115	A1994	U1883	G1766	C1631	C1366	C1366	G1217
A2766	G2639	G2282	A2373	G2266	G2178	G2116	G1995	C1883	A1767	A1632	U1525	U1525	G1218
U2767	G2640	G2283	C2376	G2267	A2180	G2116	C1995	U1889	U1768	G1633	C1366	C1366	A1219
C2768	A2641	G2284	G2377	G2268	G2182	U2121	C1995	G1890	C1775	C1634	G1371	G1371	U1220
U2769	G2642	A2285	G2377	G2269	C2183	G2122	U1998	A1891	C1776	C1635	G1378	G1378	A1222
A2770	G2643	G2286	G2384	G2292	C2184	G2123	U1998	G1892	C1776	G1537	U1549	U1549	A1223
A2771	G2647	G2287	G2388	G2293	C2185	U2124	C2001	G1892	C1785	G1538	C1391	C1391	G1228
G2772	G2647	G2288	A2388	G2294	G2186	C2125	G2007	C1897	A1786	A1540	U1398	U1398	G1229
G2776	G2653	G2289	A2389	G2295	G2187	G2126	A2008	A1898	G1787	U1546	G1402	G1402	U1233
A2777	C2658	G2290	G2395	G2296	U2188	C2127	G2011	A1899	U1788	C1547	A1405	A1405	U1243
A2778	U2659	G2291	G2396	G2297	U2189	G2128	G2011	U1899	G1789	C1548	A1406	A1406	C1246
G2782	G2660	G2292	G2397	G2298	A2190	G2129	G2011	C1904	A1793	U1550	U1418	U1418	A1255
G2783	U2661	G2293	U2402	G2299	A2191	U2130	G2014	G1908	G1794	C1551	A1425	A1425	G1273
C2784	U2662	G2294	U2402	G2300	A2192	U2131	U2015	A1911	G1795	A1552	G1426	G1426	G1277
C2785	U2665	G2295	G2411	G2301	U2193	C2133	C2018	A1911	A1804	A1553	A1430	A1430	G1278
A2791	A2666	G2296	G2411	G2302	U2194	G2134	G2019	C1915	C1805	A1554	G1431	G1431	G1281
G2796	A2672	G2297	U2418	G2303	C2196	U2135	G2019	G1921	U1806	C1555	A1441	A1441	G1289
G2797	G2673	G2298	G2419	G2304	A2197	G2137	A2023	A1922	U1809	A1556	U1442	U1442	G1296
C2798	A2677	G2299	U2420	G2305	U2198	G2138	G2024	A1923	U1810	C1561	U1451	U1451	G1299
C2800	C2678	G2300	G2422	G2306	G2203	U2140	G2034	C1924	A1811	U1562	G1462	G1462	G1302
C2801	G2679	G2301	G2422	G2307	G2204	A2141	A2035	G1928	A1812	C1562	G1463	G1463	G1312
C2802	G2680	G2302	G2429	G2308	G2205	G2142	A2041	U1933	A1813	C1563	G1464	G1464	U1313
A2803	C2695	G2303	G2434	G2309	G2206	U2144	A2042	U1934	A1814	U1566	A1465	A1465	A1314
G2804	U2696	G2304	U2435	G2310	G2207	G2145	A2043	A1935	A1815	G1567	U1467	U1467	G1317
G2805	G2697	G2305	G2436	G2311	G2208	G2146	U2044	A1936	A1816	U1568	A1473	A1473	A1318
G2806	G2698	G2306	A2437	G2312	G2209	G2147	G2045	U1937	A1817	U1569	C1474	C1474	U1319
G2807	U2699	G2307	A2437	G2313	U2211	A2148	G2051	A1938	C1821	G1572	G1467	G1467	G1317
G	U2700	G2308	A2438	G2314	G2212	G2149	A2052	U1939	A1822	G1573	G1467	G1467	G1317
U	G2701	G2309	G2439	G2315	G2213	C2150	A2053	A1940	G1823	C1579	G1467	G1467	G1317
C	C2702	G2310	G2440	G2316	G2214	U2152	G2054	A1941	U1825	G	G1467	G1467	G1317
A	C2703	G2311	G2441	G2317	G2215	U2153	A2055	C1942	C1826	U	G1467	G1467	G1317
G2812	U2714	G2312	A2442	G2318	U2154	U2154	U2056	U1827	U1718	A	G1467	G1467	G1317
G2813	C2814	G2313	U2443	G2319	U2155	A2156	G2057	U1945	U1828	C	G1467	G1467	G1317
G2814	U2724	G2314	A2447	G2320	G2227	A2157	C2061	C1946	G1830	G1584	G1467	G1467	G1317
G2815	A2725	G2315	A2451	G2321	G2228	C2158	C2061	U1951	G1831	G1585	A1473	A1473	G1317
G2816		G2316		G2322	U2230	C2159	C2065	G1952	G1832	U1587	C1474	C1474	G1317

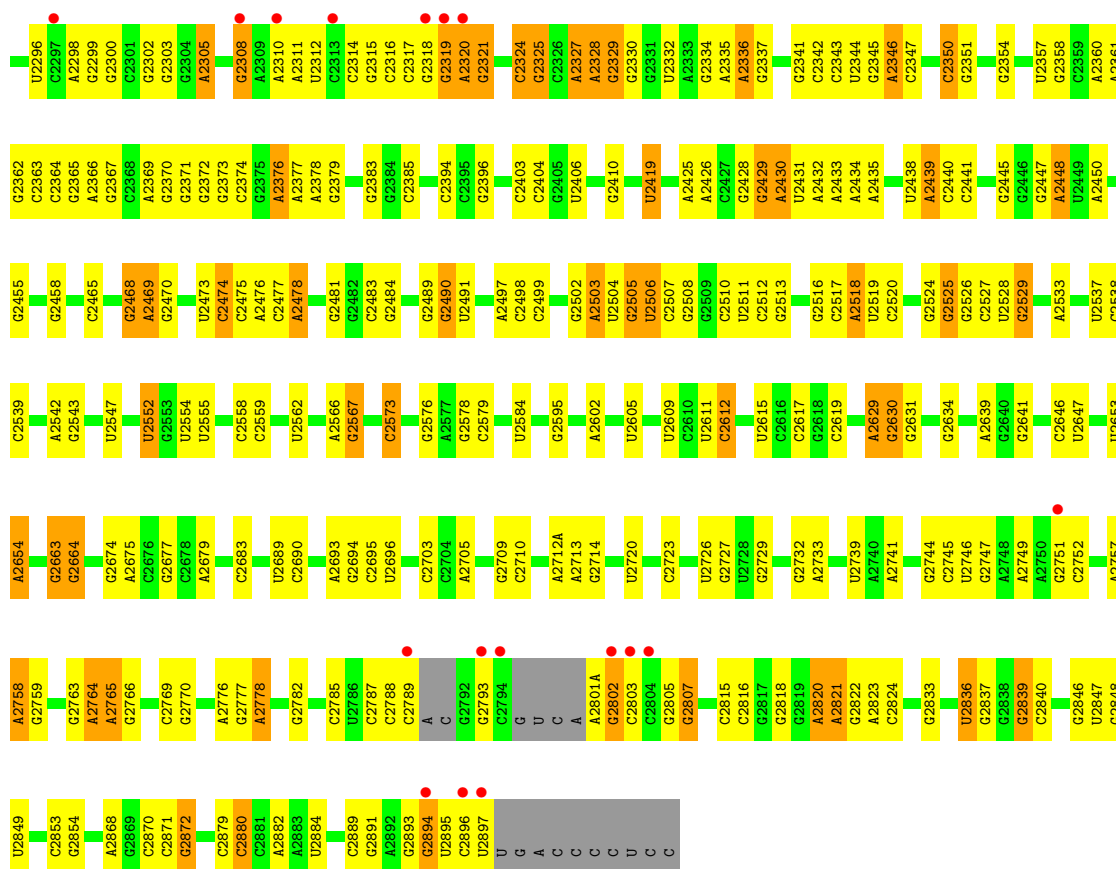


● Molecule 1: 23S Ribosomal RNA

Chain 2A: 3% 53% 34% 9% .



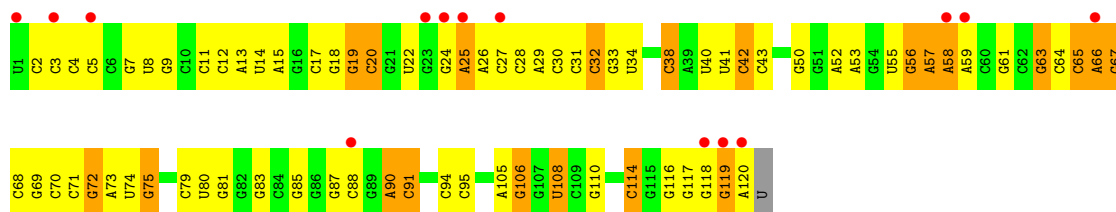
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G2187	C2040	A1928	A1700	U1590	G1482	G1389	G1206	G1120	C995
C2188	G2041	A1929	G1703	U1591	G1490	A1395	U1210	C1124	A996
U2189	A2042	G1930	G1721	C1592	G1491	U1405	U1211	G1125	C997
G2190	C2043	U1931	A1722	G1593	G1492	U1406	A1213	A1126	G998
C2191	G2048	A1936	U1739	G1594	G1493	U1407	A1214	U1130	U999
G2192	G2049	A1937	A1740	C1607	A1494	C1408	A1218	U1131	A1000
G2193	C2050	U1938	A1741	A1608	A1495	C1409	C1218	A1005	C1006
G2194	G2055	U1939	A1746	A1609	U1497	C1411	G1219	A1007	C1007
A2198	C2056	C1942	G1747	A1610	C1506	A1412	A1220	G1011	G1011
C2205	G2057	G1945	G1747A	A1616	A1507	G1413	G1221	U1012	U1012
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A2208	C2060	U1955	G1839	U1629	C1509A	U1420	C1225	G1015	G1015
U2218	A2061	C1958	A1847	G1756	A1509B	G1421	A1226	G1016	G1016
G2219	G2062	G1959	A1848	U1757	A1509B	G1422	G1229	G1017	G1017
G2220	C2063	A1960	G1849	U1758	G1510	G1423	G1230	U1019	U1019
A2225	A2064	C1961	A1762	G1763	C1511	U1427	G1231	A1021	A1021
U2232	C2065	U1962	G1764	A1853	U1514	C1428	G1232	G1022	G1022
G2235	C2066	U1963	G1769	G1857	G1515	G1429	G1233	U1023	U1023
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G2239	A2070	G1968	A1776	A1859	C1517	U1431	G1235	G1025	G1025
A2247	G2071	U1969	G1777	G1865	G1518	C1432	U1236	U1026	U1026
U2248	U2074	A1970	U1778	A1866	G1519	U1433	G1237	A1027	A1027
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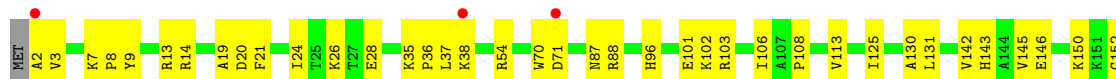
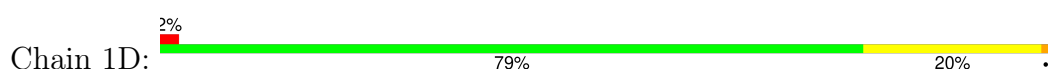
• Molecule 2: 5S Ribosomal RNA



• Molecule 2: 5S Ribosomal RNA

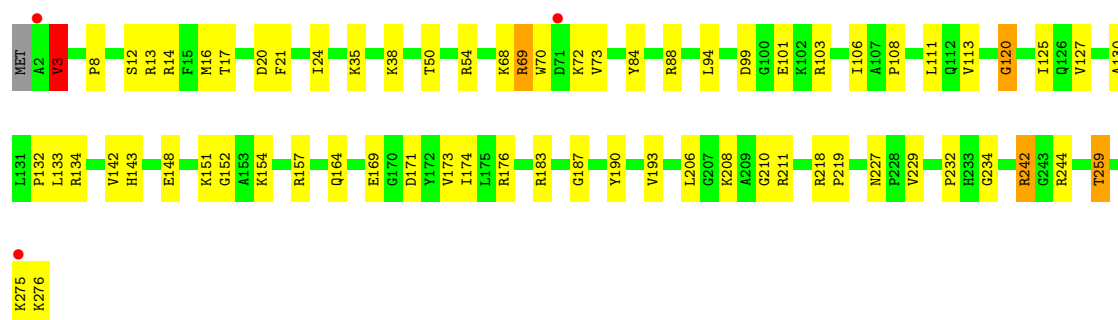
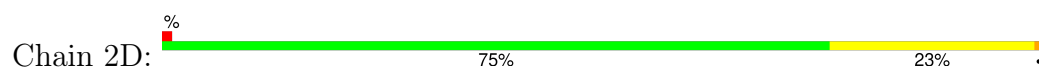


• Molecule 3: 50S ribosomal protein L2

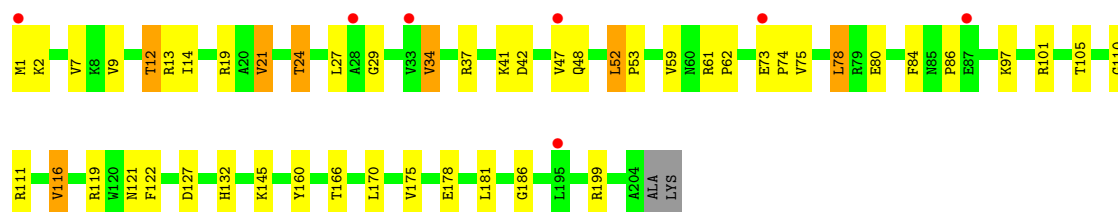
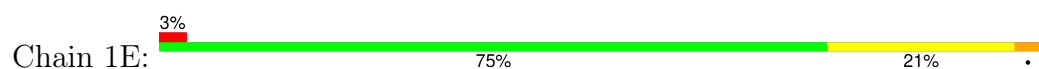




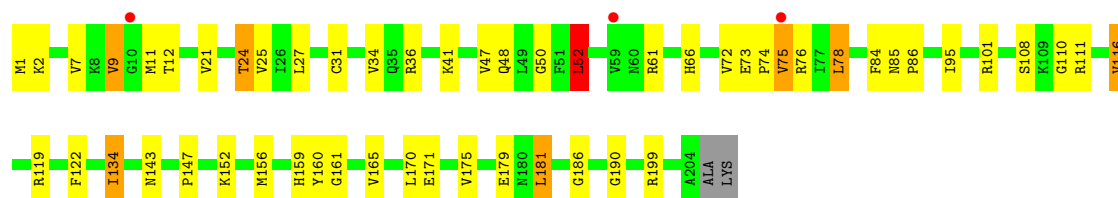
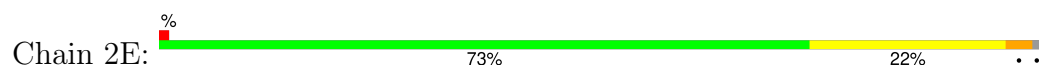
- Molecule 3: 50S ribosomal protein L2



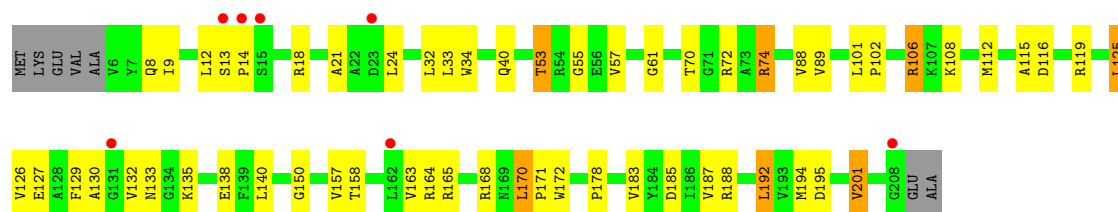
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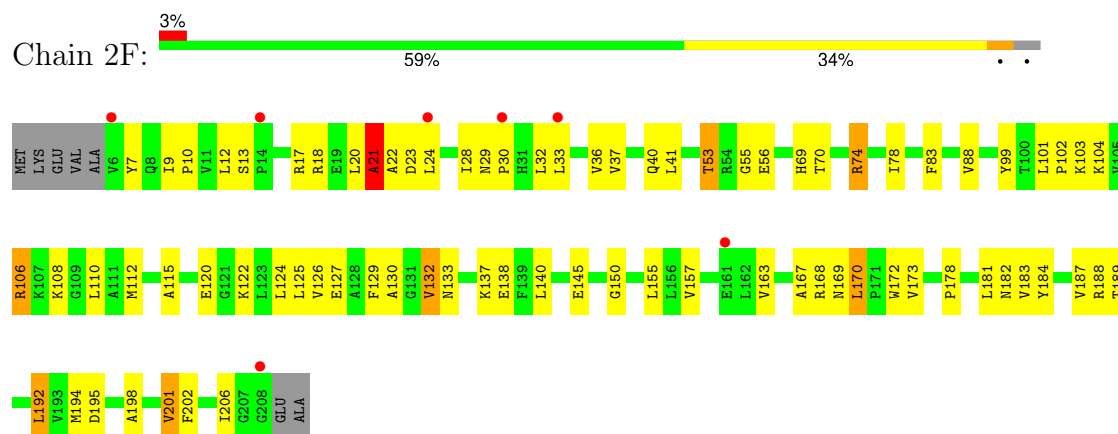
- Molecule 4: 50S ribosomal protein L3



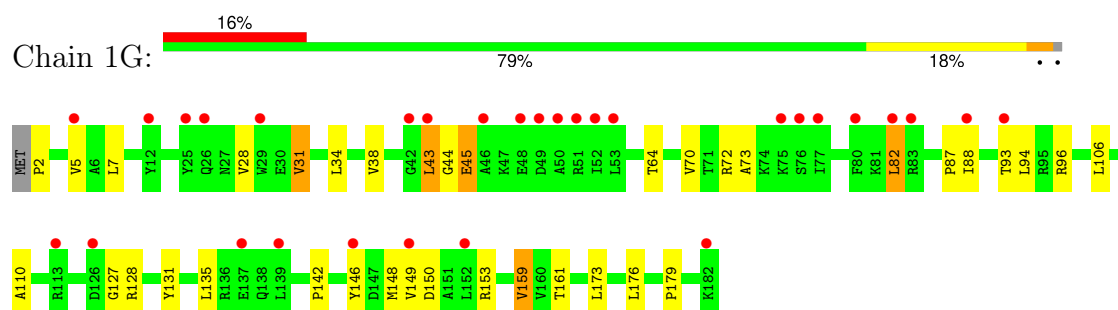
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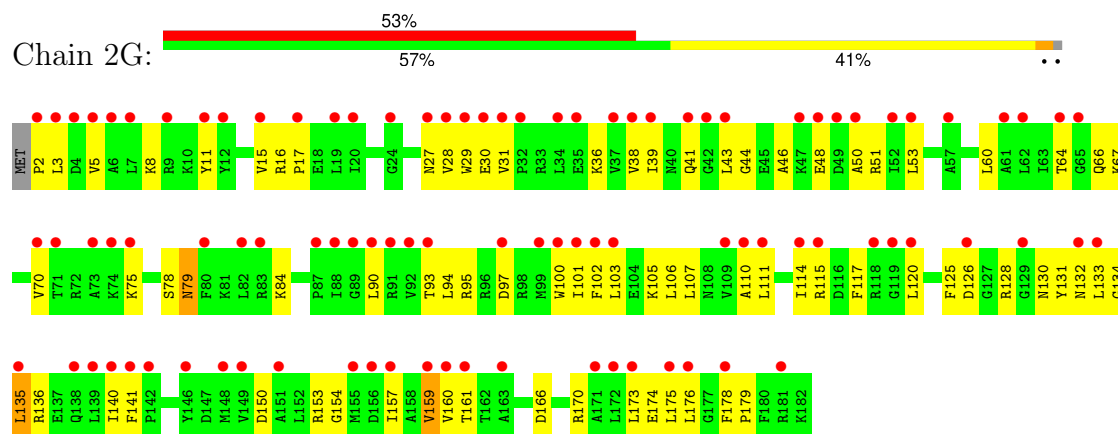
- Molecule 5: 50S ribosomal protein L4



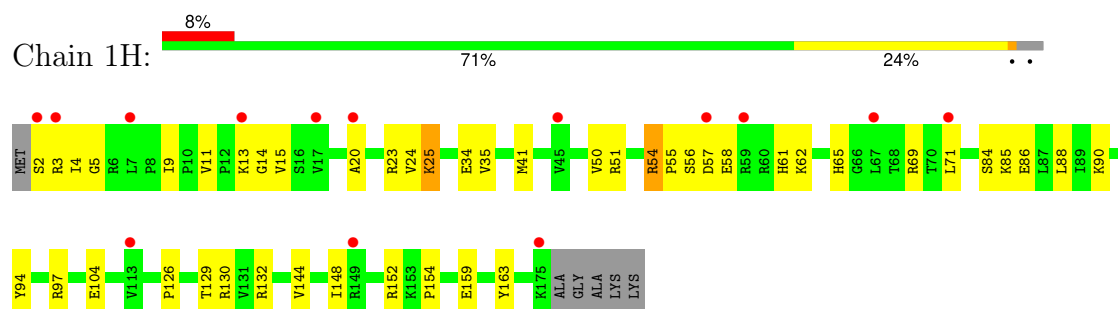
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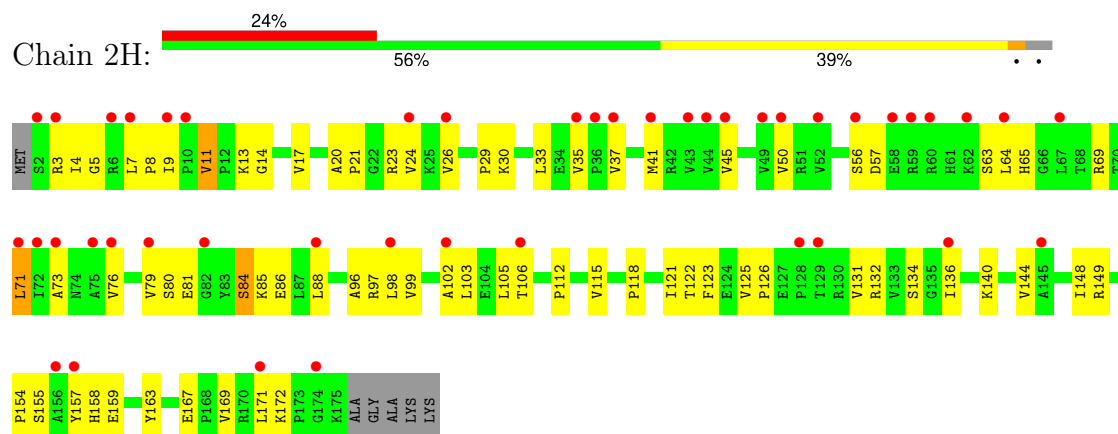
- Molecule 6: 50S ribosomal protein L5



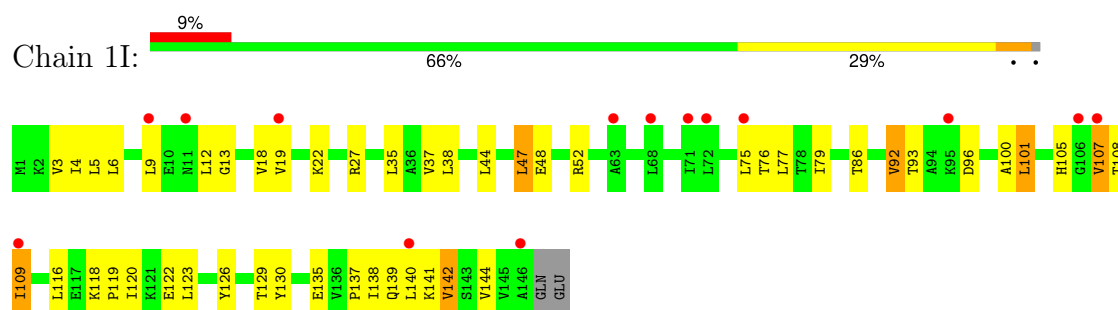
- Molecule 7: 50S ribosomal protein L6



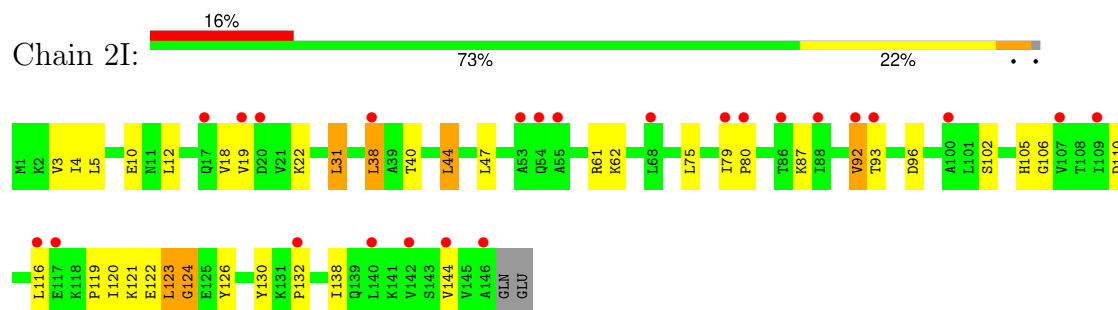
- Molecule 7: 50S ribosomal protein L6



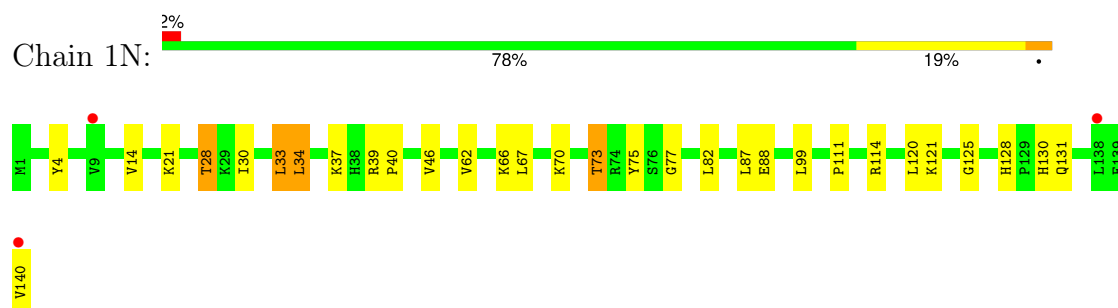
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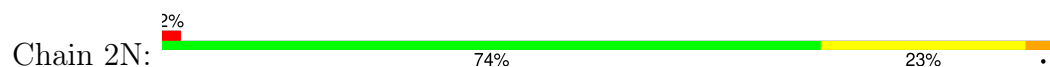
- Molecule 8: 50S ribosomal protein L9



- Molecule 9: 50S ribosomal protein L13

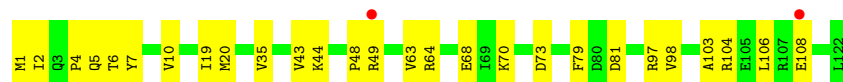
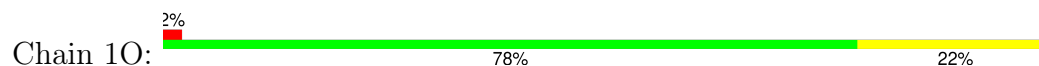


- Molecule 9: 50S ribosomal protein L13

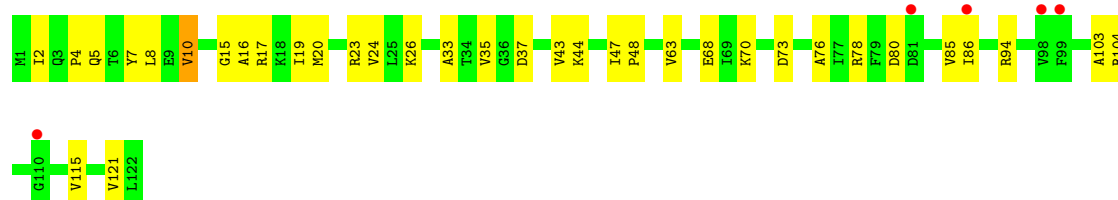
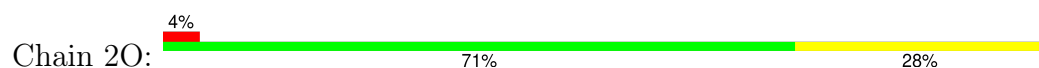




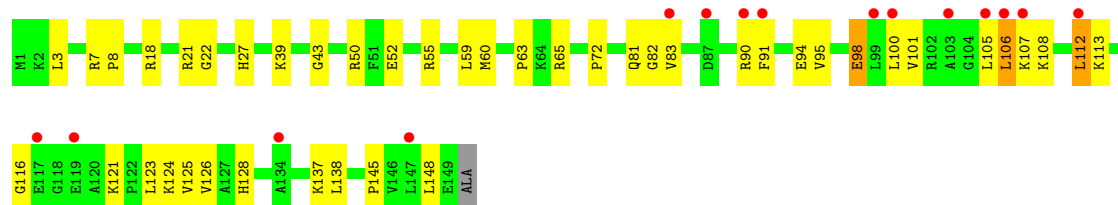
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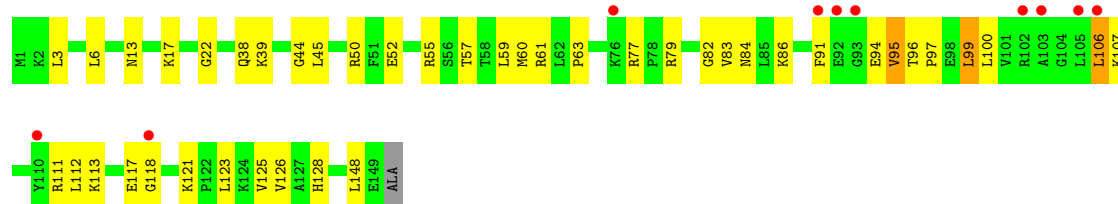
- Molecule 10: 50S ribosomal protein L14



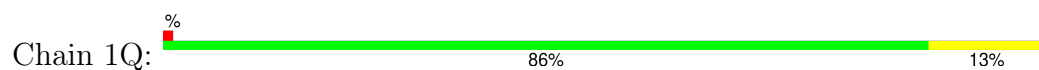
- Molecule 11: 50S ribosomal protein L15



- Molecule 11: 50S ribosomal protein L15

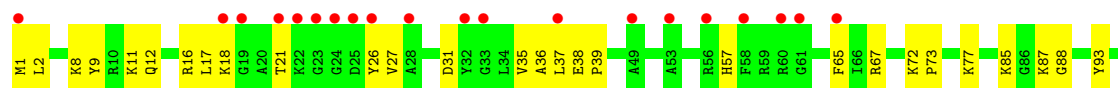


- Molecule 12: 50S ribosomal protein L16

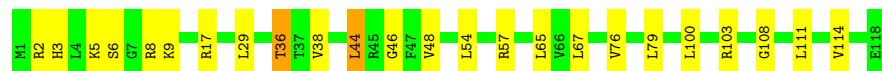
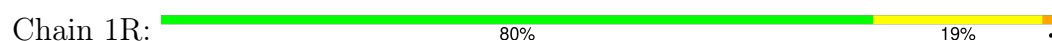




- Molecule 12: 50S ribosomal protein L16



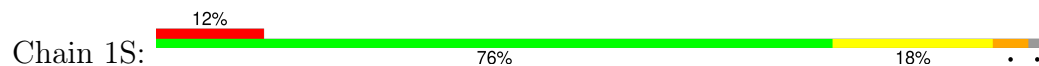
- Molecule 13: 50S ribosomal protein L17



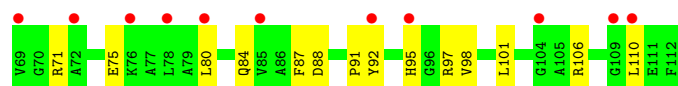
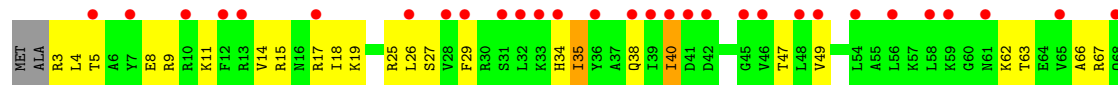
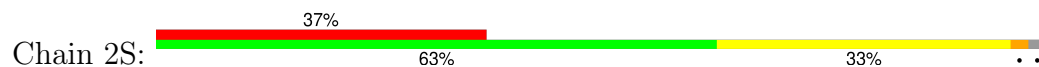
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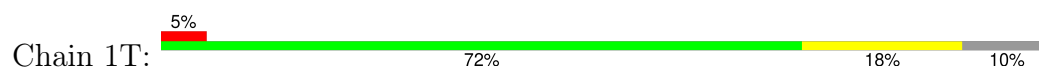
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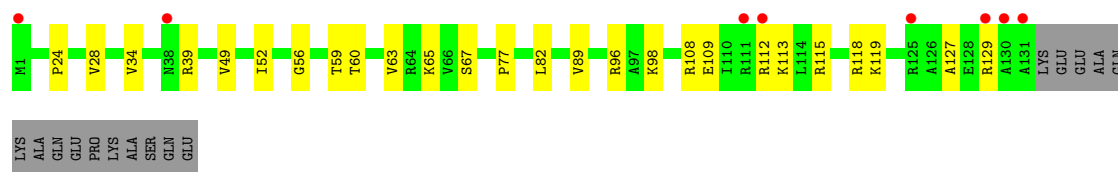


- Molecule 14: 50S ribosomal protein L18

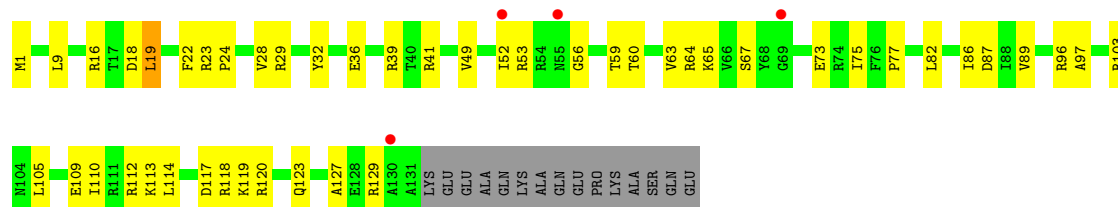


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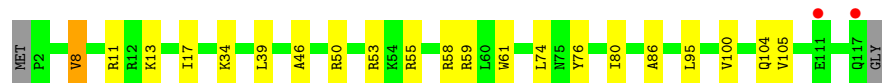
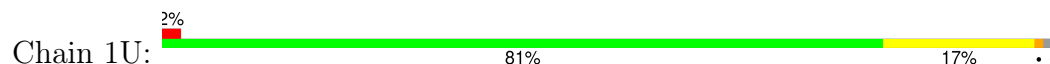




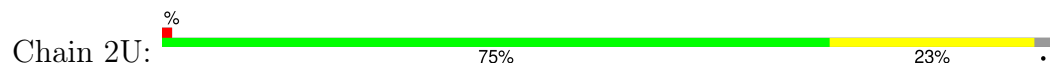
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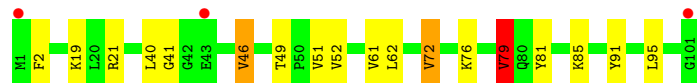
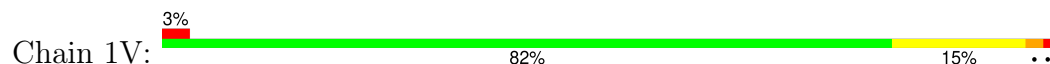
- Molecule 16: 50S ribosomal protein L20



- Molecule 16: 50S ribosomal protein L20



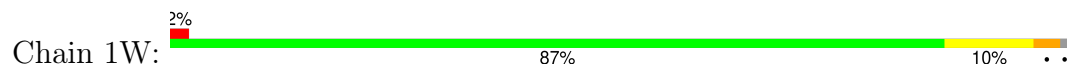
- Molecule 17: 50S ribosomal protein L21



- Molecule 17: 50S ribosomal protein L21

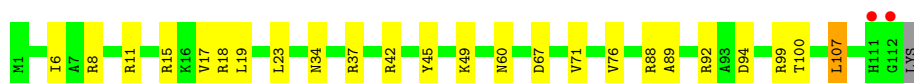
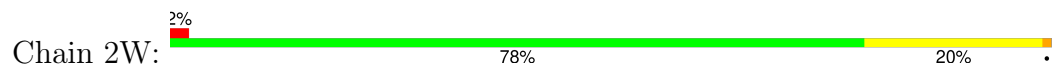


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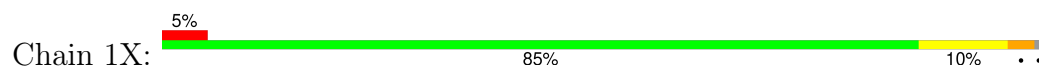




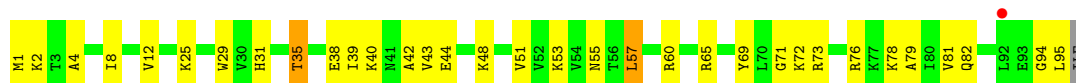
- Molecule 18: 50S ribosomal protein L22



- Molecule 19: 50S ribosomal protein L23



- Molecule 19: 50S ribosomal protein L23



- Molecule 20: 50S ribosomal protein L24

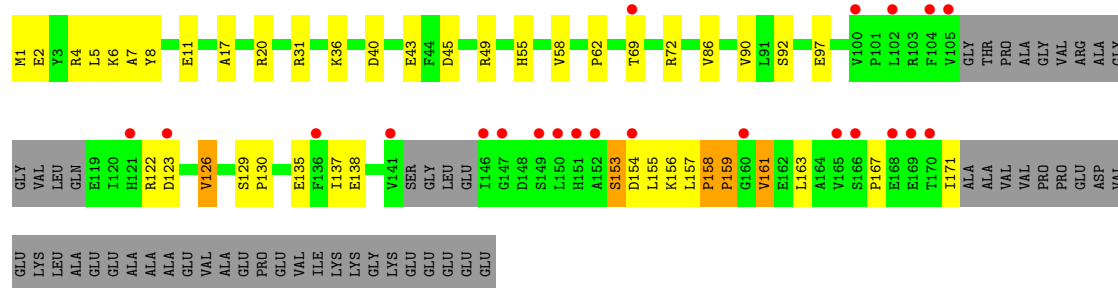


- Molecule 20: 50S ribosomal protein L24

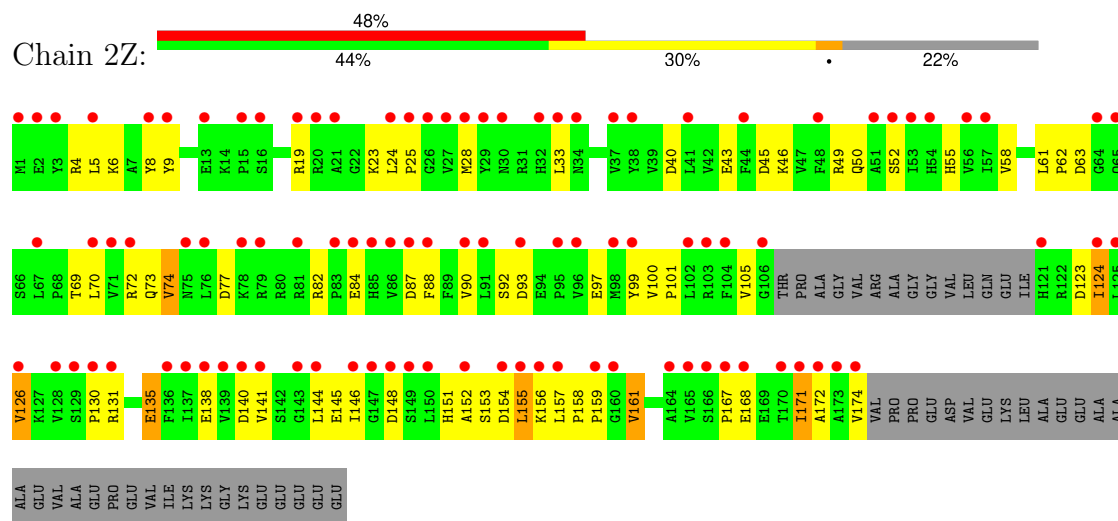


- Molecule 21: 50S ribosomal protein L25

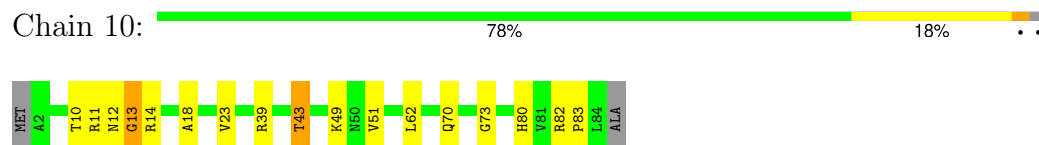




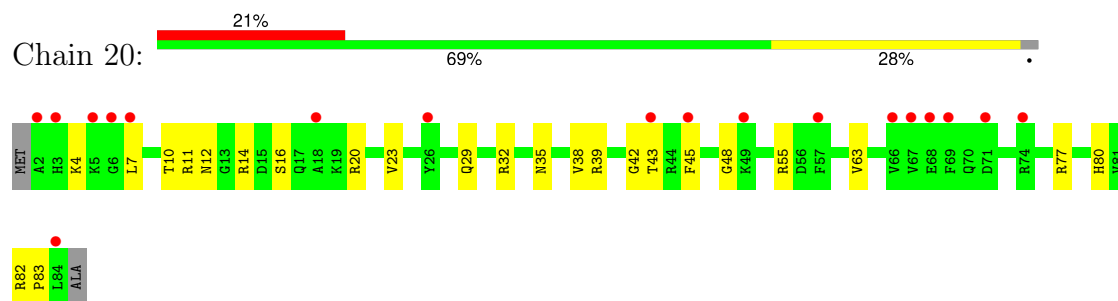
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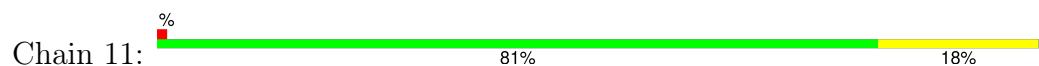
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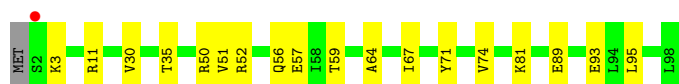


• Molecule 22: 50S ribosomal protein L27

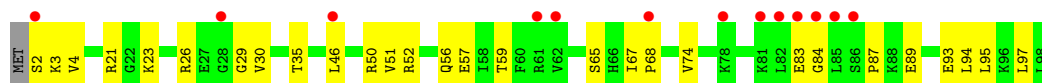


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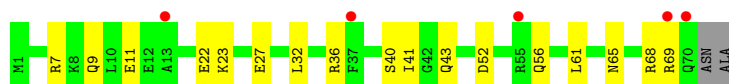
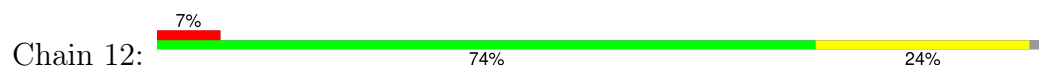




- Molecule 23: 50S ribosomal protein L28



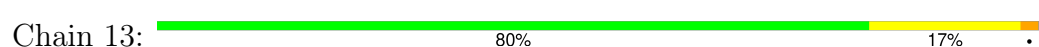
- Molecule 24: 50S ribosomal protein L29



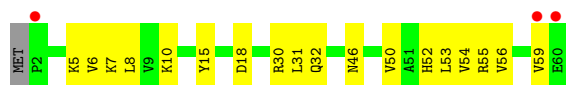
- Molecule 24: 50S ribosomal protein L29



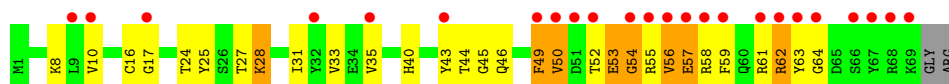
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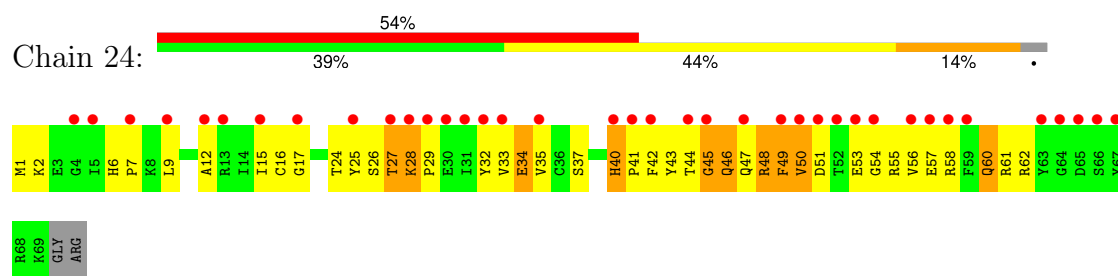
- Molecule 25: 50S ribosomal protein L30



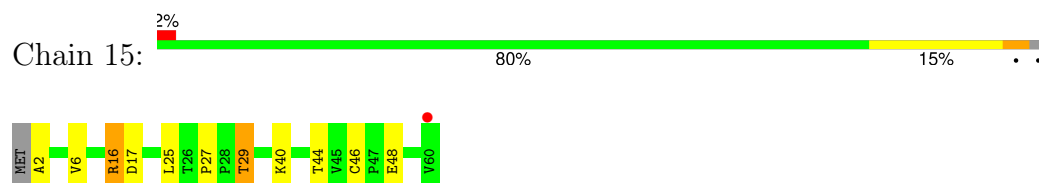
- Molecule 26: 50S ribosomal protein L31



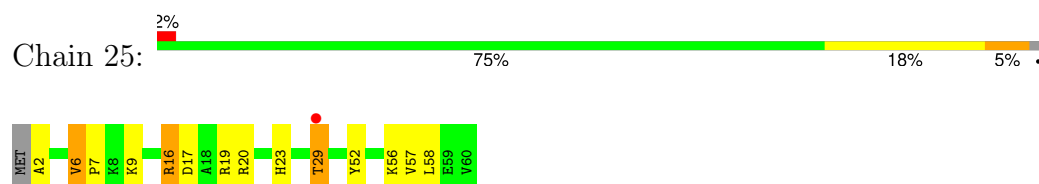
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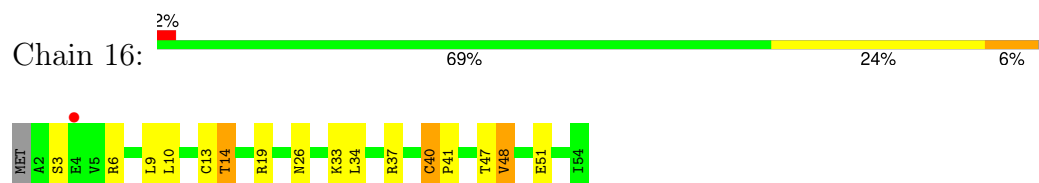
- Molecule 27: 50S ribosomal protein L32



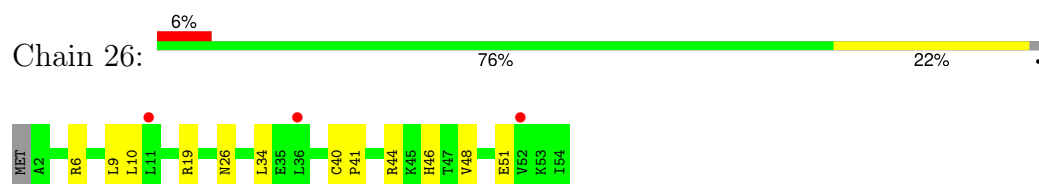
- Molecule 27: 50S ribosomal protein L32



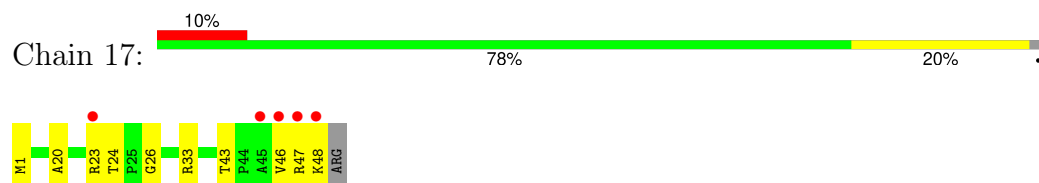
- Molecule 28: 50S ribosomal protein L33



- Molecule 28: 50S ribosomal protein L33

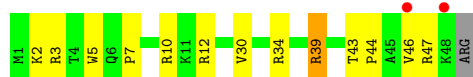


- Molecule 29: 50S ribosomal protein L34

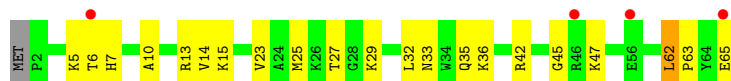


- Molecule 29: 50S ribosomal protein L34

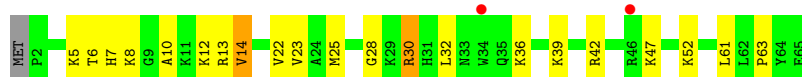




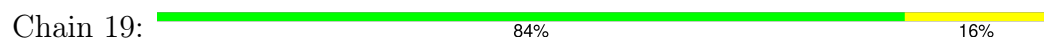
- Molecule 30: 50S ribosomal protein L35



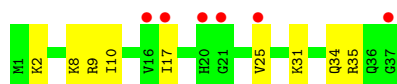
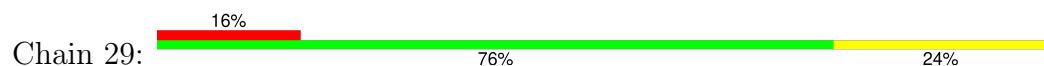
- Molecule 30: 50S ribosomal protein L35



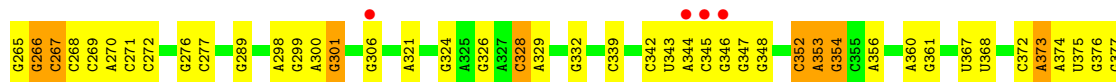
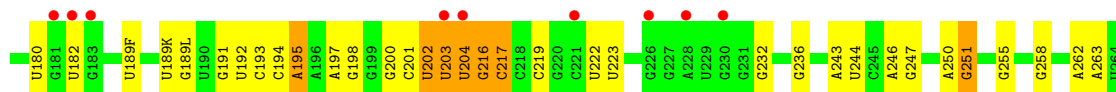
- Molecule 31: 50S ribosomal protein L36

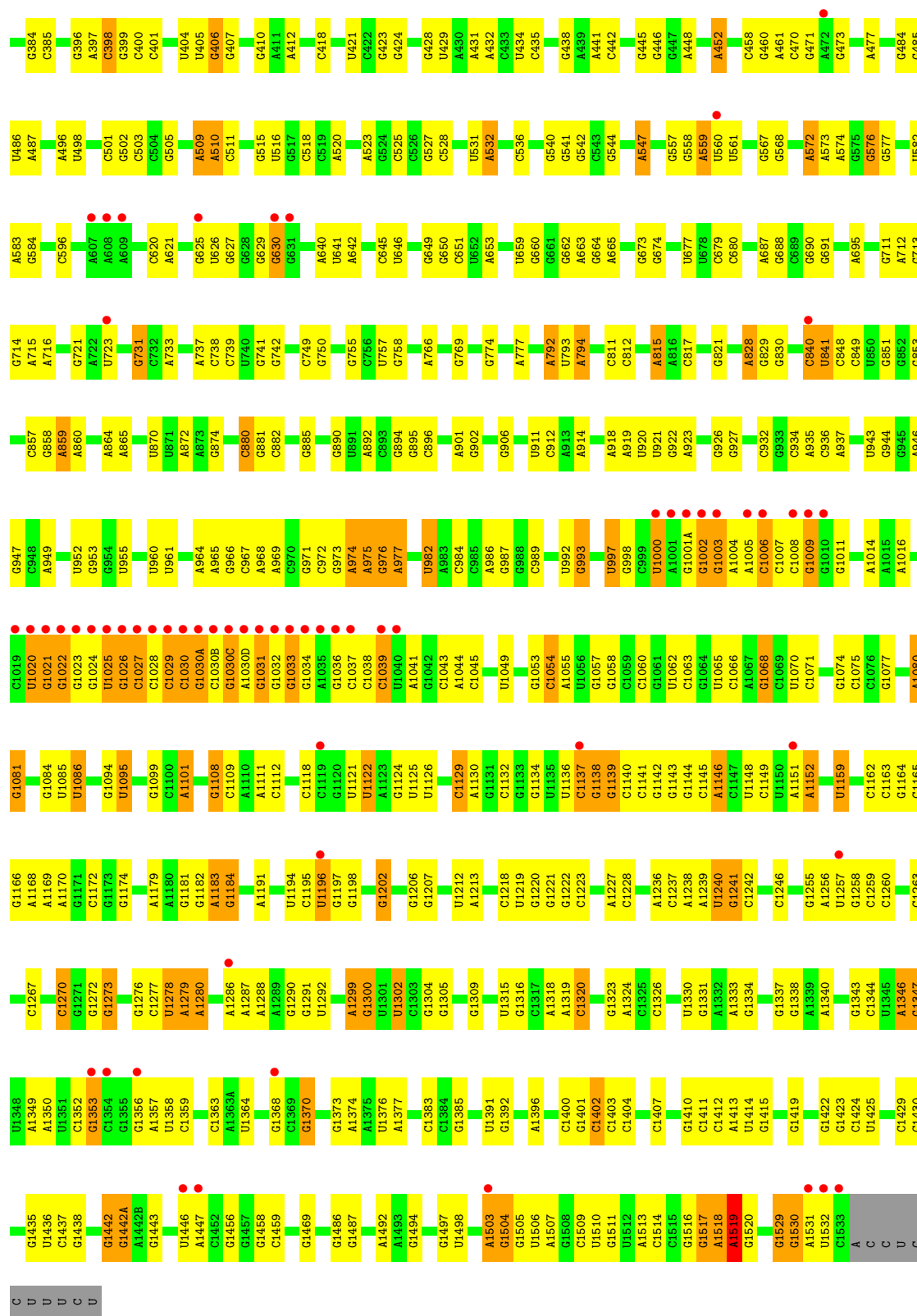


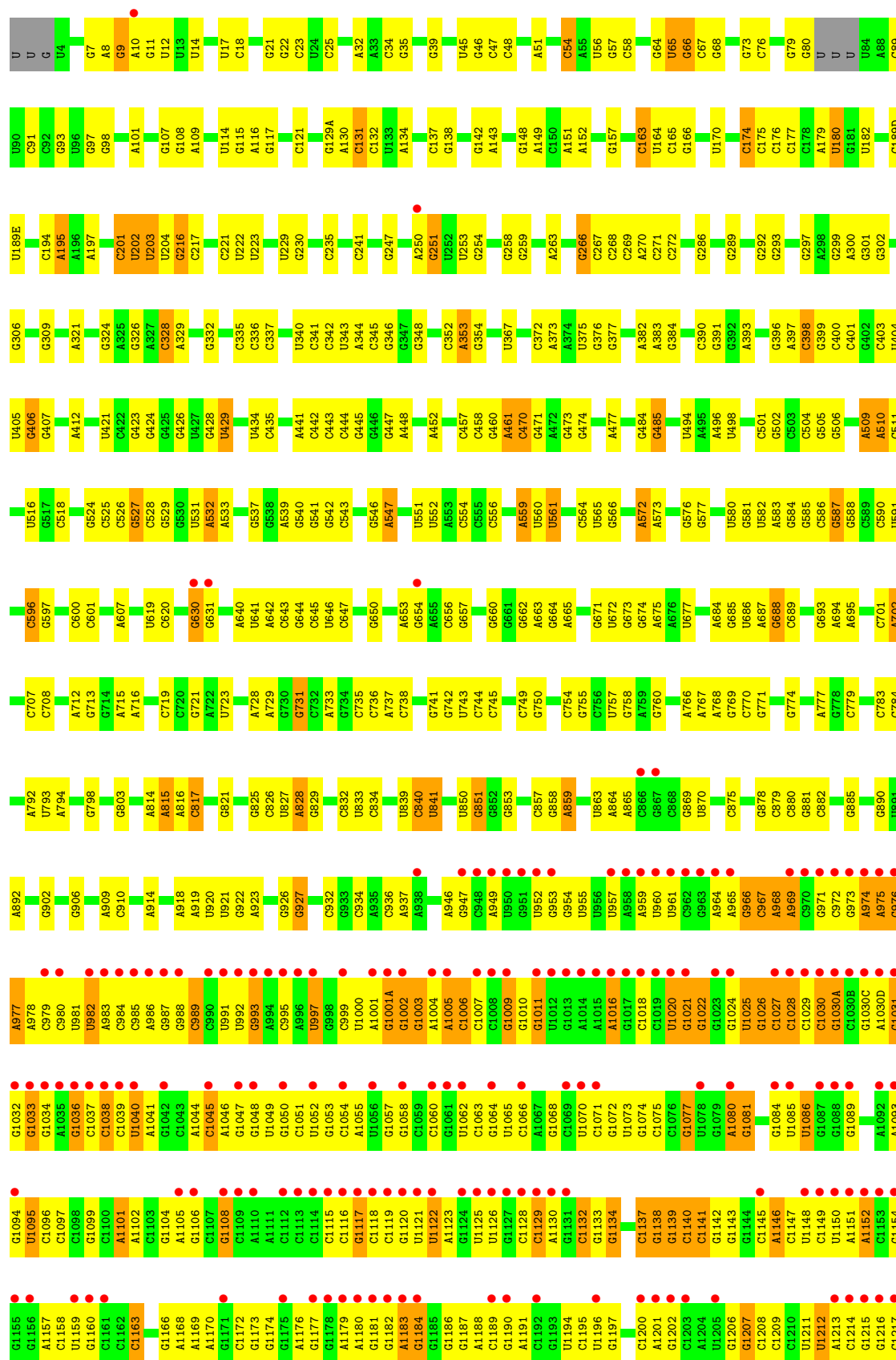
- Molecule 31: 50S ribosomal protein L36

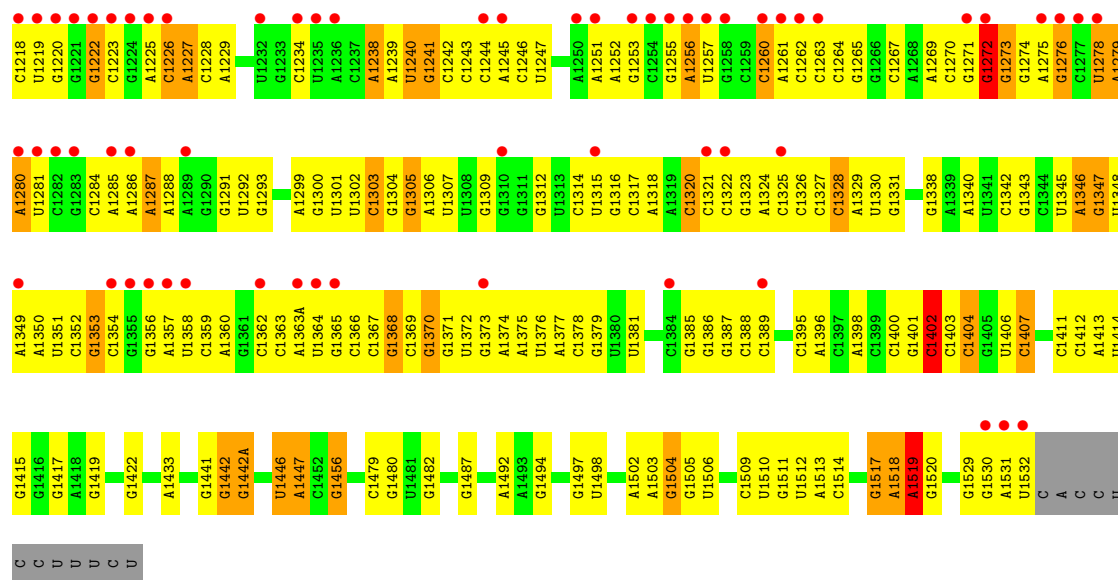


- Molecule 32: 16S Ribosomal RNA

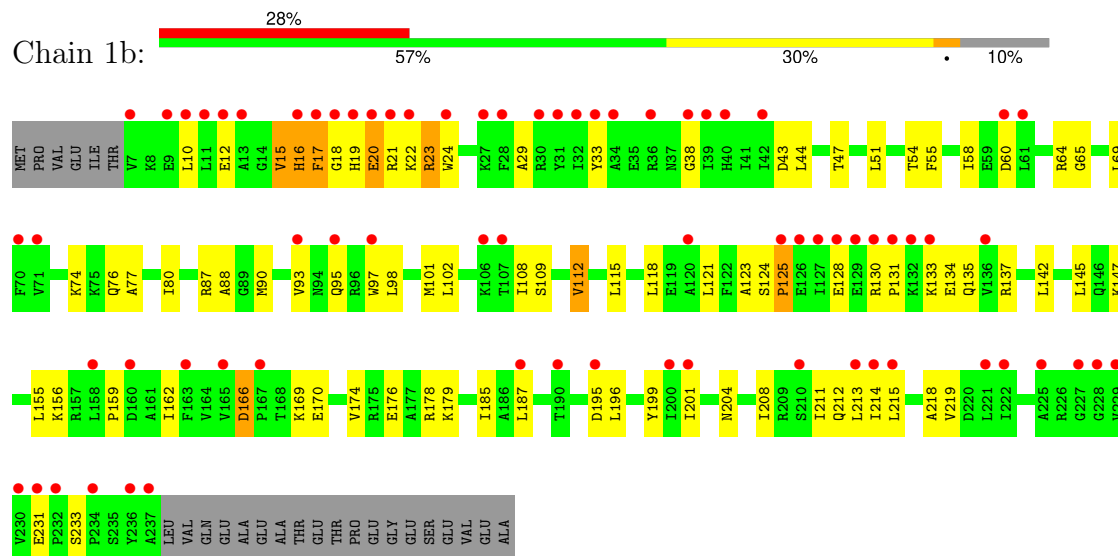




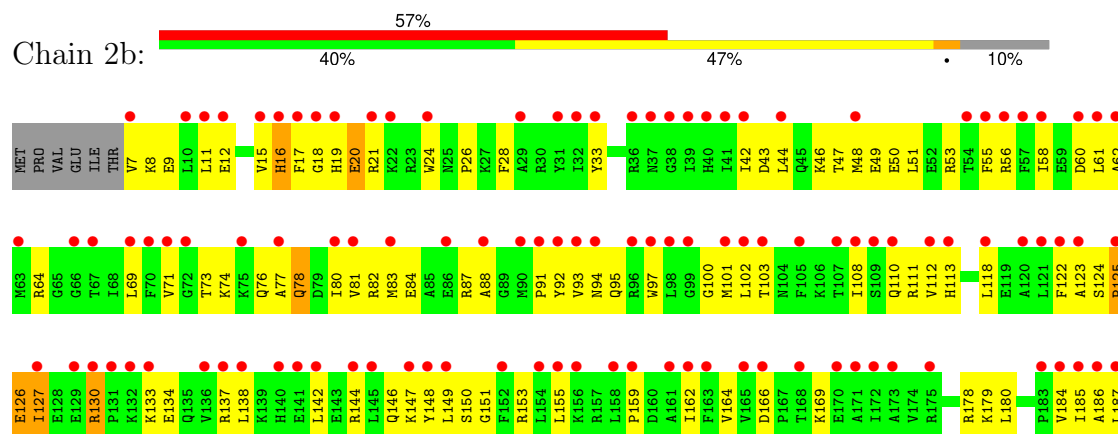


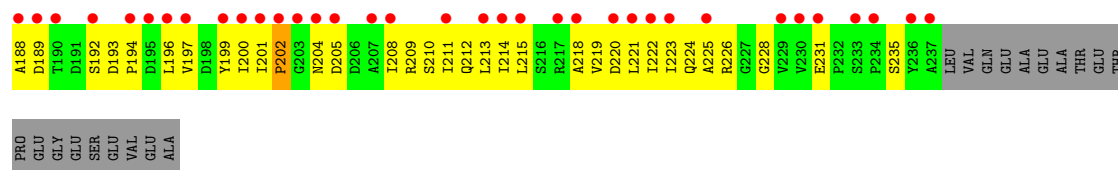


• Molecule 33: 30S ribosomal protein S2

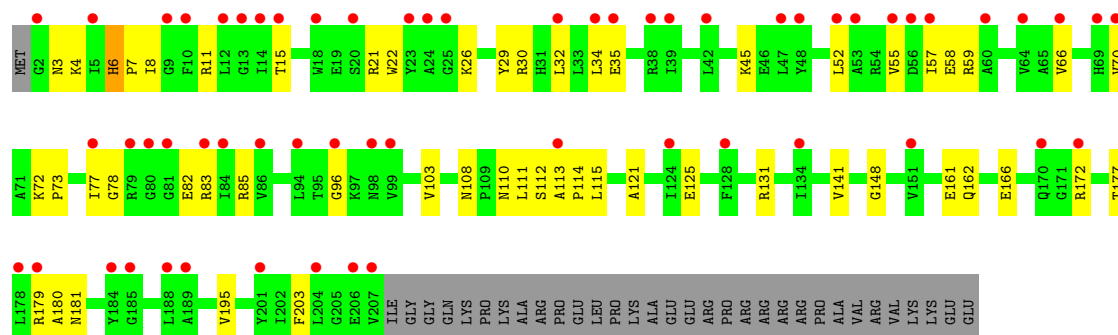


• Molecule 33: 30S ribosomal protein S2

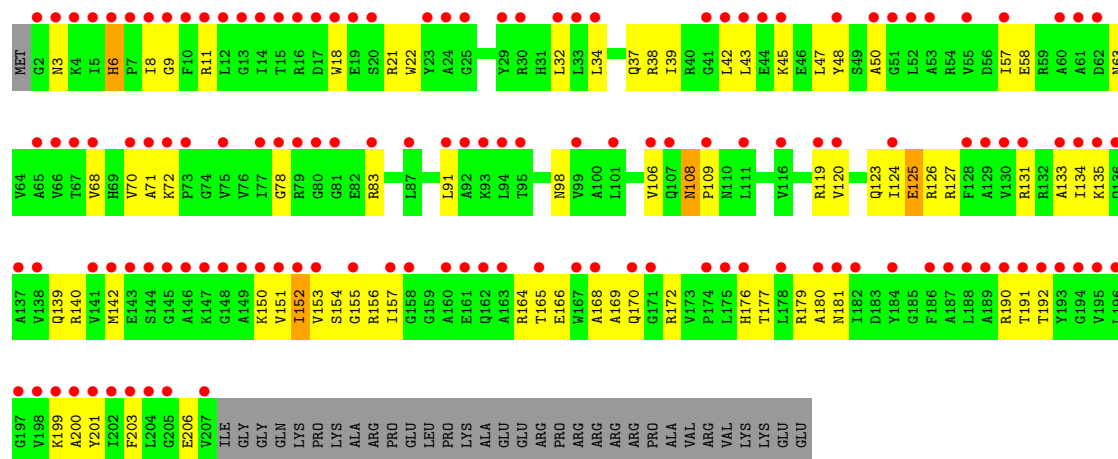




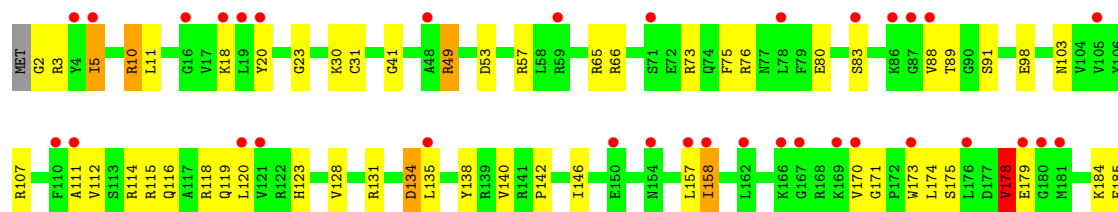
• Molecule 34: 30S ribosomal protein S3



• Molecule 34: 30S ribosomal protein S3

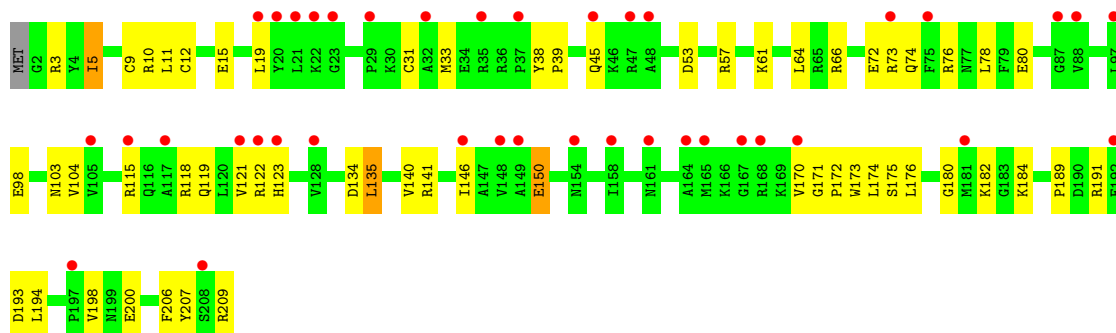
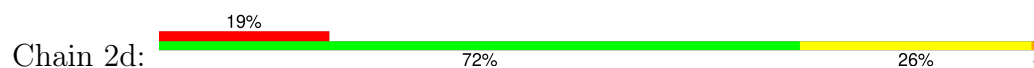


• Molecule 35: 30S ribosomal protein S4

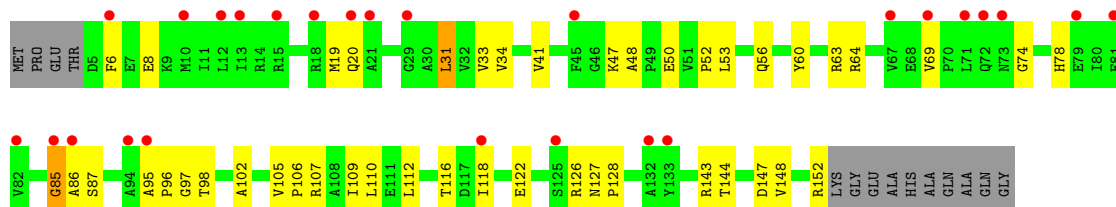




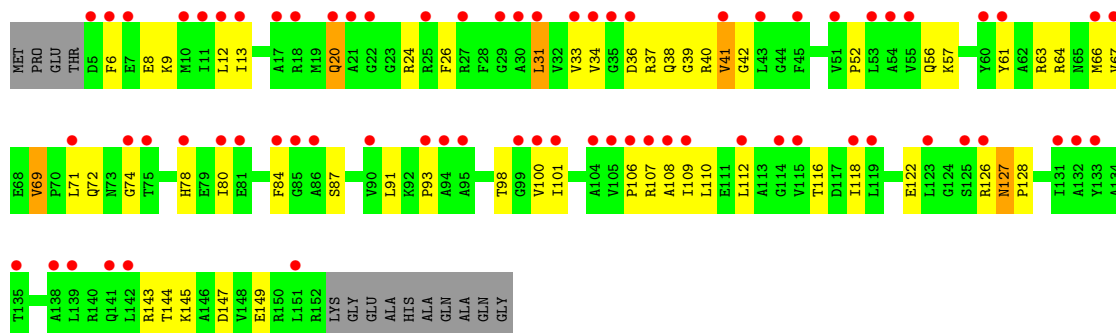
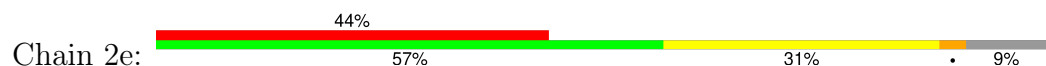
- Molecule 35: 30S ribosomal protein S4



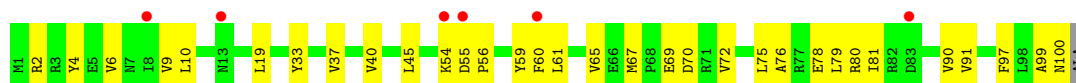
- Molecule 36: 30S ribosomal protein S5



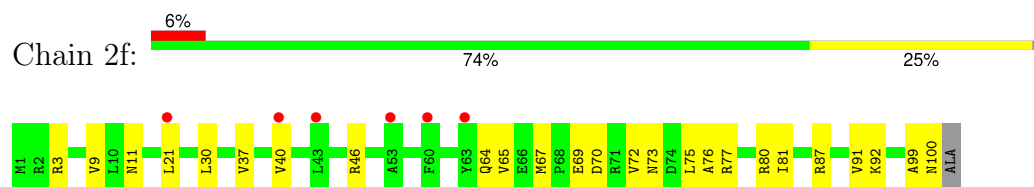
- Molecule 36: 30S ribosomal protein S5



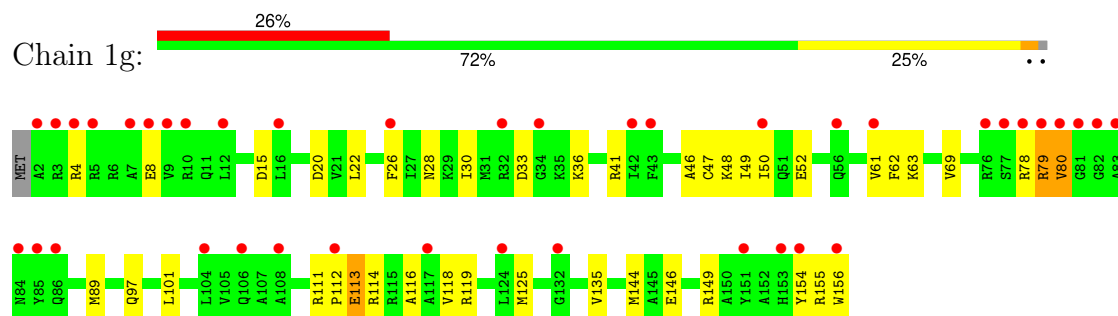
- Molecule 37: 30S ribosomal protein S6



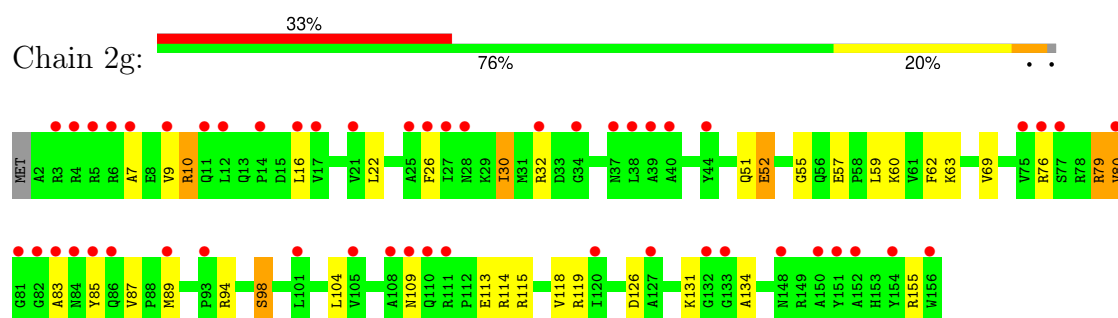
- Molecule 37: 30S ribosomal protein S6



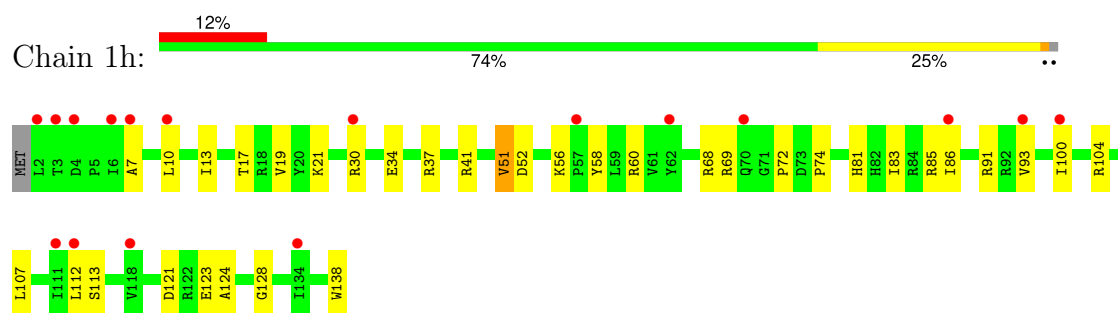
- Molecule 38: 30S ribosomal protein S7



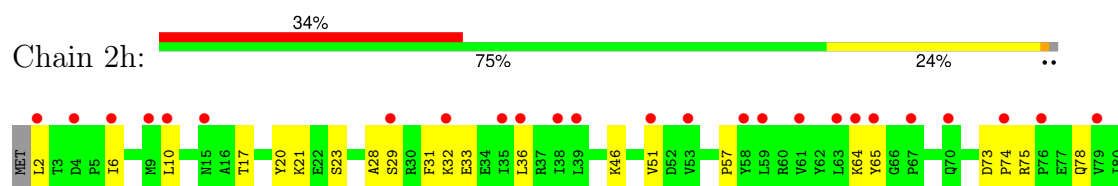
- Molecule 38: 30S ribosomal protein S7

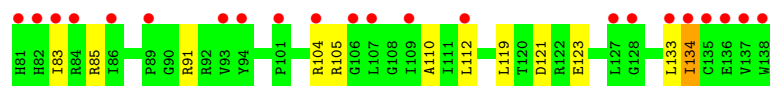


- Molecule 39: 30S ribosomal protein S8

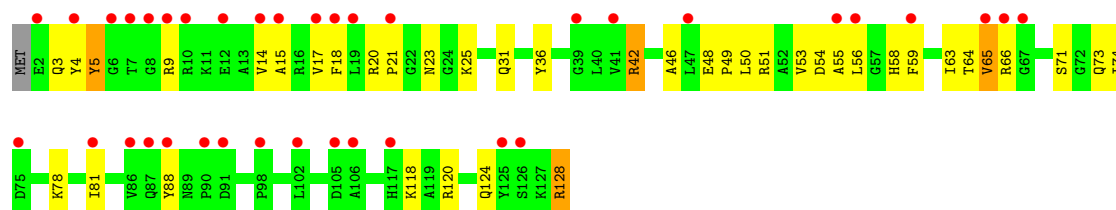


- Molecule 39: 30S ribosomal protein S8

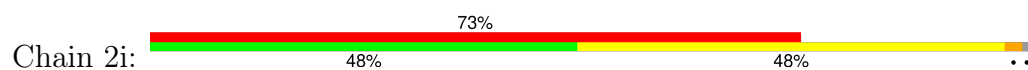




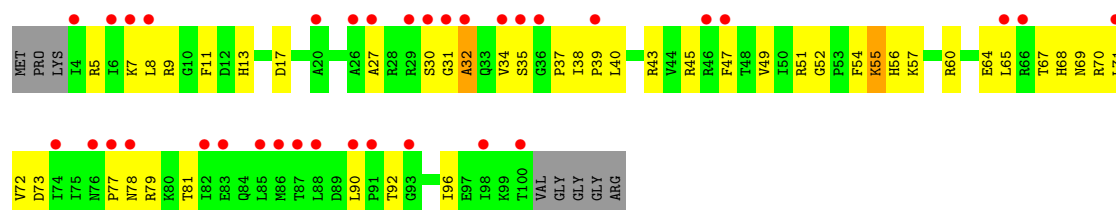
- Molecule 40: 30S ribosomal protein S9



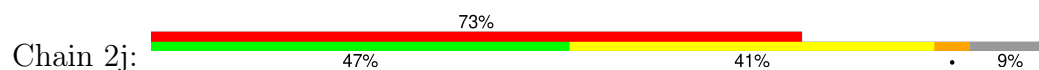
- Molecule 40: 30S ribosomal protein S9



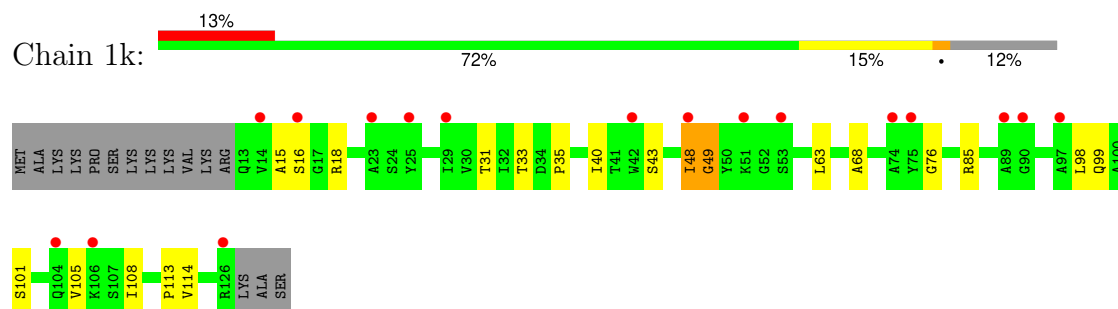
- Molecule 41: 30S ribosomal protein S10



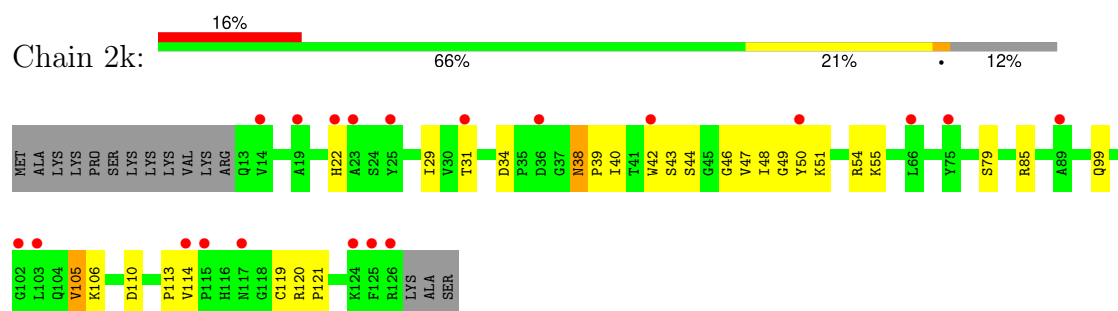
- Molecule 41: 30S ribosomal protein S10



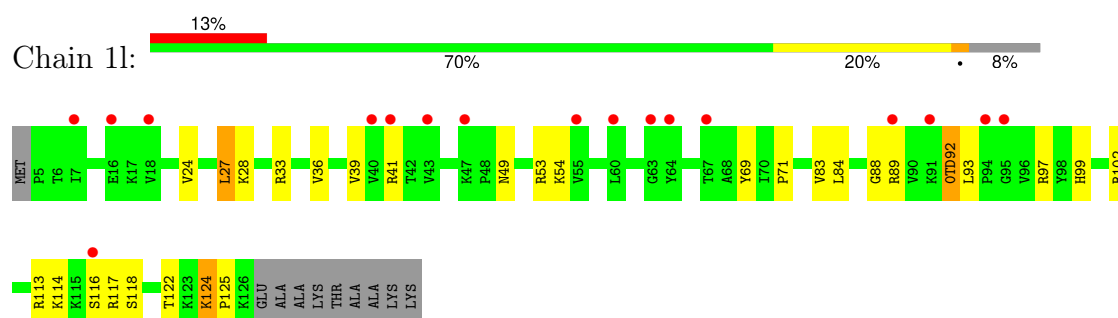
- Molecule 42: 30S ribosomal protein S11



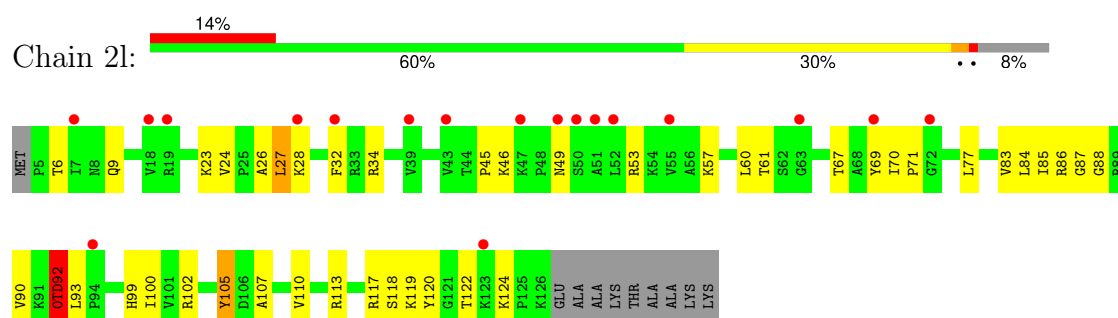
- Molecule 42: 30S ribosomal protein S11



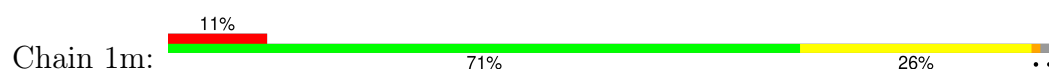
- Molecule 43: 30S ribosomal protein S12

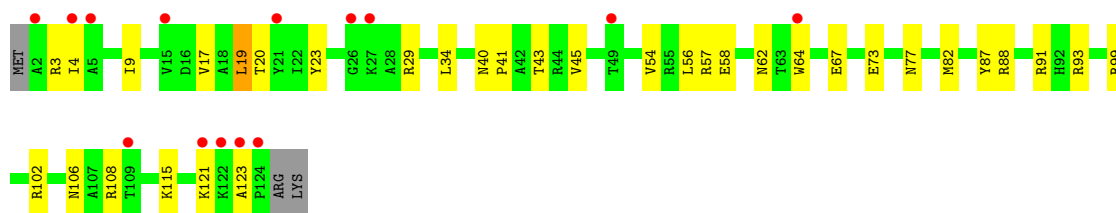


- Molecule 43: 30S ribosomal protein S12

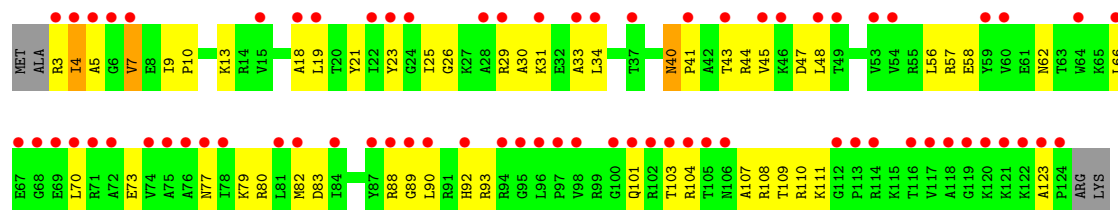


- Molecule 44: 30S ribosomal protein S13





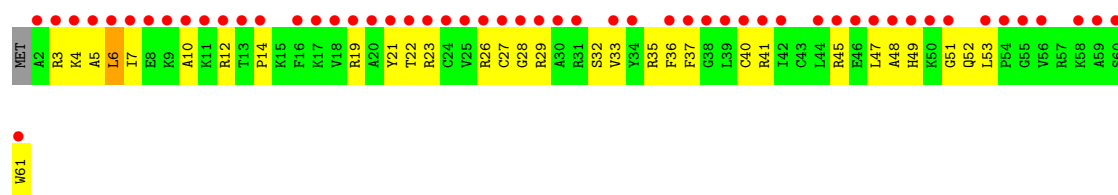
• Molecule 44: 30S ribosomal protein S13



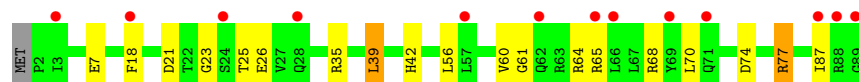
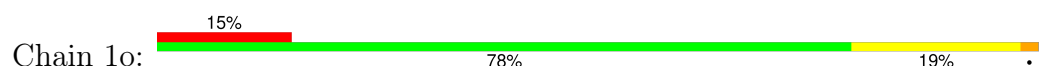
• Molecule 45: 30S ribosomal protein S14 type Z



• Molecule 45: 30S ribosomal protein S14 type Z



• Molecule 46: 30S ribosomal protein S15

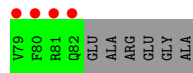
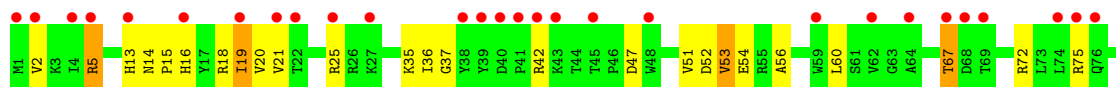


• Molecule 46: 30S ribosomal protein S15

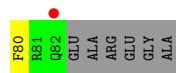




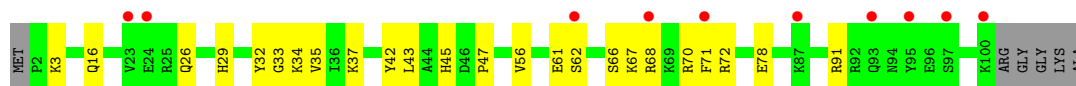
- Molecule 47: 30S ribosomal protein S16



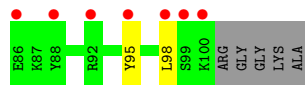
- Molecule 47: 30S ribosomal protein S16



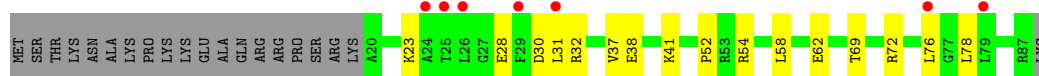
- Molecule 48: 30S ribosomal protein S17



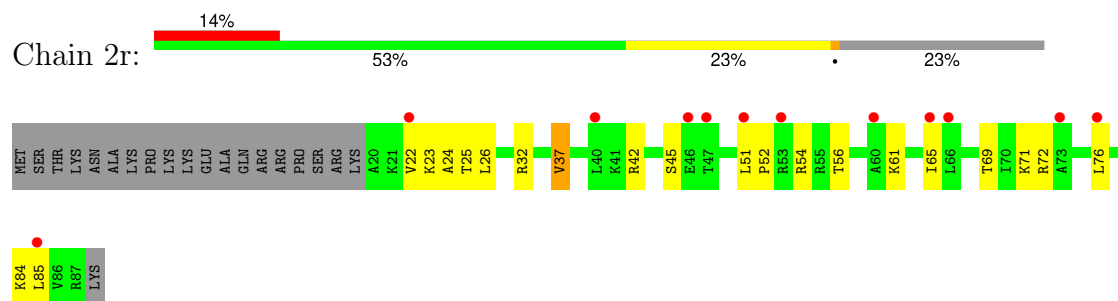
- Molecule 48: 30S ribosomal protein S17



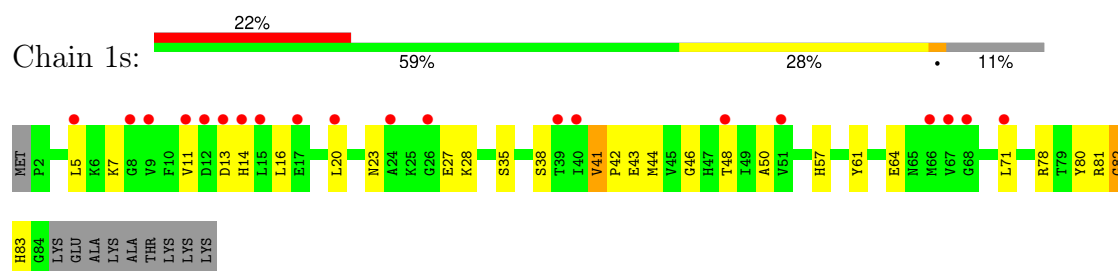
- Molecule 49: 30S ribosomal protein S18



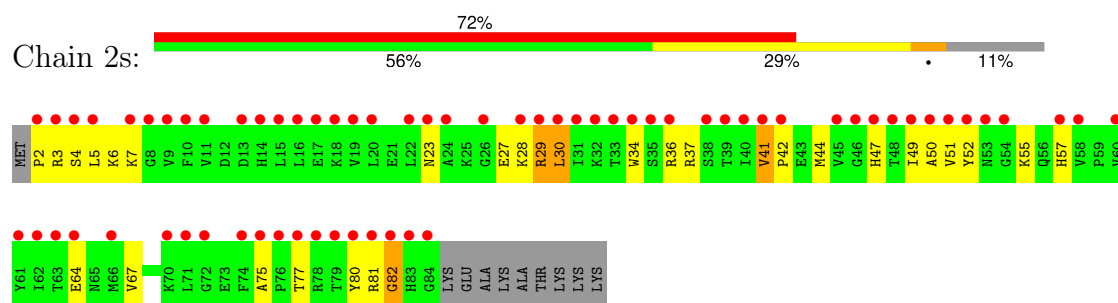
- Molecule 49: 30S ribosomal protein S18



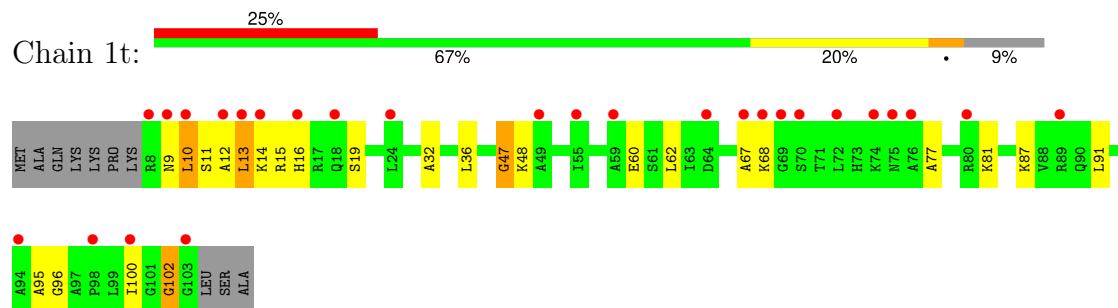
- Molecule 50: 30S ribosomal protein S19



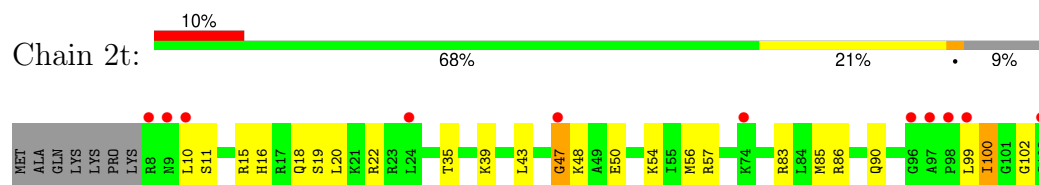
- Molecule 50: 30S ribosomal protein S19



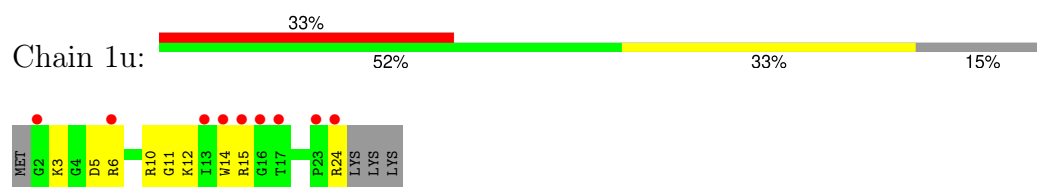
- Molecule 51: 30S ribosomal protein S20



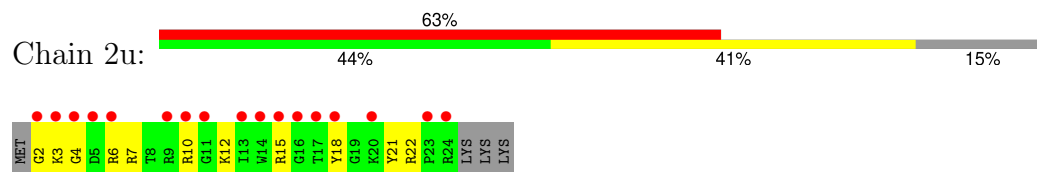
- Molecule 51: 30S ribosomal protein S20



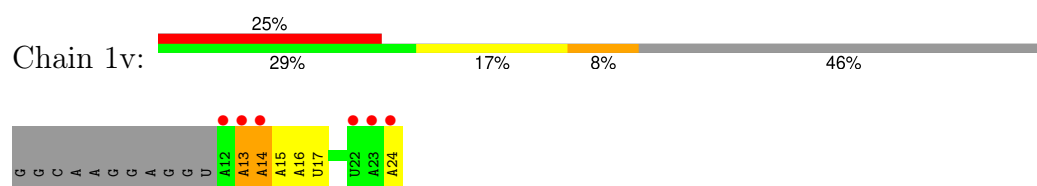
- Molecule 52: 30S ribosomal protein Thx



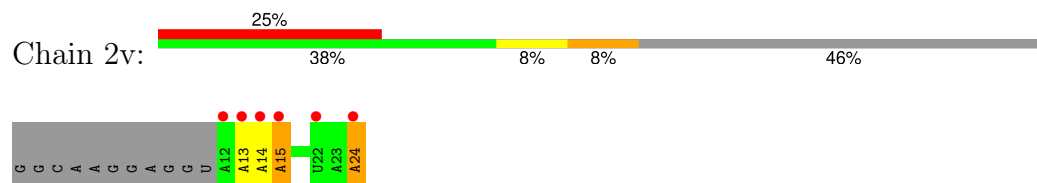
- Molecule 52: 30S ribosomal protein Thx



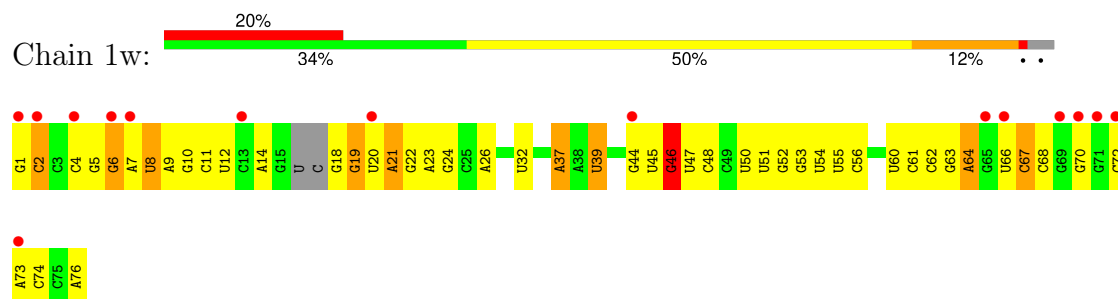
- Molecule 53: mRNA



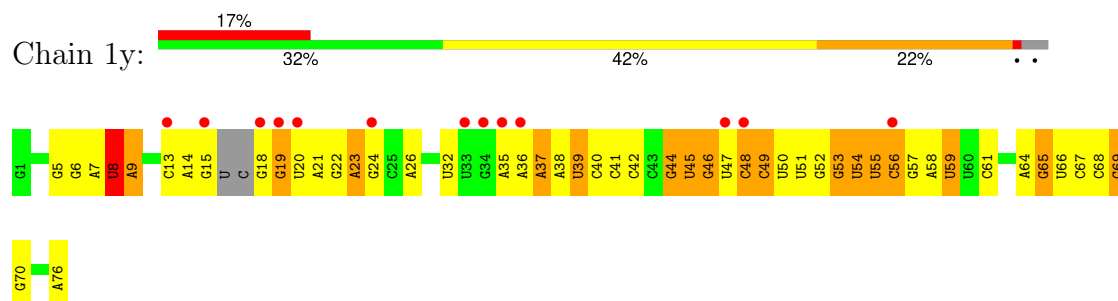
- Molecule 53: mRNA



- Molecule 54: A-site and E-site tRNAs

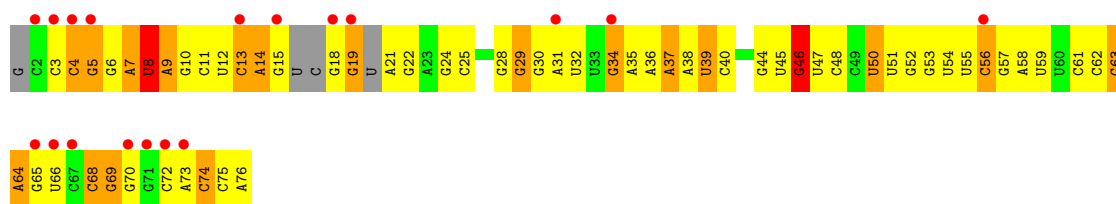


- Molecule 54: A-site and E-site tRNAs

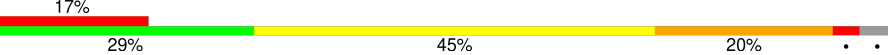


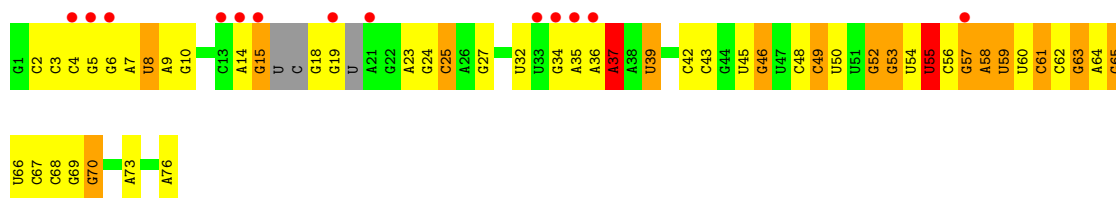
- Molecule 54: A-site and E-site tRNAs

Chain 2w: 



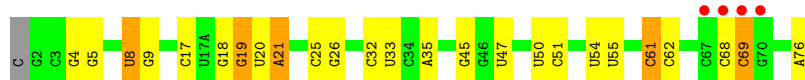
- Molecule 54: A-site and E-site tRNAs

Chain 2y: 



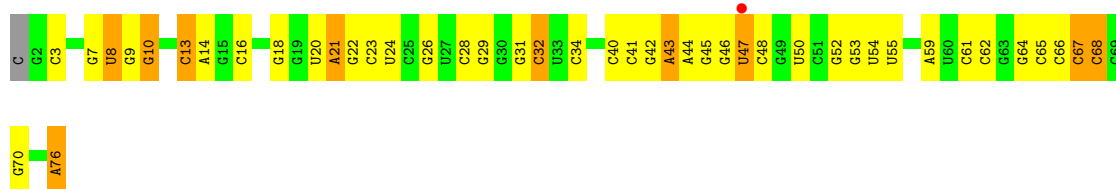
- Molecule 55: P-site tRNA

Chain 1x: 



- Molecule 55: P-site tRNA

Chain 2x: 



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.70Å 450.05Å 624.09Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	122.01 – 2.50 122.01 – 2.50	Depositor EDS
% Data completeness (in resolution range)	97.8 (122.01-2.50) 97.8 (122.01-2.50)	Depositor EDS
R_{merge}	0.14	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.22 (at 2.52Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.8.2_1309)	Depositor
R, R_{free}	0.231 , 0.281 0.232 , 0.282	Depositor DCC
R_{free} test set	98495 reflections (4.91%)	wwPDB-VP
Wilson B-factor (Å ²)	47.4	Xtriage
Anisotropy	0.174	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 57.4	EDS
L-test for twinning ²	$\langle L \rangle = 0.41$, $\langle L^2 \rangle = 0.23$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.91	EDS
Total number of atoms	300910	wwPDB-VP
Average B, all atoms (Å ²)	60.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.58% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: M2G, MG, 5MC, 2MU, K, MIA, 4OC, 5MU, ZN, SF4, MA6, PSU, OMG, 2MA, 7MG, 0TD, 2MG, UR3, 4SU

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	0.34	0/69009	0.51	3/107712 (0.0%)
1	2A	0.28	0/67293	0.49	1/105034 (0.0%)
2	1B	0.26	0/2882	0.41	0/4494
2	2B	0.30	0/2879	0.48	0/4487
3	1D	0.56	0/2186	0.90	2/2944 (0.1%)
3	2D	0.49	0/2186	0.93	4/2944 (0.1%)
4	1E	0.57	0/1592	0.93	0/2149
4	2E	0.49	0/1592	0.94	4/2149 (0.2%)
5	1F	0.55	0/1619	0.89	3/2193 (0.1%)
5	2F	0.46	0/1615	0.93	3/2188 (0.1%)
6	1G	0.44	0/1448	0.87	3/1957 (0.2%)
6	2G	0.44	0/1453	1.00	6/1963 (0.3%)
7	1H	0.49	0/1356	0.92	3/1834 (0.2%)
7	2H	0.44	0/1356	0.92	2/1834 (0.1%)
8	1I	0.42	0/1112	0.88	1/1514 (0.1%)
8	2I	0.41	0/1079	0.92	4/1475 (0.3%)
9	1N	0.54	0/1144	0.90	2/1543 (0.1%)
9	2N	0.46	0/1144	0.99	6/1543 (0.4%)
10	1O	0.54	0/943	0.88	0/1269
10	2O	0.44	0/943	0.84	0/1269
11	1P	0.54	0/1152	0.86	2/1533 (0.1%)
11	2P	0.43	0/1152	0.97	4/1533 (0.3%)
12	1Q	0.54	0/1143	0.79	0/1527
12	2Q	0.46	0/1143	0.91	0/1527
13	1R	0.59	0/982	0.88	1/1312 (0.1%)
13	2R	0.52	0/982	0.85	0/1312
14	1S	0.45	0/883	0.85	3/1176 (0.3%)
14	2S	0.45	0/880	0.92	1/1172 (0.1%)
15	1T	0.50	0/1105	0.85	0/1477
15	2T	0.45	0/1097	0.85	2/1468 (0.1%)
16	1U	0.61	0/977	0.86	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.48	0/977	0.88	0/1301
17	1V	0.58	0/782	0.88	0/1049
17	2V	0.45	0/782	0.91	0/1049
18	1W	0.63	0/897	0.92	0/1205
18	2W	0.50	0/897	0.86	0/1205
19	1X	0.53	0/764	0.88	2/1025 (0.2%)
19	2X	0.49	0/764	0.88	0/1025
20	1Y	0.49	0/819	0.85	0/1095
20	2Y	0.41	0/819	0.91	2/1095 (0.2%)
21	1Z	0.45	0/1267	0.98	5/1717 (0.3%)
21	2Z	0.41	0/1299	0.93	1/1763 (0.1%)
22	10	0.53	0/662	0.97	1/881 (0.1%)
22	20	0.41	0/662	0.93	2/881 (0.2%)
23	11	0.50	0/762	0.85	0/1014
23	21	0.46	0/762	0.87	0/1014
24	12	0.51	0/590	0.79	0/781
24	22	0.41	0/590	0.80	0/781
25	13	0.56	0/474	0.93	2/635 (0.3%)
25	23	0.42	0/469	0.88	0/630
26	14	0.44	0/565	1.08	6/761 (0.8%)
26	24	0.50	0/545	1.06	5/737 (0.7%)
27	15	0.60	0/469	0.86	1/635 (0.2%)
27	25	0.49	0/469	0.91	0/635
28	16	0.55	0/460	0.79	2/613 (0.3%)
28	26	0.41	0/456	0.77	0/608
29	17	0.54	0/426	0.93	1/561 (0.2%)
29	27	0.57	0/426	0.92	0/561
30	18	0.53	0/525	0.90	2/691 (0.3%)
30	28	0.47	0/525	0.90	2/691 (0.3%)
31	19	0.51	0/310	0.89	0/407
31	29	0.46	0/310	0.92	0/407
32	1a	0.24	0/35795	0.44	0/55864
32	2a	0.24	1/35886 (0.0%)	0.45	2/56005 (0.0%)
33	1b	0.42	0/1881	0.96	10/2542 (0.4%)
33	2b	0.44	0/1860	0.98	5/2518 (0.2%)
34	1c	0.39	0/1572	0.88	5/2126 (0.2%)
34	2c	0.47	0/1566	0.97	9/2119 (0.4%)
35	1d	0.40	0/1685	0.87	2/2262 (0.1%)
35	2d	0.42	0/1704	0.86	4/2284 (0.2%)
36	1e	0.43	0/1145	0.92	4/1543 (0.3%)
36	2e	0.45	0/1149	1.01	4/1548 (0.3%)
37	1f	0.43	0/823	0.80	0/1115
37	2f	0.42	0/829	0.81	2/1123 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.42	0/1250	0.87	1/1679 (0.1%)
38	2g	0.38	0/1254	0.90	2/1683 (0.1%)
39	1h	0.40	0/1108	0.90	1/1494 (0.1%)
39	2h	0.39	0/1108	0.90	3/1494 (0.2%)
40	1i	0.41	0/1002	0.91	1/1346 (0.1%)
40	2i	0.42	0/997	0.91	0/1343
41	1j	0.39	0/722	0.95	4/982 (0.4%)
41	2j	0.47	0/727	1.03	5/988 (0.5%)
42	1k	0.44	0/844	0.86	2/1145 (0.2%)
42	2k	0.41	0/848	0.85	2/1149 (0.2%)
43	1l	0.43	0/937	0.86	2/1260 (0.2%)
43	2l	0.41	0/937	0.94	4/1260 (0.3%)
44	1m	0.41	0/969	0.89	1/1302 (0.1%)
44	2m	0.43	0/961	0.91	4/1291 (0.3%)
45	1n	0.39	0/501	0.81	0/664
45	2n	0.39	0/501	0.84	0/664
46	1o	0.41	0/739	0.83	1/985 (0.1%)
46	2o	0.38	0/739	0.82	0/985
47	1p	0.40	0/697	0.83	1/939 (0.1%)
47	2p	0.41	0/693	0.77	0/935
48	1q	0.40	0/836	0.84	0/1117
48	2q	0.37	0/836	0.80	0/1117
49	1r	0.43	0/560	0.80	0/746
49	2r	0.36	0/560	0.79	0/746
50	1s	0.38	0/667	0.94	1/900 (0.1%)
50	2s	0.54	0/661	1.10	3/893 (0.3%)
51	1t	0.37	0/730	0.85	0/965
51	2t	0.43	0/729	0.84	1/965 (0.1%)
52	1u	0.32	0/203	0.79	0/266
52	2u	0.38	0/203	0.80	0/266
53	1v	0.24	0/310	0.38	0/480
53	2v	0.32	0/310	0.43	0/480
54	1w	0.30	1/1606 (0.1%)	0.44	0/2497
54	1y	0.29	1/1606 (0.1%)	0.44	0/2497
54	2w	0.31	0/1556	0.43	0/2418
54	2y	0.30	0/1583	0.48	0/2459
55	1x	0.30	0/1725	0.45	0/2689
55	2x	0.27	1/1725 (0.1%)	0.42	0/2689
All	All	0.35	4/316686 (0.0%)	0.62	180/474113 (0.0%)

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

sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
43	2l	0	1

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1y	8	4SU	O3'-P	5.24	1.61	1.56
54	1w	8	4SU	O3'-P	5.23	1.61	1.56
32	2a	1498	UR3	O3'-P	5.16	1.61	1.56
55	2x	8	4SU	O3'-P	5.15	1.61	1.56

All (180) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	1Z	158	PRO	CA-C-N	10.29	132.70	119.84
21	1Z	158	PRO	C-N-CA	10.29	132.70	119.84
9	2N	125	GLY	CA-C-N	8.71	128.44	119.56
9	2N	125	GLY	C-N-CA	8.71	128.44	119.56
33	1b	123	ALA	N-CA-C	-8.18	103.29	113.18
11	2P	22	GLY	CA-C-N	8.01	127.58	118.85
11	2P	22	GLY	C-N-CA	8.01	127.58	118.85
26	14	54	GLY	N-CA-C	7.92	126.70	115.30
34	2c	48	TYR	N-CA-C	-7.92	102.64	111.82
46	1o	87	ILE	N-CA-C	7.62	118.90	111.67
22	20	82	ARG	CA-C-N	7.56	127.57	119.78
22	20	82	ARG	C-N-CA	7.56	127.57	119.78
1	1A	2014	G	C2'-C3'-O3'	7.05	120.08	109.50
50	2s	82	GLY	N-CA-C	7.04	120.30	111.85
41	2j	90	LEU	CA-C-N	7.01	128.60	119.84
41	2j	90	LEU	C-N-CA	7.01	128.60	119.84
34	1c	72	LYS	CA-C-N	6.96	128.55	119.84
34	1c	72	LYS	C-N-CA	6.96	128.55	119.84
33	2b	130	ARG	CA-C-N	6.94	126.97	119.89
33	2b	130	ARG	C-N-CA	6.94	126.97	119.89
6	2G	48	GLU	N-CA-C	-6.85	104.06	113.18
9	1N	125	GLY	CA-C-N	6.84	126.54	119.56
9	1N	125	GLY	C-N-CA	6.84	126.54	119.56
41	2j	52	GLY	CA-C-N	6.82	126.42	119.19
41	2j	52	GLY	C-N-CA	6.82	126.42	119.19
39	2h	73	ASP	CA-C-N	6.80	127.76	120.83
39	2h	73	ASP	C-N-CA	6.80	127.76	120.83
8	2l	124	GLY	N-CA-C	6.77	119.56	110.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	2P	44	GLY	CA-C-N	6.67	133.71	121.70
11	2P	44	GLY	C-N-CA	6.67	133.71	121.70
47	1p	5	ARG	N-CA-C	6.53	117.75	108.74
42	1k	40	ILE	N-CA-C	-6.52	106.62	111.90
11	1P	22	GLY	CA-C-N	6.49	125.92	118.85
11	1P	22	GLY	C-N-CA	6.49	125.92	118.85
43	2l	105	TYR	CB-CA-C	-6.48	108.41	117.23
34	2c	6	HIS	CA-C-N	6.37	126.06	119.56
34	2c	6	HIS	C-N-CA	6.37	126.06	119.56
35	2d	171	GLY	CA-C-N	6.36	126.11	119.05
35	2d	171	GLY	C-N-CA	6.36	126.11	119.05
37	2f	11	ASN	CA-C-N	6.22	125.85	119.56
37	2f	11	ASN	C-N-CA	6.22	125.85	119.56
6	2G	44	GLY	N-CA-C	-6.18	106.80	115.32
34	2c	108	ASN	CA-C-N	6.14	126.04	119.28
34	2c	108	ASN	C-N-CA	6.14	126.04	119.28
43	2l	119	LYS	N-CA-C	-6.03	101.99	110.50
5	1F	89	VAL	N-CA-C	6.01	116.07	110.42
26	14	40	HIS	CA-C-N	6.00	126.16	119.32
26	14	40	HIS	C-N-CA	6.00	126.16	119.32
5	1F	9	ILE	CA-C-N	5.94	125.88	119.76
5	1F	9	ILE	C-N-CA	5.94	125.88	119.76
50	2s	30	LEU	N-CA-C	5.93	118.83	110.23
43	2l	28	LYS	N-CA-C	5.90	119.39	111.24
9	2N	94	HIS	CA-C-N	5.86	125.72	119.28
9	2N	94	HIS	C-N-CA	5.86	125.72	119.28
41	2j	60	ARG	N-CA-C	5.85	117.48	109.18
1	2A	1992	G	C2'-C3'-O3'	5.83	118.25	109.50
21	1Z	157	LEU	CA-C-N	5.81	126.36	120.38
21	1Z	157	LEU	C-N-CA	5.81	126.36	120.38
7	1H	54	ARG	CA-C-N	5.81	125.43	119.56
7	1H	54	ARG	C-N-CA	5.81	125.43	119.56
38	2g	10	ARG	N-CA-C	5.79	118.62	110.23
43	1l	124	LYS	CA-C-N	5.75	125.71	119.78
43	1l	124	LYS	C-N-CA	5.75	125.71	119.78
8	2l	132	PRO	N-CA-C	-5.75	108.07	114.92
20	2Y	91	GLU	N-CA-C	-5.72	106.26	113.18
4	2E	190	GLY	CA-C-N	5.70	125.89	120.31
4	2E	190	GLY	C-N-CA	5.70	125.89	120.31
32	2a	1272	G	N1-C2-N2	-5.68	99.14	116.20
44	2m	107	ALA	N-CA-C	-5.67	104.58	112.30
30	18	62	LEU	CA-C-N	5.67	125.29	119.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	18	62	LEU	C-N-CA	5.67	125.29	119.56
4	2E	31	CYS	CA-C-N	5.66	125.42	119.76
4	2E	31	CYS	C-N-CA	5.66	125.42	119.76
20	2Y	93	GLY	N-CA-C	-5.66	107.17	113.79
44	1m	106	ASN	CB-CA-C	-5.66	110.07	116.63
50	1s	82	GLY	N-CA-C	5.65	118.93	111.52
50	2s	34	TRP	N-CA-C	-5.64	105.74	113.30
8	2I	31	LEU	CA-C-N	-5.63	113.87	119.56
8	2I	31	LEU	C-N-CA	-5.63	113.87	119.56
33	1b	18	GLY	N-CA-C	5.62	118.59	112.29
29	17	47	ARG	N-CA-C	5.62	117.48	111.36
7	1H	9	ILE	N-CA-C	5.60	113.42	107.76
5	2F	21	ALA	CA-C-N	5.59	131.77	121.70
5	2F	21	ALA	C-N-CA	5.59	131.77	121.70
35	2d	39	PRO	CA-C-N	5.59	125.56	120.03
35	2d	39	PRO	C-N-CA	5.59	125.56	120.03
28	16	40	CYS	CA-C-N	5.58	125.10	119.19
28	16	40	CYS	C-N-CA	5.58	125.10	119.19
3	2D	244	ARG	CA-C-N	-5.57	114.64	120.38
3	2D	244	ARG	C-N-CA	-5.57	114.64	120.38
14	1S	90	GLY	CA-C-N	5.57	125.66	119.87
14	1S	90	GLY	C-N-CA	5.57	125.66	119.87
34	2c	125	GLU	N-CA-C	-5.53	106.37	113.23
36	1e	48	ALA	N-CA-C	5.53	113.20	108.22
38	1g	114	ARG	N-CA-C	5.52	116.98	110.97
26	24	60	GLN	N-CA-C	-5.52	105.81	112.54
8	1I	13	GLY	N-CA-C	5.51	118.79	110.75
6	1G	45	GLU	N-CA-C	-5.50	105.83	112.54
14	2S	40	ILE	N-CA-C	5.50	115.81	108.11
43	2l	23	LYS	N-CA-C	-5.49	105.80	112.88
44	2m	40	ASN	CA-C-N	5.47	125.14	119.56
44	2m	40	ASN	C-N-CA	5.47	125.14	119.56
25	13	11	SER	CA-C-N	5.47	125.95	120.04
25	13	11	SER	C-N-CA	5.47	125.95	120.04
39	2h	134	ILE	N-CA-C	5.45	115.54	110.42
33	1b	65	GLY	N-CA-C	-5.44	105.45	114.48
36	2e	127	ASN	CA-C-N	5.44	124.89	119.24
36	2e	127	ASN	C-N-CA	5.44	124.89	119.24
35	1d	188	LEU	CA-C-N	5.43	125.35	119.76
35	1d	188	LEU	C-N-CA	5.43	125.35	119.76
26	24	28	LYS	CA-C-N	5.43	125.08	119.05
26	24	28	LYS	C-N-CA	5.43	125.08	119.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	2D	120	GLY	CA-C-N	5.43	125.25	119.28
3	2D	120	GLY	C-N-CA	5.43	125.25	119.28
5	2F	9	ILE	N-CA-C	5.42	113.80	107.89
22	10	13	GLY	N-CA-C	5.40	125.98	113.18
6	1G	96	ARG	CB-CA-C	-5.38	110.35	116.54
33	2b	130	ARG	N-CA-C	5.37	117.37	110.39
41	1j	90	LEU	CA-C-N	5.37	126.55	119.84
41	1j	90	LEU	C-N-CA	5.37	126.55	119.84
36	2e	98	THR	N-CA-C	5.36	117.12	111.28
33	1b	128	GLU	N-CA-C	-5.36	106.59	113.02
3	1D	7	LYS	CA-C-N	5.35	126.52	119.84
3	1D	7	LYS	C-N-CA	5.35	126.52	119.84
34	1c	6	HIS	CA-C-N	5.33	125.00	119.56
34	1c	6	HIS	C-N-CA	5.33	125.00	119.56
30	28	52	LYS	CA-C-N	-5.32	113.14	119.05
30	28	52	LYS	C-N-CA	-5.32	113.14	119.05
7	2H	11	VAL	CA-C-N	5.30	125.59	119.92
7	2H	11	VAL	C-N-CA	5.30	125.59	119.92
33	1b	38	GLY	N-CA-C	-5.29	107.95	115.30
19	1X	94	GLY	CA-C-N	5.28	131.20	121.70
19	1X	94	GLY	C-N-CA	5.28	131.20	121.70
33	2b	193	ASP	CA-C-N	5.28	124.46	118.97
33	2b	193	ASP	C-N-CA	5.28	124.46	118.97
40	1i	5	TYR	N-CA-C	5.26	118.03	109.24
21	1Z	153	SER	N-CA-C	5.25	117.43	111.02
27	15	27	PRO	O-C-N	5.25	123.72	121.31
9	2N	110	GLY	CA-C-N	5.25	124.70	119.24
9	2N	110	GLY	C-N-CA	5.25	124.70	119.24
33	1b	156	LYS	N-CA-C	-5.25	106.67	114.64
34	2c	126	ARG	N-CA-C	-5.25	106.73	113.02
36	2e	26	PHE	N-CA-C	5.23	117.48	109.95
41	1j	52	GLY	CA-C-N	5.22	124.83	119.56
41	1j	52	GLY	C-N-CA	5.22	124.83	119.56
6	2G	78	SER	N-CA-C	5.22	116.65	111.07
36	1e	98	THR	N-CA-C	5.21	116.65	111.07
33	1b	23	ARG	N-CA-C	-5.21	106.69	112.57
26	14	52	THR	N-CA-C	-5.20	104.69	112.54
14	1S	40	ILE	N-CA-C	5.18	115.37	108.11
6	2G	141	PHE	CA-C-N	5.17	124.83	119.56
6	2G	141	PHE	C-N-CA	5.17	124.83	119.56
15	2T	19	LEU	CA-C-N	5.16	125.07	119.85
15	2T	19	LEU	C-N-CA	5.16	125.07	119.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1e	127	ASN	CA-C-N	5.16	124.61	119.24
36	1e	127	ASN	C-N-CA	5.16	124.61	119.24
38	2g	114	ARG	N-CA-C	5.15	116.58	110.97
21	2Z	52	SER	CB-CA-C	-5.13	110.67	116.63
26	24	40	HIS	CA-C-N	5.11	125.15	119.32
26	24	40	HIS	C-N-CA	5.11	125.15	119.32
6	2G	160	VAL	N-CA-C	5.11	115.27	108.11
33	1b	166	ASP	CA-C-N	5.11	124.90	119.28
33	1b	166	ASP	C-N-CA	5.11	124.90	119.28
39	1h	100	ILE	N-CA-C	5.11	113.96	108.95
42	2k	38	ASN	CA-C-N	5.10	125.03	119.78
42	2k	38	ASN	C-N-CA	5.10	125.03	119.78
32	2a	1272	G	N3-C2-N2	5.09	135.16	119.90
1	1A	2014	G	P-O3'-C3'	5.06	127.79	120.20
44	2m	7	VAL	N-CA-C	5.06	116.96	109.17
34	1c	96	GLY	N-CA-C	-5.06	108.34	115.32
34	2c	72	LYS	CA-C-N	5.05	126.15	119.84
34	2c	72	LYS	C-N-CA	5.05	126.15	119.84
1	1A	1700	G	C2'-C3'-O3'	5.04	117.05	109.50
6	1G	127	GLY	N-CA-C	-5.04	107.70	114.25
33	1b	15	VAL	N-CA-C	5.03	119.80	109.34
51	2t	11	SER	N-CA-C	-5.03	106.74	112.92
42	1k	49	GLY	N-CA-C	5.02	125.09	113.18
26	14	28	LYS	CA-C-N	5.01	124.61	119.05
26	14	28	LYS	C-N-CA	5.01	124.61	119.05
13	1R	38	VAL	CB-CA-C	-5.00	108.94	113.70

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
43	2l	92	0TD	Mainchain

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	31193	632	0
1	2A	60322	0	30425	882	0
2	1B	2577	0	1305	22	0
2	2B	2575	0	1303	65	0
3	1D	2136	0	2218	47	0
3	2D	2136	0	2218	62	0
4	1E	1559	0	1618	34	0
4	2E	1559	0	1618	38	0
5	1F	1584	0	1625	36	0
5	2F	1580	0	1619	55	0
6	1G	1423	0	1436	22	0
6	2G	1428	0	1438	73	0
7	1H	1330	0	1407	28	0
7	2H	1330	0	1407	46	0
8	1I	1097	0	1140	33	0
8	2I	1064	0	1082	25	0
9	1N	1117	0	1184	21	0
9	2N	1117	0	1184	22	0
10	1O	933	0	996	20	0
10	2O	933	0	996	25	0
11	1P	1135	0	1212	36	0
11	2P	1135	0	1212	34	0
12	1Q	1122	0	1179	15	0
12	2Q	1122	0	1179	35	0
13	1R	968	0	1033	12	0
13	2R	968	0	1033	21	0
14	1S	873	0	927	19	0
14	2S	870	0	923	31	0
15	1T	1091	0	1151	19	0
15	2T	1083	0	1136	36	0
16	1U	959	0	1019	18	0
16	2U	959	0	1019	26	0
17	1V	771	0	830	10	0
17	2V	771	0	830	23	0
18	1W	886	0	940	8	0
18	2W	886	0	940	14	0
19	1X	750	0	814	10	0
19	2X	750	0	814	28	0
20	1Y	806	0	881	21	0
20	2Y	806	0	881	25	0
21	1Z	1240	0	1240	25	0
21	2Z	1271	0	1273	48	0
22	10	653	0	674	14	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	20	653	0	674	20	0
23	11	755	0	826	11	0
23	21	755	0	826	21	0
24	12	588	0	643	11	0
24	22	588	0	643	17	0
25	13	469	0	518	6	0
25	23	464	0	514	12	0
26	14	552	0	533	21	0
26	24	532	0	503	39	0
27	15	455	0	465	7	0
27	25	455	0	465	12	0
28	16	453	0	473	13	0
28	26	449	0	469	10	0
29	17	418	0	467	9	0
29	27	418	0	467	17	0
30	18	517	0	582	18	0
30	28	517	0	582	19	0
31	19	307	0	335	4	0
31	29	307	0	335	8	0
32	1a	32246	0	16295	441	0
32	2a	32327	0	16339	638	0
33	1b	1846	0	1867	60	0
33	2b	1825	0	1828	107	0
34	1c	1548	0	1535	35	0
34	2c	1542	0	1517	56	0
35	1d	1655	0	1672	51	0
35	2d	1674	0	1714	43	0
36	1e	1129	0	1185	30	0
36	2e	1133	0	1191	39	0
37	1f	810	0	804	25	0
37	2f	816	0	808	17	0
38	1g	1231	0	1238	29	0
38	2g	1235	0	1249	27	0
39	1h	1088	0	1126	27	0
39	2h	1088	0	1126	27	0
40	1i	983	0	986	28	0
40	2i	978	0	966	54	0
41	1j	709	0	650	32	0
41	2j	714	0	672	37	0
42	1k	829	0	825	9	0
42	2k	833	0	836	19	0
43	1l	932	0	981	19	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	2l	932	0	981	28	0
44	1m	958	0	1002	25	0
44	2m	950	0	988	49	0
45	1n	492	0	529	19	0
45	2n	492	0	529	37	0
46	1o	728	0	760	16	0
46	2o	728	0	760	18	0
47	1p	681	0	697	20	0
47	2p	677	0	686	19	0
48	1q	823	0	891	26	0
48	2q	823	0	891	17	0
49	1r	555	0	618	12	0
49	2r	555	0	618	15	0
50	1s	652	0	662	24	0
50	2s	646	0	644	27	0
51	1t	728	0	798	15	0
51	2t	727	0	796	18	0
52	1u	199	0	208	8	0
52	2u	199	0	208	12	0
53	1v	277	0	140	3	0
53	2v	277	0	140	3	0
54	1w	1592	0	819	35	0
54	1y	1585	0	804	40	0
54	2w	1544	0	788	47	0
54	2y	1565	0	795	53	0
55	1x	1625	0	828	15	0
55	2x	1625	0	828	24	0
56	10	6	0	0	0	0
56	11	3	0	0	0	0
56	12	1	0	0	0	0
56	13	3	0	0	0	0
56	15	2	0	0	0	0
56	16	3	0	0	0	0
56	17	1	0	0	0	0
56	18	3	0	0	0	0
56	19	2	0	0	0	0
56	1A	1141	0	0	0	0
56	1B	37	0	0	0	0
56	1D	12	0	0	0	0
56	1E	11	0	0	0	0
56	1F	8	0	0	0	0
56	1G	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	1I	1	0	0	0	0
56	1N	6	0	0	0	0
56	1O	7	0	0	0	0
56	1P	4	0	0	0	0
56	1Q	6	0	0	0	0
56	1R	3	0	0	0	0
56	1S	3	0	0	0	0
56	1T	2	0	0	0	0
56	1U	8	0	0	0	0
56	1V	3	0	0	0	0
56	1W	5	0	0	0	0
56	1X	6	0	0	0	0
56	1Y	3	0	0	0	0
56	1Z	3	0	0	0	0
56	1a	229	0	0	0	0
56	1b	2	0	0	0	0
56	1d	1	0	0	0	0
56	1e	1	0	0	0	0
56	1f	2	0	0	0	0
56	1l	3	0	0	0	0
56	1n	2	0	0	0	0
56	1s	1	0	0	0	0
56	1t	1	0	0	0	0
56	1v	1	0	0	0	0
56	1w	11	0	0	0	0
56	1x	16	0	0	0	0
56	1y	4	0	0	0	0
56	20	3	0	0	0	0
56	23	2	0	0	0	0
56	25	4	0	0	0	0
56	27	1	0	0	0	0
56	28	2	0	0	0	0
56	2A	909	0	0	0	0
56	2B	21	0	0	0	0
56	2D	5	0	0	0	0
56	2E	9	0	0	0	0
56	2F	4	0	0	0	0
56	2G	1	0	0	0	0
56	2N	1	0	0	0	0
56	2O	1	0	0	0	0
56	2P	1	0	0	0	0
56	2Q	3	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	2R	1	0	0	0	0
56	2T	3	0	0	0	0
56	2U	4	0	0	0	0
56	2V	1	0	0	0	0
56	2W	3	0	0	0	0
56	2X	3	0	0	0	0
56	2Y	1	0	0	0	0
56	2Z	1	0	0	0	0
56	2a	244	0	0	0	0
56	2d	1	0	0	0	0
56	2e	1	0	0	0	0
56	2f	1	0	0	0	0
56	2g	1	0	0	0	0
56	2i	1	0	0	0	0
56	2j	2	0	0	0	0
56	2l	2	0	0	0	0
56	2n	1	0	0	0	0
56	2q	2	0	0	0	0
56	2r	2	0	0	0	0
56	2t	1	0	0	0	0
56	2v	2	0	0	0	0
56	2w	8	0	0	0	0
56	2x	5	0	0	0	0
56	2y	7	0	0	0	0
57	1A	1	0	0	0	0
57	2A	1	0	0	0	0
58	14	1	0	0	0	0
58	15	1	0	0	0	0
58	16	1	0	0	0	0
58	19	1	0	0	0	0
58	1Y	1	0	0	0	0
58	1n	1	0	0	0	0
58	24	1	0	0	0	0
58	25	1	0	0	0	0
58	26	1	0	0	0	0
58	29	1	0	0	0	0
58	2Y	1	0	0	0	0
58	2n	1	0	0	0	0
59	1d	8	0	0	0	0
59	2d	8	0	0	1	0
60	10	12	0	0	0	0
60	11	10	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	12	4	0	0	0	0
60	13	6	0	0	0	0
60	14	1	0	0	0	0
60	15	6	0	0	0	0
60	16	3	0	0	0	0
60	17	9	0	0	0	0
60	18	13	0	0	1	0
60	1A	2238	0	0	95	0
60	1B	68	0	0	3	0
60	1D	28	0	0	1	0
60	1E	28	0	0	3	0
60	1F	13	0	0	1	0
60	1G	7	0	0	1	0
60	1H	2	0	0	0	0
60	1I	3	0	0	0	0
60	1N	7	0	0	1	0
60	1O	8	0	0	0	0
60	1P	23	0	0	3	0
60	1Q	14	0	0	0	0
60	1R	14	0	0	0	0
60	1S	5	0	0	0	0
60	1T	8	0	0	1	0
60	1U	11	0	0	1	0
60	1V	9	0	0	0	0
60	1W	6	0	0	0	0
60	1X	8	0	0	2	0
60	1Y	4	0	0	0	0
60	1Z	1	0	0	0	0
60	1a	438	0	0	28	0
60	1b	1	0	0	0	0
60	1d	1	0	0	0	0
60	1e	1	0	0	0	0
60	1f	1	0	0	0	0
60	1g	1	0	0	0	0
60	1i	1	0	0	0	0
60	1l	8	0	0	0	0
60	1m	2	0	0	0	0
60	1o	1	0	0	0	0
60	1p	1	0	0	0	0
60	1q	4	0	0	0	0
60	1u	1	0	0	1	0
60	1v	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	1w	21	0	0	1	0
60	1x	15	0	0	0	0
60	1y	1	0	0	0	0
60	20	7	0	0	0	0
60	21	12	0	0	0	0
60	22	1	0	0	0	0
60	23	1	0	0	0	0
60	25	4	0	0	1	0
60	26	1	0	0	0	0
60	27	4	0	0	1	0
60	28	6	0	0	2	0
60	29	1	0	0	0	0
60	2A	1389	0	0	90	0
60	2B	26	0	0	1	0
60	2D	28	0	0	2	0
60	2E	16	0	0	0	0
60	2F	16	0	0	0	0
60	2H	1	0	0	0	0
60	2I	4	0	0	0	0
60	2N	1	0	0	0	0
60	2P	14	0	0	1	0
60	2Q	2	0	0	0	0
60	2R	2	0	0	0	0
60	2T	6	0	0	0	0
60	2U	2	0	0	0	0
60	2V	2	0	0	0	0
60	2W	2	0	0	0	0
60	2X	5	0	0	0	0
60	2Y	1	0	0	1	0
60	2Z	2	0	0	0	0
60	2a	377	0	0	34	0
60	2d	1	0	0	0	0
60	2e	2	0	0	0	0
60	2g	1	0	0	0	0
60	2i	1	0	0	0	0
60	2j	4	0	0	0	0
60	2l	5	0	0	1	0
60	2o	1	0	0	0	0
60	2p	2	0	0	0	0
60	2q	1	0	0	0	0
60	2r	1	0	0	1	0
60	2t	4	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
60	2u	1	0	0	1	0
60	2v	1	0	0	0	0
60	2w	2	0	0	0	0
60	2x	7	0	0	0	0
60	2y	19	0	0	5	0
All	All	300910	0	196690	4749	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 10.

All (4749) 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:1128:U:H3	1:1A:1132:A:N6	1.34	1.25
1:2A:2136:C:N4	1:2A:2155:G:H1	1.44	1.15
55:1x:4:G:H1	55:1x:69:C:N4	1.48	1.10
32:2a:997:U:H3	32:2a:1044:A:N6	1.49	1.10
1:1A:1128:U:O4	1:1A:1132:A:N1	1.85	1.09
1:2A:2138:C:N4	1:2A:2153:G:H1	1.48	1.09
54:2w:50:U:H3	54:2w:64:A:N6	1.50	1.07
54:1w:6:G:H1	54:1w:67:C:N4	1.55	1.05
54:1w:7:A:N6	54:1w:66:U:H3	1.55	1.03
1:1A:1740:U:H1'	3:1D:14:ARG:HH22	1.22	1.01
32:2a:1089:G:H1	32:2a:1096:C:N4	1.62	0.98
32:1a:998:G:H1	32:1a:1043:C:H42	1.08	0.98
1:1A:2122:G:H1	1:1A:2211:U:H3	1.14	0.96
1:2A:1693:U:H1'	3:2D:14:ARG:HH22	1.31	0.95
32:2a:1000:U:H3	32:2a:1041:A:N6	1.62	0.95
54:2y:5:G:H1	54:2y:68:C:H42	1.01	0.95
32:1a:1004:A:N6	32:1a:1037:C:N3	2.14	0.94
44:2m:3:ARG:HG2	44:2m:9:ILE:H	1.31	0.94
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.50	0.94
1:2A:2129:C:H42	1:2A:2159:G:H1	1.06	0.93
1:1A:1105:G:H1	1:1A:1125:C:H42	0.99	0.93
1:1A:2511:C:OP1	60:1A:5012:HOH:O	1.83	0.93
1:1A:2439:C:OP1	60:1A:5528:HOH:O	1.87	0.93
1:1A:2702:C:OP1	13:1R:17:ARG:NH2	2.01	0.93
32:2a:1002:G:H1	32:2a:1038:C:H42	1.11	0.93
20:1Y:92:ASN:HB3	20:1Y:94:LYS:H	1.33	0.92
54:2y:55:PSU:HN1	54:2y:57:G:H5''	1.30	0.92
1:1A:2143:G:H1	1:1A:2199:C:H42	1.07	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1011:G:H1	32:2a:1018:C:H42	1.17	0.92
54:1w:7:A:H61	54:1w:66:U:H3	0.98	0.92
1:2A:1171:G:N2	1:2A:1178:C:N3	2.18	0.92
32:2a:1133:G:H1	32:2a:1141:C:H42	1.13	0.91
54:1w:6:G:H1	54:1w:67:C:H42	0.91	0.91
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.53	0.90
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.35	0.90
54:2y:15:G:H22	54:2y:48:C:H42	1.15	0.90
1:2A:2127:G:N2	1:2A:2161:C:C2	2.40	0.90
32:1a:1009:G:O6	32:1a:1020:U:O2	1.90	0.90
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.21	0.89
54:2y:50:U:H3	54:2y:64:A:H61	1.18	0.89
1:2A:2136:C:N4	1:2A:2155:G:N1	2.19	0.89
32:2a:656:C:O2'	46:2o:28:GLN:NE2	2.06	0.89
54:2w:4:C:H42	54:2w:69:G:H1	1.18	0.89
1:1A:1099:C:H42	1:1A:1152:G:H1	1.17	0.88
32:2a:1089:G:H1	32:2a:1096:C:H42	0.92	0.88
1:1A:1105:G:H1	1:1A:1125:C:N4	1.71	0.88
22:10:10:THR:HG22	22:10:12:ASN:H	1.37	0.88
32:2a:1000:U:H3	32:2a:1041:A:H61	0.88	0.88
1:2A:2136:C:N3	1:2A:2155:G:N2	2.22	0.87
32:2a:975:A:H4'	32:2a:976:G:H5''	1.57	0.86
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.20	0.86
1:1A:2121:U:H3	1:1A:2212:G:H1	0.91	0.85
1:2A:854:G:H2'	1:2A:855:G:H8	1.38	0.85
1:2A:2014:A:H4'	18:2W:92:ARG:HH22	1.37	0.85
1:2A:2127:G:N1	1:2A:2161:C:C4	2.44	0.85
1:2A:1689:A:H62	1:2A:1698:A:H2	1.20	0.85
36:2e:78:HIS:HE1	36:2e:143:ARG:H	1.21	0.85
40:2i:9:ARG:HG2	40:2i:14:VAL:HG12	1.57	0.85
1:2A:2345:G:H4'	1:2A:2346:A:H5''	1.58	0.85
11:2P:52:GLU:OE1	11:2P:55:ARG:NH1	2.08	0.85
1:1A:303:C:H42	1:1A:385:G:H1	1.21	0.85
1:1A:1378:G:OP1	60:1A:4704:HOH:O	1.94	0.85
54:2y:5:G:H1	54:2y:68:C:N4	1.74	0.85
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.24	0.85
1:2A:2807:G:N1	1:2A:2893:G:O6	2.09	0.85
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.11	0.85
1:1A:1694:G:OP1	60:1A:5101:HOH:O	1.94	0.85
11:1P:52:GLU:OE1	11:1P:55:ARG:NH1	2.10	0.85
54:1w:6:G:N2	54:1w:67:C:N3	2.24	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:559:A:H4'	32:2a:560:U:H3'	1.59	0.84
1:1A:1740:U:O2	3:1D:14:ARG:NH2	2.11	0.84
1:1A:1111:U:O2	1:1A:1119:A:N6	2.11	0.84
32:2a:1029:C:C4	32:2a:1032:G:N1	2.46	0.84
32:2a:597:G:OP2	60:2a:3377:HOH:O	1.96	0.84
1:1A:929:G:H1	1:1A:940:C:H42	1.25	0.83
32:1a:559:A:H4'	32:1a:560:U:H3'	1.59	0.83
1:2A:2127:G:C2	1:2A:2161:C:N3	2.46	0.83
55:1x:4:G:N2	55:1x:69:C:N3	2.24	0.83
1:1A:2831:A:OP2	60:1A:5352:HOH:O	1.97	0.83
23:21:2:SER:HB3	23:21:46:LEU:HD12	1.60	0.83
1:2A:2099:U:H3	1:2A:2190:G:H1	1.22	0.83
1:1A:2158:C:N3	1:1A:2177:G:N2	2.26	0.83
17:2V:72:VAL:HG13	17:2V:85:LYS:HB2	1.61	0.83
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.12	0.83
32:1a:998:G:H1	32:1a:1043:C:N4	1.77	0.82
54:2w:50:U:H3	54:2w:64:A:H61	0.83	0.82
32:1a:189(F):U:H3	48:1q:72:ARG:HH22	1.28	0.82
1:2A:1204:A:H2	1:2A:1241:A:H62	1.28	0.82
11:2P:100:LEU:HD12	11:2P:112:LEU:HD11	1.60	0.82
1:2A:2138:C:N3	1:2A:2153:G:N2	2.24	0.82
32:1a:1162:C:H42	32:1a:1174:G:H1	1.23	0.82
1:1A:2143:G:H1	1:1A:2199:C:N4	1.78	0.82
1:2A:2129:C:N4	1:2A:2159:G:H1	1.77	0.82
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.61	0.81
11:2P:59:LEU:HD11	30:28:10:ALA:HB2	1.62	0.81
1:1A:889:G:N7	60:1A:5371:HOH:O	2.14	0.81
1:2A:2524:G:N7	60:2A:5109:HOH:O	2.13	0.81
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.62	0.81
3:2D:13:ARG:NH1	3:2D:16:MET:SD	2.54	0.81
32:2a:406:G:H21	35:2d:119:GLN:HE22	1.27	0.81
1:1A:2152:U:H2'	1:1A:2180:A:H61	1.45	0.81
41:1j:38:ILE:HD11	41:1j:71:LEU:HD23	1.63	0.81
1:1A:1140:U:H1'	1:1A:1143:U:H5	1.46	0.81
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.63	0.81
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.13	0.80
1:2A:1021:A:H62	1:2A:1141:U:H3	1.28	0.80
1:1A:2832:G:OP2	60:1A:5352:HOH:O	1.98	0.80
32:1a:664:G:H22	32:1a:741:G:H1	1.26	0.80
7:2H:84:SER:HB3	7:2H:132:ARG:HH11	1.47	0.80
1:1A:2158:C:N4	1:1A:2177:G:N1	2.29	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1389:G:N7	60:2A:4894:HOH:O	2.14	0.80
54:2w:4:C:N4	54:2w:69:G:H1	1.78	0.80
1:1A:1108:G:H1	1:1A:1123:A:H61	1.30	0.80
32:1a:1027:C:C2	32:1a:1034:G:N2	2.50	0.80
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.64	0.80
1:1A:2156:A:C4	1:1A:2180:A:H2	1.99	0.80
33:1b:118:LEU:HB3	33:1b:142:LEU:HD12	1.63	0.80
1:2A:2822:G:OP2	60:2A:5369:HOH:O	1.99	0.80
1:2A:962:G:OP1	60:2A:4399:HOH:O	2.00	0.79
1:2A:1647:G:OP1	60:2A:4350:HOH:O	2.00	0.79
32:1a:1196:U:H3	34:1c:162:GLN:HE22	1.30	0.79
1:2A:1670:C:OP1	60:2A:4902:HOH:O	2.00	0.79
38:1g:50:ILE:HD13	38:1g:125:MET:HG2	1.64	0.79
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.15	0.79
3:1D:242:ARG:NH1	60:1D:412:HOH:O	2.16	0.79
1:2A:2127:G:C2	1:2A:2161:C:C4	2.71	0.79
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.63	0.79
32:2a:1055:A:N7	32:2a:1200:C:N4	2.31	0.79
5:1F:70:THR:HG23	5:1F:72:ARG:H	1.48	0.79
1:2A:711:G:N2	1:2A:720:C:O2	2.16	0.79
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	1.64	0.79
32:1a:299:G:O6	60:1a:1950:HOH:O	2.01	0.79
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.64	0.79
2:1B:33:G:H5'	6:1G:2:PRO:HD3	1.65	0.78
10:1O:97:ARG:NH1	32:1a:339:C:OP2	2.15	0.78
33:1b:201:ILE:HG21	33:1b:214:ILE:HG21	1.64	0.78
1:2A:882:G:H2'	1:2A:883:G:H8	1.48	0.78
32:2a:1002:G:H1	32:2a:1038:C:N4	1.80	0.78
1:2A:1818:U:OP2	3:2D:157:ARG:NH1	2.16	0.78
32:2a:1011:G:H1	32:2a:1018:C:N4	1.80	0.78
32:1a:78:G:C6	32:1a:91:C:N4	2.51	0.78
32:1a:101:A:N7	60:1a:2034:HOH:O	2.17	0.78
33:1b:93:VAL:HG21	33:1b:97:TRP:HD1	1.49	0.78
32:2a:130:A:H5'	48:2q:63:ARG:HH11	1.46	0.78
1:2A:1816:G:O6	3:2D:35:LYS:NZ	2.16	0.78
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.15	0.78
54:2y:18:G:N2	54:2y:55:PSU:N3	2.26	0.78
32:2a:1004:A:N6	32:2a:1037:C:O2	2.15	0.78
32:2a:1133:G:H1	32:2a:1141:C:N4	1.80	0.78
1:1A:294:C:H42	1:1A:390:G:H1	1.29	0.78
1:1A:656:A:OP1	11:1P:65:ARG:NH1	2.16	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.63	0.78
1:1A:1151:U:H2'	1:1A:1152:G:C8	2.18	0.78
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.19	0.78
1:1A:2146:G:H1	1:1A:2196:C:H42	1.31	0.78
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.47	0.78
54:2y:15:G:H22	54:2y:48:C:N4	1.82	0.78
1:1A:1085:G:H1	1:1A:1162:C:H42	1.31	0.78
1:2A:1634:A:OP1	60:2A:4877:HOH:O	2.01	0.78
1:1A:1044:C:OP1	60:1A:4714:HOH:O	2.02	0.77
1:1A:2460:A:OP1	60:1A:5012:HOH:O	2.01	0.77
1:2A:948:G:OP1	60:2A:4399:HOH:O	2.00	0.77
32:1a:997:U:H3	32:1a:1044:A:H61	1.31	0.77
1:2A:2287:A:H62	1:2A:2344:U:H3	1.33	0.77
41:1j:30:SER:HG	41:1j:81:THR:HG1	1.23	0.77
49:1r:52:PRO:HB2	49:1r:54:ARG:HG2	1.66	0.77
32:2a:987:G:H1	32:2a:1218:C:H42	1.32	0.77
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.64	0.77
1:2A:1530:C:O2'	1:2A:1531:C:O5'	2.01	0.77
2:2B:7:G:H1	2:2B:114:C:H42	1.33	0.77
2:2B:27:C:N4	2:2B:56:G:O6	2.18	0.77
1:2A:2127:G:C6	1:2A:2161:C:N4	2.53	0.77
32:1a:532:A:N6	32:1a:1206:G:O2'	2.17	0.77
1:2A:888:C:OP1	44:2m:93:ARG:NH1	2.17	0.77
1:2A:1826:G:H4'	3:2D:242:ARG:HE	1.47	0.77
40:1i:31:GLN:HE21	40:1i:36:TYR:HD1	1.30	0.77
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.67	0.77
1:1A:1711:A:OP1	60:1A:5025:HOH:O	2.02	0.77
60:1A:5352:HOH:O	4:1E:110:GLY:O	2.02	0.77
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.67	0.77
32:1a:766:A:OP2	60:1a:1932:HOH:O	2.01	0.77
15:1T:98:LYS:NZ	60:1T:8106:HOH:O	2.17	0.76
1:1A:925:A:N6	1:1A:945:A:O2'	2.17	0.76
32:1a:156:G:N2	32:1a:165:C:O2	2.18	0.76
1:2A:424:G:N7	60:2A:5062:HOH:O	2.18	0.76
54:1y:50:U:O4	54:1y:64:A:N1	2.19	0.76
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.68	0.76
32:2a:117:G:OP2	60:2a:3619:HOH:O	2.04	0.76
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.67	0.76
1:1A:2007:G:OP2	60:1A:5698:HOH:O	2.02	0.76
1:2A:2126:A:N6	1:2A:2162:G:O2'	2.18	0.76
8:2I:4:ILE:HG12	8:2I:18:VAL:HG22	1.68	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1030:C:N4	32:2a:1031:G:H1	1.82	0.76
2:2B:17:C:O2	2:2B:67:G:N2	2.17	0.76
32:2a:1028:C:N3	32:2a:1033:G:O6	2.19	0.76
1:1A:1055:A:OP2	9:1N:37:LYS:NZ	2.19	0.76
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.04	0.76
43:1l:53:ARG:HG3	43:1l:93:LEU:HD21	1.68	0.76
32:2a:107:G:N7	51:2t:15:ARG:NH2	2.34	0.76
32:2a:151:A:N6	32:2a:170:U:O2	2.19	0.76
32:2a:532:A:N6	32:2a:1206:G:O2'	2.19	0.76
32:1a:1518:MA6:N6	32:1a:1519:MA6:H103	2.02	0.75
39:1h:34:GLU:OE1	39:1h:37:ARG:NH1	2.19	0.75
1:2A:1155:A:H5''	16:2U:55:ARG:HH11	1.50	0.75
32:2a:596:C:O2	32:2a:644:G:N2	2.18	0.75
32:2a:770:C:OP1	60:2a:3457:HOH:O	2.03	0.75
54:2y:10:G:H1	54:2y:25:C:H42	1.31	0.75
1:2A:1783:A:OP2	60:2A:4560:HOH:O	2.03	0.75
1:1A:2227:G:H3'	1:1A:2228:G:C8	2.22	0.75
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.68	0.75
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.68	0.75
32:2a:554:C:O2'	60:2a:3651:HOH:O	2.03	0.75
1:1A:1151:U:H2'	1:1A:1152:G:H8	1.51	0.75
32:1a:1030:C:H42	32:1a:1031:G:H1	1.34	0.75
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.52	0.75
32:2a:1328:C:OP1	52:2u:21:TYR:OH	2.05	0.75
10:1O:20:MET:HE3	10:1O:44:LYS:HE3	1.69	0.75
12:1Q:111:GLU:OE2	12:1Q:133:ARG:NH2	2.20	0.75
1:2A:2332:U:O4	60:2A:4436:HOH:O	2.04	0.75
32:2a:988:G:H1	32:2a:1217:C:H42	1.32	0.75
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.67	0.75
41:2j:8:LEU:HB2	41:2j:96:ILE:HG12	1.68	0.75
1:2A:1693:U:O2	3:2D:14:ARG:NH2	2.18	0.75
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.18	0.75
32:1a:1469:G:N7	60:1a:2194:HOH:O	2.20	0.75
32:2a:547:A:OP1	60:2a:3518:HOH:O	2.04	0.75
1:1A:1099:C:N4	1:1A:1152:G:H1	1.85	0.75
1:2A:2308:G:O6	1:2A:2311:A:N6	2.19	0.75
32:2a:1128:C:O2'	32:2a:1147:C:N3	2.20	0.75
54:2y:15:G:N2	54:2y:48:C:H42	1.85	0.74
32:2a:1025:U:H3	32:2a:1036:G:H1	0.78	0.74
1:2A:143:G:H4'	19:2X:35:THR:HG21	1.69	0.74
40:1i:9:ARG:HG2	40:1i:14:VAL:HG12	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:880:G:N2	1:2A:898:C:O2	2.19	0.74
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.69	0.74
2:2B:22:U:H3	2:2B:61:G:H1	1.36	0.74
22:20:10:THR:HG22	22:20:12:ASN:H	1.52	0.74
34:2c:9:GLY:HA3	45:2n:49:HIS:HA	1.69	0.74
1:1A:1059:C:OP2	60:1A:5073:HOH:O	2.04	0.74
32:1a:1108:G:O6	60:1a:2308:HOH:O	2.05	0.74
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.50	0.74
21:2Z:153:SER:HB3	21:2Z:167:PRO:HB3	1.69	0.74
1:1A:786:G:OP1	60:1A:5040:HOH:O	2.06	0.74
1:2A:2884:U:OP2	60:2A:4309:HOH:O	2.06	0.74
33:1b:166:ASP:HB3	33:1b:169:LYS:HB3	1.70	0.74
32:2a:1119:C:H2'	32:2a:1120:G:H8	1.50	0.74
15:2T:65:LYS:HE3	15:2T:67:SER:HB2	1.68	0.74
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.70	0.74
54:2w:8:4SU:S4	54:2w:13:C:O2'	2.46	0.74
1:1A:493:G:OP1	29:17:33:ARG:NH1	2.22	0.73
30:18:6:THR:HG22	30:18:63:PRO:HD2	1.70	0.73
33:1b:121:LEU:HD11	33:1b:130:ARG:HH22	1.53	0.73
44:1m:3:ARG:NH2	44:1m:9:ILE:O	2.20	0.73
1:2A:2310:A:N1	6:2G:79:ASN:ND2	2.36	0.73
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.21	0.73
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.88	0.73
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.69	0.73
54:2w:4:C:N3	54:2w:69:G:N2	2.36	0.73
1:1A:542:C:OP1	27:15:16:ARG:NH2	2.22	0.73
32:2a:1089:G:N2	32:2a:1096:C:N3	2.34	0.73
1:1A:2145:G:H1	1:1A:2197:C:H42	1.34	0.73
1:2A:1156:A:OP2	60:2A:4427:HOH:O	2.07	0.73
2:2B:117:G:N7	60:2B:3126:HOH:O	2.22	0.73
54:2w:14:A:H61	54:2w:21:A:H2	1.35	0.73
1:1A:1123:A:H2'	1:1A:1124:U:H4'	1.70	0.73
1:2A:792:G:O6	60:2A:4331:HOH:O	2.06	0.73
3:2D:152:GLY:O	60:2D:427:HOH:O	2.05	0.73
5:2F:33:LEU:HD13	5:2F:112:MET:HE2	1.69	0.73
12:2Q:26:TYR:O	12:2Q:67:ARG:NH1	2.21	0.73
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.70	0.73
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.24	0.73
32:2a:1026:G:O6	32:2a:1036:G:N2	2.22	0.73
32:1a:574:A:OP2	60:1a:2133:HOH:O	2.07	0.73
22:10:11:ARG:O	22:10:14:ARG:NH2	2.20	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:23:ASN:HB2	40:1i:25:LYS:HD3	1.70	0.72
41:2j:6:ILE:HG12	41:2j:98:ILE:HG13	1.71	0.72
54:2w:19:G:H1	54:2w:56:C:H42	1.36	0.72
32:1a:1025:U:O2	32:1a:1036:G:O6	2.06	0.72
35:1d:134:ASP:N	35:1d:134:ASP:OD1	2.20	0.72
55:2x:7:G:H5''	55:2x:8:4SU:H5	1.71	0.72
54:2y:50:U:H3	54:2y:64:A:N6	1.87	0.72
32:1a:78:G:N1	32:1a:91:C:C4	2.57	0.72
1:2A:794:G:OP1	60:2A:4747:HOH:O	2.07	0.72
32:2a:396:G:O2'	32:2a:398:C:OP1	2.04	0.72
43:2l:86:ARG:NH1	60:2l:303:HOH:O	2.22	0.72
1:1A:1848:G:OP1	3:1D:88:ARG:NH2	2.22	0.72
35:1d:107:ARG:HH21	35:1d:194:LEU:HD21	1.55	0.72
1:2A:822:U:OP2	60:2A:4800:HOH:O	2.07	0.72
1:2A:1671:U:OP2	60:2A:4902:HOH:O	2.08	0.72
32:2a:927:G:O2'	60:2a:3660:HOH:O	2.06	0.72
32:2a:1317:C:O2	50:2s:37:ARG:NH1	2.23	0.72
1:1A:2421:G:O2'	60:1A:5384:HOH:O	2.06	0.72
1:2A:854:G:H2'	1:2A:855:G:C8	2.23	0.72
1:1A:1101:G:H1	1:1A:1150:C:H42	1.37	0.72
1:1A:2820:A:N6	1:1A:2900:G:O2'	2.22	0.72
32:1a:812:C:N3	60:1a:1935:HOH:O	2.23	0.72
41:2j:38:ILE:HD11	41:2j:71:LEU:HD23	1.71	0.72
1:1A:2695:C:O2	10:1O:70:LYS:NZ	2.18	0.72
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.23	0.72
32:1a:473:G:OP2	47:1p:75:ARG:NH1	2.23	0.72
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.72	0.72
46:1o:26:GLU:OE2	46:1o:77:ARG:NE	2.23	0.72
1:2A:728:G:H5''	3:2D:13:ARG:HH21	1.55	0.72
1:2A:2822:G:N7	60:2A:5368:HOH:O	2.23	0.72
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.72	0.72
23:21:21:ARG:HD3	23:21:35:THR:HG21	1.72	0.72
1:1A:2180:A:O2'	1:1A:2181:G:OP2	2.07	0.72
32:1a:1008:C:N3	32:1a:1021:G:O6	2.23	0.72
32:2a:1271:G:N2	32:2a:1272:G:N7	2.38	0.72
44:2m:34:LEU:HD13	44:2m:41:PRO:HB3	1.72	0.72
54:2w:11:C:H42	54:2w:24:G:H1	1.38	0.72
1:1A:701:A:OP2	60:1A:4755:HOH:O	2.08	0.71
1:1A:1829:U:H5'	3:1D:259:THR:HG22	1.72	0.71
1:2A:531:C:OP1	1:2A:561:G:N1	2.22	0.71
1:2A:1566:A:OP1	3:2D:211:ARG:NH1	2.22	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2288:G:N7	60:1A:5504:HOH:O	2.23	0.71
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.21	0.71
33:2b:7:VAL:HG12	33:2b:8:LYS:H	1.56	0.71
33:2b:71:VAL:HB	33:2b:164:VAL:HA	1.72	0.71
46:2o:54:ARG:HG2	46:2o:58:MET:HE2	1.72	0.71
32:1a:266:G:H5''	32:1a:268:C:H41	1.56	0.71
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.71	0.71
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.70	0.71
4:2E:119:ARG:HD2	4:2E:160:TYR:HB2	1.70	0.71
7:2H:7:LEU:HD12	7:2H:8:PRO:HD2	1.72	0.71
32:2a:8:A:H5'	36:2e:101:ILE:HG22	1.72	0.71
1:1A:1810:U:OP2	60:1A:5038:HOH:O	2.06	0.71
1:1A:873:U:OP1	60:1A:5528:HOH:O	2.08	0.71
1:2A:987:G:O2'	1:2A:1000:A:N3	2.23	0.71
1:1A:1939:PSU:O2	60:1A:5275:HOH:O	2.08	0.71
32:1a:894:G:N7	60:1a:2251:HOH:O	2.23	0.71
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.24	0.71
1:2A:467:G:OP2	29:27:34:ARG:HD3	1.90	0.71
1:2A:1271:G:OP2	60:2A:4350:HOH:O	2.08	0.71
32:2a:115:G:OP2	60:2a:3350:HOH:O	2.07	0.71
32:2a:444:C:H2'	32:2a:445:G:H8	1.56	0.71
1:2A:1031:G:H5''	31:29:8:LYS:HE3	1.73	0.71
1:2A:1693:U:H1'	3:2D:14:ARG:NH2	2.04	0.71
5:2F:140:LEU:HD11	5:2F:170:LEU:HD11	1.71	0.71
1:1A:927:G:H2'	1:1A:928:G:H8	1.54	0.71
1:1A:943:C:N3	1:1A:944:C:N4	2.38	0.71
1:1A:1069:U:OP2	60:1A:4871:HOH:O	2.08	0.71
1:1A:1716:A:OP2	60:1A:4989:HOH:O	2.07	0.71
1:1A:2798:C:OP1	4:1E:41:LYS:NZ	2.18	0.71
14:1S:68:GLN:HG3	14:1S:71:ARG:HH21	1.55	0.71
34:1c:32:LEU:HD23	34:1c:59:ARG:HD3	1.72	0.71
1:2A:692:C:O2'	3:2D:38:LYS:NZ	2.21	0.71
32:2a:1260:C:O2	32:2a:1274:G:N2	2.23	0.71
55:2x:3:C:H42	55:2x:70:G:H1	1.39	0.71
1:1A:2772:G:N7	60:1A:4321:HOH:O	2.24	0.71
39:2h:21:LYS:O	39:2h:65:TYR:OH	2.09	0.71
1:1A:331:G:N7	60:1A:4450:HOH:O	2.24	0.70
1:1A:1924:C:OP1	3:1D:242:ARG:NH1	2.22	0.70
1:2A:568:U:O4	60:2A:4947:HOH:O	2.08	0.70
32:1a:515:G:N7	60:1a:2127:HOH:O	2.25	0.70
6:2G:79:ASN:N	6:2G:79:ASN:OD1	2.24	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2776:G:OP2	60:1A:4740:HOH:O	2.09	0.70
1:2A:2677:G:N3	60:2A:5258:HOH:O	2.24	0.70
50:2s:41:VAL:HG12	50:2s:44:MET:HG3	1.72	0.70
20:1Y:54:LYS:HA	20:1Y:56:PRO:HD3	1.72	0.70
32:2a:201:C:H42	32:2a:216:G:H1	1.36	0.70
1:1A:1299:A:OP1	60:1A:5877:HOH:O	2.08	0.70
26:14:53:GLU:HG3	26:14:54:GLY:H	1.55	0.70
1:2A:131:G:OP1	60:2A:4066:HOH:O	2.08	0.70
1:2A:2490:G:O6	60:2A:4471:HOH:O	2.09	0.70
32:2a:1274:G:N2	32:2a:1275:A:N7	2.38	0.70
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.72	0.70
1:1A:2802:C:O2	1:1A:2903:G:N2	2.22	0.70
32:1a:972:C:O2'	41:1j:55:LYS:O	2.10	0.70
1:2A:2478:A:OP2	31:29:2:LYS:NZ	2.24	0.70
1:1A:928:G:N2	1:1A:943:C:O2	2.25	0.70
20:2Y:102:CYS:SG	20:2Y:103:GLY:N	2.63	0.70
35:2d:175:SER:HB3	35:2d:184:LYS:HB3	1.72	0.70
1:1A:1296:G:OP2	11:1P:21:ARG:NH1	2.25	0.70
1:1A:1740:U:H1'	3:1D:14:ARG:NH2	2.04	0.70
1:1A:2440:G:OP1	60:1A:5528:HOH:O	2.08	0.70
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.24	0.70
32:1a:1370:G:N7	60:1a:1970:HOH:O	2.24	0.70
1:2A:89:G:H3'	1:2A:90:U:H5''	1.72	0.70
1:2A:882:G:H2'	1:2A:883:G:C8	2.26	0.70
1:2A:1466:G:HO2'	1:2A:1546:C:HO2'	1.31	0.70
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.73	0.70
32:2a:953:G:H5'	32:2a:965:A:H61	1.55	0.70
34:2c:18:TRP:O	34:2c:21:ARG:NH1	2.23	0.70
1:1A:1361:C:OP2	60:1A:4704:HOH:O	2.09	0.70
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.38	0.70
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.25	0.70
26:24:34:GLU:OE1	44:2m:3:ARG:N	2.25	0.70
33:2b:58:ILE:HG21	33:2b:222:ILE:HG22	1.74	0.70
1:1A:1060:U:OP2	60:1A:5073:HOH:O	2.10	0.70
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.72	0.70
32:1a:1136:U:H5''	32:1a:1137:C:C4	2.27	0.70
1:2A:109:G:N7	60:2A:5070:HOH:O	2.25	0.70
2:2B:41:U:H5	6:2G:70:VAL:H	1.40	0.70
32:2a:986:A:N3	50:2s:52:TYR:OH	2.24	0.70
1:1A:1857:G:H4'	3:1D:242:ARG:HE	1.56	0.69
1:1A:2045:G:H5'	1:1A:2629:C:H4'	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2149:G:H1	1:1A:2183:C:H42	1.37	0.69
1:1A:2641:A:O2'	1:1A:2642:G:OP2	2.10	0.69
1:2A:1973:G:OP1	60:2A:5051:HOH:O	2.10	0.69
1:2A:2710:C:N4	60:2A:4933:HOH:O	2.24	0.69
24:22:1:MET:N	24:22:52:ASP:OD1	2.23	0.69
32:2a:864:A:OP2	60:2a:3438:HOH:O	2.10	0.69
32:1a:200:G:H1	32:1a:217:C:H42	1.39	0.69
32:1a:525:C:OP1	43:1l:89:ARG:NH1	2.25	0.69
54:1w:5:G:H2'	54:1w:6:G:H8	1.57	0.69
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.75	0.69
10:2O:20:MET:HE3	10:2O:44:LYS:HE3	1.74	0.69
32:2a:654:G:O6	32:2a:754:C:N4	2.20	0.69
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.65	0.69
32:2a:1360:A:OP2	45:2n:35:ARG:NH2	2.25	0.69
33:2b:74:LYS:NZ	33:2b:205:ASP:O	2.26	0.69
5:2F:20:LEU:HD13	5:2F:125:LEU:HD13	1.74	0.69
32:1a:1027:C:C4	32:1a:1034:G:C2	2.80	0.69
36:2e:78:HIS:CD2	39:2h:104:ARG:HD2	2.27	0.69
42:2k:110:ASP:HB3	49:2r:85:LEU:HB3	1.73	0.69
1:2A:963:U:OP2	60:2A:4399:HOH:O	2.09	0.69
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.10	0.69
6:2G:15:VAL:HG13	6:2G:175:LEU:HD23	1.74	0.69
32:2a:664:G:H22	32:2a:741:G:H1	1.38	0.69
32:2a:972:C:O2'	41:2j:55:LYS:O	2.08	0.69
1:1A:1312:G:O5'	18:1W:15:ARG:NH2	2.25	0.69
32:2a:403:C:O2'	35:2d:122:ARG:NH2	2.26	0.69
49:2r:26:LEU:HD11	49:2r:42:ARG:HD3	1.74	0.69
1:1A:1785:C:H5	15:1T:96:ARG:NH2	1.91	0.69
1:1A:2362:C:OP2	60:1A:5166:HOH:O	2.09	0.69
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.58	0.69
8:1I:129:THR:HG22	8:1I:139:GLN:HE22	1.58	0.69
36:1e:50:GLU:HB2	36:1e:53:LEU:HD13	1.73	0.69
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.74	0.69
42:2k:54:ARG:NH1	54:2y:39:PSU:O2'	2.26	0.69
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.73	0.69
50:1s:28:LYS:NZ	50:1s:46:GLY:O	2.25	0.69
5:2F:101:LEU:O	5:2F:106:ARG:NH1	2.26	0.69
32:2a:583:A:OP2	60:2a:3403:HOH:O	2.11	0.69
37:2f:46:ARG:HH22	49:2r:37:VAL:HG11	1.55	0.69
1:2A:1016:G:O6	1:2A:1147:C:N4	2.26	0.69
11:2P:95:VAL:HA	11:2P:99:LEU:HD21	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:815:A:N7	32:2a:1509:C:O2'	2.26	0.69
32:1a:1198:G:OP1	60:1a:2016:HOH:O	2.10	0.68
1:2A:775:G:O3'	60:2A:4370:HOH:O	2.10	0.68
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.75	0.68
32:2a:1191:A:OP2	34:2c:3:ASN:ND2	2.26	0.68
37:2f:37:VAL:HA	37:2f:65:VAL:HG12	1.74	0.68
1:1A:2384:G:O6	60:1A:4543:HOH:O	2.06	0.68
32:1a:148:G:H2'	32:1a:149:A:H8	1.58	0.68
1:2A:1278:A:OP1	13:2R:36:THR:HG22	1.93	0.68
1:2A:2250:G:OP1	12:2Q:85:LYS:NZ	2.26	0.68
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.29	0.68
32:2a:673:G:H2'	32:2a:674:G:C8	2.27	0.68
1:2A:307:G:N1	1:2A:310:A:OP2	2.27	0.68
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.29	0.68
32:2a:148:G:H2'	32:2a:149:A:H8	1.56	0.68
7:1H:86:GLU:OE2	7:1H:132:ARG:NH2	2.27	0.68
32:1a:324:G:N7	60:1a:2314:HOH:O	2.25	0.68
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.74	0.68
1:2A:249:C:O2	30:28:12:LYS:NZ	2.25	0.68
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.25	0.68
32:2a:1302:U:OP2	44:2m:21:TYR:OH	2.06	0.68
50:2s:50:ALA:HB1	50:2s:57:HIS:HB3	1.74	0.68
32:1a:376:G:H5''	47:1p:5:ARG:HG2	1.75	0.68
32:1a:829:G:O6	60:1a:2228:HOH:O	2.09	0.68
1:1A:1990:G:OP1	60:1A:4816:HOH:O	2.11	0.68
32:1a:1292:U:P	38:1g:41:ARG:HH22	2.16	0.68
1:2A:300:A:OP1	20:2Y:86:ARG:NH2	2.26	0.68
32:2a:953:G:H5'	32:2a:965:A:N6	2.09	0.68
54:2w:18:G:O2'	54:2w:57:G:N2	2.26	0.68
54:2y:10:G:H1	54:2y:25:C:N4	1.92	0.68
1:1A:1552:C:H2'	1:1A:1553:A:H8	1.59	0.68
32:1a:1075:C:OP1	33:1b:179:LYS:NZ	2.21	0.68
36:1e:85:GLY:O	36:1e:87:SER:N	2.23	0.68
1:2A:2305:A:H5''	6:2G:134:GLY:HA3	1.76	0.68
37:2f:30:LEU:HD23	37:2f:75:LEU:HD11	1.75	0.68
41:2j:8:LEU:HG	41:2j:70:ARG:HB2	1.76	0.68
4:1E:127:ASP:OD2	60:1E:411:HOH:O	2.10	0.68
11:1P:59:LEU:HD11	30:18:10:ALA:HB2	1.74	0.68
32:2a:407:G:H5''	35:2d:115:ARG:HG2	1.74	0.68
50:2s:27:GLU:HB2	50:2s:28:LYS:HA	1.76	0.68
1:1A:1100:A:H61	1:1A:1151:U:H3	1.42	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:156:G:N1	32:1a:165:C:N3	2.38	0.68
54:1y:7:A:O2'	54:1y:49:C:OP2	2.09	0.68
4:2E:52:LEU:HB3	4:2E:76:ARG:HD3	1.76	0.68
5:1F:157:VAL:HB	5:1F:194:MET:HG2	1.77	0.67
35:1d:178:VAL:HG12	35:1d:179:GLU:H	1.59	0.67
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.76	0.67
32:2a:1226:C:H41	44:2m:104:ARG:HG2	1.59	0.67
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.26	0.67
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.76	0.67
1:1A:1431:G:O2'	1:1A:1442:U:O2	2.09	0.67
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.29	0.67
32:1a:62:U:OP1	32:1a:385:C:O2'	2.13	0.67
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.12	0.67
4:2E:27:LEU:HD22	15:2T:1:MET:HE1	1.74	0.67
32:2a:1518:MA6:N6	32:2a:1519:MA6:H103	2.09	0.67
1:1A:2850:C:OP2	60:1A:5118:HOH:O	2.12	0.67
1:1A:2884:C:OP1	60:1A:5250:HOH:O	2.11	0.67
1:2A:481:G:N7	60:2A:5310:HOH:O	2.27	0.67
1:2A:922:U:O2'	22:20:29:GLN:NE2	2.27	0.67
1:2A:2268:A:OP1	60:2A:4307:HOH:O	2.11	0.67
7:1H:94:TYR:OH	7:1H:152:ARG:NH1	2.26	0.67
32:2a:266:G:H5''	32:2a:268:C:H41	1.58	0.67
1:1A:1202:A:OP1	16:1U:55:ARG:NH1	2.28	0.67
32:1a:1086:U:H3	32:1a:1099:G:H22	1.42	0.67
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.30	0.67
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.74	0.67
1:1A:1228:G:O2'	25:13:29:ARG:NH1	2.26	0.67
1:2A:1187:G:H5'	17:2V:81:TYR:CE1	2.28	0.67
2:2B:55:U:H1'	6:2G:29:TRP:HD1	1.59	0.67
32:2a:1028:C:O2	32:2a:1033:G:N1	2.26	0.67
1:2A:821:A:N1	60:2A:4282:HOH:O	2.27	0.67
1:2A:1024:G:OP2	60:2A:4644:HOH:O	2.13	0.67
1:2A:1803:A:O2'	3:2D:259:THR:HG21	1.95	0.67
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.28	0.67
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.75	0.67
38:2g:59:LEU:HG	38:2g:63:LYS:HE2	1.75	0.67
1:1A:2286:A:OP2	60:1A:5505:HOH:O	2.13	0.67
60:1A:5352:HOH:O	13:1R:3:HIS:NE2	2.27	0.67
6:1G:45:GLU:OE2	60:1G:3104:HOH:O	2.12	0.67
8:2I:93:THR:HG22	8:2I:119:PRO:HB3	1.77	0.67
18:2W:34:ASN:OD1	18:2W:37:ARG:NH2	2.26	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:2p:51:VAL:HG12	47:2p:53:VAL:H	1.59	0.67
14:1S:15:ARG:O	14:1S:19:LYS:HG2	1.94	0.67
32:1a:975:A:H4'	32:1a:976:G:H5''	1.76	0.67
1:2A:1218:C:H42	1:2A:1231:G:H1	1.43	0.67
2:2B:55:U:O2'	6:2G:27:ASN:ND2	2.25	0.67
32:2a:1271:G:H2'	32:2a:1272:G:H5''	1.76	0.67
39:2h:6:ILE:HB	39:2h:85:ARG:NH1	2.10	0.67
40:2i:9:ARG:H	40:2i:79:LEU:HD23	1.60	0.67
1:1A:290:G:N7	60:1A:5216:HOH:O	2.28	0.66
1:1A:787:U:OP2	60:1A:4742:HOH:O	2.12	0.66
1:2A:861:A:N3	2:2B:79:C:O2'	2.27	0.66
1:2A:2143:C:H2'	1:2A:2144:U:O4'	1.95	0.66
32:2a:1030:C:H42	32:2a:1031:G:H1	1.42	0.66
32:2a:1075:C:H5''	33:2b:179:LYS:HZ3	1.58	0.66
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	1.74	0.66
42:2k:51:LYS:HA	42:2k:55:LYS:HE3	1.77	0.66
1:1A:593:G:O6	60:1A:5012:HOH:O	2.11	0.66
1:1A:1997:G:OP2	60:1A:4758:HOH:O	2.12	0.66
32:1a:407:G:H5''	35:1d:115:ARG:HG2	1.78	0.66
1:2A:2782:G:OP2	60:2A:4806:HOH:O	2.12	0.66
17:2V:40:LEU:HB2	17:2V:46:VAL:HG13	1.76	0.66
1:1A:715:G:N7	60:1A:5891:HOH:O	2.28	0.66
1:1A:2564:2MU:OP2	60:1A:5027:HOH:O	2.12	0.66
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.75	0.66
32:2a:1160:G:OP1	33:2b:133:LYS:NZ	2.28	0.66
32:2a:1239:A:H62	32:2a:1299:A:H62	1.41	0.66
48:2q:95:TYR:HA	48:2q:98:LEU:HD12	1.76	0.66
1:1A:2158:C:N4	1:1A:2177:G:C6	2.63	0.66
44:1m:58:GLU:O	44:1m:62:ASN:ND2	2.28	0.66
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.77	0.66
5:2F:40:GLN:HE22	5:2F:184:TYR:H	1.42	0.66
1:1A:1070:G:OP2	60:1A:4871:HOH:O	2.13	0.66
32:1a:1162:C:N4	32:1a:1174:G:H1	1.92	0.66
32:1a:134:A:H61	47:1p:25:ARG:HH12	1.43	0.66
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.28	0.66
23:21:51:VAL:HG11	23:21:74:VAL:HG21	1.77	0.66
32:2a:1060:C:H5''	41:2j:51:ARG:HG2	1.76	0.66
54:2y:55:PSU:N1	54:2y:57:G:H5''	2.08	0.66
32:1a:401:C:P	35:1d:73:ARG:HH21	2.18	0.66
1:2A:1648:C:OP1	60:2A:4350:HOH:O	2.12	0.66
1:2A:2518:A:OP2	60:2A:4219:HOH:O	2.13	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2547:U:O2	10:2O:23:ARG:NH2	2.28	0.66
32:2a:952:U:H2'	32:2a:953:G:C8	2.30	0.66
32:2a:1226:C:O2'	44:2m:111:LYS:NZ	2.25	0.66
24:12:52:ASP:O	24:12:56:GLN:HG3	1.96	0.66
32:2a:952:U:H2'	32:2a:953:G:H8	1.60	0.66
1:1A:2055:A:OP1	60:1A:4436:HOH:O	2.12	0.66
32:1a:116:A:OP1	60:1a:2042:HOH:O	2.12	0.66
1:2A:731:C:OP1	60:2A:4876:HOH:O	2.13	0.66
1:2A:2362:G:N3	60:2A:5180:HOH:O	2.29	0.66
26:24:24:THR:OG1	26:24:25:TYR:N	2.29	0.66
32:2a:1316:G:N7	50:2s:7:LYS:NZ	2.42	0.66
1:1A:1649:A:OP1	60:1A:5524:HOH:O	2.13	0.66
11:1P:100:LEU:HD12	11:1P:112:LEU:HD11	1.78	0.66
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.10	0.66
1:2A:1959:G:N7	60:2A:4532:HOH:O	2.29	0.66
7:2H:35:VAL:HG13	7:2H:71:LEU:HD22	1.78	0.66
32:2a:1273:G:H3'	32:2a:1274:G:H8	1.61	0.66
1:1A:265:U:O4	60:1A:5675:HOH:O	2.10	0.65
1:1A:930:G:H22	1:1A:939:C:H42	1.42	0.65
1:1A:1077:G:H5''	31:19:8:LYS:HE3	1.77	0.65
4:1E:119:ARG:HD2	4:1E:160:TYR:HB2	1.77	0.65
32:1a:558:G:OP1	60:1a:1950:HOH:O	2.14	0.65
32:1a:1033:G:H2'	32:1a:1034:G:H8	1.61	0.65
54:1w:7:A:N1	54:1w:66:U:O2	2.29	0.65
1:2A:322:A:OP2	5:2F:169:ASN:HB2	1.96	0.65
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	1.78	0.65
1:1A:1159:U:H2'	1:1A:1160:G:H8	1.61	0.65
1:1A:2164:C:N3	1:1A:2171:G:O6	2.30	0.65
8:1I:4:ILE:HG12	8:1I:18:VAL:HG22	1.77	0.65
54:1w:5:G:H2'	54:1w:6:G:C8	2.31	0.65
6:2G:120:LEU:N	6:2G:179:PRO:O	2.25	0.65
8:2I:4:ILE:HD11	8:2I:44:LEU:HD12	1.77	0.65
54:2w:53:G:H1	54:2w:61:C:H42	1.44	0.65
1:1A:2158:C:N3	1:1A:2177:G:C2	2.65	0.65
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.30	0.65
1:2A:1395:A:OP1	60:2A:4567:HOH:O	2.13	0.65
5:2F:103:LYS:HA	5:2F:106:ARG:HG3	1.78	0.65
13:2R:24:GLN:HE22	13:2R:36:THR:HG21	1.61	0.65
32:2a:1264:C:N4	32:2a:1265:G:O6	2.29	0.65
46:2o:4:THR:OG1	46:2o:7:GLU:OE1	2.12	0.65
1:1A:1441:A:OP1	60:1A:5524:HOH:O	2.14	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:16:HIS:HD2	33:1b:204:ASN:H	1.44	0.65
32:2a:504:C:OP1	60:2a:3526:HOH:O	2.15	0.65
32:2a:712:A:N6	60:2a:3344:HOH:O	2.29	0.65
1:1A:625:G:O2'	1:1A:702:A:N6	2.29	0.65
5:1F:13:SER:OG	5:1F:127:GLU:OE1	2.12	0.65
32:1a:1191:A:OP1	34:1c:4:LYS:NZ	2.30	0.65
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.24	0.65
54:2w:51:U:H3	54:2w:63:G:H1	1.44	0.65
1:1A:992:G:OP2	60:1A:5140:HOH:O	2.15	0.65
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.32	0.65
30:28:23:VAL:HG11	30:28:47:LYS:HD3	1.79	0.65
54:2w:50:U:O2	54:2w:64:A:N1	2.30	0.65
32:1a:161:A:N1	32:1a:347:G:O2'	2.30	0.65
32:1a:649:G:H2'	32:1a:650:G:H8	1.62	0.65
1:2A:2136:C:H42	1:2A:2155:G:H1	1.32	0.65
32:2a:157:G:H1	32:2a:164:U:H3	1.44	0.65
39:2h:28:ALA:HB3	39:2h:57:PRO:HB2	1.78	0.65
54:2y:57:G:N2	60:2y:3116:HOH:O	2.29	0.65
1:2A:271(H):G:H2'	1:2A:271(I):G:H8	1.62	0.65
32:2a:406:G:N2	35:2d:119:GLN:HE22	1.94	0.65
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.27	0.64
42:1k:85:ARG:HD3	42:1k:113:PRO:HD3	1.79	0.64
1:2A:2058:A:OP1	60:2A:4924:HOH:O	2.13	0.64
1:2A:2141:G:O6	1:2A:2150:U:O2	2.15	0.64
2:2B:66:A:H61	2:2B:108:U:H2'	1.62	0.64
41:2j:32:ALA:HB1	41:2j:33:GLN:HA	1.79	0.64
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.25	0.64
54:2y:6:G:H1	54:2y:67:C:H42	1.43	0.64
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.32	0.64
1:2A:897:C:H1'	54:2w:56:C:H5	1.63	0.64
32:2a:1004:A:N6	32:2a:1037:C:H1'	2.11	0.64
1:1A:83:A:H5'	20:1Y:8:LYS:HG2	1.78	0.64
1:1A:1243:U:O4	60:1A:5606:HOH:O	2.08	0.64
1:1A:1105:G:N2	1:1A:1125:C:N3	2.42	0.64
1:2A:1434:A:H61	1:2A:1558:A:H62	1.43	0.64
1:2A:2042:A:OP1	60:2A:4114:HOH:O	2.15	0.64
1:2A:2499:C:OP2	60:2A:4650:HOH:O	2.15	0.64
6:2G:135:LEU:HD21	6:2G:157:ILE:HD12	1.78	0.64
12:2Q:57:HIS:HD2	12:2Q:117:ALA:HB2	1.61	0.64
32:2a:949:A:H1'	32:2a:1364:U:H3	1.62	0.64
34:2c:39:ILE:HG23	34:2c:91:LEU:HD11	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:2l:117:ARG:HG2	43:2l:122:THR:HB	1.79	0.64
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.33	0.64
5:1F:133:ASN:N	5:1F:138:GLU:OE1	2.31	0.64
32:1a:677:U:H3	32:1a:713:G:H22	1.46	0.64
7:2H:96:ALA:HB1	7:2H:103:LEU:HD11	1.80	0.64
23:21:50:ARG:NH1	23:21:57:GLU:OE2	2.23	0.64
32:2a:1009:G:H22	32:2a:1021:G:H1'	1.62	0.64
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.79	0.64
7:1H:3:ARG:NH1	7:1H:5:GLY:H	1.96	0.64
11:1P:63:PRO:HG2	30:18:25:MET:HB2	1.78	0.64
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.30	0.64
2:2B:14:U:OP2	2:2B:70:C:O2'	2.13	0.64
5:2F:12:LEU:HB2	5:2F:124:LEU:HD11	1.79	0.64
32:2a:1129:C:H2'	32:2a:1139:G:N7	2.13	0.64
45:2n:48:ALA:HB2	45:2n:53:LEU:HD12	1.79	0.64
3:1D:71:ASP:HB3	3:1D:103:ARG:HH12	1.63	0.64
32:1a:107:G:N7	51:1t:15:ARG:NH2	2.46	0.64
35:1d:175:SER:HB3	35:1d:184:LYS:HB3	1.79	0.64
1:2A:1411:C:H42	1:2A:1591:G:H1	1.46	0.64
1:2A:2759:G:OP2	60:2A:4824:HOH:O	2.15	0.64
29:27:34:ARG:HE	29:27:39:ARG:HG2	1.63	0.64
5:1F:108:LYS:HG2	5:1F:112:MET:HE2	1.80	0.64
54:1y:8:4SU:H4'	54:1y:48:C:H4'	1.80	0.64
1:2A:494:G:OP1	18:2W:8:ARG:NH1	2.31	0.64
1:2A:1033:U:OP1	31:29:9:ARG:NH2	2.22	0.64
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.12	0.64
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.62	0.64
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.12	0.64
47:2p:52:ASP:O	47:2p:54:GLU:N	2.30	0.64
55:2x:40:C:H2'	55:2x:41:C:H6	1.63	0.64
1:1A:1452:U:H2'	1:1A:1453:C:C6	2.32	0.64
1:1A:2562:G:OP1	60:1A:4989:HOH:O	2.15	0.64
2:1B:106:G:H5'	21:1Z:31:ARG:HG2	1.78	0.64
1:2A:132:G:O6	60:2A:4610:HOH:O	2.11	0.64
1:2A:449:A:OP2	60:2A:4655:HOH:O	2.15	0.64
15:2T:41:ARG:NH2	32:2a:346:G:OP1	2.28	0.64
10:1O:104:ARG:CZ	15:1T:34:VAL:HG11	2.28	0.64
26:14:56:VAL:HG23	26:14:57:GLU:H	1.61	0.64
32:1a:45:U:H2'	32:1a:46:G:C8	2.33	0.64
32:1a:102:G:O6	60:1a:2035:HOH:O	2.09	0.64
1:2A:322:A:OP1	5:2F:168:ARG:HD2	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1355:G:O6	60:2A:5022:HOH:O	2.13	0.64
32:2a:1145:C:H4'	32:2a:1146:A:H5'	1.79	0.64
54:2y:67:C:H2'	54:2y:68:C:H6	1.63	0.64
1:1A:2149:G:H1	1:1A:2183:C:N4	1.96	0.63
32:1a:944:G:OP1	60:1a:2092:HOH:O	2.15	0.63
32:1a:953:G:H5'	32:1a:965:A:H61	1.61	0.63
5:2F:145:GLU:OE1	5:2F:145:GLU:N	2.31	0.63
7:2H:125:VAL:HG12	7:2H:131:VAL:HG22	1.80	0.63
33:2b:87:ARG:NH1	33:2b:220:ASP:OD1	2.31	0.63
34:2c:151:VAL:HG22	34:2c:200:ALA:HA	1.80	0.63
1:1A:2128:G:H1	1:1A:2205:C:H42	1.44	0.63
32:1a:1027:C:N4	32:1a:1034:G:C6	2.67	0.63
39:1h:10:LEU:HD22	39:1h:83:ILE:HD11	1.80	0.63
40:1i:17:VAL:HG23	40:1i:63:ILE:HG12	1.80	0.63
1:2A:1011:G:OP2	16:2U:70:ARG:NH2	2.31	0.63
12:2Q:11:LYS:HE3	12:2Q:88:GLY:O	1.97	0.63
32:2a:1029:C:C2	32:2a:1032:G:N2	2.66	0.63
32:2a:1163:C:H42	32:2a:1173:G:H1	1.47	0.63
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.80	0.63
33:2b:218:ALA:O	33:2b:222:ILE:HG23	1.98	0.63
34:2c:43:LEU:HD21	34:2c:91:LEU:HD13	1.80	0.63
1:1A:121:G:OP2	60:1A:4220:HOH:O	2.15	0.63
3:1D:8:PRO:HB3	3:1D:14:ARG:HD2	1.79	0.63
1:2A:370:G:N7	60:2A:4061:HOH:O	2.30	0.63
1:2A:1673:U:O2'	60:2A:4420:HOH:O	2.13	0.63
1:2A:1833:U:OP1	60:2A:5389:HOH:O	2.15	0.63
36:2e:8:GLU:HG2	36:2e:34:VAL:HG23	1.81	0.63
32:1a:1095:U:OP2	60:1a:2308:HOH:O	2.16	0.63
1:2A:1920:4OC:HM22	1:2A:1921:G:H5'	1.80	0.63
1:2A:2498:C:OP2	60:2A:4650:HOH:O	2.15	0.63
5:2F:110:LEU:HD21	5:2F:181:LEU:HD23	1.81	0.63
54:2y:18:G:H22	54:2y:55:PSU:HN3	1.41	0.63
32:1a:120:A:OP1	60:1a:2280:HOH:O	2.15	0.63
32:1a:1149:C:P	40:1i:9:ARG:HH21	2.22	0.63
47:1p:51:VAL:HG12	47:1p:53:VAL:H	1.64	0.63
32:2a:1190:G:H5'	34:2c:176:HIS:HE1	1.62	0.63
33:2b:55:PHE:HE1	33:2b:218:ALA:HA	1.64	0.63
33:2b:187:LEU:HA	33:2b:201:ILE:HB	1.80	0.63
26:14:24:THR:OG1	26:14:25:TYR:N	2.30	0.63
1:1A:1718:U:O4	60:1A:4989:HOH:O	2.13	0.63
19:1X:88:LYS:HE2	19:1X:93:GLU:HG3	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:1P:60:MET:HA	30:18:13:ARG:NH1	2.13	0.63
33:1b:174:VAL:O	33:1b:178:ARG:HG2	1.99	0.63
47:1p:13:HIS:O	47:1p:42:ARG:NH1	2.32	0.63
1:2A:1007:C:OP1	9:2N:35:ARG:NH1	2.30	0.63
1:2A:2785:C:OP1	4:2E:41:LYS:NZ	2.28	0.63
32:2a:17:U:H2'	32:2a:18:C:C6	2.34	0.63
1:1A:1513:G:O2'	1:1A:1593:C:O2'	2.17	0.62
8:1I:77:LEU:HD12	8:1I:101:LEU:HD13	1.81	0.62
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.26	0.62
33:1b:51:LEU:HD22	33:1b:55:PHE:HE2	1.63	0.62
1:2A:2746:U:OP1	7:2H:85:LYS:NZ	2.28	0.62
3:2D:69:ARG:HE	3:2D:130:ALA:HB2	1.64	0.62
32:2a:1239:A:H4'	32:2a:1240:U:H5''	1.79	0.62
1:1A:1103:A:N6	1:1A:1133:G:OP2	2.31	0.62
1:1A:2205:C:H2'	1:1A:2206:G:H8	1.64	0.62
32:1a:38:G:O6	60:1a:2178:HOH:O	2.13	0.62
1:2A:875:G:O6	1:2A:902:C:N4	2.32	0.62
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.39	0.62
29:27:34:ARG:HG3	29:27:34:ARG:HH11	1.63	0.62
32:2a:997:U:H3	32:2a:1044:A:H61	0.73	0.62
32:2a:1132:C:H42	32:2a:1142:G:H1	1.46	0.62
41:2j:30:SER:O	41:2j:81:THR:OG1	2.17	0.62
54:2y:7:A:O2'	54:2y:49:C:O4'	2.16	0.62
1:1A:1834:A:O2'	3:1D:259:THR:HG21	1.99	0.62
1:2A:1653:G:H3'	13:2R:2:ARG:HD3	1.81	0.62
1:1A:303:C:N3	1:1A:385:G:N2	2.43	0.62
1:1A:414:U:O4	60:1A:5867:HOH:O	2.10	0.62
1:1A:1103:A:H61	1:1A:1127:U:H3	1.46	0.62
24:12:65:ASN:OD1	24:12:69:ARG:NH1	2.33	0.62
1:2A:829:A:N7	1:2A:2248:C:H5'	2.13	0.62
1:2A:900:A:O2'	1:2A:901:A:OP1	2.15	0.62
32:2a:1414:U:O4	60:2a:3578:HOH:O	2.14	0.62
1:1A:2328:C:O2'	6:1G:128:ARG:NH2	2.32	0.62
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.33	0.62
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.32	0.62
55:1x:4:G:H1	55:1x:69:C:H42	0.72	0.62
1:2A:2162:G:H4'	1:2A:2172:U:H2'	1.81	0.62
2:2B:31:C:H4'	6:2G:29:TRP:CZ2	2.35	0.62
21:2Z:69:THR:HG22	21:2Z:90:VAL:HA	1.81	0.62
32:2a:640:A:N6	60:2a:3376:HOH:O	2.32	0.62
1:1A:1104:G:H1	1:1A:1126:C:H42	1.46	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2136:C:O2'	1:2A:2137:C:O5'	2.18	0.62
26:24:33:VAL:HG12	26:24:35:VAL:H	1.64	0.62
32:1a:1270:C:OP2	52:1u:24:ARG:NH2	2.33	0.62
33:1b:195:ASP:O	39:1h:68:ARG:NH2	2.32	0.62
6:2G:38:VAL:HG22	6:2G:93:THR:HG23	1.81	0.62
32:2a:1029:C:N3	32:2a:1032:G:N2	2.47	0.62
32:2a:1029:C:N4	32:2a:1032:G:N1	2.48	0.62
38:2g:16:LEU:HD21	40:2i:45:ALA:HB2	1.80	0.62
17:1V:72:VAL:HG13	17:1V:85:LYS:HB3	1.81	0.62
1:2A:271(G):C:H2'	1:2A:271(H):G:H8	1.65	0.62
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.31	0.62
1:2A:2318:G:H21	14:2S:3:ARG:HD3	1.64	0.62
32:2a:64:G:H4'	32:2a:65:U:H3'	1.81	0.62
7:1H:84:SER:OG	7:1H:132:ARG:NH1	2.33	0.62
43:1l:117:ARG:HG2	43:1l:122:THR:HB	1.82	0.62
32:2a:1075:C:H5''	33:2b:179:LYS:NZ	2.14	0.62
34:2c:47:LEU:HD12	34:2c:68:VAL:HG11	1.82	0.62
1:1A:2130:C:H2'	1:1A:2131:U:H6	1.65	0.62
47:1p:19:ILE:HG23	47:1p:36:ILE:HG13	1.81	0.62
32:2a:646:U:H2'	32:2a:647:C:C6	2.34	0.62
32:2a:1020:U:H2'	32:2a:1021:G:H8	1.63	0.62
33:2b:118:LEU:O	33:2b:122:PHE:HB3	2.00	0.62
44:2m:31:LYS:HA	44:2m:34:LEU:HD12	1.82	0.62
1:1A:1219:A:H4'	1:1A:1220:U:OP1	1.99	0.61
1:1A:2150:C:H42	1:1A:2182:G:H1	1.47	0.61
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.30	0.61
32:1a:1166:G:N2	32:1a:1170:A:OP2	2.33	0.61
1:2A:848:G:C2	1:2A:933:A:H1'	2.35	0.61
1:2A:2138:C:H42	1:2A:2153:G:H1	0.71	0.61
1:2A:2663:G:H3'	1:2A:2664:G:H8	1.64	0.61
37:2f:99:ALA:HB1	49:2r:23:LYS:HE3	1.81	0.61
1:1A:1159:U:H2'	1:1A:1160:G:C8	2.35	0.61
32:1a:1346:A:OP1	40:1i:120:ARG:NH1	2.23	0.61
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.82	0.61
5:1F:140:LEU:HD11	5:1F:170:LEU:HD11	1.81	0.61
34:1c:15:THR:HG21	34:1c:181:ASN:HA	1.83	0.61
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.82	0.61
32:2a:1219:U:OP1	45:2n:19:ARG:NH1	2.32	0.61
4:2E:36:ARG:HG2	4:2E:47:VAL:HG12	1.81	0.61
7:2H:144:VAL:O	7:2H:148:ILE:HG12	2.00	0.61
15:1T:65:LYS:HE3	15:1T:67:SER:HB2	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.32	0.61
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.82	0.61
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.28	0.61
24:22:1:MET:SD	24:22:56:GLN:NE2	2.73	0.61
8:1I:140:LEU:HD22	8:1I:142:VAL:HG13	1.82	0.61
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.27	0.61
30:18:23:VAL:HG11	30:18:47:LYS:HD3	1.81	0.61
32:1a:1000:U:O4	32:1a:1041:A:N1	2.33	0.61
32:1a:1202:G:H1'	45:1n:29:ARG:HD2	1.81	0.61
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.83	0.61
44:2m:89:GLY:O	44:2m:93:ARG:HG3	2.01	0.61
1:1A:2784:C:H2'	1:1A:2785:C:C6	2.35	0.61
1:2A:2396:G:O2'	60:2A:5236:HOH:O	2.16	0.61
7:2H:149:ARG:NH1	7:2H:167:GLU:OE1	2.34	0.61
32:2a:947:G:H1	32:2a:1234:C:H42	1.48	0.61
32:2a:1312:G:H5'	50:2s:5:LEU:HD11	1.82	0.61
33:2b:71:VAL:HG21	33:2b:164:VAL:HG22	1.81	0.61
34:2c:78:GLY:HA3	34:2c:83:ARG:H	1.66	0.61
36:2e:12:LEU:HB3	36:2e:31:LEU:HB2	1.82	0.61
54:1w:66:U:H2'	54:1w:67:C:C6	2.35	0.61
2:2B:43:C:O4'	6:2G:66:GLN:NE2	2.33	0.61
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.32	0.61
1:2A:2484:G:H1'	12:2Q:124:LYS:HD2	1.83	0.61
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.34	0.61
32:2a:45:U:H2'	32:2a:46:G:C8	2.36	0.61
32:2a:980:C:H1'	45:2n:19:ARG:HA	1.83	0.61
32:2a:1347:G:H22	32:2a:1373:G:H2'	1.66	0.61
54:2w:68:C:H2'	54:2w:69:G:H8	1.65	0.61
54:2y:18:G:N2	54:2y:55:PSU:C4	2.68	0.61
33:1b:60:ASP:O	33:1b:64:ARG:HG2	2.01	0.61
41:1j:65:LEU:HD13	45:1n:56:VAL:HG22	1.82	0.61
32:2a:771:G:N7	60:2a:3539:HOH:O	2.31	0.61
32:2a:983:A:N1	32:2a:1222:G:N2	2.47	0.61
32:2a:1011:G:N2	32:2a:1018:C:N3	2.48	0.61
32:2a:1134:G:H1	32:2a:1140:C:H42	1.49	0.61
1:1A:799:A:H3'	29:17:1:MET:HE1	1.83	0.60
21:1Z:69:THR:HG22	21:1Z:90:VAL:HA	1.81	0.60
32:1a:946:A:H2'	32:1a:947:G:C8	2.35	0.60
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.66	0.60
8:2I:93:THR:H	8:2I:96:ASP:HB2	1.66	0.60
54:2w:39:PSU:H2'	54:2w:40:C:H6	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.34	0.60
32:1a:1228:C:OP1	44:1m:115:LYS:NZ	2.34	0.60
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.82	0.60
48:2q:26:GLN:HG2	48:2q:37:LYS:HG2	1.83	0.60
1:1A:2340:A:H2'	1:1A:2341:G:C8	2.37	0.60
1:2A:1300:U:H4'	1:2A:1301:A:H5''	1.81	0.60
8:2I:124:GLY:H	8:2I:144:VAL:HG23	1.65	0.60
7:1H:56:SER:HB3	7:1H:61:HIS:ND1	2.17	0.60
41:1j:5:ARG:NH1	41:1j:71:LEU:HD21	2.16	0.60
1:2A:422:A:OP2	60:2A:4062:HOH:O	2.16	0.60
1:2A:1378:A:OP1	29:27:10:ARG:NH2	2.35	0.60
1:2A:2324:C:H5''	1:2A:2325:G:H5'	1.84	0.60
2:2B:24:G:H4'	2:2B:25:A:N7	2.17	0.60
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.01	0.60
54:2w:9:A:H5'	54:2w:46:7MG:HN22	1.66	0.60
1:1A:555:G:N1	1:1A:2045:G:OP1	2.30	0.60
1:1A:1451:U:H2'	1:1A:1452:U:C6	2.37	0.60
32:1a:410:G:OP1	35:1d:30:LYS:NZ	2.25	0.60
33:1b:16:HIS:CG	33:1b:17:PHE:H	2.20	0.60
1:2A:1493:C:N4	1:2A:2206:G:O2'	2.34	0.60
15:2T:109:GLU:HG2	15:2T:112:ARG:NH2	2.17	0.60
32:2a:328:C:H4'	32:2a:329:A:H5'	1.83	0.60
33:2b:78:GLN:O	33:2b:94:ASN:ND2	2.34	0.60
44:2m:25:ILE:HD11	44:2m:66:LEU:HD13	1.83	0.60
45:2n:4:LYS:HA	45:2n:7:ILE:HG12	1.82	0.60
32:1a:625:G:H4'	47:1p:16:HIS:CD2	2.36	0.60
34:1c:26:LYS:HE2	41:1j:45:ARG:HH22	1.67	0.60
42:2k:31:THR:HG23	42:2k:42:TRP:HB3	1.82	0.60
1:1A:1405:A:H2'	1:1A:1406:A:H5'	1.83	0.60
1:1A:2175:G:H2'	1:1A:2176:G:C8	2.36	0.60
1:1A:2624:C:OP2	27:15:2:ALA:N	2.34	0.60
1:2A:1812:A:OP2	60:2A:5276:HOH:O	2.16	0.60
2:2B:40:U:H2'	26:24:2:LYS:HE3	1.83	0.60
2:2B:83:G:H1	2:2B:94:C:H42	1.48	0.60
1:1A:181:C:OP1	60:1A:4235:HOH:O	2.17	0.60
32:1a:584:G:H5'	48:1q:91:ARG:HH22	1.66	0.60
16:2U:66:ASN:HD21	16:2U:70:ARG:HH21	1.50	0.60
32:2a:1305:G:H22	32:2a:1331:G:H1'	1.65	0.60
1:1A:2348:A:H61	22:10:43:THR:HG22	1.67	0.60
32:1a:78:G:C2	32:1a:91:C:N3	2.69	0.60
37:1f:97:PHE:HD2	49:1r:31:LEU:HD11	1.67	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.35	0.60
1:2A:1005:C:H2'	1:2A:1006:C:C6	2.36	0.60
1:2A:2144:U:H1'	1:2A:2148:G:N2	2.17	0.60
32:2a:1029:C:N4	32:2a:1032:G:C6	2.70	0.60
1:1A:2349:G:OP1	60:1A:4319:HOH:O	2.17	0.60
26:14:54:GLY:N	26:14:55:ARG:HA	2.17	0.60
32:1a:1503:A:O2'	53:1v:13:A:N1	2.34	0.60
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.84	0.60
1:2A:615:G:OP1	5:2F:40:GLN:HG2	2.02	0.60
46:2o:28:GLN:HE21	46:2o:66:LEU:HD21	1.67	0.60
1:1A:2776:G:N7	60:1A:4738:HOH:O	2.31	0.59
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.84	0.59
41:1j:37:PRO:HA	41:1j:72:VAL:HG12	1.84	0.59
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.17	0.59
54:1y:19:G:N2	54:1y:56:C:N3	2.50	0.59
4:1E:29:GLY:HA3	60:1E:419:HOH:O	2.00	0.59
32:1a:262:A:H2'	32:1a:263:A:C8	2.37	0.59
2:2B:42:C:O2'	6:2G:67:LYS:O	2.13	0.59
3:2D:164:GLN:HB3	3:2D:176:ARG:HG2	1.84	0.59
6:2G:173:LEU:HD23	6:2G:176:LEU:HD12	1.85	0.59
37:2f:3:ARG:HD3	37:2f:64:GLN:HE21	1.67	0.59
48:2q:32:TYR:O	48:2q:34:LYS:N	2.33	0.59
54:2y:55:PSU:HN1	54:2y:57:G:C5'	2.12	0.59
54:2y:67:C:H2'	54:2y:68:C:C6	2.37	0.59
1:2A:2156:G:H2'	1:2A:2157:G:C2	2.37	0.59
1:2A:2815:C:H5'	27:25:29:THR:HG21	1.84	0.59
4:2E:179:GLU:HG3	15:2T:9:LEU:HD21	1.84	0.59
19:2X:29:TRP:CZ3	19:2X:76:ARG:HG3	2.36	0.59
32:2a:35:G:O2'	43:2l:118:SER:O	2.16	0.59
32:2a:1126:U:H3	41:2j:40:LEU:HD11	1.66	0.59
7:1H:97:ARG:NE	7:1H:104:GLU:OE1	2.35	0.59
41:1j:54:PHE:O	41:1j:56:HIS:N	2.34	0.59
40:2i:77:ILE:O	40:2i:81:ILE:HG12	2.03	0.59
1:1A:2766:A:O2'	31:19:15:LYS:NZ	2.35	0.59
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.84	0.59
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	1.84	0.59
32:1a:890:G:O2'	32:1a:906:G:O6	2.18	0.59
33:1b:74:LYS:HD2	33:1b:166:ASP:HB2	1.84	0.59
1:2A:1253:A:OP1	60:2A:4014:HOH:O	2.16	0.59
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.37	0.59
19:2X:48:LYS:NZ	24:22:30:ARG:HH22	2.00	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.17	0.59
1:1A:1140:U:H1'	1:1A:1143:U:C5	2.34	0.59
1:1A:2430:A:OP2	30:18:29:LYS:NZ	2.36	0.59
1:1A:2825:C:H5'	27:15:29:THR:HG21	1.84	0.59
8:1I:126:TYR:HB2	8:1I:142:VAL:HG23	1.84	0.59
1:2A:2096:U:H3	1:2A:2193:G:H1	1.49	0.59
16:2U:104:GLN:NE2	16:2U:105:VAL:HG23	2.17	0.59
21:2Z:45:ASP:O	21:2Z:49:ARG:HG2	2.01	0.59
54:2y:7:A:H61	54:2y:66:U:H3	1.50	0.59
1:1A:1100:A:N6	1:1A:1151:U:H3	2.01	0.59
32:1a:164:U:H2'	32:1a:165:C:C6	2.37	0.59
32:1a:997:U:H3	32:1a:1044:A:N6	1.99	0.59
32:1a:1346:A:N1	32:1a:1374:A:H5''	2.17	0.59
1:2A:2376:A:H3'	1:2A:2377:A:H8	1.66	0.59
1:2A:2448:A:OP1	60:2A:4843:HOH:O	2.16	0.59
6:2G:15:VAL:HG22	6:2G:175:LEU:HB3	1.83	0.59
54:2w:9:A:O2'	54:2w:10:G:N7	2.34	0.59
1:1A:2150:C:H2'	1:1A:2151:C:O4'	2.01	0.59
2:1B:66:A:H61	2:1B:109:C:H5'	1.67	0.59
32:2a:448:A:P	32:2a:485:G:H22	2.26	0.59
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	1.85	0.59
32:1a:376:G:O3'	47:1p:5:ARG:HD2	2.02	0.59
32:1a:1007:C:N3	32:1a:1022:G:O6	2.36	0.59
32:1a:1037:C:H2'	32:1a:1038:C:H6	1.67	0.59
32:1a:1385:G:N7	60:1a:2216:HOH:O	2.32	0.59
1:2A:848:G:N3	1:2A:933:A:H1'	2.17	0.59
1:2A:878:A:H61	1:2A:899:A:H1'	1.66	0.59
1:2A:1220:A:OP2	16:2U:19:LYS:NZ	2.34	0.59
1:1A:1410:G:P	23:11:3:LYS:HG3	2.43	0.59
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.85	0.59
22:10:70:GLN:OE1	22:10:80:HIS:NE2	2.31	0.59
54:1w:66:U:H2'	54:1w:67:C:H6	1.66	0.59
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.20	0.59
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.03	0.59
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	1.85	0.59
9:2N:67:LEU:HD12	9:2N:87:LEU:HD13	1.85	0.59
19:2X:48:LYS:HZ3	24:22:30:ARG:HH22	1.48	0.59
44:2m:3:ARG:HG2	44:2m:9:ILE:N	2.12	0.59
1:1A:2297:C:OP2	28:16:6:ARG:NH1	2.35	0.58
32:1a:1302:U:H5	44:1m:17:VAL:HG21	1.68	0.58
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:1w:51:U:H2'	54:1w:52:G:C8	2.38	0.58
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.33	0.58
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.02	0.58
30:28:30:ARG:O	60:28:201:HOH:O	2.16	0.58
32:2a:1005:A:OP1	32:2a:1006:C:N4	2.36	0.58
35:2d:61:LYS:NZ	35:2d:72:GLU:OE1	2.34	0.58
46:2o:11:VAL:HG21	46:2o:34:LEU:HD22	1.85	0.58
1:1A:83:A:H5''	20:1Y:8:LYS:HE3	1.85	0.58
1:1A:997:G:OP1	12:1Q:16:ARG:NH2	2.35	0.58
1:1A:2146:G:H1	1:1A:2196:C:N4	2.00	0.58
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.18	0.58
1:2A:855:G:H2'	1:2A:856:C:C6	2.38	0.58
34:2c:131:ARG:HH11	34:2c:166:GLU:HG3	1.68	0.58
40:2i:28:VAL:HA	40:2i:63:ILE:O	2.02	0.58
1:1A:2879:G:H2'	1:1A:2880:C:O4'	2.03	0.58
31:19:2:LYS:HE2	31:19:31:LYS:O	2.03	0.58
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.37	0.58
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.16	0.58
51:1t:10:LEU:HG	51:1t:12:ALA:H	1.68	0.58
1:2A:271(G):C:H2'	1:2A:271(H):G:C8	2.38	0.58
1:2A:307:G:H21	1:2A:330:A:H62	1.52	0.58
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.35	0.58
1:2A:2394:C:OP2	30:28:30:ARG:NH1	2.35	0.58
8:2I:12:LEU:HD22	8:2I:19:VAL:HG21	1.86	0.58
8:2I:31:LEU:HD21	8:2I:38:LEU:HG	1.84	0.58
32:2a:1348:U:H4'	40:2i:120:ARG:HD2	1.86	0.58
54:2y:9:A:H4'	54:2y:46:7MG:H5'	1.85	0.58
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	1.85	0.58
32:1a:158:G:N2	32:1a:163:C:O2	2.33	0.58
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.72	0.58
33:1b:187:LEU:HA	33:1b:201:ILE:HB	1.85	0.58
34:1c:52:LEU:HD21	34:1c:55:VAL:HG23	1.85	0.58
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.68	0.58
32:2a:375:U:OP1	47:2p:69:THR:HG21	2.01	0.58
32:2a:662:G:H2'	32:2a:663:A:C8	2.39	0.58
33:2b:208:ILE:HD13	33:2b:211:ILE:HD12	1.84	0.58
1:1A:2130:C:H2'	1:1A:2131:U:C6	2.39	0.58
1:1A:2145:G:H1	1:1A:2197:C:N4	2.01	0.58
2:1B:89:G:OP1	60:1B:3145:HOH:O	2.17	0.58
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.21	0.58
1:2A:2439:A:N6	55:2x:76:A:OP1	2.35	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:187:VAL:HG12	11:2P:3:LEU:HD12	1.85	0.58
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.03	0.58
26:24:16:CYS:SG	26:24:17:GLY:N	2.77	0.58
32:2a:645:C:OP2	60:2a:3322:HOH:O	2.17	0.58
32:2a:890:G:O2'	32:2a:906:G:O6	2.18	0.58
32:2a:1027:C:N4	32:2a:1036:G:O6	2.36	0.58
44:2m:79:LYS:NZ	44:2m:83:ASP:OD2	2.33	0.58
49:2r:61:LYS:O	49:2r:65:ILE:HG12	2.03	0.58
1:1A:173:C:H2'	1:1A:174:U:C6	2.39	0.58
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.39	0.58
1:2A:903:C:H2'	1:2A:904:C:C6	2.39	0.58
5:2F:24:LEU:HD23	5:2F:115:ALA:HA	1.86	0.58
11:2P:39:LYS:HB2	11:2P:45:LEU:HG	1.85	0.58
26:24:41:PRO:HG3	26:24:49:PHE:CE2	2.39	0.58
33:2b:74:LYS:O	33:2b:78:GLN:HG2	2.03	0.58
41:2j:17:ASP:OD1	41:2j:70:ARG:NE	2.33	0.58
54:2y:58:A:N3	54:2y:60:U:N3	2.51	0.58
1:1A:1071:G:C4	1:1A:1180:C:H1'	2.38	0.58
26:14:57:GLU:HB3	26:14:58:ARG:HA	1.85	0.58
1:2A:2317:C:N4	1:2A:2318:G:O6	2.36	0.58
3:2D:3:VAL:HG13	3:2D:17:THR:HB	1.86	0.58
3:2D:101:GLU:OE2	3:2D:103:ARG:NH1	2.35	0.58
37:2f:100:ASN:ND2	49:2r:23:LYS:HE2	2.19	0.58
1:1A:810:G:OP1	60:1A:5161:HOH:O	2.17	0.58
33:1b:55:PHE:HE1	33:1b:218:ALA:HA	1.67	0.58
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.50	0.58
37:1f:97:PHE:CD2	49:1r:31:LEU:HD11	2.39	0.58
41:1j:27:ALA:HB2	41:1j:81:THR:HG21	1.86	0.58
54:1w:4:C:H2'	54:1w:5:G:H8	1.68	0.58
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.39	0.58
32:2a:1007:C:N3	32:2a:1022:G:O6	2.36	0.58
43:2l:92:OTD:O	43:2l:93:LEU:HD23	2.03	0.58
1:1A:1834:A:H4'	3:1D:259:THR:HG23	1.85	0.58
32:1a:1159:U:OP1	33:1b:133:LYS:NZ	2.35	0.58
37:1f:10:LEU:HB2	37:1f:59:TYR:HB3	1.86	0.58
1:2A:2469:A:H3'	1:2A:2470:G:H8	1.69	0.58
11:2P:60:MET:HA	30:28:13:ARG:NH1	2.19	0.58
14:2S:92:TYR:HB3	14:2S:98:VAL:HG21	1.85	0.58
24:22:9:GLN:HE22	24:22:56:GLN:HB3	1.69	0.58
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.86	0.58
39:2h:20:TYR:OH	39:2h:78:GLN:NE2	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:61:GLY:O	60:1F:407:HOH:O	2.17	0.58
37:1f:60:PHE:CE2	49:1r:78:LEU:HD21	2.39	0.58
37:1f:100:ASN:HB2	49:1r:28:GLU:HA	1.85	0.58
1:2A:108:U:H2'	1:2A:109:G:H8	1.68	0.58
1:2A:247:G:H4'	1:2A:386:G:C5	2.39	0.58
1:2A:2151:G:H2'	1:2A:2152:G:H8	1.68	0.58
33:2b:146:GLN:O	33:2b:150:SER:HB3	2.04	0.58
35:2d:119:GLN:HG3	35:2d:123:HIS:CD2	2.39	0.58
39:2h:110:ALA:HB3	39:2h:121:ASP:HB3	1.86	0.58
1:1A:1232:G:H5''	17:1V:81:TYR:CE1	2.38	0.57
11:1P:94:GLU:OE2	11:1P:124:LYS:NZ	2.37	0.57
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.69	0.57
7:2H:17:VAL:HG13	7:2H:26:VAL:HG22	1.85	0.57
32:2a:76:C:H42	32:2a:93:G:H1	1.50	0.57
32:2a:974:A:OP2	45:2n:41:ARG:NH1	2.37	0.57
38:2g:113:GLU:HG3	38:2g:118:VAL:HG12	1.86	0.57
12:1Q:110:THR:HG23	12:1Q:113:GLN:HB2	1.86	0.57
32:1a:582:U:OP1	46:1o:64:ARG:NH1	2.37	0.57
1:2A:1448:G:N7	60:2A:4812:HOH:O	2.33	0.57
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.39	0.57
1:2A:911:A:H2'	12:2Q:9:TYR:OH	2.04	0.57
1:2A:2141:G:H2'	1:2A:2142:C:O4'	2.04	0.57
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.69	0.57
31:29:10:ILE:HD11	31:29:34:GLN:HE21	1.68	0.57
32:2a:953:G:O6	44:2m:104:ARG:NH2	2.38	0.57
1:1A:701:A:N7	60:1A:4756:HOH:O	2.33	0.57
4:1E:7:VAL:HG12	4:1E:27:LEU:HB3	1.86	0.57
32:1a:1030:C:N3	32:1a:1031:G:N2	2.53	0.57
50:1s:11:VAL:HG12	50:1s:13:ASP:H	1.69	0.57
1:2A:2031:A:N3	1:2A:2455:G:O2'	2.32	0.57
2:2B:50:G:OP1	14:2S:63:THR:N	2.36	0.57
7:2H:86:GLU:OE2	7:2H:132:ARG:NH2	2.38	0.57
20:2Y:28:LYS:HG3	20:2Y:40:GLU:HG2	1.85	0.57
30:28:28:GLY:O	30:28:36:LYS:NZ	2.27	0.57
32:2a:67:C:H2'	32:2a:68:G:C8	2.38	0.57
1:1A:1829:U:H5'	3:1D:259:THR:CG2	2.34	0.57
1:1A:2457:G:OP1	5:1F:74:ARG:NH2	2.36	0.57
32:1a:1037:C:H2'	32:1a:1038:C:C6	2.39	0.57
34:1c:30:ARG:NH1	45:1n:35:ARG:O	2.37	0.57
40:1i:53:VAL:O	40:1i:55:ALA:N	2.37	0.57
44:1m:34:LEU:HD13	44:1m:41:PRO:HA	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:397:G:N7	60:2A:4631:HOH:O	2.32	0.57
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.86	0.57
1:2A:1839:G:C8	1:2A:1927:A:H1'	2.40	0.57
1:2A:2318:G:H21	14:2S:3:ARG:CD	2.17	0.57
22:20:11:ARG:O	22:20:14:ARG:NH2	2.36	0.57
32:2a:1226:C:N4	44:2m:104:ARG:HG2	2.19	0.57
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.39	0.57
54:2w:39:PSU:H2'	54:2w:40:C:C6	2.37	0.57
27:15:16:ARG:HG3	27:15:17:ASP:N	2.19	0.57
1:2A:2129:C:N3	1:2A:2159:G:N2	2.46	0.57
7:2H:159:GLU:HG2	7:2H:169:VAL:HG11	1.87	0.57
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.39	0.57
33:2b:97:TRP:HH2	33:2b:102:LEU:HD13	1.69	0.57
44:2m:92:HIS:HA	44:2m:110:ARG:HH21	1.68	0.57
60:1A:6276:HOH:O	3:1D:14:ARG:HG3	2.04	0.57
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.86	0.57
33:1b:134:GLU:HA	33:1b:137:ARG:HE	1.70	0.57
1:2A:1021:A:N6	1:2A:1141:U:H3	2.00	0.57
32:2a:565:U:OP2	32:2a:566:G:O2'	2.17	0.57
32:2a:966:M2G:HM22	55:2x:34:C:H5'	1.86	0.57
33:2b:126:GLU:CD	33:2b:126:GLU:H	2.12	0.57
32:1a:404:U:H2'	32:1a:405:U:C6	2.40	0.57
32:1a:405:U:OP2	35:1d:3:ARG:NH1	2.38	0.57
37:1f:75:LEU:O	37:1f:79:LEU:HG	2.05	0.57
38:1g:46:ALA:HA	38:1g:49:ILE:HD12	1.87	0.57
1:2A:1857:G:O2'	1:2A:1885:A:N6	2.35	0.57
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.04	0.57
11:2P:79:ARG:O	11:2P:111:ARG:N	2.33	0.57
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	1.87	0.57
32:2a:1244:C:H42	32:2a:1293:G:H1	1.52	0.57
32:2a:1328:C:O2'	44:2m:29:ARG:NE	2.38	0.57
38:2g:80:VAL:HB	38:2g:85:TYR:HE2	1.69	0.57
40:2i:7:THR:H	40:2i:83:ARG:HD2	1.70	0.57
1:1A:1211:U:H2'	1:1A:1212:C:C6	2.39	0.57
1:1A:2699:U:OP2	60:1A:4849:HOH:O	2.17	0.57
60:1A:6427:HOH:O	28:16:19:ARG:HD2	2.04	0.57
32:1a:662:G:H2'	32:1a:663:A:C8	2.38	0.57
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.85	0.57
1:2A:212:G:H2'	1:2A:213:A:O4'	2.05	0.57
1:2A:296:C:O3'	20:2Y:95:LYS:NZ	2.38	0.57
1:2A:2269:A:OP1	60:2A:4307:HOH:O	2.18	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:33:ALA:HB1	44:2m:56:LEU:HD11	1.87	0.57
3:1D:125:ILE:HB	37:1f:81:ILE:HD11	1.86	0.57
21:1Z:126:VAL:HG13	21:1Z:161:VAL:HG23	1.85	0.57
32:1a:108:G:N1	51:1t:15:ARG:HG2	2.19	0.57
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.34	0.57
54:1w:4:C:H2'	54:1w:5:G:C8	2.40	0.57
1:2A:276:A:H5''	1:2A:277:C:H5'	1.85	0.57
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.20	0.57
54:2w:12:U:H3'	54:2w:13:C:H5''	1.85	0.57
54:2y:2:C:H2'	54:2y:3:C:H6	1.68	0.57
1:1A:2442:A:H2'	1:1A:2442:A:N3	2.20	0.56
9:1N:67:LEU:HD12	9:1N:87:LEU:HD22	1.86	0.56
15:1T:24:PRO:HD3	15:1T:52:ILE:HD12	1.87	0.56
1:2A:1607:C:N4	1:2A:1622:G:OP2	2.31	0.56
1:2A:2376:A:N3	14:2S:106:ARG:NH2	2.51	0.56
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.39	0.56
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.40	0.56
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.39	0.56
33:2b:73:THR:HA	33:2b:94:ASN:O	2.05	0.56
33:2b:74:LYS:HD2	33:2b:166:ASP:HB2	1.86	0.56
9:1N:67:LEU:O	9:1N:88:GLU:HG3	2.06	0.56
32:1a:56:U:H2'	32:1a:57:G:C8	2.39	0.56
32:1a:1030(A):G:H1'	32:1a:1031:G:H1	1.69	0.56
32:1a:1183:A:O2'	32:1a:1184:G:OP1	2.19	0.56
37:1f:60:PHE:HE2	49:1r:78:LEU:HD21	1.69	0.56
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.87	0.56
32:2a:148:G:H2'	32:2a:149:A:C8	2.38	0.56
32:2a:1273:G:H3'	32:2a:1274:G:C8	2.39	0.56
32:2a:1314:C:N4	50:2s:2:PRO:O	2.38	0.56
37:2f:9:VAL:HB	37:2f:87:ARG:HB2	1.87	0.56
44:2m:13:LYS:NZ	44:2m:21:TYR:OH	2.38	0.56
45:2n:12:ARG:NH1	45:2n:14:PRO:HA	2.20	0.56
1:1A:346:A:OP1	5:1F:168:ARG:HD2	2.05	0.56
1:1A:641:G:OP1	5:1F:40:GLN:HG2	2.05	0.56
1:1A:1346:U:H4'	1:1A:1347:A:H5''	1.87	0.56
1:1A:2155:G:O2'	1:1A:2178:G:N2	2.38	0.56
1:1A:2897:U:H2'	1:1A:2898:C:C6	2.40	0.56
11:1P:106:LEU:HD13	11:1P:112:LEU:HG	1.86	0.56
32:1a:673:G:H2'	32:1a:674:G:C8	2.39	0.56
32:1a:1095:U:OP1	32:1a:1108:G:N1	2.38	0.56
32:1a:1202:G:O4'	45:1n:29:ARG:NH1	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.39	0.56
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.38	0.56
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.23	0.56
1:2A:740:U:H2'	1:2A:741:G:C8	2.40	0.56
1:2A:857:C:OP2	22:20:77:ARG:NH2	2.38	0.56
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.40	0.56
2:2B:57:A:N3	6:2G:29:TRP:HB3	2.20	0.56
16:2U:50:ARG:HH12	17:2V:72:VAL:HA	1.71	0.56
32:2a:297:G:N2	32:2a:300:A:OP2	2.38	0.56
32:2a:1030(A):G:N1	32:2a:1030(D):A:OP2	2.38	0.56
32:2a:1343:G:H1'	40:2i:121:ARG:HH12	1.71	0.56
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.87	0.56
40:2i:4:TYR:O	40:2i:18:PHE:HA	2.05	0.56
45:2n:32:SER:O	45:2n:32:SER:OG	2.21	0.56
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.87	0.56
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.35	0.56
39:1h:86:ILE:HG22	39:1h:93:VAL:HG21	1.88	0.56
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	1.88	0.56
1:2A:1530:C:HO2'	1:2A:1531:C:P	2.29	0.56
52:2u:2:GLY:N	60:2u:101:HOH:O	2.37	0.56
1:1A:1108:G:P	1:1A:1116:A:H1'	2.46	0.56
1:1A:2008:A:OP2	60:1A:5695:HOH:O	2.17	0.56
38:1g:20:ASP:OD2	38:1g:63:LYS:NZ	2.37	0.56
40:1i:50:LEU:HD23	40:1i:81:ILE:HD11	1.87	0.56
1:2A:1798:U:H5'	3:2D:259:THR:CG2	2.31	0.56
7:2H:99:VAL:N	7:2H:102:ALA:O	2.38	0.56
32:2a:506:G:H1	32:2a:525:C:H42	1.53	0.56
32:2a:1216:G:H5''	45:2n:5:ALA:HB2	1.87	0.56
40:2i:24:GLY:HA2	40:2i:59:PHE:O	2.05	0.56
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.86	0.56
44:2m:10:PRO:HD2	44:2m:18:ALA:HA	1.88	0.56
1:1A:1133:G:H2'	1:1A:1135:G:C8	2.41	0.56
1:1A:2647:C:O2'	4:1E:80:GLU:OE2	2.21	0.56
13:1R:67:LEU:HD13	13:1R:76:VAL:HG21	1.86	0.56
17:1V:40:LEU:HB2	17:1V:46:VAL:HG13	1.87	0.56
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.41	0.56
1:2A:994:C:O2'	1:2A:996:A:OP1	2.23	0.56
6:2G:102:PHE:HZ	6:2G:157:ILE:HD13	1.71	0.56
33:2b:15:VAL:O	33:2b:17:PHE:N	2.39	0.56
38:2g:89:MET:SD	38:2g:155:ARG:HB2	2.45	0.56
50:2s:41:VAL:HG22	50:2s:42:PRO:HD2	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1221:G:H1'	1:1A:1222:A:H5''	1.88	0.56
1:1A:2434:A:O4'	54:1y:76:A:N6	2.39	0.56
21:1Z:154:ASP:OD1	21:1Z:154:ASP:N	2.36	0.56
33:1b:115:LEU:HD13	33:1b:145:LEU:HB3	1.86	0.56
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.88	0.56
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.40	0.56
1:2A:2820:A:O2'	1:2A:2821:A:OP1	2.20	0.56
6:2G:75:LYS:HA	6:2G:84:LYS:HD2	1.88	0.56
21:2Z:19:ARG:NH1	21:2Z:84:GLU:O	2.38	0.56
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.86	0.56
32:2a:585:G:OP1	48:2q:37:LYS:NZ	2.31	0.56
1:1A:1000:C:OP1	12:1Q:87:LYS:HE3	2.06	0.56
1:1A:1699:A:OP1	13:1R:8:ARG:NH1	2.37	0.56
24:12:23:LYS:O	24:12:27:GLU:HG3	2.06	0.56
32:1a:67:C:H2'	32:1a:68:G:C8	2.40	0.56
32:1a:1027:C:C4	32:1a:1034:G:N1	2.74	0.56
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.39	0.56
1:2A:271(H):G:H2'	1:2A:271(I):G:C8	2.40	0.56
1:2A:884:C:N3	1:2A:893:C:O2'	2.35	0.56
1:2A:887:A:H4'	1:2A:888:C:C5	2.40	0.56
1:2A:2127:G:N1	1:2A:2161:C:N4	2.53	0.56
48:2q:45:HIS:HB3	48:2q:72:ARG:HG2	1.87	0.56
12:2Q:141:GLN:NE2	21:2Z:74:VAL:O	2.37	0.56
20:2Y:94:LYS:NZ	60:2Y:601:HOH:O	2.38	0.56
26:24:9:LEU:HD23	26:24:27:THR:HG23	1.88	0.56
32:2a:560:U:H5'	32:2a:566:G:N2	2.21	0.56
32:2a:987:G:H1	32:2a:1218:C:N4	2.00	0.56
35:2d:98:GLU:OE1	35:2d:103:ASN:ND2	2.39	0.56
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.41	0.56
1:2A:500:G:N1	1:2A:503:A:OP2	2.38	0.56
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.40	0.56
6:2G:41:GLN:HE21	6:2G:153:ARG:HB3	1.70	0.56
6:2G:170:ARG:HH12	6:2G:174:GLU:CD	2.13	0.56
29:27:34:ARG:NE	29:27:39:ARG:HG2	2.20	0.56
32:2a:644:G:OP1	60:2a:3318:HOH:O	2.18	0.56
32:2a:1133:G:N2	32:2a:1141:C:N3	2.52	0.56
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.39	0.56
32:2a:1225:A:OP1	44:2m:103:THR:OG1	2.21	0.56
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.41	0.56
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.88	0.55
21:1Z:138:GLU:H	21:1Z:156:LYS:NZ	2.04	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:93:VAL:HG21	33:1b:97:TRP:CD1	2.35	0.55
54:1w:26:A:H61	54:1w:44:G:H1	1.55	0.55
6:2G:36:LYS:HD3	6:2G:95:ARG:NH1	2.21	0.55
14:2S:67:ARG:O	14:2S:71:ARG:HG3	2.05	0.55
28:26:10:LEU:HD13	28:26:19:ARG:HD3	1.88	0.55
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.41	0.55
32:2a:1305:G:H5'	52:2u:4:GLY:HA3	1.87	0.55
32:2a:1395:C:O2'	32:2a:1401:G:O2'	2.21	0.55
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.88	0.55
39:1h:124:ALA:O	39:1h:128:GLY:N	2.39	0.55
47:1p:52:ASP:O	47:1p:54:GLU:N	2.39	0.55
1:2A:236:C:H2'	1:2A:237:C:H6	1.70	0.55
1:2A:2316:C:O2'	6:2G:128:ARG:NH2	2.38	0.55
2:2B:75:G:H22	21:2Z:73:GLN:NE2	2.04	0.55
36:2e:33:VAL:HG13	36:2e:112:LEU:HD12	1.88	0.55
1:1A:611:U:H2'	1:1A:612:C:C6	2.41	0.55
3:1D:2:ALA:N	3:1D:200:ASP:OD2	2.39	0.55
26:14:63:TYR:N	26:14:64:GLY:HA2	2.21	0.55
32:1a:1353:G:OP1	52:1u:10:ARG:NH1	2.40	0.55
36:1e:33:VAL:HG13	36:1e:112:LEU:HD12	1.88	0.55
54:1y:15:G:H22	54:1y:48:C:H42	1.54	0.55
54:1y:55:PSU:N1	54:1y:57:G:OP2	2.40	0.55
1:2A:2882:A:OP1	13:2R:96:ARG:NE	2.39	0.55
3:2D:127:VAL:HA	3:2D:193:VAL:HG23	1.88	0.55
3:2D:232:PRO:O	60:2D:404:HOH:O	2.18	0.55
13:2R:100:LEU:HD11	13:2R:113:LEU:HD23	1.89	0.55
15:2T:16:ARG:NH2	15:2T:18:ASP:OD2	2.39	0.55
32:2a:671:G:H5'	37:2f:77:ARG:HH22	1.72	0.55
32:2a:1003:G:N2	32:2a:1025:U:O4	2.40	0.55
32:2a:1009:G:N2	32:2a:1021:G:H1'	2.21	0.55
32:2a:1096:C:O2	32:2a:1170:A:O2'	2.24	0.55
1:1A:1109:G:N2	1:1A:1122:C:O2'	2.39	0.55
1:1A:1233:U:H4'	17:1V:79:VAL:HG22	1.88	0.55
32:1a:396:G:O2'	32:1a:398:C:OP1	2.17	0.55
32:1a:955:U:O2'	50:1s:83:HIS:HD2	1.90	0.55
6:2G:131:TYR:HE2	6:2G:133:LEU:HD23	1.72	0.55
27:25:56:LYS:NZ	27:25:58:LEU:O	2.39	0.55
1:1A:2157:A:H5'	1:1A:2182:G:H4'	1.87	0.55
5:1F:125:LEU:HD12	5:1F:194:MET:HB2	1.87	0.55
6:1G:72:ARG:NH1	6:1G:87:PRO:HG3	2.21	0.55
23:11:50:ARG:HD2	23:11:57:GLU:OE2	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:17:ARG:HH21	10:2O:47:ILE:HG21	1.71	0.55
21:2Z:72:ARG:NH2	21:2Z:97:GLU:O	2.38	0.55
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.88	0.55
43:2l:57:LYS:HG2	43:2l:67:THR:HG22	1.88	0.55
1:1A:1111:U:H5''	1:1A:1112:U:OP2	2.06	0.55
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.54	0.55
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.22	0.55
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.20	0.55
32:1a:1316:G:OP1	45:1n:17:LYS:NZ	2.39	0.55
36:1e:8:GLU:OE2	36:1e:63:ARG:NH2	2.40	0.55
51:1t:13:LEU:HD12	51:1t:14:LYS:N	2.21	0.55
1:2A:403:U:H4'	1:2A:404:C:H5'	1.88	0.55
1:2A:482:A:H1'	1:2A:498:G:N2	2.22	0.55
1:2A:1865:G:N2	1:2A:1877:A:OP2	2.39	0.55
9:2N:12:ARG:NH2	9:2N:50:ASP:OD2	2.39	0.55
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.21	0.55
39:2h:6:ILE:O	39:2h:10:LEU:HG	2.06	0.55
1:1A:1108:G:OP1	1:1A:1116:A:O2'	2.23	0.55
1:1A:2227:G:H8	1:1A:2228:G:N7	2.04	0.55
32:1a:102:G:O2'	32:1a:151:A:N3	2.35	0.55
32:1a:1352:C:H2'	32:1a:1353:G:C8	2.41	0.55
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.42	0.55
3:2D:171:ASP:O	3:2D:187:GLY:N	2.37	0.55
32:2a:542:G:OP1	35:2d:10:ARG:NH2	2.23	0.55
32:2a:1245:A:H2'	32:2a:1246:C:O4'	2.07	0.55
54:2y:8:4SU:H1'	54:2y:48:C:H1'	1.89	0.55
1:1A:1108:G:H1	1:1A:1123:A:N6	2.03	0.55
18:1W:68:ARG:HH11	18:1W:111:HIS:HA	1.71	0.55
54:1y:36:A:H2'	54:1y:37:MIA:O4'	2.07	0.55
1:2A:863:A:H2'	1:2A:864:G:C8	2.41	0.55
32:2a:986:A:H2'	32:2a:987:G:O4'	2.06	0.55
33:2b:144:ARG:NH2	33:2b:148:TYR:OH	2.39	0.55
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.89	0.55
1:1A:1827:U:H2'	1:1A:1828:C:C6	2.41	0.55
14:1S:39:ILE:HB	14:1S:49:VAL:HG13	1.89	0.55
1:2A:93:G:H2'	1:2A:94:C:C6	2.42	0.55
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.36	0.55
7:2H:41:MET:HE2	7:2H:64:LEU:HB2	1.88	0.55
10:2O:63:VAL:HG11	10:2O:85:VAL:HG23	1.89	0.55
32:2a:130:A:O2'	32:2a:131:C:O5'	2.25	0.55
32:2a:946:A:H2'	32:2a:947:G:C8	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:16:HIS:O	51:2t:19:SER:OG	2.19	0.55
1:1A:843:C:H2'	1:1A:844:C:C6	2.42	0.55
1:1A:1633:A:H2'	1:1A:1634:C:C6	2.41	0.55
11:1P:91:PHE:O	11:1P:121:LYS:NZ	2.36	0.55
1:2A:668:G:H5'	1:2A:669:G:OP2	2.07	0.55
1:2A:1041:C:H1'	1:2A:1115:G:N2	2.22	0.55
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.72	0.55
32:2a:501:C:H2'	32:2a:502:G:H8	1.71	0.55
32:2a:728:A:H2'	32:2a:729:A:C8	2.42	0.55
32:2a:1239:A:H62	32:2a:1299:A:N6	2.04	0.55
34:2c:6:HIS:CG	45:2n:49:HIS:HB3	2.42	0.55
34:2c:134:ILE:HD11	34:2c:153:VAL:HG23	1.88	0.55
7:1H:41:MET:HE2	7:1H:65:HIS:HA	1.89	0.54
8:1I:3:VAL:HG12	8:1I:38:LEU:HA	1.88	0.54
1:2A:586:A:N1	1:2A:809:G:O2'	2.31	0.54
3:2D:103:ARG:HG3	3:2D:103:ARG:HH11	1.71	0.54
26:24:40:HIS:HB3	26:24:43:TYR:HB2	1.89	0.54
32:2a:34:C:H2'	32:2a:35:G:H8	1.72	0.54
33:2b:134:GLU:HA	33:2b:137:ARG:HE	1.73	0.54
39:2h:29:SER:HB3	39:2h:32:LYS:HG3	1.89	0.54
1:1A:85:C:H4'	1:1A:102:U:H1'	1.89	0.54
6:1G:38:VAL:HG22	6:1G:93:THR:HG23	1.87	0.54
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.40	0.54
40:1i:65:VAL:HG11	40:1i:73:GLN:HB3	1.89	0.54
50:1s:20:LEU:HD23	50:1s:23:ASN:HD22	1.72	0.54
1:2A:643:A:N1	1:2A:2369:A:O2'	2.39	0.54
9:2N:35:ARG:HD3	9:2N:37:LYS:HD2	1.88	0.54
32:2a:551:U:H2'	32:2a:552:U:C6	2.42	0.54
55:2x:44:A:H2'	55:2x:45:G:C8	2.42	0.54
54:2y:35:A:H2'	54:2y:36:A:O4'	2.08	0.54
1:1A:294:C:N3	1:1A:390:G:N2	2.44	0.54
1:1A:2784:C:H2'	1:1A:2785:C:H6	1.72	0.54
32:1a:328:C:H4'	32:1a:329:A:H5'	1.88	0.54
32:1a:1236:A:H4'	32:1a:1304:G:H4'	1.88	0.54
32:1a:1350:A:O2'	38:1g:33:ASP:OD1	2.21	0.54
54:1w:51:U:H2'	54:1w:52:G:H8	1.71	0.54
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.26	0.54
1:2A:1762:A:N1	60:2A:4405:HOH:O	2.34	0.54
5:2F:184:TYR:CZ	5:2F:188:ARG:HD2	2.41	0.54
19:2X:60:ARG:NH2	29:27:47:ARG:HH12	2.05	0.54
32:2a:719:C:N4	49:2r:71:LYS:HE2	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1142:G:H2'	32:2a:1143:G:O4'	2.07	0.54
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.07	0.54
33:2b:47:THR:HA	33:2b:202:PRO:HG2	1.88	0.54
34:2c:119:ARG:HE	34:2c:140:ARG:NH2	2.05	0.54
1:1A:602:G:H2'	1:1A:603:C:C6	2.43	0.54
8:1I:93:THR:H	8:1I:96:ASP:HB2	1.73	0.54
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.89	0.54
32:1a:1144:G:H21	32:1a:1146:A:H62	1.55	0.54
1:2A:955:C:OP1	12:2Q:87:LYS:HE3	2.07	0.54
1:2A:2815:C:H2'	1:2A:2816:C:H6	1.72	0.54
6:2G:11:TYR:O	6:2G:16:ARG:HG2	2.06	0.54
25:23:8:LEU:HG	25:23:31:LEU:HD23	1.90	0.54
32:2a:1318:A:O2'	50:2s:37:ARG:HB2	2.08	0.54
33:2b:15:VAL:HG12	33:2b:209:ARG:HD2	1.88	0.54
36:2e:78:HIS:HD2	39:2h:104:ARG:HD2	1.73	0.54
1:1A:2148:A:N3	1:1A:2149:G:H1'	2.23	0.54
32:1a:998:G:N2	32:1a:1043:C:N3	2.46	0.54
33:1b:162:ILE:O	33:1b:185:ILE:HG12	2.08	0.54
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.90	0.54
54:1y:48:C:C2	54:1y:59:U:H1'	2.42	0.54
1:2A:652(D):C:H42	1:2A:652(U):G:H1	1.54	0.54
2:2B:28:C:H2'	2:2B:29:A:O4'	2.07	0.54
7:2H:20:ALA:HB3	7:2H:23:ARG:HG3	1.90	0.54
10:2O:73:ASP:OD2	15:2T:32:TYR:OH	2.20	0.54
32:2a:1010:G:N2	32:2a:1020:U:HO2'	2.06	0.54
50:2s:52:TYR:HB2	50:2s:57:HIS:CE1	2.42	0.54
1:1A:525:G:N7	60:1A:5331:HOH:O	2.33	0.54
1:1A:2603:C:H2'	1:1A:2604:G:C8	2.41	0.54
1:1A:2880:C:H2'	1:1A:2881:C:O4'	2.07	0.54
26:14:59:PHE:CE2	50:1s:64:GLU:HB3	2.43	0.54
42:1k:99:GLN:HE21	42:1k:108:ILE:HD11	1.72	0.54
48:1q:45:HIS:NE2	48:1q:47:PRO:HG3	2.23	0.54
22:20:32:ARG:H	22:20:35:ASN:ND2	2.06	0.54
32:2a:646:U:H2'	32:2a:647:C:H6	1.73	0.54
34:2c:131:ARG:HD3	34:2c:166:GLU:OE2	2.07	0.54
38:2g:94:ARG:O	38:2g:98:SER:OG	2.25	0.54
39:2h:17:THR:HA	39:2h:65:TYR:HE1	1.72	0.54
1:1A:1091:A:H4'	1:1A:1091:A:OP1	2.07	0.54
1:1A:1466:U:O2'	1:1A:1467:G:OP1	2.21	0.54
1:1A:2759:U:OP1	7:1H:85:LYS:NZ	2.32	0.54
1:1A:2801:C:OP1	4:1E:61:ARG:NH2	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:40:ASN:HB3	44:1m:43:THR:HG23	1.88	0.54
1:2A:637:A:H2'	11:2P:117:GLU:OE2	2.08	0.54
3:2D:8:PRO:HB3	3:2D:14:ARG:HD2	1.89	0.54
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	1.90	0.54
9:2N:20:GLY:HA2	9:2N:61:ARG:HG3	1.88	0.54
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.41	0.54
21:2Z:50:GLN:OE1	21:2Z:50:GLN:N	2.41	0.54
32:2a:179:A:H2'	32:2a:180:U:C6	2.43	0.54
33:2b:78:GLN:NE2	33:2b:95:GLN:OE1	2.40	0.54
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.72	0.54
34:2c:134:ILE:HG22	34:2c:168:ALA:HB3	1.90	0.54
1:1A:123:G:H21	29:17:48:LYS:HG2	1.72	0.54
1:1A:1131:A:HO2'	1:1A:1150:C:HO2'	1.53	0.54
1:1A:1289:G:O3'	11:1P:7:ARG:NH2	2.41	0.54
1:1A:2159:C:H2'	1:1A:2160:C:C6	2.43	0.54
1:1A:2348:A:H61	22:10:43:THR:CG2	2.19	0.54
54:1w:6:G:N1	54:1w:67:C:N4	2.27	0.54
13:2R:44:LEU:HD22	13:2R:48:VAL:HG23	1.90	0.54
15:2T:49:VAL:HG12	15:2T:63:VAL:HG22	1.90	0.54
17:2V:62:LEU:CD1	17:2V:95:LEU:HB2	2.38	0.54
26:24:60:GLN:O	26:24:62:ARG:N	2.40	0.54
32:2a:1345:U:OP2	60:2a:3494:HOH:O	2.18	0.54
38:2g:59:LEU:O	38:2g:63:LYS:HG3	2.08	0.54
54:2w:19:G:H1	54:2w:56:C:N4	2.05	0.54
54:2w:36:A:H2'	54:2w:37:MIA:H8	1.90	0.54
1:1A:1695:C:OP1	60:1A:5101:HOH:O	2.17	0.54
4:1E:59:VAL:HG21	4:1E:74:PRO:HB3	1.89	0.54
10:1O:64:ARG:HB2	10:1O:79:PHE:CG	2.43	0.54
15:1T:127:ALA:C	15:1T:129:ARG:H	2.16	0.54
32:1a:731:G:H5'	32:1a:766:A:H4'	1.90	0.54
32:1a:1030:C:N3	32:1a:1031:G:C2	2.75	0.54
54:1w:63:G:H2'	54:1w:64:A:C8	2.42	0.54
1:2A:2142:C:H2'	1:2A:2143:C:O4'	2.08	0.54
1:2A:2474:C:H5''	1:2A:2475:C:OP2	2.08	0.54
4:2E:72:VAL:HG12	4:2E:73:GLU:O	2.07	0.54
7:2H:3:ARG:HH22	7:2H:65:HIS:HB3	1.72	0.54
32:2a:509:A:N3	32:2a:543:C:O2'	2.38	0.54
32:2a:1359:C:OP2	45:2n:35:ARG:NH1	2.41	0.54
54:2w:74:C:N4	54:2w:75:C:O2	2.40	0.54
1:1A:231:G:C8	30:18:5:LYS:HG2	2.43	0.54
1:1A:1700:G:H3'	13:1R:2:ARG:HD3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:128:G:O2'	48:1q:3:LYS:NZ	2.41	0.54
34:1c:78:GLY:HA3	34:1c:83:ARG:H	1.73	0.54
48:1q:45:HIS:CD2	48:1q:47:PRO:HG3	2.43	0.54
1:2A:72:U:OP1	60:2A:4855:HOH:O	2.19	0.54
1:2A:728:G:H4'	3:2D:13:ARG:HE	1.73	0.54
54:2y:42:C:H2'	54:2y:43:C:H6	1.73	0.54
1:1A:1137:G:C6	1:1A:1147:U:C2	2.96	0.53
1:1A:2367:C:H1'	22:10:39:ARG:HH21	1.73	0.53
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.90	0.53
15:1T:24:PRO:HA	15:1T:49:VAL:HG23	1.89	0.53
40:1i:55:ALA:HA	40:1i:58:HIS:HD2	1.73	0.53
1:2A:1448:G:H4'	1:2A:1542:A:OP1	2.08	0.53
1:2A:2430:A:OP2	60:2A:4409:HOH:O	2.17	0.53
20:2Y:13:VAL:HG12	20:2Y:74:PRO:HA	1.88	0.53
32:2a:1129:C:OP2	40:2i:66:ARG:NH1	2.41	0.53
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.76	0.53
36:2e:33:VAL:HG21	36:2e:109:ILE:HA	1.90	0.53
46:2o:26:GLU:OE1	46:2o:26:GLU:N	2.39	0.53
50:2s:80:TYR:O	50:2s:82:GLY:N	2.42	0.53
54:2y:18:G:N1	54:2y:55:PSU:C4	2.71	0.53
1:1A:18:C:O2'	1:1A:577:U:OP1	2.21	0.53
1:1A:1462:G:O2'	1:1A:1463:C:OP2	2.24	0.53
1:1A:2071:G:N7	60:1A:5009:HOH:O	2.33	0.53
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.41	0.53
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.23	0.53
2:2B:14:U:O2	2:2B:108:U:H4'	2.07	0.53
32:2a:643:C:H2'	32:2a:644:G:H8	1.73	0.53
54:2y:6:G:N2	54:2y:67:C:N3	2.56	0.53
1:1A:1105:G:H2'	1:1A:1106:U:C5	2.43	0.53
1:1A:1552:C:H2'	1:1A:1553:A:C8	2.41	0.53
20:1Y:92:ASN:N	20:1Y:93:GLY:HA2	2.21	0.53
32:1a:1151:A:O2'	32:1a:1152:A:H8	1.92	0.53
35:1d:98:GLU:HG3	35:1d:189:PRO:HG2	1.88	0.53
1:2A:1152:C:H2'	1:2A:1153:C:H6	1.72	0.53
17:2V:52:VAL:HG23	17:2V:55:ALA:HB3	1.89	0.53
33:2b:186:ALA:O	33:2b:201:ILE:N	2.37	0.53
34:2c:6:HIS:HD2	34:2c:8:ILE:H	1.55	0.53
1:1A:1775:C:H5'	1:1A:1776:G:OP2	2.08	0.53
1:1A:2642:G:H2'	1:1A:2643:G:C8	2.43	0.53
32:1a:715:A:H2'	32:1a:716:A:C8	2.44	0.53
35:1d:23:GLY:HA3	35:1d:112:VAL:HG12	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.41	0.53
32:2a:1108:G:O6	60:2a:3564:HOH:O	2.18	0.53
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.23	0.53
35:2d:173:TRP:CD1	35:2d:174:LEU:HG	2.44	0.53
51:2t:86:ARG:O	51:2t:90:GLN:HB2	2.08	0.53
1:1A:302:A:H2'	1:1A:303:C:C6	2.43	0.53
1:1A:551:A:O2'	1:1A:2065:C:O2	2.26	0.53
1:1A:927:G:H2'	1:1A:928:G:C8	2.40	0.53
6:1G:150:ASP:OD1	6:1G:150:ASP:N	2.41	0.53
15:1T:49:VAL:HG12	15:1T:63:VAL:HG22	1.90	0.53
32:1a:78:G:N1	32:1a:91:C:N4	2.55	0.53
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.09	0.53
1:2A:320:A:OP2	5:2F:137:LYS:NZ	2.29	0.53
1:2A:568:U:H5'	1:2A:945:A:N1	2.23	0.53
4:2E:11:MET:HG2	4:2E:24:THR:HB	1.90	0.53
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.44	0.53
32:2a:1122:U:H2'	32:2a:1123:A:H8	1.73	0.53
34:2c:47:LEU:HD22	34:2c:50:ALA:HB3	1.89	0.53
40:2i:8:GLY:O	40:2i:15:ALA:N	2.37	0.53
1:1A:2193:A:O2'	1:1A:2194:U:H5''	2.09	0.53
33:1b:166:ASP:O	33:1b:170:GLU:N	2.42	0.53
36:1e:60:TYR:OH	36:1e:64:ARG:NH2	2.35	0.53
39:1h:51:VAL:HG11	39:1h:60:ARG:HH12	1.72	0.53
1:2A:1379:A:H4'	1:2A:1380:G:OP2	2.07	0.53
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.42	0.53
20:2Y:30:VAL:HG22	20:2Y:37:VAL:HG12	1.90	0.53
32:2a:132:C:O2	32:2a:230:G:N2	2.30	0.53
32:2a:1006:C:H2'	32:2a:1007:C:C6	2.42	0.53
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	1.90	0.53
1:1A:1961:5MU:OP1	1:1A:2616:U:O2'	2.27	0.53
1:1A:2011:G:O6	60:1A:5950:HOH:O	2.19	0.53
9:1N:4:TYR:CE2	16:1U:100:VAL:HG11	2.43	0.53
21:1Z:1:MET:HE2	21:1Z:135:GLU:HB2	1.91	0.53
21:1Z:163:LEU:HD23	21:1Z:167:PRO:HG3	1.91	0.53
54:1y:40:C:H2'	54:1y:41:C:H6	1.73	0.53
1:2A:2148:G:H2'	1:2A:2149:G:C8	2.44	0.53
1:2A:2497:A:H5''	60:2A:4025:HOH:O	2.09	0.53
7:2H:24:VAL:HG22	7:2H:35:VAL:HB	1.91	0.53
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.91	0.53
23:21:56:GLN:HE21	23:21:87:PRO:HG3	1.74	0.53
32:2a:393:A:OP1	60:2a:3393:HOH:O	2.19	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:825:G:H1	32:2a:875:C:H42	1.57	0.53
32:2a:988:G:H1	32:2a:1217:C:N4	2.01	0.53
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.24	0.53
1:1A:1101:G:H1	1:1A:1150:C:N4	2.04	0.53
1:1A:1898:A:H2'	1:1A:1899:A:C8	2.43	0.53
1:1A:2812:A:H1'	1:1A:2904:U:H1'	1.90	0.53
32:1a:625:G:H2'	32:1a:626:U:C6	2.44	0.53
54:1w:9:A:O2'	54:1w:10:G:N7	2.42	0.53
54:1y:23:A:H2'	54:1y:24:G:C8	2.44	0.53
1:2A:796:C:H2'	1:2A:797:C:C6	2.44	0.53
1:2A:884:C:H3'	1:2A:885:C:C6	2.44	0.53
5:2F:13:SER:HB3	5:2F:127:GLU:HG3	1.90	0.53
12:2Q:38:GLU:HG3	12:2Q:127:ILE:HG22	1.90	0.53
13:2R:33:ARG:NH2	27:25:57:VAL:O	2.33	0.53
32:2a:501:C:H2'	32:2a:502:G:C8	2.43	0.53
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.09	0.53
7:1H:11:VAL:HG21	7:1H:50:VAL:HG23	1.89	0.53
32:1a:620:C:H2'	32:1a:621:A:O4'	2.09	0.53
32:1a:750:G:N3	46:1o:23:GLY:HA3	2.24	0.53
32:1a:757:U:H2'	32:1a:758:G:O4'	2.09	0.53
32:1a:1029:C:N3	32:1a:1032:G:O6	2.42	0.53
32:1a:1239:A:H4'	32:1a:1240:U:H5''	1.90	0.53
1:2A:857:C:H4'	22:20:23:VAL:HG21	1.91	0.53
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.24	0.53
1:2A:2184:G:H2'	1:2A:2185:C:C6	2.43	0.53
1:2A:2468:G:C2	1:2A:2481:G:N3	2.77	0.53
7:2H:98:LEU:HB2	7:2H:125:VAL:HG22	1.90	0.53
33:2b:80:ILE:HD11	33:2b:212:GLN:HA	1.91	0.53
1:1A:904:C:H4'	22:10:23:VAL:HG21	1.89	0.53
20:1Y:87:LYS:HB3	20:1Y:95:LYS:HD2	1.90	0.53
26:14:33:VAL:HG12	26:14:35:VAL:H	1.74	0.53
32:1a:458:C:H2'	32:1a:460:G:O4'	2.09	0.53
44:1m:4:ILE:HD12	44:1m:57:ARG:HA	1.91	0.53
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.09	0.53
2:2B:31:C:H4'	6:2G:29:TRP:HZ2	1.74	0.53
6:2G:41:GLN:HG3	6:2G:154:GLY:O	2.09	0.53
12:2Q:17:LEU:HB3	12:2Q:39:PRO:HB2	1.90	0.53
32:2a:537:G:H5''	43:2l:113:ARG:NH1	2.24	0.53
1:1A:1040:C:OP1	16:1U:53:ARG:NH2	2.42	0.52
1:1A:1201:A:OP1	16:1U:55:ARG:HD2	2.10	0.52
1:1A:1338:U:H2'	1:1A:1339:C:C6	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1915:C:OP1	60:1A:5837:HOH:O	2.19	0.52
1:1A:2250:G:N3	1:1A:2250:G:H2'	2.23	0.52
32:1a:167:G:H2'	32:1a:168:G:C8	2.45	0.52
39:1h:91:ARG:HD3	48:1q:32:TYR:O	2.08	0.52
1:2A:11:G:C2'	1:2A:12:U:H5'	2.39	0.52
1:2A:144:C:H2'	1:2A:145:G:H8	1.74	0.52
3:2D:169:GLU:HG2	3:2D:174:ILE:HD11	1.90	0.52
6:2G:5:VAL:H	6:2G:8:LYS:HE2	1.74	0.52
19:2X:43:VAL:HG21	19:2X:81:VAL:HG11	1.91	0.52
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.24	0.52
32:2a:1169:A:H2'	32:2a:1170:A:C8	2.44	0.52
32:2a:1227:A:OP2	44:2m:111:LYS:HE2	2.09	0.52
32:2a:1279:A:O2'	32:2a:1281:U:OP2	2.22	0.52
32:2a:1314:C:OP1	50:2s:6:LYS:NZ	2.31	0.52
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.27	0.52
46:2o:87:ILE:O	46:2o:88:ARG:HB3	2.09	0.52
1:1A:2044:U:O2'	1:1A:2629:C:H5'	2.10	0.52
1:1A:2175:G:H2'	1:1A:2176:G:H8	1.73	0.52
9:1N:70:LYS:HD3	9:1N:87:LEU:HD12	1.91	0.52
19:1X:35:THR:HG22	19:1X:38:GLU:HB2	1.91	0.52
32:1a:865:A:H2	32:1a:918:A:H4'	1.75	0.52
42:1k:48:ILE:HD12	42:1k:63:LEU:HB2	1.91	0.52
1:2A:236:C:H2'	1:2A:237:C:C6	2.44	0.52
1:2A:455:C:N3	1:2A:472:A:H2'	2.24	0.52
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.09	0.52
2:2B:4:C:H42	2:2B:117:G:H1	1.56	0.52
25:23:52:HIS:CD2	25:23:53:LEU:HG	2.45	0.52
32:2a:1106:G:H5''	34:2c:172:ARG:HB3	1.91	0.52
34:2c:150:LYS:HG3	34:2c:169:ALA:HB2	1.89	0.52
40:2i:31:GLN:HE21	40:2i:36:TYR:HD1	1.56	0.52
54:2w:11:C:N4	54:2w:24:G:H1	2.05	0.52
55:2x:47:U:N3	55:2x:50:U:OP1	2.42	0.52
1:1A:831:A:N6	3:1D:229:VAL:HG11	2.24	0.52
1:1A:964:A:N3	2:1B:80:U:O2'	2.35	0.52
1:1A:2147:G:N1	1:1A:2194:U:OP1	2.20	0.52
32:1a:262:A:C6	32:1a:263:A:C6	2.97	0.52
1:2A:981:A:N1	1:2A:2027:G:O2'	2.40	0.52
1:2A:2151:G:H2'	1:2A:2152:G:C8	2.44	0.52
4:2E:9:VAL:HG22	4:2E:25:VAL:HB	1.91	0.52
32:2a:25:C:H5'	32:2a:524:G:H1'	1.90	0.52
32:2a:986:A:H1'	50:2s:55:LYS:HA	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1190:G:O2'	34:2c:3:ASN:HB2	2.09	0.52
50:2s:28:LYS:HB3	50:2s:29:ARG:CB	2.39	0.52
1:1A:2661:U:H2'	1:1A:2662:U:C6	2.44	0.52
60:1A:4906:HOH:O	11:1P:39:LYS:HE3	2.09	0.52
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.44	0.52
33:1b:54:THR:HG21	33:1b:201:ILE:HD11	1.90	0.52
37:1f:76:ALA:O	37:1f:80:ARG:HG3	2.09	0.52
38:1g:113:GLU:HG2	38:1g:119:ARG:HG2	1.91	0.52
44:1m:87:TYR:O	44:1m:91:ARG:HG2	2.10	0.52
1:2A:1192:G:OP2	11:2P:17:LYS:NZ	2.43	0.52
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.25	0.52
1:2A:2303:G:O2'	6:2G:132:ASN:HB2	2.09	0.52
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.99	0.52
7:2H:33:LEU:HD11	7:2H:136:ILE:HG22	1.90	0.52
9:2N:42:TRP:HA	9:2N:48:MET:HE1	1.91	0.52
1:1A:941:U:O2'	1:1A:942:A:OP1	2.23	0.52
1:1A:1320:A:N3	1:1A:1343:C:H1'	2.24	0.52
1:1A:1425:A:H4'	1:1A:1426:G:OP2	2.09	0.52
1:1A:1823:G:O2'	1:1A:1861:C:OP1	2.25	0.52
32:1a:78:G:N2	32:1a:91:C:N3	2.57	0.52
32:1a:148:G:H2'	32:1a:149:A:C8	2.40	0.52
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.45	0.52
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.27	0.52
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.09	0.52
1:2A:928:G:H8	1:2A:928:G:O5'	1.92	0.52
1:2A:1345:C:OP2	60:2A:4866:HOH:O	2.19	0.52
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.24	0.52
1:2A:2128:C:N3	1:2A:2160:G:O6	2.43	0.52
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.08	0.52
21:2Z:73:GLN:O	21:2Z:87:ASP:N	2.34	0.52
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.45	0.52
45:2n:47:LEU:HB3	45:2n:52:GLN:HB2	1.92	0.52
1:1A:1613:A:OP1	3:1D:211:ARG:NH1	2.43	0.52
1:1A:2429:C:OP1	11:1P:65:ARG:NH2	2.43	0.52
26:14:61:ARG:HG3	26:14:62:ARG:N	2.24	0.52
32:1a:1060:C:OP1	45:1n:45:ARG:NH2	2.40	0.52
54:1w:22:G:N7	54:1w:46:7MG:N2	2.53	0.52
54:1y:51:U:H2'	54:1y:52:G:C8	2.45	0.52
19:2X:94:GLY:H	19:2X:95:LEU:HA	1.74	0.52
32:2a:21:G:H2'	32:2a:22:G:C8	2.45	0.52
32:2a:353:A:H5'	32:2a:353:A:H8	1.73	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:375:U:O4	60:2a:3562:HOH:O	2.13	0.52
32:2a:1163:C:N4	32:2a:1173:G:H1	2.06	0.52
54:2y:14:A:O2'	54:2y:15:G:OP1	2.24	0.52
1:1A:123:G:N2	29:17:48:LYS:HG2	2.24	0.52
1:1A:1882:U:H2'	1:1A:1883:C:O4'	2.08	0.52
4:1E:111:ARG:HD2	4:1E:160:TYR:CD2	2.45	0.52
8:1I:5:LEU:HD11	8:1I:19:VAL:HG22	1.92	0.52
20:1Y:6:HIS:HE1	20:1Y:72:VAL:O	1.93	0.52
26:14:28:LYS:HE2	26:14:31:ILE:HD11	1.91	0.52
32:1a:1030:C:N4	32:1a:1031:G:H1	2.04	0.52
1:2A:1431:U:H2'	1:2A:1432:C:C6	2.44	0.52
1:2A:2144:U:O2'	1:2A:2147:G:O6	2.23	0.52
2:2B:75:G:N2	21:2Z:87:ASP:OD1	2.37	0.52
21:2Z:141:VAL:HG13	21:2Z:144:LEU:HB3	1.92	0.52
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.07	0.52
32:2a:674:G:H2'	32:2a:675:A:H8	1.75	0.52
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.45	0.52
32:2a:1137:C:H5''	32:2a:1138:G:OP1	2.10	0.52
32:2a:1315:U:O2'	32:2a:1360:A:N3	2.32	0.52
1:1A:2227:G:H3'	1:1A:2228:G:N7	2.24	0.52
32:1a:544:G:OP2	35:1d:66:ARG:NH2	2.43	0.52
41:1j:57:LYS:HE2	41:1j:60:ARG:NH2	2.25	0.52
1:2A:1231:G:H2'	1:2A:1232:G:C8	2.45	0.52
1:2A:1805:U:O2	3:2D:50:THR:HB	2.10	0.52
8:2I:110:ASP:N	8:2I:130:TYR:OH	2.35	0.52
14:2S:35:ILE:HG12	14:2S:101:LEU:HD12	1.90	0.52
33:2b:103:THR:HA	33:2b:180:LEU:HD11	1.92	0.52
1:1A:54:G:O2'	1:1A:125:A:N1	2.38	0.52
1:1A:1115:A:H1'	1:1A:1142:A:H4'	1.90	0.52
33:1b:95:GLN:OE1	33:1b:147:LYS:HG2	2.10	0.52
1:2A:728:G:C5'	3:2D:13:ARG:HH21	2.22	0.52
1:2A:2319:G:N2	14:2S:3:ARG:HD2	2.25	0.52
43:2l:86:ARG:HG3	43:2l:87:GLY:O	2.10	0.52
45:2n:47:LEU:O	45:2n:51:GLY:N	2.37	0.52
1:1A:2264:G:OP2	60:1A:5857:HOH:O	2.19	0.52
1:1A:2699:U:H2'	1:1A:2700:U:O4'	2.09	0.52
35:1d:65:ARG:HG2	35:1d:75:PHE:CD1	2.45	0.52
40:1i:3:GLN:HE21	40:1i:20:ARG:NH2	2.07	0.52
1:2A:184:C:H2'	1:2A:185:U:C6	2.45	0.52
1:2A:859:G:N2	1:2A:917:A:OP2	2.44	0.52
2:2B:30:C:H2'	2:2B:31:C:H5'	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:173:LEU:O	6:2G:178:PHE:N	2.37	0.52
32:2a:11:G:H1	32:2a:23:C:H42	1.58	0.52
32:2a:494:U:OP2	60:2a:3449:HOH:O	2.19	0.52
32:2a:863:U:O2'	32:2a:865:A:N7	2.42	0.52
32:2a:865:A:N3	32:2a:918:A:O2'	2.36	0.52
32:2a:1057:G:H2'	32:2a:1058:G:O4'	2.10	0.52
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.45	0.52
35:2d:15:GLU:OE2	35:2d:66:ARG:NH1	2.42	0.52
35:2d:172:PRO:HD2	35:2d:173:TRP:CZ3	2.44	0.52
1:1A:704:U:H2'	1:1A:705:C:C6	2.45	0.51
1:1A:1001:G:H5''	12:1Q:77:LYS:HD2	1.92	0.51
5:1F:135:LYS:HB2	5:1F:138:GLU:CD	2.35	0.51
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.25	0.51
32:1a:78:G:N2	32:1a:91:C:C2	2.78	0.51
32:1a:376:G:H5''	47:1p:5:ARG:CG	2.40	0.51
32:1a:1053:G:H4'	32:1a:1054:C:H5'	1.91	0.51
32:1a:1239:A:H62	32:1a:1299:A:N6	2.07	0.51
32:1a:1246:C:H42	32:1a:1291:G:H1	1.58	0.51
41:1j:17:ASP:OD1	41:1j:70:ARG:NE	2.44	0.51
1:2A:1116:C:H2'	1:2A:1117:G:C8	2.45	0.51
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.45	0.51
1:2A:2314:C:H2'	1:2A:2315:G:C8	2.44	0.51
1:2A:2483:C:N3	12:2Q:124:LYS:NZ	2.55	0.51
2:2B:20:C:H42	2:2B:63:G:H1	1.59	0.51
2:2B:87:G:N2	2:2B:90:A:OP2	2.36	0.51
3:2D:20:ASP:OD1	3:2D:20:ASP:N	2.35	0.51
24:22:65:ASN:OD1	24:22:69:ARG:NH1	2.43	0.51
32:2a:1004:A:N3	32:2a:1038:C:C2	2.77	0.51
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.45	0.51
32:2a:1329:A:H5''	44:2m:26:GLY:H	1.75	0.51
33:2b:118:LEU:HD13	33:2b:142:LEU:HB2	1.92	0.51
43:2l:24:VAL:HB	43:2l:27:LEU:HD22	1.91	0.51
1:1A:553:A:O2'	1:1A:554:A:H5'	2.10	0.51
10:1O:73:ASP:HB2	15:1T:82:LEU:HD13	1.92	0.51
26:14:44:THR:O	26:14:46:GLN:N	2.43	0.51
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	1.92	0.51
36:1e:33:VAL:HG21	36:1e:109:ILE:HA	1.92	0.51
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.75	0.51
40:1i:4:TYR:CE1	40:1i:88:TYR:HA	2.45	0.51
40:1i:21:PRO:HA	40:1i:59:PHE:HD1	1.75	0.51
44:1m:82:MET:O	44:1m:93:ARG:NH2	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:996:A:H1'	17:2V:9:GLY:O	2.10	0.51
55:2x:3:C:N4	55:2x:70:G:H1	2.06	0.51
1:1A:1141:A:C8	1:1A:1142:A:C8	2.98	0.51
1:1A:2518:U:O2'	54:1w:76:A:H4'	2.10	0.51
2:1B:25:A:OP2	60:1B:3134:HOH:O	2.19	0.51
12:1Q:16:ARG:HG3	12:1Q:18:LYS:HG3	1.93	0.51
19:1X:57:LEU:HA	60:1X:3101:HOH:O	2.11	0.51
24:12:7:ARG:O	24:12:11:GLU:HG3	2.11	0.51
32:1a:165:C:H2'	32:1a:166:G:C8	2.46	0.51
32:1a:406:G:N2	35:1d:119:GLN:HE22	2.08	0.51
54:1y:5:G:H1'	54:1y:69:G:N2	2.25	0.51
1:2A:77:C:OP1	24:22:59:ARG:HD3	2.10	0.51
1:2A:852:G:H2'	1:2A:853:G:H8	1.75	0.51
1:2A:2127:G:N2	1:2A:2161:C:N3	2.58	0.51
4:2E:1:MET:HE3	4:2E:199:ARG:HD2	1.93	0.51
15:2T:36:GLU:O	15:2T:39:ARG:HG2	2.11	0.51
19:2X:1:MET:H3	24:22:29:LYS:HE3	1.74	0.51
22:20:63:VAL:HG21	22:20:83:PRO:HG3	1.91	0.51
32:2a:572:A:OP1	60:2a:3361:HOH:O	2.19	0.51
32:2a:798:G:N7	60:2a:3535:HOH:O	2.34	0.51
32:2a:828:A:H2'	32:2a:829:G:O4'	2.10	0.51
34:2c:142:MET:HG3	34:2c:170:GLN:HB3	1.92	0.51
36:2e:144:THR:H	36:2e:147:ASP:HB2	1.75	0.51
1:1A:776:G:C6	3:1D:208:LYS:HB2	2.46	0.51
1:1A:831:A:C6	3:1D:229:VAL:HG11	2.45	0.51
1:1A:1832:G:OP2	3:1D:154:LYS:NZ	2.39	0.51
1:1A:2128:G:H1	1:1A:2205:C:N4	2.09	0.51
33:1b:97:TRP:HZ2	33:1b:102:LEU:HD13	1.75	0.51
41:1j:5:ARG:HH11	41:1j:71:LEU:HD21	1.76	0.51
54:1y:67:C:H2'	54:1y:68:C:C6	2.45	0.51
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.46	0.51
6:2G:106:LEU:O	6:2G:111:LEU:HD12	2.10	0.51
11:2P:84:ASN:OD1	11:2P:117:GLU:HB2	2.10	0.51
32:2a:701:C:OP1	32:2a:702:A:O2'	2.19	0.51
32:2a:975:A:N1	41:2j:48:THR:HB	2.25	0.51
32:2a:1010:G:N2	32:2a:1020:U:O2'	2.43	0.51
32:2a:1417:G:O6	60:2a:3547:HOH:O	2.18	0.51
40:2i:85:LEU:HB3	40:2i:92:TYR:HD2	1.75	0.51
54:2w:30:G:O6	54:2w:31:A:N6	2.44	0.51
4:1E:105:THR:OG1	4:1E:166:THR:OG1	2.22	0.51
32:1a:265:G:H2'	32:1a:267:C:H5	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:690:G:C6	32:1a:691:G:C6	2.98	0.51
1:2A:271(K):U:H4'	1:2A:271(L):U:OP2	2.09	0.51
1:2A:1019:U:H3	1:2A:1142(A):A:N6	2.07	0.51
1:2A:1349:A:OP1	60:2A:4475:HOH:O	2.19	0.51
1:2A:1364:G:P	23:21:3:LYS:HG3	2.51	0.51
1:2A:1853:A:N1	1:2A:2087:G:H1'	2.25	0.51
2:2B:24:G:O4'	2:2B:26:A:N6	2.35	0.51
6:2G:3:LEU:HD12	6:2G:8:LYS:NZ	2.25	0.51
32:2a:560:U:H4'	32:2a:561:U:O5'	2.10	0.51
40:2i:108:VAL:HG12	40:2i:109:VAL:H	1.76	0.51
50:2s:80:TYR:C	50:2s:82:GLY:H	2.18	0.51
5:1F:187:VAL:HG12	11:1P:3:LEU:HD12	1.92	0.51
28:16:10:LEU:HD13	28:16:19:ARG:HD3	1.91	0.51
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.32	0.51
33:1b:109:SER:HA	33:1b:112:VAL:HG13	1.92	0.51
36:1e:95:ALA:HB1	36:1e:96:PRO:HD2	1.91	0.51
54:1w:66:U:H1'	60:1w:211:HOH:O	2.11	0.51
1:2A:265:A:C8	1:2A:266:G:H1'	2.45	0.51
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.46	0.51
2:2B:24:G:N7	2:2B:56:G:H2'	2.25	0.51
19:2X:40:LYS:HG3	19:2X:51:VAL:HB	1.91	0.51
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.92	0.51
33:2b:76:GLN:HB2	33:2b:208:ILE:HD11	1.93	0.51
1:1A:1121:C:H2'	1:1A:1122:C:H5'	1.92	0.51
1:1A:1898:A:H2'	1:1A:1899:A:H8	1.76	0.51
1:1A:2801:C:O2'	1:1A:2819:A:N3	2.37	0.51
9:1N:21:LYS:NZ	9:1N:140:VAL:OXT	2.24	0.51
33:1b:101:MET:HA	33:1b:108:ILE:HG13	1.91	0.51
38:1g:22:LEU:HG	38:1g:62:PHE:HE2	1.76	0.51
1:2A:646:A:H2'	1:2A:647:G:O4'	2.11	0.51
1:2A:892:G:H3'	1:2A:893:C:H5''	1.93	0.51
1:2A:2394:C:N3	54:2y:76:A:O2'	2.35	0.51
32:2a:222:U:H2'	32:2a:223:U:C6	2.46	0.51
32:2a:977:A:O2'	32:2a:981:U:N3	2.44	0.51
36:2e:110:LEU:HD13	36:2e:118:ILE:HG21	1.92	0.51
39:2h:121:ASP:N	39:2h:121:ASP:OD1	2.44	0.51
1:1A:183:G:OP2	60:1A:4833:HOH:O	2.19	0.51
8:1I:27:ARG:HD3	23:11:71:TYR:CE2	2.45	0.51
10:1O:4:PRO:O	10:1O:5:GLN:HB2	2.10	0.51
33:1b:24:TRP:HZ3	33:1b:29:ALA:HB2	1.76	0.51
48:1q:26:GLN:HE21	48:1q:37:LYS:HE3	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2815:C:H2'	1:2A:2816:C:C6	2.46	0.51
6:2G:103:LEU:HA	6:2G:106:LEU:HB3	1.93	0.51
32:2a:731:G:OP2	60:2a:3607:HOH:O	2.19	0.51
32:2a:1368:G:OP1	40:2i:111:ARG:NH2	2.44	0.51
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.24	0.51
39:2h:10:LEU:HD22	39:2h:83:ILE:HD11	1.92	0.51
32:1a:952:U:H2'	32:1a:953:G:C8	2.45	0.51
37:1f:91:VAL:HG11	49:1r:72:ARG:NH1	2.25	0.51
50:1s:41:VAL:HG13	50:1s:43:GLU:H	1.75	0.51
1:2A:208:C:H2'	1:2A:209:C:C6	2.46	0.51
38:2g:79:ARG:HA	38:2g:83:ALA:O	2.11	0.51
54:2y:5:G:N2	54:2y:68:C:N3	2.49	0.51
1:1A:906:G:O2'	1:1A:962:G:O6	2.22	0.51
8:1I:76:THR:HG22	8:1I:141:LYS:HE2	1.93	0.51
20:1Y:7:VAL:HG21	20:1Y:72:VAL:HG12	1.92	0.51
32:1a:163:C:H2'	32:1a:164:U:C6	2.46	0.51
32:1a:943:U:H1'	40:1i:124:GLN:HE22	1.75	0.51
32:1a:1060:C:H5''	41:1j:51:ARG:HG2	1.92	0.51
34:1c:11:ARG:NH2	34:1c:177:THR:O	2.42	0.51
35:1d:111:ALA:HB2	35:1d:120:LEU:HD12	1.92	0.51
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.26	0.51
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.11	0.51
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.92	0.51
6:2G:173:LEU:HB3	6:2G:178:PHE:CG	2.46	0.51
32:2a:501:C:OP2	43:2l:124:LYS:NZ	2.38	0.51
32:2a:533:A:OP1	60:2a:3602:HOH:O	2.19	0.51
32:2a:1330:U:H4'	44:2m:23:TYR:CE1	2.45	0.51
51:2t:35:THR:O	51:2t:39:LYS:N	2.39	0.51
52:2u:3:LYS:HA	52:2u:10:ARG:HG3	1.93	0.51
1:1A:1085:G:H1	1:1A:1162:C:N4	2.07	0.50
1:1A:2053:A:N3	1:1A:2467:G:O2'	2.40	0.50
1:1A:2153:G:H5'	1:1A:2155:G:C8	2.46	0.50
3:1D:9:TYR:CZ	3:1D:13:ARG:HG2	2.45	0.50
7:1H:20:ALA:HB3	7:1H:23:ARG:HB2	1.92	0.50
32:1a:1004:A:H5''	32:1a:1024:G:H1	1.76	0.50
48:1q:56:VAL:HB	48:1q:78:GLU:HB3	1.92	0.50
1:2A:893:C:H2'	1:2A:894:C:C5	2.46	0.50
1:2A:2431:U:OP1	60:2A:4148:HOH:O	2.19	0.50
1:2A:2820:A:OP2	13:2R:2:ARG:NH2	2.44	0.50
21:2Z:77:ASP:N	21:2Z:82:ARG:O	2.34	0.50
32:2a:134:A:H61	47:2p:25:ARG:HH12	1.58	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:47:PHE:HE2	41:2j:65:LEU:HB2	1.76	0.50
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.93	0.50
43:2l:88:GLY:HA3	43:2l:99:HIS:HD2	1.75	0.50
48:2q:40:LYS:HD3	48:2q:42:TYR:OH	2.11	0.50
1:1A:1410:G:OP2	23:11:3:LYS:HG3	2.12	0.50
1:1A:2041:A:O4'	16:1U:34:LYS:HE3	2.11	0.50
1:1A:2163:G:C6	1:1A:2164:C:C2	3.00	0.50
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.91	0.50
15:1T:112:ARG:HG3	15:1T:115:ARG:NH2	2.26	0.50
32:1a:557:G:OP1	60:1a:1945:HOH:O	2.19	0.50
39:1h:81:HIS:N	39:1h:138:TRP:O	2.44	0.50
54:1y:23:A:H2'	54:1y:24:G:H8	1.76	0.50
1:2A:637:A:H5''	11:2P:117:GLU:HG2	1.94	0.50
1:2A:1607:C:H4'	1:2A:1608:A:O5'	2.11	0.50
1:2A:2185:C:H2'	1:2A:2186:G:O4'	2.11	0.50
1:2A:2318:G:H21	14:2S:3:ARG:NE	2.09	0.50
7:2H:24:VAL:HG13	7:2H:37:VAL:HG21	1.94	0.50
29:27:34:ARG:HG3	29:27:34:ARG:NH1	2.27	0.50
32:2a:271:C:H2'	32:2a:272:C:C6	2.46	0.50
32:2a:1157:A:H5'	32:2a:1158:C:C6	2.45	0.50
1:1A:964:A:H5''	2:1B:98:G:O2'	2.11	0.50
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.47	0.50
32:1a:236:G:H5''	48:1q:42:TYR:OH	2.10	0.50
32:1a:438:G:H4'	35:1d:123:HIS:CE1	2.47	0.50
32:1a:1111:A:N1	34:1c:177:THR:OG1	2.37	0.50
33:1b:213:LEU:HD22	33:1b:214:ILE:HD13	1.94	0.50
44:1m:3:ARG:HH22	44:1m:45:VAL:HG11	1.76	0.50
1:2A:731:C:H5''	60:2A:4876:HOH:O	2.11	0.50
1:2A:1270:C:H5''	1:2A:1271:G:O5'	2.11	0.50
1:2A:1335:U:OP1	19:2X:65:ARG:NH1	2.44	0.50
1:2A:2206:G:H5''	1:2A:2207:G:C8	2.46	0.50
1:2A:2357:U:OP1	22:20:20:ARG:NE	2.35	0.50
1:2A:2506:U:O2'	54:2w:76:A:H4'	2.10	0.50
1:2A:2705:A:OP2	60:2A:4355:HOH:O	2.19	0.50
5:2F:150:GLY:HA2	5:2F:172:TRP:CE3	2.46	0.50
10:2O:10:VAL:HG21	10:2O:16:ALA:HB3	1.93	0.50
20:2Y:43:ASN:CG	20:2Y:65:ALA:HB3	2.37	0.50
32:2a:1099:G:OP2	33:2b:144:ARG:NH2	2.44	0.50
32:2a:1207:2MG:H2'	32:2a:1208:C:C6	2.46	0.50
32:2a:1251:A:N1	32:2a:1354:C:O2'	2.42	0.50
32:2a:1342:C:H2'	32:2a:1343:G:H8	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:236:G:H4'	1:1A:413:G:C5	2.47	0.50
32:1a:1008:C:O2	32:1a:1021:G:N1	2.35	0.50
38:1g:89:MET:SD	38:1g:155:ARG:HB2	2.52	0.50
3:2D:206:LEU:O	3:2D:211:ARG:HD3	2.12	0.50
4:2E:50:GLY:HA3	4:2E:75:VAL:HG11	1.94	0.50
6:2G:110:ALA:HB1	6:2G:140:ILE:HG22	1.93	0.50
10:2O:24:VAL:HG12	10:2O:33:ALA:HB2	1.93	0.50
32:2a:1003:G:H2'	32:2a:1004:A:O4'	2.12	0.50
32:2a:1116:C:H2'	32:2a:1117:G:H5''	1.94	0.50
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.26	0.50
33:2b:60:ASP:O	33:2b:64:ARG:HG2	2.11	0.50
1:1A:928:G:H3'	1:1A:929:G:H8	1.76	0.50
5:1F:150:GLY:HA2	5:1F:172:TRP:CE3	2.47	0.50
14:1S:19:LYS:HE2	14:1S:25:ARG:CZ	2.41	0.50
32:1a:1036:G:H5'	32:1a:1037:C:OP2	2.12	0.50
32:1a:1095:U:P	32:1a:1108:G:H1	2.34	0.50
33:1b:178:ARG:NH1	33:1b:196:LEU:O	2.44	0.50
39:1h:13:ILE:O	39:1h:17:THR:HG23	2.11	0.50
54:1y:18:G:O2'	54:1y:57:G:O6	2.29	0.50
1:2A:557:U:H2'	1:2A:558:G:H8	1.75	0.50
1:2A:746:A:H2'	1:2A:2612:C:H5''	1.93	0.50
1:2A:981:A:OP1	60:2A:4304:HOH:O	2.19	0.50
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.46	0.50
1:2A:1920:4OC:O5'	1:2A:1920:4OC:H6	2.11	0.50
1:2A:2145:C:O2'	1:2A:2147:G:N7	2.44	0.50
1:2A:2167:U:H3'	1:2A:2168:G:H21	1.77	0.50
1:2A:2749:A:H1'	7:2H:63:SER:HB3	1.93	0.50
5:2F:53:THR:HG22	5:2F:56:GLU:HG3	1.93	0.50
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	1.93	0.50
8:2I:102:SER:O	8:2I:106:GLY:N	2.40	0.50
32:2a:131:C:H2'	32:2a:132:C:C6	2.47	0.50
32:2a:202:U:H3'	32:2a:203:U:C5	2.46	0.50
52:2u:6:ARG:HE	52:2u:15:ARG:NH2	2.10	0.50
1:1A:599:U:H2'	1:1A:600:G:C8	2.46	0.50
1:1A:2143:G:H2'	1:1A:2144:U:C6	2.47	0.50
9:1N:30:ILE:HG22	9:1N:34:LEU:HD22	1.92	0.50
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.11	0.50
32:1a:376:G:P	47:1p:67:THR:HG21	2.52	0.50
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.47	0.50
39:1h:19:VAL:HG23	39:1h:21:LYS:HG2	1.94	0.50
1:2A:120:U:H5''	1:2A:122:G:OP2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:483:A:O2'	20:2Y:49:VAL:O	2.28	0.50
1:2A:947:G:H2'	1:2A:948:G:C8	2.47	0.50
1:2A:2319:G:H22	14:2S:3:ARG:HD2	1.76	0.50
1:2A:2342:C:O2'	1:2A:2374:C:OP1	2.29	0.50
1:2A:2438:U:O2'	1:2A:2440:C:OP1	2.26	0.50
2:2B:7:G:H5'	14:2S:29:PHE:CE2	2.46	0.50
11:2P:106:LEU:HD13	11:2P:112:LEU:HG	1.93	0.50
34:2c:152:ILE:HG12	34:2c:199:LYS:HB2	1.94	0.50
42:2k:85:ARG:HD3	42:2k:113:PRO:HD3	1.93	0.50
54:2w:5:G:H2'	54:2w:6:G:H8	1.77	0.50
1:1A:1814:A:H5'	1:1A:2620:G:H4'	1.94	0.50
1:1A:1874:C:H5'	3:1D:253:GLN:OE1	2.11	0.50
2:1B:41:U:H5	6:1G:70:VAL:H	1.59	0.50
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.77	0.50
6:1G:28:VAL:O	6:1G:31:VAL:HG13	2.11	0.50
8:1I:101:LEU:HG	8:1I:107:VAL:HG13	1.93	0.50
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.93	0.50
19:1X:31:HIS:NE2	60:1X:3103:HOH:O	2.35	0.50
27:15:40:LYS:NZ	27:15:44:THR:O	2.38	0.50
32:1a:277:C:OP1	48:1q:68:ARG:NH2	2.26	0.50
32:1a:1024:G:H2'	32:1a:1025:U:H5''	1.93	0.50
32:1a:1055:A:O2'	34:1c:161:GLU:O	2.29	0.50
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.94	0.50
1:2A:817:C:O2'	1:2A:839:U:H5''	2.11	0.50
1:2A:821:A:H2'	1:2A:946:G:H5''	1.93	0.50
1:2A:1153:C:H2'	1:2A:1154:G:O4'	2.12	0.50
1:2A:1218:C:N4	1:2A:1231:G:H1	2.08	0.50
1:2A:1991:U:H2'	1:2A:1992:G:H5''	1.92	0.50
1:2A:2315:G:H1'	6:2G:126:ASP:OD2	2.11	0.50
1:2A:2823:A:OP1	4:2E:159:HIS:NE2	2.45	0.50
4:2E:73:GLU:HG2	4:2E:74:PRO:HD2	1.94	0.50
21:2Z:23:LYS:HD3	21:2Z:40:ASP:HA	1.93	0.50
26:24:1:MET:HE2	26:24:6:HIS:CE1	2.46	0.50
32:2a:735:C:H2'	32:2a:736:C:H6	1.75	0.50
32:2a:1330:U:H4'	44:2m:23:TYR:CZ	2.47	0.50
32:2a:1406:U:H3'	32:2a:1407:5MC:HM53	1.92	0.50
33:2b:16:HIS:HB2	33:2b:204:ASN:CB	2.42	0.50
43:2l:84:LEU:HB2	43:2l:105:TYR:CE2	2.46	0.50
1:1A:922:G:H2'	1:1A:923:C:O4'	2.11	0.50
1:1A:1452:U:H2'	1:1A:1453:C:H6	1.76	0.50
1:1A:2376:C:H2'	1:1A:2377:G:O4'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2420:U:H2'	1:1A:2421:G:C8	2.47	0.50
32:1a:445:G:H2'	32:1a:446:G:C8	2.47	0.50
32:1a:739:C:HO2'	46:1o:42:HIS:HD1	1.60	0.50
41:1j:49:VAL:HG23	45:1n:41:ARG:HB2	1.94	0.50
1:2A:71:A:H5''	1:2A:73:A:C8	2.47	0.50
1:2A:863:A:H2'	1:2A:864:G:H8	1.77	0.50
1:2A:1459:G:OP2	60:2A:5251:HOH:O	2.19	0.50
3:2D:176:ARG:HG3	3:2D:176:ARG:O	2.11	0.50
6:2G:120:LEU:HD12	6:2G:178:PHE:HB3	1.93	0.50
27:25:52:TYR:HB3	27:25:57:VAL:HG21	1.94	0.50
32:2a:309:G:O2'	32:2a:607:A:N1	2.44	0.50
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.38	0.50
32:2a:978:A:O2'	32:2a:1322:C:N3	2.43	0.50
33:2b:186:ALA:HB3	33:2b:197:VAL:HG11	1.93	0.50
34:2c:180:ALA:HB1	34:2c:203:PHE:CE1	2.47	0.50
55:2x:23:C:H2'	55:2x:24:U:C6	2.47	0.50
1:1A:268:G:H4'	23:11:81:LYS:HG2	1.93	0.50
1:1A:2141:A:O2'	1:1A:2142:G:H5''	2.12	0.50
1:1A:2251:G:OP2	60:1A:5809:HOH:O	2.20	0.50
40:1i:46:ALA:HA	40:1i:78:LYS:HB2	1.94	0.50
2:2B:33:G:H5'	6:2G:2:PRO:HD3	1.94	0.50
12:2Q:65:PHE:HB2	12:2Q:105:GLU:HB2	1.93	0.50
32:2a:324:G:N7	60:2a:3432:HOH:O	2.35	0.50
32:2a:448:A:OP2	32:2a:485:G:N2	2.41	0.50
32:2a:660:G:H1	32:2a:745:C:H42	1.60	0.50
32:2a:833:U:H2'	32:2a:834:C:C6	2.47	0.50
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.30	0.50
32:2a:1049:U:C5	32:2a:1201:A:H5'	2.47	0.50
1:1A:1465:A:O2'	1:1A:1467:G:N7	2.41	0.49
1:1A:2661:U:H2'	1:1A:2662:U:H6	1.77	0.49
3:1D:206:LEU:O	3:1D:211:ARG:HD3	2.12	0.49
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	1.93	0.49
1:2A:1530:C:H1'	1:2A:1531:C:OP1	2.12	0.49
4:2E:101:ARG:HD3	4:2E:170:LEU:C	2.37	0.49
32:2a:993:G:O6	32:2a:1045:C:N4	2.35	0.49
32:2a:1309:G:OP1	44:2m:88:ARG:NH2	2.43	0.49
41:2j:6:ILE:HA	41:2j:97:GLU:O	2.12	0.49
43:2l:46:LYS:HG3	43:2l:92:0TD:CSB	2.42	0.49
1:1A:1546:G:H2'	1:1A:1547:C:C6	2.47	0.49
7:1H:41:MET:HE1	7:1H:54:ARG:HB3	1.95	0.49
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:29:TYR:OH	45:1n:54:PRO:O	2.24	0.49
38:1g:50:ILE:HD13	38:1g:125:MET:CG	2.38	0.49
40:1i:3:GLN:HE21	40:1i:20:ARG:HH21	1.59	0.49
1:2A:2025:C:H2'	1:2A:2026:C:C6	2.47	0.49
6:2G:106:LEU:O	6:2G:110:ALA:HB3	2.13	0.49
14:2S:15:ARG:O	14:2S:19:LYS:HG2	2.12	0.49
26:24:40:HIS:CE1	26:24:42:PHE:HB3	2.48	0.49
26:24:48:ARG:HG3	26:24:51:ASP:O	2.12	0.49
32:2a:1104:G:H4'	33:2b:111:ARG:HH21	1.77	0.49
32:2a:1151:A:O4'	41:2j:39:PRO:HB2	2.11	0.49
43:2l:70:ILE:HG12	43:2l:100:ILE:HD12	1.94	0.49
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.45	0.49
1:1A:929:G:H1	1:1A:940:C:N4	2.01	0.49
1:1A:2185:C:OP1	1:1A:2187:G:N2	2.45	0.49
20:1Y:98:VAL:HG12	20:1Y:105:ALA:HA	1.94	0.49
35:1d:116:GLN:NE2	35:1d:157:LEU:HD21	2.27	0.49
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.47	0.49
1:2A:1882:C:H5''	23:21:26:ARG:HH21	1.77	0.49
12:2Q:12:GLN:NE2	12:2Q:72:LYS:HG3	2.27	0.49
26:24:46:GLN:C	26:24:48:ARG:H	2.20	0.49
32:2a:989:C:H1'	32:2a:1016:A:H2	1.77	0.49
32:2a:1063:C:H3'	32:2a:1064:G:H2'	1.94	0.49
32:2a:1104:G:H4'	33:2b:111:ARG:NH2	2.27	0.49
32:2a:1242:C:H2'	32:2a:1243:C:O4'	2.12	0.49
33:2b:178:ARG:NH2	39:2h:74:PRO:HB3	2.27	0.49
34:2c:131:ARG:HE	34:2c:135:LYS:HE3	1.76	0.49
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.48	0.49
1:1A:1821:C:H5''	1:1A:1822:A:OP1	2.12	0.49
1:1A:1847:G:O2'	1:1A:1848:G:OP2	2.29	0.49
1:1A:2296:C:OP1	28:16:3:SER:OG	2.30	0.49
13:1R:44:LEU:HD22	13:1R:48:VAL:HG23	1.93	0.49
14:1S:34:HIS:O	14:1S:97:ARG:NH2	2.45	0.49
18:1W:71:VAL:HA	18:1W:107:LEU:HD12	1.93	0.49
32:1a:811:C:O2'	32:1a:901:A:N1	2.43	0.49
37:1f:97:PHE:N	49:1r:30:ASP:OD1	2.44	0.49
1:2A:32:C:N4	1:2A:33:U:O4	2.46	0.49
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.42	0.49
5:2F:133:ASN:N	5:2F:138:GLU:OE1	2.46	0.49
6:2G:3:LEU:HD22	26:24:25:TYR:CZ	2.46	0.49
6:2G:103:LEU:HD23	6:2G:106:LEU:HD23	1.93	0.49
7:2H:11:VAL:HG21	7:2H:50:VAL:HG23	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:5:LEU:HD11	8:2I:19:VAL:HG22	1.93	0.49
12:2Q:37:LEU:HD21	12:2Q:130:LYS:HE2	1.94	0.49
19:2X:4:ALA:HB1	19:2X:42:ALA:HA	1.94	0.49
32:2a:34:C:H2'	32:2a:35:G:C8	2.47	0.49
32:2a:1502:A:C8	32:2a:1505:G:N2	2.76	0.49
54:2y:65:G:H2'	54:2y:66:U:C6	2.47	0.49
32:1a:164:U:H2'	32:1a:165:C:H6	1.77	0.49
32:1a:737:A:H2'	32:1a:738:C:C6	2.47	0.49
32:1a:741:G:H2'	32:1a:742:G:O4'	2.13	0.49
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.46	0.49
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.94	0.49
1:2A:2490:G:H8	1:2A:2490:G:OP2	1.96	0.49
1:2A:2641:G:H5''	9:2N:76:SER:HB3	1.94	0.49
10:2O:86:ILE:HG22	10:2O:94:ARG:HD2	1.95	0.49
12:2Q:12:GLN:HE21	12:2Q:72:LYS:HG3	1.76	0.49
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.48	0.49
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.11	0.49
43:2l:77:LEU:HD21	43:2l:107:ALA:HB2	1.95	0.49
45:2n:6:LEU:O	45:2n:10:ALA:N	2.45	0.49
1:1A:64:C:H5'	19:1X:71:GLY:HA3	1.94	0.49
1:1A:1466:U:HO2'	1:1A:1467:G:P	2.34	0.49
1:1A:1495:G:H4'	1:1A:1589:A:OP1	2.12	0.49
1:1A:2262:G:OP1	12:1Q:85:LYS:NZ	2.45	0.49
1:1A:2339:A:H2'	1:1A:2340:A:C8	2.47	0.49
1:1A:2476:C:H1'	60:1A:5819:HOH:O	2.11	0.49
1:1A:2576:A:C2	1:1A:2659:U:H4'	2.47	0.49
10:1O:64:ARG:HB2	10:1O:79:PHE:CD2	2.47	0.49
18:1W:67:ASP:OD1	18:1W:67:ASP:N	2.45	0.49
32:1a:841:U:OP1	32:1a:841:U:H6	1.96	0.49
32:1a:1302:U:C5	44:1m:17:VAL:HG21	2.46	0.49
35:1d:11:LEU:HD23	35:1d:66:ARG:HB3	1.95	0.49
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.47	0.49
38:1g:47:CYS:HA	38:1g:50:ILE:HG22	1.93	0.49
54:1y:68:C:H2'	54:1y:69:G:H5''	1.95	0.49
1:2A:456:C:H4'	60:2A:5139:HOH:O	2.11	0.49
2:2B:32:C:H42	2:2B:50:G:H1	1.59	0.49
6:2G:136:ARG:HA	6:2G:154:GLY:HA3	1.93	0.49
15:2T:127:ALA:C	15:2T:129:ARG:H	2.20	0.49
27:25:6:VAL:HG12	60:25:5001:HOH:O	2.13	0.49
32:2a:757:U:H2'	32:2a:758:G:O4'	2.13	0.49
32:2a:936:C:H2'	32:2a:937:A:O4'	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1353:G:OP1	52:2u:10:ARG:NH1	2.46	0.49
40:2i:85:LEU:HB3	40:2i:92:TYR:CD2	2.48	0.49
54:2w:72:C:H2'	54:2w:73:A:H8	1.77	0.49
1:1A:510:C:H2'	1:1A:511:C:C6	2.48	0.49
1:1A:1639:G:H2'	1:1A:1640:G:C8	2.48	0.49
1:1A:1809:U:H2'	1:1A:1815:A:N6	2.27	0.49
1:1A:2255:U:H2'	1:1A:2256:U:C6	2.48	0.49
1:1A:2588:G:H1'	60:1A:4548:HOH:O	2.11	0.49
1:1A:2897:U:H2'	1:1A:2898:C:H6	1.78	0.49
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.45	0.49
7:1H:88:LEU:HD23	7:1H:130:ARG:HG2	1.94	0.49
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.45	0.49
1:2A:82:G:N1	1:2A:103:A:OP2	2.37	0.49
1:2A:1021:A:H8	1:2A:1021:A:H3'	1.77	0.49
1:2A:1155:A:H5''	16:2U:55:ARG:NH1	2.25	0.49
1:2A:2121:G:H1	1:2A:2177:C:H42	1.59	0.49
1:2A:2893:G:H5''	1:2A:2894:G:O4'	2.12	0.49
4:2E:2:LYS:HB2	4:2E:95:ILE:HD12	1.95	0.49
32:2a:1073:U:H2'	32:2a:1074:G:H8	1.78	0.49
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.48	0.49
41:2j:7:LYS:HG2	41:2j:71:LEU:HD13	1.95	0.49
48:2q:57:VAL:HG12	48:2q:76:LEU:HA	1.95	0.49
1:1A:1106:U:N3	1:1A:1108:G:O2'	2.43	0.49
1:1A:1952:G:O2'	1:1A:1990:G:O6	2.31	0.49
34:1c:110:ASN:O	34:1c:141:VAL:HG22	2.13	0.49
37:1f:99:ALA:HB1	49:1r:23:LYS:NZ	2.28	0.49
48:1q:26:GLN:HG2	48:1q:37:LYS:HG2	1.94	0.49
54:1y:38:A:H2'	54:1y:39:PSU:O4'	2.12	0.49
1:2A:127:A:H5''	1:2A:128:C:C6	2.47	0.49
1:2A:141:A:C8	1:2A:1408:C:O2'	2.65	0.49
1:2A:1224:C:O2	17:2V:85:LYS:NZ	2.45	0.49
1:2A:2785:C:O2'	4:2E:66:HIS:ND1	2.43	0.49
6:2G:97:ASP:HA	6:2G:100:TRP:HD1	1.78	0.49
9:2N:38:HIS:CE1	9:2N:39:ARG:HG3	2.48	0.49
26:24:7:PRO:HB2	26:24:27:THR:HG21	1.95	0.49
26:24:34:GLU:HA	44:2m:57:ARG:NH1	2.28	0.49
26:24:53:GLU:HG2	26:24:54:GLY:H	1.77	0.49
32:2a:1030(A):G:N2	32:2a:1030(D):A:OP2	2.45	0.49
32:2a:1360:A:H8	32:2a:1360:A:OP1	1.96	0.49
34:2c:119:ARG:HE	34:2c:140:ARG:HH21	1.61	0.49
41:2j:47:PHE:N	41:2j:63:PHE:O	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1109:G:O2'	1:1A:1122:C:N4	2.46	0.49
1:1A:1128:U:C4	1:1A:1132:A:N1	2.74	0.49
1:1A:1676:G:H2'	1:1A:1677:C:C6	2.48	0.49
1:1A:2642:G:H2'	1:1A:2643:G:H8	1.78	0.49
6:1G:146:TYR:O	6:1G:149:VAL:HG12	2.13	0.49
21:1Z:153:SER:HB3	21:1Z:167:PRO:HB3	1.95	0.49
32:1a:536:C:OP2	60:1a:2236:HOH:O	2.20	0.49
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.48	0.49
37:1f:45:LEU:HD12	37:1f:59:TYR:HD1	1.78	0.49
50:1s:41:VAL:HG12	50:1s:44:MET:HG3	1.93	0.49
1:2A:588:U:H2'	1:2A:589:C:C6	2.48	0.49
1:2A:1263:U:H2'	1:2A:1264:G:C8	2.47	0.49
1:2A:2171:A:N3	1:2A:2172:U:N3	2.61	0.49
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.48	0.49
1:2A:2882:A:H5'	13:2R:96:ARG:HG3	1.95	0.49
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.94	0.49
4:2E:7:VAL:HG12	4:2E:27:LEU:HB3	1.95	0.49
4:2E:52:LEU:O	4:2E:76:ARG:N	2.28	0.49
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	1.95	0.49
15:2T:39:ARG:NH2	32:2a:345:C:OP2	2.38	0.49
26:24:58:ARG:HG3	50:2s:67:VAL:HB	1.95	0.49
32:2a:443:C:H2'	32:2a:444:C:C6	2.48	0.49
32:2a:585:G:O2'	32:2a:879:C:OP1	2.28	0.49
32:2a:664:G:N2	32:2a:741:G:H1	2.05	0.49
32:2a:1048:G:N2	32:2a:1214:C:O2	2.42	0.49
32:2a:1120:G:C6	32:2a:1121:U:C4	3.00	0.49
32:2a:1275:A:H3'	32:2a:1276:G:H8	1.78	0.49
33:2b:74:LYS:HG2	33:2b:169:LYS:HG2	1.94	0.49
48:2q:45:HIS:CD2	48:2q:47:PRO:HD3	2.48	0.49
32:1a:1027:C:N4	32:1a:1034:G:N1	2.61	0.49
32:1a:1288:A:N3	32:1a:1352:C:O2'	2.43	0.49
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.30	0.49
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.37	0.49
1:2A:1019:U:H2'	1:2A:1020:A:H8	1.77	0.49
8:2I:122:GLU:O	8:2I:126:TYR:OH	2.28	0.49
9:2N:67:LEU:O	9:2N:88:GLU:HG3	2.13	0.49
12:2Q:118:LEU:HD12	12:2Q:131:ILE:HG23	1.95	0.49
20:2Y:56:PRO:C	20:2Y:58:GLY:H	2.20	0.49
21:2Z:92:SER:O	21:2Z:130:PRO:HG3	2.12	0.49
32:2a:596:C:N3	32:2a:644:G:N1	2.37	0.49
32:2a:1001:A:H2'	32:2a:1001(A):G:C8	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1208:C:H2'	32:2a:1209:C:H6	1.78	0.49
38:2g:69:VAL:HG11	38:2g:134:ALA:HB1	1.95	0.49
32:1a:567:G:N3	60:1a:1988:HOH:O	2.35	0.48
32:1a:1049:U:OP1	45:1n:3:ARG:HB3	2.13	0.48
38:1g:111:ARG:HG2	38:1g:112:PRO:HD2	1.94	0.48
41:1j:40:LEU:HB2	41:1j:69:ASN:CB	2.43	0.48
44:1m:3:ARG:HG3	44:1m:4:ILE:HG22	1.94	0.48
1:2A:7:G:H4'	9:2N:13:TRP:CZ2	2.48	0.48
1:2A:222:A:H5''	1:2A:421:U:OP1	2.13	0.48
1:2A:1235:G:C6	1:2A:1236:G:N1	2.81	0.48
32:2a:107:G:H2'	32:2a:108:G:O4'	2.13	0.48
32:2a:1207:2MG:H2'	32:2a:1208:C:H6	1.77	0.48
33:2b:124:SER:HB3	33:2b:125:PRO:HD3	1.95	0.48
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.13	0.48
44:2m:30:ALA:O	44:2m:34:LEU:HG	2.13	0.48
51:2t:56:MET:HE3	51:2t:85:MET:HG2	1.95	0.48
54:2w:19:G:N2	54:2w:56:C:N3	2.52	0.48
8:1I:77:LEU:HD21	8:1I:100:ALA:HB1	1.96	0.48
9:1N:114:ARG:HD3	60:1N:303:HOH:O	2.12	0.48
10:1O:64:ARG:HD2	10:1O:81:ASP:OD1	2.13	0.48
32:1a:984:C:H42	32:1a:1221:G:H1	1.60	0.48
32:1a:1164:G:H2'	32:1a:1165:C:C6	2.48	0.48
35:1d:3:ARG:HG3	35:1d:5:ILE:HG23	1.95	0.48
45:1n:6:LEU:HB3	45:1n:23:ARG:NH2	2.28	0.48
1:2A:253:C:OP2	30:28:5:LYS:NZ	2.40	0.48
1:2A:601:C:O2	1:2A:605:C:H4'	2.12	0.48
1:2A:816:C:H2'	1:2A:817:C:H6	1.78	0.48
1:2A:855:G:H1	1:2A:922:U:H3	1.59	0.48
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.48	0.48
1:2A:2846:G:H2'	1:2A:2847:U:O4'	2.13	0.48
6:2G:39:ILE:HG12	6:2G:157:ILE:HG12	1.95	0.48
9:2N:33:LEU:HA	9:2N:38:HIS:HD2	1.77	0.48
30:28:6:THR:HG22	30:28:63:PRO:HD2	1.94	0.48
32:2a:137:C:H2'	32:2a:138:G:H8	1.79	0.48
32:2a:194:C:H2'	32:2a:195:A:H5''	1.95	0.48
32:2a:235:C:N4	60:2a:3311:HOH:O	2.46	0.48
32:2a:947:G:H1	32:2a:1234:C:N4	2.10	0.48
33:2b:84:GLU:HB3	33:2b:219:VAL:HG21	1.94	0.48
33:2b:185:ILE:HG22	33:2b:199:TYR:HB2	1.95	0.48
54:2y:10:G:O2'	60:2y:3108:HOH:O	2.20	0.48
54:2y:36:A:H2'	54:2y:37:MIA:O4'	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1112:U:H2'	1:1A:1114:G:OP2	2.13	0.48
1:1A:2153:G:H5''	1:1A:2154:U:H3'	1.94	0.48
5:1F:24:LEU:HD23	5:1F:115:ALA:HA	1.95	0.48
12:1Q:111:GLU:O	12:1Q:115:MET:HG2	2.13	0.48
32:1a:191:G:N2	51:1t:102:GLY:O	2.44	0.48
32:1a:406:G:H21	35:1d:119:GLN:HE22	1.60	0.48
35:1d:76:ARG:O	35:1d:80:GLU:HG2	2.12	0.48
1:2A:531:C:OP1	1:2A:561:G:N2	2.47	0.48
1:2A:1912:A:OP1	60:2A:4443:HOH:O	2.19	0.48
5:2F:20:LEU:HD23	5:2F:22:ALA:HB2	1.95	0.48
21:2Z:33:LEU:HD11	21:2Z:90:VAL:HG21	1.96	0.48
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.48	0.48
34:2c:42:LEU:HA	34:2c:45:LYS:NZ	2.29	0.48
37:2f:3:ARG:HD3	37:2f:64:GLN:NE2	2.28	0.48
1:1A:1817:A:H1'	1:1A:1960:A:N6	2.28	0.48
1:1A:2298:A:H4'	1:1A:2299:A:O4'	2.13	0.48
1:1A:2849:G:H5'	13:1R:46:GLY:HA2	1.94	0.48
4:1E:47:VAL:HG11	4:1E:86:PRO:HD2	1.94	0.48
1:2A:250:G:C6	1:2A:251:A:C6	3.02	0.48
1:2A:1021:A:H3'	1:2A:1021:A:C8	2.48	0.48
1:2A:1580:A:H3'	1:2A:1581:G:C8	2.48	0.48
32:2a:684:A:H1'	42:2k:39:PRO:HD2	1.96	0.48
32:2a:1183:A:O2'	32:2a:1184:G:OP1	2.25	0.48
33:2b:166:ASP:HB3	33:2b:169:LYS:HB3	1.96	0.48
38:2g:126:ASP:HB3	38:2g:131:LYS:HB2	1.94	0.48
1:1A:174:U:H4'	1:1A:207:A:H4'	1.96	0.48
1:1A:1688:A:H2'	1:1A:1689:G:O4'	2.12	0.48
1:1A:1921:G:N3	1:1A:1921:G:H2'	2.27	0.48
2:1B:48:A:H4'	14:1S:95:HIS:HD2	1.77	0.48
32:1a:176:C:H2'	32:1a:177:C:C6	2.48	0.48
32:1a:222:U:H2'	32:1a:223:U:C6	2.48	0.48
55:1x:19:G:H4'	55:1x:20:U:OP2	2.12	0.48
1:2A:557:U:H2'	1:2A:558:G:C8	2.49	0.48
1:2A:855:G:C6	1:2A:856:C:N4	2.82	0.48
1:2A:1292:U:H2'	1:2A:1293:C:C6	2.48	0.48
4:2E:111:ARG:HD2	4:2E:160:TYR:CD2	2.47	0.48
5:2F:28:ILE:HG23	5:2F:112:MET:HE3	1.95	0.48
7:2H:118:PRO:HG2	7:2H:121:ILE:HG13	1.95	0.48
16:2U:76:TYR:CZ	16:2U:80:ILE:HG13	2.49	0.48
32:2a:8:A:C6	35:2d:209:ARG:HB2	2.47	0.48
32:2a:1150:U:H4'	41:2j:41:PRO:HG3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.47	0.48
33:2b:16:HIS:CB	33:2b:210:SER:HB2	2.40	0.48
33:2b:101:MET:HA	33:2b:108:ILE:HG13	1.95	0.48
1:1A:310:C:H2'	1:1A:311:C:H6	1.79	0.48
1:1A:1793:A:H2'	60:1A:5028:HOH:O	2.14	0.48
1:1A:1857:G:H4'	3:1D:242:ARG:NE	2.27	0.48
16:1U:59:ARG:HD3	60:1U:305:HOH:O	2.13	0.48
32:1a:266:G:O3'	48:1q:67:LYS:HB2	2.13	0.48
32:1a:659:U:H2'	32:1a:660:G:H8	1.79	0.48
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.14	0.48
40:1i:49:PRO:HD3	40:1i:78:LYS:HG3	1.95	0.48
55:1x:68:C:H2'	55:1x:69:C:C6	2.49	0.48
1:2A:2117:A:O2'	1:2A:2118:U:H5''	2.14	0.48
1:2A:2137:C:N3	1:2A:2155:G:C6	2.82	0.48
2:2B:58:A:H2'	2:2B:59:A:O4'	2.14	0.48
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.44	0.48
10:2O:73:ASP:HB2	15:2T:82:LEU:CD1	2.43	0.48
16:2U:113:ALA:O	16:2U:117:GLN:HG2	2.14	0.48
18:2W:18:ARG:NH1	18:2W:76:VAL:O	2.47	0.48
18:2W:71:VAL:HA	18:2W:107:LEU:HD12	1.95	0.48
19:2X:57:LEU:HD22	19:2X:78:LYS:HE2	1.95	0.48
20:2Y:38:ILE:HD13	20:2Y:66:PRO:HA	1.96	0.48
21:2Z:138:GLU:H	21:2Z:156:LYS:HE2	1.79	0.48
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.78	0.48
32:2a:404:U:H2'	32:2a:405:U:C6	2.48	0.48
33:2b:149:LEU:O	33:2b:153:ARG:N	2.42	0.48
40:2i:21:PRO:HA	40:2i:59:PHE:HD1	1.79	0.48
44:2m:4:ILE:HG23	44:2m:5:ALA:H	1.79	0.48
44:2m:73:GLU:O	44:2m:77:ASN:ND2	2.46	0.48
49:2r:32:ARG:NE	60:2r:5001:HOH:O	2.46	0.48
1:1A:1785:C:OP1	15:1T:96:ARG:NH1	2.46	0.48
1:1A:2255:U:OP1	60:1A:4235:HOH:O	2.20	0.48
1:1A:2304:C:H2'	1:1A:2305:C:H6	1.78	0.48
8:1I:86:THR:HG22	8:1I:122:GLU:OE1	2.13	0.48
24:12:22:GLU:OE2	24:12:68:ARG:NH2	2.45	0.48
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.14	0.48
32:1a:1326:C:OP1	52:1u:12:LYS:NZ	2.35	0.48
41:1j:31:GLY:HA2	41:1j:32:ALA:O	2.13	0.48
1:2A:141:A:H8	1:2A:1408:C:HO2'	1.57	0.48
1:2A:471:A:H2'	1:2A:472:A:O4'	2.13	0.48
1:2A:652(U):G:H2'	1:2A:652(V):C:O4'	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:670:A:H4'	1:2A:671:C:O5'	2.14	0.48
1:2A:1151:G:H4'	16:2U:81:HIS:ND1	2.29	0.48
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.77	0.48
1:2A:2218:U:H1'	23:21:52:ARG:HH12	1.78	0.48
2:2B:11:C:H3'	2:2B:12:C:C6	2.49	0.48
2:2B:55:U:H1'	6:2G:29:TRP:CD1	2.44	0.48
12:2Q:125:LEU:C	12:2Q:127:ILE:H	2.22	0.48
14:2S:34:HIS:O	14:2S:97:ARG:NH2	2.44	0.48
26:24:46:GLN:HE21	26:24:48:ARG:HD3	1.78	0.48
32:2a:909:A:N3	32:2a:1413:A:O2'	2.38	0.48
32:2a:1179:A:H4'	40:2i:103:THR:HA	1.96	0.48
34:2c:18:TRP:HE3	34:2c:18:TRP:H	1.62	0.48
36:2e:71:LEU:O	36:2e:72:GLN:NE2	2.44	0.48
39:2h:29:SER:HB3	39:2h:32:LYS:CG	2.43	0.48
43:2l:71:PRO:O	43:2l:102:ARG:HD2	2.14	0.48
45:2n:27:CYS:SG	45:2n:28:GLY:N	2.87	0.48
45:2n:37:PHE:HE2	45:2n:53:LEU:HD13	1.78	0.48
1:1A:2545:A:H2'	1:1A:2546:A:O4'	2.14	0.48
32:1a:1070:U:H2'	32:1a:1071:C:C6	2.49	0.48
46:1o:39:LEU:HB3	46:1o:56:LEU:HD13	1.95	0.48
1:2A:251:A:C5	1:2A:252:G:H1'	2.48	0.48
1:2A:555:U:O2'	1:2A:556:G:N7	2.43	0.48
1:2A:848:G:C4	1:2A:933:A:H8	2.32	0.48
1:2A:1899:G:O2'	1:2A:1900:A:OP2	2.28	0.48
1:2A:2674:G:H2'	1:2A:2675:A:C8	2.49	0.48
2:2B:75:G:H1	21:2Z:73:GLN:HE22	1.60	0.48
2:2B:75:G:H1	21:2Z:73:GLN:NE2	2.12	0.48
16:2U:28:ARG:NH1	16:2U:38:THR:OG1	2.41	0.48
29:27:12:ARG:NH2	29:27:44:PRO:HB3	2.28	0.48
32:2a:1122:U:H2'	32:2a:1123:A:C8	2.48	0.48
34:2c:199:LYS:HB3	34:2c:201:TYR:HE2	1.79	0.48
36:2e:39:GLY:HA2	36:2e:71:LEU:HD13	1.96	0.48
37:2f:67:MET:HE1	37:2f:75:LEU:HD22	1.95	0.48
38:2g:57:GLU:HG3	38:2g:60:LYS:H	1.78	0.48
47:2p:22:THR:HA	47:2p:33:ILE:HG13	1.96	0.48
49:2r:45:SER:HB3	49:2r:51:LEU:HD21	1.95	0.48
54:2y:6:G:H1	54:2y:67:C:N4	2.11	0.48
1:1A:768:C:H2'	1:1A:769:A:C8	2.48	0.48
1:1A:1099:C:C4	1:1A:1100:A:C8	3.02	0.48
21:1Z:45:ASP:O	21:1Z:49:ARG:HG3	2.13	0.48
32:1a:130:A:O2'	32:1a:131:C:O5'	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:19:HIS:CD2	33:1b:20:GLU:HG3	2.49	0.48
36:1e:148:VAL:HG11	36:1e:152:ARG:HH21	1.78	0.48
1:2A:90:U:H1'	1:2A:92:A:C8	2.49	0.48
1:2A:392:C:H5''	1:2A:409:C:H5''	1.96	0.48
1:2A:1567:A:OP2	3:2D:84:TYR:OH	2.20	0.48
1:2A:1721:G:H8	1:2A:1741:A:H62	1.61	0.48
1:2A:2095:C:H2'	1:2A:2096:U:O4'	2.14	0.48
1:2A:2193:G:H2'	1:2A:2194:G:H8	1.79	0.48
1:2A:2238:G:H5''	60:2A:5271:HOH:O	2.14	0.48
7:2H:106:THR:HG22	7:2H:112:PRO:HB3	1.95	0.48
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.77	0.48
32:2a:560:U:H5'	32:2a:566:G:H22	1.78	0.48
32:2a:620:C:H5''	60:2a:3373:HOH:O	2.14	0.48
41:2j:49:VAL:CG2	45:2n:41:ARG:HB2	2.38	0.48
1:1A:441:C:H2'	1:1A:442:A:C8	2.49	0.48
1:1A:1210:G:H2'	1:1A:1211:U:C6	2.49	0.48
3:1D:218:ARG:HB3	3:1D:219:PRO:HD2	1.96	0.48
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.62	0.48
19:1X:94:GLY:CA	19:1X:95:LEU:HB2	2.44	0.48
32:1a:19:C:O2'	32:1a:572:A:N1	2.47	0.48
32:1a:271:C:H2'	32:1a:272:C:C6	2.49	0.48
32:1a:642:A:N3	39:1h:113:SER:OG	2.35	0.48
32:1a:1429:C:H2'	32:1a:1430:C:H6	1.78	0.48
36:1e:152:ARG:NH2	39:1h:107:LEU:O	2.47	0.48
43:1l:88:GLY:HA3	43:1l:99:HIS:HD2	1.78	0.48
1:2A:74:A:H5'	1:2A:75:G:O4'	2.14	0.48
1:2A:332:A:O2'	1:2A:334:C:OP2	2.26	0.48
1:2A:445:C:OP1	16:2U:2:PRO:HA	2.13	0.48
1:2A:1794:U:H2'	1:2A:1795:C:H6	1.79	0.48
1:2A:2152:G:C2	1:2A:2153:G:H1'	2.49	0.48
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.14	0.48
4:2E:111:ARG:HD2	4:2E:160:TYR:CE2	2.49	0.48
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.43	0.48
14:2S:62:LYS:O	14:2S:66:ALA:N	2.44	0.48
19:2X:60:ARG:HH22	29:27:47:ARG:HH12	1.62	0.48
21:2Z:154:ASP:OD1	21:2Z:154:ASP:N	2.37	0.48
23:21:50:ARG:HD2	23:21:57:GLU:OE2	2.14	0.48
32:2a:662:G:H2'	32:2a:663:A:H8	1.79	0.48
32:2a:1055:A:H62	32:2a:1200:C:N4	2.11	0.48
32:2a:1271:G:C2	32:2a:1272:G:N7	2.81	0.48
32:2a:1318:A:OP1	50:2s:3:ARG:NH2	2.41	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:909:G:H2'	1:1A:910:A:O4'	2.14	0.47
1:1A:2180:A:HO2'	1:1A:2181:G:P	2.37	0.47
2:1B:88:C:H2'	2:1B:89:G:O4'	2.14	0.47
3:1D:20:ASP:OD1	3:1D:20:ASP:N	2.40	0.47
6:1G:7:LEU:HD21	6:1G:176:LEU:HD22	1.96	0.47
32:1a:407:G:H5''	35:1d:115:ARG:CG	2.44	0.47
32:1a:973:G:H3'	32:1a:974:A:H5''	1.96	0.47
34:1c:131:ARG:HH11	34:1c:166:GLU:HG3	1.79	0.47
38:1g:15:ASP:OD1	38:1g:20:ASP:N	2.34	0.47
54:1y:14:A:N6	54:1y:15:G:C6	2.82	0.47
1:2A:2165:G:H2'	1:2A:2166:G:O4'	2.13	0.47
1:2A:2192:G:H5'	1:2A:2193:G:OP2	2.14	0.47
2:2B:68:C:H2'	2:2B:69:G:H8	1.78	0.47
7:2H:73:ALA:O	7:2H:76:VAL:HG22	2.14	0.47
32:2a:1075:C:OP1	33:2b:179:LYS:NZ	2.26	0.47
1:1A:721:G:O2'	5:1F:74:ARG:HD3	2.14	0.47
1:1A:1154:U:H2'	1:1A:1155:C:O4'	2.14	0.47
5:1F:150:GLY:HA2	5:1F:172:TRP:CD2	2.48	0.47
11:1P:43:GLY:HA3	60:1P:303:HOH:O	2.13	0.47
14:1S:43:GLU:OE2	22:10:49:LYS:NZ	2.47	0.47
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.79	0.47
30:18:23:VAL:CG1	30:18:47:LYS:HD3	2.44	0.47
32:1a:192:U:H2'	32:1a:193:C:H6	1.79	0.47
32:1a:353:A:H5'	32:1a:353:A:H8	1.78	0.47
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.49	0.47
55:1x:4:G:H2'	55:1x:5:G:C8	2.49	0.47
1:2A:75:G:H4'	24:22:55:ARG:NH1	2.29	0.47
1:2A:563:G:H21	16:2U:37:GLU:CD	2.22	0.47
1:2A:906:G:HO2'	12:2Q:67:ARG:HH21	1.58	0.47
1:2A:1790:C:H5''	1:2A:1791:A:OP1	2.14	0.47
1:2A:1968:G:OP1	60:2A:5052:HOH:O	2.20	0.47
1:2A:2498:C:H3'	60:2A:4650:HOH:O	2.13	0.47
1:2A:2529:G:O6	31:29:31:LYS:NZ	2.47	0.47
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.13	0.47
5:2F:202:PHE:O	5:2F:206:ILE:HG12	2.13	0.47
32:2a:473:G:H2'	32:2a:474:G:H8	1.79	0.47
32:2a:587:G:N1	32:2a:754:C:OP2	2.45	0.47
32:2a:1030:C:N3	32:2a:1031:G:N2	2.57	0.47
32:2a:1352:C:H2'	32:2a:1353:G:C8	2.49	0.47
33:2b:24:TRP:CZ3	33:2b:26:PRO:HA	2.49	0.47
33:2b:81:VAL:HB	33:2b:94:ASN:HD21	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:173:TRP:CD1	35:2d:189:PRO:HG3	2.49	0.47
4:1E:24:THR:HG22	4:1E:186:GLY:O	2.13	0.47
32:1a:171:A:H2'	32:1a:172:A:C8	2.48	0.47
32:1a:1030:C:N4	32:1a:1031:G:N1	2.49	0.47
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.79	0.47
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.38	0.47
35:1d:88:VAL:HG22	36:1e:97:GLY:HA2	1.95	0.47
36:1e:78:HIS:HD2	39:1h:104:ARG:HD2	1.78	0.47
1:2A:492:A:H2'	1:2A:493:G:O4'	2.14	0.47
1:2A:1005:C:C2	1:2A:1143:A:C6	3.02	0.47
1:2A:2115:G:H4'	1:2A:2167:U:C4	2.49	0.47
32:2a:406:G:H21	35:2d:119:GLN:NE2	2.05	0.47
32:2a:999:C:H2'	32:2a:1000:U:O4'	2.14	0.47
55:2x:14:A:N6	55:2x:21:A:C2	2.80	0.47
1:1A:968:U:H2'	1:1A:969:C:C6	2.49	0.47
1:1A:1081:U:H2'	1:1A:1082:G:C8	2.49	0.47
7:1H:4:ILE:O	7:1H:69:ARG:HD2	2.14	0.47
1:2A:602:G:O2'	1:2A:655:A:N6	2.47	0.47
1:2A:872:A:H2'	1:2A:873:G:H8	1.78	0.47
1:2A:921:G:C6	1:2A:922:U:C4	3.02	0.47
1:2A:2144:U:H1'	1:2A:2148:G:H22	1.79	0.47
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.49	0.47
23:21:83:GLU:OE1	23:21:83:GLU:N	2.43	0.47
28:26:40:CYS:O	28:26:44:ARG:N	2.48	0.47
32:2a:707:C:H2'	32:2a:708:C:C6	2.49	0.47
32:2a:993:G:N3	32:2a:993:G:H2'	2.29	0.47
32:2a:1138:G:C6	32:2a:1140:C:H1'	2.48	0.47
32:2a:1151:A:O2'	32:2a:1152:A:H8	1.98	0.47
1:1A:2159:C:H2'	1:1A:2160:C:H6	1.80	0.47
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.72	0.47
8:1I:75:LEU:O	8:1I:141:LYS:NZ	2.47	0.47
32:1a:232:G:H1'	32:1a:262:A:N1	2.29	0.47
32:1a:1027:C:N3	32:1a:1034:G:N2	2.62	0.47
33:1b:87:ARG:NH2	33:1b:233:SER:HB3	2.29	0.47
41:1j:27:ALA:HB3	41:1j:34:VAL:HG11	1.96	0.47
48:1q:61:GLU:HA	48:1q:71:PHE:CD1	2.49	0.47
1:2A:910:A:N1	1:2A:2277:G:H1'	2.30	0.47
1:2A:1152:C:H2'	1:2A:1153:C:C6	2.49	0.47
2:2B:118:G:C2	2:2B:119:G:H1'	2.50	0.47
5:2F:40:GLN:NE2	5:2F:182:ASN:HB2	2.30	0.47
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2Q:12:GLN:HE21	12:2Q:73:PRO:HD2	1.80	0.47
21:2Z:151:HIS:ND1	21:2Z:168:GLU:O	2.47	0.47
32:2a:1320:C:H2'	32:2a:1321:C:O4'	2.15	0.47
54:2y:15:G:N1	54:2y:48:C:N3	2.53	0.47
1:1A:505:A:N3	1:1A:507:G:H5''	2.28	0.47
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.70	0.47
54:1y:67:C:H2'	54:1y:68:C:H6	1.78	0.47
1:2A:2630:G:H2'	1:2A:2631:G:H8	1.78	0.47
9:2N:25:ARG:O	9:2N:29:LYS:HE2	2.15	0.47
17:2V:4:ILE:HD12	17:2V:39:LEU:HB3	1.97	0.47
32:2a:269:C:H2'	32:2a:270:A:C8	2.49	0.47
32:2a:1086:U:H3	32:2a:1099:G:H22	1.61	0.47
34:2c:63:ASN:HB3	34:2c:98:ASN:HD22	1.79	0.47
40:2i:3:GLN:HE21	40:2i:20:ARG:NH2	2.13	0.47
50:2s:51:VAL:HB	50:2s:75:ALA:HB2	1.95	0.47
1:1A:662:A:H4'	1:1A:663:G:O5'	2.15	0.47
1:1A:2023:A:OP1	13:1R:9:LYS:NZ	2.41	0.47
1:1A:2126:G:H1	1:1A:2207:C:H42	1.61	0.47
1:1A:2614:A:OP1	60:1A:5843:HOH:O	2.20	0.47
3:1D:146:GLU:HG2	3:1D:152:GLY:C	2.39	0.47
5:1F:192:LEU:HD13	5:1F:194:MET:HE2	1.97	0.47
11:1P:90:ARG:NH1	11:1P:105:LEU:HD11	2.30	0.47
32:1a:78:G:C2	32:1a:91:C:C4	3.02	0.47
32:1a:202:U:H3'	32:1a:203:U:C5	2.49	0.47
32:1a:523:A:H61	43:1l:92:0TD:CG	2.27	0.47
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.14	0.47
32:1a:1376:U:H2'	32:1a:1377:A:C8	2.50	0.47
32:1a:1516:G:H2'	32:1a:1518:MA6:OP2	2.15	0.47
35:1d:107:ARG:NH2	35:1d:194:LEU:HD11	2.30	0.47
38:1g:26:PHE:O	38:1g:30:ILE:HD12	2.15	0.47
52:1u:5:ASP:OD2	60:1u:201:HOH:O	2.20	0.47
54:1y:40:C:H2'	54:1y:41:C:C6	2.50	0.47
1:2A:117:G:C6	1:2A:119:A:C6	3.03	0.47
1:2A:118:A:C8	1:2A:119:A:C8	3.03	0.47
1:2A:528:A:H8	9:2N:114:ARG:NH2	2.12	0.47
1:2A:569:U:H5''	60:2A:4285:HOH:O	2.14	0.47
1:2A:839:U:H2'	1:2A:840:C:C6	2.50	0.47
1:2A:912:C:P	12:2Q:8:LYS:HZ3	2.37	0.47
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.20	0.47
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.15	0.47
1:2A:1778:U:H2'	1:2A:1784:A:N6	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2019:A:OP2	27:25:9:LYS:NZ	2.47	0.47
1:2A:2074:U:H2'	1:2A:2075:U:C6	2.49	0.47
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.80	0.47
1:2A:2150:U:H2'	1:2A:2151:G:C8	2.49	0.47
1:2A:2191:G:H2'	1:2A:2192:G:O4'	2.15	0.47
1:2A:2504:U:OP2	60:2A:4333:HOH:O	2.20	0.47
2:2B:105:A:H5'	2:2B:106:G:OP2	2.14	0.47
4:2E:9:VAL:HG13	4:2E:25:VAL:O	2.14	0.47
5:2F:53:THR:HG23	5:2F:55:GLY:N	2.26	0.47
5:2F:178:PRO:HB2	5:2F:201:VAL:HG21	1.97	0.47
6:2G:101:ILE:HD13	26:24:25:TYR:HB2	1.96	0.47
11:2P:60:MET:HA	30:28:13:ARG:HH12	1.80	0.47
15:2T:29:ARG:HB3	15:2T:87:ASP:HB2	1.96	0.47
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.32	0.47
20:2Y:87:LYS:HB3	20:2Y:95:LYS:HD3	1.95	0.47
32:2a:689:C:OP2	42:2k:55:LYS:HE2	2.15	0.47
32:2a:768:A:N3	32:2a:1512:U:O2'	2.46	0.47
32:2a:976:G:P	45:2n:32:SER:H	2.37	0.47
32:2a:982:U:O2	32:2a:1222:G:N1	2.32	0.47
32:2a:1238:A:C2	32:2a:1303:C:H4'	2.50	0.47
32:2a:1261:A:H3'	32:2a:1262:C:H6	1.80	0.47
32:2a:1328:C:O2'	44:2m:29:ARG:NH2	2.47	0.47
33:2b:223:ILE:O	33:2b:226:ARG:HG2	2.15	0.47
34:2c:47:LEU:CD1	34:2c:68:VAL:HG11	2.43	0.47
36:2e:6:PHE:HB3	36:2e:34:VAL:HG22	1.96	0.47
36:2e:57:LYS:HG2	36:2e:61:TYR:CE2	2.49	0.47
40:2i:23:ASN:ND2	40:2i:25:LYS:HG2	2.30	0.47
40:2i:79:LEU:HD22	40:2i:104:ARG:HB2	1.97	0.47
44:2m:43:THR:HB	44:2m:48:LEU:HD21	1.96	0.47
46:2o:39:LEU:HB3	46:2o:56:LEU:HD13	1.97	0.47
1:1A:180:A:H2'	1:1A:181:C:C6	2.50	0.47
1:1A:704:U:H2'	1:1A:705:C:H6	1.80	0.47
1:1A:2569:G:H2'	1:1A:2570:C:C6	2.50	0.47
2:1B:2:C:H2'	2:1B:3:C:C6	2.50	0.47
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.49	0.47
16:1U:8:VAL:HG23	16:1U:11:ARG:HH21	1.79	0.47
26:14:16:CYS:SG	26:14:17:GLY:N	2.88	0.47
30:18:23:VAL:HG13	30:18:47:LYS:HB3	1.97	0.47
32:1a:626:U:C2	32:1a:627:G:C8	3.03	0.47
33:1b:88:ALA:HB2	33:1b:219:VAL:HG13	1.97	0.47
1:2A:1033:U:P	31:29:9:ARG:HH22	2.34	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1288:U:O4	13:2R:106:GLY:HA3	2.15	0.47
1:2A:1300:U:H4'	1:2A:1301:A:C5'	2.45	0.47
12:2Q:16:ARG:HG2	12:2Q:18:LYS:HG3	1.97	0.47
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.14	0.47
32:2a:176:C:H2'	32:2a:177:C:C6	2.50	0.47
32:2a:376:G:H5''	47:2p:5:ARG:HD2	1.96	0.47
32:2a:964:A:N3	32:2a:969:A:O2'	2.45	0.47
32:2a:974:A:P	45:2n:41:ARG:HH12	2.38	0.47
32:2a:1002:G:C6	32:2a:1003:G:H8	2.33	0.47
32:2a:1128:C:O2'	32:2a:1129:C:OP1	2.32	0.47
32:2a:1152:A:OP1	41:2j:70:ARG:NH2	2.41	0.47
32:2a:1280:A:O2'	32:2a:1281:U:H5'	2.15	0.47
33:2b:178:ARG:NH1	33:2b:196:LEU:O	2.47	0.47
41:2j:64:GLU:OE2	41:2j:66:ARG:NH1	2.48	0.47
1:1A:347:G:C8	5:1F:171:PRO:HG3	2.50	0.47
4:1E:34:VAL:HG22	4:1E:48:GLN:HG2	1.97	0.47
32:1a:129:U:H5'	48:1q:3:LYS:HZ1	1.80	0.47
32:1a:373:A:H2'	32:1a:374:A:H8	1.80	0.47
32:1a:1002:G:N2	32:1a:1004:A:O2'	2.48	0.47
32:1a:1318:A:OP1	50:1s:7:LYS:NZ	2.41	0.47
38:1g:50:ILE:HG12	38:1g:61:VAL:HG11	1.97	0.47
47:1p:56:ALA:O	47:1p:60:LEU:HB2	2.15	0.47
54:1y:19:G:N1	54:1y:56:C:N4	2.62	0.47
1:2A:597:U:H2'	1:2A:598:G:C8	2.50	0.47
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.50	0.47
1:2A:1371:G:H2'	1:2A:1372:U:H5	1.80	0.47
1:2A:2358:G:N2	60:28:203:HOH:O	2.40	0.47
19:2X:72:LYS:HG2	19:2X:73:ARG:O	2.15	0.47
32:2a:109:A:C6	32:2a:326:G:C6	3.03	0.47
32:2a:114:U:O2'	32:2a:115:G:H5'	2.15	0.47
32:2a:991:U:C4	32:2a:1212:U:H1'	2.50	0.47
32:2a:1263:C:N3	32:2a:1272:G:O6	2.48	0.47
33:2b:95:GLN:HB2	33:2b:148:TYR:CD1	2.49	0.47
36:2e:78:HIS:CE1	36:2e:143:ARG:H	2.14	0.47
39:2h:20:TYR:HA	39:2h:65:TYR:CZ	2.49	0.47
44:2m:13:LYS:O	44:2m:45:VAL:HG23	2.15	0.47
54:2w:58:A:H4'	54:2w:59:U:OP1	2.15	0.47
1:1A:943:C:H5'	54:1w:56:C:OP1	2.15	0.47
1:1A:1091:A:OP1	1:1A:1092:A:H3'	2.14	0.47
1:1A:1120:G:C2	1:1A:1121:C:H1'	2.50	0.47
1:1A:2121:U:O4	1:1A:2212:G:O6	2.34	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2124:U:H3	1:1A:2209:G:H1	1.61	0.47
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.48	0.47
8:1I:6:LEU:HD11	8:1I:37:VAL:HG23	1.97	0.47
10:1O:19:ILE:HG22	10:1O:43:VAL:HA	1.96	0.47
17:1V:62:LEU:HD11	17:1V:95:LEU:HB2	1.96	0.47
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.50	0.47
32:1a:1068:G:H8	32:1a:1068:G:OP2	1.98	0.47
1:2A:1115:G:H2'	1:2A:1116:C:O4'	2.15	0.47
1:2A:1169:G:H1	1:2A:1180:C:H42	1.63	0.47
1:2A:2014:A:H4'	18:2W:92:ARG:NH2	2.17	0.47
1:2A:2094:G:P	8:2I:22:LYS:HD2	2.54	0.47
1:2A:2343:C:O2'	1:2A:2373:G:O2'	2.26	0.47
1:2A:2619:C:OP1	4:2E:152:LYS:NZ	2.45	0.47
7:2H:84:SER:HB3	7:2H:132:ARG:NH1	2.23	0.47
12:2Q:111:GLU:OE2	12:2Q:133:ARG:NH2	2.43	0.47
26:24:16:CYS:HA	26:24:33:VAL:HB	1.96	0.47
32:2a:447:G:O6	32:2a:485:G:O2'	2.30	0.47
32:2a:817:C:OP2	60:2a:3551:HOH:O	2.21	0.47
32:2a:1244:C:N4	32:2a:1293:G:H1	2.13	0.47
33:2b:91:PRO:HA	33:2b:151:GLY:O	2.15	0.47
34:2c:37:GLN:HE22	45:2n:52:GLN:HB3	1.80	0.47
43:2l:46:LYS:HG3	43:2l:92:OTD:H8	1.97	0.47
54:2y:52:G:H5'	54:2y:53:G:OP2	2.15	0.47
1:1A:1324:A:OP1	13:1R:36:THR:HG23	2.15	0.46
1:1A:1473:A:H4'	1:1A:1474:C:O4'	2.15	0.46
1:1A:2579:G:H2'	1:1A:2580:C:C6	2.51	0.46
32:1a:1025:U:O2	32:1a:1036:G:C6	2.68	0.46
33:1b:80:ILE:HG12	33:1b:215:LEU:HD23	1.97	0.46
33:1b:155:LEU:HD21	33:1b:159:PRO:HD3	1.97	0.46
44:1m:3:ARG:NH2	44:1m:45:VAL:HG11	2.30	0.46
54:1y:26:A:H61	54:1y:44:G:H1	1.62	0.46
1:2A:229:A:O5'	1:2A:230:U:H5'	2.15	0.46
1:2A:286:C:H2'	1:2A:287:C:C6	2.50	0.46
1:2A:856:C:O5'	1:2A:856:C:H6	1.98	0.46
1:2A:1024:G:HO2'	1:2A:1144:G:HO2'	1.63	0.46
1:2A:2298:A:N6	1:2A:2318:G:C8	2.84	0.46
1:2A:2639:A:C2	1:2A:2778:A:C8	3.03	0.46
1:2A:2764:A:H5''	1:2A:2765:A:OP2	2.14	0.46
2:2B:83:G:H1	2:2B:94:C:N4	2.13	0.46
4:2E:48:GLN:HE21	4:2E:78:LEU:HG	1.79	0.46
6:2G:126:ASP:HB2	6:2G:130:ASN:HB2	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:546:G:OP1	35:2d:73:ARG:HG2	2.15	0.46
32:2a:1030(A):G:N2	32:2a:1030(C):G:H3'	2.30	0.46
32:2a:1084:G:H5'	32:2a:1102:A:OP2	2.15	0.46
32:2a:1381:U:O2'	38:2g:79:ARG:HD3	2.14	0.46
32:2a:1479:C:H2'	32:2a:1480:G:H8	1.80	0.46
33:2b:134:GLU:HA	33:2b:137:ARG:NE	2.30	0.46
33:2b:164:VAL:HB	33:2b:186:ALA:HB2	1.96	0.46
34:2c:11:ARG:NH2	34:2c:177:THR:O	2.46	0.46
34:2c:125:GLU:HB2	34:2c:190:ARG:NH2	2.30	0.46
45:2n:26:ARG:NH2	45:2n:47:LEU:HD21	2.30	0.46
1:1A:572:A:H1'	1:1A:573:G:OP1	2.14	0.46
1:1A:2045:G:H4'	1:1A:2629:C:O3'	2.15	0.46
3:1D:26:LYS:HE2	3:1D:28:GLU:O	2.15	0.46
28:16:40:CYS:HA	28:16:41:PRO:HD3	1.80	0.46
32:1a:713:G:H2'	32:1a:714:G:C8	2.50	0.46
32:1a:841:U:H6	32:1a:841:U:P	2.39	0.46
35:1d:3:ARG:HD3	35:1d:118:ARG:HD2	1.97	0.46
40:1i:5:TYR:HB2	40:1i:18:PHE:CE1	2.51	0.46
55:1x:50:U:H2'	55:1x:51:C:C6	2.50	0.46
1:2A:882:G:H1	1:2A:894:C:H42	1.63	0.46
1:2A:993:G:O6	1:2A:994:C:N4	2.49	0.46
1:2A:2432:A:N1	23:21:35:THR:HG22	2.31	0.46
7:2H:169:VAL:HG12	7:2H:171:LEU:HD23	1.96	0.46
13:2R:18:LEU:HD21	13:2R:22:ARG:CZ	2.45	0.46
32:2a:976:G:C8	32:2a:1358:U:C2	3.03	0.46
32:2a:1050:G:H1'	32:2a:1214:C:O2	2.15	0.46
32:2a:1152:A:P	41:2j:70:ARG:HH22	2.38	0.46
32:2a:1367:C:P	40:2i:112:LYS:HZ1	2.38	0.46
33:2b:192:SER:O	33:2b:194:PRO:HD3	2.16	0.46
34:2c:135:LYS:O	34:2c:139:GLN:HB2	2.15	0.46
35:2d:121:VAL:O	35:2d:134:ASP:HA	2.14	0.46
37:2f:69:GLU:CD	37:2f:69:GLU:H	2.23	0.46
1:1A:273:G:O2'	1:1A:274:U:H5''	2.15	0.46
1:1A:2134:G:H1'	54:1y:19:G:O2'	2.15	0.46
3:1D:8:PRO:HB3	3:1D:14:ARG:CD	2.45	0.46
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.51	0.46
8:1I:109:ILE:HD11	8:1I:130:TYR:CE2	2.51	0.46
8:1I:129:THR:HG22	8:1I:139:GLN:NE2	2.26	0.46
32:1a:1414:U:H3	32:1a:1486:G:H1	1.64	0.46
35:1d:53:ASP:O	35:1d:57:ARG:HG3	2.15	0.46
35:1d:194:LEU:HD12	35:1d:195:ALA:H	1.79	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:1t:60:GLU:HG3	51:1t:81:LYS:HD2	1.97	0.46
1:2A:1035:U:H3	1:2A:1120:G:H1	1.64	0.46
1:2A:1171:G:OP2	1:2A:1171:G:H8	1.98	0.46
3:2D:101:GLU:CD	3:2D:103:ARG:HH12	2.22	0.46
15:2T:64:ARG:HG3	15:2T:73:GLU:HG2	1.96	0.46
26:24:15:ILE:HB	26:24:32:TYR:HD1	1.80	0.46
32:2a:857:C:H2'	32:2a:858:G:O4'	2.15	0.46
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.50	0.46
32:2a:1324:A:O4'	32:2a:1362:C:H4'	2.16	0.46
32:2a:1388:C:H2'	32:2a:1389:C:C6	2.49	0.46
33:2b:81:VAL:HA	33:2b:215:LEU:HD21	1.98	0.46
34:2c:71:ALA:HA	34:2c:106:VAL:HB	1.98	0.46
1:1A:646:A:OP2	11:1P:108:LYS:NZ	2.43	0.46
1:1A:939:C:H2'	1:1A:940:C:C6	2.50	0.46
1:1A:956:A:N1	1:1A:2289:G:H1'	2.31	0.46
1:1A:1103:A:N6	1:1A:1127:U:H3	2.12	0.46
1:1A:1105:G:H2'	1:1A:1106:U:C6	2.51	0.46
1:1A:2148:A:N1	1:1A:2184:G:O2'	2.42	0.46
13:1R:2:ARG:HG2	13:1R:5:LYS:HB2	1.98	0.46
32:1a:922:G:C6	32:1a:923:A:C6	3.03	0.46
32:1a:1137:C:H5''	32:1a:1138:G:OP1	2.15	0.46
1:2A:94(A):G:H2'	1:2A:95:G:O4'	2.15	0.46
5:2F:10:PRO:HB3	5:2F:17:ARG:CZ	2.45	0.46
21:2Z:93:ASP:CB	21:2Z:131:ARG:HH22	2.29	0.46
23:21:83:GLU:HA	23:21:84:GLY:HA2	1.74	0.46
24:22:38:GLN:O	24:22:41:ILE:HG12	2.14	0.46
26:24:53:GLU:H	26:24:53:GLU:CD	2.23	0.46
32:2a:814:A:N7	32:2a:816:A:C4	2.83	0.46
32:2a:1347:G:H5''	40:2i:107:ARG:HB3	1.98	0.46
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.50	0.46
44:2m:40:ASN:HA	44:2m:41:PRO:HD2	1.83	0.46
54:2w:34:G:H2'	54:2w:35:A:C8	2.50	0.46
1:1A:137:G:O2'	1:1A:138:G:H5'	2.16	0.46
1:1A:559:U:H2'	1:1A:560:C:C6	2.50	0.46
1:1A:581:G:OP1	9:1N:111:PRO:HD2	2.16	0.46
1:1A:953:U:O2'	12:1Q:101:ARG:NH2	2.46	0.46
1:1A:1139:G:H3'	1:1A:1140:U:H5''	1.98	0.46
1:1A:1995:G:OP2	60:1A:4765:HOH:O	2.21	0.46
6:1G:82:LEU:HD21	6:1G:88:ILE:HG21	1.98	0.46
8:1I:77:LEU:HB3	8:1I:142:VAL:HG12	1.97	0.46
32:1a:510:A:H5''	35:1d:49:ARG:HH12	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.51	0.46
41:1j:11:PHE:HE1	41:1j:67:THR:HG22	1.81	0.46
48:1q:29:HIS:N	48:1q:34:LYS:O	2.47	0.46
1:2A:448:U:O4	1:2A:583:G:H1'	2.15	0.46
1:2A:647:G:H8	1:2A:647:G:O5'	1.97	0.46
5:2F:101:LEU:HD12	5:2F:102:PRO:HD2	1.97	0.46
10:2O:15:GLY:O	10:2O:47:ILE:HG12	2.15	0.46
10:2O:26:LYS:NZ	10:2O:37:ASP:OD2	2.40	0.46
15:2T:60:THR:HG22	15:2T:77:PRO:HA	1.97	0.46
26:24:53:GLU:HG3	26:24:56:VAL:HG13	1.98	0.46
32:2a:707:C:H2'	32:2a:708:C:H6	1.80	0.46
32:2a:728:A:H2'	32:2a:729:A:H8	1.81	0.46
33:2b:92:TYR:N	33:2b:151:GLY:O	2.37	0.46
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.30	0.46
35:2d:74:GLN:O	35:2d:78:LEU:HD13	2.16	0.46
36:2e:93:PRO:HG2	39:2h:105:ARG:HE	1.81	0.46
1:1A:265:U:H2'	1:1A:266:C:C6	2.50	0.46
1:1A:1132:A:H5''	1:1A:1132:A:N3	2.30	0.46
1:1A:2859:U:H4'	1:1A:2878:A:C2	2.50	0.46
2:1B:29:A:O2'	2:1B:58:A:N1	2.43	0.46
10:1O:63:VAL:HG12	10:1O:106:LEU:HD11	1.98	0.46
11:1P:138:LEU:HD23	11:1P:145:PRO:HB3	1.98	0.46
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.32	0.46
20:1Y:13:VAL:HG12	20:1Y:74:PRO:HA	1.98	0.46
32:1a:17:U:H2'	32:1a:18:C:C6	2.51	0.46
32:1a:404:U:H2'	32:1a:405:U:H6	1.80	0.46
32:1a:1309:G:OP1	44:1m:88:ARG:NH2	2.45	0.46
34:1c:35:GLU:CD	34:1c:59:ARG:HH22	2.22	0.46
37:1f:67:MET:SD	37:1f:72:VAL:HG12	2.55	0.46
54:1w:18:G:H4'	54:1w:60:U:C6	2.51	0.46
54:1y:64:A:H2'	54:1y:65:G:C8	2.51	0.46
1:2A:395:U:O2'	1:2A:396:G:N7	2.42	0.46
1:2A:2370:G:C6	1:2A:2371:G:C6	3.04	0.46
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.46	0.46
21:2Z:105:VAL:O	21:2Z:140:ASP:HA	2.16	0.46
28:26:34:LEU:H	28:26:51:GLU:HG2	1.80	0.46
32:2a:643:C:H5'	39:2h:31:PHE:CE1	2.51	0.46
32:2a:1133:G:H2'	32:2a:1134:G:C8	2.50	0.46
32:2a:1251:A:N6	32:2a:1285:A:N1	2.63	0.46
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	1.97	0.46
34:2c:134:ILE:HD11	34:2c:153:VAL:CG2	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:2k:48:ILE:O	42:2k:50:TYR:N	2.49	0.46
44:2m:108:ARG:HA	44:2m:108:ARG:HD3	1.78	0.46
47:2p:9:PHE:HE2	47:2p:18:ARG:HD2	1.81	0.46
50:2s:23:ASN:OD1	50:2s:47:HIS:HE1	1.98	0.46
54:2w:11:C:N3	54:2w:24:G:N2	2.63	0.46
1:1A:928:G:C2	1:1A:929:G:H1'	2.51	0.46
1:1A:1897:C:H2'	1:1A:1898:A:O4'	2.16	0.46
26:14:55:ARG:N	26:14:56:VAL:HA	2.31	0.46
32:1a:166:G:H2'	32:1a:167:G:C8	2.50	0.46
35:1d:187:ARG:NH2	35:1d:193:ASP:OD2	2.48	0.46
1:2A:286:C:H2'	1:2A:287:C:H6	1.80	0.46
1:2A:526:A:O2'	1:2A:2043:C:O2	2.30	0.46
1:2A:1231:G:H2'	1:2A:1232:G:H8	1.80	0.46
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.51	0.46
1:2A:1837:C:OP1	32:2a:784:C:H4'	2.16	0.46
1:2A:2059:A:H2'	1:2A:2503:2MA:HM23	1.97	0.46
1:2A:2360:A:H2'	1:2A:2361:A:O4'	2.16	0.46
8:2I:123:LEU:HD12	8:2I:123:LEU:HA	1.76	0.46
10:2O:4:PRO:O	10:2O:5:GLN:HB2	2.16	0.46
15:2T:19:LEU:HD22	15:2T:86:ILE:HD12	1.96	0.46
25:23:18:ASP:OD1	25:23:18:ASP:N	2.44	0.46
32:2a:340:U:H2'	32:2a:341:C:C6	2.51	0.46
32:2a:399:G:H2'	32:2a:400:C:C6	2.50	0.46
32:2a:693:G:H2'	32:2a:694:A:C8	2.50	0.46
32:2a:922:G:C6	32:2a:923:A:C6	3.03	0.46
33:2b:82:ARG:HG3	33:2b:92:TYR:OH	2.15	0.46
34:2c:34:LEU:HD11	34:2c:38:ARG:HH21	1.80	0.46
36:2e:122:GLU:HB2	36:2e:126:ARG:HH11	1.80	0.46
38:2g:32:ARG:HH21	38:2g:109:ASN:ND2	2.12	0.46
40:2i:29:ASN:ND2	40:2i:65:VAL:O	2.37	0.46
45:2n:29:ARG:HD3	45:2n:40:CYS:HB2	1.97	0.46
46:2o:3:ILE:CD1	46:2o:38:ARG:HE	2.29	0.46
1:1A:1464:G:N7	60:1A:4647:HOH:O	2.36	0.46
1:1A:2740:G:O2'	10:1O:70:LYS:NZ	2.45	0.46
12:1Q:30:GLY:HA2	12:1Q:107:ALA:HB2	1.98	0.46
32:1a:1272:G:H2'	32:1a:1273:G:O4'	2.16	0.46
33:1b:80:ILE:HD11	33:1b:212:GLN:HA	1.97	0.46
33:1b:124:SER:HA	33:1b:125:PRO:HA	1.72	0.46
45:1n:4:LYS:HA	45:1n:7:ILE:HG22	1.98	0.46
45:1n:29:ARG:HD3	45:1n:40:CYS:SG	2.55	0.46
1:2A:1027:A:C6	1:2A:1126:A:C4	3.04	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:42:C:C4	2:2B:43:C:C4	3.04	0.46
4:2E:143:ASN:HD22	4:2E:147:PRO:HD3	1.81	0.46
11:2P:91:PHE:O	11:2P:121:LYS:NZ	2.42	0.46
21:2Z:155:LEU:HB3	21:2Z:157:LEU:HG	1.97	0.46
32:2a:254:G:OP1	48:2q:66:SER:OG	2.16	0.46
32:2a:986:A:O2'	50:2s:55:LYS:O	2.33	0.46
32:2a:1003:G:C5	32:2a:1004:A:C2	3.04	0.46
32:2a:1077:G:N2	32:2a:1080:A:OP2	2.45	0.46
32:2a:1220:G:O3'	50:2s:36:ARG:HD3	2.16	0.46
32:2a:1240:U:OP2	38:2g:115:ARG:HA	2.16	0.46
32:2a:1272:G:N2	32:2a:1273:G:C4	2.84	0.46
47:2p:21:VAL:HG13	47:2p:34:GLU:HB3	1.98	0.46
1:1A:11:G:H2'	1:1A:12:U:H5''	1.96	0.46
1:1A:1405:A:C2	1:1A:1418:U:O4	2.68	0.46
1:1A:1941:A:O2'	32:1a:1517:G:N3	2.43	0.46
1:1A:2495:C:OP1	54:1w:64:A:H4'	2.16	0.46
2:1B:91:C:H5'	12:1Q:18:LYS:HA	1.97	0.46
4:1E:97:LYS:HE2	4:1E:97:LYS:HB3	1.65	0.46
6:1G:43:LEU:HD11	6:1G:153:ARG:HD2	1.97	0.46
11:1P:128:HIS:NE2	11:1P:148:LEU:HD11	2.30	0.46
32:1a:7:G:H5'	32:1a:298:A:O4'	2.16	0.46
32:1a:1026:G:C8	32:1a:1027:C:O2	2.69	0.46
32:1a:1038:C:C2'	32:1a:1039:C:H5'	2.46	0.46
1:2A:311:A:C6	1:2A:328:U:C4	3.04	0.46
1:2A:774:A:H2'	1:2A:774:A:N3	2.31	0.46
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.51	0.46
1:2A:2156:G:H2'	1:2A:2157:G:C4	2.49	0.46
1:2A:2379:G:O2'	14:2S:17:ARG:NH2	2.48	0.46
1:2A:2595:G:N7	60:2A:5057:HOH:O	2.35	0.46
2:2B:19:G:H2'	2:2B:20:C:O4'	2.15	0.46
3:2D:21:PHE:HB3	3:2D:24:ILE:HD12	1.97	0.46
12:2Q:85:LYS:HG2	22:20:7:LEU:HB2	1.98	0.46
19:2X:44:GLU:O	19:2X:48:LYS:N	2.49	0.46
20:2Y:20:TYR:CE2	20:2Y:43:ASN:HA	2.51	0.46
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.51	0.46
32:2a:428:G:OP2	35:2d:10:ARG:NH1	2.49	0.46
32:2a:539:A:H2'	32:2a:540:G:C8	2.51	0.46
32:2a:1273:G:C5	32:2a:1274:G:C4	3.04	0.46
32:2a:1370:G:N7	40:2i:109:VAL:HG11	2.30	0.46
33:2b:19:HIS:CG	33:2b:20:GLU:H	2.34	0.46
35:2d:173:TRP:CZ3	35:2d:193:ASP:HB3	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:2l:69:TYR:CD1	43:2l:90:VAL:HG21	2.51	0.46
44:2m:90:LEU:HD23	44:2m:93:ARG:HD2	1.97	0.46
1:1A:649:C:O2'	1:1A:704:U:OP1	2.32	0.46
1:1A:655:G:OP2	30:18:15:LYS:NZ	2.31	0.46
1:1A:664:U:H2'	1:1A:665:C:C6	2.51	0.46
8:1I:48:GLU:HB3	8:1I:52:ARG:HH12	1.80	0.46
32:1a:1148:U:H2'	32:1a:1149:C:O4'	2.17	0.46
34:1c:45:LYS:HB2	34:1c:45:LYS:HE3	1.64	0.46
38:1g:111:ARG:CG	38:1g:112:PRO:HD2	2.45	0.46
48:1q:62:SER:HB3	48:1q:72:ARG:NH2	2.30	0.46
54:1y:52:G:H2'	54:1y:53:G:C8	2.51	0.46
1:2A:600:G:O6	60:2A:4478:HOH:O	2.21	0.46
1:2A:628:G:H2'	1:2A:629:G:C8	2.51	0.46
1:2A:764:A:H5'	3:2D:210:GLY:HA2	1.98	0.46
1:2A:940:G:N3	1:2A:1191:G:H4'	2.31	0.46
1:2A:944:G:H5''	1:2A:945:A:O5'	2.15	0.46
1:2A:1784:A:O2'	60:2A:4593:HOH:O	2.21	0.46
5:2F:7:TYR:O	5:2F:22:ALA:N	2.49	0.46
12:2Q:36:ALA:HB2	12:2Q:103:MET:SD	2.55	0.46
30:28:8:LYS:HB3	30:28:12:LYS:HE3	1.98	0.46
32:2a:1241:G:H2'	32:2a:1242:C:C6	2.51	0.46
54:2w:8:4SU:N3	54:2w:15:G:O6	2.49	0.46
1:1A:667:G:OP1	60:1A:5361:HOH:O	2.21	0.45
1:1A:1137:G:C6	1:1A:1138:C:C4	3.04	0.45
1:1A:2205:C:H2'	1:1A:2206:G:C8	2.47	0.45
1:1A:2303:U:H2'	1:1A:2304:C:C6	2.51	0.45
1:1A:2411:G:H1'	60:1A:6427:HOH:O	2.16	0.45
1:1A:2430:A:H2'	1:1A:2431:U:C6	2.50	0.45
1:1A:2473:C:H2'	1:1A:2474:U:C6	2.51	0.45
1:1A:2864:G:H2'	1:1A:2865:C:C6	2.51	0.45
32:1a:1003:G:N3	32:1a:1004:A:H2	2.14	0.45
32:1a:1437:C:H2'	32:1a:1438:G:H8	1.80	0.45
38:1g:78:ARG:HH21	38:1g:79:ARG:NH1	2.14	0.45
39:1h:104:ARG:HA	39:1h:104:ARG:HD3	1.75	0.45
51:1t:10:LEU:HD12	51:1t:11:SER:H	1.80	0.45
54:1y:9:A:O3'	54:1y:45:U:O2'	2.32	0.45
1:2A:27:G:N2	1:2A:512:G:H1'	2.31	0.45
1:2A:1272:A:H3'	1:2A:1273:U:H5''	1.97	0.45
1:2A:1510:G:H2'	1:2A:1511:C:C6	2.52	0.45
1:2A:2315:G:H2'	1:2A:2316:C:H6	1.81	0.45
5:2F:18:ARG:NH1	5:2F:127:GLU:OE2	2.43	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:51:ARG:HA	6:2G:51:ARG:HD3	1.84	0.45
13:2R:103:ARG:HD3	13:2R:108:GLY:O	2.15	0.45
15:2T:18:ASP:OD1	15:2T:18:ASP:N	2.42	0.45
19:2X:12:VAL:HG22	19:2X:29:TRP:CE2	2.51	0.45
29:27:2:LYS:NZ	60:27:203:HOH:O	2.49	0.45
32:2a:22:G:H4'	32:2a:885:G:C8	2.52	0.45
32:2a:1052:U:O2'	32:2a:1055:A:OP2	2.20	0.45
32:2a:1072:G:C5	32:2a:1073:U:C4	3.04	0.45
34:2c:119:ARG:O	34:2c:123:GLN:HG3	2.17	0.45
35:2d:57:ARG:HB3	35:2d:206:PHE:HB2	1.98	0.45
36:2e:40:ARG:HB3	36:2e:66:MET:HE1	1.98	0.45
38:2g:22:LEU:HG	38:2g:62:PHE:HE2	1.81	0.45
51:2t:50:GLU:HB2	51:2t:99:LEU:HD22	1.97	0.45
1:1A:92:C:H2'	1:1A:93:G:O4'	2.16	0.45
1:1A:602:G:OP1	60:1A:5436:HOH:O	2.21	0.45
1:1A:2331:G:N2	14:1S:3:ARG:HA	2.31	0.45
5:1F:165:ARG:HG3	5:1F:168:ARG:NH2	2.31	0.45
32:1a:110:C:H2'	32:1a:111:G:O4'	2.17	0.45
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.46	0.45
39:1h:51:VAL:HG11	39:1h:60:ARG:NH1	2.31	0.45
45:1n:23:ARG:NH1	45:1n:30:ALA:HB2	2.31	0.45
1:2A:263:C:H2'	1:2A:264:C:O4'	2.17	0.45
1:2A:320:A:H4'	1:2A:322:A:C8	2.51	0.45
1:2A:661:C:H2'	1:2A:662:G:C8	2.52	0.45
1:2A:829:A:C5	1:2A:2248:C:H5'	2.51	0.45
1:2A:1017:G:O6	1:2A:1146:C:N4	2.49	0.45
1:2A:2135:A:H5'	1:2A:2159:G:O2'	2.16	0.45
1:2A:2723:C:OP1	13:2R:3:HIS:ND1	2.25	0.45
10:2O:19:ILE:HG22	10:2O:43:VAL:HA	1.98	0.45
14:2S:11:LYS:HG3	14:2S:91:PRO:HD3	1.97	0.45
19:2X:94:GLY:N	19:2X:95:LEU:HA	2.30	0.45
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.97	0.45
30:28:23:VAL:CG1	30:28:47:LYS:HD3	2.46	0.45
32:2a:909:A:H2'	32:2a:910:C:O4'	2.16	0.45
32:2a:1024:G:H2'	32:2a:1025:U:H5''	1.99	0.45
36:2e:36:ASP:C	36:2e:38:GLN:H	2.24	0.45
36:2e:106:PRO:O	36:2e:110:LEU:HG	2.16	0.45
48:2q:32:TYR:C	48:2q:34:LYS:H	2.23	0.45
1:1A:924:U:H3	1:1A:945:A:H2	1.65	0.45
1:1A:1121:C:O2	1:1A:1122:C:H2'	2.16	0.45
1:1A:1935:A:H4'	1:1A:1936:C:H5''	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:121:ASN:ND2	60:1E:408:HOH:O	2.39	0.45
28:16:13:CYS:SG	28:16:47:THR:HG21	2.57	0.45
32:1a:189(K):U:H2'	32:1a:189(L):G:C8	2.51	0.45
32:1a:1006:C:N3	32:1a:1023:G:N2	2.64	0.45
34:1c:73:PRO:HB3	34:1c:103:VAL:HG11	1.98	0.45
39:1h:30:ARG:O	39:1h:34:GLU:HG2	2.16	0.45
54:1w:21:A:N6	54:1w:46:7MG:C4	2.84	0.45
54:1y:19:G:C4'	54:1y:57:G:H22	2.28	0.45
1:2A:511:U:H4'	1:2A:1235:G:H4'	1.96	0.45
1:2A:658:C:H2'	1:2A:659:C:C6	2.52	0.45
1:2A:1192:G:O6	60:2A:4615:HOH:O	2.20	0.45
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.16	0.45
1:2A:1857:G:C6	1:2A:1858:G:N1	2.85	0.45
1:2A:2357:U:P	22:20:20:ARG:HE	2.38	0.45
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.51	0.45
1:2A:2516:G:C6	1:2A:2517:C:C4	3.05	0.45
7:2H:154:PRO:HB3	7:2H:163:TYR:CE1	2.52	0.45
32:2a:630:G:H2'	32:2a:631:G:C8	2.51	0.45
32:2a:671:G:H2'	32:2a:672:U:O4'	2.17	0.45
32:2a:881:G:H2'	32:2a:882:C:O4'	2.16	0.45
32:2a:918:A:H2'	32:2a:919:A:O4'	2.15	0.45
32:2a:984:C:H2'	32:2a:985:C:H6	1.81	0.45
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.16	0.45
40:2i:6:GLY:HA3	40:2i:80:GLY:O	2.17	0.45
41:2j:11:PHE:HE1	41:2j:67:THR:HG22	1.81	0.45
48:2q:54:GLY:O	48:2q:81:ARG:N	2.48	0.45
51:2t:18:GLN:O	51:2t:22:ARG:HG3	2.17	0.45
54:2w:5:G:H2'	54:2w:6:G:C8	2.52	0.45
1:1A:1281:G:H5''	60:1A:5107:HOH:O	2.16	0.45
1:1A:1539:C:N4	1:1A:2227:G:O2'	2.47	0.45
1:1A:1549:U:H2'	1:1A:1550:C:C6	2.51	0.45
1:1A:1683:C:H2'	1:1A:1684:A:C8	2.51	0.45
1:1A:1945:U:H2'	1:1A:1946:C:C6	2.52	0.45
1:1A:2143:G:N2	1:1A:2199:C:N3	2.48	0.45
1:1A:2178:G:OP2	1:1A:2178:G:H8	1.99	0.45
2:1B:33:G:C2	2:1B:50:G:C2	3.04	0.45
6:1G:179:PRO:HG3	26:14:43:TYR:OH	2.16	0.45
8:1I:79:ILE:HB	8:1I:144:VAL:HG12	1.99	0.45
25:13:8:LEU:HG	25:13:31:LEU:HD23	1.99	0.45
32:1a:711:G:OP1	37:1f:54:LYS:NZ	2.35	0.45
32:1a:830:G:O6	60:1a:2228:HOH:O	2.19	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:54:VAL:HA	44:1m:57:ARG:HB3	1.99	0.45
1:2A:709:U:H2'	1:2A:710:G:C8	2.52	0.45
1:2A:1028:A:N6	1:2A:1125:G:H2'	2.32	0.45
1:2A:2330:G:H21	22:20:42:GLY:N	2.15	0.45
1:2A:2473:U:O2	1:2A:2473:U:H2'	2.15	0.45
25:23:10:LYS:NZ	25:23:15:TYR:OH	2.47	0.45
32:2a:920:U:H2'	32:2a:921:U:C6	2.51	0.45
32:2a:1346:A:N7	38:2g:10:ARG:NH1	2.63	0.45
33:2b:224:GLN:HG3	33:2b:225:ALA:N	2.30	0.45
34:2c:108:ASN:HA	34:2c:109:PRO:HD2	1.76	0.45
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.81	0.45
41:2j:5:ARG:HA	41:2j:73:ASP:OD1	2.16	0.45
41:2j:6:ILE:O	41:2j:71:LEU:HD12	2.16	0.45
42:2k:43:SER:HA	42:2k:47:VAL:HG21	1.97	0.45
43:2l:34:ARG:O	43:2l:61:THR:HG23	2.17	0.45
54:2w:28:G:H2'	54:2w:29:G:O4'	2.16	0.45
1:1A:2796:G:N7	60:1A:5760:HOH:O	2.36	0.45
15:1T:127:ALA:C	15:1T:129:ARG:N	2.74	0.45
21:1Z:7:ALA:O	21:1Z:62:PRO:HD3	2.17	0.45
32:1a:343:U:O2'	32:1a:346:G:O6	2.30	0.45
32:1a:1121:U:C2'	32:1a:1122:U:H5'	2.46	0.45
40:1i:48:GLU:CD	40:1i:51:ARG:HD2	2.42	0.45
41:1j:64:GLU:HB3	45:1n:59:ALA:HB2	1.98	0.45
42:1k:15:ALA:HA	42:1k:76:GLY:O	2.17	0.45
54:1w:11:C:H2'	54:1w:12:U:C6	2.52	0.45
1:2A:265:A:H1'	1:2A:266:G:O4'	2.17	0.45
1:2A:328:U:H4'	20:2Y:68:HIS:CG	2.51	0.45
1:2A:660:G:H5'	5:2F:99:TYR:CE1	2.52	0.45
1:2A:1007:C:OP1	9:2N:37:LYS:NZ	2.49	0.45
1:2A:1218:C:OP2	16:2U:15:LYS:NZ	2.40	0.45
1:2A:1245:G:OP1	11:2P:13:ASN:ND2	2.36	0.45
24:22:52:ASP:O	24:22:56:GLN:HG3	2.17	0.45
32:2a:45:U:H2'	32:2a:46:G:H8	1.81	0.45
32:2a:509:A:O2'	32:2a:510:A:OP1	2.29	0.45
33:2b:50:GLU:HB3	33:2b:200:ILE:O	2.16	0.45
36:2e:93:PRO:HG2	39:2h:105:ARG:NE	2.32	0.45
40:2i:4:TYR:CZ	40:2i:88:TYR:HD1	2.35	0.45
44:2m:123:ALA:HB2	54:2w:39:PSU:H1'	1.98	0.45
1:1A:348:A:N6	1:1A:362:G:O2'	2.50	0.45
1:1A:2108:U:H2'	1:1A:2109:G:H8	1.81	0.45
1:1A:2150:C:N4	1:1A:2182:G:H1	2.14	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:101:LEU:HD12	5:1F:102:PRO:HD2	1.98	0.45
20:1Y:92:ASN:CG	20:1Y:94:LYS:HG2	2.41	0.45
32:1a:1144:G:N2	32:1a:1146:A:H62	2.12	0.45
33:1b:17:PHE:HB3	33:1b:44:LEU:HD11	1.97	0.45
33:1b:21:ARG:O	33:1b:23:ARG:HG3	2.16	0.45
33:1b:133:LYS:O	33:1b:137:ARG:HG3	2.17	0.45
46:1o:64:ARG:HH12	46:1o:68:ARG:NH2	2.15	0.45
52:1u:6:ARG:HH21	52:1u:15:ARG:NH2	2.15	0.45
1:2A:1912:A:C8	1:2A:1918:A:C2	3.05	0.45
1:2A:2562:U:H1'	10:2O:23:ARG:HE	1.81	0.45
2:2B:25:A:H2'	2:2B:26:A:H8	1.82	0.45
19:2X:25:LYS:HA	19:2X:81:VAL:O	2.16	0.45
32:2a:865:A:H2	32:2a:918:A:H4'	1.82	0.45
32:2a:954:G:H2'	32:2a:955:U:O4'	2.16	0.45
32:2a:1269:A:N1	32:2a:1312:G:O2'	2.37	0.45
50:2s:80:TYR:CZ	50:2s:82:GLY:HA2	2.52	0.45
1:1A:2157:A:H2	1:1A:2158:C:C2	2.35	0.45
1:1A:2880:C:OP1	13:1R:57:ARG:NH1	2.37	0.45
16:1U:58:ARG:HA	16:1U:61:TRP:CE3	2.51	0.45
32:1a:501:C:H2'	32:1a:502:G:C8	2.52	0.45
32:1a:502:G:H2'	32:1a:503:C:O4'	2.17	0.45
32:1a:840:C:H4'	32:1a:841:U:OP1	2.16	0.45
32:1a:920:U:H2'	32:1a:921:U:C6	2.52	0.45
33:1b:131:PRO:O	33:1b:135:GLN:N	2.48	0.45
35:1d:83:SER:HA	35:1d:89:THR:OG1	2.15	0.45
39:1h:56:LYS:HB2	39:1h:58:TYR:HE2	1.82	0.45
1:2A:300:A:P	20:2Y:86:ARG:HH21	2.40	0.45
1:2A:699:A:H2'	1:2A:700:G:O4'	2.17	0.45
1:2A:884:C:H3'	1:2A:885:C:H6	1.82	0.45
1:2A:1910:G:H2'	1:2A:1911:PSU:H6	1.82	0.45
1:2A:2065:C:H2'	1:2A:2066:C:H6	1.82	0.45
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.32	0.45
3:2D:12:SER:HB3	3:2D:208:LYS:HB3	1.97	0.45
4:2E:24:THR:HG22	4:2E:186:GLY:O	2.17	0.45
7:2H:80:SER:OG	7:2H:81:GLU:OE1	2.33	0.45
25:23:10:LYS:HB3	25:23:53:LEU:HA	1.99	0.45
32:2a:715:A:H2'	32:2a:716:A:C8	2.51	0.45
32:2a:1004:A:N1	32:2a:1037:C:C2	2.85	0.45
32:2a:1256:A:N1	32:2a:1278:U:H1'	2.31	0.45
34:2c:58:GLU:HB3	41:2j:92:THR:OG1	2.17	0.45
40:2i:17:VAL:HG11	40:2i:81:ILE:HA	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:2k:54:ARG:HH22	54:2y:39:PSU:H4'	1.80	0.45
44:2m:40:ASN:HB3	44:2m:43:THR:HG23	1.99	0.45
49:2r:22:VAL:HB	49:2r:56:THR:HA	1.99	0.45
1:1A:34:C:H5''	1:1A:35:G:OP2	2.17	0.45
1:1A:1202:A:P	16:1U:55:ARG:HH11	2.38	0.45
1:1A:1405:A:H2	1:1A:1418:U:O4	2.00	0.45
1:1A:1958:A:OP1	1:1A:1959:A:H5'	2.16	0.45
1:1A:2285:A:H2'	1:1A:2286:A:C8	2.51	0.45
1:1A:2803:A:H5'	1:1A:2902:G:H21	1.82	0.45
5:1F:188:ARG:HA	11:1P:3:LEU:HD11	1.99	0.45
20:1Y:92:ASN:HB3	20:1Y:94:LYS:N	2.16	0.45
32:1a:865:A:C2	32:1a:918:A:H4'	2.51	0.45
34:1c:82:GLU:OE2	34:1c:85:ARG:NH1	2.50	0.45
38:1g:146:GLU:O	38:1g:149:ARG:HB2	2.17	0.45
1:2A:839:U:H1'	1:2A:1191:G:H1'	1.98	0.45
1:2A:1509(B):A:H2'	1:2A:1510:G:C8	2.51	0.45
1:2A:2129:C:H5'	1:2A:2130:U:OP2	2.17	0.45
4:2E:181:LEU:HD12	4:2E:181:LEU:HA	1.83	0.45
13:2R:67:LEU:CD1	13:2R:76:VAL:HG21	2.47	0.45
19:2X:35:THR:HG22	19:2X:38:GLU:H	1.81	0.45
21:2Z:146:ILE:HG12	21:2Z:174:VAL:HG13	1.98	0.45
24:22:1:MET:HE3	24:22:5:GLU:HB3	1.99	0.45
25:23:46:ASN:O	25:23:50:VAL:HG22	2.17	0.45
32:2a:741:G:H2'	32:2a:742:G:O4'	2.16	0.45
32:2a:1027:C:H2'	32:2a:1034:G:H22	1.82	0.45
32:2a:1352:C:H42	32:2a:1370:G:H1	1.65	0.45
32:2a:1356:G:H2'	32:2a:1357:A:C8	2.52	0.45
32:2a:1396:A:OP2	60:2a:3396:HOH:O	2.21	0.45
35:2d:180:GLY:O	35:2d:182:LYS:HG3	2.17	0.45
40:2i:16:ARG:HH11	40:2i:64:THR:HG21	1.81	0.45
55:2x:44:A:C6	55:2x:45:G:C6	3.05	0.45
1:1A:1093:G:H2'	1:1A:1156:G:N2	2.32	0.45
3:1D:108:PRO:HB3	3:1D:143:HIS:HE1	1.82	0.45
3:1D:232:PRO:HB3	3:1D:244:ARG:CZ	2.47	0.45
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.52	0.45
9:1N:128:HIS:O	9:1N:131:GLN:NE2	2.50	0.45
32:1a:44:G:C2	32:1a:45:U:H1'	2.52	0.45
32:1a:266:G:H2'	32:1a:266:G:N3	2.32	0.45
32:1a:542:G:H5'	35:1d:41:GLY:HA3	1.99	0.45
32:1a:1129:C:H2'	32:1a:1139:G:N7	2.31	0.45
42:1k:98:LEU:O	42:1k:101:SER:OG	2.29	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:1l:113:ARG:NH2	43:1l:116:SER:HB2	2.32	0.45
43:1l:124:LYS:HA	43:1l:125:PRO:HD3	1.77	0.45
1:2A:195:A:H5''	1:2A:196:A:O5'	2.16	0.45
1:2A:322:A:C5	1:2A:340:A:C2	3.05	0.45
1:2A:1374:G:H2'	1:2A:1375:C:C6	2.52	0.45
1:2A:2019:A:O4'	16:2U:34:LYS:HE3	2.17	0.45
1:2A:2262:U:OP2	22:20:16:SER:OG	2.29	0.45
2:2B:7:G:H1	2:2B:114:C:N4	2.08	0.45
5:2F:192:LEU:HD13	5:2F:194:MET:HE2	1.99	0.45
15:2T:16:ARG:HB3	15:2T:18:ASP:OD1	2.17	0.45
16:2U:52:ARG:HA	16:2U:55:ARG:HE	1.82	0.45
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.98	0.45
32:2a:909:A:H2	32:2a:1413:A:N3	2.15	0.45
32:2a:973:G:H3'	32:2a:974:A:H5''	1.99	0.45
32:2a:1187:G:OP1	40:2i:113:LYS:NZ	2.46	0.45
32:2a:1264:C:C4	32:2a:1272:G:O6	2.70	0.45
36:2e:69:VAL:HG22	36:2e:71:LEU:HD12	1.98	0.45
1:1A:213:G:H2'	1:1A:214:A:O4'	2.16	0.45
1:1A:597:C:N3	4:1E:145:LYS:NZ	2.65	0.45
14:1S:20:ARG:NH2	22:10:51:VAL:O	2.45	0.45
15:1T:56:GLY:O	15:1T:59:THR:HG22	2.17	0.45
16:1U:86:ALA:O	17:1V:49:THR:HG23	2.17	0.45
18:1W:68:ARG:NH1	18:1W:111:HIS:HA	2.32	0.45
32:1a:1030(B):C:H2'	32:1a:1030(C):G:H5'	1.99	0.45
50:1s:80:TYR:O	50:1s:82:GLY:N	2.48	0.45
55:1x:25:C:H2'	55:1x:26:G:O4'	2.16	0.45
1:2A:323:G:HO2'	1:2A:1205:U:H3	1.62	0.45
1:2A:570:G:H2'	1:2A:2030:A:C5	2.51	0.45
1:2A:1147:C:H2'	1:2A:1148:A:H8	1.81	0.45
1:2A:1353:A:H2'	1:2A:1354:A:C8	2.52	0.45
1:2A:2162:G:H4'	1:2A:2172:U:C2'	2.45	0.45
1:2A:2261:C:O2'	1:2A:2262:U:H5'	2.17	0.45
3:2D:73:VAL:HG13	3:2D:120:GLY:HA3	1.97	0.45
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	1.99	0.45
4:2E:36:ARG:NH1	4:2E:85:ASN:OD1	2.50	0.45
6:2G:131:TYR:CE2	6:2G:133:LEU:HD23	2.51	0.45
32:2a:229:U:H5''	47:2p:33:ILE:HD13	1.99	0.45
32:2a:767:A:H2'	32:2a:768:A:O4'	2.17	0.45
32:2a:1208:C:H2'	32:2a:1209:C:C6	2.52	0.45
38:2g:26:PHE:O	38:2g:30:ILE:HD12	2.17	0.45
40:2i:99:LEU:HB3	40:2i:101:PHE:HE2	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:2j:51:ARG:HG3	45:2n:45:ARG:NH2	2.32	0.45
47:2p:60:LEU:HD21	47:2p:80:PHE:HE1	1.82	0.45
1:1A:329:U:H2'	1:1A:330:U:C6	2.53	0.44
1:1A:1846:A:OP2	3:1D:54:ARG:NH2	2.37	0.44
1:1A:2304:C:H2'	1:1A:2305:C:C6	2.52	0.44
2:1B:28:C:OP1	14:1S:36:TYR:OH	2.30	0.44
33:1b:54:THR:O	33:1b:58:ILE:HG13	2.17	0.44
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.51	0.44
36:1e:31:LEU:HD23	36:1e:31:LEU:HA	1.75	0.44
37:1f:19:LEU:HD11	37:1f:59:TYR:CE1	2.52	0.44
49:1r:38:GLU:HA	49:1r:41:LYS:HE3	1.99	0.44
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.52	0.44
54:1y:56:C:C2	54:1y:57:G:C8	3.05	0.44
1:2A:61:G:H5'	24:22:50:ILE:HG21	1.99	0.44
1:2A:154(A):C:H42	1:2A:171:G:H1	1.65	0.44
1:2A:639:U:H2'	1:2A:640:C:C6	2.52	0.44
1:2A:947:G:N2	1:2A:971:C:C2	2.85	0.44
1:2A:1466:G:O2'	1:2A:1546:C:O2'	2.09	0.44
1:2A:2070:G:H2'	1:2A:2071:A:C8	2.51	0.44
1:2A:2102:U:H2'	1:2A:2103:C:C6	2.53	0.44
1:2A:2332:U:H5'	1:2A:2336:A:N6	2.33	0.44
26:24:44:THR:O	26:24:45:GLY:C	2.60	0.44
26:24:47:GLN:C	26:24:49:PHE:H	2.24	0.44
32:2a:980:C:H3'	32:2a:981:U:H6	1.80	0.44
32:2a:995:C:N3	32:2a:1046:A:O2'	2.43	0.44
33:2b:48:MET:HE2	33:2b:49:GLU:HB2	1.99	0.44
38:2g:76:ARG:N	38:2g:87:VAL:O	2.48	0.44
1:1A:449:A:H2'	1:1A:450:A:C8	2.53	0.44
1:1A:1550:C:H2'	1:1A:1551:C:H6	1.82	0.44
1:1A:1787:G:H4'	1:1A:1789:G:O4'	2.17	0.44
1:1A:2054:G:H1'	4:1E:145:LYS:HD3	1.99	0.44
1:1A:2764:G:C4	7:1H:2:SER:HA	2.52	0.44
6:1G:43:LEU:HB3	6:1G:44:GLY:H	1.55	0.44
16:1U:104:GLN:NE2	16:1U:105:VAL:HG23	2.32	0.44
30:18:42:ARG:HD2	60:18:212:HOH:O	2.17	0.44
32:1a:1198:G:H5''	60:1a:2016:HOH:O	2.17	0.44
1:2A:275:G:C2	1:2A:276:A:C4	3.05	0.44
1:2A:1462:C:H4'	1:2A:2703:C:H5'	2.00	0.44
1:2A:2184:G:O2'	1:2A:2185:C:H5'	2.17	0.44
1:2A:2350:C:H5''	30:28:42:ARG:HD3	1.99	0.44
7:2H:103:LEU:HB3	7:2H:115:VAL:HB	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:149:ARG:HH12	7:2H:167:GLU:CD	2.25	0.44
20:2Y:38:ILE:HD11	20:2Y:66:PRO:HG3	1.99	0.44
32:2a:129(A):G:C6	32:2a:189(E):U:H4'	2.53	0.44
32:2a:271:C:H2'	32:2a:272:C:H6	1.82	0.44
32:2a:737:A:H2'	32:2a:738:C:C6	2.52	0.44
32:2a:859:A:OP2	32:2a:869:G:N1	2.40	0.44
32:2a:1009:G:C2	32:2a:1021:G:N3	2.85	0.44
32:2a:1286:A:C8	32:2a:1287:A:H4'	2.51	0.44
32:2a:1349:A:H2'	32:2a:1350:A:H8	1.82	0.44
44:2m:23:TYR:HE2	44:2m:70:LEU:HD22	1.81	0.44
2:1B:12:C:H2'	22:10:73:GLY:HA3	1.99	0.44
21:1Z:1:MET:HA	21:1Z:2:GLU:HA	1.70	0.44
32:1a:116:A:H8	32:1a:116:A:O5'	2.00	0.44
33:1b:155:LEU:HD12	33:1b:155:LEU:HA	1.87	0.44
55:1x:45:G:H8	55:1x:45:G:O5'	2.00	0.44
1:2A:297:C:OP1	20:2Y:87:LYS:HG3	2.18	0.44
1:2A:1359:A:C2	1:2A:1372:U:O4	2.71	0.44
1:2A:1785:A:OP1	60:2A:4173:HOH:O	2.21	0.44
1:2A:2305:A:H1'	6:2G:136:ARG:HB3	1.98	0.44
1:2A:2853:C:H2'	1:2A:2854:G:H8	1.82	0.44
7:2H:122:THR:O	7:2H:134:SER:OG	2.35	0.44
16:2U:81:HIS:CG	16:2U:117:GLN:HE22	2.35	0.44
26:24:58:ARG:HH21	44:2m:80:ARG:HH22	1.63	0.44
32:2a:1350:A:C2	32:2a:1351:U:C2	3.05	0.44
33:2b:51:LEU:HD22	33:2b:55:PHE:CE2	2.52	0.44
33:2b:155:LEU:HD21	33:2b:159:PRO:HD3	1.99	0.44
36:2e:74:GLY:HA3	36:2e:116:THR:HG22	1.98	0.44
38:2g:79:ARG:CG	38:2g:80:VAL:H	2.30	0.44
43:2l:45:PRO:CB	43:2l:92:0TD:OD1	2.66	0.44
54:2w:51:U:H2'	54:2w:52:G:C8	2.52	0.44
1:1A:2108:U:H2'	1:1A:2109:G:C8	2.53	0.44
1:1A:2619:G:H2'	1:1A:2620:G:O4'	2.17	0.44
1:1A:2665:U:H2'	1:1A:2666:A:C8	2.53	0.44
32:1a:405:U:O4	35:1d:2:GLY:N	2.50	0.44
32:1a:828:A:H2'	32:1a:829:G:O4'	2.16	0.44
32:1a:935:A:O2'	32:1a:1383:C:N3	2.47	0.44
32:1a:1025:U:C2	32:1a:1036:G:O6	2.70	0.44
34:1c:73:PRO:O	34:1c:77:ILE:HG12	2.18	0.44
34:1c:121:ALA:O	34:1c:125:GLU:HG3	2.16	0.44
39:1h:81:HIS:ND1	39:1h:138:TRP:OXT	2.41	0.44
41:1j:45:ARG:HG2	41:1j:47:PHE:CZ	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:721:C:H2'	1:2A:722:A:C8	2.52	0.44
1:2A:911:A:O4'	1:2A:2264:C:H4'	2.17	0.44
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.18	0.44
1:2A:1237:A:OP1	60:2A:4545:HOH:O	2.21	0.44
1:2A:2133:G:C2	1:2A:2157:G:C5	3.06	0.44
1:2A:2184:G:H2'	1:2A:2185:C:H6	1.80	0.44
1:2A:2470:G:O6	1:2A:2481:G:C2	2.70	0.44
1:2A:2552:2MU:H6	1:2A:2552:2MU:O5'	2.17	0.44
2:2B:29:A:H2'	2:2B:30:C:C6	2.53	0.44
11:2P:6:LEU:HD23	11:2P:6:LEU:HA	1.81	0.44
17:2V:31:ALA:O	17:2V:61:VAL:HG12	2.18	0.44
22:20:45:PHE:HE1	22:20:77:ARG:NE	2.14	0.44
27:25:20:ARG:HG2	27:25:23:HIS:CE1	2.53	0.44
32:2a:1261:A:H3'	32:2a:1262:C:C6	2.51	0.44
32:2a:1356:G:N2	32:2a:1367:C:C2	2.85	0.44
32:2a:1456:G:O2'	51:2t:39:LYS:HE3	2.17	0.44
33:2b:110:GLN:O	33:2b:113:HIS:HB2	2.18	0.44
33:2b:213:LEU:HD22	33:2b:214:ILE:HD13	1.99	0.44
36:2e:24:ARG:HD2	53:2v:24:A:OP2	2.17	0.44
44:2m:3:ARG:HB3	44:2m:7:VAL:O	2.17	0.44
52:2u:6:ARG:HE	52:2u:15:ARG:CZ	2.31	0.44
55:2x:67:C:C2'	55:2x:68:C:H5'	2.48	0.44
1:1A:1099:C:N3	1:1A:1152:G:N2	2.53	0.44
1:1A:2177:G:H2'	1:1A:2177:G:N3	2.33	0.44
15:1T:39:ARG:NH2	32:1a:345:C:H5''	2.33	0.44
24:12:41:ILE:HG13	24:12:43:GLN:HG3	1.99	0.44
32:1a:37:U:O2'	32:1a:547:A:N1	2.45	0.44
32:1a:952:U:H2'	32:1a:953:G:H8	1.82	0.44
32:1a:1095:U:H5''	32:1a:1109:C:O2	2.16	0.44
32:1a:1513:A:H2'	32:1a:1514:C:C6	2.52	0.44
36:1e:6:PHE:HB3	36:1e:34:VAL:HG22	1.99	0.44
38:1g:48:LYS:O	38:1g:52:GLU:HG3	2.17	0.44
54:1w:18:G:H4'	54:1w:60:U:H6	1.81	0.44
1:2A:7:G:N2	1:2A:2896:C:O2	2.49	0.44
1:2A:248:G:C2	1:2A:2431:U:H4'	2.53	0.44
1:2A:441:U:H2'	1:2A:442:G:C8	2.53	0.44
1:2A:973:A:H8	1:2A:973:A:OP1	2.01	0.44
1:2A:1037:G:C2	1:2A:1119:C:C2	3.06	0.44
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.81	0.44
1:2A:1916:A:H2'	1:2A:1917:PSU:O4'	2.18	0.44
1:2A:2168:G:C8	1:2A:2170:A:N7	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:8:LYS:HE2	6:2G:8:LYS:HB3	1.81	0.44
6:2G:131:TYR:HB3	6:2G:159:VAL:HG13	2.00	0.44
13:2R:26:LYS:HE2	13:2R:70:LEU:O	2.17	0.44
15:2T:56:GLY:O	15:2T:59:THR:HG22	2.17	0.44
20:2Y:86:ARG:HB2	20:2Y:98:VAL:HG23	1.99	0.44
23:21:67:ILE:N	23:21:68:PRO:HD2	2.32	0.44
26:24:57:GLU:CB	26:24:58:ARG:HA	2.48	0.44
32:2a:12:U:H4'	32:2a:526:C:O2'	2.17	0.44
32:2a:336:C:H2'	32:2a:337:C:C6	2.52	0.44
32:2a:922:G:N3	32:2a:1398:A:H2	2.15	0.44
32:2a:1206:G:C6	32:2a:1207:2MG:C4	3.06	0.44
32:2a:1272:G:N2	32:2a:1273:G:N9	2.66	0.44
33:2b:112:VAL:HG22	33:2b:149:LEU:HD13	2.00	0.44
35:2d:12:CYS:SG	35:2d:19:LEU:HB2	2.57	0.44
38:2g:69:VAL:HG13	38:2g:134:ALA:O	2.18	0.44
1:1A:1201:A:P	16:1U:55:ARG:HD2	2.57	0.44
1:1A:1314:A:C2	1:1A:2035:A:C4	3.06	0.44
1:1A:1821:C:H2'	1:1A:1822:A:C5	2.52	0.44
1:1A:2073:A:H5'	1:1A:2590:G:O4'	2.18	0.44
1:1A:2177:G:H3'	1:1A:2178:G:C8	2.52	0.44
1:1A:2205:C:HO2'	1:1A:2206:G:P	2.41	0.44
10:1O:64:ARG:HD3	10:1O:79:PHE:CD1	2.52	0.44
21:1Z:137:ILE:HA	21:1Z:156:LYS:HZ1	1.83	0.44
28:16:34:LEU:H	28:16:51:GLU:HG2	1.83	0.44
32:1a:1014:A:H4'	50:1s:14:HIS:CE1	2.52	0.44
32:1a:1029:C:H41	32:1a:1030(A):G:N2	2.14	0.44
34:1c:113:ALA:HB3	34:1c:114:PRO:HD3	2.00	0.44
35:1d:107:ARG:HH22	35:1d:194:LEU:HD11	1.82	0.44
50:1s:80:TYR:C	50:1s:82:GLY:H	2.25	0.44
1:2A:112:U:H5'	24:22:65:ASN:ND2	2.32	0.44
1:2A:1507:A:O2'	1:2A:1508:A:H8	2.01	0.44
1:2A:2050:C:H1'	4:2E:156:MET:HE2	2.00	0.44
6:2G:173:LEU:HB3	6:2G:178:PHE:CD2	2.53	0.44
32:2a:737:A:H1'	37:2f:73:ASN:HD21	1.83	0.44
32:2a:980:C:H3'	32:2a:981:U:C6	2.52	0.44
32:2a:1000:U:H2'	32:2a:1001:A:C8	2.53	0.44
32:2a:1003:G:N2	32:2a:1025:U:C4	2.85	0.44
32:2a:1029:C:N3	32:2a:1032:G:C2	2.86	0.44
33:2b:9:GLU:O	33:2b:12:GLU:HG2	2.18	0.44
33:2b:43:ASP:OD2	33:2b:46:LYS:N	2.46	0.44
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.43	0.44
1:1A:326:C:P	20:1Y:73:ARG:HH22	2.41	0.44
1:1A:556:C:H4'	1:1A:557:A:H5''	1.98	0.44
1:1A:895:G:H2'	1:1A:896:A:C8	2.53	0.44
1:1A:937:A:H2'	1:1A:938:G:O4'	2.17	0.44
1:1A:1115:A:H2'	1:1A:1119:A:N7	2.32	0.44
1:1A:2291:G:O6	22:10:14:ARG:HG3	2.18	0.44
6:1G:64:THR:HB	6:1G:94:LEU:HD21	1.98	0.44
8:1I:109:ILE:HD12	8:1I:109:ILE:HA	1.83	0.44
32:1a:629:G:H2'	32:1a:630:G:O4'	2.18	0.44
34:1c:180:ALA:HB1	34:1c:203:PHE:CE1	2.53	0.44
38:1g:28:ASN:HD21	38:1g:36:LYS:NZ	2.15	0.44
1:2A:674:G:H1'	5:2F:74:ARG:HD3	2.00	0.44
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.52	0.44
6:2G:11:TYR:HB2	6:2G:176:LEU:HD21	1.98	0.44
13:2R:24:GLN:NE2	13:2R:36:THR:HG21	2.32	0.44
26:24:49:PHE:HB3	26:24:50:VAL:H	1.49	0.44
32:2a:444:C:H2'	32:2a:445:G:C8	2.44	0.44
32:2a:540:G:C6	32:2a:541:G:C5	3.06	0.44
32:2a:1350:A:N6	60:2a:3648:HOH:O	2.49	0.44
32:2a:1446:U:O2'	32:2a:1447:A:O5'	2.36	0.44
33:2b:18:GLY:HA3	33:2b:42:ILE:H	1.82	0.44
33:2b:95:GLN:HG3	33:2b:147:LYS:HE2	1.99	0.44
33:2b:127:ILE:O	33:2b:127:ILE:HG12	2.17	0.44
47:2p:69:THR:O	47:2p:73:LEU:HG	2.17	0.44
54:2w:68:C:H2'	54:2w:69:G:C8	2.49	0.44
1:1A:8:A:H2'	1:1A:9:U:C6	2.53	0.44
1:1A:1411:A:O2'	23:11:11:ARG:NH1	2.51	0.44
1:1A:1513:G:H2'	1:1A:1594:C:H41	1.83	0.44
1:1A:1997:G:H2'	1:1A:1998:U:O4'	2.17	0.44
1:1A:2371:C:H2'	1:1A:2372:A:O4'	2.18	0.44
5:1F:158:THR:OG1	5:1F:195:ASP:OD2	2.31	0.44
7:1H:55:PRO:HG2	7:1H:61:HIS:ND1	2.32	0.44
13:1R:103:ARG:HD3	13:1R:108:GLY:O	2.18	0.44
32:1a:881:G:H2'	32:1a:882:C:O4'	2.18	0.44
34:1c:108:ASN:HB3	34:1c:111:LEU:HD12	2.00	0.44
35:1d:88:VAL:HG12	35:1d:91:SER:H	1.83	0.44
51:1t:87:LYS:O	51:1t:91:LEU:HG	2.18	0.44
54:1y:58:A:O2'	54:1y:59:U:OP1	2.33	0.44
1:2A:892:G:H3'	1:2A:893:C:C5'	2.47	0.44
1:2A:1137:G:H2'	1:2A:1138:G:O4'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2542:A:H4'	1:2A:2543:G:C8	2.53	0.44
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.53	0.44
2:2B:33:G:N3	2:2B:50:G:N2	2.66	0.44
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.82	0.44
3:2D:133:LEU:HB3	3:2D:173:VAL:HG11	1.99	0.44
4:2E:108:SER:HB3	4:2E:165:VAL:CG2	2.47	0.44
7:2H:45:VAL:HG12	7:2H:50:VAL:HG22	1.99	0.44
20:2Y:52:SER:HB2	20:2Y:53:PRO:HD2	2.00	0.44
32:2a:688:G:H2'	32:2a:689:C:H6	1.82	0.44
32:2a:967:5MC:H2'	32:2a:968:A:N7	2.33	0.44
37:2f:91:VAL:HG11	49:2r:72:ARG:NH1	2.33	0.44
39:2h:33:GLU:O	39:2h:36:LEU:N	2.51	0.44
1:1A:1117:G:H1'	1:1A:1135:G:H2'	1.99	0.44
1:1A:1634:C:H2'	1:1A:1635:C:H6	1.82	0.44
18:1W:19:LEU:HB3	27:15:25:LEU:HD11	2.00	0.44
32:1a:1316:G:N1	32:1a:1319:A:OP2	2.50	0.44
34:1c:148:GLY:HA3	34:1c:172:ARG:O	2.18	0.44
35:1d:196:LEU:HD12	35:1d:196:LEU:H	1.82	0.44
54:1w:60:U:H5'	54:1w:61:C:H5	1.83	0.44
1:2A:11:G:H2'	1:2A:12:U:H5'	1.99	0.44
1:2A:1664:A:OP1	60:2A:5119:HOH:O	2.21	0.44
2:2B:18:G:O2'	2:2B:19:G:H5'	2.18	0.44
5:2F:155:LEU:HB2	5:2F:189:THR:HG21	2.00	0.44
7:2H:56:SER:OG	7:2H:57:ASP:N	2.50	0.44
7:2H:103:LEU:HD21	7:2H:105:LEU:HD21	2.00	0.44
21:2Z:126:VAL:HG13	21:2Z:161:VAL:HG23	2.00	0.44
32:2a:76:C:N4	32:2a:93:G:H1	2.16	0.44
32:2a:583:A:H2'	32:2a:584:G:O4'	2.17	0.44
32:2a:954:G:H2'	32:2a:955:U:C6	2.53	0.44
34:2c:6:HIS:HB3	45:2n:49:HIS:ND1	2.33	0.44
39:2h:91:ARG:HD3	48:2q:32:TYR:O	2.17	0.44
44:2m:44:ARG:O	44:2m:48:LEU:HG	2.17	0.44
47:2p:14:ASN:OD1	47:2p:42:ARG:NH2	2.50	0.44
48:2q:19:VAL:HG23	48:2q:44:ALA:HB3	2.00	0.44
54:2w:10:G:N2	54:2w:11:C:C2	2.85	0.44
55:2x:20:U:O2	55:2x:20:U:H2'	2.18	0.44
55:2x:50:U:H3	55:2x:64:G:H1	1.64	0.44
54:2y:63:G:H2'	54:2y:64:A:O4'	2.18	0.44
1:1A:71:U:H5'	24:12:61:LEU:HD12	1.99	0.43
1:1A:791:G:OP1	4:1E:132:HIS:ND1	2.41	0.43
1:1A:929:G:H4'	54:1w:19:G:C6	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1149:A:H8	1:1A:1149:A:OP2	2.00	0.43
1:1A:2735:G:H2'	1:1A:2736:C:C6	2.53	0.43
2:1B:66:A:N6	2:1B:109:C:H5'	2.30	0.43
14:1S:27:SER:HA	14:1S:88:ASP:HB3	2.00	0.43
24:12:32:LEU:HD22	24:12:36:ARG:HH11	1.82	0.43
32:1a:640:A:C5	32:1a:641:U:C4	3.06	0.43
32:1a:964:A:OP1	60:1a:2017:HOH:O	2.21	0.43
32:1a:1509:C:H2'	32:1a:1510:U:O4'	2.18	0.43
36:1e:78:HIS:CD2	39:1h:104:ARG:HH11	2.36	0.43
50:1s:80:TYR:CZ	50:1s:82:GLY:HA2	2.53	0.43
1:2A:218:A:C2	1:2A:235:U:H4'	2.52	0.43
1:2A:601:C:O2'	5:2F:104:LYS:NZ	2.49	0.43
1:2A:910:A:N3	1:2A:2264:C:O2'	2.40	0.43
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.18	0.43
1:2A:2131:G:N7	1:2A:2133:G:C2	2.86	0.43
1:2A:2168:G:H8	1:2A:2170:A:N7	2.16	0.43
2:2B:17:C:H2'	2:2B:18:G:O4'	2.18	0.43
2:2B:24:G:N2	2:2B:27:C:N3	2.59	0.43
5:2F:32:LEU:O	5:2F:36:VAL:HG23	2.18	0.43
9:2N:96:GLU:CD	9:2N:96:GLU:H	2.26	0.43
11:2P:128:HIS:NE2	11:2P:148:LEU:HD11	2.33	0.43
12:2Q:103:MET:HE1	12:2Q:125:LEU:HD13	1.99	0.43
15:2T:109:GLU:HG2	15:2T:112:ARG:HH22	1.81	0.43
32:2a:54:C:N4	32:2a:353:A:OP2	2.42	0.43
32:2a:600:C:H2'	32:2a:601:C:C6	2.53	0.43
32:2a:742:G:P	46:2o:35:ARG:HH22	2.40	0.43
32:2a:1047:G:HO2'	32:2a:1215:G:HO2'	1.58	0.43
32:2a:1070:U:H2'	32:2a:1071:C:C6	2.53	0.43
33:2b:87:ARG:HH11	33:2b:219:VAL:HG12	1.83	0.43
35:2d:76:ARG:O	35:2d:80:GLU:HG2	2.18	0.43
51:2t:43:LEU:O	51:2t:47:GLY:N	2.38	0.43
1:1A:2051:G:H2'	1:1A:2053:A:OP1	2.17	0.43
3:1D:145:VAL:HG12	3:1D:146:GLU:O	2.17	0.43
8:1I:135:GLU:C	8:1I:137:PRO:HD3	2.43	0.43
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	2.17	0.43
32:1a:93:G:H2'	32:1a:96:U:O4'	2.18	0.43
32:1a:160:A:H2'	32:1a:161:A:O4'	2.18	0.43
32:1a:166:G:H2'	32:1a:167:G:H8	1.84	0.43
32:1a:974:A:H8	32:1a:974:A:OP1	2.01	0.43
32:1a:1142:G:H2'	32:1a:1143:G:O4'	2.18	0.43
32:1a:1182:G:H4'	32:1a:1183:A:H5''	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1191:A:H5''	34:1c:4:LYS:NZ	2.33	0.43
33:1b:98:LEU:O	33:1b:101:MET:HG3	2.18	0.43
54:1y:18:G:H1	54:1y:55:PSU:H1'	1.82	0.43
54:1y:41:C:H2'	54:1y:42:C:C6	2.52	0.43
1:2A:93:G:H2'	1:2A:94:C:H6	1.81	0.43
1:2A:652(B):A:H61	1:2A:655:A:H1'	1.82	0.43
1:2A:2010:G:H5''	18:2W:42:ARG:HB2	2.00	0.43
1:2A:2018:G:H2'	1:2A:2019:A:O4'	2.18	0.43
1:2A:2311:A:O2'	1:2A:2312:U:O4'	2.32	0.43
1:2A:2343:C:O3'	1:2A:2373:G:H4'	2.18	0.43
1:2A:2695:C:H2'	1:2A:2696:U:C6	2.52	0.43
1:2A:2745:C:C4	1:2A:2746:U:C4	3.06	0.43
1:2A:2787:C:H2'	1:2A:2788:C:H6	1.84	0.43
2:2B:3:C:H2'	2:2B:4:C:C6	2.54	0.43
6:2G:41:GLN:NE2	6:2G:153:ARG:HB3	2.33	0.43
6:2G:70:VAL:HA	6:2G:90:LEU:HD23	1.99	0.43
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.43	0.43
10:2O:7:TYR:CZ	10:2O:44:LYS:HG3	2.54	0.43
15:2T:73:GLU:OE2	15:2T:103:ARG:NE	2.37	0.43
15:2T:105:LEU:HB2	15:2T:110:ILE:HG13	2.00	0.43
22:20:38:VAL:HG11	22:20:45:PHE:HD2	1.83	0.43
26:24:60:GLN:O	26:24:62:ARG:HG2	2.18	0.43
32:2a:163:C:H2'	32:2a:164:U:C6	2.53	0.43
32:2a:165:C:H2'	32:2a:166:G:C8	2.53	0.43
32:2a:174:C:H2'	32:2a:175:C:H6	1.83	0.43
32:2a:1000:U:O2	32:2a:1041:A:N1	2.51	0.43
32:2a:1077:G:N1	32:2a:1080:A:OP2	2.49	0.43
32:2a:1080:A:H5''	32:2a:1081:G:OP2	2.18	0.43
33:2b:17:PHE:HB2	33:2b:44:LEU:HD11	2.00	0.43
34:2c:120:VAL:HG13	34:2c:133:ALA:HB1	2.00	0.43
39:2h:20:TYR:HD1	39:2h:65:TYR:CD1	2.35	0.43
40:2i:18:PHE:O	40:2i:61:ALA:HA	2.18	0.43
43:2l:6:THR:HG23	43:2l:9:GLN:OE1	2.18	0.43
54:2y:18:G:O6	54:2y:55:PSU:H1'	2.18	0.43
1:1A:1212:C:H2'	1:1A:1213:U:C6	2.54	0.43
1:1A:2190:G:O6	1:1A:2193:A:H5''	2.18	0.43
1:1A:2198:A:H2'	1:1A:2199:C:C6	2.53	0.43
5:1F:32:LEU:HD13	5:1F:112:MET:HE1	1.99	0.43
11:1P:121:LYS:O	11:1P:123:LEU:N	2.51	0.43
21:1Z:158:PRO:HA	21:1Z:159:PRO:HD3	1.93	0.43
32:1a:345:C:H5'	32:1a:346:G:C4	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:626:U:H2'	32:1a:627:G:H8	1.83	0.43
53:1v:14:A:H2'	53:1v:14:A:N3	2.33	0.43
1:2A:118:A:N3	1:2A:178:G:H1'	2.33	0.43
1:2A:848:G:C4	1:2A:933:A:C8	3.05	0.43
1:2A:1171:G:N2	1:2A:1178:C:C4	2.86	0.43
1:2A:1529:G:O6	1:2A:1530:C:N4	2.51	0.43
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.51	0.43
1:2A:1945:G:O6	1:2A:1960:A:N6	2.52	0.43
1:2A:2065:C:H4'	1:2A:2251:OMG:HM22	2.00	0.43
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.53	0.43
1:2A:2752:C:H6	1:2A:2752:C:O5'	2.02	0.43
3:2D:227:ASN:C	3:2D:234:GLY:HA3	2.44	0.43
7:2H:3:ARG:HH12	7:2H:5:GLY:CA	2.30	0.43
7:2H:97:ARG:O	7:2H:103:LEU:HD12	2.18	0.43
26:24:12:ALA:CB	26:24:26:SER:HB3	2.49	0.43
26:24:41:PRO:HG3	26:24:49:PHE:CZ	2.53	0.43
32:2a:108:G:N1	51:2t:15:ARG:HG2	2.32	0.43
32:2a:1134:G:H1	32:2a:1140:C:N4	2.12	0.43
32:2a:1261:A:C8	32:2a:1275:A:C6	3.06	0.43
32:2a:1272:G:N2	32:2a:1273:G:C8	2.73	0.43
32:2a:1307:U:O5'	32:2a:1307:U:H6	2.01	0.43
33:2b:77:ALA:HA	33:2b:80:ILE:HG22	1.99	0.43
43:2l:53:ARG:HG3	43:2l:93:LEU:HD21	1.99	0.43
46:2o:43:LEU:HD12	46:2o:56:LEU:HD22	1.99	0.43
55:2x:21:A:N6	55:2x:46:G:N3	2.66	0.43
1:1A:44:G:H5''	1:1A:45:C:OP1	2.17	0.43
1:1A:333:G:N3	1:1A:353:G:O2'	2.46	0.43
1:1A:1071:G:O2'	60:1A:4871:HOH:O	2.09	0.43
1:1A:1104:G:H1	1:1A:1126:C:N4	2.13	0.43
1:1A:2874:G:OP1	15:1T:119:LYS:HD2	2.19	0.43
60:1A:5923:HOH:O	9:1N:73:THR:HG21	2.18	0.43
6:1G:142:PRO:HB2	26:14:31:ILE:HG21	2.01	0.43
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.53	0.43
32:1a:509:A:O2'	32:1a:510:A:OP1	2.29	0.43
32:1a:1347:G:N2	32:1a:1373:G:H2'	2.33	0.43
51:1t:16:HIS:O	51:1t:19:SER:OG	2.29	0.43
1:2A:171:G:H2'	1:2A:172:C:C6	2.53	0.43
1:2A:990:A:N6	1:2A:1186:G:H1'	2.34	0.43
1:2A:1155:A:OP1	16:2U:55:ARG:HD2	2.19	0.43
1:2A:1913:A:H4'	1:2A:1914:C:C5'	2.49	0.43
1:2A:2193:G:H2'	1:2A:2194:G:C8	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:124:GLY:N	8:2I:144:VAL:HG23	2.32	0.43
16:2U:66:ASN:OD1	16:2U:70:ARG:NE	2.48	0.43
19:2X:55:ASN:O	19:2X:79:ALA:HA	2.18	0.43
32:2a:458:C:H2'	32:2a:460:G:O4'	2.18	0.43
32:2a:783:C:H2'	32:2a:784:C:C6	2.52	0.43
32:2a:974:A:OP2	45:2n:29:ARG:NH2	2.50	0.43
32:2a:1029:C:C4	32:2a:1032:G:C2	3.06	0.43
32:2a:1070:U:H2'	32:2a:1071:C:H6	1.83	0.43
32:2a:1342:C:H2'	32:2a:1343:G:C8	2.53	0.43
33:2b:53:ARG:HA	33:2b:56:ARG:HH11	1.84	0.43
33:2b:101:MET:HG2	33:2b:108:ILE:HG21	2.00	0.43
33:2b:164:VAL:HB	33:2b:186:ALA:CB	2.49	0.43
36:2e:108:ALA:O	36:2e:112:LEU:HG	2.17	0.43
42:2k:38:ASN:HA	42:2k:39:PRO:HD3	1.80	0.43
1:1A:237:G:OP1	60:1A:6419:HOH:O	2.21	0.43
1:1A:1098:C:H2'	1:1A:1099:C:H6	1.83	0.43
1:1A:1825:U:H2'	1:1A:1826:C:C6	2.54	0.43
1:1A:2137:G:C2	1:1A:2139:A:N7	2.87	0.43
1:1A:2164:C:O2	1:1A:2171:G:N1	2.35	0.43
1:1A:2641:A:HO2'	1:1A:2642:G:P	2.40	0.43
30:18:62:LEU:HB3	30:18:65:GLU:HG2	1.99	0.43
32:1a:1278:U:H5'	32:1a:1279:A:C5'	2.49	0.43
33:1b:76:GLN:OE1	33:1b:76:GLN:N	2.48	0.43
39:1h:7:ALA:HB2	39:1h:85:ARG:HG3	2.00	0.43
40:1i:15:ALA:HB2	40:1i:65:VAL:HG13	2.00	0.43
47:1p:47:ASP:OD1	47:1p:47:ASP:N	2.52	0.43
1:2A:71:A:N7	19:2X:31:HIS:HE1	2.17	0.43
1:2A:990:A:C6	1:2A:1186:G:H1'	2.54	0.43
1:2A:1324:G:C2	1:2A:1331:A:C2	3.07	0.43
1:2A:1746:G:C2	1:2A:1747:G:C8	3.06	0.43
1:2A:2489:G:O2'	1:2A:2490:G:H5'	2.19	0.43
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.54	0.43
5:2F:126:VAL:HG21	5:2F:129:PHE:CE1	2.53	0.43
5:2F:132:VAL:HG21	5:2F:163:VAL:HG22	1.99	0.43
7:2H:155:SER:HB3	7:2H:158:HIS:O	2.18	0.43
17:2V:24:LYS:HG3	17:2V:64:HIS:HD2	1.82	0.43
21:2Z:145:GLU:HG3	21:2Z:146:ILE:N	2.33	0.43
23:21:52:ARG:HH21	23:21:57:GLU:HB2	1.83	0.43
32:2a:202:U:H3'	32:2a:203:U:C6	2.53	0.43
32:2a:259:G:OP2	51:2t:83:ARG:NH1	2.51	0.43
32:2a:461:A:O2'	32:2a:470:C:H5'	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1002:G:N2	32:2a:1038:C:N3	2.53	0.43
32:2a:1095:U:H2'	32:2a:1096:C:C6	2.52	0.43
32:2a:1240:U:N3	38:2g:30:ILE:O	2.48	0.43
34:2c:22:TRP:CH2	34:2c:32:LEU:HB3	2.53	0.43
36:2e:41:VAL:O	36:2e:67:VAL:HG12	2.18	0.43
40:2i:7:THR:O	40:2i:83:ARG:NH1	2.51	0.43
45:2n:29:ARG:HD3	45:2n:40:CYS:CB	2.49	0.43
54:2w:10:G:H2'	54:2w:11:C:C6	2.54	0.43
1:1A:2402:U:P	30:18:35:GLN:HE22	2.42	0.43
6:1G:34:LEU:HD23	6:1G:161:THR:HG22	2.01	0.43
15:1T:109:GLU:O	15:1T:113:LYS:HG2	2.19	0.43
23:11:50:ARG:HG2	23:11:59:THR:HG22	2.01	0.43
32:1a:35:G:O2'	43:1l:118:SER:O	2.33	0.43
32:1a:540:G:H2'	32:1a:541:G:O4'	2.18	0.43
32:1a:1003:G:C4	32:1a:1004:A:H2	2.37	0.43
35:1d:103:ASN:OD1	35:1d:114:ARG:NE	2.36	0.43
47:1p:19:ILE:N	47:1p:37:GLY:O	2.51	0.43
1:2A:108:U:H2'	1:2A:109:G:C8	2.51	0.43
1:2A:208:C:H2'	1:2A:209:C:H6	1.82	0.43
1:2A:589:C:H2'	1:2A:590:A:C8	2.54	0.43
1:2A:643:A:C8	28:26:44:ARG:NH1	2.87	0.43
1:2A:1226:A:OP1	17:2V:84:LYS:NZ	2.32	0.43
1:2A:1268:A:H2'	1:2A:1269:A:O4'	2.17	0.43
1:2A:2059:A:O2'	5:2F:69:HIS:HD2	2.02	0.43
1:2A:2061:G:H5''	1:2A:2503:2MA:C2	2.49	0.43
1:2A:2110:G:H3'	1:2A:2111:C:H5'	2.00	0.43
1:2A:2149:G:C6	1:2A:2150:U:C2	3.07	0.43
5:2F:37:VAL:O	5:2F:41:LEU:HG	2.18	0.43
32:2a:743:U:H2'	32:2a:744:C:C6	2.53	0.43
32:2a:1004:A:H5''	32:2a:1024:G:H22	1.84	0.43
32:2a:1060:C:C5'	41:2j:51:ARG:HG2	2.47	0.43
32:2a:1188:A:H2'	32:2a:1189:C:O4'	2.19	0.43
32:2a:1228:C:H2'	32:2a:1229:A:H8	1.84	0.43
33:2b:153:ARG:HE	33:2b:153:ARG:HB2	1.67	0.43
34:2c:127:ARG:HH22	34:2c:192:THR:HG23	1.84	0.43
39:2h:20:TYR:HE2	39:2h:75:ARG:HD2	1.83	0.43
41:2j:9:ARG:NH2	41:2j:69:ASN:HD21	2.17	0.43
43:2l:110:VAL:HG23	43:2l:120:TYR:HB3	2.01	0.43
44:2m:82:MET:HE3	44:2m:92:HIS:HB3	1.99	0.43
50:2s:64:GLU:H	50:2s:64:GLU:CD	2.26	0.43
55:2x:31:G:H2'	55:2x:32:5MC:H6	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1537:G:O2'	3:1D:101:GLU:HB2	2.18	0.43
1:1A:1566:U:H2'	1:1A:1567:G:O4'	2.18	0.43
1:1A:2314:G:C2	1:1A:2327:G:C2	3.07	0.43
5:1F:14:PRO:HD2	5:1F:127:GLU:OE1	2.17	0.43
7:1H:24:VAL:HG22	7:1H:35:VAL:HB	2.01	0.43
7:1H:25:LYS:HG3	7:1H:34:GLU:HG2	2.00	0.43
7:1H:61:HIS:O	7:1H:65:HIS:HB2	2.19	0.43
27:15:46:CYS:SG	27:15:48:GLU:HB2	2.59	0.43
31:19:32:HIS:O	31:19:34:GLN:HG3	2.18	0.43
32:1a:399:G:H2'	32:1a:400:C:C6	2.54	0.43
32:1a:892:A:O2'	32:1a:1415:G:H4'	2.19	0.43
32:1a:1437:C:H2'	32:1a:1438:G:C8	2.53	0.43
33:1b:178:ARG:NH2	39:1h:74:PRO:HB3	2.33	0.43
48:1q:32:TYR:O	48:1q:34:LYS:N	2.46	0.43
50:1s:27:GLU:OE1	50:1s:27:GLU:N	2.34	0.43
1:2A:37:C:H4'	1:2A:451:C:OP1	2.18	0.43
1:2A:613:G:O2'	1:2A:614(C):A:N1	2.50	0.43
1:2A:874:G:H5'	1:2A:875:G:OP2	2.19	0.43
1:2A:1636:C:H2'	1:2A:1637:A:C8	2.54	0.43
1:2A:2321:G:N3	1:2A:2321:G:H2'	2.34	0.43
1:2A:2629:A:H1'	1:2A:2630:G:H5''	2.01	0.43
12:2Q:73:PRO:HA	12:2Q:93:TYR:CD1	2.53	0.43
32:2a:580:U:H2'	32:2a:581:G:O4'	2.18	0.43
32:2a:586:C:O2'	32:2a:878:G:H4'	2.19	0.43
32:2a:952:U:O2'	32:2a:965:A:N6	2.47	0.43
32:2a:1291:G:C6	32:2a:1292:U:C4	3.06	0.43
42:2k:44:SER:OG	42:2k:47:VAL:HG23	2.19	0.43
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.33	0.43
54:2w:63:G:H2'	54:2w:64:A:H5''	2.01	0.43
1:1A:905:U:O2	1:1A:2280:A:H2'	2.18	0.43
1:1A:1512:G:O2'	1:1A:1592:A:N1	2.51	0.43
1:1A:1908:C:O5'	1:1A:1908:C:H6	2.01	0.43
1:1A:2158:C:C2	1:1A:2177:G:N2	2.86	0.43
1:1A:2283:G:OP1	22:10:18:ALA:HB1	2.18	0.43
7:1H:58:GLU:O	7:1H:62:LYS:HG3	2.18	0.43
11:1P:55:ARG:NH1	60:1P:315:HOH:O	2.52	0.43
32:1a:431:A:H2'	32:1a:432:A:O4'	2.19	0.43
32:1a:1009:G:O6	32:1a:1020:U:C2	2.69	0.43
32:1a:1028:C:C2	32:1a:1029:C:H1'	2.54	0.43
35:1d:138:TYR:HE2	35:1d:140:VAL:HA	1.83	0.43
35:1d:142:PRO:HA	35:1d:185:PHE:HD2	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:19:LEU:HD21	44:1m:56:LEU:HD21	1.99	0.43
51:1t:13:LEU:HD12	51:1t:14:LYS:H	1.83	0.43
54:1w:1:G:H2'	54:1w:2:C:C6	2.54	0.43
1:2A:116:C:H2'	1:2A:117:G:O4'	2.19	0.43
1:2A:923:C:C4'	22:20:29:GLN:HE21	2.31	0.43
1:2A:932:G:H4'	1:2A:933:A:O5'	2.18	0.43
1:2A:1204:A:N6	1:2A:1240:U:H2'	2.33	0.43
1:2A:1665:A:H2'	1:2A:1666:G:O4'	2.18	0.43
1:2A:1799:G:O2'	3:2D:183:ARG:NH1	2.49	0.43
1:2A:1915:5MU:H2'	1:2A:1916:A:O4'	2.19	0.43
1:2A:2094:G:OP1	8:2I:22:LYS:HD2	2.19	0.43
1:2A:2516:G:O6	1:2A:2517:C:N4	2.51	0.43
6:2G:16:ARG:HB2	6:2G:17:PRO:HD3	2.01	0.43
14:2S:5:THR:OG1	14:2S:8:GLU:HG2	2.18	0.43
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.60	0.43
21:2Z:6:LYS:HE3	21:2Z:8:TYR:HE2	1.83	0.43
32:2a:292:G:N7	32:2a:293:G:H1'	2.33	0.43
32:2a:685:G:C2	32:2a:686:U:C4	3.07	0.43
32:2a:1085:U:H3'	32:2a:1086:U:H6	1.84	0.43
32:2a:1278:U:H5'	32:2a:1279:A:H5'	2.00	0.43
35:2d:150:GLU:H	35:2d:150:GLU:HG3	1.53	0.43
36:2e:9:LYS:HB2	36:2e:112:LEU:HD11	1.99	0.43
36:2e:127:ASN:HA	36:2e:128:PRO:HD3	1.87	0.43
51:2t:50:GLU:HB2	51:2t:99:LEU:CD2	2.48	0.43
54:2w:7:A:N1	54:2w:66:U:O4	2.51	0.43
1:1A:1806:U:OP1	1:1A:2001:C:O2'	2.30	0.43
1:1A:2160:C:C2	1:1A:2176:G:C2	3.06	0.43
1:1A:2162:C:O2	1:1A:2174:G:N2	2.52	0.43
1:1A:2315:G:O6	60:1A:5145:HOH:O	2.20	0.43
29:17:20:ALA:HA	29:17:23:ARG:HH21	1.84	0.43
32:1a:520:A:N1	32:1a:536:C:H1'	2.34	0.43
32:1a:583:A:H2'	32:1a:584:G:O4'	2.19	0.43
32:1a:936:C:H2'	32:1a:937:A:O4'	2.18	0.43
32:1a:1057:G:H2'	32:1a:1058:G:O4'	2.19	0.43
32:1a:1080:A:OP1	36:1e:47:LYS:HD3	2.19	0.43
32:1a:1323:G:H2'	32:1a:1324:A:C8	2.54	0.43
46:1o:61:GLY:O	46:1o:65:ARG:HG3	2.19	0.43
51:1t:36:LEU:HD12	51:1t:62:LEU:HD12	2.01	0.43
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.54	0.43
1:2A:783:A:O2'	1:2A:785:G:OP1	2.30	0.43
1:2A:1260:G:C6	1:2A:1261:C:C4	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1411:C:N4	1:2A:1591:G:H1	2.14	0.43
1:2A:1496:A:OP2	1:2A:1496:A:H8	2.02	0.43
1:2A:1589:C:H2'	1:2A:1590:U:C6	2.54	0.43
1:2A:1776:G:O6	60:2A:4213:HOH:O	2.21	0.43
1:2A:2432:A:C6	1:2A:2433:A:C6	3.07	0.43
7:2H:157:TYR:CE1	7:2H:172:LYS:HG3	2.54	0.43
15:2T:119:LYS:O	15:2T:123:GLN:HG3	2.19	0.43
21:2Z:40:ASP:OD2	21:2Z:43:GLU:HG3	2.18	0.43
24:22:7:ARG:O	24:22:11:GLU:HG3	2.19	0.43
25:23:7:LYS:NZ	25:23:32:GLN:O	2.42	0.43
32:2a:839:U:H3'	32:2a:840:C:H6	1.84	0.43
32:2a:1040:U:C2	32:2a:1041:A:C8	3.07	0.43
34:2c:155:GLY:O	34:2c:157:ILE:N	2.50	0.43
35:2d:64:LEU:HB2	35:2d:198:VAL:HG11	2.00	0.43
40:2i:26:VAL:HG22	40:2i:61:ALA:HB3	2.00	0.43
41:2j:47:PHE:CE2	41:2j:65:LEU:HB2	2.54	0.43
1:1A:989:G:O3'	60:1A:4831:HOH:O	2.21	0.43
1:1A:1132:A:H5'	1:1A:1133:G:OP1	2.19	0.43
1:1A:1312:G:O2'	1:1A:2034:G:O6	2.36	0.43
1:1A:2802:C:O2'	1:1A:2803:A:H4'	2.18	0.43
3:1D:96:HIS:CD2	3:1D:102:LYS:HE2	2.54	0.43
10:1O:1:MET:HE2	10:1O:1:MET:HB3	1.92	0.43
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.37	0.43
20:1Y:20:TYR:HB3	20:1Y:23:ARG:HG3	2.00	0.43
25:13:5:LYS:NZ	25:13:34:GLU:OE2	2.41	0.43
32:1a:134:A:N1	47:1p:25:ARG:NH1	2.67	0.43
32:1a:374:A:C6	32:1a:375:U:C4	3.07	0.43
32:1a:448:A:C4	32:1a:487:A:C2	3.06	0.43
32:1a:486:U:H2'	32:1a:487:A:C8	2.54	0.43
32:1a:895:G:H2'	32:1a:896:C:C6	2.54	0.43
32:1a:1194:U:H2'	32:1a:1195:C:C6	2.54	0.43
35:1d:140:VAL:HG11	35:1d:146:ILE:HD11	2.00	0.43
38:1g:28:ASN:HD21	38:1g:36:LYS:HZ1	1.66	0.43
46:1o:60:VAL:O	46:1o:64:ARG:HB2	2.19	0.43
46:1o:74:ASP:OD2	46:1o:77:ARG:NH1	2.50	0.43
49:1r:58:LEU:HD22	49:1r:62:GLU:HB3	2.00	0.43
1:2A:752:A:P	29:27:3:ARG:HH22	2.42	0.43
1:2A:800:A:H8	1:2A:800:A:OP1	2.01	0.43
1:2A:1857:G:C6	1:2A:1858:G:C6	3.07	0.43
1:2A:1923:U:H2'	1:2A:1924:C:C6	2.54	0.43
1:2A:2125:G:H1'	1:2A:2173:A:N6	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2447:G:N2	1:2A:2450:A:OP2	2.52	0.43
2:2B:25:A:H2'	2:2B:26:A:C8	2.54	0.43
2:2B:64:C:H2'	2:2B:65:C:C6	2.54	0.43
6:2G:125:PHE:CE2	6:2G:170:ARG:HD3	2.53	0.43
7:2H:69:ARG:O	7:2H:73:ALA:N	2.30	0.43
8:2I:79:ILE:HA	8:2I:80:PRO:HD2	1.92	0.43
9:2N:35:ARG:HB2	9:2N:37:LYS:HG3	2.00	0.43
21:2Z:145:GLU:HB3	21:2Z:148:ASP:CG	2.43	0.43
30:28:14:VAL:HG13	30:28:22:VAL:HG13	2.01	0.43
32:2a:657:G:H4'	46:2o:28:GLN:HG3	2.00	0.43
32:2a:979:C:N4	32:2a:1360:A:H62	2.17	0.43
32:2a:1411:C:H2'	32:2a:1412:C:H6	1.83	0.43
34:2c:6:HIS:CD2	34:2c:8:ILE:H	2.36	0.43
54:2y:18:G:H5'	60:2y:3105:HOH:O	2.19	0.43
1:1A:354:A:HO2'	1:1A:355:A:H8	1.65	0.42
1:1A:1093:G:H2'	1:1A:1156:G:H22	1.84	0.42
1:1A:2121:U:O2	1:1A:2212:G:N2	2.34	0.42
1:1A:2800:C:H1'	4:1E:62:PRO:HG3	2.01	0.42
5:1F:178:PRO:HB2	5:1F:201:VAL:HG21	2.00	0.42
8:1I:116:LEU:HD21	8:1I:119:PRO:HA	1.99	0.42
36:1e:102:ALA:O	36:1e:107:ARG:NH2	2.52	0.42
36:1e:122:GLU:O	36:1e:126:ARG:NH1	2.45	0.42
43:1l:113:ARG:O	43:1l:114:LYS:HD3	2.20	0.42
44:1m:29:ARG:HD3	44:1m:64:TRP:CE2	2.54	0.42
54:1y:52:G:H2'	54:1y:53:G:H8	1.84	0.42
1:2A:64:A:H2	19:2X:69:TYR:CD2	2.37	0.42
1:2A:729:G:OP1	3:2D:12:SER:HB2	2.19	0.42
1:2A:999:U:O2'	1:2A:1000:A:H5'	2.19	0.42
1:2A:1278:A:H2'	1:2A:1279:G:C8	2.54	0.42
1:2A:2558:C:H2'	1:2A:2559:C:O4'	2.18	0.42
10:2O:76:ALA:HB3	15:2T:75:ILE:HB	2.01	0.42
13:2R:38:VAL:HG22	13:2R:112:ALA:HB2	1.99	0.42
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.18	0.42
14:2S:25:ARG:HG2	14:2S:40:ILE:HB	2.01	0.42
19:2X:60:ARG:HH22	29:27:47:ARG:NH1	2.17	0.42
21:2Z:100:VAL:HA	21:2Z:101:PRO:HD3	1.86	0.42
32:2a:826:C:H2'	32:2a:827:U:C6	2.54	0.42
32:2a:975:A:H5''	32:2a:1363(A):A:N6	2.34	0.42
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.83	0.42
48:2q:59:ILE:HD12	48:2q:71:PHE:HD2	1.83	0.42
54:2y:49:C:H1'	60:2y:3111:HOH:O	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1475:G:H2'	1:1A:1476:C:C6	2.54	0.42
2:1B:7:G:N7	60:1B:3119:HOH:O	2.36	0.42
9:1N:67:LEU:HA	9:1N:87:LEU:HD22	2.01	0.42
16:1U:17:ILE:HG23	16:1U:39:LEU:HD12	2.00	0.42
32:1a:129:U:H5'	48:1q:3:LYS:NZ	2.34	0.42
32:1a:1030(C):G:H2'	32:1a:1030(D):A:C8	2.54	0.42
32:1a:1080:A:H5''	32:1a:1081:G:OP2	2.19	0.42
32:1a:1136:U:H5''	32:1a:1137:C:C5	2.54	0.42
32:1a:1359:C:OP1	45:1n:22:THR:OG1	2.34	0.42
35:1d:128:VAL:N	35:1d:131:ARG:O	2.52	0.42
37:1f:70:ASP:OD1	37:1f:70:ASP:N	2.38	0.42
38:1g:78:ARG:HD2	38:1g:156:TRP:CE3	2.54	0.42
50:1s:48:THR:HG22	50:1s:61:TYR:HA	2.01	0.42
1:2A:433:C:O2'	1:2A:434:U:H5'	2.19	0.42
1:2A:878:A:N6	1:2A:899:A:O2'	2.52	0.42
1:2A:1131:G:H8	1:2A:2025:C:H4'	1.84	0.42
1:2A:1630:G:H2'	1:2A:1631:C:C6	2.54	0.42
1:2A:1754:C:H5	15:2T:96:ARG:NH2	2.17	0.42
1:2A:2612:C:OP2	27:25:2:ALA:N	2.52	0.42
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.18	0.42
11:2P:38:GLN:HG2	11:2P:45:LEU:H	1.85	0.42
25:23:5:LYS:O	25:23:56:VAL:HA	2.18	0.42
32:2a:390:C:H2'	32:2a:391:G:C8	2.54	0.42
32:2a:779:C:H42	32:2a:803:G:H1	1.66	0.42
32:2a:832:C:N4	32:2a:833:U:C4	2.87	0.42
32:2a:1122:U:H3	32:2a:1151:A:H61	1.66	0.42
32:2a:1132:C:N4	32:2a:1142:G:H1	2.14	0.42
32:2a:1509:C:H2'	32:2a:1510:U:O4'	2.19	0.42
33:2b:134:GLU:O	33:2b:138:LEU:HG	2.19	0.42
33:2b:212:GLN:NE2	33:2b:235:SER:HA	2.34	0.42
34:2c:180:ALA:HB1	34:2c:203:PHE:HE1	1.84	0.42
35:2d:11:LEU:HD23	35:2d:66:ARG:HB3	2.02	0.42
41:2j:25:GLU:OE2	41:2j:29:ARG:NE	2.50	0.42
1:1A:651:U:O4	11:1P:107:LYS:HE2	2.19	0.42
1:1A:1477:U:H2'	1:1A:1478:C:C6	2.55	0.42
1:1A:2145:G:H2'	1:1A:2146:G:C8	2.54	0.42
4:1E:37:ARG:HA	4:1E:42:ASP:OD2	2.19	0.42
14:1S:90:GLY:HA3	14:1S:91:PRO:HD2	1.93	0.42
21:1Z:1:MET:HG3	21:1Z:55:HIS:ND1	2.33	0.42
24:12:61:LEU:HA	24:12:61:LEU:HD23	1.76	0.42
26:14:8:LYS:HE3	26:14:10:VAL:CG1	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:63:TYR:N	26:14:63:TYR:CD1	2.87	0.42
32:1a:711:G:H2'	32:1a:712:A:C8	2.54	0.42
32:1a:864:A:H2'	32:1a:865:A:C8	2.54	0.42
32:1a:1004:A:N6	32:1a:1036:G:N2	2.67	0.42
37:1f:10:LEU:HD13	37:1f:61:LEU:HD13	2.00	0.42
1:2A:625:G:N7	11:2P:107:LYS:NZ	2.58	0.42
1:2A:1253:A:H4'	60:2A:4847:HOH:O	2.19	0.42
1:2A:1473:G:C6	1:2A:1474:C:C4	3.07	0.42
14:2S:4:LEU:HD23	14:2S:4:LEU:HA	1.81	0.42
14:2S:80:LEU:HA	14:2S:80:LEU:HD12	1.77	0.42
21:2Z:153:SER:O	21:2Z:155:LEU:N	2.52	0.42
32:2a:137:C:H2'	32:2a:138:G:C8	2.54	0.42
32:2a:840:C:H4'	32:2a:841:U:OP1	2.17	0.42
32:2a:981:U:H5'	45:2n:21:TYR:CE2	2.54	0.42
32:2a:1406:U:O2	32:2a:1517:G:N2	2.53	0.42
34:2c:179:ARG:NH1	34:2c:206:GLU:OE1	2.52	0.42
40:2i:23:ASN:HD21	40:2i:25:LYS:HG2	1.83	0.42
55:2x:28:C:H2'	55:2x:29:G:H8	1.84	0.42
1:1A:125:A:H5''	1:1A:126:C:C6	2.55	0.42
1:1A:469:A:H1'	1:1A:1246:C:O4'	2.19	0.42
1:1A:722:A:C8	1:1A:851:A:C6	3.07	0.42
1:1A:776:G:OP2	3:1D:13:ARG:NH2	2.41	0.42
1:1A:1756:U:H2'	1:1A:1757:C:C6	2.54	0.42
1:1A:2227:G:H5''	1:1A:2228:G:C5	2.55	0.42
5:1F:106:ARG:H	5:1F:106:ARG:HG2	1.50	0.42
21:1Z:123:ASP:OD1	21:1Z:123:ASP:N	2.52	0.42
32:1a:195:A:H4'	51:1t:68:LYS:HE3	2.01	0.42
32:1a:356:A:N3	32:1a:368:U:O2'	2.45	0.42
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.20	0.42
33:1b:12:GLU:O	33:1b:15:VAL:HG22	2.19	0.42
37:1f:55:ASP:HA	37:1f:56:PRO:HD2	1.87	0.42
44:1m:121:LYS:HB2	44:1m:121:LYS:HE2	1.72	0.42
1:2A:14:A:C6	1:2A:526:A:C2	3.07	0.42
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.53	0.42
1:2A:1328:G:H2'	1:2A:1330:C:C5	2.54	0.42
6:2G:107:LEU:HD21	6:2G:178:PHE:CE1	2.54	0.42
11:2P:86:LYS:HB3	11:2P:118:GLY:HA3	2.01	0.42
21:2Z:9:TYR:OH	21:2Z:63:ASP:OD2	2.23	0.42
21:2Z:99:TYR:HB3	21:2Z:123:ASP:CG	2.44	0.42
25:23:6:VAL:HA	25:23:56:VAL:HG22	2.00	0.42
26:24:12:ALA:HB3	26:24:26:SER:HB3	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:382:A:H2'	32:2a:383:A:C8	2.55	0.42
32:2a:509:A:H2'	32:2a:510:A:C8	2.55	0.42
32:2a:689:C:P	42:2k:46:GLY:HA3	2.59	0.42
33:2b:189:ASP:HB3	33:2b:204:ASN:HA	2.00	0.42
34:2c:9:GLY:N	45:2n:49:HIS:O	2.53	0.42
36:2e:84:PHE:N	36:2e:87:SER:O	2.51	0.42
42:2k:120:ARG:HA	42:2k:121:PRO:HD3	1.90	0.42
55:2x:43:A:H2'	55:2x:44:A:C8	2.54	0.42
1:1A:52:A:H2'	1:1A:53:G:O4'	2.19	0.42
1:1A:284:G:C2	1:1A:285:U:O4	2.72	0.42
1:1A:1122:C:O2'	1:1A:1123:A:N7	2.52	0.42
1:1A:1124:U:H5'	1:1A:1125:C:OP1	2.20	0.42
1:1A:1633:A:H2'	1:1A:1634:C:H6	1.84	0.42
1:1A:2177:G:H3'	1:1A:2178:G:H8	1.85	0.42
1:1A:2658:C:H2'	1:1A:2659:U:O4'	2.19	0.42
4:1E:14:ILE:HG13	4:1E:21:VAL:HG13	2.01	0.42
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.19	0.42
23:11:52:ARG:HD3	23:11:56:GLN:O	2.20	0.42
32:1a:194:C:H2'	32:1a:195:A:H5''	2.02	0.42
32:1a:376:G:OP2	47:1p:67:THR:HG21	2.19	0.42
32:1a:650:G:O2'	32:1a:651:C:H5'	2.20	0.42
32:1a:792:A:O2'	32:1a:794:A:N7	2.48	0.42
32:1a:1112:C:H1'	34:1c:179:ARG:HH11	1.83	0.42
32:1a:1124:G:H5''	41:1j:35:SER:OG	2.20	0.42
32:1a:1309:G:N7	44:1m:99:ARG:NH2	2.67	0.42
35:1d:170:VAL:HG12	35:1d:171:GLY:H	1.84	0.42
1:2A:478:A:N1	1:2A:500:G:H4'	2.34	0.42
1:2A:732:C:H2'	1:2A:733:G:O4'	2.20	0.42
1:2A:1354:A:O3'	3:2D:38:LYS:HE2	2.20	0.42
1:2A:1506:C:H2'	1:2A:1507:A:H5'	2.01	0.42
1:2A:2291:U:O2'	1:2A:2374:C:H1'	2.19	0.42
4:2E:110:GLY:HA2	4:2E:161:GLY:HA3	2.01	0.42
6:2G:150:ASP:OD1	6:2G:150:ASP:N	2.47	0.42
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.20	0.42
32:2a:241:C:C2	32:2a:286:G:C2	3.08	0.42
32:2a:406:G:H4'	35:2d:5:ILE:HD11	2.00	0.42
32:2a:1028:C:N3	32:2a:1033:G:C6	2.87	0.42
32:2a:1346:A:N6	32:2a:1375:A:OP2	2.42	0.42
32:2a:1371:G:C6	32:2a:1372:U:C4	3.08	0.42
35:2d:38:TYR:CE1	35:2d:45:GLN:HG3	2.55	0.42
35:2d:104:VAL:HG21	35:2d:140:VAL:HG21	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:2g:76:ARG:HD3	38:2g:76:ARG:HA	1.79	0.42
43:2l:84:LEU:HD12	43:2l:85:ILE:H	1.84	0.42
44:2m:19:LEU:HD11	44:2m:56:LEU:HD21	2.00	0.42
44:2m:45:VAL:HA	44:2m:48:LEU:HD12	2.01	0.42
54:2y:7:A:N3	60:2y:3111:HOH:O	2.37	0.42
1:1A:1223:C:O5'	1:1A:1223:C:H6	2.02	0.42
1:1A:1550:C:H2'	1:1A:1551:C:C6	2.54	0.42
1:1A:2018:C:H4'	1:1A:2019:G:OP1	2.19	0.42
1:1A:2295:C:H2'	1:1A:2296:C:O4'	2.20	0.42
1:1A:2331:G:H22	14:1S:3:ARG:HA	1.85	0.42
5:1F:32:LEU:HD22	5:1F:112:MET:CE	2.50	0.42
5:1F:34:TRP:CH2	11:1P:8:PRO:HB3	2.54	0.42
21:1Z:17:ALA:HA	21:1Z:20:ARG:NH1	2.34	0.42
32:1a:1223:C:OP2	50:1s:78:ARG:NH2	2.49	0.42
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.20	0.42
41:1j:7:LYS:HE3	41:1j:9:ARG:NH1	2.34	0.42
54:1w:7:A:N6	54:1w:66:U:N3	2.36	0.42
1:2A:6:A:N3	9:2N:133:GLN:NE2	2.67	0.42
1:2A:271(D):G:H2'	1:2A:271(E):U:C6	2.55	0.42
1:2A:612:C:C2	1:2A:616:G:N2	2.88	0.42
1:2A:778:G:C6	1:2A:779:U:N3	2.88	0.42
1:2A:1683:C:H2'	1:2A:1684:C:C6	2.54	0.42
1:2A:1987:G:H2'	1:2A:1988:C:H6	1.84	0.42
1:2A:2107:C:H5''	1:2A:2108:C:OP2	2.20	0.42
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.18	0.42
1:2A:2801(A):A:H5'	1:2A:2802:G:C8	2.54	0.42
5:2F:120:GLU:HG3	5:2F:122:LYS:HG2	2.01	0.42
12:2Q:31:ASP:HA	12:2Q:134:ARG:HH11	1.85	0.42
21:2Z:171:ILE:HD12	21:2Z:172:ALA:N	2.35	0.42
23:21:94:LEU:O	23:21:97:LEU:HB2	2.18	0.42
28:26:40:CYS:HA	28:26:41:PRO:HD3	1.92	0.42
32:2a:165:C:H2'	32:2a:166:G:H8	1.83	0.42
32:2a:221:C:H2'	32:2a:222:U:H6	1.85	0.42
32:2a:528:C:H5'	32:2a:529:G:OP2	2.20	0.42
32:2a:630:G:H2'	32:2a:631:G:H8	1.85	0.42
32:2a:731:G:H5'	32:2a:766:A:H4'	2.00	0.42
34:2c:164:ARG:HG2	34:2c:165:THR:N	2.35	0.42
55:2x:10:G:N2	55:2x:26:G:H1'	2.35	0.42
1:1A:27:G:C2	1:1A:537:G:N3	2.87	0.42
1:1A:1525:G:N2	1:1A:1562:U:C2	2.87	0.42
1:1A:2324:U:OP1	6:1G:73:ALA:HA	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2760:G:O6	1:1A:2768:C:H5''	2.19	0.42
6:1G:5:VAL:HG12	26:14:25:TYR:CE2	2.55	0.42
7:1H:144:VAL:O	7:1H:148:ILE:HG13	2.19	0.42
28:16:14:THR:HG21	28:16:48:VAL:HG13	2.02	0.42
32:1a:68:G:H1	32:1a:101:A:H61	1.66	0.42
32:1a:428:G:OP2	35:1d:10:ARG:HD2	2.19	0.42
32:1a:501:C:H2'	32:1a:502:G:H8	1.84	0.42
32:1a:815:A:N7	32:1a:1509:C:O2'	2.45	0.42
32:1a:911:U:OP2	43:1l:97:ARG:NH2	2.52	0.42
35:1d:18:LYS:HD2	35:1d:20:TYR:CZ	2.54	0.42
37:1f:6:VAL:HG22	37:1f:90:VAL:HG22	2.01	0.42
42:1k:43:SER:HB3	42:1k:68:ALA:HB2	2.02	0.42
46:1o:74:ASP:CG	46:1o:77:ARG:HB2	2.45	0.42
54:1y:8:4SU:H4'	54:1y:48:C:C4'	2.49	0.42
1:2A:569:U:H1'	1:2A:947:G:O4'	2.20	0.42
1:2A:597:U:H2'	1:2A:598:G:H8	1.85	0.42
1:2A:879:G:C6	1:2A:880:G:C2	3.08	0.42
1:2A:988:A:H5''	25:23:31:LEU:HD11	2.02	0.42
1:2A:1006:C:C2	1:2A:1138:G:N2	2.88	0.42
1:2A:2404:C:O3'	11:2P:77:ARG:NH2	2.53	0.42
1:2A:2526:G:H2'	1:2A:2527:C:H6	1.83	0.42
1:2A:2639:A:O3'	9:2N:97:ARG:NH2	2.47	0.42
2:2B:13:A:H4'	2:2B:15:A:C5	2.54	0.42
15:2T:22:PHE:CE1	15:2T:52:ILE:HD11	2.54	0.42
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.19	0.42
32:2a:57:G:H2'	32:2a:58:C:C6	2.54	0.42
32:2a:250:A:H4'	32:2a:251:G:O5'	2.20	0.42
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.32	0.42
32:2a:590:C:H2'	32:2a:591:U:C6	2.55	0.42
32:2a:997:U:O2	32:2a:1044:A:N1	2.53	0.42
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.54	0.42
32:2a:1010:G:N1	32:2a:1020:U:H1'	2.35	0.42
32:2a:1097:C:H1'	32:2a:1170:A:H1'	2.01	0.42
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.82	0.42
32:2a:1441:G:H8	32:2a:1441:G:O5'	2.03	0.42
33:2b:162:ILE:O	33:2b:185:ILE:HG12	2.19	0.42
39:2h:104:ARG:HD3	39:2h:104:ARG:HA	1.91	0.42
40:2i:85:LEU:O	40:2i:89:ASN:N	2.50	0.42
44:2m:101:GLN:OE1	44:2m:101:GLN:N	2.53	0.42
47:2p:19:ILE:N	47:2p:37:GLY:O	2.52	0.42
53:2v:14:A:H2'	53:2v:14:A:N3	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:44:G:H2'	54:2w:45:U:H5'	2.01	0.42
1:1A:482:C:O2'	1:1A:483:A:OP2	2.35	0.42
1:1A:1478:C:H2'	1:1A:1479:U:O4'	2.20	0.42
1:1A:2132:G:H2'	1:1A:2132:G:OP2	2.19	0.42
1:1A:2541:G:H5''	1:1A:2542:A:H5''	2.02	0.42
1:1A:2623:U:H6	1:1A:2623:U:H5'	1.85	0.42
4:1E:1:MET:HE3	4:1E:199:ARG:HD2	2.01	0.42
4:1E:48:GLN:NE2	4:1E:78:LEU:HG	2.35	0.42
14:1S:110:LEU:HA	14:1S:110:LEU:HD12	1.72	0.42
19:1X:31:HIS:HA	19:1X:32:PRO:HD3	1.94	0.42
32:1a:377:G:P	47:1p:5:ARG:HH11	2.43	0.42
32:1a:977:A:H1'	32:1a:982:U:O4	2.19	0.42
37:1f:33:TYR:OH	37:1f:78:GLU:HG3	2.20	0.42
42:1k:18:ARG:HB2	42:1k:33:THR:OG1	2.19	0.42
1:2A:255:A:O2'	1:2A:384:U:OP1	2.21	0.42
1:2A:652(B):A:N6	1:2A:655:A:H1'	2.34	0.42
1:2A:729:G:C6	3:2D:208:LYS:HB2	2.54	0.42
1:2A:854:G:N2	1:2A:924:C:N3	2.68	0.42
1:2A:881:G:H3'	1:2A:882:G:H8	1.84	0.42
1:2A:1124:C:H2'	1:2A:1125:G:O4'	2.20	0.42
1:2A:1924:C:H4'	55:2x:13:C:O2'	2.20	0.42
1:2A:2286:A:H4'	1:2A:2287:A:O4'	2.19	0.42
1:2A:2428:G:H5''	1:2A:2429:G:OP1	2.20	0.42
4:2E:1:MET:O	4:2E:84:PHE:HB2	2.20	0.42
12:2Q:57:HIS:NE2	12:2Q:116:GLU:HB3	2.35	0.42
22:20:48:GLY:HA3	22:20:80:HIS:CE1	2.55	0.42
26:24:34:GLU:HA	44:2m:57:ARG:CZ	2.49	0.42
32:2a:677:U:H1'	42:2k:119:CYS:SG	2.60	0.42
32:2a:1194:U:H2'	32:2a:1195:C:C6	2.55	0.42
36:2e:52:PRO:O	36:2e:56:GLN:HG3	2.19	0.42
41:2j:16:LEU:O	41:2j:20:ALA:N	2.50	0.42
49:2r:24:ALA:C	49:2r:26:LEU:H	2.28	0.42
54:2w:50:U:N3	54:2w:64:A:N6	2.26	0.42
54:2y:59:U:H3'	54:2y:60:U:O2	2.20	0.42
1:1A:223:C:H2'	1:1A:224:U:C6	2.55	0.42
1:1A:2209:G:C6	1:1A:2210:C:C4	3.07	0.42
4:1E:7:VAL:CG1	4:1E:27:LEU:HB3	2.50	0.42
7:1H:3:ARG:HH22	7:1H:65:HIS:HB3	1.85	0.42
32:1a:189(F):U:N3	48:1q:72:ARG:NH2	2.58	0.42
32:1a:192:U:H2'	32:1a:193:C:C6	2.54	0.42
32:1a:269:C:H2'	32:1a:270:A:C8	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1e:106:PRO:O	36:1e:110:LEU:HG	2.19	0.42
38:1g:113:GLU:HG3	38:1g:118:VAL:HG12	2.02	0.42
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	2.01	0.42
54:1y:66:U:C4	54:1y:67:C:C4	3.07	0.42
1:2A:30:G:H2'	1:2A:31:C:O4'	2.19	0.42
1:2A:861:A:C2	1:2A:917:A:C4	3.07	0.42
1:2A:1470:G:H5''	1:2A:1471:A:OP1	2.19	0.42
1:2A:1641:A:H2'	1:2A:1642:G:O4'	2.20	0.42
1:2A:2363:C:O2	22:20:39:ARG:NH2	2.53	0.42
1:2A:2709:G:O2'	1:2A:2710:C:H5'	2.19	0.42
2:2B:13:A:H2'	2:2B:70:C:O2'	2.20	0.42
2:2B:38:C:O4'	14:2S:95:HIS:NE2	2.53	0.42
4:2E:108:SER:HB3	4:2E:165:VAL:HG21	2.01	0.42
32:2a:189(D):C:H2'	32:2a:189(E):U:O4'	2.19	0.42
32:2a:1120:G:C2	32:2a:1154:G:C2	3.08	0.42
32:2a:1122:U:C2	32:2a:1123:A:C8	3.08	0.42
35:2d:33:MET:HB2	59:2d:501:SF4:S2	2.60	0.42
35:2d:53:ASP:O	35:2d:57:ARG:HG3	2.20	0.42
52:2u:6:ARG:O	52:2u:12:LYS:HE3	2.20	0.42
54:2y:7:A:N6	54:2y:66:U:H3	2.16	0.42
1:1A:207:A:C2	1:1A:224:U:H4'	2.55	0.42
1:1A:698:G:H2'	1:1A:699:C:C6	2.55	0.42
1:1A:1016:C:H2'	1:1A:1017:G:O4'	2.19	0.42
1:1A:1402:G:OP2	60:1A:4902:HOH:O	2.21	0.42
1:1A:2142:G:O2'	1:1A:2143:G:H5'	2.20	0.42
1:1A:2672:A:H2'	1:1A:2673:G:O4'	2.20	0.42
2:1B:74:U:H2'	2:1B:75:G:O4'	2.20	0.42
4:1E:101:ARG:HD3	4:1E:170:LEU:C	2.45	0.42
22:10:82:ARG:HA	22:10:83:PRO:HD3	1.88	0.42
29:17:24:THR:HG22	29:17:26:GLY:H	1.85	0.42
30:18:29:LYS:HE2	30:18:45:GLY:HA2	2.00	0.42
32:1a:69:G:H2'	32:1a:70:G:H8	1.84	0.42
32:1a:69:G:H2'	32:1a:70:G:C8	2.54	0.42
32:1a:117:G:OP2	60:1a:2042:HOH:O	2.21	0.42
32:1a:576:G:O6	32:1a:880:C:O2'	2.30	0.42
32:1a:1129:C:OP1	40:1i:66:ARG:NH1	2.53	0.42
32:1a:1151:A:O4'	41:1j:39:PRO:HB2	2.20	0.42
54:1y:26:A:N6	54:1y:44:G:H1	2.18	0.42
1:2A:27:G:O2'	1:2A:28:A:OP2	2.36	0.42
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.20	0.42
1:2A:648:G:O2'	1:2A:2351:G:OP1	2.21	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:652(D):C:N4	1:2A:652(U):G:H1	2.17	0.42
1:2A:717:G:H2'	1:2A:718:A:O4'	2.20	0.42
1:2A:1042:G:H4'	1:2A:1042:G:OP1	2.19	0.42
1:2A:1490:A:O2'	3:2D:99:ASP:OD1	2.38	0.42
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.55	0.42
1:2A:2579:C:H4'	4:2E:134:ILE:HG12	2.01	0.42
3:2D:275:LYS:HD2	3:2D:275:LYS:HA	1.92	0.42
6:2G:36:LYS:HD3	6:2G:95:ARG:HH12	1.84	0.42
15:2T:28:VAL:HG13	15:2T:86:ILE:HG23	2.01	0.42
16:2U:103:PRO:O	16:2U:107:ALA:N	2.53	0.42
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	2.02	0.42
21:2Z:70:LEU:HD23	21:2Z:70:LEU:HA	1.76	0.42
21:2Z:146:ILE:HG12	21:2Z:174:VAL:C	2.45	0.42
25:23:7:LYS:N	25:23:55:ARG:O	2.47	0.42
26:24:28:LYS:HA	26:24:29:PRO:HD3	1.79	0.42
32:2a:152:A:N6	32:2a:170:U:C2	2.88	0.42
32:2a:1030(A):G:N3	32:2a:1030(C):G:C8	2.88	0.42
33:2b:83:MET:O	33:2b:87:ARG:N	2.45	0.42
35:2d:3:ARG:HD3	35:2d:118:ARG:NE	2.34	0.42
36:2e:8:GLU:OE2	36:2e:63:ARG:NH2	2.48	0.42
40:2i:50:LEU:H	40:2i:50:LEU:HG	1.68	0.42
40:2i:63:ILE:HD13	40:2i:77:ILE:HG23	2.02	0.42
46:2o:48:LYS:HA	46:2o:48:LYS:HD3	1.76	0.42
51:2t:54:LYS:HE2	51:2t:54:LYS:HB3	1.83	0.42
55:2x:16:C:H5'	55:2x:59:A:N1	2.34	0.42
1:1A:200:A:H2'	1:1A:201:G:O4'	2.20	0.41
1:1A:1074:A:N6	1:1A:1171:G:H2'	2.35	0.41
1:1A:2116:G:P	8:1I:22:LYS:HD2	2.60	0.41
3:1D:19:ALA:HB3	3:1D:21:PHE:CE1	2.55	0.41
7:1H:90:LYS:HD3	7:1H:159:GLU:HG2	2.01	0.41
11:1P:59:LEU:HD23	30:18:13:ARG:HH11	1.85	0.41
20:1Y:43:ASN:HD22	20:1Y:43:ASN:HA	1.60	0.41
26:14:61:ARG:HH21	50:1s:42:PRO:HD3	1.84	0.41
28:16:34:LEU:N	28:16:51:GLU:HG2	2.36	0.41
32:1a:79:G:C6	32:1a:90:U:C2	3.08	0.41
32:1a:1263:C:O2	32:1a:1273:G:N2	2.53	0.41
36:1e:52:PRO:HG2	36:1e:53:LEU:HD12	2.02	0.41
38:1g:69:VAL:HG22	38:1g:135:VAL:HG22	2.01	0.41
1:2A:853:G:C2	1:2A:854:G:C4	3.07	0.41
1:2A:1287:A:C5	1:2A:1288:U:C4	3.08	0.41
1:2A:1359:A:N1	1:2A:1372:U:C4	2.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1866:C:H2'	1:2A:1876:A:O4'	2.20	0.41
1:2A:2298:A:N3	1:2A:2321:G:C2	2.88	0.41
1:2A:2319:G:N2	14:2S:3:ARG:HA	2.35	0.41
1:2A:2507:C:H5''	1:2A:2573:C:C4	2.55	0.41
1:2A:2525:G:N2	1:2A:2539:C:C2	2.88	0.41
1:2A:2820:A:C5	13:2R:4:LEU:HD11	2.55	0.41
8:2I:62:LYS:HB2	8:2I:62:LYS:HE3	1.85	0.41
11:2P:121:LYS:O	11:2P:123:LEU:N	2.53	0.41
17:2V:84:LYS:O	17:2V:85:LYS:HD2	2.19	0.41
20:2Y:73:ARG:HH21	20:2Y:83:THR:C	2.27	0.41
23:21:89:GLU:O	23:21:93:GLU:HG2	2.20	0.41
29:27:5:TRP:CD1	29:27:7:PRO:HD3	2.55	0.41
32:2a:892:A:O2'	32:2a:1415:G:H4'	2.19	0.41
32:2a:946:A:OP2	60:2a:3546:HOH:O	2.22	0.41
32:2a:1093:A:C4	32:2a:1095:U:H5'	2.55	0.41
32:2a:1288:A:N3	32:2a:1352:C:O2'	2.46	0.41
32:2a:1312:G:H1	32:2a:1325:C:H42	1.67	0.41
33:2b:130:ARG:HD3	33:2b:130:ARG:HA	1.82	0.41
1:1A:116:A:C8	1:1A:117:A:C8	3.08	0.41
1:1A:1073:A:C2	1:1A:2500:A:H5'	2.55	0.41
1:1A:1091:A:O2'	1:1A:1093:G:C4	2.67	0.41
1:1A:1553:A:O2'	1:1A:1556:A:N6	2.53	0.41
1:1A:1827:U:H2'	1:1A:1828:C:H6	1.85	0.41
1:1A:2346:G:H4'	1:1A:2347:A:OP2	2.20	0.41
1:1A:2564:2MU:O5'	1:1A:2564:2MU:H6	2.20	0.41
1:1A:2641:A:H1'	1:1A:2642:G:O5'	2.20	0.41
1:1A:2666:A:N1	1:1A:2677:A:H5''	2.35	0.41
1:1A:2764:G:H4'	7:1H:4:ILE:HD11	2.02	0.41
15:1T:118:ARG:HG2	32:1a:1442(A):G:C8	2.54	0.41
17:1V:21:ARG:NH1	17:1V:91:TYR:CZ	2.89	0.41
18:1W:73:ALA:HB3	18:1W:106:ILE:HD12	2.02	0.41
25:13:59:VAL:O	25:13:60:GLU:HG2	2.20	0.41
28:16:33:LYS:HA	28:16:51:GLU:OE2	2.20	0.41
29:17:46:VAL:HG13	29:17:48:LYS:NZ	2.35	0.41
30:18:33:ASN:HA	30:18:36:LYS:HD2	2.03	0.41
32:1a:243:A:H4'	32:1a:244:U:H5''	2.02	0.41
32:1a:528:C:H41	43:1l:49:ASN:CG	2.28	0.41
32:1a:1219:U:OP1	45:1n:19:ARG:NH2	2.49	0.41
32:1a:1518:MA6:C6	32:1a:1519:MA6:H103	2.49	0.41
33:1b:97:TRP:HH2	33:1b:176:GLU:CD	2.28	0.41
36:1e:85:GLY:C	36:1e:87:SER:H	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:1s:20:LEU:HD23	50:1s:23:ASN:ND2	2.34	0.41
1:2A:84:A:N1	1:2A:98:G:O2'	2.36	0.41
1:2A:322:A:H4'	1:2A:323:G:OP2	2.19	0.41
1:2A:925:C:H2'	1:2A:926:A:H8	1.84	0.41
1:2A:945:A:C4	1:2A:2448:A:C2	3.08	0.41
1:2A:1019:U:H2'	1:2A:1020:A:C8	2.54	0.41
1:2A:1113:U:H2'	1:2A:1114:G:C8	2.55	0.41
1:2A:1157:G:O2'	25:23:31:LEU:HD12	2.20	0.41
1:2A:1478:G:O2'	1:2A:1558:A:N1	2.48	0.41
1:2A:1628:G:H2'	1:2A:1629:U:C6	2.55	0.41
1:2A:2112:G:C2	1:2A:2113:U:H1'	2.55	0.41
1:2A:2694:G:C6	1:2A:2695:C:C4	3.08	0.41
8:2I:110:ASP:H	8:2I:130:TYR:HH	1.60	0.41
16:2U:104:GLN:O	16:2U:107:ALA:HB3	2.21	0.41
32:2a:270:A:H2'	32:2a:271:C:C6	2.56	0.41
32:2a:677:U:H3	32:2a:713:G:H22	1.68	0.41
32:2a:735:C:H2'	32:2a:736:C:C6	2.55	0.41
32:2a:1054:C:C4	54:2w:34:G:H1'	2.55	0.41
33:2b:188:ALA:HB1	33:2b:192:SER:OG	2.21	0.41
39:2h:112:LEU:HD22	39:2h:133:LEU:HA	2.02	0.41
50:2s:64:GLU:O	50:2s:67:VAL:HG23	2.20	0.41
1:1A:110:U:H5'	24:12:65:ASN:ND2	2.34	0.41
1:1A:467:U:H2'	1:1A:468:G:C8	2.56	0.41
1:1A:613:A:H2'	1:1A:614:C:O4'	2.20	0.41
1:1A:831:A:O4'	3:1D:227:ASN:ND2	2.53	0.41
1:1A:847:A:H8	1:1A:847:A:OP1	2.03	0.41
1:1A:904:C:N4	1:1A:905:U:O4	2.53	0.41
12:1Q:60:ARG:HH21	54:1w:53:G:P	2.43	0.41
23:11:51:VAL:HG11	23:11:74:VAL:HG21	2.02	0.41
28:16:9:LEU:HD13	28:16:51:GLU:HB2	2.01	0.41
32:1a:90:U:H4'	32:1a:91:C:OP1	2.19	0.41
32:1a:109:A:C6	32:1a:326:G:C6	3.09	0.41
32:1a:1027:C:C5	32:1a:1028:C:C4	3.08	0.41
32:1a:1084:G:C5	32:1a:1085:U:C4	3.08	0.41
32:1a:1443:G:N2	32:1a:1459:C:O2	2.44	0.41
43:1l:24:VAL:HB	43:1l:27:LEU:HD22	2.00	0.41
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	2.02	0.41
54:1y:58:A:HO2'	54:1y:59:U:P	2.43	0.41
1:2A:144:C:H2'	1:2A:145:G:C8	2.54	0.41
1:2A:274:G:H2'	1:2A:275:G:C8	2.56	0.41
1:2A:328:U:H4'	20:2Y:68:HIS:CD2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:336:C:H4'	20:2Y:6:HIS:CD2	2.55	0.41
1:2A:484:C:H2'	1:2A:485:C:C6	2.56	0.41
1:2A:524:U:H2'	1:2A:525:U:C6	2.55	0.41
1:2A:971:C:H2'	1:2A:972:G:O4'	2.21	0.41
1:2A:1913:A:H4'	1:2A:1914:C:O5'	2.18	0.41
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.55	0.41
1:2A:2372:G:H1'	28:26:46:HIS:CE1	2.55	0.41
1:2A:2776:A:H4'	1:2A:2777:G:H5'	2.01	0.41
5:2F:29:ASN:HA	5:2F:30:PRO:HD3	1.92	0.41
5:2F:192:LEU:HD22	5:2F:194:MET:HG3	2.02	0.41
11:2P:55:ARG:HA	60:2P:4007:HOH:O	2.20	0.41
17:2V:19:LYS:HE3	17:2V:62:LEU:HD21	2.02	0.41
21:2Z:24:LEU:HA	21:2Z:25:PRO:HD3	1.90	0.41
21:2Z:152:ALA:O	21:2Z:155:LEU:HB2	2.20	0.41
27:25:16:ARG:HG3	27:25:17:ASP:N	2.36	0.41
32:2a:66:G:H8	32:2a:66:G:OP1	2.02	0.41
32:2a:130:A:N3	32:2a:263:A:O2'	2.44	0.41
32:2a:131:C:H2'	32:2a:132:C:H6	1.85	0.41
32:2a:1173:G:H2'	32:2a:1174:G:C8	2.55	0.41
33:2b:33:TYR:HB2	33:2b:43:ASP:HA	2.01	0.41
38:2g:16:LEU:HD22	40:2i:41:VAL:O	2.21	0.41
39:2h:119:LEU:HB3	39:2h:123:GLU:HB2	2.02	0.41
45:2n:21:TYR:HE1	45:2n:23:ARG:NE	2.17	0.41
47:2p:13:HIS:O	47:2p:42:ARG:NH1	2.53	0.41
1:1A:287:G:N7	1:1A:448:U:H2'	2.35	0.41
1:1A:491:G:C6	1:1A:492:A:N6	2.89	0.41
1:1A:672:G:O5'	1:1A:672:G:H8	2.04	0.41
1:1A:2854:G:O6	60:1A:5078:HOH:O	2.22	0.41
1:1A:2856:G:H2'	1:1A:2857:U:O4'	2.20	0.41
1:1A:2881:C:N3	60:1A:5080:HOH:O	2.37	0.41
3:1D:130:ALA:C	3:1D:131:LEU:HD12	2.45	0.41
4:1E:52:LEU:HA	4:1E:53:PRO:HD3	1.92	0.41
9:1N:73:THR:OG1	9:1N:82:LEU:HD11	2.21	0.41
10:1O:7:TYR:HE2	10:1O:20:MET:HE2	1.84	0.41
16:1U:34:LYS:HA	16:1U:34:LYS:HD3	1.57	0.41
32:1a:343:U:O2'	32:1a:344:A:H2'	2.20	0.41
32:1a:944:G:O6	32:1a:1337:G:H8	2.03	0.41
32:1a:949:A:H1'	32:1a:1364:U:H3	1.84	0.41
43:1l:33:ARG:HA	43:1l:33:ARG:HD3	1.92	0.41
1:2A:342:G:O2'	1:2A:343:C:H5'	2.20	0.41
1:2A:479:A:O2'	1:2A:481:G:H5'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:588:U:O5'	1:2A:588:U:H6	2.04	0.41
1:2A:881:G:H3'	1:2A:882:G:C8	2.55	0.41
1:2A:1876:A:H2'	1:2A:1877:A:C8	2.56	0.41
1:2A:2653:U:H5''	1:2A:2654:A:OP2	2.21	0.41
3:2D:72:LYS:HD2	3:2D:103:ARG:NH1	2.36	0.41
3:2D:132:PRO:HD3	3:2D:190:TYR:CZ	2.55	0.41
7:2H:30:LYS:N	7:2H:79:VAL:O	2.50	0.41
32:2a:619:U:C2	35:2d:135:LEU:HD22	2.56	0.41
32:2a:1004:A:H1'	32:2a:1038:C:O2	2.20	0.41
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.14	0.41
35:2d:61:LYS:HD2	35:2d:207:TYR:OH	2.20	0.41
45:2n:3:ARG:HG3	45:2n:4:LYS:N	2.34	0.41
54:2y:58:A:H4'	54:2y:59:U:OP1	2.20	0.41
1:1A:215:G:H21	1:1A:217:A:H62	1.67	0.41
1:1A:402:C:H2'	1:1A:403:C:C6	2.55	0.41
1:1A:1273:G:OP1	16:1U:13:LYS:HG2	2.21	0.41
2:1B:14:U:O2	2:1B:108:U:H4'	2.20	0.41
5:1F:8:GLN:HE22	5:1F:21:ALA:HA	1.85	0.41
5:1F:164:ARG:O	5:1F:168:ARG:HB2	2.20	0.41
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	2.01	0.41
8:1I:47:LEU:HA	8:1I:47:LEU:HD23	1.79	0.41
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.55	0.41
11:1P:27:HIS:HB2	60:1P:321:HOH:O	2.19	0.41
11:1P:126:VAL:HG12	11:1P:148:LEU:HD23	2.03	0.41
12:1Q:134:ARG:CZ	21:1Z:122:ARG:HH21	2.33	0.41
17:1V:2:PHE:CE2	17:1V:41:GLY:HA3	2.55	0.41
32:1a:250:A:H4'	32:1a:251:G:O5'	2.20	0.41
32:1a:277:C:P	48:1q:68:ARG:HH22	2.41	0.41
32:1a:418:C:H1'	32:1a:540:G:O2'	2.20	0.41
32:1a:1152:A:OP1	41:1j:68:HIS:ND1	2.53	0.41
32:1a:1218:C:OP2	45:1n:9:LYS:NZ	2.53	0.41
32:1a:1221:G:OP1	32:1a:1320:C:N4	2.49	0.41
35:1d:178:VAL:O	35:1d:179:GLU:HB2	2.20	0.41
38:1g:97:GLN:O	38:1g:101:LEU:HG	2.20	0.41
38:1g:144:MET:HE2	38:1g:144:MET:HB3	1.73	0.41
1:2A:191:A:H2'	1:2A:192:C:C6	2.54	0.41
1:2A:927:G:H2'	1:2A:928:G:O4'	2.20	0.41
1:2A:1213:A:H2'	1:2A:1214:A:O4'	2.20	0.41
1:2A:1297:C:OP1	1:2A:2710:C:H4'	2.21	0.41
1:2A:2365:G:O6	30:28:39:LYS:HE3	2.20	0.41
3:2D:16:MET:HE3	3:2D:16:MET:HB2	1.96	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:195:ASP:HB3	5:2F:198:ALA:H	1.85	0.41
7:2H:4:ILE:O	7:2H:69:ARG:HD2	2.20	0.41
8:2I:61:ARG:HD3	8:2I:61:ARG:HA	1.75	0.41
8:2I:116:LEU:HD11	8:2I:120:ILE:HG13	2.02	0.41
19:2X:35:THR:O	19:2X:39:ILE:HG13	2.21	0.41
26:24:40:HIS:O	26:24:44:THR:HG22	2.20	0.41
32:2a:1004:A:C8	32:2a:1005:A:C4'	3.04	0.41
32:2a:1115:C:H2'	32:2a:1116:C:C6	2.56	0.41
32:2a:1306:A:N6	32:2a:1331:G:O4'	2.53	0.41
33:2b:47:THR:O	33:2b:51:LEU:HG	2.21	0.41
42:2k:79:SER:HB2	42:2k:106:LYS:HD3	2.03	0.41
46:2o:55:GLY:O	46:2o:59:MET:HG3	2.21	0.41
1:1A:386:U:H6	1:1A:386:U:H2'	1.69	0.41
1:1A:493:G:P	29:17:33:ARG:HH12	2.43	0.41
1:1A:821:A:H2'	1:1A:821:A:N3	2.36	0.41
1:1A:1277:G:H2'	1:1A:1278:G:C8	2.56	0.41
1:1A:1668:G:OP2	60:1A:5519:HOH:O	2.22	0.41
1:1A:2157:A:H2'	1:1A:2157:A:N3	2.35	0.41
1:1A:2418:U:C2	11:1P:72:PRO:HG2	2.55	0.41
1:1A:2638:C:H2'	1:1A:2639:G:O4'	2.20	0.41
60:1A:6391:HOH:O	9:1N:28:THR:HG23	2.20	0.41
3:1D:70:TRP:CE2	3:1D:150:LYS:HD3	2.56	0.41
9:1N:39:ARG:HA	9:1N:40:PRO:HD3	1.92	0.41
15:1T:108:ARG:HG3	15:1T:109:GLU:N	2.34	0.41
32:1a:266:G:H4'	32:1a:267:C:C5	2.55	0.41
32:1a:360:A:C6	32:1a:361:G:C6	3.09	0.41
32:1a:438:G:H4'	35:1d:123:HIS:ND1	2.35	0.41
32:1a:645:C:H2'	32:1a:646:U:C6	2.56	0.41
33:1b:47:THR:O	33:1b:51:LEU:HG	2.20	0.41
35:1d:158:ILE:H	35:1d:158:ILE:HG13	1.66	0.41
37:1f:9:VAL:HG22	37:1f:60:PHE:CE1	2.55	0.41
41:1j:49:VAL:HG21	45:1n:41:ARG:O	2.20	0.41
46:1o:74:ASP:OD2	46:1o:77:ARG:HB2	2.20	0.41
54:1y:22:G:C2	54:1y:23:A:C5	3.08	0.41
1:2A:996:A:C2	1:2A:997:G:C8	3.09	0.41
1:2A:1221(A):C:C2	1:2A:1229:G:C2	3.09	0.41
1:2A:1232:G:H2'	1:2A:1233:C:C6	2.56	0.41
1:2A:1359:A:H2'	1:2A:1360:A:H5'	2.03	0.41
1:2A:1431:U:H2'	1:2A:1432:C:H6	1.84	0.41
1:2A:2539:C:H4'	31:29:35:ARG:NH2	2.36	0.41
2:2B:41:U:O4	6:2G:70:VAL:HB	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:91:C:H5'	12:2Q:18:LYS:HA	2.02	0.41
9:2N:34:LEU:O	9:2N:49:GLY:HA3	2.20	0.41
32:2a:56:U:H2'	32:2a:57:G:C8	2.55	0.41
32:2a:56:U:H2'	32:2a:57:G:H8	1.85	0.41
32:2a:299:G:H8	32:2a:299:G:O5'	2.03	0.41
32:2a:457:C:H2'	32:2a:458:C:H6	1.85	0.41
32:2a:1085:U:H3'	32:2a:1086:U:C5	2.56	0.41
33:2b:58:ILE:O	33:2b:62:ALA:N	2.45	0.41
33:2b:224:GLN:HA	33:2b:228:GLY:O	2.20	0.41
40:2i:69:GLY:O	40:2i:73:GLN:HG3	2.21	0.41
45:2n:36:PHE:HD2	45:2n:37:PHE:CD1	2.39	0.41
52:2u:7:ARG:HG2	52:2u:21:TYR:CZ	2.56	0.41
1:1A:861:C:H2'	1:1A:862:C:C6	2.56	0.41
1:1A:1560:U:O2'	1:1A:1561:C:H5'	2.20	0.41
1:1A:2190:G:N1	1:1A:2193:A:C8	2.88	0.41
1:1A:2245:U:H2'	1:1A:2246:G:C8	2.55	0.41
1:1A:2327:G:H2'	1:1A:2328:C:C6	2.56	0.41
4:1E:47:VAL:O	4:1E:80:GLU:HA	2.21	0.41
9:1N:33:LEU:HD12	9:1N:33:LEU:HA	1.80	0.41
11:1P:81:GLN:NE2	11:1P:105:LEU:O	2.54	0.41
11:1P:116:GLY:O	11:1P:137:LYS:NZ	2.42	0.41
23:11:89:GLU:O	23:11:93:GLU:HG2	2.21	0.41
32:1a:1349:A:OP2	40:1i:118:LYS:HE2	2.20	0.41
33:1b:33:TYR:HB2	33:1b:43:ASP:CB	2.43	0.41
39:1h:72:PRO:O	39:1h:74:PRO:HD3	2.21	0.41
40:1i:55:ALA:HA	40:1i:58:HIS:CD2	2.55	0.41
42:1k:98:LEU:HD23	42:1k:98:LEU:HA	1.87	0.41
50:1s:27:GLU:CB	50:1s:28:LYS:HA	2.40	0.41
51:1t:67:ALA:HB2	51:1t:77:ALA:HB2	2.03	0.41
54:1w:26:A:N6	54:1w:44:G:H1	2.19	0.41
1:2A:829:A:N7	1:2A:2247:A:O2'	2.45	0.41
1:2A:953:A:C2	1:2A:954:G:C8	3.09	0.41
1:2A:1288:U:C2	1:2A:1327:C:O2	2.74	0.41
1:2A:1826:G:H4'	3:2D:242:ARG:HH21	1.84	0.41
1:2A:1848:A:C4	1:2A:1849:G:C8	3.09	0.41
1:2A:2135:A:H2'	1:2A:2136:C:C6	2.56	0.41
1:2A:2335:A:C8	1:2A:2337:G:C5	3.09	0.41
1:2A:2366:A:H2'	1:2A:2367:G:O4'	2.20	0.41
1:2A:2584:U:H6	1:2A:2584:U:O5'	2.04	0.41
1:2A:2747:G:H21	1:2A:2757:A:H62	1.67	0.41
3:2D:68:LYS:C	3:2D:70:TRP:H	2.29	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:121:ILE:HD11	7:2H:140:LYS:HG2	2.02	0.41
29:27:30:VAL:O	29:27:34:ARG:HG2	2.21	0.41
32:2a:9:G:H2'	32:2a:10:A:H8	1.86	0.41
32:2a:1074:G:O2'	32:2a:1101:A:N1	2.51	0.41
32:2a:1252:A:H2'	32:2a:1253:G:O4'	2.20	0.41
32:2a:1364:U:O2'	32:2a:1365:G:H5'	2.20	0.41
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.56	0.41
33:2b:100:GLY:HA2	33:2b:103:THR:OG1	2.19	0.41
1:1A:739:C:O2'	3:1D:38:LYS:NZ	2.47	0.41
1:1A:2023:A:H2'	1:1A:2024:G:C8	2.55	0.41
25:13:18:ASP:OD1	25:13:18:ASP:N	2.49	0.41
29:17:46:VAL:HG13	29:17:48:LYS:HZ3	1.86	0.41
32:1a:204:U:H4'	32:1a:216:G:O5'	2.20	0.41
32:1a:769:G:H4'	32:1a:1513:A:H4'	2.02	0.41
32:1a:872:A:C8	32:1a:874:G:C8	3.09	0.41
32:1a:1030(A):G:O2'	32:1a:1031:G:N2	2.54	0.41
32:1a:1333:A:H2'	32:1a:1334:G:O4'	2.21	0.41
32:1a:1396:A:H2	36:1e:19:MET:HG3	1.85	0.41
32:1a:1458:G:H5'	51:1t:32:ALA:HB2	2.03	0.41
33:1b:178:ARG:HB3	39:1h:72:PRO:HA	2.02	0.41
37:1f:2:ARG:HB2	37:1f:4:TYR:CE2	2.56	0.41
46:1o:18:PHE:CE2	46:1o:21:ASP:HB2	2.56	0.41
55:1x:17:C:OP1	55:1x:61:C:H5''	2.21	0.41
54:1y:41:C:H2'	54:1y:42:C:H6	1.86	0.41
1:2A:7:G:H4'	9:2N:13:TRP:CH2	2.55	0.41
1:2A:394:A:C6	1:2A:395:U:C4	3.09	0.41
1:2A:468:G:N7	29:27:39:ARG:NH2	2.69	0.41
1:2A:2507:C:H2'	1:2A:2508:G:O4'	2.20	0.41
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.56	0.41
2:2B:11:C:H3'	2:2B:12:C:H6	1.86	0.41
5:2F:23:ASP:O	5:2F:24:LEU:HD12	2.21	0.41
8:2I:87:LYS:NZ	8:2I:122:GLU:OE2	2.53	0.41
12:2Q:85:LYS:HG2	22:20:7:LEU:CB	2.50	0.41
15:2T:24:PRO:HA	15:2T:49:VAL:HG23	2.02	0.41
16:2U:89:GLU:HB2	17:2V:50:PRO:HB3	2.01	0.41
19:2X:44:GLU:HG3	19:2X:51:VAL:HG23	2.03	0.41
26:24:62:ARG:HA	26:24:62:ARG:HD3	1.75	0.41
29:27:34:ARG:NH2	29:27:39:ARG:HG2	2.35	0.41
32:2a:429:U:H3'	35:2d:9:CYS:SG	2.60	0.41
32:2a:1168:A:H2'	32:2a:1169:A:C8	2.56	0.41
32:2a:1274:G:N2	32:2a:1275:A:H62	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1326:C:H5''	52:2u:18:TYR:O	2.19	0.41
32:2a:1327:C:H2'	32:2a:1328:C:C6	2.55	0.41
32:2a:1371:G:OP1	40:2i:12:GLU:HB2	2.20	0.41
32:2a:1404:5MC:O2	32:2a:1519:MA6:O2'	2.31	0.41
33:2b:185:ILE:HG22	33:2b:199:TYR:CD2	2.52	0.41
34:2c:179:ARG:NH1	34:2c:206:GLU:HB2	2.36	0.41
34:2c:190:ARG:HG2	34:2c:191:THR:N	2.34	0.41
35:2d:176:LEU:HD12	35:2d:182:LYS:O	2.20	0.41
41:2j:38:ILE:HG13	41:2j:71:LEU:HB3	2.03	0.41
45:2n:3:ARG:HG3	45:2n:4:LYS:H	1.85	0.41
48:2q:53:LEU:HD23	48:2q:82:MET:HE1	2.02	0.41
49:2r:25:THR:HG23	49:2r:26:LEU:HD12	2.02	0.41
55:2x:61:C:H2'	55:2x:62:C:H6	1.86	0.41
54:2y:3:C:N3	54:2y:70:G:O6	2.54	0.41
1:1A:271:U:H4'	1:1A:272:U:OP2	2.18	0.41
1:1A:310:C:H2'	1:1A:311:C:C6	2.55	0.41
1:1A:463:C:H2'	1:1A:464:G:C8	2.56	0.41
1:1A:1118:C:H2'	1:1A:1139:G:O6	2.20	0.41
1:1A:1140:U:O2'	1:1A:1141:A:N7	2.51	0.41
1:1A:1720:U:OP1	60:1A:5027:HOH:O	2.21	0.41
1:1A:1739:U:O2'	1:1A:1740:U:H2'	2.20	0.41
1:1A:1765:U:H2'	1:1A:1766:G:O4'	2.21	0.41
1:1A:2136:A:H2	1:1A:2190:G:H1'	1.85	0.41
1:1A:2158:C:C4	1:1A:2177:G:N1	2.88	0.41
1:1A:2331:G:N1	14:1S:3:ARG:HA	2.36	0.41
3:1D:35:LYS:HB2	3:1D:36:PRO:HD2	2.02	0.41
3:1D:37:LEU:HD22	3:1D:87:ASN:ND2	2.36	0.41
4:1E:2:LYS:HA	4:1E:84:PHE:CE1	2.56	0.41
7:1H:56:SER:OG	7:1H:57:ASP:N	2.54	0.41
8:1I:118:LYS:HA	8:1I:119:PRO:HD3	1.95	0.41
11:1P:98:GLU:O	11:1P:101:VAL:HG12	2.21	0.41
20:1Y:65:ALA:HA	20:1Y:66:PRO:HD3	1.93	0.41
21:1Z:6:LYS:HD3	21:1Z:8:TYR:OH	2.20	0.41
21:1Z:126:VAL:CG1	21:1Z:161:VAL:HG23	2.51	0.41
32:1a:243:A:C2	32:1a:246:A:C8	3.09	0.41
32:1a:277:C:H5''	48:1q:68:ARG:NH2	2.36	0.41
32:1a:486:U:H2'	32:1a:487:A:H8	1.85	0.41
32:1a:584:G:H5'	48:1q:91:ARG:NH2	2.34	0.41
32:1a:857:C:H2'	32:1a:858:G:O4'	2.21	0.41
32:1a:918:A:H2'	32:1a:919:A:O4'	2.20	0.41
32:1a:1330:U:H2'	32:1a:1331:G:H5'	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:1g:79:ARG:CG	38:1g:80:VAL:H	2.33	0.41
41:1j:38:ILE:HG13	41:1j:71:LEU:HB3	2.03	0.41
44:1m:3:ARG:HG3	44:1m:4:ILE:N	2.36	0.41
54:1y:7:A:OP1	54:1y:8:4SU:H5	2.20	0.41
1:2A:109:G:H2'	1:2A:110:G:O4'	2.21	0.41
1:2A:195:A:N7	60:2A:4402:HOH:O	2.37	0.41
1:2A:224:G:H2'	1:2A:225:A:O4'	2.21	0.41
1:2A:228:A:O2'	1:2A:229:A:H4'	2.21	0.41
1:2A:289:A:H2'	1:2A:290:G:O4'	2.21	0.41
1:2A:372:G:H8	23:21:65:SER:O	2.04	0.41
1:2A:484:C:H2'	1:2A:485:C:H6	1.86	0.41
1:2A:571:A:O2'	17:2V:78:LYS:HE2	2.21	0.41
1:2A:956:G:H5''	12:2Q:77:LYS:HD2	2.02	0.41
1:2A:1567:A:H2'	3:2D:84:TYR:HE2	1.85	0.41
1:2A:1785:A:N6	60:2A:5150:HOH:O	2.54	0.41
1:2A:2848:G:C8	15:2T:97:ALA:HB2	2.56	0.41
60:2A:4018:HOH:O	16:2U:14:HIS:HE1	2.04	0.41
2:2B:94:C:H2'	2:2B:95:C:C6	2.56	0.41
4:2E:50:GLY:CA	4:2E:75:VAL:HG11	2.50	0.41
7:2H:9:ILE:HG12	7:2H:69:ARG:HG3	2.03	0.41
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.49	0.41
8:2I:75:LEU:HD22	8:2I:105:HIS:CD2	2.55	0.41
11:2P:57:THR:O	11:2P:61:ARG:HG3	2.21	0.41
14:2S:8:GLU:HG2	14:2S:8:GLU:H	1.54	0.41
15:2T:23:ARG:NH1	15:2T:120:ARG:HD3	2.35	0.41
16:2U:104:GLN:O	16:2U:108:GLU:HG3	2.21	0.41
17:2V:62:LEU:HD22	17:2V:93:GLU:HG2	2.01	0.41
18:2W:45:TYR:OH	18:2W:49:LYS:NZ	2.45	0.41
21:2Z:61:LEU:HA	21:2Z:62:PRO:HD3	1.94	0.41
21:2Z:138:GLU:H	21:2Z:156:LYS:CE	2.34	0.41
21:2Z:158:PRO:HA	21:2Z:159:PRO:HD3	1.92	0.41
23:21:30:VAL:HG21	54:2y:76:A:H5''	2.02	0.41
26:24:44:THR:O	26:24:46:GLN:N	2.54	0.41
28:26:9:LEU:HD13	28:26:51:GLU:HB2	2.03	0.41
32:2a:142:G:H2'	32:2a:143:A:C8	2.56	0.41
32:2a:302:G:N3	32:2a:556:C:H4'	2.36	0.41
32:2a:641:U:O3'	32:2a:642:A:H8	2.03	0.41
32:2a:957:U:H2'	32:2a:959:A:OP2	2.21	0.41
32:2a:1028:C:O5'	32:2a:1028:C:H6	2.04	0.41
32:2a:1031:G:H5''	32:2a:1032:G:OP2	2.21	0.41
32:2a:1101:A:H4'	32:2a:1102:A:O5'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1186:G:H21	45:2n:61:TRP:C	2.28	0.41
32:2a:1385:G:H2'	32:2a:1386:G:H8	1.84	0.41
32:2a:1417:G:C6	32:2a:1482:G:C6	3.09	0.41
33:2b:28:PHE:CD1	33:2b:194:PRO:HG3	2.56	0.41
33:2b:110:GLN:HG2	33:2b:111:ARG:HH12	1.85	0.41
35:2d:191:ARG:NH2	35:2d:200:GLU:OE1	2.51	0.41
36:2e:145:LYS:O	36:2e:149:GLU:HB2	2.20	0.41
40:2i:18:PHE:HD2	40:2i:62:TYR:HD2	1.69	0.41
40:2i:86:VAL:HA	40:2i:89:ASN:O	2.21	0.41
41:2j:54:PHE:O	41:2j:55:LYS:HG2	2.21	0.41
43:2l:26:ALA:HB1	43:2l:60:LEU:HD22	2.02	0.41
51:2t:43:LEU:HD23	51:2t:43:LEU:HA	1.94	0.41
53:2v:14:A:H2	53:2v:15:A:C4	2.39	0.41
1:1A:38:A:H2'	1:1A:39:C:C6	2.56	0.41
1:1A:572:A:H61	17:1V:19:LYS:H	1.69	0.41
1:1A:1116:A:N6	1:1A:1142:A:N3	2.68	0.41
1:1A:2196:C:OP2	1:1A:2196:C:H6	2.04	0.41
1:1A:2679:C:H2'	1:1A:2680:G:O4'	2.20	0.41
1:1A:2801:C:P	4:1E:61:ARG:HH21	2.44	0.41
1:1A:2804:C:H2'	1:1A:2805:G:C8	2.55	0.41
3:1D:171:ASP:O	3:1D:187:GLY:N	2.45	0.41
6:1G:173:LEU:HD23	6:1G:176:LEU:HD12	2.03	0.41
10:1O:49:ARG:HH12	32:1a:1423:G:P	2.44	0.41
26:14:49:PHE:HB3	26:14:50:VAL:H	1.39	0.41
32:1a:560:U:H6	32:1a:560:U:H2'	1.69	0.41
32:1a:1024:G:N2	32:1a:1025:U:C6	2.89	0.41
34:1c:6:HIS:HA	34:1c:7:PRO:HD3	1.78	0.41
34:1c:30:ARG:O	34:1c:34:LEU:N	2.43	0.41
48:1q:43:LEU:HD11	48:1q:68:ARG:NH1	2.36	0.41
54:1w:37:MIA:H162	54:1w:37:MIA:H121	1.75	0.41
1:2A:35:G:H2'	1:2A:36:G:O4'	2.20	0.41
1:2A:581:C:H2'	1:2A:582:G:C8	2.56	0.41
1:2A:815:C:C2	1:2A:1193:G:C2	3.08	0.41
1:2A:1464:C:H2'	1:2A:1465:G:C8	2.56	0.41
1:2A:1529:G:C6	1:2A:1530:C:C4	3.09	0.41
1:2A:1859:A:N6	1:2A:1883:G:O2'	2.53	0.41
1:2A:2055:C:H5'	1:2A:2056:G:O5'	2.21	0.41
1:2A:2140:C:O2	1:2A:2140:C:H2'	2.21	0.41
1:2A:2148:G:H2'	1:2A:2149:G:N7	2.35	0.41
1:2A:2336:A:H61	22:20:43:THR:HG22	1.85	0.41
1:2A:2510:C:C4	1:2A:2511:U:C4	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2512:C:H5''	1:2A:2513:G:OP2	2.21	0.41
1:2A:2519:U:H5'	1:2A:2567:G:H21	1.86	0.41
1:2A:2679:A:C2	1:2A:2729:G:C2	3.09	0.41
1:2A:2741:A:N6	1:2A:2763:G:O2'	2.54	0.41
1:2A:2839:G:C6	1:2A:2840:C:N3	2.89	0.41
2:2B:71:C:H2'	2:2B:72:G:C8	2.56	0.41
5:2F:29:ASN:O	5:2F:112:MET:HE1	2.21	0.41
11:2P:52:GLU:HB3	11:2P:55:ARG:CZ	2.50	0.41
11:2P:94:GLU:HG2	11:2P:96:THR:HG23	2.03	0.41
12:2Q:31:ASP:HA	12:2Q:134:ARG:NH1	2.36	0.41
12:2Q:110:THR:HG23	12:2Q:113:GLN:OE1	2.21	0.41
13:2R:109:ALA:HA	13:2R:110:PRO:HD2	1.91	0.41
17:2V:27:ALA:O	17:2V:64:HIS:HE1	2.04	0.41
28:26:34:LEU:N	28:26:51:GLU:HG2	2.36	0.41
32:2a:1030(A):G:C2	32:2a:1030(D):A:OP2	2.75	0.41
32:2a:1053:G:H4'	32:2a:1054:C:H3'	2.03	0.41
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.21	0.41
32:2a:1369:C:H2'	32:2a:1370:G:O4'	2.21	0.41
32:2a:1378:C:N4	32:2a:1379:G:N3	2.69	0.41
32:2a:1511:G:H2'	32:2a:1512:U:O4'	2.21	0.41
36:2e:34:VAL:O	36:2e:42:GLY:N	2.51	0.41
40:2i:20:ARG:HA	40:2i:21:PRO:HD3	1.97	0.41
51:2t:20:LEU:HD23	51:2t:20:LEU:HA	1.80	0.41
54:2w:28:G:C2	54:2w:29:G:H1'	2.56	0.41
55:2x:21:A:H62	55:2x:46:G:H2'	1.86	0.41
1:1A:943:C:H2'	1:1A:944:C:C6	2.56	0.40
1:1A:1759:C:H2'	1:1A:1760:U:O4'	2.22	0.40
1:1A:2156:A:C5	1:1A:2180:A:H2	2.35	0.40
1:1A:2742:G:H2'	1:1A:2743:C:O4'	2.21	0.40
3:1D:21:PHE:HB3	3:1D:24:ILE:HD12	2.02	0.40
5:1F:12:LEU:HB3	5:1F:126:VAL:HG12	2.03	0.40
21:1Z:4:ARG:HG2	21:1Z:58:VAL:HB	2.01	0.40
23:11:64:ALA:HA	23:11:67:ILE:HG13	2.02	0.40
28:16:10:LEU:O	28:16:51:GLU:HA	2.20	0.40
32:1a:345:C:H5'	32:1a:346:G:C5	2.56	0.40
35:1d:175:SER:CB	35:1d:184:LYS:HB3	2.48	0.40
35:1d:188:LEU:HA	35:1d:189:PRO:HD3	1.85	0.40
36:1e:78:HIS:HE1	36:1e:143:ARG:N	2.02	0.40
43:1l:39:VAL:HG11	43:1l:41:ARG:NH1	2.35	0.40
43:1l:54:LYS:N	43:1l:54:LYS:HD2	2.35	0.40
50:1s:35:SER:HB3	50:1s:38:SER:OG	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:1s:71:LEU:HD23	50:1s:71:LEU:HA	1.69	0.40
52:1u:11:GLY:O	52:1u:15:ARG:HG2	2.22	0.40
1:2A:1188:U:C4'	17:2V:79:VAL:HG22	2.49	0.40
1:2A:1593:G:H2'	1:2A:1594:G:H8	1.87	0.40
1:2A:2528:U:O2'	1:2A:2529:G:H3'	2.21	0.40
6:2G:46:ALA:HB2	6:2G:53:LEU:HG	2.02	0.40
9:2N:99:LEU:HD23	9:2N:99:LEU:HA	1.89	0.40
15:2T:113:LYS:O	15:2T:114:LEU:HD23	2.21	0.40
18:2W:60:ASN:HD22	18:2W:60:ASN:N	2.19	0.40
21:2Z:28:MET:HA	21:2Z:88:PHE:O	2.21	0.40
32:2a:142:G:H2'	32:2a:143:A:H8	1.86	0.40
32:2a:377:G:OP1	47:2p:3:LYS:HE2	2.21	0.40
32:2a:560:U:H6	32:2a:560:U:H2'	1.51	0.40
32:2a:1222:G:C6	32:2a:1223:C:C4	3.09	0.40
32:2a:1247:U:H1'	32:2a:1291:G:N2	2.36	0.40
32:2a:1278:U:H5'	32:2a:1279:A:C5'	2.51	0.40
34:2c:131:ARG:NE	34:2c:135:LYS:HE3	2.35	0.40
40:2i:82:ALA:HA	40:2i:85:LEU:HD12	2.03	0.40
45:2n:32:SER:O	45:2n:40:CYS:HA	2.21	0.40
52:2u:18:TYR:HD1	52:2u:22:ARG:O	2.03	0.40
54:2y:4:C:H2'	54:2y:5:G:H5'	2.03	0.40
54:2y:60:U:O2'	54:2y:61:C:H5'	2.21	0.40
1:1A:1058:U:O4	9:1N:28:THR:HG21	2.21	0.40
1:1A:1229:G:H5'	25:13:29:ARG:NH1	2.36	0.40
1:1A:1572:G:C6	1:1A:1573:G:C2	3.08	0.40
1:1A:2368:C:H2'	1:1A:2369:U:O4'	2.21	0.40
12:1Q:43:THR:HA	12:1Q:94:VAL:HG12	2.03	0.40
16:1U:76:TYR:CZ	16:1U:80:ILE:HG13	2.57	0.40
32:1a:57:G:H2'	32:1a:58:C:C6	2.57	0.40
32:1a:69:G:C2	32:1a:70:G:C5	3.10	0.40
32:1a:679:C:H2'	32:1a:680:C:C6	2.55	0.40
32:1a:911:U:H2'	32:1a:912:C:C6	2.56	0.40
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.21	0.40
33:1b:90:MET:HE2	33:1b:90:MET:HA	2.03	0.40
33:1b:118:LEU:HD13	33:1b:142:LEU:HB2	2.03	0.40
36:1e:105:VAL:HG21	36:1e:128:PRO:HB3	2.04	0.40
39:1h:121:ASP:OD1	39:1h:121:ASP:N	2.54	0.40
55:1x:61:C:H2'	55:1x:62:C:H6	1.85	0.40
1:2A:64:A:O3'	19:2X:71:GLY:HA3	2.20	0.40
1:2A:84:A:H5''	20:2Y:8:LYS:HE3	2.02	0.40
1:2A:244:A:C2	1:2A:255:A:C4	3.10	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:272:G:H4'	1:2A:272(A):U:H5''	2.02	0.40
1:2A:582:G:H2'	1:2A:583:G:C8	2.56	0.40
1:2A:778:G:C5	1:2A:779:U:C4	3.09	0.40
1:2A:1021:A:C8	1:2A:1021:A:C3'	3.04	0.40
1:2A:1263:U:C4	1:2A:1264:G:C6	3.08	0.40
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.57	0.40
1:2A:2070:G:H2'	1:2A:2071:A:H8	1.85	0.40
1:2A:2369:A:C6	1:2A:2370:G:C5	3.09	0.40
1:2A:2419:U:O5'	1:2A:2419:U:H6	2.04	0.40
1:2A:2533:A:O2'	1:2A:2664:G:H5''	2.21	0.40
6:2G:27:ASN:O	6:2G:30:GLU:HB3	2.20	0.40
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	2.02	0.40
6:2G:111:LEU:HD23	6:2G:117:PHE:CE1	2.56	0.40
7:2H:115:VAL:HG12	7:2H:123:PHE:CE2	2.56	0.40
10:2O:2:ILE:HB	10:2O:33:ALA:HB3	2.03	0.40
17:2V:89:GLN:HA	17:2V:90:PRO:HD3	1.88	0.40
18:2W:11:ARG:NH1	18:2W:99:ARG:O	2.54	0.40
21:2Z:46:LYS:O	21:2Z:50:GLN:NE2	2.50	0.40
32:2a:343:U:O2'	32:2a:344:A:H2'	2.21	0.40
32:2a:1084:G:OP1	32:2a:1086:U:C2	2.74	0.40
32:2a:1305:G:C2	32:2a:1331:G:N3	2.89	0.40
32:2a:1316:G:H2'	32:2a:1318:A:OP2	2.21	0.40
34:2c:120:VAL:HG11	34:2c:134:ILE:HD13	2.04	0.40
36:2e:100:VAL:O	36:2e:107:ARG:NH1	2.37	0.40
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.56	0.40
51:2t:57:ARG:HH22	51:2t:100:ILE:HD12	1.86	0.40
1:1A:1068:G:N7	9:1N:66:LYS:HE2	2.36	0.40
1:1A:1136:U:N3	1:1A:1148:C:H1'	2.37	0.40
1:1A:1891:G:N2	1:1A:1904:C:O2	2.51	0.40
1:1A:2081:A:C8	1:1A:2515:2MA:HM22	2.56	0.40
1:1A:2132:G:OP1	1:1A:2140:U:N3	2.54	0.40
2:1B:12:C:H4'	2:1B:13:A:OP1	2.22	0.40
8:1I:9:LEU:HD21	8:1I:35:LEU:HD13	2.02	0.40
8:1I:122:GLU:HB2	8:1I:126:TYR:OH	2.21	0.40
24:12:9:GLN:HE22	24:12:56:GLN:HB3	1.86	0.40
32:1a:100:C:H2'	32:1a:101:A:C8	2.56	0.40
32:1a:270:A:H2'	32:1a:271:C:C6	2.57	0.40
32:1a:352:C:H4'	32:1a:354:G:OP1	2.21	0.40
32:1a:659:U:H2'	32:1a:660:G:C8	2.55	0.40
32:1a:859:A:H2'	32:1a:860:A:O4'	2.21	0.40
32:1a:1241:G:H2'	32:1a:1242:C:H6	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1258:G:H2'	32:1a:1259:C:C6	2.57	0.40
32:1a:1424:C:H2'	32:1a:1425:U:O4'	2.21	0.40
43:1l:28:LYS:HB2	43:1l:33:ARG:HH21	1.85	0.40
52:1u:5:ASP:O	52:1u:11:GLY:HA3	2.22	0.40
1:2A:30:G:C6	1:2A:31:C:C4	3.09	0.40
1:2A:569:U:C4	1:2A:570:G:C6	3.10	0.40
1:2A:644:A:C2	1:2A:2369:A:H1'	2.56	0.40
1:2A:748:G:C8	18:2W:89:ALA:HB1	2.56	0.40
1:2A:848:G:H2'	1:2A:849:A:C8	2.55	0.40
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.41	0.40
1:2A:1266:G:O4'	18:2W:15:ARG:NH2	2.54	0.40
1:2A:2048:G:OP1	60:2A:4976:HOH:O	2.22	0.40
1:2A:2064:C:H1'	1:2A:2450:A:C2	2.56	0.40
1:2A:2070:G:H2'	1:2A:2071:A:O4'	2.21	0.40
1:2A:2525:G:C2	1:2A:2539:C:C2	3.09	0.40
2:2B:80:U:O2'	2:2B:81:G:H8	2.05	0.40
5:2F:78:ILE:HA	5:2F:83:PHE:CD2	2.56	0.40
6:2G:16:ARG:HH11	6:2G:16:ARG:HG3	1.85	0.40
6:2G:111:LEU:HA	6:2G:114:ILE:HD12	2.01	0.40
11:2P:95:VAL:HG23	11:2P:100:LEU:HD21	2.03	0.40
11:2P:126:VAL:HG12	11:2P:148:LEU:CD2	2.51	0.40
29:27:34:ARG:HH21	29:27:39:ARG:HG2	1.85	0.40
30:28:61:LEU:C	30:28:63:PRO:HD3	2.47	0.40
32:2a:434:U:H2'	32:2a:435:C:C6	2.57	0.40
32:2a:975:A:C5	32:2a:1357:A:H2	2.39	0.40
32:2a:1304:G:C6	32:2a:1305:G:N1	2.89	0.40
32:2a:1327:C:H2'	32:2a:1328:C:H6	1.86	0.40
33:2b:88:ALA:CB	33:2b:222:ILE:HD11	2.51	0.40
38:2g:52:GLU:H	38:2g:52:GLU:HG2	1.72	0.40
39:2h:46:LYS:HA	39:2h:64:LYS:HE3	2.02	0.40
39:2h:85:ARG:HD2	39:2h:134:ILE:O	2.21	0.40
41:2j:50:ILE:HA	41:2j:60:ARG:HD3	2.03	0.40
1:1A:56:C:H2'	1:1A:57:G:O4'	2.21	0.40
1:1A:540:A:H1'	1:1A:604:C:H1'	2.04	0.40
1:1A:831:A:C8	1:1A:839:G:C5	3.09	0.40
1:1A:1371:G:OP1	60:1A:5441:HOH:O	2.22	0.40
1:1A:2863:C:H2'	1:1A:2864:G:C8	2.57	0.40
9:1N:121:LYS:HD3	9:1N:130:HIS:CE1	2.56	0.40
11:1P:21:ARG:HA	11:1P:21:ARG:HD3	1.95	0.40
14:1S:25:ARG:HB3	14:1S:25:ARG:HH11	1.87	0.40
16:1U:46:ALA:O	16:1U:50:ARG:HG2	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:1W:13:SER:HA	18:1W:14:PRO:HD3	1.92	0.40
21:1Z:40:ASP:OD2	21:1Z:43:GLU:HG3	2.21	0.40
21:1Z:72:ARG:NH2	21:1Z:97:GLU:O	2.53	0.40
22:10:62:LEU:HA	22:10:62:LEU:HD23	1.89	0.40
26:14:62:ARG:HB3	26:14:63:TYR:H	1.65	0.40
32:1a:198:G:O6	32:1a:219:C:N4	2.55	0.40
32:1a:434:U:H2'	32:1a:435:C:C6	2.57	0.40
32:1a:848:C:H2'	32:1a:849:C:H6	1.86	0.40
32:1a:986:A:H2'	32:1a:987:G:O4'	2.21	0.40
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.56	0.40
34:1c:22:TRP:HB3	34:1c:59:ARG:HB2	2.02	0.40
34:1c:112:SER:HB3	34:1c:115:LEU:HB2	2.03	0.40
37:1f:69:GLU:CD	37:1f:69:GLU:H	2.29	0.40
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.77	0.40
1:2A:185:U:H4'	1:2A:218:A:H4'	2.02	0.40
1:2A:1028:A:H2'	1:2A:1029:A:C8	2.56	0.40
1:2A:1515:G:C2	1:2A:1516:C:C2	3.10	0.40
1:2A:1688:U:H2'	1:2A:1698:A:N6	2.36	0.40
1:2A:2118:U:N3	1:2A:2149:G:H1'	2.36	0.40
1:2A:2128:C:H6	1:2A:2128:C:O5'	2.04	0.40
1:2A:2187:G:C6	1:2A:2188:C:C4	3.10	0.40
5:2F:108:LYS:HE2	5:2F:108:LYS:HB2	1.88	0.40
6:2G:107:LEU:HA	6:2G:111:LEU:HD13	2.04	0.40
32:2a:253:U:H2'	32:2a:254:G:H8	1.87	0.40
32:2a:527:7MG:O6	43:2l:49:ASN:ND2	2.55	0.40
32:2a:1256:A:H61	32:2a:1278:U:H1'	1.86	0.40
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.39	0.40
37:2f:91:VAL:HG12	37:2f:92:LYS:O	2.22	0.40
41:2j:11:PHE:CE1	41:2j:67:THR:HG22	2.56	0.40
55:2x:66:C:H2'	55:2x:67:C:O4'	2.22	0.40
1:1A:510:C:H2'	1:1A:511:C:H6	1.87	0.40
1:1A:591:U:H5'	1:1A:990:A:N6	2.37	0.40
1:1A:645:G:N3	1:1A:645:G:H2'	2.35	0.40
1:1A:1111:U:H1'	1:1A:1120:G:C2	2.56	0.40
1:1A:1120:G:N1	1:1A:1121:C:H1'	2.37	0.40
1:1A:1140:U:H2'	1:1A:1141:A:C8	2.56	0.40
1:1A:1476:C:H2'	1:1A:1477:U:C6	2.56	0.40
1:1A:1992:A:H4'	1:1A:1993:A:OP1	2.21	0.40
1:1A:2180:A:H1'	1:1A:2181:G:O5'	2.22	0.40
1:1A:2388:A:H2'	1:1A:2389:A:O4'	2.21	0.40
1:1A:2697:G:H5'	10:1O:68:GLU:OE2	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2724:U:OP1	1:1A:2727:G:H4'	2.21	0.40
4:1E:178:GLU:H	4:1E:178:GLU:CD	2.28	0.40
11:1P:18:ARG:NH2	11:1P:21:ARG:NH1	2.69	0.40
14:1S:46:VAL:HG12	14:1S:48:LEU:HD12	2.02	0.40
32:1a:255:G:H1'	48:1q:16:GLN:OE1	2.21	0.40
32:1a:300:A:H2'	32:1a:301:G:O4'	2.22	0.40
32:1a:993:G:H2'	32:1a:993:G:N3	2.36	0.40
32:1a:1152:A:H5'	41:1j:13:HIS:CG	2.57	0.40
32:1a:1168:A:H2'	32:1a:1169:A:C8	2.56	0.40
32:1a:1401:G:C2	32:1a:1402:4OC:H1'	2.57	0.40
35:1d:173:TRP:CD2	35:1d:189:PRO:HG3	2.56	0.40
38:1g:50:ILE:HD11	38:1g:61:VAL:HG21	2.03	0.40
42:1k:16:SER:O	42:1k:35:PRO:HD3	2.20	0.40
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.86	0.40
44:1m:73:GLU:HG2	44:1m:77:ASN:ND2	2.37	0.40
47:1p:14:ASN:N	47:1p:15:PRO:HD3	2.36	0.40
47:1p:18:ARG:HD3	47:1p:35:LYS:HD2	2.04	0.40
53:1v:16:A:H2'	53:1v:17:U:O4'	2.21	0.40
55:1x:8:4SU:O2	55:1x:21:A:H2	2.04	0.40
1:2A:274:G:H2'	1:2A:275:G:H8	1.86	0.40
1:2A:877:U:O2'	1:2A:900:A:N6	2.55	0.40
1:2A:993:G:C2	1:2A:1162:G:C2	3.09	0.40
1:2A:1657:C:H2'	1:2A:1658:C:C6	2.56	0.40
1:2A:1858:G:O6	60:2A:4492:HOH:O	2.21	0.40
1:2A:2205:C:H1'	1:2A:2220:G:N2	2.37	0.40
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.87	0.40
1:2A:2505:G:O6	1:2A:2576:G:H2'	2.22	0.40
1:2A:2615:U:C2	27:25:7:PRO:HA	2.56	0.40
1:2A:2720:U:C4	1:2A:2872:G:C6	3.10	0.40
1:2A:2836:U:H2'	1:2A:2837:G:H8	1.81	0.40
10:2O:104:ARG:HH21	15:2T:36:GLU:CD	2.29	0.40
14:2S:26:LEU:HD22	14:2S:87:PHE:CD1	2.56	0.40
24:22:35:LEU:CD1	24:22:53:LEU:HD12	2.51	0.40
32:2a:14:U:H5''	60:2a:3397:HOH:O	2.21	0.40
32:2a:335:C:O2'	32:2a:1433:A:N3	2.48	0.40
32:2a:582:U:C2	32:2a:760:G:C6	3.10	0.40
32:2a:850:U:H2'	32:2a:851:G:H5''	2.03	0.40
32:2a:1027:C:H2'	32:2a:1034:G:N2	2.36	0.40
32:2a:1128:C:O2'	32:2a:1129:C:P	2.79	0.40
36:2e:40:ARG:HB3	36:2e:66:MET:CE	2.51	0.40
36:2e:80:ILE:HG22	36:2e:91:LEU:HB2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:2i:3:GLN:HE21	40:2i:20:ARG:HH21	1.68	0.40
40:2i:18:PHE:HB2	40:2i:62:TYR:O	2.22	0.40
43:2l:117:ARG:NH2	43:2l:124:LYS:HB2	2.37	0.40
46:2o:80:ALA:O	46:2o:83:GLU:HG2	2.22	0.40
54:2w:21:A:N6	54:2w:46:7MG:C4	2.90	0.40
54:2y:66:U:O4	54:2y:67:C:N4	2.55	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%)	262 (96%)	11 (4%)	0	100	100
3	2D	273/276 (99%)	260 (95%)	11 (4%)	2 (1%)	18	34
4	1E	202/206 (98%)	193 (96%)	8 (4%)	1 (0%)	24	43
4	2E	202/206 (98%)	194 (96%)	7 (4%)	1 (0%)	24	43
5	1F	201/210 (96%)	198 (98%)	2 (1%)	1 (0%)	24	43
5	2F	201/210 (96%)	197 (98%)	2 (1%)	2 (1%)	12	24
6	1G	179/182 (98%)	170 (95%)	9 (5%)	0	100	100
6	2G	179/182 (98%)	168 (94%)	10 (6%)	1 (1%)	21	38
7	1H	172/180 (96%)	164 (95%)	7 (4%)	1 (1%)	21	38
7	2H	172/180 (96%)	158 (92%)	12 (7%)	2 (1%)	10	20
8	1I	144/148 (97%)	132 (92%)	12 (8%)	0	100	100
8	2I	144/148 (97%)	128 (89%)	14 (10%)	2 (1%)	9	17
9	1N	138/140 (99%)	134 (97%)	4 (3%)	0	100	100
9	2N	138/140 (99%)	133 (96%)	4 (3%)	1 (1%)	18	34
10	1O	120/122 (98%)	112 (93%)	8 (7%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
10	2O	120/122 (98%)	114 (95%)	6 (5%)	0	100	100
11	1P	147/150 (98%)	139 (95%)	8 (5%)	0	100	100
11	2P	147/150 (98%)	137 (93%)	10 (7%)	0	100	100
12	1Q	139/141 (99%)	133 (96%)	6 (4%)	0	100	100
12	2Q	139/141 (99%)	131 (94%)	7 (5%)	1 (1%)	18	34
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
13	2R	116/118 (98%)	112 (97%)	4 (3%)	0	100	100
14	1S	108/112 (96%)	106 (98%)	2 (2%)	0	100	100
14	2S	108/112 (96%)	105 (97%)	2 (2%)	1 (1%)	14	27
15	1T	129/146 (88%)	123 (95%)	6 (5%)	0	100	100
15	2T	129/146 (88%)	125 (97%)	4 (3%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	114 (100%)	0	0	100	100
17	1V	99/101 (98%)	97 (98%)	1 (1%)	1 (1%)	12	24
17	2V	99/101 (98%)	97 (98%)	1 (1%)	1 (1%)	12	24
18	1W	110/113 (97%)	110 (100%)	0	0	100	100
18	2W	110/113 (97%)	110 (100%)	0	0	100	100
19	1X	93/96 (97%)	90 (97%)	3 (3%)	0	100	100
19	2X	93/96 (97%)	88 (95%)	4 (4%)	1 (1%)	11	22
20	1Y	105/110 (96%)	98 (93%)	5 (5%)	2 (2%)	6	11
20	2Y	105/110 (96%)	99 (94%)	4 (4%)	2 (2%)	6	11
21	1Z	148/206 (72%)	136 (92%)	11 (7%)	1 (1%)	18	34
21	2Z	156/206 (76%)	141 (90%)	15 (10%)	0	100	100
22	10	81/85 (95%)	80 (99%)	0	1 (1%)	10	20
22	20	81/85 (95%)	77 (95%)	3 (4%)	1 (1%)	10	20
23	11	95/98 (97%)	92 (97%)	3 (3%)	0	100	100
23	21	95/98 (97%)	91 (96%)	4 (4%)	0	100	100
24	12	68/72 (94%)	68 (100%)	0	0	100	100
24	22	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
25	13	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
25	23	57/60 (95%)	53 (93%)	3 (5%)	1 (2%)	6	12

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
26	14	67/71 (94%)	58 (87%)	4 (6%)	5 (8%)	1	0
26	24	67/71 (94%)	53 (79%)	10 (15%)	4 (6%)	1	1
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
27	25	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
28	26	51/54 (94%)	50 (98%)	1 (2%)	0	100	100
29	17	46/49 (94%)	44 (96%)	2 (4%)	0	100	100
29	27	46/49 (94%)	44 (96%)	1 (2%)	1 (2%)	5	9
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	61 (98%)	1 (2%)	0	100	100
31	19	35/37 (95%)	35 (100%)	0	0	100	100
31	29	35/37 (95%)	35 (100%)	0	0	100	100
33	1b	229/256 (90%)	200 (87%)	22 (10%)	7 (3%)	3	5
33	2b	229/256 (90%)	202 (88%)	19 (8%)	8 (4%)	3	4
34	1c	204/239 (85%)	188 (92%)	15 (7%)	1 (0%)	24	43
34	2c	204/239 (85%)	187 (92%)	15 (7%)	2 (1%)	12	24
35	1d	206/209 (99%)	196 (95%)	9 (4%)	1 (0%)	24	43
35	2d	206/209 (99%)	197 (96%)	8 (4%)	1 (0%)	24	43
36	1e	146/162 (90%)	137 (94%)	6 (4%)	3 (2%)	5	9
36	2e	146/162 (90%)	139 (95%)	5 (3%)	2 (1%)	9	17
37	1f	98/101 (97%)	96 (98%)	2 (2%)	0	100	100
37	2f	98/101 (97%)	96 (98%)	2 (2%)	0	100	100
38	1g	153/156 (98%)	144 (94%)	6 (4%)	3 (2%)	6	10
38	2g	153/156 (98%)	143 (94%)	7 (5%)	3 (2%)	6	10
39	1h	135/138 (98%)	133 (98%)	2 (2%)	0	100	100
39	2h	135/138 (98%)	131 (97%)	4 (3%)	0	100	100
40	1i	125/128 (98%)	115 (92%)	9 (7%)	1 (1%)	16	31
40	2i	125/128 (98%)	114 (91%)	10 (8%)	1 (1%)	16	31
41	1j	95/105 (90%)	86 (90%)	4 (4%)	5 (5%)	1	1
41	2j	94/105 (90%)	85 (90%)	5 (5%)	4 (4%)	2	2
42	1k	112/129 (87%)	106 (95%)	4 (4%)	2 (2%)	6	12

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
42	2k	112/129 (87%)	107 (96%)	3 (3%)	2 (2%)	6	12
43	1l	119/132 (90%)	115 (97%)	4 (3%)	0	100	100
43	2l	119/132 (90%)	112 (94%)	7 (6%)	0	100	100
44	1m	121/126 (96%)	114 (94%)	7 (6%)	0	100	100
44	2m	120/126 (95%)	110 (92%)	9 (8%)	1 (1%)	16	31
45	1n	58/61 (95%)	56 (97%)	2 (3%)	0	100	100
45	2n	58/61 (95%)	55 (95%)	3 (5%)	0	100	100
46	1o	86/89 (97%)	82 (95%)	4 (5%)	0	100	100
46	2o	86/89 (97%)	81 (94%)	4 (5%)	1 (1%)	10	20
47	1p	80/88 (91%)	76 (95%)	3 (4%)	1 (1%)	9	18
47	2p	80/88 (91%)	76 (95%)	3 (4%)	1 (1%)	9	18
48	1q	97/105 (92%)	93 (96%)	3 (3%)	1 (1%)	12	24
48	2q	97/105 (92%)	94 (97%)	2 (2%)	1 (1%)	12	24
49	1r	66/88 (75%)	65 (98%)	1 (2%)	0	100	100
49	2r	66/88 (75%)	65 (98%)	1 (2%)	0	100	100
50	1s	81/93 (87%)	75 (93%)	5 (6%)	1 (1%)	10	20
50	2s	81/93 (87%)	74 (91%)	5 (6%)	2 (2%)	4	7
51	1t	94/106 (89%)	87 (93%)	0	7 (7%)	1	1
51	2t	94/106 (89%)	86 (92%)	4 (4%)	4 (4%)	2	2
52	1u	21/27 (78%)	21 (100%)	0	0	100	100
52	2u	21/27 (78%)	21 (100%)	0	0	100	100
All	All	11370/12128 (94%)	10779 (95%)	488 (4%)	103 (1%)	14	27

All (103) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
7	1H	126	PRO
21	1Z	159	PRO
26	14	62	ARG
33	1b	10	LEU
38	1g	79	ARG
40	1i	54	ASP
41	1j	55	LYS
50	1s	81	ARG

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Mol	Chain	Res	Type
51	1t	10	LEU
51	1t	100	ILE
5	2F	21	ALA
5	2F	130	ALA
7	2H	126	PRO
8	2I	10	GLU
17	2V	79	VAL
26	24	55	ARG
26	24	61	ARG
29	27	46	VAL
33	2b	16	HIS
33	2b	123	ALA
34	2c	181	ASN
38	2g	79	ARG
44	2m	4	ILE
50	2s	81	ARG
51	2t	10	LEU
17	1V	79	VAL
26	14	45	GLY
26	14	56	VAL
42	1k	49	GLY
3	2D	69	ARG
6	2G	50	ALA
8	2I	40	THR
14	2S	84	GLN
26	24	45	GLY
40	2i	54	ASP
51	2t	47	GLY
4	1E	52	LEU
22	10	13	GLY
33	1b	17	PHE
38	1g	80	VAL
41	1j	32	ALA
41	1j	77	PRO
41	1j	78	ASN
51	1t	47	GLY
51	1t	96	GLY
51	1t	102	GLY
4	2E	52	LEU
9	2N	2	LYS
19	2X	2	LYS
26	24	46	GLN

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Mol	Chain	Res	Type
33	2b	125	PRO
36	2e	37	ARG
41	2j	77	PRO
48	2q	33	GLY
50	2s	29	ARG
26	14	57	GLU
33	1b	16	HIS
33	1b	20	GLU
33	1b	22	LYS
34	1c	66	VAL
35	1d	178	VAL
36	1e	86	ALA
51	1t	95	ALA
3	2D	3	VAL
20	2Y	103	GLY
33	2b	20	GLU
33	2b	78	GLN
34	2c	156	ARG
38	2g	7	ALA
38	2g	80	VAL
41	2j	78	ASN
51	2t	100	ILE
20	1Y	54	LYS
26	14	53	GLU
33	1b	231	GLU
41	1j	79	ARG
42	1k	105	VAL
20	2Y	57	GLN
22	20	4	LYS
33	2b	21	ARG
33	2b	231	GLU
41	2j	55	LYS
42	2k	49	GLY
46	2o	88	ARG
38	1g	4	ARG
51	1t	9	ASN
7	2H	29	PRO
36	2e	69	VAL
42	2k	105	VAL
47	2p	53	VAL
48	1q	33	GLY
25	23	59	VAL

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Mol	Chain	Res	Type
51	2t	102	GLY
20	1Y	103	GLY
36	1e	69	VAL
36	1e	85	GLY
47	1p	53	VAL
33	2b	202	PRO
41	2j	75	ILE
12	2Q	27	VAL
35	2d	5	ILE
33	1b	125	PRO

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	1D	215/218 (99%)	207 (96%)	8 (4%)	30	57
3	2D	215/218 (99%)	206 (96%)	9 (4%)	26	52
4	1E	164/166 (99%)	152 (93%)	12 (7%)	13	27
4	2E	164/166 (99%)	152 (93%)	12 (7%)	13	27
5	1F	160/166 (96%)	147 (92%)	13 (8%)	11	23
5	2F	159/166 (96%)	149 (94%)	10 (6%)	16	34
6	1G	143/156 (92%)	137 (96%)	6 (4%)	26	52
6	2G	143/156 (92%)	134 (94%)	9 (6%)	16	34
7	1H	144/148 (97%)	139 (96%)	5 (4%)	32	58
7	2H	144/148 (97%)	141 (98%)	3 (2%)	47	74
8	1I	113/124 (91%)	104 (92%)	9 (8%)	11	24
8	2I	105/124 (85%)	99 (94%)	6 (6%)	18	39
9	1N	118/119 (99%)	109 (92%)	9 (8%)	12	26
9	2N	118/119 (99%)	107 (91%)	11 (9%)	8	18
10	1O	100/100 (100%)	97 (97%)	3 (3%)	36	64
10	2O	100/100 (100%)	98 (98%)	2 (2%)	48	75

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	1P	115/116 (99%)	109 (95%)	6 (5%)	21	42
11	2P	115/116 (99%)	110 (96%)	5 (4%)	26	51
12	1Q	111/111 (100%)	108 (97%)	3 (3%)	39	67
12	2Q	111/111 (100%)	105 (95%)	6 (5%)	20	41
13	1R	101/101 (100%)	91 (90%)	10 (10%)	7	16
13	2R	101/101 (100%)	94 (93%)	7 (7%)	14	30
14	1S	86/88 (98%)	82 (95%)	4 (5%)	23	47
14	2S	85/88 (97%)	81 (95%)	4 (5%)	23	47
15	1T	115/127 (91%)	113 (98%)	2 (2%)	53	78
15	2T	113/127 (89%)	112 (99%)	1 (1%)	70	87
16	1U	93/94 (99%)	90 (97%)	3 (3%)	34	62
16	2U	93/94 (99%)	92 (99%)	1 (1%)	65	84
17	1V	80/82 (98%)	74 (92%)	6 (8%)	12	26
17	2V	80/82 (98%)	73 (91%)	7 (9%)	9	20
18	1W	90/92 (98%)	84 (93%)	6 (7%)	15	31
18	2W	90/92 (98%)	83 (92%)	7 (8%)	11	24
19	1X	77/78 (99%)	75 (97%)	2 (3%)	40	68
19	2X	77/78 (99%)	75 (97%)	2 (3%)	40	68
20	1Y	85/91 (93%)	80 (94%)	5 (6%)	18	37
20	2Y	85/91 (93%)	82 (96%)	3 (4%)	32	58
21	1Z	135/179 (75%)	128 (95%)	7 (5%)	21	42
21	2Z	137/179 (76%)	129 (94%)	8 (6%)	18	38
22	10	65/67 (97%)	64 (98%)	1 (2%)	57	80
22	20	65/67 (97%)	65 (100%)	0	100	100
23	11	80/83 (96%)	77 (96%)	3 (4%)	29	56
23	21	80/83 (96%)	78 (98%)	2 (2%)	42	69
24	12	65/67 (97%)	64 (98%)	1 (2%)	57	80
24	22	65/67 (97%)	65 (100%)	0	100	100
25	13	51/52 (98%)	48 (94%)	3 (6%)	18	37
25	23	50/52 (96%)	48 (96%)	2 (4%)	28	54
26	14	59/63 (94%)	56 (95%)	3 (5%)	21	43

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
26	24	53/63 (84%)	47 (89%)	6 (11%)	5	12
27	15	50/52 (96%)	47 (94%)	3 (6%)	17	36
27	25	50/52 (96%)	47 (94%)	3 (6%)	17	36
28	16	51/52 (98%)	48 (94%)	3 (6%)	18	37
28	26	50/52 (96%)	49 (98%)	1 (2%)	48	75
29	17	41/42 (98%)	40 (98%)	1 (2%)	43	70
29	27	41/42 (98%)	39 (95%)	2 (5%)	22	45
30	18	54/55 (98%)	52 (96%)	2 (4%)	30	57
30	28	54/55 (98%)	51 (94%)	3 (6%)	19	39
31	19	34/34 (100%)	34 (100%)	0	100	100
31	29	34/34 (100%)	33 (97%)	1 (3%)	37	65
33	1b	192/220 (87%)	190 (99%)	2 (1%)	68	86
33	2b	187/220 (85%)	182 (97%)	5 (3%)	39	67
34	1c	142/188 (76%)	138 (97%)	4 (3%)	38	66
34	2c	140/188 (74%)	135 (96%)	5 (4%)	31	58
35	1d	169/181 (93%)	160 (95%)	9 (5%)	20	42
35	2d	173/181 (96%)	167 (96%)	6 (4%)	32	58
36	1e	113/123 (92%)	109 (96%)	4 (4%)	32	58
36	2e	114/123 (93%)	109 (96%)	5 (4%)	25	50
37	1f	84/90 (93%)	83 (99%)	1 (1%)	63	83
37	2f	85/90 (94%)	82 (96%)	3 (4%)	32	58
38	1g	119/127 (94%)	117 (98%)	2 (2%)	53	78
38	2g	120/127 (94%)	115 (96%)	5 (4%)	26	52
39	1h	114/119 (96%)	111 (97%)	3 (3%)	40	68
39	2h	114/119 (96%)	111 (97%)	3 (3%)	40	68
40	1i	90/99 (91%)	86 (96%)	4 (4%)	25	50
40	2i	89/99 (90%)	82 (92%)	7 (8%)	11	24
41	1j	66/92 (72%)	66 (100%)	0	100	100
41	2j	69/92 (75%)	66 (96%)	3 (4%)	26	51
42	1k	82/99 (83%)	79 (96%)	3 (4%)	30	57
42	2k	83/99 (84%)	82 (99%)	1 (1%)	63	83

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
43	1l	96/108 (89%)	92 (96%)	4 (4%)	26	52
43	2l	96/108 (89%)	94 (98%)	2 (2%)	47	74
44	1m	93/101 (92%)	91 (98%)	2 (2%)	45	73
44	2m	92/101 (91%)	91 (99%)	1 (1%)	65	84
45	1n	49/50 (98%)	43 (88%)	6 (12%)	5	10
45	2n	49/50 (98%)	46 (94%)	3 (6%)	17	35
46	1o	78/80 (98%)	75 (96%)	3 (4%)	29	56
46	2o	78/80 (98%)	76 (97%)	2 (3%)	40	68
47	1p	69/74 (93%)	64 (93%)	5 (7%)	13	28
47	2p	68/74 (92%)	63 (93%)	5 (7%)	13	27
48	1q	94/97 (97%)	93 (99%)	1 (1%)	65	84
48	2q	94/97 (97%)	92 (98%)	2 (2%)	47	74
49	1r	59/77 (77%)	57 (97%)	2 (3%)	32	60
49	2r	59/77 (77%)	56 (95%)	3 (5%)	21	43
50	1s	69/80 (86%)	67 (97%)	2 (3%)	37	65
50	2s	67/80 (84%)	64 (96%)	3 (4%)	24	49
51	1t	70/82 (85%)	69 (99%)	1 (1%)	59	81
51	2t	70/82 (85%)	70 (100%)	0	100	100
52	1u	18/22 (82%)	18 (100%)	0	100	100
52	2u	18/22 (82%)	18 (100%)	0	100	100
All	All	9303/10064 (92%)	8909 (96%)	394 (4%)	26	52

All (394) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	106	ILE
3	1D	113	VAL
3	1D	142	VAL
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	257	LEU
4	1E	9	VAL
4	1E	12	THR

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Mol	Chain	Res	Type
4	1E	19	ARG
4	1E	21	VAL
4	1E	24	THR
4	1E	34	VAL
4	1E	73	GLU
4	1E	75	VAL
4	1E	78	LEU
4	1E	116	VAL
4	1E	175	VAL
4	1E	181	LEU
5	1F	18	ARG
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	88	VAL
5	1F	106	ARG
5	1F	125	LEU
5	1F	132	VAL
5	1F	170	LEU
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
6	1G	31	VAL
6	1G	43	LEU
6	1G	82	LEU
6	1G	135	LEU
6	1G	148	MET
6	1G	159	VAL
7	1H	15	VAL
7	1H	25	LYS
7	1H	51	ARG
7	1H	71	LEU
7	1H	129	THR
8	1I	44	LEU
8	1I	47	LEU
8	1I	92	VAL
8	1I	101	LEU
8	1I	107	VAL
8	1I	108	THR
8	1I	109	ILE
8	1I	123	LEU

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Mol	Chain	Res	Type
8	1I	142	VAL
9	1N	14	VAL
9	1N	28	THR
9	1N	33	LEU
9	1N	34	LEU
9	1N	46	VAL
9	1N	62	VAL
9	1N	73	THR
9	1N	99	LEU
9	1N	120	LEU
10	1O	10	VAL
10	1O	98	VAL
10	1O	108	GLU
11	1P	83	VAL
11	1P	95	VAL
11	1P	98	GLU
11	1P	106	LEU
11	1P	112	LEU
11	1P	125	VAL
12	1Q	35	VAL
12	1Q	109	VAL
12	1Q	110	THR
13	1R	6	SER
13	1R	29	LEU
13	1R	36	THR
13	1R	44	LEU
13	1R	54	LEU
13	1R	65	LEU
13	1R	79	LEU
13	1R	100	LEU
13	1R	111	LEU
13	1R	114	VAL
14	1S	14	VAL
14	1S	25	ARG
14	1S	49	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	89	VAL
16	1U	8	VAL
16	1U	74	LEU
16	1U	95	LEU
17	1V	46	VAL

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Mol	Chain	Res	Type
17	1V	51	VAL
17	1V	52	VAL
17	1V	61	VAL
17	1V	72	VAL
17	1V	79	VAL
18	1W	17	VAL
18	1W	19	LEU
18	1W	23	LEU
18	1W	67	ASP
18	1W	78	GLU
18	1W	107	LEU
19	1X	35	THR
19	1X	57	LEU
20	1Y	1	MET
20	1Y	7	VAL
20	1Y	43	ASN
20	1Y	72	VAL
20	1Y	90	LEU
21	1Z	5	LEU
21	1Z	86	VAL
21	1Z	126	VAL
21	1Z	129	SER
21	1Z	155	LEU
21	1Z	161	VAL
21	1Z	171	ILE
22	10	43	THR
23	11	30	VAL
23	11	35	THR
23	11	95	LEU
24	12	40	SER
25	13	23	LEU
25	13	54	VAL
25	13	60	GLU
26	14	27	THR
26	14	49	PHE
26	14	50	VAL
27	15	6	VAL
27	15	16	ARG
27	15	29	THR
28	16	14	THR
28	16	37	ARG
28	16	48	VAL

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Mol	Chain	Res	Type
29	17	43	THR
30	18	14	VAL
30	18	32	LEU
33	1b	112	VAL
33	1b	208	ILE
34	1c	21	ARG
34	1c	57	ILE
34	1c	70	VAL
34	1c	195	VAL
35	1d	5	ILE
35	1d	10	ARG
35	1d	31	CYS
35	1d	49	ARG
35	1d	134	ASP
35	1d	135	LEU
35	1d	158	ILE
35	1d	178	VAL
35	1d	194	LEU
36	1e	20	GLN
36	1e	31	LEU
36	1e	41	VAL
36	1e	56	GLN
37	1f	40	VAL
38	1g	8	GLU
38	1g	113	GLU
39	1h	51	VAL
39	1h	69	ARG
39	1h	112	LEU
40	1i	42	ARG
40	1i	64	THR
40	1i	65	VAL
40	1i	128	ARG
42	1k	31	THR
42	1k	48	ILE
42	1k	114	VAL
43	1l	27	LEU
43	1l	36	VAL
43	1l	83	VAL
43	1l	84	LEU
44	1m	19	LEU
44	1m	102	ARG
45	1n	3	ARG

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Mol	Chain	Res	Type
45	1n	6	LEU
45	1n	7	ILE
45	1n	22	THR
45	1n	23	ARG
45	1n	33	VAL
46	1o	7	GLU
46	1o	39	LEU
46	1o	77	ARG
47	1p	2	VAL
47	1p	19	ILE
47	1p	20	VAL
47	1p	21	VAL
47	1p	67	THR
48	1q	35	VAL
49	1r	37	VAL
49	1r	76	LEU
50	1s	5	LEU
50	1s	41	VAL
51	1t	13	LEU
3	2D	3	VAL
3	2D	94	LEU
3	2D	106	ILE
3	2D	113	VAL
3	2D	134	ARG
3	2D	142	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	276	LYS
4	2E	9	VAL
4	2E	12	THR
4	2E	21	VAL
4	2E	24	THR
4	2E	34	VAL
4	2E	52	LEU
4	2E	75	VAL
4	2E	78	LEU
4	2E	116	VAL
4	2E	134	ILE
4	2E	175	VAL
4	2E	181	LEU
5	2F	53	THR
5	2F	70	THR

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Mol	Chain	Res	Type
5	2F	74	ARG
5	2F	88	VAL
5	2F	106	ARG
5	2F	132	VAL
5	2F	170	LEU
5	2F	183	VAL
5	2F	192	LEU
5	2F	201	VAL
6	2G	28	VAL
6	2G	31	VAL
6	2G	43	LEU
6	2G	60	LEU
6	2G	79	ASN
6	2G	115	ARG
6	2G	135	LEU
6	2G	159	VAL
6	2G	161	THR
7	2H	71	LEU
7	2H	84	SER
7	2H	88	LEU
8	2I	38	LEU
8	2I	44	LEU
8	2I	47	LEU
8	2I	92	VAL
8	2I	121	LYS
8	2I	123	LEU
9	2N	14	VAL
9	2N	28	THR
9	2N	33	LEU
9	2N	34	LEU
9	2N	46	VAL
9	2N	58	ASP
9	2N	62	VAL
9	2N	67	LEU
9	2N	87	LEU
9	2N	99	LEU
9	2N	120	LEU
10	2O	8	LEU
10	2O	10	VAL
11	2P	83	VAL
11	2P	95	VAL
11	2P	99	LEU

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Mol	Chain	Res	Type
11	2P	106	LEU
11	2P	125	VAL
12	2Q	1	MET
12	2Q	2	LEU
12	2Q	21	THR
12	2Q	35	VAL
12	2Q	109	VAL
12	2Q	110	THR
13	2R	18	LEU
13	2R	29	LEU
13	2R	44	LEU
13	2R	65	LEU
13	2R	100	LEU
13	2R	111	LEU
13	2R	114	VAL
14	2S	35	ILE
14	2S	49	VAL
14	2S	75	GLU
14	2S	110	LEU
15	2T	89	VAL
16	2U	74	LEU
17	2V	43	GLU
17	2V	46	VAL
17	2V	51	VAL
17	2V	61	VAL
17	2V	72	VAL
17	2V	79	VAL
17	2V	82	ARG
18	2W	6	ILE
18	2W	17	VAL
18	2W	19	LEU
18	2W	23	LEU
18	2W	67	ASP
18	2W	100	THR
18	2W	107	LEU
19	2X	35	THR
19	2X	57	LEU
20	2Y	28	LYS
20	2Y	72	VAL
20	2Y	90	LEU
21	2Z	5	LEU
21	2Z	74	VAL

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Mol	Chain	Res	Type
21	2Z	124	ILE
21	2Z	126	VAL
21	2Z	135	GLU
21	2Z	155	LEU
21	2Z	161	VAL
21	2Z	171	ILE
23	21	4	VAL
23	21	95	LEU
25	23	30	ARG
25	23	54	VAL
26	24	27	THR
26	24	34	GLU
26	24	37	SER
26	24	48	ARG
26	24	49	PHE
26	24	50	VAL
27	25	6	VAL
27	25	16	ARG
27	25	29	THR
28	26	48	VAL
29	27	39	ARG
29	27	43	THR
30	28	14	VAL
30	28	30	ARG
30	28	32	LEU
31	29	17	ILE
33	2b	11	LEU
33	2b	93	VAL
33	2b	126	GLU
33	2b	127	ILE
33	2b	221	LEU
34	2c	57	ILE
34	2c	70	VAL
34	2c	124	ILE
34	2c	152	ILE
34	2c	154	SER
35	2d	31	CYS
35	2d	135	LEU
35	2d	141	ARG
35	2d	150	GLU
35	2d	170	VAL
35	2d	194	LEU

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Mol	Chain	Res	Type
36	2e	13	ILE
36	2e	20	GLN
36	2e	31	LEU
36	2e	41	VAL
36	2e	64	ARG
37	2f	21	LEU
37	2f	40	VAL
37	2f	72	VAL
38	2g	9	VAL
38	2g	30	ILE
38	2g	52	GLU
38	2g	98	SER
38	2g	104	LEU
39	2h	2	LEU
39	2h	23	SER
39	2h	51	VAL
40	2i	17	VAL
40	2i	27	THR
40	2i	53	VAL
40	2i	65	VAL
40	2i	102	LEU
40	2i	108	VAL
40	2i	128	ARG
41	2j	8	LEU
41	2j	49	VAL
41	2j	100	THR
42	2k	114	VAL
43	2l	27	LEU
43	2l	83	VAL
44	2m	47	ASP
45	2n	6	LEU
45	2n	22	THR
45	2n	33	VAL
46	2o	39	LEU
46	2o	65	ARG
47	2p	2	VAL
47	2p	20	VAL
47	2p	21	VAL
47	2p	62	VAL
47	2p	67	THR
48	2q	35	VAL
48	2q	83	ASP

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Mol	Chain	Res	Type
49	2r	37	VAL
49	2r	76	LEU
49	2r	84	LYS
50	2s	41	VAL
50	2s	49	ILE
50	2s	77	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (120) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
4	1E	48	GLN
4	1E	121	ASN
5	1F	8	GLN
5	1F	40	GLN
8	1I	104	GLN
8	1I	105	HIS
8	1I	139	GLN
9	1N	56	ASN
10	1O	3	GLN
13	1R	71	GLN
13	1R	91	GLN
14	1S	95	HIS
15	1T	43	GLN
15	1T	90	GLN
16	1U	81	HIS
16	1U	117	GLN
17	1V	80	GLN
18	1W	60	ASN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	43	ASN
21	1Z	73	GLN
23	11	19	GLN
23	11	56	GLN
24	12	9	GLN
25	13	32	GLN
26	14	47	GLN
33	1b	78	GLN
33	1b	113	HIS
33	1b	140	HIS

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Mol	Chain	Res	Type
34	1c	6	HIS
34	1c	98	ASN
34	1c	162	GLN
34	1c	181	ASN
35	1d	74	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	123	HIS
35	1d	125	HIS
36	1e	38	GLN
36	1e	78	HIS
36	1e	141	GLN
38	1g	28	ASN
38	1g	86	GLN
38	1g	148	ASN
40	1i	3	GLN
40	1i	31	GLN
40	1i	58	HIS
40	1i	117	HIS
40	1i	124	GLN
41	1j	56	HIS
42	1k	93	GLN
42	1k	99	GLN
43	1l	99	HIS
44	1m	77	ASN
50	1s	23	ASN
50	1s	69	HIS
50	1s	83	HIS
51	1t	75	ASN
3	2D	87	ASN
5	2F	40	GLN
5	2F	69	HIS
6	2G	40	ASN
6	2G	41	GLN
8	2I	104	GLN
8	2I	105	HIS
8	2I	139	GLN
9	2N	38	HIS
12	2Q	12	GLN
12	2Q	57	HIS
13	2R	13	HIS
13	2R	24	GLN

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Mol	Chain	Res	Type
13	2R	31	HIS
14	2S	38	GLN
15	2T	79	HIS
15	2T	90	GLN
16	2U	117	GLN
18	2W	60	ASN
19	2X	31	HIS
19	2X	82	GLN
20	2Y	6	HIS
21	2Z	55	HIS
22	20	3	HIS
22	20	35	ASN
23	21	56	GLN
24	22	9	GLN
24	22	70	GLN
26	24	46	GLN
31	29	20	HIS
33	2b	40	HIS
33	2b	94	ASN
33	2b	140	HIS
33	2b	212	GLN
34	2c	37	GLN
34	2c	98	ASN
35	2d	77	ASN
35	2d	119	GLN
35	2d	125	HIS
35	2d	161	ASN
36	2e	78	HIS
37	2f	64	GLN
37	2f	73	ASN
38	2g	28	ASN
38	2g	86	GLN
38	2g	122	HIS
39	2h	78	GLN
40	2i	3	GLN
40	2i	58	HIS
40	2i	124	GLN
42	2k	22	HIS
42	2k	78	GLN
43	2l	99	HIS
44	2m	77	ASN
46	2o	28	GLN

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Mol	Chain	Res	Type
50	2s	47	HIS
50	2s	56	GLN
50	2s	69	HIS
51	2t	75	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	419 (14%)	43 (1%)
1	2A	2791/2915 (95%)	510 (18%)	28 (1%)
2	1B	120/121 (99%)	11 (9%)	1 (0%)
2	2B	118/121 (97%)	35 (29%)	0
32	1a	1497/1521 (98%)	244 (16%)	0
32	2a	1501/1521 (98%)	255 (16%)	0
53	1v	12/24 (50%)	4 (33%)	0
53	2v	12/24 (50%)	3 (25%)	0
54	1w	72/76 (94%)	22 (30%)	0
54	1y	72/76 (94%)	23 (31%)	0
54	2w	69/76 (90%)	27 (39%)	0
54	2y	70/76 (92%)	24 (34%)	0
55	1x	75/77 (97%)	8 (10%)	0
55	2x	75/77 (97%)	16 (21%)	0
All	All	9348/9620 (97%)	1601 (17%)	72 (0%)

All (1601) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	13	A
1	1A	34	C
1	1A	45	C
1	1A	60	G
1	1A	70	A
1	1A	71	U
1	1A	73	A
1	1A	74	G
1	1A	83	A
1	1A	117	A
1	1A	118	U
1	1A	137	G
1	1A	185	A

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Mol	Chain	Res	Type
1	1A	186	A
1	1A	189	U
1	1A	194	G
1	1A	203	G
1	1A	204	G
1	1A	205	A
1	1A	211	A
1	1A	217	A
1	1A	218	A
1	1A	222	A
1	1A	237	G
1	1A	258	U
1	1A	271	U
1	1A	272	U
1	1A	273	G
1	1A	288	U
1	1A	289	G
1	1A	296	U
1	1A	303	C
1	1A	335	A
1	1A	353	G
1	1A	354	A
1	1A	376	G
1	1A	387	G
1	1A	388	A
1	1A	389	G
1	1A	407	U
1	1A	413	G
1	1A	423	G
1	1A	427	G
1	1A	432	U
1	1A	438	G
1	1A	455	A
1	1A	470	C
1	1A	474	U
1	1A	477	C
1	1A	480	A
1	1A	482	C
1	1A	483	A
1	1A	505	A
1	1A	507	G
1	1A	529	U

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Mol	Chain	Res	Type
1	1A	530	A
1	1A	534	C
1	1A	537	G
1	1A	555	G
1	1A	556	C
1	1A	557	A
1	1A	558	G
1	1A	569	G
1	1A	573	G
1	1A	586	G
1	1A	596	G
1	1A	598	A
1	1A	609	A
1	1A	626	A
1	1A	627	G
1	1A	630	U
1	1A	639	G
1	1A	641	G
1	1A	642	G
1	1A	652	A
1	1A	659	C
1	1A	660	C
1	1A	662	A
1	1A	670	C
1	1A	671	A
1	1A	697	C
1	1A	716	G
1	1A	733	G
1	1A	777	C
1	1A	793	A
1	1A	794	U
1	1A	822	G
1	1A	823	G
1	1A	829	A
1	1A	831	A
1	1A	832	G
1	1A	837	C
1	1A	839	G
1	1A	848	G
1	1A	852	G
1	1A	859	C
1	1A	866	A

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Mol	Chain	Res	Type
1	1A	874	U
1	1A	875	U
1	1A	906	G
1	1A	913	A
1	1A	924	U
1	1A	926	G
1	1A	927	G
1	1A	931	C
1	1A	932	C
1	1A	933	C
1	1A	934	A
1	1A	935	C
1	1A	936	C
1	1A	937	A
1	1A	940	C
1	1A	941	U
1	1A	942	A
1	1A	943	C
1	1A	944	C
1	1A	946	A
1	1A	953	U
1	1A	956	A
1	1A	977	G
1	1A	990	A
1	1A	991	G
1	1A	998	A
1	1A	1006	C
1	1A	1008	U
1	1A	1019	G
1	1A	1020	C
1	1A	1029	A
1	1A	1042	A
1	1A	1055	A
1	1A	1058	U
1	1A	1059	C
1	1A	1068	G
1	1A	1072	U
1	1A	1073	A
1	1A	1079	U
1	1A	1084	C
1	1A	1090	G
1	1A	1091	A

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Mol	Chain	Res	Type
1	1A	1092	A
1	1A	1093	G
1	1A	1094	A
1	1A	1100	A
1	1A	1101	G
1	1A	1104	G
1	1A	1112	U
1	1A	1114	G
1	1A	1117	G
1	1A	1119	A
1	1A	1120	G
1	1A	1121	C
1	1A	1122	C
1	1A	1124	U
1	1A	1125	C
1	1A	1127	U
1	1A	1129	U
1	1A	1130	A
1	1A	1134	A
1	1A	1135	G
1	1A	1136	U
1	1A	1137	G
1	1A	1139	G
1	1A	1140	U
1	1A	1142	A
1	1A	1146	C
1	1A	1147	U
1	1A	1148	C
1	1A	1149	A
1	1A	1153	G
1	1A	1156	G
1	1A	1157	A
1	1A	1158	G
1	1A	1162	C
1	1A	1180	C
1	1A	1181	G
1	1A	1195	G
1	1A	1201	A
1	1A	1217	G
1	1A	1218	G
1	1A	1219	A
1	1A	1220	U

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Mol	Chain	Res	Type
1	1A	1221	G
1	1A	1222	A
1	1A	1223	C
1	1A	1256	U
1	1A	1299	A
1	1A	1302	G
1	1A	1317	G
1	1A	1318	A
1	1A	1322	A
1	1A	1346	U
1	1A	1347	A
1	1A	1349	G
1	1A	1366	C
1	1A	1391	C
1	1A	1398	U
1	1A	1405	A
1	1A	1406	A
1	1A	1411	A
1	1A	1426	G
1	1A	1430	A
1	1A	1431	G
1	1A	1441	A
1	1A	1442	U
1	1A	1462	G
1	1A	1463	C
1	1A	1466	U
1	1A	1467	G
1	1A	1474	C
1	1A	1491	A
1	1A	1497	G
1	1A	1502	G
1	1A	1514	C
1	1A	1529	G
1	1A	1539	C
1	1A	1540	A
1	1A	1554	A
1	1A	1555	C
1	1A	1556	A
1	1A	1569	U
1	1A	1586	G
1	1A	1587	U
1	1A	1605	A

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Mol	Chain	Res	Type
1	1A	1613	A
1	1A	1616	A
1	1A	1625	U
1	1A	1627	A
1	1A	1628	G
1	1A	1631	C
1	1A	1632	A
1	1A	1654	A
1	1A	1686	U
1	1A	1694	G
1	1A	1695	C
1	1A	1700	G
1	1A	1701	A
1	1A	1721	G
1	1A	1741	C
1	1A	1743	G
1	1A	1747	A
1	1A	1750	G
1	1A	1767	A
1	1A	1768	U
1	1A	1776	G
1	1A	1787	G
1	1A	1794	G
1	1A	1795	G
1	1A	1804	A
1	1A	1811	A
1	1A	1813	C
1	1A	1817	A
1	1A	1822	A
1	1A	1831	C
1	1A	1847	G
1	1A	1848	G
1	1A	1859	G
1	1A	1860	A
1	1A	1878	A
1	1A	1889	G
1	1A	1892	G
1	1A	1899	A
1	1A	1911	A
1	1A	1922	A
1	1A	1928	G
1	1A	1951	G

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Mol	Chain	Res	Type
1	1A	1952	G
1	1A	1959	A
1	1A	1960	A
1	1A	1977	U
1	1A	1985	U
1	1A	1989	C
1	1A	1992	A
1	1A	1993	A
1	1A	1994	A
1	1A	2014	G
1	1A	2015	U
1	1A	2019	G
1	1A	2042	A
1	1A	2045	G
1	1A	2053	A
1	1A	2054	G
1	1A	2055	A
1	1A	2057	G
1	1A	2061	C
1	1A	2065	C
1	1A	2077	C
1	1A	2078	G
1	1A	2082	A
1	1A	2083	G
1	1A	2084	A
1	1A	2091	G
1	1A	2115	G
1	1A	2132	G
1	1A	2135	U
1	1A	2136	A
1	1A	2137	G
1	1A	2138	G
1	1A	2143	G
1	1A	2149	G
1	1A	2151	C
1	1A	2152	U
1	1A	2153	G
1	1A	2154	U
1	1A	2155	G
1	1A	2156	A
1	1A	2157	A
1	1A	2162	C

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Mol	Chain	Res	Type
1	1A	2163	G
1	1A	2164	C
1	1A	2166	U
1	1A	2168	C
1	1A	2172	U
1	1A	2173	G
1	1A	2178	G
1	1A	2179	G
1	1A	2180	A
1	1A	2181	G
1	1A	2182	G
1	1A	2184	G
1	1A	2187	G
1	1A	2188	G
1	1A	2189	U
1	1A	2193	A
1	1A	2194	U
1	1A	2197	C
1	1A	2200	C
1	1A	2203	G
1	1A	2204	G
1	1A	2206	G
1	1A	2207	C
1	1A	2214	G
1	1A	2220	A
1	1A	2227	G
1	1A	2228	G
1	1A	2229	A
1	1A	2231	G
1	1A	2237	A
1	1A	2250	G
1	1A	2251	G
1	1A	2280	A
1	1A	2281	A
1	1A	2292	G
1	1A	2295	C
1	1A	2299	A
1	1A	2317	A
1	1A	2320	G
1	1A	2321	A
1	1A	2332	A
1	1A	2337	G

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Mol	Chain	Res	Type
1	1A	2346	G
1	1A	2359	C
1	1A	2362	C
1	1A	2373	A
1	1A	2384	G
1	1A	2395	G
1	1A	2397	C
1	1A	2418	U
1	1A	2419	G
1	1A	2422	G
1	1A	2436	C
1	1A	2437	A
1	1A	2441	G
1	1A	2442	A
1	1A	2443	U
1	1A	2447	A
1	1A	2451	A
1	1A	2453	C
1	1A	2460	A
1	1A	2486	C
1	1A	2488	A
1	1A	2514	G
1	1A	2517	G
1	1A	2518	U
1	1A	2530	A
1	1A	2541	G
1	1A	2561	G
1	1A	2566	U
1	1A	2578	A
1	1A	2579	G
1	1A	2585	C
1	1A	2586	G
1	1A	2590	G
1	1A	2614	A
1	1A	2621	U
1	1A	2623	U
1	1A	2624	C
1	1A	2641	A
1	1A	2642	G
1	1A	2653	G
1	1A	2666	A
1	1A	2701	U

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Mol	Chain	Res	Type
1	1A	2702	C
1	1A	2703	C
1	1A	2714	U
1	1A	2725	A
1	1A	2726	A
1	1A	2727	G
1	1A	2739	U
1	1A	2746	A
1	1A	2770	A
1	1A	2771	A
1	1A	2778	A
1	1A	2782	C
1	1A	2791	A
1	1A	2803	A
1	1A	2804	C
1	1A	2806	G
1	1A	2813	G
1	1A	2828	G
1	1A	2830	A
1	1A	2831	A
1	1A	2845	A
1	1A	2846	U
1	1A	2879	G
1	1A	2882	G
1	1A	2890	C
1	1A	2901	A
1	1A	2903	G
2	1B	2	C
2	1B	12	C
2	1B	25	A
2	1B	35	U
2	1B	45	A
2	1B	56	G
2	1B	67	G
2	1B	73	A
2	1B	85	G
2	1B	106	G
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G

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Mol	Chain	Res	Type
32	1a	47	C
32	1a	48	C
32	1a	51	A
32	1a	54	C
32	1a	61	G
32	1a	65	U
32	1a	79	G
32	1a	91	C
32	1a	97	G
32	1a	98	G
32	1a	101	A
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	163	C
32	1a	174	C
32	1a	180	U
32	1a	182	U
32	1a	195	A
32	1a	197	A
32	1a	201	C
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	217	C
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	301	G
32	1a	306	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	342	C
32	1a	348	G
32	1a	352	C
32	1a	353	A

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Mol	Chain	Res	Type
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	421	U
32	1a	423	G
32	1a	424	G
32	1a	429	U
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	477	A
32	1a	484	G
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	531	U
32	1a	532	A
32	1a	547	A
32	1a	559	A
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	630	G
32	1a	653	A

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Mol	Chain	Res	Type
32	1a	665	A
32	1a	687	A
32	1a	688	G
32	1a	695	A
32	1a	721	G
32	1a	723	U
32	1a	731	G
32	1a	733	A
32	1a	749	C
32	1a	755	G
32	1a	774	G
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	853	G
32	1a	859	A
32	1a	870	U
32	1a	880	C
32	1a	885	G
32	1a	902	G
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	932	C
32	1a	934	C
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A

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Mol	Chain	Res	Type
32	1a	982	U
32	1a	989	C
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	1000	U
32	1a	1001(A)	G
32	1a	1002	G
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1009	G
32	1a	1011	G
32	1a	1016	A
32	1a	1020	U
32	1a	1021	G
32	1a	1022	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1033	G
32	1a	1039	C
32	1a	1045	C
32	1a	1054	C
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1080	A
32	1a	1081	G
32	1a	1086	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1108	G
32	1a	1122	U
32	1a	1125	U
32	1a	1129	C

Continued on next page...

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Mol	Chain	Res	Type
32	1a	1130	A
32	1a	1132	C
32	1a	1134	G
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1140	C
32	1a	1141	C
32	1a	1146	A
32	1a	1152	A
32	1a	1159	U
32	1a	1163	C
32	1a	1172	C
32	1a	1181	G
32	1a	1183	A
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1212	U
32	1a	1213	A
32	1a	1220	G
32	1a	1222	G
32	1a	1227	A
32	1a	1238	A
32	1a	1240	U
32	1a	1241	G
32	1a	1256	A
32	1a	1257	U
32	1a	1260	C
32	1a	1267	C
32	1a	1270	C
32	1a	1273	G
32	1a	1276	G
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1290	G
32	1a	1299	A
32	1a	1300	G

Continued on next page...

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Mol	Chain	Res	Type
32	1a	1302	U
32	1a	1320	C
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1368	G
32	1a	1370	G
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U
32	1a	1447	A
32	1a	1456	G
32	1a	1487	G
32	1a	1492	A
32	1a	1494	G
32	1a	1497	G
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1517	G
32	1a	1519	MA6
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1532	U
53	1v	13	A
53	1v	14	A
53	1v	15	A
53	1v	24	A
54	1w	2	C
54	1w	6	G
54	1w	8	4SU
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A

Continued on next page...

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Mol	Chain	Res	Type
54	1w	24	G
54	1w	45	U
54	1w	46	7MG
54	1w	47	U
54	1w	48	C
54	1w	50	U
54	1w	62	C
54	1w	64	A
54	1w	67	C
54	1w	68	C
54	1w	70	G
54	1w	72	C
54	1w	73	A
54	1w	74	C
55	1x	9	G
55	1x	18	G
55	1x	19	G
55	1x	21	A
55	1x	47	U
55	1x	61	C
55	1x	69	C
55	1x	76	A
54	1y	6	G
54	1y	8	4SU
54	1y	9	A
54	1y	13	C
54	1y	19	G
54	1y	20	U
54	1y	21	A
54	1y	23	A
54	1y	35	A
54	1y	44	G
54	1y	45	U
54	1y	46	7MG
54	1y	47	U
54	1y	48	C
54	1y	49	C
54	1y	53	G
54	1y	54	5MU
54	1y	56	C
54	1y	59	U
54	1y	61	C

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Mol	Chain	Res	Type
54	1y	65	G
54	1y	69	G
54	1y	70	G
1	2A	8	A
1	2A	12	U
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	84	A
1	2A	90	U
1	2A	94	C
1	2A	95	G
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	127	A
1	2A	154(A)	C
1	2A	157	U
1	2A	173	G
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	221	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	233	A
1	2A	248	G
1	2A	249	C
1	2A	250	G
1	2A	267	C

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Mol	Chain	Res	Type
1	2A	271(A)	A
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(B)	G
1	2A	272(I)	U
1	2A	272(J)	C
1	2A	274	G
1	2A	277	C
1	2A	278	A
1	2A	294	A
1	2A	303	U
1	2A	311	A
1	2A	316	C
1	2A	317	G
1	2A	324	A
1	2A	325	G
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	333	G
1	2A	352	G
1	2A	362	U
1	2A	363	G
1	2A	363(B)	G
1	2A	363(D)	G
1	2A	386	G
1	2A	396	G
1	2A	402	A
1	2A	403	U
1	2A	405	U
1	2A	406	G
1	2A	407	G
1	2A	411	G
1	2A	412	A
1	2A	418	G
1	2A	421	U
1	2A	422	A
1	2A	435	C
1	2A	444	C

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Mol	Chain	Res	Type
1	2A	454	A
1	2A	455	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	501	A
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	517	C
1	2A	520	G
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	588	U
1	2A	592	G
1	2A	599	G
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	621	A
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	651	G
1	2A	652(B)	A
1	2A	652(U)	G
1	2A	667	U
1	2A	669	G
1	2A	686	G
1	2A	701	G

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Mol	Chain	Res	Type
1	2A	709	U
1	2A	717	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	771	G
1	2A	775	G
1	2A	776	G
1	2A	782	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	847	U
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	869	G
1	2A	870	A
1	2A	874	G
1	2A	875	G
1	2A	879	G
1	2A	880	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	915	C
1	2A	917	A

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Mol	Chain	Res	Type
1	2A	932	G
1	2A	933	A
1	2A	941	A
1	2A	944	G
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	958	U
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	997	G
1	2A	998	C
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1020	A
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1042	G
1	2A	1043	C
1	2A	1114	G
1	2A	1116	C
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1142	U
1	2A	1144	G
1	2A	1166	C
1	2A	1169	G
1	2A	1171	G
1	2A	1180	C
1	2A	1188	U

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Mol	Chain	Res	Type
1	2A	1205	U
1	2A	1206	G
1	2A	1210	A
1	2A	1211	U
1	2A	1218	C
1	2A	1220	A
1	2A	1224	C
1	2A	1237	A
1	2A	1248	G
1	2A	1250	G
1	2A	1252	G
1	2A	1253	A
1	2A	1256	G
1	2A	1268	A
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1321	A
1	2A	1345	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1411	C
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	1435	G
1	2A	1437	C

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Mol	Chain	Res	Type
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1460	A
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1495	A
1	2A	1496	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1514	U
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1586	A
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1616	A
1	2A	1629	U
1	2A	1647	G
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

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Mol	Chain	Res	Type
1	2A	1722	A
1	2A	1739	U
1	2A	1740	G
1	2A	1746	G
1	2A	1747(A)	G
1	2A	1756	G
1	2A	1758	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1769	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1786	A
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1811	G
1	2A	1812	A
1	2A	1816	G
1	2A	1828	G
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1857	G
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
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	1936	A
1	2A	1937	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U

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Mol	Chain	Res	Type
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	2027	G
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2069	G
1	2A	2093	G
1	2A	2099	U
1	2A	2105	C
1	2A	2108	C
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2116	G
1	2A	2119	A
1	2A	2120	G
1	2A	2122	U
1	2A	2125	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2137	C
1	2A	2138	C
1	2A	2140	C

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Mol	Chain	Res	Type
1	2A	2142	C
1	2A	2146	C
1	2A	2150	U
1	2A	2151	G
1	2A	2154	G
1	2A	2155	G
1	2A	2156	G
1	2A	2157	G
1	2A	2158	A
1	2A	2161	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2169	A
1	2A	2172	U
1	2A	2174	C
1	2A	2178	C
1	2A	2185	C
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2232	U
1	2A	2235	G
1	2A	2239	G
1	2A	2275	C
1	2A	2279	G
1	2A	2283	C
1	2A	2287	A
1	2A	2302	G
1	2A	2305	A
1	2A	2308	G
1	2A	2319	G
1	2A	2320	A
1	2A	2321	G
1	2A	2324	C
1	2A	2325	G

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Mol	Chain	Res	Type
1	2A	2327	A
1	2A	2328	A
1	2A	2329	G
1	2A	2334	G
1	2A	2336	A
1	2A	2341	G
1	2A	2346	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	2403	C
1	2A	2406	U
1	2A	2410	G
1	2A	2419	U
1	2A	2425	A
1	2A	2426	A
1	2A	2429	G
1	2A	2430	A
1	2A	2434	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2458	G
1	2A	2465	C
1	2A	2468	G
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2477	C
1	2A	2478	A
1	2A	2490	G
1	2A	2491	U
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2520	C

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Mol	Chain	Res	Type
1	2A	2525	G
1	2A	2529	G
1	2A	2554	U
1	2A	2555	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2629	A
1	2A	2630	G
1	2A	2634	G
1	2A	2654	A
1	2A	2663	G
1	2A	2664	G
1	2A	2689	U
1	2A	2690	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2739	U
1	2A	2744	G
1	2A	2751	G
1	2A	2758	A
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2789	C
1	2A	2793	G
1	2A	2802	G
1	2A	2803	C
1	2A	2807	G
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2824	C

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Mol	Chain	Res	Type
1	2A	2833	G
1	2A	2836	U
1	2A	2839	G
1	2A	2872	G
1	2A	2879	C
1	2A	2880	C
1	2A	2894	G
1	2A	2895	U
1	2A	2897	U
2	2B	2	C
2	2B	5	C
2	2B	8	U
2	2B	9	G
2	2B	19	G
2	2B	20	C
2	2B	25	A
2	2B	32	C
2	2B	34	U
2	2B	38	C
2	2B	42	C
2	2B	52	A
2	2B	53	A
2	2B	56	G
2	2B	57	A
2	2B	58	A
2	2B	63	G
2	2B	65	C
2	2B	66	A
2	2B	67	G
2	2B	72	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	85	G
2	2B	88	C
2	2B	90	A
2	2B	91	C
2	2B	106	G
2	2B	108	U
2	2B	110	G
2	2B	114	C
2	2B	116	G

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Mol	Chain	Res	Type
2	2B	119	G
2	2B	120	A
32	2a	7	G
32	2a	9	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	51	A
32	2a	54	C
32	2a	65	U
32	2a	66	G
32	2a	73	G
32	2a	79	G
32	2a	80	G
32	2a	89	C
32	2a	91	C
32	2a	97	G
32	2a	98	G
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	163	C
32	2a	174	C
32	2a	180	U
32	2a	182	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	217	C
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	301	G

Continued on next page...

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Mol	Chain	Res	Type
32	2a	306	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	342	C
32	2a	348	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	441	A
32	2a	442	C
32	2a	452	A
32	2a	461	A
32	2a	470	C
32	2a	471	G
32	2a	477	A
32	2a	484	G
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	531	U
32	2a	532	A
32	2a	547	A
32	2a	559	A
32	2a	561	U

Continued on next page...

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Mol	Chain	Res	Type
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	587	G
32	2a	588	G
32	2a	596	C
32	2a	630	G
32	2a	650	G
32	2a	653	A
32	2a	665	A
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	702	A
32	2a	721	G
32	2a	723	U
32	2a	731	G
32	2a	733	A
32	2a	749	C
32	2a	755	G
32	2a	774	G
32	2a	777	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	815	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	853	G
32	2a	859	A
32	2a	870	U
32	2a	880	C
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G

Continued on next page...

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Mol	Chain	Res	Type
32	2a	932	C
32	2a	934	C
32	2a	960	U
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	982	U
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	997	U
32	2a	1001(A)	G
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
32	2a	1022	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	1031	G
32	2a	1033	G
32	2a	1036	G
32	2a	1038	C
32	2a	1039	C
32	2a	1040	U
32	2a	1045	C
32	2a	1051	C
32	2a	1065	U

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Mol	Chain	Res	Type
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1080	A
32	2a	1081	G
32	2a	1086	U
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1108	G
32	2a	1117	G
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1134	G
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1141	C
32	2a	1146	A
32	2a	1152	A
32	2a	1159	U
32	2a	1163	C
32	2a	1172	C
32	2a	1181	G
32	2a	1182	G
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1211	U
32	2a	1212	U
32	2a	1213	A
32	2a	1222	G
32	2a	1226	C
32	2a	1227	A
32	2a	1238	A
32	2a	1240	U

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Mol	Chain	Res	Type
32	2a	1241	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1267	C
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1276	G
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1287	A
32	2a	1300	G
32	2a	1303	C
32	2a	1305	G
32	2a	1320	C
32	2a	1328	C
32	2a	1338	G
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1402	4OC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1456	G
32	2a	1487	G
32	2a	1492	A
32	2a	1494	G
32	2a	1497	G
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1519	MA6

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Mol	Chain	Res	Type
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
53	2v	15	A
53	2v	24	A
54	2w	3	C
54	2w	4	C
54	2w	5	G
54	2w	7	A
54	2w	8	4SU
54	2w	9	A
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	25	C
54	2w	29	G
54	2w	34	G
54	2w	38	A
54	2w	46	7MG
54	2w	47	U
54	2w	48	C
54	2w	50	U
54	2w	56	C
54	2w	62	C
54	2w	63	G
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	10	G
55	2x	13	C
55	2x	18	G
55	2x	21	A
55	2x	22	G
55	2x	42	G

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Mol	Chain	Res	Type
55	2x	43	A
55	2x	47	U
55	2x	48	C
55	2x	52	G
55	2x	53	G
55	2x	65	C
55	2x	67	C
55	2x	68	C
55	2x	76	A
54	2y	15	G
54	2y	19	G
54	2y	23	A
54	2y	24	G
54	2y	25	C
54	2y	27	G
54	2y	34	G
54	2y	37	MIA
54	2y	45	U
54	2y	49	C
54	2y	52	G
54	2y	53	G
54	2y	55	PSU
54	2y	56	C
54	2y	57	G
54	2y	58	A
54	2y	59	U
54	2y	61	C
54	2y	62	C
54	2y	63	G
54	2y	65	G
54	2y	69	G
54	2y	70	G
54	2y	73	A

All (72) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	115	G
1	1A	185	A
1	1A	271	U
1	1A	302	A

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Mol	Chain	Res	Type
1	1A	509	A
1	1A	572	A
1	1A	596	G
1	1A	793	A
1	1A	821	A
1	1A	847	A
1	1A	913	A
1	1A	941	U
1	1A	1019	G
1	1A	1065	U
1	1A	1067	A
1	1A	1093	G
1	1A	1119	A
1	1A	1188	A
1	1A	1201	A
1	1A	1219	A
1	1A	1220	U
1	1A	1221	G
1	1A	1255	A
1	1A	1321	A
1	1A	1347	A
1	1A	1425	A
1	1A	1466	U
1	1A	1554	A
1	1A	1654	A
1	1A	1700	G
1	1A	2014	G
1	1A	2156	A
1	1A	2180	A
1	1A	2192	A
1	1A	2203	G
1	1A	2205	C
1	1A	2418	U
1	1A	2442	A
1	1A	2451	A
1	1A	2641	A
1	1A	2701	U
1	1A	2769	U
2	1B	1	U
1	2A	34	C
1	2A	195	A
1	2A	196	A

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Mol	Chain	Res	Type
1	2A	228	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	752	A
1	2A	774	A
1	2A	827	U
1	2A	856	C
1	2A	883	G
1	2A	900	A
1	2A	1210	A
1	2A	1420	U
1	2A	1442	G
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2406	U
1	2A	2439	A
1	2A	2689	U

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

84 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
54	MIA	1y	37	54	21,24,32	1.62	3 (14%)	30,35,47	2.01	10 (33%)
54	PSU	2y	39	54	18,21,22	1.36	2 (11%)	21,30,33	1.93	3 (14%)

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	1.57	5 (21%)	33,38,41	2.22	12 (36%)
54	PSU	1w	39	54	18,21,22	1.37	2 (11%)	21,30,33	1.96	3 (14%)
32	5MC	2a	1404	32	19,22,23	1.70	3 (15%)	26,32,35	1.19	3 (11%)
54	PSU	1w	32	56,54	18,21,22	1.35	2 (11%)	21,30,33	2.01	3 (14%)
32	M2G	1a	966	32	24,27,28	1.34	3 (12%)	33,40,43	1.84	5 (15%)
54	7MG	2w	46	54	23,26,27	1.40	3 (13%)	27,39,42	2.47	6 (22%)
32	UR3	2a	1498	32	19,22,23	1.07	2 (10%)	26,32,35	1.81	4 (15%)
32	7MG	2a	527	56,32	23,26,27	1.34	4 (17%)	27,39,42	2.59	6 (22%)
1	5MU	1A	1961	56,1	19,22,23	1.32	4 (21%)	27,32,35	2.59	6 (22%)
55	5MC	1x	32	55	19,22,23	1.67	3 (15%)	26,32,35	1.23	3 (11%)
1	2MA	1A	2515	56,1	22,25,26	1.50	4 (18%)	32,37,40	2.49	9 (28%)
32	5MC	1a	967	32	19,22,23	1.67	3 (15%)	26,32,35	1.15	3 (11%)
32	5MC	1a	1404	32	19,22,23	1.62	3 (15%)	26,32,35	1.19	3 (11%)
55	4SU	2x	8	55	18,21,22	2.04	6 (33%)	25,30,33	1.43	5 (20%)
54	5MU	1y	54	54	19,22,23	1.55	6 (31%)	27,32,35	1.99	6 (22%)
55	5MU	1x	54	55,56	19,22,23	1.45	6 (31%)	27,32,35	1.89	6 (22%)
54	PSU	1w	55	54	18,21,22	1.37	2 (11%)	21,30,33	1.98	3 (14%)
1	PSU	1A	1933	1	18,21,22	1.33	2 (11%)	21,30,33	2.07	4 (19%)
54	PSU	1y	55	54	18,21,22	1.33	2 (11%)	21,30,33	2.13	4 (19%)
1	2MU	1A	2564	56,1	19,22,24	1.20	2 (10%)	25,31,36	2.02	6 (24%)
54	MIA	1w	37	54	28,31,32	2.34	6 (21%)	38,44,47	2.66	12 (31%)
54	5MU	2w	54	54	19,22,23	1.39	4 (21%)	27,32,35	1.89	6 (22%)
32	2MG	2a	1207	32	23,26,27	1.25	3 (13%)	33,38,41	2.17	7 (21%)
1	OMG	1A	2263	56,1,55	23,26,27	1.24	3 (13%)	32,38,41	1.96	7 (21%)
54	PSU	2w	39	54	18,21,22	1.35	2 (11%)	21,30,33	1.81	4 (19%)
1	OMG	2A	2251	56,1,55	23,26,27	1.20	3 (13%)	32,38,41	2.10	7 (21%)
1	5MU	2A	1939	56,1	19,22,23	1.46	6 (31%)	27,32,35	2.51	6 (22%)
32	5MC	1a	1400	32	19,22,23	1.60	3 (15%)	26,32,35	1.15	2 (7%)
1	PSU	2A	2605	1	18,21,22	1.25	2 (11%)	21,30,33	2.18	6 (28%)
32	MA6	2a	1519	32	23,26,27	1.54	4 (17%)	33,38,41	2.42	12 (36%)
1	4OC	2A	1920	1	19,22,24	0.76	0	25,31,35	0.85	0
54	4SU	2w	8	54	18,21,22	1.81	4 (22%)	25,30,33	2.48	5 (20%)
32	5MC	2a	1400	32	19,22,23	1.68	3 (15%)	26,32,35	1.20	3 (11%)
32	5MC	2a	1407	32	19,22,23	1.52	3 (15%)	26,32,35	1.21	4 (15%)
1	2MA	2A	2503	56,1	22,25,26	1.45	4 (18%)	32,37,40	2.36	7 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	7MG	1a	527	56,32	23,26,27	1.46	4 (17%)	27,39,42	2.46	7 (25%)
55	PSU	2x	55	55	18,21,22	1.39	2 (11%)	21,30,33	1.97	4 (19%)
1	2MU	2A	2552	56,1	19,22,24	1.31	2 (10%)	25,31,36	1.80	5 (20%)
1	5MC	2A	1942	1	19,22,23	1.50	2 (10%)	26,32,35	1.12	2 (7%)
1	PSU	2A	1911	1	18,21,22	1.42	2 (11%)	21,30,33	1.84	4 (19%)
1	5MC	2A	1962	56,1	19,22,23	1.52	3 (15%)	26,32,35	1.29	3 (11%)
32	2MG	1a	1207	32	23,26,27	1.30	3 (13%)	33,38,41	2.07	6 (18%)
54	5MU	1w	54	54	19,22,23	1.47	5 (26%)	27,32,35	2.07	6 (22%)
32	UR3	1a	1498	32	19,22,23	1.10	1 (5%)	26,32,35	1.83	5 (19%)
32	5MC	2a	967	32	19,22,23	1.92	2 (10%)	26,32,35	1.16	4 (15%)
54	PSU	1y	32	54	18,21,22	1.41	3 (16%)	21,30,33	1.89	3 (14%)
32	M2G	2a	966	32	24,27,28	1.29	4 (16%)	33,40,43	1.87	6 (18%)
54	PSU	2w	55	56,54	18,21,22	1.38	2 (11%)	21,30,33	1.94	3 (14%)
32	PSU	1a	516	32	18,21,22	1.42	3 (16%)	21,30,33	1.88	5 (23%)
54	PSU	1y	39	54	18,21,22	1.42	2 (11%)	21,30,33	1.84	4 (19%)
32	MA6	1a	1519	32	23,26,27	1.58	4 (17%)	33,38,41	2.27	13 (39%)
32	5MC	1a	1407	32	19,22,23	1.66	3 (15%)	26,32,35	1.24	4 (15%)
54	4SU	1y	8	54	18,21,22	1.72	4 (22%)	25,30,33	1.88	6 (24%)
55	4SU	1x	8	55	18,21,22	2.11	5 (27%)	25,30,33	1.64	6 (24%)
54	PSU	2w	32	54	18,21,22	1.38	2 (11%)	21,30,33	1.99	4 (19%)
1	4OC	1A	1942	1	19,22,24	0.78	0	25,31,35	0.97	1 (4%)
54	PSU	2y	55	54	18,21,22	1.33	3 (16%)	21,30,33	1.91	5 (23%)
1	5MU	1A	1937	1	19,22,23	1.35	5 (26%)	27,32,35	2.18	7 (25%)
54	7MG	1y	46	54	23,26,27	1.35	4 (17%)	27,39,42	2.61	6 (22%)
54	4SU	2y	8	54	18,21,22	1.87	4 (22%)	25,30,33	2.25	5 (20%)
54	5MU	2y	54	54	19,22,23	1.51	4 (21%)	27,32,35	2.12	9 (33%)
32	4OC	1a	1402	32	20,23,24	0.79	0	25,32,35	1.03	2 (8%)
32	MA6	1a	1518	32	23,26,27	1.53	5 (21%)	33,38,41	2.31	13 (39%)
55	5MU	2x	54	55	19,22,23	1.39	5 (26%)	27,32,35	2.22	6 (22%)
32	4OC	2a	1402	56,32	20,23,24	0.81	0	25,32,35	1.07	1 (4%)
1	5MU	2A	1915	1	19,22,23	1.46	5 (26%)	27,32,35	2.23	6 (22%)
54	7MG	2y	46	54	23,26,27	1.45	4 (17%)	27,39,42	2.79	6 (22%)
1	5MC	1A	1984	56,1	19,22,23	1.57	3 (15%)	26,32,35	1.23	5 (19%)
43	0TD	2l	92	43	8,9,10	5.75	3 (37%)	6,11,13	2.22	1 (16%)
1	5MC	1A	1964	56,1	19,22,23	1.51	3 (15%)	26,32,35	1.23	2 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	PSU	1A	1939	1	18,21,22	1.42	4 (22%)	21,30,33	2.12	4 (19%)
43	0TD	1l	92	43	8,9,10	5.73	6 (75%)	6,11,13	4.21	3 (50%)
55	5MC	2x	32	55	19,22,23	1.56	3 (15%)	26,32,35	1.19	3 (11%)
54	MIA	2w	37	54	24,27,32	2.04	5 (20%)	32,39,47	2.38	10 (31%)
1	PSU	2A	1917	1	18,21,22	1.36	2 (11%)	21,30,33	1.96	3 (14%)
54	PSU	2y	32	54	18,21,22	1.36	2 (11%)	21,30,33	1.93	4 (19%)
55	PSU	1x	55	55,56	18,21,22	1.35	2 (11%)	21,30,33	2.01	4 (19%)
32	PSU	2a	516	32	18,21,22	1.34	2 (11%)	21,30,33	1.90	4 (19%)
54	MIA	2y	37	54	21,24,32	1.58	4 (19%)	30,35,47	2.08	9 (30%)
1	PSU	1A	2617	56,1	18,21,22	1.51	4 (22%)	21,30,33	2.12	4 (19%)
54	7MG	1w	46	54	23,26,27	1.48	4 (17%)	27,39,42	2.54	7 (25%)
54	4SU	1w	8	54	18,21,22	1.82	5 (27%)	25,30,33	1.99	5 (20%)

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
54	MIA	1y	37	54	-	0/7/25/34	0/3/3/3
54	PSU	2y	39	54	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	1/11/29/30	0/3/3/3
54	PSU	1w	39	54	-	1/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	32	56,54	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
54	7MG	2w	46	54	-	4/7/37/38	0/3/3/3
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
32	7MG	2a	527	56,32	-	3/7/37/38	0/3/3/3
1	5MU	1A	1961	56,1	-	0/7/25/26	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
1	2MA	1A	2515	56,1	-	1/7/25/26	0/3/3/3
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	55	-	1/7/25/26	0/2/2/2
54	5MU	1y	54	54	-	3/7/25/26	0/2/2/2
55	5MU	1x	54	55,56	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1933	1	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	PSU	1y	55	54	-	1/7/25/26	0/2/2/2
1	2MU	1A	2564	56,1	-	0/9/27/28	0/2/2/2
54	MIA	1w	37	54	-	1/15/33/34	0/3/3/3
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/9/27/28	0/3/3/3
1	OMG	1A	2263	56,1,55	-	0/9/27/28	0/3/3/3
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	56,1,55	-	0/9/27/28	0/3/3/3
1	5MU	2A	1939	56,1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	2/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3
1	4OC	2A	1920	1	-	0/9/27/30	0/2/2/2
54	4SU	2w	8	54	-	1/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	56,1	-	1/7/25/26	0/3/3/3
32	7MG	1a	527	56,32	-	2/7/37/38	0/3/3/3
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
1	2MU	2A	2552	56,1	-	0/9/27/28	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	56,1	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/9/27/28	0/3/3/3
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
54	PSU	1y	32	54	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
54	PSU	2w	55	56,54	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32	-	0/7/25/26	0/2/2/2
54	PSU	1y	39	54	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	4/11/29/30	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
54	4SU	1y	8	54	-	3/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
1	4OC	1A	1942	1	-	1/9/27/30	0/2/2/2
54	PSU	2y	55	54	-	2/7/25/26	0/2/2/2
1	5MU	1A	1937	1	-	0/7/25/26	0/2/2/2
54	7MG	1y	46	54	-	2/7/37/38	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	4SU	2y	8	54	-	0/7/25/26	0/2/2/2
54	5MU	2y	54	54	-	2/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	3/9/29/30	0/2/2/2
32	MA6	1a	1518	32	-	2/11/29/30	0/3/3/3
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	56,32	-	2/9/29/30	0/2/2/2
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
54	7MG	2y	46	54	-	3/7/37/38	0/3/3/3
1	5MC	1A	1984	56,1	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	1/7/12/14	-
1	5MC	1A	1964	56,1	-	0/7/25/26	0/2/2/2
1	PSU	1A	1939	1	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
54	MIA	2w	37	54	-	2/11/29/34	0/3/3/3
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
54	PSU	2y	32	54	-	1/7/25/26	0/2/2/2
55	PSU	1x	55	55,56	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
54	MIA	2y	37	54	-	3/7/25/34	0/3/3/3
1	PSU	1A	2617	56,1	-	0/7/25/26	0/2/2/2
54	7MG	1w	46	54	-	3/7/37/38	0/3/3/3
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2

All (271) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-15.10	1.67	1.82
43	1l	92	0TD	CB-SB	-15.01	1.67	1.82
32	2a	967	5MC	C5-C4	7.30	1.49	1.44
54	1w	37	MIA	C2-S10	-6.99	1.70	1.75
54	1w	37	MIA	C13-C14	6.94	1.53	1.32
54	2w	37	MIA	C2-S10	-6.20	1.70	1.75
32	2a	1400	5MC	C5-C4	6.11	1.48	1.44
32	1a	967	5MC	C5-C4	6.09	1.48	1.44
32	2a	1404	5MC	C5-C4	6.09	1.48	1.44
32	1a	1407	5MC	C5-C4	5.94	1.48	1.44
55	1x	32	5MC	C5-C4	5.87	1.48	1.44
32	1a	1400	5MC	C5-C4	5.77	1.48	1.44
32	1a	1404	5MC	C5-C4	5.73	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1984	5MC	C5-C4	5.50	1.48	1.44
1	1A	1964	5MC	C5-C4	5.42	1.48	1.44
55	2x	32	5MC	C5-C4	5.37	1.48	1.44
32	2a	1407	5MC	C5-C4	5.31	1.48	1.44
1	2A	1962	5MC	C5-C4	5.21	1.48	1.44
1	2A	1942	5MC	C5-C4	5.10	1.48	1.44
54	1y	37	MIA	C5-C4	5.08	1.48	1.39
54	2y	8	4SU	C4-S4	-5.05	1.59	1.68
54	2w	37	MIA	C5-C4	5.01	1.48	1.39
54	2w	8	4SU	C4-S4	-4.97	1.59	1.68
54	2y	37	MIA	C5-C4	4.97	1.48	1.39
55	1x	8	4SU	C4-N3	-4.95	1.32	1.37
32	2a	1518	MA6	C5-C4	4.87	1.47	1.39
54	1w	37	MIA	C5-C4	4.83	1.47	1.39
54	1w	8	4SU	C4-S4	-4.77	1.60	1.68
32	1a	1519	MA6	C5-C4	4.76	1.47	1.39
32	2a	1519	MA6	C5-C4	4.71	1.47	1.39
43	2l	92	0TD	CB-CA	-4.68	1.53	1.54
55	2x	8	4SU	C4-N3	-4.66	1.32	1.37
32	1a	1518	MA6	C5-C4	4.47	1.47	1.39
55	2x	8	4SU	C4-S4	-4.40	1.60	1.68
54	1y	8	4SU	C4-S4	-4.36	1.61	1.68
1	1A	2515	2MA	C5-C4	4.29	1.46	1.39
1	2A	2503	2MA	C5-C4	4.13	1.46	1.39
54	1y	32	PSU	C6-C5	4.13	1.39	1.35
55	1x	8	4SU	C4-S4	-4.10	1.61	1.68
54	2w	55	PSU	C6-C5	4.09	1.39	1.35
54	1y	39	PSU	C6-C5	4.05	1.39	1.35
54	1w	55	PSU	C6-C5	4.04	1.39	1.35
55	2x	55	PSU	C6-C5	3.97	1.39	1.35
32	1a	527	7MG	C4-N9	-3.88	1.33	1.37
54	2y	32	PSU	C6-C5	3.86	1.39	1.35
1	2A	1911	PSU	C6-C5	3.84	1.39	1.35
55	1x	8	4SU	C2-N3	-3.80	1.31	1.38
54	2y	46	7MG	C5-C4	3.75	1.49	1.37
54	2w	46	7MG	C4-N9	-3.73	1.33	1.37
32	2a	516	PSU	C6-C5	3.72	1.39	1.35
54	2w	39	PSU	C6-C5	3.72	1.39	1.35
54	1w	39	PSU	C6-C5	3.67	1.39	1.35
32	1a	516	PSU	C6-C5	3.63	1.39	1.35
54	1w	46	7MG	C4-N9	-3.61	1.33	1.37
54	2w	32	PSU	C6-C5	3.60	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	39	PSU	C6-C5	3.57	1.39	1.35
1	2A	2605	PSU	C6-C5	3.57	1.39	1.35
1	2A	1917	PSU	C6-C5	3.56	1.39	1.35
54	1w	46	7MG	C5-C4	3.52	1.48	1.37
54	1y	55	PSU	C6-C5	3.52	1.39	1.35
54	1y	46	7MG	C5-C4	3.47	1.48	1.37
55	1x	55	PSU	C6-C5	3.45	1.39	1.35
54	2y	54	5MU	C2-N1	3.44	1.43	1.38
32	1a	527	7MG	C5-C4	3.40	1.48	1.37
54	2w	46	7MG	C5-C4	3.35	1.47	1.37
54	1w	32	PSU	C6-C5	3.35	1.39	1.35
54	1y	8	4SU	C4-N3	-3.32	1.34	1.37
32	2a	966	M2G	C5-C4	3.29	1.47	1.38
32	2a	527	7MG	C5-C4	3.28	1.47	1.37
43	1l	92	0TD	CSB-SB	-3.27	1.73	1.79
55	1x	8	4SU	C5-C4	-3.26	1.38	1.42
32	2a	1207	2MG	C5-C4	3.23	1.47	1.38
32	1a	1207	2MG	C5-C4	3.22	1.47	1.38
32	1a	966	M2G	C5-C4	3.21	1.47	1.38
55	2x	8	4SU	C5-C4	-3.16	1.38	1.42
54	1w	8	4SU	C4-N3	-3.15	1.34	1.37
1	2A	1942	5MC	C6-C5	3.14	1.39	1.34
1	1A	1939	PSU	C6-C5	3.14	1.38	1.35
1	1A	1933	PSU	C6-C5	3.13	1.38	1.35
32	2a	1404	5MC	C6-C5	3.10	1.39	1.34
1	1A	2263	OMG	C5-C4	3.10	1.47	1.38
32	1a	966	M2G	C2-N2	3.10	1.40	1.35
54	1y	54	5MU	C6-C5	3.09	1.39	1.34
1	2A	2251	OMG	C5-C4	3.08	1.47	1.38
55	2x	54	5MU	C6-C5	3.04	1.39	1.34
32	1a	1518	MA6	C5-C6	3.02	1.49	1.41
54	1w	54	5MU	C6-C5	3.01	1.39	1.34
54	2w	37	MIA	C5-C6	2.97	1.49	1.41
54	2y	8	4SU	C4-N3	-2.96	1.34	1.37
54	1y	37	MIA	C5-C6	2.96	1.49	1.41
32	2a	1518	MA6	C5-C6	2.94	1.48	1.41
54	2w	8	4SU	C2-N1	2.93	1.43	1.38
32	1a	967	5MC	C6-C5	2.93	1.39	1.34
55	2x	8	4SU	C2-N3	-2.92	1.32	1.38
1	1A	2617	PSU	C4-N3	-2.92	1.33	1.38
55	2x	32	5MC	C6-C5	2.92	1.39	1.34
32	1a	1404	5MC	C6-C5	2.91	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2y	55	PSU	C6-C5	2.89	1.38	1.35
54	2w	8	4SU	C4-N3	-2.89	1.34	1.37
54	2w	54	5MU	C6-C5	2.87	1.39	1.34
32	1a	1407	5MC	C6-C5	2.87	1.39	1.34
55	1x	32	5MC	C6-C5	2.87	1.39	1.34
1	1A	2263	OMG	C6-N1	-2.86	1.33	1.38
43	1l	92	0TD	CA-N	-2.86	1.39	1.47
54	1y	54	5MU	C2-N1	2.85	1.42	1.38
1	1A	2617	PSU	C2-N1	-2.85	1.32	1.36
1	1A	1939	PSU	C4-N3	-2.85	1.33	1.38
32	2a	527	7MG	C4-N9	-2.84	1.34	1.37
55	1x	54	5MU	C6-C5	2.84	1.39	1.34
1	1A	2515	2MA	C5-C6	2.83	1.48	1.41
54	1w	8	4SU	C5-C4	-2.82	1.39	1.42
1	2A	1915	5MU	C2-N1	2.82	1.42	1.38
1	2A	1939	5MU	C4-C5	2.82	1.49	1.44
32	1a	1498	UR3	C2-N1	2.81	1.42	1.38
1	2A	1915	5MU	C6-C5	2.81	1.39	1.34
1	1A	1961	5MU	C6-C5	2.80	1.39	1.34
1	2A	1939	5MU	C6-C5	2.79	1.39	1.34
55	1x	54	5MU	C4-N3	-2.79	1.33	1.38
1	2A	2503	2MA	C5-N7	-2.79	1.34	1.39
54	2y	8	4SU	C5-C4	-2.78	1.39	1.42
32	1a	1400	5MC	C6-C5	2.78	1.39	1.34
32	2a	967	5MC	C6-C5	2.77	1.39	1.34
1	1A	1933	PSU	C4-N3	-2.77	1.33	1.38
54	2y	37	MIA	C5-C6	2.76	1.48	1.41
54	1w	37	MIA	C5-C6	2.76	1.48	1.41
32	1a	1519	MA6	C5-N7	-2.76	1.34	1.39
32	2a	1400	5MC	C6-C5	2.76	1.39	1.34
32	2a	966	M2G	C2-N2	2.75	1.40	1.35
1	2A	1915	5MU	C4-C5	2.74	1.49	1.44
54	2y	46	7MG	C8-N9	2.73	1.47	1.45
54	2y	8	4SU	C2-N1	2.73	1.42	1.38
32	2a	1519	MA6	C5-C6	2.71	1.48	1.41
43	2l	92	0TD	OD2-CG	-2.69	1.22	1.30
54	1y	54	5MU	C4-N3	-2.69	1.33	1.38
55	2x	54	5MU	C4-C5	2.69	1.49	1.44
54	1w	54	5MU	C2-N1	2.68	1.42	1.38
1	1A	2617	PSU	C2-N3	-2.67	1.33	1.37
32	1a	516	PSU	C4-N3	-2.67	1.33	1.38
54	2y	54	5MU	C6-C5	2.67	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	54	5MU	C4-C5	2.65	1.49	1.44
43	1l	92	0TD	OD2-CG	-2.64	1.22	1.30
1	2A	1962	5MC	C6-N1	-2.64	1.33	1.38
54	1y	54	5MU	C4-C5	2.64	1.49	1.44
1	1A	2564	2MU	C4-N3	-2.61	1.34	1.38
1	2A	1939	5MU	C4-N3	-2.61	1.34	1.38
32	1a	1207	2MG	C6-N1	-2.61	1.34	1.38
1	1A	1937	5MU	C6-C5	2.60	1.38	1.34
1	1A	1984	5MC	C6-N1	-2.60	1.33	1.38
32	1a	1519	MA6	C5-C6	2.60	1.48	1.41
54	1y	39	PSU	C4-N3	-2.59	1.34	1.38
54	1w	54	5MU	C4-N3	-2.58	1.34	1.38
54	1y	37	MIA	C8-N7	2.57	1.36	1.31
1	1A	1961	5MU	C4-N3	-2.56	1.34	1.38
32	2a	1518	MA6	C8-N7	2.56	1.36	1.31
1	2A	1962	5MC	C6-C5	2.56	1.38	1.34
54	1w	39	PSU	C4-N3	-2.56	1.34	1.38
54	2y	46	7MG	C6-N1	-2.53	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.53	1.33	1.38
54	2y	39	PSU	C4-N3	-2.53	1.34	1.38
54	2w	32	PSU	C4-N3	-2.52	1.34	1.38
1	2A	2552	2MU	C4-N3	-2.51	1.34	1.38
1	2A	1911	PSU	C4-N3	-2.51	1.34	1.38
32	2a	1498	UR3	C2-N1	2.51	1.42	1.38
43	1l	92	0TD	CB-CG	-2.50	1.47	1.52
55	1x	32	5MC	C6-N1	-2.50	1.33	1.38
54	2w	54	5MU	C4-C5	2.49	1.48	1.44
54	2w	46	7MG	C8-N9	2.49	1.47	1.45
1	1A	1964	5MC	C6-C5	2.49	1.38	1.34
54	2w	8	4SU	C5-C4	-2.48	1.39	1.42
54	1w	46	7MG	C8-N9	2.48	1.47	1.45
54	1w	46	7MG	C6-N1	-2.48	1.34	1.38
54	2y	54	5MU	C4-C5	2.47	1.48	1.44
54	2w	54	5MU	C2-N1	2.47	1.42	1.38
1	1A	1937	5MU	C4-N3	-2.46	1.34	1.38
32	1a	966	M2G	C6-N1	-2.46	1.34	1.38
54	2w	39	PSU	C4-N3	-2.46	1.34	1.38
55	2x	55	PSU	C4-N3	-2.46	1.34	1.38
54	2w	37	MIA	C8-N7	2.45	1.36	1.31
55	1x	54	5MU	C4-C5	2.45	1.48	1.44
54	2y	55	PSU	C4-N3	-2.45	1.34	1.38
54	1w	32	PSU	C4-N3	-2.45	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1519	MA6	C5-N7	-2.44	1.34	1.39
54	2y	54	5MU	C4-N3	-2.43	1.34	1.38
32	1a	1518	MA6	C4-N9	-2.43	1.32	1.37
54	1y	8	4SU	C5-C4	-2.42	1.39	1.42
55	1x	8	4SU	O2-C2	2.42	1.27	1.23
32	1a	1207	2MG	C2-N3	2.39	1.36	1.32
32	2a	1518	MA6	C4-N9	-2.39	1.32	1.37
54	2w	55	PSU	C4-N3	-2.39	1.34	1.38
32	2a	527	7MG	C6-N1	-2.37	1.34	1.38
55	1x	55	PSU	C4-N3	-2.37	1.34	1.38
32	2a	1407	5MC	C6-C5	2.36	1.38	1.34
1	1A	1961	5MU	C6-N1	-2.36	1.34	1.38
1	2A	2552	2MU	C5-C4	2.36	1.48	1.43
43	1l	92	0TD	CB-CA	-2.36	1.54	1.54
1	2A	1915	5MU	C4-N3	-2.36	1.34	1.38
54	1y	55	PSU	C4-N3	-2.36	1.34	1.38
32	1a	527	7MG	C6-N1	-2.36	1.34	1.38
32	2a	1207	2MG	C6-N1	-2.34	1.34	1.38
1	1A	2515	2MA	C5-N7	-2.33	1.34	1.39
54	1w	37	MIA	C8-N7	2.33	1.36	1.31
1	2A	1917	PSU	C4-N3	-2.33	1.34	1.38
54	1y	46	7MG	C4-N9	-2.32	1.35	1.37
54	1w	8	4SU	C2-N1	2.32	1.42	1.38
1	2A	2251	OMG	C6-N1	-2.31	1.34	1.38
54	2y	37	MIA	C8-N7	2.31	1.36	1.31
54	2y	32	PSU	C4-N3	-2.30	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.29	1.34	1.38
1	2A	1939	5MU	C2-N3	-2.28	1.34	1.38
54	1y	46	7MG	C6-N1	-2.28	1.34	1.38
54	1w	37	MIA	C5-N7	-2.27	1.34	1.39
32	2a	1519	MA6	C8-N7	2.27	1.36	1.31
1	2A	2605	PSU	C4-N3	-2.27	1.34	1.38
1	1A	1937	5MU	C4-C5	2.27	1.48	1.44
1	1A	1937	5MU	C2-N1	2.26	1.42	1.38
1	2A	1939	5MU	C6-N1	-2.26	1.34	1.38
1	2A	2503	2MA	C5-C6	2.26	1.47	1.41
1	1A	1984	5MC	C6-C5	2.26	1.38	1.34
1	1A	2263	OMG	C5-N7	-2.25	1.34	1.39
54	1y	46	7MG	C8-N9	2.25	1.47	1.45
32	2a	527	7MG	C5-C6	2.25	1.49	1.43
32	1a	527	7MG	C8-N9	2.25	1.47	1.45
1	2A	2503	2MA	C8-N7	2.23	1.36	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	1400	5MC	C6-N1	-2.22	1.34	1.38
1	1A	2564	2MU	C2-N3	-2.22	1.34	1.38
54	1y	32	PSU	C4-N3	-2.22	1.34	1.38
55	2x	54	5MU	C4-N3	-2.20	1.34	1.38
32	2a	966	M2G	C6-N1	-2.20	1.34	1.38
1	1A	1939	PSU	C2-N1	-2.19	1.33	1.36
1	1A	1961	5MU	C2-N3	-2.19	1.34	1.38
54	2w	37	MIA	C5-N7	-2.19	1.35	1.39
32	1a	967	5MC	C6-N1	-2.19	1.34	1.38
32	2a	1498	UR3	C6-C5	2.19	1.40	1.35
54	1y	54	5MU	C2-N3	-2.18	1.34	1.38
32	2a	1518	MA6	C5-N7	-2.17	1.35	1.39
32	2a	516	PSU	C4-N3	-2.17	1.34	1.38
32	1a	1518	MA6	C5-N7	-2.17	1.35	1.39
54	2y	55	PSU	C2-N1	-2.16	1.33	1.36
55	1x	54	5MU	C2-N3	-2.16	1.34	1.38
1	1A	1964	5MC	C6-N1	-2.15	1.34	1.38
32	1a	516	PSU	C2-N3	-2.15	1.33	1.37
32	1a	1404	5MC	C6-N1	-2.14	1.34	1.38
55	1x	54	5MU	C2-N1	2.14	1.41	1.38
32	2a	1207	2MG	C2-N3	2.14	1.36	1.32
54	1w	55	PSU	C4-N3	-2.13	1.34	1.38
32	1a	1519	MA6	C8-N7	2.13	1.35	1.31
1	2A	1939	5MU	C2-N1	2.13	1.41	1.38
1	1A	2617	PSU	C6-C5	2.12	1.37	1.35
1	1A	1937	5MU	C6-N1	-2.12	1.34	1.38
32	1a	1518	MA6	C8-N7	2.11	1.35	1.31
32	1a	1407	5MC	C6-N1	-2.11	1.34	1.38
54	2w	54	5MU	C4-N3	-2.10	1.34	1.38
55	2x	8	4SU	O2-C2	2.10	1.26	1.23
54	1w	54	5MU	C2-N3	-2.08	1.34	1.38
1	2A	2251	OMG	C5-N7	-2.08	1.34	1.39
55	2x	8	4SU	C2-N1	2.07	1.41	1.38
1	1A	1939	PSU	C2-N3	-2.07	1.34	1.37
54	2y	46	7MG	C2-N3	2.07	1.38	1.33
55	1x	54	5MU	C6-N1	-2.05	1.34	1.38
32	2a	966	M2G	C5-N7	-2.05	1.35	1.39
54	1w	8	4SU	C2-N3	-2.04	1.34	1.38
1	1A	2515	2MA	C8-N7	2.03	1.35	1.31
32	2a	1404	5MC	C6-N1	-2.02	1.34	1.38
55	2x	54	5MU	C6-N1	-2.02	1.34	1.38
55	2x	54	5MU	C2-N1	2.02	1.41	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1y	54	5MU	C6-N1	-2.02	1.34	1.38
54	1y	32	PSU	C4-C5	2.01	1.49	1.44
1	2A	1915	5MU	C2-N3	-2.01	1.34	1.38
54	1y	8	4SU	C6-C5	2.01	1.39	1.35
54	2y	37	MIA	C5-N7	-2.00	1.35	1.39
55	2x	32	5MC	C6-N1	-2.00	1.34	1.38

All (436) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2y	46	7MG	N9-C4-N3	10.07	140.22	125.46
54	1y	46	7MG	N9-C4-N3	9.11	138.80	125.46
54	1w	37	MIA	C12-C13-C14	-8.83	111.17	127.01
54	1w	46	7MG	N9-C4-N3	8.77	138.32	125.46
32	2a	527	7MG	N9-C4-N3	8.50	137.91	125.46
1	1A	2515	2MA	C5-C4-N3	-8.41	118.32	127.18
32	1a	527	7MG	N9-C4-N3	8.37	137.72	125.46
1	2A	2503	2MA	C5-C4-N3	-8.28	118.45	127.18
54	2w	37	MIA	C5-C4-N3	-8.03	118.72	127.18
54	2w	46	7MG	N9-C4-N3	7.71	136.76	125.46
54	1w	37	MIA	C5-C4-N3	-7.62	119.15	127.18
54	2w	8	4SU	C4-N3-C2	-7.55	120.08	127.31
43	1l	92	0TD	CB-CA-N	-7.31	94.29	109.10
32	2a	1498	UR3	C4-N3-C2	-7.02	118.93	124.58
1	1A	2515	2MA	N3-C4-N9	7.01	135.89	126.99
1	2A	2503	2MA	N3-C4-N9	6.89	135.73	126.99
32	1a	1498	UR3	C4-N3-C2	-6.78	119.13	124.58
32	2a	1207	2MG	C2-N3-C4	6.75	120.44	112.00
43	1l	92	0TD	CSB-SB-CB	6.71	114.44	102.36
32	1a	1207	2MG	C2-N3-C4	6.64	120.31	112.00
54	1y	55	PSU	N1-C2-N3	6.64	122.17	115.17
1	1A	1939	PSU	N1-C2-N3	6.57	122.10	115.17
1	1A	1961	5MU	O4-C4-C5	-6.45	117.54	124.92
1	1A	2617	PSU	N1-C2-N3	6.42	121.94	115.17
1	1A	1961	5MU	C5-C4-N3	6.41	120.89	115.32
1	2A	2251	OMG	C5-C4-N3	-6.41	118.20	128.39
54	2w	8	4SU	C5-C4-N3	6.36	120.67	114.75
55	2x	55	PSU	N1-C2-N3	6.36	121.87	115.17
54	2w	32	PSU	N1-C2-N3	6.32	121.83	115.17
1	2A	1939	5MU	C4-N3-C2	-6.19	119.23	127.34
54	2y	8	4SU	C4-N3-C2	-6.15	121.42	127.31
1	1A	1961	5MU	C4-N3-C2	-6.14	119.29	127.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1933	PSU	N1-C2-N3	6.14	121.64	115.17
55	1x	55	PSU	N1-C2-N3	6.12	121.62	115.17
54	1w	32	PSU	N1-C2-N3	6.12	121.62	115.17
1	2A	1917	PSU	N1-C2-N3	6.10	121.60	115.17
32	2a	966	M2G	C5-C4-N3	-6.09	118.70	128.39
54	1w	39	PSU	N1-C2-N3	6.08	121.58	115.17
1	2A	2605	PSU	N1-C2-N3	6.05	121.55	115.17
32	2a	1519	MA6	C5-C4-N3	-6.05	118.39	126.72
32	1a	966	M2G	C5-C4-N3	-6.03	118.80	128.39
54	2y	8	4SU	C5-C4-N3	6.01	120.34	114.75
54	2w	37	MIA	N3-C4-N9	5.99	134.59	126.99
54	2y	32	PSU	N1-C2-N3	5.96	121.45	115.17
54	2y	39	PSU	N1-C2-N3	5.94	121.43	115.17
54	2w	55	PSU	N1-C2-N3	5.90	121.39	115.17
54	1y	39	PSU	N1-C2-N3	5.88	121.37	115.17
54	1y	32	PSU	N1-C2-N3	5.83	121.32	115.17
32	1a	1519	MA6	C5-C4-N3	-5.83	118.69	126.72
32	2a	1207	2MG	C5-C4-N3	-5.83	119.11	128.39
1	1A	2263	OMG	C5-C4-N3	-5.83	119.12	128.39
32	1a	1207	2MG	C5-C4-N3	-5.83	119.12	128.39
1	2A	1939	5MU	C5-C4-N3	5.82	120.38	115.32
54	1w	37	MIA	N3-C4-N9	5.80	134.34	126.99
54	1w	55	PSU	N1-C2-N3	5.78	121.27	115.17
54	2y	46	7MG	C5-C4-N3	-5.76	117.31	128.13
1	2A	1911	PSU	N1-C2-N3	5.76	121.24	115.17
32	1a	516	PSU	N1-C2-N3	5.71	121.19	115.17
32	2a	516	PSU	N1-C2-N3	5.67	121.15	115.17
32	2a	527	7MG	N9-C8-N7	-5.62	95.42	103.37
54	1w	8	4SU	C4-N3-C2	-5.55	121.99	127.31
54	1y	8	4SU	C4-N3-C2	-5.55	122.00	127.31
54	2w	39	PSU	N1-C2-N3	5.53	121.00	115.17
54	2y	37	MIA	C5-C4-N3	-5.51	119.12	126.72
54	1y	37	MIA	C5-C4-N3	-5.47	119.19	126.72
55	2x	54	5MU	N3-C2-N1	5.42	121.94	114.89
54	2w	46	7MG	N9-C8-N7	-5.42	95.70	103.37
1	2A	1915	5MU	C4-N3-C2	-5.40	120.26	127.34
55	2x	54	5MU	C4-N3-C2	-5.39	120.28	127.34
54	1w	54	5MU	N3-C2-N1	5.36	121.87	114.89
54	2y	55	PSU	N1-C2-N3	5.36	120.82	115.17
1	2A	1915	5MU	C5-C4-N3	5.36	119.98	115.32
1	1A	1937	5MU	C4-N3-C2	-5.34	120.34	127.34
54	1w	8	4SU	C5-C4-N3	5.30	119.68	114.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1y	46	7MG	N9-C8-N7	-5.26	95.92	103.37
1	2A	1939	5MU	C5-C6-N1	-5.25	117.61	123.31
32	2a	527	7MG	C5-C4-N3	-5.23	118.30	128.13
54	1w	46	7MG	N9-C8-N7	-5.18	96.03	103.37
1	1A	2564	2MU	N3-C2-N1	5.17	121.62	114.89
43	2l	92	0TD	CSB-SB-CB	5.14	111.61	102.36
1	2A	2251	OMG	C2-N3-C4	5.13	121.13	112.30
1	2A	2251	OMG	N9-C4-N3	5.13	136.20	125.95
54	1y	46	7MG	C5-C4-N3	-5.11	118.54	128.13
1	1A	2263	OMG	C2-N3-C4	5.06	121.01	112.30
54	1w	54	5MU	C4-N3-C2	-5.04	120.73	127.34
1	1A	2564	2MU	C4-N3-C2	-5.04	120.36	126.61
1	2A	1939	5MU	N3-C2-N1	5.02	121.42	114.89
1	1A	1937	5MU	N3-C2-N1	5.01	121.42	114.89
32	1a	527	7MG	N9-C8-N7	-4.94	96.38	103.37
54	1y	54	5MU	N3-C2-N1	4.92	121.30	114.89
32	1a	527	7MG	C5-C4-N3	-4.90	118.92	128.13
32	2a	1519	MA6	N3-C4-N9	4.88	135.47	127.17
54	2y	37	MIA	N3-C4-N9	4.87	135.45	127.17
32	2a	1518	MA6	C5-C4-N3	-4.85	120.03	126.72
1	2A	2605	PSU	C4-N3-C2	-4.84	119.70	126.37
1	1A	1937	5MU	C5-C4-N3	4.84	119.53	115.32
1	2A	2552	2MU	N3-C2-N1	4.82	121.17	114.89
54	2y	46	7MG	C2-N3-C4	4.81	120.58	112.30
54	1y	54	5MU	C4-N3-C2	-4.81	121.04	127.34
32	1a	1518	MA6	C5-C4-N3	-4.78	120.14	126.72
54	2y	46	7MG	N9-C8-N7	-4.71	96.71	103.37
54	2w	46	7MG	C5-C4-N3	-4.70	119.30	128.13
1	1A	1961	5MU	N3-C2-N1	4.70	121.00	114.89
55	1x	54	5MU	N3-C2-N1	4.69	121.00	114.89
1	2A	1915	5MU	N3-C2-N1	4.63	120.92	114.89
32	1a	1518	MA6	C2-N1-C6	4.62	123.12	111.83
1	1A	1961	5MU	C5-C6-N1	-4.61	118.30	123.31
1	2A	1939	5MU	O4-C4-C5	-4.60	119.65	124.92
32	2a	966	M2G	N9-C4-N3	4.59	135.13	125.95
1	1A	2263	OMG	N9-C4-N3	4.58	135.11	125.95
32	1a	1519	MA6	N3-C4-N9	4.54	134.88	127.17
54	1w	46	7MG	C5-C4-N3	-4.52	119.64	128.13
1	2A	1915	5MU	O4-C4-C5	-4.52	119.75	124.92
54	2y	8	4SU	C5-C4-S4	-4.52	119.15	124.31
32	2a	1518	MA6	C9-N6-C6	-4.51	109.05	120.52
1	2A	2552	2MU	C4-N3-C2	-4.51	121.02	126.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2y	54	5MU	C5-C4-N3	4.50	119.23	115.32
32	2a	527	7MG	C2-N3-C4	4.49	120.04	112.30
32	1a	966	M2G	N9-C4-N3	4.49	134.93	125.95
32	1a	966	M2G	C2-N3-C4	4.47	120.77	112.51
32	2a	1518	MA6	C2-N1-C6	4.46	122.71	111.83
55	1x	54	5MU	C4-N3-C2	-4.45	121.50	127.34
54	2y	54	5MU	C4-N3-C2	-4.41	121.55	127.34
32	2a	966	M2G	C2-N3-C4	4.40	120.65	112.51
1	1A	1933	PSU	C4-N3-C2	-4.39	120.32	126.37
1	1A	2617	PSU	C4-N3-C2	-4.39	120.33	126.37
1	1A	1937	5MU	O4-C4-C5	-4.39	119.90	124.92
54	1y	46	7MG	C2-N3-C4	4.34	119.78	112.30
54	1w	54	5MU	C5-C4-N3	4.34	119.10	115.32
54	1y	8	4SU	N3-C2-N1	4.30	120.49	114.89
54	1y	37	MIA	N3-C4-N9	4.30	134.48	127.17
54	1y	54	5MU	C5-C4-N3	4.29	119.05	115.32
32	1a	1518	MA6	C4-C5-N7	-4.28	105.69	110.58
54	2w	54	5MU	O4-C4-C5	-4.27	120.03	124.92
32	2a	1519	MA6	C2-N1-C6	4.26	122.23	111.83
55	2x	54	5MU	C5-C4-N3	4.26	119.02	115.32
32	1a	1207	2MG	N9-C4-N3	4.21	134.38	125.95
55	2x	54	5MU	O4-C4-C5	-4.21	120.10	124.92
32	1a	1519	MA6	C9-N6-C6	-4.19	109.85	120.52
54	2w	8	4SU	N3-C2-N1	4.19	120.35	114.89
54	1w	37	MIA	C15-C14-C13	-4.18	110.11	122.66
54	2y	54	5MU	N3-C2-N1	4.16	120.31	114.89
54	2w	54	5MU	C4-N3-C2	-4.15	121.90	127.34
1	1A	1939	PSU	C4-N3-C2	-4.15	120.66	126.37
32	2a	1519	MA6	N1-C6-N6	4.13	121.88	116.86
54	2w	54	5MU	N3-C2-N1	4.12	120.25	114.89
32	1a	1400	5MC	C5-C6-N1	-4.11	118.84	123.31
55	1x	8	4SU	C6-C5-C4	-4.10	116.40	119.95
54	1w	55	PSU	O2-C2-N1	-4.07	118.59	122.79
54	2w	46	7MG	C2-N3-C4	4.06	119.29	112.30
32	1a	1518	MA6	C9-N6-C6	-4.05	110.23	120.52
54	2y	54	5MU	O4-C4-C5	-4.04	120.30	124.92
54	1w	32	PSU	C4-N3-C2	-4.04	120.81	126.37
32	2a	1207	2MG	N9-C4-N3	4.03	134.01	125.95
54	2w	32	PSU	C4-N3-C2	-4.03	120.82	126.37
1	1A	1939	PSU	O2-C2-N1	-4.03	118.64	122.79
54	2w	8	4SU	C5-C4-S4	-4.01	119.73	124.31
54	1y	55	PSU	O2-C2-N1	-3.98	118.69	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1519	MA6	C9-N6-C6	-3.96	110.44	120.52
55	1x	55	PSU	C4-N3-C2	-3.95	120.93	126.37
32	1a	1519	MA6	C2-N1-C6	3.95	121.47	111.83
54	2w	54	5MU	C5-C4-N3	3.94	118.75	115.32
54	1y	8	4SU	C5-C4-N3	3.94	118.41	114.75
54	1y	55	PSU	C4-N3-C2	-3.92	120.97	126.37
1	1A	1964	5MC	C5-C6-N1	-3.91	119.06	123.31
54	2y	55	PSU	C4-N3-C2	-3.90	120.99	126.37
32	2a	1518	MA6	C4-C5-N7	-3.89	106.14	110.58
32	1a	527	7MG	C2-N3-C4	3.88	118.97	112.30
55	2x	55	PSU	C4-N3-C2	-3.84	121.08	126.37
55	2x	8	4SU	C1'-N1-C2	3.84	124.49	117.59
1	2A	1915	5MU	C5-C6-N1	-3.82	119.16	123.31
54	2y	55	PSU	O2-C2-N1	-3.82	118.85	122.79
55	1x	54	5MU	C5-C4-N3	3.82	118.64	115.32
1	2A	1917	PSU	C4-N3-C2	-3.81	121.12	126.37
1	2A	2503	2MA	N6-C6-N1	3.81	122.17	117.03
54	2y	32	PSU	C4-N3-C2	-3.81	121.13	126.37
54	2w	37	MIA	C4-C5-N7	-3.80	106.23	110.58
54	2w	55	PSU	C4-N3-C2	-3.80	121.14	126.37
32	1a	967	5MC	C5-C6-N1	-3.79	119.19	123.31
1	2A	1917	PSU	O2-C2-N1	-3.79	118.88	122.79
32	2a	1519	MA6	C2-N3-C4	3.78	121.05	111.83
54	2y	39	PSU	C4-N3-C2	-3.77	121.17	126.37
32	2a	516	PSU	C4-N3-C2	-3.77	121.18	126.37
54	1w	39	PSU	O2-C2-N1	-3.77	118.91	122.79
1	1A	2515	2MA	C4-N9-C8	3.76	109.69	105.74
54	1w	32	PSU	O2-C2-N1	-3.75	118.92	122.79
54	1w	54	5MU	O4-C4-C5	-3.74	120.64	124.92
1	2A	1962	5MC	C5-C6-N1	-3.74	119.25	123.31
1	1A	2515	2MA	C4-C5-N7	-3.71	106.34	110.58
54	2w	39	PSU	C4-N3-C2	-3.71	121.26	126.37
32	1a	1519	MA6	C4-C5-N7	-3.71	106.34	110.58
54	2y	37	MIA	N3-C2-N1	-3.70	122.98	128.58
1	1A	2617	PSU	O2-C2-N1	-3.70	118.97	122.79
55	1x	8	4SU	O2-C2-N1	3.69	127.60	122.80
54	1w	39	PSU	C4-N3-C2	-3.69	121.28	126.37
54	1y	37	MIA	C2-N3-C4	3.63	120.71	111.83
32	1a	516	PSU	C4-N3-C2	-3.63	121.36	126.37
54	1y	37	MIA	C4-C5-N7	-3.63	106.43	110.58
32	2a	1400	5MC	C5-C6-N1	-3.63	119.37	123.31
54	1w	8	4SU	N3-C2-N1	3.62	119.60	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	1207	2MG	C6-C5-N7	3.61	136.87	130.29
54	1y	37	MIA	N3-C2-N1	-3.61	123.11	128.58
32	1a	1518	MA6	N3-C4-N9	3.60	133.29	127.17
54	2y	37	MIA	C2-N3-C4	3.60	120.63	111.83
1	1A	2564	2MU	O2-C2-N1	-3.60	118.11	122.80
54	1y	54	5MU	C5-C6-N1	-3.60	119.40	123.31
1	1A	1933	PSU	O2-C2-N1	-3.60	119.08	122.79
54	1w	55	PSU	C4-N3-C2	-3.57	121.45	126.37
54	2y	8	4SU	N3-C2-N1	3.56	119.53	114.89
55	2x	54	5MU	O2-C2-N1	-3.55	118.17	122.80
54	1y	32	PSU	C4-N3-C2	-3.54	121.49	126.37
32	1a	1404	5MC	C5-C6-N1	-3.54	119.47	123.31
54	1w	46	7MG	C2-N3-C4	3.53	118.38	112.30
32	2a	1518	MA6	C2-N3-C4	3.52	120.42	111.83
32	1a	1207	2MG	C6-C5-N7	3.50	136.67	130.29
54	1w	37	MIA	C16-C14-C13	-3.50	112.16	122.66
55	1x	54	5MU	C5-C6-N1	-3.48	119.53	123.31
32	2a	1518	MA6	N1-C2-N3	-3.48	123.32	128.58
32	1a	1518	MA6	N1-C2-N3	-3.47	123.32	128.58
54	1y	54	5MU	O4-C4-C5	-3.47	120.94	124.92
32	2a	1519	MA6	N1-C2-N3	-3.47	123.33	128.58
32	2a	967	5MC	C5-C6-N1	-3.47	119.55	123.31
54	2y	39	PSU	O2-C2-N1	-3.46	119.22	122.79
54	1w	8	4SU	C5-C4-S4	-3.44	120.38	124.31
54	1w	37	MIA	C6-C5-N7	3.44	136.17	132.43
54	2w	37	MIA	C2-N3-C4	3.43	121.29	112.29
54	2y	54	5MU	C1'-N1-C2	3.43	123.75	117.59
32	1a	1407	5MC	C5-C6-N1	-3.43	119.59	123.31
32	1a	1518	MA6	C4-N9-C8	3.42	109.33	105.74
32	2a	1519	MA6	C4-C5-N7	-3.41	106.68	110.58
55	2x	54	5MU	C5-C6-N1	-3.41	119.61	123.31
54	2y	37	MIA	C4-N9-C8	3.41	109.32	105.74
32	1a	1518	MA6	C2-N3-C4	3.40	120.14	111.83
1	1A	2564	2MU	C5-C4-N3	3.40	119.56	114.80
54	1y	39	PSU	C4-N3-C2	-3.39	121.70	126.37
54	1w	46	7MG	C5-C4-N9	-3.39	102.00	106.33
1	1A	2564	2MU	O4-C4-C5	-3.38	119.33	125.16
1	2A	1942	5MC	C5-C6-N1	-3.38	119.64	123.31
54	1w	37	MIA	C2-N3-C4	3.38	121.14	112.29
54	1w	37	MIA	C4-C5-N7	-3.37	106.73	110.58
32	2a	516	PSU	O2-C2-N1	-3.36	119.32	122.79
32	2a	1518	MA6	N3-C4-N9	3.36	132.88	127.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1911	PSU	C4-N3-C2	-3.36	121.75	126.37
54	1y	32	PSU	O2-C2-N1	-3.36	119.33	122.79
32	1a	1519	MA6	C2-N3-C4	3.35	120.02	111.83
54	2w	37	MIA	C6-C5-N7	3.33	136.06	132.43
32	2a	1407	5MC	C5-C4-N3	-3.33	118.34	121.75
32	1a	1519	MA6	N1-C6-N6	3.33	120.91	116.86
1	1A	2263	OMG	C6-C5-N7	3.32	136.32	130.29
54	1w	54	5MU	C5-C6-N1	-3.31	119.72	123.31
1	2A	2605	PSU	O2-C2-N1	-3.31	119.38	122.79
55	1x	32	5MC	C5-C4-N3	-3.30	118.38	121.75
1	1A	1937	5MU	C5-C6-N1	-3.28	119.75	123.31
54	2w	55	PSU	O2-C2-N1	-3.27	119.42	122.79
54	2w	32	PSU	O2-C2-N1	-3.27	119.42	122.79
55	1x	55	PSU	O2-C2-N1	-3.24	119.45	122.79
54	2y	54	5MU	C1'-N1-C6	-3.23	115.83	121.15
55	1x	54	5MU	O4-C4-C5	-3.23	121.23	124.92
55	2x	8	4SU	C5-C4-N3	3.22	117.74	114.75
1	2A	2552	2MU	O2-C2-N1	-3.21	118.61	122.80
54	2y	32	PSU	O2-C2-N1	-3.19	119.50	122.79
1	1A	2515	2MA	C5-N7-C8	3.18	108.44	103.45
1	1A	1961	5MU	O2-C2-N1	-3.16	118.68	122.80
55	1x	32	5MC	C5-C6-N1	-3.15	119.89	123.31
32	2a	1404	5MC	C5-C6-N1	-3.15	119.90	123.31
54	2y	37	MIA	C4-C5-N7	-3.14	106.99	110.58
55	2x	55	PSU	O2-C2-N1	-3.10	119.59	122.79
32	1a	966	M2G	C6-C5-N7	3.10	135.93	130.29
1	1A	2515	2MA	N6-C6-N1	3.09	121.20	117.03
32	1a	1518	MA6	C5-N7-C8	3.07	108.28	103.45
1	1A	1964	5MC	C5-C4-N3	-3.05	118.62	121.75
1	2A	1939	5MU	O2-C2-N1	-3.03	118.85	122.80
54	2w	8	4SU	C1'-N1-C2	3.03	123.04	117.59
55	1x	8	4SU	C1'-N1-C2	3.03	123.03	117.59
54	2y	46	7MG	C5-C4-N9	-3.03	102.46	106.33
32	2a	966	M2G	C6-C5-N7	3.00	135.75	130.29
32	1a	1404	5MC	C5-C4-N3	-3.00	118.68	121.75
32	2a	1207	2MG	C4-C5-N7	-3.00	105.92	110.67
32	2a	527	7MG	C5-C6-N1	2.98	116.19	110.94
1	2A	1911	PSU	O2-C2-N1	-2.98	119.72	122.79
32	2a	1404	5MC	C5-C4-N3	-2.97	118.71	121.75
32	2a	1498	UR3	C5-C4-N3	2.96	118.94	115.04
1	1A	2515	2MA	N9-C8-N7	-2.95	109.74	113.94
1	1A	1984	5MC	C5-C4-N3	-2.94	118.74	121.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	37	MIA	C12-N6-C6	-2.94	120.12	122.85
1	2A	2503	2MA	C4-C5-N7	-2.94	107.22	110.58
1	2A	2503	2MA	C4-N9-C8	2.92	108.81	105.74
55	2x	32	5MC	C5-C4-N3	-2.92	118.76	121.75
32	1a	1207	2MG	C4-C5-N7	-2.88	106.10	110.67
1	2A	2251	OMG	C6-C5-N7	2.88	135.53	130.29
32	2a	1519	MA6	C5-C6-N6	-2.88	120.78	125.33
54	1y	46	7MG	C5-C4-N9	-2.88	102.65	106.33
1	2A	2552	2MU	C5-C4-N3	2.88	118.83	114.80
32	2a	1407	5MC	C5-C6-N1	-2.85	120.22	123.31
32	1a	1498	UR3	C5-C4-N3	2.84	118.78	115.04
32	2a	1498	UR3	C6-N1-C2	-2.83	119.49	121.80
1	2A	1942	5MC	C5-C4-N3	-2.83	118.85	121.75
32	1a	1407	5MC	C5-C4-N3	-2.83	118.86	121.75
1	1A	1937	5MU	O2-C2-N1	-2.81	119.14	122.80
32	2a	1400	5MC	C5-C4-N3	-2.81	118.88	121.75
54	1w	37	MIA	C2-N1-C6	2.80	122.86	117.54
32	1a	1518	MA6	C10-N6-C6	-2.79	113.43	120.52
32	1a	1518	MA6	C6-C5-N7	2.79	137.88	133.43
32	1a	1498	UR3	C1'-N1-C2	2.76	121.55	117.04
32	2a	1518	MA6	C10-N6-C6	-2.75	113.52	120.52
1	2A	1962	5MC	C5-C4-N3	-2.74	118.95	121.75
1	1A	1942	4OC	O2-C2-N3	-2.74	118.02	122.33
32	1a	516	PSU	O2-C2-N1	-2.73	119.97	122.79
55	2x	32	5MC	C5-C6-N1	-2.72	120.36	123.31
32	1a	1519	MA6	C5-N7-C8	2.69	107.68	103.45
54	2y	54	5MU	C5-C6-N1	-2.69	120.39	123.31
32	1a	1518	MA6	N9-C8-N7	-2.68	110.14	113.94
54	1y	37	MIA	C4-N9-C8	2.68	108.55	105.74
54	1y	8	4SU	C5-C4-S4	-2.68	121.25	124.31
54	1y	37	MIA	C5-N7-C8	2.67	107.65	103.45
32	1a	1519	MA6	N1-C2-N3	-2.65	124.57	128.58
54	2w	37	MIA	C5-N7-C8	2.65	107.61	103.45
54	2y	54	5MU	O2-C2-N3	-2.61	116.67	121.49
1	2A	2552	2MU	O4-C4-C5	-2.59	120.69	125.16
32	1a	527	7MG	C5-C6-N1	2.59	115.50	110.94
54	1w	37	MIA	N3-C2-N1	-2.59	122.27	127.00
54	2w	46	7MG	C5-C6-N1	2.58	115.49	110.94
55	1x	8	4SU	C4-N3-C2	2.58	129.79	127.31
54	2y	37	MIA	C5-N7-C8	2.57	107.50	103.45
32	2a	1518	MA6	C6-C5-N7	2.56	137.51	133.43
32	2a	1518	MA6	C10-N6-C9	-2.55	107.98	116.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	2617	PSU	C5-C6-N1	-2.55	118.61	122.14
32	2a	967	5MC	C5-C4-N3	-2.54	119.16	121.75
1	2A	2503	2MA	C5-N7-C8	2.52	107.42	103.45
32	2a	966	M2G	C4-C5-N7	-2.51	106.69	110.67
32	2a	1519	MA6	C10-N6-C6	-2.51	114.15	120.52
1	1A	1984	5MC	O2-C2-N3	-2.50	118.39	122.33
1	1A	1984	5MC	C5-C6-N1	-2.50	120.60	123.31
32	1a	516	PSU	C6-C5-C4	-2.50	116.49	118.17
1	2A	2605	PSU	C6-C5-C4	-2.50	116.49	118.17
32	2a	1519	MA6	C5-N7-C8	2.49	107.37	103.45
32	2a	1402	4OC	C6-C5-C4	2.49	120.00	117.00
32	2a	1519	MA6	C4-N9-C8	2.48	108.34	105.74
32	1a	966	M2G	C4-C5-N7	-2.48	106.74	110.67
1	2A	2251	OMG	C4-C5-N7	-2.47	106.75	110.67
1	2A	2251	OMG	O6-C6-C5	-2.47	120.01	126.53
32	1a	967	5MC	C5-C4-N3	-2.47	119.22	121.75
54	1w	46	7MG	C4-C5-N7	2.46	108.29	105.38
32	2a	1518	MA6	C5-N7-C8	2.46	107.32	103.45
54	2w	37	MIA	C2-N1-C6	2.46	122.21	117.54
1	1A	2564	2MU	C2'-C1'-N1	-2.45	109.59	114.24
32	2a	1407	5MC	O2-C2-N3	-2.44	118.48	122.33
32	1a	1404	5MC	O2-C2-N3	-2.43	118.50	122.33
32	1a	1518	MA6	C10-N6-C9	-2.43	108.38	116.18
54	2w	37	MIA	N3-C2-N1	-2.43	122.57	127.00
32	1a	1402	4OC	C6-C5-C4	2.42	119.92	117.00
54	2w	54	5MU	C5-C6-N1	-2.42	120.69	123.31
54	2w	54	5MU	C5M-C5-C4	2.42	121.36	118.78
32	1a	1400	5MC	C5-C4-N3	-2.42	119.28	121.75
32	1a	1498	UR3	C3U-N3-C4	2.41	121.21	117.87
55	2x	8	4SU	O2-C2-N1	2.41	125.93	122.80
32	2a	1518	MA6	C4-N9-C8	2.40	108.25	105.74
32	1a	1402	4OC	CM4-N4-C4	-2.38	117.80	122.45
54	1w	37	MIA	C5-N7-C8	2.35	107.15	103.45
32	1a	1498	UR3	C6-N1-C2	-2.35	119.88	121.80
32	1a	527	7MG	C5-C4-N9	-2.34	103.33	106.33
32	1a	1519	MA6	C4-N9-C8	2.34	108.19	105.74
1	2A	2605	PSU	O4-C4-C5	-2.33	118.21	124.01
1	1A	2263	OMG	O6-C6-C5	-2.33	120.37	126.53
54	2w	39	PSU	O2-C2-N1	-2.33	120.38	122.79
54	2y	54	5MU	C5M-C5-C4	2.31	121.25	118.78
55	1x	54	5MU	O2-C2-N1	-2.31	119.79	122.80
54	1y	39	PSU	O2-C2-N1	-2.31	120.41	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	2x	32	5MC	O2-C2-N3	-2.27	118.75	122.33
54	1y	37	MIA	C6-C5-N7	2.27	136.47	132.09
32	1a	1407	5MC	O2-C2-N3	-2.27	118.75	122.33
32	2a	1404	5MC	O2-C2-N3	-2.27	118.75	122.33
54	1w	8	4SU	C1'-N1-C2	2.27	121.67	117.59
54	1y	46	7MG	C5-C6-N1	2.27	114.93	110.94
1	2A	2503	2MA	N9-C8-N7	-2.26	110.73	113.94
54	2y	8	4SU	C1'-N1-C2	2.24	121.62	117.59
54	2y	37	MIA	N9-C8-N7	-2.23	110.77	113.94
54	1w	54	5MU	O2-C2-N1	-2.22	119.91	122.80
1	1A	2515	2MA	C6-C5-N7	2.22	136.37	132.09
32	2a	967	5MC	CM5-C5-C6	-2.22	119.85	122.85
55	1x	8	4SU	C5-C4-N3	2.21	116.80	114.75
1	1A	1984	5MC	C1'-N1-C6	-2.20	117.52	121.15
32	1a	527	7MG	O6-C6-C5	-2.19	122.23	127.62
54	2w	37	MIA	C4-N9-C8	2.19	108.04	105.74
54	1y	54	5MU	O2-C2-N3	-2.19	117.45	121.49
32	2a	967	5MC	O2-C2-N3	-2.19	118.89	122.33
32	1a	1519	MA6	C5-C6-N6	-2.18	121.88	125.33
1	1A	2263	OMG	C4-C5-N7	-2.17	107.23	110.67
32	1a	967	5MC	O2-C2-N3	-2.17	118.91	122.33
32	1a	1519	MA6	C4-C5-C6	2.17	118.15	115.91
1	1A	1933	PSU	C5-C6-N1	-2.17	119.13	122.14
54	2w	46	7MG	O6-C6-C5	-2.17	122.30	127.62
54	1w	37	MIA	C4-N9-C8	2.15	108.00	105.74
1	2A	1911	PSU	C6-C5-C4	-2.14	116.73	118.17
54	2y	37	MIA	C2-N1-C6	2.14	122.24	118.73
1	1A	1937	5MU	C5M-C5-C4	2.14	121.06	118.78
54	2y	46	7MG	C5-C6-N1	2.13	114.69	110.94
54	1w	46	7MG	O6-C6-C5	-2.13	122.39	127.62
55	2x	8	4SU	C1'-N1-C6	-2.13	116.23	120.78
1	2A	1962	5MC	N4-C4-N3	2.13	122.36	118.51
1	1A	2515	2MA	C2-N1-C6	2.12	121.36	118.10
32	2a	1207	2MG	C8-N7-C5	2.11	108.03	104.26
55	2x	55	PSU	C5-C6-N1	-2.11	119.21	122.14
54	1y	8	4SU	C1'-N1-C2	2.11	121.38	117.59
54	1y	55	PSU	O4'-C1'-C2'	2.11	108.07	105.15
54	2y	55	PSU	C6-C5-C4	-2.11	116.75	118.17
54	2y	32	PSU	O4'-C1'-C2'	2.10	108.06	105.15
55	2x	8	4SU	C6-C5-C4	-2.10	118.13	119.95
54	2y	55	PSU	O4'-C1'-C2'	2.09	108.05	105.15
32	2a	1207	2MG	N1-C2-N2	2.09	118.69	116.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	1x	55	PSU	C5-C6-N1	-2.09	119.25	122.14
32	2a	1407	5MC	CM5-C5-C6	-2.08	120.04	122.85
1	1A	1984	5MC	CM5-C5-C6	-2.07	120.04	122.85
32	2a	516	PSU	O4'-C1'-C2'	2.07	108.02	105.15
55	1x	8	4SU	O2-C2-N3	-2.07	117.67	121.49
32	2a	966	M2G	O6-C6-C5	-2.06	121.08	126.53
54	2w	32	PSU	C5-C6-N1	-2.06	119.28	122.14
1	1A	2263	OMG	C5-C6-N1	2.06	118.49	113.25
1	2A	1915	5MU	C5M-C5-C4	2.05	120.98	118.78
54	1y	39	PSU	O2-C2-N3	-2.05	118.22	121.86
1	2A	2251	OMG	C8-N7-C5	2.05	107.91	104.26
1	2A	2605	PSU	C5-C6-N1	-2.05	119.30	122.14
32	1a	516	PSU	O4'-C1'-C2'	2.05	107.98	105.15
54	1y	37	MIA	N9-C8-N7	-2.04	111.04	113.94
1	1A	1939	PSU	C5-C6-N1	-2.03	119.32	122.14
32	1a	1407	5MC	CM5-C5-C6	-2.03	120.10	122.85
54	1y	37	MIA	C2-N1-C6	2.03	122.07	118.73
43	1l	92	0TD	O-C-CA	-2.03	119.56	124.77
32	1a	1207	2MG	C8-N7-C5	2.03	107.87	104.26
54	1y	8	4SU	C6-N1-C2	-2.02	118.54	121.00
54	2w	39	PSU	C5-C6-N1	-2.02	119.34	122.14
32	2a	1400	5MC	O2-C2-N3	-2.01	119.16	122.33
32	2a	1498	UR3	C3U-N3-C4	2.01	120.66	117.87
32	1a	1519	MA6	C10-N6-C6	-2.01	115.40	120.52
55	1x	32	5MC	O2-C2-N3	-2.01	119.16	122.33
32	2a	527	7MG	C5-C4-N9	-2.00	103.77	106.33

There are no chirality outliers.

All (62) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD2
32	2a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	1w	37	MIA	C12-C13-C14-C16
54	1y	46	7MG	C4'-C5'-O5'-P
54	1y	54	5MU	O4'-C4'-C5'-O5'
54	2y	55	PSU	C2'-C1'-C5-C6
54	2y	55	PSU	O4'-C1'-C5-C6
32	1a	1400	5MC	O4'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
54	2y	37	MIA	C3'-C4'-C5'-O5'
54	1y	8	4SU	C3'-C4'-C5'-O5'
54	1y	8	4SU	O4'-C4'-C5'-O5'
54	2w	46	7MG	O4'-C4'-C5'-O5'
54	1y	54	5MU	C3'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	2w	46	7MG	C3'-C4'-C5'-O5'
32	1a	527	7MG	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	1a	1400	5MC	C3'-C4'-C5'-O5'
32	2a	527	7MG	C3'-C4'-C5'-O5'
54	2y	37	MIA	O4'-C4'-C5'-O5'
54	2y	46	7MG	O4'-C1'-N9-C4
32	1a	1518	MA6	C5-C6-N6-C10
32	1a	1402	4OC	C3'-C4'-C5'-O5'
54	2y	32	PSU	O4'-C4'-C5'-O5'
54	2w	46	7MG	C2'-C1'-N9-C8
32	2a	1519	MA6	C5-C6-N6-C10
54	1w	46	7MG	C2'-C1'-N9-C8
54	2y	46	7MG	C2'-C1'-N9-C8
32	1a	527	7MG	O4'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
43	2l	92	0TD	CG-CB-SB-CSB
54	2w	37	MIA	N1-C6-N6-C12
43	1l	92	0TD	SB-CB-CG-OD1
54	1w	39	PSU	O4'-C1'-C5-C4
54	1y	55	PSU	O4'-C1'-C5-C4
32	2a	527	7MG	O4'-C4'-C5'-O5'
54	1y	46	7MG	C2'-C1'-N9-C8
54	2y	46	7MG	O4'-C1'-N9-C8
32	1a	1518	MA6	C5-C6-N6-C9
32	1a	1519	MA6	C5-C6-N6-C10
32	2a	1518	MA6	C5-C6-N6-C10
32	1a	1519	MA6	C4'-C5'-O5'-P
54	1w	46	7MG	C4'-C5'-O5'-P
32	1a	1402	4OC	C3'-C2'-O2'-CM2
54	1y	8	4SU	C4'-C5'-O5'-P
54	2y	37	MIA	C4'-C5'-O5'-P
54	2y	54	5MU	C2'-C1'-N1-C6
32	2a	527	7MG	C4'-C5'-O5'-P
54	2y	54	5MU	C2'-C1'-N1-C2

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Mol	Chain	Res	Type	Atoms
54	2w	46	7MG	O4'-C1'-N9-C8
1	2A	2503	2MA	O4'-C4'-C5'-O5'
1	1A	2515	2MA	C4'-C5'-O5'-P
54	1w	46	7MG	O4'-C1'-N9-C8
55	2x	8	4SU	C2'-C1'-N1-C2
54	2w	37	MIA	C5-C6-N6-C12
54	1y	54	5MU	C4'-C5'-O5'-P
1	1A	1942	4OC	C2'-C1'-N1-C2
54	2w	8	4SU	C2'-C1'-N1-C2

There are no ring outliers.

44 monomers are involved in 73 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	1y	37	MIA	1	0
54	2y	39	PSU	2	0
32	2a	1518	MA6	2	0
54	1w	39	PSU	1	0
32	2a	1404	5MC	1	0
54	2w	46	7MG	2	0
32	2a	527	7MG	1	0
1	1A	1961	5MU	1	0
1	1A	2515	2MA	1	0
55	2x	8	4SU	1	0
54	1y	55	PSU	2	0
1	1A	2564	2MU	2	0
54	1w	37	MIA	1	0
32	2a	1207	2MG	3	0
54	2w	39	PSU	3	0
1	2A	2251	OMG	1	0
32	2a	1519	MA6	3	0
1	2A	1920	4OC	2	0
54	2w	8	4SU	2	0
32	2a	1407	5MC	1	0
1	2A	2503	2MA	2	0
1	2A	2552	2MU	1	0
1	2A	1911	PSU	1	0
32	2a	967	5MC	2	0
32	2a	966	M2G	1	0
54	1y	39	PSU	1	0
32	1a	1519	MA6	2	0
54	1y	8	4SU	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
55	1x	8	4SU	2	0
54	2y	55	PSU	8	0
54	2y	8	4SU	1	0
32	1a	1402	4OC	2	0
32	1a	1518	MA6	3	0
32	2a	1402	4OC	2	0
1	2A	1915	5MU	1	0
54	2y	46	7MG	1	0
43	2l	92	0TD	4	0
1	1A	1939	PSU	1	0
43	1l	92	0TD	1	0
55	2x	32	5MC	1	0
54	2w	37	MIA	1	0
1	2A	1917	PSU	1	0
54	2y	37	MIA	1	0
54	1w	46	7MG	2	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2853 ligands modelled in this entry, 2851 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	$\# Z > 2$
59	SF4	1d	501	35	0,12,12	-	-	-		
59	SF4	2d	501	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
59	SF4	1d	501	35	-	-	0/6/5/5
59	SF4	2d	501	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.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	2d	501	SF4	1	0

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1A	2860/2915 (98%)	-0.06	157 (5%) 30 27	24, 43, 91, 103	0
1	2A	2789/2915 (95%)	0.02	100 (3%) 46 41	28, 48, 89, 106	0
2	1B	120/121 (99%)	0.50	1 (0%) 82 80	39, 61, 72, 90	0
2	2B	120/121 (99%)	1.26	14 (11%) 9 7	45, 68, 77, 91	0
3	1D	275/276 (99%)	0.31	5 (1%) 67 64	25, 42, 58, 80	0
3	2D	275/276 (99%)	0.31	3 (1%) 78 75	28, 45, 61, 78	0
4	1E	204/206 (99%)	0.42	7 (3%) 48 43	23, 46, 66, 80	0
4	2E	204/206 (99%)	0.40	3 (1%) 72 68	26, 50, 67, 80	0
5	1F	203/210 (96%)	0.55	7 (3%) 48 43	22, 51, 76, 91	0
5	2F	203/210 (96%)	0.65	7 (3%) 48 43	27, 56, 76, 91	0
6	1G	181/182 (99%)	1.37	30 (16%) 4 3	48, 69, 80, 92	0
6	2G	181/182 (99%)	2.11	96 (53%) 0 0	54, 73, 81, 93	0
7	1H	174/180 (96%)	1.16	14 (8%) 18 16	47, 64, 74, 83	0
7	2H	174/180 (96%)	1.59	44 (25%) 1 1	54, 70, 78, 83	0
8	1I	146/148 (98%)	1.17	14 (9%) 13 11	49, 73, 82, 85	0
8	2I	146/148 (98%)	1.31	24 (16%) 4 3	50, 73, 82, 86	0
9	1N	140/140 (100%)	0.74	3 (2%) 63 59	31, 48, 67, 77	0
9	2N	140/140 (100%)	0.68	3 (2%) 63 59	37, 53, 71, 80	0
10	1O	122/122 (100%)	0.08	2 (1%) 70 67	23, 40, 60, 74	0
10	2O	122/122 (100%)	0.87	5 (4%) 41 37	45, 59, 72, 81	0
11	1P	149/150 (99%)	0.82	15 (10%) 12 10	24, 53, 75, 81	0
11	2P	149/150 (99%)	0.84	10 (6%) 24 21	29, 58, 76, 85	0
12	1Q	141/141 (100%)	0.64	1 (0%) 84 81	33, 51, 68, 77	0
12	2Q	141/141 (100%)	1.24	25 (17%) 4 3	37, 56, 73, 79	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	29, 40, 55, 62	0
13	2R	118/118 (100%)	0.14	0 100 100	31, 43, 58, 65	0
14	1S	110/112 (98%)	1.17	13 (11%) 9 7	49, 62, 72, 77	0
14	2S	110/112 (98%)	1.88	41 (37%) 1 1	55, 66, 75, 79	0
15	1T	131/146 (89%)	0.67	8 (6%) 27 23	38, 50, 72, 77	0
15	2T	131/146 (89%)	0.65	4 (3%) 51 47	43, 53, 74, 78	0
16	1U	116/118 (98%)	0.38	2 (1%) 69 65	26, 39, 55, 73	0
16	2U	116/118 (98%)	0.55	1 (0%) 81 78	33, 46, 61, 73	0
17	1V	101/101 (100%)	0.57	3 (2%) 52 48	28, 51, 67, 76	0
17	2V	101/101 (100%)	0.94	6 (5%) 28 24	33, 57, 70, 76	0
18	1W	112/113 (99%)	0.13	2 (1%) 67 64	26, 37, 55, 88	0
18	2W	112/113 (99%)	0.18	2 (1%) 67 64	30, 41, 57, 88	0
19	1X	95/96 (98%)	0.51	5 (5%) 32 28	30, 44, 63, 75	0
19	2X	95/96 (98%)	0.63	1 (1%) 78 75	34, 49, 65, 76	0
20	1Y	107/110 (97%)	1.02	10 (9%) 14 12	45, 57, 74, 83	0
20	2Y	107/110 (97%)	1.35	13 (12%) 8 7	48, 61, 76, 86	0
21	1Z	154/206 (74%)	0.95	22 (14%) 6 5	38, 64, 86, 96	0
21	2Z	160/206 (77%)	2.30	99 (61%) 0 0	72, 83, 93, 99	0
22	10	83/85 (97%)	0.21	0 100 100	25, 38, 59, 71	0
22	20	83/85 (97%)	1.51	18 (21%) 2 2	41, 66, 78, 82	0
23	11	97/98 (98%)	0.26	1 (1%) 79 76	23, 44, 71, 77	0
23	21	97/98 (98%)	1.01	13 (13%) 7 5	38, 58, 74, 82	0
24	12	70/72 (97%)	0.86	5 (7%) 22 19	40, 57, 66, 79	0
24	22	70/72 (97%)	0.99	2 (2%) 53 49	46, 61, 69, 78	0
25	13	59/60 (98%)	0.56	0 100 100	29, 45, 69, 83	0
25	23	59/60 (98%)	0.76	3 (5%) 33 29	36, 51, 72, 87	0
26	14	69/71 (97%)	1.71	24 (34%) 1 1	64, 79, 89, 97	0
26	24	69/71 (97%)	2.23	38 (55%) 0 0	70, 80, 89, 97	0
27	15	59/60 (98%)	0.12	1 (1%) 69 65	25, 36, 57, 72	0
27	25	59/60 (98%)	0.12	1 (1%) 69 65	30, 40, 60, 71	0
28	16	53/54 (98%)	0.53	1 (1%) 66 62	38, 51, 64, 74	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.86	3 (5%) 29 26	42, 54, 65, 71	0
29	17	48/49 (97%)	0.11	5 (10%) 11 10	24, 31, 58, 69	0
29	27	48/49 (97%)	0.08	2 (4%) 40 36	28, 35, 58, 70	0
30	18	64/65 (98%)	0.49	4 (6%) 26 23	33, 42, 50, 66	0
30	28	64/65 (98%)	0.69	2 (3%) 51 47	38, 46, 53, 67	0
31	19	37/37 (100%)	0.74	0 100 100	37, 50, 67, 68	0
31	29	37/37 (100%)	1.28	6 (16%) 4 3	46, 54, 71, 72	0
32	1a	1488/1521 (97%)	0.76	95 (6%) 25 22	42, 72, 92, 103	0
32	2a	1491/1521 (98%)	1.02	238 (15%) 5 4	44, 74, 93, 103	0
33	1b	231/256 (90%)	1.65	72 (31%) 1 1	69, 82, 89, 94	0
33	2b	231/256 (90%)	2.41	146 (63%) 0 0	72, 83, 89, 94	0
34	1c	206/239 (86%)	1.65	59 (28%) 1 1	67, 80, 86, 92	0
34	2c	206/239 (86%)	2.50	137 (66%) 0 0	69, 82, 88, 93	0
35	1d	208/209 (99%)	1.43	39 (18%) 3 2	56, 72, 80, 87	0
35	2d	208/209 (99%)	1.43	39 (18%) 3 2	58, 71, 80, 88	0
36	1e	148/162 (91%)	1.38	26 (17%) 4 3	56, 72, 80, 86	0
36	2e	148/162 (91%)	2.03	71 (47%) 0 0	59, 74, 83, 87	0
37	1f	100/101 (99%)	1.10	6 (6%) 27 24	50, 66, 76, 78	0
37	2f	100/101 (99%)	1.13	6 (6%) 27 24	60, 72, 80, 86	0
38	1g	155/156 (99%)	1.55	40 (25%) 1 1	62, 74, 83, 100	0
38	2g	155/156 (99%)	1.76	51 (32%) 1 1	65, 76, 84, 102	0
39	1h	137/138 (99%)	1.26	17 (12%) 8 6	60, 72, 78, 83	0
39	2h	137/138 (99%)	1.78	47 (34%) 1 1	64, 74, 80, 84	0
40	1i	127/128 (99%)	1.55	37 (29%) 1 1	51, 75, 83, 87	0
40	2i	127/128 (99%)	2.77	93 (73%) 0 0	71, 85, 91, 92	0
41	1j	97/105 (92%)	1.86	35 (36%) 1 1	59, 78, 90, 95	0
41	2j	96/105 (91%)	3.02	77 (80%) 0 0	74, 87, 94, 98	0
42	1k	114/129 (88%)	1.14	17 (14%) 5 4	52, 69, 80, 83	0
42	2k	114/129 (88%)	1.32	20 (17%) 4 3	55, 71, 81, 87	0
43	1l	121/132 (91%)	1.06	17 (14%) 6 5	53, 64, 74, 77	0
43	2l	121/132 (91%)	1.37	18 (14%) 5 4	55, 67, 75, 80	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	123/126 (97%)	1.11	14 (11%) 10 8	54, 69, 78, 82	0
44	2m	122/126 (96%)	2.55	72 (59%) 0 0	73, 84, 90, 94	0
45	1n	60/61 (98%)	1.44	8 (13%) 7 6	57, 69, 78, 82	0
45	2n	60/61 (98%)	3.18	54 (90%) 0 0	78, 85, 93, 95	0
46	1o	88/89 (98%)	1.21	13 (14%) 5 4	56, 69, 78, 82	0
46	2o	88/89 (98%)	1.36	17 (19%) 3 2	57, 70, 80, 83	0
47	1p	82/88 (93%)	1.76	32 (39%) 1 0	58, 70, 80, 83	0
47	2p	82/88 (93%)	1.60	18 (21%) 2 2	59, 69, 81, 82	0
48	1q	99/105 (94%)	1.30	10 (10%) 12 10	57, 70, 79, 82	0
48	2q	99/105 (94%)	1.51	21 (21%) 2 2	60, 70, 79, 82	0
49	1r	68/88 (77%)	1.16	7 (10%) 12 10	60, 68, 79, 82	0
49	2r	68/88 (77%)	1.28	12 (17%) 4 3	60, 70, 80, 82	0
50	1s	83/93 (89%)	1.57	20 (24%) 2 1	70, 79, 86, 91	0
50	2s	83/93 (89%)	2.78	67 (80%) 0 0	74, 81, 88, 94	0
51	1t	96/106 (90%)	1.51	27 (28%) 1 1	58, 71, 80, 86	0
51	2t	96/106 (90%)	1.23	11 (11%) 9 8	59, 71, 81, 85	0
52	1u	23/27 (85%)	1.83	9 (39%) 1 0	65, 74, 78, 80	0
52	2u	23/27 (85%)	2.88	17 (73%) 0 0	68, 75, 80, 83	0
53	1v	13/24 (54%)	1.72	6 (46%) 0 0	60, 74, 92, 98	0
53	2v	13/24 (54%)	2.30	6 (46%) 0 0	65, 78, 95, 98	0
54	1w	67/76 (88%)	1.43	15 (22%) 2 2	44, 89, 97, 101	0
54	1y	67/76 (88%)	1.41	13 (19%) 3 2	37, 91, 97, 101	0
54	2w	65/76 (85%)	1.69	18 (27%) 1 1	56, 96, 101, 104	0
54	2y	66/76 (86%)	1.56	13 (19%) 3 2	51, 95, 99, 100	0
55	1x	72/77 (93%)	0.49	4 (5%) 30 26	33, 66, 84, 87	0
55	2x	72/77 (93%)	0.92	1 (1%) 73 70	52, 81, 90, 95	0
All	All	20875/21748 (95%)	0.81	2859 (13%) 6 5	22, 63, 88, 106	0

All (2859) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
41	2j	40	LEU	6.8
38	1g	80	VAL	6.8

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Mol	Chain	Res	Type	RSRZ
44	2m	102	ARG	6.7
45	2n	25	VAL	6.7
45	1n	2	ALA	6.6
38	1g	82	GLY	6.5
33	2b	165	VAL	6.4
50	2s	79	THR	6.3
41	2j	47	PHE	6.2
52	2u	11	GLY	6.1
34	2c	171	GLY	6.0
7	1H	2	SER	5.9
52	2u	14	TRP	5.9
40	2i	14	VAL	5.9
16	1U	117	GLN	5.8
41	2j	65	LEU	5.7
21	2Z	139	VAL	5.7
45	2n	39	LEU	5.6
41	2j	55	LYS	5.6
44	2m	90	LEU	5.5
21	2Z	172	ALA	5.5
44	2m	6	GLY	5.5
23	2l	2	SER	5.3
44	2m	123	ALA	5.3
33	2b	237	ALA	5.3
3	1D	276	LYS	5.3
41	2j	54	PHE	5.2
45	2n	34	TYR	5.2
38	1g	79	ARG	5.2
44	2m	100	GLY	5.2
40	2i	9	ARG	5.2
6	2G	29	TRP	5.1
34	2c	198	VAL	5.1
45	2n	7	ILE	5.1
44	2m	124	PRO	5.1
1	1A	1140	U	5.1
34	1c	2	GLY	5.1
21	2Z	173	ALA	5.1
40	2i	102	LEU	5.1
50	2s	80	TYR	5.1
33	2b	214	ILE	5.1
34	2c	182	ILE	5.1
41	2j	32	ALA	5.0
40	2i	126	SER	5.0

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Mol	Chain	Res	Type	RSRZ
1	1A	1104	G	5.0
44	2m	78	ILE	4.9
6	1G	139	LEU	4.9
33	2b	187	LEU	4.9
34	2c	2	GLY	4.9
6	2G	74	LYS	4.9
46	1o	87	ILE	4.9
33	2b	161	ALA	4.9
34	2c	189	ALA	4.9
33	2b	21	ARG	4.9
26	14	59	PHE	4.9
45	2n	2	ALA	4.9
45	2n	5	ALA	4.9
38	2g	82	GLY	4.9
34	2c	124	ILE	4.8
44	1m	2	ALA	4.8
1	1A	1110	C	4.8
41	2j	37	PRO	4.8
41	2j	41	PRO	4.8
44	2m	68	GLY	4.8
1	1A	1143	U	4.8
33	2b	200	ILE	4.8
1	1A	932	C	4.8
41	2j	35	SER	4.8
39	1h	2	LEU	4.8
1	1A	1141	A	4.7
53	2v	14	A	4.7
44	1m	122	LYS	4.7
41	2j	85	LEU	4.7
40	2i	106	ALA	4.7
38	2g	16	LEU	4.7
34	2c	68	VAL	4.7
44	2m	104	ARG	4.7
33	2b	185	ILE	4.7
33	2b	152	PHE	4.7
44	2m	4	ILE	4.6
34	2c	149	ALA	4.6
6	2G	159	VAL	4.6
34	2c	33	LEU	4.6
50	2s	13	ASP	4.6
50	2s	84	GLY	4.5
32	1a	1531	A	4.5

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Mol	Chain	Res	Type	RSRZ
34	2c	129	ALA	4.5
1	1A	2906	U	4.5
33	2b	236	TYR	4.5
1	1A	2814	C	4.5
40	2i	11	LYS	4.5
41	2j	87	THR	4.5
52	2u	6	ARG	4.5
21	2Z	146	ILE	4.4
34	2c	137	ALA	4.4
41	1j	32	ALA	4.4
1	2A	883	G	4.4
34	2c	8	ILE	4.4
41	2j	50	ILE	4.4
6	2G	28	VAL	4.4
44	2m	60	VAL	4.4
50	2s	9	VAL	4.4
44	2m	120	LYS	4.4
44	2m	122	LYS	4.4
44	1m	124	PRO	4.3
45	2n	38	GLY	4.3
34	1c	207	VAL	4.3
33	2b	163	PHE	4.3
40	2i	36	TYR	4.3
45	2n	21	TYR	4.3
1	1A	1112	U	4.3
40	2i	39	GLY	4.3
21	1Z	141	VAL	4.3
50	2s	75	ALA	4.3
1	1A	1105	G	4.3
36	2e	22	GLY	4.3
6	2G	15	VAL	4.3
9	1N	9	VAL	4.3
44	2m	96	LEU	4.3
1	1A	1144	A	4.3
21	1Z	149	SER	4.3
32	1a	1023	G	4.2
34	2c	197	GLY	4.2
40	2i	37	PHE	4.2
34	2c	187	ALA	4.2
40	2i	62	TYR	4.2
44	2m	118	ALA	4.2
1	1A	931	C	4.2

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Mol	Chain	Res	Type	RSRZ
50	2s	54	GLY	4.2
54	1w	1	G	4.2
21	2Z	171	ILE	4.2
41	2j	74	ILE	4.2
1	1A	1103	A	4.2
34	2c	52	LEU	4.2
38	2g	84	ASN	4.2
41	2j	78	ASN	4.2
40	2i	90	PRO	4.2
40	2i	125	TYR	4.2
24	12	70	GLN	4.2
1	1A	936	C	4.2
1	2A	896	A	4.2
45	2n	55	GLY	4.2
33	2b	39	ILE	4.2
7	2H	52	VAL	4.2
21	2Z	86	VAL	4.2
26	14	56	VAL	4.2
38	2g	80	VAL	4.2
38	2g	5	ARG	4.2
40	2i	83	ARG	4.2
33	2b	61	LEU	4.2
40	2i	19	LEU	4.2
6	2G	11	TYR	4.1
32	1a	344	A	4.1
45	2n	29	ARG	4.1
47	2p	48	TRP	4.1
32	2a	1150	U	4.1
40	2i	124	GLN	4.1
41	2j	42	THR	4.1
45	2n	13	THR	4.1
45	2n	40	CYS	4.1
27	15	60	VAL	4.1
45	2n	18	VAL	4.1
1	1A	1127	U	4.1
50	2s	24	ALA	4.1
34	2c	9	GLY	4.1
34	2c	48	TYR	4.1
38	1g	81	GLY	4.1
42	2k	25	TYR	4.1
41	2j	38	ILE	4.1
40	2i	7	THR	4.1

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Mol	Chain	Res	Type	RSRZ
21	2Z	144	LEU	4.1
41	2j	49	VAL	4.1
33	2b	91	PRO	4.1
38	2g	81	GLY	4.1
26	24	32	TYR	4.1
44	2m	23	TYR	4.1
22	20	84	LEU	4.1
33	2b	11	LEU	4.1
33	2b	81	VAL	4.1
32	1a	163	C	4.0
32	2a	1149	C	4.0
1	1A	1106	U	4.0
33	1b	127	ILE	4.0
38	2g	85	TYR	4.0
33	2b	184	VAL	4.0
26	24	49	PHE	4.0
1	1A	2141	A	4.0
6	2G	50	ALA	4.0
53	1v	12	A	4.0
45	2n	3	ARG	4.0
32	2a	1219	U	4.0
33	1b	228	GLY	4.0
52	1u	2	GLY	4.0
34	1c	184	TYR	4.0
34	2c	188	LEU	4.0
36	2e	12	LEU	4.0
33	2b	230	VAL	4.0
25	23	2	PRO	4.0
24	12	69	ARG	4.0
40	2i	10	ARG	4.0
32	2a	1119	C	4.0
41	2j	13	HIS	4.0
45	2n	6	LEU	4.0
50	2s	2	PRO	4.0
6	1G	80	PHE	4.0
33	1b	120	ALA	4.0
32	2a	1222	G	4.0
50	2s	82	GLY	4.0
1	1A	933	C	4.0
40	2i	27	THR	4.0
7	2H	45	VAL	4.0
44	2m	87	TYR	4.0

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Mol	Chain	Res	Type	RSRZ
47	1p	82	GLN	4.0
38	1g	8	GLU	3.9
38	2g	7	ALA	3.9
32	2a	1033	G	3.9
34	2c	5	ILE	3.9
39	2h	2	LEU	3.9
50	2s	71	LEU	3.9
54	2w	3	C	3.9
47	2p	82	GLN	3.9
33	2b	101	MET	3.9
40	2i	67	GLY	3.9
33	2b	201	ILE	3.9
40	2i	99	LEU	3.9
45	2n	53	LEU	3.9
26	14	58	ARG	3.9
33	1b	229	VAL	3.9
6	1G	146	TYR	3.9
40	2i	15	ALA	3.9
51	1t	103	GLY	3.9
51	1t	13	LEU	3.9
44	2m	105	THR	3.9
32	1a	1001(A)	G	3.9
44	2m	54	VAL	3.9
40	2i	5	TYR	3.9
45	1n	34	TYR	3.9
33	2b	123	ALA	3.9
41	1j	86	MET	3.9
44	2m	106	ASN	3.9
21	2Z	137	ILE	3.9
34	1c	39	ILE	3.9
40	2i	81	ILE	3.9
45	2n	58	LYS	3.9
40	2i	49	PRO	3.9
1	1A	1142	A	3.9
44	2m	117	VAL	3.9
54	2y	36	A	3.9
1	1A	1102	G	3.8
32	2a	1030	C	3.8
38	1g	85	TYR	3.8
50	2s	10	PHE	3.8
26	24	31	ILE	3.8
35	1d	194	LEU	3.8

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Mol	Chain	Res	Type	RSRZ
41	2j	8	LEU	3.8
44	2m	67	GLU	3.8
34	2c	170	GLN	3.8
21	2Z	149	SER	3.8
1	2A	229	A	3.8
34	2c	53	ALA	3.8
33	2b	199	TYR	3.8
1	1A	2163	G	3.8
1	1A	2813	G	3.8
1	2A	2136	C	3.8
32	1a	630	G	3.8
32	2a	1127	G	3.8
26	24	65	ASP	3.8
50	2s	22	LEU	3.8
34	2c	195	VAL	3.8
36	1e	10	MET	3.8
32	2a	1126	U	3.8
15	1T	130	ALA	3.8
54	1w	73	A	3.8
26	14	54	GLY	3.8
33	2b	38	GLY	3.8
21	1Z	146	ILE	3.8
21	1Z	150	LEU	3.8
33	1b	125	PRO	3.8
38	2g	76	ARG	3.8
40	2i	61	ALA	3.8
45	2n	61	TRP	3.8
6	2G	146	TYR	3.8
19	1X	95	LEU	3.8
33	2b	118	LEU	3.8
34	2c	12	LEU	3.8
40	2i	105	ASP	3.8
32	2a	1038	C	3.8
1	2A	2155	G	3.8
32	1a	1036	G	3.8
32	2a	973	G	3.8
32	2a	1220	G	3.8
54	2w	71	G	3.8
26	14	50	VAL	3.7
33	1b	165	VAL	3.7
44	2m	98	VAL	3.7
42	2k	126	ARG	3.7

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Mol	Chain	Res	Type	RSRZ
47	1p	42	ARG	3.7
50	2s	81	ARG	3.7
45	2n	49	HIS	3.7
15	1T	131	ALA	3.7
36	2e	86	ALA	3.7
36	2e	85	GLY	3.7
33	2b	222	ILE	3.7
38	2g	12	LEU	3.7
41	2j	88	LEU	3.7
1	1A	1145	G	3.7
33	2b	71	VAL	3.7
40	2i	20	ARG	3.7
40	2i	41	VAL	3.7
36	2e	94	ALA	3.7
38	1g	2	ALA	3.7
14	2S	29	PHE	3.7
5	1F	131	GLY	3.7
35	1d	167	GLY	3.7
36	2e	81	GLU	3.7
53	2v	12	A	3.7
32	2a	1018	C	3.7
32	1a	1002	G	3.7
32	2a	1224	G	3.7
41	2j	10	GLY	3.7
19	2X	92	LEU	3.7
1	1A	1111	U	3.7
32	2a	1183	A	3.7
7	2H	50	VAL	3.7
26	24	56	VAL	3.7
41	2j	59	SER	3.7
1	1A	935	C	3.7
32	2a	1019	C	3.7
21	2Z	26	GLY	3.7
1	1A	1114	G	3.7
21	2Z	33	LEU	3.7
32	1a	1026	G	3.7
34	2c	94	LEU	3.7
34	2c	157	ILE	3.7
22	20	5	LYS	3.7
29	17	48	LYS	3.7
33	1b	21	ARG	3.7
6	2G	12	TYR	3.7

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Mol	Chain	Res	Type	RSRZ
21	2Z	170	THR	3.6
34	2c	151	VAL	3.6
39	1h	93	VAL	3.6
40	2i	44	VAL	3.6
41	1j	34	VAL	3.6
1	1A	1146	C	3.6
51	1t	12	ALA	3.6
33	2b	122	PHE	3.6
34	2c	142	MET	3.6
32	2a	1030(A)	G	3.6
32	2a	1034	G	3.6
32	2a	1036	G	3.6
54	2y	19	G	3.6
32	1a	204	U	3.6
34	2c	176	HIS	3.6
1	1A	2136	A	3.6
32	1a	1035	A	3.6
54	2w	73	A	3.6
6	1G	50	ALA	3.6
6	2G	57	ALA	3.6
14	2S	58	LEU	3.6
34	2c	41	GLY	3.6
34	2c	178	LEU	3.6
45	2n	44	LEU	3.6
50	2s	20	LEU	3.6
50	2s	40	ILE	3.6
40	2i	17	VAL	3.6
1	1A	1116	A	3.6
53	2v	13	A	3.6
40	2i	45	ALA	3.6
41	2j	71	LEU	3.6
41	2j	23	ILE	3.6
41	2j	96	ILE	3.6
1	2A	1536	C	3.6
26	24	51	ASP	3.6
26	14	67	TYR	3.6
33	2b	148	TYR	3.6
40	2i	4	TYR	3.6
21	2Z	174	VAL	3.6
32	2a	1216	G	3.6
34	2c	138	VAL	3.6
32	1a	160	A	3.6

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Mol	Chain	Res	Type	RSRZ
32	1a	1005	A	3.6
20	2Y	80	GLY	3.6
21	2Z	21	ALA	3.6
44	2m	5	ALA	3.6
45	2n	20	ALA	3.6
45	2n	28	GLY	3.6
51	2t	47	GLY	3.6
1	2A	1043	C	3.5
32	2a	1030(B)	C	3.5
21	1Z	168	GLU	3.5
9	1N	140	VAL	3.5
21	2Z	27	VAL	3.5
33	2b	67	THR	3.5
34	2c	55	VAL	3.5
34	2c	120	VAL	3.5
36	2e	41	VAL	3.5
42	1k	25	TYR	3.5
50	2s	41	VAL	3.5
40	1i	126	SER	3.5
1	1A	1221	G	3.5
32	2a	1058	G	3.5
5	1F	208	GLY	3.5
7	2H	64	LEU	3.5
18	1W	112	GLY	3.5
33	2b	99	GLY	3.5
41	2j	90	LEU	3.5
50	1s	71	LEU	3.5
32	2a	994	A	3.5
26	24	59	PHE	3.5
50	1s	13	ASP	3.5
54	1w	4	C	3.5
32	1a	1257	U	3.5
33	2b	197	VAL	3.5
40	2i	66	ARG	3.5
40	2i	86	VAL	3.5
26	14	66	SER	3.5
6	1G	42	GLY	3.5
38	2g	34	GLY	3.5
43	2l	51	ALA	3.5
44	2m	112	GLY	3.5
35	2d	146	ILE	3.5
32	1a	1447	A	3.5

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Mol	Chain	Res	Type	RSRZ
54	1w	65	G	3.5
1	1A	2807	C	3.5
33	2b	136	VAL	3.5
40	2i	28	VAL	3.5
36	2e	31	LEU	3.5
50	2s	15	LEU	3.5
23	2l	28	GLY	3.5
40	2i	13	ALA	3.5
45	2n	30	ALA	3.5
21	2Z	57	ILE	3.5
34	2c	134	ILE	3.5
41	1j	4	ILE	3.5
40	2i	101	PHE	3.5
1	1A	1133	G	3.5
1	1A	1139	G	3.5
33	1b	129	GLU	3.5
52	2u	15	ARG	3.5
20	2Y	57	GLN	3.5
1	1A	1138	C	3.5
1	2A	2803	C	3.5
32	2a	980	C	3.5
32	2a	1260	C	3.5
32	2a	1281	U	3.5
40	2i	96	LEU	3.5
34	2c	155	GLY	3.5
36	2e	133	TYR	3.5
23	1l	2	SER	3.5
34	2c	200	ALA	3.5
40	2i	82	ALA	3.5
44	1m	5	ALA	3.5
33	2b	162	ILE	3.5
34	2c	77	ILE	3.5
34	2c	202	ILE	3.5
36	2e	109	ILE	3.5
36	2e	118	ILE	3.5
50	1s	40	ILE	3.5
21	2Z	48	PHE	3.5
35	1d	169	LYS	3.5
40	1i	59	PHE	3.5
45	2n	36	PHE	3.5
38	2g	109	ASN	3.4
32	1a	1001	A	3.4

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Mol	Chain	Res	Type	RSRZ
32	2a	1251	A	3.4
46	1o	88	ARG	3.4
52	2u	24	ARG	3.4
53	2v	24	A	3.4
1	1A	1108	G	3.4
20	1Y	1	MET	3.4
32	1a	1024	G	3.4
14	2S	69	VAL	3.4
33	1b	230	VAL	3.4
38	2g	75	VAL	3.4
50	2s	11	VAL	3.4
33	1b	131	PRO	3.4
1	1A	2905	C	3.4
32	2a	962	C	3.4
41	2j	36	GLY	3.4
40	1i	106	ALA	3.4
41	2j	14	LYS	3.4
44	2m	22	ILE	3.4
48	2q	95	TYR	3.4
50	2s	52	TYR	3.4
6	2G	35	GLU	3.4
41	2j	69	ASN	3.4
32	2a	1092	A	3.4
32	2a	1286	A	3.4
1	2A	2160	G	3.4
14	2S	5	THR	3.4
44	2m	19	LEU	3.4
40	1i	15	ALA	3.4
1	1A	271	U	3.4
1	1A	2135	U	3.4
6	2G	80	PHE	3.4
37	2f	60	PHE	3.4
33	1b	130	ARG	3.4
34	2c	30	ARG	3.4
32	2a	975	A	3.4
21	1Z	170	THR	3.4
33	1b	133	LYS	3.4
44	2m	15	VAL	3.4
33	2b	196	LEU	3.4
34	2c	13	GLY	3.4
35	2d	87	GLY	3.4
1	1A	2174	G	3.4

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Mol	Chain	Res	Type	RSRZ
1	2A	2159	G	3.4
8	1I	146	ALA	3.4
32	1a	1003	G	3.4
32	2a	993	G	3.4
32	2a	1017	G	3.4
54	2y	34	G	3.4
1	1A	1124	U	3.4
45	2n	23	ARG	3.4
1	1A	2167	C	3.4
51	2t	9	ASN	3.4
3	1D	275	LYS	3.4
1	1A	934	A	3.4
6	2G	160	VAL	3.4
32	2a	983	A	3.4
36	2e	33	VAL	3.4
41	1j	88	LEU	3.4
43	1l	43	VAL	3.4
33	2b	218	ALA	3.4
38	1g	3	ARG	3.4
40	2i	16	ARG	3.4
40	2i	63	ILE	3.4
41	2j	68	HIS	3.4
49	2r	60	ALA	3.4
40	2i	18	PHE	3.3
1	1A	2162	C	3.3
1	2A	2804	C	3.3
44	2m	64	TRP	3.3
33	2b	69	LEU	3.3
40	1i	14	VAL	3.3
41	2j	72	VAL	3.3
43	2l	52	LEU	3.3
49	2r	66	LEU	3.3
40	2i	103	THR	3.3
21	2Z	121	HIS	3.3
39	2h	106	GLY	3.3
41	2j	56	HIS	3.3
50	2s	14	HIS	3.3
21	2Z	51	ALA	3.3
50	2s	31	ILE	3.3
39	2h	135	CYS	3.3
40	2i	92	TYR	3.3
47	1p	39	TYR	3.3

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Mol	Chain	Res	Type	RSRZ
32	1a	1025	U	3.3
1	2A	171	G	3.3
1	2A	2116	G	3.3
32	1a	1030(A)	G	3.3
44	2m	121	LYS	3.3
34	2c	91	LEU	3.3
39	2h	36	LEU	3.3
22	20	43	THR	3.3
41	1j	87	THR	3.3
41	2j	79	ARG	3.3
33	2b	207	ALA	3.3
44	2m	72	ALA	3.3
53	1v	24	A	3.3
21	2Z	136	PHE	3.3
41	2j	99	LYS	3.3
36	2e	61	TYR	3.3
1	1A	1109	G	3.3
32	2a	1048	G	3.3
1	2A	886	C	3.3
6	2G	17	PRO	3.3
32	2a	1066	C	3.3
44	2m	88	ARG	3.3
41	2j	94	VAL	3.3
48	2q	9	VAL	3.3
50	2s	63	THR	3.3
26	24	54	GLY	3.3
31	29	37	GLY	3.3
20	2Y	5	MET	3.3
34	2c	71	ALA	3.3
41	2j	27	ALA	3.3
41	2j	75	ILE	3.3
1	1A	572	A	3.3
1	1A	2195	A	3.3
14	2S	92	TYR	3.3
26	24	63	TYR	3.3
33	2b	10	LEU	3.3
38	2g	3	ARG	3.3
41	2j	43	ARG	3.3
44	2m	66	LEU	3.3
1	1A	2806	G	3.3
1	2A	2133	G	3.3
1	2A	2157	G	3.3

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Mol	Chain	Res	Type	RSRZ
6	2G	5	VAL	3.3
32	2a	1272	G	3.3
34	2c	153	VAL	3.3
1	1A	1121	C	3.3
1	1A	2186	C	3.3
32	1a	1028	C	3.3
6	2G	88	ILE	3.3
7	2H	72	ILE	3.3
33	2b	22	LYS	3.3
33	2b	173	ALA	3.3
34	2c	168	ALA	3.3
32	2a	1531	A	3.2
34	2c	128	PHE	3.2
36	2e	20	GLN	3.2
21	2Z	30	ASN	3.2
33	2b	31	TYR	3.2
40	2i	29	ASN	3.2
44	2m	3	ARG	3.2
50	2s	78	ARG	3.2
6	2G	82	LEU	3.2
21	2Z	150	LEU	3.2
33	2b	145	LEU	3.2
34	2c	109	PRO	3.2
26	24	57	GLU	3.2
14	1S	46	VAL	3.2
44	2m	53	VAL	3.2
21	2Z	147	GLY	3.2
35	2d	167	GLY	3.2
36	2e	74	GLY	3.2
1	1A	2212	G	3.2
1	2A	2149	G	3.2
32	1a	1034	G	3.2
36	2e	17	ALA	3.2
54	1y	18	G	3.2
7	2H	2	SER	3.2
22	20	69	PHE	3.2
47	1p	76	GLN	3.2
1	1A	1100	A	3.2
1	1A	1115	A	3.2
1	2A	2119	A	3.2
6	2G	53	LEU	3.2
34	2c	201	TYR	3.2

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Mol	Chain	Res	Type	RSRZ
39	2h	94	TYR	3.2
46	2o	31	LEU	3.2
33	2b	86	GLU	3.2
1	1A	1128	U	3.2
34	2c	141	VAL	3.2
45	2n	33	VAL	3.2
31	29	21	GLY	3.2
34	2c	205	GLY	3.2
40	2i	115	GLY	3.2
41	1j	31	GLY	3.2
36	2e	13	ILE	3.2
32	1a	1030(B)	C	3.2
34	2c	167	TRP	3.2
1	2A	882	G	3.2
1	2A	2802	G	3.2
2	2B	23	G	3.2
54	1w	70	G	3.2
33	2b	55	PHE	3.2
8	2I	68	LEU	3.2
41	2j	80	LYS	3.2
32	1a	1532	U	3.2
34	1c	96	GLY	3.2
38	2g	21	VAL	3.2
33	1b	107	THR	3.2
50	2s	48	THR	3.2
21	2Z	52	SER	3.2
32	2a	1263	C	3.2
41	2j	63	PHE	3.2
1	1A	2137	G	3.2
32	2a	971	G	3.2
32	2a	976	G	3.2
40	2i	91	ASP	3.2
11	1P	105	LEU	3.2
34	1c	52	LEU	3.2
43	1l	60	LEU	3.2
44	2m	97	PRO	3.2
47	1p	27	LYS	3.2
51	1t	9	ASN	3.2
14	2S	36	TYR	3.2
33	2b	92	TYR	3.2
51	2t	103	GLY	3.2
52	1u	16	GLY	3.2

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Mol	Chain	Res	Type	RSRZ
39	1h	134	ILE	3.2
41	2j	48	THR	3.2
34	2c	146	ALA	3.1
40	2i	104	ARG	3.1
52	2u	10	ARG	3.1
33	2b	57	PHE	3.1
34	1c	10	PHE	3.1
33	2b	131	PRO	3.1
50	2s	76	PRO	3.1
35	1d	176	LEU	3.1
40	2i	56	LEU	3.1
32	2a	953	G	3.1
32	2a	1124	G	3.1
1	1A	937	A	3.1
8	1I	19	VAL	3.1
10	2O	98	VAL	3.1
34	2c	80	GLY	3.1
52	2u	16	GLY	3.1
6	2G	39	ILE	3.1
34	2c	60	ALA	3.1
36	1e	86	ALA	3.1
40	2i	76	ALA	3.1
12	2Q	22	LYS	3.1
6	2G	102	PHE	3.1
37	1f	60	PHE	3.1
45	2n	16	PHE	3.1
33	2b	234	PRO	3.1
52	2u	5	ASP	3.1
21	2Z	125	LEU	3.1
41	1j	85	LEU	3.1
20	1Y	92	ASN	3.1
32	1a	1027	C	3.1
32	1a	1037	C	3.1
32	2a	979	C	3.1
54	1w	72	C	3.1
1	1A	2173	G	3.1
26	24	50	VAL	3.1
1	1A	2803	A	3.1
1	1A	2812	A	3.1
6	2G	161	THR	3.1
21	2Z	53	ILE	3.1
32	2a	1182	G	3.1

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Mol	Chain	Res	Type	RSRZ
33	2b	112	VAL	3.1
34	2c	158	GLY	3.1
40	2i	100	GLY	3.1
43	2l	18	VAL	3.1
50	2s	26	GLY	3.1
32	2a	1035	A	3.1
34	1c	179	ARG	3.1
38	2g	4	ARG	3.1
41	2j	82	ILE	3.1
46	1o	69	TYR	3.1
47	2p	38	TYR	3.1
50	2s	61	TYR	3.1
1	1A	1147	U	3.1
45	1n	59	ALA	3.1
51	2t	74	LYS	3.1
40	1i	2	GLU	3.1
41	2j	61	GLU	3.1
33	2b	192	SER	3.1
1	1A	2164	C	3.1
1	2A	885	C	3.1
1	2A	2896	C	3.1
14	2S	17	ARG	3.1
33	2b	144	ARG	3.1
34	1c	79	ARG	3.1
36	1e	85	GLY	3.1
41	2j	52	GLY	3.1
41	2j	44	VAL	3.1
50	2s	29	ARG	3.1
34	1c	84	ILE	3.1
38	1g	50	ILE	3.1
44	2m	37	THR	3.1
1	1A	942	A	3.1
1	1A	1135	G	3.1
1	2A	2112	G	3.1
1	2A	2135	A	3.1
32	1a	1021	G	3.1
32	2a	1030(D)	A	3.1
32	2a	1110	A	3.1
51	1t	14	LYS	3.1
52	2u	3	LYS	3.1
32	1a	1446	U	3.1
32	2a	1085	U	3.1

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Mol	Chain	Res	Type	RSRZ
6	2G	19	LEU	3.1
6	2G	43	LEU	3.1
33	2b	121	LEU	3.1
50	2s	30	LEU	3.1
47	1p	48	TRP	3.1
51	1t	75	ASN	3.1
7	1H	3	ARG	3.1
33	2b	175	ARG	3.1
51	2t	8	ARG	3.1
5	2F	208	GLY	3.1
23	2l	84	GLY	3.1
34	2c	148	GLY	3.1
14	1S	84	GLN	3.0
26	14	69	LYS	3.0
32	2a	995	C	3.1
32	2a	1116	C	3.1
34	2c	57	ILE	3.1
41	1j	6	ILE	3.1
47	1p	43	LYS	3.0
50	2s	70	LYS	3.0
33	1b	237	ALA	3.0
34	2c	180	ALA	3.0
45	2n	59	ALA	3.0
35	1d	181	MET	3.0
32	1a	1033	G	3.0
32	2a	1024	G	3.0
38	1g	153	HIS	3.0
52	2u	23	PRO	3.0
40	2i	79	LEU	3.0
44	2m	70	LEU	3.0
34	2c	190	ARG	3.0
41	2j	76	ASN	3.0
34	2c	18	TRP	3.0
6	2G	20	ILE	3.0
7	2H	37	VAL	3.0
6	2G	41	GLN	3.0
45	2n	42	ILE	3.0
1	1A	1126	C	3.0
1	1A	2160	C	3.0
12	2Q	136	ALA	3.0
32	1a	1008	C	3.0
32	2a	1203	C	3.0

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Mol	Chain	Res	Type	RSRZ
44	1m	123	ALA	3.0
54	2w	2	C	3.0
22	20	26	TYR	3.0
36	2e	10	MET	3.0
47	1p	1	MET	3.0
1	1A	218	A	3.0
1	1A	1130	A	3.0
1	1A	1134	A	3.0
21	2Z	167	PRO	3.0
32	1a	162	A	3.0
33	2b	154	LEU	3.0
34	2c	32	LEU	3.0
34	2c	204	LEU	3.0
39	1h	112	LEU	3.0
40	1i	102	LEU	3.0
12	2Q	104	PHE	3.0
36	2e	5	ASP	3.0
40	2i	59	PHE	3.0
1	1A	2181	G	3.0
6	1G	51	ARG	3.0
32	1a	102	G	3.0
32	2a	1064	G	3.0
40	2i	42	ARG	3.0
52	1u	24	ARG	3.0
41	2j	19	SER	3.0
14	2S	61	ASN	3.0
6	2G	24	GLY	3.0
34	2c	194	GLY	3.0
33	2b	93	VAL	3.0
41	2j	34	VAL	3.0
42	2k	114	VAL	3.0
41	2j	15	THR	3.0
10	1O	108	GLU	3.0
40	2i	122	ALA	3.0
42	2k	19	ALA	3.0
1	1A	2165	C	3.0
1	2A	884	C	3.0
32	1a	1006	C	3.0
32	2a	1114	C	3.0
32	2a	1115	C	3.0
6	2G	2	PRO	3.0
6	2G	87	PRO	3.0

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Mol	Chain	Res	Type	RSRZ
17	2V	50	PRO	3.0
50	2s	16	LEU	3.0
1	2A	1847	A	3.0
36	2e	107	ARG	3.0
53	2v	15	A	3.0
34	2c	10	PHE	3.0
35	1d	110	PHE	3.0
1	1A	2805	G	3.0
1	2A	2166	G	3.0
34	2c	145	GLY	3.0
44	2m	119	GLY	3.0
26	24	47	GLN	3.0
33	1b	200	ILE	3.0
33	2b	172	ILE	3.0
34	2c	130	VAL	3.0
36	2e	131	ILE	3.0
42	1k	14	VAL	3.0
50	1s	9	VAL	3.0
21	2Z	138	GLU	3.0
35	1d	150	GLU	3.0
40	2i	12	GLU	3.0
41	2j	86	MET	3.0
3	2D	2	ALA	3.0
12	2Q	28	ALA	3.0
21	2Z	99	TYR	3.0
8	2I	38	LEU	3.0
14	2S	32	LEU	3.0
33	2b	158	LEU	3.0
39	2h	127	LEU	3.0
45	2n	41	ARG	3.0
32	2a	948	C	3.0
33	1b	106	LYS	3.0
47	1p	68	ASP	3.0
32	2a	1357	A	3.0
43	2l	50	SER	3.0
35	1d	180	GLY	3.0
6	2G	140	ILE	2.9
21	2Z	141	VAL	2.9
33	2b	7	VAL	2.9
33	2b	211	ILE	2.9
34	2c	70	VAL	2.9
36	2e	67	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
41	1j	98	ILE	2.9
52	2u	13	ILE	2.9
52	2u	17	THR	2.9
47	1p	16	HIS	2.9
6	2G	32	PRO	2.9
46	2o	19	PRO	2.9
34	1c	201	TYR	2.9
44	2m	34	LEU	2.9
32	1a	1354	C	2.9
32	2a	1037	C	2.9
32	2a	1262	C	2.9
42	2k	125	PHE	2.9
47	1p	80	PHE	2.9
47	2p	9	PHE	2.9
32	2a	1196	U	2.9
1	1A	2139	A	2.9
1	2A	2173	A	2.9
21	2Z	166	SER	2.9
32	2a	974	A	2.9
50	2s	4	SER	2.9
41	1j	78	ASN	2.9
54	1y	35	A	2.9
34	1c	25	GLY	2.9
34	1c	185	GLY	2.9
33	2b	32	ILE	2.9
6	2G	92	VAL	2.9
11	1P	119	GLU	2.9
33	2b	141	GLU	2.9
34	1c	14	ILE	2.9
35	1d	170	VAL	2.9
44	2m	7	VAL	2.9
40	2i	64	THR	2.9
44	2m	103	THR	2.9
21	2Z	164	ALA	2.9
36	1e	95	ALA	2.9
40	1i	10	ARG	2.9
40	2i	84	ALA	2.9
42	2k	89	ALA	2.9
45	2n	10	ALA	2.9
49	1r	24	ALA	2.9
1	1A	927	G	2.9
1	1A	930	G	2.9

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Mol	Chain	Res	Type	RSRZ
32	1a	346	G	2.9
32	2a	1215	G	2.9
32	2a	1356	G	2.9
6	1G	75	LYS	2.9
33	1b	221	LEU	2.9
46	1o	66	LEU	2.9
33	2b	70	PHE	2.9
34	2c	186	PHE	2.9
11	2P	118	GLY	2.9
12	2Q	23	GLY	2.9
18	2W	112	GLY	2.9
26	24	66	SER	2.9
32	2a	1277	C	2.9
38	2g	77	SER	2.9
38	2g	86	GLN	2.9
51	1t	70	SER	2.9
1	2A	2117	A	2.9
23	21	83	GLU	2.9
30	18	65	GLU	2.9
41	1j	74	ILE	2.9
54	2y	35	A	2.9
7	2H	24	VAL	2.9
8	2I	92	VAL	2.9
14	2S	28	VAL	2.9
21	2Z	90	VAL	2.9
34	2c	6	HIS	2.9
50	2s	45	VAL	2.9
26	14	55	ARG	2.9
26	24	29	PRO	2.9
35	2d	37	PRO	2.9
41	2j	18	ALA	2.9
41	2j	77	PRO	2.9
1	1A	2187	G	2.9
1	2A	2156	G	2.9
1	2A	2793	G	2.9
32	2a	1002	G	2.9
32	2a	1221	G	2.9
12	2Q	65	PHE	2.9
33	1b	70	PHE	2.9
33	2b	17	PHE	2.9
41	1j	47	PHE	2.9
25	23	60	GLU	2.9

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Mol	Chain	Res	Type	RSRZ
26	14	57	GLU	2.9
33	1b	126	GLU	2.9
15	2T	52	ILE	2.9
32	2a	1128	C	2.9
36	1e	13	ILE	2.9
7	2H	6	ARG	2.9
14	1S	3	ARG	2.9
21	2Z	96	VAL	2.9
34	2c	66	VAL	2.9
34	2c	75	VAL	2.9
44	2m	94	ARG	2.9
50	2s	83	HIS	2.9
32	1a	152	A	2.9
32	1a	1503	A	2.9
7	2H	145	ALA	2.9
33	2b	225	ALA	2.9
36	2e	54	ALA	2.9
42	2k	23	ALA	2.9
34	2c	87	LEU	2.9
36	2e	71	LEU	2.9
36	2e	123	LEU	2.9
45	2n	47	LEU	2.9
48	2q	84	LEU	2.9
1	2A	545	G	2.9
32	2a	1001(A)	G	2.9
32	2a	1117	G	2.9
34	1c	48	TYR	2.9
54	2w	15	G	2.9
55	1x	70	G	2.9
21	1Z	160	GLY	2.9
35	2d	23	GLY	2.9
36	2e	114	GLY	2.9
21	2Z	16	SER	2.8
6	1G	88	ILE	2.8
6	2G	118	ARG	2.8
8	2I	88	ILE	2.8
36	2e	78	HIS	2.8
38	2g	27	ILE	2.8
1	1A	1072	U	2.8
1	2A	1026	U	2.8
7	2H	35	VAL	2.8
46	2o	27	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
32	2a	866	C	2.8
1	1A	302	A	2.8
1	2A	2310	A	2.8
33	2b	54	THR	2.8
34	1c	15	THR	2.8
45	2n	24	CYS	2.8
33	2b	171	ALA	2.8
44	2m	76	ALA	2.8
11	2P	105	LEU	2.8
21	2Z	102	LEU	2.8
33	2b	221	LEU	2.8
22	20	71	ASP	2.8
33	2b	97	TRP	2.8
51	1t	18	GLN	2.8
36	2e	6	PHE	2.8
45	2n	8	GLU	2.8
45	2n	37	PHE	2.8
38	2g	151	TYR	2.8
21	2Z	143	GLY	2.8
36	2e	99	GLY	2.8
38	1g	32	ARG	2.8
39	2h	64	LYS	2.8
52	2u	2	GLY	2.8
1	1A	1101	G	2.8
31	29	20	HIS	2.8
32	2a	1031	G	2.8
32	2a	1190	G	2.8
32	2a	1202	G	2.8
32	2a	1255	G	2.8
33	2b	94	ASN	2.8
34	2c	3	ASN	2.8
1	2A	2132	U	2.8
21	2Z	126	VAL	2.8
35	1d	105	VAL	2.8
41	1j	77	PRO	2.8
1	1A	943	C	2.8
8	2I	146	ALA	2.8
32	2a	1129	C	2.8
35	1d	111	ALA	2.8
6	2G	133	LEU	2.8
32	1a	1030(D)	A	2.8
32	2a	949	A	2.8

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Mol	Chain	Res	Type	RSRZ
32	2a	1151	A	2.8
41	1j	8	LEU	2.8
50	2s	5	LEU	2.8
21	2Z	98	MET	2.8
21	2Z	87	ASP	2.8
21	2Z	78	LYS	2.8
26	24	42	PHE	2.8
34	2c	4	LYS	2.8
34	2c	199	LYS	2.8
41	2j	9	ARG	2.8
51	1t	74	LYS	2.8
14	1S	22	GLY	2.8
33	1b	227	GLY	2.8
40	1i	4	TYR	2.8
50	2s	8	GLY	2.8
50	2s	72	GLY	2.8
39	2h	35	ILE	2.8
36	2e	90	VAL	2.8
39	2h	93	VAL	2.8
1	2A	1171	G	2.8
32	1a	1031	G	2.8
32	2a	1156	G	2.8
45	2n	54	PRO	2.8
54	2w	18	G	2.8
1	1A	1129	U	2.8
11	1P	106	LEU	2.8
33	2b	138	LEU	2.8
49	2r	40	LEU	2.8
50	1s	5	LEU	2.8
32	1a	1119	C	2.8
32	2a	990	C	2.8
1	1A	1119	A	2.8
1	2A	2126	A	2.8
9	2N	118	LYS	2.8
36	1e	81	GLU	2.8
38	2g	32	ARG	2.8
40	2i	70	LYS	2.8
44	1m	27	LYS	2.8
45	1n	57	ARG	2.8
51	2t	96	GLY	2.8
6	1G	77	ILE	2.8
47	1p	19	ILE	2.8

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Mol	Chain	Res	Type	RSRZ
48	1q	95	TYR	2.8
7	1H	113	VAL	2.8
12	2Q	106	VAL	2.8
35	2d	29	PRO	2.8
36	2e	100	VAL	2.8
39	2h	53	VAL	2.8
39	2h	137	VAL	2.8
47	1p	2	VAL	2.8
47	2p	20	VAL	2.8
48	2q	56	VAL	2.8
26	24	44	THR	2.8
1	2A	2150	U	2.8
6	2G	61	ALA	2.8
32	2a	950	U	2.8
33	2b	142	LEU	2.8
34	1c	178	LEU	2.8
34	2c	160	ALA	2.8
34	2c	192	THR	2.8
35	1d	162	LEU	2.8
40	1i	19	LEU	2.8
40	2i	40	LEU	2.8
40	2i	43	ALA	2.8
1	2A	2154	G	2.8
54	1y	19	G	2.8
34	2c	147	LYS	2.8
35	2d	47	ARG	2.8
41	2j	5	ARG	2.8
41	2j	70	ARG	2.8
1	2A	2169	A	2.8
32	2a	1213	A	2.8
32	2a	1280	A	2.8
53	1v	13	A	2.8
54	2w	72	C	2.8
26	14	51	ASP	2.8
21	2Z	106	GLY	2.7
22	20	45	PHE	2.8
26	24	17	GLY	2.7
36	2e	84	PHE	2.8
44	1m	26	GLY	2.7
46	2o	15	PHE	2.8
36	1e	118	ILE	2.7
34	1c	18	TRP	2.7

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Mol	Chain	Res	Type	RSRZ
21	2Z	15	PRO	2.7
38	1g	154	TYR	2.7
48	2q	99	SER	2.7
50	2s	38	SER	2.7
50	2s	42	PRO	2.7
6	2G	109	VAL	2.7
7	1H	45	VAL	2.7
7	2H	79	VAL	2.7
14	2S	49	VAL	2.7
14	2S	65	VAL	2.7
21	2Z	128	VAL	2.7
42	2k	14	VAL	2.7
6	2G	62	LEU	2.7
7	2H	7	LEU	2.7
11	1P	100	LEU	2.7
26	24	9	LEU	2.7
36	2e	21	ALA	2.7
40	1i	55	ALA	2.7
40	2i	119	ALA	2.7
47	1p	69	THR	2.7
50	1s	24	ALA	2.7
32	2a	1040	U	2.7
32	2a	1532	U	2.7
50	2s	18	LYS	2.7
6	2G	48	GLU	2.7
41	1j	46	ARG	2.7
1	1A	2134	G	2.7
1	1A	2816	G	2.7
1	1A	945	A	2.7
1	1A	1122	C	2.7
1	1A	2180	A	2.7
1	1A	2196	C	2.7
1	2A	2137	C	2.7
1	2A	2146	C	2.7
1	2A	2297	C	2.7
2	2B	88	C	2.7
26	24	40	HIS	2.7
32	2a	970	C	2.7
32	2a	1004	A	2.7
32	2a	1016	A	2.7
34	2c	62	ASP	2.7
50	1s	14	HIS	2.7

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Mol	Chain	Res	Type	RSRZ
54	1y	48	C	2.7
54	2w	4	C	2.7
34	1c	128	PHE	2.7
41	2j	93	GLY	2.7
48	1q	71	PHE	2.7
6	2G	52	ILE	2.7
35	1d	154	ASN	2.7
38	2g	37	ASN	2.7
41	2j	53	PRO	2.7
21	2Z	8	TYR	2.7
29	17	46	VAL	2.7
38	2g	154	TYR	2.7
42	1k	75	TYR	2.7
47	1p	38	TYR	2.7
33	1b	158	LEU	2.7
34	1c	32	LEU	2.7
41	1j	71	LEU	2.7
6	2G	163	ALA	2.7
33	2b	132	LYS	2.7
45	2n	17	LYS	2.7
45	2n	50	LYS	2.7
14	1S	13	ARG	2.7
40	2i	93	ARG	2.7
40	2i	128	ARG	2.7
41	2j	66	ARG	2.7
21	2Z	84	GLU	2.7
1	1A	2194	U	2.7
32	2a	952	U	2.7
32	2a	992	U	2.7
41	2j	84	GLN	2.7
54	1y	47	U	2.7
18	2W	111	HIS	2.7
21	2Z	154	ASP	2.7
1	2A	2115	G	2.7
12	2Q	33	GLY	2.7
32	1a	306	G	2.7
32	2a	1061	G	2.7
45	2n	51	GLY	2.7
54	2y	5	G	2.7
32	1a	101	A	2.7
32	1a	150	C	2.7
32	2a	1029	C	2.7

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Mol	Chain	Res	Type	RSRZ
32	2a	1054	C	2.7
32	2a	1109	C	2.7
32	2a	1112	C	2.7
33	1b	163	PHE	2.7
33	2b	105	PHE	2.7
33	2b	58	ILE	2.7
33	2b	223	ILE	2.7
54	1w	2	C	2.7
55	1x	69	C	2.7
21	2Z	130	PRO	2.7
42	2k	117	ASN	2.7
11	1P	83	VAL	2.7
33	1b	136	VAL	2.7
43	1l	18	VAL	2.7
26	24	25	TYR	2.7
33	1b	187	LEU	2.7
33	2b	44	LEU	2.7
36	2e	60	TYR	2.7
38	2g	156	TRP	2.7
40	2i	114	TYR	2.7
47	2p	6	LEU	2.7
49	1r	79	LEU	2.7
8	2I	53	ALA	2.7
34	1c	53	ALA	2.7
35	2d	35	ARG	2.7
36	2e	135	THR	2.7
14	2S	68	GLN	2.7
1	2A	271(L)	U	2.7
1	2A	2113	U	2.7
32	2a	1148	U	2.7
54	2y	33	U	2.7
4	2E	10	GLY	2.7
6	2G	101	ILE	2.7
35	1d	189	PRO	2.7
41	2j	6	ILE	2.7
51	1t	100	ILE	2.7
1	2A	881	G	2.7
2	2B	24	G	2.7
32	1a	183	G	2.7
32	2a	630	G	2.7
1	1A	34	C	2.7
32	2a	965	A	2.7

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Mol	Chain	Res	Type	RSRZ
32	2a	1001	A	2.7
32	2a	1108	G	2.7
32	2a	1171	G	2.7
32	2a	1181	G	2.7
3	1D	38	LYS	2.7
32	2a	1118	C	2.7
32	2a	1217	C	2.7
32	2a	1250	A	2.7
54	1w	69	G	2.7
54	1w	71	G	2.7
54	2w	19	G	2.7
34	2c	150	LYS	2.7
39	2h	32	LYS	2.7
7	2H	49	VAL	2.7
26	14	68	ARG	2.7
33	1b	10	LEU	2.7
33	1b	11	LEU	2.7
33	2b	215	LEU	2.7
35	1d	88	VAL	2.7
36	2e	142	LEU	2.7
40	1i	41	VAL	2.7
41	1j	65	LEU	2.7
43	1l	40	VAL	2.7
43	2l	39	VAL	2.7
47	2p	74	LEU	2.7
50	2s	19	VAL	2.7
51	1t	8	ARG	2.7
6	2G	151	ALA	2.7
8	2I	86	THR	2.7
12	2Q	139	GLU	2.7
33	1b	190	THR	2.7
33	2b	29	ALA	2.7
34	2c	19	GLU	2.7
35	2d	164	ALA	2.7
35	2d	192	GLU	2.7
50	1s	48	THR	2.7
21	1Z	151	HIS	2.7
32	2a	1078	U	2.7
54	1w	20	U	2.7
33	2b	60	ASP	2.6
33	2b	66	GLY	2.6
7	2H	128	PRO	2.6

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Mol	Chain	Res	Type	RSRZ
33	2b	80	ILE	2.6
39	2h	67	PRO	2.6
40	2i	95	LYS	2.6
43	1l	7	ILE	2.6
47	1p	4	ILE	2.6
50	2s	28	LYS	2.6
51	2t	98	PRO	2.6
6	2G	115	ARG	2.6
7	2H	41	MET	2.6
35	2d	122	ARG	2.6
6	2G	34	LEU	2.6
8	1I	140	LEU	2.6
8	2I	144	VAL	2.6
11	2P	106	LEU	2.6
32	2a	1130	A	2.6
33	2b	229	VAL	2.6
35	1d	135	LEU	2.6
36	2e	51	VAL	2.6
44	2m	74	VAL	2.6
48	2q	23	VAL	2.6
48	2q	76	LEU	2.6
1	1A	2176	G	2.6
32	1a	1029	C	2.6
32	2a	1030(C)	G	2.6
32	2a	1214	C	2.6
32	2a	1223	C	2.6
50	1s	67	VAL	2.6
54	2w	13	C	2.6
6	2G	110	ALA	2.6
14	2S	7	TYR	2.6
21	1Z	69	THR	2.6
21	2Z	152	ALA	2.6
29	17	45	ALA	2.6
34	2c	163	ALA	2.6
35	2d	45	GLN	2.6
38	2g	83	ALA	2.6
39	1h	7	ALA	2.6
22	20	3	HIS	2.6
1	1A	2154	U	2.6
21	2Z	140	ASP	2.6
35	1d	87	GLY	2.6
39	2h	4	ASP	2.6

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Mol	Chain	Res	Type	RSRZ
40	2i	32	ASP	2.6
54	2w	66	U	2.6
33	1b	27	LYS	2.6
5	2F	14	PRO	2.6
6	2G	141	PHE	2.6
12	2Q	58	PHE	2.6
39	2h	134	ILE	2.6
41	2j	91	PRO	2.6
44	1m	4	ILE	2.6
38	1g	5	ARG	2.6
38	1g	10	ARG	2.6
6	2G	175	LEU	2.6
14	2S	26	LEU	2.6
19	1X	92	LEU	2.6
35	2d	21	LEU	2.6
46	1o	57	LEU	2.6
33	1b	7	VAL	2.6
35	2d	105	VAL	2.6
38	2g	9	VAL	2.6
50	1s	11	VAL	2.6
2	2B	120	A	2.6
32	2a	969	A	2.6
32	2a	1014	A	2.6
32	2a	1261	A	2.6
1	1A	944	C	2.6
32	1a	1533	C	2.6
32	2a	1189	C	2.6
32	2a	1321	C	2.6
32	2a	1322	C	2.6
36	1e	72	GLN	2.6
36	1e	94	ALA	2.6
36	2e	95	ALA	2.6
38	2g	108	ALA	2.6
44	2m	75	ALA	2.6
1	1A	2155	G	2.6
1	2A	2125	G	2.6
2	2B	119	G	2.6
32	1a	1032	G	2.6
32	2a	1088	G	2.6
32	2a	1131	G	2.6
54	1y	15	G	2.6
52	1u	14	TRP	2.6

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Mol	Chain	Res	Type	RSRZ
40	2i	112	LYS	2.6
45	2n	4	LYS	2.6
6	2G	49	ASP	2.6
40	1i	75	ASP	2.6
40	2i	69	GLY	2.6
40	2i	75	ASP	2.6
21	2Z	81	ARG	2.6
32	2a	1205	U	2.6
32	2a	1358	U	2.6
33	2b	42	ILE	2.6
42	1k	126	ARG	2.6
33	2b	63	MET	2.6
44	2m	82	MET	2.6
51	1t	55	ILE	2.6
5	2F	24	LEU	2.6
6	2G	172	LEU	2.6
33	1b	128	GLU	2.6
34	2c	42	LEU	2.6
40	1i	56	LEU	2.6
49	1r	31	LEU	2.6
41	1j	76	ASN	2.6
50	2s	23	ASN	2.6
50	2s	53	ASN	2.6
1	2A	652(B)	A	2.6
21	1Z	121	HIS	2.6
32	2a	1275	A	2.6
33	2b	103	THR	2.6
33	2b	168	THR	2.6
34	2c	15	THR	2.6
38	1g	7	ALA	2.6
41	2j	67	THR	2.6
44	2m	33	ALA	2.6
1	1A	1555	C	2.6
1	1A	2815	C	2.6
32	1a	345	C	2.6
54	2w	67	C	2.6
29	27	48	LYS	2.6
34	2c	72	LYS	2.6
42	2k	124	LYS	2.6
48	1q	100	LYS	2.6
1	1A	929	G	2.6
1	1A	2147	G	2.6

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Mol	Chain	Res	Type	RSRZ
1	1A	2184	G	2.6
2	2B	118	G	2.6
32	2a	1047	G	2.6
32	2a	1120	G	2.6
54	2y	15	G	2.6
6	2G	83	ARG	2.6
15	1T	125	ARG	2.6
17	2V	65	GLY	2.6
29	17	47	ARG	2.6
33	1b	18	GLY	2.6
34	1c	56	ASP	2.6
36	2e	29	GLY	2.6
46	1o	89	GLY	2.6
50	1s	26	GLY	2.6
34	2c	152	ILE	2.6
32	2a	1125	U	2.6
40	2i	33	PHE	2.6
43	2l	32	PHE	2.6
6	2G	139	LEU	2.6
21	2Z	76	LEU	2.6
21	2Z	91	LEU	2.6
33	1b	61	LEU	2.6
38	1g	16	LEU	2.6
48	2q	98	LEU	2.6
51	1t	24	LEU	2.6
51	2t	10	LEU	2.6
6	1G	5	VAL	2.6
8	2I	142	VAL	2.6
33	1b	95	GLN	2.6
40	1i	86	VAL	2.6
6	1G	76	SER	2.6
6	2G	73	ALA	2.6
18	1W	111	HIS	2.6
21	2Z	129	SER	2.6
34	1c	60	ALA	2.6
34	2c	20	SER	2.6
36	2e	138	ALA	2.6
44	2m	18	ALA	2.6
50	1s	39	THR	2.6
52	1u	17	THR	2.6
21	2Z	156	LYS	2.6
33	1b	132	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
45	2n	9	LYS	2.6
1	2A	887	A	2.6
2	2B	25	A	2.6
21	2Z	38	TYR	2.6
1	2A	888	C	2.5
15	1T	111	ARG	2.5
41	2j	46	ARG	2.5
41	2j	51	ARG	2.5
6	2G	156	ASP	2.5
7	2H	82	GLY	2.5
33	2b	203	GLY	2.5
34	2c	17	ASP	2.5
47	1p	41	PRO	2.5
1	1A	2228	G	2.5
8	2I	109	ILE	2.5
32	2a	987	G	2.5
34	1c	5	ILE	2.5
50	2s	49	ILE	2.5
54	1y	24	G	2.5
8	2I	117	GLU	2.5
21	1Z	169	GLU	2.5
21	2Z	88	PHE	2.5
33	2b	12	GLU	2.5
35	1d	179	GLU	2.5
38	1g	26	PHE	2.5
1	1A	1220	U	2.5
1	1A	2166	U	2.5
6	1G	53	LEU	2.5
6	1G	152	LEU	2.5
9	1N	138	LEU	2.5
21	2Z	155	LEU	2.5
36	2e	112	LEU	2.5
44	2m	48	LEU	2.5
51	1t	10	LEU	2.5
6	2G	149	VAL	2.5
8	2I	54	GLN	2.5
33	2b	37	ASN	2.5
39	2h	51	VAL	2.5
49	2r	22	VAL	2.5
12	2Q	53	ALA	2.5
21	1Z	152	ALA	2.5
6	2G	93	THR	2.5

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Mol	Chain	Res	Type	RSRZ
21	1Z	166	SER	2.5
34	2c	61	ALA	2.5
35	1d	71	SER	2.5
51	2t	97	ALA	2.5
21	2Z	131	ARG	2.5
26	24	58	ARG	2.5
35	2d	115	ARG	2.5
39	2h	104	ARG	2.5
47	1p	5	ARG	2.5
6	1G	25	TYR	2.5
7	2H	157	TYR	2.5
21	2Z	9	TYR	2.5
6	2G	99	MET	2.5
32	1a	161	A	2.5
32	1a	1286	A	2.5
33	1b	33	TYR	2.5
34	2c	193	TYR	2.5
39	2h	58	TYR	2.5
1	1A	1098	C	2.5
1	2A	2139	C	2.5
1	2A	2174	C	2.5
1	2A	2313	C	2.5
2	2B	27	C	2.5
21	2Z	64	GLY	2.5
6	1G	29	TRP	2.5
12	2Q	25	ASP	2.5
32	2a	1027	C	2.5
32	2a	1113	C	2.5
32	2a	1254	C	2.5
35	1d	16	GLY	2.5
38	2g	133	GLY	2.5
35	2d	158	ILE	2.5
39	2h	138	TRP	2.5
54	1w	13	C	2.5
20	2Y	44	ILE	2.5
24	22	66	GLU	2.5
1	1A	11	G	2.5
7	1H	7	LEU	2.5
14	2S	110	LEU	2.5
21	2Z	70	LEU	2.5
33	1b	28	PHE	2.5
32	2a	951	G	2.5

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Mol	Chain	Res	Type	RSRZ
32	2a	1032	G	2.5
32	2a	1276	G	2.5
33	1b	213	LEU	2.5
50	1s	15	LEU	2.5
54	1w	6	G	2.5
1	1A	2189	U	2.5
14	2S	38	GLN	2.5
32	2a	982	U	2.5
32	2a	1121	U	2.5
21	2Z	54	HIS	2.5
33	2b	147	LYS	2.5
34	1c	151	VAL	2.5
38	1g	9	VAL	2.5
48	2q	10	VAL	2.5
12	2Q	49	ALA	2.5
44	2m	28	ALA	2.5
7	2H	60	ARG	2.5
33	2b	217	ARG	2.5
35	2d	168	ARG	2.5
35	2d	165	MET	2.5
39	2h	89	PRO	2.5
1	1A	925	A	2.5
1	2A	2114	A	2.5
22	20	6	GLY	2.5
26	24	64	GLY	2.5
32	1a	149	A	2.5
32	2a	1152	A	2.5
38	1g	34	GLY	2.5
40	1i	67	GLY	2.5
46	2o	20	GLY	2.5
6	1G	137	GLU	2.5
14	2S	40	ILE	2.5
21	2Z	13	GLU	2.5
22	20	68	GLU	2.5
33	1b	12	GLU	2.5
34	1c	124	ILE	2.5
6	2G	100	TRP	2.5
32	2a	985	C	2.5
33	1b	24	TRP	2.5
33	2b	24	TRP	2.5
21	2Z	24	LEU	2.5
35	1d	78	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
38	1g	12	LEU	2.5
38	1g	43	PHE	2.5
41	1j	90	LEU	2.5
51	2t	99	LEU	2.5
39	1h	70	GLN	2.5
40	2i	116	LYS	2.5
40	2i	127	LYS	2.5
44	2m	101	GLN	2.5
1	1A	12	U	2.5
1	2A	2118	U	2.5
14	1S	16	ASN	2.5
32	2a	1364	U	2.5
34	1c	55	VAL	2.5
35	2d	88	VAL	2.5
43	2l	49	ASN	2.5
1	1A	2153	G	2.5
1	2A	2153	G	2.5
1	2A	2319	G	2.5
32	2a	963	G	2.5
32	2a	1089	G	2.5
32	2a	1094	G	2.5
20	1Y	2	ARG	2.5
22	20	2	ALA	2.5
30	28	46	ARG	2.5
34	2c	92	ALA	2.5
36	2e	126	ARG	2.5
38	1g	83	ALA	2.5
40	2i	111	ARG	2.5
41	1j	66	ARG	2.5
47	1p	25	ARG	2.5
49	2r	53	ARG	2.5
7	2H	106	THR	2.5
48	2q	7	THR	2.5
49	2r	47	THR	2.5
50	2s	77	THR	2.5
36	2e	66	MET	2.5
34	2c	174	PRO	2.5
40	2i	123	PRO	2.5
4	1E	73	GLU	2.5
12	2Q	19	GLY	2.5
28	16	4	GLU	2.5
36	2e	7	GLU	2.5

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Mol	Chain	Res	Type	RSRZ
40	1i	39	GLY	2.5
40	2i	68	GLY	2.5
41	2j	31	GLY	2.5
33	1b	39	ILE	2.5
35	1d	158	ILE	2.5
1	1A	1149	A	2.5
6	2G	120	LEU	2.5
7	2H	71	LEU	2.5
7	2H	171	LEU	2.5
34	2c	196	LEU	2.5
45	2n	11	LYS	2.5
49	2r	51	LEU	2.5
51	1t	68	LYS	2.5
10	2O	99	PHE	2.5
20	2Y	89	PHE	2.5
24	22	70	GLN	2.5
1	1A	1908	C	2.5
32	2a	1282	C	2.5
32	2a	1362	C	2.5
39	2h	82	HIS	2.5
54	1y	13	C	2.5
5	2F	6	VAL	2.5
6	2G	27	ASN	2.5
6	2G	37	VAL	2.5
20	2Y	45	VAL	2.5
21	1Z	100	VAL	2.5
26	14	10	VAL	2.5
35	2d	121	VAL	2.5
38	1g	84	ASN	2.5
44	2m	45	VAL	2.5
45	2n	56	VAL	2.5
1	1A	2211	U	2.5
32	1a	182	U	2.5
32	1a	1040	U	2.5
40	1i	66	ARG	2.5
44	2m	114	ARG	2.5
45	2n	26	ARG	2.5
54	1w	66	U	2.5
4	1E	28	ALA	2.5
33	2b	186	ALA	2.5
33	2b	188	ALA	2.5
34	2c	133	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
45	1n	20	ALA	2.5
33	2b	107	THR	2.5
32	2a	947	G	2.5
32	2a	1042	G	2.5
54	1w	44	G	2.5
54	2w	70	G	2.5
39	2h	101	PRO	2.4
44	2m	41	PRO	2.4
45	2n	27	CYS	2.4
11	1P	117	GLU	2.4
17	1V	43	GLU	2.4
17	1V	101	GLY	2.4
33	1b	38	GLY	2.4
38	1g	132	GLY	2.4
40	1i	8	GLY	2.4
41	1j	83	GLU	2.4
43	2l	63	GLY	2.4
43	2l	72	GLY	2.4
20	1Y	107	ASP	2.4
40	2i	97	LYS	2.4
43	2l	47	LYS	2.4
8	1I	72	LEU	2.4
36	1e	71	LEU	2.4
36	2e	139	LEU	2.4
1	1A	1113	A	2.4
1	1A	2192	A	2.4
32	2a	959	A	2.4
36	1e	6	PHE	2.4
38	2g	26	PHE	2.4
54	2y	14	A	2.4
6	2G	91	ARG	2.4
12	2Q	56	ARG	2.4
14	1S	20	ARG	2.4
29	17	23	ARG	2.4
30	18	46	ARG	2.4
36	2e	27	ARG	2.4
1	2A	2164	C	2.4
6	2G	31	VAL	2.4
20	1Y	7	VAL	2.4
21	1Z	105	VAL	2.4
32	1a	153	C	2.4
32	2a	1039	C	2.4

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Mol	Chain	Res	Type	RSRZ
32	2a	1354	C	2.4
32	2a	1384	C	2.4
33	2b	204	ASN	2.4
34	1c	86	VAL	2.4
36	1e	67	VAL	2.4
1	2A	2144	U	2.4
32	1a	560	U	2.4
33	2b	83	MET	2.4
33	2b	90	MET	2.4
42	1k	74	ALA	2.4
47	1p	64	ALA	2.4
26	24	52	THR	2.4
44	1m	49	THR	2.4
44	1m	109	THR	2.4
45	2n	22	THR	2.4
36	2e	125	SER	2.4
33	2b	159	PRO	2.4
34	2c	73	PRO	2.4
1	1A	926	G	2.4
1	2A	2206	G	2.4
26	24	45	GLY	2.4
32	2a	1050	G	2.4
32	2a	1253	G	2.4
34	2c	135	LYS	2.4
36	1e	29	GLY	2.4
46	2o	89	GLY	2.4
48	2q	80	GLY	2.4
50	2s	7	LYS	2.4
6	2G	97	ASP	2.4
8	1I	71	ILE	2.4
33	1b	214	ILE	2.4
33	2b	41	ILE	2.4
34	1c	134	ILE	2.4
37	1f	55	ASP	2.4
40	1i	105	ASP	2.4
41	2j	17	ASP	2.4
4	1E	195	LEU	2.4
6	1G	43	LEU	2.4
21	2Z	65	GLN	2.4
34	2c	175	LEU	2.4
34	2c	184	TYR	2.4
35	1d	120	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
36	2e	43	LEU	2.4
36	2e	119	LEU	2.4
39	2h	70	GLN	2.4
44	2m	59	TYR	2.4
51	2t	24	LEU	2.4
40	2i	117	HIS	2.4
14	2S	13	ARG	2.4
38	2g	6	ARG	2.4
40	1i	18	PHE	2.4
32	1a	228	A	2.4
6	2G	38	VAL	2.4
8	1I	107	VAL	2.4
9	2N	9	VAL	2.4
14	2S	46	VAL	2.4
21	2Z	34	ASN	2.4
34	2c	207	VAL	2.4
35	2d	154	ASN	2.4
40	2i	26	VAL	2.4
1	2A	2111	C	2.4
14	2S	72	ALA	2.4
32	2a	1028	C	2.4
54	1y	56	C	2.4
26	14	52	THR	2.4
7	2H	56	SER	2.4
33	2b	170	GLU	2.4
34	2c	44	GLU	2.4
39	2h	29	SER	2.4
45	2n	14	PRO	2.4
23	2l	81	LYS	2.4
11	2P	93	GLY	2.4
12	2Q	61	GLY	2.4
14	2S	45	GLY	2.4
14	2S	104	GLY	2.4
21	2Z	160	GLY	2.4
3	2D	71	ASP	2.4
10	2O	81	ASP	2.4
31	29	17	ILE	2.4
34	1c	57	ILE	2.4
36	2e	36	ASP	2.4
50	2s	62	ILE	2.4
1	2A	2751	G	2.4
6	1G	26	GLN	2.4

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Mol	Chain	Res	Type	RSRZ
8	1I	68	LEU	2.4
14	2S	80	LEU	2.4
32	2a	1178	G	2.4
32	2a	1283	G	2.4
34	2c	34	LEU	2.4
35	1d	188	LEU	2.4
39	2h	39	LEU	2.4
54	2w	5	G	2.4
14	2S	95	HIS	2.4
33	2b	113	HIS	2.4
33	2b	140	HIS	2.4
33	1b	236	TYR	2.4
33	2b	33	TYR	2.4
7	2H	43	VAL	2.4
34	1c	99	VAL	2.4
36	2e	105	VAL	2.4
50	2s	51	VAL	2.4
32	2a	10	A	2.4
32	2a	1225	A	2.4
32	2a	1363(A)	A	2.4
44	2m	77	ASN	2.4
54	1y	36	A	2.4
6	2G	171	ALA	2.4
33	1b	34	ALA	2.4
33	1b	225	ALA	2.4
33	2b	88	ALA	2.4
38	1g	156	TRP	2.4
40	2i	52	ALA	2.4
42	1k	89	ALA	2.4
6	2G	64	THR	2.4
33	2b	129	GLU	2.4
37	1f	54	LYS	2.4
40	2i	110	GLU	2.4
47	2p	69	THR	2.4
1	1A	270	C	2.4
1	1A	2133	C	2.4
1	1A	2183	C	2.4
1	2A	2794	C	2.4
2	2B	3	C	2.4
32	1a	1020	U	2.4
32	2a	1159	U	2.4
32	2a	1235	U	2.4

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Mol	Chain	Res	Type	RSRZ
55	1x	68	C	2.4
26	24	4	GLY	2.4
41	1j	93	GLY	2.4
42	2k	102	GLY	2.4
36	2e	101	ILE	2.4
39	1h	86	ILE	2.4
39	2h	38	ILE	2.4
39	2h	86	ILE	2.4
46	2o	12	ILE	2.4
7	2H	88	LEU	2.4
8	2I	17	GLN	2.4
8	2I	20	ASP	2.4
21	2Z	85	HIS	2.4
21	2Z	157	LEU	2.4
28	26	11	LEU	2.4
33	2b	149	LEU	2.4
34	1c	170	GLN	2.4
34	2c	131	ARG	2.4
37	2f	21	LEU	2.4
39	2h	63	LEU	2.4
39	2h	112	LEU	2.4
41	1j	29	ARG	2.4
46	1o	71	GLN	2.4
48	1q	68	ARG	2.4
49	1r	26	LEU	2.4
1	1A	1117	G	2.4
1	1A	2188	G	2.4
1	2A	2165	G	2.4
14	2S	12	PHE	2.4
22	20	57	PHE	2.4
32	1a	230	G	2.4
32	2a	1009	G	2.4
34	2c	203	PHE	2.4
46	1o	18	PHE	2.4
48	2q	32	TYR	2.4
21	2Z	71	VAL	2.4
33	1b	93	VAL	2.4
34	1c	70	VAL	2.4
47	2p	62	VAL	2.4
39	2h	15	ASN	2.4
14	2S	59	LYS	2.4
35	2d	117	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
38	2g	127	ALA	2.4
44	2m	31	LYS	2.4
1	1A	2901	A	2.4
26	24	53	GLU	2.4
32	1a	472	A	2.4
32	1a	609	A	2.4
47	2p	7	ALA	2.4
12	2Q	21	THR	2.3
21	2Z	25	PRO	2.3
34	2c	7	PRO	2.3
35	1d	173	TRP	2.4
35	2d	197	PRO	2.3
36	2e	93	PRO	2.3
40	1i	90	PRO	2.3
14	2S	31	SER	2.3
33	2b	109	SER	2.3
35	2d	208	SER	2.3
1	1A	2124	U	2.3
2	2B	1	U	2.3
54	1y	20	U	2.3
1	2A	2145	C	2.3
2	1B	88	C	2.3
32	2a	1069	C	2.3
32	2a	1161	C	2.3
34	1c	13	GLY	2.3
39	2h	128	GLY	2.3
41	1j	36	GLY	2.3
21	2Z	79	ARG	2.3
6	2G	4	ASP	2.3
6	2G	176	LEU	2.3
14	2S	48	LEU	2.3
20	1Y	90	LEU	2.3
21	2Z	5	LEU	2.3
23	21	82	LEU	2.3
33	1b	42	ILE	2.3
34	2c	119	ARG	2.3
33	2b	195	ASP	2.3
34	1c	42	LEU	2.3
34	2c	111	LEU	2.3
35	1d	204	ILE	2.3
43	1l	41	ARG	2.3
44	2m	29	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
47	1p	75	ARG	2.3
11	2P	91	PHE	2.3
21	2Z	29	TYR	2.3
8	2I	19	VAL	2.3
8	2I	107	VAL	2.3
29	27	46	VAL	2.3
34	1c	64	VAL	2.3
35	1d	166	LYS	2.3
38	2g	105	VAL	2.3
39	2h	61	VAL	2.3
48	1q	23	VAL	2.3
48	1q	87	LYS	2.3
15	1T	38	ASN	2.3
32	1a	226	G	2.3
35	2d	161	ASN	2.3
15	2T	130	ALA	2.3
33	1b	20	GLU	2.3
44	2m	69	GLU	2.3
45	2n	46	GLU	2.3
51	1t	94	ALA	2.3
33	1b	167	PRO	2.3
33	2b	190	THR	2.3
34	2c	67	THR	2.3
39	1h	3	THR	2.3
1	2A	2158	A	2.3
32	2a	1179	A	2.3
5	1F	15	SER	2.3
11	1P	90	ARG	2.3
12	2Q	60	ARG	2.3
16	2U	43	GLY	2.3
33	2b	130	ARG	2.3
34	2c	144	SER	2.3
36	2e	25	ARG	2.3
39	2h	84	ARG	2.3
43	2l	19	ARG	2.3
32	2a	1020	U	2.3
32	2a	1070	U	2.3
6	2G	157	ILE	2.3
11	1P	99	LEU	2.3
33	1b	19	HIS	2.3
33	2b	110	GLN	2.3
34	2c	162	GLN	2.3

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Mol	Chain	Res	Type	RSRZ
36	2e	53	LEU	2.3
39	2h	107	LEU	2.3
39	2h	109	ILE	2.3
41	2j	98	ILE	2.3
42	2k	103	LEU	2.3
1	2A	897	C	2.3
33	1b	60	ASP	2.3
39	2h	9	MET	2.3
24	12	37	PHE	2.3
33	1b	17	PHE	2.3
42	1k	106	LYS	2.3
43	1l	47	LYS	2.3
20	2Y	35	TYR	2.3
21	2Z	56	VAL	2.3
26	14	35	VAL	2.3
35	2d	20	TYR	2.3
36	1e	82	VAL	2.3
37	2f	40	VAL	2.3
39	1h	62	TYR	2.3
43	2l	55	VAL	2.3
47	1p	21	VAL	2.3
6	2G	30	GLU	2.3
7	2H	75	ALA	2.3
8	2I	100	ALA	2.3
33	1b	13	ALA	2.3
33	2b	183	PRO	2.3
41	1j	91	PRO	2.3
41	2j	26	ALA	2.3
47	2p	77	ALA	2.3
1	1A	2143	G	2.3
1	1A	2190	G	2.3
1	2A	2110	G	2.3
1	2A	2168	G	2.3
6	2G	71	THR	2.3
15	1T	129	ARG	2.3
22	20	74	ARG	2.3
32	1a	1009	G	2.3
32	2a	986	A	2.3
32	2a	1105	A	2.3
6	2G	138	GLN	2.3
34	1c	9	GLY	2.3
34	2c	78	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
44	2m	95	GLY	2.3
6	1G	52	ILE	2.3
23	21	85	LEU	2.3
34	1c	204	LEU	2.3
34	2c	14	ILE	2.3
35	1d	5	ILE	2.3
39	2h	10	LEU	2.3
41	2j	16	LEU	2.3
46	2o	87	ILE	2.3
32	1a	203	U	2.3
4	1E	1	MET	2.3
21	2Z	28	MET	2.3
1	1A	940	C	2.3
32	2a	972	C	2.3
20	1Y	60	PHE	2.3
20	2Y	55	TYR	2.3
22	20	66	VAL	2.3
26	24	30	GLU	2.3
26	24	33	VAL	2.3
26	24	35	VAL	2.3
34	1c	66	VAL	2.3
39	2h	136	GLU	2.3
49	2r	46	GLU	2.3
33	1b	31	TYR	2.3
34	2c	23	TYR	2.3
34	2c	29	TYR	2.3
35	1d	20	TYR	2.3
40	1i	125	TYR	2.3
50	1s	51	VAL	2.3
23	21	68	PRO	2.3
33	1b	232	PRO	2.3
33	2b	120	ALA	2.3
34	1c	189	ALA	2.3
34	2c	50	ALA	2.3
37	2f	53	ALA	2.3
39	2h	76	PRO	2.3
40	2i	21	PRO	2.3
51	1t	67	ALA	2.3
14	1S	17	ARG	2.3
34	2c	16	ARG	2.3
35	2d	73	ARG	2.3
36	2e	18	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
45	2n	31	ARG	2.3
30	18	6	THR	2.3
6	2G	129	GLY	2.3
33	2b	18	GLY	2.3
33	2b	19	HIS	2.3
34	2c	107	GLN	2.3
36	2e	35	GLY	2.3
40	2i	6	GLY	2.3
40	2i	72	GLY	2.3
45	1n	51	GLY	2.3
1	1A	928	G	2.3
1	2A	2308	G	2.3
5	1F	13	SER	2.3
6	1G	82	LEU	2.3
7	2H	136	ILE	2.3
32	1a	1010	G	2.3
32	2a	631	G	2.3
32	2a	1355	G	2.3
34	1c	188	LEU	2.3
38	1g	124	LEU	2.3
50	2s	34	TRP	2.3
54	1w	7	A	2.3
11	2P	76	LYS	2.3
21	1Z	154	ASP	2.3
33	2b	189	ASP	2.3
35	2d	22	LYS	2.3
44	1m	121	LYS	2.3
1	1A	274	U	2.3
32	2a	961	U	2.3
1	1A	2150	C	2.3
6	2G	178	PHE	2.3
32	2a	1325	C	2.3
36	1e	45	PHE	2.3
43	1l	16	GLU	2.3
50	2s	17	GLU	2.3
7	2H	44	VAL	2.3
33	1b	71	VAL	2.3
34	2c	116	VAL	2.3
38	1g	61	VAL	2.3
40	1i	17	VAL	2.3
40	2i	53	VAL	2.3
47	1p	79	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
48	2q	5	VAL	2.3
8	2I	132	PRO	2.3
12	2Q	26	TYR	2.3
26	14	63	TYR	2.3
33	2b	96	ARG	2.3
34	2c	11	ARG	2.3
35	1d	59	ARG	2.3
38	1g	4	ARG	2.3
38	2g	14	PRO	2.3
35	1d	195	ALA	2.2
36	1e	132	ALA	2.2
36	2e	132	ALA	2.2
40	1i	88	TYR	2.3
41	2j	60	ARG	2.3
48	2q	92	ARG	2.3
51	1t	80	ARG	2.3
45	1n	5	ALA	2.2
50	2s	50	ALA	2.2
6	1G	93	THR	2.2
34	2c	165	THR	2.2
34	2c	191	THR	2.2
43	1l	67	THR	2.2
47	2p	45	THR	2.2
26	14	17	GLY	2.2
26	14	64	GLY	2.2
38	1g	86	GLN	2.2
3	2D	275	LYS	2.2
6	2G	90	LEU	2.2
14	2S	39	ILE	2.2
17	1V	1	MET	2.2
20	1Y	88	LYS	2.2
21	1Z	102	LEU	2.2
23	21	46	LEU	2.2
26	24	15	ILE	2.2
28	26	36	LEU	2.2
33	2b	233	SER	2.2
34	1c	12	LEU	2.2
38	2g	101	LEU	2.2
39	1h	100	ILE	2.2
39	2h	6	ILE	2.2
44	2m	46	LYS	2.2
50	1s	20	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
52	2u	20	LYS	2.2
1	1A	1132	A	2.2
1	1A	2641	A	2.2
1	2A	899	A	2.2
1	2A	2134	A	2.2
2	2B	58	A	2.2
32	2a	958	A	2.2
32	2a	1005	A	2.2
32	2a	1201	A	2.2
32	2a	1289	A	2.2
40	1i	91	ASP	2.2
1	1A	299	G	2.2
1	2A	1533	G	2.2
32	2a	1062	U	2.2
32	2a	1232	U	2.2
32	2a	1315	U	2.2
33	1b	9	GLU	2.2
21	2Z	44	PHE	2.2
21	2Z	104	PHE	2.2
50	2s	74	PHE	2.2
21	2Z	72	ARG	2.2
1	1A	2159	C	2.2
6	2G	142	PRO	2.2
7	2H	36	PRO	2.2
21	2Z	165	VAL	2.2
24	12	55	ARG	2.2
34	1c	38	ARG	2.2
34	1c	83	ARG	2.2
35	2d	170	VAL	2.2
36	2e	34	VAL	2.2
39	2h	79	VAL	2.2
40	1i	9	ARG	2.2
43	1l	94	PRO	2.2
43	2l	43	VAL	2.2
47	1p	62	VAL	2.2
47	1p	81	ARG	2.2
32	1a	63	C	2.2
32	1a	103	C	2.2
32	2a	984	C	2.2
32	2a	1060	C	2.2
48	2q	21	VAL	2.2
48	2q	77	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
50	2s	60	VAL	2.2
55	1x	67	C	2.2
7	2H	73	ALA	2.2
8	1I	63	ALA	2.2
14	1S	72	ALA	2.2
34	2c	24	ALA	2.2
36	2e	30	ALA	2.2
40	2i	94	ALA	2.2
41	1j	27	ALA	2.2
21	2Z	3	TYR	2.2
26	14	43	TYR	2.2
36	2e	75	THR	2.2
8	1I	106	GLY	2.2
14	2S	33	LYS	2.2
15	2T	69	GLY	2.2
44	2m	24	GLY	2.2
50	2s	32	LYS	2.2
5	2F	33	LEU	2.2
6	2G	7	LEU	2.2
38	2g	38	LEU	2.2
39	2h	133	LEU	2.2
47	1p	74	LEU	2.2
26	24	5	ILE	2.2
34	1c	77	ILE	2.2
6	1G	49	ASP	2.2
7	1H	57	ASP	2.2
37	1f	83	ASP	2.2
47	2p	59	TRP	2.2
11	2P	92	GLU	2.2
32	1a	140	A	2.2
32	2a	996	A	2.2
33	2b	231	GLU	2.2
34	1c	206	GLU	2.2
41	2j	64	GLU	2.2
53	1v	14	A	2.2
1	1A	2172	U	2.2
32	1a	723	U	2.2
32	2a	957	U	2.2
1	1A	1584	G	2.2
1	2A	271(M)	G	2.2
1	2A	2131	G	2.2
7	2H	3	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
12	1Q	60	ARG	2.2
21	2Z	20	ARG	2.2
23	21	61	ARG	2.2
26	24	13	ARG	2.2
32	2a	1021	G	2.2
32	2a	1023	G	2.2
32	2a	1084	G	2.2
32	2a	1177	G	2.2
32	2a	1530	G	2.2
33	2b	36	ARG	2.2
54	2w	34	G	2.2
21	1Z	104	PHE	2.2
4	1E	47	VAL	2.2
7	2H	26	VAL	2.2
7	2H	76	VAL	2.2
20	2Y	53	PRO	2.2
26	24	41	PRO	2.2
28	26	52	VAL	2.2
34	2c	106	VAL	2.2
41	2j	39	PRO	2.2
43	2l	94	PRO	2.2
1	2A	2789	C	2.2
6	1G	46	ALA	2.2
26	24	12	ALA	2.2
32	1a	174	C	2.2
32	1a	1039	C	2.2
32	2a	1192	C	2.2
32	2a	1244	C	2.2
33	2b	62	ALA	2.2
33	2b	77	ALA	2.2
35	1d	48	ALA	2.2
38	2g	39	ALA	2.2
38	2g	152	ALA	2.2
45	2n	48	ALA	2.2
54	2y	13	C	2.2
6	1G	12	TYR	2.2
14	2S	76	LYS	2.2
7	2H	129	THR	2.2
26	14	32	TYR	2.2
26	24	67	TYR	2.2
33	1b	22	LYS	2.2
33	2b	75	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
33	2b	133	LYS	2.2
42	2k	75	TYR	2.2
43	1l	91	LYS	2.2
43	2l	69	TYR	2.2
44	2m	43	THR	2.2
46	2o	9	GLN	2.2
47	2p	16	HIS	2.2
33	2b	48	MET	2.2
7	2H	67	LEU	2.2
7	2H	174	GLY	2.2
33	2b	213	LEU	2.2
34	1c	47	LEU	2.2
34	2c	43	LEU	2.2
40	1i	6	GLY	2.2
50	1s	66	MET	2.2
17	2V	71	LEU	2.2
46	2o	85	LEU	2.2
21	2Z	124	ILE	2.2
36	2e	11	ILE	2.2
41	1j	82	ILE	2.2
35	1d	83	SER	2.2
39	1h	4	ASP	2.2
50	1s	12	ASP	2.2
5	2F	161	GLU	2.2
21	2Z	19	ARG	2.2
33	1b	97	TRP	2.2
38	1g	78	ARG	2.2
45	2n	12	ARG	2.2
46	2o	88	ARG	2.2
1	2A	362	U	2.2
1	2A	614(A)	U	2.2
1	2A	2320	A	2.2
2	2B	66	A	2.2
32	2a	1180	A	2.2
5	1F	14	PRO	2.2
7	2H	10	PRO	2.2
21	2Z	159	PRO	2.2
33	2b	194	PRO	2.2
44	2m	113	PRO	2.2
53	2v	22	U	2.2
4	1E	33	VAL	2.2
4	2E	75	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
7	1H	17	VAL	2.2
34	2c	99	VAL	2.2
35	1d	121	VAL	2.2
40	1i	65	VAL	2.2
1	1A	2122	G	2.2
1	1A	2132	G	2.2
32	1a	148	G	2.2
33	2b	156	LYS	2.2
42	1k	23	ALA	2.2
43	2l	123	LYS	2.2
54	2w	65	G	2.2
6	2G	6	ALA	2.2
8	2I	55	ALA	2.2
11	1P	103	ALA	2.2
33	1b	16	HIS	2.2
34	1c	24	ALA	2.2
34	1c	69	HIS	2.2
34	2c	65	ALA	2.2
36	1e	21	ALA	2.2
46	2o	71	GLN	2.2
50	2s	47	HIS	2.2
51	1t	76	ALA	2.2
9	2N	1	MET	2.2
21	2Z	1	MET	2.2
38	1g	56	GLN	2.2
1	1A	1118	C	2.2
1	1A	2130	C	2.2
1	1A	2151	C	2.2
1	1A	2168	C	2.2
1	2A	2138	C	2.2
26	24	27	THR	2.2
6	2G	103	LEU	2.2
7	2H	98	LEU	2.2
12	2Q	24	GLY	2.2
17	2V	42	GLY	2.2
17	2V	91	TYR	2.2
34	2c	51	GLY	2.2
37	2f	63	TYR	2.2
42	2k	50	TYR	2.2
50	2s	33	THR	2.2
22	20	7	LEU	2.2
33	1b	215	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
33	2b	98	LEU	2.2
33	2b	102	LEU	2.2
38	1g	104	LEU	2.2
39	2h	59	LEU	2.2
40	2i	85	LEU	2.2
50	2s	46	GLY	2.2
54	2w	56	C	2.2
6	2G	114	ILE	2.2
10	2O	86	ILE	2.2
33	1b	32	ILE	2.2
33	1b	222	ILE	2.2
33	2b	208	ILE	2.2
39	1h	6	ILE	2.2
39	1h	111	ILE	2.2
42	1k	29	ILE	2.2
52	1u	13	ILE	2.2
3	1D	71	ASP	2.2
6	1G	48	GLU	2.2
19	1X	90	GLU	2.2
20	2Y	107	ASP	2.2
33	1b	195	ASP	2.2
42	2k	36	ASP	2.2
7	1H	59	ARG	2.2
20	2Y	23	ARG	2.2
34	2c	79	ARG	2.2
36	1e	18	ARG	2.2
38	1g	76	ARG	2.2
43	1l	89	ARG	2.2
52	1u	6	ARG	2.2
33	2b	202	PRO	2.2
42	2k	115	PRO	2.2
45	1n	61	TRP	2.2
21	1Z	136	PHE	2.2
1	2A	878	A	2.1
1	2A	2171	A	2.1
32	1a	1196	U	2.2
32	2a	250	A	2.1
32	2a	991	U	2.2
32	2a	997	U	2.2
32	2a	1015	A	2.1
32	2a	1052	U	2.2
32	2a	1056	U	2.2

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Mol	Chain	Res	Type	RSRZ
40	2i	118	LYS	2.2
49	1r	29	PHE	2.2
38	2g	17	VAL	2.1
40	2i	65	VAL	2.1
54	2y	21	A	2.1
8	1I	11	ASN	2.1
11	1P	134	ALA	2.1
14	1S	74	ALA	2.1
15	1T	1	MET	2.1
24	12	13	ALA	2.1
33	1b	40	HIS	2.1
35	2d	123	HIS	2.1
42	1k	104	GLN	2.1
1	1A	162	G	2.1
1	2A	2318	G	2.1
6	2G	135	LEU	2.1
7	1H	67	LEU	2.1
12	2Q	37	LEU	2.1
21	2Z	67	LEU	2.1
27	25	29	THR	2.1
32	1a	625	G	2.1
32	1a	1022	G	2.1
32	2a	654	G	2.1
32	2a	1271	G	2.1
32	2a	1310	G	2.1
34	1c	81	GLY	2.1
37	2f	43	LEU	2.1
42	2k	66	LEU	2.1
44	2m	81	LEU	2.1
46	2o	4	THR	2.1
8	2I	79	ILE	2.1
12	2Q	137	TYR	2.1
33	2b	108	ILE	2.1
34	1c	23	TYR	2.1
42	1k	48	ILE	2.1
44	2m	84	ILE	2.1
46	1o	3	ILE	2.1
47	2p	32	TYR	2.1
48	2q	88	TYR	2.1
52	2u	18	TYR	2.1
1	2A	652(T)	C	2.1
1	2A	2175	C	2.1

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Mol	Chain	Res	Type	RSRZ
32	1a	165	C	2.1
32	1a	840	C	2.1
32	1a	1030	C	2.1
32	2a	1200	C	2.1
6	1G	83	ARG	2.1
6	2G	181	ARG	2.1
10	1O	49	ARG	2.1
21	2Z	2	GLU	2.1
33	2b	166	ASP	2.1
34	1c	20	SER	2.1
52	1u	15	ARG	2.1
21	1Z	123	ASP	2.1
6	2G	75	LYS	2.1
7	1H	175	LYS	2.1
8	2I	80	PRO	2.1
14	1S	44	LYS	2.1
21	2Z	95	PRO	2.1
23	2I	78	LYS	2.1
34	2c	93	LYS	2.1
38	1g	112	PRO	2.1
41	2j	7	LYS	2.1
11	1P	91	PHE	2.1
35	2d	75	PHE	2.1
36	2e	45	PHE	2.1
6	2G	70	VAL	2.1
23	2I	62	VAL	2.1
33	2b	15	VAL	2.1
35	2d	128	VAL	2.1
39	1h	118	VAL	2.1
43	1l	55	VAL	2.1
47	1p	59	TRP	2.1
1	1A	9	U	2.1
1	2A	157	U	2.1
1	2A	2130	U	2.1
6	2G	148	MET	2.1
32	2a	1012	U	2.1
33	2b	16	HIS	2.1
50	2s	58	VAL	2.1
1	1A	1878	A	2.1
2	2B	59	A	2.1
32	1a	134	A	2.1
32	1a	608	A	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	964	A	2.1
32	2a	1245	A	2.1
36	1e	20	GLN	2.1
36	2e	141	GLN	2.1
38	2g	110	GLN	2.1
46	1o	28	GLN	2.1
35	2d	149	ALA	2.1
36	2e	108	ALA	2.1
38	2g	25	ALA	2.1
41	1j	26	ALA	2.1
54	2w	31	A	2.1
21	2Z	75	ASN	2.1
34	2c	181	ASN	2.1
6	2G	3	LEU	2.1
6	2G	42	GLY	2.1
6	2G	119	GLY	2.1
7	1H	71	LEU	2.1
8	1I	75	LEU	2.1
11	1P	112	LEU	2.1
14	2S	78	LEU	2.1
34	1c	94	LEU	2.1
34	2c	81	GLY	2.1
40	1i	7	THR	2.1
40	1i	47	LEU	2.1
43	1l	63	GLY	2.1
43	1l	95	GLY	2.1
49	1r	25	THR	2.1
49	2r	85	LEU	2.1
52	2u	4	GLY	2.1
7	2H	9	ILE	2.1
8	1I	109	ILE	2.1
36	2e	80	ILE	2.1
38	1g	42	ILE	2.1
4	1E	87	GLU	2.1
6	1G	113	ARG	2.1
11	2P	102	ARG	2.1
12	2Q	32	TYR	2.1
1	1A	1120	G	2.1
1	1A	1217	G	2.1
1	1A	2178	G	2.1
1	2A	652(U)	G	2.1
20	2Y	91	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
32	1a	104	G	2.1
32	1a	631	G	2.1
32	1a	1356	G	2.1
32	2a	867	G	2.1
32	2a	1013	G	2.1
32	2a	1154	G	2.1
32	2a	1258	G	2.1
33	1b	231	GLU	2.1
38	1g	151	TYR	2.1
39	2h	65	TYR	2.1
44	1m	21	TYR	2.1
51	1t	89	ARG	2.1
2	2B	5	C	2.1
23	2l	86	SER	2.1
33	2b	220	ASP	2.1
41	1j	30	SER	2.1
51	1t	64	ASP	2.1
54	2y	4	C	2.1
22	20	49	LYS	2.1
48	2q	100	LYS	2.1
21	2Z	83	PRO	2.1
33	2b	125	PRO	2.1
51	1t	98	PRO	2.1
12	2Q	1	MET	2.1
14	2S	34	HIS	2.1
38	2g	89	MET	2.1
48	2q	82	MET	2.1
50	2s	57	HIS	2.1
6	1G	149	VAL	2.1
14	2S	85	VAL	2.1
21	2Z	37	VAL	2.1
22	20	67	VAL	2.1
31	29	25	VAL	2.1
36	2e	115	VAL	2.1
1	1A	2131	U	2.1
1	2A	2167	U	2.1
32	1a	164	U	2.1
38	2g	148	ASN	2.1
54	1y	33	U	2.1
1	1A	1219	A	2.1
5	1F	162	LEU	2.1
8	1I	9	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
8	2I	116	LEU	2.1
20	2Y	83	THR	2.1
33	2b	72	GLY	2.1
34	1c	34	LEU	2.1
35	2d	19	LEU	2.1
36	2e	151	LEU	2.1
41	1j	100	THR	2.1
50	1s	8	GLY	2.1
7	2H	59	ARG	2.1
26	14	62	ARG	2.1
34	2c	83	ARG	2.1
38	2g	111	ARG	2.1
45	2n	45	ARG	2.1
34	2c	143	GLU	2.1
50	1s	17	GLU	2.1
50	2s	64	GLU	2.1
6	2G	126	ASP	2.1
7	2H	62	LYS	2.1
11	1P	107	LYS	2.1
14	1S	83	LYS	2.1
14	2S	41	ASP	2.1
33	1b	160	ASP	2.1
34	2c	45	LYS	2.1
35	1d	18	LYS	2.1
35	1d	86	LYS	2.1
42	1k	51	LYS	2.1
33	1b	210	SER	2.1
42	1k	53	SER	2.1
45	2n	60	SER	2.1
46	1o	24	SER	2.1
1	1A	2331	G	2.1
1	1A	2843	G	2.1
1	2A	880	G	2.1
1	2A	1170	G	2.1
32	1a	1353	G	2.1
32	2a	988	G	2.1
32	2a	1184	G	2.1
54	2y	57	G	2.1
1	1A	161	C	2.1
1	1A	670	C	2.1
1	1A	2158	C	2.1
1	2A	277	C	2.1

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Mol	Chain	Res	Type	RSRZ
32	1a	221	C	2.1
32	1a	1019	C	2.1
32	2a	999	C	2.1
40	1i	98	PRO	2.1
41	1j	39	PRO	2.1
52	1u	23	PRO	2.1
33	2b	40	HIS	2.1
35	2d	181	MET	2.1
51	1t	16	HIS	2.1
20	1Y	89	PHE	2.1
38	2g	11	GLN	2.1
41	2j	33	GLN	2.1
46	1o	62	GLN	2.1
36	2e	55	VAL	2.1
3	1D	2	ALA	2.1
7	2H	102	ALA	2.1
19	1X	91	ALA	2.1
38	1g	117	ALA	2.1
38	2g	150	ALA	2.1
41	1j	20	ALA	2.1
1	1A	386	U	2.1
6	2G	132	ASN	2.1
14	1S	110	LEU	2.1
14	2S	10	ARG	2.1
19	1X	94	GLY	2.1
21	2Z	103	ARG	2.1
26	14	9	LEU	2.1
26	14	61	ARG	2.1
32	2a	960	U	2.1
32	2a	1122	U	2.1
32	2a	1278	U	2.1
35	1d	19	LEU	2.1
36	1e	73	ASN	2.1
34	1c	80	GLY	2.1
34	2c	25	GLY	2.1
36	1e	15	ARG	2.1
39	1h	10	LEU	2.1
42	2k	42	TRP	2.1
33	1b	30	ARG	2.1
38	2g	132	GLY	2.1
39	1h	30	ARG	2.1
50	2s	3	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
53	1v	22	U	2.1
42	1k	90	GLY	2.1
44	2m	89	GLY	2.1
51	1t	69	GLY	2.1
7	2H	58	GLU	2.1
8	2I	93	THR	2.1
20	1Y	91	GLU	2.1
34	2c	95	THR	2.1
34	2c	161	GLU	2.1
36	1e	79	GLU	2.1
40	2i	2	GLU	2.1
42	2k	31	THR	2.1
44	2m	116	THR	2.1
1	1A	1123	A	2.1
32	2a	938	A	2.1
32	2a	1093	A	2.1
33	2b	127	ILE	2.1
37	1f	8	ILE	2.1
38	2g	120	ILE	2.1
43	2l	7	ILE	2.1
41	1j	7	LYS	2.1
21	2Z	148	ASP	2.1
33	2b	205	ASP	2.1
35	1d	4	TYR	2.1
36	1e	133	TYR	2.1
47	1p	40	ASP	2.1
36	1e	125	SER	2.1
41	1j	35	SER	2.1
43	1l	116	SER	2.1
5	2F	30	PRO	2.1
39	1h	57	PRO	2.1
40	1i	21	PRO	2.1
50	2s	66	MET	2.1
21	2Z	32	HIS	2.1
1	1A	273	G	2.0
1	2A	2163	C	2.1
1	2A	2894	G	2.0
32	1a	100	C	2.1
32	1a	181	G	2.0
32	2a	1045	C	2.1
32	2a	1071	C	2.1
32	2a	1155	G	2.0

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Mol	Chain	Res	Type	RSRZ
32	2a	1175	G	2.0
32	2a	1218	C	2.1
39	2h	81	HIS	2.1
40	1i	117	HIS	2.1
32	2a	1365	G	2.0
32	2a	1373	G	2.0
34	2c	136	GLN	2.0
38	1g	106	GLN	2.0
54	1y	34	G	2.0
54	2y	6	G	2.0
4	2E	59	VAL	2.0
21	1Z	165	VAL	2.0
26	14	49	PHE	2.0
46	2o	18	PHE	2.0
7	1H	149	ARG	2.0
11	2P	103	ALA	2.0
33	1b	36	ARG	2.0
34	1c	113	ALA	2.0
34	1c	172	ARG	2.0
35	2d	32	ALA	2.0
35	2d	48	ALA	2.0
38	1g	108	ALA	2.0
42	1k	97	ALA	2.0
45	2n	19	ARG	2.0
46	2o	16	ALA	2.0
49	2r	73	ALA	2.0
52	2u	9	ARG	2.0
6	2G	111	LEU	2.0
14	2S	54	LEU	2.0
14	2S	56	LEU	2.0
33	2b	155	LEU	2.0
34	1c	98	ASN	2.0
35	1d	157	LEU	2.0
35	2d	97	LEU	2.0
38	2g	28	ASN	2.0
49	2r	76	LEU	2.0
6	2G	65	GLY	2.0
10	2O	110	GLY	2.0
14	2S	109	GLY	2.0
16	1U	111	GLU	2.0
34	1c	35	GLU	2.0
40	1i	12	GLU	2.0

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Mol	Chain	Res	Type	RSRZ
48	2q	78	GLU	2.0
1	2A	9	U	2.0
1	2A	2897	U	2.0
30	28	34	TRP	2.0
6	1G	182	LYS	2.0
32	1a	1000	U	2.0
32	2a	1257	U	2.0
42	1k	42	TRP	2.0
50	1s	68	GLY	2.0
47	1p	45	THR	2.0
50	2s	39	THR	2.0
55	2x	47	U	2.0
33	1b	201	ILE	2.0
39	2h	83	ILE	2.0
32	2a	1080	A	2.0
32	2a	1236	A	2.0
32	2a	1285	A	2.0
32	2a	1349	A	2.0
5	1F	23	ASP	2.0
11	1P	87	ASP	2.0
14	2S	42	ASP	2.0
21	2Z	93	ASP	2.0
38	2g	93	PRO	2.0
39	2h	74	PRO	2.0
46	2o	75	PRO	2.0
48	1q	97	SER	2.0
50	2s	35	SER	2.0
40	2i	58	HIS	2.0
42	2k	22	HIS	2.0
44	2m	92	HIS	2.0
40	1i	87	GLN	2.0
40	2i	38	GLN	2.0
40	2i	87	GLN	2.0
48	1q	93	GLN	2.0
1	1A	1125	C	2.0
1	1A	2161	C	2.0
1	2A	2108	C	2.0
6	2G	9	ARG	2.0
15	1T	112	ARG	2.0
25	23	59	VAL	2.0
31	29	16	VAL	2.0
32	1a	1137	C	2.0

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Mol	Chain	Res	Type	RSRZ
32	2a	1007	C	2.0
32	2a	1008	C	2.0
32	2a	1145	C	2.0
32	2a	1153	C	2.0
32	2a	1226	C	2.0
32	2a	1234	C	2.0
32	2a	1389	C	2.0
33	2b	56	ARG	2.0
33	2b	137	ARG	2.0
35	2d	148	VAL	2.0
36	1e	69	VAL	2.0
44	1m	15	VAL	2.0
44	2m	71	ARG	2.0
46	1o	65	ARG	2.0
50	2s	36	ARG	2.0
1	1A	269	G	2.0
1	1A	1137	G	2.0
1	2A	2207	G	2.0
32	1a	69	G	2.0
32	1a	1030(C)	G	2.0
32	1a	1368	G	2.0
32	2a	1011	G	2.0
32	2a	1087	G	2.0
32	2a	1106	G	2.0
32	2a	1160	G	2.0
6	2G	173	LEU	2.0
7	1H	20	ALA	2.0
7	2H	156	ALA	2.0
8	2I	140	LEU	2.0
11	1P	147	LEU	2.0
17	2V	38	LEU	2.0
21	2Z	41	LEU	2.0
22	20	18	ALA	2.0
34	2c	101	LEU	2.0
36	1e	12	LEU	2.0
36	2e	104	ALA	2.0
38	2g	40	ALA	2.0
41	2j	20	ALA	2.0
47	2p	73	LEU	2.0
48	1q	24	GLU	2.0
48	2q	86	GLU	2.0
49	1r	76	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
51	1t	49	ALA	2.0
51	1t	59	ALA	2.0
6	2G	47	LYS	2.0
21	2Z	168	GLU	2.0
6	2G	89	GLY	2.0
7	1H	13	LYS	2.0
8	1I	95	LYS	2.0
12	2Q	18	LYS	2.0
15	2T	55	ASN	2.0
21	1Z	147	GLY	2.0
26	24	28	LYS	2.0
30	18	56	GLU	2.0
51	1t	72	LEU	2.0
37	1f	13	ASN	2.0
43	2l	28	LYS	2.0
46	2o	61	GLY	2.0
47	2p	14	ASN	2.0
40	1i	81	ILE	2.0
41	2j	100	THR	2.0
44	2m	49	THR	2.0
47	1p	22	THR	2.0
47	1p	67	THR	2.0
49	2r	65	ILE	2.0
44	1m	64	TRP	2.0
1	2A	900	A	2.0
6	1G	126	ASP	2.0
6	2G	155	MET	2.0
26	24	7	PRO	2.0
32	1a	607	A	2.0
32	1a	1151	A	2.0
32	2a	1256	A	2.0
33	1b	234	PRO	2.0
36	2e	106	PRO	2.0
53	1v	23	A	2.0
11	2P	110	TYR	2.0
38	1g	77	SER	2.0
38	2g	44	TYR	2.0
41	2j	62	HIS	2.0
42	1k	16	SER	2.0
43	1l	64	TYR	2.0
47	1p	13	HIS	2.0
47	2p	39	TYR	2.0

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Mol	Chain	Res	Type	RSRZ
48	1q	62	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, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	7MG	2w	46	24/25	0.51	0.16	83,96,107,134	0
54	4SU	2w	8	20/21	0.58	0.16	81,98,120,128	0
54	7MG	2y	46	24/25	0.61	0.19	68,95,99,128	0
54	PSU	2y	55	20/21	0.61	0.15	80,96,115,118	0
54	5MU	2y	54	21/22	0.63	0.17	79,93,108,123	0
54	PSU	2w	55	20/21	0.65	0.17	80,94,98,113	0
54	7MG	1w	46	24/25	0.66	0.17	76,90,101,124	0
54	7MG	1y	46	24/25	0.67	0.17	76,95,106,115	0
54	5MU	1y	54	21/22	0.68	0.15	76,87,95,116	0
54	4SU	1y	8	20/21	0.70	0.17	80,98,105,114	0
54	MIA	2y	37	22/30	0.70	0.17	72,86,94,120	0
54	PSU	1y	55	20/21	0.72	0.16	72,89,99,120	0
54	4SU	2y	8	20/21	0.74	0.16	87,94,106,113	0
32	2MG	2a	1207	24/25	0.75	0.16	74,85,90,98	0
54	PSU	2y	32	20/21	0.76	0.17	73,89,97,108	0
55	PSU	2x	55	20/21	0.80	0.14	69,84,106,107	0
54	PSU	1y	32	20/21	0.81	0.16	69,87,94,95	0
54	PSU	2y	39	20/21	0.81	0.13	78,84,100,112	0
54	4SU	1w	8	20/21	0.81	0.14	75,86,105,114	0
54	5MU	2w	54	21/22	0.82	0.15	66,85,93,101	0
55	5MU	2x	54	21/22	0.82	0.15	71,87,95,100	0
54	MIA	1y	37	22/30	0.82	0.14	76,83,93,94	0
54	PSU	1w	55	20/21	0.83	0.12	72,81,90,98	0
55	4SU	2x	8	20/21	0.83	0.15	74,85,90,96	0
1	5MU	2A	1915	21/22	0.85	0.16	64,72,79,93	0
54	PSU	2w	39	20/21	0.86	0.14	80,88,96,102	0
54	PSU	2w	32	20/21	0.87	0.13	69,85,94,103	0
32	M2G	2a	966	25/26	0.87	0.18	52,69,95,99	0
54	MIA	2w	37	25/30	0.88	0.13	70,82,91,110	0
54	PSU	1y	39	20/21	0.88	0.12	71,81,89,95	0
43	0TD	2l	92	10/11	0.89	0.14	65,68,73,79	0
55	5MC	2x	32	21/22	0.89	0.15	65,78,87,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
32	PSU	2a	516	20/21	0.90	0.10	65,72,79,83	0
32	5MC	2a	967	21/22	0.91	0.15	62,71,79,86	0
43	0TD	1l	92	10/11	0.91	0.15	61,64,70,74	0
32	5MC	2a	1400	21/22	0.91	0.16	70,74,80,93	0
54	PSU	1w	32	20/21	0.91	0.12	59,72,79,83	0
32	5MC	2a	1404	21/22	0.91	0.12	47,59,74,77	0
32	7MG	2a	527	24/25	0.91	0.12	61,70,77,88	0
55	PSU	1x	55	20/21	0.91	0.11	56,67,81,87	0
1	PSU	2A	1917	20/21	0.91	0.12	56,65,75,76	0
54	MIA	1w	37	29/30	0.92	0.14	43,62,74,78	0
32	4OC	2a	1402	22/23	0.92	0.12	45,63,71,90	0
55	5MU	1x	54	21/22	0.92	0.11	57,71,79,83	0
1	PSU	2A	1911	20/21	0.93	0.10	56,60,66,70	0
32	PSU	1a	516	20/21	0.93	0.12	63,70,78,78	0
1	5MU	1A	1937	21/22	0.93	0.12	56,67,75,82	0
54	PSU	1w	39	20/21	0.93	0.10	50,70,80,83	0
1	4OC	2A	1920	21/23	0.93	0.12	46,57,62,72	0
32	UR3	2a	1498	21/22	0.93	0.12	48,58,62,68	0
55	5MC	1x	32	21/22	0.94	0.12	44,54,67,73	0
32	2MG	1a	1207	24/25	0.94	0.09	62,72,76,80	0
54	5MU	1w	54	21/22	0.94	0.10	55,67,78,79	0
1	PSU	1A	1939	20/21	0.94	0.13	53,60,71,72	0
1	5MU	2A	1939	21/22	0.94	0.10	24,34,41,46	0
32	MA6	2a	1518	24/25	0.94	0.13	41,63,74,82	0
1	5MC	1A	1964	21/22	0.95	0.10	38,47,52,60	0
1	PSU	1A	1933	20/21	0.95	0.12	49,59,62,66	0
55	4SU	1x	8	20/21	0.95	0.10	46,60,69,73	0
1	5MC	2A	1942	21/22	0.95	0.10	45,50,58,61	0
1	5MC	2A	1962	21/22	0.95	0.10	28,43,52,59	0
32	7MG	1a	527	24/25	0.95	0.10	40,50,60,67	0
32	5MC	2a	1407	21/22	0.95	0.12	48,57,69,76	0
32	M2G	1a	966	25/26	0.95	0.10	41,55,61,77	0
32	5MC	1a	967	21/22	0.95	0.11	51,58,67,70	0
32	MA6	2a	1519	24/25	0.95	0.13	47,65,74,81	0
32	MA6	1a	1519	24/25	0.96	0.10	39,48,57,71	0
1	PSU	2A	2605	20/21	0.96	0.07	25,33,40,42	0
32	5MC	1a	1407	21/22	0.96	0.10	34,42,56,62	0
1	5MU	1A	1961	21/22	0.97	0.08	21,33,38,44	0
32	5MC	1a	1400	21/22	0.97	0.09	39,53,61,67	0
32	4OC	1a	1402	22/23	0.97	0.09	37,47,55,61	0
32	5MC	1a	1404	21/22	0.97	0.08	32,43,50,53	0
1	4OC	1A	1942	21/23	0.97	0.10	42,55,61,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
1	2MU	1A	2564	21/23	0.97	0.08	26,36,40,46	0
1	PSU	1A	2617	20/21	0.97	0.08	24,31,37,39	0
1	OMG	2A	2251	24/25	0.97	0.07	27,36,44,46	0
1	2MA	2A	2503	23/24	0.97	0.07	25,30,35,37	0
1	2MU	2A	2552	21/23	0.97	0.08	28,38,46,52	0
1	OMG	1A	2263	24/25	0.98	0.07	22,32,39,44	0
32	UR3	1a	1498	21/22	0.98	0.06	38,43,50,54	0
32	MA6	1a	1518	24/25	0.98	0.09	31,47,51,57	0
1	2MA	1A	2515	23/24	0.98	0.08	20,26,31,34	0
1	5MC	1A	1984	21/22	0.98	0.07	31,38,48,57	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($\text{\AA}^2$)	Q<0.9
56	MG	1A	3786	1/1	0.27	0.30	81,81,81,81	0
56	MG	1A	4076	1/1	0.55	0.14	75,75,75,75	0
56	MG	2B	3016	1/1	0.60	0.28	81,81,81,81	0
56	MG	1Z	302	1/1	0.63	0.13	67,67,67,67	0
56	MG	1G	3004	1/1	0.63	0.22	92,92,92,92	0
56	MG	1A	3671	1/1	0.65	0.21	67,67,67,67	0
56	MG	2a	3028	1/1	0.66	0.37	84,84,84,84	0
56	MG	2A	3687	1/1	0.68	0.29	63,63,63,63	0
56	MG	2A	3875	1/1	0.68	0.24	76,76,76,76	0
56	MG	2a	3201	1/1	0.68	0.24	79,79,79,79	0
56	MG	1A	3975	1/1	0.70	0.18	93,93,93,93	0
56	MG	1B	3032	1/1	0.70	0.23	80,80,80,80	0
56	MG	2a	3198	1/1	0.70	0.22	83,83,83,83	0
56	MG	1A	4044	1/1	0.70	0.25	79,79,79,79	0
56	MG	1A	3468	1/1	0.71	0.17	68,68,68,68	0
56	MG	1A	3894	1/1	0.71	0.21	73,73,73,73	0
56	MG	1a	1746	1/1	0.71	0.21	84,84,84,84	0
56	MG	1a	1773	1/1	0.72	0.13	90,90,90,90	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3856	1/1	0.72	0.19	41,41,41,41	0
56	MG	2a	3131	1/1	0.72	0.31	80,80,80,80	0
56	MG	2A	3686	1/1	0.72	0.22	57,57,57,57	0
56	MG	2B	3014	1/1	0.72	0.17	77,77,77,77	0
56	MG	2a	3210	1/1	0.72	0.16	70,70,70,70	0
56	MG	2A	3821	1/1	0.73	0.20	79,79,79,79	0
56	MG	2A	3884	1/1	0.73	0.20	42,42,42,42	0
56	MG	1A	3585	1/1	0.73	0.20	66,66,66,66	0
56	MG	1E	307	1/1	0.74	0.21	70,70,70,70	0
56	MG	1A	3795	1/1	0.74	0.24	51,51,51,51	0
56	MG	1y	3004	1/1	0.74	0.18	86,86,86,86	0
56	MG	2A	3091	1/1	0.74	0.17	60,60,60,60	0
56	MG	2A	3656	1/1	0.74	0.17	77,77,77,77	0
56	MG	1A	3531	1/1	0.74	0.21	67,67,67,67	0
56	MG	2a	3228	1/1	0.74	0.28	86,86,86,86	0
56	MG	2A	3712	1/1	0.75	0.15	63,63,63,63	0
56	MG	2a	3010	1/1	0.75	0.29	76,76,76,76	0
56	MG	2B	3003	1/1	0.75	0.25	74,74,74,74	0
56	MG	1A	3834	1/1	0.75	0.21	69,69,69,69	0
56	MG	2a	3127	1/1	0.76	0.22	85,85,85,85	0
56	MG	1A	3994	1/1	0.76	0.19	76,76,76,76	0
56	MG	2a	3136	1/1	0.76	0.19	73,73,73,73	0
56	MG	2A	3691	1/1	0.76	0.26	68,68,68,68	0
56	MG	2B	3021	1/1	0.76	0.27	75,75,75,75	0
56	MG	1a	1610	1/1	0.76	0.14	79,79,79,79	0
56	MG	1a	1656	1/1	0.76	0.29	75,75,75,75	0
56	MG	2a	3240	1/1	0.76	0.15	63,63,63,63	0
56	MG	2y	3005	1/1	0.76	0.24	82,82,82,82	0
56	MG	1A	3423	1/1	0.77	0.24	67,67,67,67	0
56	MG	2a	3003	1/1	0.77	0.14	64,64,64,64	0
56	MG	1A	3555	1/1	0.77	0.30	60,60,60,60	0
56	MG	1B	3007	1/1	0.77	0.31	85,85,85,85	0
56	MG	2a	3046	1/1	0.77	0.23	64,64,64,64	0
56	MG	1A	3566	1/1	0.77	0.29	72,72,72,72	0
56	MG	2A	3844	1/1	0.77	0.15	50,50,50,50	0
56	MG	1a	1776	1/1	0.77	0.12	91,91,91,91	0
56	MG	2a	3179	1/1	0.77	0.13	100,100,100,100	0
56	MG	2A	3871	1/1	0.77	0.15	70,70,70,70	0
56	MG	1e	201	1/1	0.77	0.14	79,79,79,79	0
56	MG	1A	3319	1/1	0.77	0.24	63,63,63,63	0
56	MG	1A	3641	1/1	0.77	0.24	65,65,65,65	0
56	MG	1U	202	1/1	0.77	0.36	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2v	3002	1/1	0.77	0.23	77,77,77,77	0
56	MG	1A	3530	1/1	0.77	0.22	63,63,63,63	0
56	MG	2A	3865	1/1	0.78	0.13	71,71,71,71	0
56	MG	2a	3090	1/1	0.78	0.12	68,68,68,68	0
56	MG	2a	3117	1/1	0.78	0.27	81,81,81,81	0
56	MG	1A	3912	1/1	0.78	0.19	80,80,80,80	0
56	MG	1A	3962	1/1	0.78	0.14	62,62,62,62	0
56	MG	1x	102	1/1	0.78	0.27	63,63,63,63	0
56	MG	1A	3879	1/1	0.78	0.20	51,51,51,51	0
56	MG	2a	3192	1/1	0.78	0.22	63,63,63,63	0
56	MG	1A	3466	1/1	0.78	0.13	64,64,64,64	0
56	MG	2a	3199	1/1	0.78	0.19	72,72,72,72	0
56	MG	2A	3719	1/1	0.78	0.22	57,57,57,57	0
56	MG	2A	3291	1/1	0.78	0.13	56,56,56,56	0
56	MG	2Z	8001	1/1	0.78	0.17	78,78,78,78	0
56	MG	2A	3839	1/1	0.78	0.13	45,45,45,45	0
56	MG	2A	3362	1/1	0.78	0.21	68,68,68,68	0
56	MG	2x	102	1/1	0.78	0.21	77,77,77,77	0
56	MG	2A	3536	1/1	0.78	0.12	51,51,51,51	0
56	MG	1A	3264	1/1	0.79	0.12	63,63,63,63	0
56	MG	2A	3880	1/1	0.79	0.12	65,65,65,65	0
56	MG	2A	3754	1/1	0.79	0.13	45,45,45,45	0
56	MG	2A	3646	1/1	0.79	0.14	55,55,55,55	0
56	MG	2a	3104	1/1	0.79	0.23	75,75,75,75	0
56	MG	1A	3164	1/1	0.79	0.26	73,73,73,73	0
56	MG	1a	1738	1/1	0.79	0.14	66,66,66,66	0
56	MG	1A	3832	1/1	0.79	0.17	62,62,62,62	0
56	MG	2A	3374	1/1	0.79	0.21	65,65,65,65	0
56	MG	2A	3453	1/1	0.79	0.11	45,45,45,45	0
56	MG	1f	3002	1/1	0.80	0.33	80,80,80,80	0
56	MG	2a	3036	1/1	0.80	0.21	83,83,83,83	0
56	MG	1A	3718	1/1	0.80	0.20	67,67,67,67	0
56	MG	2A	3855	1/1	0.80	0.12	69,69,69,69	0
56	MG	2A	3667	1/1	0.80	0.15	49,49,49,49	0
56	MG	1a	1689	1/1	0.80	0.27	73,73,73,73	0
56	MG	1A	3830	1/1	0.80	0.12	66,66,66,66	0
56	MG	1A	3776	1/1	0.80	0.27	75,75,75,75	0
56	MG	2A	3710	1/1	0.80	0.14	63,63,63,63	0
56	MG	2a	3155	1/1	0.80	0.13	81,81,81,81	0
56	MG	2a	3161	1/1	0.80	0.14	91,91,91,91	0
56	MG	2a	3166	1/1	0.80	0.13	84,84,84,84	0
56	MG	1a	1750	1/1	0.80	0.29	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3716	1/1	0.80	0.19	55,55,55,55	0
56	MG	1A	3694	1/1	0.80	0.16	61,61,61,61	0
56	MG	2A	3722	1/1	0.80	0.20	58,58,58,58	0
56	MG	15	103	1/1	0.80	0.15	61,61,61,61	0
56	MG	2a	3204	1/1	0.80	0.23	86,86,86,86	0
56	MG	2E	307	1/1	0.80	0.20	54,54,54,54	0
56	MG	2E	308	1/1	0.80	0.12	38,38,38,38	0
56	MG	2A	3756	1/1	0.80	0.18	42,42,42,42	0
56	MG	2j	8001	1/1	0.80	0.14	75,75,75,75	0
56	MG	1A	3875	1/1	0.80	0.19	60,60,60,60	0
56	MG	2w	108	1/1	0.80	0.22	66,66,66,66	0
56	MG	2A	3822	1/1	0.80	0.16	66,66,66,66	0
56	MG	2a	3024	1/1	0.80	0.32	72,72,72,72	0
56	MG	1x	114	1/1	0.81	0.21	82,82,82,82	0
56	MG	2A	3748	1/1	0.81	0.13	57,57,57,57	0
56	MG	1A	3829	1/1	0.81	0.11	59,59,59,59	0
56	MG	1A	3073	1/1	0.81	0.29	69,69,69,69	0
56	MG	2a	3034	1/1	0.81	0.23	72,72,72,72	0
56	MG	2A	3773	1/1	0.81	0.16	63,63,63,63	0
56	MG	2A	3808	1/1	0.81	0.15	60,60,60,60	0
56	MG	2a	3062	1/1	0.81	0.28	70,70,70,70	0
56	MG	1A	3272	1/1	0.81	0.14	60,60,60,60	0
56	MG	2a	3206	1/1	0.81	0.17	69,69,69,69	0
56	MG	2a	3103	1/1	0.81	0.22	76,76,76,76	0
56	MG	1A	3913	1/1	0.81	0.15	80,80,80,80	0
56	MG	2a	3108	1/1	0.81	0.26	78,78,78,78	0
56	MG	1B	3029	1/1	0.81	0.23	66,66,66,66	0
56	MG	1A	3646	1/1	0.81	0.10	32,32,32,32	0
56	MG	2a	3128	1/1	0.81	0.21	87,87,87,87	0
56	MG	1a	1672	1/1	0.81	0.12	73,73,73,73	0
56	MG	1A	3824	1/1	0.81	0.23	70,70,70,70	0
56	MG	1w	109	1/1	0.82	0.21	67,67,67,67	0
56	MG	2B	3020	1/1	0.82	0.30	78,78,78,78	0
56	MG	1Y	503	1/1	0.82	0.15	78,78,78,78	0
56	MG	2A	3769	1/1	0.82	0.15	62,62,62,62	0
56	MG	2A	3607	1/1	0.82	0.18	55,55,55,55	0
56	MG	1B	3020	1/1	0.82	0.26	82,82,82,82	0
56	MG	1A	3888	1/1	0.82	0.15	70,70,70,70	0
56	MG	2A	3058	1/1	0.82	0.19	66,66,66,66	0
56	MG	2a	3012	1/1	0.82	0.27	71,71,71,71	0
56	MG	1A	3863	1/1	0.82	0.22	50,50,50,50	0
56	MG	2a	3200	1/1	0.82	0.26	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3128	1/1	0.82	0.13	48,48,48,48	0
56	MG	2A	3138	1/1	0.82	0.20	59,59,59,59	0
56	MG	2A	3699	1/1	0.82	0.10	76,76,76,76	0
56	MG	2A	3256	1/1	0.82	0.18	53,53,53,53	0
56	MG	2A	3266	1/1	0.82	0.15	59,59,59,59	0
56	MG	1A	3871	1/1	0.82	0.23	49,49,49,49	0
56	MG	1A	3800	1/1	0.82	0.15	65,65,65,65	0
56	MG	2A	3364	1/1	0.82	0.29	77,77,77,77	0
56	MG	2w	102	1/1	0.82	0.13	62,62,62,62	0
56	MG	2A	3893	1/1	0.82	0.16	66,66,66,66	0
56	MG	2A	3741	1/1	0.82	0.14	61,61,61,61	0
56	MG	1A	3548	1/1	0.82	0.17	49,49,49,49	0
56	MG	1A	3853	1/1	0.83	0.13	52,52,52,52	0
56	MG	1A	3799	1/1	0.83	0.16	57,57,57,57	0
56	MG	2a	3037	1/1	0.83	0.15	77,77,77,77	0
56	MG	2a	3040	1/1	0.83	0.15	57,57,57,57	0
56	MG	1A	3727	1/1	0.83	0.17	36,36,36,36	0
56	MG	2A	3810	1/1	0.83	0.14	51,51,51,51	0
56	MG	2a	3085	1/1	0.83	0.26	65,65,65,65	0
56	MG	2A	3819	1/1	0.83	0.20	64,64,64,64	0
56	MG	2a	3099	1/1	0.83	0.26	74,74,74,74	0
56	MG	1A	4024	1/1	0.83	0.14	71,71,71,71	0
56	MG	1a	1784	1/1	0.83	0.15	74,74,74,74	0
56	MG	2A	3501	1/1	0.83	0.16	59,59,59,59	0
56	MG	1a	1824	1/1	0.83	0.15	73,73,73,73	0
56	MG	2A	3606	1/1	0.83	0.18	61,61,61,61	0
56	MG	1A	3802	1/1	0.83	0.13	57,57,57,57	0
56	MG	1A	4072	1/1	0.83	0.19	62,62,62,62	0
56	MG	1v	3001	1/1	0.83	0.31	77,77,77,77	0
56	MG	1A	3734	1/1	0.83	0.10	59,59,59,59	0
56	MG	1a	1612	1/1	0.83	0.15	74,74,74,74	0
56	MG	1x	109	1/1	0.83	0.21	82,82,82,82	0
56	MG	1a	1617	1/1	0.83	0.13	63,63,63,63	0
56	MG	2A	3696	1/1	0.83	0.11	58,58,58,58	0
56	MG	2B	3010	1/1	0.83	0.16	73,73,73,73	0
56	MG	1A	3757	1/1	0.83	0.18	27,27,27,27	0
56	MG	1a	1663	1/1	0.83	0.15	76,76,76,76	0
56	MG	1A	3316	1/1	0.83	0.22	58,58,58,58	0
56	MG	2A	3116	1/1	0.83	0.29	68,68,68,68	0
56	MG	2A	3117	1/1	0.83	0.19	63,63,63,63	0
56	MG	1A	3446	1/1	0.83	0.21	61,61,61,61	0
56	MG	2A	3737	1/1	0.83	0.20	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3236	1/1	0.83	0.14	75,75,75,75	0
56	MG	1a	1702	1/1	0.83	0.41	73,73,73,73	0
56	MG	2a	3007	1/1	0.83	0.26	71,71,71,71	0
56	MG	2n	502	1/1	0.83	0.11	86,86,86,86	0
56	MG	2A	3744	1/1	0.83	0.18	55,55,55,55	0
56	MG	2w	101	1/1	0.83	0.26	73,73,73,73	0
56	MG	1a	1718	1/1	0.83	0.22	70,70,70,70	0
56	MG	2w	104	1/1	0.83	0.14	69,69,69,69	0
56	MG	2a	3013	1/1	0.83	0.33	78,78,78,78	0
56	MG	2A	3259	1/1	0.83	0.24	61,61,61,61	0
56	MG	1A	3320	1/1	0.83	0.20	60,60,60,60	0
56	MG	1A	4061	1/1	0.84	0.14	72,72,72,72	0
56	MG	2A	3466	1/1	0.84	0.22	65,65,65,65	0
56	MG	1x	103	1/1	0.84	0.14	71,71,71,71	0
56	MG	2a	3071	1/1	0.84	0.18	75,75,75,75	0
56	MG	2a	3083	1/1	0.84	0.20	72,72,72,72	0
56	MG	1A	3521	1/1	0.84	0.20	65,65,65,65	0
56	MG	2A	3829	1/1	0.84	0.12	59,59,59,59	0
56	MG	2a	3095	1/1	0.84	0.22	71,71,71,71	0
56	MG	2A	3568	1/1	0.84	0.13	46,46,46,46	0
56	MG	2A	3577	1/1	0.84	0.22	56,56,56,56	0
56	MG	1A	3937	1/1	0.84	0.15	31,31,31,31	0
56	MG	1a	1744	1/1	0.84	0.22	73,73,73,73	0
56	MG	2A	3039	1/1	0.84	0.12	55,55,55,55	0
56	MG	2A	3649	1/1	0.84	0.14	69,69,69,69	0
56	MG	1B	3002	1/1	0.84	0.19	58,58,58,58	0
56	MG	2A	3876	1/1	0.84	0.14	66,66,66,66	0
56	MG	1A	3948	1/1	0.84	0.15	60,60,60,60	0
56	MG	2A	3883	1/1	0.84	0.16	56,56,56,56	0
56	MG	2A	3101	1/1	0.84	0.22	59,59,59,59	0
56	MG	1A	3630	1/1	0.84	0.11	32,32,32,32	0
56	MG	1B	3024	1/1	0.84	0.10	50,50,50,50	0
56	MG	2A	3126	1/1	0.84	0.19	58,58,58,58	0
56	MG	1A	3794	1/1	0.84	0.18	61,61,61,61	0
56	MG	2A	3700	1/1	0.84	0.19	65,65,65,65	0
56	MG	2B	3019	1/1	0.84	0.16	76,76,76,76	0
56	MG	1a	1795	1/1	0.84	0.14	70,70,70,70	0
56	MG	2A	3169	1/1	0.84	0.45	73,73,73,73	0
56	MG	1A	3890	1/1	0.84	0.15	57,57,57,57	0
56	MG	1a	1665	1/1	0.84	0.18	78,78,78,78	0
56	MG	1A	3257	1/1	0.84	0.12	68,68,68,68	0
56	MG	2a	3229	1/1	0.84	0.30	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	28	102	1/1	0.84	0.14	52,52,52,52	0
56	MG	2A	3728	1/1	0.84	0.12	58,58,58,58	0
56	MG	1A	3708	1/1	0.84	0.17	76,76,76,76	0
56	MG	2A	3342	1/1	0.84	0.19	59,59,59,59	0
56	MG	2t	3001	1/1	0.84	0.18	60,60,60,60	0
56	MG	2A	3353	1/1	0.84	0.17	65,65,65,65	0
56	MG	2A	3354	1/1	0.84	0.21	68,68,68,68	0
56	MG	1w	101	1/1	0.84	0.15	64,64,64,64	0
56	MG	1a	1696	1/1	0.84	0.24	71,71,71,71	0
56	MG	1w	110	1/1	0.84	0.16	66,66,66,66	0
56	MG	2A	3406	1/1	0.84	0.19	55,55,55,55	0
56	MG	2A	3447	1/1	0.84	0.25	46,46,46,46	0
56	MG	2y	3007	1/1	0.84	0.17	68,68,68,68	0
56	MG	1A	3895	1/1	0.85	0.13	61,61,61,61	0
56	MG	1a	1829	1/1	0.85	0.19	73,73,73,73	0
56	MG	1A	3478	1/1	0.85	0.32	65,65,65,65	0
56	MG	1A	4000	1/1	0.85	0.14	34,34,34,34	0
56	MG	2a	3110	1/1	0.85	0.24	73,73,73,73	0
56	MG	19	102	1/1	0.85	0.15	51,51,51,51	0
56	MG	2A	3757	1/1	0.85	0.12	52,52,52,52	0
56	MG	2A	3766	1/1	0.85	0.14	52,52,52,52	0
56	MG	2A	3635	1/1	0.85	0.17	43,43,43,43	0
56	MG	2A	3770	1/1	0.85	0.12	57,57,57,57	0
56	MG	2a	3138	1/1	0.85	0.13	79,79,79,79	0
56	MG	2A	3644	1/1	0.85	0.15	64,64,64,64	0
56	MG	2T	3001	1/1	0.85	0.15	53,53,53,53	0
56	MG	2A	3780	1/1	0.85	0.16	80,80,80,80	0
56	MG	2A	3802	1/1	0.85	0.08	56,56,56,56	0
56	MG	1a	1704	1/1	0.85	0.23	63,63,63,63	0
56	MG	1A	3357	1/1	0.85	0.15	56,56,56,56	0
56	MG	2A	3814	1/1	0.85	0.19	55,55,55,55	0
56	MG	1A	4026	1/1	0.85	0.13	51,51,51,51	0
56	MG	1a	1743	1/1	0.85	0.16	73,73,73,73	0
56	MG	2A	3330	1/1	0.85	0.26	63,63,63,63	0
56	MG	1A	3752	1/1	0.85	0.12	41,41,41,41	0
56	MG	2a	3033	1/1	0.85	0.13	63,63,63,63	0
56	MG	1a	1625	1/1	0.85	0.29	63,63,63,63	0
56	MG	1a	1645	1/1	0.85	0.17	80,80,80,80	0
56	MG	2a	3232	1/1	0.85	0.17	77,77,77,77	0
56	MG	2a	3234	1/1	0.85	0.14	66,66,66,66	0
56	MG	1x	115	1/1	0.85	0.15	75,75,75,75	0
56	MG	1y	3001	1/1	0.85	0.11	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1762	1/1	0.85	0.17	78,78,78,78	0
56	MG	2a	3048	1/1	0.85	0.25	67,67,67,67	0
56	MG	2a	3053	1/1	0.85	0.28	66,66,66,66	0
56	MG	2v	3001	1/1	0.85	0.23	69,69,69,69	0
56	MG	1A	3691	1/1	0.85	0.19	41,41,41,41	0
56	MG	2a	3063	1/1	0.85	0.17	74,74,74,74	0
56	MG	1A	3774	1/1	0.85	0.12	55,55,55,55	0
56	MG	1A	3970	1/1	0.85	0.13	70,70,70,70	0
56	MG	1a	1790	1/1	0.85	0.12	73,73,73,73	0
56	MG	1a	1669	1/1	0.85	0.19	73,73,73,73	0
56	MG	2a	3093	1/1	0.85	0.23	64,64,64,64	0
56	MG	2A	3506	1/1	0.85	0.17	31,31,31,31	0
56	MG	2A	3540	1/1	0.86	0.09	47,47,47,47	0
56	MG	1a	1660	1/1	0.86	0.15	74,74,74,74	0
56	MG	2A	3096	1/1	0.86	0.11	59,59,59,59	0
56	MG	2A	3100	1/1	0.86	0.11	57,57,57,57	0
56	MG	2a	3076	1/1	0.86	0.15	73,73,73,73	0
56	MG	1A	3407	1/1	0.86	0.14	65,65,65,65	0
56	MG	2A	3610	1/1	0.86	0.14	67,67,67,67	0
56	MG	2A	3614	1/1	0.86	0.12	36,36,36,36	0
56	MG	2A	3626	1/1	0.86	0.13	53,53,53,53	0
56	MG	2A	3113	1/1	0.86	0.11	52,52,52,52	0
56	MG	2A	3860	1/1	0.86	0.13	59,59,59,59	0
56	MG	1a	1789	1/1	0.86	0.12	72,72,72,72	0
56	MG	1A	3332	1/1	0.86	0.27	56,56,56,56	0
56	MG	2A	3647	1/1	0.86	0.19	51,51,51,51	0
56	MG	1A	4033	1/1	0.86	0.10	76,76,76,76	0
56	MG	1a	1797	1/1	0.86	0.16	64,64,64,64	0
56	MG	2a	3120	1/1	0.86	0.18	72,72,72,72	0
56	MG	2a	3121	1/1	0.86	0.28	75,75,75,75	0
56	MG	1A	3487	1/1	0.86	0.21	70,70,70,70	0
56	MG	1a	1827	1/1	0.86	0.11	58,58,58,58	0
56	MG	2A	3892	1/1	0.86	0.16	78,78,78,78	0
56	MG	2A	3229	1/1	0.86	0.15	41,41,41,41	0
56	MG	1V	203	1/1	0.86	0.16	67,67,67,67	0
56	MG	2a	3148	1/1	0.86	0.11	77,77,77,77	0
56	MG	2B	3004	1/1	0.86	0.15	69,69,69,69	0
56	MG	1A	4060	1/1	0.86	0.09	37,37,37,37	0
56	MG	1A	3488	1/1	0.86	0.21	59,59,59,59	0
56	MG	2a	3171	1/1	0.86	0.14	73,73,73,73	0
56	MG	1A	3432	1/1	0.86	0.14	54,54,54,54	0
56	MG	2A	3295	1/1	0.86	0.15	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3711	1/1	0.86	0.20	56,56,56,56	0
56	MG	2A	3326	1/1	0.86	0.27	64,64,64,64	0
56	MG	1A	3440	1/1	0.86	0.16	50,50,50,50	0
56	MG	2A	3341	1/1	0.86	0.17	52,52,52,52	0
56	MG	1a	1721	1/1	0.86	0.11	58,58,58,58	0
56	MG	2U	202	1/1	0.86	0.13	54,54,54,54	0
56	MG	1a	1603	1/1	0.86	0.10	59,59,59,59	0
56	MG	2a	3226	1/1	0.86	0.26	64,64,64,64	0
56	MG	1A	3823	1/1	0.86	0.20	65,65,65,65	0
56	MG	1A	3343	1/1	0.86	0.25	59,59,59,59	0
56	MG	2a	3231	1/1	0.86	0.11	68,68,68,68	0
56	MG	1B	3019	1/1	0.86	0.15	56,56,56,56	0
56	MG	1A	3245	1/1	0.86	0.20	64,64,64,64	0
56	MG	1a	1755	1/1	0.86	0.11	74,74,74,74	0
56	MG	2A	3421	1/1	0.86	0.21	61,61,61,61	0
56	MG	1a	1760	1/1	0.86	0.09	74,74,74,74	0
56	MG	2j	8002	1/1	0.86	0.13	66,66,66,66	0
56	MG	2l	202	1/1	0.86	0.10	70,70,70,70	0
56	MG	1A	3692	1/1	0.86	0.19	64,64,64,64	0
56	MG	2a	3030	1/1	0.86	0.11	61,61,61,61	0
56	MG	1a	1766	1/1	0.86	0.28	76,76,76,76	0
56	MG	2A	3481	1/1	0.86	0.18	56,56,56,56	0
56	MG	2A	3488	1/1	0.86	0.18	65,65,65,65	0
56	MG	2A	3051	1/1	0.86	0.10	43,43,43,43	0
56	MG	2A	3056	1/1	0.86	0.13	60,60,60,60	0
56	MG	2A	3520	1/1	0.86	0.22	65,65,65,65	0
56	MG	1A	4012	1/1	0.86	0.11	34,34,34,34	0
56	MG	2a	3050	1/1	0.86	0.22	61,61,61,61	0
56	MG	2a	3051	1/1	0.86	0.20	69,69,69,69	0
56	MG	2A	3141	1/1	0.87	0.09	51,51,51,51	0
56	MG	2A	3153	1/1	0.87	0.18	52,52,52,52	0
56	MG	1a	1705	1/1	0.87	0.27	63,63,63,63	0
56	MG	2A	3832	1/1	0.87	0.11	54,54,54,54	0
56	MG	1A	3377	1/1	0.87	0.14	54,54,54,54	0
56	MG	2A	3245	1/1	0.87	0.18	59,59,59,59	0
56	MG	1w	105	1/1	0.87	0.15	87,87,87,87	0
56	MG	2A	3615	1/1	0.87	0.10	51,51,51,51	0
56	MG	2A	3625	1/1	0.87	0.21	69,69,69,69	0
56	MG	1A	3744	1/1	0.87	0.21	74,74,74,74	0
56	MG	1a	1730	1/1	0.87	0.13	80,80,80,80	0
56	MG	2A	3271	1/1	0.87	0.15	49,49,49,49	0
56	MG	2A	3290	1/1	0.87	0.22	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1602	1/1	0.87	0.24	72,72,72,72	0
56	MG	1A	3541	1/1	0.87	0.15	73,73,73,73	0
56	MG	2A	3301	1/1	0.87	0.11	60,60,60,60	0
56	MG	2A	3307	1/1	0.87	0.23	68,68,68,68	0
56	MG	1A	3348	1/1	0.87	0.13	62,62,62,62	0
56	MG	1A	3766	1/1	0.87	0.12	47,47,47,47	0
56	MG	2A	3336	1/1	0.87	0.13	53,53,53,53	0
56	MG	2B	3006	1/1	0.87	0.16	59,59,59,59	0
56	MG	1A	3685	1/1	0.87	0.21	60,60,60,60	0
56	MG	1a	1624	1/1	0.87	0.10	50,50,50,50	0
56	MG	2A	3346	1/1	0.87	0.11	54,54,54,54	0
56	MG	2A	3703	1/1	0.87	0.10	47,47,47,47	0
56	MG	1y	3002	1/1	0.87	0.21	75,75,75,75	0
56	MG	1A	3850	1/1	0.87	0.10	53,53,53,53	0
56	MG	2a	3193	1/1	0.87	0.26	73,73,73,73	0
56	MG	2A	3360	1/1	0.87	0.14	63,63,63,63	0
56	MG	1A	3441	1/1	0.87	0.20	56,56,56,56	0
56	MG	1A	3856	1/1	0.87	0.14	47,47,47,47	0
56	MG	1A	3987	1/1	0.87	0.10	32,32,32,32	0
56	MG	1A	3557	1/1	0.87	0.32	60,60,60,60	0
56	MG	2A	3408	1/1	0.87	0.10	51,51,51,51	0
56	MG	2A	3062	1/1	0.87	0.15	61,61,61,61	0
56	MG	2a	3214	1/1	0.87	0.08	91,91,91,91	0
56	MG	2a	3220	1/1	0.87	0.15	66,66,66,66	0
56	MG	2a	3221	1/1	0.87	0.19	60,60,60,60	0
56	MG	2a	3006	1/1	0.87	0.21	74,74,74,74	0
56	MG	2A	3743	1/1	0.87	0.14	75,75,75,75	0
56	MG	2A	3428	1/1	0.87	0.10	52,52,52,52	0
56	MG	2A	3747	1/1	0.87	0.12	51,51,51,51	0
56	MG	1A	3867	1/1	0.87	0.15	69,69,69,69	0
56	MG	2a	3017	1/1	0.87	0.16	66,66,66,66	0
56	MG	1A	3444	1/1	0.87	0.31	63,63,63,63	0
56	MG	2a	3238	1/1	0.87	0.18	62,62,62,62	0
56	MG	2A	3459	1/1	0.87	0.15	62,62,62,62	0
56	MG	1O	206	1/1	0.87	0.17	84,84,84,84	0
56	MG	2A	3470	1/1	0.87	0.17	56,56,56,56	0
56	MG	1a	1674	1/1	0.87	0.29	72,72,72,72	0
56	MG	1a	1676	1/1	0.87	0.29	67,67,67,67	0
56	MG	1a	1677	1/1	0.87	0.19	68,68,68,68	0
56	MG	1A	3312	1/1	0.87	0.30	59,59,59,59	0
56	MG	2A	3799	1/1	0.87	0.21	68,68,68,68	0
56	MG	2A	3507	1/1	0.87	0.19	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3623	1/1	0.87	0.16	59,59,59,59	0
56	MG	1A	3723	1/1	0.87	0.09	47,47,47,47	0
56	MG	2A	3812	1/1	0.87	0.10	47,47,47,47	0
56	MG	2a	3058	1/1	0.87	0.36	73,73,73,73	0
56	MG	1A	3428	1/1	0.87	0.11	51,51,51,51	0
56	MG	2A	3553	1/1	0.87	0.13	71,71,71,71	0
56	MG	2A	3119	1/1	0.88	0.13	47,47,47,47	0
56	MG	2A	3795	1/1	0.88	0.12	37,37,37,37	0
56	MG	2A	3123	1/1	0.88	0.13	56,56,56,56	0
56	MG	2A	3500	1/1	0.88	0.16	55,55,55,55	0
56	MG	2A	3805	1/1	0.88	0.17	77,77,77,77	0
56	MG	1A	3821	1/1	0.88	0.13	47,47,47,47	0
56	MG	2a	3064	1/1	0.88	0.18	81,81,81,81	0
56	MG	2a	3069	1/1	0.88	0.12	62,62,62,62	0
56	MG	2A	3505	1/1	0.88	0.14	59,59,59,59	0
56	MG	1B	3035	1/1	0.88	0.10	59,59,59,59	0
56	MG	1E	302	1/1	0.88	0.29	58,58,58,58	0
56	MG	2A	3815	1/1	0.88	0.16	48,48,48,48	0
56	MG	1A	3997	1/1	0.88	0.12	39,39,39,39	0
56	MG	2A	3535	1/1	0.88	0.21	59,59,59,59	0
56	MG	2a	3094	1/1	0.88	0.21	68,68,68,68	0
56	MG	2A	3147	1/1	0.88	0.16	58,58,58,58	0
56	MG	1A	3607	1/1	0.88	0.10	35,35,35,35	0
56	MG	1A	3610	1/1	0.88	0.18	54,54,54,54	0
56	MG	2A	3220	1/1	0.88	0.27	68,68,68,68	0
56	MG	1a	1694	1/1	0.88	0.14	58,58,58,58	0
56	MG	2A	3601	1/1	0.88	0.11	39,39,39,39	0
56	MG	2a	3111	1/1	0.88	0.19	76,76,76,76	0
56	MG	2A	3604	1/1	0.88	0.24	64,64,64,64	0
56	MG	1T	8001	1/1	0.88	0.15	63,63,63,63	0
56	MG	2A	3255	1/1	0.88	0.11	59,59,59,59	0
56	MG	2A	3867	1/1	0.88	0.09	64,64,64,64	0
56	MG	1A	3542	1/1	0.88	0.27	75,75,75,75	0
56	MG	1w	104	1/1	0.88	0.22	69,69,69,69	0
56	MG	1A	3544	1/1	0.88	0.08	47,47,47,47	0
56	MG	1w	106	1/1	0.88	0.26	74,74,74,74	0
56	MG	1A	3512	1/1	0.88	0.10	50,50,50,50	0
56	MG	1a	1709	1/1	0.88	0.13	59,59,59,59	0
56	MG	1A	3472	1/1	0.88	0.13	56,56,56,56	0
56	MG	1A	4049	1/1	0.88	0.11	55,55,55,55	0
56	MG	2B	3002	1/1	0.88	0.09	49,49,49,49	0
56	MG	2A	3305	1/1	0.88	0.12	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3182	1/1	0.88	0.17	71,71,71,71	0
56	MG	2a	3187	1/1	0.88	0.17	72,72,72,72	0
56	MG	2a	3190	1/1	0.88	0.16	66,66,66,66	0
56	MG	1a	1726	1/1	0.88	0.39	67,67,67,67	0
56	MG	1x	111	1/1	0.88	0.22	66,66,66,66	0
56	MG	1x	113	1/1	0.88	0.18	62,62,62,62	0
56	MG	2A	3333	1/1	0.88	0.13	55,55,55,55	0
56	MG	1A	3897	1/1	0.88	0.18	62,62,62,62	0
56	MG	1A	3836	1/1	0.88	0.19	54,54,54,54	0
56	MG	1A	3424	1/1	0.88	0.22	70,70,70,70	0
56	MG	2A	3345	1/1	0.88	0.14	59,59,59,59	0
56	MG	1A	3308	1/1	0.88	0.17	51,51,51,51	0
56	MG	1A	4084	1/1	0.88	0.10	50,50,50,50	0
56	MG	2O	8001	1/1	0.88	0.18	65,65,65,65	0
56	MG	1a	1613	1/1	0.88	0.09	74,74,74,74	0
56	MG	1a	1752	1/1	0.88	0.13	68,68,68,68	0
56	MG	2a	3227	1/1	0.88	0.17	59,59,59,59	0
56	MG	1A	4113	1/1	0.88	0.15	56,56,56,56	0
56	MG	1A	3855	1/1	0.88	0.18	53,53,53,53	0
56	MG	2a	3230	1/1	0.88	0.12	63,63,63,63	0
56	MG	1A	3951	1/1	0.88	0.16	72,72,72,72	0
56	MG	2a	3005	1/1	0.88	0.37	75,75,75,75	0
56	MG	2A	3397	1/1	0.88	0.15	54,54,54,54	0
56	MG	2A	3066	1/1	0.88	0.10	41,41,41,41	0
56	MG	2a	3008	1/1	0.88	0.28	68,68,68,68	0
56	MG	2A	3080	1/1	0.88	0.14	58,58,58,58	0
56	MG	2A	3738	1/1	0.88	0.15	59,59,59,59	0
56	MG	2A	3413	1/1	0.88	0.12	56,56,56,56	0
56	MG	1B	3012	1/1	0.88	0.16	55,55,55,55	0
56	MG	1A	3350	1/1	0.88	0.26	59,59,59,59	0
56	MG	2A	3429	1/1	0.88	0.09	65,65,65,65	0
56	MG	2A	3437	1/1	0.88	0.12	67,67,67,67	0
56	MG	2A	3439	1/1	0.88	0.13	60,60,60,60	0
56	MG	1A	3754	1/1	0.88	0.14	48,48,48,48	0
56	MG	1a	1779	1/1	0.88	0.11	65,65,65,65	0
56	MG	1A	3866	1/1	0.88	0.17	46,46,46,46	0
56	MG	2a	3039	1/1	0.88	0.36	73,73,73,73	0
56	MG	1A	3805	1/1	0.88	0.12	54,54,54,54	0
56	MG	2y	3002	1/1	0.88	0.15	64,64,64,64	0
56	MG	2A	3468	1/1	0.88	0.33	59,59,59,59	0
56	MG	1a	1666	1/1	0.88	0.13	59,59,59,59	0
56	MG	2A	3239	1/1	0.89	0.13	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1629	1/1	0.89	0.11	57,57,57,57	0
56	MG	1a	1633	1/1	0.89	0.14	60,60,60,60	0
56	MG	1a	1636	1/1	0.89	0.15	67,67,67,67	0
56	MG	2A	3257	1/1	0.89	0.24	65,65,65,65	0
56	MG	1a	1640	1/1	0.89	0.13	58,58,58,58	0
56	MG	1A	4103	1/1	0.89	0.14	67,67,67,67	0
56	MG	2A	3268	1/1	0.89	0.14	63,63,63,63	0
56	MG	1A	3901	1/1	0.89	0.21	43,43,43,43	0
56	MG	2A	3654	1/1	0.89	0.19	62,62,62,62	0
56	MG	2a	3014	1/1	0.89	0.17	64,64,64,64	0
56	MG	2A	3281	1/1	0.89	0.13	63,63,63,63	0
56	MG	2a	3018	1/1	0.89	0.23	65,65,65,65	0
56	MG	2a	3019	1/1	0.89	0.12	57,57,57,57	0
56	MG	2a	3020	1/1	0.89	0.15	71,71,71,71	0
56	MG	2A	3664	1/1	0.89	0.11	54,54,54,54	0
56	MG	2a	3026	1/1	0.89	0.23	64,64,64,64	0
56	MG	2A	3286	1/1	0.89	0.17	55,55,55,55	0
56	MG	2a	3029	1/1	0.89	0.15	67,67,67,67	0
56	MG	1A	3905	1/1	0.89	0.12	46,46,46,46	0
56	MG	2a	3032	1/1	0.89	0.20	60,60,60,60	0
56	MG	1n	102	1/1	0.89	0.29	66,66,66,66	0
56	MG	1a	1661	1/1	0.89	0.20	70,70,70,70	0
56	MG	2A	3693	1/1	0.89	0.09	35,35,35,35	0
56	MG	1A	3703	1/1	0.89	0.11	56,56,56,56	0
56	MG	1A	3315	1/1	0.89	0.25	61,61,61,61	0
56	MG	1B	3016	1/1	0.89	0.13	54,54,54,54	0
56	MG	2A	3702	1/1	0.89	0.07	49,49,49,49	0
56	MG	2A	3322	1/1	0.89	0.14	60,60,60,60	0
56	MG	1A	3926	1/1	0.89	0.17	53,53,53,53	0
56	MG	1A	3344	1/1	0.89	0.22	64,64,64,64	0
56	MG	2A	3332	1/1	0.89	0.13	62,62,62,62	0
56	MG	1A	3571	1/1	0.89	0.10	57,57,57,57	0
56	MG	2a	3059	1/1	0.89	0.21	74,74,74,74	0
56	MG	2A	3718	1/1	0.89	0.16	64,64,64,64	0
56	MG	1B	3025	1/1	0.89	0.16	77,77,77,77	0
56	MG	2A	3340	1/1	0.89	0.11	51,51,51,51	0
56	MG	1B	3028	1/1	0.89	0.07	61,61,61,61	0
56	MG	2a	3070	1/1	0.89	0.14	61,61,61,61	0
56	MG	2A	3733	1/1	0.89	0.13	50,50,50,50	0
56	MG	1a	1683	1/1	0.89	0.13	61,61,61,61	0
56	MG	2a	3081	1/1	0.89	0.12	49,49,49,49	0
56	MG	1a	1688	1/1	0.89	0.24	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3218	1/1	0.89	0.16	62,62,62,62	0
56	MG	2A	3350	1/1	0.89	0.19	61,61,61,61	0
56	MG	1A	3833	1/1	0.89	0.14	60,60,60,60	0
56	MG	2A	3745	1/1	0.89	0.14	56,56,56,56	0
56	MG	1A	3598	1/1	0.89	0.12	51,51,51,51	0
56	MG	1A	3504	1/1	0.89	0.12	44,44,44,44	0
56	MG	1A	3983	1/1	0.89	0.13	48,48,48,48	0
56	MG	1F	302	1/1	0.89	0.13	47,47,47,47	0
56	MG	2a	3106	1/1	0.89	0.17	62,62,62,62	0
56	MG	2A	3023	1/1	0.89	0.09	48,48,48,48	0
56	MG	2A	3758	1/1	0.89	0.12	58,58,58,58	0
56	MG	2A	3765	1/1	0.89	0.10	53,53,53,53	0
56	MG	2A	3380	1/1	0.89	0.11	55,55,55,55	0
56	MG	2A	3386	1/1	0.89	0.19	63,63,63,63	0
56	MG	1A	3299	1/1	0.89	0.28	61,61,61,61	0
56	MG	1a	1712	1/1	0.89	0.23	67,67,67,67	0
56	MG	2A	3053	1/1	0.89	0.14	54,54,54,54	0
56	MG	2A	3410	1/1	0.89	0.17	55,55,55,55	0
56	MG	1A	3143	1/1	0.89	0.20	55,55,55,55	0
56	MG	1R	203	1/1	0.89	0.20	47,47,47,47	0
56	MG	2a	3141	1/1	0.89	0.14	94,94,94,94	0
56	MG	2A	3424	1/1	0.89	0.19	50,50,50,50	0
56	MG	2A	3425	1/1	0.89	0.18	58,58,58,58	0
56	MG	2a	3156	1/1	0.89	0.10	69,69,69,69	0
56	MG	1A	3362	1/1	0.89	0.14	54,54,54,54	0
56	MG	2A	3064	1/1	0.89	0.10	51,51,51,51	0
56	MG	2A	3065	1/1	0.89	0.18	57,57,57,57	0
56	MG	1A	3363	1/1	0.89	0.22	60,60,60,60	0
56	MG	2A	3441	1/1	0.89	0.11	51,51,51,51	0
56	MG	1a	1735	1/1	0.89	0.18	57,57,57,57	0
56	MG	1A	3370	1/1	0.89	0.18	57,57,57,57	0
56	MG	2A	3094	1/1	0.89	0.13	44,44,44,44	0
56	MG	2A	3463	1/1	0.89	0.14	57,57,57,57	0
56	MG	2A	3836	1/1	0.89	0.20	42,42,42,42	0
56	MG	1A	4022	1/1	0.89	0.08	72,72,72,72	0
56	MG	1A	3648	1/1	0.89	0.12	55,55,55,55	0
56	MG	2A	3469	1/1	0.89	0.15	55,55,55,55	0
56	MG	13	103	1/1	0.89	0.12	47,47,47,47	0
56	MG	2A	3474	1/1	0.89	0.14	55,55,55,55	0
56	MG	2A	3104	1/1	0.89	0.10	53,53,53,53	0
56	MG	1A	3783	1/1	0.89	0.14	34,34,34,34	0
56	MG	1a	1751	1/1	0.89	0.16	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3665	1/1	0.89	0.12	60,60,60,60	0
56	MG	1a	1601	1/1	0.89	0.10	53,53,53,53	0
56	MG	1A	3667	1/1	0.89	0.11	61,61,61,61	0
56	MG	1A	3322	1/1	0.89	0.18	59,59,59,59	0
56	MG	1a	1605	1/1	0.89	0.10	65,65,65,65	0
56	MG	2A	3521	1/1	0.89	0.12	51,51,51,51	0
56	MG	2A	3130	1/1	0.89	0.15	53,53,53,53	0
56	MG	2A	3906	1/1	0.89	0.35	62,62,62,62	0
56	MG	2B	3001	1/1	0.89	0.16	62,62,62,62	0
56	MG	1a	1770	1/1	0.89	0.16	60,60,60,60	0
56	MG	2a	3237	1/1	0.89	0.32	66,66,66,66	0
56	MG	1A	3268	1/1	0.89	0.30	59,59,59,59	0
56	MG	2A	3544	1/1	0.89	0.10	42,42,42,42	0
56	MG	2d	502	1/1	0.89	0.16	68,68,68,68	0
56	MG	2A	3546	1/1	0.89	0.10	44,44,44,44	0
56	MG	2B	3007	1/1	0.89	0.13	55,55,55,55	0
56	MG	2B	3008	1/1	0.89	0.14	58,58,58,58	0
56	MG	2A	3549	1/1	0.89	0.16	58,58,58,58	0
56	MG	2q	202	1/1	0.89	0.12	78,78,78,78	0
56	MG	2r	102	1/1	0.89	0.13	73,73,73,73	0
56	MG	1A	3687	1/1	0.89	0.11	31,31,31,31	0
56	MG	1A	4068	1/1	0.89	0.14	48,48,48,48	0
56	MG	1A	3545	1/1	0.89	0.13	67,67,67,67	0
56	MG	2A	3579	1/1	0.89	0.17	60,60,60,60	0
56	MG	2A	3186	1/1	0.89	0.16	54,54,54,54	0
56	MG	2A	3206	1/1	0.89	0.19	56,56,56,56	0
56	MG	2A	3605	1/1	0.89	0.12	51,51,51,51	0
56	MG	1A	3471	1/1	0.89	0.19	57,57,57,57	0
56	MG	2A	3228	1/1	0.89	0.29	65,65,65,65	0
56	MG	2T	3003	1/1	0.89	0.17	63,63,63,63	0
56	MG	1A	3418	1/1	0.89	0.13	54,54,54,54	0
58	ZN	24	501	1/1	0.89	0.11	128,128,128,128	0
56	MG	2B	3017	1/1	0.90	0.12	65,65,65,65	0
56	MG	11	103	1/1	0.90	0.09	65,65,65,65	0
56	MG	2A	3168	1/1	0.90	0.19	52,52,52,52	0
56	MG	1A	4007	1/1	0.90	0.08	86,86,86,86	0
56	MG	2A	3171	1/1	0.90	0.11	38,38,38,38	0
56	MG	2A	3177	1/1	0.90	0.21	63,63,63,63	0
56	MG	2A	3572	1/1	0.90	0.09	44,44,44,44	0
56	MG	2A	3573	1/1	0.90	0.09	42,42,42,42	0
56	MG	2A	3178	1/1	0.90	0.16	57,57,57,57	0
56	MG	1A	3831	1/1	0.90	0.28	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2W	202	1/1	0.90	0.10	58,58,58,58	0
56	MG	2A	3583	1/1	0.90	0.26	69,69,69,69	0
56	MG	23	101	1/1	0.90	0.15	61,61,61,61	0
56	MG	2A	3590	1/1	0.90	0.13	64,64,64,64	0
56	MG	1a	1767	1/1	0.90	0.14	66,66,66,66	0
56	MG	2A	3603	1/1	0.90	0.10	50,50,50,50	0
56	MG	2A	3218	1/1	0.90	0.14	61,61,61,61	0
56	MG	18	103	1/1	0.90	0.12	72,72,72,72	0
56	MG	1A	3458	1/1	0.90	0.15	54,54,54,54	0
56	MG	1A	3203	1/1	0.90	0.10	50,50,50,50	0
56	MG	1A	3209	1/1	0.90	0.15	68,68,68,68	0
56	MG	1A	3835	1/1	0.90	0.14	59,59,59,59	0
56	MG	1A	3699	1/1	0.90	0.17	64,64,64,64	0
56	MG	2a	3015	1/1	0.90	0.23	62,62,62,62	0
56	MG	2a	3016	1/1	0.90	0.15	66,66,66,66	0
56	MG	2A	3619	1/1	0.90	0.12	37,37,37,37	0
56	MG	1A	3558	1/1	0.90	0.12	52,52,52,52	0
56	MG	1a	1794	1/1	0.90	0.11	52,52,52,52	0
56	MG	1A	4053	1/1	0.90	0.20	37,37,37,37	0
56	MG	2A	3642	1/1	0.90	0.16	47,47,47,47	0
56	MG	2A	3261	1/1	0.90	0.15	59,59,59,59	0
56	MG	2A	3265	1/1	0.90	0.14	59,59,59,59	0
56	MG	1A	3560	1/1	0.90	0.23	55,55,55,55	0
56	MG	1a	1803	1/1	0.90	0.10	73,73,73,73	0
56	MG	2a	3031	1/1	0.90	0.10	49,49,49,49	0
56	MG	1A	3709	1/1	0.90	0.14	52,52,52,52	0
56	MG	2A	3655	1/1	0.90	0.12	65,65,65,65	0
56	MG	2A	3280	1/1	0.90	0.14	54,54,54,54	0
56	MG	2A	3658	1/1	0.90	0.14	55,55,55,55	0
56	MG	1a	1618	1/1	0.90	0.08	48,48,48,48	0
56	MG	2A	3284	1/1	0.90	0.15	59,59,59,59	0
56	MG	2A	3681	1/1	0.90	0.10	50,50,50,50	0
56	MG	2a	3044	1/1	0.90	0.17	57,57,57,57	0
56	MG	2A	3684	1/1	0.90	0.09	44,44,44,44	0
56	MG	2A	3685	1/1	0.90	0.10	53,53,53,53	0
56	MG	1a	1620	1/1	0.90	0.15	66,66,66,66	0
56	MG	1d	502	1/1	0.90	0.28	67,67,67,67	0
56	MG	1a	1623	1/1	0.90	0.11	60,60,60,60	0
56	MG	2a	3056	1/1	0.90	0.21	63,63,63,63	0
56	MG	2a	3057	1/1	0.90	0.19	71,71,71,71	0
56	MG	1A	4065	1/1	0.90	0.09	51,51,51,51	0
56	MG	1l	203	1/1	0.90	0.12	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3304	1/1	0.90	0.15	60,60,60,60	0
56	MG	1A	4066	1/1	0.90	0.11	71,71,71,71	0
56	MG	1A	3711	1/1	0.90	0.10	61,61,61,61	0
56	MG	2a	3065	1/1	0.90	0.09	57,57,57,57	0
56	MG	2a	3067	1/1	0.90	0.36	65,65,65,65	0
56	MG	2A	3313	1/1	0.90	0.25	64,64,64,64	0
56	MG	2A	3709	1/1	0.90	0.10	33,33,33,33	0
56	MG	2A	3314	1/1	0.90	0.11	47,47,47,47	0
56	MG	1a	1630	1/1	0.90	0.09	60,60,60,60	0
56	MG	1A	4071	1/1	0.90	0.07	26,26,26,26	0
56	MG	1A	3564	1/1	0.90	0.07	40,40,40,40	0
56	MG	2A	3717	1/1	0.90	0.11	39,39,39,39	0
56	MG	2a	3088	1/1	0.90	0.17	62,62,62,62	0
56	MG	2A	3331	1/1	0.90	0.08	56,56,56,56	0
56	MG	2a	3091	1/1	0.90	0.18	76,76,76,76	0
56	MG	1A	4074	1/1	0.90	0.12	64,64,64,64	0
56	MG	1w	107	1/1	0.90	0.32	67,67,67,67	0
56	MG	1A	3378	1/1	0.90	0.11	53,53,53,53	0
56	MG	2a	3096	1/1	0.90	0.14	65,65,65,65	0
56	MG	1A	3568	1/1	0.90	0.15	50,50,50,50	0
56	MG	2a	3100	1/1	0.90	0.15	69,69,69,69	0
56	MG	1x	101	1/1	0.90	0.10	56,56,56,56	0
56	MG	1A	3386	1/1	0.90	0.17	54,54,54,54	0
56	MG	2A	3740	1/1	0.90	0.12	53,53,53,53	0
56	MG	1A	4104	1/1	0.90	0.09	30,30,30,30	0
56	MG	1x	104	1/1	0.90	0.23	72,72,72,72	0
56	MG	1A	3737	1/1	0.90	0.13	57,57,57,57	0
56	MG	1A	4116	1/1	0.90	0.11	41,41,41,41	0
56	MG	1A	4120	1/1	0.90	0.13	44,44,44,44	0
56	MG	1A	3581	1/1	0.90	0.17	58,58,58,58	0
56	MG	2A	3753	1/1	0.90	0.19	45,45,45,45	0
56	MG	1B	3006	1/1	0.90	0.23	45,45,45,45	0
56	MG	2a	3130	1/1	0.90	0.38	72,72,72,72	0
56	MG	1A	3745	1/1	0.90	0.14	19,19,19,19	0
56	MG	2a	3135	1/1	0.90	0.13	62,62,62,62	0
56	MG	1A	3406	1/1	0.90	0.16	47,47,47,47	0
56	MG	1y	3003	1/1	0.90	0.25	71,71,71,71	0
56	MG	2A	3759	1/1	0.90	0.09	46,46,46,46	0
56	MG	2a	3145	1/1	0.90	0.08	76,76,76,76	0
56	MG	2a	3146	1/1	0.90	0.13	84,84,84,84	0
56	MG	2A	3764	1/1	0.90	0.13	66,66,66,66	0
56	MG	2A	3381	1/1	0.90	0.11	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3595	1/1	0.90	0.12	59,59,59,59	0
56	MG	2A	3387	1/1	0.90	0.18	59,59,59,59	0
56	MG	2A	3393	1/1	0.90	0.09	48,48,48,48	0
56	MG	2A	3008	1/1	0.90	0.11	49,49,49,49	0
56	MG	2a	3174	1/1	0.90	0.13	69,69,69,69	0
56	MG	2a	3178	1/1	0.90	0.12	75,75,75,75	0
56	MG	1a	1682	1/1	0.90	0.09	66,66,66,66	0
56	MG	1A	3323	1/1	0.90	0.14	50,50,50,50	0
56	MG	2A	3798	1/1	0.90	0.14	52,52,52,52	0
56	MG	2A	3042	1/1	0.90	0.12	42,42,42,42	0
56	MG	2A	3412	1/1	0.90	0.19	59,59,59,59	0
56	MG	2A	3045	1/1	0.90	0.11	58,58,58,58	0
56	MG	2a	3197	1/1	0.90	0.10	69,69,69,69	0
56	MG	2A	3050	1/1	0.90	0.08	51,51,51,51	0
56	MG	1A	3412	1/1	0.90	0.17	52,52,52,52	0
56	MG	1B	3021	1/1	0.90	0.12	46,46,46,46	0
56	MG	2A	3426	1/1	0.90	0.17	63,63,63,63	0
56	MG	1a	1691	1/1	0.90	0.23	69,69,69,69	0
56	MG	2a	3205	1/1	0.90	0.26	70,70,70,70	0
56	MG	2A	3818	1/1	0.90	0.18	66,66,66,66	0
56	MG	2a	3209	1/1	0.90	0.21	77,77,77,77	0
56	MG	1A	3770	1/1	0.90	0.09	74,74,74,74	0
56	MG	1A	3325	1/1	0.90	0.22	64,64,64,64	0
56	MG	2a	3219	1/1	0.90	0.11	65,65,65,65	0
56	MG	2A	3438	1/1	0.90	0.25	68,68,68,68	0
56	MG	2A	3827	1/1	0.90	0.14	58,58,58,58	0
56	MG	2a	3224	1/1	0.90	0.19	74,74,74,74	0
56	MG	1A	3618	1/1	0.90	0.14	56,56,56,56	0
56	MG	1A	3215	1/1	0.90	0.14	65,65,65,65	0
56	MG	1A	3918	1/1	0.90	0.12	56,56,56,56	0
56	MG	1A	3513	1/1	0.90	0.13	62,62,62,62	0
56	MG	2A	3458	1/1	0.90	0.17	65,65,65,65	0
56	MG	1A	3304	1/1	0.90	0.27	55,55,55,55	0
56	MG	1A	3643	1/1	0.90	0.08	34,34,34,34	0
56	MG	2a	3233	1/1	0.90	0.14	68,68,68,68	0
56	MG	1a	1719	1/1	0.90	0.28	63,63,63,63	0
56	MG	1a	1720	1/1	0.90	0.20	67,67,67,67	0
56	MG	1A	3645	1/1	0.90	0.10	37,37,37,37	0
56	MG	1a	1722	1/1	0.90	0.15	65,65,65,65	0
56	MG	2A	3471	1/1	0.90	0.22	54,54,54,54	0
56	MG	2a	3242	1/1	0.90	0.17	55,55,55,55	0
56	MG	2A	3110	1/1	0.90	0.10	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2g	8001	1/1	0.90	0.11	75,75,75,75	0
56	MG	2A	3477	1/1	0.90	0.35	56,56,56,56	0
56	MG	1A	3525	1/1	0.90	0.21	58,58,58,58	0
56	MG	1O	201	1/1	0.90	0.17	63,63,63,63	0
56	MG	2A	3888	1/1	0.90	0.11	57,57,57,57	0
56	MG	1A	3305	1/1	0.90	0.26	55,55,55,55	0
56	MG	1O	207	1/1	0.90	0.13	65,65,65,65	0
56	MG	2A	3503	1/1	0.90	0.11	58,58,58,58	0
56	MG	1A	3127	1/1	0.90	0.23	51,51,51,51	0
56	MG	1A	3048	1/1	0.90	0.22	48,48,48,48	0
56	MG	1T	8002	1/1	0.90	0.11	58,58,58,58	0
56	MG	2A	3515	1/1	0.90	0.10	55,55,55,55	0
56	MG	1A	3253	1/1	0.90	0.08	61,61,61,61	0
56	MG	2w	107	1/1	0.90	0.12	75,75,75,75	0
56	MG	2A	3134	1/1	0.90	0.15	72,72,72,72	0
56	MG	1A	3679	1/1	0.90	0.15	39,39,39,39	0
56	MG	1A	3110	1/1	0.90	0.09	42,42,42,42	0
56	MG	2B	3011	1/1	0.90	0.24	67,67,67,67	0
56	MG	1A	3188	1/1	0.90	0.10	49,49,49,49	0
56	MG	2A	3541	1/1	0.90	0.07	30,30,30,30	0
56	MG	1A	3026	1/1	0.91	0.15	60,60,60,60	0
56	MG	1A	3182	1/1	0.91	0.14	55,55,55,55	0
56	MG	2A	3317	1/1	0.91	0.11	55,55,55,55	0
56	MG	2A	3321	1/1	0.91	0.18	54,54,54,54	0
56	MG	1A	3870	1/1	0.91	0.11	39,39,39,39	0
56	MG	1x	106	1/1	0.91	0.14	63,63,63,63	0
56	MG	1x	108	1/1	0.91	0.19	63,63,63,63	0
56	MG	1A	3732	1/1	0.91	0.19	64,64,64,64	0
56	MG	1A	4134	1/1	0.91	0.28	46,46,46,46	0
56	MG	2a	3021	1/1	0.91	0.20	65,65,65,65	0
56	MG	1x	112	1/1	0.91	0.16	71,71,71,71	0
56	MG	2A	3335	1/1	0.91	0.14	59,59,59,59	0
56	MG	1A	3572	1/1	0.91	0.09	55,55,55,55	0
56	MG	1A	3878	1/1	0.91	0.12	33,33,33,33	0
56	MG	2A	3695	1/1	0.91	0.13	38,38,38,38	0
56	MG	1A	3278	1/1	0.91	0.10	51,51,51,51	0
56	MG	2A	3698	1/1	0.91	0.08	51,51,51,51	0
56	MG	1A	3361	1/1	0.91	0.09	49,49,49,49	0
56	MG	1B	3014	1/1	0.91	0.08	63,63,63,63	0
56	MG	1A	3285	1/1	0.91	0.17	39,39,39,39	0
56	MG	2A	3348	1/1	0.91	0.14	48,48,48,48	0
56	MG	2A	3708	1/1	0.91	0.10	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3597	1/1	0.91	0.15	50,50,50,50	0
56	MG	2A	3001	1/1	0.91	0.15	47,47,47,47	0
56	MG	2A	3006	1/1	0.91	0.24	56,56,56,56	0
56	MG	1A	3484	1/1	0.91	0.11	54,54,54,54	0
56	MG	2A	3018	1/1	0.91	0.14	44,44,44,44	0
56	MG	1A	3756	1/1	0.91	0.09	39,39,39,39	0
56	MG	2A	3366	1/1	0.91	0.08	54,54,54,54	0
56	MG	2a	3054	1/1	0.91	0.14	65,65,65,65	0
56	MG	1A	3089	1/1	0.91	0.12	48,48,48,48	0
56	MG	2A	3378	1/1	0.91	0.12	62,62,62,62	0
56	MG	1A	3904	1/1	0.91	0.12	36,36,36,36	0
56	MG	2A	3731	1/1	0.91	0.14	57,57,57,57	0
56	MG	1A	3189	1/1	0.91	0.23	43,43,43,43	0
56	MG	2A	3734	1/1	0.91	0.11	57,57,57,57	0
56	MG	2A	3384	1/1	0.91	0.11	62,62,62,62	0
56	MG	1a	1701	1/1	0.91	0.24	51,51,51,51	0
56	MG	1A	3489	1/1	0.91	0.11	44,44,44,44	0
56	MG	1A	3192	1/1	0.91	0.12	52,52,52,52	0
56	MG	1B	3034	1/1	0.91	0.11	58,58,58,58	0
56	MG	2A	3398	1/1	0.91	0.23	55,55,55,55	0
56	MG	1a	1707	1/1	0.91	0.35	63,63,63,63	0
56	MG	1a	1708	1/1	0.91	0.20	68,68,68,68	0
56	MG	2A	3063	1/1	0.91	0.17	67,67,67,67	0
56	MG	1A	3505	1/1	0.91	0.10	47,47,47,47	0
56	MG	1a	1710	1/1	0.91	0.35	77,77,77,77	0
56	MG	2A	3420	1/1	0.91	0.14	43,43,43,43	0
56	MG	1D	311	1/1	0.91	0.19	56,56,56,56	0
56	MG	1A	3778	1/1	0.91	0.15	57,57,57,57	0
56	MG	1E	304	1/1	0.91	0.14	55,55,55,55	0
56	MG	2A	3762	1/1	0.91	0.10	52,52,52,52	0
56	MG	1A	3936	1/1	0.91	0.09	31,31,31,31	0
56	MG	1A	3639	1/1	0.91	0.12	41,41,41,41	0
56	MG	1G	3002	1/1	0.91	0.13	56,56,56,56	0
56	MG	2a	3101	1/1	0.91	0.15	56,56,56,56	0
56	MG	1A	3307	1/1	0.91	0.21	45,45,45,45	0
56	MG	1a	1727	1/1	0.91	0.14	49,49,49,49	0
56	MG	2A	3771	1/1	0.91	0.10	39,39,39,39	0
56	MG	2A	3772	1/1	0.91	0.11	53,53,53,53	0
56	MG	1a	1729	1/1	0.91	0.26	61,61,61,61	0
56	MG	1G	3005	1/1	0.91	0.15	66,66,66,66	0
56	MG	2a	3114	1/1	0.91	0.10	51,51,51,51	0
56	MG	2A	3783	1/1	0.91	0.14	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3119	1/1	0.91	0.24	71,71,71,71	0
56	MG	2A	3442	1/1	0.91	0.24	50,50,50,50	0
56	MG	1a	1733	1/1	0.91	0.09	58,58,58,58	0
56	MG	2a	3122	1/1	0.91	0.26	73,73,73,73	0
56	MG	2a	3126	1/1	0.91	0.25	69,69,69,69	0
56	MG	1N	201	1/1	0.91	0.34	59,59,59,59	0
56	MG	2A	3801	1/1	0.91	0.09	64,64,64,64	0
56	MG	2a	3129	1/1	0.91	0.14	59,59,59,59	0
56	MG	2A	3455	1/1	0.91	0.25	54,54,54,54	0
56	MG	1A	3787	1/1	0.91	0.11	55,55,55,55	0
56	MG	1A	3955	1/1	0.91	0.10	30,30,30,30	0
56	MG	1A	3788	1/1	0.91	0.17	59,59,59,59	0
56	MG	2A	3465	1/1	0.91	0.25	55,55,55,55	0
56	MG	1A	3966	1/1	0.91	0.14	59,59,59,59	0
56	MG	1A	3096	1/1	0.91	0.19	49,49,49,49	0
56	MG	1A	3100	1/1	0.91	0.14	60,60,60,60	0
56	MG	1A	3016	1/1	0.91	0.18	51,51,51,51	0
56	MG	1A	3124	1/1	0.91	0.22	44,44,44,44	0
56	MG	2A	3472	1/1	0.91	0.18	60,60,60,60	0
56	MG	2A	3823	1/1	0.91	0.10	73,73,73,73	0
56	MG	2a	3165	1/1	0.91	0.10	54,54,54,54	0
56	MG	1a	1757	1/1	0.91	0.14	48,48,48,48	0
56	MG	2A	3475	1/1	0.91	0.10	44,44,44,44	0
56	MG	2A	3152	1/1	0.91	0.10	62,62,62,62	0
56	MG	1A	3649	1/1	0.91	0.10	54,54,54,54	0
56	MG	1A	3232	1/1	0.91	0.15	47,47,47,47	0
56	MG	10	106	1/1	0.91	0.09	65,65,65,65	0
56	MG	2A	3854	1/1	0.91	0.10	77,77,77,77	0
56	MG	1A	3539	1/1	0.91	0.07	49,49,49,49	0
56	MG	2A	3172	1/1	0.91	0.09	47,47,47,47	0
56	MG	2A	3174	1/1	0.91	0.10	53,53,53,53	0
56	MG	2a	3194	1/1	0.91	0.16	68,68,68,68	0
56	MG	1A	4002	1/1	0.91	0.17	33,33,33,33	0
56	MG	1A	4006	1/1	0.91	0.08	76,76,76,76	0
56	MG	2A	3183	1/1	0.91	0.11	56,56,56,56	0
56	MG	2A	3518	1/1	0.91	0.12	52,52,52,52	0
56	MG	16	104	1/1	0.91	0.18	53,53,53,53	0
56	MG	2A	3189	1/1	0.91	0.10	52,52,52,52	0
56	MG	2A	3531	1/1	0.91	0.12	51,51,51,51	0
56	MG	2A	3532	1/1	0.91	0.24	65,65,65,65	0
56	MG	2a	3208	1/1	0.91	0.14	75,75,75,75	0
56	MG	2A	3203	1/1	0.91	0.11	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3890	1/1	0.91	0.12	61,61,61,61	0
56	MG	17	101	1/1	0.91	0.13	54,54,54,54	0
56	MG	2a	3215	1/1	0.91	0.17	71,71,71,71	0
56	MG	2a	3218	1/1	0.91	0.16	61,61,61,61	0
56	MG	1A	3822	1/1	0.91	0.10	48,48,48,48	0
56	MG	2A	3894	1/1	0.91	0.12	55,55,55,55	0
56	MG	1A	3420	1/1	0.91	0.21	55,55,55,55	0
56	MG	2A	3910	1/1	0.91	0.18	57,57,57,57	0
56	MG	2A	3224	1/1	0.91	0.12	52,52,52,52	0
56	MG	1A	3053	1/1	0.91	0.12	52,52,52,52	0
56	MG	1A	3247	1/1	0.91	0.12	58,58,58,58	0
56	MG	1A	3425	1/1	0.91	0.10	55,55,55,55	0
56	MG	1A	3058	1/1	0.91	0.11	54,54,54,54	0
56	MG	1A	4036	1/1	0.91	0.09	43,43,43,43	0
56	MG	1a	1813	1/1	0.91	0.14	58,58,58,58	0
56	MG	1A	3552	1/1	0.91	0.14	60,60,60,60	0
56	MG	1A	3148	1/1	0.91	0.23	48,48,48,48	0
56	MG	2a	3235	1/1	0.91	0.12	71,71,71,71	0
56	MG	1a	1828	1/1	0.91	0.12	59,59,59,59	0
56	MG	1A	4052	1/1	0.91	0.10	31,31,31,31	0
56	MG	2A	3592	1/1	0.91	0.20	57,57,57,57	0
56	MG	1A	3696	1/1	0.91	0.11	61,61,61,61	0
56	MG	1A	3698	1/1	0.91	0.11	73,73,73,73	0
56	MG	1A	3328	1/1	0.91	0.16	64,64,64,64	0
56	MG	2e	3001	1/1	0.91	0.11	79,79,79,79	0
56	MG	2D	305	1/1	0.91	0.17	50,50,50,50	0
56	MG	2E	306	1/1	0.91	0.15	67,67,67,67	0
56	MG	1A	3844	1/1	0.91	0.12	54,54,54,54	0
56	MG	1A	3848	1/1	0.91	0.10	56,56,56,56	0
56	MG	1A	3261	1/1	0.91	0.17	55,55,55,55	0
56	MG	1A	3851	1/1	0.91	0.16	62,62,62,62	0
56	MG	2T	3002	1/1	0.91	0.12	58,58,58,58	0
56	MG	2A	3287	1/1	0.91	0.14	55,55,55,55	0
56	MG	1A	3333	1/1	0.91	0.17	52,52,52,52	0
56	MG	1A	3854	1/1	0.91	0.10	51,51,51,51	0
56	MG	2Y	502	1/1	0.91	0.18	54,54,54,54	0
56	MG	2A	3622	1/1	0.91	0.25	63,63,63,63	0
56	MG	1a	1639	1/1	0.91	0.13	62,62,62,62	0
56	MG	1A	3152	1/1	0.91	0.12	55,55,55,55	0
56	MG	1a	1642	1/1	0.91	0.28	67,67,67,67	0
56	MG	1A	3565	1/1	0.91	0.27	71,71,71,71	0
56	MG	2A	3306	1/1	0.91	0.10	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2y	3003	1/1	0.91	0.14	70,70,70,70	0
56	MG	1A	3266	1/1	0.91	0.08	52,52,52,52	0
56	MG	2A	3308	1/1	0.91	0.10	49,49,49,49	0
56	MG	2A	3312	1/1	0.91	0.11	51,51,51,51	0
56	MG	2A	3493	1/1	0.92	0.20	53,53,53,53	0
56	MG	1A	3582	1/1	0.92	0.22	54,54,54,54	0
56	MG	2B	3012	1/1	0.92	0.10	55,55,55,55	0
56	MG	1A	3419	1/1	0.92	0.31	60,60,60,60	0
56	MG	2A	3155	1/1	0.92	0.08	59,59,59,59	0
56	MG	1W	201	1/1	0.92	0.23	57,57,57,57	0
56	MG	1A	3710	1/1	0.92	0.17	68,68,68,68	0
56	MG	1A	4010	1/1	0.92	0.08	26,26,26,26	0
56	MG	2A	3508	1/1	0.92	0.09	60,60,60,60	0
56	MG	2D	301	1/1	0.92	0.10	57,57,57,57	0
56	MG	10	105	1/1	0.92	0.17	70,70,70,70	0
56	MG	2E	302	1/1	0.92	0.09	52,52,52,52	0
56	MG	2E	303	1/1	0.92	0.10	49,49,49,49	0
56	MG	1A	3088	1/1	0.92	0.09	47,47,47,47	0
56	MG	2A	3175	1/1	0.92	0.15	65,65,65,65	0
56	MG	1a	1761	1/1	0.92	0.10	64,64,64,64	0
56	MG	2A	3530	1/1	0.92	0.11	37,37,37,37	0
56	MG	2Q	3001	1/1	0.92	0.09	50,50,50,50	0
56	MG	11	101	1/1	0.92	0.07	38,38,38,38	0
56	MG	2A	3180	1/1	0.92	0.13	51,51,51,51	0
56	MG	2A	3534	1/1	0.92	0.09	40,40,40,40	0
56	MG	1A	4019	1/1	0.92	0.12	42,42,42,42	0
56	MG	2W	201	1/1	0.92	0.14	57,57,57,57	0
56	MG	1A	3712	1/1	0.92	0.06	40,40,40,40	0
56	MG	2W	203	1/1	0.92	0.12	59,59,59,59	0
56	MG	2A	3539	1/1	0.92	0.11	62,62,62,62	0
56	MG	1A	3596	1/1	0.92	0.14	51,51,51,51	0
56	MG	20	3001	1/1	0.92	0.14	59,59,59,59	0
56	MG	2A	3195	1/1	0.92	0.10	56,56,56,56	0
56	MG	25	105	1/1	0.92	0.11	58,58,58,58	0
56	MG	27	101	1/1	0.92	0.15	51,51,51,51	0
56	MG	2A	3197	1/1	0.92	0.27	57,57,57,57	0
56	MG	2A	3198	1/1	0.92	0.09	61,61,61,61	0
56	MG	2a	3004	1/1	0.92	0.21	57,57,57,57	0
56	MG	1a	1771	1/1	0.92	0.10	70,70,70,70	0
56	MG	1A	3840	1/1	0.92	0.11	63,63,63,63	0
56	MG	2A	3555	1/1	0.92	0.10	43,43,43,43	0
56	MG	2A	3556	1/1	0.92	0.14	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3560	1/1	0.92	0.12	63,63,63,63	0
56	MG	2A	3209	1/1	0.92	0.12	61,61,61,61	0
56	MG	2A	3217	1/1	0.92	0.24	64,64,64,64	0
56	MG	1A	3310	1/1	0.92	0.15	40,40,40,40	0
56	MG	18	102	1/1	0.92	0.16	50,50,50,50	0
56	MG	1a	1782	1/1	0.92	0.09	79,79,79,79	0
56	MG	2A	3226	1/1	0.92	0.08	58,58,58,58	0
56	MG	2A	3227	1/1	0.92	0.23	57,57,57,57	0
56	MG	1a	1783	1/1	0.92	0.13	83,83,83,83	0
56	MG	2A	3597	1/1	0.92	0.28	61,61,61,61	0
56	MG	2A	3599	1/1	0.92	0.08	51,51,51,51	0
56	MG	2a	3022	1/1	0.92	0.12	72,72,72,72	0
56	MG	1A	3724	1/1	0.92	0.12	58,58,58,58	0
56	MG	1A	3224	1/1	0.92	0.13	50,50,50,50	0
56	MG	2A	3241	1/1	0.92	0.19	56,56,56,56	0
56	MG	1A	4047	1/1	0.92	0.14	50,50,50,50	0
56	MG	2A	3252	1/1	0.92	0.14	52,52,52,52	0
56	MG	1A	3729	1/1	0.92	0.09	42,42,42,42	0
56	MG	1A	3852	1/1	0.92	0.08	33,33,33,33	0
56	MG	1A	3267	1/1	0.92	0.09	57,57,57,57	0
56	MG	1A	4054	1/1	0.92	0.11	81,81,81,81	0
56	MG	1A	3004	1/1	0.92	0.10	34,34,34,34	0
56	MG	2A	3620	1/1	0.92	0.21	65,65,65,65	0
56	MG	2a	3038	1/1	0.92	0.09	68,68,68,68	0
56	MG	2A	3262	1/1	0.92	0.11	57,57,57,57	0
56	MG	1a	1815	1/1	0.92	0.06	64,64,64,64	0
56	MG	1a	1818	1/1	0.92	0.09	54,54,54,54	0
56	MG	1A	3735	1/1	0.92	0.12	41,41,41,41	0
56	MG	2A	3637	1/1	0.92	0.09	42,42,42,42	0
56	MG	2a	3049	1/1	0.92	0.19	55,55,55,55	0
56	MG	2A	3640	1/1	0.92	0.15	45,45,45,45	0
56	MG	2A	3269	1/1	0.92	0.12	53,53,53,53	0
56	MG	1A	3614	1/1	0.92	0.08	39,39,39,39	0
56	MG	2A	3275	1/1	0.92	0.16	58,58,58,58	0
56	MG	1A	3861	1/1	0.92	0.11	33,33,33,33	0
56	MG	1A	3743	1/1	0.92	0.15	60,60,60,60	0
56	MG	2A	3653	1/1	0.92	0.22	58,58,58,58	0
56	MG	1a	1622	1/1	0.92	0.24	62,62,62,62	0
56	MG	1A	3526	1/1	0.92	0.14	53,53,53,53	0
56	MG	1A	3527	1/1	0.92	0.12	40,40,40,40	0
56	MG	1A	3746	1/1	0.92	0.16	55,55,55,55	0
56	MG	2A	3661	1/1	0.92	0.11	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1628	1/1	0.92	0.16	58,58,58,58	0
56	MG	1s	101	1/1	0.92	0.14	65,65,65,65	0
56	MG	2A	3670	1/1	0.92	0.14	70,70,70,70	0
56	MG	2A	3300	1/1	0.92	0.21	55,55,55,55	0
56	MG	2a	3073	1/1	0.92	0.09	66,66,66,66	0
56	MG	2A	3682	1/1	0.92	0.12	70,70,70,70	0
56	MG	1A	3240	1/1	0.92	0.08	35,35,35,35	0
56	MG	1A	3631	1/1	0.92	0.08	32,32,32,32	0
56	MG	1a	1631	1/1	0.92	0.21	54,54,54,54	0
56	MG	1A	3242	1/1	0.92	0.10	43,43,43,43	0
56	MG	1a	1635	1/1	0.92	0.34	75,75,75,75	0
56	MG	1A	3367	1/1	0.92	0.12	57,57,57,57	0
56	MG	2A	3694	1/1	0.92	0.10	51,51,51,51	0
56	MG	2A	3309	1/1	0.92	0.10	53,53,53,53	0
56	MG	2A	3310	1/1	0.92	0.21	62,62,62,62	0
56	MG	1a	1637	1/1	0.92	0.23	68,68,68,68	0
56	MG	1A	3882	1/1	0.92	0.11	36,36,36,36	0
56	MG	1A	3884	1/1	0.92	0.13	48,48,48,48	0
56	MG	1A	3762	1/1	0.92	0.09	60,60,60,60	0
56	MG	1a	1643	1/1	0.92	0.21	61,61,61,61	0
56	MG	1A	4125	1/1	0.92	0.19	54,54,54,54	0
56	MG	2a	3105	1/1	0.92	0.15	45,45,45,45	0
56	MG	1a	1651	1/1	0.92	0.12	56,56,56,56	0
56	MG	1A	3067	1/1	0.92	0.16	51,51,51,51	0
56	MG	1A	3769	1/1	0.92	0.13	29,29,29,29	0
56	MG	1x	110	1/1	0.92	0.11	52,52,52,52	0
56	MG	1B	3003	1/1	0.92	0.15	56,56,56,56	0
56	MG	2a	3115	1/1	0.92	0.14	57,57,57,57	0
56	MG	2A	3334	1/1	0.92	0.25	64,64,64,64	0
56	MG	1A	3445	1/1	0.92	0.31	62,62,62,62	0
56	MG	1A	3298	1/1	0.92	0.09	43,43,43,43	0
56	MG	2A	3339	1/1	0.92	0.11	51,51,51,51	0
56	MG	1A	3900	1/1	0.92	0.15	44,44,44,44	0
56	MG	2a	3124	1/1	0.92	0.20	61,61,61,61	0
56	MG	1A	3450	1/1	0.92	0.14	57,57,57,57	0
56	MG	1a	1671	1/1	0.92	0.25	66,66,66,66	0
56	MG	1A	3169	1/1	0.92	0.21	55,55,55,55	0
56	MG	1B	3017	1/1	0.92	0.18	50,50,50,50	0
56	MG	1A	3779	1/1	0.92	0.11	56,56,56,56	0
56	MG	1A	3465	1/1	0.92	0.14	60,60,60,60	0
56	MG	2a	3132	1/1	0.92	0.24	63,63,63,63	0
56	MG	1a	1679	1/1	0.92	0.10	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3742	1/1	0.92	0.10	49,49,49,49	0
56	MG	1a	1681	1/1	0.92	0.14	54,54,54,54	0
56	MG	2A	3359	1/1	0.92	0.09	56,56,56,56	0
56	MG	2A	3017	1/1	0.92	0.21	52,52,52,52	0
56	MG	1A	3382	1/1	0.92	0.11	54,54,54,54	0
56	MG	1B	3022	1/1	0.92	0.15	60,60,60,60	0
56	MG	2a	3149	1/1	0.92	0.08	56,56,56,56	0
56	MG	2a	3151	1/1	0.92	0.09	78,78,78,78	0
56	MG	2a	3152	1/1	0.92	0.08	67,67,67,67	0
56	MG	2A	3751	1/1	0.92	0.11	61,61,61,61	0
56	MG	2A	3365	1/1	0.92	0.12	56,56,56,56	0
56	MG	1A	3302	1/1	0.92	0.21	56,56,56,56	0
56	MG	2A	3367	1/1	0.92	0.21	61,61,61,61	0
56	MG	1A	3392	1/1	0.92	0.16	56,56,56,56	0
56	MG	2A	3376	1/1	0.92	0.11	58,58,58,58	0
56	MG	1A	3682	1/1	0.92	0.12	35,35,35,35	0
56	MG	1A	3399	1/1	0.92	0.10	52,52,52,52	0
56	MG	1a	1695	1/1	0.92	0.41	68,68,68,68	0
56	MG	1B	3030	1/1	0.92	0.12	59,59,59,59	0
56	MG	2a	3185	1/1	0.92	0.10	47,47,47,47	0
56	MG	1a	1697	1/1	0.92	0.18	63,63,63,63	0
56	MG	1A	3947	1/1	0.92	0.08	44,44,44,44	0
56	MG	2A	3060	1/1	0.92	0.19	53,53,53,53	0
56	MG	2A	3394	1/1	0.92	0.16	50,50,50,50	0
56	MG	2A	3396	1/1	0.92	0.08	56,56,56,56	0
56	MG	1B	3033	1/1	0.92	0.11	56,56,56,56	0
56	MG	1a	1703	1/1	0.92	0.30	55,55,55,55	0
56	MG	2A	3404	1/1	0.92	0.07	53,53,53,53	0
56	MG	1A	3798	1/1	0.92	0.08	63,63,63,63	0
56	MG	2A	3797	1/1	0.92	0.13	52,52,52,52	0
56	MG	1A	3686	1/1	0.92	0.11	35,35,35,35	0
56	MG	1A	3476	1/1	0.92	0.13	52,52,52,52	0
56	MG	2A	3067	1/1	0.92	0.09	57,57,57,57	0
56	MG	2A	3068	1/1	0.92	0.11	56,56,56,56	0
56	MG	2A	3071	1/1	0.92	0.10	52,52,52,52	0
56	MG	2A	3072	1/1	0.92	0.07	46,46,46,46	0
56	MG	2A	3422	1/1	0.92	0.10	58,58,58,58	0
56	MG	2A	3811	1/1	0.92	0.08	47,47,47,47	0
56	MG	2A	3074	1/1	0.92	0.18	73,73,73,73	0
56	MG	1A	3689	1/1	0.92	0.12	51,51,51,51	0
56	MG	2A	3088	1/1	0.92	0.09	49,49,49,49	0
56	MG	2A	3816	1/1	0.92	0.16	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3222	1/1	0.92	0.14	63,63,63,63	0
56	MG	2A	3427	1/1	0.92	0.07	45,45,45,45	0
56	MG	1A	3963	1/1	0.92	0.15	60,60,60,60	0
56	MG	1A	3404	1/1	0.92	0.16	59,59,59,59	0
56	MG	2A	3430	1/1	0.92	0.07	51,51,51,51	0
56	MG	2A	3432	1/1	0.92	0.11	60,60,60,60	0
56	MG	2A	3434	1/1	0.92	0.11	59,59,59,59	0
56	MG	1A	3808	1/1	0.92	0.10	36,36,36,36	0
56	MG	2A	3097	1/1	0.92	0.07	56,56,56,56	0
56	MG	1a	1713	1/1	0.92	0.09	68,68,68,68	0
56	MG	1F	308	1/1	0.92	0.14	53,53,53,53	0
56	MG	1A	3483	1/1	0.92	0.09	46,46,46,46	0
56	MG	2A	3106	1/1	0.92	0.14	59,59,59,59	0
56	MG	2A	3448	1/1	0.92	0.17	49,49,49,49	0
56	MG	2A	3450	1/1	0.92	0.21	50,50,50,50	0
56	MG	2A	3108	1/1	0.92	0.18	44,44,44,44	0
56	MG	2A	3864	1/1	0.92	0.08	63,63,63,63	0
56	MG	1A	3980	1/1	0.92	0.10	74,74,74,74	0
56	MG	2A	3456	1/1	0.92	0.26	60,60,60,60	0
56	MG	2A	3457	1/1	0.92	0.23	57,57,57,57	0
56	MG	2A	3111	1/1	0.92	0.14	54,54,54,54	0
56	MG	1A	3982	1/1	0.92	0.12	29,29,29,29	0
56	MG	2A	3461	1/1	0.92	0.25	52,52,52,52	0
56	MG	2A	3115	1/1	0.92	0.22	51,51,51,51	0
56	MG	1A	3206	1/1	0.92	0.15	55,55,55,55	0
56	MG	1a	1723	1/1	0.92	0.26	61,61,61,61	0
56	MG	1A	3181	1/1	0.92	0.18	54,54,54,54	0
56	MG	1O	204	1/1	0.92	0.21	58,58,58,58	0
56	MG	1A	3342	1/1	0.92	0.13	57,57,57,57	0
56	MG	1A	3996	1/1	0.92	0.07	43,43,43,43	0
56	MG	1Q	203	1/1	0.92	0.12	64,64,64,64	0
56	MG	1A	3573	1/1	0.92	0.20	60,60,60,60	0
56	MG	1S	3001	1/1	0.92	0.22	51,51,51,51	0
56	MG	1A	3006	1/1	0.92	0.19	57,57,57,57	0
56	MG	2A	3479	1/1	0.92	0.29	54,54,54,54	0
56	MG	2y	3001	1/1	0.92	0.15	59,59,59,59	0
56	MG	1A	4001	1/1	0.92	0.10	17,17,17,17	0
56	MG	2B	3005	1/1	0.92	0.07	53,53,53,53	0
56	MG	2A	3482	1/1	0.92	0.24	63,63,63,63	0
56	MG	2A	3487	1/1	0.92	0.25	62,62,62,62	0
56	MG	2A	3150	1/1	0.92	0.20	39,39,39,39	0
56	MG	2A	3446	1/1	0.93	0.21	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3733	1/1	0.93	0.07	52,52,52,52	0
56	MG	1A	3047	1/1	0.93	0.05	21,21,21,21	0
56	MG	2A	3449	1/1	0.93	0.24	47,47,47,47	0
56	MG	1A	3885	1/1	0.93	0.10	37,37,37,37	0
56	MG	2A	3452	1/1	0.93	0.19	42,42,42,42	0
56	MG	1A	3886	1/1	0.93	0.11	57,57,57,57	0
56	MG	2A	3454	1/1	0.93	0.14	58,58,58,58	0
56	MG	2A	3908	1/1	0.93	0.15	44,44,44,44	0
56	MG	1a	1706	1/1	0.93	0.26	60,60,60,60	0
56	MG	1A	3251	1/1	0.93	0.08	58,58,58,58	0
56	MG	1A	3589	1/1	0.93	0.11	52,52,52,52	0
56	MG	1A	3892	1/1	0.93	0.09	39,39,39,39	0
56	MG	1A	3590	1/1	0.93	0.15	37,37,37,37	0
56	MG	1a	1711	1/1	0.93	0.17	65,65,65,65	0
56	MG	2A	3462	1/1	0.93	0.23	59,59,59,59	0
56	MG	1A	3592	1/1	0.93	0.13	21,21,21,21	0
56	MG	2A	3127	1/1	0.93	0.07	50,50,50,50	0
56	MG	2B	3009	1/1	0.93	0.19	61,61,61,61	0
56	MG	1A	3594	1/1	0.93	0.10	31,31,31,31	0
56	MG	1A	3473	1/1	0.93	0.19	50,50,50,50	0
56	MG	1A	3094	1/1	0.93	0.14	52,52,52,52	0
56	MG	1A	3753	1/1	0.93	0.15	34,34,34,34	0
56	MG	1A	3385	1/1	0.93	0.18	58,58,58,58	0
56	MG	2A	3143	1/1	0.93	0.17	56,56,56,56	0
56	MG	1A	3906	1/1	0.93	0.11	51,51,51,51	0
56	MG	1D	302	1/1	0.93	0.19	55,55,55,55	0
56	MG	1A	3907	1/1	0.93	0.15	54,54,54,54	0
56	MG	2A	3478	1/1	0.93	0.09	50,50,50,50	0
56	MG	1A	3908	1/1	0.93	0.26	65,65,65,65	0
56	MG	1A	3256	1/1	0.93	0.08	57,57,57,57	0
56	MG	2A	3161	1/1	0.93	0.13	44,44,44,44	0
56	MG	2A	3484	1/1	0.93	0.11	53,53,53,53	0
56	MG	2A	3485	1/1	0.93	0.17	63,63,63,63	0
56	MG	1E	305	1/1	0.93	0.21	57,57,57,57	0
56	MG	2F	302	1/1	0.93	0.12	53,53,53,53	0
56	MG	1A	3190	1/1	0.93	0.15	39,39,39,39	0
56	MG	2A	3492	1/1	0.93	0.10	54,54,54,54	0
56	MG	2A	3170	1/1	0.93	0.23	54,54,54,54	0
56	MG	2A	3494	1/1	0.93	0.22	50,50,50,50	0
56	MG	1A	3759	1/1	0.93	0.11	24,24,24,24	0
56	MG	1a	1737	1/1	0.93	0.12	66,66,66,66	0
56	MG	2V	201	1/1	0.93	0.08	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1F	307	1/1	0.93	0.09	50,50,50,50	0
56	MG	1A	3923	1/1	0.93	0.07	47,47,47,47	0
56	MG	1A	3095	1/1	0.93	0.12	55,55,55,55	0
56	MG	1G	3003	1/1	0.93	0.09	66,66,66,66	0
56	MG	2A	3179	1/1	0.93	0.10	59,59,59,59	0
56	MG	1A	3613	1/1	0.93	0.07	33,33,33,33	0
56	MG	2A	3516	1/1	0.93	0.17	56,56,56,56	0
56	MG	2A	3182	1/1	0.93	0.11	42,42,42,42	0
56	MG	1A	3197	1/1	0.93	0.08	52,52,52,52	0
56	MG	28	101	1/1	0.93	0.10	53,53,53,53	0
56	MG	1I	3001	1/1	0.93	0.12	70,70,70,70	0
56	MG	2a	3001	1/1	0.93	0.11	57,57,57,57	0
56	MG	2A	3528	1/1	0.93	0.15	57,57,57,57	0
56	MG	1A	3943	1/1	0.93	0.08	81,81,81,81	0
56	MG	2A	3194	1/1	0.93	0.23	67,67,67,67	0
56	MG	1N	204	1/1	0.93	0.20	64,64,64,64	0
56	MG	1a	1758	1/1	0.93	0.08	56,56,56,56	0
56	MG	1a	1759	1/1	0.93	0.14	64,64,64,64	0
56	MG	2A	3202	1/1	0.93	0.17	56,56,56,56	0
56	MG	1N	205	1/1	0.93	0.18	57,57,57,57	0
56	MG	2A	3205	1/1	0.93	0.23	52,52,52,52	0
56	MG	1A	3944	1/1	0.93	0.08	60,60,60,60	0
56	MG	1O	202	1/1	0.93	0.13	67,67,67,67	0
56	MG	2A	3210	1/1	0.93	0.09	47,47,47,47	0
56	MG	1A	3616	1/1	0.93	0.10	40,40,40,40	0
56	MG	2A	3552	1/1	0.93	0.10	59,59,59,59	0
56	MG	1A	3265	1/1	0.93	0.21	63,63,63,63	0
56	MG	1A	3494	1/1	0.93	0.09	39,39,39,39	0
56	MG	1A	3625	1/1	0.93	0.07	19,19,19,19	0
56	MG	2A	3225	1/1	0.93	0.13	62,62,62,62	0
56	MG	2A	3561	1/1	0.93	0.09	62,62,62,62	0
56	MG	1Q	205	1/1	0.93	0.12	39,39,39,39	0
56	MG	2a	3027	1/1	0.93	0.09	61,61,61,61	0
56	MG	1a	1774	1/1	0.93	0.09	60,60,60,60	0
56	MG	1A	3959	1/1	0.93	0.12	56,56,56,56	0
56	MG	1a	1777	1/1	0.93	0.16	55,55,55,55	0
56	MG	2A	3231	1/1	0.93	0.10	49,49,49,49	0
56	MG	2A	3235	1/1	0.93	0.15	50,50,50,50	0
56	MG	2A	3588	1/1	0.93	0.06	47,47,47,47	0
56	MG	2A	3238	1/1	0.93	0.17	56,56,56,56	0
56	MG	1A	3146	1/1	0.93	0.13	36,36,36,36	0
56	MG	1S	3002	1/1	0.93	0.08	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3244	1/1	0.93	0.10	54,54,54,54	0
56	MG	1A	3782	1/1	0.93	0.15	25,25,25,25	0
56	MG	2A	3247	1/1	0.93	0.10	51,51,51,51	0
56	MG	2a	3042	1/1	0.93	0.26	58,58,58,58	0
56	MG	1A	3409	1/1	0.93	0.27	60,60,60,60	0
56	MG	2a	3045	1/1	0.93	0.12	65,65,65,65	0
56	MG	2A	3254	1/1	0.93	0.17	53,53,53,53	0
56	MG	1a	1788	1/1	0.93	0.08	69,69,69,69	0
56	MG	1A	3969	1/1	0.93	0.09	66,66,66,66	0
56	MG	1U	203	1/1	0.93	0.24	42,42,42,42	0
56	MG	2A	3258	1/1	0.93	0.20	58,58,58,58	0
56	MG	2a	3052	1/1	0.93	0.11	62,62,62,62	0
56	MG	1a	1793	1/1	0.93	0.09	82,82,82,82	0
56	MG	1A	3784	1/1	0.93	0.07	39,39,39,39	0
56	MG	1A	3506	1/1	0.93	0.07	42,42,42,42	0
56	MG	1X	105	1/1	0.93	0.07	47,47,47,47	0
56	MG	2A	3623	1/1	0.93	0.11	48,48,48,48	0
56	MG	1a	1798	1/1	0.93	0.12	56,56,56,56	0
56	MG	2a	3060	1/1	0.93	0.08	63,63,63,63	0
56	MG	2a	3061	1/1	0.93	0.16	54,54,54,54	0
56	MG	2A	3267	1/1	0.93	0.18	58,58,58,58	0
56	MG	2A	3630	1/1	0.93	0.13	69,69,69,69	0
56	MG	1A	3509	1/1	0.93	0.09	45,45,45,45	0
56	MG	1A	3410	1/1	0.93	0.09	57,57,57,57	0
56	MG	2A	3270	1/1	0.93	0.10	53,53,53,53	0
56	MG	1A	3002	1/1	0.93	0.10	59,59,59,59	0
56	MG	2A	3643	1/1	0.93	0.08	34,34,34,34	0
56	MG	2A	3272	1/1	0.93	0.12	51,51,51,51	0
56	MG	1A	3087	1/1	0.93	0.15	32,32,32,32	0
56	MG	2a	3075	1/1	0.93	0.17	49,49,49,49	0
56	MG	2A	3278	1/1	0.93	0.10	57,57,57,57	0
56	MG	2a	3078	1/1	0.93	0.22	74,74,74,74	0
56	MG	2a	3080	1/1	0.93	0.08	50,50,50,50	0
56	MG	1a	1823	1/1	0.93	0.12	68,68,68,68	0
56	MG	1A	3330	1/1	0.93	0.11	50,50,50,50	0
56	MG	2A	3282	1/1	0.93	0.12	63,63,63,63	0
56	MG	2a	3087	1/1	0.93	0.16	63,63,63,63	0
56	MG	1A	3995	1/1	0.93	0.10	73,73,73,73	0
56	MG	13	101	1/1	0.93	0.11	55,55,55,55	0
56	MG	1A	3270	1/1	0.93	0.15	59,59,59,59	0
56	MG	2A	3659	1/1	0.93	0.08	59,59,59,59	0
56	MG	2A	3288	1/1	0.93	0.07	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1b	3001	1/1	0.93	0.07	83,83,83,83	0
56	MG	1b	3002	1/1	0.93	0.13	61,61,61,61	0
56	MG	2a	3097	1/1	0.93	0.14	72,72,72,72	0
56	MG	2A	3294	1/1	0.93	0.09	52,52,52,52	0
56	MG	2A	3671	1/1	0.93	0.07	46,46,46,46	0
56	MG	2A	3672	1/1	0.93	0.14	45,45,45,45	0
56	MG	2A	3673	1/1	0.93	0.13	64,64,64,64	0
56	MG	2A	3674	1/1	0.93	0.13	55,55,55,55	0
56	MG	1A	3659	1/1	0.93	0.06	23,23,23,23	0
56	MG	2A	3299	1/1	0.93	0.10	51,51,51,51	0
56	MG	1A	3999	1/1	0.93	0.12	55,55,55,55	0
56	MG	2a	3109	1/1	0.93	0.27	67,67,67,67	0
56	MG	1A	3422	1/1	0.93	0.14	38,38,38,38	0
56	MG	2A	3303	1/1	0.93	0.09	60,60,60,60	0
56	MG	1A	3666	1/1	0.93	0.10	34,34,34,34	0
56	MG	1A	3154	1/1	0.93	0.20	51,51,51,51	0
56	MG	2a	3116	1/1	0.93	0.18	67,67,67,67	0
56	MG	1A	3810	1/1	0.93	0.14	45,45,45,45	0
56	MG	1A	3813	1/1	0.93	0.14	56,56,56,56	0
56	MG	1A	3814	1/1	0.93	0.15	45,45,45,45	0
56	MG	1w	103	1/1	0.93	0.07	57,57,57,57	0
56	MG	1A	3818	1/1	0.93	0.14	57,57,57,57	0
56	MG	2A	3311	1/1	0.93	0.18	63,63,63,63	0
56	MG	2a	3125	1/1	0.93	0.08	65,65,65,65	0
56	MG	1A	3334	1/1	0.93	0.20	56,56,56,56	0
56	MG	1a	1606	1/1	0.93	0.11	65,65,65,65	0
56	MG	1A	3537	1/1	0.93	0.11	49,49,49,49	0
56	MG	2A	3705	1/1	0.93	0.12	57,57,57,57	0
56	MG	1A	3538	1/1	0.93	0.12	54,54,54,54	0
56	MG	1A	3684	1/1	0.93	0.10	32,32,32,32	0
56	MG	1a	1615	1/1	0.93	0.09	67,67,67,67	0
56	MG	2A	3325	1/1	0.93	0.10	63,63,63,63	0
56	MG	1A	3340	1/1	0.93	0.19	58,58,58,58	0
56	MG	2a	3137	1/1	0.93	0.08	79,79,79,79	0
56	MG	2A	3327	1/1	0.93	0.10	50,50,50,50	0
56	MG	1A	3426	1/1	0.93	0.14	50,50,50,50	0
56	MG	2a	3142	1/1	0.93	0.10	74,74,74,74	0
56	MG	1A	3101	1/1	0.93	0.11	44,44,44,44	0
56	MG	1A	4046	1/1	0.93	0.07	30,30,30,30	0
56	MG	1A	3431	1/1	0.93	0.14	52,52,52,52	0
56	MG	1A	3690	1/1	0.93	0.06	28,28,28,28	0
56	MG	1A	3281	1/1	0.93	0.11	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1626	1/1	0.93	0.15	61,61,61,61	0
56	MG	2a	3153	1/1	0.93	0.09	74,74,74,74	0
56	MG	2A	3337	1/1	0.93	0.10	47,47,47,47	0
56	MG	1A	3436	1/1	0.93	0.10	45,45,45,45	0
56	MG	2a	3158	1/1	0.93	0.08	52,52,52,52	0
56	MG	1A	3438	1/1	0.93	0.13	50,50,50,50	0
56	MG	1A	3839	1/1	0.93	0.09	66,66,66,66	0
56	MG	1A	3219	1/1	0.93	0.09	37,37,37,37	0
56	MG	2A	3343	1/1	0.93	0.09	57,57,57,57	0
56	MG	2A	3344	1/1	0.93	0.12	55,55,55,55	0
56	MG	1A	3064	1/1	0.93	0.14	53,53,53,53	0
56	MG	1A	3231	1/1	0.93	0.19	51,51,51,51	0
56	MG	1A	4067	1/1	0.93	0.08	56,56,56,56	0
56	MG	2A	3349	1/1	0.93	0.12	58,58,58,58	0
56	MG	1A	3352	1/1	0.93	0.18	64,64,64,64	0
56	MG	1A	3301	1/1	0.93	0.10	54,54,54,54	0
56	MG	2A	3004	1/1	0.93	0.14	48,48,48,48	0
56	MG	1A	3448	1/1	0.93	0.19	59,59,59,59	0
56	MG	1A	3114	1/1	0.93	0.16	57,57,57,57	0
56	MG	2A	3010	1/1	0.93	0.14	51,51,51,51	0
56	MG	1A	3454	1/1	0.93	0.08	59,59,59,59	0
56	MG	2A	3760	1/1	0.93	0.19	58,58,58,58	0
56	MG	2A	3761	1/1	0.93	0.17	46,46,46,46	0
56	MG	1A	3570	1/1	0.93	0.08	54,54,54,54	0
56	MG	2a	3202	1/1	0.93	0.14	64,64,64,64	0
56	MG	1a	1648	1/1	0.93	0.11	59,59,59,59	0
56	MG	2A	3024	1/1	0.93	0.11	49,49,49,49	0
56	MG	2A	3369	1/1	0.93	0.10	47,47,47,47	0
56	MG	2a	3207	1/1	0.93	0.12	74,74,74,74	0
56	MG	2A	3768	1/1	0.93	0.10	62,62,62,62	0
56	MG	2A	3370	1/1	0.93	0.15	50,50,50,50	0
56	MG	2A	3372	1/1	0.93	0.17	41,41,41,41	0
56	MG	2a	3211	1/1	0.93	0.17	61,61,61,61	0
56	MG	2A	3029	1/1	0.93	0.11	44,44,44,44	0
56	MG	2A	3035	1/1	0.93	0.07	31,31,31,31	0
56	MG	1A	4087	1/1	0.93	0.18	54,54,54,54	0
56	MG	2A	3774	1/1	0.93	0.09	51,51,51,51	0
56	MG	2A	3777	1/1	0.93	0.10	41,41,41,41	0
56	MG	1A	4092	1/1	0.93	0.18	37,37,37,37	0
56	MG	2A	3781	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3043	1/1	0.93	0.08	53,53,53,53	0
56	MG	2A	3794	1/1	0.93	0.08	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	4093	1/1	0.93	0.31	35,35,35,35	0
56	MG	1A	4095	1/1	0.93	0.08	67,67,67,67	0
56	MG	1a	1662	1/1	0.93	0.09	67,67,67,67	0
56	MG	2A	3392	1/1	0.93	0.07	55,55,55,55	0
56	MG	1A	3715	1/1	0.93	0.12	54,54,54,54	0
56	MG	1A	3859	1/1	0.93	0.14	44,44,44,44	0
56	MG	1A	4109	1/1	0.93	0.14	49,49,49,49	0
56	MG	1A	3116	1/1	0.93	0.13	47,47,47,47	0
56	MG	2A	3809	1/1	0.93	0.08	59,59,59,59	0
56	MG	1A	3719	1/1	0.93	0.10	50,50,50,50	0
56	MG	1A	3722	1/1	0.93	0.14	39,39,39,39	0
56	MG	1A	4123	1/1	0.93	0.12	35,35,35,35	0
56	MG	2a	3239	1/1	0.93	0.10	65,65,65,65	0
56	MG	2A	3407	1/1	0.93	0.15	61,61,61,61	0
56	MG	1A	3183	1/1	0.93	0.08	54,54,54,54	0
56	MG	1A	4131	1/1	0.93	0.13	58,58,58,58	0
56	MG	1A	3306	1/1	0.93	0.24	38,38,38,38	0
56	MG	1A	4137	1/1	0.93	0.07	44,44,44,44	0
56	MG	2A	3414	1/1	0.93	0.15	59,59,59,59	0
56	MG	2A	3419	1/1	0.93	0.09	51,51,51,51	0
56	MG	1A	3576	1/1	0.93	0.21	57,57,57,57	0
56	MG	1A	3872	1/1	0.93	0.11	33,33,33,33	0
56	MG	2q	201	1/1	0.93	0.09	76,76,76,76	0
56	MG	2A	3073	1/1	0.93	0.07	36,36,36,36	0
56	MG	1a	1686	1/1	0.93	0.21	54,54,54,54	0
56	MG	2A	3077	1/1	0.93	0.09	45,45,45,45	0
56	MG	2A	3079	1/1	0.93	0.07	41,41,41,41	0
56	MG	1B	3005	1/1	0.93	0.08	55,55,55,55	0
56	MG	1A	3874	1/1	0.93	0.12	40,40,40,40	0
56	MG	2A	3090	1/1	0.93	0.11	60,60,60,60	0
56	MG	1a	1690	1/1	0.93	0.18	70,70,70,70	0
56	MG	2A	3857	1/1	0.93	0.09	47,47,47,47	0
56	MG	1A	3728	1/1	0.93	0.10	26,26,26,26	0
56	MG	2A	3095	1/1	0.93	0.08	39,39,39,39	0
56	MG	2x	103	1/1	0.93	0.09	64,64,64,64	0
56	MG	2x	104	1/1	0.93	0.17	60,60,60,60	0
56	MG	2A	3436	1/1	0.93	0.10	49,49,49,49	0
56	MG	1B	3009	1/1	0.93	0.14	43,43,43,43	0
56	MG	1B	3010	1/1	0.93	0.24	73,73,73,73	0
56	MG	2y	3004	1/1	0.93	0.13	59,59,59,59	0
56	MG	1B	3011	1/1	0.93	0.11	55,55,55,55	0
56	MG	1A	3580	1/1	0.93	0.15	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3185	1/1	0.93	0.12	47,47,47,47	0
56	MG	2A	3907	1/1	0.94	0.09	57,57,57,57	0
56	MG	1A	3452	1/1	0.94	0.21	58,58,58,58	0
56	MG	2A	3909	1/1	0.94	0.11	43,43,43,43	0
56	MG	1A	3971	1/1	0.94	0.11	44,44,44,44	0
56	MG	1A	3453	1/1	0.94	0.11	57,57,57,57	0
56	MG	2A	3486	1/1	0.94	0.35	55,55,55,55	0
56	MG	1A	3976	1/1	0.94	0.09	72,72,72,72	0
56	MG	1a	1775	1/1	0.94	0.10	76,76,76,76	0
56	MG	2A	3490	1/1	0.94	0.09	61,61,61,61	0
56	MG	1A	3979	1/1	0.94	0.10	73,73,73,73	0
56	MG	2A	3213	1/1	0.94	0.10	45,45,45,45	0
56	MG	1A	3023	1/1	0.94	0.18	59,59,59,59	0
56	MG	2A	3498	1/1	0.94	0.08	55,55,55,55	0
56	MG	1A	3455	1/1	0.94	0.08	47,47,47,47	0
56	MG	2A	3219	1/1	0.94	0.10	51,51,51,51	0
56	MG	1a	1781	1/1	0.94	0.08	71,71,71,71	0
56	MG	2B	3013	1/1	0.94	0.12	61,61,61,61	0
56	MG	1A	3129	1/1	0.94	0.18	51,51,51,51	0
56	MG	2B	3015	1/1	0.94	0.11	50,50,50,50	0
56	MG	1A	3459	1/1	0.94	0.12	47,47,47,47	0
56	MG	1A	3990	1/1	0.94	0.12	52,52,52,52	0
56	MG	1A	3346	1/1	0.94	0.16	48,48,48,48	0
56	MG	2A	3510	1/1	0.94	0.12	46,46,46,46	0
56	MG	1A	3131	1/1	0.94	0.10	72,72,72,72	0
56	MG	1A	3790	1/1	0.94	0.07	25,25,25,25	0
56	MG	2D	302	1/1	0.94	0.13	51,51,51,51	0
56	MG	2D	304	1/1	0.94	0.22	45,45,45,45	0
56	MG	1A	3467	1/1	0.94	0.08	45,45,45,45	0
56	MG	1A	3194	1/1	0.94	0.20	43,43,43,43	0
56	MG	1Y	502	1/1	0.94	0.17	59,59,59,59	0
56	MG	2A	3522	1/1	0.94	0.09	59,59,59,59	0
56	MG	1A	3627	1/1	0.94	0.15	62,62,62,62	0
56	MG	2A	3529	1/1	0.94	0.07	43,43,43,43	0
56	MG	1Z	301	1/1	0.94	0.11	56,56,56,56	0
56	MG	2G	3001	1/1	0.94	0.11	51,51,51,51	0
56	MG	2A	3242	1/1	0.94	0.11	52,52,52,52	0
56	MG	1A	3351	1/1	0.94	0.19	49,49,49,49	0
56	MG	1a	1804	1/1	0.94	0.08	77,77,77,77	0
56	MG	2A	3246	1/1	0.94	0.08	65,65,65,65	0
56	MG	1a	1806	1/1	0.94	0.09	66,66,66,66	0
56	MG	1A	3196	1/1	0.94	0.12	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2U	203	1/1	0.94	0.20	46,46,46,46	0
56	MG	1A	4003	1/1	0.94	0.08	20,20,20,20	0
56	MG	1A	3637	1/1	0.94	0.11	50,50,50,50	0
56	MG	2A	3543	1/1	0.94	0.06	34,34,34,34	0
56	MG	1A	3353	1/1	0.94	0.25	64,64,64,64	0
56	MG	2X	102	1/1	0.94	0.09	56,56,56,56	0
56	MG	12	101	1/1	0.94	0.11	60,60,60,60	0
56	MG	1A	3134	1/1	0.94	0.10	54,54,54,54	0
56	MG	2A	3550	1/1	0.94	0.15	44,44,44,44	0
56	MG	13	102	1/1	0.94	0.14	53,53,53,53	0
56	MG	23	102	1/1	0.94	0.09	48,48,48,48	0
56	MG	1A	3273	1/1	0.94	0.23	53,53,53,53	0
56	MG	2A	3554	1/1	0.94	0.07	39,39,39,39	0
56	MG	1A	3811	1/1	0.94	0.08	45,45,45,45	0
56	MG	2A	3263	1/1	0.94	0.08	55,55,55,55	0
56	MG	2A	3558	1/1	0.94	0.08	31,31,31,31	0
56	MG	1A	4021	1/1	0.94	0.19	66,66,66,66	0
56	MG	1A	3812	1/1	0.94	0.07	45,45,45,45	0
56	MG	2A	3563	1/1	0.94	0.08	49,49,49,49	0
56	MG	1A	3480	1/1	0.94	0.08	52,52,52,52	0
56	MG	1A	4025	1/1	0.94	0.07	77,77,77,77	0
56	MG	1A	3137	1/1	0.94	0.09	33,33,33,33	0
56	MG	2A	3574	1/1	0.94	0.08	44,44,44,44	0
56	MG	2a	3011	1/1	0.94	0.22	64,64,64,64	0
56	MG	2A	3576	1/1	0.94	0.12	39,39,39,39	0
56	MG	1A	4029	1/1	0.94	0.07	53,53,53,53	0
56	MG	1A	4032	1/1	0.94	0.09	68,68,68,68	0
56	MG	2A	3580	1/1	0.94	0.12	49,49,49,49	0
56	MG	1A	3647	1/1	0.94	0.08	29,29,29,29	0
56	MG	2A	3586	1/1	0.94	0.12	53,53,53,53	0
56	MG	2A	3274	1/1	0.94	0.20	53,53,53,53	0
56	MG	1a	1604	1/1	0.94	0.10	58,58,58,58	0
56	MG	2A	3591	1/1	0.94	0.07	50,50,50,50	0
56	MG	2A	3276	1/1	0.94	0.10	55,55,55,55	0
56	MG	1A	3280	1/1	0.94	0.10	50,50,50,50	0
56	MG	1A	3076	1/1	0.94	0.19	53,53,53,53	0
56	MG	1a	1607	1/1	0.94	0.22	67,67,67,67	0
56	MG	1A	3652	1/1	0.94	0.08	31,31,31,31	0
56	MG	1A	3658	1/1	0.94	0.12	37,37,37,37	0
56	MG	1A	3825	1/1	0.94	0.11	57,57,57,57	0
56	MG	1A	4051	1/1	0.94	0.09	38,38,38,38	0
56	MG	1A	3369	1/1	0.94	0.13	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3289	1/1	0.94	0.09	47,47,47,47	0
56	MG	2A	3611	1/1	0.94	0.11	62,62,62,62	0
56	MG	1A	3660	1/1	0.94	0.17	31,31,31,31	0
56	MG	1A	3207	1/1	0.94	0.13	54,54,54,54	0
56	MG	2A	3616	1/1	0.94	0.08	46,46,46,46	0
56	MG	2A	3617	1/1	0.94	0.10	38,38,38,38	0
56	MG	2A	3292	1/1	0.94	0.09	54,54,54,54	0
56	MG	1A	3491	1/1	0.94	0.12	59,59,59,59	0
56	MG	2a	3041	1/1	0.94	0.19	50,50,50,50	0
56	MG	1x	105	1/1	0.94	0.10	62,62,62,62	0
56	MG	2a	3043	1/1	0.94	0.10	64,64,64,64	0
56	MG	1A	3493	1/1	0.94	0.09	36,36,36,36	0
56	MG	1x	107	1/1	0.94	0.07	61,61,61,61	0
56	MG	1A	4062	1/1	0.94	0.06	14,14,14,14	0
56	MG	2A	3628	1/1	0.94	0.09	52,52,52,52	0
56	MG	2A	3629	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3302	1/1	0.94	0.10	66,66,66,66	0
56	MG	2A	3631	1/1	0.94	0.09	39,39,39,39	0
56	MG	1A	3669	1/1	0.94	0.07	34,34,34,34	0
56	MG	1A	3373	1/1	0.94	0.11	52,52,52,52	0
56	MG	1a	1627	1/1	0.94	0.20	55,55,55,55	0
56	MG	1A	3674	1/1	0.94	0.10	39,39,39,39	0
56	MG	1A	3501	1/1	0.94	0.10	51,51,51,51	0
56	MG	1A	4069	1/1	0.94	0.13	42,42,42,42	0
56	MG	1A	4070	1/1	0.94	0.13	56,56,56,56	0
56	MG	1A	3681	1/1	0.94	0.06	34,34,34,34	0
56	MG	1A	3291	1/1	0.94	0.09	59,59,59,59	0
56	MG	1A	4073	1/1	0.94	0.06	42,42,42,42	0
56	MG	1A	3846	1/1	0.94	0.08	53,53,53,53	0
56	MG	1a	1638	1/1	0.94	0.10	58,58,58,58	0
56	MG	1A	3293	1/1	0.94	0.19	50,50,50,50	0
56	MG	2A	3318	1/1	0.94	0.13	48,48,48,48	0
56	MG	1A	4083	1/1	0.94	0.10	44,44,44,44	0
56	MG	1A	3380	1/1	0.94	0.18	48,48,48,48	0
56	MG	2A	3324	1/1	0.94	0.07	41,41,41,41	0
56	MG	2a	3072	1/1	0.94	0.09	53,53,53,53	0
56	MG	1A	3507	1/1	0.94	0.18	51,51,51,51	0
56	MG	2a	3074	1/1	0.94	0.15	63,63,63,63	0
56	MG	2A	3012	1/1	0.94	0.07	39,39,39,39	0
56	MG	2A	3016	1/1	0.94	0.13	61,61,61,61	0
56	MG	2a	3077	1/1	0.94	0.09	61,61,61,61	0
56	MG	1A	4091	1/1	0.94	0.14	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1647	1/1	0.94	0.13	65,65,65,65	0
56	MG	1A	3079	1/1	0.94	0.09	57,57,57,57	0
56	MG	2A	3675	1/1	0.94	0.13	55,55,55,55	0
56	MG	2A	3680	1/1	0.94	0.10	62,62,62,62	0
56	MG	1A	3061	1/1	0.94	0.31	62,62,62,62	0
56	MG	1a	1652	1/1	0.94	0.20	63,63,63,63	0
56	MG	2A	3683	1/1	0.94	0.10	62,62,62,62	0
56	MG	2A	3033	1/1	0.94	0.10	42,42,42,42	0
56	MG	1A	3300	1/1	0.94	0.23	61,61,61,61	0
56	MG	1a	1657	1/1	0.94	0.13	57,57,57,57	0
56	MG	1A	4101	1/1	0.94	0.10	39,39,39,39	0
56	MG	1A	4102	1/1	0.94	0.10	45,45,45,45	0
56	MG	1A	3519	1/1	0.94	0.06	49,49,49,49	0
56	MG	1A	3387	1/1	0.94	0.12	54,54,54,54	0
56	MG	1a	1664	1/1	0.94	0.23	62,62,62,62	0
56	MG	2A	3052	1/1	0.94	0.11	58,58,58,58	0
56	MG	1A	4108	1/1	0.94	0.20	48,48,48,48	0
56	MG	2A	3055	1/1	0.94	0.07	46,46,46,46	0
56	MG	1A	3857	1/1	0.94	0.14	48,48,48,48	0
56	MG	1a	1668	1/1	0.94	0.20	67,67,67,67	0
56	MG	1A	3391	1/1	0.94	0.09	41,41,41,41	0
56	MG	1A	3103	1/1	0.94	0.06	38,38,38,38	0
56	MG	1A	3697	1/1	0.94	0.10	51,51,51,51	0
56	MG	2A	3358	1/1	0.94	0.07	65,65,65,65	0
56	MG	1a	1673	1/1	0.94	0.21	67,67,67,67	0
56	MG	1A	3398	1/1	0.94	0.17	58,58,58,58	0
56	MG	1a	1675	1/1	0.94	0.10	60,60,60,60	0
56	MG	2A	3363	1/1	0.94	0.29	65,65,65,65	0
56	MG	2a	3118	1/1	0.94	0.10	65,65,65,65	0
56	MG	1A	3104	1/1	0.94	0.16	40,40,40,40	0
56	MG	1A	3400	1/1	0.94	0.14	54,54,54,54	0
56	MG	1A	3705	1/1	0.94	0.09	42,42,42,42	0
56	MG	2A	3721	1/1	0.94	0.07	46,46,46,46	0
56	MG	1A	4135	1/1	0.94	0.11	44,44,44,44	0
56	MG	1A	3402	1/1	0.94	0.17	54,54,54,54	0
56	MG	2A	3730	1/1	0.94	0.09	43,43,43,43	0
56	MG	1A	3221	1/1	0.94	0.15	55,55,55,55	0
56	MG	1a	1684	1/1	0.94	0.19	60,60,60,60	0
56	MG	1A	3155	1/1	0.94	0.15	47,47,47,47	0
56	MG	2A	3736	1/1	0.94	0.16	67,67,67,67	0
56	MG	2A	3375	1/1	0.94	0.10	52,52,52,52	0
56	MG	1a	1687	1/1	0.94	0.11	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3082	1/1	0.94	0.09	50,50,50,50	0
56	MG	2A	3379	1/1	0.94	0.07	53,53,53,53	0
56	MG	2A	3085	1/1	0.94	0.10	44,44,44,44	0
56	MG	1A	3877	1/1	0.94	0.06	39,39,39,39	0
56	MG	1A	3540	1/1	0.94	0.18	52,52,52,52	0
56	MG	1A	3226	1/1	0.94	0.10	47,47,47,47	0
56	MG	1A	3227	1/1	0.94	0.10	42,42,42,42	0
56	MG	2A	3388	1/1	0.94	0.10	56,56,56,56	0
56	MG	2A	3749	1/1	0.94	0.08	48,48,48,48	0
56	MG	1A	3543	1/1	0.94	0.16	73,73,73,73	0
56	MG	2A	3752	1/1	0.94	0.17	61,61,61,61	0
56	MG	1A	3163	1/1	0.94	0.23	52,52,52,52	0
56	MG	1A	3028	1/1	0.94	0.09	34,34,34,34	0
56	MG	2A	3098	1/1	0.94	0.07	49,49,49,49	0
56	MG	1B	3013	1/1	0.94	0.07	55,55,55,55	0
56	MG	1A	3416	1/1	0.94	0.10	47,47,47,47	0
56	MG	2A	3399	1/1	0.94	0.13	60,60,60,60	0
56	MG	2a	3164	1/1	0.94	0.09	73,73,73,73	0
56	MG	2A	3402	1/1	0.94	0.11	50,50,50,50	0
56	MG	2A	3403	1/1	0.94	0.22	60,60,60,60	0
56	MG	2a	3170	1/1	0.94	0.07	80,80,80,80	0
56	MG	2A	3103	1/1	0.94	0.20	42,42,42,42	0
56	MG	2a	3172	1/1	0.94	0.07	66,66,66,66	0
56	MG	1A	3417	1/1	0.94	0.12	51,51,51,51	0
56	MG	2a	3176	1/1	0.94	0.08	62,62,62,62	0
56	MG	2a	3177	1/1	0.94	0.07	67,67,67,67	0
56	MG	2A	3105	1/1	0.94	0.09	51,51,51,51	0
56	MG	1A	3236	1/1	0.94	0.21	37,37,37,37	0
56	MG	2a	3180	1/1	0.94	0.07	73,73,73,73	0
56	MG	2A	3767	1/1	0.94	0.09	56,56,56,56	0
56	MG	1A	3165	1/1	0.94	0.15	48,48,48,48	0
56	MG	1A	3166	1/1	0.94	0.19	38,38,38,38	0
56	MG	1A	3730	1/1	0.94	0.10	43,43,43,43	0
56	MG	1A	3421	1/1	0.94	0.08	46,46,46,46	0
56	MG	1A	3034	1/1	0.94	0.13	45,45,45,45	0
56	MG	1A	3246	1/1	0.94	0.11	58,58,58,58	0
56	MG	2a	3196	1/1	0.94	0.11	64,64,64,64	0
56	MG	1A	3180	1/1	0.94	0.11	36,36,36,36	0
56	MG	1A	3250	1/1	0.94	0.09	49,49,49,49	0
56	MG	1A	3742	1/1	0.94	0.08	64,64,64,64	0
56	MG	1A	3115	1/1	0.94	0.17	57,57,57,57	0
56	MG	2A	3782	1/1	0.94	0.05	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1715	1/1	0.94	0.12	49,49,49,49	0
56	MG	2A	3784	1/1	0.94	0.06	47,47,47,47	0
56	MG	2A	3786	1/1	0.94	0.06	48,48,48,48	0
56	MG	2A	3788	1/1	0.94	0.07	53,53,53,53	0
56	MG	2A	3790	1/1	0.94	0.15	65,65,65,65	0
56	MG	1a	1717	1/1	0.94	0.12	64,64,64,64	0
56	MG	1A	3909	1/1	0.94	0.08	40,40,40,40	0
56	MG	2A	3796	1/1	0.94	0.09	49,49,49,49	0
56	MG	1A	3326	1/1	0.94	0.14	41,41,41,41	0
56	MG	1A	3430	1/1	0.94	0.08	47,47,47,47	0
56	MG	2A	3431	1/1	0.94	0.14	62,62,62,62	0
56	MG	1A	3090	1/1	0.94	0.19	54,54,54,54	0
56	MG	1D	305	1/1	0.94	0.09	42,42,42,42	0
56	MG	2A	3435	1/1	0.94	0.06	49,49,49,49	0
56	MG	1D	309	1/1	0.94	0.07	46,46,46,46	0
56	MG	2A	3148	1/1	0.94	0.14	52,52,52,52	0
56	MG	2A	3149	1/1	0.94	0.25	54,54,54,54	0
56	MG	1A	3920	1/1	0.94	0.09	44,44,44,44	0
56	MG	2A	3151	1/1	0.94	0.11	40,40,40,40	0
56	MG	2A	3813	1/1	0.94	0.12	48,48,48,48	0
56	MG	1A	3921	1/1	0.94	0.10	50,50,50,50	0
56	MG	2A	3444	1/1	0.94	0.16	49,49,49,49	0
56	MG	1A	3748	1/1	0.94	0.14	25,25,25,25	0
56	MG	1A	3329	1/1	0.94	0.10	43,43,43,43	0
56	MG	2A	3158	1/1	0.94	0.07	41,41,41,41	0
56	MG	2A	3159	1/1	0.94	0.18	53,53,53,53	0
56	MG	1E	306	1/1	0.94	0.09	31,31,31,31	0
56	MG	2A	3167	1/1	0.94	0.14	52,52,52,52	0
56	MG	1A	3435	1/1	0.94	0.09	53,53,53,53	0
56	MG	1E	311	1/1	0.94	0.14	42,42,42,42	0
56	MG	1A	3254	1/1	0.94	0.14	53,53,53,53	0
56	MG	2A	3834	1/1	0.94	0.07	40,40,40,40	0
56	MG	1F	303	1/1	0.94	0.10	38,38,38,38	0
56	MG	2a	3243	1/1	0.94	0.16	64,64,64,64	0
56	MG	1F	306	1/1	0.94	0.12	53,53,53,53	0
56	MG	2A	3842	1/1	0.94	0.09	59,59,59,59	0
56	MG	2A	3843	1/1	0.94	0.13	58,58,58,58	0
56	MG	2i	8001	1/1	0.94	0.06	51,51,51,51	0
56	MG	2A	3173	1/1	0.94	0.07	51,51,51,51	0
56	MG	1A	3939	1/1	0.94	0.11	53,53,53,53	0
56	MG	2A	3460	1/1	0.94	0.25	64,64,64,64	0
56	MG	1A	3117	1/1	0.94	0.21	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3583	1/1	0.94	0.16	42,42,42,42	0
56	MG	1A	3184	1/1	0.94	0.14	62,62,62,62	0
56	MG	2r	101	1/1	0.94	0.09	68,68,68,68	0
56	MG	1A	3760	1/1	0.94	0.12	35,35,35,35	0
56	MG	1a	1756	1/1	0.94	0.22	72,72,72,72	0
56	MG	2A	3866	1/1	0.94	0.09	42,42,42,42	0
56	MG	1A	3260	1/1	0.94	0.09	39,39,39,39	0
56	MG	1A	3335	1/1	0.94	0.32	62,62,62,62	0
56	MG	2A	3185	1/1	0.94	0.07	45,45,45,45	0
56	MG	1A	3337	1/1	0.94	0.14	48,48,48,48	0
56	MG	1N	202	1/1	0.94	0.09	48,48,48,48	0
56	MG	2A	3191	1/1	0.94	0.15	50,50,50,50	0
56	MG	1A	3338	1/1	0.94	0.12	49,49,49,49	0
56	MG	2A	3886	1/1	0.94	0.18	45,45,45,45	0
56	MG	2A	3476	1/1	0.94	0.10	41,41,41,41	0
56	MG	1A	3772	1/1	0.94	0.07	36,36,36,36	0
56	MG	2A	3196	1/1	0.94	0.10	56,56,56,56	0
56	MG	1A	3119	1/1	0.94	0.09	51,51,51,51	0
56	MG	2A	3480	1/1	0.94	0.28	65,65,65,65	0
56	MG	2A	3899	1/1	0.94	0.12	45,45,45,45	0
56	MG	2A	3903	1/1	0.94	0.11	58,58,58,58	0
56	MG	1A	3070	1/1	0.94	0.15	41,41,41,41	0
58	ZN	2n	501	1/1	0.94	0.08	107,107,107,107	0
56	MG	2A	3208	1/1	0.95	0.16	57,57,57,57	0
56	MG	2A	3885	1/1	0.95	0.18	54,54,54,54	0
56	MG	1A	3992	1/1	0.95	0.12	75,75,75,75	0
56	MG	1Q	204	1/1	0.95	0.08	51,51,51,51	0
56	MG	2A	3889	1/1	0.95	0.10	49,49,49,49	0
56	MG	1A	3993	1/1	0.95	0.07	37,37,37,37	0
56	MG	2A	3891	1/1	0.95	0.12	71,71,71,71	0
56	MG	2A	3214	1/1	0.95	0.07	56,56,56,56	0
56	MG	2A	3216	1/1	0.95	0.12	56,56,56,56	0
56	MG	1Q	206	1/1	0.95	0.06	54,54,54,54	0
56	MG	2A	3495	1/1	0.95	0.07	51,51,51,51	0
56	MG	2A	3900	1/1	0.95	0.15	44,44,44,44	0
56	MG	1A	3208	1/1	0.95	0.08	55,55,55,55	0
56	MG	1a	1778	1/1	0.95	0.08	64,64,64,64	0
56	MG	1A	3655	1/1	0.95	0.07	39,39,39,39	0
56	MG	1A	3514	1/1	0.95	0.12	53,53,53,53	0
56	MG	1S	3003	1/1	0.95	0.08	59,59,59,59	0
56	MG	1A	3158	1/1	0.95	0.11	56,56,56,56	0
56	MG	1A	3210	1/1	0.95	0.08	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3809	1/1	0.95	0.15	51,51,51,51	0
56	MG	2A	3509	1/1	0.95	0.10	38,38,38,38	0
56	MG	1A	3664	1/1	0.95	0.07	48,48,48,48	0
56	MG	2A	3230	1/1	0.95	0.11	48,48,48,48	0
56	MG	1V	202	1/1	0.95	0.18	53,53,53,53	0
56	MG	2A	3232	1/1	0.95	0.14	64,64,64,64	0
56	MG	2A	3234	1/1	0.95	0.09	52,52,52,52	0
56	MG	1A	3339	1/1	0.95	0.11	51,51,51,51	0
56	MG	2A	3236	1/1	0.95	0.08	53,53,53,53	0
56	MG	2A	3527	1/1	0.95	0.06	31,31,31,31	0
56	MG	1A	3121	1/1	0.95	0.13	43,43,43,43	0
56	MG	1W	204	1/1	0.95	0.10	40,40,40,40	0
56	MG	1A	3216	1/1	0.95	0.20	50,50,50,50	0
56	MG	1A	3529	1/1	0.95	0.15	43,43,43,43	0
56	MG	2A	3243	1/1	0.95	0.11	52,52,52,52	0
56	MG	2A	3533	1/1	0.95	0.10	48,48,48,48	0
56	MG	2B	3018	1/1	0.95	0.08	65,65,65,65	0
56	MG	1A	3816	1/1	0.95	0.10	49,49,49,49	0
56	MG	1Y	504	1/1	0.95	0.18	48,48,48,48	0
56	MG	1A	3123	1/1	0.95	0.12	54,54,54,54	0
56	MG	2A	3537	1/1	0.95	0.06	35,35,35,35	0
56	MG	1a	1812	1/1	0.95	0.09	70,70,70,70	0
56	MG	2A	3249	1/1	0.95	0.10	57,57,57,57	0
56	MG	1A	3025	1/1	0.95	0.09	41,41,41,41	0
56	MG	1Z	303	1/1	0.95	0.06	56,56,56,56	0
56	MG	10	101	1/1	0.95	0.11	63,63,63,63	0
56	MG	2E	304	1/1	0.95	0.17	46,46,46,46	0
56	MG	2E	305	1/1	0.95	0.10	40,40,40,40	0
56	MG	2A	3545	1/1	0.95	0.11	52,52,52,52	0
56	MG	10	104	1/1	0.95	0.20	64,64,64,64	0
56	MG	1A	3675	1/1	0.95	0.15	32,32,32,32	0
56	MG	2E	309	1/1	0.95	0.10	60,60,60,60	0
56	MG	2F	301	1/1	0.95	0.15	58,58,58,58	0
56	MG	1A	3676	1/1	0.95	0.12	24,24,24,24	0
56	MG	1A	3677	1/1	0.95	0.10	29,29,29,29	0
56	MG	2N	8001	1/1	0.95	0.05	47,47,47,47	0
56	MG	1A	3678	1/1	0.95	0.07	61,61,61,61	0
56	MG	1A	3102	1/1	0.95	0.09	54,54,54,54	0
56	MG	2Q	3002	1/1	0.95	0.08	44,44,44,44	0
56	MG	2R	201	1/1	0.95	0.09	48,48,48,48	0
56	MG	1A	3680	1/1	0.95	0.14	44,44,44,44	0
56	MG	1A	3427	1/1	0.95	0.09	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3557	1/1	0.95	0.08	45,45,45,45	0
56	MG	1A	3167	1/1	0.95	0.09	41,41,41,41	0
56	MG	2A	3559	1/1	0.95	0.10	39,39,39,39	0
56	MG	2U	204	1/1	0.95	0.14	45,45,45,45	0
56	MG	15	102	1/1	0.95	0.08	39,39,39,39	0
56	MG	1A	3225	1/1	0.95	0.17	52,52,52,52	0
56	MG	16	101	1/1	0.95	0.09	45,45,45,45	0
56	MG	2A	3565	1/1	0.95	0.07	36,36,36,36	0
56	MG	1A	4037	1/1	0.95	0.10	62,62,62,62	0
56	MG	2X	103	1/1	0.95	0.10	46,46,46,46	0
56	MG	2A	3569	1/1	0.95	0.09	49,49,49,49	0
56	MG	2A	3571	1/1	0.95	0.07	35,35,35,35	0
56	MG	1t	3001	1/1	0.95	0.12	58,58,58,58	0
56	MG	20	3003	1/1	0.95	0.10	58,58,58,58	0
56	MG	1A	4043	1/1	0.95	0.07	50,50,50,50	0
56	MG	2A	3273	1/1	0.95	0.07	51,51,51,51	0
56	MG	25	101	1/1	0.95	0.23	55,55,55,55	0
56	MG	18	101	1/1	0.95	0.16	47,47,47,47	0
56	MG	1A	3128	1/1	0.95	0.21	41,41,41,41	0
56	MG	1A	4045	1/1	0.95	0.07	38,38,38,38	0
56	MG	1A	3171	1/1	0.95	0.23	53,53,53,53	0
56	MG	2A	3582	1/1	0.95	0.06	51,51,51,51	0
56	MG	2a	3002	1/1	0.95	0.07	50,50,50,50	0
56	MG	2A	3279	1/1	0.95	0.10	53,53,53,53	0
56	MG	1A	3294	1/1	0.95	0.16	52,52,52,52	0
56	MG	1A	4048	1/1	0.95	0.07	48,48,48,48	0
56	MG	1A	3354	1/1	0.95	0.15	68,68,68,68	0
56	MG	2A	3283	1/1	0.95	0.10	61,61,61,61	0
56	MG	1A	3437	1/1	0.95	0.07	52,52,52,52	0
56	MG	2A	3596	1/1	0.95	0.08	47,47,47,47	0
56	MG	2A	3285	1/1	0.95	0.06	49,49,49,49	0
56	MG	1A	3841	1/1	0.95	0.09	27,27,27,27	0
56	MG	1A	3842	1/1	0.95	0.11	26,26,26,26	0
56	MG	1A	3546	1/1	0.95	0.11	45,45,45,45	0
56	MG	1a	1608	1/1	0.95	0.12	60,60,60,60	0
56	MG	1A	4055	1/1	0.95	0.05	33,33,33,33	0
56	MG	1A	4059	1/1	0.95	0.06	21,21,21,21	0
56	MG	1A	3230	1/1	0.95	0.17	60,60,60,60	0
56	MG	1A	3847	1/1	0.95	0.08	48,48,48,48	0
56	MG	1a	1616	1/1	0.95	0.09	55,55,55,55	0
56	MG	2A	3612	1/1	0.95	0.08	39,39,39,39	0
56	MG	2A	3613	1/1	0.95	0.09	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3297	1/1	0.95	0.16	51,51,51,51	0
56	MG	1A	3693	1/1	0.95	0.13	40,40,40,40	0
56	MG	1A	4063	1/1	0.95	0.07	57,57,57,57	0
56	MG	1A	4064	1/1	0.95	0.08	66,66,66,66	0
56	MG	1A	3062	1/1	0.95	0.27	59,59,59,59	0
56	MG	1A	3130	1/1	0.95	0.10	41,41,41,41	0
56	MG	1A	3442	1/1	0.95	0.09	56,56,56,56	0
56	MG	1A	3235	1/1	0.95	0.14	66,66,66,66	0
56	MG	1A	3364	1/1	0.95	0.16	64,64,64,64	0
56	MG	1A	3700	1/1	0.95	0.07	16,16,16,16	0
56	MG	2a	3035	1/1	0.95	0.25	63,63,63,63	0
56	MG	2A	3627	1/1	0.95	0.10	50,50,50,50	0
56	MG	1A	3563	1/1	0.95	0.13	43,43,43,43	0
56	MG	1A	3704	1/1	0.95	0.10	49,49,49,49	0
56	MG	1A	3858	1/1	0.95	0.04	30,30,30,30	0
56	MG	1A	3029	1/1	0.95	0.10	38,38,38,38	0
56	MG	1A	3447	1/1	0.95	0.06	46,46,46,46	0
56	MG	1A	4078	1/1	0.95	0.10	41,41,41,41	0
56	MG	2A	3638	1/1	0.95	0.12	43,43,43,43	0
56	MG	1A	3238	1/1	0.95	0.14	57,57,57,57	0
56	MG	2A	3641	1/1	0.95	0.10	57,57,57,57	0
56	MG	2A	3315	1/1	0.95	0.11	54,54,54,54	0
56	MG	2a	3047	1/1	0.95	0.12	52,52,52,52	0
56	MG	1A	3865	1/1	0.95	0.33	43,43,43,43	0
56	MG	1A	3567	1/1	0.95	0.10	54,54,54,54	0
56	MG	2A	3645	1/1	0.95	0.07	40,40,40,40	0
56	MG	2A	3320	1/1	0.95	0.20	54,54,54,54	0
56	MG	1A	4088	1/1	0.95	0.10	57,57,57,57	0
56	MG	1A	4090	1/1	0.95	0.14	37,37,37,37	0
56	MG	2A	3651	1/1	0.95	0.15	44,44,44,44	0
56	MG	1a	1641	1/1	0.95	0.14	58,58,58,58	0
56	MG	2A	3028	1/1	0.95	0.07	54,54,54,54	0
56	MG	1A	3132	1/1	0.95	0.09	40,40,40,40	0
56	MG	2A	3030	1/1	0.95	0.07	51,51,51,51	0
56	MG	2A	3329	1/1	0.95	0.11	56,56,56,56	0
56	MG	1A	3869	1/1	0.95	0.08	56,56,56,56	0
56	MG	2A	3034	1/1	0.95	0.08	45,45,45,45	0
56	MG	2A	3662	1/1	0.95	0.10	48,48,48,48	0
56	MG	2A	3663	1/1	0.95	0.10	64,64,64,64	0
56	MG	1a	1644	1/1	0.95	0.14	66,66,66,66	0
56	MG	2A	3665	1/1	0.95	0.07	52,52,52,52	0
56	MG	2a	3068	1/1	0.95	0.18	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3036	1/1	0.95	0.09	54,54,54,54	0
56	MG	1A	3569	1/1	0.95	0.10	54,54,54,54	0
56	MG	1a	1646	1/1	0.95	0.07	51,51,51,51	0
56	MG	1A	3451	1/1	0.95	0.09	47,47,47,47	0
56	MG	1A	4097	1/1	0.95	0.07	47,47,47,47	0
56	MG	2A	3338	1/1	0.95	0.24	62,62,62,62	0
56	MG	1a	1649	1/1	0.95	0.13	45,45,45,45	0
56	MG	2A	3676	1/1	0.95	0.11	48,48,48,48	0
56	MG	2A	3678	1/1	0.95	0.07	49,49,49,49	0
56	MG	1A	4100	1/1	0.95	0.07	47,47,47,47	0
56	MG	2a	3079	1/1	0.95	0.17	59,59,59,59	0
56	MG	1A	3133	1/1	0.95	0.08	44,44,44,44	0
56	MG	1A	3374	1/1	0.95	0.17	55,55,55,55	0
56	MG	2A	3054	1/1	0.95	0.09	54,54,54,54	0
56	MG	2a	3084	1/1	0.95	0.07	44,44,44,44	0
56	MG	1A	3721	1/1	0.95	0.09	57,57,57,57	0
56	MG	1a	1659	1/1	0.95	0.21	62,62,62,62	0
56	MG	2A	3057	1/1	0.95	0.07	46,46,46,46	0
56	MG	1A	3376	1/1	0.95	0.10	51,51,51,51	0
56	MG	2A	3688	1/1	0.95	0.06	38,38,38,38	0
56	MG	2A	3689	1/1	0.95	0.16	71,71,71,71	0
56	MG	2A	3059	1/1	0.95	0.10	46,46,46,46	0
56	MG	1A	4105	1/1	0.95	0.11	44,44,44,44	0
56	MG	2A	3351	1/1	0.95	0.16	54,54,54,54	0
56	MG	2A	3061	1/1	0.95	0.07	49,49,49,49	0
56	MG	1A	3244	1/1	0.95	0.07	49,49,49,49	0
56	MG	2A	3355	1/1	0.95	0.10	51,51,51,51	0
56	MG	2A	3356	1/1	0.95	0.12	55,55,55,55	0
56	MG	1A	3579	1/1	0.95	0.16	44,44,44,44	0
56	MG	1A	3457	1/1	0.95	0.11	59,59,59,59	0
56	MG	1A	3883	1/1	0.95	0.11	68,68,68,68	0
56	MG	2A	3704	1/1	0.95	0.06	56,56,56,56	0
56	MG	2a	3107	1/1	0.95	0.12	57,57,57,57	0
56	MG	1A	3052	1/1	0.95	0.07	56,56,56,56	0
56	MG	1a	1667	1/1	0.95	0.16	65,65,65,65	0
56	MG	1A	3112	1/1	0.95	0.10	49,49,49,49	0
56	MG	2A	3070	1/1	0.95	0.21	42,42,42,42	0
56	MG	2a	3112	1/1	0.95	0.12	54,54,54,54	0
56	MG	1A	3464	1/1	0.95	0.11	45,45,45,45	0
56	MG	1A	4129	1/1	0.95	0.09	42,42,42,42	0
56	MG	2A	3713	1/1	0.95	0.13	67,67,67,67	0
56	MG	1A	3091	1/1	0.95	0.14	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3586	1/1	0.95	0.15	49,49,49,49	0
56	MG	2A	3371	1/1	0.95	0.09	48,48,48,48	0
56	MG	1A	3588	1/1	0.95	0.10	46,46,46,46	0
56	MG	2A	3720	1/1	0.95	0.06	41,41,41,41	0
56	MG	1A	3384	1/1	0.95	0.12	57,57,57,57	0
56	MG	1A	4142	1/1	0.95	0.10	42,42,42,42	0
56	MG	2A	3726	1/1	0.95	0.13	56,56,56,56	0
56	MG	2A	3727	1/1	0.95	0.09	51,51,51,51	0
56	MG	1A	3249	1/1	0.95	0.21	56,56,56,56	0
56	MG	1A	3741	1/1	0.95	0.10	45,45,45,45	0
56	MG	1a	1680	1/1	0.95	0.15	64,64,64,64	0
56	MG	1B	3004	1/1	0.95	0.16	50,50,50,50	0
56	MG	1A	3898	1/1	0.95	0.10	50,50,50,50	0
56	MG	2A	3382	1/1	0.95	0.08	50,50,50,50	0
56	MG	2a	3134	1/1	0.95	0.18	64,64,64,64	0
56	MG	1A	3899	1/1	0.95	0.10	52,52,52,52	0
56	MG	1A	3001	1/1	0.95	0.09	42,42,42,42	0
56	MG	2A	3739	1/1	0.95	0.12	59,59,59,59	0
56	MG	1B	3008	1/1	0.95	0.13	57,57,57,57	0
56	MG	2a	3139	1/1	0.95	0.08	73,73,73,73	0
56	MG	1A	3318	1/1	0.95	0.07	46,46,46,46	0
56	MG	2A	3389	1/1	0.95	0.12	58,58,58,58	0
56	MG	2A	3391	1/1	0.95	0.12	58,58,58,58	0
56	MG	1A	3147	1/1	0.95	0.15	54,54,54,54	0
56	MG	2A	3099	1/1	0.95	0.10	42,42,42,42	0
56	MG	1A	3252	1/1	0.95	0.11	52,52,52,52	0
56	MG	2A	3395	1/1	0.95	0.09	50,50,50,50	0
56	MG	1A	3393	1/1	0.95	0.10	50,50,50,50	0
56	MG	2A	3750	1/1	0.95	0.13	47,47,47,47	0
56	MG	1A	3395	1/1	0.95	0.11	42,42,42,42	0
56	MG	1a	1692	1/1	0.95	0.25	69,69,69,69	0
56	MG	1a	1693	1/1	0.95	0.10	58,58,58,58	0
56	MG	2a	3159	1/1	0.95	0.19	71,71,71,71	0
56	MG	1A	3750	1/1	0.95	0.09	29,29,29,29	0
56	MG	2a	3163	1/1	0.95	0.06	72,72,72,72	0
56	MG	1A	3751	1/1	0.95	0.10	48,48,48,48	0
56	MG	1A	3600	1/1	0.95	0.07	46,46,46,46	0
56	MG	1A	3601	1/1	0.95	0.09	11,11,11,11	0
56	MG	2a	3168	1/1	0.95	0.07	78,78,78,78	0
56	MG	2A	3112	1/1	0.95	0.10	42,42,42,42	0
56	MG	1A	3916	1/1	0.95	0.07	53,53,53,53	0
56	MG	2A	3114	1/1	0.95	0.10	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3411	1/1	0.95	0.09	53,53,53,53	0
56	MG	2A	3763	1/1	0.95	0.09	52,52,52,52	0
56	MG	1A	3193	1/1	0.95	0.13	34,34,34,34	0
56	MG	1A	3919	1/1	0.95	0.12	38,38,38,38	0
56	MG	1B	3023	1/1	0.95	0.07	54,54,54,54	0
56	MG	2A	3415	1/1	0.95	0.09	50,50,50,50	0
56	MG	2A	3416	1/1	0.95	0.18	59,59,59,59	0
56	MG	2A	3418	1/1	0.95	0.08	61,61,61,61	0
56	MG	2a	3186	1/1	0.95	0.13	53,53,53,53	0
56	MG	1A	3044	1/1	0.95	0.08	37,37,37,37	0
56	MG	2a	3189	1/1	0.95	0.11	48,48,48,48	0
56	MG	1A	3324	1/1	0.95	0.20	55,55,55,55	0
56	MG	1A	3758	1/1	0.95	0.09	71,71,71,71	0
56	MG	1A	3486	1/1	0.95	0.06	42,42,42,42	0
56	MG	1A	3255	1/1	0.95	0.13	47,47,47,47	0
56	MG	2A	3776	1/1	0.95	0.10	44,44,44,44	0
56	MG	1A	3403	1/1	0.95	0.10	27,27,27,27	0
56	MG	2A	3778	1/1	0.95	0.06	52,52,52,52	0
56	MG	2A	3131	1/1	0.95	0.08	42,42,42,42	0
56	MG	2A	3133	1/1	0.95	0.07	49,49,49,49	0
56	MG	1A	3938	1/1	0.95	0.05	55,55,55,55	0
56	MG	1A	3765	1/1	0.95	0.06	25,25,25,25	0
56	MG	2a	3203	1/1	0.95	0.16	62,62,62,62	0
56	MG	1A	3195	1/1	0.95	0.23	40,40,40,40	0
56	MG	1A	3768	1/1	0.95	0.10	61,61,61,61	0
56	MG	2A	3146	1/1	0.95	0.07	43,43,43,43	0
56	MG	1A	3624	1/1	0.95	0.09	28,28,28,28	0
56	MG	2A	3791	1/1	0.95	0.09	46,46,46,46	0
56	MG	2A	3792	1/1	0.95	0.15	51,51,51,51	0
56	MG	1D	307	1/1	0.95	0.10	45,45,45,45	0
56	MG	1A	3490	1/1	0.95	0.07	50,50,50,50	0
56	MG	2a	3213	1/1	0.95	0.14	69,69,69,69	0
56	MG	1A	3949	1/1	0.95	0.09	63,63,63,63	0
56	MG	1E	301	1/1	0.95	0.10	37,37,37,37	0
56	MG	2a	3216	1/1	0.95	0.18	65,65,65,65	0
56	MG	1A	3950	1/1	0.95	0.07	41,41,41,41	0
56	MG	2A	3440	1/1	0.95	0.15	43,43,43,43	0
56	MG	1A	3626	1/1	0.95	0.09	44,44,44,44	0
56	MG	1A	3953	1/1	0.95	0.07	46,46,46,46	0
56	MG	2A	3803	1/1	0.95	0.06	42,42,42,42	0
56	MG	2a	3223	1/1	0.95	0.23	52,52,52,52	0
56	MG	2A	3443	1/1	0.95	0.20	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3225	1/1	0.95	0.10	57,57,57,57	0
56	MG	1A	3954	1/1	0.95	0.08	58,58,58,58	0
56	MG	1A	3327	1/1	0.95	0.13	28,28,28,28	0
56	MG	1A	3957	1/1	0.95	0.06	55,55,55,55	0
56	MG	1a	1731	1/1	0.95	0.13	50,50,50,50	0
56	MG	1F	301	1/1	0.95	0.10	40,40,40,40	0
56	MG	1a	1734	1/1	0.95	0.13	67,67,67,67	0
56	MG	1A	3151	1/1	0.95	0.14	47,47,47,47	0
56	MG	1a	1736	1/1	0.95	0.09	57,57,57,57	0
56	MG	1A	3961	1/1	0.95	0.08	38,38,38,38	0
56	MG	1A	3408	1/1	0.95	0.14	60,60,60,60	0
56	MG	1a	1742	1/1	0.95	0.06	51,51,51,51	0
56	MG	1A	3636	1/1	0.95	0.09	38,38,38,38	0
56	MG	1A	3780	1/1	0.95	0.06	21,21,21,21	0
56	MG	1A	3495	1/1	0.95	0.10	42,42,42,42	0
56	MG	1a	1747	1/1	0.95	0.10	49,49,49,49	0
56	MG	2A	3828	1/1	0.95	0.07	80,80,80,80	0
56	MG	1A	3638	1/1	0.95	0.07	53,53,53,53	0
56	MG	2A	3830	1/1	0.95	0.15	48,48,48,48	0
56	MG	1A	3259	1/1	0.95	0.06	40,40,40,40	0
56	MG	1A	3973	1/1	0.95	0.06	85,85,85,85	0
56	MG	1A	3502	1/1	0.95	0.13	49,49,49,49	0
56	MG	2A	3837	1/1	0.95	0.08	37,37,37,37	0
56	MG	1A	3059	1/1	0.95	0.11	48,48,48,48	0
56	MG	2A	3187	1/1	0.95	0.10	50,50,50,50	0
56	MG	2A	3188	1/1	0.95	0.06	36,36,36,36	0
56	MG	1A	3153	1/1	0.95	0.11	37,37,37,37	0
56	MG	2A	3848	1/1	0.95	0.06	36,36,36,36	0
56	MG	2A	3850	1/1	0.95	0.07	59,59,59,59	0
56	MG	2A	3190	1/1	0.95	0.09	45,45,45,45	0
56	MG	1A	3413	1/1	0.95	0.10	36,36,36,36	0
56	MG	2A	3473	1/1	0.95	0.13	57,57,57,57	0
56	MG	2A	3193	1/1	0.95	0.07	55,55,55,55	0
56	MG	2A	3858	1/1	0.95	0.07	43,43,43,43	0
56	MG	1A	3981	1/1	0.95	0.06	52,52,52,52	0
56	MG	2w	103	1/1	0.95	0.10	56,56,56,56	0
56	MG	1N	206	1/1	0.95	0.12	42,42,42,42	0
56	MG	2w	105	1/1	0.95	0.15	70,70,70,70	0
56	MG	1A	3415	1/1	0.95	0.12	59,59,59,59	0
56	MG	1A	3060	1/1	0.95	0.06	45,45,45,45	0
56	MG	1A	3985	1/1	0.95	0.09	23,23,23,23	0
56	MG	2A	3868	1/1	0.95	0.08	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3869	1/1	0.95	0.05	56,56,56,56	0
56	MG	2x	105	1/1	0.95	0.16	57,57,57,57	0
56	MG	2A	3199	1/1	0.95	0.08	50,50,50,50	0
56	MG	2A	3872	1/1	0.95	0.07	44,44,44,44	0
56	MG	2A	3874	1/1	0.95	0.07	53,53,53,53	0
56	MG	1A	3796	1/1	0.95	0.06	34,34,34,34	0
56	MG	1a	1769	1/1	0.95	0.08	55,55,55,55	0
56	MG	2A	3878	1/1	0.95	0.08	49,49,49,49	0
57	K	1A	3584	1/1	0.95	0.09	58,58,58,58	0
56	MG	1A	3120	1/1	0.95	0.09	42,42,42,42	0
56	MG	1P	204	1/1	0.95	0.15	47,47,47,47	0
56	MG	1A	3396	1/1	0.96	0.06	47,47,47,47	0
56	MG	2D	303	1/1	0.96	0.05	35,35,35,35	0
56	MG	1A	3198	1/1	0.96	0.12	41,41,41,41	0
56	MG	1A	3474	1/1	0.96	0.22	60,60,60,60	0
56	MG	2E	301	1/1	0.96	0.11	50,50,50,50	0
56	MG	2A	3014	1/1	0.96	0.18	43,43,43,43	0
56	MG	1A	4094	1/1	0.96	0.07	37,37,37,37	0
56	MG	1A	3725	1/1	0.96	0.07	52,52,52,52	0
56	MG	1A	3201	1/1	0.96	0.08	45,45,45,45	0
56	MG	1A	3587	1/1	0.96	0.14	38,38,38,38	0
56	MG	2A	3598	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3477	1/1	0.96	0.09	48,48,48,48	0
56	MG	2A	3025	1/1	0.96	0.14	42,42,42,42	0
56	MG	2A	3026	1/1	0.96	0.08	36,36,36,36	0
56	MG	1A	3202	1/1	0.96	0.06	32,32,32,32	0
56	MG	1A	3479	1/1	0.96	0.05	38,38,38,38	0
56	MG	1A	3591	1/1	0.96	0.14	52,52,52,52	0
56	MG	2A	3031	1/1	0.96	0.07	45,45,45,45	0
56	MG	2P	201	1/1	0.96	0.05	45,45,45,45	0
56	MG	2A	3608	1/1	0.96	0.05	61,61,61,61	0
56	MG	2A	3609	1/1	0.96	0.12	42,42,42,42	0
56	MG	2A	3032	1/1	0.96	0.06	38,38,38,38	0
56	MG	1A	3889	1/1	0.96	0.13	60,60,60,60	0
56	MG	1A	3017	1/1	0.96	0.12	54,54,54,54	0
56	MG	1A	3482	1/1	0.96	0.08	50,50,50,50	0
56	MG	2U	201	1/1	0.96	0.09	40,40,40,40	0
56	MG	1A	4112	1/1	0.96	0.11	42,42,42,42	0
56	MG	2A	3038	1/1	0.96	0.07	31,31,31,31	0
56	MG	1A	3093	1/1	0.96	0.16	33,33,33,33	0
56	MG	2A	3040	1/1	0.96	0.12	52,52,52,52	0
56	MG	2A	3316	1/1	0.96	0.10	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3041	1/1	0.96	0.12	49,49,49,49	0
56	MG	1a	1650	1/1	0.96	0.11	53,53,53,53	0
56	MG	1A	3066	1/1	0.96	0.07	35,35,35,35	0
56	MG	2A	3044	1/1	0.96	0.09	48,48,48,48	0
56	MG	1A	4117	1/1	0.96	0.21	39,39,39,39	0
56	MG	2A	3323	1/1	0.96	0.12	56,56,56,56	0
56	MG	2A	3046	1/1	0.96	0.07	48,48,48,48	0
56	MG	2A	3048	1/1	0.96	0.09	41,41,41,41	0
56	MG	1A	3485	1/1	0.96	0.10	48,48,48,48	0
56	MG	1A	3018	1/1	0.96	0.13	33,33,33,33	0
56	MG	2A	3328	1/1	0.96	0.13	39,39,39,39	0
56	MG	25	103	1/1	0.96	0.10	52,52,52,52	0
56	MG	25	104	1/1	0.96	0.07	43,43,43,43	0
56	MG	2A	3636	1/1	0.96	0.23	59,59,59,59	0
56	MG	1A	4124	1/1	0.96	0.29	46,46,46,46	0
56	MG	1A	3019	1/1	0.96	0.14	37,37,37,37	0
56	MG	2A	3639	1/1	0.96	0.11	34,34,34,34	0
56	MG	1A	4127	1/1	0.96	0.09	34,34,34,34	0
56	MG	1A	4128	1/1	0.96	0.22	43,43,43,43	0
56	MG	1A	3331	1/1	0.96	0.11	54,54,54,54	0
56	MG	1A	4130	1/1	0.96	0.05	38,38,38,38	0
56	MG	1A	3604	1/1	0.96	0.11	65,65,65,65	0
56	MG	1A	4132	1/1	0.96	0.17	39,39,39,39	0
56	MG	1A	3605	1/1	0.96	0.08	32,32,32,32	0
56	MG	1A	3159	1/1	0.96	0.08	39,39,39,39	0
56	MG	2A	3648	1/1	0.96	0.07	51,51,51,51	0
56	MG	1A	3608	1/1	0.96	0.10	51,51,51,51	0
56	MG	1A	4138	1/1	0.96	0.09	43,43,43,43	0
56	MG	1A	4140	1/1	0.96	0.06	31,31,31,31	0
56	MG	1A	3609	1/1	0.96	0.10	50,50,50,50	0
56	MG	1A	3212	1/1	0.96	0.21	32,32,32,32	0
56	MG	1A	3411	1/1	0.96	0.10	43,43,43,43	0
56	MG	1A	3911	1/1	0.96	0.09	65,65,65,65	0
56	MG	1A	3755	1/1	0.96	0.11	36,36,36,36	0
56	MG	2A	3660	1/1	0.96	0.06	45,45,45,45	0
56	MG	1a	1678	1/1	0.96	0.23	63,63,63,63	0
56	MG	1A	3492	1/1	0.96	0.12	52,52,52,52	0
56	MG	1A	3615	1/1	0.96	0.08	25,25,25,25	0
56	MG	1A	3917	1/1	0.96	0.05	80,80,80,80	0
56	MG	2a	3025	1/1	0.96	0.14	57,57,57,57	0
56	MG	2A	3352	1/1	0.96	0.09	53,53,53,53	0
56	MG	2A	3666	1/1	0.96	0.07	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3076	1/1	0.96	0.11	35,35,35,35	0
56	MG	2A	3669	1/1	0.96	0.07	42,42,42,42	0
56	MG	1A	3213	1/1	0.96	0.09	42,42,42,42	0
56	MG	1A	3160	1/1	0.96	0.13	41,41,41,41	0
56	MG	1A	3621	1/1	0.96	0.10	48,48,48,48	0
56	MG	2A	3081	1/1	0.96	0.12	45,45,45,45	0
56	MG	1a	1685	1/1	0.96	0.16	51,51,51,51	0
56	MG	2A	3083	1/1	0.96	0.16	49,49,49,49	0
56	MG	2A	3361	1/1	0.96	0.11	51,51,51,51	0
56	MG	1A	3622	1/1	0.96	0.07	36,36,36,36	0
56	MG	2A	3679	1/1	0.96	0.07	41,41,41,41	0
56	MG	2A	3086	1/1	0.96	0.10	44,44,44,44	0
56	MG	2A	3087	1/1	0.96	0.10	53,53,53,53	0
56	MG	1A	3922	1/1	0.96	0.08	57,57,57,57	0
56	MG	2A	3089	1/1	0.96	0.06	46,46,46,46	0
56	MG	1A	3763	1/1	0.96	0.09	52,52,52,52	0
56	MG	1A	3336	1/1	0.96	0.11	41,41,41,41	0
56	MG	1A	3931	1/1	0.96	0.08	55,55,55,55	0
56	MG	1A	3497	1/1	0.96	0.14	33,33,33,33	0
56	MG	1A	3498	1/1	0.96	0.08	46,46,46,46	0
56	MG	2A	3373	1/1	0.96	0.07	52,52,52,52	0
56	MG	1A	3499	1/1	0.96	0.09	49,49,49,49	0
56	MG	2A	3692	1/1	0.96	0.09	56,56,56,56	0
56	MG	1A	3500	1/1	0.96	0.05	38,38,38,38	0
56	MG	1A	3628	1/1	0.96	0.09	28,28,28,28	0
56	MG	2A	3377	1/1	0.96	0.07	57,57,57,57	0
56	MG	1A	3162	1/1	0.96	0.31	44,44,44,44	0
56	MG	2a	3055	1/1	0.96	0.05	51,51,51,51	0
56	MG	1A	3945	1/1	0.96	0.09	41,41,41,41	0
56	MG	1a	1700	1/1	0.96	0.23	50,50,50,50	0
56	MG	1A	3269	1/1	0.96	0.12	52,52,52,52	0
56	MG	1A	3777	1/1	0.96	0.10	55,55,55,55	0
56	MG	2A	3383	1/1	0.96	0.20	60,60,60,60	0
56	MG	1A	3633	1/1	0.96	0.08	58,58,58,58	0
56	MG	1B	3031	1/1	0.96	0.06	67,67,67,67	0
56	MG	2A	3706	1/1	0.96	0.05	47,47,47,47	0
56	MG	2A	3707	1/1	0.96	0.06	61,61,61,61	0
56	MG	1A	3503	1/1	0.96	0.08	32,32,32,32	0
56	MG	1A	3217	1/1	0.96	0.15	47,47,47,47	0
56	MG	1A	3952	1/1	0.96	0.08	46,46,46,46	0
56	MG	2A	3390	1/1	0.96	0.08	57,57,57,57	0
56	MG	1A	3781	1/1	0.96	0.09	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1B	3037	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3126	1/1	0.96	0.09	41,41,41,41	0
56	MG	1A	3099	1/1	0.96	0.08	44,44,44,44	0
56	MG	1A	3956	1/1	0.96	0.06	61,61,61,61	0
56	MG	2A	3118	1/1	0.96	0.15	50,50,50,50	0
56	MG	1A	3021	1/1	0.96	0.10	45,45,45,45	0
56	MG	2A	3120	1/1	0.96	0.10	51,51,51,51	0
56	MG	2A	3122	1/1	0.96	0.06	39,39,39,39	0
56	MG	2A	3724	1/1	0.96	0.06	57,57,57,57	0
56	MG	2A	3725	1/1	0.96	0.09	49,49,49,49	0
56	MG	1a	1714	1/1	0.96	0.16	66,66,66,66	0
56	MG	2a	3082	1/1	0.96	0.16	54,54,54,54	0
56	MG	2A	3124	1/1	0.96	0.10	48,48,48,48	0
56	MG	1D	310	1/1	0.96	0.14	39,39,39,39	0
56	MG	2A	3405	1/1	0.96	0.14	33,33,33,33	0
56	MG	2a	3086	1/1	0.96	0.10	57,57,57,57	0
56	MG	1A	3958	1/1	0.96	0.12	44,44,44,44	0
56	MG	1D	312	1/1	0.96	0.17	42,42,42,42	0
56	MG	2A	3129	1/1	0.96	0.10	50,50,50,50	0
56	MG	2A	3409	1/1	0.96	0.17	47,47,47,47	0
56	MG	2a	3092	1/1	0.96	0.13	51,51,51,51	0
56	MG	1A	3785	1/1	0.96	0.07	47,47,47,47	0
56	MG	1A	3960	1/1	0.96	0.08	23,23,23,23	0
56	MG	1A	3642	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3222	1/1	0.96	0.12	56,56,56,56	0
56	MG	1A	3345	1/1	0.96	0.07	47,47,47,47	0
56	MG	1A	3964	1/1	0.96	0.08	45,45,45,45	0
56	MG	1E	308	1/1	0.96	0.13	34,34,34,34	0
56	MG	2A	3417	1/1	0.96	0.10	41,41,41,41	0
56	MG	2a	3102	1/1	0.96	0.19	58,58,58,58	0
56	MG	2A	3144	1/1	0.96	0.14	45,45,45,45	0
56	MG	1A	3074	1/1	0.96	0.06	27,27,27,27	0
56	MG	1A	3968	1/1	0.96	0.06	62,62,62,62	0
56	MG	1A	3791	1/1	0.96	0.07	43,43,43,43	0
56	MG	1A	3793	1/1	0.96	0.27	37,37,37,37	0
56	MG	1F	305	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3347	1/1	0.96	0.08	44,44,44,44	0
56	MG	1A	3517	1/1	0.96	0.08	37,37,37,37	0
56	MG	1A	3518	1/1	0.96	0.10	48,48,48,48	0
56	MG	1A	3651	1/1	0.96	0.12	32,32,32,32	0
56	MG	2A	3156	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3977	1/1	0.96	0.09	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3978	1/1	0.96	0.06	65,65,65,65	0
56	MG	2A	3160	1/1	0.96	0.17	44,44,44,44	0
56	MG	2A	3433	1/1	0.96	0.05	64,64,64,64	0
56	MG	1A	3283	1/1	0.96	0.14	40,40,40,40	0
56	MG	2A	3162	1/1	0.96	0.12	53,53,53,53	0
56	MG	2A	3166	1/1	0.96	0.11	47,47,47,47	0
56	MG	1A	3284	1/1	0.96	0.21	56,56,56,56	0
56	MG	2a	3123	1/1	0.96	0.13	54,54,54,54	0
56	MG	1A	3657	1/1	0.96	0.10	27,27,27,27	0
56	MG	1A	3803	1/1	0.96	0.25	44,44,44,44	0
56	MG	1A	3804	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3522	1/1	0.96	0.06	49,49,49,49	0
56	MG	1a	1753	1/1	0.96	0.09	59,59,59,59	0
56	MG	1a	1754	1/1	0.96	0.06	51,51,51,51	0
56	MG	1A	3806	1/1	0.96	0.06	34,34,34,34	0
56	MG	2A	3445	1/1	0.96	0.21	55,55,55,55	0
56	MG	1A	3989	1/1	0.96	0.06	60,60,60,60	0
56	MG	2A	3775	1/1	0.96	0.06	38,38,38,38	0
56	MG	2A	3176	1/1	0.96	0.09	46,46,46,46	0
56	MG	1A	3075	1/1	0.96	0.06	28,28,28,28	0
56	MG	1O	203	1/1	0.96	0.11	63,63,63,63	0
56	MG	2A	3779	1/1	0.96	0.08	56,56,56,56	0
56	MG	1A	3429	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3057	1/1	0.96	0.10	54,54,54,54	0
56	MG	1A	3528	1/1	0.96	0.05	45,45,45,45	0
56	MG	2a	3144	1/1	0.96	0.11	83,83,83,83	0
56	MG	1A	3292	1/1	0.96	0.07	56,56,56,56	0
56	MG	1A	3031	1/1	0.96	0.12	31,31,31,31	0
56	MG	1A	3356	1/1	0.96	0.09	39,39,39,39	0
56	MG	1a	1768	1/1	0.96	0.09	53,53,53,53	0
56	MG	2a	3150	1/1	0.96	0.06	78,78,78,78	0
56	MG	1A	3998	1/1	0.96	0.09	65,65,65,65	0
56	MG	1A	3815	1/1	0.96	0.21	44,44,44,44	0
56	MG	1A	3533	1/1	0.96	0.09	36,36,36,36	0
56	MG	1A	3817	1/1	0.96	0.14	45,45,45,45	0
56	MG	2A	3192	1/1	0.96	0.09	44,44,44,44	0
56	MG	1A	3672	1/1	0.96	0.06	31,31,31,31	0
56	MG	2A	3464	1/1	0.96	0.23	54,54,54,54	0
56	MG	1A	3819	1/1	0.96	0.12	48,48,48,48	0
56	MG	1A	3534	1/1	0.96	0.19	33,33,33,33	0
56	MG	2A	3800	1/1	0.96	0.05	67,67,67,67	0
56	MG	2A	3467	1/1	0.96	0.17	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3179	1/1	0.96	0.07	36,36,36,36	0
56	MG	1U	201	1/1	0.96	0.09	52,52,52,52	0
56	MG	1A	3105	1/1	0.96	0.10	40,40,40,40	0
56	MG	1A	4011	1/1	0.96	0.07	43,43,43,43	0
56	MG	2A	3201	1/1	0.96	0.06	51,51,51,51	0
56	MG	2a	3173	1/1	0.96	0.07	62,62,62,62	0
56	MG	1U	204	1/1	0.96	0.13	38,38,38,38	0
56	MG	1U	205	1/1	0.96	0.10	35,35,35,35	0
56	MG	1V	201	1/1	0.96	0.08	49,49,49,49	0
56	MG	1a	1786	1/1	0.96	0.08	64,64,64,64	0
56	MG	2A	3207	1/1	0.96	0.08	44,44,44,44	0
56	MG	1A	3082	1/1	0.96	0.15	49,49,49,49	0
56	MG	1A	4016	1/1	0.96	0.06	46,46,46,46	0
56	MG	2a	3183	1/1	0.96	0.06	76,76,76,76	0
56	MG	2a	3184	1/1	0.96	0.13	54,54,54,54	0
56	MG	1A	3233	1/1	0.96	0.07	49,49,49,49	0
56	MG	2A	3212	1/1	0.96	0.06	52,52,52,52	0
56	MG	1A	4020	1/1	0.96	0.06	53,53,53,53	0
56	MG	2a	3188	1/1	0.96	0.08	68,68,68,68	0
56	MG	2A	3483	1/1	0.96	0.16	55,55,55,55	0
56	MG	1A	3826	1/1	0.96	0.06	42,42,42,42	0
56	MG	2a	3191	1/1	0.96	0.06	63,63,63,63	0
56	MG	2A	3824	1/1	0.96	0.08	78,78,78,78	0
56	MG	1A	3827	1/1	0.96	0.14	50,50,50,50	0
56	MG	1A	3234	1/1	0.96	0.20	54,54,54,54	0
56	MG	2a	3195	1/1	0.96	0.06	41,41,41,41	0
56	MG	1A	3135	1/1	0.96	0.06	32,32,32,32	0
56	MG	1A	3368	1/1	0.96	0.17	47,47,47,47	0
56	MG	1A	4028	1/1	0.96	0.09	69,69,69,69	0
56	MG	2A	3833	1/1	0.96	0.11	55,55,55,55	0
56	MG	2A	3223	1/1	0.96	0.13	44,44,44,44	0
56	MG	1A	3136	1/1	0.96	0.10	52,52,52,52	0
56	MG	1a	1811	1/1	0.96	0.08	77,77,77,77	0
56	MG	1A	3683	1/1	0.96	0.12	40,40,40,40	0
56	MG	10	102	1/1	0.96	0.07	44,44,44,44	0
56	MG	10	103	1/1	0.96	0.07	45,45,45,45	0
56	MG	1A	3086	1/1	0.96	0.12	50,50,50,50	0
56	MG	1A	3239	1/1	0.96	0.10	30,30,30,30	0
56	MG	2A	3504	1/1	0.96	0.05	36,36,36,36	0
56	MG	1A	3140	1/1	0.96	0.16	43,43,43,43	0
56	MG	1a	1826	1/1	0.96	0.06	58,58,58,58	0
56	MG	1A	4040	1/1	0.96	0.05	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	4041	1/1	0.96	0.18	36,36,36,36	0
56	MG	1A	3838	1/1	0.96	0.15	45,45,45,45	0
56	MG	2A	3237	1/1	0.96	0.09	39,39,39,39	0
56	MG	2A	3511	1/1	0.96	0.08	24,24,24,24	0
56	MG	1A	3142	1/1	0.96	0.10	23,23,23,23	0
56	MG	1A	3553	1/1	0.96	0.25	49,49,49,49	0
56	MG	2A	3517	1/1	0.96	0.06	42,42,42,42	0
56	MG	1A	3554	1/1	0.96	0.17	47,47,47,47	0
56	MG	1A	3113	1/1	0.96	0.07	35,35,35,35	0
56	MG	1A	3843	1/1	0.96	0.08	31,31,31,31	0
56	MG	1l	202	1/1	0.96	0.09	69,69,69,69	0
56	MG	2A	3873	1/1	0.96	0.10	40,40,40,40	0
56	MG	1A	3556	1/1	0.96	0.21	42,42,42,42	0
56	MG	1A	3845	1/1	0.96	0.10	38,38,38,38	0
56	MG	1A	3311	1/1	0.96	0.14	48,48,48,48	0
56	MG	2A	3248	1/1	0.96	0.09	42,42,42,42	0
56	MG	1A	3144	1/1	0.96	0.09	52,52,52,52	0
56	MG	2A	3881	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3695	1/1	0.96	0.07	57,57,57,57	0
56	MG	2A	3253	1/1	0.96	0.06	47,47,47,47	0
56	MG	1A	3849	1/1	0.96	0.10	44,44,44,44	0
56	MG	19	101	1/1	0.96	0.17	49,49,49,49	0
56	MG	2A	3887	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	4056	1/1	0.96	0.06	47,47,47,47	0
56	MG	1A	4058	1/1	0.96	0.07	47,47,47,47	0
56	MG	1A	3313	1/1	0.96	0.26	49,49,49,49	0
56	MG	1A	3383	1/1	0.96	0.09	55,55,55,55	0
56	MG	2A	3260	1/1	0.96	0.09	53,53,53,53	0
56	MG	1A	3456	1/1	0.96	0.13	48,48,48,48	0
56	MG	1A	3005	1/1	0.96	0.09	41,41,41,41	0
56	MG	2A	3897	1/1	0.96	0.14	57,57,57,57	0
56	MG	2A	3898	1/1	0.96	0.07	28,28,28,28	0
56	MG	1w	111	1/1	0.96	0.07	41,41,41,41	0
56	MG	2A	3264	1/1	0.96	0.05	62,62,62,62	0
56	MG	2A	3902	1/1	0.96	0.15	43,43,43,43	0
56	MG	2A	3547	1/1	0.96	0.04	37,37,37,37	0
56	MG	2A	3905	1/1	0.96	0.13	38,38,38,38	0
56	MG	1A	3040	1/1	0.96	0.07	36,36,36,36	0
56	MG	1A	3317	1/1	0.96	0.09	47,47,47,47	0
56	MG	1A	3461	1/1	0.96	0.15	44,44,44,44	0
56	MG	1A	3462	1/1	0.96	0.10	32,32,32,32	0
56	MG	1A	3706	1/1	0.96	0.10	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3463	1/1	0.96	0.06	53,53,53,53	0
56	MG	1A	3860	1/1	0.96	0.11	47,47,47,47	0
56	MG	1A	3042	1/1	0.96	0.13	40,40,40,40	0
56	MG	1A	3862	1/1	0.96	0.16	43,43,43,43	0
56	MG	1A	3388	1/1	0.96	0.10	42,42,42,42	0
56	MG	1A	3149	1/1	0.96	0.10	33,33,33,33	0
56	MG	1A	3575	1/1	0.96	0.14	33,33,33,33	0
56	MG	2w	106	1/1	0.96	0.12	60,60,60,60	0
56	MG	2A	3277	1/1	0.96	0.14	50,50,50,50	0
56	MG	1A	3150	1/1	0.96	0.14	50,50,50,50	0
56	MG	1A	3868	1/1	0.96	0.08	47,47,47,47	0
56	MG	1A	4079	1/1	0.96	0.13	46,46,46,46	0
56	MG	2A	3570	1/1	0.96	0.08	53,53,53,53	0
56	MG	1A	3716	1/1	0.96	0.08	28,28,28,28	0
56	MG	1A	3321	1/1	0.96	0.20	51,51,51,51	0
56	MG	1A	4085	1/1	0.96	0.08	21,21,21,21	0
56	MG	1A	3469	1/1	0.96	0.12	53,53,53,53	0
56	MG	1A	3720	1/1	0.96	0.07	53,53,53,53	0
56	MG	1A	3024	1/1	0.96	0.09	43,43,43,43	0
56	MG	2A	3578	1/1	0.96	0.07	39,39,39,39	0
56	MG	2A	3005	1/1	0.96	0.15	48,48,48,48	0
56	MG	1a	1632	1/1	0.96	0.15	52,52,52,52	0
56	MG	2A	3007	1/1	0.96	0.06	43,43,43,43	0
56	MG	2A	3003	1/1	0.97	0.12	43,43,43,43	0
56	MG	1A	3173	1/1	0.97	0.13	42,42,42,42	0
56	MG	1A	3175	1/1	0.97	0.17	40,40,40,40	0
56	MG	1A	3876	1/1	0.97	0.08	49,49,49,49	0
56	MG	2a	3009	1/1	0.97	0.06	60,60,60,60	0
56	MG	1A	3764	1/1	0.97	0.09	31,31,31,31	0
56	MG	1A	4027	1/1	0.97	0.12	50,50,50,50	0
56	MG	2A	3451	1/1	0.97	0.29	56,56,56,56	0
56	MG	1A	3460	1/1	0.97	0.08	48,48,48,48	0
56	MG	2A	3011	1/1	0.97	0.04	48,48,48,48	0
56	MG	1A	3389	1/1	0.97	0.11	53,53,53,53	0
56	MG	2A	3013	1/1	0.97	0.11	44,44,44,44	0
56	MG	1A	4031	1/1	0.97	0.06	54,54,54,54	0
56	MG	2A	3015	1/1	0.97	0.10	43,43,43,43	0
56	MG	2A	3240	1/1	0.97	0.10	40,40,40,40	0
56	MG	1E	309	1/1	0.97	0.05	50,50,50,50	0
56	MG	1A	3880	1/1	0.97	0.11	30,30,30,30	0
56	MG	1A	3881	1/1	0.97	0.08	37,37,37,37	0
56	MG	2a	3023	1/1	0.97	0.05	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3019	1/1	0.97	0.06	38,38,38,38	0
56	MG	2A	3022	1/1	0.97	0.12	47,47,47,47	0
56	MG	1A	3390	1/1	0.97	0.12	35,35,35,35	0
56	MG	1A	3007	1/1	0.97	0.06	38,38,38,38	0
56	MG	1A	4038	1/1	0.97	0.04	45,45,45,45	0
56	MG	1A	3654	1/1	0.97	0.12	36,36,36,36	0
56	MG	1A	3550	1/1	0.97	0.16	38,38,38,38	0
56	MG	1A	4042	1/1	0.97	0.07	46,46,46,46	0
56	MG	2A	3735	1/1	0.97	0.06	55,55,55,55	0
56	MG	1G	3001	1/1	0.97	0.10	41,41,41,41	0
56	MG	1A	3220	1/1	0.97	0.08	41,41,41,41	0
56	MG	1A	3775	1/1	0.97	0.11	27,27,27,27	0
56	MG	1A	3045	1/1	0.97	0.07	36,36,36,36	0
56	MG	1A	3022	1/1	0.97	0.07	21,21,21,21	0
56	MG	1A	3008	1/1	0.97	0.10	26,26,26,26	0
56	MG	1A	3893	1/1	0.97	0.11	17,17,17,17	0
56	MG	1A	3397	1/1	0.97	0.07	47,47,47,47	0
56	MG	1A	3271	1/1	0.97	0.09	50,50,50,50	0
56	MG	1a	1698	1/1	0.97	0.04	52,52,52,52	0
56	MG	2A	3746	1/1	0.97	0.04	68,68,68,68	0
56	MG	1a	1699	1/1	0.97	0.17	40,40,40,40	0
56	MG	1A	3049	1/1	0.97	0.11	26,26,26,26	0
56	MG	1A	3559	1/1	0.97	0.17	34,34,34,34	0
56	MG	1A	3092	1/1	0.97	0.07	50,50,50,50	0
56	MG	1A	3670	1/1	0.97	0.07	32,32,32,32	0
56	MG	1A	3562	1/1	0.97	0.05	24,24,24,24	0
56	MG	2A	3047	1/1	0.97	0.09	46,46,46,46	0
56	MG	1A	3401	1/1	0.97	0.14	35,35,35,35	0
56	MG	2A	3755	1/1	0.97	0.08	50,50,50,50	0
56	MG	1O	205	1/1	0.97	0.05	44,44,44,44	0
56	MG	2A	3489	1/1	0.97	0.06	41,41,41,41	0
56	MG	1A	3274	1/1	0.97	0.11	36,36,36,36	0
56	MG	1A	3475	1/1	0.97	0.08	42,42,42,42	0
56	MG	1A	3789	1/1	0.97	0.05	29,29,29,29	0
56	MG	1A	3277	1/1	0.97	0.11	38,38,38,38	0
56	MG	1A	3051	1/1	0.97	0.06	50,50,50,50	0
56	MG	2A	3497	1/1	0.97	0.06	63,63,63,63	0
56	MG	1A	3792	1/1	0.97	0.07	35,35,35,35	0
56	MG	2A	3499	1/1	0.97	0.05	46,46,46,46	0
56	MG	1A	3405	1/1	0.97	0.16	42,42,42,42	0
56	MG	1R	202	1/1	0.97	0.11	38,38,38,38	0
56	MG	2A	3502	1/1	0.97	0.05	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3066	1/1	0.97	0.12	54,54,54,54	0
56	MG	1A	3228	1/1	0.97	0.08	41,41,41,41	0
56	MG	1A	3187	1/1	0.97	0.14	47,47,47,47	0
56	MG	1A	3282	1/1	0.97	0.05	30,30,30,30	0
56	MG	1A	3797	1/1	0.97	0.10	53,53,53,53	0
56	MG	1A	3341	1/1	0.97	0.14	55,55,55,55	0
56	MG	1A	3033	1/1	0.97	0.17	36,36,36,36	0
56	MG	1A	3574	1/1	0.97	0.19	43,43,43,43	0
56	MG	1A	3012	1/1	0.97	0.05	30,30,30,30	0
56	MG	1a	1725	1/1	0.97	0.26	55,55,55,55	0
56	MG	1A	3054	1/1	0.97	0.11	39,39,39,39	0
56	MG	1A	3288	1/1	0.97	0.08	43,43,43,43	0
56	MG	1a	1728	1/1	0.97	0.22	48,48,48,48	0
56	MG	2A	3293	1/1	0.97	0.07	50,50,50,50	0
56	MG	1A	3929	1/1	0.97	0.07	42,42,42,42	0
56	MG	1U	208	1/1	0.97	0.10	38,38,38,38	0
56	MG	2A	3296	1/1	0.97	0.11	45,45,45,45	0
56	MG	2A	3523	1/1	0.97	0.08	27,27,27,27	0
56	MG	2A	3524	1/1	0.97	0.06	48,48,48,48	0
56	MG	2A	3789	1/1	0.97	0.09	49,49,49,49	0
56	MG	2A	3526	1/1	0.97	0.04	41,41,41,41	0
56	MG	1A	3688	1/1	0.97	0.06	15,15,15,15	0
56	MG	2A	3298	1/1	0.97	0.08	41,41,41,41	0
56	MG	2A	3793	1/1	0.97	0.13	56,56,56,56	0
56	MG	1A	4082	1/1	0.97	0.11	38,38,38,38	0
56	MG	1A	3934	1/1	0.97	0.06	44,44,44,44	0
56	MG	2A	3078	1/1	0.97	0.09	25,25,25,25	0
56	MG	1A	3191	1/1	0.97	0.16	42,42,42,42	0
56	MG	1A	3807	1/1	0.97	0.06	38,38,38,38	0
56	MG	1X	101	1/1	0.97	0.08	40,40,40,40	0
56	MG	1X	102	1/1	0.97	0.08	46,46,46,46	0
56	MG	2a	3098	1/1	0.97	0.08	46,46,46,46	0
56	MG	1a	1740	1/1	0.97	0.10	35,35,35,35	0
56	MG	1X	103	1/1	0.97	0.11	40,40,40,40	0
56	MG	1X	104	1/1	0.97	0.06	52,52,52,52	0
56	MG	1A	4086	1/1	0.97	0.20	43,43,43,43	0
56	MG	2A	3806	1/1	0.97	0.08	66,66,66,66	0
56	MG	1a	1745	1/1	0.97	0.10	55,55,55,55	0
56	MG	2A	3542	1/1	0.97	0.04	39,39,39,39	0
56	MG	1A	3125	1/1	0.97	0.15	41,41,41,41	0
56	MG	1A	3039	1/1	0.97	0.09	36,36,36,36	0
56	MG	1a	1748	1/1	0.97	0.06	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3092	1/1	0.97	0.10	43,43,43,43	0
56	MG	1A	4089	1/1	0.97	0.05	36,36,36,36	0
56	MG	2A	3548	1/1	0.97	0.09	38,38,38,38	0
56	MG	1A	3940	1/1	0.97	0.05	48,48,48,48	0
56	MG	1A	3942	1/1	0.97	0.05	56,56,56,56	0
56	MG	1A	3349	1/1	0.97	0.10	44,44,44,44	0
56	MG	1A	3077	1/1	0.97	0.14	35,35,35,35	0
56	MG	1A	3078	1/1	0.97	0.10	31,31,31,31	0
56	MG	1A	3156	1/1	0.97	0.15	40,40,40,40	0
56	MG	1A	3157	1/1	0.97	0.11	53,53,53,53	0
56	MG	2A	3825	1/1	0.97	0.09	58,58,58,58	0
56	MG	2A	3102	1/1	0.97	0.09	56,56,56,56	0
56	MG	1A	4099	1/1	0.97	0.09	41,41,41,41	0
56	MG	1A	3496	1/1	0.97	0.10	38,38,38,38	0
56	MG	1A	3243	1/1	0.97	0.08	53,53,53,53	0
56	MG	2A	3831	1/1	0.97	0.05	45,45,45,45	0
56	MG	1A	3013	1/1	0.97	0.17	35,35,35,35	0
56	MG	2A	3562	1/1	0.97	0.04	37,37,37,37	0
56	MG	2A	3107	1/1	0.97	0.06	46,46,46,46	0
56	MG	1A	3199	1/1	0.97	0.11	45,45,45,45	0
56	MG	2A	3566	1/1	0.97	0.09	33,33,33,33	0
56	MG	2A	3838	1/1	0.97	0.06	47,47,47,47	0
56	MG	2A	3109	1/1	0.97	0.05	37,37,37,37	0
56	MG	2A	3840	1/1	0.97	0.11	43,43,43,43	0
56	MG	1a	1764	1/1	0.97	0.04	59,59,59,59	0
56	MG	1a	1765	1/1	0.97	0.06	49,49,49,49	0
56	MG	1A	3593	1/1	0.97	0.10	56,56,56,56	0
56	MG	2A	3845	1/1	0.97	0.08	42,42,42,42	0
56	MG	1A	3820	1/1	0.97	0.09	41,41,41,41	0
56	MG	2A	3849	1/1	0.97	0.10	44,44,44,44	0
56	MG	1A	4106	1/1	0.97	0.07	29,29,29,29	0
56	MG	2A	3852	1/1	0.97	0.05	49,49,49,49	0
56	MG	1A	4107	1/1	0.97	0.08	42,42,42,42	0
56	MG	2A	3575	1/1	0.97	0.06	39,39,39,39	0
56	MG	1A	3358	1/1	0.97	0.12	33,33,33,33	0
56	MG	1A	3360	1/1	0.97	0.20	31,31,31,31	0
56	MG	1a	1772	1/1	0.97	0.05	39,39,39,39	0
56	MG	2A	3859	1/1	0.97	0.06	53,53,53,53	0
56	MG	16	103	1/1	0.97	0.08	54,54,54,54	0
56	MG	1A	4110	1/1	0.97	0.06	56,56,56,56	0
56	MG	2a	3154	1/1	0.97	0.11	68,68,68,68	0
56	MG	2A	3581	1/1	0.97	0.07	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	4111	1/1	0.97	0.08	34,34,34,34	0
56	MG	1A	3080	1/1	0.97	0.14	42,42,42,42	0
56	MG	1A	3081	1/1	0.97	0.15	34,34,34,34	0
56	MG	1A	3248	1/1	0.97	0.16	47,47,47,47	0
56	MG	2A	3589	1/1	0.97	0.05	45,45,45,45	0
56	MG	2A	3347	1/1	0.97	0.12	51,51,51,51	0
56	MG	1A	3599	1/1	0.97	0.08	21,21,21,21	0
56	MG	1a	1780	1/1	0.97	0.06	74,74,74,74	0
56	MG	2A	3595	1/1	0.97	0.08	49,49,49,49	0
56	MG	2a	3169	1/1	0.97	0.07	51,51,51,51	0
56	MG	1A	3161	1/1	0.97	0.16	38,38,38,38	0
56	MG	1A	3365	1/1	0.97	0.09	53,53,53,53	0
56	MG	2A	3879	1/1	0.97	0.07	37,37,37,37	0
56	MG	1A	3713	1/1	0.97	0.14	62,62,62,62	0
56	MG	2A	3132	1/1	0.97	0.14	56,56,56,56	0
56	MG	2a	3175	1/1	0.97	0.06	46,46,46,46	0
56	MG	1A	3714	1/1	0.97	0.08	46,46,46,46	0
56	MG	2A	3602	1/1	0.97	0.06	42,42,42,42	0
56	MG	1A	3965	1/1	0.97	0.13	67,67,67,67	0
56	MG	2A	3135	1/1	0.97	0.07	43,43,43,43	0
56	MG	1A	3603	1/1	0.97	0.14	39,39,39,39	0
56	MG	2a	3181	1/1	0.97	0.06	69,69,69,69	0
56	MG	1A	3433	1/1	0.97	0.13	47,47,47,47	0
56	MG	2A	3142	1/1	0.97	0.16	41,41,41,41	0
56	MG	1A	3434	1/1	0.97	0.08	48,48,48,48	0
56	MG	1a	1792	1/1	0.97	0.06	59,59,59,59	0
56	MG	2A	3145	1/1	0.97	0.09	36,36,36,36	0
56	MG	1A	3606	1/1	0.97	0.10	36,36,36,36	0
56	MG	1a	1609	1/1	0.97	0.15	54,54,54,54	0
56	MG	1A	3510	1/1	0.97	0.05	45,45,45,45	0
56	MG	1A	4133	1/1	0.97	0.14	45,45,45,45	0
56	MG	1A	3972	1/1	0.97	0.06	60,60,60,60	0
56	MG	1a	1800	1/1	0.97	0.10	70,70,70,70	0
56	MG	1a	1614	1/1	0.97	0.11	45,45,45,45	0
56	MG	1A	3511	1/1	0.97	0.06	45,45,45,45	0
56	MG	2A	3904	1/1	0.97	0.16	41,41,41,41	0
56	MG	2A	3154	1/1	0.97	0.16	48,48,48,48	0
56	MG	2A	3621	1/1	0.97	0.08	51,51,51,51	0
56	MG	1A	4136	1/1	0.97	0.07	40,40,40,40	0
56	MG	1A	3366	1/1	0.97	0.05	38,38,38,38	0
56	MG	1A	3309	1/1	0.97	0.14	33,33,33,33	0
56	MG	1A	3611	1/1	0.97	0.06	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1814	1/1	0.97	0.09	55,55,55,55	0
56	MG	1a	1621	1/1	0.97	0.06	42,42,42,42	0
56	MG	1A	4141	1/1	0.97	0.24	50,50,50,50	0
56	MG	2A	3163	1/1	0.97	0.10	56,56,56,56	0
56	MG	2A	3164	1/1	0.97	0.20	53,53,53,53	0
56	MG	2A	3633	1/1	0.97	0.11	55,55,55,55	0
56	MG	2A	3634	1/1	0.97	0.07	34,34,34,34	0
56	MG	2A	3165	1/1	0.97	0.20	49,49,49,49	0
56	MG	1a	1819	1/1	0.97	0.05	48,48,48,48	0
56	MG	2A	3385	1/1	0.97	0.13	52,52,52,52	0
56	MG	1a	1820	1/1	0.97	0.05	57,57,57,57	0
56	MG	1a	1821	1/1	0.97	0.05	62,62,62,62	0
56	MG	1A	3020	1/1	0.97	0.05	25,25,25,25	0
56	MG	1B	3001	1/1	0.97	0.20	48,48,48,48	0
56	MG	2a	3217	1/1	0.97	0.07	61,61,61,61	0
56	MG	1A	3515	1/1	0.97	0.09	29,29,29,29	0
56	MG	1A	3107	1/1	0.97	0.14	35,35,35,35	0
56	MG	1A	3108	1/1	0.97	0.29	43,43,43,43	0
56	MG	1A	3371	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3620	1/1	0.97	0.12	25,25,25,25	0
56	MG	1A	3520	1/1	0.97	0.09	41,41,41,41	0
56	MG	1A	3372	1/1	0.97	0.12	58,58,58,58	0
56	MG	1A	3443	1/1	0.97	0.07	54,54,54,54	0
56	MG	1f	3001	1/1	0.97	0.12	34,34,34,34	0
56	MG	2A	3652	1/1	0.97	0.13	41,41,41,41	0
56	MG	1A	3524	1/1	0.97	0.05	47,47,47,47	0
56	MG	2A	3400	1/1	0.97	0.06	56,56,56,56	0
56	MG	2A	3401	1/1	0.97	0.12	52,52,52,52	0
56	MG	2A	3181	1/1	0.97	0.13	40,40,40,40	0
56	MG	2A	3657	1/1	0.97	0.16	39,39,39,39	0
56	MG	1A	3991	1/1	0.97	0.12	48,48,48,48	0
56	MG	1A	3083	1/1	0.97	0.15	44,44,44,44	0
56	MG	1A	3111	1/1	0.97	0.06	40,40,40,40	0
56	MG	1n	103	1/1	0.97	0.16	48,48,48,48	0
56	MG	1A	3211	1/1	0.97	0.07	49,49,49,49	0
56	MG	1B	3015	1/1	0.97	0.09	58,58,58,58	0
56	MG	1A	3043	1/1	0.97	0.06	39,39,39,39	0
56	MG	1A	3629	1/1	0.97	0.08	32,32,32,32	0
56	MG	1w	102	1/1	0.97	0.13	61,61,61,61	0
56	MG	1A	3138	1/1	0.97	0.25	36,36,36,36	0
56	MG	2a	3244	1/1	0.97	0.07	43,43,43,43	0
56	MG	1A	3449	1/1	0.97	0.06	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3749	1/1	0.97	0.07	41,41,41,41	0
56	MG	1A	3379	1/1	0.97	0.09	37,37,37,37	0
56	MG	1A	3634	1/1	0.97	0.08	44,44,44,44	0
56	MG	2Q	3003	1/1	0.97	0.06	51,51,51,51	0
56	MG	1A	3532	1/1	0.97	0.16	36,36,36,36	0
56	MG	1A	3258	1/1	0.97	0.07	33,33,33,33	0
56	MG	1B	3027	1/1	0.97	0.04	35,35,35,35	0
56	MG	2A	3200	1/1	0.97	0.10	42,42,42,42	0
56	MG	2A	3677	1/1	0.97	0.27	35,35,35,35	0
56	MG	1A	4005	1/1	0.97	0.05	50,50,50,50	0
56	MG	1A	3864	1/1	0.97	0.13	35,35,35,35	0
56	MG	2A	3423	1/1	0.97	0.07	58,58,58,58	0
56	MG	1A	3381	1/1	0.97	0.07	43,43,43,43	0
56	MG	1a	1654	1/1	0.97	0.17	49,49,49,49	0
56	MG	1A	4008	1/1	0.97	0.06	56,56,56,56	0
56	MG	1A	4009	1/1	0.97	0.09	27,27,27,27	0
56	MG	1a	1658	1/1	0.97	0.12	57,57,57,57	0
56	MG	1A	3214	1/1	0.97	0.10	42,42,42,42	0
56	MG	1A	3640	1/1	0.97	0.09	53,53,53,53	0
56	MG	1A	3170	1/1	0.97	0.11	39,39,39,39	0
56	MG	1A	4013	1/1	0.97	0.04	33,33,33,33	0
56	MG	2A	3690	1/1	0.97	0.12	61,61,61,61	0
56	MG	2x	101	1/1	0.97	0.10	42,42,42,42	0
56	MG	1D	301	1/1	0.97	0.17	46,46,46,46	0
56	MG	2A	3215	1/1	0.97	0.09	37,37,37,37	0
56	MG	1A	4015	1/1	0.97	0.04	37,37,37,37	0
56	MG	1D	304	1/1	0.97	0.12	30,30,30,30	0
56	MG	1A	3139	1/1	0.97	0.08	48,48,48,48	0
56	MG	1A	4018	1/1	0.97	0.13	67,67,67,67	0
56	MG	2A	3697	1/1	0.97	0.06	34,34,34,34	0
56	MG	1A	3262	1/1	0.97	0.06	49,49,49,49	0
56	MG	2A	3222	1/1	0.97	0.10	38,38,38,38	0
56	MG	2y	3006	1/1	0.97	0.05	86,86,86,86	0
56	MG	1A	3263	1/1	0.97	0.13	52,52,52,52	0
56	MG	1a	1670	1/1	0.97	0.09	59,59,59,59	0
57	K	2A	3496	1/1	0.97	0.10	73,73,73,73	0
56	MG	1A	3761	1/1	0.97	0.09	51,51,51,51	0
56	MG	2A	3002	1/1	0.97	0.26	57,57,57,57	0
56	MG	1A	3663	1/1	0.98	0.05	28,28,28,28	0
56	MG	1A	3470	1/1	0.98	0.07	47,47,47,47	0
56	MG	2A	3846	1/1	0.98	0.05	47,47,47,47	0
56	MG	2A	3847	1/1	0.98	0.09	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1w	108	1/1	0.98	0.05	63,63,63,63	0
56	MG	2A	3650	1/1	0.98	0.11	41,41,41,41	0
56	MG	1A	3915	1/1	0.98	0.05	39,39,39,39	0
56	MG	1A	3106	1/1	0.98	0.06	25,25,25,25	0
56	MG	2A	3853	1/1	0.98	0.05	50,50,50,50	0
56	MG	1A	3237	1/1	0.98	0.19	38,38,38,38	0
56	MG	2A	3136	1/1	0.98	0.12	45,45,45,45	0
56	MG	2A	3137	1/1	0.98	0.04	42,42,42,42	0
56	MG	1A	3828	1/1	0.98	0.07	34,34,34,34	0
56	MG	2A	3139	1/1	0.98	0.15	32,32,32,32	0
56	MG	2A	3140	1/1	0.98	0.14	50,50,50,50	0
56	MG	1A	4139	1/1	0.98	0.05	35,35,35,35	0
56	MG	2A	3861	1/1	0.98	0.06	36,36,36,36	0
56	MG	2A	3862	1/1	0.98	0.07	71,71,71,71	0
56	MG	2A	3863	1/1	0.98	0.06	58,58,58,58	0
56	MG	1A	3204	1/1	0.98	0.12	26,26,26,26	0
56	MG	1A	3668	1/1	0.98	0.11	28,28,28,28	0
56	MG	2a	3089	1/1	0.98	0.18	65,65,65,65	0
56	MG	1A	3205	1/1	0.98	0.08	42,42,42,42	0
56	MG	1A	3275	1/1	0.98	0.07	44,44,44,44	0
56	MG	1A	3276	1/1	0.98	0.08	49,49,49,49	0
56	MG	1A	4030	1/1	0.98	0.05	44,44,44,44	0
56	MG	1A	3174	1/1	0.98	0.20	38,38,38,38	0
56	MG	1A	3927	1/1	0.98	0.04	47,47,47,47	0
56	MG	2A	3668	1/1	0.98	0.06	45,45,45,45	0
56	MG	1A	3673	1/1	0.98	0.09	29,29,29,29	0
56	MG	1A	4034	1/1	0.98	0.05	51,51,51,51	0
56	MG	1A	4035	1/1	0.98	0.04	46,46,46,46	0
56	MG	2A	3877	1/1	0.98	0.14	28,28,28,28	0
56	MG	1A	3930	1/1	0.98	0.04	30,30,30,30	0
56	MG	1a	1716	1/1	0.98	0.06	53,53,53,53	0
56	MG	1x	116	1/1	0.98	0.04	59,59,59,59	0
56	MG	1A	3241	1/1	0.98	0.07	44,44,44,44	0
56	MG	2A	3882	1/1	0.98	0.06	44,44,44,44	0
56	MG	2A	3157	1/1	0.98	0.09	58,58,58,58	0
56	MG	1A	3933	1/1	0.98	0.05	47,47,47,47	0
56	MG	2A	3491	1/1	0.98	0.16	55,55,55,55	0
56	MG	1A	3837	1/1	0.98	0.10	21,21,21,21	0
56	MG	1A	3535	1/1	0.98	0.18	45,45,45,45	0
56	MG	1A	3536	1/1	0.98	0.15	37,37,37,37	0
56	MG	1A	3279	1/1	0.98	0.05	38,38,38,38	0
56	MG	2a	3113	1/1	0.98	0.13	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3014	1/1	0.98	0.05	31,31,31,31	0
56	MG	1a	1724	1/1	0.98	0.06	36,36,36,36	0
56	MG	1A	3481	1/1	0.98	0.09	39,39,39,39	0
56	MG	1B	3018	1/1	0.98	0.04	37,37,37,37	0
56	MG	1A	3941	1/1	0.98	0.04	46,46,46,46	0
56	MG	2A	3896	1/1	0.98	0.19	39,39,39,39	0
56	MG	1A	3176	1/1	0.98	0.05	37,37,37,37	0
56	MG	2A	3009	1/1	0.98	0.06	31,31,31,31	0
56	MG	1A	3177	1/1	0.98	0.14	38,38,38,38	0
56	MG	1A	3178	1/1	0.98	0.10	21,21,21,21	0
56	MG	1A	4050	1/1	0.98	0.12	32,32,32,32	0
56	MG	1a	1732	1/1	0.98	0.08	48,48,48,48	0
56	MG	1A	3071	1/1	0.98	0.10	38,38,38,38	0
56	MG	1A	3072	1/1	0.98	0.07	19,19,19,19	0
56	MG	1B	3026	1/1	0.98	0.04	42,42,42,42	0
56	MG	1A	3286	1/1	0.98	0.31	49,49,49,49	0
56	MG	2A	3512	1/1	0.98	0.04	53,53,53,53	0
56	MG	2A	3513	1/1	0.98	0.08	34,34,34,34	0
56	MG	1A	3767	1/1	0.98	0.07	41,41,41,41	0
56	MG	2a	3133	1/1	0.98	0.07	54,54,54,54	0
56	MG	2A	3701	1/1	0.98	0.08	64,64,64,64	0
56	MG	1A	3287	1/1	0.98	0.13	30,30,30,30	0
56	MG	2A	3020	1/1	0.98	0.17	49,49,49,49	0
56	MG	2A	3021	1/1	0.98	0.07	28,28,28,28	0
56	MG	2A	3519	1/1	0.98	0.06	33,33,33,33	0
56	MG	1A	3547	1/1	0.98	0.06	53,53,53,53	0
56	MG	2a	3140	1/1	0.98	0.04	57,57,57,57	0
56	MG	1a	1741	1/1	0.98	0.06	34,34,34,34	0
56	MG	2A	3184	1/1	0.98	0.13	48,48,48,48	0
56	MG	2a	3143	1/1	0.98	0.05	73,73,73,73	0
56	MG	1A	4057	1/1	0.98	0.06	40,40,40,40	0
56	MG	1A	3015	1/1	0.98	0.07	40,40,40,40	0
56	MG	2A	3525	1/1	0.98	0.07	34,34,34,34	0
56	MG	2a	3147	1/1	0.98	0.10	49,49,49,49	0
56	MG	1A	3771	1/1	0.98	0.08	49,49,49,49	0
56	MG	2A	3027	1/1	0.98	0.16	48,48,48,48	0
56	MG	2A	3714	1/1	0.98	0.07	39,39,39,39	0
56	MG	1A	3549	1/1	0.98	0.05	38,38,38,38	0
56	MG	2A	3357	1/1	0.98	0.05	39,39,39,39	0
56	MG	1a	1611	1/1	0.98	0.06	22,22,22,22	0
56	MG	1A	3289	1/1	0.98	0.07	52,52,52,52	0
56	MG	1A	3617	1/1	0.98	0.07	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1749	1/1	0.98	0.10	45,45,45,45	0
56	MG	2a	3157	1/1	0.98	0.06	64,64,64,64	0
56	MG	1A	3290	1/1	0.98	0.08	46,46,46,46	0
56	MG	2A	3723	1/1	0.98	0.05	50,50,50,50	0
56	MG	1A	3619	1/1	0.98	0.13	31,31,31,31	0
56	MG	2a	3162	1/1	0.98	0.03	62,62,62,62	0
56	MG	1D	303	1/1	0.98	0.13	37,37,37,37	0
56	MG	1A	3439	1/1	0.98	0.09	40,40,40,40	0
56	MG	2A	3037	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	3056	1/1	0.98	0.10	28,28,28,28	0
56	MG	2A	3729	1/1	0.98	0.05	41,41,41,41	0
56	MG	2A	3368	1/1	0.98	0.06	47,47,47,47	0
56	MG	1a	1619	1/1	0.98	0.06	62,62,62,62	0
56	MG	1A	3011	1/1	0.98	0.12	46,46,46,46	0
56	MG	1A	3035	1/1	0.98	0.09	20,20,20,20	0
56	MG	1A	3046	1/1	0.98	0.12	32,32,32,32	0
56	MG	2A	3204	1/1	0.98	0.13	48,48,48,48	0
56	MG	1A	3295	1/1	0.98	0.05	48,48,48,48	0
56	MG	1A	3296	1/1	0.98	0.08	58,58,58,58	0
56	MG	1A	3701	1/1	0.98	0.08	48,48,48,48	0
56	MG	2F	303	1/1	0.98	0.04	48,48,48,48	0
56	MG	2F	304	1/1	0.98	0.17	53,53,53,53	0
56	MG	1A	3702	1/1	0.98	0.07	34,34,34,34	0
56	MG	2A	3551	1/1	0.98	0.07	39,39,39,39	0
56	MG	1E	303	1/1	0.98	0.08	26,26,26,26	0
56	MG	1A	3394	1/1	0.98	0.05	35,35,35,35	0
56	MG	2A	3211	1/1	0.98	0.06	43,43,43,43	0
56	MG	1A	3561	1/1	0.98	0.28	48,48,48,48	0
56	MG	1A	4077	1/1	0.98	0.10	11,11,11,11	0
56	MG	1A	3297	1/1	0.98	0.13	32,32,32,32	0
56	MG	1A	3186	1/1	0.98	0.08	39,39,39,39	0
56	MG	1A	4080	1/1	0.98	0.10	23,23,23,23	0
56	MG	1a	1634	1/1	0.98	0.05	27,27,27,27	0
56	MG	1E	310	1/1	0.98	0.03	42,42,42,42	0
56	MG	1A	3036	1/1	0.98	0.12	31,31,31,31	0
56	MG	1A	3974	1/1	0.98	0.06	45,45,45,45	0
56	MG	2A	3564	1/1	0.98	0.06	31,31,31,31	0
56	MG	1A	3098	1/1	0.98	0.11	25,25,25,25	0
56	MG	1A	3118	1/1	0.98	0.09	38,38,38,38	0
56	MG	2A	3567	1/1	0.98	0.04	50,50,50,50	0
56	MG	1F	304	1/1	0.98	0.17	40,40,40,40	0
56	MG	2X	101	1/1	0.98	0.03	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3037	1/1	0.98	0.11	40,40,40,40	0
56	MG	1A	3303	1/1	0.98	0.08	33,33,33,33	0
56	MG	1A	3223	1/1	0.98	0.08	32,32,32,32	0
56	MG	1A	3038	1/1	0.98	0.07	50,50,50,50	0
56	MG	1A	3141	1/1	0.98	0.06	35,35,35,35	0
56	MG	1A	3063	1/1	0.98	0.08	38,38,38,38	0
56	MG	1A	3717	1/1	0.98	0.08	22,22,22,22	0
56	MG	2A	3069	1/1	0.98	0.06	40,40,40,40	0
56	MG	1a	1785	1/1	0.98	0.04	55,55,55,55	0
56	MG	1A	3984	1/1	0.98	0.09	34,34,34,34	0
56	MG	1a	1787	1/1	0.98	0.05	72,72,72,72	0
56	MG	1A	3801	1/1	0.98	0.04	28,28,28,28	0
56	MG	2a	3212	1/1	0.98	0.10	51,51,51,51	0
56	MG	1A	3986	1/1	0.98	0.08	22,22,22,22	0
56	MG	2A	3075	1/1	0.98	0.08	37,37,37,37	0
56	MG	1A	3355	1/1	0.98	0.18	47,47,47,47	0
56	MG	2A	3584	1/1	0.98	0.12	37,37,37,37	0
56	MG	2A	3585	1/1	0.98	0.05	43,43,43,43	0
56	MG	1a	1791	1/1	0.98	0.05	54,54,54,54	0
56	MG	2A	3587	1/1	0.98	0.05	37,37,37,37	0
56	MG	1A	4098	1/1	0.98	0.06	45,45,45,45	0
56	MG	1N	203	1/1	0.98	0.05	48,48,48,48	0
56	MG	1A	3988	1/1	0.98	0.04	68,68,68,68	0
56	MG	1A	3122	1/1	0.98	0.06	44,44,44,44	0
56	MG	1A	3644	1/1	0.98	0.04	33,33,33,33	0
56	MG	2A	3594	1/1	0.98	0.04	38,38,38,38	0
56	MG	1A	3887	1/1	0.98	0.09	31,31,31,31	0
56	MG	2A	3785	1/1	0.98	0.16	45,45,45,45	0
56	MG	2A	3084	1/1	0.98	0.04	45,45,45,45	0
56	MG	2A	3787	1/1	0.98	0.04	64,64,64,64	0
56	MG	1a	1799	1/1	0.98	0.05	49,49,49,49	0
56	MG	2A	3250	1/1	0.98	0.06	41,41,41,41	0
56	MG	1A	3050	1/1	0.98	0.14	32,32,32,32	0
56	MG	2A	3600	1/1	0.98	0.06	40,40,40,40	0
56	MG	1A	3229	1/1	0.98	0.17	33,33,33,33	0
56	MG	1A	3578	1/1	0.98	0.14	33,33,33,33	0
56	MG	1a	1805	1/1	0.98	0.05	47,47,47,47	0
56	MG	1A	3891	1/1	0.98	0.04	41,41,41,41	0
56	MG	1a	1808	1/1	0.98	0.05	53,53,53,53	0
56	MG	1a	1809	1/1	0.98	0.05	56,56,56,56	0
56	MG	2A	3093	1/1	0.98	0.09	54,54,54,54	0
56	MG	2a	3241	1/1	0.98	0.04	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3516	1/1	0.98	0.15	25,25,25,25	0
56	MG	1A	3359	1/1	0.98	0.09	38,38,38,38	0
56	MG	1P	201	1/1	0.98	0.04	26,26,26,26	0
56	MG	1P	202	1/1	0.98	0.06	31,31,31,31	0
56	MG	1P	203	1/1	0.98	0.15	30,30,30,30	0
56	MG	2f	3001	1/1	0.98	0.08	41,41,41,41	0
56	MG	2A	3804	1/1	0.98	0.12	31,31,31,31	0
56	MG	1A	3145	1/1	0.98	0.13	32,32,32,32	0
56	MG	1Q	201	1/1	0.98	0.08	36,36,36,36	0
56	MG	2A	3807	1/1	0.98	0.06	61,61,61,61	0
56	MG	2l	201	1/1	0.98	0.04	66,66,66,66	0
56	MG	1Q	202	1/1	0.98	0.04	46,46,46,46	0
56	MG	1A	3168	1/1	0.98	0.08	42,42,42,42	0
56	MG	1a	1822	1/1	0.98	0.10	54,54,54,54	0
56	MG	2A	3618	1/1	0.98	0.06	39,39,39,39	0
56	MG	1A	3653	1/1	0.98	0.08	27,27,27,27	0
56	MG	1A	3009	1/1	0.98	0.04	24,24,24,24	0
56	MG	1A	3731	1/1	0.98	0.04	17,17,17,17	0
56	MG	1R	201	1/1	0.98	0.17	30,30,30,30	0
56	MG	1A	4114	1/1	0.98	0.04	34,34,34,34	0
56	MG	2A	3624	1/1	0.98	0.04	32,32,32,32	0
56	MG	1A	4115	1/1	0.98	0.15	51,51,51,51	0
56	MG	1A	3314	1/1	0.98	0.05	33,33,33,33	0
56	MG	1A	3656	1/1	0.98	0.05	46,46,46,46	0
56	MG	1A	4118	1/1	0.98	0.10	36,36,36,36	0
56	MG	1A	4119	1/1	0.98	0.07	34,34,34,34	0
56	MG	1A	3902	1/1	0.98	0.08	33,33,33,33	0
56	MG	2A	3826	1/1	0.98	0.14	54,54,54,54	0
56	MG	1A	4122	1/1	0.98	0.04	41,41,41,41	0
56	MG	1A	3903	1/1	0.98	0.06	40,40,40,40	0
56	MG	1A	3010	1/1	0.98	0.14	39,39,39,39	0
56	MG	1A	3523	1/1	0.98	0.07	44,44,44,44	0
56	MG	1A	4126	1/1	0.98	0.12	45,45,45,45	0
56	MG	1U	206	1/1	0.98	0.14	32,32,32,32	0
56	MG	2A	3121	1/1	0.98	0.12	42,42,42,42	0
56	MG	1A	3736	1/1	0.98	0.09	46,46,46,46	0
56	MG	1A	3069	1/1	0.98	0.12	20,20,20,20	0
56	MG	1A	3738	1/1	0.98	0.04	43,43,43,43	0
56	MG	2A	3125	1/1	0.98	0.14	44,44,44,44	0
56	MG	1A	3172	1/1	0.98	0.05	43,43,43,43	0
56	MG	1A	3910	1/1	0.98	0.04	76,76,76,76	0
56	MG	2A	3841	1/1	0.98	0.04	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	ZN	14	501	1/1	0.98	0.05	99,99,99,99	0
58	ZN	2Y	501	1/1	0.98	0.04	81,81,81,81	0
56	MG	1A	3662	1/1	0.98	0.07	30,30,30,30	0
58	ZN	25	102	1/1	0.98	0.15	68,68,68,68	0
56	MG	1W	205	1/1	0.98	0.05	39,39,39,39	0
59	SF4	1d	501	8/8	0.98	0.05	59,71,76,86	0
59	SF4	2d	501	8/8	0.98	0.05	61,71,85,99	0
56	MG	1D	306	1/1	0.99	0.10	32,32,32,32	0
56	MG	1A	3739	1/1	0.99	0.04	39,39,39,39	0
56	MG	1l	201	1/1	0.99	0.11	43,43,43,43	0
56	MG	1D	308	1/1	0.99	0.06	48,48,48,48	0
56	MG	1A	3740	1/1	0.99	0.09	28,28,28,28	0
56	MG	1a	1653	1/1	0.99	0.04	54,54,54,54	0
56	MG	1A	3032	1/1	0.99	0.17	31,31,31,31	0
56	MG	1a	1655	1/1	0.99	0.03	43,43,43,43	0
56	MG	2A	3851	1/1	0.99	0.04	46,46,46,46	0
56	MG	2A	3538	1/1	0.99	0.04	35,35,35,35	0
56	MG	1A	3924	1/1	0.99	0.03	50,50,50,50	0
56	MG	1A	3925	1/1	0.99	0.04	14,14,14,14	0
56	MG	2A	3319	1/1	0.99	0.04	49,49,49,49	0
56	MG	1A	3041	1/1	0.99	0.20	38,38,38,38	0
56	MG	1A	4004	1/1	0.99	0.04	29,29,29,29	0
56	MG	1A	3027	1/1	0.99	0.04	33,33,33,33	0
56	MG	1A	4096	1/1	0.99	0.05	30,30,30,30	0
56	MG	2A	3251	1/1	0.99	0.06	42,42,42,42	0
56	MG	1A	3928	1/1	0.99	0.11	31,31,31,31	0
56	MG	1A	3967	1/1	0.99	0.05	65,65,65,65	0
56	MG	1A	3773	1/1	0.99	0.04	41,41,41,41	0
56	MG	1A	3065	1/1	0.99	0.13	33,33,33,33	0
56	MG	1A	3896	1/1	0.99	0.12	47,47,47,47	0
56	MG	1A	3932	1/1	0.99	0.06	45,45,45,45	0
56	MG	1A	3602	1/1	0.99	0.08	25,25,25,25	0
56	MG	2A	3049	1/1	0.99	0.07	23,23,23,23	0
56	MG	1U	207	1/1	0.99	0.13	31,31,31,31	0
56	MG	2A	3870	1/1	0.99	0.05	33,33,33,33	0
56	MG	2A	3632	1/1	0.99	0.03	41,41,41,41	0
56	MG	1A	3030	1/1	0.99	0.04	34,34,34,34	0
56	MG	1A	4014	1/1	0.99	0.03	34,34,34,34	0
56	MG	1A	3935	1/1	0.99	0.05	50,50,50,50	0
56	MG	1A	3747	1/1	0.99	0.09	53,53,53,53	0
56	MG	1A	4017	1/1	0.99	0.05	36,36,36,36	0
56	MG	1W	202	1/1	0.99	0.13	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1W	203	1/1	0.99	0.05	30,30,30,30	0
56	MG	1A	3200	1/1	0.99	0.15	23,23,23,23	0
56	MG	1a	1796	1/1	0.99	0.03	59,59,59,59	0
56	MG	1A	3003	1/1	0.99	0.05	27,27,27,27	0
56	MG	1A	3551	1/1	0.99	0.14	37,37,37,37	0
56	MG	1A	3084	1/1	0.99	0.04	34,34,34,34	0
56	MG	1a	1739	1/1	0.99	0.03	36,36,36,36	0
56	MG	1a	1801	1/1	0.99	0.03	53,53,53,53	0
56	MG	1a	1802	1/1	0.99	0.06	52,52,52,52	0
56	MG	1A	3650	1/1	0.99	0.07	35,35,35,35	0
56	MG	2a	3160	1/1	0.99	0.04	49,49,49,49	0
56	MG	1A	4023	1/1	0.99	0.04	47,47,47,47	0
56	MG	1A	3414	1/1	0.99	0.04	39,39,39,39	0
56	MG	20	3002	1/1	0.99	0.03	63,63,63,63	0
56	MG	1X	106	1/1	0.99	0.06	29,29,29,29	0
56	MG	1a	1807	1/1	0.99	0.04	67,67,67,67	0
56	MG	1A	3085	1/1	0.99	0.10	30,30,30,30	0
56	MG	2a	3167	1/1	0.99	0.03	69,69,69,69	0
56	MG	2A	3732	1/1	0.99	0.07	42,42,42,42	0
56	MG	1A	3726	1/1	0.99	0.04	48,48,48,48	0
56	MG	2A	3895	1/1	0.99	0.09	46,46,46,46	0
56	MG	1a	1810	1/1	0.99	0.03	51,51,51,51	0
56	MG	1A	3068	1/1	0.99	0.10	38,38,38,38	0
56	MG	1A	3946	1/1	0.99	0.03	49,49,49,49	0
56	MG	1A	3097	1/1	0.99	0.03	35,35,35,35	0
56	MG	1A	4121	1/1	0.99	0.09	34,34,34,34	0
56	MG	2A	3901	1/1	0.99	0.12	59,59,59,59	0
56	MG	2A	3817	1/1	0.99	0.03	56,56,56,56	0
56	MG	1A	3632	1/1	0.99	0.03	34,34,34,34	0
56	MG	1a	1816	1/1	0.99	0.04	48,48,48,48	0
56	MG	2A	3820	1/1	0.99	0.06	49,49,49,49	0
56	MG	1a	1817	1/1	0.99	0.04	79,79,79,79	0
56	MG	1A	4075	1/1	0.99	0.03	42,42,42,42	0
56	MG	1A	3612	1/1	0.99	0.05	41,41,41,41	0
56	MG	2A	3221	1/1	0.99	0.08	48,48,48,48	0
56	MG	2A	3514	1/1	0.99	0.04	32,32,32,32	0
56	MG	1A	3508	1/1	0.99	0.11	36,36,36,36	0
56	MG	1A	3635	1/1	0.99	0.05	32,32,32,32	0
56	MG	1A	3914	1/1	0.99	0.07	53,53,53,53	0
56	MG	2A	3593	1/1	0.99	0.05	30,30,30,30	0
56	MG	1A	3707	1/1	0.99	0.09	29,29,29,29	0
56	MG	11	102	1/1	0.99	0.04	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1825	1/1	0.99	0.14	37,37,37,37	0
56	MG	1A	4081	1/1	0.99	0.08	44,44,44,44	0
56	MG	1B	3036	1/1	0.99	0.03	36,36,36,36	0
56	MG	2A	3835	1/1	0.99	0.03	43,43,43,43	0
56	MG	1A	3375	1/1	0.99	0.08	43,43,43,43	0
58	ZN	15	101	1/1	0.99	0.09	37,37,37,37	0
58	ZN	19	103	1/1	0.99	0.04	44,44,44,44	0
58	ZN	1n	101	1/1	0.99	0.04	71,71,71,71	0
56	MG	1A	3109	1/1	0.99	0.13	35,35,35,35	0
56	MG	1A	3661	1/1	0.99	0.07	32,32,32,32	0
56	MG	2A	3233	1/1	0.99	0.10	32,32,32,32	0
58	ZN	26	501	1/1	0.99	0.03	60,60,60,60	0
58	ZN	29	101	1/1	0.99	0.04	73,73,73,73	0
56	MG	1A	4039	1/1	0.99	0.02	21,21,21,21	0
56	MG	1A	3577	1/1	0.99	0.09	27,27,27,27	0
56	MG	1A	3055	1/1	0.99	0.11	43,43,43,43	0
56	MG	1A	3873	1/1	1.00	0.07	35,35,35,35	0
58	ZN	1Y	501	1/1	1.00	0.03	60,60,60,60	0
56	MG	1a	1763	1/1	1.00	0.09	55,55,55,55	0
56	MG	2A	3715	1/1	1.00	0.04	46,46,46,46	0
58	ZN	16	102	1/1	1.00	0.04	44,44,44,44	0

6.5 Other polymers

There are no such residues in this entry.