



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 6, 2026 – 07:27 AM EDT

PDB ID : 8G2D / pdb_00008g2d
Title : Crystal structure of the wild-type *Thermus thermophilus* 70S ribosome in complex with tylosin, mRNA, deacylated A- and E-site tRNA^{phe}, and deacylated P-site tRNA^{met} at 2.70Å resolution
Authors : Aleksandrova, E.V.; Wu, K.J.Y.; Tresco, B.I.C.; Syroegin, E.A.; Killeavy, E.E.; Balasanyants, S.M.; Svetlov, M.S.; Gregory, S.T.; Atkinson, G.C.; Myers, A.G.; Polikanov, Y.S.
Deposited on : 2023-02-03
Resolution : 2.70 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)

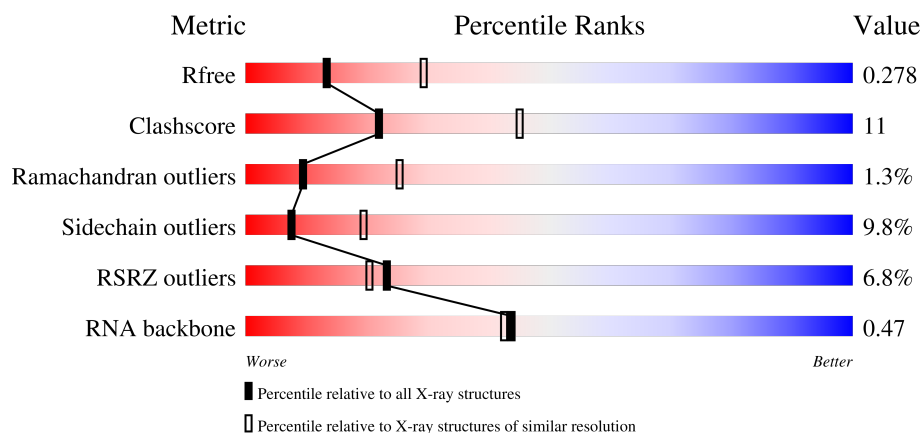
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

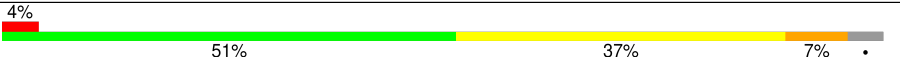
The reported resolution of this entry is 2.70 Å.

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	3538 (2.70-2.70)
Clashscore	190562	3843 (2.70-2.70)
Ramachandran outliers	187476	3778 (2.70-2.70)
Sidechain outliers	187428	3778 (2.70-2.70)
RSRZ outliers	180081	3538 (2.70-2.70)
RNA backbone	3983	1044 (2.90-2.50)

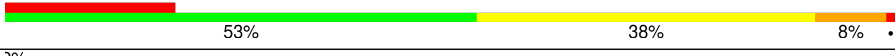
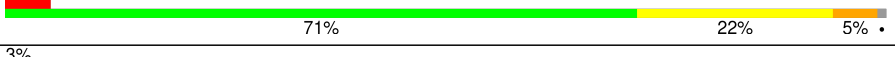
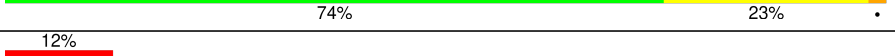
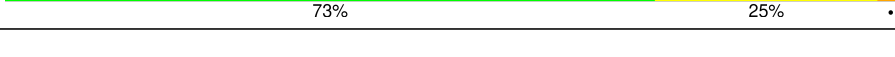
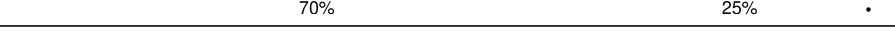
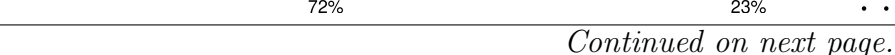
The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively.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

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Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.50

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

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

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

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

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

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	PSU	2y	55	-	-	X	-
59	SF4	1d	302	-	-	X	-

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 299892 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	1F	202	Total	C	N	O	S	0	0	0
			1583	1009	297	275	2			
5	2F	202	Total	C	N	O	S	0	0	0
			1579	1007	296	274	2			

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

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

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

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

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

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

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

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

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

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

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total	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 MF-mRNA.

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

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	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 Deacylated tRNAmet.

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	1106	Total	Mg	0	0
			1106	1106		
56	1B	35	Total	Mg	0	0
			35	35		
56	1D	11	Total	Mg	0	0
			11	11		
56	1E	13	Total	Mg	0	0
			13	13		
56	1F	10	Total	Mg	0	0
			10	10		
56	1G	4	Total	Mg	0	0
			4	4		
56	1I	1	Total	Mg	0	0
			1	1		

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

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	19	1	Total 1	Mg 1	0	0
56	1a	224	Total 224	Mg 224	0	0
56	1b	2	Total 2	Mg 2	0	0
56	1d	1	Total 1	Mg 1	0	0
56	1e	2	Total 2	Mg 2	0	0
56	1f	2	Total 2	Mg 2	0	0
56	1h	1	Total 1	Mg 1	0	0
56	1k	1	Total 1	Mg 1	0	0
56	1l	2	Total 2	Mg 2	0	0
56	1m	1	Total 1	Mg 1	0	0
56	1n	2	Total 2	Mg 2	0	0
56	1p	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	7	Total 7	Mg 7	0	0
56	1x	14	Total 14	Mg 14	0	0
56	1y	4	Total 4	Mg 4	0	0
56	2A	877	Total 877	Mg 877	0	0
56	2B	21	Total 21	Mg 21	0	0
56	2D	6	Total 6	Mg 6	0	0
56	2E	10	Total 10	Mg 10	0	0

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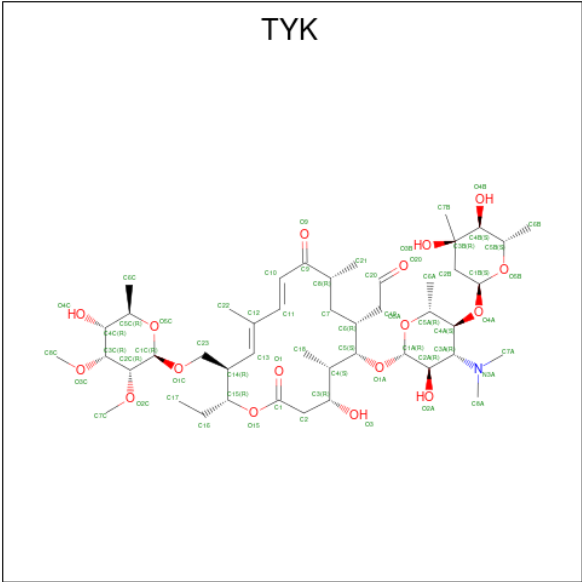
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	2F	7	Total 7	Mg 7	0	0
56	2G	1	Total 1	Mg 1	0	0
56	2N	1	Total 1	Mg 1	0	0
56	2O	1	Total 1	Mg 1	0	0
56	2P	3	Total 3	Mg 3	0	0
56	2Q	3	Total 3	Mg 3	0	0
56	2R	2	Total 2	Mg 2	0	0
56	2T	3	Total 3	Mg 3	0	0
56	2U	1	Total 1	Mg 1	0	0
56	2V	2	Total 2	Mg 2	0	0
56	2W	3	Total 3	Mg 3	0	0
56	2X	2	Total 2	Mg 2	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	21	1	Total 1	Mg 1	0	0
56	23	4	Total 4	Mg 4	0	0
56	25	4	Total 4	Mg 4	0	0
56	26	1	Total 1	Mg 1	0	0
56	27	1	Total 1	Mg 1	0	0
56	28	4	Total 4	Mg 4	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	29	1	Total 1	Mg 1	0	0
56	2a	234	Total 234	Mg 234	0	0
56	2d	2	Total 2	Mg 2	0	0
56	2e	1	Total 1	Mg 1	0	0
56	2f	1	Total 1	Mg 1	0	0
56	2g	1	Total 1	Mg 1	0	0
56	2j	2	Total 2	Mg 2	0	0
56	2k	1	Total 1	Mg 1	0	0
56	2l	4	Total 4	Mg 4	0	0
56	2m	1	Total 1	Mg 1	0	0
56	2q	2	Total 2	Mg 2	0	0
56	2r	2	Total 2	Mg 2	0	0
56	2t	1	Total 1	Mg 1	0	0
56	2v	2	Total 2	Mg 2	0	0
56	2w	7	Total 7	Mg 7	0	0
56	2x	4	Total 4	Mg 4	0	0
56	2y	6	Total 6	Mg 6	0	0

- Molecule 57 is TYLOSIN (CCD ID: TYK) (formula: $C_{46}H_{77}NO_{17}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
57	1A	1	Total	C	N	O	0	0
			64	46	1	17		
57	2A	1	Total	C	N	O	0	0
			64	46	1	17		

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

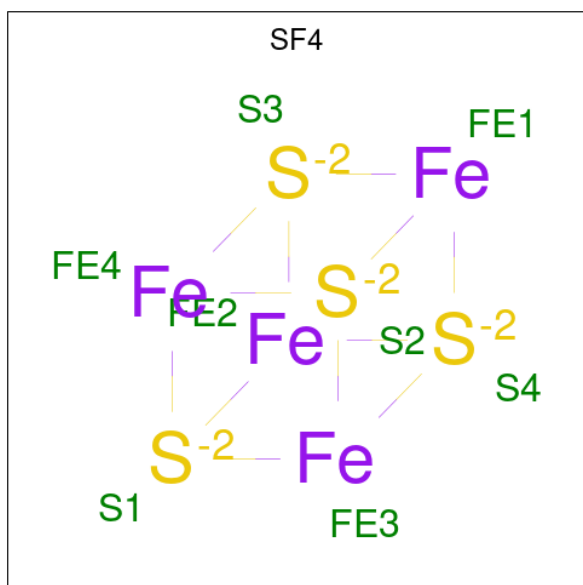
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1Y	1	Total	Zn	0	0
			1	1		
58	14	1	Total	Zn	0	0
			1	1		
58	15	1	Total	Zn	0	0
			1	1		
58	16	1	Total	Zn	0	0
			1	1		
58	19	1	Total	Zn	0	0
			1	1		
58	1n	1	Total	Zn	0	0
			1	1		
58	2Y	1	Total	Zn	0	0
			1	1		
58	24	1	Total	Zn	0	0
			1	1		
58	25	1	Total	Zn	0	0
			1	1		
58	26	1	Total	Zn	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
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 POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	1x	1	Total	K	0	0
			1	1		
60	2A	1	Total	K	0	0
			1	1		

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1A	1864	Total	O	0	0
			1864	1864		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1B	59	Total 59	O 59	0	0
61	1D	24	Total 24	O 24	0	0
61	1E	26	Total 26	O 26	0	0
61	1F	17	Total 17	O 17	0	0
61	1G	5	Total 5	O 5	0	0
61	1H	1	Total 1	O 1	0	0
61	1I	2	Total 2	O 2	0	0
61	1N	7	Total 7	O 7	0	0
61	1O	9	Total 9	O 9	0	0
61	1P	21	Total 21	O 21	0	0
61	1Q	10	Total 10	O 10	0	0
61	1R	10	Total 10	O 10	0	0
61	1S	5	Total 5	O 5	0	0
61	1T	7	Total 7	O 7	0	0
61	1U	10	Total 10	O 10	0	0
61	1V	7	Total 7	O 7	0	0
61	1W	8	Total 8	O 8	0	0
61	1X	5	Total 5	O 5	0	0
61	1Y	3	Total 3	O 3	0	0
61	1Z	1	Total 1	O 1	0	0
61	10	10	Total 10	O 10	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	11	9	Total 9	O 9	0	0
61	12	4	Total 4	O 4	0	0
61	13	4	Total 4	O 4	0	0
61	14	1	Total 1	O 1	0	0
61	15	5	Total 5	O 5	0	0
61	16	2	Total 2	O 2	0	0
61	17	10	Total 10	O 10	0	0
61	18	13	Total 13	O 13	0	0
61	1a	264	Total 264	O 264	0	0
61	1b	1	Total 1	O 1	0	0
61	1d	1	Total 1	O 1	0	0
61	1f	1	Total 1	O 1	0	0
61	1g	1	Total 1	O 1	0	0
61	1i	2	Total 2	O 2	0	0
61	1k	1	Total 1	O 1	0	0
61	1l	4	Total 4	O 4	0	0
61	1m	1	Total 1	O 1	0	0
61	1o	1	Total 1	O 1	0	0
61	1p	1	Total 1	O 1	0	0
61	1q	5	Total 5	O 5	0	0
61	1u	1	Total 1	O 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1v	4	Total 4	O 4	0	0
61	1w	13	Total 13	O 13	0	0
61	1x	13	Total 13	O 13	0	0
61	2A	1086	Total 1086	O 1086	0	0
61	2B	21	Total 21	O 21	0	0
61	2D	18	Total 18	O 18	0	0
61	2E	11	Total 11	O 11	0	0
61	2F	13	Total 13	O 13	0	0
61	2I	5	Total 5	O 5	0	0
61	2N	1	Total 1	O 1	0	0
61	2O	1	Total 1	O 1	0	0
61	2P	9	Total 9	O 9	0	0
61	2Q	3	Total 3	O 3	0	0
61	2R	3	Total 3	O 3	0	0
61	2T	6	Total 6	O 6	0	0
61	2U	1	Total 1	O 1	0	0
61	2W	1	Total 1	O 1	0	0
61	2X	3	Total 3	O 3	0	0
61	2Y	2	Total 2	O 2	0	0
61	2Z	1	Total 1	O 1	0	0
61	20	5	Total 5	O 5	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	21	9	Total 9	O 9	0	0
61	22	1	Total 1	O 1	0	0
61	23	1	Total 1	O 1	0	0
61	25	3	Total 3	O 3	0	0
61	27	3	Total 3	O 3	0	0
61	28	6	Total 6	O 6	0	0
61	29	1	Total 1	O 1	0	0
61	2a	226	Total 226	O 226	0	0
61	2d	2	Total 2	O 2	0	0
61	2e	1	Total 1	O 1	0	0
61	2i	1	Total 1	O 1	0	0
61	2j	4	Total 4	O 4	0	0
61	2l	6	Total 6	O 6	0	0
61	2p	3	Total 3	O 3	0	0
61	2q	1	Total 1	O 1	0	0
61	2t	4	Total 4	O 4	0	0
61	2u	1	Total 1	O 1	0	0
61	2v	1	Total 1	O 1	0	0
61	2w	2	Total 2	O 2	0	0
61	2x	7	Total 7	O 7	0	0
61	2y	16	Total 16	O 16	0	0

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.

Chain 1A:

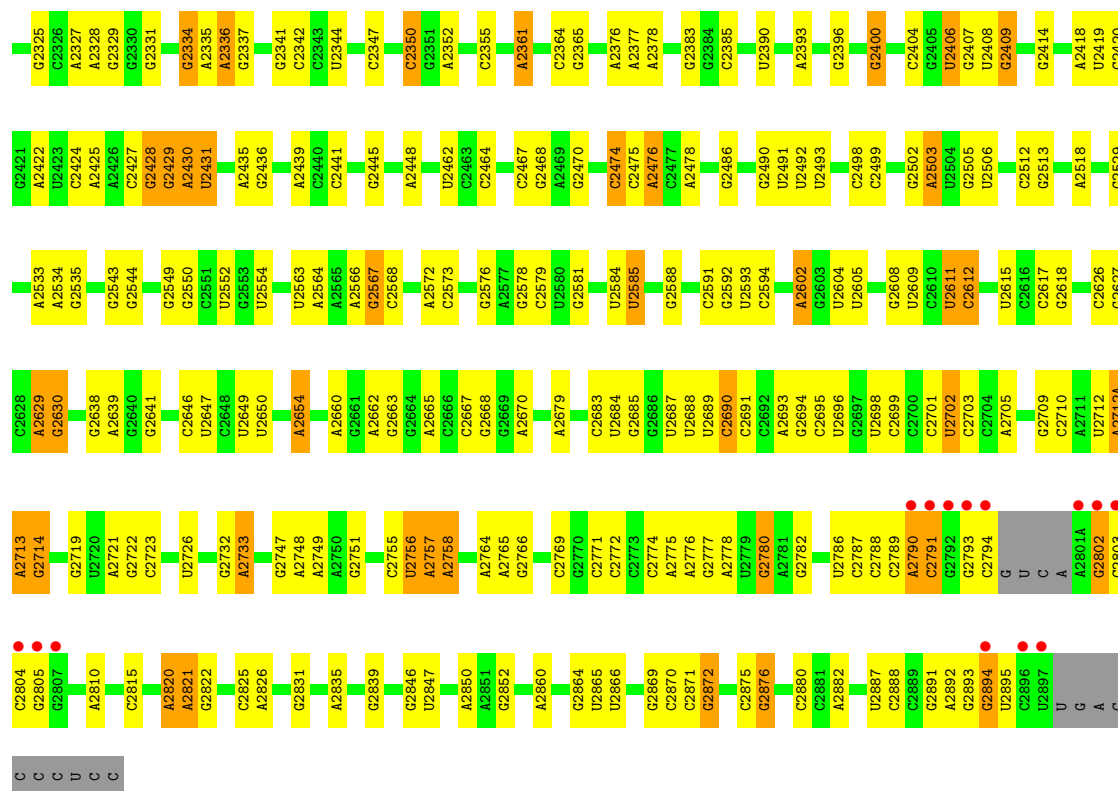
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57%

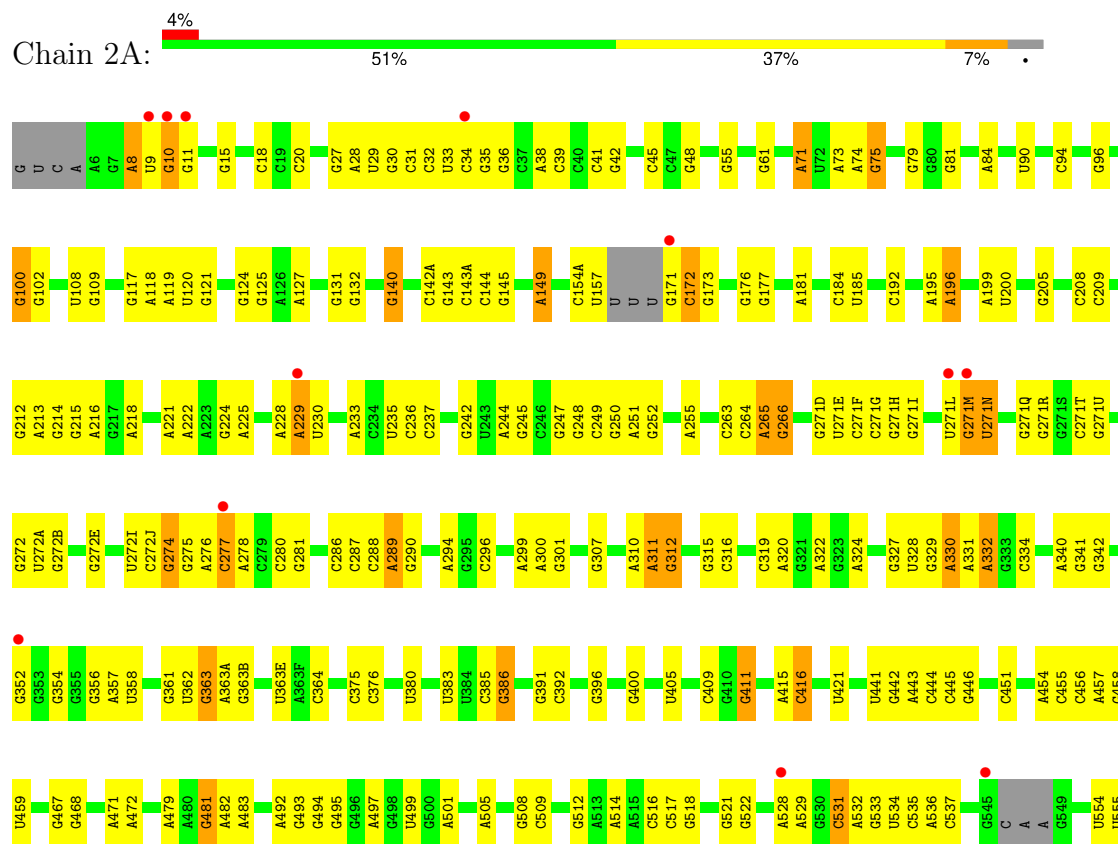
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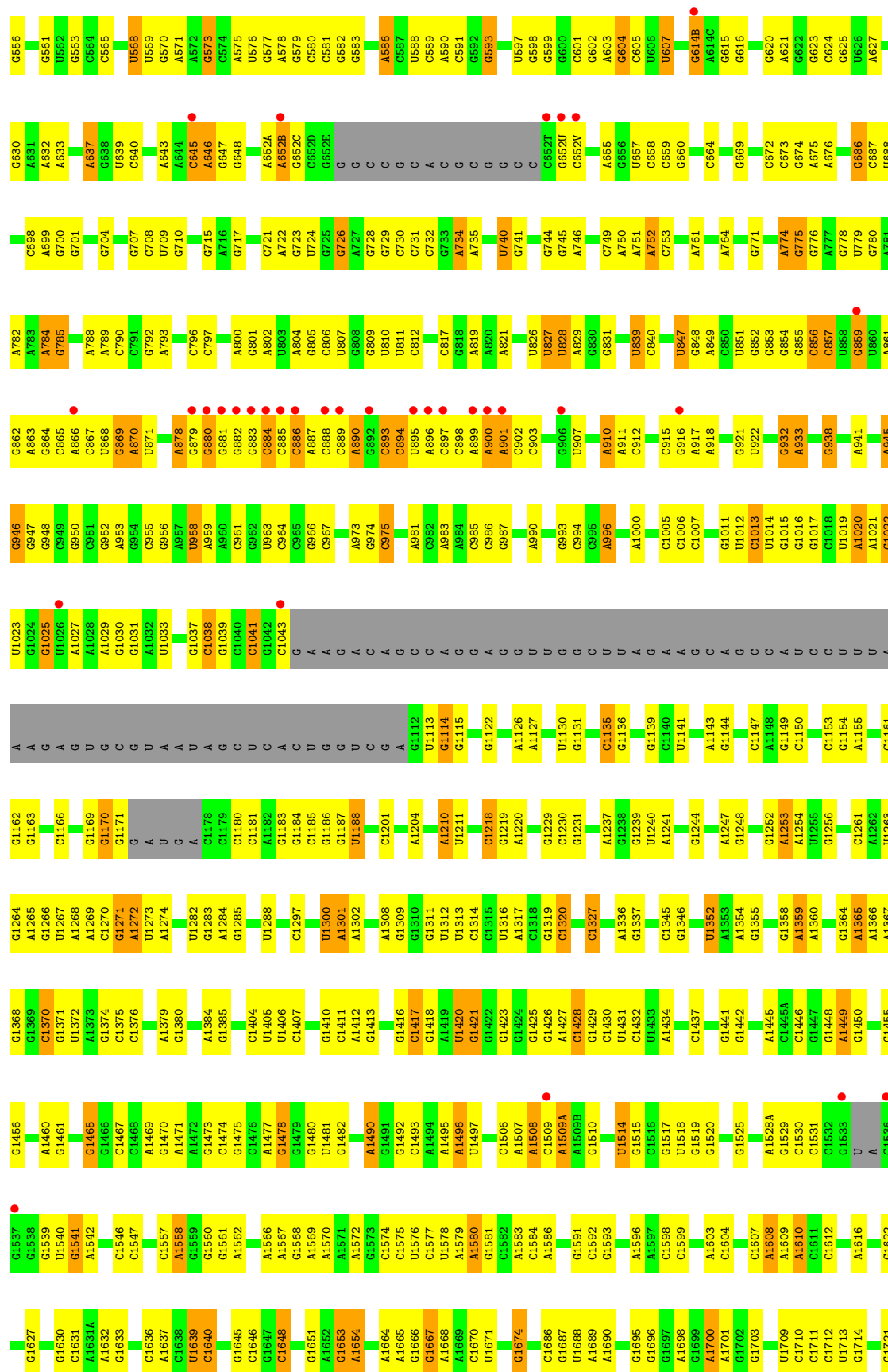
7%

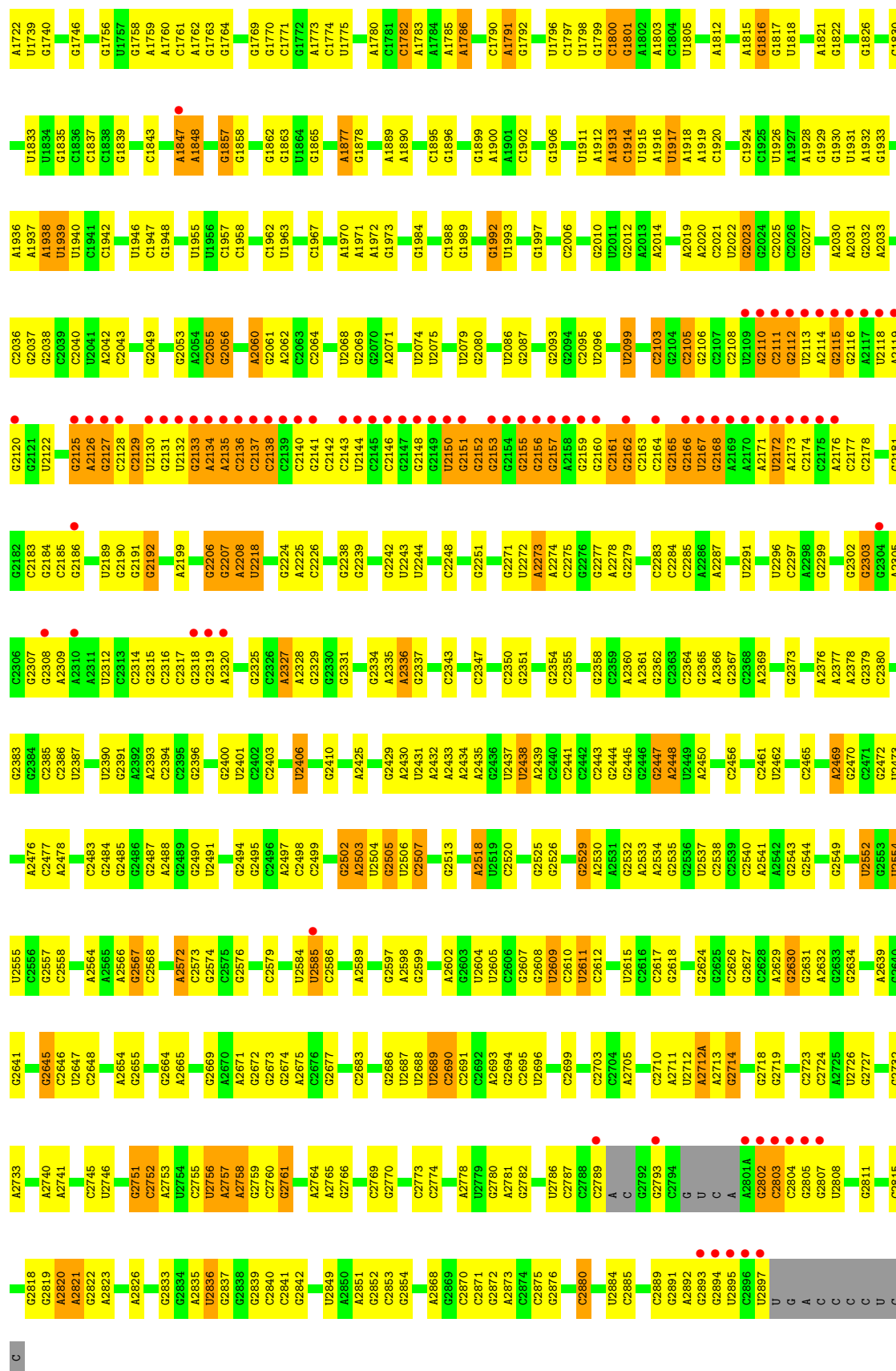
U2233	G2090	G1999	G1785	G1687	C1557	A1489	A1360	C1258	U1165	U1078	C1008
G2234	G2093	C2006	A1786	A1688	A1588	G1450	G1366	G1259	C1166	C1079	A1009
G2235	G2094	G1903	C1790	A1689	A1586	A1452	A1365	G1260	U1167	C1080	A1010
G2236	G2095	G1906	A1791	U1671	A1567	G1455	G1368	G1261	G1170	U1081	C1011
G2238	G2096	G1907	U1794	G1674	A1569	G1456	G1369	G1264	G1171	U1082	C1012
G2239	U2099	G1908	C1795	C1675	A1570	G1461	U1372	G1265	G1173	A1084	U1014
U2243	G2100	C1907	C1796	C1676	A1571	G1462	U1373	G1266	A1174	A1085	A1021
U2244	G2101	C1908	C1797	C1677	A1572	G1463	U1374	G1267	A1175	A1086	A1022
U2245	G2102	C1909	C1798	C1678	A1573	G1464	A1379	G1268	A1176	A1087	G1022
G2251	G2103	C1910	C1799	G1681	A1574	C1465	G1380	G1269	A1177	A1088	U1023
C2264	G2104	U1915	C1801	C1686	G1581	A1469	G1381	G1270	C1178	G1089	G1024
A2268	C2105	U1916	A1802	U1687	C1584	G1482	A1384	A1272	C1179	U1090	G1025
A2269	C2106	U1917	A1803	U1688	C1585	G1483	A1385	A1273	C1180	G1091	U1026
G2270	C2107	U1918	A1804	U1689	C1586	G1484	U1394	A1274	G1183	C1092	A1027
G2271	C2108	U1919	A1805	U1690	C1587	C1493	U1395	A1275	G1184	U1094	A1028
G2272	C2109	C1920	A1811	C1694	C1588	A1494	A1396	A1276	G1187	A1095	A1032
A2273	C2110	G1929	A1812	G1695	C1589	A1495	U1397	A1277	G1188	U1096	U1033
A2274	C2111	G1930	A1813	G1696	C1590	A1496	C1398	U1288	U1188	U1097	G1034
G2277	C2112	G1931	A1814	A1701	G1593	U1503	U1405	C1289	A1189	A1098	U1035
A2278	C2113	G1932	A1815	A1702	G1594	C1504	U1406	C1290	G1190	C1100	G1036
G2279	C2114	A1937	A1816	G1702	G1595	C1505	U1407	G1291	G1191	U1101	C1038
G2280	C2115	U1938	A1817	G1703	A1603	C1506	U1408	C1292	G1196	C1102	G1039
C2283	C2116	U1939	A1825	U1709	C1607	A1507	G1413	C1293	C1201	A1103	G1040
G2284	C2117	C1942	A1826	C1710	A1608	A1508	G1414	C1294	G1202	C1104	C1041
C2285	C2118	C1943	C1827	C1711	A1609	C1509	G1415	C1295	A1204	U1105	A1044
A2286	C2119	U1946	A1828	G1712	A1610	A1509A	C1416	C1296	G1205	G1107	A1045
A2287	C2120	C1947	A1829	G1713	A1611	A1509B	G1417	C1297	A1206	G1108	A1046
G2288	C2121	U1951	U1833	G1714	A1612	U1518	G1418	C1298	A1210	C1109	G1047
G2289	C2122	A1952	A1834	G1715	C1617	G1519	U1419	G1299	U1211	G1110	A1048
G2290	C2123	A1953	C1843	A1722	A1618	G1520	U1420	U1300	G1212	A1111	C1052
U2291	C2124	G1954	C1844	A1723	G1619	G1521	G1421	A1301	G1213	G1112	C1053
C2292	C2125	U1955	A1847	A1724	G1620	G1522	G1422	G1302	G1214	U1113	A1054
C2293	C2126	U1956	A1848	G1725	A1631A	A1523	G1423	G1303	G1215	G1114	G1055
C2294	C2127	C1962	U1851	C1743	A1632	A1524	G1424	U1315	G1227	G1115	G1056
U2295	C2128	U1963	A1852	A1743	A1633	C1530	G1425	U1316	G1228	C1116	A1057
C2296	C2129	G1964	C1853	C1744	A1634	C1531	G1426	A1317	G1229	G1117	G1058
U2297	C2130	C1965	G1858	G1745	C1636	C1532	C1427	C1318	G1230	G1122	G1059
C2298	C2131	G1966	A1859	G1746	A1637	G1533	U1430	G1319	G1231	U1123	U1060
C2299	C2132	C1967	A1860	G1747	A1641	G1534	U1431	C1320	U1234	G1125	G1062
C2300	C2133	G1968	G1861	G1748	G1642	G1535	U1432	G1321	G1235	A1126	G1063
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G2302	C2135	U1970	G1863	A1752	G1644	U1540	A1434	G1332	A1237	U1135	U1065
C2303	C2136	A1971	C1866	G1753	G1645	U1541	G1435	G1333	G1238	C1135	U1066
C2304	C2137	C1972	A1876	G1754	G1646	G1542	C1436	C1334	U1240	G1136	A1067
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A2320	C2145	C1996	A1890	G1782	A1664	C1550	G1448	U1358	G1257	C1154	G1075
	C2146	U1997	A1891	A1783	A1665	A1554		G1449			G1076
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• Molecule 1: 23S Ribosomal RNA

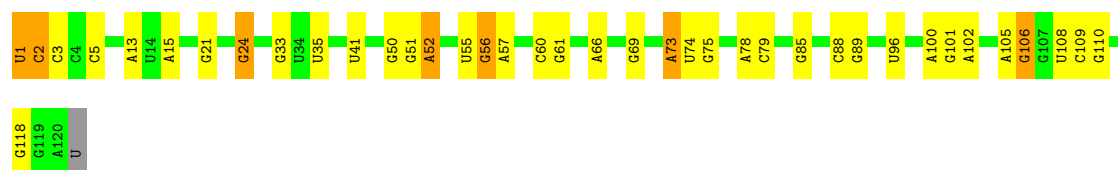






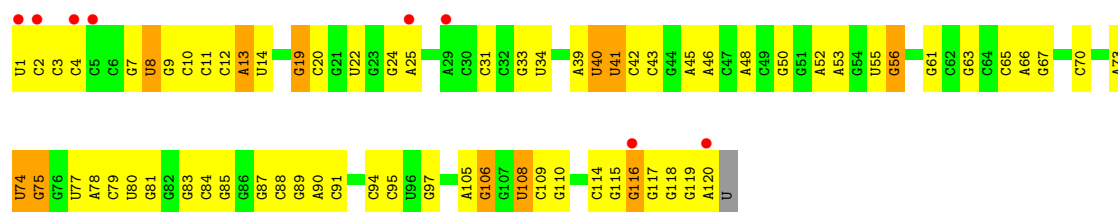
• Molecule 2: 5S Ribosomal RNA

Chain 1B:  67% 26% 6% .



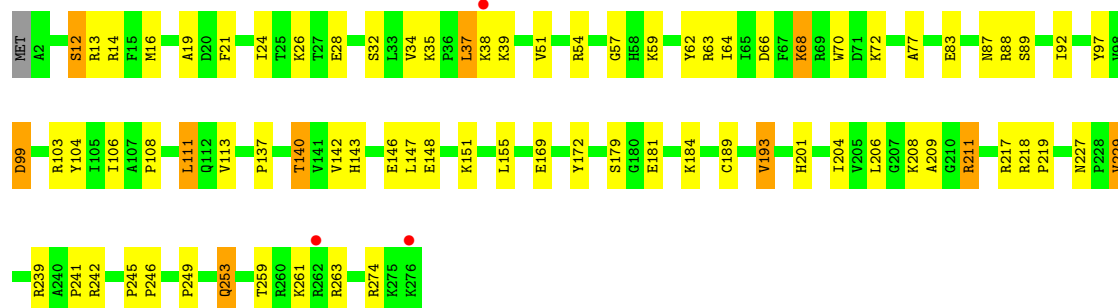
• Molecule 2: 5S Ribosomal RNA

Chain 2B:  7% 41% 49% 9% .



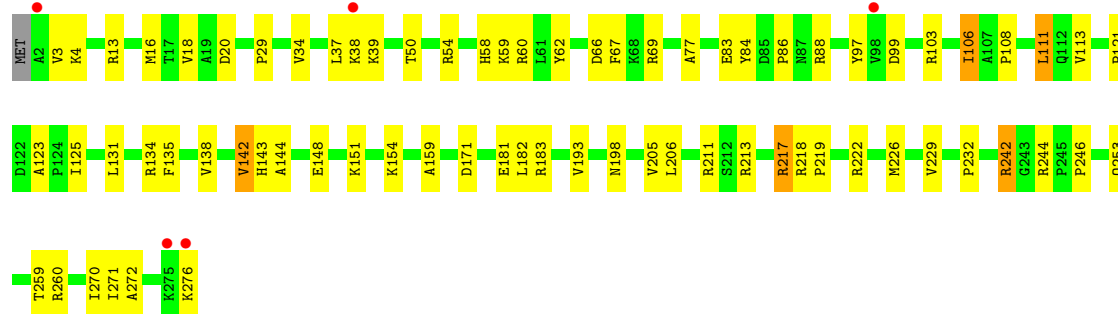
• Molecule 3: 50S ribosomal protein L2

Chain 1D:  71% 25% .



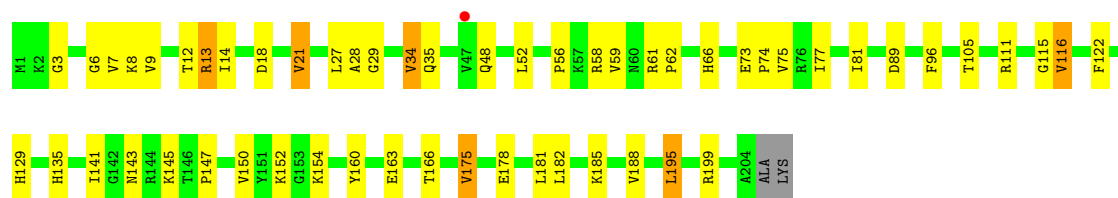
• Molecule 3: 50S ribosomal protein L2

Chain 2D:  73% 25% .



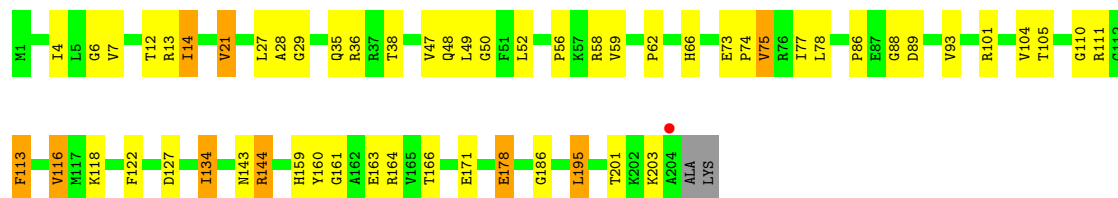
• Molecule 4: 50S ribosomal protein L3

Chain 1E:  72% 24% .



• Molecule 4: 50S ribosomal protein L3

Chain 2E: 71% 23% . .



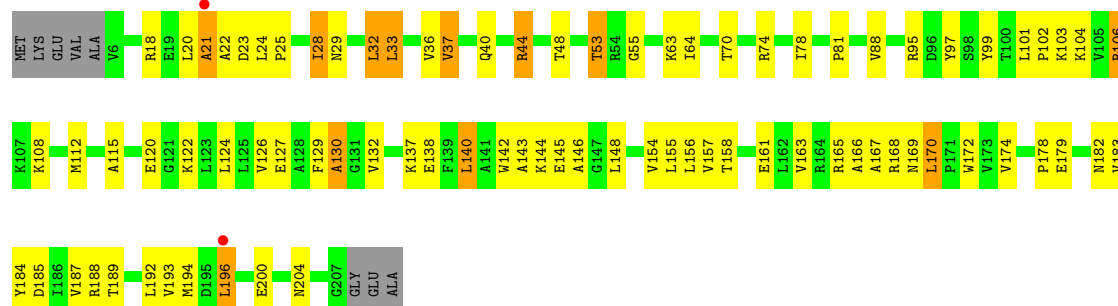
• Molecule 5: 50S ribosomal protein L4

Chain 1F: 60% 33% . .



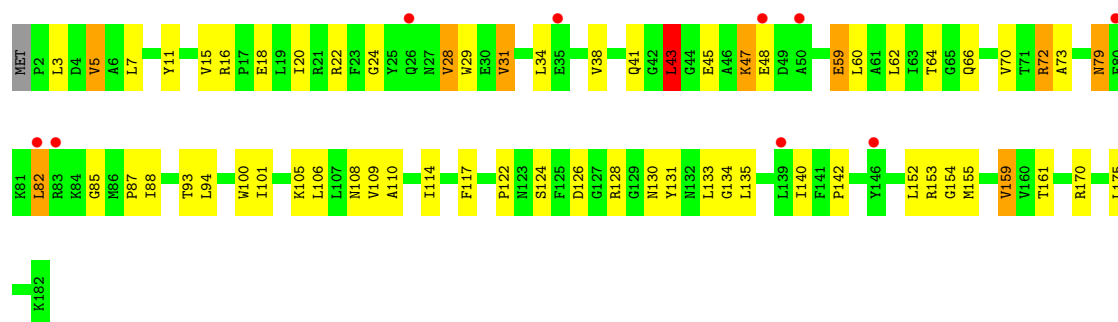
• Molecule 5: 50S ribosomal protein L4

Chain 2F: % 57% 34% 6% .



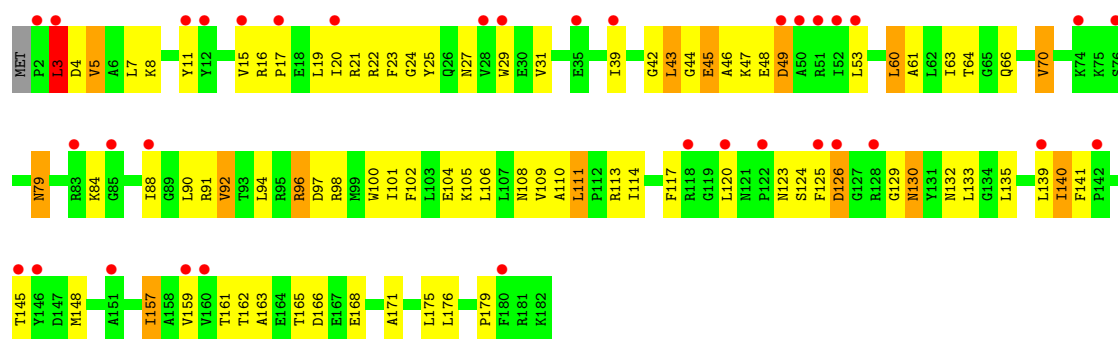
• Molecule 6: 50S ribosomal protein L5

Chain 1G: 5% 65% 29% 5% . .



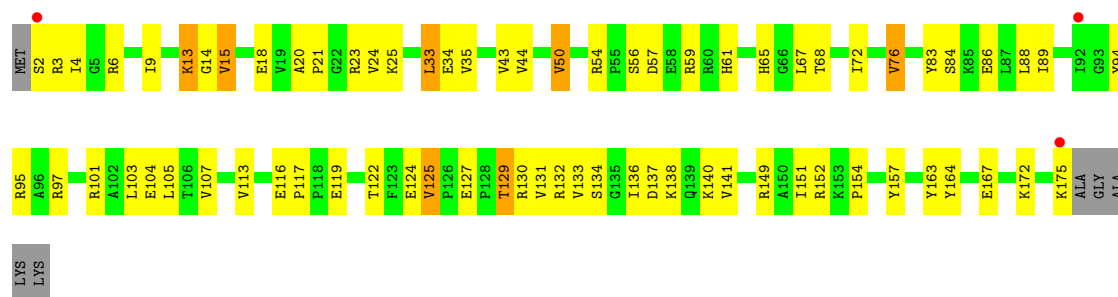
• Molecule 6: 50S ribosomal protein L5

Chain 2G: 19% 53% 38% 8% ..



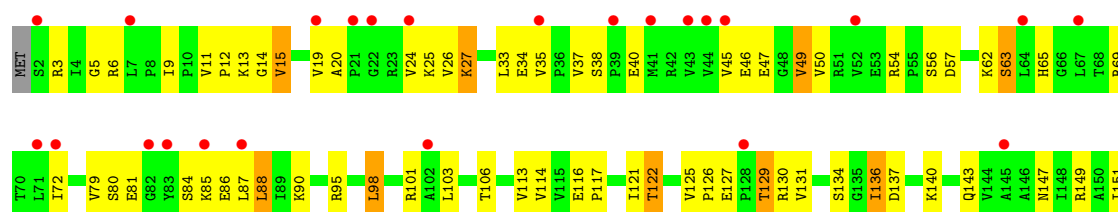
• Molecule 7: 50S ribosomal protein L6

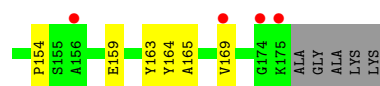
Chain 1H: 2% 57% 36% . .



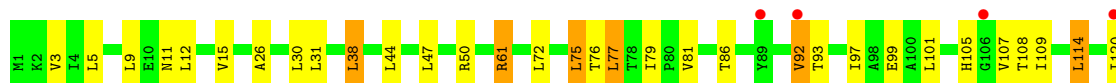
• Molecule 7: 50S ribosomal protein L6

Chain 2H: 16% 56% 36% 5% .

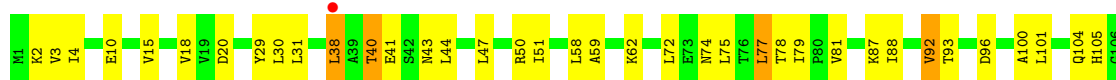




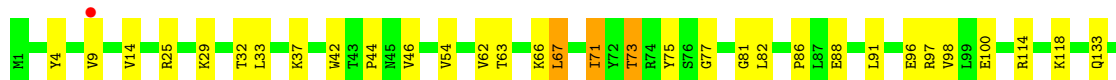
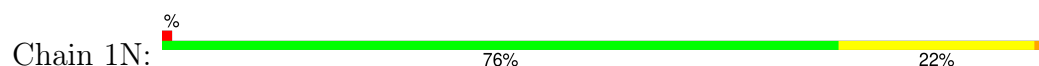
- Molecule 8: 50S ribosomal protein L9



- Molecule 8: 50S ribosomal protein L9



- Molecule 9: 50S ribosomal protein L13



- Molecule 9: 50S ribosomal protein L13



- Molecule 10: 50S ribosomal protein L14

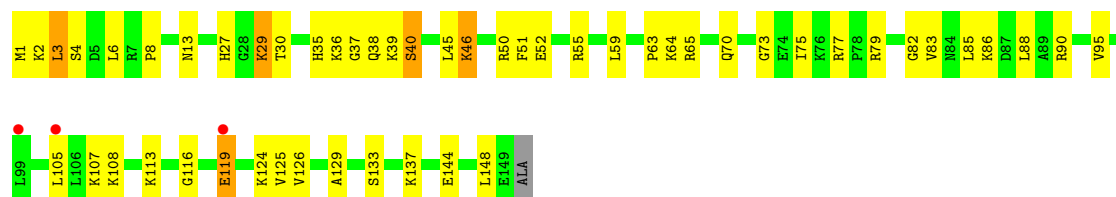




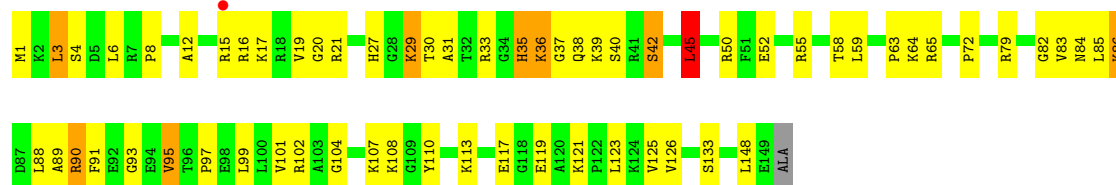
- Molecule 10: 50S ribosomal protein L14



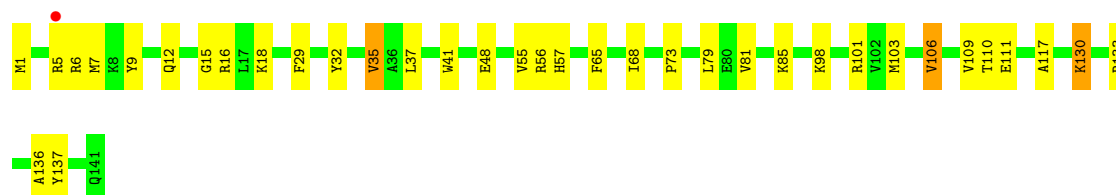
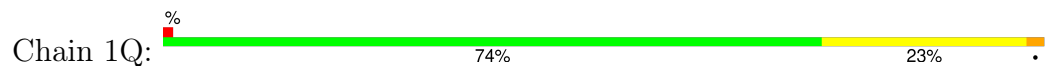
- Molecule 11: 50S ribosomal protein L15



- Molecule 11: 50S ribosomal protein L15

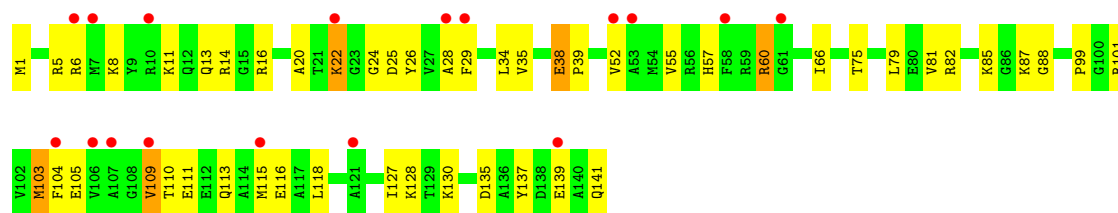


- Molecule 12: 50S ribosomal protein L16

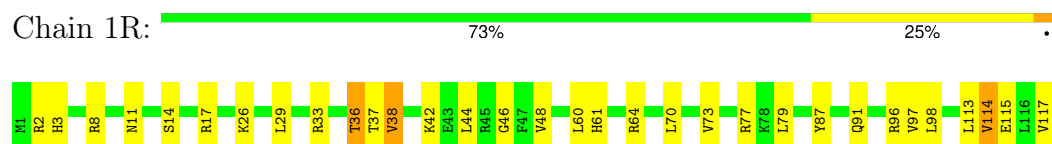


- Molecule 12: 50S ribosomal protein L16

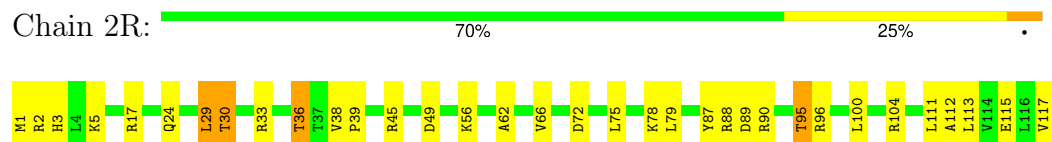




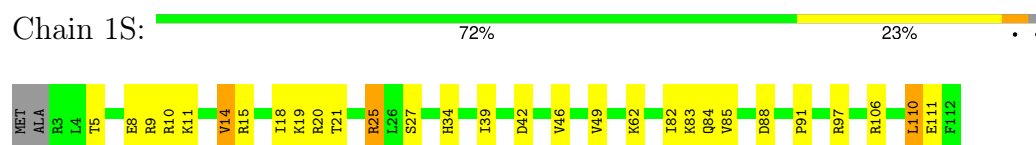
- Molecule 13: 50S ribosomal protein L17



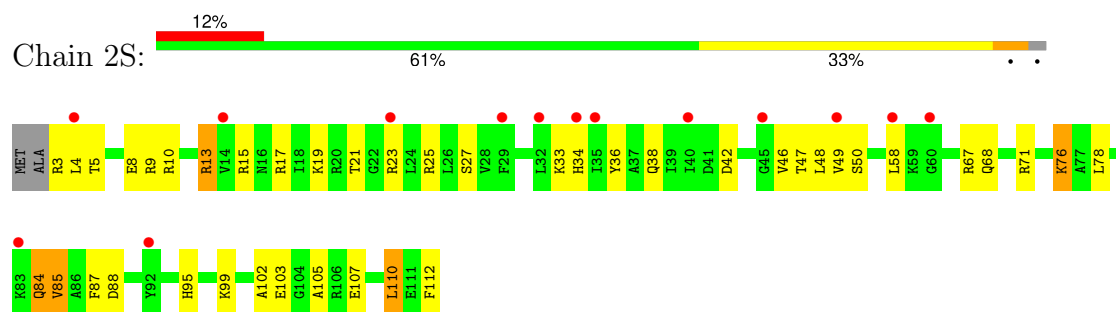
- Molecule 13: 50S ribosomal protein L17



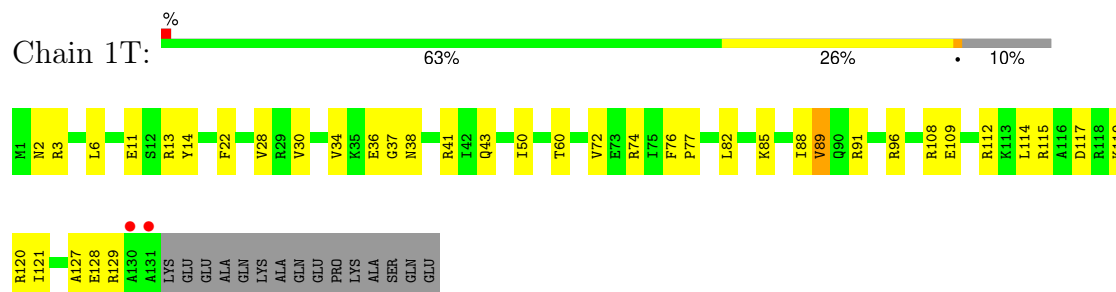
- Molecule 14: 50S ribosomal protein L18



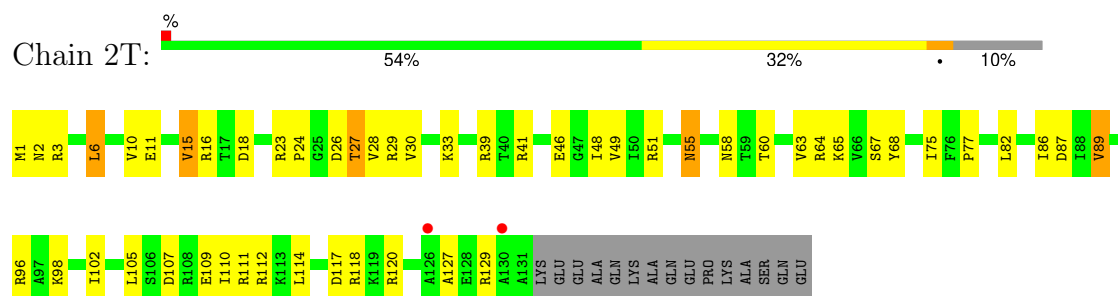
- Molecule 14: 50S ribosomal protein L18



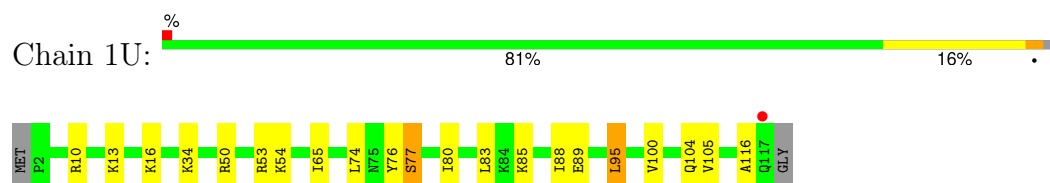
- Molecule 15: 50S ribosomal protein L19



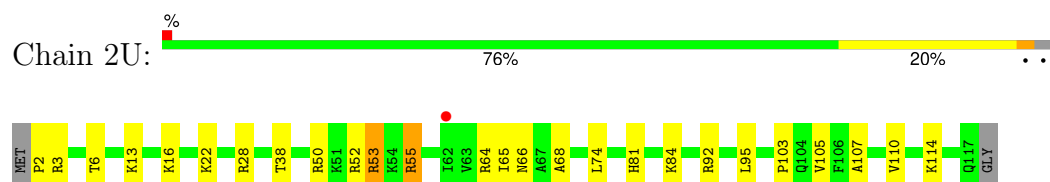
• Molecule 15: 50S ribosomal protein L19



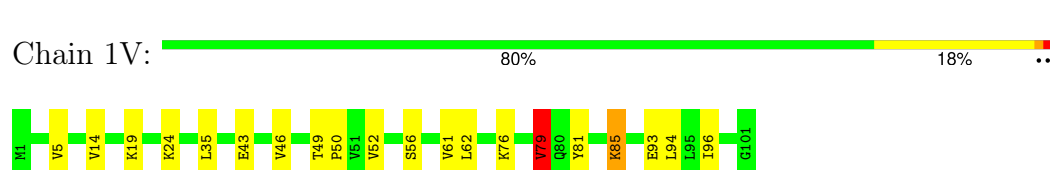
• Molecule 16: 50S ribosomal protein L20



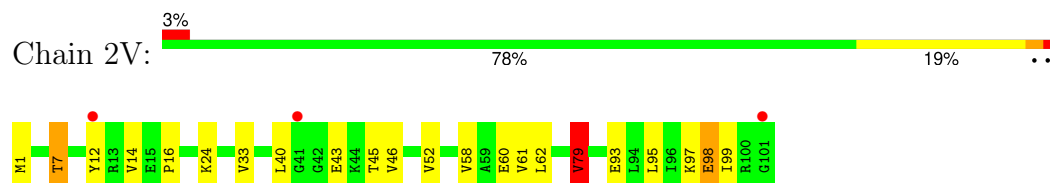
• Molecule 16: 50S ribosomal protein L20



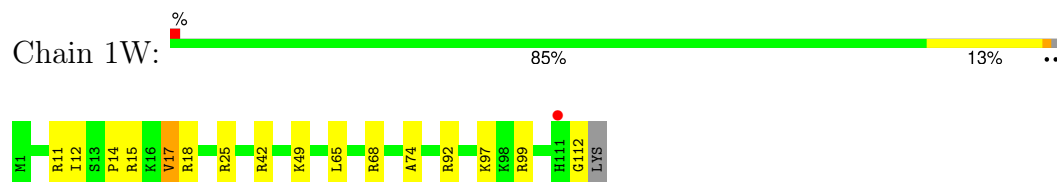
• Molecule 17: 50S ribosomal protein L21



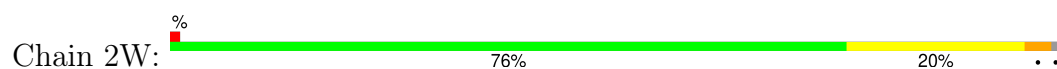
• Molecule 17: 50S ribosomal protein L21



• Molecule 18: 50S ribosomal protein L22



• Molecule 18: 50S ribosomal protein L22





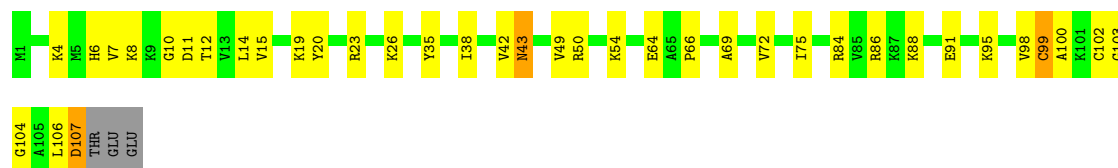
- Molecule 19: 50S ribosomal protein L23



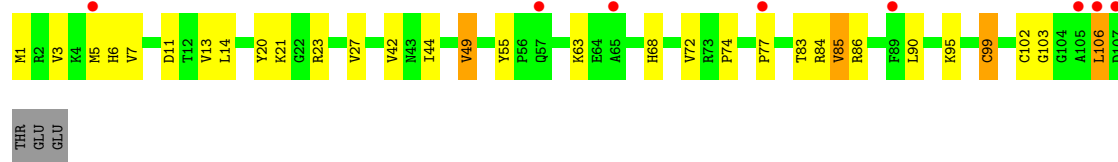
- Molecule 19: 50S ribosomal protein L23



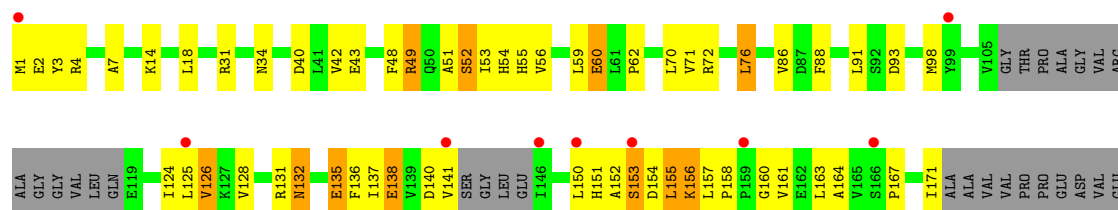
- Molecule 20: 50S ribosomal protein L24



- Molecule 20: 50S ribosomal protein L24

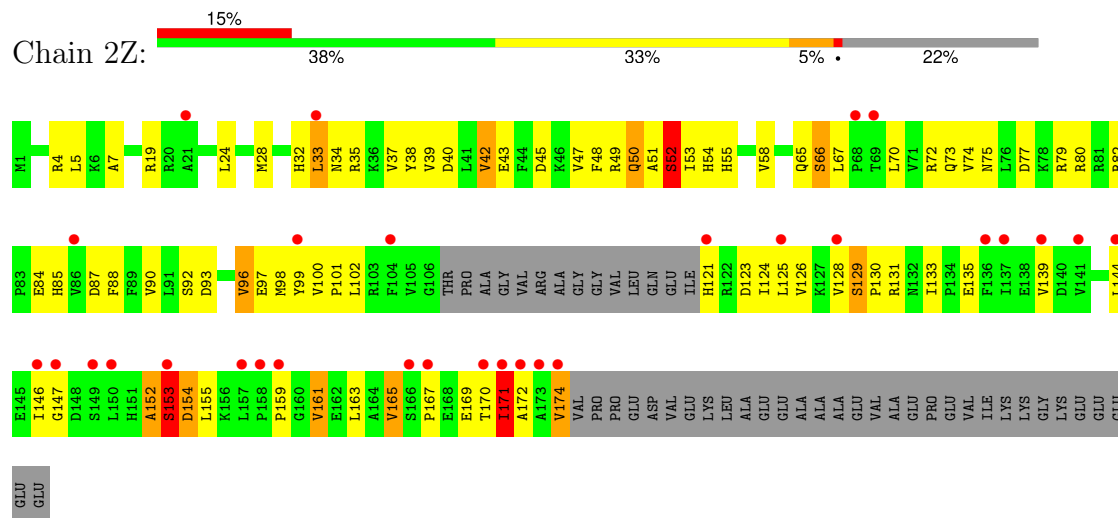


- Molecule 21: 50S ribosomal protein L25

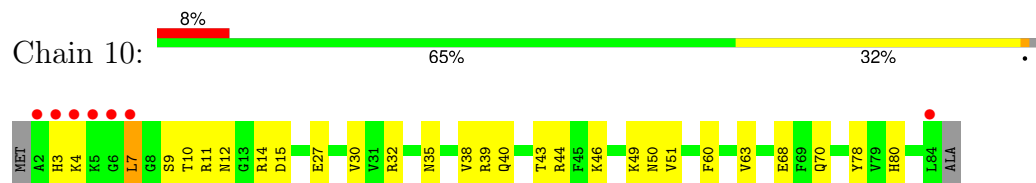


LYS
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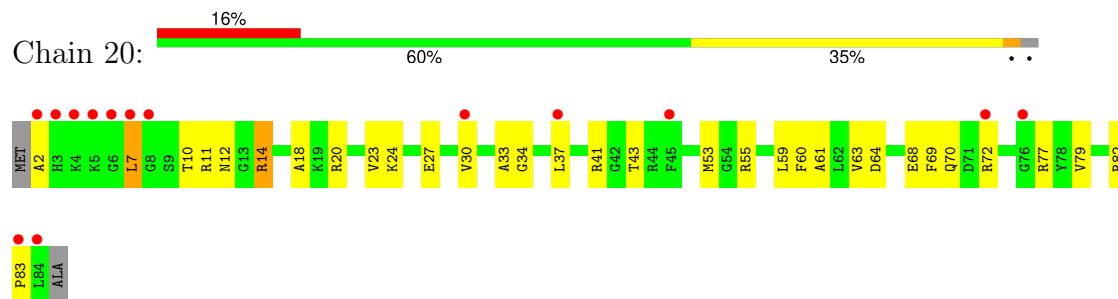
• Molecule 21: 50S ribosomal protein L25



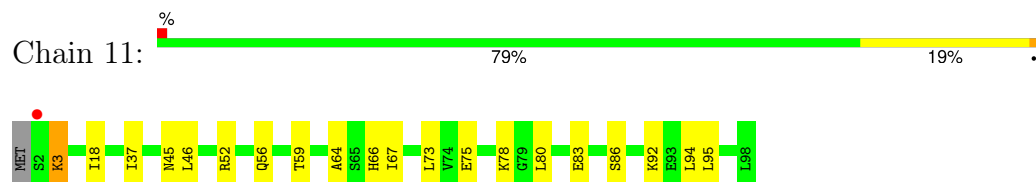
• Molecule 22: 50S ribosomal protein L27



• Molecule 22: 50S ribosomal protein L27

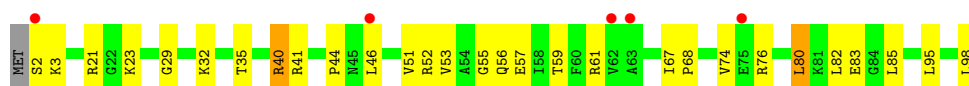


• Molecule 23: 50S ribosomal protein L28



• Molecule 23: 50S ribosomal protein L28

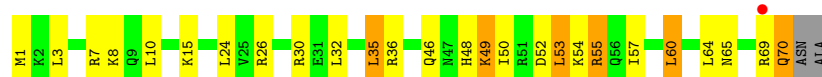




- Molecule 24: 50S ribosomal protein L29



- Molecule 24: 50S ribosomal protein L29



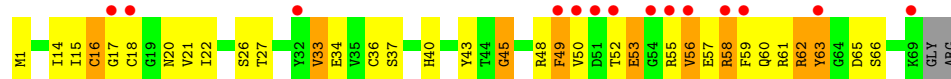
- Molecule 25: 50S ribosomal protein L30



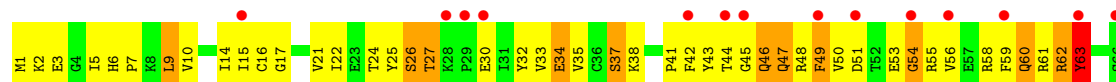
- Molecule 25: 50S ribosomal protein L30



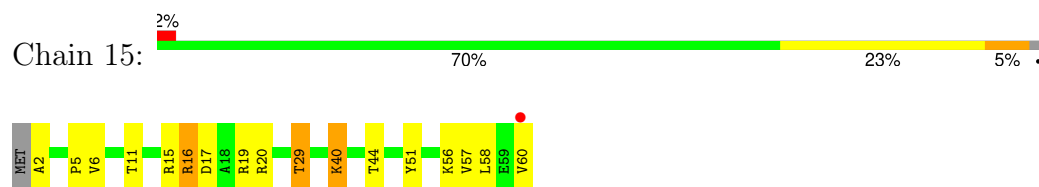
- Molecule 26: 50S ribosomal protein L31



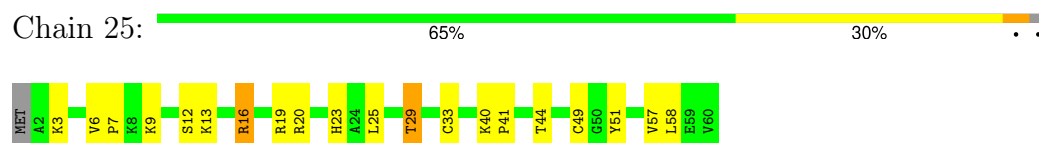
- Molecule 26: 50S ribosomal protein L31



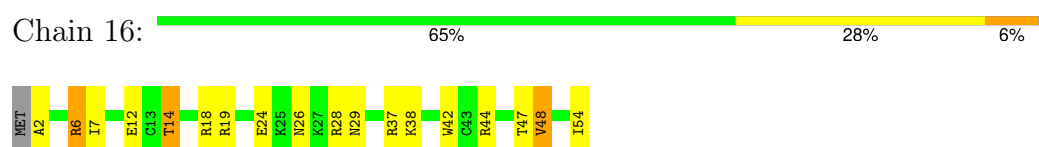
- Molecule 27: 50S ribosomal protein L32



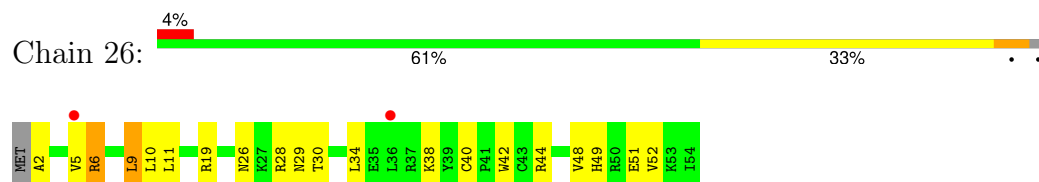
- Molecule 27: 50S ribosomal protein L32



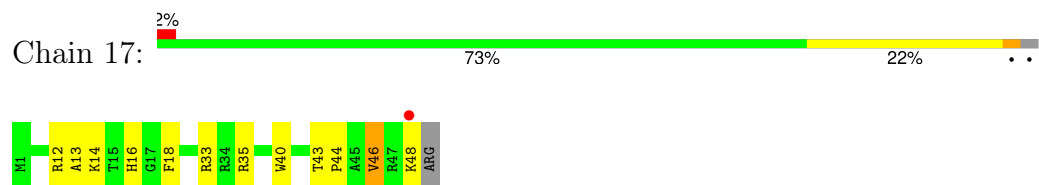
- Molecule 28: 50S ribosomal protein L33



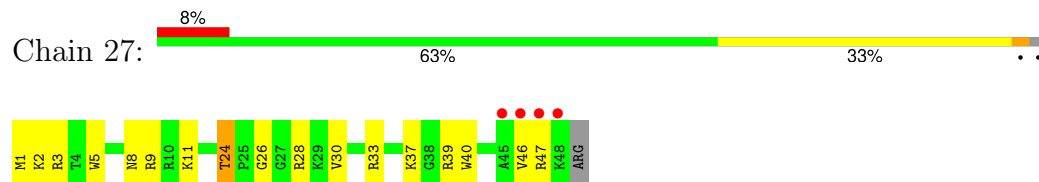
- Molecule 28: 50S ribosomal protein L33



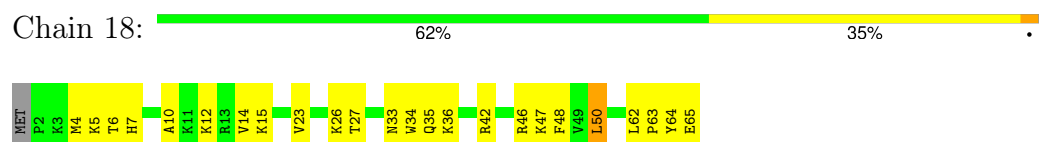
- Molecule 29: 50S ribosomal protein L34



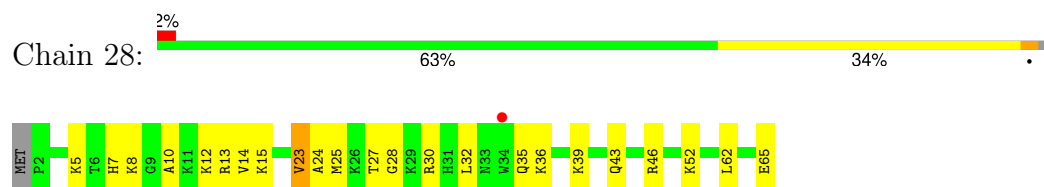
- Molecule 29: 50S ribosomal protein L34



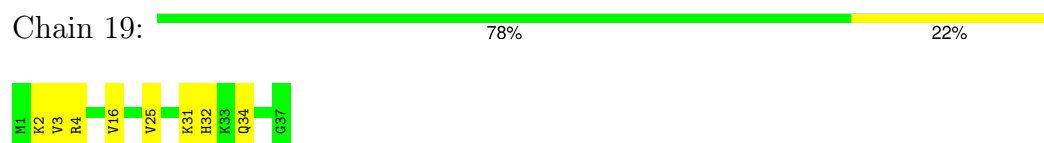
- Molecule 30: 50S ribosomal protein L35



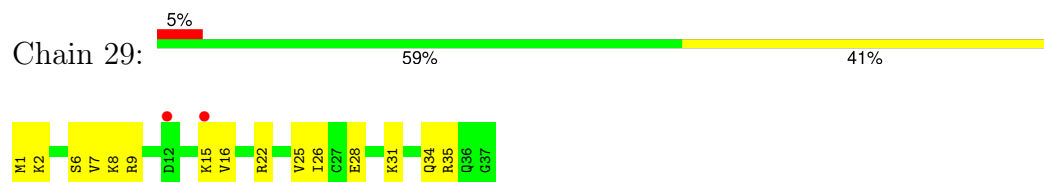
- Molecule 30: 50S ribosomal protein L35



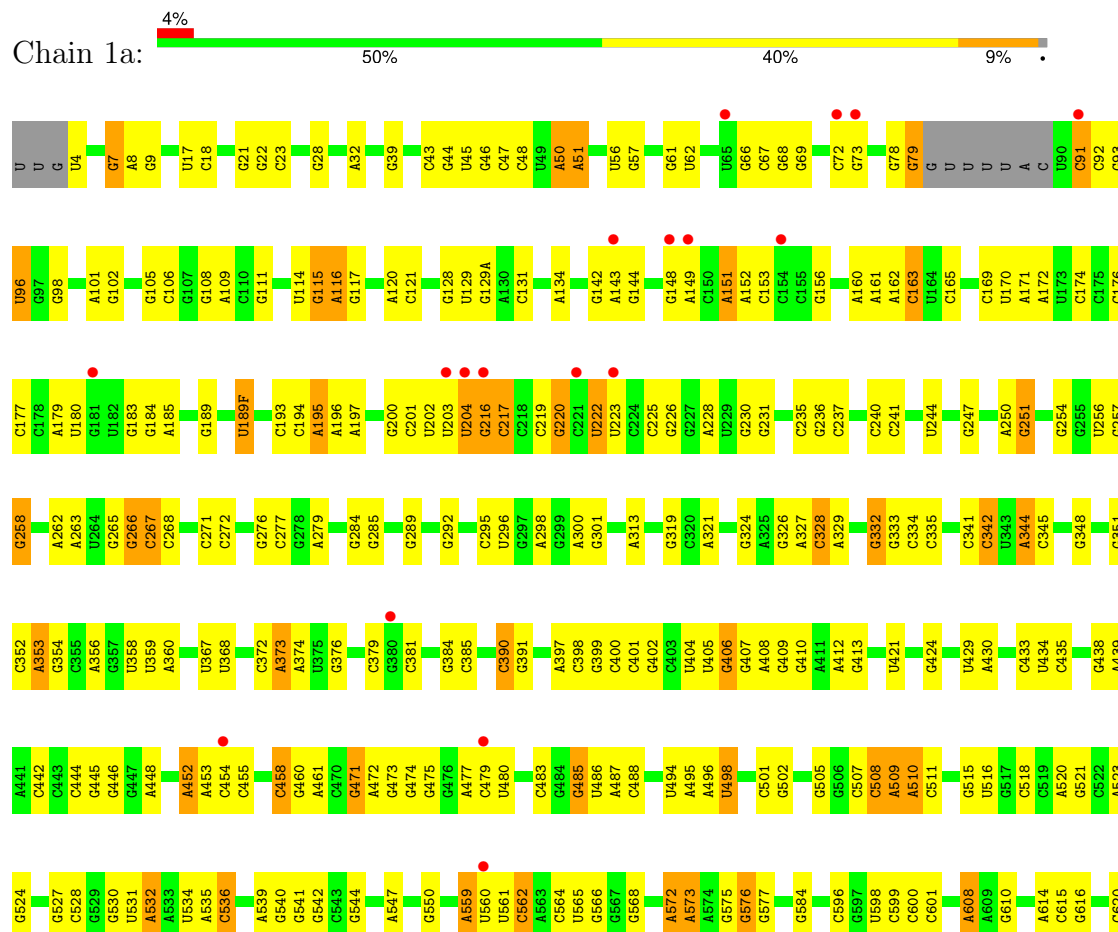
- Molecule 31: 50S ribosomal protein L36

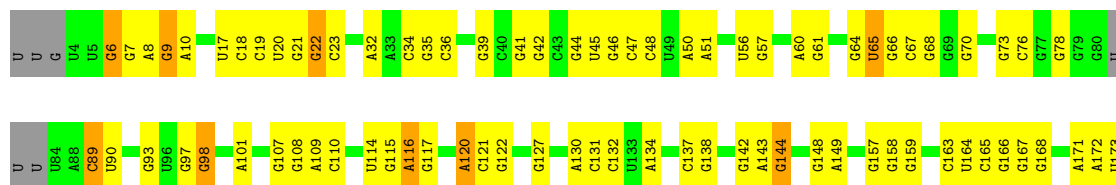
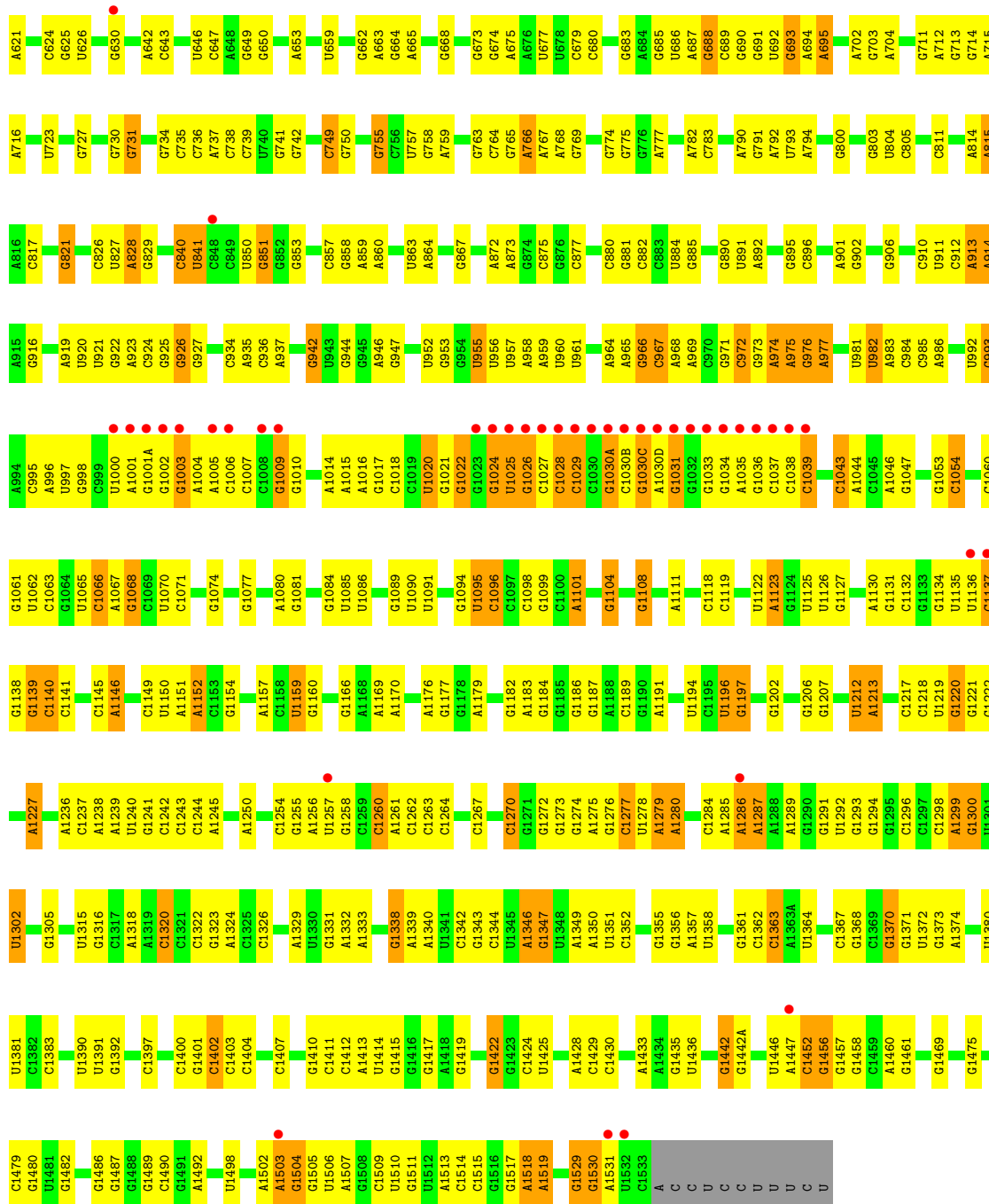


- Molecule 31: 50S ribosomal protein L36

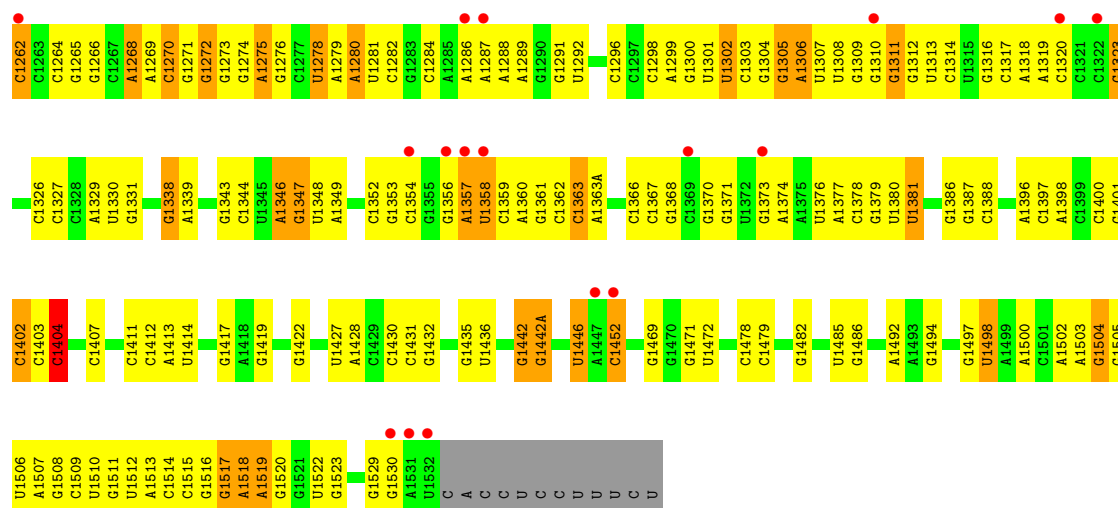


- Molecule 32: 16S Ribosomal RNA

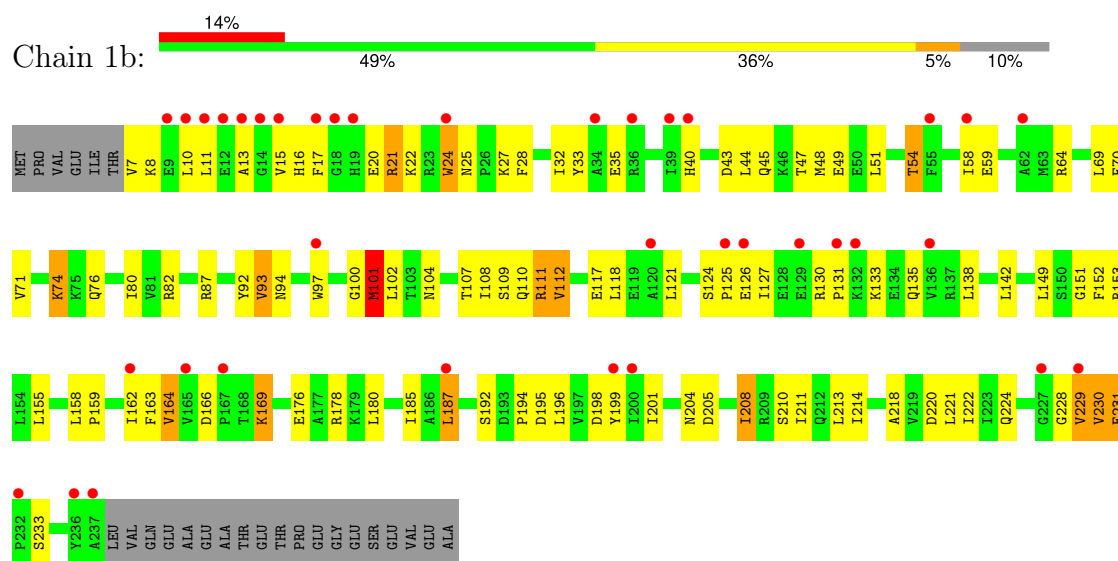




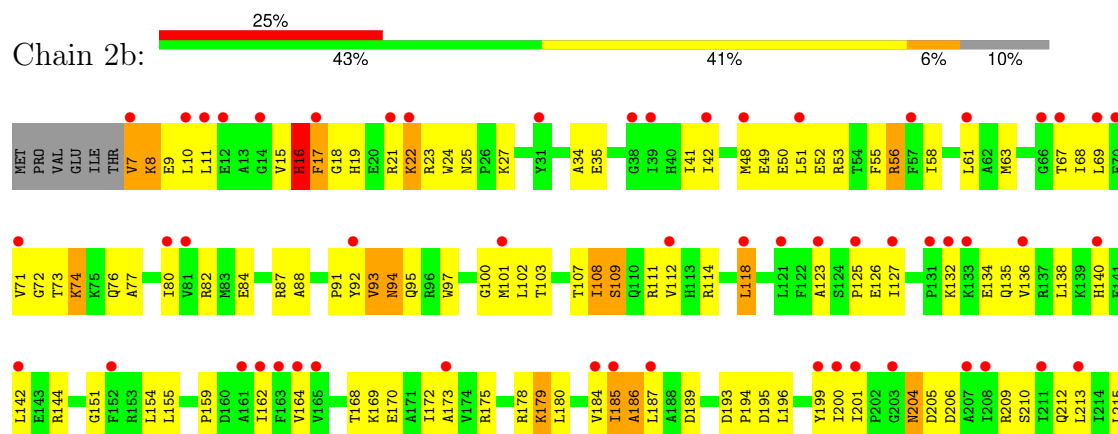
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G1215	U1091	A1030D	A974	A901	C813	A728	G644	G561	C486	C403	G301	A196
C1216	U1092	G1031	A975	G902	C814	A729	G645	U562	C487	G404	G302	A197
G1217	A1093	G1032	G976	G903	U813	G730	C646	G566	C501	G405	G309	G200
C1218	U1094	G1033	A977	G906	A814	G731	U646	G567	G502	G406	A313	C201
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G1220	C1096	A1035	C979	A909	A816	A733	A648	G569	C504	G410	U202	U203
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G1222	U1098	C1037	C981	C911	C821	G735	U652	A572	C506	G412	G326	G216
G1223	C1099	C1038	C982	A913	G826	A736	A653	A573	C507	A413	G327	C217
G1224	A1101	U1040	C984	A914	C827	C737	C656	A574	C508	G414	G328	G218
A1225	U1102	G1041	A986	A918	C828	G741	G662	G575	C509	G415	C329	C219
C1226	C1103	G1042	A987	A919	C829	G742	A663	G576	G510	G416	G332	G220
C1228	A1105	G1043	G988	A920	C830	G743	A664	G577	C511	G417	G336	U222
A1229	U1106	G1044	C989	U921	G831	G744	G665	G578	C512	G418	C337	C224
U1230	G1107	C1045	C990	G922	C832	G745	G666	C579	C513	G419	C338	C225
G1231	U1108	A1046	A991	A923	U833	C746	A667	G580	C514	C422	U223	U224
U1232	C1109	G1047	G992	C924	C834	A747	A668	G581	G515	G423	U225	G230
C1233	A1110	G1048	G993	G925	U835	C748	A669	G582	C516	G424	G231	G232
G1234	U1111	U1049	A994	G926	C836	C749	G670	U583	C517	G425	G233	C237
C1235	C1112	G1050	C995	G927	C837	G750	G671	G584	C518	A430	G234	G235
U1236	C1113	C1051	A996	C931	C838	A753	U672	G585	C519	A431	G236	G237
A1237	U1114	U1052	U997	C932	U839	C754	G673	G586	C520	G426	U340	G238
U1238	C1115	G1053	G998	C934	C840	G755	A674	G587	C521	G427	C341	G239
U1239	U1116	C1054	C999	A935	U841	C756	A675	G588	C522	G428	C342	G240
C1240	G1117	A1055	U1000	A936	C848	C757	A676	G589	C523	U429	G343	G241
G1241	C1118	U1056	A1001	A937	C851	U757	U677	G590	C524	A430	G344	G242
C1242	C1119	G1057	G1001A	A938	G851	G758	G678	U591	C525	A431	G345	G243
U1243	G1120	C1058	G1002	G939	G855	C762	A683	C596	C526	A432	G346	G244
A1244	U1121	G1059	G1003	C940	C856	G763	A684	G597	C527	G432	G350	G245
C1245	C1122	C1060	A1004	G941	C857	C764	G685	U598	C528	C436	C351	A250
G1246	A1123	U1061	A1005	G942	C858	G765	U686	G599	C529	G437	A352	G251
C1247	U1124	G1062	C1006	C943	C859	A768	A687	C600	C530	U438	G353	G252
U1248	U1125	C1063	C1007	A944	A859	G769	G688	C601	A533	A439	G354	G253
A1249	G1126	G1064	U1008	A945	C862	G770	A695	G604	C536	A441	G357	G254
C1250	U1127	U1065	G1009	A946	C863	C771	A696	U605	C537	G442	G358	G255
U1251	C1128	C1066	U863	C948	A864	G772	A697	G606	C538	G443	A363	G256
G1252	U1129	A1067	G1010	A949	A865	U773	C701	A607	G537	C444	U261	U261
C1253	A1130	G1068	U1012	U952	C868	G774	A702	A608	A539	G445	A262	A263
U1254	C1131	C1069	G1013	G953	G869	A775	G703	A609	G540	A448	U367	A264
G1255	U1132	U1072	A1014	G954	U870	G776	G704	G610	G541	C372	C372	G266
C1256	G1133	U1073	A1015	U955		G777	G705		G542	A373		
U1257	U1134	G1074	G1017	U956		G779	C707					

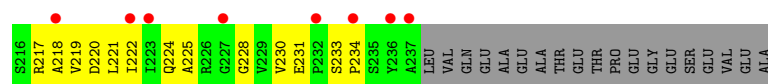


- Molecule 33: 30S ribosomal protein S2

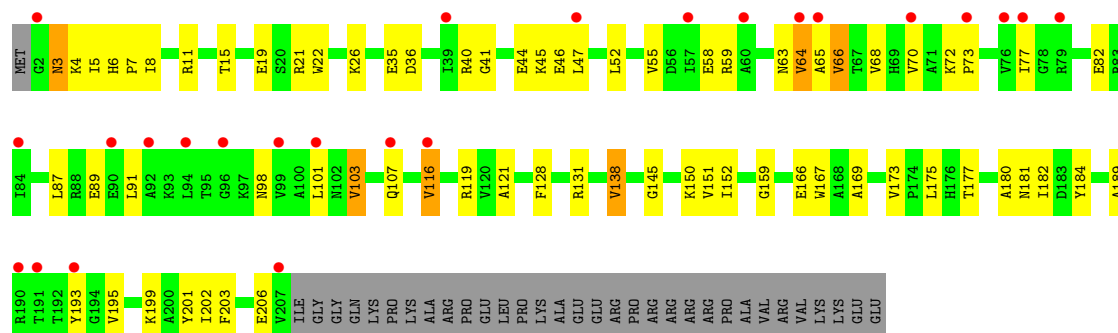


- Molecule 33: 30S ribosomal protein S2

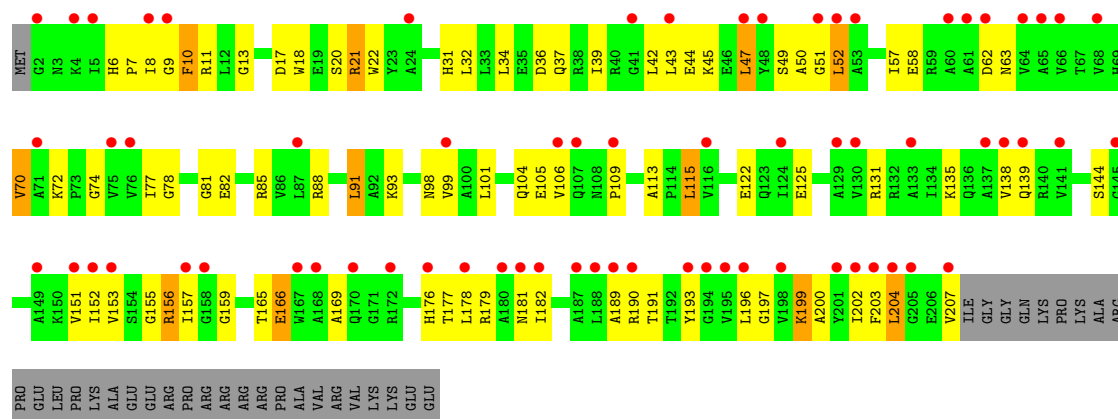




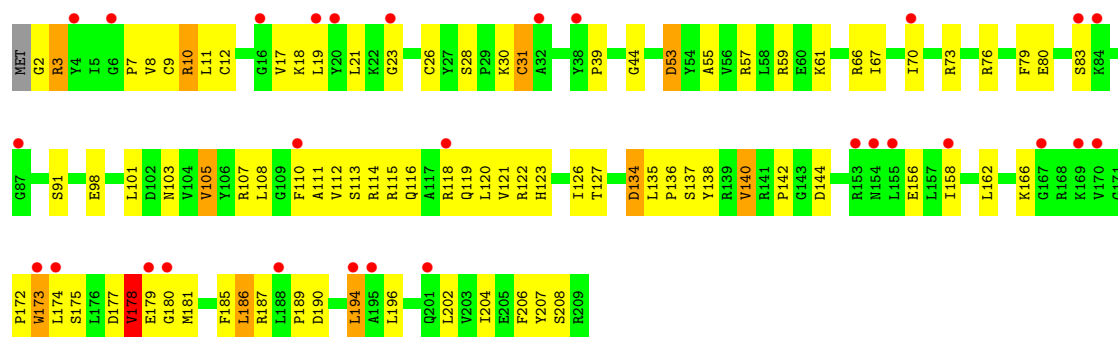
• Molecule 34: 30S ribosomal protein S3



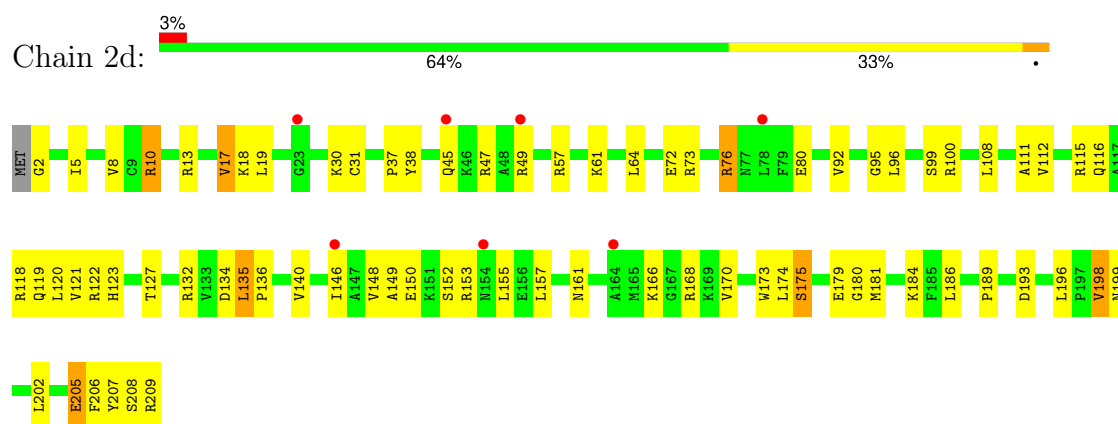
• Molecule 34: 30S ribosomal protein S3



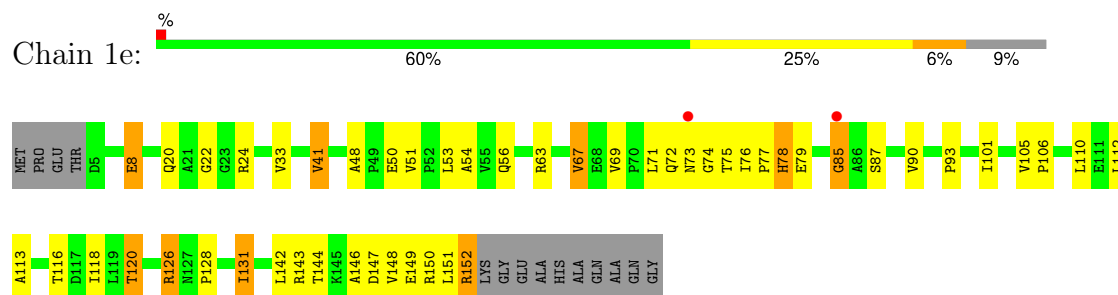
• Molecule 35: 30S ribosomal protein S4



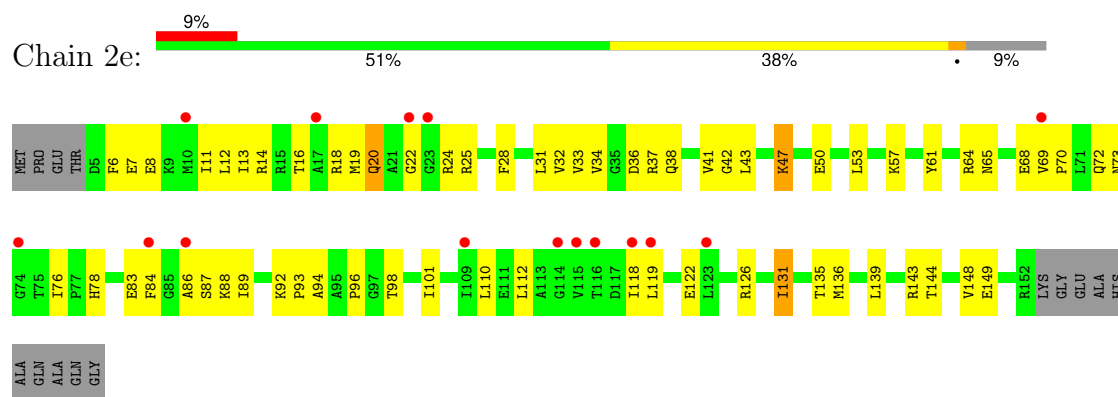
• Molecule 35: 30S ribosomal protein S4



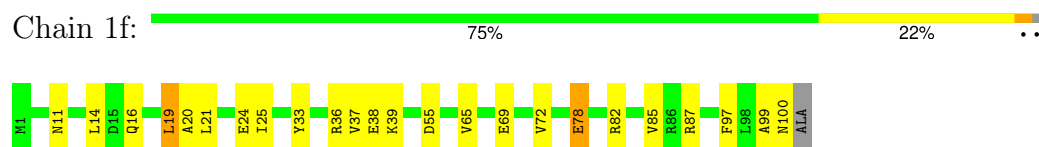
- Molecule 36: 30S ribosomal protein S5



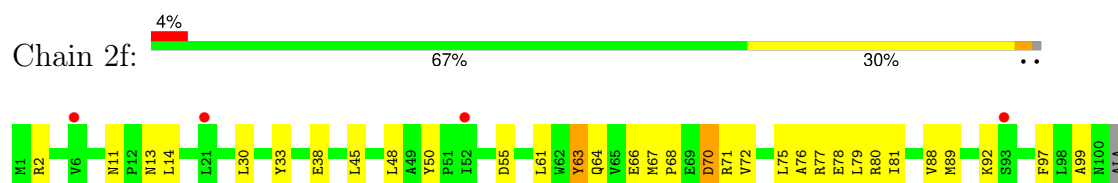
- Molecule 36: 30S ribosomal protein S5



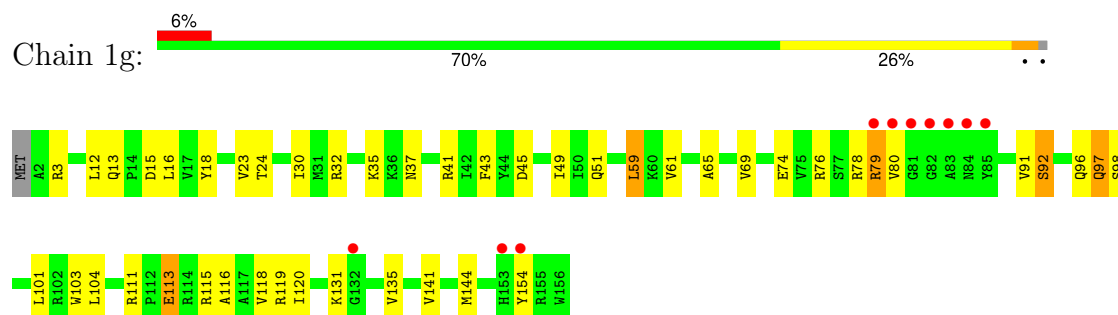
- Molecule 37: 30S ribosomal protein S6



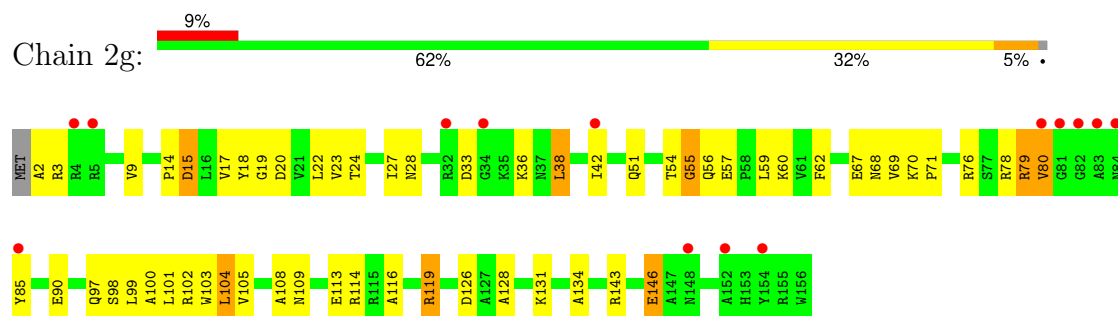
- Molecule 37: 30S ribosomal protein S6



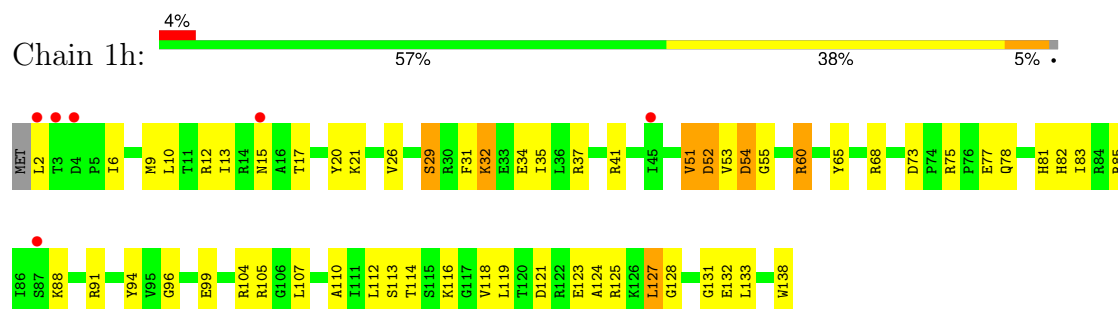
- Molecule 38: 30S ribosomal protein S7



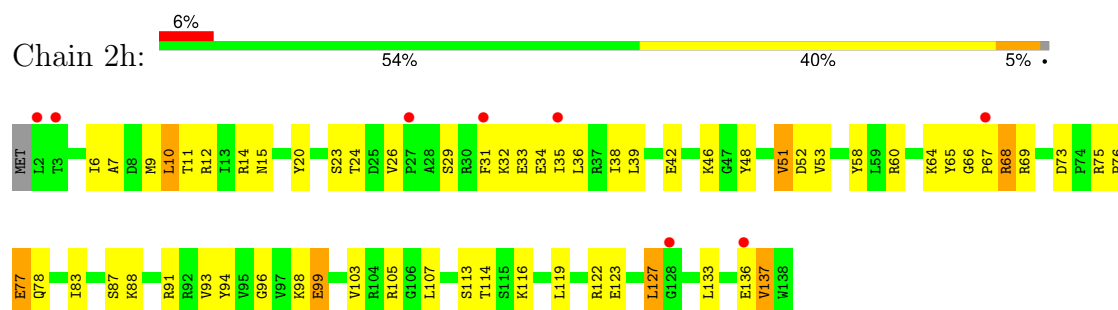
- Molecule 38: 30S ribosomal protein S7



- Molecule 39: 30S ribosomal protein S8

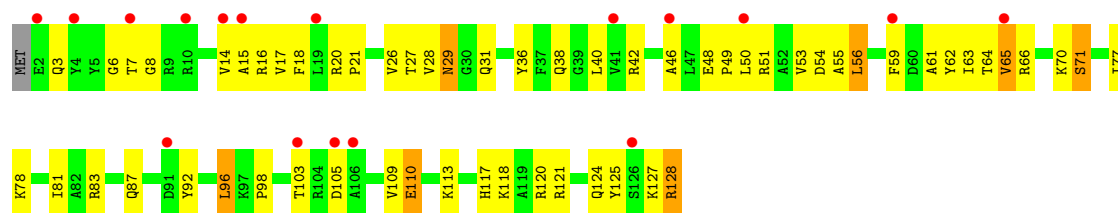


- Molecule 39: 30S ribosomal protein S8

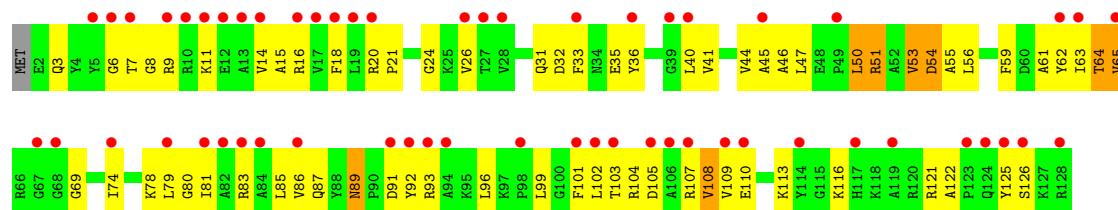
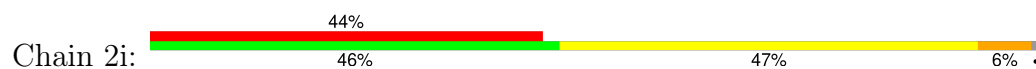


- Molecule 40: 30S ribosomal protein S9





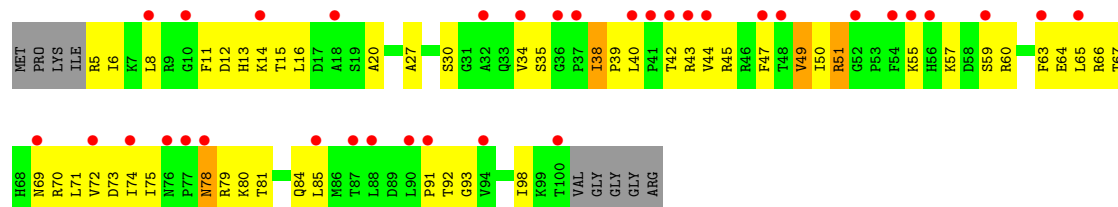
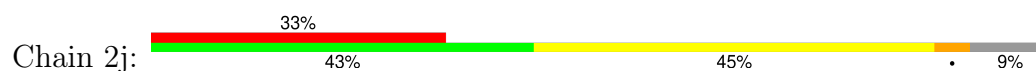
• Molecule 40: 30S ribosomal protein S9



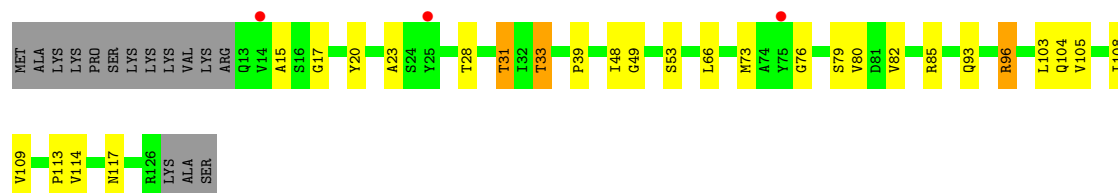
• Molecule 41: 30S ribosomal protein S10



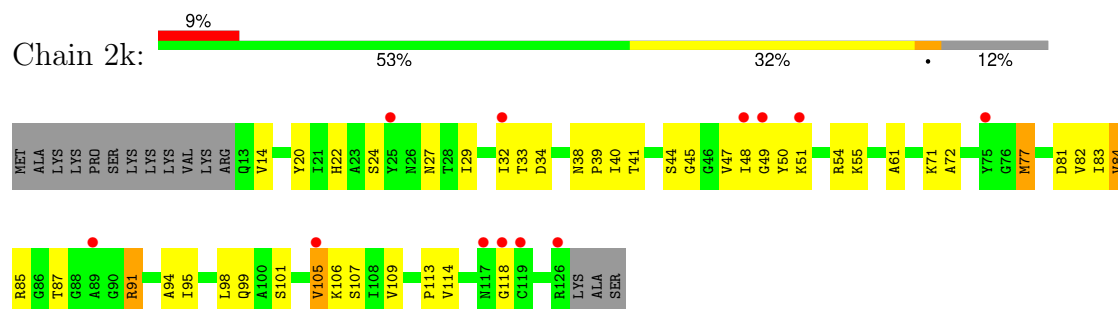
• Molecule 41: 30S ribosomal protein S10



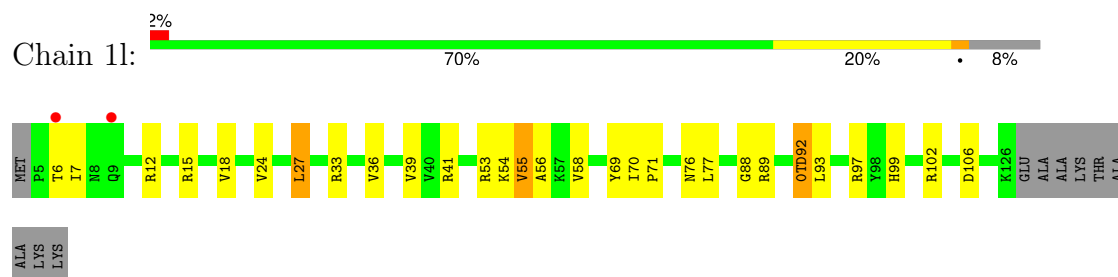
• Molecule 42: 30S ribosomal protein S11



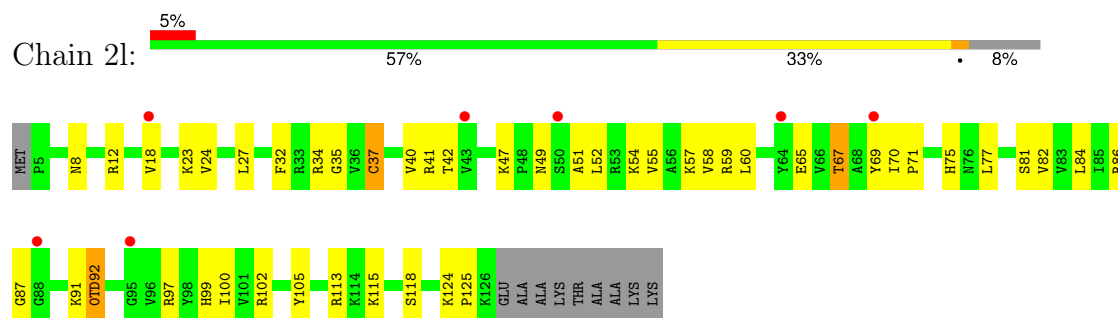
- Molecule 42: 30S ribosomal protein S11



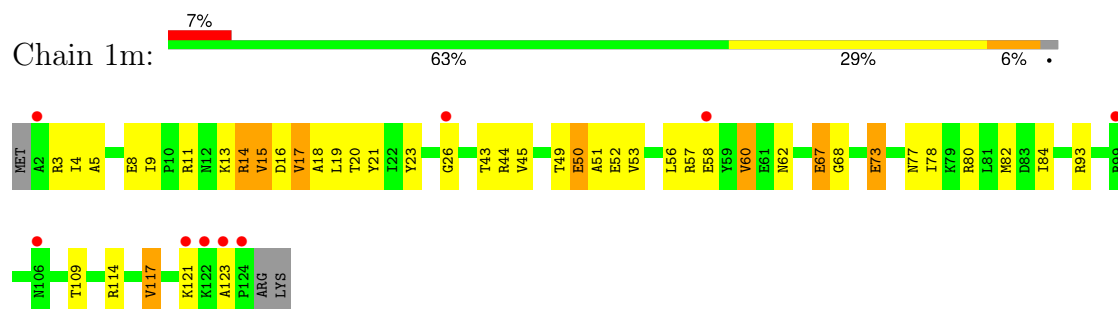
- Molecule 43: 30S ribosomal protein S12



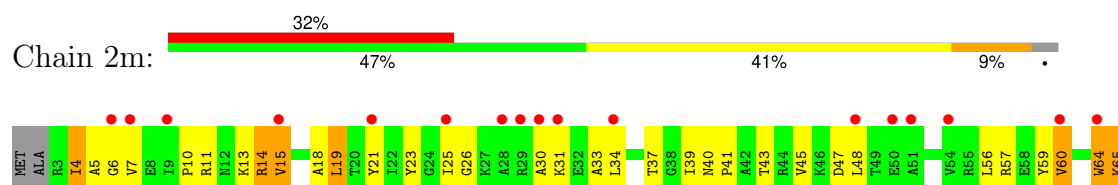
- Molecule 43: 30S ribosomal protein S12

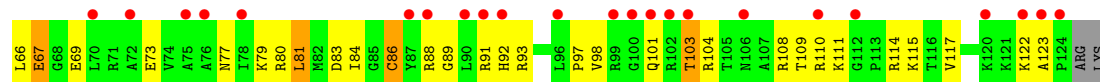


- Molecule 44: 30S ribosomal protein S13

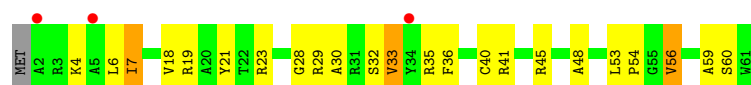


- Molecule 44: 30S ribosomal protein S13

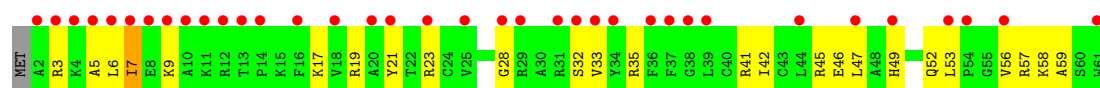




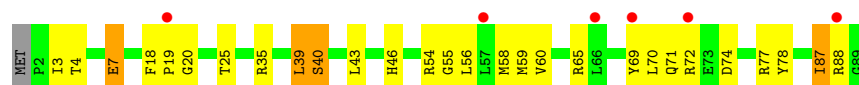
- Molecule 45: 30S ribosomal protein S14 type Z



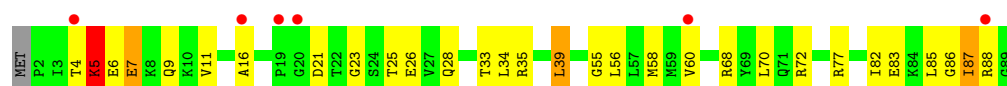
- Molecule 45: 30S ribosomal protein S14 type Z



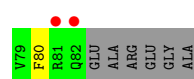
- Molecule 46: 30S ribosomal protein S15



- Molecule 46: 30S ribosomal protein S15

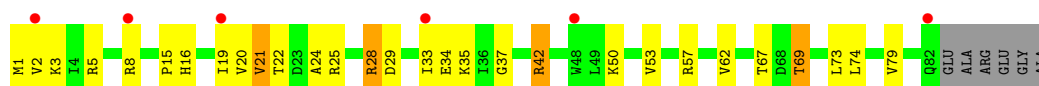


- Molecule 47: 30S ribosomal protein S16



- Molecule 47: 30S ribosomal protein S16

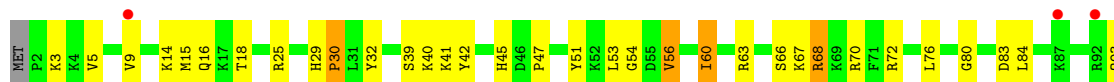




- Molecule 48: 30S ribosomal protein S17



- Molecule 48: 30S ribosomal protein S17



- Molecule 49: 30S ribosomal protein S18

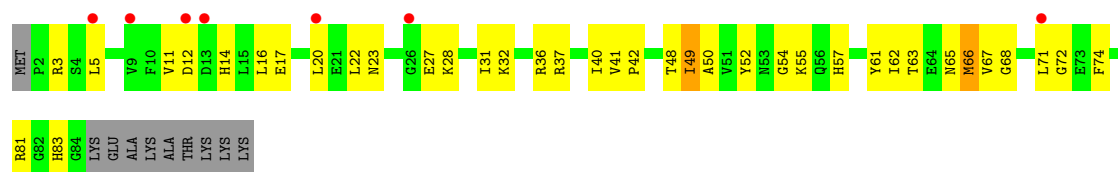


- Molecule 49: 30S ribosomal protein S18

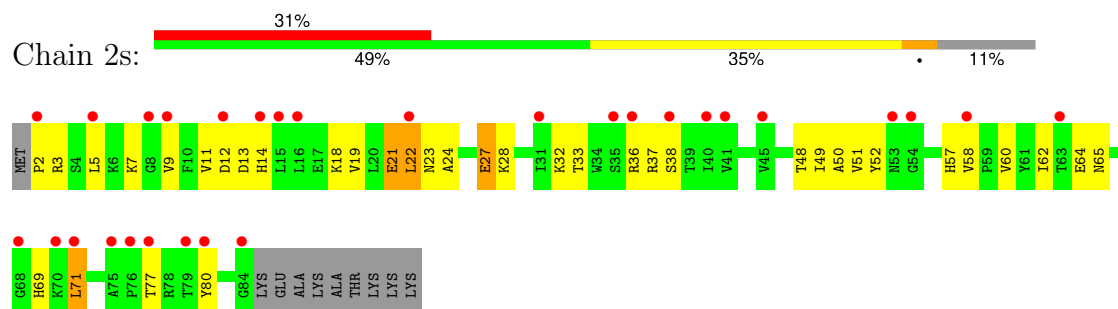


- Molecule 50: 30S ribosomal protein S19

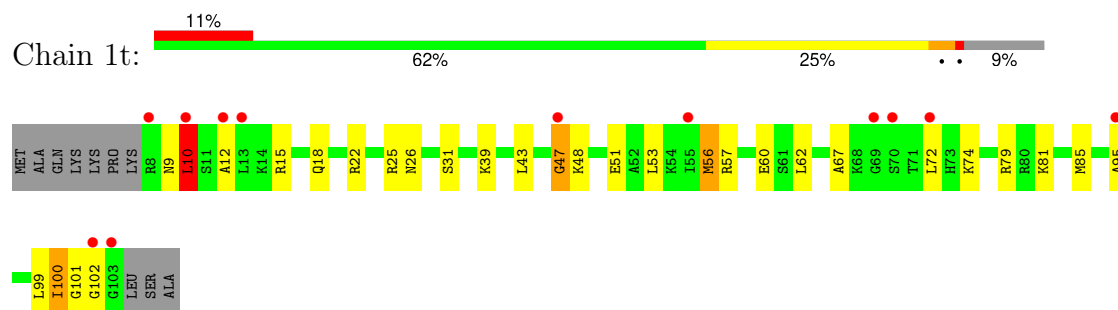




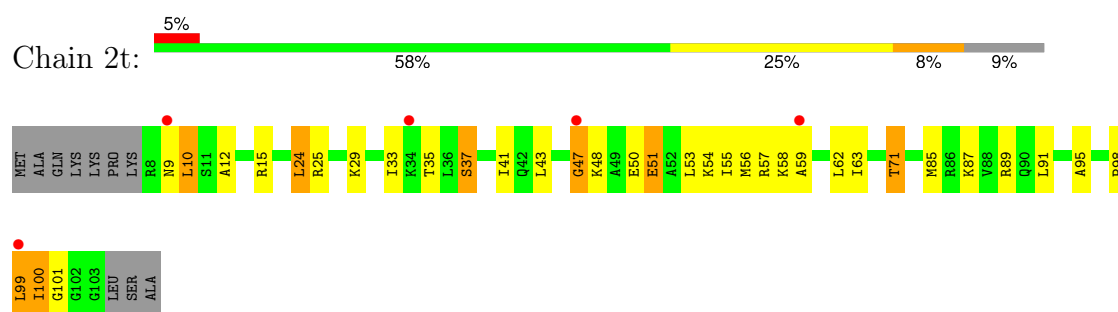
- Molecule 50: 30S ribosomal protein S19



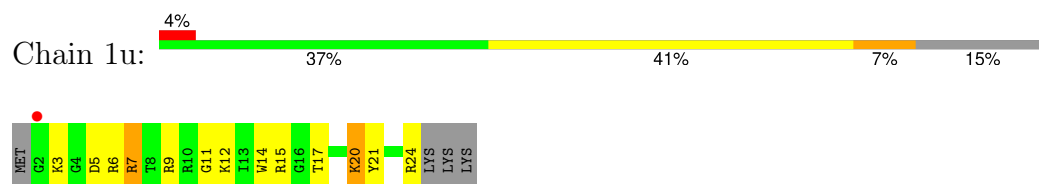
- Molecule 51: 30S ribosomal protein S20



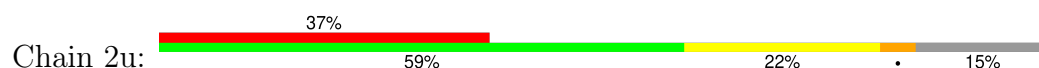
- Molecule 51: 30S ribosomal protein S20

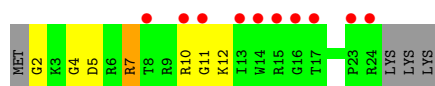


- Molecule 52: 30S ribosomal protein Thx

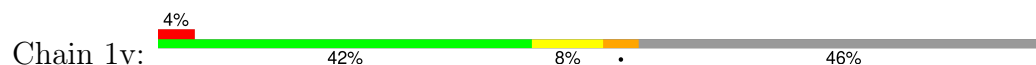


- Molecule 52: 30S ribosomal protein Thx

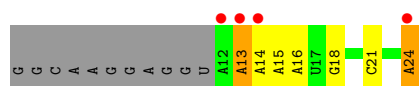
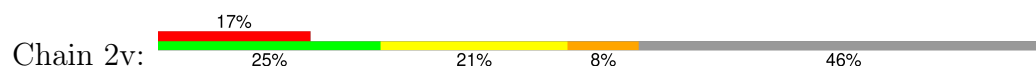




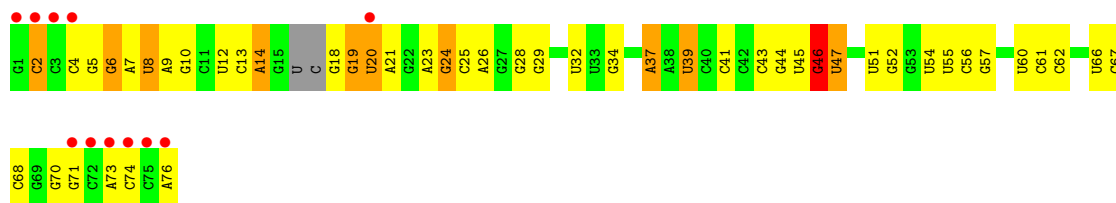
• Molecule 53: MF-mRNA



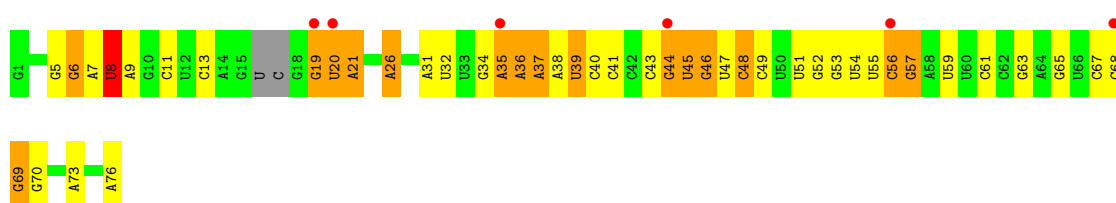
• Molecule 53: MF-mRNA



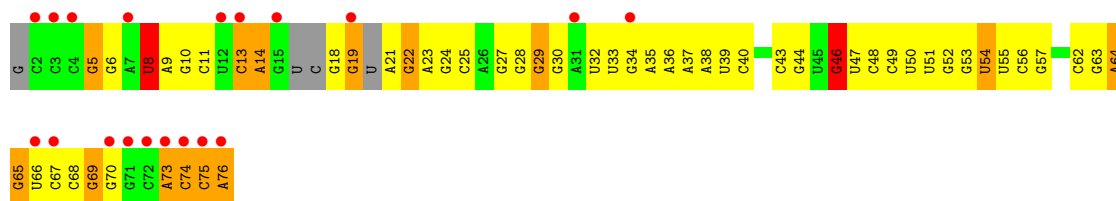
• Molecule 54: A-site and E-site Deacylated tRNAphe



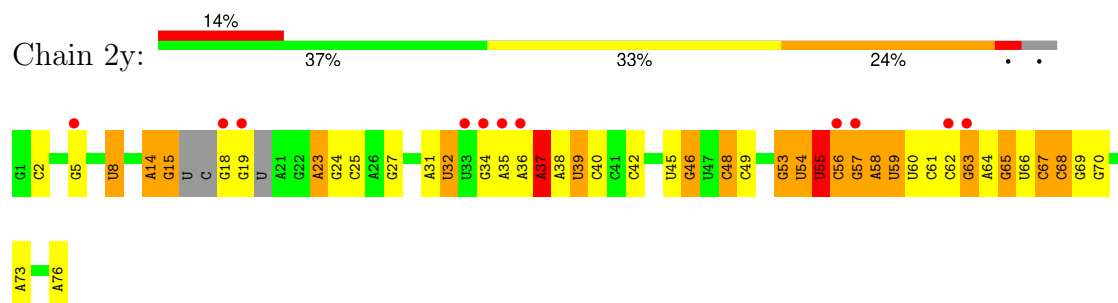
• Molecule 54: A-site and E-site Deacylated tRNAphe



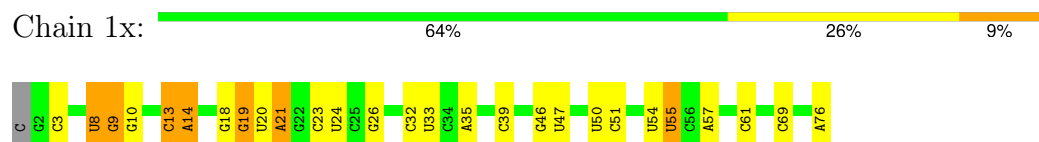
• Molecule 54: A-site and E-site Deacylated tRNAphe



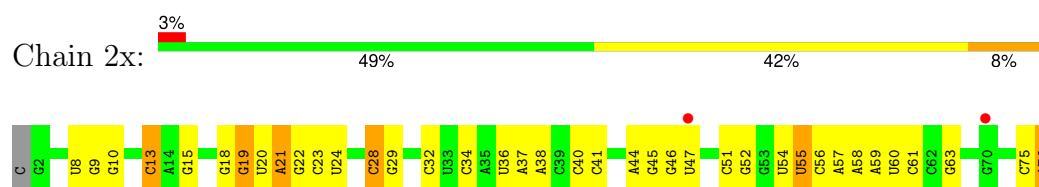
- Molecule 54: A-site and E-site Deacylated tRNA^{phe}



- Molecule 55: P-site Deacylated tRNA^{met}



- Molecule 55: P-site Deacylated tRNA^{met}



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.36Å 449.77Å 616.87Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	254.37 – 2.70 254.37 – 2.70	Depositor EDS
% Data completeness (in resolution range)	97.1 (254.37-2.70) 97.1 (254.37-2.70)	Depositor EDS
R_{merge}	0.16	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.23 (at 2.69Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.224 , 0.277 0.225 , 0.278	Depositor DCC
R_{free} test set	76639 reflections (4.87%)	wwPDB-VP
Wilson B-factor (Å ²)	47.4	Xtriage
Anisotropy	0.166	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.32 , 56.3	EDS
L-test for twinning ²	$\langle L \rangle = 0.38$, $\langle L^2 \rangle = 0.21$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.89	EDS
Total number of atoms	299892	wwPDB-VP
Average B, all atoms (Å ²)	53.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.71% 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, 0TD, G7M, SF4, 2MU, MA6, ZN, K, 4SU, 2MG, 4OC, MG, 5MC, 5MU, PSU, TYK, 2MA, OMC, UR3, OMG, MIA

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	1A	0.28	0/69010	0.46	1/107716 (0.0%)
1	2A	0.22	0/67294	0.40	1/105038 (0.0%)
2	1B	0.23	0/2882	0.40	0/4494
2	2B	0.19	0/2879	0.36	0/4487
3	1D	0.27	0/2186	0.50	0/2944
3	2D	0.23	0/2186	0.46	0/2944
4	1E	0.28	0/1592	0.50	0/2149
4	2E	0.22	0/1592	0.46	1/2149 (0.0%)
5	1F	0.26	0/1618	0.49	0/2191
5	2F	0.22	0/1614	0.47	2/2186 (0.1%)
6	1G	0.23	0/1448	0.45	0/1957
6	2G	0.20	0/1453	0.46	0/1963
7	1H	0.23	0/1356	0.41	0/1834
7	2H	0.19	0/1356	0.44	0/1834
8	1I	0.21	0/1112	0.44	0/1514
8	2I	0.19	0/1079	0.40	0/1475
9	1N	0.26	0/1144	0.45	0/1543
9	2N	0.19	0/1144	0.39	0/1543
10	1O	0.26	0/943	0.48	0/1269
10	2O	0.22	0/943	0.47	0/1269
11	1P	0.25	0/1152	0.53	0/1533
11	2P	0.22	0/1152	0.49	0/1533
12	1Q	0.25	0/1143	0.46	0/1527
12	2Q	0.19	0/1143	0.43	0/1527
13	1R	0.27	0/982	0.49	0/1312
13	2R	0.21	0/982	0.45	0/1312
14	1S	0.27	0/883	0.51	0/1176
14	2S	0.19	0/880	0.44	0/1172
15	1T	0.26	0/1105	0.54	1/1477 (0.1%)
15	2T	0.21	0/1097	0.43	0/1468
16	1U	0.29	0/977	0.47	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	2U	0.20	0/977	0.42	0/1301
17	1V	0.26	0/782	0.52	0/1049
17	2V	0.19	0/782	0.40	0/1049
18	1W	0.30	0/897	0.49	0/1205
18	2W	0.21	0/897	0.40	0/1205
19	1X	0.26	0/764	0.54	3/1025 (0.3%)
19	2X	0.21	0/764	0.51	2/1025 (0.2%)
20	1Y	0.25	0/819	0.54	0/1095
20	2Y	0.19	0/819	0.42	0/1095
21	1Z	0.21	0/1267	0.44	0/1717
21	2Z	0.22	0/1299	0.47	0/1763
22	10	0.27	0/662	0.48	0/881
22	20	0.20	0/662	0.43	0/881
23	11	0.26	0/762	0.44	0/1014
23	21	0.23	0/762	0.43	0/1014
24	12	0.26	0/590	0.45	0/781
24	22	0.19	0/590	0.37	0/781
25	13	0.27	0/474	0.48	0/635
25	23	0.20	0/469	0.44	0/630
26	14	0.29	0/565	0.68	1/761 (0.1%)
26	24	0.25	0/545	0.67	1/737 (0.1%)
27	15	0.26	0/469	0.53	0/635
27	25	0.26	0/469	0.49	0/635
28	16	0.27	0/460	0.47	0/613
28	26	0.21	0/456	0.43	0/608
29	17	0.31	0/426	0.52	0/561
29	27	0.25	0/426	0.50	0/561
30	18	0.27	0/525	0.47	0/691
30	28	0.22	0/525	0.41	0/691
31	19	0.28	0/310	0.52	0/407
31	29	0.20	0/310	0.45	0/407
32	1a	0.21	0/35795	0.39	0/55864
32	2a	0.20	0/35886	0.38	0/56005
33	1b	0.21	0/1881	0.50	0/2542
33	2b	0.22	0/1860	0.50	0/2518
34	1c	0.19	0/1572	0.43	0/2126
34	2c	0.22	0/1566	0.47	0/2119
35	1d	0.19	0/1685	0.46	0/2262
35	2d	0.21	0/1704	0.44	0/2284
36	1e	0.22	0/1145	0.46	0/1543
36	2e	0.22	0/1149	0.52	0/1548
37	1f	0.21	0/823	0.43	0/1115
37	2f	0.20	0/829	0.43	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	1g	0.19	0/1250	0.43	0/1679
38	2g	0.19	0/1254	0.42	0/1683
39	1h	0.19	0/1108	0.45	0/1494
39	2h	0.19	0/1108	0.44	0/1494
40	1i	0.20	0/1002	0.51	0/1346
40	2i	0.21	0/997	0.49	0/1343
41	1j	0.20	0/722	0.43	0/982
41	2j	0.22	0/727	0.54	0/988
42	1k	0.19	0/844	0.42	0/1145
42	2k	0.18	0/848	0.41	0/1149
43	1l	0.21	0/937	0.44	0/1260
43	2l	0.19	0/937	0.41	0/1260
44	1m	0.21	0/969	0.48	1/1302 (0.1%)
44	2m	0.21	0/961	0.45	0/1291
45	1n	0.19	0/501	0.46	0/664
45	2n	0.21	0/501	0.47	0/664
46	1o	0.20	0/739	0.38	0/985
46	2o	0.18	0/739	0.38	0/985
47	1p	0.20	0/697	0.47	0/939
47	2p	0.20	0/693	0.46	0/935
48	1q	0.20	0/836	0.43	0/1117
48	2q	0.19	0/836	0.46	0/1117
49	1r	0.22	0/560	0.42	0/746
49	2r	0.18	0/560	0.39	0/746
50	1s	0.19	0/667	0.49	0/900
50	2s	0.24	0/661	0.59	0/893
51	1t	0.20	0/730	0.49	0/965
51	2t	0.21	0/729	0.51	0/965
52	1u	0.19	0/203	0.42	0/266
52	2u	0.22	0/203	0.45	0/266
53	1v	0.19	0/310	0.32	0/480
53	2v	0.21	0/310	0.32	0/480
54	1w	0.29	1/1606 (0.1%)	0.41	0/2497
54	1y	0.28	2/1606 (0.1%)	0.40	0/2497
54	2w	0.30	1/1556 (0.1%)	0.41	0/2418
54	2y	0.29	2/1583 (0.1%)	0.44	0/2459
55	1x	0.27	0/1725	0.42	0/2689
55	2x	0.24	1/1725 (0.1%)	0.36	0/2689
All	All	0.23	7/316686 (0.0%)	0.43	14/474117 (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
11	1P	0	1
11	2P	0	1
33	2b	0	1
All	All	0	3

All (7) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1y	8	4SU	O3'-P	5.43	1.61	1.56
54	1w	46	G7M	O3'-P	5.34	1.61	1.56
54	2w	46	G7M	O3'-P	5.24	1.61	1.56
55	2x	8	4SU	O3'-P	5.09	1.61	1.56
54	2y	46	G7M	O3'-P	5.07	1.61	1.56
54	2y	8	4SU	O3'-P	5.06	1.61	1.56
54	1y	46	G7M	O3'-P	5.03	1.61	1.56

All (14) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	1T	89	VAL	N-CA-C	-6.52	106.44	112.96
1	1A	1992	G	C2'-C3'-O3'	5.99	118.48	109.50
4	2E	186	GLY	N-CA-C	5.69	118.91	110.60
5	2F	21	ALA	CA-C-N	5.41	131.43	121.70
5	2F	21	ALA	C-N-CA	5.41	131.43	121.70
26	14	66	SER	CA-C-O	-5.22	113.04	120.51
44	1m	50	GLU	N-CA-C	-5.20	107.01	113.19
1	2A	1992	G	C2'-C3'-O3'	5.15	117.23	109.50
19	2X	94	GLY	CA-C-N	5.15	130.97	121.70
19	2X	94	GLY	C-N-CA	5.15	130.97	121.70
19	1X	94	GLY	N-CA-C	5.13	125.34	113.18
19	1X	94	GLY	CA-C-N	5.09	130.86	121.70
19	1X	94	GLY	C-N-CA	5.09	130.86	121.70
26	24	54	GLY	N-CA-C	-5.06	108.91	115.59

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
11	1P	35	HIS	Peptide
11	2P	35	HIS	Peptide
33	2b	186	ALA	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1A	61852	0	31193	773	1
1	2A	60322	0	30423	825	0
2	1B	2577	0	1305	28	0
2	2B	2575	0	1303	48	0
3	1D	2136	0	2218	70	0
3	2D	2136	0	2217	61	0
4	1E	1559	0	1618	36	0
4	2E	1559	0	1618	34	0
5	1F	1583	0	1625	47	0
5	2F	1579	0	1619	59	0
6	1G	1423	0	1436	49	0
6	2G	1428	0	1438	59	0
7	1H	1330	0	1407	44	0
7	2H	1330	0	1407	43	0
8	1I	1097	0	1140	27	0
8	2I	1064	0	1082	29	0
9	1N	1117	0	1184	22	0
9	2N	1117	0	1184	21	0
10	1O	933	0	996	25	0
10	2O	933	0	996	28	0
11	1P	1135	0	1212	48	0
11	2P	1135	0	1212	50	0
12	1Q	1122	0	1179	23	0
12	2Q	1122	0	1179	36	0
13	1R	968	0	1033	25	0
13	2R	968	0	1033	26	0
14	1S	873	0	927	18	0
14	2S	870	0	923	29	0
15	1T	1091	0	1151	25	0
15	2T	1083	0	1136	36	0
16	1U	959	0	1019	19	0
16	2U	959	0	1019	22	0
17	1V	771	0	830	10	1
17	2V	771	0	830	15	0
18	1W	886	0	939	12	0
18	2W	886	0	940	16	0
19	1X	750	0	814	23	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	2X	750	0	814	22	0
20	1Y	806	0	881	22	0
20	2Y	806	0	881	16	0
21	1Z	1240	0	1240	37	0
21	2Z	1271	0	1273	55	0
22	10	653	0	674	20	0
22	20	653	0	674	25	0
23	11	755	0	826	11	0
23	21	755	0	826	22	0
24	12	588	0	643	11	0
24	22	588	0	643	21	0
25	13	469	0	518	16	0
25	23	464	0	514	18	0
26	14	552	0	533	31	0
26	24	532	0	503	37	0
27	15	455	0	465	12	1
27	25	455	0	465	16	0
28	16	453	0	473	14	0
28	26	449	0	469	15	0
29	17	418	0	467	11	0
29	27	418	0	467	16	0
30	18	517	0	582	27	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	16294	514	0
32	2a	32327	0	16338	639	1
33	1b	1846	0	1867	74	0
33	2b	1825	0	1828	95	0
34	1c	1548	0	1535	40	0
34	2c	1542	0	1517	61	0
35	1d	1655	0	1672	71	0
35	2d	1674	0	1714	54	0
36	1e	1129	0	1185	31	0
36	2e	1133	0	1191	45	0
37	1f	810	0	804	13	0
37	2f	816	0	808	19	0
38	1g	1231	0	1238	27	0
38	2g	1235	0	1249	37	0
39	1h	1088	0	1126	40	0
39	2h	1088	0	1126	42	0
40	1i	983	0	986	44	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
40	2i	978	0	966	47	0
41	1j	709	0	650	31	0
41	2j	714	0	672	37	0
42	1k	829	0	825	11	0
42	2k	833	0	836	24	0
43	1l	932	0	981	19	0
43	2l	932	0	981	36	0
44	1m	958	0	1002	32	0
44	2m	950	0	988	55	0
45	1n	492	0	529	18	0
45	2n	492	0	529	26	0
46	1o	728	0	760	19	0
46	2o	728	0	760	22	0
47	1p	681	0	697	25	0
47	2p	677	0	686	21	0
48	1q	823	0	891	29	0
48	2q	823	0	891	21	0
49	1r	555	0	618	9	0
49	2r	555	0	618	15	0
50	1s	652	0	662	33	0
50	2s	646	0	644	31	0
51	1t	728	0	798	21	0
51	2t	727	0	796	26	0
52	1u	199	0	208	10	0
52	2u	199	0	208	7	0
53	1v	277	0	140	3	0
53	2v	277	0	140	7	0
54	1w	1592	0	818	31	0
54	1y	1585	0	803	18	0
54	2w	1544	0	787	41	0
54	2y	1565	0	794	30	0
55	1x	1625	0	829	15	0
55	2x	1625	0	829	16	0
56	10	7	0	0	0	0
56	11	3	0	0	0	0
56	12	2	0	0	0	0
56	13	6	0	0	0	0
56	15	5	0	0	0	0
56	16	4	0	0	0	0
56	17	3	0	0	0	0
56	18	5	0	0	0	0
56	19	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	1A	1106	0	0	0	0
56	1B	35	0	0	0	0
56	1D	11	0	0	0	0
56	1E	13	0	0	0	0
56	1F	10	0	0	0	0
56	1G	4	0	0	0	0
56	1I	1	0	0	0	0
56	1N	5	0	0	0	0
56	1O	6	0	0	0	0
56	1P	5	0	0	0	0
56	1Q	6	0	0	0	0
56	1R	6	0	0	0	0
56	1S	3	0	0	0	0
56	1T	3	0	0	0	0
56	1U	12	0	0	0	0
56	1V	6	0	0	0	0
56	1W	7	0	0	0	0
56	1X	7	0	0	0	0
56	1Y	3	0	0	0	0
56	1Z	3	0	0	0	0
56	1a	224	0	0	0	0
56	1b	2	0	0	0	0
56	1d	1	0	0	0	0
56	1e	2	0	0	0	0
56	1f	2	0	0	0	0
56	1h	1	0	0	0	0
56	1k	1	0	0	0	0
56	1l	2	0	0	0	0
56	1m	1	0	0	0	0
56	1n	2	0	0	0	0
56	1p	1	0	0	0	0
56	1t	1	0	0	0	0
56	1v	1	0	0	0	0
56	1w	7	0	0	0	0
56	1x	14	0	0	0	0
56	1y	4	0	0	0	0
56	20	3	0	0	0	0
56	21	1	0	0	0	0
56	23	4	0	0	0	0
56	25	4	0	0	0	0
56	26	1	0	0	0	0
56	27	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	28	4	0	0	0	0
56	29	1	0	0	0	0
56	2A	877	0	0	0	0
56	2B	21	0	0	0	0
56	2D	6	0	0	0	0
56	2E	10	0	0	0	0
56	2F	7	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	3	0	0	0	0
56	2Q	3	0	0	0	0
56	2R	2	0	0	0	0
56	2T	3	0	0	0	0
56	2U	1	0	0	0	0
56	2V	2	0	0	0	0
56	2W	3	0	0	0	0
56	2X	2	0	0	0	0
56	2Y	1	0	0	0	0
56	2Z	1	0	0	0	0
56	2a	234	0	0	0	0
56	2d	2	0	0	0	0
56	2e	1	0	0	0	0
56	2f	1	0	0	0	0
56	2g	1	0	0	0	0
56	2j	2	0	0	0	0
56	2k	1	0	0	0	0
56	2l	4	0	0	0	0
56	2m	1	0	0	0	0
56	2q	2	0	0	0	0
56	2r	2	0	0	0	0
56	2t	1	0	0	0	0
56	2v	2	0	0	0	0
56	2w	7	0	0	0	0
56	2x	4	0	0	0	0
56	2y	6	0	0	0	0
57	1A	64	0	76	6	0
57	2A	64	0	76	4	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

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
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	5	0
59	2d	8	0	0	0	0
60	1x	1	0	0	0	0
60	2A	1	0	0	0	0
61	10	10	0	0	1	0
61	11	9	0	0	0	0
61	12	4	0	0	1	0
61	13	4	0	0	1	0
61	14	1	0	0	0	0
61	15	5	0	0	0	0
61	16	2	0	0	0	0
61	17	10	0	0	0	0
61	18	13	0	0	1	0
61	1A	1864	0	0	102	0
61	1B	59	0	0	3	0
61	1D	24	0	0	1	0
61	1E	26	0	0	3	0
61	1F	17	0	0	1	0
61	1G	5	0	0	1	0
61	1H	1	0	0	0	0
61	1I	2	0	0	0	0
61	1N	7	0	0	0	0
61	1O	9	0	0	0	0
61	1P	21	0	0	1	0
61	1Q	10	0	0	0	0
61	1R	10	0	0	1	0
61	1S	5	0	0	0	0
61	1T	7	0	0	0	0
61	1U	10	0	0	0	0
61	1V	7	0	0	0	0
61	1W	8	0	0	2	0
61	1X	5	0	0	1	0
61	1Y	3	0	0	0	0
61	1Z	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
6l	1a	264	0	0	25	0
6l	1b	1	0	0	1	0
6l	1d	1	0	0	0	0
6l	1f	1	0	0	0	0
6l	1g	1	0	0	1	0
6l	1i	2	0	0	0	0
6l	1k	1	0	0	0	0
6l	1l	4	0	0	0	0
6l	1m	1	0	0	0	0
6l	1o	1	0	0	0	0
6l	1p	1	0	0	0	0
6l	1q	5	0	0	0	0
6l	1u	1	0	0	1	0
6l	1v	4	0	0	0	0
6l	1w	13	0	0	0	0
6l	1x	13	0	0	1	0
6l	20	5	0	0	1	0
6l	21	9	0	0	1	0
6l	22	1	0	0	0	0
6l	23	1	0	0	0	0
6l	25	3	0	0	0	0
6l	27	3	0	0	1	0
6l	28	6	0	0	1	0
6l	29	1	0	0	0	0
6l	2A	1086	0	0	84	0
6l	2B	21	0	0	1	0
6l	2D	18	0	0	1	0
6l	2E	11	0	0	1	0
6l	2F	13	0	0	0	0
6l	2I	5	0	0	1	0
6l	2N	1	0	0	0	0
6l	2O	1	0	0	0	0
6l	2P	9	0	0	0	0
6l	2Q	3	0	0	0	0
6l	2R	3	0	0	0	0
6l	2T	6	0	0	0	0
6l	2U	1	0	0	0	0
6l	2W	1	0	0	0	0
6l	2X	3	0	0	1	0
6l	2Y	2	0	0	0	0
6l	2Z	1	0	0	0	0
6l	2a	226	0	0	28	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	2d	2	0	0	0	0
61	2e	1	0	0	0	0
61	2i	1	0	0	0	0
61	2j	4	0	0	2	0
61	2l	6	0	0	1	0
61	2p	3	0	0	0	0
61	2q	1	0	0	0	0
61	2t	4	0	0	0	0
61	2u	1	0	0	0	0
61	2v	1	0	0	0	0
61	2w	2	0	0	0	0
61	2x	7	0	0	0	0
61	2y	16	0	0	0	0
All	All	299892	0	196834	5098	2

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 11.

All (5098) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1082:U:H3	1:1A:1086:A:N6	1.56	1.03
1:1A:1082:U:O4	1:1A:1086:A:N1	1.94	1.00
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.45	0.98
1:1A:2124:G:H1	1:1A:2174:C:H42	1.02	0.97
1:2A:2585:U:H5	54:2w:76:A:HO3'	1.03	0.96
2:2B:7:G:H21	14:2S:38:GLN:HE22	1.13	0.96
1:1A:2096:U:H3	1:1A:2193:G:H1	1.09	0.95
1:2A:2127:G:C2	1:2A:2161:C:N3	2.36	0.94
32:1a:1004:A:N6	32:1a:1037:C:N3	2.16	0.94
26:14:16:CYS:SG	26:14:17:GLY:N	2.41	0.92
1:1A:2427:C:OP1	61:1A:4203:HOH:O	1.86	0.92
54:2y:18:G:H22	54:2y:55:PSU:HN3	1.09	0.92
10:1O:48:PRO:HB3	32:1a:1422:G:H5''	1.51	0.92
32:2a:559:A:H4'	32:2a:560:U:H3'	1.54	0.90
2:2B:22:U:H3	2:2B:61:G:H1	1.18	0.89
1:2A:2127:G:C6	1:2A:2161:C:N4	2.41	0.88
1:2A:2129:C:H42	1:2A:2159:G:H1	1.17	0.87
1:1A:1039:G:H1	1:1A:1116:C:H42	1.21	0.87
1:1A:1082:U:H3	1:1A:1086:A:H61	0.88	0.87
10:2O:48:PRO:HB3	32:2a:1422:G:H5''	1.57	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2822:G:OP2	61:1A:4204:HOH:O	1.91	0.87
1:2A:1670:C:OP1	61:2A:5703:HOH:O	1.91	0.87
15:2T:41:ARG:NH2	32:2a:346:G:OP1	2.06	0.86
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.57	0.86
1:1A:517:C:OP1	27:15:16:ARG:NH2	2.07	0.86
1:1A:631:A:OP1	11:1P:65:ARG:NH1	2.08	0.86
1:2A:2127:G:C2	1:2A:2161:C:C4	2.64	0.86
1:1A:2124:G:H1	1:1A:2174:C:N4	1.74	0.85
26:14:58:ARG:HH11	50:1s:68:GLY:HA3	1.41	0.85
54:2y:55:PSU:HN1	54:2y:57:G:H5''	1.40	0.85
1:1A:2499:C:OP1	61:1A:4205:HOH:O	1.94	0.85
54:2y:18:G:N2	54:2y:55:PSU:N3	2.23	0.85
55:1x:8:4SU:O2	55:1x:21:A:H2	1.60	0.84
1:2A:1689:A:H62	1:2A:1698:A:H2	1.25	0.83
32:2a:266:G:H5''	32:2a:268:C:H41	1.43	0.83
1:1A:1453:U:OP1	13:1R:77:ARG:NH1	2.11	0.83
1:2A:2127:G:N2	1:2A:2161:C:C2	2.47	0.83
1:1A:1315:C:OP2	61:1A:4207:HOH:O	1.98	0.82
32:1a:1151:A:HO2'	32:1a:1152:A:H8	1.27	0.82
1:2A:2712(A):A:OP2	61:2A:5704:HOH:O	1.97	0.82
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.61	0.82
32:1a:376:G:H5''	47:1p:5:ARG:HG2	1.61	0.82
34:2c:6:HIS:HD2	34:2c:8:ILE:H	1.25	0.82
1:1A:1253:A:OP1	61:1A:4206:HOH:O	1.97	0.82
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.61	0.82
1:2A:1411:C:H42	1:2A:1591:G:H1	1.28	0.82
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.62	0.82
1:2A:2127:G:N1	1:2A:2161:C:C4	2.48	0.82
1:1A:1054:A:H61	1:1A:1105:U:H3	1.28	0.81
1:2A:728:G:H5''	3:2D:13:ARG:HH21	1.44	0.81
1:2A:2507:C:O2'	54:2w:74:C:N4	2.12	0.81
32:2a:542:G:OP1	35:2d:10:ARG:NH2	2.14	0.81
32:2a:1133:G:H1	32:2a:1141:C:H42	1.28	0.81
1:2A:1801:G:OP2	3:2D:154:LYS:NZ	2.13	0.81
1:2A:568:U:O4	61:2A:5705:HOH:O	1.99	0.81
7:1H:149:ARG:NH1	7:1H:167:GLU:OE2	2.13	0.80
1:1A:2136:C:N3	1:1A:2155:G:N2	2.29	0.80
7:1H:101:ARG:HH22	7:1H:122:THR:HA	1.46	0.80
8:1I:31:LEU:HD21	8:1I:38:LEU:HD22	1.63	0.80
6:1G:126:ASP:HB2	6:1G:130:ASN:H	1.46	0.80
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.63	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1669:A:OP2	61:1A:4208:HOH:O	1.98	0.80
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.13	0.80
41:1j:49:VAL:HG23	45:1n:41:ARG:HB2	1.64	0.80
32:1a:1009:G:O6	32:1a:1020:U:O2	1.98	0.79
1:2A:2099:U:H3	1:2A:2190:G:H1	1.28	0.79
33:1b:69:LEU:HB3	33:1b:162:ILE:HG22	1.65	0.79
22:20:70:GLN:HE21	22:20:72:ARG:HD2	1.47	0.79
32:2a:975:A:H4'	32:2a:976:G:H5''	1.65	0.79
32:2a:376:G:H5''	47:2p:5:ARG:HB2	1.62	0.79
33:2b:101:MET:HA	33:2b:108:ILE:HG13	1.64	0.79
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.65	0.79
6:1G:114:ILE:HG12	6:1G:140:ILE:HD13	1.63	0.79
35:1d:107:ARG:HH21	35:1d:194:LEU:HD21	1.46	0.79
1:2A:981:A:OP1	61:2A:5706:HOH:O	2.01	0.79
33:1b:201:ILE:HG21	33:1b:214:ILE:HG21	1.63	0.79
1:1A:880:G:H2'	1:1A:881:G:H8	1.46	0.79
4:2E:77:ILE:HG12	4:2E:195:LEU:HD11	1.64	0.78
5:1F:158:THR:O	5:1F:164:ARG:NH1	2.15	0.78
32:1a:324:G:N7	61:1a:1912:HOH:O	2.15	0.78
32:1a:44:G:O6	61:1a:1901:HOH:O	2.01	0.78
36:2e:122:GLU:O	36:2e:126:ARG:NH1	2.16	0.78
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.13	0.78
32:2a:671:G:H5'	37:2f:77:ARG:HH22	1.46	0.78
1:1A:2136:C:N4	1:1A:2155:G:N1	2.31	0.78
1:2A:570:G:O6	61:2A:5707:HOH:O	2.01	0.78
14:2S:38:GLN:NE2	14:2S:47:THR:OG1	2.17	0.78
32:2a:1271:G:N2	32:2a:1272:G:N7	2.31	0.77
1:1A:2588:G:O6	61:1A:4209:HOH:O	2.02	0.77
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NH1	2.17	0.77
1:1A:746:A:N7	61:1A:4249:HOH:O	2.16	0.77
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.67	0.77
12:1Q:111:GLU:OE2	12:1Q:133:ARG:NH2	2.17	0.77
1:1A:1065:U:O2	1:1A:1073:A:N6	2.16	0.77
1:1A:1783:A:N7	61:1A:4251:HOH:O	2.17	0.77
21:2Z:154:ASP:N	21:2Z:154:ASP:OD1	2.17	0.77
3:1D:13:ARG:NH1	3:1D:16:MET:SD	2.57	0.77
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.49	0.77
1:2A:2136:C:N4	1:2A:2155:G:H1	1.82	0.77
5:2F:40:GLN:HE22	5:2F:182:ASN:HB2	1.50	0.77
1:1A:762:U:OP1	61:1A:4210:HOH:O	2.03	0.77
1:1A:467:G:OP1	29:17:33:ARG:NH1	2.18	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:883:G:H22	1:1A:893:C:H42	1.31	0.76
26:14:16:CYS:HB3	26:14:20:ASN:HB3	1.64	0.76
1:2A:2499:C:OP2	61:2A:5708:HOH:O	2.02	0.76
1:2A:2781:A:H5''	1:2A:2782:G:H5'	1.66	0.76
11:2P:52:GLU:OE1	11:2P:55:ARG:NH1	2.14	0.76
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.67	0.76
1:1A:2550:G:OP1	61:1A:4208:HOH:O	2.03	0.76
1:1A:826:U:OP1	61:1A:4203:HOH:O	2.03	0.76
1:2A:2690:C:OP1	13:2R:17:ARG:NH2	2.18	0.76
32:2a:742:G:OP2	46:2o:35:ARG:NH2	2.18	0.76
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.65	0.76
32:1a:975:A:H4'	32:1a:976:G:H5''	1.68	0.76
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.19	0.75
50:1s:20:LEU:HD23	50:1s:23:ASN:HD22	1.51	0.75
26:24:46:GLN:HG2	26:24:48:ARG:H	1.50	0.75
1:1A:1890:A:OP2	61:1A:4211:HOH:O	2.03	0.75
22:10:10:THR:HG22	22:10:12:ASN:H	1.52	0.75
32:1a:116:A:OP1	61:1a:1902:HOH:O	2.03	0.75
1:2A:724:U:O4	61:2A:5709:HOH:O	2.04	0.75
1:2A:1011:G:OP2	16:2U:66:ASN:ND2	2.20	0.75
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.19	0.75
32:2a:1182:G:H4'	32:2a:1183:A:H5''	1.68	0.75
35:1d:134:ASP:N	35:1d:134:ASP:OD1	2.19	0.75
36:1e:148:VAL:HG21	39:1h:107:LEU:HB3	1.69	0.75
26:24:16:CYS:SG	26:24:17:GLY:N	2.59	0.75
54:1w:2:C:H42	54:1w:71:G:H1	1.34	0.75
1:2A:785:G:OP2	61:2A:5710:HOH:O	2.04	0.75
32:2a:953:G:N7	44:2m:104:ARG:NH2	2.35	0.75
40:2i:21:PRO:HA	40:2i:59:PHE:HA	1.69	0.75
19:2X:53:LYS:HB3	19:2X:82:GLN:HB3	1.67	0.75
1:1A:963:U:OP2	61:1A:4212:HOH:O	2.04	0.74
1:1A:1332:G:OP1	61:1A:4207:HOH:O	2.04	0.74
32:1a:803:G:OP1	61:1a:1903:HOH:O	2.04	0.74
6:2G:44:GLY:HA2	6:2G:88:ILE:HB	1.69	0.74
7:2H:3:ARG:HG2	7:2H:6:ARG:HH11	1.52	0.74
35:1d:105:VAL:HG13	35:1d:110:PHE:HB2	1.68	0.74
1:2A:1798:U:H5'	3:2D:259:THR:HG22	1.69	0.74
1:1A:1264:G:OP1	27:15:19:ARG:NH2	2.18	0.74
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.69	0.74
34:2c:78:GLY:HA3	34:2c:82:GLU:H	1.52	0.74
30:18:6:THR:HG22	30:18:63:PRO:HD2	1.67	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1568:G:N7	61:2A:5750:HOH:O	2.20	0.74
3:2D:125:ILE:HB	37:2f:81:ILE:HD11	1.68	0.74
50:2s:11:VAL:O	50:2s:13:ASP:N	2.18	0.74
32:1a:1414:U:H3	32:1a:1486:G:H1	1.35	0.74
1:2A:1973:G:OP1	61:2A:5712:HOH:O	2.06	0.74
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.20	0.74
21:2Z:47:VAL:O	21:2Z:50:GLN:NE2	2.21	0.74
35:2d:57:ARG:HD3	35:2d:205:GLU:HB3	1.70	0.74
1:1A:2285:C:OP2	28:16:6:ARG:NH1	2.20	0.74
57:1A:4107:TYK:HC5B	57:1A:4107:TYK:H7A3	1.68	0.74
35:2d:119:GLN:HG2	35:2d:123:HIS:HD2	1.52	0.74
18:1W:25:ARG:NH2	18:1W:74:ALA:O	2.20	0.73
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.21	0.73
34:2c:151:VAL:HG22	34:2c:200:ALA:HA	1.69	0.73
54:2y:18:G:N2	54:2y:55:PSU:HN3	1.84	0.73
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.70	0.73
19:2X:44:GLU:OE2	61:2X:201:HOH:O	2.05	0.73
3:1D:35:LYS:HE2	3:1D:64:ILE:HG12	1.67	0.73
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.69	0.73
32:1a:407:G:H5''	35:1d:115:ARG:HG2	1.69	0.73
1:2A:1648:C:OP1	61:2A:5714:HOH:O	2.06	0.73
32:2a:1117:G:N2	32:2a:1180:A:O2'	2.22	0.73
1:1A:1952:A:OP1	10:1O:44:LYS:NZ	2.18	0.73
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.22	0.73
41:2j:38:ILE:HG12	41:2j:71:LEU:HB3	1.69	0.73
1:2A:2042:A:OP1	61:2A:5716:HOH:O	2.07	0.73
1:2A:2518:A:OP2	61:2A:5711:HOH:O	2.05	0.73
41:2j:69:ASN:O	41:2j:70:ARG:NH1	2.19	0.73
5:2F:21:ALA:HB3	5:2F:22:ALA:HA	1.71	0.73
40:1i:96:LEU:H	40:1i:98:PRO:HD2	1.54	0.73
32:2a:597:G:OP2	61:2a:3301:HOH:O	2.06	0.73
32:2a:1189:C:OP1	41:2j:51:ARG:NH2	2.22	0.73
1:1A:400:G:O6	61:1A:4214:HOH:O	2.07	0.72
7:1H:9:ILE:HB	7:1H:50:VAL:HG13	1.70	0.72
32:2a:547:A:OP1	61:2a:3302:HOH:O	2.07	0.72
32:2a:1029:C:N3	32:2a:1032:G:N2	2.37	0.72
1:1A:11:G:H2'	1:1A:12:U:H5''	1.71	0.72
39:1h:110:ALA:HB3	39:1h:121:ASP:HB3	1.70	0.72
22:10:11:ARG:O	22:10:14:ARG:NH2	2.21	0.72
34:1c:59:ARG:HG2	34:1c:64:VAL:HB	1.69	0.72
46:1o:54:ARG:HG2	46:1o:58:MET:HE2	1.70	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1254:A:OP2	61:2A:5715:HOH:O	2.07	0.72
1:1A:1094:U:H1'	1:1A:1097:U:H5	1.54	0.72
1:1A:981:A:OP1	61:1A:4213:HOH:O	2.06	0.72
41:1j:81:THR:HA	41:1j:84:GLN:HB3	1.72	0.72
1:2A:975:C:OP1	61:2A:5713:HOH:O	2.06	0.72
32:2a:444:C:H2'	32:2a:445:G:H8	1.54	0.72
32:2a:501:C:H2'	32:2a:502:G:H8	1.54	0.72
13:1R:11:ASN:ND2	61:1R:301:HOH:O	2.21	0.72
29:27:2:LYS:NZ	61:27:201:HOH:O	2.22	0.72
32:2a:1310:G:H5'	44:2m:77:ASN:HD21	1.53	0.72
40:2i:16:ARG:HB2	40:2i:64:THR:HG22	1.71	0.72
1:1A:1670:C:OP2	61:1A:4208:HOH:O	2.07	0.72
32:1a:1060:C:H5''	41:1j:51:ARG:HG2	1.69	0.72
32:2a:677:U:H3	32:2a:713:G:H22	1.36	0.72
32:2a:1055:A:N7	32:2a:1200:C:N4	2.36	0.72
4:1E:122:PHE:O	61:1E:402:HOH:O	2.06	0.72
1:2A:81:G:N7	61:2A:5761:HOH:O	2.22	0.72
1:1A:2467:C:OP2	61:1A:4217:HOH:O	2.08	0.72
53:2v:16:A:H61	55:2x:36:U:H3	1.35	0.72
6:1G:126:ASP:OD2	6:1G:130:ASN:ND2	2.17	0.72
32:1a:610:G:OP1	61:1a:1904:HOH:O	2.08	0.72
32:1a:964:A:OP1	61:1a:1905:HOH:O	2.08	0.72
32:2a:972:C:O2'	41:2j:55:LYS:O	2.08	0.72
1:1A:1062:G:H8	1:1A:1070:A:H4'	1.53	0.71
22:20:10:THR:HG22	22:20:12:ASN:H	1.55	0.71
32:1a:171:A:H2'	32:1a:172:A:C8	2.25	0.71
1:2A:752:A:H3'	29:27:1:MET:HE1	1.72	0.71
1:2A:1783:A:OP2	61:2A:5718:HOH:O	2.08	0.71
36:2e:57:LYS:HG2	36:2e:61:TYR:HE2	1.55	0.71
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.05	0.71
33:2b:71:VAL:HG21	33:2b:164:VAL:HG22	1.70	0.71
32:1a:1166:G:N2	32:1a:1170:A:OP2	2.23	0.71
52:1u:5:ASP:OD1	61:1u:101:HOH:O	2.08	0.71
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.72	0.71
32:2a:1274:G:N2	32:2a:1275:A:N7	2.39	0.71
1:1A:1648:C:OP1	61:1A:4220:HOH:O	2.09	0.71
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.24	0.71
22:20:11:ARG:O	22:20:14:ARG:NH2	2.23	0.71
41:2j:50:ILE:O	45:2n:41:ARG:NH1	2.24	0.71
1:1A:1070:A:N6	1:1A:1096:A:N3	2.39	0.71
32:1a:117:G:OP2	61:1a:1902:HOH:O	2.08	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1027:C:N4	32:1a:1034:G:C6	2.58	0.71
1:2A:2677:G:N3	61:2A:5763:HOH:O	2.22	0.71
1:1A:248:G:OP1	61:1A:4216:HOH:O	2.07	0.71
32:2a:572:A:OP1	61:2a:3303:HOH:O	2.08	0.71
1:1A:2608:G:N7	61:1A:4287:HOH:O	2.24	0.71
11:1P:52:GLU:OE1	11:1P:55:ARG:NH1	2.23	0.71
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	1.72	0.71
1:2A:740:U:OP1	61:2A:5717:HOH:O	2.07	0.71
32:1a:559:A:H4'	32:1a:560:U:H3'	1.72	0.71
40:1i:21:PRO:HA	40:1i:59:PHE:HA	1.73	0.71
32:2a:673:G:H2'	32:2a:674:G:C8	2.26	0.71
34:1c:6:HIS:HD2	34:1c:8:ILE:H	1.35	0.71
3:1D:147:LEU:HD13	3:1D:155:LEU:HD11	1.73	0.70
32:1a:877:C:OP1	39:1h:88:LYS:NZ	2.23	0.70
1:2A:1352:U:OP2	61:2A:5719:HOH:O	2.08	0.70
32:2a:1086:U:H3	32:2a:1099:G:H22	1.39	0.70
34:1c:15:THR:HG21	34:1c:181:ASN:HA	1.73	0.70
44:1m:58:GLU:O	44:1m:62:ASN:ND2	2.23	0.70
1:2A:2206:G:H5''	1:2A:2207:G:N7	2.06	0.70
32:2a:768:A:OP2	61:2a:3305:HOH:O	2.09	0.70
1:1A:2821:A:OP2	61:1A:4204:HOH:O	2.08	0.70
6:2G:114:ILE:HA	6:2G:140:ILE:HD11	1.72	0.70
32:2a:1379:G:O6	38:2g:2:ALA:N	2.25	0.70
40:2i:53:VAL:O	40:2i:55:ALA:N	2.23	0.70
40:1i:128:ARG:NH2	55:1x:33:U:OP2	2.23	0.70
1:2A:2129:C:N4	1:2A:2159:G:H1	1.88	0.70
1:1A:1986:A:OP1	61:1A:4224:HOH:O	2.10	0.70
24:12:65:ASN:OD1	24:12:69:ARG:NH1	2.25	0.70
1:2A:2513:G:N7	61:2A:5783:HOH:O	2.25	0.70
5:2F:53:THR:HG23	5:2F:55:GLY:H	1.57	0.70
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.24	0.70
1:1A:1013:C:OP2	61:1A:4221:HOH:O	2.09	0.70
32:2a:1152:A:OP1	41:2j:70:ARG:NH2	2.24	0.70
1:2A:2624:G:N7	61:2A:5784:HOH:O	2.25	0.70
1:1A:2136:C:N4	1:1A:2155:G:H1	1.90	0.70
32:1a:1145:C:H4'	32:1a:1146:A:H5'	1.74	0.70
33:2b:8:LYS:HG2	33:2b:9:GLU:H	1.56	0.70
32:1a:521:G:OP2	43:1l:54:LYS:NZ	2.25	0.70
54:1w:26:A:H61	54:1w:44:G:H1	1.36	0.70
1:2A:2285:C:OP2	28:26:6:ARG:NH1	2.25	0.70
1:2A:2759:G:OP2	61:2A:5722:HOH:O	2.10	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:1:MET:N	24:22:52:ASP:OD1	2.25	0.70
32:2a:576:G:OP1	61:2a:3304:HOH:O	2.09	0.70
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.74	0.70
1:2A:400:G:N7	61:2A:5776:HOH:O	2.24	0.70
1:2A:2572:A:OP1	1:2A:2574:G:O2'	2.10	0.70
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.72	0.70
1:2A:2127:G:C2	1:2A:2161:C:C2	2.80	0.69
1:2A:2819:G:N7	61:2A:5781:HOH:O	2.25	0.69
24:22:65:ASN:OD1	24:22:69:ARG:NH1	2.25	0.69
1:1A:792:G:O6	61:1A:4218:HOH:O	2.08	0.69
1:2A:2782:G:OP2	61:2A:5721:HOH:O	2.10	0.69
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.27	0.69
1:1A:1271:G:OP2	61:1A:4220:HOH:O	2.11	0.69
2:2B:75:G:H22	21:2Z:73:GLN:HE21	1.40	0.69
21:2Z:52:SER:OG	21:2Z:53:ILE:N	2.25	0.69
1:1A:1968:G:OP1	61:1A:4223:HOH:O	2.09	0.69
1:1A:2428:G:OP1	61:1A:4203:HOH:O	2.09	0.69
21:2Z:131:ARG:H	21:2Z:131:ARG:HD2	1.58	0.69
32:2a:401:C:OP2	35:2d:73:ARG:NH2	2.22	0.69
32:2a:403:C:O2'	35:2d:122:ARG:NH2	2.26	0.69
32:2a:684:A:N6	61:2a:3325:HOH:O	2.25	0.69
1:2A:467:G:OP1	29:27:33:ARG:NH1	2.24	0.69
1:2A:1354:A:H5''	3:2D:38:LYS:HD3	1.75	0.69
32:2a:1239:A:H62	32:2a:1299:A:H62	1.38	0.69
1:1A:1603:A:OP1	61:1A:4228:HOH:O	2.10	0.69
1:1A:2337:G:OP1	61:1A:4227:HOH:O	2.10	0.69
18:1W:92:ARG:NH2	61:1W:301:HOH:O	2.25	0.69
42:1k:79:SER:HA	42:1k:104:GLN:HB3	1.73	0.69
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.27	0.69
32:2a:864:A:OP2	61:2a:3306:HOH:O	2.11	0.69
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.65	0.69
6:2G:113:ARG:NH2	6:2G:139:LEU:O	2.26	0.69
21:2Z:152:ALA:O	21:2Z:154:ASP:N	2.26	0.69
44:2m:34:LEU:HD13	44:2m:41:PRO:HB3	1.74	0.69
54:2w:8:4SU:S4	54:2w:13:C:O2'	2.49	0.69
1:1A:2006:C:OP1	61:1A:4222:HOH:O	2.09	0.69
1:1A:2705:A:N3	61:1A:4303:HOH:O	2.26	0.69
32:1a:1027:C:C2	32:1a:1034:G:N2	2.61	0.69
2:2B:1:U:OP3	61:2B:301:HOH:O	2.11	0.69
2:2B:4:C:H42	2:2B:117:G:H1	1.39	0.69
5:1F:116:ASP:OD1	5:1F:119:ARG:NH2	2.26	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.73	0.69
1:2A:2431:U:OP2	61:2A:5720:HOH:O	2.09	0.69
7:2H:33:LEU:HD21	7:2H:136:ILE:HB	1.75	0.69
21:2Z:97:GLU:HB3	21:2Z:125:LEU:HD11	1.75	0.69
8:1I:38:LEU:HD23	8:1I:38:LEU:H	1.56	0.68
40:1i:48:GLU:HA	40:1i:51:ARG:HD3	1.73	0.68
1:2A:2445:G:N7	61:2A:5795:HOH:O	2.26	0.68
44:2m:88:ARG:O	44:2m:92:HIS:ND1	2.26	0.68
1:1A:2602:A:OP1	61:1A:4230:HOH:O	2.11	0.68
1:2A:2138:C:H42	1:2A:2153:G:H1	1.38	0.68
42:2k:85:ARG:HD3	42:2k:113:PRO:HD3	1.74	0.68
1:1A:982:C:OP2	61:1A:4225:HOH:O	2.10	0.68
33:2b:18:GLY:HA2	33:2b:42:ILE:HG13	1.74	0.68
41:2j:49:VAL:HG23	45:2n:41:ARG:HB2	1.73	0.68
51:2t:57:ARG:HH22	51:2t:100:ILE:HD12	1.58	0.68
13:1R:96:ARG:NH1	13:1R:115:GLU:OE2	2.26	0.68
32:1a:148:G:H2'	32:1a:149:A:H8	1.58	0.68
1:2A:821:A:N1	61:2A:5785:HOH:O	2.25	0.68
1:1A:728:G:H5''	3:1D:13:ARG:HH21	1.59	0.68
1:1A:1779:U:OP2	61:1A:4229:HOH:O	2.11	0.68
32:1a:972:C:O2'	41:1j:55:LYS:O	2.11	0.68
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.29	0.68
38:2g:69:VAL:HG21	38:2g:104:LEU:HD13	1.76	0.68
1:1A:1452:A:OP2	61:1A:4226:HOH:O	2.10	0.68
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.12	0.68
1:1A:185:U:H4'	1:1A:218:A:H4'	1.75	0.68
32:1a:1027:C:C4	32:1a:1034:G:C2	2.81	0.68
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.76	0.68
34:2c:6:HIS:CD2	34:2c:8:ILE:H	2.10	0.68
1:1A:392:C:OP1	61:1A:4233:HOH:O	2.12	0.68
32:1a:664:G:H22	32:1a:741:G:H1	1.42	0.68
32:1a:1219:U:OP1	45:1n:19:ARG:NH1	2.24	0.68
1:2A:674:G:H1'	5:2F:74:ARG:HD3	1.76	0.68
1:2A:1271:G:OP2	61:2A:5714:HOH:O	2.10	0.68
32:2a:559:A:OP1	36:2e:126:ARG:NH2	2.26	0.68
32:2a:1469:G:N7	61:2a:3328:HOH:O	2.27	0.68
32:2a:1264:C:H42	32:2a:1271:G:H1	1.41	0.68
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.27	0.68
4:1E:135:HIS:NE2	61:1E:403:HOH:O	2.27	0.68
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.76	0.68
1:2A:392:C:H5''	1:2A:409:C:H5''	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:2W:11:ARG:NH1	18:2W:99:ARG:O	2.26	0.68
44:2m:25:ILE:HD11	44:2m:66:LEU:HD13	1.74	0.68
32:1a:1505:G:OP2	61:1a:1907:HOH:O	2.12	0.67
8:2I:29:TYR:HD2	8:2I:30:LEU:HD23	1.59	0.67
32:2a:1029:C:N4	32:2a:1032:G:N1	2.41	0.67
4:1E:77:ILE:HG21	4:1E:195:LEU:HD11	1.76	0.67
19:1X:43:VAL:HG21	19:1X:81:VAL:HG11	1.76	0.67
1:2A:2105:C:H2'	1:2A:2106:G:H8	1.59	0.67
44:1m:17:VAL:O	44:1m:20:THR:OG1	2.10	0.67
6:2G:11:TYR:HB2	6:2G:176:LEU:HD21	1.74	0.67
32:1a:863:U:OP1	61:1a:1906:HOH:O	2.11	0.67
32:1a:966:M2G:HM13	32:1a:967:5MC:H1'	1.76	0.67
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.59	0.67
1:2A:2022:U:O2'	1:2A:2617:C:H5'	1.93	0.67
1:1A:2361:A:OP2	30:18:26:LYS:NZ	2.26	0.67
7:1H:137:ASP:HB3	7:1H:140:LYS:HB3	1.76	0.67
32:1a:944:G:OP1	61:1a:1908:HOH:O	2.13	0.67
1:1A:1023:U:OP2	61:1A:4215:HOH:O	2.13	0.67
48:1q:26:GLN:HE21	48:1q:37:LYS:HE3	1.59	0.67
50:1s:27:GLU:N	50:1s:27:GLU:OE1	2.27	0.67
1:1A:739:G:OP1	61:1A:4231:HOH:O	2.11	0.67
14:1S:15:ARG:O	14:1S:19:LYS:HG2	1.95	0.67
1:2A:2394:C:N3	54:2y:76:A:O2'	2.25	0.67
3:2D:66:ASP:OD2	3:2D:103:ARG:NH1	2.28	0.67
10:2O:76:ALA:HB3	15:2T:75:ILE:HB	1.76	0.67
32:2a:1289:A:OP1	52:2u:10:ARG:NH2	2.28	0.67
39:2h:119:LEU:HB3	39:2h:123:GLU:HB2	1.77	0.67
1:2A:1264:G:OP1	27:25:19:ARG:NH2	2.21	0.67
26:24:53:GLU:HG2	26:24:54:GLY:H	1.60	0.67
34:1c:87:LEU:O	34:1c:91:LEU:N	2.27	0.67
11:2P:29:LYS:HD3	11:2P:30:THR:HG23	1.77	0.67
32:1a:542:G:OP1	35:1d:10:ARG:NH2	2.28	0.67
39:1h:51:VAL:HG21	39:1h:60:ARG:HB2	1.76	0.67
1:2A:728:G:H4'	3:2D:13:ARG:HE	1.59	0.67
13:2R:33:ARG:NH1	13:2R:115:GLU:OE1	2.27	0.67
41:2j:11:PHE:HE1	41:2j:67:THR:HG22	1.57	0.67
1:1A:23:G:OP1	1:1A:504:U:N3	2.27	0.66
23:21:52:ARG:HH21	23:21:57:GLU:HB2	1.60	0.66
32:2a:1133:G:H1	32:2a:1141:C:N4	1.93	0.66
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.26	0.66
44:1m:11:ARG:HA	44:1m:45:VAL:HB	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:25:40:LYS:NZ	27:25:44:THR:O	2.28	0.66
1:1A:2629:A:O2'	1:1A:2630:G:OP2	2.14	0.66
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.28	0.66
22:10:27:GLU:HG3	22:10:68:GLU:HA	1.77	0.66
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.78	0.66
32:2a:1346:A:N1	32:2a:1374:A:H5''	2.10	0.66
35:1d:31:CYS:HB2	59:1d:302:SF4:S3	2.34	0.66
43:1l:71:PRO:O	43:1l:102:ARG:NH1	2.28	0.66
1:2A:2598:A:OP2	61:2A:5729:HOH:O	2.14	0.66
11:2P:91:PHE:O	11:2P:121:LYS:NZ	2.24	0.66
15:2T:39:ARG:NH2	32:2a:345:C:OP2	2.29	0.66
15:2T:55:ASN:HD22	15:2T:58:ASN:HB2	1.60	0.66
1:1A:1993:U:OP2	61:1A:4232:HOH:O	2.12	0.66
32:2a:1318:A:H5''	50:2s:3:ARG:HH22	1.61	0.66
1:1A:370:G:OP2	61:1A:4237:HOH:O	2.14	0.66
32:1a:410:G:OP1	35:1d:30:LYS:NZ	2.27	0.66
16:1U:89:GLU:HG3	17:1V:50:PRO:HB3	1.77	0.66
32:1a:45:U:H2'	32:1a:46:G:C8	2.31	0.66
10:2O:111:PHE:HB3	10:2O:114:ILE:HD12	1.78	0.66
44:2m:31:LYS:HA	44:2m:34:LEU:HD12	1.78	0.66
1:1A:1938:A:OP2	61:1A:4238:HOH:O	2.14	0.66
8:1I:72:LEU:HD21	8:1I:107:VAL:HG11	1.77	0.66
54:1w:60:U:H5''	54:1w:61:C:H5	1.60	0.66
1:2A:897:C:H1'	54:2w:56:C:H5	1.60	0.66
32:2a:862:C:H1'	32:2a:874:G:H5''	1.78	0.66
1:1A:1183:G:O2'	25:13:29:ARG:NH2	2.28	0.66
1:1A:1619:G:N7	61:1A:4317:HOH:O	2.28	0.66
36:1e:149:GLU:HA	36:1e:152:ARG:HB2	1.78	0.66
33:2b:97:TRP:HH2	33:2b:102:LEU:HD13	1.59	0.66
1:1A:326:G:N7	61:1A:4336:HOH:O	2.29	0.66
1:1A:2414:G:N7	61:1A:4322:HOH:O	2.28	0.66
8:1I:130:TYR:O	8:1I:138:ILE:N	2.27	0.66
32:1a:171:A:H2'	32:1a:172:A:H8	1.61	0.66
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.30	0.66
21:2Z:102:LEU:HD23	21:2Z:139:VAL:HG21	1.78	0.66
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.96	0.66
1:1A:671:C:N4	61:1A:4331:HOH:O	2.29	0.65
20:1Y:106:LEU:O	20:1Y:107:ASP:HB2	1.95	0.65
32:1a:486:U:H2'	32:1a:487:A:H8	1.60	0.65
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.61	0.65
1:2A:2597:G:OP1	61:2A:5725:HOH:O	2.13	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	1.78	0.65
21:2Z:101:PRO:HA	21:2Z:123:ASP:HA	1.78	0.65
1:1A:1418:G:OP2	61:1A:4234:HOH:O	2.12	0.65
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.77	0.65
33:1b:22:LYS:HG2	33:1b:40:HIS:HE1	1.61	0.65
1:2A:1352:U:OP1	61:2A:5732:HOH:O	2.14	0.65
1:2A:2183:C:H2'	1:2A:2184:G:H8	1.60	0.65
27:25:33:CYS:HB2	27:25:40:LYS:HD3	1.79	0.65
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.76	0.65
32:1a:1136:U:H5''	32:1a:1137:C:C4	2.31	0.65
1:2A:271(U):G:N7	61:2A:5814:HOH:O	2.29	0.65
2:2B:48:A:H4'	14:2S:95:HIS:HD2	1.61	0.65
32:2a:363:A:OP2	43:2l:34:ARG:NH1	2.29	0.65
32:2a:953:G:H5'	32:2a:965:A:H61	1.60	0.65
43:2l:86:ARG:NH1	61:2l:301:HOH:O	2.28	0.65
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.29	0.65
1:1A:2687:U:OP2	61:1A:4236:HOH:O	2.14	0.65
1:1A:1893:C:OP1	61:1A:4239:HOH:O	2.14	0.65
1:1A:2584:U:H2'	1:1A:2585:U:H2'	1.78	0.65
1:2A:775:G:O3'	61:2A:5727:HOH:O	2.13	0.65
35:1d:79:PHE:O	35:1d:83:SER:OG	2.15	0.65
1:2A:2302:G:N2	6:2G:126:ASP:OD1	2.25	0.65
32:2a:375:U:O4	61:2a:3307:HOH:O	2.11	0.65
15:1T:74:ARG:HG2	15:1T:76:PHE:CZ	2.32	0.65
19:1X:31:HIS:CD2	19:1X:33:LYS:H	2.15	0.65
1:2A:332:A:O2'	1:2A:334:C:OP2	2.14	0.65
1:2A:854:G:O6	61:2A:5728:HOH:O	2.14	0.65
1:2A:1833:U:OP1	61:2A:5723:HOH:O	2.13	0.65
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.78	0.65
23:21:2:SER:HB3	23:21:46:LEU:HD12	1.79	0.65
32:2a:1518:MA6:H93	32:2a:1519:MA6:H92	1.76	0.65
1:1A:2223:G:OP1	3:1D:172:TYR:OH	2.13	0.65
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.29	0.65
1:2A:2589:A:OP1	61:2A:5730:HOH:O	2.14	0.65
1:2A:2683:C:O2	10:2O:70:LYS:NZ	2.29	0.65
1:1A:1975:G:OP2	61:1A:4242:HOH:O	2.15	0.65
4:1E:29:GLY:HA3	61:1E:405:HOH:O	1.96	0.65
11:1P:39:LYS:HB2	11:1P:45:LEU:HG	1.77	0.65
1:2A:789:A:N1	61:2A:5823:HOH:O	2.30	0.65
1:2A:918:A:N3	2:2B:80:U:O2'	2.29	0.65
1:2A:2822:G:OP2	61:2A:5726:HOH:O	2.13	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:31:LEU:HD21	8:2I:38:LEU:HG	1.79	0.65
33:2b:219:VAL:HA	33:2b:222:ILE:HG12	1.79	0.65
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.78	0.65
1:1A:1352:U:OP2	61:1A:4245:HOH:O	2.15	0.65
1:1A:2810:A:N6	1:1A:2891:G:O2'	2.30	0.65
36:1e:8:GLU:OE2	36:1e:63:ARG:NH2	2.30	0.65
1:2A:2711:A:OP2	61:2A:5704:HOH:O	2.14	0.65
7:2H:159:GLU:HG3	7:2H:169:VAL:HG11	1.78	0.65
10:2O:13:ASN:HD21	10:2O:96:THR:H	1.44	0.65
19:2X:94:GLY:H	19:2X:95:LEU:HB2	1.60	0.65
39:2h:46:LYS:HG3	39:2h:64:LYS:HG2	1.79	0.65
51:2t:43:LEU:HD13	51:2t:51:GLU:HB3	1.79	0.65
1:1A:331:A:N1	61:1A:4329:HOH:O	2.29	0.64
7:1H:86:GLU:OE2	7:1H:132:ARG:NH2	2.30	0.64
21:1Z:157:LEU:HD21	21:1Z:163:LEU:HB2	1.79	0.64
32:1a:1401:G:N7	61:1a:1926:HOH:O	2.28	0.64
12:2Q:52:VAL:HA	12:2Q:55:VAL:HG12	1.79	0.64
32:2a:64:G:H4'	32:2a:65:U:H3'	1.79	0.64
32:2a:1095:U:H2'	32:2a:1096:C:C6	2.32	0.64
32:2a:1329:A:H5''	44:2m:26:GLY:H	1.61	0.64
32:2a:1347:G:H5''	40:2i:107:ARG:HB3	1.79	0.64
1:1A:897:C:N3	1:1A:898:C:N4	2.45	0.64
1:1A:2815:C:H5'	27:15:29:THR:HG21	1.79	0.64
2:1B:13:A:N1	2:1B:69:G:O2'	2.28	0.64
1:1A:272(J):C:H2'	1:1A:274:G:H8	1.62	0.64
48:1q:9:VAL:HG12	48:1q:56:VAL:HG22	1.79	0.64
1:2A:307:G:H21	1:2A:330:A:H62	1.44	0.64
1:2A:576:U:OP1	61:2A:5735:HOH:O	2.15	0.64
1:2A:2127:G:C5	1:2A:2161:C:N4	2.65	0.64
1:2A:2448:A:OP1	61:2A:5707:HOH:O	2.15	0.64
15:2T:117:ASP:OD2	15:2T:120:ARG:NE	2.30	0.64
23:21:32:LYS:O	61:21:201:HOH:O	2.14	0.64
32:2a:973:G:H3'	32:2a:974:A:H5''	1.78	0.64
34:2c:125:GLU:HB2	34:2c:190:ARG:HE	1.63	0.64
8:2I:4:ILE:HG12	8:2I:18:VAL:HG22	1.79	0.64
1:1A:1395:A:OP1	61:1A:4228:HOH:O	2.15	0.64
1:2A:1948:G:N7	61:2A:5826:HOH:O	2.30	0.64
1:2A:2362:G:N3	61:2A:5817:HOH:O	2.29	0.64
15:2T:27:THR:HB	15:2T:89:VAL:HG22	1.80	0.64
32:2a:770:C:OP1	61:2a:3308:HOH:O	2.15	0.64
32:2a:1226:C:OP2	44:2m:91:ARG:NH1	2.30	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1267:U:O3'	61:2A:5733:HOH:O	2.15	0.64
1:2A:2206:G:H3'	1:2A:2207:G:C8	2.32	0.64
1:2A:2448:A:N6	61:2A:5825:HOH:O	2.30	0.64
44:2m:33:ALA:O	44:2m:37:THR:OG1	2.12	0.64
32:1a:864:A:OP1	61:1a:1910:HOH:O	2.14	0.64
1:2A:236:C:H2'	1:2A:237:C:H6	1.63	0.64
1:2A:2639:A:OP2	61:2A:5734:HOH:O	2.15	0.64
4:2E:127:ASP:OD2	61:2E:401:HOH:O	2.14	0.64
6:2G:126:ASP:OD2	6:2G:130:ASN:ND2	2.31	0.64
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HB2	1.61	0.64
6:1G:64:THR:HB	6:1G:94:LEU:HD21	1.80	0.64
32:1a:1159:U:OP1	33:1b:133:LYS:NZ	2.30	0.64
7:2H:11:VAL:HG13	7:2H:15:VAL:HG22	1.78	0.64
1:1A:422:A:OP2	61:1A:4243:HOH:O	2.15	0.64
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.32	0.64
32:1a:998:G:H1	32:1a:1043:C:H42	1.46	0.64
40:1i:29:ASN:ND2	40:1i:65:VAL:O	2.30	0.64
2:2B:40:U:H2'	26:24:2:LYS:HE3	1.80	0.64
15:2T:16:ARG:NH2	15:2T:18:ASP:OD2	2.31	0.64
15:2T:107:ASP:OD2	15:2T:111:ARG:NH1	2.27	0.64
32:2a:1271:G:N1	32:2a:1272:G:O6	2.31	0.64
32:1a:453:A:O2'	47:1p:68:ASP:O	2.15	0.64
14:2S:25:ARG:NH1	14:2S:42:ASP:OD2	2.30	0.64
21:2Z:146:ILE:HG12	21:2Z:174:VAL:HG13	1.80	0.64
1:1A:2350:C:OP2	61:1A:4241:HOH:O	2.15	0.63
7:1H:56:SER:HB3	7:1H:61:HIS:ND1	2.13	0.63
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.63	0.63
32:1a:1291:G:O2'	40:1i:38:GLN:OE1	2.17	0.63
13:2R:56:LYS:NZ	13:2R:90:ARG:O	2.30	0.63
32:2a:1002:G:H1	32:2a:1038:C:H42	1.46	0.63
32:2a:1251:A:H2'	32:2a:1252:A:C8	2.33	0.63
1:1A:1398:C:OP1	19:1X:53:LYS:NZ	2.30	0.63
1:1A:1456:G:OP2	61:1A:4244:HOH:O	2.15	0.63
32:1a:1025:U:O2	32:1a:1036:G:O6	2.17	0.63
32:1a:1296:C:OP1	44:1m:44:ARG:NH2	2.31	0.63
3:1D:239:ARG:NH2	61:1D:403:HOH:O	2.23	0.63
32:1a:1047:G:H5''	45:1n:4:LYS:HD3	1.78	0.63
32:1a:1302:U:OP2	44:1m:21:TYR:OH	2.09	0.63
1:2A:143(A):C:O2'	19:2X:2:LYS:NZ	2.31	0.63
32:2a:1089:G:H1	32:2a:1096:C:H42	1.47	0.63
32:2a:1270:C:HO2'	32:2a:1313:U:HO2'	1.43	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1329:A:OP2	52:2u:7:ARG:NH1	2.25	0.63
39:2h:33:GLU:O	39:2h:36:LEU:N	2.31	0.63
40:2i:9:ARG:HG3	40:2i:14:VAL:HG13	1.80	0.63
44:2m:81:LEU:HD22	44:2m:88:ARG:HH12	1.63	0.63
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.14	0.63
43:1l:39:VAL:HG11	43:1l:41:ARG:HH11	1.61	0.63
32:2a:297:G:N2	32:2a:300:A:OP2	2.31	0.63
32:2a:619:U:N3	35:2d:134:ASP:OD1	2.28	0.63
21:2Z:5:LEU:HB2	21:2Z:47:VAL:HG21	1.80	0.63
41:2j:78:ASN:O	41:2j:80:LYS:N	2.32	0.63
14:1S:27:SER:HA	14:1S:88:ASP:HB3	1.79	0.63
32:1a:148:G:H2'	32:1a:149:A:C8	2.33	0.63
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.63	0.63
1:2A:1456:G:OP2	61:2A:5736:HOH:O	2.15	0.63
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.31	0.63
48:2q:9:VAL:HG12	48:2q:56:VAL:HG22	1.79	0.63
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.32	0.63
32:1a:67:C:H2'	32:1a:68:G:C8	2.34	0.63
32:1a:142:G:H2'	32:1a:143:A:H8	1.63	0.63
1:2A:1783:A:HO2'	1:2A:2607:G:HO2'	1.43	0.63
1:1A:1062:G:P	1:1A:1070:A:H1'	2.39	0.63
21:1Z:93:ASP:HB3	21:1Z:131:ARG:HH22	1.64	0.63
41:1j:35:SER:HB3	41:1j:73:ASP:HB2	1.81	0.63
1:2A:2499:C:O2	61:2A:5731:HOH:O	2.14	0.63
32:2a:953:G:H5'	32:2a:965:A:N6	2.13	0.63
1:1A:1188:U:H4'	17:1V:79:VAL:HG22	1.81	0.63
1:1A:2400:G:O6	61:1A:4219:HOH:O	2.09	0.63
2:1B:57:A:H1'	6:1G:29:TRP:HB2	1.80	0.63
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.81	0.63
12:2Q:85:LYS:HD3	22:20:7:LEU:HD22	1.80	0.63
32:2a:1029:C:C4	32:2a:1032:G:N1	2.64	0.63
33:2b:74:LYS:HG2	33:2b:169:LYS:HG2	1.78	0.63
38:2g:80:VAL:HB	38:2g:85:TYR:HE2	1.63	0.63
1:1A:1070:A:N7	1:1A:1096:A:O2'	2.25	0.62
22:10:70:GLN:OE1	22:10:80:HIS:NE2	2.30	0.62
7:2H:98:LEU:HD13	7:2H:125:VAL:HG22	1.79	0.62
32:2a:979:C:OP1	32:2a:1223:C:N4	2.32	0.62
54:2w:18:G:O2'	54:2w:57:G:N2	2.32	0.62
1:1A:1054:A:N6	1:1A:1105:U:H3	1.96	0.62
26:14:18:CYS:SG	26:14:20:ASN:HB2	2.40	0.62
50:1s:49:ILE:HG13	50:1s:62:ILE:HD11	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:495:G:N3	18:2W:61:ASN:ND2	2.47	0.62
1:2A:1792:G:O2'	1:2A:1830:C:OP1	2.16	0.62
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.82	0.62
14:2S:50:SER:O	14:2S:76:LYS:NZ	2.32	0.62
32:2a:903:G:OP1	61:2a:3309:HOH:O	2.16	0.62
32:2a:931:C:H42	32:2a:1386:G:H1	1.47	0.62
40:2i:99:LEU:HB3	40:2i:101:PHE:CE2	2.35	0.62
51:2t:10:LEU:HB3	51:2t:12:ALA:H	1.64	0.62
1:1A:1011:G:OP1	16:1U:77:SER:OG	2.14	0.62
1:1A:1062:G:H2'	1:1A:1063:G:H8	1.64	0.62
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.30	0.62
32:2a:1149:C:O2'	32:2a:1280:A:N1	2.32	0.62
34:2c:77:ILE:HG13	34:2c:78:GLY:H	1.64	0.62
33:1b:195:ASP:O	39:1h:68:ARG:NH2	2.32	0.62
34:1c:8:ILE:HD13	34:1c:184:TYR:HB3	1.81	0.62
44:1m:4:ILE:HD12	44:1m:5:ALA:HA	1.81	0.62
54:1y:51:U:H3	54:1y:63:G:H1	1.47	0.62
12:2Q:11:LYS:NZ	12:2Q:88:GLY:O	2.26	0.62
32:2a:1138:G:C6	32:2a:1140:C:H1'	2.35	0.62
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.64	0.62
44:1m:80:ARG:NH1	50:1s:65:ASN:O	2.32	0.62
54:1y:8:4SU:H4'	54:1y:48:C:H4'	1.81	0.62
1:2A:852:G:H2'	1:2A:853:G:C8	2.34	0.62
1:2A:2143:C:H2'	1:2A:2144:U:O4'	1.99	0.62
35:2d:157:LEU:O	35:2d:161:ASN:ND2	2.31	0.62
42:1k:85:ARG:HD3	42:1k:113:PRO:HD3	1.79	0.62
1:2A:1113:U:H2'	1:2A:1114:G:C8	2.34	0.62
1:2A:2317:C:N4	1:2A:2318:G:O6	2.32	0.62
8:1I:77:LEU:HD11	8:1I:101:LEU:HB2	1.82	0.62
1:2A:2303:G:O2'	6:2G:132:ASN:ND2	2.32	0.62
13:2R:49:ASP:OD1	13:2R:95:THR:OG1	2.17	0.62
21:2Z:130:PRO:HG2	21:2Z:131:ARG:HD2	1.81	0.62
32:2a:587:G:N2	32:2a:754:C:OP2	2.31	0.62
32:2a:1348:U:H2'	32:2a:1349:A:H8	1.64	0.62
1:1A:1300:U:H4'	1:1A:1301:A:H5''	1.80	0.62
1:1A:1509(A):A:H3'	1:1A:1509(B):A:H8	1.64	0.62
4:1E:59:VAL:HG21	4:1E:74:PRO:HB3	1.81	0.62
26:14:55:ARG:N	26:14:56:VAL:HA	2.14	0.62
32:2a:1176:A:H2'	32:2a:1177:G:C8	2.34	0.62
1:1A:602:G:O2'	1:1A:655:A:N6	2.32	0.62
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1030(A):G:O2'	32:1a:1031:G:N2	2.33	0.62
35:1d:31:CYS:CB	59:1d:302:SF4:S3	2.88	0.62
50:1s:22:LEU:HB3	50:1s:27:GLU:HB3	1.82	0.62
54:1y:26:A:H61	54:1y:44:G:H1	1.47	0.62
1:2A:2447:G:N2	1:2A:2450:A:OP2	2.33	0.62
23:21:82:LEU:HA	23:21:85:LEU:HD12	1.82	0.62
32:1a:1191:A:OP1	34:1c:4:LYS:NZ	2.29	0.62
33:1b:93:VAL:HG21	33:1b:97:TRP:HD1	1.64	0.62
1:2A:1031:G:H5''	31:29:8:LYS:HE3	1.82	0.62
32:2a:390:C:O3'	47:2p:28:ARG:NH2	2.32	0.62
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	1.82	0.62
12:1Q:85:LYS:HG2	22:10:7:LEU:HB3	1.82	0.61
1:2A:956:G:OP2	12:2Q:14:ARG:NH1	2.31	0.61
32:2a:407:G:H5''	35:2d:115:ARG:HB3	1.81	0.61
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.15	0.61
1:1A:1086:A:O2'	1:1A:1087:G:N7	2.33	0.61
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.35	0.61
8:1I:3:VAL:HG12	8:1I:38:LEU:HA	1.82	0.61
1:2A:2727:G:O2'	10:2O:70:LYS:NZ	2.33	0.61
13:2R:100:LEU:HD21	13:2R:113:LEU:HD23	1.82	0.61
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.35	0.61
40:2i:99:LEU:HB3	40:2i:101:PHE:HE2	1.65	0.61
26:14:55:ARG:H	26:14:56:VAL:HA	1.65	0.61
32:1a:486:U:H2'	32:1a:487:A:C8	2.35	0.61
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.35	0.61
32:2a:504:C:OP1	61:2a:3310:HOH:O	2.16	0.61
32:1a:986:A:N3	50:1s:52:TYR:OH	2.34	0.61
6:2G:109:VAL:HG21	26:24:14:ILE:HD13	1.82	0.61
18:2W:1:MET:HE2	18:2W:62:HIS:HB3	1.83	0.61
32:2a:426:G:OP1	35:2d:38:TYR:OH	2.16	0.61
32:2a:742:G:P	46:2o:35:ARG:HH22	2.23	0.61
34:2c:47:LEU:HB2	34:2c:52:LEU:HD22	1.81	0.61
36:2e:31:LEU:HD22	36:2e:43:LEU:HD11	1.82	0.61
40:2i:26:VAL:HG23	40:2i:33:PHE:HB2	1.80	0.61
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.35	0.61
4:1E:34:VAL:HB	4:1E:48:GLN:HE21	1.64	0.61
11:1P:50:ARG:HH21	30:18:7:HIS:HD2	1.47	0.61
39:1h:124:ALA:O	39:1h:128:GLY:N	2.34	0.61
1:2A:1639:U:H2'	1:2A:1640:C:H5''	1.81	0.61
14:2S:68:GLN:HA	14:2S:71:ARG:HD3	1.82	0.61
32:2a:419:C:OP1	32:2a:513:C:O2'	2.17	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:192:C:OP1	61:1A:4248:HOH:O	2.16	0.61
13:1R:97:VAL:HG22	13:1R:114:VAL:HG13	1.83	0.61
2:2B:24:G:N7	2:2B:56:G:H2'	2.15	0.61
21:2Z:72:ARG:NH2	21:2Z:97:GLU:O	2.33	0.61
41:1j:5:ARG:NH2	41:1j:73:ASP:OD2	2.32	0.61
1:2A:749:C:OP2	61:2A:5737:HOH:O	2.15	0.61
42:2k:48:ILE:O	42:2k:50:TYR:N	2.33	0.61
8:1I:75:LEU:HD22	8:1I:105:HIS:CD2	2.36	0.61
21:1Z:156:LYS:HD2	21:1Z:158:PRO:HD3	1.81	0.61
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.36	0.61
6:2G:39:ILE:HA	6:2G:157:ILE:HG13	1.83	0.61
12:2Q:38:GLU:HG3	12:2Q:127:ILE:HB	1.82	0.61
15:2T:30:VAL:HG22	15:2T:86:ILE:HG12	1.82	0.61
32:2a:410:G:OP1	35:2d:30:LYS:NZ	2.29	0.61
34:2c:7:PRO:O	34:2c:11:ARG:NH1	2.33	0.61
1:1A:1196:C:HO2'	1:1A:1227:G:HO2'	1.49	0.61
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.83	0.61
32:1a:501:C:H2'	32:1a:502:G:H8	1.66	0.61
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.83	0.61
54:1w:51:U:H2'	54:1w:52:G:C8	2.36	0.61
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.34	0.61
1:2A:918:A:O2'	2:2B:97:G:N2	2.33	0.61
24:22:35:LEU:HD11	24:22:49:LYS:HB2	1.83	0.61
40:2i:78:LYS:HE3	40:2i:101:PHE:HD1	1.66	0.61
5:1F:161:GLU:HG2	5:1F:164:ARG:HH21	1.66	0.61
32:1a:134:A:H61	47:1p:25:ARG:HH12	1.49	0.61
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.82	0.61
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.19	0.61
32:2a:1010:G:N2	32:2a:1020:U:O2'	2.34	0.61
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.34	0.61
1:1A:194:G:OP2	61:1A:4247:HOH:O	2.16	0.60
1:2A:861:A:N6	1:2A:916:G:O2'	2.34	0.60
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.84	0.60
1:1A:2723:C:OP1	13:1R:3:HIS:ND1	2.29	0.60
1:1A:2782:G:N7	61:1A:4347:HOH:O	2.31	0.60
32:1a:673:G:H2'	32:1a:674:G:C8	2.35	0.60
10:2O:68:GLU:OE1	10:2O:78:ARG:NH1	2.34	0.60
32:2a:1298:C:OP2	38:2g:114:ARG:NH2	2.34	0.60
33:2b:118:LEU:HD13	33:2b:142:LEU:HB2	1.81	0.60
1:2A:861:A:N3	2:2B:79:C:O2'	2.33	0.60
18:2W:12:ILE:HD13	18:2W:17:VAL:HG13	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.68	0.60
49:2r:47:THR:O	49:2r:47:THR:OG1	2.17	0.60
1:1A:582:G:N7	61:1A:4350:HOH:O	2.31	0.60
1:1A:1380:G:N2	1:1A:1570:A:N1	2.48	0.60
6:1G:66:GLN:NE2	6:1G:93:THR:O	2.31	0.60
40:1i:53:VAL:O	40:1i:55:ALA:N	2.35	0.60
1:2A:2162:G:H4'	1:2A:2172:U:H2'	1.84	0.60
57:2A:3879:TYK:HC5B	57:2A:3879:TYK:H7A3	1.81	0.60
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.84	0.60
1:1A:1009:A:OP2	9:1N:37:LYS:NZ	2.27	0.60
32:1a:184:G:H2'	32:1a:185:A:H8	1.66	0.60
47:1p:15:PRO:O	47:1p:16:HIS:ND1	2.34	0.60
1:2A:247:G:O6	30:28:12:LYS:NZ	2.34	0.60
1:2A:568:U:H5'	1:2A:945:A:N1	2.17	0.60
1:2A:2406:U:C2	11:2P:72:PRO:HG2	2.36	0.60
47:2p:57:ARG:NH2	47:2p:79:VAL:O	2.34	0.60
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.83	0.60
1:2A:2006:C:O2'	1:2A:2823:A:N3	2.33	0.60
4:2E:14:ILE:HG13	4:2E:21:VAL:HG13	1.83	0.60
8:2I:38:LEU:H	8:2I:38:LEU:HD12	1.66	0.60
20:2Y:13:VAL:HG12	20:2Y:74:PRO:HA	1.82	0.60
32:2a:280:C:N3	48:2q:39:SER:N	2.48	0.60
43:2l:35:GLY:HA3	43:2l:60:LEU:HD23	1.82	0.60
1:1A:807:U:OP1	11:1P:36:LYS:NZ	2.35	0.60
1:1A:2352:A:N6	1:1A:2365:G:O2'	2.33	0.60
21:1Z:52:SER:O	21:1Z:54:HIS:N	2.33	0.60
1:2A:573:G:OP1	61:2A:5739:HOH:O	2.17	0.60
26:24:15:ILE:HD12	26:24:21:VAL:HG12	1.83	0.60
32:2a:987:G:H1	32:2a:1218:C:H42	1.49	0.60
32:2a:1005:A:H5''	32:2a:1006:C:C5	2.36	0.60
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.37	0.60
38:2g:105:VAL:O	38:2g:109:ASN:ND2	2.32	0.60
1:1A:1227:G:OP2	16:1U:16:LYS:NZ	2.35	0.60
32:1a:373:A:H2'	32:1a:374:A:H8	1.65	0.60
32:1a:1004:A:H5'	32:1a:1024:G:H1	1.66	0.60
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.37	0.60
1:1A:624:C:O2'	1:1A:657:U:OP1	2.17	0.60
32:1a:401:C:OP2	35:1d:73:ARG:NH1	2.35	0.60
32:1a:791:G:O6	61:1a:1911:HOH:O	2.15	0.60
32:2a:117:G:OP2	61:2a:3311:HOH:O	2.16	0.60
32:2a:662:G:H2'	32:2a:663:A:C8	2.36	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1971:A:C4	3:1D:241:PRO:HD3	2.37	0.60
5:1F:53:THR:CG2	5:1F:55:GLY:H	2.15	0.60
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.20	0.60
1:2A:1690:A:N1	61:2A:5836:HOH:O	2.32	0.60
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	1.84	0.60
12:2Q:82:ARG:H	22:20:7:LEU:HD11	1.67	0.60
28:26:34:LEU:HB2	28:26:51:GLU:HB2	1.84	0.60
32:2a:651:C:N4	32:2a:753:A:OP2	2.34	0.60
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.67	0.60
32:1a:544:G:OP1	35:1d:59:ARG:NH2	2.33	0.59
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.17	0.59
33:1b:13:ALA:HB2	33:1b:44:LEU:HD12	1.84	0.59
1:2A:2136:C:O2'	1:2A:2137:C:O5'	2.20	0.59
5:2F:40:GLN:NE2	5:2F:182:ASN:HB2	2.15	0.59
32:2a:1075:C:OP1	33:2b:179:LYS:NZ	2.34	0.59
32:2a:1118:C:OP1	40:2i:104:ARG:NH1	2.35	0.59
35:2d:18:LYS:NZ	35:2d:31:CYS:SG	2.75	0.59
50:2s:19:VAL:O	50:2s:23:ASN:ND2	2.35	0.59
1:1A:2124:G:N2	1:1A:2174:C:N3	2.40	0.59
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.37	0.59
19:1X:31:HIS:HD2	19:1X:33:LYS:H	1.47	0.59
32:1a:642:A:N3	39:1h:113:SER:OG	2.33	0.59
33:1b:10:LEU:HA	33:1b:48:MET:HE1	1.83	0.59
33:1b:16:HIS:CG	33:1b:17:PHE:H	2.20	0.59
1:2A:514:A:N3	1:2A:581:C:O2'	2.34	0.59
1:2A:2630:G:H2'	1:2A:2631:G:H8	1.67	0.59
5:2F:132:VAL:HG21	5:2F:163:VAL:HG22	1.84	0.59
32:2a:254:G:OP1	48:2q:66:SER:OG	2.18	0.59
32:2a:1226:C:O2'	44:2m:111:LYS:NZ	2.33	0.59
44:2m:4:ILE:HG23	44:2m:5:ALA:H	1.67	0.59
1:1A:2422:A:O4'	54:1y:76:A:N6	2.35	0.59
13:1R:87:TYR:OH	13:1R:117:VAL:O	2.18	0.59
26:14:57:GLU:O	26:14:59:PHE:N	2.35	0.59
30:18:62:LEU:HB3	30:18:65:GLU:HG2	1.83	0.59
32:1a:977:A:H1'	32:1a:982:U:O4	2.02	0.59
1:2A:9:U:H2'	1:2A:10:G:C8	2.37	0.59
1:1A:272(G):C:H42	1:1A:363(C):G:H1	1.50	0.59
1:1A:1607:C:O2'	61:1A:4250:HOH:O	2.17	0.59
51:1t:60:GLU:HG3	51:1t:81:LYS:HD2	1.83	0.59
1:2A:863:A:H2'	1:2A:864:G:C8	2.38	0.59
15:2T:1:MET:HE2	15:2T:6:LEU:HD21	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.34	0.59
21:1Z:52:SER:C	21:1Z:54:HIS:H	2.11	0.59
1:2A:731:C:H5''	61:2A:5915:HOH:O	2.01	0.59
1:2A:880:G:H2'	1:2A:881:G:H8	1.68	0.59
1:2A:2144:U:H1'	1:2A:2148:G:N2	2.18	0.59
1:2A:2507:C:H5''	1:2A:2573:C:N4	2.17	0.59
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.37	0.59
1:1A:2591:C:H2'	1:1A:2592:G:C8	2.37	0.59
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	1.84	0.59
1:2A:1300:U:H4'	1:2A:1301:A:H5''	1.84	0.59
1:2A:2125:G:N1	1:2A:2172:U:OP1	2.25	0.59
3:2D:148:GLU:HB2	3:2D:151:LYS:HD2	1.82	0.59
10:2O:63:VAL:HG23	10:2O:64:ARG:HG2	1.83	0.59
14:2S:23:ARG:NH1	14:2S:85:VAL:O	2.35	0.59
23:21:80:LEU:HD23	23:21:82:LEU:HD21	1.84	0.59
37:2f:13:ASN:ND2	37:2f:55:ASP:OD2	2.35	0.59
41:2j:30:SER:O	41:2j:81:THR:OG1	2.19	0.59
1:1A:1274:A:N3	1:1A:1297:C:H1'	2.17	0.59
3:1D:148:GLU:HB2	3:1D:151:LYS:HD2	1.85	0.59
32:1a:452:A:H4'	47:1p:72:ARG:CZ	2.32	0.59
32:1a:1270:C:OP2	52:1u:24:ARG:NH2	2.35	0.59
1:2A:300:A:OP1	20:2Y:86:ARG:NH2	2.29	0.59
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.37	0.59
1:2A:2207:G:H3'	1:2A:2208:A:H5''	1.84	0.59
21:2Z:40:ASP:HB3	21:2Z:43:GLU:HB2	1.85	0.59
1:1A:593:G:H4'	30:18:4:MET:HE2	1.85	0.59
1:2A:698:C:O2'	1:2A:734:A:N6	2.35	0.59
1:2A:784:A:C6	3:2D:229:VAL:HG11	2.36	0.59
1:2A:1025:G:C4	1:2A:1135:C:H1'	2.37	0.59
7:2H:88:LEU:HD11	7:2H:165:ALA:HA	1.83	0.59
32:2a:45:U:H2'	32:2a:46:G:C8	2.37	0.59
32:2a:1190:G:H5'	34:2c:176:HIS:CE1	2.37	0.59
33:2b:58:ILE:HA	33:2b:61:LEU:HB3	1.84	0.59
43:2l:113:ARG:NE	43:2l:115:LYS:O	2.33	0.59
1:1A:301:G:OP2	20:1Y:84:ARG:NH2	2.32	0.59
32:1a:677:U:H3	32:1a:713:G:H22	1.51	0.59
32:1a:1342:C:H1'	40:1i:124:GLN:HE21	1.68	0.59
1:2A:2126:A:N6	1:2A:2162:G:O2'	2.31	0.59
2:2B:41:U:H5	6:2G:70:VAL:H	1.50	0.59
26:24:24:THR:OG1	26:24:25:TYR:N	2.36	0.59
32:2a:1239:A:H4'	32:2a:1240:U:H5'	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1446:U:N3	32:2a:1452:C:O2	2.35	0.59
50:2s:38:SER:HB2	50:2s:71:LEU:HD22	1.85	0.59
54:2w:14:A:H61	54:2w:21:A:H2	1.49	0.59
6:1G:47:LYS:HG3	6:1G:48:GLU:H	1.67	0.59
54:1w:26:A:N6	54:1w:44:G:H1	2.01	0.59
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.17	0.59
1:2A:2478:A:OP2	31:29:2:LYS:NZ	2.24	0.59
6:2G:16:ARG:HG2	6:2G:20:ILE:HD11	1.85	0.59
26:24:50:VAL:HG11	44:2m:64:TRP:HA	1.85	0.59
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.18	0.59
41:2j:6:ILE:HB	41:2j:72:VAL:HG23	1.85	0.59
5:1F:50:SER:HB2	5:1F:94:PRO:HD3	1.85	0.58
5:1F:155:LEU:HB2	5:1F:189:THR:HG21	1.85	0.58
7:1H:97:ARG:NE	7:1H:104:GLU:OE1	2.36	0.58
32:1a:800:G:O6	61:1a:1909:HOH:O	2.14	0.58
32:1a:1267:C:O2	52:1u:20:LYS:NZ	2.34	0.58
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.84	0.58
11:2P:38:GLN:O	11:2P:39:LYS:HB3	2.02	0.58
34:2c:42:LEU:HA	34:2c:45:LYS:HE3	1.83	0.58
36:2e:83:GLU:HA	36:2e:88:LYS:HA	1.85	0.58
46:2o:82:ILE:O	46:2o:86:GLY:N	2.36	0.58
1:1A:453:C:O2	1:1A:457:A:O2'	2.18	0.58
1:1A:2470:G:O6	1:1A:2476:A:O2'	2.14	0.58
15:1T:127:ALA:C	15:1T:129:ARG:H	2.11	0.58
32:1a:946:A:H2'	32:1a:947:G:C8	2.38	0.58
34:1c:116:VAL:HG21	34:1c:202:ILE:HD11	1.85	0.58
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.38	0.58
32:2a:814:A:H2'	32:2a:816:A:H5'	1.86	0.58
51:2t:25:ARG:HG2	51:2t:29:LYS:HE3	1.84	0.58
1:1A:2023:G:H5'	1:1A:2617:C:H4'	1.85	0.58
18:1W:12:ILE:HD13	18:1W:17:VAL:HG13	1.85	0.58
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.38	0.58
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.85	0.58
8:2I:40:THR:O	8:2I:44:LEU:HB2	2.03	0.58
1:1A:483:A:O2'	20:1Y:49:VAL:O	2.21	0.58
1:1A:1693:U:H1'	3:1D:14:ARG:NH1	2.18	0.58
7:1H:164:TYR:N	7:1H:167:GLU:OE1	2.35	0.58
32:1a:562:C:H1'	43:1l:15:ARG:HB3	1.85	0.58
33:1b:16:HIS:HD2	33:1b:204:ASN:H	1.50	0.58
42:1k:73:MET:HG2	42:1k:103:LEU:HD21	1.86	0.58
1:2A:900:A:O2'	1:2A:901:A:OP1	2.19	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2010:G:H5''	18:2W:42:ARG:HB2	1.83	0.58
7:2H:154:PRO:HB3	7:2H:163:TYR:CZ	2.38	0.58
23:21:51:VAL:HG11	23:21:74:VAL:HG21	1.85	0.58
23:21:53:VAL:HG22	23:21:74:VAL:HG13	1.85	0.58
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.19	0.58
32:2a:662:G:O2'	32:2a:836:G:OP1	2.21	0.58
32:2a:1030(A):G:N3	32:2a:1030(C):G:H8	2.00	0.58
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.39	0.58
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.38	0.58
32:1a:1182:G:H4'	32:1a:1183:A:H5''	1.85	0.58
34:1c:55:VAL:HG22	34:1c:68:VAL:HG22	1.84	0.58
38:1g:111:ARG:NE	38:1g:113:GLU:OE2	2.28	0.58
54:1w:2:C:N4	54:1w:71:G:H1	2.01	0.58
1:2A:2504:U:OP2	61:2A:5742:HOH:O	2.17	0.58
32:2a:405:U:O4	35:2d:2:GLY:N	2.36	0.58
32:2a:1118:C:H1'	32:2a:1179:A:C5	2.38	0.58
35:2d:173:TRP:CD1	35:2d:189:PRO:HG3	2.38	0.58
44:2m:33:ALA:HA	44:2m:59:TYR:CE2	2.39	0.58
6:1G:131:TYR:HB3	6:1G:159:VAL:HG13	1.84	0.58
31:19:2:LYS:NZ	31:19:31:LYS:O	2.36	0.58
50:1s:31:ILE:HB	50:1s:49:ILE:HG23	1.86	0.58
1:2A:826:U:H4'	11:2P:55:ARG:HB3	1.86	0.58
1:2A:852:G:H2'	1:2A:853:G:H8	1.67	0.58
6:2G:66:GLN:HE21	6:2G:98:ARG:HE	1.52	0.58
34:2c:18:TRP:O	34:2c:21:ARG:NH1	2.37	0.58
40:2i:47:LEU:HB3	40:2i:50:LEU:HD21	1.85	0.58
45:2n:21:TYR:OH	45:2n:23:ARG:NH2	2.35	0.58
51:2t:43:LEU:O	51:2t:47:GLY:N	2.25	0.58
32:1a:515:G:N7	61:1a:1927:HOH:O	2.32	0.58
1:2A:2871:C:N4	61:2A:5834:HOH:O	2.31	0.58
21:2Z:79:ARG:HD2	21:2Z:80:ARG:HH12	1.66	0.58
26:24:14:ILE:HB	26:24:22:ILE:HB	1.86	0.58
32:2a:188:C:O4'	51:2t:89:ARG:NH2	2.36	0.58
33:2b:71:VAL:HB	33:2b:164:VAL:HA	1.84	0.58
33:2b:178:ARG:HH12	39:2h:68:ARG:HH22	1.49	0.58
36:1e:69:VAL:HG11	36:1e:113:ALA:HB1	1.86	0.58
46:1o:55:GLY:HA2	46:1o:58:MET:HE3	1.84	0.58
1:2A:245:G:O6	30:28:8:LYS:NZ	2.36	0.58
1:2A:1785:A:N6	61:2A:5873:HOH:O	2.37	0.58
8:2I:4:ILE:HD13	8:2I:47:LEU:HD13	1.86	0.58
32:2a:1040:U:H2'	32:2a:1041:A:H8	1.68	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1302:U:OP2	44:2m:21:TYR:OH	2.19	0.58
33:2b:118:LEU:HD21	33:2b:138:LEU:HB3	1.84	0.58
1:1A:649:G:N7	61:1A:4356:HOH:O	2.32	0.58
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.37	0.58
21:1Z:40:ASP:HB3	21:1Z:43:GLU:HB2	1.85	0.58
1:2A:1506:C:H2'	1:2A:1507:A:H5'	1.85	0.58
32:2a:1029:C:N4	32:2a:1032:G:H1	2.02	0.58
32:2a:1119:C:H2'	32:2a:1120:G:H8	1.67	0.58
32:2a:1132:C:H2'	32:2a:1133:G:H8	1.69	0.58
1:1A:1176:G:H4'	1:1A:1177:A:OP1	2.03	0.58
1:2A:492:A:H2'	1:2A:493:G:O4'	2.04	0.58
1:2A:987:G:O2'	1:2A:1000:A:N3	2.33	0.58
1:2A:1412:A:H2'	1:2A:1413:G:C8	2.38	0.58
34:2c:88:ARG:HA	34:2c:91:LEU:HB2	1.85	0.58
1:1A:218:A:C2	1:1A:235:U:H4'	2.39	0.57
1:1A:1014:U:OP2	61:1A:4221:HOH:O	2.17	0.57
1:1A:1779:U:H2'	61:1A:4251:HOH:O	2.05	0.57
32:1a:715:A:H2'	32:1a:716:A:C8	2.39	0.57
33:1b:131:PRO:O	33:1b:135:GLN:N	2.36	0.57
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.03	0.57
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.36	0.57
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.36	0.57
1:2A:2136:C:H42	1:2A:2155:G:H1	1.49	0.57
1:2A:2507:C:O2'	54:2w:75:C:O2	2.22	0.57
16:2U:103:PRO:O	16:2U:107:ALA:N	2.36	0.57
34:2c:109:PRO:HB3	34:2c:115:LEU:HD23	1.85	0.57
41:2j:47:PHE:N	41:2j:63:PHE:O	2.37	0.57
1:1A:429:A:OP2	61:1A:4252:HOH:O	2.17	0.57
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.39	0.57
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.39	0.57
1:2A:839:U:H2'	1:2A:840:C:C6	2.39	0.57
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.04	0.57
1:2A:2820:A:O2'	1:2A:2821:A:OP1	2.22	0.57
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.85	0.57
33:2b:73:THR:HB	33:2b:95:GLN:O	2.04	0.57
33:1b:93:VAL:HG21	33:1b:97:TRP:CD1	2.39	0.57
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.86	0.57
1:2A:646:A:H2'	1:2A:647:G:O4'	2.04	0.57
6:2G:16:ARG:HB3	6:2G:17:PRO:HD3	1.87	0.57
28:26:6:ARG:NH1	28:26:26:ASN:HB2	2.18	0.57
50:2s:49:ILE:HG22	50:2s:62:ILE:HD11	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2344:U:OP1	28:16:37:ARG:NH1	2.37	0.57
25:13:6:VAL:HG12	25:13:54:VAL:HG21	1.85	0.57
1:2A:363:G:H2'	1:2A:363(A):A:H8	1.69	0.57
15:2T:127:ALA:C	15:2T:129:ARG:H	2.10	0.57
32:2a:17:U:H2'	32:2a:18:C:C6	2.39	0.57
2:1B:21:G:N7	61:1B:303:HOH:O	2.32	0.57
36:1e:110:LEU:HD13	36:1e:118:ILE:HD13	1.85	0.57
1:2A:1769:G:O2'	1:2A:1958:C:OP1	2.18	0.57
18:2W:64:MET:HE2	18:2W:109:GLU:HG3	1.86	0.57
25:23:10:LYS:O	25:23:53:LEU:HB3	2.04	0.57
33:2b:218:ALA:O	33:2b:222:ILE:HG23	2.04	0.57
1:1A:2361:A:OP1	30:18:27:THR:OG1	2.16	0.57
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.69	0.57
10:1O:64:ARG:HD3	10:1O:79:PHE:CD1	2.40	0.57
54:1y:9:A:O3'	54:1y:45:U:O2'	2.22	0.57
1:2A:236:C:H2'	1:2A:237:C:C6	2.39	0.57
1:2A:912:C:OP1	12:2Q:8:LYS:NZ	2.37	0.57
1:2A:1021:A:H62	1:2A:1141:U:H3	1.51	0.57
1:2A:2875:C:OP1	15:2T:3:ARG:NH2	2.36	0.57
8:2I:72:LEU:HD21	8:2I:107:VAL:HG11	1.87	0.57
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HB2	2.39	0.57
21:2Z:93:ASP:HB3	21:2Z:131:ARG:NH2	2.20	0.57
46:2o:87:ILE:HG22	46:2o:88:ARG:H	1.68	0.57
1:1A:74:A:OP1	61:12:201:HOH:O	2.17	0.57
1:1A:2445:G:OP1	5:1F:74:ARG:NH2	2.36	0.57
1:1A:2533:A:H2'	1:1A:2534:A:O4'	2.04	0.57
1:1A:2719:G:O6	61:1A:4235:HOH:O	2.14	0.57
32:1a:1218:C:H2'	32:1a:1219:U:C6	2.39	0.57
32:1a:1351:U:O4	40:1i:118:LYS:NZ	2.38	0.57
55:1x:8:4SU:O2	55:1x:21:A:C2	2.51	0.57
1:2A:363:G:H2'	1:2A:363(A):A:C8	2.40	0.57
1:2A:1265:A:OP2	61:2A:5741:HOH:O	2.17	0.57
1:2A:2218:U:N3	23:21:55:GLY:O	2.37	0.57
3:2D:67:PHE:HE1	3:2D:106:ILE:HD13	1.69	0.57
7:2H:127:GLU:OE2	7:2H:130:ARG:NE	2.37	0.57
32:2a:9:G:H2'	32:2a:10:A:C8	2.39	0.57
32:2a:1026:G:N2	32:2a:1027:C:O4'	2.37	0.57
37:2f:50:TYR:CE2	49:2r:77:GLY:HA2	2.40	0.57
54:2y:55:PSU:N1	54:2y:57:G:H5''	2.16	0.57
1:1A:1268:A:OP1	61:1A:4222:HOH:O	2.17	0.57
1:1A:2099:U:H3	1:1A:2190:G:H1	1.53	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2747:G:O6	1:1A:2755:C:H5''	2.05	0.57
4:1E:111:ARG:HD2	4:1E:160:TYR:CD2	2.39	0.57
32:1a:1504:G:OP1	61:1a:1915:HOH:O	2.17	0.57
12:2Q:141:GLN:NE2	21:2Z:74:VAL:O	2.37	0.57
16:2U:81:HIS:HD2	16:2U:84:LYS:HE2	1.68	0.57
32:2a:876:G:O5'	39:2h:14:ARG:NH1	2.38	0.57
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.38	0.57
32:1a:1320:C:O2	50:1s:36:ARG:NH2	2.38	0.57
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.39	0.57
35:1d:121:VAL:HG22	35:1d:126:ILE:HG13	1.87	0.57
36:1e:50:GLU:HB2	36:1e:53:LEU:HD13	1.87	0.57
1:2A:796:C:H2'	1:2A:797:C:C6	2.40	0.57
1:2A:885:C:H2'	1:2A:886:C:H4'	1.87	0.57
2:2B:11:C:H3'	2:2B:12:C:C6	2.40	0.57
32:2a:34:C:H2'	32:2a:35:G:C8	2.40	0.57
33:2b:87:ARG:NH1	33:2b:220:ASP:OD1	2.38	0.57
43:2l:57:LYS:HG2	43:2l:67:THR:HG22	1.87	0.57
1:1A:252:G:OP1	11:1P:50:ARG:NH1	2.36	0.57
3:1D:39:LYS:NZ	3:1D:57:GLY:O	2.27	0.57
5:1F:157:VAL:HB	5:1F:194:MET:HG2	1.86	0.57
6:1G:59:GLU:OE2	6:1G:153:ARG:NH2	2.37	0.57
1:2A:863:A:H2'	1:2A:864:G:H8	1.70	0.57
1:2A:2127:G:N3	1:2A:2161:C:N3	2.53	0.57
32:2a:501:C:H2'	32:2a:502:G:C8	2.36	0.57
32:2a:921:U:O2	36:2e:19:MET:HB2	2.04	0.57
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.87	0.57
1:1A:2286:A:H4'	1:1A:2287:A:O4'	2.05	0.56
32:1a:67:C:O2'	32:1a:171:A:N3	2.35	0.56
32:1a:128:G:O2'	48:1q:3:LYS:NZ	2.38	0.56
35:1d:112:VAL:HG23	35:1d:116:GLN:HE22	1.70	0.56
1:2A:2136:C:N4	1:2A:2155:G:N1	2.52	0.56
1:2A:2805:G:H2'	1:2A:2807:G:H8	1.70	0.56
32:2a:646:U:H2'	32:2a:647:C:C6	2.40	0.56
33:2b:126:GLU:CD	33:2b:126:GLU:H	2.13	0.56
42:2k:34:ASP:OD1	42:2k:38:ASN:N	2.38	0.56
46:2o:5:LYS:O	46:2o:9:GLN:HG2	2.05	0.56
1:1A:228:A:H8	1:1A:229:A:H5'	1.69	0.56
1:1A:657:U:H2'	1:1A:658:C:C6	2.40	0.56
7:1H:94:TYR:OH	7:1H:152:ARG:NH1	2.37	0.56
32:1a:356:A:N3	32:1a:368:U:O2'	2.34	0.56
32:1a:1457:G:H2'	32:1a:1458:G:C8	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:1j:81:THR:HG22	41:1j:85:LEU:HG	1.87	0.56
1:2A:340:A:H2'	1:2A:341:G:O4'	2.05	0.56
17:2V:62:LEU:HD12	17:2V:93:GLU:HG2	1.86	0.56
32:2a:224:C:H2'	32:2a:225:C:H6	1.70	0.56
33:2b:74:LYS:NZ	33:2b:205:ASP:O	2.38	0.56
33:2b:97:TRP:HE1	33:2b:172:ILE:HG22	1.69	0.56
40:2i:6:GLY:HA3	40:2i:80:GLY:O	2.05	0.56
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.40	0.56
1:1A:613:G:N2	1:1A:614(C):A:O2'	2.37	0.56
1:1A:1721:G:H1'	1:1A:1741:A:H61	1.69	0.56
32:1a:300:A:O2'	32:1a:564:C:N3	2.35	0.56
34:1c:63:ASN:HB2	34:1c:98:ASN:HB2	1.87	0.56
54:1w:9:A:O2'	54:1w:10:G:N7	2.39	0.56
1:2A:643:A:N1	1:2A:2369:A:O2'	2.34	0.56
1:2A:740:U:H2'	1:2A:741:G:C8	2.40	0.56
1:2A:1170:G:O6	1:2A:1180:C:N4	2.38	0.56
1:2A:2393:A:H5''	11:2P:63:PRO:HB3	1.87	0.56
6:2G:39:ILE:HG21	6:2G:60:LEU:HD21	1.86	0.56
21:2Z:66:SER:O	21:2Z:66:SER:OG	2.21	0.56
21:2Z:130:PRO:HA	21:2Z:133:ILE:HG13	1.87	0.56
32:2a:9:G:H2'	32:2a:10:A:H8	1.68	0.56
32:2a:1122:U:H2'	32:2a:1123:A:H8	1.69	0.56
33:2b:15:VAL:HB	33:2b:209:ARG:HB3	1.88	0.56
47:2p:15:PRO:O	47:2p:16:HIS:ND1	2.39	0.56
6:1G:79:ASN:OD1	6:1G:79:ASN:N	2.36	0.56
26:14:58:ARG:NH1	50:1s:68:GLY:HA3	2.15	0.56
46:1o:87:ILE:HG22	46:1o:88:ARG:H	1.70	0.56
1:2A:1688:U:O2	1:2A:1700:A:H5'	2.04	0.56
3:2D:20:ASP:OD1	3:2D:20:ASP:N	2.34	0.56
19:2X:4:ALA:HB1	19:2X:42:ALA:HA	1.86	0.56
32:2a:1159:U:O2'	32:2a:1160:G:OP2	2.22	0.56
44:2m:45:VAL:HA	44:2m:48:LEU:HD12	1.87	0.56
46:2o:11:VAL:HG21	46:2o:34:LEU:HD22	1.87	0.56
49:2r:70:ILE:HG22	49:2r:74:ARG:HD2	1.85	0.56
1:1A:2316:C:O2'	6:1G:128:ARG:NH2	2.39	0.56
32:1a:244:U:O2	61:1a:1913:HOH:O	2.17	0.56
32:1a:1003:G:C4	32:1a:1004:A:H2	2.23	0.56
41:1j:5:ARG:NE	41:1j:73:ASP:OD1	2.36	0.56
50:1s:40:ILE:HB	50:1s:67:VAL:O	2.05	0.56
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.40	0.56
1:2A:2183:C:H2'	1:2A:2184:G:C8	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2E:36:ARG:HG2	4:2E:47:VAL:HG12	1.86	0.56
32:2a:165:C:H2'	32:2a:166:G:C8	2.39	0.56
32:2a:986:A:N3	50:2s:52:TYR:OH	2.34	0.56
1:1A:1060:U:H3	1:1A:1088:A:H8	1.52	0.56
7:1H:3:ARG:HE	7:1H:54:ARG:HH12	1.52	0.56
10:1O:104:ARG:CZ	15:1T:34:VAL:HG11	2.35	0.56
38:1g:74:GLU:HG2	38:1g:91:VAL:HG22	1.88	0.56
1:2A:468:G:OP2	29:27:37:LYS:NZ	2.37	0.56
26:24:53:GLU:C	26:24:55:ARG:H	2.12	0.56
32:2a:1356:G:H2'	32:2a:1357:A:C8	2.41	0.56
43:2l:37:CYS:HB3	43:2l:58:VAL:HG22	1.88	0.56
44:2m:65:LYS:HE2	44:2m:69:GLU:HG2	1.88	0.56
48:2q:54:GLY:O	48:2q:80:GLY:N	2.36	0.56
50:2s:32:LYS:HA	50:2s:50:ALA:HB3	1.88	0.56
1:1A:272(J):C:H2'	1:1A:274:G:C8	2.39	0.56
1:1A:1278:A:OP1	13:1R:36:THR:HG23	2.05	0.56
1:1A:2638:G:O2'	1:1A:2775:A:N1	2.36	0.56
32:1a:474:G:H5'	32:1a:475:G:OP2	2.05	0.56
44:1m:9:ILE:HB	44:1m:18:ALA:HB1	1.86	0.56
1:2A:831:G:O2'	11:2P:38:GLN:OE1	2.22	0.56
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.05	0.56
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.41	0.56
39:2h:39:LEU:HD21	39:2h:137:VAL:HG21	1.87	0.56
47:2p:15:PRO:HD2	47:2p:42:ARG:HD3	1.88	0.56
32:1a:875:C:H1'	39:1h:15:ASN:HD21	1.70	0.56
32:1a:1255:G:N7	41:1j:43:ARG:NH2	2.53	0.56
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.05	0.56
1:2A:38:A:OP1	61:2A:5740:HOH:O	2.17	0.56
1:2A:857:C:OP2	22:20:77:ARG:NH2	2.39	0.56
1:2A:2206:G:H3'	1:2A:2207:G:H8	1.71	0.56
10:2O:68:GLU:HB3	10:2O:78:ARG:HB2	1.88	0.56
25:23:10:LYS:HB3	25:23:53:LEU:HA	1.87	0.56
43:2l:70:ILE:HG12	43:2l:100:ILE:HD13	1.88	0.56
1:1A:253:C:OP2	30:18:5:LYS:NZ	2.27	0.56
1:1A:1062:G:H2'	1:1A:1063:G:C8	2.39	0.56
1:1A:1069:A:H1'	1:1A:1096:A:H4'	1.88	0.56
11:1P:126:VAL:HG12	11:1P:148:LEU:HD22	1.88	0.56
32:1a:1025:U:C2	32:1a:1036:G:O6	2.58	0.56
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.41	0.56
35:1d:119:GLN:HG2	35:1d:123:HIS:CD2	2.40	0.56
1:2A:2131:G:N7	1:2A:2133:G:N2	2.53	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2R:29:LEU:HB3	13:2R:75:LEU:HD11	1.87	0.56
32:2a:7:G:H5'	32:2a:298:A:O4'	2.06	0.56
1:1A:639:U:H2'	1:1A:640:C:C6	2.41	0.56
3:1D:38:LYS:NZ	3:1D:39:LYS:O	2.32	0.56
32:1a:625:G:H4'	47:1p:16:HIS:CD2	2.41	0.56
32:1a:1212:U:H5'	32:1a:1213:A:O5'	2.06	0.56
39:1h:35:ILE:HG22	39:1h:118:VAL:HG11	1.88	0.56
44:1m:3:ARG:NH2	44:1m:9:ILE:O	2.36	0.56
48:1q:58:GLU:O	48:1q:74:LEU:N	2.33	0.56
14:2S:4:LEU:HD22	14:2S:8:GLU:HG3	1.87	0.56
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	1.87	0.56
32:2a:34:C:H2'	32:2a:35:G:H8	1.71	0.56
32:2a:765:G:N1	32:2a:812:C:O2'	2.34	0.56
32:2a:1314:C:N4	50:2s:2:PRO:O	2.39	0.56
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.86	0.56
39:2h:51:VAL:HG11	39:2h:60:ARG:NH1	2.20	0.56
47:2p:53:VAL:HG13	47:2p:79:VAL:HG22	1.87	0.56
3:1D:137:PRO:O	3:1D:140:THR:OG1	2.23	0.55
6:1G:131:TYR:HE2	6:1G:133:LEU:HD23	1.71	0.55
12:1Q:35:VAL:HG13	12:1Q:130:LYS:HB3	1.87	0.55
32:1a:501:C:H2'	32:1a:502:G:C8	2.41	0.55
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.87	0.55
40:1i:46:ALA:HA	40:1i:78:LYS:HB2	1.88	0.55
44:1m:123:ALA:HB2	54:1w:39:PSU:H1'	1.87	0.55
1:2A:121:G:H4'	1:2A:149:A:H5'	1.88	0.55
1:2A:2880:C:O3'	13:2R:90:ARG:NH1	2.38	0.55
6:2G:110:ALA:HB1	6:2G:140:ILE:HG23	1.89	0.55
21:2Z:121:HIS:HB3	21:2Z:123:ASP:O	2.06	0.55
32:2a:109:A:OP2	61:2a:3315:HOH:O	2.18	0.55
33:2b:178:ARG:HH22	39:2h:68:ARG:HH12	1.54	0.55
36:2e:42:GLY:HA3	36:2e:65:ASN:O	2.06	0.55
37:2f:97:PHE:HE2	49:2r:62:GLU:HG2	1.71	0.55
1:1A:870:A:OP1	12:1Q:6:ARG:NE	2.38	0.55
1:1A:1176:G:H1'	1:1A:1177:A:H5'	1.89	0.55
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.25	0.55
14:1S:19:LYS:HE2	14:1S:25:ARG:CZ	2.37	0.55
32:1a:129(A):G:N3	32:1a:189(F):U:H5''	2.20	0.55
32:1a:974:A:OP2	45:1n:29:ARG:NH1	2.39	0.55
32:1a:1030(C):G:H2'	32:1a:1030(D):A:C8	2.41	0.55
32:1a:1068:G:H8	32:1a:1068:G:OP2	1.89	0.55
32:1a:1194:U:H4'	36:1e:22:GLY:HA2	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:1h:91:ARG:HD3	48:1q:32:TYR:O	2.06	0.55
47:1p:67:THR:H	47:1p:70:ALA:HB3	1.71	0.55
54:1y:67:C:H2'	54:1y:68:C:C6	2.42	0.55
1:2A:2674:G:H2'	1:2A:2675:A:C8	2.40	0.55
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.87	0.55
5:2F:103:LYS:HA	5:2F:106:ARG:HD3	1.88	0.55
7:2H:154:PRO:HB3	7:2H:163:TYR:CE1	2.41	0.55
20:2Y:77:PRO:HD2	20:2Y:106:LEU:HD22	1.88	0.55
21:2Z:75:ASN:HB2	21:2Z:85:HIS:HB3	1.88	0.55
33:2b:76:GLN:HE21	33:2b:206:ASP:HA	1.71	0.55
54:2w:68:C:H2'	54:2w:69:G:C8	2.41	0.55
1:1A:1094:U:H1'	1:1A:1097:U:C5	2.40	0.55
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.88	0.55
1:1A:1652:A:OP1	13:1R:8:ARG:NH1	2.37	0.55
1:1A:2228:G:OP1	3:1D:263:ARG:NH2	2.36	0.55
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.41	0.55
9:1N:4:TYR:CE2	16:1U:100:VAL:HG11	2.42	0.55
32:1a:1130:A:OP2	40:1i:62:TYR:OH	2.19	0.55
1:2A:829:A:N7	1:2A:2248:C:H5'	2.21	0.55
1:2A:897:C:H5'	54:2w:56:C:OP1	2.07	0.55
1:2A:952:G:OP1	12:2Q:16:ARG:NH2	2.39	0.55
1:2A:2127:G:C6	1:2A:2161:C:C4	2.93	0.55
4:2E:48:GLN:NE2	4:2E:78:LEU:HD13	2.22	0.55
30:28:30:ARG:NH1	61:28:201:HOH:O	2.40	0.55
32:2a:341:C:H2'	32:2a:342:C:C6	2.42	0.55
32:2a:473:G:H2'	32:2a:474:G:H8	1.71	0.55
33:2b:217:ARG:HA	33:2b:220:ASP:HB2	1.89	0.55
41:2j:8:LEU:HD12	41:2j:16:LEU:HD22	1.88	0.55
42:2k:87:THR:HG22	42:2k:91:ARG:HH12	1.70	0.55
44:2m:33:ALA:HB1	44:2m:56:LEU:HD11	1.87	0.55
1:1A:484:C:H2'	1:1A:485:C:C6	2.42	0.55
1:1A:2336:A:H61	22:10:43:THR:CG2	2.19	0.55
19:1X:54:VAL:HG22	19:1X:81:VAL:HG12	1.87	0.55
32:1a:328:C:H4'	32:1a:329:A:H5'	1.87	0.55
33:1b:76:GLN:HB3	33:1b:208:ILE:HG23	1.88	0.55
34:1c:11:ARG:NH2	34:1c:177:THR:O	2.39	0.55
39:1h:121:ASP:HB2	39:1h:125:ARG:HH12	1.71	0.55
1:2A:854:G:H2'	1:2A:855:G:H8	1.71	0.55
8:2I:117:GLU:HG3	8:2I:118:LYS:H	1.70	0.55
21:2Z:171:ILE:HD12	21:2Z:172:ALA:H	1.71	0.55
32:2a:996:A:H3'	32:2a:997:U:H5''	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.42	0.55
47:2p:28:ARG:NH1	47:2p:29:ASP:OD2	2.40	0.55
1:1A:1056:G:H4'	1:1A:1086:A:H8	1.71	0.55
32:1a:129:U:H5'	48:1q:3:LYS:HZ1	1.71	0.55
32:1a:204:U:H4'	32:1a:216:G:O5'	2.06	0.55
32:1a:572:A:OP2	61:1a:1916:HOH:O	2.18	0.55
32:1a:573:A:OP2	61:1a:1916:HOH:O	2.18	0.55
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.07	0.55
38:1g:51:GLN:O	38:1g:51:GLN:NE2	2.38	0.55
1:2A:212:G:H2'	1:2A:213:A:O4'	2.07	0.55
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.70	0.55
1:2A:1311:G:N2	1:2A:1312:U:O4	2.35	0.55
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.41	0.55
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.41	0.55
1:2A:2646:C:H2'	1:2A:2647:U:O4'	2.06	0.55
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.07	0.55
8:2I:29:TYR:CD2	8:2I:30:LEU:HD23	2.39	0.55
26:24:46:GLN:C	26:24:48:ARG:H	2.15	0.55
32:2a:8:A:H5'	36:2e:101:ILE:HG22	1.88	0.55
34:2c:18:TRP:HZ2	45:2n:57:ARG:HB3	1.71	0.55
34:2c:156:ARG:NH2	34:2c:159:GLY:O	2.39	0.55
35:2d:111:ALA:HB2	35:2d:120:LEU:HD12	1.89	0.55
1:1A:278:A:H2'	1:1A:279:C:C6	2.41	0.55
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.28	0.55
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.42	0.55
1:1A:2106:G:H1	1:1A:2183:C:H42	1.54	0.55
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.42	0.55
1:2A:2533:A:OP1	1:2A:2665:A:O2'	2.24	0.55
6:2G:123:ASN:O	6:2G:125:PHE:N	2.38	0.55
32:2a:165:C:H2'	32:2a:166:G:H8	1.69	0.55
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.24	0.55
43:2l:57:LYS:HA	43:2l:67:THR:HA	1.89	0.55
1:1A:184:C:H2'	1:1A:185:U:C6	2.41	0.55
1:1A:530:G:N1	1:1A:2023:G:OP1	2.37	0.55
1:1A:833:U:O2	11:1P:55:ARG:NH2	2.34	0.55
1:1A:1379:A:H4'	1:1A:1380:G:OP2	2.06	0.55
1:1A:2142:C:H2'	1:1A:2143:C:C6	2.42	0.55
2:1B:96:U:OP1	21:1Z:14:LYS:NZ	2.38	0.55
4:1E:12:THR:HG21	15:1T:11:GLU:HG2	1.88	0.55
5:1F:111:ALA:HB2	5:1F:206:ILE:HG21	1.87	0.55
25:13:51:ALA:HA	25:13:54:VAL:HG12	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.06	0.55
36:1e:41:VAL:HG23	36:1e:67:VAL:HG12	1.88	0.55
1:2A:27:G:N2	1:2A:512:G:H1'	2.22	0.55
13:2R:2:ARG:HA	13:2R:5:LYS:HD2	1.88	0.55
32:2a:35:G:O2'	43:2l:118:SER:O	2.23	0.55
32:2a:431:A:OP2	61:2a:3314:HOH:O	2.18	0.55
32:2a:999:C:H42	32:2a:1042:G:H1	1.55	0.55
36:2e:11:ILE:HD11	36:2e:33:VAL:HG12	1.88	0.55
40:2i:15:ALA:HB2	40:2i:65:VAL:HG23	1.87	0.55
50:2s:33:THR:HG21	50:2s:49:ILE:HD11	1.87	0.55
1:1A:1062:G:H22	1:1A:1077:A:H61	1.54	0.55
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.41	0.55
1:1A:2429:G:OP1	61:1A:4203:HOH:O	2.18	0.55
10:1O:115:VAL:HG13	10:1O:121:VAL:HG21	1.88	0.55
20:1Y:20:TYR:HB3	20:1Y:23:ARG:HG3	1.89	0.55
20:1Y:86:ARG:HE	20:1Y:100:ALA:HA	1.71	0.55
32:1a:973:G:H3'	32:1a:974:A:H5''	1.88	0.55
36:1e:105:VAL:HG21	36:1e:128:PRO:HB3	1.88	0.55
1:2A:878:A:H61	1:2A:899:A:H1'	1.71	0.55
1:2A:1507:A:O2'	1:2A:1508:A:O5'	2.25	0.55
2:2B:19:G:H2'	2:2B:20:C:O4'	2.05	0.55
11:2P:37:GLY:O	11:2P:40:SER:OG	2.19	0.55
17:2V:40:LEU:HB2	17:2V:46:VAL:HB	1.88	0.55
32:2a:532:A:N6	32:2a:1206:G:O2'	2.39	0.55
32:2a:1030(A):G:N2	32:2a:1030(D):A:OP2	2.40	0.55
32:2a:1084:G:H5'	32:2a:1102:A:OP2	2.06	0.55
35:2d:17:VAL:HG12	35:2d:19:LEU:HD12	1.87	0.55
36:2e:53:LEU:O	36:2e:57:LYS:N	2.36	0.55
1:1A:75:G:H4'	24:12:55:ARG:NH1	2.22	0.55
1:1A:1038:C:H42	1:1A:1117:G:H1	1.55	0.55
11:1P:59:LEU:HD11	30:18:10:ALA:HA	1.89	0.55
32:1a:454:C:H3'	32:1a:455:C:C6	2.42	0.55
32:1a:1111:A:N1	34:1c:177:THR:OG1	2.31	0.55
35:1d:26:CYS:CB	59:1d:302:SF4:S1	2.91	0.55
36:1e:144:THR:H	36:1e:147:ASP:HB2	1.72	0.55
41:1j:62:HIS:HB3	45:1n:59:ALA:HB3	1.89	0.55
1:2A:1169:G:H1	1:2A:1180:C:H42	1.54	0.55
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.07	0.55
1:2A:2126:A:H61	1:2A:2162:G:HO2'	1.49	0.55
1:2A:2821:A:H2'	1:2A:2822:G:C8	2.42	0.55
32:2a:130:A:N3	32:2a:263:A:O2'	2.33	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:237:C:H5''	48:2q:25:ARG:CZ	2.37	0.55
32:2a:833:U:H2'	32:2a:834:C:H6	1.72	0.55
32:2a:1272:G:N2	32:2a:1273:G:C4	2.75	0.55
32:2a:1360:A:N7	61:2a:3337:HOH:O	2.34	0.55
34:2c:32:LEU:O	34:2c:36:ASP:HB2	2.06	0.55
34:2c:63:ASN:HA	34:2c:98:ASN:H	1.72	0.55
54:2w:18:G:O2'	54:2w:19:G:OP2	2.23	0.55
1:1A:861:A:N3	2:1B:79:C:O2'	2.40	0.55
1:1A:1695:G:N7	3:1D:14:ARG:NH2	2.55	0.55
1:1A:2155:G:H3'	1:1A:2156:G:H8	1.71	0.55
7:1H:24:VAL:HG22	7:1H:35:VAL:HB	1.87	0.55
7:1H:56:SER:OG	7:1H:57:ASP:N	2.40	0.55
8:1I:75:LEU:O	8:1I:141:LYS:NZ	2.40	0.55
30:18:23:VAL:HG22	30:18:47:LYS:HB3	1.89	0.55
32:1a:405:U:H5''	32:1a:495:A:H2	1.72	0.55
1:2A:2584:U:O2'	54:2w:76:A:H2'	2.07	0.55
32:2a:771:G:N7	61:2a:3334:HOH:O	2.33	0.55
32:2a:952:U:H2'	32:2a:953:G:C8	2.41	0.55
35:2d:196:LEU:H	35:2d:196:LEU:HD12	1.72	0.55
53:2v:16:A:N6	55:2x:36:U:H3	2.04	0.55
1:1A:871:U:OP1	12:1Q:5:ARG:HG3	2.06	0.54
1:1A:1709:U:H2'	1:1A:1710:C:C6	2.42	0.54
1:1A:2712:U:O2'	1:1A:2712(A):A:OP2	2.21	0.54
7:1H:33:LEU:HD21	7:1H:136:ILE:HG13	1.89	0.54
11:1P:29:LYS:HD3	11:1P:30:THR:HG23	1.87	0.54
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.35	0.54
33:1b:169:LYS:O	33:1b:169:LYS:HD2	2.07	0.54
45:1n:23:ARG:NH1	45:1n:30:ALA:HB2	2.22	0.54
54:1y:38:A:H2'	54:1y:39:PSU:O4'	2.07	0.54
1:2A:624:C:OP1	61:2A:5743:HOH:O	2.18	0.54
8:2I:77:LEU:HD23	8:2I:142:VAL:HG13	1.88	0.54
13:2R:33:ARG:NH2	27:25:57:VAL:O	2.35	0.54
26:24:48:ARG:HG3	26:24:51:ASP:O	2.07	0.54
32:2a:148:G:H2'	32:2a:149:A:C8	2.41	0.54
32:2a:1058:G:H1	32:2a:1199:U:H3	1.53	0.54
1:1A:1721:G:H1'	1:1A:1741:A:N6	2.22	0.54
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.07	0.54
25:13:35:ARG:HG2	25:13:37:LEU:HD21	1.90	0.54
32:1a:1240:U:O2'	38:1g:32:ARG:NH2	2.39	0.54
35:1d:98:GLU:OE1	35:1d:103:ASN:ND2	2.39	0.54
41:1j:54:PHE:O	41:1j:56:HIS:N	2.36	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:1o:69:TYR:HA	46:1o:72:ARG:HE	1.71	0.54
54:1w:66:U:H2'	54:1w:67:C:C6	2.42	0.54
1:2A:648:G:O2'	1:2A:2351:G:OP1	2.16	0.54
1:2A:828:U:H4'	1:2A:831:G:N1	2.22	0.54
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.42	0.54
1:2A:2498:C:OP2	61:2A:5708:HOH:O	2.18	0.54
32:2a:1064:G:O6	32:2a:1191:A:N6	2.41	0.54
54:2w:19:G:N2	54:2w:57:G:H1'	2.22	0.54
1:1A:363(C):G:H2'	1:1A:363(D):G:C8	2.43	0.54
1:1A:668:G:H5'	1:1A:669:G:OP2	2.08	0.54
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.72	0.54
1:1A:2171:A:O2'	1:1A:2172:U:H5''	2.08	0.54
11:1P:116:GLY:O	11:1P:137:LYS:NZ	2.27	0.54
12:1Q:15:GLY:H	12:1Q:41:TRP:HZ2	1.54	0.54
33:1b:230:VAL:HG22	33:1b:231:GLU:H	1.72	0.54
35:1d:26:CYS:HB3	59:1d:302:SF4:S1	2.46	0.54
35:1d:178:VAL:C	35:1d:180:GLY:H	2.15	0.54
39:1h:9:MET:SD	39:1h:26:VAL:HG11	2.47	0.54
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.89	0.54
9:2N:38:HIS:CE1	9:2N:39:ARG:HG3	2.42	0.54
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.27	0.54
32:2a:116:A:H61	32:2a:313:A:H1'	1.72	0.54
46:2o:16:ALA:HB1	46:2o:21:ASP:HB3	1.89	0.54
54:2w:68:C:H2'	54:2w:69:G:H8	1.71	0.54
54:2y:34:G:H2'	54:2y:35:A:C8	2.42	0.54
1:1A:86:C:H4'	1:1A:104:U:H1'	1.88	0.54
1:1A:1653:G:H3'	13:1R:2:ARG:HD3	1.89	0.54
1:1A:1670:C:O2	4:1E:129:HIS:NE2	2.37	0.54
4:1E:143:ASN:HD22	4:1E:147:PRO:HD3	1.73	0.54
21:1Z:4:ARG:HH21	21:1Z:60:GLU:HG2	1.71	0.54
32:1a:664:G:N2	32:1a:741:G:H1	2.04	0.54
32:1a:749:C:H2'	32:1a:750:G:H8	1.71	0.54
32:1a:1152:A:OP1	41:1j:68:HIS:ND1	2.40	0.54
47:1p:56:ALA:O	47:1p:60:LEU:HB2	2.07	0.54
55:1x:39:C:O2'	54:1y:35:A:O2'	2.24	0.54
1:2A:1005:C:H2'	1:2A:1006:C:C6	2.42	0.54
1:2A:1428:C:N4	1:2A:1570:A:OP2	2.36	0.54
8:2I:4:ILE:HD11	8:2I:44:LEU:HD12	1.88	0.54
11:2P:85:LEU:HA	11:2P:88:LEU:HD12	1.88	0.54
32:2a:1144:G:N2	32:2a:1146:A:H62	2.04	0.54
43:2l:37:CYS:HA	43:2l:58:VAL:HA	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:272(F):C:H42	1:1A:363(D):G:H1	1.54	0.54
1:1A:851:U:OP1	25:13:49:LYS:NZ	2.38	0.54
1:1A:1069:A:H2'	1:1A:1073:A:N7	2.23	0.54
6:1G:18:GLU:HG3	6:1G:22:ARG:HD2	1.90	0.54
32:1a:532:A:N6	32:1a:1206:G:O2'	2.39	0.54
32:1a:1123:A:O2'	41:1j:37:PRO:O	2.22	0.54
39:1h:116:LYS:HG3	39:1h:127:LEU:HD21	1.88	0.54
54:1w:5:G:H2'	54:1w:6:G:H8	1.71	0.54
1:2A:2393:A:O2'	30:28:13:ARG:NH2	2.40	0.54
21:2Z:28:MET:HE2	21:2Z:37:VAL:HG11	1.89	0.54
32:2a:1132:C:H42	32:2a:1142:G:H1	1.55	0.54
33:2b:109:SER:O	33:2b:112:VAL:HG22	2.08	0.54
40:2i:78:LYS:HE3	40:2i:101:PHE:CD1	2.42	0.54
1:1A:97:C:OP1	24:12:2:LYS:NZ	2.36	0.54
5:1F:192:LEU:HD13	5:1F:194:MET:HE2	1.90	0.54
19:1X:2:LYS:NZ	19:1X:38:GLU:OE2	2.39	0.54
21:1Z:138:GLU:H	21:1Z:156:LYS:HZ1	1.54	0.54
1:2A:271(M):G:H4'	1:2A:271(N):U:OP1	2.07	0.54
26:24:34:GLU:HA	44:2m:57:ARG:NH1	2.22	0.54
51:2t:50:GLU:O	51:2t:100:ILE:HD11	2.07	0.54
1:1A:2158:A:O2'	1:1A:2159:G:OP2	2.22	0.54
30:18:33:ASN:HA	30:18:36:LYS:HD2	1.89	0.54
1:2A:307:G:N1	1:2A:310:A:OP2	2.41	0.54
2:2B:80:U:H2'	2:2B:81:G:C8	2.43	0.54
3:2D:13:ARG:NH1	3:2D:16:MET:SD	2.81	0.54
39:2h:83:ILE:HB	39:2h:137:VAL:HG13	1.88	0.54
40:2i:9:ARG:HG2	40:2i:14:VAL:HG22	1.90	0.54
40:2i:32:ASP:HB3	40:2i:35:GLU:HB2	1.90	0.54
42:2k:48:ILE:C	42:2k:50:TYR:H	2.16	0.54
1:1A:526:A:O2'	1:1A:2043:C:O2	2.22	0.54
1:1A:857:C:N4	1:1A:858:U:O4	2.40	0.54
2:1B:106:G:H5'	21:1Z:31:ARG:HG2	1.90	0.54
3:1D:169:GLU:OE2	3:1D:184:LYS:NZ	2.35	0.54
35:1d:19:LEU:O	35:1d:21:LEU:HG	2.08	0.54
40:1i:42:ARG:NH1	40:1i:71:SER:OG	2.41	0.54
44:1m:19:LEU:HD11	44:1m:56:LEU:HD21	1.90	0.54
1:2A:71:A:H5''	1:2A:73:A:C8	2.43	0.54
1:2A:1664:A:OP1	61:2A:5744:HOH:O	2.19	0.54
5:2F:155:LEU:HB2	5:2F:189:THR:HG21	1.89	0.54
14:2S:15:ARG:NE	14:2S:88:ASP:OD2	2.37	0.54
32:2a:174:C:H2'	32:2a:175:C:H6	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:545:C:OP1	35:2d:61:LYS:NZ	2.40	0.54
32:2a:1183:A:H3'	32:2a:1184:G:H5''	1.90	0.54
32:2a:1247:U:H1'	32:2a:1291:G:N2	2.22	0.54
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.08	0.54
32:1a:102:G:O2'	32:1a:151:A:N3	2.40	0.54
32:1a:454:C:OP2	32:1a:455:C:N4	2.28	0.54
35:1d:11:LEU:HG	35:1d:66:ARG:HD3	1.88	0.54
36:1e:142:LEU:O	36:1e:143:ARG:NH1	2.40	0.54
46:1o:4:THR:OG1	46:1o:7:GLU:OE2	2.25	0.54
1:2A:2150:U:H2'	1:2A:2151:G:C8	2.41	0.54
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.37	0.54
32:2a:237:C:H5''	48:2q:25:ARG:NE	2.22	0.54
32:2a:481:G:O2'	32:2a:483:C:N4	2.37	0.54
32:2a:1119:C:OP2	40:2i:9:ARG:NH1	2.41	0.54
7:1H:20:ALA:HB1	7:1H:21:PRO:HD2	1.90	0.54
7:1H:116:GLU:HG3	7:1H:117:PRO:HD2	1.90	0.54
32:1a:974:A:H8	32:1a:974:A:OP1	1.91	0.54
32:1a:1169:A:H2'	32:1a:1170:A:C8	2.43	0.54
32:1a:1370:G:O6	61:1a:1914:HOH:O	2.17	0.54
1:2A:184:C:H2'	1:2A:185:U:C6	2.43	0.54
1:2A:2646:C:OP2	1:2A:2732:G:O2'	2.26	0.54
1:2A:2689:U:P	1:2A:2719:G:H22	2.30	0.54
39:2h:91:ARG:HD3	48:2q:32:TYR:O	2.07	0.54
1:1A:278:A:O2'	1:1A:279:C:OP1	2.25	0.53
33:1b:92:TYR:CE2	33:1b:151:GLY:HA3	2.43	0.53
33:1b:187:LEU:HA	33:1b:201:ILE:HB	1.90	0.53
44:1m:82:MET:O	44:1m:93:ARG:NH2	2.40	0.53
1:2A:516:C:OP1	27:25:13:LYS:NZ	2.40	0.53
1:2A:686:G:H21	1:2A:788:A:H61	1.56	0.53
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.23	0.53
32:2a:1054:C:C4	54:2w:34:G:H1'	2.42	0.53
32:2a:1403:C:C2	32:2a:1404:5MC:HM52	2.43	0.53
39:2h:9:MET:HE2	39:2h:32:LYS:HD3	1.89	0.53
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.43	0.53
1:1A:2131:G:N2	1:1A:2158:A:N1	2.56	0.53
1:1A:2316:C:H1'	6:1G:128:ARG:HH21	1.73	0.53
6:1G:16:ARG:HG2	6:1G:31:VAL:HG21	1.90	0.53
32:1a:520:A:N1	32:1a:536:C:H1'	2.23	0.53
32:1a:1086:U:H3	32:1a:1099:G:H22	1.54	0.53
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.41	0.53
33:1b:163:PHE:HA	33:1b:185:ILE:HG13	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1188:U:H4'	17:2V:79:VAL:HG22	1.90	0.53
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.73	0.53
1:2A:2165:G:H2'	1:2A:2166:G:O4'	2.08	0.53
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.43	0.53
1:2A:2724:C:OP1	4:2E:118:LYS:NZ	2.40	0.53
5:2F:120:GLU:HG3	5:2F:122:LYS:HG3	1.89	0.53
5:2F:145:GLU:OE1	5:2F:145:GLU:N	2.41	0.53
7:2H:80:SER:OG	7:2H:81:GLU:OE1	2.15	0.53
32:2a:1005:A:H1'	32:2a:1025:U:N3	2.24	0.53
33:2b:80:ILE:HD11	33:2b:212:GLN:HA	1.90	0.53
33:2b:93:VAL:HG21	33:2b:97:TRP:HE3	1.73	0.53
34:2c:6:HIS:CG	45:2n:49:HIS:HB3	2.43	0.53
54:2y:55:PSU:HN1	54:2y:57:G:C5'	2.18	0.53
1:1A:121:G:H4'	1:1A:149:A:H5'	1.90	0.53
5:1F:32:LEU:HB3	5:1F:112:MET:HE1	1.90	0.53
11:1P:50:ARG:HD3	30:18:7:HIS:CD2	2.44	0.53
11:1P:119:GLU:CD	25:23:3:ARG:HD2	2.33	0.53
25:13:26:LEU:O	25:13:35:ARG:HD3	2.07	0.53
27:15:16:ARG:O	27:15:20:ARG:HG3	2.08	0.53
32:1a:22:G:H4'	32:1a:885:G:C8	2.44	0.53
32:1a:850:U:H2'	32:1a:851:G:H5''	1.90	0.53
43:1l:70:ILE:HD13	43:1l:77:LEU:HD12	1.90	0.53
1:2A:2138:C:N4	1:2A:2153:G:H1	2.05	0.53
32:2a:779:C:H2'	32:2a:780:A:O4'	2.08	0.53
39:2h:38:ILE:O	39:2h:42:GLU:HB2	2.08	0.53
43:2l:41:ARG:HH22	43:2l:57:LYS:HE2	1.71	0.53
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.43	0.53
32:1a:953:G:H5'	32:1a:965:A:H61	1.73	0.53
32:1a:976:G:N2	32:1a:1363:C:OP2	2.39	0.53
33:1b:112:VAL:HG12	33:1b:149:LEU:HD13	1.91	0.53
1:2A:1434:A:H61	1:2A:1558:A:H62	1.57	0.53
1:2A:1771:C:OP1	61:2A:5745:HOH:O	2.19	0.53
1:2A:2136:C:N3	1:2A:2155:G:N2	2.49	0.53
32:2a:377:G:OP1	47:2p:3:LYS:NZ	2.31	0.53
32:2a:575:G:O2'	32:2a:821:G:H5'	2.08	0.53
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.23	0.53
40:2i:108:VAL:HG12	40:2i:109:VAL:H	1.73	0.53
44:2m:10:PRO:HD2	44:2m:18:ALA:HA	1.89	0.53
44:2m:15:VAL:O	44:2m:19:LEU:HG	2.08	0.53
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.44	0.53
29:17:18:PHE:HA	29:17:43:THR:HG21	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:690:G:C6	32:1a:691:G:C6	2.97	0.53
45:1n:23:ARG:HD2	45:1n:28:GLY:O	2.08	0.53
54:1w:13:C:H2'	54:1w:14:A:H5''	1.89	0.53
1:2A:675:A:OP1	5:2F:63:LYS:NZ	2.42	0.53
1:2A:955:C:OP2	12:2Q:14:ARG:HG3	2.08	0.53
1:2A:2655:G:O2'	1:2A:2664:G:O6	2.26	0.53
6:2G:64:THR:HB	6:2G:94:LEU:HD21	1.91	0.53
11:2P:63:PRO:HG2	30:28:25:MET:HB2	1.90	0.53
22:20:2:ALA:N	61:20:201:HOH:O	2.41	0.53
32:2a:523:A:H61	43:2l:92:0TD:CG	2.20	0.53
32:2a:1226:C:H4'	50:2s:80:TYR:CZ	2.43	0.53
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.09	0.53
1:1A:1064:C:N3	1:1A:1074:G:O6	2.41	0.53
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.23	0.53
26:14:16:CYS:HB2	26:14:36:CYS:HB3	1.91	0.53
32:1a:925:G:H1'	32:1a:1502:A:C4	2.44	0.53
36:1e:76:ILE:HD11	36:1e:93:PRO:HD3	1.91	0.53
1:2A:117:G:OP2	1:2A:119:A:O2'	2.18	0.53
5:2F:140:LEU:HD21	5:2F:170:LEU:HD11	1.90	0.53
25:23:7:LYS:NZ	25:23:34:GLU:OE1	2.30	0.53
32:2a:1366:C:O2'	41:2j:60:ARG:NH2	2.42	0.53
33:2b:178:ARG:HH22	39:2h:68:ARG:HH22	1.56	0.53
51:2t:33:ILE:O	51:2t:37:SER:OG	2.23	0.53
1:1A:247:G:H4'	1:1A:386:G:C5	2.43	0.53
7:1H:124:GLU:OE1	7:1H:132:ARG:HD2	2.08	0.53
32:1a:78:G:O6	32:1a:92:C:N4	2.42	0.53
32:1a:1349:A:H5''	40:1i:121:ARG:HB2	1.90	0.53
47:1p:49:LEU:HD11	47:1p:51:VAL:HG23	1.90	0.53
1:2A:1665:A:H2'	1:2A:1666:G:O4'	2.08	0.53
2:2B:24:G:H4'	2:2B:25:A:C8	2.44	0.53
13:2R:2:ARG:NH1	13:2R:5:LYS:O	2.42	0.53
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.09	0.53
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.89	0.53
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.44	0.53
32:2a:1137:C:H5''	32:2a:1138:G:OP1	2.09	0.53
47:2p:19:ILE:N	47:2p:37:GLY:O	2.41	0.53
1:1A:1671:U:O4	61:1A:4208:HOH:O	2.19	0.53
1:1A:2227:A:OP2	61:1A:4255:HOH:O	2.18	0.53
3:1D:21:PHE:HB3	3:1D:24:ILE:HD12	1.89	0.53
32:1a:688:G:H2'	32:1a:689:C:H6	1.74	0.53
34:1c:6:HIS:CD2	34:1c:8:ILE:H	2.23	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:2I:59:ALA:HA	8:2I:62:LYS:HB2	1.91	0.53
14:2S:105:ALA:HB1	14:2S:110:LEU:HD23	1.91	0.53
24:22:32:LEU:HA	24:22:53:LEU:HD13	1.90	0.53
32:2a:132:C:H4'	32:2a:262:A:H1'	1.90	0.53
34:2c:20:SER:HB3	34:2c:22:TRP:HE1	1.73	0.53
43:2l:37:CYS:SG	43:2l:81:SER:HB2	2.49	0.53
43:2l:59:ARG:HB2	43:2l:65:GLU:HG3	1.91	0.53
1:1A:603:A:N1	1:1A:625:G:O2'	2.39	0.53
1:1A:1174:A:H4'	1:1A:1175:U:OP1	2.09	0.53
5:1F:13:SER:HB2	5:1F:127:GLU:HG3	1.91	0.53
26:14:20:ASN:ND2	26:14:36:CYS:SG	2.81	0.53
32:1a:993:G:H2'	32:1a:995:C:H41	1.74	0.53
41:1j:39:PRO:HA	41:1j:70:ARG:HD3	1.90	0.53
1:2A:1636:C:H2'	1:2A:1637:A:C8	2.44	0.53
1:2A:2691:C:HO2'	1:2A:2871:C:HO2'	1.56	0.53
32:2a:401:C:P	35:2d:73:ARG:HH21	2.32	0.53
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.42	0.53
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.73	0.53
1:1A:2679:A:OP2	4:1E:160:TYR:OH	2.23	0.53
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	1.90	0.53
1:2A:593:G:H1	1:2A:664:C:H42	1.57	0.53
1:2A:639:U:H2'	1:2A:640:C:C6	2.44	0.53
1:2A:1037:G:H2'	1:2A:1038:C:O4'	2.09	0.53
1:2A:1645:G:H5''	1:2A:1646:C:H5'	1.90	0.53
30:28:15:LYS:HG2	30:28:23:VAL:HG12	1.90	0.53
32:2a:143:A:H5''	32:2a:144:G:H5'	1.90	0.53
32:2a:815:A:N7	32:2a:1509:C:O2'	2.42	0.53
1:1A:682:G:OP2	61:1A:4257:HOH:O	2.19	0.52
1:1A:2492:U:H2'	1:1A:2493:U:H6	1.75	0.52
26:14:57:GLU:HG2	26:14:58:ARG:H	1.74	0.52
32:1a:1469:G:N7	61:1a:1933:HOH:O	2.34	0.52
48:1q:6:LEU:HD23	48:1q:23:VAL:HG11	1.90	0.52
1:2A:451:C:N4	1:2A:454:A:OP2	2.29	0.52
1:2A:2108:C:H42	1:2A:2181:G:H1	1.55	0.52
6:2G:11:TYR:HA	6:2G:15:VAL:HB	1.90	0.52
10:2O:2:ILE:HD12	10:2O:6:THR:HG21	1.91	0.52
32:2a:1414:U:O4	61:2a:3313:HOH:O	2.17	0.52
35:2d:8:VAL:HB	35:2d:115:ARG:HH22	1.75	0.52
1:1A:1507:A:O2'	1:1A:1509(A):A:N6	2.41	0.52
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.24	0.52
4:1E:35:GLN:OE1	4:1E:66:HIS:HE1	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:58:ARG:HD3	50:1s:68:GLY:H	1.73	0.52
1:2A:383:U:H2'	1:2A:385:C:H5	1.74	0.52
1:2A:2853:C:H2'	1:2A:2854:G:H8	1.73	0.52
8:2I:2:LYS:HA	8:2I:20:ASP:HA	1.91	0.52
15:2T:33:LYS:HB3	15:2T:82:LEU:HD22	1.90	0.52
32:2a:41:G:H2'	32:2a:42:G:H8	1.73	0.52
32:2a:179:A:H2'	32:2a:180:U:C6	2.45	0.52
33:2b:25:ASN:HD21	33:2b:27:LYS:HB2	1.75	0.52
45:2n:5:ALA:O	45:2n:9:LYS:HB2	2.09	0.52
1:1A:784:A:C5	3:1D:229:VAL:HG21	2.44	0.52
1:1A:839:U:H1'	1:1A:1191:G:H1'	1.92	0.52
32:1a:399:G:H2'	32:1a:400:C:C6	2.44	0.52
32:1a:1179:A:H4'	40:1i:103:THR:HA	1.90	0.52
36:1e:77:PRO:HD2	36:1e:142:LEU:HD13	1.91	0.52
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.45	0.52
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.09	0.52
12:2Q:35:VAL:HG12	12:2Q:130:LYS:HB3	1.91	0.52
19:2X:31:HIS:CD2	19:2X:33:LYS:H	2.28	0.52
34:2c:81:GLY:O	34:2c:85:ARG:NH1	2.42	0.52
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.09	0.52
1:1A:654:A:OP2	61:1A:4256:HOH:O	2.18	0.52
1:1A:2646:C:OP2	1:1A:2732:G:O2'	2.20	0.52
1:1A:2701:C:H2'	1:1A:2702:U:H2'	1.92	0.52
32:1a:8:A:N7	35:1d:208:SER:OG	2.38	0.52
32:1a:376:G:O3'	47:1p:5:ARG:HD2	2.10	0.52
32:1a:1004:A:H5''	32:1a:1025:U:H5	1.75	0.52
35:1d:162:LEU:HD22	35:1d:178:VAL:HG13	1.91	0.52
37:1f:11:ASN:HB3	37:1f:14:LEU:HG	1.90	0.52
1:2A:800:A:H8	1:2A:800:A:OP1	1.92	0.52
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.28	0.52
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.43	0.52
1:2A:2497:A:H5''	61:2A:6248:HOH:O	2.09	0.52
32:2a:20:U:H2'	32:2a:21:G:O4'	2.10	0.52
32:2a:643:C:H2'	32:2a:644:G:H8	1.75	0.52
32:2a:671:G:H5'	37:2f:77:ARG:NH2	2.20	0.52
32:2a:728:A:H2'	32:2a:729:A:C8	2.45	0.52
32:2a:1058:G:H2'	32:2a:1059:C:C6	2.45	0.52
54:2w:23:A:H2'	54:2w:24:G:C8	2.45	0.52
1:1A:568:U:H5'	1:1A:945:A:N6	2.25	0.52
1:1A:1668:A:O2'	1:1A:1674:G:N7	2.36	0.52
1:1A:2134:A:O2'	1:1A:2135:A:OP1	2.27	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:1F:74:ARG:O	61:1F:401:HOH:O	2.19	0.52
33:1b:100:GLY:O	33:1b:102:LEU:N	2.43	0.52
35:1d:112:VAL:HG23	35:1d:116:GLN:NE2	2.23	0.52
37:1f:100:ASN:HB2	49:1r:28:GLU:HA	1.90	0.52
42:1k:23:ALA:HB2	42:1k:28:THR:HG23	1.91	0.52
1:2A:132:G:O6	61:2A:5738:HOH:O	2.16	0.52
1:2A:531:C:OP1	1:2A:561:G:N1	2.38	0.52
1:2A:645:C:H5''	1:2A:646:A:OP2	2.09	0.52
1:2A:673:C:H5''	5:2F:81:PRO:HD2	1.92	0.52
1:2A:793:A:OP2	1:2A:2071:A:O2'	2.25	0.52
1:2A:2849:U:O4	15:2T:23:ARG:NH2	2.42	0.52
24:22:70:GLN:O	24:22:70:GLN:NE2	2.42	0.52
26:24:60:GLN:O	26:24:62:ARG:N	2.35	0.52
32:2a:230:G:H2'	32:2a:231:G:O4'	2.10	0.52
35:2d:72:GLU:O	35:2d:76:ARG:HB2	2.09	0.52
50:2s:11:VAL:C	50:2s:13:ASP:H	2.15	0.52
54:2w:30:G:H1	54:2w:40:C:H42	1.57	0.52
1:1A:1187:G:H5''	17:1V:81:TYR:CE1	2.44	0.52
1:1A:1359:A:H2	1:1A:1372:U:O4	1.91	0.52
1:1A:1865:G:OP1	61:1A:4261:HOH:O	2.19	0.52
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.09	0.52
2:1B:2:C:H2'	2:1B:3:C:C6	2.44	0.52
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.57	0.52
17:1V:5:VAL:HG21	17:1V:35:LEU:HD23	1.92	0.52
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	1.90	0.52
25:13:7:LYS:HB2	25:13:34:GLU:HG3	1.92	0.52
41:1j:38:ILE:HG12	41:1j:71:LEU:HB3	1.90	0.52
44:1m:14:ARG:NH2	44:1m:16:ASP:OD2	2.41	0.52
1:2A:804:A:OP1	61:2A:5748:HOH:O	2.19	0.52
1:2A:2167:U:H3'	1:2A:2168:G:H21	1.75	0.52
1:2A:2632:A:O2'	1:2A:2811:G:O2'	2.18	0.52
15:2T:29:ARG:HB3	15:2T:87:ASP:HB2	1.91	0.52
32:2a:1271:G:C2	32:2a:1272:G:N7	2.78	0.52
34:2c:62:ASP:O	34:2c:98:ASN:ND2	2.43	0.52
34:2c:152:ILE:HG12	34:2c:199:LYS:HB2	1.92	0.52
40:2i:24:GLY:HA2	40:2i:59:PHE:O	2.10	0.52
42:2k:32:ILE:HG21	42:2k:72:ALA:HB2	1.90	0.52
1:1A:27:G:O2'	1:1A:28:A:OP2	2.27	0.52
1:1A:1184:G:H5'	25:13:29:ARG:HH21	1.74	0.52
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.44	0.52
1:1A:2161:C:O2'	1:1A:2162:G:H8	1.93	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2611:U:H5'	1:1A:2611:U:H6	1.75	0.52
5:1F:156:LEU:HD21	5:1F:163:VAL:HG12	1.90	0.52
6:1G:122:PRO:HB3	6:1G:170:ARG:HH12	1.74	0.52
9:1N:91:LEU:HG	9:1N:98:VAL:HG21	1.91	0.52
14:1S:20:ARG:NH2	22:10:51:VAL:O	2.42	0.52
32:1a:78:G:C6	32:1a:91:C:N4	2.78	0.52
34:1c:131:ARG:NH1	34:1c:166:GLU:OE2	2.42	0.52
39:1h:121:ASP:HB2	39:1h:125:ARG:NH1	2.25	0.52
54:1y:5:G:H1'	54:1y:69:G:N2	2.24	0.52
1:2A:2823:A:OP1	4:2E:113:PHE:HB2	2.10	0.52
3:2D:60:ARG:NH1	3:2D:86:PRO:O	2.42	0.52
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	1.90	0.52
19:2X:12:VAL:HG22	19:2X:29:TRP:CE2	2.45	0.52
32:2a:452:A:HO2'	32:2a:453:A:H8	1.57	0.52
32:2a:1077:G:N1	32:2a:1080:A:OP2	2.33	0.52
33:2b:52:GLU:HG2	33:2b:56:ARG:HH12	1.74	0.52
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.92	0.52
46:2o:39:LEU:HD13	46:2o:56:LEU:HB2	1.91	0.52
1:1A:2010:G:O6	61:1A:4262:HOH:O	2.19	0.52
1:1A:2591:C:H2'	1:1A:2592:G:H8	1.74	0.52
7:1H:3:ARG:NH1	7:1H:4:ILE:H	2.07	0.52
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.10	0.52
14:1S:39:ILE:HB	14:1S:49:VAL:HG12	1.92	0.52
32:1a:711:G:H2'	32:1a:712:A:C8	2.44	0.52
40:1i:31:GLN:HE21	40:1i:36:TYR:HD1	1.57	0.52
1:2A:882:G:H2'	1:2A:883:G:C8	2.45	0.52
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.92	0.52
10:2O:15:GLY:O	10:2O:47:ILE:HG12	2.10	0.52
10:2O:80:ASP:OD2	15:2T:64:ARG:NH2	2.43	0.52
25:23:8:LEU:HB2	25:23:28:LEU:HD22	1.91	0.52
54:2w:33:U:N3	54:2w:36:A:OP2	2.37	0.52
54:2y:14:A:O2'	54:2y:15:G:OP1	2.25	0.52
1:1A:1794:U:H2'	1:1A:1795:C:H6	1.75	0.52
1:1A:1992:G:OP2	61:1A:4258:HOH:O	2.19	0.52
10:1O:73:ASP:HB2	15:1T:82:LEU:HD13	1.92	0.52
33:1b:178:ARG:NH1	33:1b:198:ASP:OD1	2.43	0.52
1:2A:652(A):A:H3'	1:2A:652(B):A:H5''	1.92	0.52
1:2A:2144:U:H1'	1:2A:2148:G:H22	1.74	0.52
7:2H:25:LYS:HG2	7:2H:34:GLU:HG2	1.92	0.52
13:2R:62:ALA:O	13:2R:66:VAL:HG23	2.10	0.52
23:21:3:LYS:HB2	23:21:61:ARG:HH22	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:24:1:MET:HE2	26:24:6:HIS:CE1	2.45	0.52
32:2a:509:A:N3	32:2a:543:C:O2'	2.42	0.52
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.24	0.52
38:2g:18:TYR:HB3	38:2g:59:LEU:HD22	1.91	0.52
1:1A:588:U:H2'	1:1A:589:C:C6	2.44	0.52
1:1A:800:A:H8	1:1A:800:A:OP1	1.93	0.52
1:1A:2026:C:H2'	1:1A:2027:G:O4'	2.10	0.52
1:1A:2685:G:H5'	10:1O:68:GLU:OE2	2.10	0.52
5:1F:9:ILE:HD12	5:1F:123:LEU:HD23	1.92	0.52
22:10:10:THR:HA	61:10:209:HOH:O	2.09	0.52
24:12:67:LYS:O	24:12:70:GLN:NE2	2.42	0.52
32:1a:262:A:H2'	32:1a:263:A:C8	2.44	0.52
39:1h:73:ASP:OD1	39:1h:75:ARG:NE	2.42	0.52
1:2A:614(B):G:N7	5:2F:44:ARG:NH2	2.58	0.52
1:2A:2645:G:H5''	1:2A:2732:G:H1'	1.92	0.52
32:2a:1040:U:H2'	32:2a:1041:A:C8	2.45	0.52
33:2b:63:MET:HG3	33:2b:225:ALA:HB1	1.90	0.52
32:1a:983:A:H5'	32:1a:984:C:OP2	2.10	0.51
32:1a:1346:A:OP1	40:1i:120:ARG:NH1	2.41	0.51
33:1b:109:SER:O	33:1b:112:VAL:HG22	2.10	0.51
44:1m:4:ILE:HD11	44:1m:60:VAL:HG22	1.92	0.51
1:2A:271(H):G:H2'	1:2A:271(I):G:H8	1.75	0.51
1:2A:602:G:O2'	1:2A:655:A:N6	2.43	0.51
1:2A:2811:G:N2	1:2A:2891:G:H1'	2.24	0.51
7:2H:9:ILE:HD11	7:2H:69:ARG:HG2	1.90	0.51
24:22:7:ARG:HA	24:22:10:LEU:HD12	1.92	0.51
32:2a:533:A:OP1	61:2a:3316:HOH:O	2.18	0.51
32:2a:566:G:O6	61:2a:3317:HOH:O	2.19	0.51
32:2a:1317:C:O2	50:2s:37:ARG:NH2	2.43	0.51
32:2a:1326:C:H2'	32:2a:1327:C:C6	2.45	0.51
33:2b:76:GLN:OE1	33:2b:76:GLN:N	2.44	0.51
33:2b:186:ALA:O	33:2b:201:ILE:N	2.38	0.51
1:1A:862:G:H2'	1:1A:863:A:O4'	2.11	0.51
1:1A:1364:G:P	23:11:3:LYS:HG3	2.50	0.51
4:1E:181:LEU:HD21	15:1T:6:LEU:HD23	1.91	0.51
32:1a:236:G:H5''	48:1q:42:TYR:OH	2.10	0.51
43:1l:88:GLY:O	43:1l:99:HIS:HD2	1.93	0.51
54:1w:18:G:O2'	54:1w:57:G:N2	2.31	0.51
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.45	0.51
1:2A:1313:U:OP1	61:2A:5747:HOH:O	2.19	0.51
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:25:LYS:HE3	7:2H:27:LYS:HE3	1.93	0.51
32:2a:757:U:H2'	32:2a:758:G:O4'	2.10	0.51
32:2a:826:C:H2'	32:2a:827:U:C6	2.46	0.51
32:2a:1129:C:O2'	32:2a:1130:A:N7	2.43	0.51
39:2h:20:TYR:HA	39:2h:65:TYR:CE1	2.46	0.51
1:1A:566:U:H5''	11:1P:29:LYS:HE3	1.92	0.51
6:1G:66:GLN:HG3	26:14:1:MET:HE1	1.92	0.51
11:1P:113:LYS:HG3	11:1P:129:ALA:HB3	1.92	0.51
21:1Z:48:PHE:HE1	21:1Z:71:VAL:HG11	1.75	0.51
27:15:40:LYS:NZ	27:15:44:THR:O	2.42	0.51
32:1a:460:G:N2	32:1a:471:G:OP2	2.35	0.51
32:1a:731:G:H5'	32:1a:766:A:H4'	1.92	0.51
1:2A:252:G:P	11:2P:50:ARG:HH22	2.33	0.51
1:2A:320:A:OP2	5:2F:137:LYS:NZ	2.38	0.51
1:2A:375:C:H2'	1:2A:376:C:C6	2.45	0.51
1:2A:1029:A:N1	1:2A:2465:C:O2'	2.42	0.51
1:2A:2134:A:OP2	1:2A:2157:G:N2	2.43	0.51
1:2A:2291:U:OP1	1:2A:2380:C:O2'	2.27	0.51
1:2A:2473:U:O2	1:2A:2473:U:H2'	2.10	0.51
2:2B:14:U:OP2	2:2B:70:C:O2'	2.19	0.51
11:2P:97:PRO:HD3	11:2P:126:VAL:O	2.11	0.51
32:2a:984:C:H2'	32:2a:985:C:C6	2.45	0.51
32:2a:1197:G:OP2	61:2a:3318:HOH:O	2.19	0.51
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.10	0.51
36:2e:7:GLU:OE1	36:2e:37:ARG:NH2	2.40	0.51
40:2i:3:GLN:HA	40:2i:20:ARG:HG2	1.90	0.51
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.41	0.51
1:1A:882:G:H4'	54:1w:19:G:C6	2.45	0.51
1:1A:1825:A:OP1	3:1D:249:PRO:HD3	2.11	0.51
1:1A:2183:C:O2'	1:1A:2184:G:OP1	2.26	0.51
2:1B:51:G:OP2	61:1B:302:HOH:O	2.19	0.51
48:1q:60:ILE:O	48:1q:62:SER:OG	2.29	0.51
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.11	0.51
1:2A:140:G:N2	1:2A:1596:A:H4'	2.25	0.51
1:2A:445:C:OP1	16:2U:2:PRO:HA	2.10	0.51
1:2A:902:C:H2'	1:2A:903:C:H6	1.76	0.51
32:2a:984:C:H2'	32:2a:985:C:H6	1.75	0.51
32:2a:1318:A:O2'	50:2s:37:ARG:HB2	2.10	0.51
32:2a:1327:C:OP2	52:2u:12:LYS:NZ	2.36	0.51
33:2b:114:ARG:O	33:2b:118:LEU:HB2	2.10	0.51
34:2c:6:HIS:HB3	45:2n:49:HIS:ND1	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:31:HIS:HA	34:2c:34:LEU:HB3	1.92	0.51
37:2f:38:GLU:OE1	37:2f:64:GLN:NE2	2.31	0.51
44:2m:80:ARG:HH21	50:2s:69:HIS:CE1	2.27	0.51
54:2y:65:G:H2'	54:2y:66:U:C6	2.45	0.51
6:1G:16:ARG:O	6:1G:20:ILE:HG13	2.11	0.51
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.27	0.51
20:1Y:20:TYR:CE2	20:1Y:43:ASN:HA	2.45	0.51
32:1a:276:G:O3'	48:1q:68:ARG:NH1	2.44	0.51
38:1g:115:ARG:HH11	38:1g:118:VAL:HG21	1.75	0.51
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.43	0.51
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.10	0.51
1:2A:1518:U:H2'	1:2A:1519:G:O4'	2.11	0.51
1:2A:1651:G:H5'	13:2R:39:PRO:HG2	1.92	0.51
1:2A:1815:A:OP2	3:2D:54:ARG:NH2	2.43	0.51
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	1.92	0.51
20:2Y:102:CYS:SG	20:2Y:103:GLY:N	2.83	0.51
32:2a:685:G:C2	32:2a:686:U:C4	2.99	0.51
32:2a:1042:G:H2'	32:2a:1043:C:O4'	2.11	0.51
33:2b:185:ILE:HB	33:2b:199:TYR:HB2	1.92	0.51
34:2c:204:LEU:H	34:2c:204:LEU:HD12	1.75	0.51
1:1A:715:G:H21	46:1o:40:SER:HB2	1.76	0.51
1:1A:1041:C:H42	1:1A:1114:G:H1	1.58	0.51
1:1A:1297:C:OP1	61:1A:4253:HOH:O	2.18	0.51
1:1A:2102:U:H3	1:1A:2187:G:H1	1.59	0.51
2:1B:41:U:H5	6:1G:70:VAL:H	1.58	0.51
2:1B:88:C:H2'	2:1B:89:G:O4'	2.10	0.51
5:1F:182:ASN:HD21	5:1F:185:ASP:CG	2.18	0.51
7:1H:86:GLU:OE1	7:1H:130:ARG:NH1	2.43	0.51
32:1a:108:G:N1	51:1t:15:ARG:HG2	2.25	0.51
32:1a:160:A:H1'	32:1a:344:A:C5	2.46	0.51
33:1b:166:ASP:OD2	61:1b:4801:HOH:O	2.19	0.51
48:1q:76:LEU:HD12	48:1q:77:VAL:H	1.75	0.51
55:1x:23:C:H2'	55:1x:24:U:C6	2.45	0.51
1:2A:75:G:H4'	24:22:55:ARG:NH2	2.26	0.51
1:2A:224:G:H2'	1:2A:225:A:O4'	2.10	0.51
1:2A:483:A:O2'	20:2Y:49:VAL:O	2.27	0.51
1:2A:657:U:H2'	1:2A:658:C:C6	2.46	0.51
1:2A:2129:C:O2	1:2A:2160:G:N2	2.43	0.51
1:2A:2141:G:C2	1:2A:2151:G:H1'	2.46	0.51
15:2T:65:LYS:HE3	15:2T:67:SER:HB2	1.92	0.51
32:2a:1003:G:N2	32:2a:1025:U:O4	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1089:G:H1	32:2a:1096:C:N4	2.07	0.51
32:2a:1251:A:N1	32:2a:1354:C:O2'	2.38	0.51
35:2d:61:LYS:HD3	35:2d:206:PHE:CE2	2.46	0.51
36:2e:57:LYS:HG2	36:2e:61:TYR:CE2	2.43	0.51
1:1A:12:U:O2	1:1A:2626:C:H4'	2.10	0.51
1:1A:1086:A:H4'	1:1A:1103:A:H2	1.76	0.51
32:1a:222:U:H2'	32:1a:223:U:C6	2.46	0.51
32:1a:1001(A):G:C2	32:1a:1002:G:H1'	2.46	0.51
32:1a:1347:G:O2'	32:1a:1373:G:O6	2.21	0.51
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.77	0.51
45:1n:48:ALA:HB2	45:1n:53:LEU:HD12	1.91	0.51
1:2A:271(H):G:H2'	1:2A:271(I):G:C8	2.46	0.51
1:2A:468:G:N7	29:27:39:ARG:NH2	2.58	0.51
1:2A:1988:C:H2'	1:2A:1989:G:O4'	2.11	0.51
1:2A:2543:G:H2'	1:2A:2544:G:C8	2.45	0.51
9:2N:110:GLY:O	9:2N:114:ARG:HG3	2.11	0.51
10:2O:119:PRO:HB2	15:2T:68:TYR:CE2	2.45	0.51
12:2Q:109:VAL:HG22	12:2Q:113:GLN:NE2	2.25	0.51
16:2U:65:ILE:HD11	16:2U:95:LEU:HB3	1.91	0.51
21:2Z:54:HIS:HE2	21:2Z:123:ASP:HB3	1.75	0.51
25:23:12:PRO:HB2	25:23:20:LYS:HG2	1.92	0.51
32:2a:952:U:H2'	32:2a:953:G:H8	1.74	0.51
32:2a:978:A:N6	32:2a:1318:A:N7	2.59	0.51
32:2a:1057:G:H2'	32:2a:1058:G:O4'	2.11	0.51
32:2a:1329:A:H5''	44:2m:26:GLY:N	2.25	0.51
32:2a:1381:U:O2'	38:2g:79:ARG:HD3	2.11	0.51
33:2b:134:GLU:O	33:2b:138:LEU:HG	2.10	0.51
57:1A:4107:TYK:H21	57:1A:4107:TYK:H222	1.91	0.51
8:1I:126:TYR:HB2	8:1I:142:VAL:HG23	1.93	0.51
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.10	0.51
32:1a:430:A:OP2	35:1d:8:VAL:HG12	2.11	0.51
32:1a:890:G:O2'	32:1a:906:G:O6	2.22	0.51
32:1a:911:U:OP2	43:1I:97:ARG:NH2	2.44	0.51
32:1a:975:A:H5'	32:1a:975:A:H8	1.76	0.51
32:1a:1460:A:H2'	32:1a:1461:G:O4'	2.11	0.51
40:1i:18:PHE:HB2	40:1i:62:TYR:O	2.10	0.51
2:2B:52:A:N6	14:2S:33:LYS:HG2	2.25	0.51
5:2F:108:LYS:O	5:2F:112:MET:N	2.38	0.51
10:2O:49:ARG:NH1	32:2a:1422:G:O3'	2.43	0.51
11:2P:20:GLY:N	11:2P:27:HIS:O	2.31	0.51
15:2T:60:THR:HG22	15:2T:77:PRO:HA	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:27:9:ARG:NH2	29:27:47:ARG:HD3	2.26	0.51
32:2a:67:C:H2'	32:2a:68:G:C8	2.45	0.51
32:2a:790:A:H61	32:2a:1498:UR3:P	2.33	0.51
32:2a:1218:C:OP2	45:2n:9:LYS:NZ	2.41	0.51
32:2a:1228:C:OP1	44:2m:115:LYS:NZ	2.33	0.51
40:2i:81:ILE:O	40:2i:85:LEU:HG	2.11	0.51
43:2l:47:LYS:NZ	53:2v:21:C:OP1	2.34	0.51
1:1A:1268:A:C2	1:1A:2013:A:C4	2.99	0.51
1:1A:1448:G:H4'	1:1A:1542:A:OP1	2.10	0.51
1:1A:1799:G:N7	3:1D:179:SER:OG	2.38	0.51
1:1A:2341:G:H2'	1:1A:2342:C:C6	2.46	0.51
1:1A:2684:U:O2'	10:1O:68:GLU:OE2	2.24	0.51
16:1U:34:LYS:HE2	16:1U:34:LYS:HA	1.93	0.51
32:1a:828:A:H2'	32:1a:829:G:O4'	2.10	0.51
32:1a:1187:G:H5'	40:1i:113:LYS:HE2	1.93	0.51
32:1a:1458:G:H5''	51:1t:31:SER:HB2	1.93	0.51
48:1q:80:GLY:O	48:1q:82:MET:N	2.44	0.51
50:1s:48:THR:HG22	50:1s:61:TYR:HD1	1.75	0.51
1:2A:1668:A:O2'	1:2A:1674:G:N7	2.37	0.51
5:2F:32:LEU:O	5:2F:36:VAL:HG23	2.10	0.51
14:2S:33:LYS:HB2	14:2S:34:HIS:CD2	2.45	0.51
16:2U:28:ARG:NH1	16:2U:38:THR:OG1	2.44	0.51
21:2Z:128:VAL:HG22	21:2Z:129:SER:H	1.76	0.51
32:2a:583:A:H2'	32:2a:584:G:O4'	2.11	0.51
32:2a:617:G:N7	61:2a:3339:HOH:O	2.34	0.51
32:2a:620:C:C2	35:2d:135:LEU:HG	2.46	0.51
33:2b:50:GLU:HB3	33:2b:200:ILE:O	2.11	0.51
37:2f:30:LEU:HD23	37:2f:75:LEU:HD11	1.93	0.51
38:2g:15:ASP:OD1	38:2g:19:GLY:N	2.43	0.51
39:2h:96:GLY:N	39:2h:99:GLU:OE1	2.44	0.51
41:2j:34:VAL:HA	41:2j:74:ILE:HD12	1.93	0.51
1:1A:684:G:OP1	29:17:16:HIS:ND1	2.41	0.51
1:1A:1204:A:H61	1:1A:1240:U:H2'	1.76	0.51
1:1A:1381:G:N7	61:1A:4359:HOH:O	2.33	0.51
1:1A:2011:U:OP1	18:1W:42:ARG:NH1	2.42	0.51
2:1B:96:U:O4	61:1B:301:HOH:O	2.19	0.51
32:1a:811:C:O2'	32:1a:901:A:N1	2.41	0.51
38:1g:32:ARG:NH2	61:1g:201:HOH:O	2.43	0.51
40:1i:40:LEU:HD11	40:1i:70:LYS:HD2	1.93	0.51
45:1n:33:VAL:HA	45:1n:40:CYS:HA	1.92	0.51
5:2F:184:TYR:CZ	5:2F:188:ARG:HD2	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:28:28:GLY:O	30:28:36:LYS:NZ	2.41	0.51
32:2a:45:U:H2'	32:2a:46:G:H8	1.75	0.51
32:2a:1371:G:O3'	40:2i:69:GLY:HA3	2.11	0.51
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.46	0.51
1:1A:686:G:N2	1:1A:788:A:H61	2.09	0.50
1:1A:1364:G:N7	23:11:3:LYS:HD2	2.26	0.50
1:1A:2112:G:C2	1:1A:2113:U:H1'	2.46	0.50
2:1B:1:U:O2'	2:1B:2:C:OP1	2.26	0.50
2:1B:24:G:N7	2:1B:56:G:H2'	2.26	0.50
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.25	0.50
32:1a:737:A:H2'	32:1a:738:C:C6	2.45	0.50
35:1d:23:GLY:HA3	35:1d:112:VAL:HG12	1.91	0.50
1:2A:581:C:H2'	1:2A:582:G:C8	2.46	0.50
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.11	0.50
1:2A:658:C:H2'	1:2A:659:C:C6	2.46	0.50
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.43	0.50
1:2A:2773:C:OP1	4:2E:166:THR:OG1	2.28	0.50
7:2H:9:ILE:HB	7:2H:50:VAL:HG13	1.91	0.50
11:2P:63:PRO:HD3	30:28:27:THR:HG22	1.93	0.50
30:28:62:LEU:HB3	30:28:65:GLU:HG2	1.93	0.50
32:2a:436:C:H2'	32:2a:437:U:H6	1.76	0.50
1:1A:528:A:O2'	1:1A:529:A:H5'	2.11	0.50
1:1A:796:C:H2'	1:1A:797:C:C6	2.46	0.50
1:1A:897:C:H5'	54:1w:56:C:OP1	2.11	0.50
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.10	0.50
1:1A:1876:A:H2'	1:1A:1877:A:C8	2.46	0.50
26:14:58:ARG:HB3	50:1s:67:VAL:HB	1.91	0.50
32:1a:955:U:O2'	50:1s:83:HIS:HD2	1.94	0.50
35:1d:112:VAL:H	35:1d:116:GLN:NE2	2.10	0.50
54:1w:5:G:H2'	54:1w:6:G:C8	2.46	0.50
1:2A:1426:G:O2'	1:2A:1572:A:N6	2.43	0.50
1:2A:1792:G:H5'	3:2D:205:VAL:HG13	1.94	0.50
32:2a:554:C:H2'	32:2a:555:C:C6	2.45	0.50
32:2a:839:U:H4'	32:2a:840:C:OP2	2.10	0.50
34:2c:144:SER:O	34:2c:144:SER:OG	2.25	0.50
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.12	0.50
1:1A:220:G:O2'	1:1A:233:A:N3	2.39	0.50
1:1A:922:U:H2'	1:1A:923:C:C6	2.46	0.50
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.46	0.50
2:1B:51:G:N7	14:1S:62:LYS:NZ	2.44	0.50
6:1G:126:ASP:N	6:1G:130:ASN:O	2.43	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1O:64:ARG:HB2	10:1O:79:PHE:CD2	2.46	0.50
13:1R:36:THR:HG22	13:1R:37:THR:H	1.76	0.50
20:1Y:12:THR:OG1	20:1Y:26:LYS:HE2	2.11	0.50
26:14:34:GLU:H	26:14:34:GLU:CD	2.18	0.50
31:19:16:VAL:HG22	31:19:25:VAL:HG22	1.93	0.50
32:1a:985:C:H2'	32:1a:986:A:C8	2.46	0.50
33:1b:97:TRP:HZ2	33:1b:102:LEU:HD13	1.75	0.50
35:1d:28:SER:HB3	35:1d:30:LYS:H	1.77	0.50
36:1e:78:HIS:CD2	39:1h:104:ARG:HD2	2.46	0.50
37:1f:20:ALA:O	37:1f:24:GLU:N	2.45	0.50
44:1m:49:THR:C	44:1m:51:ALA:H	2.19	0.50
51:1t:10:LEU:HB3	51:1t:12:ALA:H	1.76	0.50
1:2A:580:C:H2'	1:2A:581:C:C6	2.46	0.50
1:2A:2529:G:O6	31:29:31:LYS:NZ	2.44	0.50
20:2Y:20:TYR:HD1	20:2Y:23:ARG:HG3	1.77	0.50
32:2a:56:U:H2'	32:2a:57:G:C8	2.47	0.50
32:2a:137:C:H2'	32:2a:138:G:H8	1.77	0.50
32:2a:289:G:OP2	61:2a:3311:HOH:O	2.19	0.50
32:2a:921:U:O2'	36:2e:19:MET:O	2.29	0.50
34:2c:63:ASN:HB3	34:2c:98:ASN:HD22	1.75	0.50
36:2e:93:PRO:HG2	39:2h:105:ARG:NE	2.26	0.50
41:2j:40:LEU:HB2	41:2j:69:ASN:HB3	1.93	0.50
1:1A:34:C:H5''	1:1A:35:G:OP2	2.12	0.50
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.77	0.50
1:1A:1750:G:O2'	1:1A:2860:A:N1	2.43	0.50
3:1D:142:VAL:HG23	3:1D:193:VAL:HA	1.93	0.50
9:1N:133:GLN:N	9:1N:133:GLN:OE1	2.43	0.50
14:1S:14:VAL:O	14:1S:18:ILE:HG12	2.12	0.50
30:18:26:LYS:HG2	30:18:46:ARG:O	2.12	0.50
30:18:63:PRO:HG2	30:18:64:TYR:CE2	2.47	0.50
32:1a:1329:A:H5''	44:1m:26:GLY:H	1.76	0.50
39:1h:34:GLU:OE1	39:1h:37:ARG:NH2	2.44	0.50
1:2A:2125:G:H1'	1:2A:2173:A:H61	1.76	0.50
1:2A:2271:G:OP1	22:20:18:ALA:HB1	2.12	0.50
9:2N:40:PRO:HB3	16:2U:68:ALA:HB2	1.93	0.50
32:2a:336:C:H2'	32:2a:337:C:C6	2.47	0.50
32:2a:748:C:H4'	32:2a:749:C:O5'	2.12	0.50
32:2a:875:C:H1'	39:2h:15:ASN:HD21	1.77	0.50
32:2a:1219:U:OP1	45:2n:19:ARG:NH1	2.28	0.50
32:2a:1264:C:N4	32:2a:1271:G:H1	2.08	0.50
32:2a:1310:G:H2'	32:2a:1311:G:C8	2.47	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:118:LEU:HB3	33:2b:142:LEU:HD12	1.93	0.50
1:1A:2111:C:N3	1:1A:2145:C:O2'	2.39	0.50
1:2A:568:U:H5'	1:2A:945:A:C6	2.46	0.50
1:2A:893:C:H2'	1:2A:894:C:C5	2.47	0.50
1:2A:1041:C:H1'	1:2A:1115:G:N2	2.26	0.50
5:2F:148:LEU:HD13	5:2F:154:VAL:HG21	1.92	0.50
6:2G:79:ASN:OD1	6:2G:79:ASN:N	2.44	0.50
6:2G:111:LEU:HD23	6:2G:117:PHE:CZ	2.47	0.50
9:2N:67:LEU:HA	9:2N:87:LEU:HD23	1.93	0.50
32:2a:989:C:H2'	32:2a:990:C:C6	2.47	0.50
41:2j:35:SER:HB3	41:2j:73:ASP:H	1.77	0.50
1:1A:1057:A:H61	1:1A:1081:U:H3	1.59	0.50
7:1H:18:GLU:HG2	7:1H:25:LYS:HB2	1.94	0.50
15:1T:36:GLU:O	15:1T:38:ASN:N	2.45	0.50
17:1V:62:LEU:HD12	17:1V:93:GLU:HG2	1.93	0.50
32:1a:685:G:N1	32:1a:704:A:OP2	2.42	0.50
32:1a:757:U:H2'	32:1a:758:G:O4'	2.11	0.50
32:1a:1429:C:H2'	32:1a:1430:C:C6	2.46	0.50
33:1b:224:GLN:HA	33:1b:228:GLY:O	2.12	0.50
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.93	0.50
1:2A:2049:G:N7	61:2A:5853:HOH:O	2.35	0.50
1:2A:2095:C:H2'	1:2A:2096:U:O4'	2.12	0.50
1:2A:2314:C:H2'	1:2A:2315:G:C8	2.47	0.50
18:2W:34:ASN:OD1	18:2W:37:ARG:NH2	2.40	0.50
32:2a:1512:U:H2'	32:2a:1513:A:H8	1.76	0.50
1:1A:880:G:H2'	1:1A:881:G:C8	2.37	0.50
1:1A:1423:G:H2'	1:1A:1424:G:H8	1.77	0.50
1:1A:1815:A:OP2	3:1D:54:ARG:NH2	2.37	0.50
1:1A:1881:C:H2'	1:1A:1882:C:H6	1.76	0.50
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.11	0.50
3:1D:37:LEU:HB2	3:1D:62:TYR:HB2	1.94	0.50
3:1D:148:GLU:OE1	3:1D:151:LYS:NZ	2.32	0.50
5:1F:8:GLN:HE22	5:1F:21:ALA:HB2	1.75	0.50
32:1a:120:A:OP1	61:1a:1917:HOH:O	2.18	0.50
33:1b:93:VAL:HG11	33:1b:97:TRP:CD1	2.47	0.50
34:1c:19:GLU:O	34:1c:40:ARG:NH2	2.43	0.50
1:2A:61:G:H5'	24:22:50:ILE:HG21	1.93	0.50
1:2A:855:G:H2'	1:2A:856:C:C6	2.47	0.50
1:2A:2611:U:C4	27:25:3:LYS:HG2	2.47	0.50
2:2B:8:U:O3'	14:2S:25:ARG:NH2	2.45	0.50
3:2D:66:ASP:OD1	3:2D:69:ARG:N	2.45	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:18:ARG:NH1	5:2F:127:GLU:OE2	2.44	0.50
17:2V:7:THR:HG23	17:2V:12:TYR:HE2	1.76	0.50
32:2a:840:C:H4'	32:2a:841:U:OP1	2.11	0.50
32:2a:1126:U:H3	41:2j:40:LEU:HD11	1.75	0.50
32:2a:1245:A:H2'	32:2a:1246:C:O4'	2.12	0.50
33:2b:51:LEU:HD22	33:2b:55:PHE:CE2	2.46	0.50
33:2b:170:GLU:HB3	33:2b:173:ALA:HB3	1.93	0.50
34:2c:131:ARG:HH21	36:2e:50:GLU:HG3	1.77	0.50
35:2d:64:LEU:HB2	35:2d:198:VAL:HG21	1.94	0.50
35:2d:175:SER:HB3	35:2d:186:LEU:HD11	1.92	0.50
38:2g:100:ALA:O	38:2g:104:LEU:HB2	2.11	0.50
44:2m:101:GLN:OE1	44:2m:101:GLN:N	2.44	0.50
1:1A:747:U:O2	1:1A:2014:A:H1'	2.11	0.50
1:1A:1633:G:O6	61:1A:4260:HOH:O	2.19	0.50
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.46	0.50
1:1A:2831:G:P	4:1E:58:ARG:HH21	2.35	0.50
5:1F:185:ASP:HA	5:1F:188:ARG:HD3	1.94	0.50
32:1a:1070:U:H2'	32:1a:1071:C:C6	2.47	0.50
43:1l:39:VAL:HG11	43:1l:41:ARG:NH1	2.27	0.50
44:1m:4:ILE:HD13	44:1m:57:ARG:HG3	1.94	0.50
1:2A:2483:C:H2'	1:2A:2484:G:O4'	2.11	0.50
32:2a:9:G:H5''	36:2e:126:ARG:HD3	1.92	0.50
32:2a:683:G:H2'	32:2a:684:A:O4'	2.11	0.50
32:2a:716:A:N3	42:2k:118:GLY:HA2	2.27	0.50
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.94	0.50
32:2a:1202:G:N2	45:2n:46:GLU:OE2	2.40	0.50
33:2b:24:TRP:CD1	33:2b:24:TRP:H	2.30	0.50
38:2g:22:LEU:HG	38:2g:62:PHE:CE2	2.47	0.50
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.93	0.50
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.42	0.50
1:1A:1082:U:C4	1:1A:1086:A:N1	2.78	0.50
1:1A:2660:A:N7	7:1H:175:LYS:NZ	2.60	0.50
32:1a:695:A:OP2	42:1k:53:SER:N	2.45	0.50
35:1d:178:VAL:HG12	35:1d:179:GLU:H	1.76	0.50
49:1r:70:ILE:O	49:1r:74:ARG:HG3	2.12	0.50
1:2A:687:C:H2'	1:2A:688:U:O4'	2.12	0.50
1:2A:882:G:H2'	1:2A:883:G:H8	1.77	0.50
1:2A:1183:G:H5''	25:23:30:ARG:NH2	2.27	0.50
1:2A:1420:U:O2'	1:2A:1421:G:H5'	2.12	0.50
1:2A:2786:U:O2'	4:2E:62:PRO:O	2.25	0.50
9:2N:19:GLU:HG3	9:2N:59:LYS:HD2	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:382:A:H2'	32:2a:383:A:C8	2.47	0.50
32:2a:966:M2G:HM22	55:2x:34:C:H5'	1.93	0.50
32:2a:1064:G:OP1	32:2a:1386:G:H4'	2.10	0.50
38:2g:69:VAL:HG13	38:2g:134:ALA:O	2.11	0.50
40:2i:11:LYS:HA	40:2i:108:VAL:HG13	1.93	0.50
1:1A:674:G:O2'	5:1F:74:ARG:HD3	2.12	0.49
1:1A:784:A:O4'	3:1D:227:ASN:ND2	2.44	0.49
1:1A:2135:A:H5'	1:1A:2160:G:H4'	1.94	0.49
1:1A:2404:C:O3'	11:1P:77:ARG:NH2	2.45	0.49
8:1I:93:THR:O	8:1I:97:ILE:HG13	2.12	0.49
32:1a:266:G:H2'	32:1a:266:G:N3	2.27	0.49
32:1a:530:G:O6	53:1v:21:C:H1'	2.12	0.49
32:1a:1286:A:H2'	32:1a:1287:A:H4'	1.93	0.49
1:2A:652(U):G:H2'	1:2A:652(V):C:O4'	2.12	0.49
1:2A:789:A:N7	61:2A:5856:HOH:O	2.35	0.49
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.45	0.49
1:2A:2821:A:H2'	1:2A:2822:G:H8	1.77	0.49
7:2H:26:VAL:HG12	7:2H:79:VAL:HG11	1.94	0.49
14:2S:15:ARG:HE	14:2S:88:ASP:CG	2.19	0.49
15:2T:49:VAL:HG12	15:2T:63:VAL:HG22	1.93	0.49
16:2U:65:ILE:HD13	16:2U:95:LEU:HD23	1.93	0.49
32:2a:520:A:N1	32:2a:536:C:H1'	2.28	0.49
32:2a:1176:A:H2'	32:2a:1177:G:H8	1.77	0.49
51:2t:9:ASN:O	51:2t:10:LEU:HB2	2.10	0.49
1:1A:583:G:OP2	16:1U:10:ARG:NH1	2.39	0.49
1:1A:919:G:N2	1:1A:2269:A:OP2	2.42	0.49
1:1A:2064:C:H2'	1:1A:2065:C:C6	2.47	0.49
6:1G:109:VAL:HG11	26:14:14:ILE:HG21	1.95	0.49
9:1N:71:ILE:HA	9:1N:86:PRO:HA	1.94	0.49
28:16:6:ARG:NE	28:16:24:GLU:OE2	2.36	0.49
32:1a:7:G:H5'	32:1a:298:A:O4'	2.10	0.49
32:1a:116:A:H61	32:1a:313:A:H1'	1.76	0.49
32:1a:405:U:O2'	32:1a:498:U:H5'	2.12	0.49
32:1a:1518:MA6:O5'	32:1a:1518:MA6:H8	2.11	0.49
44:1m:15:VAL:O	44:1m:19:LEU:HD12	2.12	0.49
54:1w:4:C:H2'	54:1w:5:G:H8	1.76	0.49
1:2A:884:C:H3'	1:2A:885:C:H6	1.77	0.49
6:2G:125:PHE:HB3	6:2G:166:ASP:CG	2.37	0.49
12:2Q:34:LEU:HB2	12:2Q:118:LEU:HD22	1.94	0.49
32:2a:858:G:N7	61:2a:3340:HOH:O	2.34	0.49
32:2a:1005:A:H3'	32:2a:1006:C:C6	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.45	0.49
37:2f:70:ASP:OD1	37:2f:70:ASP:N	2.37	0.49
1:1A:1693:U:O2'	3:1D:14:ARG:NH2	2.46	0.49
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.45	0.49
5:1F:95:ARG:HD3	5:1F:97:TYR:CZ	2.47	0.49
21:1Z:153:SER:HA	21:1Z:167:PRO:HB3	1.94	0.49
32:1a:1189:C:OP1	41:1j:51:ARG:NH2	2.43	0.49
33:1b:16:HIS:CD2	33:1b:204:ASN:H	2.29	0.49
33:1b:87:ARG:NH2	33:1b:233:SER:HB3	2.27	0.49
51:1t:9:ASN:O	51:1t:10:LEU:HB2	2.11	0.49
1:2A:276:A:H5''	1:2A:277:C:H5'	1.93	0.49
1:2A:700:G:O2'	1:2A:1632:A:N3	2.43	0.49
1:2A:2199:A:N1	1:2A:2226:C:N4	2.59	0.49
1:2A:2841:C:H2'	1:2A:2842:G:C8	2.47	0.49
32:2a:1485:U:H2'	32:2a:1486:G:C8	2.47	0.49
36:2e:61:TYR:HA	36:2e:64:ARG:HB2	1.95	0.49
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.26	0.49
48:2q:3:LYS:HD2	48:2q:60:ILE:HD11	1.94	0.49
16:1U:76:TYR:CZ	16:1U:80:ILE:HG13	2.48	0.49
23:11:73:LEU:HB3	23:11:94:LEU:HD22	1.93	0.49
30:18:4:MET:HE3	30:18:63:PRO:HG3	1.94	0.49
32:1a:390:C:H2'	32:1a:391:G:C8	2.47	0.49
32:1a:1033:G:H2'	32:1a:1034:G:H8	1.76	0.49
40:1i:6:GLY:O	40:1i:17:VAL:HG12	2.13	0.49
1:2A:854:G:H2'	1:2A:855:G:C8	2.48	0.49
1:2A:994:C:O2'	1:2A:996:A:OP1	2.22	0.49
1:2A:1627:G:OP1	61:2A:5749:HOH:O	2.19	0.49
1:2A:2164:C:H3'	1:2A:2165:G:O4'	2.12	0.49
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.76	0.49
11:2P:52:GLU:HB3	11:2P:55:ARG:CZ	2.43	0.49
22:20:34:GLY:N	22:20:61:ALA:O	2.44	0.49
22:20:70:GLN:NE2	22:20:72:ARG:HD2	2.23	0.49
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.47	0.49
40:2i:44:VAL:O	40:2i:46:ALA:N	2.45	0.49
43:2l:8:ASN:O	43:2l:12:ARG:HG3	2.11	0.49
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.47	0.49
10:1O:34:THR:OG1	10:1O:35:VAL:N	2.40	0.49
22:10:38:VAL:HG12	22:10:40:GLN:HG2	1.92	0.49
32:1a:625:G:H2'	32:1a:626:U:C6	2.47	0.49
32:1a:1412:C:H2'	32:1a:1413:A:C8	2.48	0.49
35:1d:166:LYS:NZ	35:1d:179:GLU:OE2	2.41	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:1y:26:A:N6	54:1y:44:G:H1	2.10	0.49
1:2A:311:A:H5''	61:2A:6699:HOH:O	2.11	0.49
1:2A:1308:A:H2'	1:2A:1309:G:O4'	2.12	0.49
1:2A:1359:A:H2	1:2A:1372:U:O4	1.95	0.49
1:2A:2853:C:H2'	1:2A:2854:G:C8	2.47	0.49
6:2G:11:TYR:O	6:2G:16:ARG:HB2	2.12	0.49
7:2H:54:ARG:HD2	7:2H:56:SER:O	2.13	0.49
11:2P:39:LYS:HB2	11:2P:45:LEU:HD23	1.94	0.49
32:2a:643:C:H5'	39:2h:31:PHE:CD1	2.47	0.49
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.27	0.49
32:2a:1256:A:N1	32:2a:1278:U:H1'	2.27	0.49
1:1A:279:C:H42	1:1A:361:G:H1	1.60	0.49
1:1A:1227:G:OP1	16:1U:13:LYS:HG2	2.12	0.49
1:1A:1234:U:H2'	1:1A:1235:G:O4'	2.13	0.49
1:1A:1364:G:OP2	23:11:3:LYS:HG3	2.12	0.49
1:1A:2029:G:H2'	1:1A:2031:A:OP1	2.12	0.49
6:1G:43:LEU:HD12	6:1G:153:ARG:HD2	1.94	0.49
10:1O:59:LYS:NZ	10:1O:89:ASN:HD21	2.11	0.49
32:1a:1347:G:N2	32:1a:1373:G:H2'	2.26	0.49
37:1f:33:TYR:OH	37:1f:78:GLU:HG3	2.12	0.49
1:2A:196:A:N3	1:2A:196:A:H2'	2.27	0.49
1:2A:571:A:N6	1:2A:2499:C:O3'	2.45	0.49
1:2A:597:U:H2'	1:2A:598:G:H8	1.78	0.49
1:2A:1016:G:O6	1:2A:1147:C:N4	2.45	0.49
1:2A:2134:A:H62	1:2A:2157:G:H4'	1.77	0.49
6:2G:5:VAL:HG12	6:2G:104:GLU:OE1	2.12	0.49
8:2I:79:ILE:O	8:2I:144:VAL:HA	2.13	0.49
11:2P:64:LYS:HE3	30:28:12:LYS:HB3	1.93	0.49
11:2P:93:GLY:H	11:2P:123:LEU:HD22	1.77	0.49
17:2V:62:LEU:HD21	17:2V:95:LEU:HB2	1.94	0.49
29:27:24:THR:O	29:27:28:ARG:HG3	2.13	0.49
31:29:22:ARG:NH1	31:29:35:ARG:HD2	2.27	0.49
32:2a:417:C:H2'	32:2a:418:C:H6	1.77	0.49
32:2a:1242:C:H2'	32:2a:1243:C:O4'	2.13	0.49
32:2a:1502:A:H5'	32:2a:1504:G:N7	2.28	0.49
54:2y:18:G:O6	54:2y:56:C:N4	2.46	0.49
1:1A:271(M):G:N2	8:1I:50:ARG:HH12	2.11	0.49
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.77	0.49
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.37	0.49
34:1c:159:GLY:HA2	34:1c:193:TYR:CD1	2.47	0.49
1:2A:18:C:O2'	1:2A:554:U:OP1	2.26	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:807:U:P	11:2P:36:LYS:HD3	2.53	0.49
57:2A:3879:TYK:H222	57:2A:3879:TYK:H21	1.95	0.49
2:2B:83:G:H1	2:2B:94:C:H42	1.59	0.49
11:2P:50:ARG:O	11:2P:52:GLU:HG3	2.13	0.49
23:21:83:GLU:N	23:21:83:GLU:OE2	2.46	0.49
32:2a:200:G:H1	32:2a:217:C:H42	1.59	0.49
32:2a:552:U:O3'	43:2l:87:GLY:HA3	2.12	0.49
32:2a:707:C:H2'	32:2a:708:C:H6	1.77	0.49
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.42	0.49
35:2d:119:GLN:HG2	35:2d:123:HIS:CD2	2.38	0.49
40:2i:85:LEU:HD12	40:2i:96:LEU:HD11	1.93	0.49
41:2j:65:LEU:HD22	45:2n:56:VAL:HG22	1.95	0.49
43:2l:69:TYR:HD2	43:2l:99:HIS:CE1	2.30	0.49
3:1D:261:LYS:HZ1	3:1D:263:ARG:HH21	1.61	0.49
5:1F:53:THR:HG22	5:1F:55:GLY:H	1.77	0.49
7:1H:25:LYS:HG2	7:1H:34:GLU:HG2	1.94	0.49
11:1P:85:LEU:HA	11:1P:88:LEU:HD12	1.95	0.49
11:1P:124:LYS:HA	11:1P:144:GLU:HB3	1.93	0.49
19:1X:44:GLU:HG3	19:1X:51:VAL:HG23	1.94	0.49
32:1a:458:C:H2'	32:1a:460:G:O4'	2.13	0.49
32:1a:1530:G:H2'	32:1a:1531:A:C8	2.47	0.49
33:1b:213:LEU:HB3	33:1b:214:ILE:HD12	1.95	0.49
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.44	0.49
40:1i:49:PRO:HD3	40:1i:78:LYS:HG3	1.95	0.49
41:1j:78:ASN:O	41:1j:80:LYS:N	2.46	0.49
55:1x:19:G:H3'	55:1x:20:U:C5	2.48	0.49
1:2A:442:G:N3	5:2F:48:THR:OG1	2.36	0.49
1:2A:900:A:HO2'	1:2A:901:A:P	2.35	0.49
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.47	0.49
1:2A:1592:C:H2'	1:2A:1593:G:H8	1.78	0.49
1:2A:2689:U:OP2	1:2A:2719:G:N2	2.45	0.49
32:2a:6:G:H22	36:2e:98:THR:HG22	1.78	0.49
32:2a:988:G:C1'	32:2a:1014:A:H61	2.26	0.49
32:2a:1060:C:OP1	45:2n:45:ARG:NH2	2.43	0.49
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.48	0.49
34:2c:22:TRP:HA	41:2j:93:GLY:HA2	1.94	0.49
1:1A:489:G:N7	18:1W:49:LYS:NZ	2.60	0.49
1:1A:1190:G:OP1	11:1P:30:THR:OG1	2.23	0.49
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.12	0.49
1:1A:2774:C:H2'	1:1A:2775:A:O4'	2.12	0.49
5:1F:170:LEU:HD13	5:1F:172:TRP:CZ2	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:78:G:O2'	32:1a:79:G:H8	1.95	0.49
32:1a:1429:C:H2'	32:1a:1430:C:H6	1.78	0.49
34:1c:41:GLY:O	34:1c:45:LYS:HG2	2.12	0.49
34:1c:180:ALA:HA	34:1c:206:GLU:HA	1.95	0.49
47:1p:22:THR:HA	47:1p:33:ILE:HG12	1.95	0.49
1:2A:1023:U:O2'	1:2A:1122:G:H5'	2.13	0.49
6:2G:11:TYR:CZ	6:2G:16:ARG:HD3	2.48	0.49
25:23:5:LYS:HE3	25:23:34:GLU:OE2	2.12	0.49
32:2a:625:G:H4'	47:2p:16:HIS:CD2	2.48	0.49
33:2b:111:ARG:HH11	33:2b:111:ARG:HA	1.78	0.49
33:2b:187:LEU:HA	33:2b:201:ILE:O	2.12	0.49
48:2q:53:LEU:H	48:2q:53:LEU:HD12	1.77	0.49
54:2w:53:G:H3'	54:2w:54:5MU:H73	1.94	0.49
1:1A:1213:A:N3	1:1A:1238:G:O2'	2.44	0.49
1:1A:1413:G:H1	1:1A:1589:C:H42	1.61	0.49
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.48	0.49
3:1D:62:TYR:HA	3:1D:87:ASN:OD1	2.13	0.49
5:1F:34:TRP:CH2	11:1P:8:PRO:HB3	2.48	0.49
6:1G:135:LEU:O	6:1G:154:GLY:HA3	2.13	0.49
21:1Z:48:PHE:CE1	21:1Z:71:VAL:HG11	2.48	0.49
32:1a:691:G:H2'	32:1a:692:U:C6	2.48	0.49
35:1d:61:LYS:HD3	35:1d:206:PHE:CE2	2.47	0.49
38:1g:16:LEU:HD22	40:1i:42:ARG:HA	1.95	0.49
54:1w:12:U:H2'	54:1w:13:C:O4'	2.13	0.49
1:2A:864:G:C6	1:2A:865:C:N4	2.81	0.49
1:2A:955:C:OP1	12:2Q:87:LYS:HE3	2.13	0.49
1:2A:2495:G:H5''	12:2Q:82:ARG:HG2	1.93	0.49
32:2a:8:A:N7	35:2d:208:SER:OG	2.43	0.49
32:2a:1260:C:O5'	32:2a:1284:C:H4'	2.12	0.49
37:2f:11:ASN:HB3	37:2f:14:LEU:HG	1.95	0.49
38:2g:15:ASP:O	38:2g:19:GLY:HA2	2.13	0.49
51:2t:10:LEU:HD23	51:2t:12:ALA:HB2	1.95	0.49
1:1A:536:A:H2'	1:1A:537:C:C6	2.48	0.48
1:1A:1430:C:H2'	1:1A:1431:U:C6	2.47	0.48
1:1A:2875:C:O2'	15:1T:2:ASN:OD1	2.29	0.48
3:1D:206:LEU:O	3:1D:211:ARG:HD3	2.13	0.48
29:17:46:VAL:HG12	29:17:48:LYS:NZ	2.27	0.48
32:1a:67:C:H4'	32:1a:172:A:O4'	2.13	0.48
32:1a:321:A:N7	32:1a:328:C:O2'	2.40	0.48
32:1a:738:C:H2'	32:1a:739:C:C6	2.48	0.48
35:1d:67:ILE:HD13	35:1d:196:LEU:HD22	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:1h:21:LYS:O	39:1h:65:TYR:OH	2.27	0.48
44:1m:3:ARG:HG2	44:1m:8:GLU:HA	1.95	0.48
1:2A:27:G:O2'	1:2A:28:A:OP2	2.30	0.48
1:2A:848:G:H2'	1:2A:849:A:C8	2.48	0.48
1:2A:1857:G:C6	1:2A:1858:G:N1	2.81	0.48
1:2A:2126:A:N6	1:2A:2162:G:HO2'	2.09	0.48
1:2A:2557:G:H2'	1:2A:2558:C:H6	1.77	0.48
1:2A:2579:C:H4'	4:2E:134:ILE:HG12	1.94	0.48
7:2H:57:ASP:O	7:2H:62:LYS:HE3	2.13	0.48
9:2N:42:TRP:HA	9:2N:48:MET:SD	2.53	0.48
13:2R:87:TYR:OH	13:2R:117:VAL:O	2.15	0.48
32:2a:560:U:H4'	32:2a:561:U:O5'	2.13	0.48
32:2a:1001(A):G:H3'	32:2a:1002:G:O4'	2.13	0.48
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.47	0.48
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.13	0.48
33:2b:48:MET:HA	33:2b:51:LEU:HB2	1.95	0.48
36:2e:110:LEU:HD13	36:2e:118:ILE:HD13	1.94	0.48
1:1A:61:G:P	24:12:51:ARG:HH21	2.37	0.48
1:1A:694:U:OP1	3:1D:59:LYS:NZ	2.47	0.48
1:1A:956:G:H2'	1:1A:957:A:H2'	1.95	0.48
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.49	0.48
1:1A:2576:G:O2'	1:1A:2579:C:OP2	2.27	0.48
7:1H:157:TYR:CE1	7:1H:172:LYS:HG3	2.49	0.48
11:1P:50:ARG:HH21	30:18:7:HIS:CD2	2.29	0.48
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.95	0.48
33:1b:27:LYS:HB2	33:1b:194:PRO:HD2	1.95	0.48
41:1j:37:PRO:HA	41:1j:72:VAL:HG12	1.94	0.48
45:1n:21:TYR:OH	45:1n:23:ARG:NH2	2.40	0.48
49:1r:40:LEU:HD13	49:1r:79:LEU:HD11	1.95	0.48
50:1s:36:ARG:HB3	50:1s:72:GLY:HA3	1.95	0.48
1:2A:536:A:H2'	1:2A:537:C:C6	2.48	0.48
1:2A:1218:C:H42	1:2A:1231:G:H1	1.60	0.48
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.47	0.48
7:2H:121:ILE:HD11	7:2H:140:LYS:HG2	1.94	0.48
7:2H:125:VAL:HG12	7:2H:131:VAL:HG22	1.95	0.48
12:2Q:103:MET:HB2	12:2Q:104:PHE:CD2	2.48	0.48
18:2W:65:LEU:HD12	18:2W:68:ARG:HE	1.77	0.48
28:26:40:CYS:SG	28:26:42:TRP:HB2	2.54	0.48
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.48	0.48
32:2a:707:C:H2'	32:2a:708:C:C6	2.48	0.48
32:2a:922:G:O2'	32:2a:1398:A:N1	2.42	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:2e:68:GLU:OE2	36:2e:70:PRO:HG3	2.12	0.48
41:2j:13:HIS:CD2	41:2j:14:LYS:H	2.30	0.48
50:2s:3:ARG:HE	50:2s:7:LYS:HB2	1.78	0.48
1:1A:793:A:OP2	1:1A:2071:A:O2'	2.29	0.48
19:1X:57:LEU:HD21	19:1X:78:LYS:HE2	1.95	0.48
28:16:28:ARG:NH1	28:16:29:ASN:OD1	2.46	0.48
32:1a:22:G:H2'	32:1a:23:C:C6	2.48	0.48
32:1a:200:G:H1	32:1a:217:C:H42	1.60	0.48
33:1b:21:ARG:H	33:1b:21:ARG:HD3	1.78	0.48
35:1d:103:ASN:OD1	35:1d:114:ARG:NE	2.37	0.48
1:2A:630:G:N2	1:2A:633:A:OP2	2.39	0.48
1:2A:1576:U:H2'	1:2A:1577:C:H6	1.79	0.48
21:2Z:79:ARG:HD2	21:2Z:80:ARG:NH1	2.28	0.48
32:2a:309:G:H1'	32:2a:608:A:C2	2.48	0.48
32:2a:572:A:OP1	61:2a:3319:HOH:O	2.20	0.48
32:2a:985:C:H2'	32:2a:986:A:C8	2.49	0.48
32:2a:1016:A:H62	32:2a:1017:G:N2	2.11	0.48
32:2a:1111:A:H61	34:2c:177:THR:HA	1.76	0.48
32:2a:1320:C:N3	50:2s:36:ARG:NH2	2.61	0.48
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.48	0.48
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.78	0.48
54:2w:28:G:H2'	54:2w:29:G:O4'	2.12	0.48
54:2y:5:G:H1	54:2y:68:C:H42	1.61	0.48
1:1A:1174:A:H1'	1:1A:1175:U:O5'	2.13	0.48
2:1B:74:U:H2'	2:1B:75:G:O4'	2.14	0.48
3:1D:19:ALA:HB2	3:1D:204:ILE:HD11	1.94	0.48
4:1E:8:LYS:NZ	4:1E:188:VAL:O	2.46	0.48
26:14:55:ARG:CB	26:14:57:GLU:H	2.27	0.48
32:1a:56:U:H2'	32:1a:57:G:C8	2.49	0.48
32:1a:225:C:H2'	32:1a:226:G:H8	1.78	0.48
32:1a:662:G:H2'	32:1a:663:A:C8	2.48	0.48
1:2A:884:C:H3'	1:2A:885:C:C6	2.47	0.48
1:2A:1364:G:C8	23:21:3:LYS:HD2	2.48	0.48
6:2G:16:ARG:O	6:2G:20:ILE:HG13	2.13	0.48
11:2P:8:PRO:HB2	11:2P:12:ALA:HB3	1.94	0.48
28:26:34:LEU:H	28:26:51:GLU:HB2	1.78	0.48
32:2a:108:G:N1	51:2t:15:ARG:HG2	2.27	0.48
32:2a:222:U:H2'	32:2a:223:U:C6	2.49	0.48
32:2a:352:C:O2'	32:2a:354:G:OP1	2.26	0.48
32:2a:552:U:H4'	43:2l:86:ARG:HD2	1.96	0.48
34:2c:189:ALA:HB3	34:2c:196:LEU:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:2r:58:LEU:HD11	49:2r:66:LEU:HD13	1.93	0.48
1:1A:746:A:C2	57:1A:4107:TYK:H162	2.48	0.48
1:1A:2086:U:H2'	1:1A:2087:G:H8	1.78	0.48
1:1A:2722:G:H2'	1:1A:2723:C:C6	2.48	0.48
5:1F:110:LEU:HD22	5:1F:205:ARG:HD2	1.96	0.48
8:1I:114:LEU:HD22	8:1I:130:TYR:CD1	2.47	0.48
26:14:26:SER:OG	26:14:27:THR:N	2.44	0.48
26:14:56:VAL:O	26:14:60:GLN:HB2	2.14	0.48
32:1a:17:U:H2'	32:1a:18:C:C6	2.48	0.48
32:1a:895:G:H2'	32:1a:896:C:C6	2.49	0.48
32:1a:1027:C:N4	32:1a:1034:G:N1	2.61	0.48
32:1a:1186:G:H4'	40:1i:110:GLU:OE2	2.13	0.48
34:1c:47:LEU:HB2	34:1c:52:LEU:HD12	1.94	0.48
36:1e:33:VAL:HG13	36:1e:112:LEU:HD12	1.95	0.48
40:1i:46:ALA:HB1	40:1i:77:ILE:HB	1.94	0.48
1:2A:41:C:H2'	1:2A:42:G:H8	1.77	0.48
1:2A:441:U:H2'	1:2A:442:G:C8	2.49	0.48
1:2A:784:A:C5	3:2D:229:VAL:HG11	2.48	0.48
1:2A:1366:A:H2'	1:2A:1367:A:O4'	2.13	0.48
1:2A:2432:A:OP2	61:2A:5720:HOH:O	2.20	0.48
7:2H:143:GLN:NE2	7:2H:147:ASN:OD1	2.47	0.48
11:2P:89:ALA:HA	11:2P:121:LYS:HD3	1.95	0.48
15:2T:24:PRO:HA	15:2T:49:VAL:HG23	1.95	0.48
26:24:9:LEU:HD22	26:24:26:SER:C	2.38	0.48
32:2a:1011:G:H5'	32:2a:1012:U:OP2	2.13	0.48
32:2a:1417:G:C6	32:2a:1482:G:C6	3.02	0.48
50:2s:27:GLU:HB2	50:2s:28:LYS:HA	1.95	0.48
1:1A:1394:U:H4'	1:1A:1603:A:H4'	1.96	0.48
1:1A:1860:G:H2'	1:1A:1861:G:O4'	2.13	0.48
9:1N:62:VAL:HG22	9:1N:66:LYS:HD2	1.95	0.48
11:1P:3:LEU:HD12	11:1P:6:LEU:HD12	1.96	0.48
47:1p:60:LEU:HD11	47:1p:66:PRO:HD3	1.95	0.48
1:2A:171:G:H2'	1:2A:172:C:C6	2.49	0.48
1:2A:604:G:OP2	11:2P:90:ARG:NH2	2.40	0.48
1:2A:686:G:N2	1:2A:788:A:H61	2.11	0.48
1:2A:715:G:H5'	46:2o:60:VAL:HG11	1.96	0.48
1:2A:1301:A:O2'	1:2A:1302:A:H3'	2.13	0.48
21:2Z:65:GLN:O	21:2Z:67:LEU:N	2.47	0.48
32:2a:269:C:H2'	32:2a:270:A:C8	2.47	0.48
32:2a:1169:A:H2'	32:2a:1170:A:C8	2.48	0.48
32:2a:1178:G:N2	32:2a:1180:A:H3'	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1264:C:N4	32:2a:1265:G:O6	2.47	0.48
37:2f:33:TYR:CE2	37:2f:78:GLU:HG3	2.49	0.48
4:1E:18:ASP:HB3	15:1T:82:LEU:HD21	1.95	0.48
7:1H:3:ARG:HG2	7:1H:6:ARG:HG2	1.95	0.48
7:1H:105:LEU:HD12	7:1H:151:ILE:HD12	1.96	0.48
8:1I:26:ALA:O	8:1I:31:LEU:HB2	2.12	0.48
27:15:11:THR:HG23	27:15:15:ARG:HB3	1.95	0.48
32:1a:160:A:H2'	32:1a:161:A:O4'	2.14	0.48
33:1b:15:VAL:HG23	33:1b:16:HIS:ND1	2.28	0.48
1:2A:289:A:H2'	1:2A:290:G:O4'	2.14	0.48
1:2A:415:A:H2'	1:2A:416:C:O4'	2.14	0.48
1:2A:637:A:H5''	11:2P:117:GLU:HG2	1.95	0.48
2:2B:55:U:H1'	6:2G:29:TRP:CD1	2.49	0.48
6:2G:111:LEU:HD21	6:2G:120:LEU:HD21	1.95	0.48
6:2G:129:GLY:O	6:2G:161:THR:HB	2.14	0.48
12:2Q:135:ASP:HB3	12:2Q:137:TYR:HD2	1.79	0.48
19:2X:60:ARG:HH22	29:27:47:ARG:NH2	2.10	0.48
32:2a:417:C:H2'	32:2a:418:C:C6	2.48	0.48
32:2a:1126:U:N3	41:2j:40:LEU:HD11	2.29	0.48
32:2a:1272:G:N2	32:2a:1273:G:C5	2.81	0.48
32:2a:1316:G:N7	50:2s:7:LYS:NZ	2.43	0.48
33:2b:77:ALA:HA	33:2b:80:ILE:HG22	1.96	0.48
33:2b:178:ARG:HH12	39:2h:68:ARG:NH2	2.12	0.48
38:2g:126:ASP:HB3	38:2g:131:LYS:HB2	1.95	0.48
1:1A:303:U:O4	61:1A:4259:HOH:O	2.19	0.48
1:1A:1631(A):A:OP1	61:1A:4265:HOH:O	2.20	0.48
1:1A:2420:C:H5'	28:16:54:ILE:HD11	1.96	0.48
13:1R:38:VAL:HG12	13:1R:42:LYS:HE3	1.95	0.48
27:15:51:TYR:CE2	27:15:56:LYS:HB2	2.48	0.48
32:1a:693:G:H2'	32:1a:694:A:C8	2.49	0.48
35:1d:8:VAL:O	35:1d:11:LEU:HB2	2.14	0.48
39:1h:41:ARG:NH2	39:1h:123:GLU:OE2	2.46	0.48
1:2A:1346:G:OP2	61:2A:5752:HOH:O	2.20	0.48
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.48	0.48
1:2A:1713:U:H2'	1:2A:1714:G:H8	1.79	0.48
1:2A:1782:C:O2	1:2A:2608:G:O2'	2.27	0.48
1:2A:2641:G:H5''	9:2N:76:SER:HB3	1.95	0.48
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.13	0.48
1:2A:2821:A:O2'	1:2A:2826:A:N1	2.44	0.48
15:2T:102:ILE:HB	15:2T:110:ILE:HG12	1.95	0.48
19:2X:94:GLY:N	19:2X:95:LEU:HB2	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:664:G:H22	32:2a:741:G:H1	1.61	0.48
32:2a:833:U:H2'	32:2a:834:C:C6	2.48	0.48
32:2a:1118:C:OP1	40:2i:9:ARG:HD3	2.13	0.48
32:2a:1128:C:H1'	32:2a:1147:C:H42	1.77	0.48
35:2d:121:VAL:O	35:2d:134:ASP:HA	2.13	0.48
36:2e:76:ILE:O	36:2e:93:PRO:HB3	2.14	0.48
40:2i:31:GLN:HE21	40:2i:36:TYR:HD1	1.62	0.48
41:2j:44:VAL:HG13	41:2j:66:ARG:HG2	1.96	0.48
49:2r:70:ILE:O	49:2r:74:ARG:HG3	2.13	0.48
50:2s:52:TYR:HB2	50:2s:57:HIS:CE1	2.49	0.48
1:1A:1108:U:H2'	1:1A:1109:C:O4'	2.13	0.48
1:1A:1210:A:H5''	1:1A:1212:G:O4'	2.14	0.48
1:1A:1341:U:O2	19:1X:80:ILE:HD12	2.13	0.48
1:1A:1448:G:H1'	1:1A:1528:A:N1	2.29	0.48
1:1A:2133:G:O2'	1:1A:2156:G:N2	2.46	0.48
1:1A:2168:G:O6	1:1A:2171:A:H5''	2.13	0.48
1:1A:2612:C:OP2	27:15:2:ALA:N	2.47	0.48
21:1Z:59:LEU:HD11	21:1Z:88:PHE:CG	2.49	0.48
32:1a:867:G:O2'	32:1a:873:A:N1	2.33	0.48
32:1a:1292:U:P	38:1g:41:ARG:HH22	2.37	0.48
35:1d:138:TYR:HE2	35:1d:140:VAL:HA	1.78	0.48
1:2A:315:G:H2'	1:2A:316:C:C6	2.48	0.48
1:2A:1592:C:H2'	1:2A:1593:G:C8	2.49	0.48
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.14	0.48
1:2A:2758:A:C2	1:2A:2759:G:H1'	2.49	0.48
6:2G:15:VAL:HG13	6:2G:175:LEU:HB2	1.95	0.48
32:2a:429:U:H1'	32:2a:430:A:H5''	1.95	0.48
32:2a:926:G:H22	53:2v:15:A:H3'	1.78	0.48
35:2d:140:VAL:HG11	35:2d:146:ILE:HD11	1.95	0.48
38:2g:54:THR:O	38:2g:56:GLN:N	2.42	0.48
54:2y:61:C:H2'	54:2y:62:C:C6	2.49	0.48
1:1A:458:G:O2'	1:1A:469:G:O6	2.29	0.48
1:1A:1647:G:OP1	61:1A:4220:HOH:O	2.20	0.48
1:1A:2615:U:OP2	61:1A:4266:HOH:O	2.20	0.48
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.95	0.48
12:1Q:37:LEU:HD21	12:1Q:130:LYS:HE2	1.95	0.48
18:1W:92:ARG:NH1	61:1W:304:HOH:O	2.47	0.48
25:13:39:ASP:OD1	25:13:44:ARG:NH1	2.45	0.48
32:1a:193:C:H2'	32:1a:194:C:C6	2.49	0.48
32:1a:935:A:O2'	32:1a:1383:C:N3	2.46	0.48
32:1a:1149:C:H2'	32:1a:1150:U:C6	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1530:G:H4'	32:1a:1530:G:OP1	2.13	0.48
34:1c:73:PRO:O	34:1c:77:ILE:HG12	2.14	0.48
44:1m:11:ARG:C	44:1m:13:LYS:H	2.22	0.48
46:1o:71:GLN:HG3	46:1o:78:TYR:CG	2.49	0.48
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.96	0.48
1:2A:38:A:H2'	1:2A:39:C:C6	2.49	0.48
1:2A:2773:C:H2'	1:2A:2774:C:H6	1.78	0.48
1:2A:2815:C:H5'	27:25:29:THR:HG21	1.96	0.48
2:2B:48:A:H4'	14:2S:95:HIS:CD2	2.45	0.48
7:2H:3:ARG:NH1	7:2H:5:GLY:H	2.12	0.48
7:2H:149:ARG:HD3	7:2H:164:TYR:CE2	2.48	0.48
24:22:46:GLN:HB3	24:22:49:LYS:HD2	1.96	0.48
25:23:23:LEU:HD13	25:23:50:VAL:HG11	1.94	0.48
32:2a:416:G:C5	32:2a:417:C:C4	3.01	0.48
32:2a:649:G:H2'	32:2a:650:G:O4'	2.14	0.48
32:2a:1236:A:O2'	32:2a:1304:G:H4'	2.12	0.48
32:2a:1502:A:C8	32:2a:1505:G:N2	2.81	0.48
32:2a:1517:G:H3'	32:2a:1518:MA6:H8	1.95	0.48
34:2c:43:LEU:HD21	34:2c:91:LEU:HD13	1.95	0.48
1:1A:657:U:H2'	1:1A:658:C:H6	1.79	0.47
2:1B:52:A:OP2	2:1B:52:A:H8	1.96	0.47
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	1.96	0.47
32:1a:50:A:N1	32:1a:360:A:O2'	2.43	0.47
32:1a:913:A:H4'	32:1a:914:A:O5'	2.13	0.47
32:1a:920:U:H2'	32:1a:921:U:C6	2.49	0.47
32:1a:1315:U:H2'	32:1a:1316:G:O4'	2.14	0.47
33:1b:28:PHE:O	33:1b:32:ILE:HG13	2.13	0.47
34:1c:180:ALA:HB1	34:1c:203:PHE:CE1	2.49	0.47
40:1i:128:ARG:NH1	55:1x:35:A:OP2	2.47	0.47
44:1m:49:THR:C	44:1m:51:ALA:N	2.72	0.47
1:2A:271(G):C:H2'	1:2A:271(H):G:H8	1.79	0.47
1:2A:579:G:H2'	1:2A:580:C:C6	2.49	0.47
12:2Q:137:TYR:OH	21:2Z:45:ASP:OD1	2.32	0.47
19:2X:84:ALA:HB3	19:2X:87:GLN:NE2	2.28	0.47
26:24:33:VAL:HG12	26:24:35:VAL:H	1.78	0.47
32:2a:444:C:H2'	32:2a:445:G:C8	2.40	0.47
32:2a:586:C:O2'	32:2a:878:G:H4'	2.12	0.47
32:2a:671:G:H1	32:2a:735:C:H42	1.62	0.47
32:2a:727:G:OP1	32:2a:742:G:N2	2.37	0.47
33:2b:155:LEU:HD21	33:2b:159:PRO:HD3	1.95	0.47
44:2m:122:LYS:HG3	44:2m:123:ALA:H	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:881:G:C2	1:1A:882:G:H1'	2.49	0.47
10:1O:122:LEU:HD13	15:1T:72:VAL:HG11	1.96	0.47
11:1P:39:LYS:HB2	11:1P:45:LEU:CG	2.44	0.47
16:1U:104:GLN:NE2	16:1U:105:VAL:HG23	2.29	0.47
30:18:50:LEU:HA	30:18:50:LEU:HD23	1.72	0.47
32:1a:169:C:H2'	32:1a:170:U:H6	1.78	0.47
32:1a:826:C:H2'	32:1a:827:U:C6	2.50	0.47
32:1a:1293:G:H2'	32:1a:1294:G:C8	2.48	0.47
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.47	0.47
44:1m:73:GLU:O	44:1m:77:ASN:ND2	2.46	0.47
1:2A:590:A:H2'	1:2A:591:C:C6	2.49	0.47
1:2A:601:C:O2'	5:2F:104:LYS:NZ	2.45	0.47
1:2A:1354:A:H2'	1:2A:1355:G:O4'	2.14	0.47
1:2A:1924:C:H4'	55:2x:13:C:O2'	2.15	0.47
1:2A:2143:C:H42	1:2A:2148:G:H1	1.62	0.47
1:2A:2567:G:H2'	1:2A:2568:C:C6	2.50	0.47
1:2A:2875:C:O2'	15:2T:2:ASN:OD1	2.19	0.47
6:2G:108:ASN:HA	26:24:37:SER:HB3	1.97	0.47
9:2N:4:TYR:O	16:2U:64:ARG:NH2	2.37	0.47
10:2O:7:TYR:CZ	10:2O:44:LYS:HG3	2.48	0.47
21:2Z:152:ALA:O	21:2Z:155:LEU:HG	2.13	0.47
32:2a:545:C:O2'	32:2a:549:C:OP1	2.27	0.47
32:2a:826:C:H2'	32:2a:827:U:H6	1.78	0.47
32:2a:909:A:N3	32:2a:1413:A:O2'	2.43	0.47
34:2c:50:ALA:HB1	34:2c:72:LYS:O	2.14	0.47
50:2s:64:GLU:OE2	50:2s:65:ASN:ND2	2.47	0.47
55:2x:23:C:H2'	55:2x:24:U:C6	2.49	0.47
1:1A:1328:G:O2'	1:1A:1329:U:H2'	2.14	0.47
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.29	0.47
1:1A:1907:G:H2'	1:1A:1908:C:C6	2.49	0.47
1:1A:2168:G:C6	1:1A:2171:A:C8	3.02	0.47
1:1A:2206:G:H8	1:1A:2207:G:N7	2.12	0.47
1:1A:2503:2MA:H8	57:1A:4107:TYK:H6B1	1.96	0.47
7:1H:3:ARG:HE	7:1H:54:ARG:NH1	2.11	0.47
10:1O:18:LYS:HB2	10:1O:45:GLU:HB3	1.96	0.47
21:1Z:132:ASN:N	21:1Z:132:ASN:OD1	2.47	0.47
32:1a:738:C:H2'	32:1a:739:C:H6	1.79	0.47
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.39	0.47
1:2A:958:U:O2	2:2B:90:A:O2'	2.27	0.47
1:2A:1630:G:H2'	1:2A:1631:C:C6	2.49	0.47
1:2A:1902:C:H5'	3:2D:246:PRO:HD3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:74:U:H1'	21:2Z:34:ASN:HD21	1.79	0.47
15:2T:105:LEU:HB2	15:2T:110:ILE:HG13	1.97	0.47
21:2Z:126:VAL:HB	21:2Z:161:VAL:HG23	1.96	0.47
30:28:14:VAL:HG22	30:28:24:ALA:HB2	1.95	0.47
32:2a:357:G:OP1	32:2a:367:U:H5''	2.14	0.47
32:2a:436:C:H2'	32:2a:437:U:C6	2.50	0.47
32:2a:1047:G:O2'	32:2a:1215:G:O2'	2.23	0.47
32:2a:1411:C:H2'	32:2a:1412:C:H6	1.78	0.47
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.48	0.47
54:2w:49:C:H2'	54:2w:50:U:C6	2.50	0.47
1:1A:1086:A:H3'	1:1A:1086:A:N3	2.30	0.47
1:1A:1843:C:H5'	3:1D:253:GLN:OE1	2.15	0.47
1:1A:2149:G:C6	1:1A:2150:U:C2	3.02	0.47
1:1A:2245:U:O2'	1:1A:2436:G:OP2	2.27	0.47
1:1A:2756:U:H1'	1:1A:2757:A:H5''	1.96	0.47
1:1A:2803:C:H2'	1:1A:2804:C:C6	2.49	0.47
26:14:61:ARG:HH21	50:1s:42:PRO:HD3	1.78	0.47
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.29	0.47
40:1i:16:ARG:HB2	40:1i:64:THR:HB	1.96	0.47
40:1i:18:PHE:O	40:1i:61:ALA:HA	2.14	0.47
1:2A:55:G:O2'	1:2A:127:A:N1	2.41	0.47
1:2A:471:A:H2'	1:2A:472:A:O4'	2.15	0.47
1:2A:993:G:OP1	16:2U:50:ARG:HD2	2.15	0.47
1:2A:1374:G:H2'	1:2A:1375:C:C6	2.49	0.47
1:2A:2129:C:N3	1:2A:2159:G:N2	2.58	0.47
2:2B:1:U:O2	2:2B:1:U:H2'	2.14	0.47
2:2B:13:A:O2'	2:2B:14:U:H3'	2.13	0.47
4:2E:201:THR:HG23	4:2E:203:LYS:H	1.79	0.47
5:2F:23:ASP:C	5:2F:24:LEU:HD12	2.40	0.47
6:2G:63:ILE:HG12	6:2G:141:PHE:CG	2.49	0.47
13:2R:30:THR:O	13:2R:78:LYS:NZ	2.47	0.47
15:2T:28:VAL:HG13	15:2T:86:ILE:HG23	1.97	0.47
32:2a:909:A:H2'	32:2a:910:C:O4'	2.13	0.47
33:2b:16:HIS:HB2	33:2b:204:ASN:HD22	1.78	0.47
33:2b:84:GLU:HG3	33:2b:215:LEU:HB3	1.95	0.47
39:2h:12:ARG:HD3	39:2h:26:VAL:HG12	1.97	0.47
39:2h:103:VAL:HG11	39:2h:136:GLU:HB2	1.97	0.47
42:2k:84:VAL:HG21	42:2k:95:ILE:HD11	1.95	0.47
43:2l:59:ARG:HA	43:2l:65:GLU:HA	1.97	0.47
44:2m:19:LEU:HD21	44:2m:56:LEU:HD21	1.95	0.47
48:2q:29:HIS:CD2	48:2q:30:PRO:HD2	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1025:G:O2'	61:1A:4215:HOH:O	2.07	0.47
1:1A:1027:A:N3	61:1A:4380:HOH:O	2.36	0.47
1:1A:1289:C:H2'	1:1A:1290:C:H6	1.80	0.47
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.14	0.47
9:1N:96:GLU:H	9:1N:96:GLU:CD	2.22	0.47
28:16:12:GLU:HA	28:16:19:ARG:HA	1.96	0.47
28:16:14:THR:HG21	28:16:48:VAL:HG13	1.96	0.47
32:1a:195:A:C6	32:1a:196:A:N1	2.83	0.47
32:1a:984:C:H42	32:1a:1221:G:H1	1.62	0.47
33:1b:45:GLN:O	33:1b:49:GLU:HG3	2.14	0.47
1:2A:2151:G:H2'	1:2A:2152:G:H8	1.80	0.47
3:2D:183:ARG:HG3	3:2D:270:ILE:HG12	1.95	0.47
8:2I:87:LYS:HE3	8:2I:87:LYS:HB2	1.72	0.47
8:2I:101:LEU:HD23	8:2I:101:LEU:HA	1.76	0.47
32:2a:187:C:O2'	51:2t:89:ARG:HD2	2.15	0.47
40:2i:92:TYR:O	40:2i:96:LEU:HB2	2.13	0.47
42:2k:44:SER:O	42:2k:47:VAL:HG22	2.15	0.47
44:2m:60:VAL:HG22	44:2m:64:TRP:HZ3	1.79	0.47
55:2x:40:C:H2'	55:2x:41:C:H6	1.80	0.47
1:1A:579:G:H2'	1:1A:580:C:C6	2.49	0.47
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.14	0.47
1:1A:2581:G:N7	61:1A:4378:HOH:O	2.35	0.47
5:1F:56:GLU:OE1	5:1F:93:LYS:NZ	2.46	0.47
12:1Q:16:ARG:HG3	12:1Q:18:LYS:HE2	1.96	0.47
30:18:6:THR:HG23	30:18:64:TYR:HD2	1.80	0.47
32:1a:958:A:C2	50:1s:55:LYS:HB2	2.49	0.47
32:1a:986:A:H1'	50:1s:55:LYS:HA	1.96	0.47
32:1a:1227:A:C8	44:1m:117:VAL:HG21	2.49	0.47
32:1a:1323:G:H2'	32:1a:1324:A:C8	2.49	0.47
51:1t:48:LYS:HD3	51:1t:48:LYS:HA	1.72	0.47
55:1x:8:4SU:O5'	55:1x:8:4SU:H6	2.14	0.47
1:2A:715:G:C2	46:2o:56:LEU:HD21	2.50	0.47
1:2A:1803:A:H4'	3:2D:259:THR:HG23	1.96	0.47
1:2A:1913:A:H4'	1:2A:1914:C:O5'	2.13	0.47
3:2D:222:ARG:O	3:2D:226:MET:HG3	2.14	0.47
32:2a:578:C:O2'	32:2a:728:A:N3	2.45	0.47
32:2a:629:G:H2'	32:2a:630:G:O4'	2.14	0.47
32:2a:737:A:H2'	32:2a:738:C:C6	2.50	0.47
32:2a:738:C:OP1	37:2f:92:LYS:HE2	2.15	0.47
32:2a:828:A:H2'	32:2a:829:G:O4'	2.14	0.47
34:2c:70:VAL:HG12	34:2c:72:LYS:H	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:87:SER:HB2	39:2h:93:VAL:HB	1.96	0.47
44:2m:10:PRO:HB2	44:2m:13:LYS:HD2	1.97	0.47
1:1A:858:U:O2	1:1A:2268:A:H2'	2.14	0.47
1:1A:910:A:N1	1:1A:2277:G:H1'	2.30	0.47
1:1A:1071:G:H1'	1:1A:1089:G:H2'	1.97	0.47
1:1A:1702:G:H2'	1:1A:1703:G:O4'	2.14	0.47
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.36	0.47
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.50	0.47
1:1A:2470:G:OP1	12:1Q:56:ARG:NH2	2.47	0.47
1:1A:2865:U:OP2	15:1T:119:LYS:NZ	2.42	0.47
3:1D:89:SER:HB2	3:1D:201:HIS:CD2	2.50	0.47
3:1D:206:LEU:HA	3:1D:211:ARG:NH1	2.30	0.47
4:1E:3:GLY:HA3	4:1E:81:ILE:HD12	1.97	0.47
9:1N:29:LYS:HD2	9:1N:140:VAL:HB	1.95	0.47
9:1N:73:THR:OG1	9:1N:82:LEU:HD11	2.15	0.47
12:1Q:1:MET:HE2	12:1Q:48:GLU:HG2	1.96	0.47
32:1a:62:U:OP1	32:1a:385:C:O2'	2.31	0.47
32:1a:176:C:H2'	32:1a:177:C:H6	1.79	0.47
32:1a:277:C:P	48:1q:68:ARG:HH12	2.38	0.47
32:1a:763:G:H2'	32:1a:764:C:H6	1.80	0.47
32:1a:857:C:H2'	32:1a:858:G:O4'	2.14	0.47
32:1a:1151:A:O2'	32:1a:1152:A:H8	1.94	0.47
34:1c:45:LYS:HG3	34:1c:46:GLU:N	2.29	0.47
34:1c:175:LEU:HD21	34:1c:201:TYR:CE1	2.49	0.47
40:1i:117:HIS:HB2	40:1i:121:ARG:HG3	1.97	0.47
46:1o:18:PHE:O	46:1o:20:GLY:N	2.48	0.47
52:1u:7:ARG:HG2	52:1u:21:TYR:CE2	2.49	0.47
54:1w:37:MIA:H163	54:1w:37:MIA:H121	1.68	0.47
1:2A:108:U:H2'	1:2A:109:G:H8	1.79	0.47
1:2A:300:A:H1'	1:2A:319:C:H1'	1.95	0.47
1:2A:597:U:H2'	1:2A:598:G:C8	2.49	0.47
1:2A:659:C:H2'	1:2A:660:G:H8	1.80	0.47
1:2A:1030:G:OP2	12:2Q:128:LYS:NZ	2.47	0.47
1:2A:2126:A:N6	1:2A:2163:C:H5'	2.30	0.47
1:2A:2243:U:H2'	1:2A:2244:U:C6	2.49	0.47
3:2D:38:LYS:HE2	3:2D:39:LYS:O	2.15	0.47
3:2D:206:LEU:O	3:2D:211:ARG:HD3	2.15	0.47
12:2Q:66:ILE:HG12	12:2Q:104:PHE:CD1	2.50	0.47
21:2Z:99:TYR:HB3	21:2Z:123:ASP:CG	2.40	0.47
26:24:41:PRO:HB3	26:24:49:PHE:CD1	2.50	0.47
30:28:32:LEU:O	30:28:36:LYS:HE3	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:114:U:O2'	32:2a:115:G:H5'	2.15	0.47
32:2a:293:G:H5'	32:2a:610:G:N2	2.30	0.47
32:2a:607:A:H2'	32:2a:608:A:O4'	2.14	0.47
32:2a:814:A:H2'	32:2a:816:A:C5'	2.44	0.47
32:2a:924:C:O2'	32:2a:1502:A:N1	2.43	0.47
32:2a:1500:A:H5''	32:2a:1508:G:H5''	1.97	0.47
33:2b:109:SER:HA	33:2b:112:VAL:HG13	1.97	0.47
33:2b:189:ASP:HB3	33:2b:205:ASP:H	1.79	0.47
34:2c:138:VAL:HG11	34:2c:169:ALA:HA	1.96	0.47
37:2f:79:LEU:HB2	37:2f:88:VAL:HG21	1.96	0.47
39:2h:9:MET:HE3	39:2h:35:ILE:HD11	1.96	0.47
43:2l:40:VAL:HG11	43:2l:77:LEU:HB3	1.96	0.47
51:2t:53:LEU:HD23	51:2t:101:GLY:H	1.80	0.47
1:1A:2100:G:H1	1:1A:2189:U:H3	1.61	0.47
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.14	0.47
20:1Y:10:GLY:O	20:1Y:26:LYS:NZ	2.34	0.47
26:14:40:HIS:HB3	26:14:43:TYR:CD2	2.49	0.47
26:14:63:TYR:N	26:14:63:TYR:CD1	2.82	0.47
32:1a:523:A:N1	43:1l:92:0TD:H6	2.30	0.47
32:1a:1139:G:H4'	32:1a:1140:C:H5'	1.97	0.47
1:2A:857:C:H4'	22:20:23:VAL:HG21	1.96	0.47
1:2A:910:A:H2'	1:2A:911:A:C8	2.50	0.47
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.14	0.47
1:2A:1639:U:H4'	1:2A:2699:C:H4'	1.97	0.47
1:2A:2755:C:HO2'	1:2A:2756:U:H6	1.62	0.47
4:2E:110:GLY:HA2	4:2E:161:GLY:HA3	1.97	0.47
5:2F:95:ARG:HD3	5:2F:97:TYR:CZ	2.50	0.47
6:2G:44:GLY:C	6:2G:46:ALA:H	2.23	0.47
32:2a:109:A:C6	32:2a:326:G:C6	3.03	0.47
32:2a:137:C:H2'	32:2a:138:G:C8	2.50	0.47
32:2a:460:G:N2	32:2a:471:G:N7	2.63	0.47
32:2a:524:G:H2'	32:2a:525:C:C6	2.50	0.47
32:2a:1359:C:O2'	32:2a:1361:G:N7	2.47	0.47
34:2c:20:SER:HB3	34:2c:22:TRP:NE1	2.29	0.47
35:2d:149:ALA:HB3	35:2d:152:SER:HB2	1.96	0.47
40:2i:9:ARG:HB3	40:2i:104:ARG:HH11	1.78	0.47
44:2m:79:LYS:NZ	44:2m:83:ASP:OD2	2.45	0.47
45:2n:23:ARG:HD2	45:2n:28:GLY:O	2.15	0.47
55:2x:58:A:H4'	55:2x:59:A:OP1	2.14	0.47
1:1A:2882:A:H5'	13:1R:96:ARG:HG3	1.96	0.47
32:1a:539:A:H2'	32:1a:540:G:C8	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1239:A:H62	32:1a:1299:A:N6	2.13	0.47
32:1a:1424:C:H2'	32:1a:1425:U:O4'	2.15	0.47
54:1y:19:G:C4'	54:1y:57:G:H22	2.28	0.47
1:2A:271(G):C:H42	1:2A:271(Q):G:H1	1.62	0.47
1:2A:709:U:H2'	1:2A:710:G:C8	2.50	0.47
1:2A:1528(A):A:H2'	1:2A:1529:G:O4'	2.15	0.47
2:2B:87:G:N2	2:2B:90:A:OP2	2.41	0.47
21:2Z:159:PRO:HA	21:2Z:161:VAL:H	1.78	0.47
26:24:62:ARG:HB3	26:24:63:TYR:CE2	2.50	0.47
32:2a:283:C:H2'	32:2a:284:G:O4'	2.15	0.47
32:2a:457:C:H2'	32:2a:458:C:C6	2.50	0.47
1:1A:71:A:N7	19:1X:31:HIS:HE1	2.13	0.47
1:1A:370:G:O5'	1:1A:423:A:N6	2.48	0.47
1:1A:652(C):G:N2	1:1A:653:A:H1'	2.30	0.47
1:1A:833:U:OP1	11:1P:45:LEU:HD13	2.15	0.47
1:1A:1242:A:N1	11:1P:4:SER:OG	2.45	0.47
1:1A:1614:A:OP1	1:1A:1617:C:N4	2.40	0.47
5:1F:184:TYR:CE2	5:1F:188:ARG:HD2	2.50	0.47
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.61	0.47
20:1Y:86:ARG:HB2	20:1Y:98:VAL:HG23	1.97	0.47
32:1a:674:G:H2'	32:1a:675:A:H8	1.78	0.47
32:1a:976:G:OP1	45:1n:32:SER:N	2.47	0.47
32:1a:1241:G:H2'	32:1a:1242:C:H6	1.80	0.47
32:1a:1243:C:H2'	32:1a:1244:C:C6	2.50	0.47
33:1b:118:LEU:HD22	33:1b:142:LEU:HD12	1.95	0.47
34:1c:22:TRP:HB3	34:1c:59:ARG:HB2	1.97	0.47
41:1j:65:LEU:HD13	45:1n:56:VAL:HG13	1.95	0.47
1:2A:571:A:C2	1:2A:573:G:H2'	2.50	0.47
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.15	0.47
1:2A:2114:A:N6	1:2A:2115:G:H21	2.13	0.47
1:2A:2502:G:H5''	1:2A:2503:2MA:H5''	1.97	0.47
1:2A:2807:G:N1	1:2A:2893:G:O6	2.48	0.47
2:2B:94:C:H2'	2:2B:95:C:C6	2.50	0.47
3:2D:97:TYR:HE2	3:2D:103:ARG:HB2	1.79	0.47
7:2H:24:VAL:HG13	7:2H:37:VAL:HG21	1.96	0.47
20:2Y:83:THR:HG21	20:2Y:99:CYS:HB2	1.96	0.47
21:2Z:92:SER:O	21:2Z:130:PRO:HG3	2.14	0.47
32:2a:458:C:H2'	32:2a:460:G:O4'	2.15	0.47
32:2a:892:A:H2'	32:2a:893:C:C6	2.50	0.47
32:2a:1187:G:OP1	40:2i:113:LYS:NZ	2.47	0.47
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.50	0.47
33:2b:52:GLU:O	33:2b:56:ARG:NH1	2.48	0.47
36:2e:89:ILE:HG21	36:2e:135:THR:HA	1.96	0.47
54:2w:34:G:H2'	54:2w:35:A:C8	2.50	0.47
1:1A:61:G:OP1	24:12:51:ARG:NH2	2.49	0.46
1:1A:899:A:H2'	1:1A:899:A:N3	2.30	0.46
1:1A:1006:C:C2	1:1A:1138:G:N2	2.82	0.46
1:1A:1062:G:H22	1:1A:1077:A:N6	2.12	0.46
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.50	0.46
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.50	0.46
1:1A:2095:C:H2'	1:1A:2096:U:O4'	2.15	0.46
1:1A:2579:C:O5'	1:1A:2579:C:H6	1.98	0.46
5:1F:183:VAL:O	5:1F:187:VAL:HG23	2.16	0.46
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.50	0.46
16:1U:85:LYS:HB3	16:1U:116:ALA:HB1	1.98	0.46
32:1a:448:A:P	32:1a:485:G:H22	2.39	0.46
32:1a:1014:A:H4'	50:1s:14:HIS:CE1	2.50	0.46
32:1a:1038:C:C2'	32:1a:1039:C:H5'	2.45	0.46
37:1f:16:GLN:HA	37:1f:19:LEU:HD22	1.98	0.46
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.30	0.46
1:2A:1406:U:H2'	1:2A:1407:C:C6	2.50	0.46
1:2A:1431:U:H2'	1:2A:1432:C:C6	2.49	0.46
1:2A:1653:G:H3'	13:2R:2:ARG:HD3	1.96	0.46
1:2A:2151:G:H2'	1:2A:2152:G:C8	2.51	0.46
1:2A:2176:A:H2'	1:2A:2177:C:C6	2.50	0.46
1:2A:2315:G:H2'	1:2A:2316:C:C6	2.50	0.46
7:2H:87:LEU:HD23	7:2H:164:TYR:HA	1.97	0.46
12:2Q:39:PRO:HD3	12:2Q:99:PRO:HG3	1.97	0.46
18:2W:46:PHE:O	18:2W:50:VAL:HG23	2.14	0.46
28:26:10:LEU:HB2	28:26:52:VAL:HG12	1.97	0.46
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.30	0.46
36:2e:14:ARG:HG3	36:2e:16:THR:HG23	1.97	0.46
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.97	0.46
44:2m:84:ILE:HG13	44:2m:86:CYS:H	1.80	0.46
1:1A:1557:C:H5''	1:1A:1558:A:OP2	2.15	0.46
1:1A:2304:G:H22	1:1A:2312:U:H3	1.61	0.46
1:1A:2654:A:N1	1:1A:2665:A:H5''	2.30	0.46
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.15	0.46
11:1P:2:LYS:NZ	11:1P:4:SER:OG	2.48	0.46
16:1U:65:ILE:HD11	16:1U:95:LEU:HB3	1.96	0.46
32:1a:454:C:H3'	32:1a:455:C:H6	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:826:C:H5'	39:1h:12:ARG:CZ	2.45	0.46
32:1a:1370:G:C2	32:1a:1371:G:C8	3.04	0.46
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.51	0.46
1:2A:1283:G:O2'	1:2A:1285:G:N7	2.36	0.46
9:2N:24:GLY:O	9:2N:28:THR:HG23	2.15	0.46
21:2Z:152:ALA:C	21:2Z:154:ASP:H	2.22	0.46
32:2a:1201:A:H1'	32:2a:1202:G:OP2	2.15	0.46
34:2c:122:GLU:HA	34:2c:125:GLU:HG2	1.97	0.46
50:2s:22:LEU:O	50:2s:27:GLU:N	2.49	0.46
1:1A:271(M):G:H21	8:1I:50:ARG:NH1	2.14	0.46
1:1A:882:G:N2	1:1A:895:U:O2	2.49	0.46
1:1A:1903:G:OP1	3:1D:241:PRO:HB2	2.15	0.46
1:1A:2056:G:N2	27:15:5:PRO:HA	2.30	0.46
1:1A:2141:G:C6	1:1A:2142:C:C2	3.02	0.46
1:1A:2695:C:H2'	1:1A:2696:U:H6	1.80	0.46
6:1G:11:TYR:HA	6:1G:15:VAL:HB	1.96	0.46
18:1W:65:LEU:HD12	18:1W:68:ARG:HE	1.80	0.46
32:1a:509:A:H5''	35:1d:55:ALA:HB2	1.97	0.46
32:1a:944:G:C2	32:1a:1340:A:C6	3.04	0.46
32:1a:1457:G:H2'	32:1a:1458:G:H8	1.81	0.46
34:1c:35:GLU:CD	34:1c:59:ARG:HH22	2.23	0.46
38:1g:13:GLN:O	38:1g:24:THR:HG21	2.16	0.46
40:1i:96:LEU:HD22	40:1i:96:LEU:HA	1.78	0.46
51:1t:53:LEU:HA	51:1t:56:MET:HB3	1.97	0.46
1:2A:859:G:O2'	1:2A:916:G:O6	2.28	0.46
1:2A:2284:C:OP2	28:26:2:ALA:N	2.49	0.46
6:2G:106:LEU:HA	6:2G:110:ALA:HB3	1.96	0.46
12:2Q:25:ASP:OD1	12:2Q:26:TYR:N	2.49	0.46
17:2V:62:LEU:HD11	17:2V:95:LEU:HB2	1.97	0.46
25:23:7:LYS:HB2	25:23:34:GLU:HG3	1.97	0.46
32:2a:167:G:H2'	32:2a:168:G:H8	1.80	0.46
32:2a:448:A:P	32:2a:485:G:H22	2.38	0.46
32:2a:865:A:H2	32:2a:918:A:H4'	1.81	0.46
32:2a:890:G:O2'	32:2a:906:G:O6	2.23	0.46
32:2a:988:G:H1'	32:2a:1014:A:H61	1.80	0.46
32:2a:1026:G:H1	32:2a:1036:G:N2	2.12	0.46
32:2a:1316:G:H5''	45:2n:17:LYS:HD2	1.97	0.46
33:2b:97:TRP:CH2	33:2b:102:LEU:HD13	2.46	0.46
40:2i:89:ASN:HD22	40:2i:91:ASP:H	1.62	0.46
44:2m:73:GLU:O	44:2m:77:ASN:HB2	2.15	0.46
1:1A:1083:U:H2'	1:1A:1085:A:OP2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1359:A:C2	1:1A:1372:U:O4	2.68	0.46
1:1A:1946:U:H2'	1:1A:1947:C:C6	2.50	0.46
1:1A:2355:C:H1'	22:10:39:ARG:HH21	1.80	0.46
3:1D:26:LYS:HD3	3:1D:83:GLU:OE2	2.16	0.46
7:1H:125:VAL:HG12	7:1H:127:GLU:O	2.16	0.46
28:16:2:ALA:HB1	28:16:6:ARG:O	2.15	0.46
32:1a:433:C:H2'	32:1a:434:U:C6	2.50	0.46
32:1a:1118:C:H2'	32:1a:1119:C:C6	2.50	0.46
32:1a:1245:A:H61	32:1a:1292:U:H3	1.63	0.46
33:1b:192:SER:O	33:1b:194:PRO:HD3	2.15	0.46
1:2A:242:G:C8	30:28:5:LYS:HG2	2.51	0.46
1:2A:1803:A:HO2'	3:2D:259:THR:HG21	1.78	0.46
1:2A:2191:G:H2'	1:2A:2192:G:O4'	2.16	0.46
1:2A:2505:G:O6	1:2A:2576:G:H2'	2.15	0.46
2:2B:55:U:H2'	2:2B:56:G:O4'	2.16	0.46
17:2V:60:GLU:HB2	17:2V:97:LYS:HE2	1.97	0.46
32:2a:219:C:H2'	32:2a:220:G:O4'	2.16	0.46
36:2e:92:LYS:HB3	36:2e:119:LEU:HB2	1.96	0.46
38:2g:80:VAL:HB	38:2g:85:TYR:CE2	2.46	0.46
43:2l:84:LEU:HB2	43:2l:105:TYR:CE2	2.50	0.46
1:1A:207:A:H2'	1:1A:208:C:O4'	2.14	0.46
1:1A:1316:U:H2'	1:1A:1317:A:C8	2.50	0.46
1:1A:1803:A:H4'	3:1D:259:THR:HG23	1.97	0.46
1:1A:2134:A:OP1	1:1A:2156:G:N2	2.49	0.46
8:1I:61:ARG:HD3	8:1I:61:ARG:HA	1.71	0.46
19:1X:94:GLY:H	19:1X:95:LEU:C	2.23	0.46
32:1a:44:G:C2	32:1a:45:U:H1'	2.51	0.46
32:1a:815:A:N7	32:1a:1509:C:O2'	2.42	0.46
32:1a:1015:A:N3	32:1a:1218:C:O2'	2.44	0.46
42:1k:15:ALA:HA	42:1k:76:GLY:O	2.16	0.46
54:1w:29:G:H1	54:1w:41:C:H42	1.63	0.46
1:2A:96:G:H4'	24:22:48:HIS:CD2	2.51	0.46
1:2A:247:G:H4'	1:2A:386:G:C5	2.50	0.46
1:2A:1169:G:N2	1:2A:1181:C:N3	2.63	0.46
1:2A:1404:C:H2'	1:2A:1405:U:H6	1.81	0.46
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.50	0.46
2:2B:39:A:O2'	2:2B:40:U:H5'	2.16	0.46
14:2S:3:ARG:NH1	14:2S:4:LEU:H	2.14	0.46
32:2a:132:C:H5'	32:2a:262:A:O2'	2.14	0.46
32:2a:148:G:H2'	32:2a:149:A:H8	1.79	0.46
32:2a:922:G:N3	32:2a:1398:A:H2	2.13	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:2d:95:GLY:O	35:2d:99:SER:N	2.47	0.46
36:2e:6:PHE:HD1	36:2e:36:ASP:HB3	1.80	0.46
36:2e:8:GLU:HG2	36:2e:34:VAL:HG23	1.98	0.46
38:2g:143:ARG:HA	38:2g:146:GLU:HB3	1.98	0.46
40:2i:105:ASP:HB2	40:2i:107:ARG:HG3	1.98	0.46
1:1A:647:G:H2'	1:1A:648:G:O4'	2.16	0.46
1:1A:2131:G:H5''	1:1A:2132:U:H3'	1.97	0.46
1:1A:2695:C:H2'	1:1A:2696:U:C6	2.51	0.46
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.49	0.46
5:1F:116:ASP:OD2	11:1P:1:MET:N	2.46	0.46
6:1G:73:ALA:HB3	6:1G:85:GLY:H	1.80	0.46
15:1T:112:ARG:HG3	15:1T:115:ARG:NH2	2.30	0.46
22:10:50:ASN:HB3	22:10:63:VAL:HG22	1.97	0.46
47:1p:43:LYS:HG2	47:1p:48:TRP:CE2	2.50	0.46
1:2A:1013:C:H2'	1:2A:1014:U:H6	1.81	0.46
1:2A:1612:C:O2'	29:27:5:TRP:O	2.29	0.46
1:2A:2386:C:H2'	1:2A:2387:U:C6	2.51	0.46
2:2B:77:U:OP1	21:2Z:19:ARG:NH2	2.49	0.46
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.50	0.46
11:2P:33:ARG:HD3	11:2P:40:SER:HA	1.98	0.46
22:20:53:MET:HG3	22:20:59:LEU:HD23	1.98	0.46
26:24:47:GLN:C	26:24:49:PHE:H	2.20	0.46
32:2a:1289:A:N1	32:2a:1371:G:O2'	2.48	0.46
34:2c:91:LEU:C	34:2c:93:LYS:H	2.24	0.46
37:2f:67:MET:HG3	37:2f:68:PRO:HD2	1.98	0.46
42:2k:61:ALA:HB1	42:2k:94:ALA:HB2	1.96	0.46
1:1A:625:G:N7	11:1P:107:LYS:NZ	2.63	0.46
1:1A:892:G:H2'	1:1A:893:C:C6	2.51	0.46
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.31	0.46
1:1A:2136:C:N4	1:1A:2155:G:C6	2.81	0.46
1:1A:2846:G:H2'	1:1A:2847:U:O4'	2.16	0.46
6:1G:45:GLU:OE2	61:1G:301:HOH:O	2.21	0.46
6:1G:114:ILE:HB	6:1G:117:PHE:HB2	1.98	0.46
7:1H:89:ILE:N	7:1H:129:THR:O	2.48	0.46
11:1P:27:HIS:HB2	61:1P:304:HOH:O	2.15	0.46
15:1T:127:ALA:O	15:1T:128:GLU:HG2	2.16	0.46
32:1a:335:C:O2'	32:1a:1433:A:N3	2.43	0.46
32:1a:674:G:H2'	32:1a:675:A:C8	2.51	0.46
32:1a:1025:U:O2	32:1a:1036:G:C6	2.69	0.46
35:1d:175:SER:HB3	35:1d:186:LEU:HD21	1.97	0.46
38:1g:18:TYR:HB3	38:1g:59:LEU:HD13	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:1y:36:A:H2'	54:1y:37:MIA:O4'	2.15	0.46
1:2A:847:U:H5'	1:2A:848:G:OP2	2.16	0.46
1:2A:2366:A:H2'	1:2A:2367:G:O4'	2.15	0.46
5:2F:130:ALA:H	5:2F:142:TRP:NE1	2.13	0.46
11:2P:45:LEU:HD22	11:2P:45:LEU:HA	1.64	0.46
13:2R:38:VAL:HG22	13:2R:112:ALA:HB2	1.97	0.46
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.48	0.46
25:23:22:ALA:O	25:23:26:LEU:HG	2.16	0.46
26:24:47:GLN:O	26:24:49:PHE:N	2.36	0.46
32:2a:565:U:OP2	32:2a:566:G:O2'	2.31	0.46
32:2a:868:C:H2'	32:2a:869:G:O4'	2.16	0.46
32:2a:1387:G:H2'	32:2a:1388:C:C6	2.50	0.46
34:2c:122:GLU:O	34:2c:125:GLU:HG2	2.16	0.46
39:2h:23:SER:OG	39:2h:60:ARG:HG2	2.16	0.46
39:2h:29:SER:H	39:2h:32:LYS:HB2	1.80	0.46
44:2m:92:HIS:NE2	44:2m:98:VAL:HG21	2.31	0.46
46:2o:4:THR:O	46:2o:6:GLU:N	2.48	0.46
51:2t:59:ALA:O	51:2t:63:ILE:HG13	2.15	0.46
54:2w:51:U:H2'	54:2w:52:G:C8	2.51	0.46
1:1A:153:C:OP2	23:11:92:LYS:NZ	2.47	0.46
1:1A:620:G:N3	1:1A:620:G:H5'	2.30	0.46
1:1A:1166:C:H2'	1:1A:1167:U:C6	2.51	0.46
1:1A:1810:A:H2'	1:1A:1811:G:O4'	2.16	0.46
1:1A:2315:G:H2'	1:1A:2316:C:C6	2.50	0.46
1:1A:2364:C:H2'	1:1A:2365:G:O4'	2.16	0.46
3:1D:218:ARG:HB3	3:1D:219:PRO:HD2	1.97	0.46
13:1R:44:LEU:O	13:1R:48:VAL:HG22	2.16	0.46
15:1T:117:ASP:OD2	15:1T:120:ARG:NE	2.47	0.46
21:1Z:72:ARG:HD3	21:1Z:72:ARG:HA	1.84	0.46
32:1a:544:G:P	35:1d:59:ARG:HH22	2.38	0.46
32:1a:685:G:O2'	32:1a:686:U:H5'	2.16	0.46
32:1a:1028:C:H2'	32:1a:1029:C:O4'	2.16	0.46
32:1a:1531:A:H8	32:1a:1531:A:O5'	1.99	0.46
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.48	0.46
35:1d:76:ARG:O	35:1d:80:GLU:HG2	2.16	0.46
47:1p:1:MET:HE3	47:1p:3:LYS:HD2	1.97	0.46
1:2A:286:C:H2'	1:2A:287:C:C6	2.51	0.46
1:2A:938:G:OP2	30:28:52:LYS:NZ	2.34	0.46
1:2A:1790:C:H5''	1:2A:1791:A:OP1	2.15	0.46
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.31	0.46
4:2E:178:GLU:H	4:2E:178:GLU:HG2	1.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:96:ARG:HB3	6:2G:97:ASP:H	1.57	0.46
14:2S:99:LYS:HE2	14:2S:103:GLU:OE2	2.16	0.46
32:2a:21:G:H2'	32:2a:22:G:C8	2.51	0.46
32:2a:940:C:OP1	38:2g:102:ARG:HD3	2.15	0.46
35:2d:100:ARG:HH21	35:2d:136:PRO:C	2.22	0.46
42:2k:20:TYR:CZ	42:2k:83:ILE:HD13	2.50	0.46
54:2w:50:U:H2'	54:2w:51:U:C6	2.50	0.46
54:2y:53:G:H1	54:2y:61:C:H42	1.64	0.46
1:1A:576:U:H2'	1:1A:577:G:C8	2.51	0.46
1:1A:784:A:N6	3:1D:229:VAL:HG11	2.31	0.46
1:1A:2299:G:H2'	1:1A:2300:G:C8	2.51	0.46
1:1A:2317:C:H2'	1:1A:2318:G:O4'	2.16	0.46
1:1A:2390:U:OP2	30:18:35:GLN:NE2	2.44	0.46
7:1H:137:ASP:O	7:1H:141:VAL:HG23	2.16	0.46
22:10:32:ARG:H	22:10:35:ASN:ND2	2.13	0.46
32:1a:219:C:H2'	32:1a:220:G:O4'	2.16	0.46
32:1a:584:G:H5'	48:1q:91:ARG:HH22	1.81	0.46
36:1e:144:THR:O	36:1e:148:VAL:HG23	2.15	0.46
37:1f:97:PHE:HD2	49:1r:31:LEU:HD12	1.80	0.46
42:1k:20:TYR:HB2	42:1k:31:THR:HG23	1.97	0.46
46:1o:74:ASP:HB3	46:1o:77:ARG:HB2	1.97	0.46
1:2A:459:U:H4'	29:27:40:TRP:CZ3	2.51	0.46
1:2A:1263:U:C4	1:2A:1264:G:C6	3.04	0.46
1:2A:1268:A:H2'	1:2A:1269:A:O4'	2.16	0.46
1:2A:1364:G:OP2	23:21:3:LYS:HG3	2.16	0.46
1:2A:1446:C:H42	1:2A:1465:G:H1	1.63	0.46
1:2A:2552:2MU:H6	1:2A:2552:2MU:O5'	2.16	0.46
5:2F:148:LEU:HD11	5:2F:193:VAL:HG21	1.98	0.46
6:2G:61:ALA:HB1	26:24:7:PRO:HG3	1.98	0.46
10:2O:89:ASN:HB2	10:2O:90:GLN:NE2	2.31	0.46
18:2W:11:ARG:HA	18:2W:11:ARG:HD2	1.69	0.46
29:27:8:ASN:HB3	29:27:11:LYS:HB3	1.97	0.46
32:2a:598:U:H4'	39:2h:94:TYR:CG	2.51	0.46
36:2e:144:THR:O	36:2e:148:VAL:HG23	2.16	0.46
39:2h:48:TYR:HA	39:2h:60:ARG:O	2.15	0.46
39:2h:67:PRO:O	39:2h:69:ARG:N	2.47	0.46
50:2s:33:THR:H	50:2s:57:HIS:CE1	2.34	0.46
51:2t:98:PRO:O	51:2t:99:LEU:HB2	2.16	0.46
54:2y:58:A:N3	54:2y:60:U:C2	2.84	0.46
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.15	0.46
1:1A:1860:G:N2	1:1A:1883:G:H1'	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:67:LEU:O	9:1N:88:GLU:HB2	2.15	0.46
28:16:47:THR:HG22	28:16:48:VAL:O	2.16	0.46
1:2A:1204:A:H2	1:2A:1241:A:H62	1.62	0.46
1:2A:1364:G:P	23:21:3:LYS:HG3	2.56	0.46
1:2A:1567:A:OP2	3:2D:84:TYR:OH	2.32	0.46
1:2A:1666:G:C2'	1:2A:1667:G:H5'	2.46	0.46
1:2A:2432:A:C6	1:2A:2433:A:C6	3.03	0.46
2:2B:105:A:H5'	2:2B:106:G:OP2	2.16	0.46
7:2H:116:GLU:OE2	7:2H:117:PRO:HD2	2.16	0.46
32:2a:157:G:H1	32:2a:164:U:H3	1.64	0.46
32:2a:526:C:OP1	43:2l:91:LYS:HE3	2.16	0.46
32:2a:1218:C:H2'	32:2a:1219:U:C6	2.50	0.46
32:2a:1497:G:H1'	32:2a:1518:MA6:H2	1.98	0.46
33:2b:50:GLU:OE1	33:2b:53:ARG:NH1	2.49	0.46
41:2j:5:ARG:N	61:2j:301:HOH:O	2.50	0.46
1:1A:1570:A:H2'	1:1A:1571:A:C8	2.52	0.45
1:1A:1713:U:H2'	1:1A:1714:G:H8	1.81	0.45
1:1A:2336:A:H61	22:10:43:THR:HG21	1.81	0.45
3:1D:83:GLU:OE1	3:1D:104:TYR:OH	2.21	0.45
8:1I:12:LEU:HD23	8:1I:12:LEU:HA	1.82	0.45
8:1I:38:LEU:H	8:1I:38:LEU:CD2	2.26	0.45
9:1N:96:GLU:O	9:1N:100:GLU:HG3	2.16	0.45
32:1a:919:A:O2'	32:1a:1080:A:N1	2.48	0.45
32:1a:1027:C:C4	32:1a:1034:G:N1	2.85	0.45
32:1a:1289:A:O2'	38:1g:35:LYS:NZ	2.49	0.45
38:1g:15:ASP:HB3	38:1g:24:THR:HG22	1.98	0.45
46:1o:39:LEU:HD13	46:1o:56:LEU:HB2	1.98	0.45
1:2A:265:A:C8	1:2A:266:G:H1'	2.51	0.45
1:2A:288:C:H2'	1:2A:289:A:C8	2.52	0.45
1:2A:601:C:O2'	1:2A:605:C:H5''	2.17	0.45
1:2A:827:U:O2'	1:2A:2068:U:C2	2.69	0.45
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.16	0.45
16:2U:105:VAL:HG22	17:2V:45:THR:HG23	1.97	0.45
32:2a:375:U:OP1	47:2p:69:THR:HG21	2.16	0.45
32:2a:825:G:H2'	32:2a:826:C:C6	2.50	0.45
32:2a:1104:G:H5'	33:2b:111:ARG:HE	1.80	0.45
32:2a:1125:U:H6	32:2a:1126:U:O2'	1.99	0.45
34:2c:131:ARG:HH11	34:2c:166:GLU:HG2	1.81	0.45
38:2g:23:VAL:O	38:2g:27:ILE:HG13	2.16	0.45
41:2j:11:PHE:CE1	41:2j:67:THR:HG22	2.45	0.45
54:2y:34:G:H2'	54:2y:35:A:H8	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:264:C:O2'	1:1A:265:A:H2'	2.16	0.45
1:1A:1001:A:H2'	1:1A:1002:G:O4'	2.17	0.45
1:1A:2206:G:H5''	1:1A:2207:G:C5	2.51	0.45
1:1A:2721:A:H2'	1:1A:2722:G:O4'	2.17	0.45
61:1A:5979:HOH:O	9:1N:114:ARG:HD3	2.16	0.45
10:1O:70:LYS:HB3	10:1O:70:LYS:HE2	1.81	0.45
12:1Q:136:ALA:HB1	21:1Z:52:SER:HB3	1.98	0.45
32:1a:408:A:OP1	35:1d:113:SER:OG	2.33	0.45
32:1a:1332:A:H2'	32:1a:1333:A:C8	2.51	0.45
32:1a:1381:U:H1'	38:1g:79:ARG:HG2	1.98	0.45
33:1b:218:ALA:O	33:1b:222:ILE:HG13	2.16	0.45
35:1d:53:ASP:OD2	35:1d:57:ARG:NH2	2.50	0.45
41:1j:5:ARG:HD3	41:1j:71:LEU:HD11	1.97	0.45
1:2A:482:A:O2'	1:2A:497:A:N1	2.44	0.45
1:2A:801:G:O6	5:2F:53:THR:OG1	2.34	0.45
1:2A:1709:U:H2'	1:2A:1710:C:C6	2.51	0.45
1:2A:2156:G:H2'	1:2A:2157:G:C4	2.51	0.45
1:2A:2740:A:C6	1:2A:2741:A:C6	3.04	0.45
1:2A:2755:C:OP1	61:2A:5756:HOH:O	2.21	0.45
6:2G:3:LEU:HB2	6:2G:4:ASP:H	1.57	0.45
21:2Z:40:ASP:OD2	21:2Z:42:VAL:HG13	2.16	0.45
22:20:37:LEU:HG	22:20:60:PHE:HA	1.98	0.45
32:2a:512:U:H2'	32:2a:513:C:C6	2.51	0.45
32:2a:600:C:H2'	32:2a:601:C:C6	2.52	0.45
32:2a:662:G:H2'	32:2a:663:A:H8	1.80	0.45
32:2a:1053:G:H4'	32:2a:1054:C:H3'	1.98	0.45
33:2b:19:HIS:HB2	33:2b:204:ASN:HB2	1.97	0.45
34:2c:155:GLY:O	34:2c:157:ILE:N	2.50	0.45
35:2d:76:ARG:NE	35:2d:80:GLU:OE2	2.32	0.45
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.31	0.45
1:1A:1230:C:H2'	1:1A:1231:G:C8	2.51	0.45
1:1A:1424:G:H2'	1:1A:1425:G:O4'	2.16	0.45
1:1A:1568:G:H4'	3:1D:59:LYS:HG2	1.98	0.45
1:1A:2512:C:H2'	1:1A:2513:G:O4'	2.16	0.45
32:1a:448:A:C4	32:1a:487:A:C2	3.04	0.45
32:1a:575:G:O2'	32:1a:821:G:H5'	2.16	0.45
32:1a:598:U:H2'	32:1a:599:C:C6	2.51	0.45
32:1a:1241:G:H2'	32:1a:1242:C:C6	2.51	0.45
55:1x:50:U:H2'	55:1x:51:C:C6	2.51	0.45
1:2A:108:U:H2'	1:2A:109:G:C8	2.52	0.45
1:2A:459:U:OP2	29:27:39:ARG:NH1	2.48	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:774:A:H2'	1:2A:774:A:N3	2.32	0.45
1:2A:839:U:H2'	1:2A:840:C:H6	1.81	0.45
1:2A:1288:U:C2	1:2A:1327:C:O2	2.70	0.45
1:2A:1815:A:P	3:2D:54:ARG:HH22	2.39	0.45
1:2A:2224:G:H4'	1:2A:2226:C:C2	2.51	0.45
1:2A:2712:U:OP1	1:2A:2714:G:H4'	2.17	0.45
3:2D:159:ALA:HB1	3:2D:198:ASN:O	2.17	0.45
28:26:9:LEU:HD13	28:26:51:GLU:HG3	1.99	0.45
32:2a:432:A:H3'	32:2a:433:C:H6	1.81	0.45
32:2a:473:G:H2'	32:2a:474:G:C8	2.51	0.45
50:2s:64:GLU:CD	50:2s:64:GLU:H	2.24	0.45
55:2x:28:C:H2'	55:2x:29:G:C8	2.51	0.45
1:1A:29:U:H2'	1:1A:30:G:C8	2.52	0.45
1:1A:910:A:N3	1:1A:2264:C:O2'	2.45	0.45
1:1A:1469:A:OP2	61:1A:4268:HOH:O	2.21	0.45
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.98	0.45
1:1A:2629:A:HO2'	1:1A:2630:G:P	2.38	0.45
1:1A:2870:C:H2'	1:1A:2871:C:O4'	2.16	0.45
2:1B:33:G:C2	2:1B:50:G:C2	3.03	0.45
26:14:40:HIS:HB3	26:14:43:TYR:HD2	1.81	0.45
32:1a:433:C:H2'	32:1a:434:U:H6	1.81	0.45
32:1a:936:C:H2'	32:1a:937:A:O4'	2.17	0.45
33:1b:59:GLU:HB3	33:1b:221:LEU:HD11	1.99	0.45
33:1b:97:TRP:CZ2	33:1b:102:LEU:HD13	2.52	0.45
40:1i:8:GLY:O	40:1i:15:ALA:N	2.49	0.45
1:2A:589:C:H2'	1:2A:590:A:C8	2.52	0.45
1:2A:907:U:O2'	12:2Q:101:ARG:NH2	2.20	0.45
1:2A:1248:G:C5	16:2U:3:ARG:HB2	2.52	0.45
10:2O:63:VAL:HG11	10:2O:85:VAL:HG23	1.98	0.45
21:2Z:153:SER:HB3	21:2Z:167:PRO:HA	1.99	0.45
24:22:8:LYS:HD2	24:22:8:LYS:HA	1.72	0.45
32:2a:309:G:O2'	32:2a:607:A:N1	2.44	0.45
32:2a:1261:A:H5'	32:2a:1284:C:OP1	2.17	0.45
32:2a:1330:U:H4'	44:2m:23:TYR:CZ	2.51	0.45
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.51	0.45
42:2k:72:ALA:HB1	42:2k:77:MET:HG2	1.98	0.45
54:2y:8:4SU:H1'	54:2y:48:C:H1'	1.97	0.45
1:1A:586:A:N1	1:1A:809:G:O2'	2.37	0.45
1:1A:848:G:H2'	1:1A:849:A:C8	2.52	0.45
1:1A:2115:G:H21	1:1A:2171:A:H61	1.63	0.45
2:1B:66:A:H61	2:1B:109:C:H5'	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:73:A:N1	21:1Z:34:ASN:ND2	2.65	0.45
4:1E:14:ILE:HG13	4:1E:21:VAL:HG13	1.98	0.45
10:1O:64:ARG:HG2	10:1O:83:ALA:HB3	1.97	0.45
11:1P:38:GLN:O	11:1P:40:SER:N	2.48	0.45
23:11:64:ALA:HA	23:11:67:ILE:HG13	1.99	0.45
32:1a:216:G:H2'	32:1a:217:C:C6	2.51	0.45
32:1a:540:G:H2'	32:1a:541:G:O4'	2.16	0.45
32:1a:985:C:H2'	32:1a:986:A:H8	1.81	0.45
32:1a:998:G:H1	32:1a:1043:C:N4	2.11	0.45
32:1a:1263:C:H2'	32:1a:1264:C:C6	2.52	0.45
32:1a:1284:C:H3'	32:1a:1285:A:H8	1.81	0.45
48:1q:32:TYR:O	48:1q:34:LYS:N	2.49	0.45
1:2A:1805:U:O2	3:2D:50:THR:HB	2.17	0.45
1:2A:2242:G:OP1	61:2A:5757:HOH:O	2.21	0.45
57:2A:3879:TYK:H8	57:2A:3879:TYK:H192	1.84	0.45
3:2D:16:MET:HG3	3:2D:206:LEU:O	2.16	0.45
4:2E:56:PRO:C	4:2E:58:ARG:H	2.23	0.45
32:2a:41:G:H2'	32:2a:42:G:C8	2.51	0.45
32:2a:134:A:H61	47:2p:25:ARG:HH12	1.63	0.45
32:2a:537:G:H2'	32:2a:538:G:C8	2.51	0.45
32:2a:783:C:H2'	32:2a:784:C:C6	2.52	0.45
32:2a:1305:G:OP1	52:2u:2:GLY:HA3	2.17	0.45
40:2i:9:ARG:HB3	40:2i:104:ARG:NH1	2.32	0.45
1:1A:1035:U:H2'	1:1A:1036:G:C8	2.51	0.45
1:1A:1057:A:N7	1:1A:1086:A:H2'	2.31	0.45
5:1F:129:PHE:CD2	5:1F:163:VAL:HG21	2.52	0.45
6:1G:109:VAL:HG21	6:1G:142:PRO:HG3	1.97	0.45
7:1H:113:VAL:HG11	7:1H:151:ILE:HG21	1.98	0.45
8:1I:26:ALA:HA	8:1I:30:LEU:HB2	1.97	0.45
12:1Q:12:GLN:HG3	12:1Q:73:PRO:HD2	1.98	0.45
13:1R:98:LEU:HB2	13:1R:113:LEU:HD11	1.97	0.45
14:1S:11:LYS:HG3	14:1S:91:PRO:HD3	1.98	0.45
32:1a:405:U:O4	35:1d:2:GLY:N	2.49	0.45
32:1a:438:G:O2'	32:1a:494:U:O4	2.28	0.45
32:1a:448:A:OP2	32:1a:485:G:N1	2.40	0.45
32:1a:840:C:H4'	32:1a:841:U:OP1	2.16	0.45
32:1a:1127:G:H5'	32:1a:1280:A:O2'	2.17	0.45
33:1b:48:MET:HA	33:1b:51:LEU:HD12	1.98	0.45
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	1.96	0.45
37:1f:21:LEU:O	37:1f:25:ILE:HG13	2.17	0.45
48:1q:6:LEU:HB3	48:1q:23:VAL:HG11	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:1q:26:GLN:HG2	48:1q:37:LYS:HG2	1.97	0.45
48:1q:26:GLN:NE2	48:1q:37:LYS:HE3	2.27	0.45
52:1u:3:LYS:HB3	52:1u:14:TRP:CG	2.52	0.45
1:2A:723:G:H2'	1:2A:724:U:O4'	2.17	0.45
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.16	0.45
1:2A:1843:C:H5'	3:2D:253:GLN:OE1	2.17	0.45
2:2B:115:G:H2'	2:2B:116:G:O4'	2.17	0.45
5:2F:28:ILE:HD13	5:2F:112:MET:HE3	1.98	0.45
5:2F:127:GLU:HG2	5:2F:196:LEU:HD12	1.98	0.45
26:24:58:ARG:HA	26:24:61:ARG:HB2	1.99	0.45
32:2a:1183:A:H3'	32:2a:1184:G:C5'	2.47	0.45
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.15	0.45
32:2a:1312:G:H5'	50:2s:5:LEU:HD11	1.99	0.45
35:2d:38:TYR:CE1	35:2d:45:GLN:HG3	2.51	0.45
35:2d:155:LEU:HD23	35:2d:155:LEU:HA	1.78	0.45
38:2g:71:PRO:HG3	38:2g:103:TRP:CH2	2.51	0.45
40:2i:125:TYR:HD2	40:2i:126:SER:N	2.15	0.45
44:2m:14:ARG:H	44:2m:14:ARG:HG3	1.48	0.45
46:2o:4:THR:C	46:2o:6:GLU:H	2.25	0.45
50:2s:51:VAL:O	50:2s:58:VAL:N	2.42	0.45
1:1A:65:C:H5'	19:1X:71:GLY:HA3	1.97	0.45
1:1A:567:A:O3'	11:1P:36:LYS:HE3	2.16	0.45
1:1A:593:G:C6	1:1A:594:U:C4	3.05	0.45
1:1A:1245:G:OP1	11:1P:13:ASN:ND2	2.40	0.45
1:1A:2662:A:H2'	1:1A:2663:G:O4'	2.17	0.45
1:1A:2698:U:H2'	1:1A:2699:C:C6	2.52	0.45
1:1A:2864:G:OP1	15:1T:119:LYS:HD2	2.17	0.45
2:1B:108:U:H2'	2:1B:109:C:H5''	1.98	0.45
11:1P:64:LYS:HE3	30:18:12:LYS:HD3	1.98	0.45
21:1Z:128:VAL:HG23	21:1Z:160:GLY:O	2.17	0.45
21:1Z:152:ALA:HB1	21:1Z:163:LEU:HD11	1.97	0.45
22:10:10:THR:HG22	22:10:12:ASN:N	2.27	0.45
39:1h:53:VAL:O	39:1h:55:GLY:N	2.50	0.45
40:1i:3:GLN:HE21	40:1i:20:ARG:CZ	2.30	0.45
1:2A:251:A:C5	1:2A:252:G:H1'	2.52	0.45
1:2A:479:A:N3	1:2A:481:G:H5''	2.32	0.45
1:2A:948:G:H21	1:2A:985:C:P	2.40	0.45
1:2A:973:A:H8	1:2A:973:A:OP1	1.99	0.45
1:2A:1654:A:O4'	1:2A:2823:A:H5'	2.17	0.45
1:2A:1826:G:H4'	3:2D:242:ARG:CZ	2.46	0.45
1:2A:2355:C:H4'	22:20:24:LYS:HG3	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2360:A:H2'	1:2A:2361:A:O4'	2.17	0.45
1:2A:2390:U:P	30:28:35:GLN:HE22	2.40	0.45
3:2D:134:ARG:HG3	3:2D:135:PHE:CD1	2.52	0.45
6:2G:42:GLY:O	6:2G:44:GLY:N	2.50	0.45
6:2G:102:PHE:O	6:2G:106:LEU:N	2.49	0.45
7:2H:113:VAL:HG11	7:2H:151:ILE:HD13	1.99	0.45
10:2O:13:ASN:OD1	10:2O:97:ARG:HB2	2.16	0.45
11:2P:19:VAL:HB	11:2P:31:ALA:HA	1.99	0.45
15:2T:109:GLU:HG2	15:2T:112:ARG:NH2	2.32	0.45
21:2Z:4:ARG:HG2	21:2Z:58:VAL:HB	1.99	0.45
26:24:47:GLN:C	26:24:49:PHE:N	2.75	0.45
26:24:53:GLU:C	26:24:55:ARG:N	2.75	0.45
32:2a:999:C:N4	32:2a:1042:G:H1	2.15	0.45
32:2a:1136:U:H5''	32:2a:1137:C:C5	2.52	0.45
33:2b:69:LEU:HD13	33:2b:91:PRO:HB2	1.99	0.45
44:2m:80:ARG:HH21	50:2s:69:HIS:HE1	1.63	0.45
45:2n:47:LEU:HD22	45:2n:52:GLN:HB2	1.98	0.45
1:1A:1039:G:H1	1:1A:1116:C:N4	2.00	0.45
1:1A:1929:G:H4'	1:1A:1930:G:OP1	2.16	0.45
5:1F:161:GLU:HG2	5:1F:164:ARG:NH2	2.31	0.45
8:1I:47:LEU:HD23	8:1I:47:LEU:HA	1.87	0.45
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	1.99	0.45
15:1T:108:ARG:HG3	15:1T:109:GLU:N	2.31	0.45
26:14:43:TYR:O	26:14:45:GLY:N	2.43	0.45
29:17:13:ALA:HB2	29:17:46:VAL:HG11	1.97	0.45
32:1a:911:U:H2'	32:1a:912:C:C6	2.52	0.45
32:1a:1017:G:H2'	32:1a:1018:C:C6	2.51	0.45
33:1b:121:LEU:HD11	33:1b:130:ARG:HH22	1.82	0.45
34:1c:26:LYS:HA	45:1n:36:PHE:HE1	1.82	0.45
35:1d:101:LEU:HB2	35:1d:138:TYR:HB3	1.98	0.45
38:1g:97:GLN:O	38:1g:101:LEU:HG	2.17	0.45
55:1x:13:C:H2'	55:1x:14:A:H5''	1.99	0.45
1:2A:729:G:H2'	1:2A:1775:U:O2	2.16	0.45
1:2A:898:C:H2'	1:2A:899:A:H5'	1.98	0.45
1:2A:1761:C:H2'	1:2A:1762:A:H5''	1.98	0.45
1:2A:2683:C:H4'	4:2E:13:ARG:NH2	2.32	0.45
1:2A:2752:C:H2'	1:2A:2753:A:O4'	2.17	0.45
2:2B:39:A:O2'	2:2B:46:A:N1	2.49	0.45
26:24:53:GLU:H	26:24:53:GLU:CD	2.22	0.45
27:25:20:ARG:HG2	27:25:23:HIS:CE1	2.52	0.45
32:2a:224:C:H2'	32:2a:225:C:C6	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:292:G:N7	32:2a:293:G:H1'	2.32	0.45
32:2a:392:G:H2'	32:2a:393:A:C8	2.51	0.45
32:2a:517:G:N3	32:2a:531:U:H5'	2.32	0.45
32:2a:1188:A:O2'	45:2n:58:LYS:HE3	2.17	0.45
34:2c:131:ARG:NH1	34:2c:166:GLU:HG2	2.31	0.45
35:2d:121:VAL:HG11	35:2d:136:PRO:HA	1.98	0.45
49:2r:22:VAL:HB	49:2r:56:THR:HA	1.99	0.45
1:1A:2052:G:C8	4:1E:141:ILE:HD11	2.52	0.45
1:1A:2618:G:H21	4:1E:150:VAL:HG21	1.82	0.45
1:1A:2713:A:OP1	13:1R:14:SER:OG	2.28	0.45
3:1D:92:ILE:HD12	3:1D:104:TYR:CD1	2.52	0.45
9:1N:138:LEU:HD23	9:1N:138:LEU:HA	1.79	0.45
10:1O:13:ASN:OD1	10:1O:97:ARG:N	2.46	0.45
17:1V:85:LYS:HE2	17:1V:85:LYS:HB3	1.63	0.45
24:12:28:LYS:HD2	24:12:60:LEU:HD11	1.98	0.45
32:1a:262:A:C6	32:1a:263:A:C6	3.04	0.45
32:1a:341:C:H2'	32:1a:342:C:C6	2.52	0.45
32:1a:679:C:H2'	32:1a:680:C:C6	2.52	0.45
32:1a:841:U:P	32:1a:841:U:H6	2.40	0.45
32:1a:924:C:H2'	32:1a:925:G:C8	2.52	0.45
32:1a:1428:A:H2'	32:1a:1429:C:O4'	2.17	0.45
33:1b:16:HIS:HB3	33:1b:210:SER:HB2	1.98	0.45
33:1b:74:LYS:NZ	33:1b:205:ASP:OD2	2.47	0.45
35:1d:7:PRO:HB2	35:1d:10:ARG:HD2	1.99	0.45
54:1w:28:G:H2'	54:1w:29:G:H8	1.82	0.45
1:2A:288:C:H2'	1:2A:289:A:H8	1.81	0.45
1:2A:1283:G:N2	1:2A:1285:G:H3'	2.32	0.45
1:2A:1481:U:H3	1:2A:1510:G:H1	1.64	0.45
1:2A:1633:G:OP2	61:2A:5759:HOH:O	2.21	0.45
1:2A:2134:A:H2'	1:2A:2134:A:N3	2.32	0.45
1:2A:2472:G:N1	1:2A:2477:C:OP1	2.36	0.45
1:2A:2695:C:H2'	1:2A:2696:U:C6	2.52	0.45
6:2G:39:ILE:HB	6:2G:92:VAL:HG13	1.98	0.45
32:2a:573:A:OP2	61:2a:3320:HOH:O	2.21	0.45
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.17	0.45
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.99	0.45
54:2y:35:A:H2'	54:2y:36:A:O4'	2.17	0.45
1:1A:784:A:H5'	1:1A:785:G:OP1	2.17	0.45
1:1A:2059:A:O3'	5:1F:69:HIS:HA	2.18	0.45
1:1A:2408:U:H2'	1:1A:2409:G:C8	2.52	0.45
2:1B:2:C:H2'	2:1B:3:C:H6	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.99	0.45
6:1G:72:ARG:HH21	6:1G:87:PRO:HG3	1.82	0.45
7:1H:15:VAL:HG21	7:1H:76:VAL:HG12	1.98	0.45
21:1Z:7:ALA:O	21:1Z:62:PRO:HD3	2.16	0.45
32:1a:237:C:H5''	48:1q:25:ARG:CZ	2.47	0.45
32:1a:295:C:H2'	32:1a:296:U:O4'	2.17	0.45
32:1a:560:U:H6	32:1a:560:U:H2'	1.59	0.45
32:1a:973:G:OP1	41:1j:57:LYS:NZ	2.41	0.45
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.51	0.45
1:2A:124:G:OP1	1:2A:1376:C:O2'	2.29	0.45
1:2A:143:G:H2'	1:2A:143(A):C:C6	2.51	0.45
1:2A:459:U:H5''	29:27:40:TRP:CD2	2.52	0.45
1:2A:586:A:N1	1:2A:809:G:O2'	2.39	0.45
1:2A:1282:U:H2'	1:2A:1283:G:O4'	2.17	0.45
1:2A:2199:A:H61	1:2A:2224:G:H1'	1.82	0.45
9:2N:58:ASP:OD1	9:2N:58:ASP:N	2.39	0.45
21:2Z:7:ALA:HA	21:2Z:39:VAL:HG12	1.99	0.45
32:2a:8:A:N6	35:2d:209:ARG:HB2	2.32	0.45
32:2a:391:G:C6	32:2a:392:G:C5	3.05	0.45
32:2a:935:A:N6	38:2g:3:ARG:HG3	2.32	0.45
32:2a:954:G:H2'	32:2a:955:U:C6	2.52	0.45
32:2a:1000:U:H3	32:2a:1041:A:H61	1.64	0.45
32:2a:1054:C:C5	54:2w:34:G:H1'	2.52	0.45
32:2a:1069:C:H42	32:2a:1106:G:H1	1.65	0.45
32:2a:1132:C:H2'	32:2a:1133:G:C8	2.49	0.45
32:2a:1273:G:C6	32:2a:1274:G:C4	3.05	0.45
34:2c:70:VAL:C	34:2c:106:VAL:HB	2.42	0.45
34:2c:113:ALA:HB2	34:2c:202:ILE:HG13	1.98	0.45
35:2d:199:ASN:ND2	35:2d:202:LEU:HD13	2.31	0.45
41:2j:27:ALA:HB2	41:2j:85:LEU:HG	1.99	0.45
44:2m:13:LYS:O	44:2m:45:VAL:HG23	2.16	0.45
1:1A:27:G:C2	1:1A:512:G:N3	2.85	0.44
1:1A:1368:G:C2	1:1A:1369:G:C8	3.04	0.44
1:1A:1641:A:H2'	1:1A:1642:G:O4'	2.18	0.44
1:1A:1796:U:H2'	1:1A:1797:C:H6	1.82	0.44
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.16	0.44
1:1A:2705:A:O2'	1:1A:2852:G:OP1	2.32	0.44
6:1G:16:ARG:HH22	6:1G:28:VAL:HG12	1.82	0.44
6:1G:38:VAL:HG22	6:1G:93:THR:HG23	1.99	0.44
6:1G:108:ASN:HD22	26:14:22:ILE:HG21	1.81	0.44
12:1Q:35:VAL:HA	12:1Q:101:ARG:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:1Q:137:TYR:HE2	21:1Z:49:ARG:HH21	1.65	0.44
20:1Y:95:LYS:HB3	20:1Y:95:LYS:HE2	1.72	0.44
24:12:23:LYS:O	24:12:27:GLU:HG3	2.17	0.44
26:14:34:GLU:OE1	26:14:34:GLU:N	2.46	0.44
28:16:6:ARG:NH1	28:16:26:ASN:HB2	2.31	0.44
30:18:26:LYS:HD2	30:18:48:PHE:CD2	2.52	0.44
32:1a:1095:U:P	32:1a:1108:G:H1	2.40	0.44
32:1a:1529:G:H4'	32:1a:1530:G:OP2	2.17	0.44
39:1h:6:ILE:HD11	39:1h:31:PHE:HD2	1.82	0.44
1:2A:2137:C:N3	1:2A:2155:G:N1	2.65	0.44
1:2A:2540:C:H2'	1:2A:2541:A:O4'	2.17	0.44
1:2A:2723:C:OP1	13:2R:3:HIS:ND1	2.35	0.44
6:2G:53:LEU:HD23	6:2G:53:LEU:HA	1.79	0.44
12:2Q:81:VAL:HB	22:20:7:LEU:HD21	1.99	0.44
13:2R:96:ARG:NH2	13:2R:117:VAL:HG13	2.32	0.44
15:2T:48:ILE:HD13	15:2T:114:LEU:HD12	1.99	0.44
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.50	0.44
22:20:33:ALA:N	22:20:64:ASP:OD1	2.39	0.44
27:25:20:ARG:HG2	27:25:23:HIS:ND1	2.32	0.44
32:2a:89:C:H2'	32:2a:90:U:O4'	2.16	0.44
32:2a:997:U:H3	32:2a:1044:A:H61	1.65	0.44
32:2a:1087:G:N2	32:2a:1099:G:H1'	2.32	0.44
32:2a:1101:A:C8	33:2b:172:ILE:HD13	2.52	0.44
33:2b:103:THR:HA	33:2b:180:LEU:HD11	1.99	0.44
36:2e:135:THR:O	36:2e:139:LEU:HG	2.17	0.44
42:2k:27:ASN:ND2	42:2k:55:LYS:HD3	2.32	0.44
46:2o:55:GLY:HA2	46:2o:58:MET:HE3	1.98	0.44
48:2q:67:LYS:O	48:2q:68:ARG:HB2	2.17	0.44
55:2x:37:A:H2'	55:2x:38:A:O4'	2.17	0.44
1:1A:944:G:H5''	1:1A:945:A:O5'	2.17	0.44
1:1A:1095:A:N7	1:1A:1096:A:N7	2.64	0.44
1:1A:1569:A:H2'	1:1A:1570:A:O4'	2.17	0.44
1:1A:2273:A:H2'	1:1A:2274:A:C8	2.52	0.44
1:1A:2390:U:P	30:18:35:GLN:HE22	2.39	0.44
18:1W:14:PRO:HA	18:1W:17:VAL:HG23	1.98	0.44
19:1X:44:GLU:HG2	19:1X:49:VAL:O	2.16	0.44
30:18:62:LEU:HB3	30:18:65:GLU:CG	2.47	0.44
32:1a:405:U:H3'	32:1a:406:G:H5'	1.99	0.44
32:1a:763:G:H2'	32:1a:764:C:C6	2.53	0.44
32:1a:1324:A:O4'	32:1a:1362:C:H4'	2.17	0.44
32:1a:1410:G:H2'	32:1a:1411:C:C6	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:1c:152:ILE:HB	34:1c:199:LYS:HB2	1.99	0.44
35:1d:162:LEU:HD13	35:1d:181:MET:HG2	1.98	0.44
36:1e:148:VAL:HG12	36:1e:152:ARG:HG3	2.00	0.44
43:1l:53:ARG:HB2	43:1l:93:LEU:HD11	1.99	0.44
46:1o:56:LEU:O	46:1o:60:VAL:HG23	2.18	0.44
48:1q:28:PRO:HA	48:1q:34:LYS:O	2.16	0.44
50:1s:52:TYR:HB2	50:1s:57:HIS:CE1	2.52	0.44
52:1u:5:ASP:O	52:1u:11:GLY:HA3	2.17	0.44
1:2A:784:A:H5'	1:2A:785:G:OP1	2.17	0.44
1:2A:1007:C:OP1	9:2N:37:LYS:NZ	2.50	0.44
1:2A:1473:G:C6	1:2A:1474:C:C4	3.04	0.44
1:2A:1490:A:O2'	3:2D:99:ASP:OD1	2.35	0.44
1:2A:2884:U:OP2	61:2A:5755:HOH:O	2.21	0.44
3:2D:106:ILE:HD11	3:2D:144:ALA:HB2	2.00	0.44
5:2F:126:VAL:HG21	5:2F:129:PHE:CZ	2.52	0.44
6:2G:21:ARG:O	6:2G:24:GLY:N	2.50	0.44
6:2G:44:GLY:O	6:2G:46:ALA:N	2.50	0.44
6:2G:161:THR:HG22	6:2G:163:ALA:H	1.81	0.44
9:2N:15:LEU:HB2	9:2N:135:PRO:HB2	1.98	0.44
10:2O:9:GLU:OE1	10:2O:18:LYS:HD3	2.17	0.44
32:2a:438:G:H4'	35:2d:123:HIS:ND1	2.32	0.44
32:2a:792:A:H4'	32:2a:793:U:H5''	1.99	0.44
32:2a:913:A:H4'	32:2a:914:A:O5'	2.17	0.44
32:2a:1268:A:H2'	32:2a:1269:A:C8	2.52	0.44
32:2a:1309:G:O3'	44:2m:77:ASN:ND2	2.50	0.44
33:2b:52:GLU:O	33:2b:56:ARG:HB3	2.17	0.44
33:2b:164:VAL:HB	33:2b:186:ALA:HB2	2.00	0.44
36:2e:131:ILE:HD13	36:2e:131:ILE:HA	1.85	0.44
51:2t:24:LEU:HD13	51:2t:24:LEU:HA	1.67	0.44
1:1A:774:A:N3	1:1A:774:A:H2'	2.32	0.44
1:1A:1951:U:O2'	1:1A:1953:A:N7	2.44	0.44
1:1A:2626:C:H2'	1:1A:2627:G:O4'	2.17	0.44
1:1A:2865:U:C4	1:1A:2866:U:C4	3.05	0.44
2:1B:101:G:H2'	2:1B:102:A:O4'	2.18	0.44
8:1I:105:HIS:HB3	8:1I:107:VAL:HG23	1.99	0.44
17:1V:24:LYS:HE2	17:1V:24:LYS:HB3	1.85	0.44
19:1X:28:PHE:CZ	19:1X:92:LEU:HD11	2.53	0.44
32:1a:169:C:H2'	32:1a:170:U:C6	2.52	0.44
32:1a:711:G:H2'	32:1a:712:A:H8	1.81	0.44
32:1a:1001:A:H2'	32:1a:1001(A):G:C8	2.52	0.44
1:2A:570:G:H2'	1:2A:2030:A:C5	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:807:U:O2'	1:2A:2060:A:N1	2.49	0.44
1:2A:947:G:H2'	1:2A:948:G:C8	2.53	0.44
1:2A:1253:A:H4'	61:2A:5715:HOH:O	2.15	0.44
1:2A:1847:A:H3'	1:2A:1848:A:H5'	1.99	0.44
2:2B:75:G:H22	21:2Z:73:GLN:NE2	2.11	0.44
12:2Q:66:ILE:HG12	12:2Q:104:PHE:HD1	1.82	0.44
14:2S:4:LEU:HD23	14:2S:4:LEU:HA	1.84	0.44
19:2X:44:GLU:O	19:2X:48:LYS:N	2.47	0.44
32:2a:142:G:H2'	32:2a:143:A:C8	2.52	0.44
32:2a:553:A:H2'	32:2a:554:C:C6	2.52	0.44
32:2a:828:A:H5''	32:2a:859:A:C2	2.53	0.44
32:2a:1323:G:H4'	32:2a:1363:C:C2	2.52	0.44
38:2g:22:LEU:HD13	38:2g:97:GLN:NE2	2.33	0.44
40:2i:8:GLY:HA2	40:2i:79:LEU:HB3	1.99	0.44
40:2i:96:LEU:HD22	40:2i:101:PHE:HB2	1.99	0.44
40:2i:116:LYS:HD3	40:2i:122:ALA:HA	1.99	0.44
42:2k:41:THR:HG21	42:2k:71:LYS:HB2	2.00	0.44
49:2r:45:SER:OG	49:2r:47:THR:HG23	2.18	0.44
54:2y:48:C:H2'	54:2y:59:U:H1'	1.97	0.44
1:1A:1062:G:C8	1:1A:1070:A:H4'	2.42	0.44
1:1A:2464:C:H1'	61:1A:4583:HOH:O	2.17	0.44
1:1A:2748:A:H5'	7:1H:4:ILE:HD12	1.99	0.44
6:1G:5:VAL:HG21	6:1G:100:TRP:HB3	1.99	0.44
21:1Z:3:TYR:CE2	21:1Z:51:ALA:HB2	2.52	0.44
21:1Z:136:PHE:O	21:1Z:137:ILE:HG13	2.16	0.44
32:1a:8:A:H5'	36:1e:101:ILE:HG22	1.99	0.44
32:1a:614:A:H2'	32:1a:615:C:O4'	2.17	0.44
32:1a:643:C:O2'	39:1h:132:GLU:OE1	2.26	0.44
32:1a:1355:G:H2'	32:1a:1356:G:C8	2.52	0.44
33:1b:101:MET:HG2	33:1b:152:PHE:CZ	2.53	0.44
34:1c:121:ALA:HB1	34:1c:189:ALA:HB2	1.99	0.44
35:1d:173:TRP:O	35:1d:186:LEU:HB2	2.16	0.44
44:1m:84:ILE:HD12	50:1s:74:PHE:CZ	2.53	0.44
50:1s:23:ASN:HA	50:1s:27:GLU:CD	2.43	0.44
51:1t:56:MET:HE2	51:1t:85:MET:HA	2.00	0.44
1:2A:192:C:O2'	1:2A:802:A:N3	2.44	0.44
1:2A:330:A:H2	1:2A:1210:A:O2'	2.01	0.44
1:2A:946:G:H2'	1:2A:947:G:C8	2.52	0.44
1:2A:1316:U:H2'	1:2A:1317:A:H8	1.82	0.44
1:2A:1607:C:N4	1:2A:1622:G:OP2	2.39	0.44
1:2A:2112:G:H2'	1:2A:2113:U:O4'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2431:U:O2'	1:2A:2433:A:N7	2.48	0.44
3:2D:253:GLN:HG3	61:2D:408:HOH:O	2.18	0.44
4:2E:6:GLY:HA3	4:2E:28:ALA:HA	1.98	0.44
15:2T:28:VAL:HG12	15:2T:30:VAL:HG23	1.99	0.44
15:2T:51:ARG:HG3	15:2T:98:LYS:HD2	1.99	0.44
27:25:49:CYS:SG	27:25:51:TYR:HB2	2.57	0.44
32:2a:328:C:H4'	32:2a:329:A:H5'	1.98	0.44
32:2a:1012:U:H2'	32:2a:1013:G:C8	2.52	0.44
32:2a:1216:G:H5''	45:2n:5:ALA:HB2	1.99	0.44
33:2b:224:GLN:HA	33:2b:228:GLY:O	2.17	0.44
42:2k:45:GLY:O	42:2k:50:TYR:HB2	2.18	0.44
45:2n:3:ARG:O	45:2n:7:ILE:HG22	2.18	0.44
45:2n:53:LEU:HD23	45:2n:53:LEU:HA	1.80	0.44
51:2t:29:LYS:HD2	51:2t:71:THR:HG21	1.98	0.44
55:2x:28:C:H2'	55:2x:29:G:H8	1.81	0.44
1:1A:1032:A:H2	1:1A:1122:G:H22	1.66	0.44
1:1A:1416:G:O2'	1:1A:1417:C:OP2	2.23	0.44
3:1D:26:LYS:HE2	3:1D:28:GLU:O	2.18	0.44
10:1O:63:VAL:HA	10:1O:106:LEU:HD11	1.99	0.44
16:1U:83:LEU:HD22	16:1U:88:ILE:HD12	1.98	0.44
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.30	0.44
21:1Z:125:LEU:HG	21:1Z:164:ALA:HB3	1.99	0.44
32:1a:444:C:H2'	32:1a:445:G:C8	2.52	0.44
32:1a:646:U:H2'	32:1a:647:C:C6	2.53	0.44
32:1a:688:G:H2'	32:1a:689:C:C6	2.52	0.44
32:1a:783:C:OP1	32:1a:1515:C:O2'	2.29	0.44
32:1a:1027:C:N3	32:1a:1034:G:N2	2.66	0.44
39:1h:29:SER:OG	39:1h:32:LYS:HG2	2.18	0.44
41:1j:67:THR:O	41:1j:67:THR:OG1	2.32	0.44
42:1k:33:THR:HA	42:1k:39:PRO:HA	1.98	0.44
1:2A:100:G:O2'	24:22:7:ARG:NH2	2.51	0.44
1:2A:272:G:H4'	1:2A:272(A):U:C5'	2.47	0.44
1:2A:855:G:O2'	22:20:27:GLU:OE2	2.35	0.44
1:2A:1607:C:H5''	1:2A:1608:A:H5'	2.00	0.44
1:2A:1913:A:N6	54:2w:38:A:H5'	2.32	0.44
1:2A:2021:C:OP1	27:25:12:SER:OG	2.30	0.44
1:2A:2889:C:H2'	1:2A:2891:G:O4'	2.18	0.44
11:2P:52:GLU:HB3	11:2P:55:ARG:NH2	2.33	0.44
11:2P:126:VAL:HG12	11:2P:148:LEU:HD22	1.99	0.44
12:2Q:57:HIS:CE1	12:2Q:116:GLU:HG2	2.53	0.44
21:2Z:96:VAL:HG22	21:2Z:98:MET:HB3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:23:39:ASP:OD2	25:23:44:ARG:NH1	2.51	0.44
32:2a:976:G:C8	32:2a:1358:U:C2	3.06	0.44
32:2a:1206:G:O2'	34:2c:193:TYR:HA	2.17	0.44
33:2b:53:ARG:HA	33:2b:56:ARG:HH11	1.82	0.44
35:2d:112:VAL:H	35:2d:116:GLN:NE2	2.16	0.44
44:2m:40:ASN:HB3	44:2m:43:THR:HG23	1.98	0.44
48:2q:40:LYS:HD3	48:2q:42:TYR:OH	2.17	0.44
1:1A:548:A:H3'	1:1A:548:A:OP2	2.17	0.44
1:1A:573:G:O2'	1:1A:574:C:H3'	2.18	0.44
1:1A:2751:G:C5	7:1H:2:SER:N	2.86	0.44
1:1A:2875:C:H2'	1:1A:2876:G:O4'	2.17	0.44
6:1G:105:LYS:O	6:1G:109:VAL:HG22	2.17	0.44
14:1S:39:ILE:HG21	14:1S:82:ILE:HD13	2.00	0.44
27:15:16:ARG:HG3	27:15:17:ASP:N	2.30	0.44
32:1a:292:G:O2'	32:1a:608:A:N6	2.50	0.44
32:1a:935:A:N6	38:1g:3:ARG:HG3	2.33	0.44
33:1b:16:HIS:HB2	33:1b:204:ASN:CB	2.46	0.44
33:1b:24:TRP:CD1	33:1b:24:TRP:C	2.96	0.44
54:1w:60:U:H5''	54:1w:61:C:C5	2.47	0.44
1:2A:632:A:H2'	1:2A:633:A:C8	2.52	0.44
1:2A:2155:G:H2'	1:2A:2156:G:H5'	1.99	0.44
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.52	0.44
1:2A:2484:G:C2	1:2A:2485:G:C8	3.05	0.44
1:2A:2837:G:H21	13:2R:45:ARG:NH1	2.15	0.44
8:2I:78:THR:O	8:2I:104:GLN:NE2	2.48	0.44
8:2I:134:PRO:C	8:2I:136:VAL:H	2.25	0.44
25:23:6:VAL:HG22	25:23:56:VAL:HG22	1.99	0.44
28:26:26:ASN:O	28:26:28:ARG:N	2.51	0.44
32:2a:560:U:H5'	32:2a:566:G:N2	2.32	0.44
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.16	0.44
32:2a:925:G:H1'	32:2a:1502:A:C4	2.52	0.44
32:2a:1006:C:C4	32:2a:1007:C:C4	3.06	0.44
32:2a:1149:C:H2'	32:2a:1150:U:C6	2.52	0.44
32:2a:1316:G:H2'	32:2a:1318:A:OP2	2.18	0.44
38:2g:14:PRO:HB3	38:2g:19:GLY:O	2.18	0.44
39:2h:53:VAL:HB	39:2h:58:TYR:CD2	2.53	0.44
1:1A:624:C:H6	1:1A:624:C:O5'	2.01	0.44
1:1A:2072:G:H2'	1:1A:2073:C:O4'	2.16	0.44
3:1D:34:VAL:HG12	3:1D:63:ARG:HG3	1.99	0.44
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.83	0.44
5:1F:130:ALA:H	5:1F:142:TRP:CD1	2.35	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:235:C:H2'	32:1a:236:G:H8	1.83	0.44
33:1b:54:THR:O	33:1b:58:ILE:HG13	2.18	0.44
34:1c:131:ARG:NH2	34:1c:167:TRP:O	2.51	0.44
54:1w:19:G:H4'	54:1w:20:U:OP1	2.17	0.44
1:2A:131:G:OP1	61:2A:5754:HOH:O	2.21	0.44
1:2A:740:U:H2'	1:2A:741:G:H8	1.82	0.44
1:2A:1410:G:H2'	1:2A:1411:C:C6	2.53	0.44
1:2A:1561:G:H2'	1:2A:1562:A:C8	2.53	0.44
1:2A:1782:C:O2'	1:2A:2609:U:H5''	2.17	0.44
1:2A:2851:A:H2'	1:2A:2852:G:O4'	2.17	0.44
2:2B:14:U:O3'	2:2B:108:U:O2'	2.30	0.44
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.82	0.44
14:2S:87:PHE:HB2	14:2S:112:PHE:CE1	2.52	0.44
19:2X:12:VAL:HG22	19:2X:29:TRP:NE1	2.33	0.44
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.17	0.44
23:21:51:VAL:HG11	23:21:74:VAL:CG2	2.48	0.44
32:2a:736:C:OP1	49:2r:72:ARG:NH2	2.45	0.44
32:2a:1067:A:O2'	32:2a:1068:G:OP2	2.27	0.44
32:2a:1142:G:H3'	32:2a:1143:G:H8	1.83	0.44
33:2b:132:LYS:O	33:2b:136:VAL:HG23	2.18	0.44
44:2m:81:LEU:H	44:2m:81:LEU:HG	1.54	0.44
1:1A:55:G:O2'	1:1A:127:A:N1	2.46	0.44
1:1A:250:G:C6	1:1A:251:A:C6	3.06	0.44
1:1A:372:G:H5'	23:11:66:HIS:NE2	2.33	0.44
1:1A:380:U:H5''	23:11:18:ILE:HD12	1.99	0.44
1:1A:590:A:H2'	1:1A:591:C:O4'	2.18	0.44
1:1A:987:G:O2'	1:1A:1000:A:N3	2.46	0.44
1:1A:1072:C:H2'	1:1A:1093:G:O6	2.18	0.44
1:1A:2264:C:N4	22:10:15:ASP:OD2	2.42	0.44
4:1E:7:VAL:HG12	4:1E:27:LEU:HB3	1.99	0.44
11:1P:38:GLN:O	11:1P:39:LYS:HB3	2.17	0.44
13:1R:60:LEU:O	13:1R:64:ARG:HG3	2.17	0.44
32:1a:4:U:O4	39:1h:105:ARG:HG2	2.18	0.44
32:1a:28:G:O2'	32:1a:296:U:OP1	2.26	0.44
32:1a:1027:C:N3	32:1a:1034:G:C2	2.86	0.44
33:1b:163:PHE:HA	33:1b:185:ILE:O	2.18	0.44
39:1h:110:ALA:O	39:1h:121:ASP:N	2.51	0.44
55:1x:9:G:OP2	61:1x:201:HOH:O	2.21	0.44
1:2A:517:C:OP1	27:25:16:ARG:NH2	2.49	0.44
1:2A:565:C:H1'	1:2A:577:G:N2	2.32	0.44
1:2A:624:C:O2'	1:2A:657:U:OP1	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.32	0.44
1:2A:2335:A:C8	1:2A:2337:G:C5	3.06	0.44
8:2I:50:ARG:NH1	61:2I:201:HOH:O	2.50	0.44
8:2I:100:ALA:O	8:2I:104:GLN:HB2	2.17	0.44
9:2N:137:LYS:HE2	9:2N:139:GLU:OE2	2.17	0.44
11:2P:17:LYS:HE3	11:2P:27:HIS:CE1	2.53	0.44
13:2R:24:GLN:HE22	13:2R:36:THR:HG21	1.82	0.44
16:2U:16:LYS:HB3	16:2U:16:LYS:HE2	1.82	0.44
26:24:7:PRO:HB2	26:24:27:THR:HG21	1.99	0.44
32:2a:232:G:O2'	32:2a:263:A:N1	2.50	0.44
32:2a:643:C:H2'	32:2a:644:G:C8	2.52	0.44
32:2a:811:C:O2'	32:2a:901:A:N1	2.41	0.44
32:2a:957:U:O2'	32:2a:959:A:N7	2.41	0.44
32:2a:1275:A:H2'	32:2a:1276:G:O4'	2.17	0.44
32:2a:1517:G:N7	32:2a:1518:MA6:H103	2.33	0.44
33:2b:7:VAL:N	33:2b:221:LEU:HD21	2.32	0.44
33:2b:101:MET:HG2	33:2b:108:ILE:HG21	2.00	0.44
39:2h:66:GLY:H	39:2h:76:PRO:HB2	1.81	0.44
41:2j:57:LYS:O	41:2j:59:SER:N	2.46	0.44
54:2w:21:A:HO2'	54:2w:22:G:P	2.41	0.44
1:1A:196:A:H2'	1:1A:196:A:N3	2.32	0.44
1:1A:272(G):C:N3	1:1A:363(C):G:N2	2.47	0.44
1:1A:710:G:H2'	1:1A:711:G:C8	2.53	0.44
1:1A:817:C:H4'	1:1A:932:G:C5	2.53	0.44
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.41	0.44
1:1A:2274:A:OP2	61:1A:4269:HOH:O	2.21	0.44
1:1A:2336:A:H61	22:10:43:THR:HG22	1.82	0.44
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.53	0.44
4:1E:7:VAL:CG1	4:1E:27:LEU:HB3	2.48	0.44
4:1E:56:PRO:HG3	4:1E:74:PRO:HG2	2.00	0.44
11:1P:70:GLN:N	11:1P:70:GLN:OE1	2.50	0.44
25:13:23:LEU:HD13	25:13:50:VAL:HG11	1.99	0.44
30:18:23:VAL:CG2	30:18:47:LYS:HB3	2.48	0.44
32:1a:353:A:H5'	32:1a:353:A:H8	1.83	0.44
32:1a:731:G:OP1	32:1a:766:A:H1'	2.18	0.44
32:1a:1084:G:C5	32:1a:1085:U:C4	3.06	0.44
33:1b:102:LEU:HB3	33:1b:180:LEU:CD1	2.48	0.44
33:1b:196:LEU:HD12	33:1b:196:LEU:HA	1.86	0.44
35:1d:107:ARG:NH2	35:1d:194:LEU:HD21	2.23	0.44
44:1m:4:ILE:HA	44:1m:5:ALA:HA	1.71	0.44
54:1w:56:C:H2'	54:1w:57:G:O4'	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:862:G:O2'	2:2B:78:A:N3	2.50	0.44
1:2A:870:A:OP1	12:2Q:6:ARG:NE	2.51	0.44
1:2A:1022:G:N7	9:2N:66:LYS:HE2	2.33	0.44
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.53	0.44
1:2A:1448:G:H4'	1:2A:1542:A:OP1	2.18	0.44
1:2A:2377:A:H2'	1:2A:2378:A:C8	2.53	0.44
1:2A:2456:C:N4	61:2A:5963:HOH:O	2.51	0.44
6:2G:23:PHE:HB2	6:2G:25:TYR:CZ	2.53	0.44
19:2X:5:TYR:CE2	24:22:30:ARG:HB2	2.52	0.44
32:2a:109:A:H5'	32:2a:110:C:H5	1.83	0.44
32:2a:406:G:N2	35:2d:119:GLN:OE1	2.39	0.44
32:2a:528:C:H41	43:2l:49:ASN:ND2	2.16	0.44
32:2a:554:C:H2'	32:2a:555:C:H6	1.82	0.44
32:2a:1051:C:H2'	32:2a:1052:U:C6	2.53	0.44
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.53	0.44
48:2q:40:LYS:HD3	48:2q:42:TYR:CZ	2.53	0.44
1:1A:10:G:N2	1:1A:2802:G:OP1	2.50	0.43
1:1A:729:G:O5'	3:1D:208:LYS:NZ	2.51	0.43
1:1A:754:C:H2'	1:1A:755:C:C6	2.53	0.43
1:1A:821:A:H2'	1:1A:946:G:H5''	1.98	0.43
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.83	0.43
1:1A:2179:C:H2'	1:1A:2180:U:C6	2.53	0.43
1:1A:2771:C:H2'	1:1A:2772:C:C6	2.53	0.43
7:1H:84:SER:HA	7:1H:133:VAL:O	2.17	0.43
20:1Y:99:CYS:HB2	20:1Y:106:LEU:HD21	1.99	0.43
32:1a:319:G:H1	32:1a:334:C:H42	1.65	0.43
32:1a:430:A:OP1	35:1d:9:CYS:HB2	2.18	0.43
32:1a:523:A:H61	43:1l:92:0TD:CG	2.32	0.43
32:1a:1352:C:OP1	52:1u:3:LYS:NZ	2.42	0.43
32:1a:1518:MA6:H93	32:1a:1519:MA6:C9	2.47	0.43
35:1d:108:LEU:HB3	35:1d:110:PHE:CE1	2.53	0.43
35:1d:118:ARG:HG3	35:1d:136:PRO:HB3	2.00	0.43
36:1e:101:ILE:O	36:1e:120:THR:HG23	2.18	0.43
36:1e:146:ALA:O	36:1e:150:ARG:HG3	2.19	0.43
38:1g:113:GLU:H	38:1g:113:GLU:HG2	1.54	0.43
41:1j:16:LEU:CD2	41:1j:68:HIS:HB2	2.48	0.43
51:1t:18:GLN:O	51:1t:22:ARG:HG3	2.18	0.43
1:2A:208:C:H2'	1:2A:209:C:C6	2.53	0.43
1:2A:778:G:C6	1:2A:779:U:N3	2.86	0.43
1:2A:1161:C:H2'	1:2A:1162:G:C8	2.53	0.43
1:2A:2705:A:O2'	1:2A:2852:G:OP1	2.23	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2811:G:H22	1:2A:2891:G:H1'	1.83	0.43
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	1.99	0.43
6:2G:43:LEU:O	6:2G:45:GLU:N	2.49	0.43
16:2U:55:ARG:H	16:2U:55:ARG:HG2	1.42	0.43
32:2a:790:A:N1	32:2a:1497:G:H5''	2.34	0.43
32:2a:840:C:OP2	32:2a:840:C:H2'	2.18	0.43
32:2a:1004:A:N6	32:2a:1037:C:C2	2.86	0.43
32:2a:1085:U:H3'	32:2a:1086:U:C6	2.53	0.43
36:2e:42:GLY:HA2	36:2e:136:MET:HE1	1.99	0.43
43:2l:51:ALA:O	43:2l:52:LEU:HD23	2.18	0.43
44:2m:60:VAL:HG22	44:2m:64:TRP:CZ3	2.52	0.43
47:2p:21:VAL:HG13	47:2p:34:GLU:HB3	2.00	0.43
48:2q:9:VAL:HG11	48:2q:84:LEU:HD13	2.00	0.43
54:2y:23:A:H2'	54:2y:24:G:O4'	2.18	0.43
1:1A:614(C):A:C4	5:1F:180:GLY:HA2	2.53	0.43
1:1A:1065:U:H5''	1:1A:1066:U:OP2	2.18	0.43
1:1A:2251:OMG:HM23	1:1A:2251:OMG:H1'	1.80	0.43
1:1A:2431:U:OP2	61:1A:4270:HOH:O	2.21	0.43
1:1A:2872:G:H5''	61:1A:4471:HOH:O	2.17	0.43
9:1N:42:TRP:CH2	9:1N:44:PRO:HB3	2.53	0.43
10:1O:64:ARG:HB2	10:1O:79:PHE:CG	2.52	0.43
32:1a:472:A:H5''	47:1p:80:PHE:HB3	1.99	0.43
33:1b:100:GLY:O	33:1b:104:ASN:N	2.31	0.43
33:1b:155:LEU:HD11	33:1b:159:PRO:HG3	2.00	0.43
35:1d:172:PRO:C	35:1d:174:LEU:H	2.26	0.43
44:1m:16:ASP:OD1	44:1m:16:ASP:N	2.51	0.43
45:1n:4:LYS:HA	45:1n:7:ILE:HG23	2.00	0.43
48:1q:45:HIS:NE2	48:1q:47:PRO:HG3	2.34	0.43
1:2A:312:G:H4'	1:2A:331:A:N3	2.33	0.43
1:2A:534:U:H2'	1:2A:535:C:C6	2.54	0.43
1:2A:1598:C:H2'	1:2A:1599:C:H6	1.83	0.43
1:2A:1821:A:H2'	1:2A:1822:G:C8	2.53	0.43
1:2A:2329:G:N2	22:20:41:ARG:HB3	2.34	0.43
5:2F:187:VAL:HG12	11:2P:3:LEU:HD22	2.00	0.43
9:2N:12:ARG:NH2	9:2N:50:ASP:OD2	2.49	0.43
10:2O:48:PRO:HB2	10:2O:49:ARG:CZ	2.48	0.43
11:2P:59:LEU:HD11	30:28:10:ALA:HA	2.00	0.43
12:2Q:22:LYS:HB3	12:2Q:22:LYS:HE2	1.61	0.43
14:2S:71:ARG:NH1	14:2S:107:GLU:OE1	2.51	0.43
17:2V:58:VAL:HB	17:2V:98:GLU:HG3	1.99	0.43
21:2Z:48:PHE:CE1	21:2Z:52:SER:HA	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:522:C:OP2	43:2l:69:TYR:OH	2.26	0.43
32:2a:664:G:N2	32:2a:741:G:H1	2.16	0.43
32:2a:701:C:O2	32:2a:703:G:N1	2.51	0.43
32:2a:947:G:O3'	44:2m:109:THR:OG1	2.34	0.43
32:2a:983:A:H2	32:2a:984:C:C6	2.36	0.43
32:2a:1030(A):G:N2	32:2a:1030(C):G:H3'	2.34	0.43
32:2a:1264:C:N3	32:2a:1272:G:O6	2.51	0.43
33:2b:91:PRO:HA	33:2b:151:GLY:O	2.18	0.43
36:2e:24:ARG:HD2	53:2v:24:A:OP2	2.17	0.43
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	2.01	0.43
44:2m:6:GLY:HA3	44:2m:67:GLU:HG2	2.01	0.43
54:2w:18:G:HO2'	54:2w:57:G:N2	2.15	0.43
54:2w:43:C:H2'	54:2w:44:G:C8	2.54	0.43
1:1A:284:U:H2'	1:1A:285:C:C6	2.54	0.43
1:1A:1141:U:OP2	9:1N:63:THR:OG1	2.29	0.43
1:1A:1151:G:H2'	1:1A:1152:C:O4'	2.18	0.43
1:1A:2142:C:N3	1:1A:2149:G:O6	2.51	0.43
1:1A:2171:A:HO2'	1:1A:2172:U:H6	1.65	0.43
1:1A:2222:G:O2'	3:1D:148:GLU:OE2	2.24	0.43
1:1A:2790:A:H5'	1:1A:2893:G:H21	1.83	0.43
32:1a:673:G:O3'	37:1f:87:ARG:NH2	2.52	0.43
32:1a:714:G:H2'	32:1a:715:A:C8	2.53	0.43
32:1a:942:G:H21	40:1i:124:GLN:NE2	2.17	0.43
33:1b:229:VAL:HG12	33:1b:230:VAL:H	1.82	0.43
41:1j:61:GLU:OE1	45:1n:45:ARG:NE	2.50	0.43
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.37	0.43
1:2A:2617:C:H2'	1:2A:2618:G:O4'	2.18	0.43
7:2H:127:GLU:C	7:2H:129:THR:H	2.26	0.43
11:2P:102:ARG:C	11:2P:104:GLY:H	2.26	0.43
26:24:58:ARG:HH21	44:2m:80:ARG:NH2	2.16	0.43
32:2a:909:A:H2	32:2a:1413:A:N3	2.15	0.43
32:2a:977:A:H1'	32:2a:982:U:O4	2.19	0.43
32:2a:1002:G:H1	32:2a:1038:C:N4	2.13	0.43
32:2a:1032:G:H2'	32:2a:1033:G:C8	2.53	0.43
32:2a:1069:C:O2'	32:2a:1192:C:H1'	2.18	0.43
32:2a:1112:C:C4	34:2c:178:LEU:HD12	2.53	0.43
32:2a:1379:G:N7	38:2g:2:ALA:HB3	2.33	0.43
33:2b:91:PRO:HG3	33:2b:154:LEU:O	2.18	0.43
34:2c:18:TRP:H	34:2c:18:TRP:HE3	1.67	0.43
36:2e:19:MET:HE3	36:2e:19:MET:HB3	1.90	0.43
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.43	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:452:G:C4	1:1A:458:G:C6	3.06	0.43
1:1A:1028:A:H61	1:1A:1125:G:H2'	1.84	0.43
1:1A:1275:A:N1	1:1A:1295:C:O2'	2.48	0.43
1:1A:1930:G:O2'	1:1A:1968:G:O6	2.32	0.43
6:1G:101:ILE:HG22	6:1G:105:LYS:HE2	2.00	0.43
6:1G:126:ASP:HB2	6:1G:130:ASN:N	2.25	0.43
8:1I:38:LEU:HD21	23:11:75:GLU:OE2	2.17	0.43
12:1Q:57:HIS:CD2	12:1Q:117:ALA:HB2	2.53	0.43
14:1S:84:GLN:HA	14:1S:111:GLU:HB2	1.99	0.43
32:1a:765:G:H5''	32:1a:766:A:OP1	2.18	0.43
32:1a:1239:A:H62	32:1a:1299:A:H62	1.65	0.43
32:1a:1291:G:H5''	38:1g:41:ARG:NH2	2.33	0.43
35:1d:3:ARG:HD3	35:1d:118:ARG:HD2	2.00	0.43
36:1e:90:VAL:O	36:1e:120:THR:HA	2.18	0.43
38:1g:103:TRP:CH2	38:1g:141:VAL:HG21	2.53	0.43
51:1t:99:LEU:HA	51:1t:100:ILE:O	2.19	0.43
51:1t:100:ILE:HB	51:1t:101:GLY:H	1.67	0.43
1:2A:265:A:H1'	1:2A:266:G:O4'	2.18	0.43
1:2A:577:G:C6	1:2A:578:A:C6	3.07	0.43
1:2A:952:G:C6	1:2A:966:G:C6	3.06	0.43
1:2A:1000:A:C4	1:2A:1155:A:C6	3.07	0.43
1:2A:1480:G:C6	1:2A:1481:U:C4	3.05	0.43
1:2A:2080:G:OP1	23:21:35:THR:HG21	2.18	0.43
1:2A:2166:G:O6	1:2A:2171:A:N6	2.51	0.43
1:2A:2438:U:H5''	1:2A:2599:G:O3'	2.18	0.43
5:2F:21:ALA:CB	5:2F:22:ALA:HA	2.44	0.43
6:2G:8:LYS:HB3	6:2G:8:LYS:HE2	1.88	0.43
8:2I:40:THR:OG1	8:2I:41:GLU:N	2.46	0.43
17:2V:16:PRO:HD3	17:2V:99:ILE:HD11	1.99	0.43
32:2a:624:C:H2'	32:2a:625:G:H8	1.83	0.43
32:2a:1239:A:H62	32:2a:1299:A:N6	2.11	0.43
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.99	0.43
38:2g:28:ASN:HD22	38:2g:36:LYS:NZ	2.16	0.43
1:1A:518:G:H4'	18:1W:18:ARG:NE	2.34	0.43
1:1A:1258:C:H2'	1:1A:1259:G:O4'	2.19	0.43
1:1A:1550:C:H4'	1:1A:1743:C:O2	2.17	0.43
1:1A:1714:G:H1	1:1A:1745(A):C:H42	1.66	0.43
1:1A:2270:G:H2'	1:1A:2271:G:O4'	2.18	0.43
1:1A:2543:G:H2'	1:1A:2544:G:O4'	2.19	0.43
13:1R:73:VAL:O	13:1R:77:ARG:HG3	2.18	0.43
32:1a:92:C:H2'	32:1a:93:G:H8	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.19	0.43
32:1a:1131:G:P	40:1i:20:ARG:HH22	2.41	0.43
32:1a:1367:C:H2'	32:1a:1368:G:O4'	2.18	0.43
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	2.01	0.43
33:1b:71:VAL:HB	33:1b:164:VAL:HG13	2.00	0.43
39:1h:9:MET:SD	39:1h:32:LYS:HB3	2.58	0.43
39:1h:51:VAL:HG12	39:1h:52:ASP:H	1.83	0.43
40:1i:7:THR:O	40:1i:83:ARG:NH1	2.41	0.43
55:1x:19:G:H4'	55:1x:20:U:OP2	2.18	0.43
1:2A:32:C:O2'	1:2A:33:U:H5'	2.18	0.43
1:2A:296:C:O2'	20:2Y:95:LYS:NZ	2.51	0.43
1:2A:582:G:H2'	1:2A:583:G:C8	2.52	0.43
1:2A:623:G:H2'	1:2A:624:C:C6	2.53	0.43
1:2A:731:C:H2'	1:2A:732:C:C6	2.54	0.43
1:2A:932:G:H4'	1:2A:933:A:O5'	2.18	0.43
1:2A:1169:G:H8	1:2A:1169:G:O5'	2.01	0.43
1:2A:1474:C:H2'	1:2A:1475:G:C8	2.53	0.43
1:2A:2299:G:N1	1:2A:2318:G:N7	2.66	0.43
1:2A:2437:U:C2'	1:2A:2438:U:H5'	2.48	0.43
2:2B:55:U:O3'	6:2G:27:ASN:ND2	2.51	0.43
10:2O:13:ASN:HD22	10:2O:13:ASN:C	2.25	0.43
24:22:54:LYS:HA	24:22:57:ILE:HD12	1.99	0.43
27:25:41:PRO:O	27:25:44:THR:OG1	2.31	0.43
32:2a:642:A:N3	39:2h:113:SER:OG	2.52	0.43
36:2e:143:ARG:NE	39:2h:77:GLU:OE2	2.29	0.43
43:2l:70:ILE:HG21	43:2l:75:HIS:CD2	2.54	0.43
43:2l:82:VAL:O	43:2l:105:TYR:HB2	2.19	0.43
1:1A:805:G:H5''	11:1P:38:GLN:HG3	2.00	0.43
1:1A:2126:A:N3	1:1A:2127:G:H1'	2.34	0.43
1:1A:2378:A:H2'	14:1S:21:THR:HG21	2.01	0.43
26:14:61:ARG:O	26:14:62:ARG:C	2.61	0.43
32:1a:108:G:C6	51:1t:15:ARG:HG2	2.53	0.43
32:1a:444:C:H2'	32:1a:445:G:H8	1.83	0.43
32:1a:600:C:H2'	32:1a:601:C:C6	2.53	0.43
32:1a:1343:G:H1'	40:1i:121:ARG:NH1	2.33	0.43
39:1h:17:THR:HB	39:1h:78:GLN:OE1	2.19	0.43
1:2A:357:A:H2'	1:2A:358:U:C6	2.53	0.43
1:2A:735:A:N7	1:2A:761:A:H2	2.17	0.43
1:2A:867:C:C4	1:2A:868:U:C4	3.06	0.43
1:2A:2526:G:HO2'	31:29:1:MET:HB2	1.84	0.43
1:2A:2840:C:H2'	1:2A:2841:C:C6	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:43:C:OP1	26:24:6:HIS:NE2	2.47	0.43
4:2E:59:VAL:HG21	4:2E:74:PRO:HB3	2.00	0.43
5:2F:200:GLU:O	5:2F:204:ASN:ND2	2.51	0.43
10:2O:67:LYS:NZ	10:2O:68:GLU:OE2	2.39	0.43
19:2X:28:PHE:CE1	19:2X:92:LEU:HD11	2.53	0.43
24:22:1:MET:HE3	24:22:1:MET:HB2	1.87	0.43
32:2a:60:A:H4'	32:2a:61:G:O5'	2.19	0.43
32:2a:109:A:H5'	32:2a:110:C:C5	2.54	0.43
32:2a:418:C:H2'	32:2a:419:C:H6	1.84	0.43
32:2a:514:C:H2'	32:2a:515:G:C8	2.53	0.43
32:2a:696:A:N3	32:2a:786:G:O2'	2.44	0.43
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.52	0.43
32:2a:1014:A:H4'	50:2s:14:HIS:CD2	2.53	0.43
32:2a:1522:U:H2'	32:2a:1523:G:H8	1.83	0.43
35:2d:111:ALA:HB1	35:2d:116:GLN:HE21	1.82	0.43
35:2d:153:ARG:NH1	35:2d:181:MET:HE3	2.33	0.43
35:2d:173:TRP:CZ3	35:2d:193:ASP:HB3	2.54	0.43
54:2w:29:G:H3'	54:2w:30:G:H8	1.84	0.43
1:1A:1664:A:H1'	1:1A:2685:G:O2'	2.18	0.43
1:1A:1688:U:H1'	1:1A:1701:A:C6	2.54	0.43
1:1A:2136:C:N3	1:1A:2155:G:C2	2.87	0.43
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.83	0.43
1:1A:2690:C:OP1	13:1R:17:ARG:NH2	2.51	0.43
3:1D:77:ALA:HB2	3:1D:97:TYR:CD1	2.54	0.43
6:1G:43:LEU:CD1	6:1G:153:ARG:HD2	2.49	0.43
10:1O:77:ILE:HD12	15:1T:74:ARG:HD2	2.00	0.43
12:1Q:137:TYR:HB3	21:1Z:76:LEU:HD21	1.99	0.43
32:1a:250:A:H4'	32:1a:251:G:O5'	2.17	0.43
32:1a:487:A:H2'	32:1a:488:C:O4'	2.19	0.43
33:1b:16:HIS:CD2	33:1b:17:PHE:H	2.36	0.43
35:1d:110:PHE:N	35:1d:110:PHE:CD1	2.87	0.43
1:2A:229:A:O5'	1:2A:230:U:H5'	2.19	0.43
1:2A:322:A:C5	1:2A:340:A:C2	3.06	0.43
5:2F:20:LEU:HA	5:2F:20:LEU:HD12	1.79	0.43
5:2F:144:LYS:HB3	5:2F:145:GLU:OE1	2.19	0.43
12:2Q:20:ALA:HB2	21:2Z:79:ARG:HG2	2.00	0.43
14:2S:10:ARG:HG3	14:2S:13:ARG:NH2	2.34	0.43
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.54	0.43
21:2Z:77:ASP:N	21:2Z:82:ARG:O	2.47	0.43
32:2a:280:C:N3	48:2q:39:SER:OG	2.51	0.43
32:2a:837:G:H2'	32:2a:838:G:C8	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1316:G:N1	32:2a:1319:A:OP2	2.50	0.43
32:2a:1411:C:H2'	32:2a:1412:C:C6	2.53	0.43
1:1A:2712:U:OP1	1:1A:2714:G:H4'	2.19	0.43
1:1A:2751:G:H4'	7:1H:4:ILE:HD11	2.00	0.43
3:1D:77:ALA:HA	3:1D:97:TYR:HA	2.00	0.43
3:1D:146:GLU:HB2	3:1D:189:CYS:HB3	2.00	0.43
15:1T:22:PHE:HB3	15:1T:88:ILE:HD11	2.01	0.43
19:1X:12:VAL:HG21	19:1X:27:THR:HG22	2.01	0.43
28:16:38:LYS:HE3	28:16:38:LYS:HB3	1.82	0.43
32:1a:257:G:C6	32:1a:258:G:C5	3.06	0.43
32:1a:358:U:H2'	32:1a:359:U:C6	2.54	0.43
32:1a:881:G:P	43:1l:12:ARG:HH22	2.42	0.43
32:1a:1513:A:H2'	32:1a:1514:C:C6	2.54	0.43
35:1d:122:ARG:HA	35:1d:122:ARG:HD2	1.70	0.43
39:1h:10:LEU:HG	39:1h:83:ILE:HD11	2.00	0.43
1:2A:8:A:H2'	1:2A:9:U:H6	1.83	0.43
1:2A:521:G:H2'	1:2A:522:G:H8	1.84	0.43
1:2A:811:U:H2'	11:2P:21:ARG:HA	2.00	0.43
1:2A:1429:G:H2'	1:2A:1430:C:C6	2.54	0.43
1:2A:1599:C:OP1	19:2X:36:LYS:HG3	2.18	0.43
1:2A:2513:G:N2	4:2E:143:ASN:OD1	2.52	0.43
1:2A:2746:U:OP1	7:2H:85:LYS:NZ	2.44	0.43
5:2F:129:PHE:CD2	5:2F:163:VAL:HG21	2.54	0.43
7:2H:95:ARG:HG2	7:2H:106:THR:HB	2.00	0.43
7:2H:126:PRO:HG2	7:2H:130:ARG:NH1	2.33	0.43
25:23:9:VAL:HG12	25:23:32:GLN:HE22	1.84	0.43
29:27:1:MET:HE3	29:27:3:ARG:NH2	2.34	0.43
32:2a:23:C:H5	32:2a:561:U:O4	2.01	0.43
32:2a:1074:G:O2'	32:2a:1101:A:N1	2.44	0.43
32:2a:1096:C:O2	32:2a:1170:A:O2'	2.31	0.43
55:2x:55:PSU:O2'	55:2x:57:A:N7	2.43	0.43
1:1A:631:A:H2'	1:1A:632:A:O4'	2.19	0.43
1:1A:1075:C:C2'	1:1A:1076:C:H5'	2.49	0.43
1:1A:1179:C:O2'	1:1A:1180:C:H5'	2.18	0.43
1:1A:2046:G:H5'	27:15:19:ARG:HG3	2.00	0.43
24:12:10:LEU:HB3	24:12:14:ARG:NH1	2.33	0.43
26:14:15:ILE:HD12	26:14:21:VAL:HG22	1.99	0.43
29:17:12:ARG:NH2	29:17:44:PRO:HB3	2.34	0.43
32:1a:79:G:H1'	32:1a:91:C:O2	2.18	0.43
32:1a:401:C:H2'	32:1a:402:G:C8	2.54	0.43
32:1a:755:G:OP2	46:1o:65:ARG:HD2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:910:C:P	43:1l:97:ARG:HH22	2.41	0.43
32:1a:975:A:H5'	32:1a:975:A:C8	2.54	0.43
32:1a:1090:U:H2'	32:1a:1091:U:C6	2.54	0.43
32:1a:1350:A:C6	32:1a:1351:U:C4	3.07	0.43
36:1e:85:GLY:C	36:1e:87:SER:H	2.27	0.43
41:1j:57:LYS:HE2	41:1j:60:ARG:NH2	2.34	0.43
44:1m:50:GLU:HA	44:1m:53:VAL:HG22	2.01	0.43
44:1m:84:ILE:HG21	50:1s:66:MET:HB3	2.00	0.43
45:1n:53:LEU:O	45:1n:56:VAL:HG23	2.18	0.43
55:1x:10:G:N2	55:1x:26:G:H1'	2.34	0.43
1:2A:1027:A:C6	1:2A:1126:A:C4	3.06	0.43
1:2A:1686:C:H2'	1:2A:1687:G:O4'	2.18	0.43
3:2D:77:ALA:HB2	3:2D:97:TYR:CD1	2.54	0.43
5:2F:155:LEU:HD12	5:2F:174:VAL:O	2.19	0.43
9:2N:99:LEU:O	9:2N:103:VAL:HG23	2.18	0.43
11:2P:82:GLY:HA2	11:2P:113:LYS:O	2.19	0.43
18:2W:68:ARG:NH1	18:2W:112:GLY:H	2.17	0.43
19:2X:26:TYR:CD1	19:2X:92:LEU:HD12	2.53	0.43
23:21:44:PRO:O	23:21:46:LEU:N	2.48	0.43
26:24:1:MET:HB3	26:24:6:HIS:CD2	2.54	0.43
32:2a:158:G:H2'	32:2a:159:G:O4'	2.19	0.43
32:2a:390:C:H2'	32:2a:391:G:C8	2.54	0.43
32:2a:397:A:H3'	32:2a:397:A:N3	2.33	0.43
32:2a:438:G:H4'	35:2d:123:HIS:CE1	2.54	0.43
32:2a:539:A:H2'	32:2a:540:G:C8	2.54	0.43
32:2a:735:C:H2'	32:2a:736:C:H6	1.84	0.43
40:2i:9:ARG:HB3	40:2i:104:ARG:HD2	2.01	0.43
44:2m:108:ARG:NH2	44:2m:114:ARG:HA	2.33	0.43
54:2w:50:U:H1'	54:2w:65:G:C6	2.54	0.43
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.19	0.43
1:1A:750:A:O2'	1:1A:752:A:OP1	2.34	0.43
1:1A:2576:G:H1'	61:1A:4305:HOH:O	2.17	0.43
3:1D:16:MET:HE3	3:1D:16:MET:HB2	1.82	0.43
6:1G:41:GLN:O	6:1G:43:LEU:HD22	2.18	0.43
6:1G:124:SER:HB2	6:1G:131:TYR:CE1	2.53	0.43
22:10:46:LYS:HD2	22:10:78:TYR:CZ	2.54	0.43
24:12:33:MET:HG3	24:12:36:ARG:NH2	2.34	0.43
32:1a:332:G:H2'	32:1a:333:G:H8	1.84	0.43
32:1a:668:G:H21	46:1o:46:HIS:HE1	1.66	0.43
32:1a:713:G:H2'	32:1a:714:G:C8	2.54	0.43
32:1a:922:G:H4'	36:1e:20:GLN:HA	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1372:U:H5''	40:1i:71:SER:HB2	2.01	0.43
51:1t:39:LYS:O	51:1t:43:LEU:HG	2.19	0.43
1:2A:479:A:O2'	1:2A:481:G:H5'	2.19	0.43
1:2A:2552:2MU:H2'	1:2A:2554:U:OP2	2.18	0.43
3:2D:4:LYS:HB3	3:2D:18:VAL:HG23	2.00	0.43
5:2F:37:VAL:HG21	11:2P:6:LEU:HD13	2.00	0.43
10:2O:102:VAL:HB	10:2O:106:LEU:HD12	2.01	0.43
12:2Q:29:PHE:HB2	12:2Q:105:GLU:OE1	2.19	0.43
32:2a:76:C:H42	32:2a:93:G:H1	1.66	0.43
32:2a:580:U:H2'	32:2a:581:G:O4'	2.19	0.43
32:2a:825:G:H2'	32:2a:826:C:H6	1.83	0.43
32:2a:1068:G:OP2	32:2a:1068:G:H8	2.02	0.43
46:2o:26:GLU:OE1	46:2o:77:ARG:NH2	2.43	0.43
54:2w:5:G:H2'	54:2w:6:G:C8	2.54	0.43
1:1A:309:G:C5	1:1A:330:A:C6	3.07	0.42
1:1A:436:C:H2'	1:1A:437:G:C8	2.54	0.42
1:1A:1097:U:H2'	1:1A:1098:A:H5'	2.01	0.42
1:1A:1636:C:H2'	1:1A:1637:A:C8	2.54	0.42
1:1A:1833:U:O2'	1:1A:1969:A:N1	2.50	0.42
1:1A:2331:G:O2'	22:10:43:THR:HG22	2.19	0.42
7:1H:83:TYR:CE1	7:1H:138:LYS:HD2	2.54	0.42
17:1V:19:LYS:HA	17:1V:94:LEU:O	2.18	0.42
19:1X:39:ILE:O	19:1X:43:VAL:HG23	2.19	0.42
21:1Z:1:MET:HA	21:1Z:2:GLU:HA	1.70	0.42
31:19:32:HIS:O	31:19:34:GLN:HG3	2.18	0.42
32:1a:73:G:H1	32:1a:96:U:H3	1.67	0.42
32:1a:92:C:H2'	32:1a:93:G:C8	2.53	0.42
32:1a:176:C:H2'	32:1a:177:C:C6	2.54	0.42
32:1a:228:A:H4'	47:1p:62:VAL:HG11	2.00	0.42
32:1a:438:G:H4'	35:1d:123:HIS:ND1	2.34	0.42
32:1a:790:A:O5'	32:1a:790:A:H8	2.02	0.42
33:1b:153:ARG:HE	33:1b:153:ARG:HB3	1.70	0.42
33:1b:158:LEU:HD12	33:1b:158:LEU:HA	1.67	0.42
44:1m:67:GLU:HB3	44:1m:68:GLY:H	1.69	0.42
48:1q:45:HIS:H	48:1q:72:ARG:HA	1.84	0.42
50:1s:63:THR:OG1	50:1s:65:ASN:OD1	2.30	0.42
1:2A:1019:U:H2'	1:2A:1020:A:H8	1.84	0.42
1:2A:1365:A:O5'	23:21:41:ARG:NH2	2.52	0.42
1:2A:1417:C:H2'	1:2A:1418:G:O4'	2.19	0.42
1:2A:1508:A:H4'	1:2A:1509(A):A:C5	2.54	0.42
11:2P:38:GLN:HG2	11:2P:45:LEU:H	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:2V:24:LYS:HE2	17:2V:24:LYS:HB3	1.83	0.42
25:23:7:LYS:NZ	25:23:32:GLN:O	2.50	0.42
26:24:53:GLU:HG2	26:24:54:GLY:N	2.28	0.42
32:2a:8:A:C6	35:2d:209:ARG:HB2	2.53	0.42
32:2a:1075:C:H4'	33:2b:175:ARG:HH12	1.84	0.42
33:2b:21:ARG:O	33:2b:23:ARG:N	2.47	0.42
35:2d:108:LEU:HD21	35:2d:174:LEU:HD22	2.01	0.42
39:2h:6:ILE:O	39:2h:10:LEU:HD13	2.19	0.42
42:2k:48:ILE:H	42:2k:48:ILE:HD12	1.84	0.42
43:2l:75:HIS:CE1	43:2l:77:LEU:HB2	2.54	0.42
45:2n:42:ILE:O	45:2n:46:GLU:HG3	2.19	0.42
54:2w:74:C:H2'	54:2w:75:C:H5'	2.00	0.42
1:1A:686:G:O6	29:17:12:ARG:HA	2.19	0.42
1:1A:1052:C:H2'	1:1A:1053:C:H6	1.82	0.42
1:1A:1686:C:H2'	1:1A:1687:G:O4'	2.19	0.42
1:1A:1790:C:O2'	3:1D:209:ALA:HB2	2.19	0.42
1:1A:2090:G:N2	23:11:45:ASN:OD1	2.37	0.42
1:1A:2749:A:OP1	7:1H:3:ARG:NH1	2.52	0.42
3:1D:37:LEU:HD13	3:1D:87:ASN:ND2	2.34	0.42
11:1P:37:GLY:C	11:1P:38:GLN:O	2.63	0.42
32:1a:179:A:H2'	32:1a:180:U:C6	2.53	0.42
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.43	0.42
32:1a:1342:C:O2'	40:1i:124:GLN:HG3	2.18	0.42
33:1b:107:THR:O	33:1b:110:GLN:HB3	2.18	0.42
39:1h:114:THR:HG22	39:1h:131:GLY:HA3	2.01	0.42
40:1i:28:VAL:HG22	40:1i:63:ILE:HB	2.00	0.42
43:1l:56:ALA:HB2	43:1l:70:ILE:HD11	2.01	0.42
1:2A:458:G:O2'	29:27:39:ARG:HD3	2.19	0.42
1:2A:621:A:OP2	11:2P:108:LYS:NZ	2.51	0.42
1:2A:676:A:H1'	1:2A:2443:C:H1'	2.01	0.42
1:2A:1568:G:H5'	3:2D:60:ARG:HA	2.02	0.42
1:2A:1837:C:OP1	32:2a:784:C:H4'	2.19	0.42
1:2A:1862:G:H2'	1:2A:1863:G:H8	1.84	0.42
1:2A:2074:U:H2'	1:2A:2075:U:C6	2.55	0.42
2:2B:94:C:H2'	2:2B:95:C:H6	1.84	0.42
7:2H:149:ARG:NH1	7:2H:154:PRO:HG2	2.34	0.42
12:2Q:85:LYS:HG2	22:20:7:LEU:HB3	2.00	0.42
16:2U:110:VAL:HG12	16:2U:114:LYS:HE3	2.00	0.42
18:2W:17:VAL:HG11	18:2W:103:ILE:HD11	2.01	0.42
20:2Y:1:MET:HE2	20:2Y:1:MET:HB3	1.92	0.42
32:2a:1179:A:H4'	40:2i:103:THR:HA	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1265:G:C6	32:2a:1266:G:C5	3.08	0.42
32:2a:1307:U:H2'	32:2a:1308:U:C6	2.55	0.42
33:2b:82:ARG:HG3	33:2b:92:TYR:OH	2.19	0.42
35:2d:179:GLU:C	35:2d:181:MET:H	2.27	0.42
1:1A:338:G:OP1	20:1Y:4:LYS:NZ	2.48	0.42
1:1A:971:C:H2'	1:1A:972:G:O4'	2.18	0.42
1:1A:1432:C:H2'	1:1A:1433:U:O4'	2.19	0.42
1:1A:1549:C:H2'	1:1A:1550:C:C6	2.54	0.42
1:1A:2141:G:C4	1:1A:2142:C:H1'	2.55	0.42
1:1A:2328:A:H2'	1:1A:2329:G:H8	1.83	0.42
57:1A:4107:TYK:H14	57:1A:4107:TYK:H221	1.88	0.42
5:1F:50:SER:HA	5:1F:92:PRO:O	2.19	0.42
6:1G:60:LEU:HD12	6:1G:60:LEU:HA	1.87	0.42
22:10:43:THR:OG1	22:10:46:LYS:HG2	2.19	0.42
26:14:53:GLU:HB2	26:14:55:ARG:O	2.19	0.42
32:1a:266:G:H5''	32:1a:268:C:H41	1.83	0.42
32:1a:891:U:OP2	61:1a:1919:HOH:O	2.21	0.42
32:1a:1254:C:H2'	32:1a:1255:G:O4'	2.19	0.42
32:1a:1479:C:H2'	32:1a:1480:G:C8	2.55	0.42
38:1g:45:ASP:O	38:1g:49:ILE:HG13	2.19	0.42
38:1g:113:GLU:CG	38:1g:119:ARG:HG2	2.49	0.42
47:1p:19:ILE:HG22	47:1p:36:ILE:HG13	2.01	0.42
52:1u:6:ARG:HG2	52:1u:15:ARG:HD2	1.99	0.42
55:1x:55:PSU:O2'	55:1x:57:A:N7	2.51	0.42
1:2A:910:A:N1	1:2A:2277:G:H1'	2.35	0.42
1:2A:2841:C:H2'	1:2A:2842:G:H8	1.82	0.42
1:2A:2875:C:H2'	1:2A:2876:G:O4'	2.19	0.42
2:2B:3:C:H2'	2:2B:4:C:C6	2.54	0.42
5:2F:29:ASN:HB3	5:2F:32:LEU:HB3	2.01	0.42
5:2F:124:LEU:HB3	5:2F:193:VAL:HG22	2.01	0.42
7:2H:140:LYS:HB2	7:2H:140:LYS:HE3	1.76	0.42
32:2a:726:C:H2'	32:2a:727:G:C8	2.53	0.42
32:2a:859:A:OP2	32:2a:869:G:N1	2.51	0.42
32:2a:881:G:OP1	43:2l:12:ARG:NH2	2.52	0.42
32:2a:1207:2MG:H2'	32:2a:1208:C:H6	1.85	0.42
33:2b:213:LEU:O	33:2b:217:ARG:HB2	2.19	0.42
54:2w:21:A:O2'	54:2w:22:G:OP1	2.31	0.42
54:2w:73:A:O3'	54:2w:74:C:H4'	2.19	0.42
55:2x:15:G:N2	55:2x:21:A:N3	2.67	0.42
1:1A:1045:A:OP1	1:1A:1046:A:H3'	2.19	0.42
1:1A:2019:A:O4'	16:1U:34:LYS:HD2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2758:A:OP2	61:1A:4272:HOH:O	2.21	0.42
1:1A:2850:A:H2	13:1R:61:HIS:CG	2.38	0.42
3:1D:72:LYS:NZ	3:1D:99:ASP:OD2	2.47	0.42
11:1P:3:LEU:HD12	11:1P:3:LEU:HA	1.83	0.42
15:1T:114:LEU:HD23	15:1T:114:LEU:HA	1.85	0.42
18:1W:97:LYS:HE2	18:1W:99:ARG:NH2	2.34	0.42
20:1Y:102:CYS:SG	20:1Y:104:GLY:N	2.84	0.42
32:1a:265:G:H2'	32:1a:267:C:H5	1.84	0.42
32:1a:445:G:H2'	32:1a:446:G:O4'	2.20	0.42
32:1a:576:G:O6	32:1a:880:C:O2'	2.30	0.42
32:1a:679:C:H2'	32:1a:680:C:H6	1.85	0.42
32:1a:715:A:OP1	32:1a:805:C:O2'	2.25	0.42
32:1a:1217:C:H2'	32:1a:1218:C:O4'	2.20	0.42
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.54	0.42
34:1c:21:ARG:HG3	34:1c:58:GLU:HG2	2.01	0.42
37:1f:36:ARG:NH2	37:1f:38:GLU:OE2	2.53	0.42
39:1h:119:LEU:HB3	39:1h:123:GLU:HB2	2.00	0.42
1:2A:299:A:N1	1:2A:322:A:O2'	2.45	0.42
1:2A:660:G:H5'	5:2F:99:TYR:CE1	2.54	0.42
1:2A:851:U:O2'	25:23:42:ALA:O	2.37	0.42
1:2A:1574:C:H2'	1:2A:1575:C:C6	2.54	0.42
1:2A:1926:U:O2'	1:2A:1928:A:N7	2.45	0.42
1:2A:2671:A:H2'	1:2A:2672:G:O4'	2.19	0.42
2:2B:118:G:C2	2:2B:119:G:H1'	2.54	0.42
4:2E:163:GLU:HG2	4:2E:164:ARG:N	2.35	0.42
14:2S:67:ARG:HG2	14:2S:71:ARG:HD2	2.02	0.42
20:2Y:7:VAL:CG1	20:2Y:27:VAL:HG21	2.49	0.42
21:2Z:73:GLN:H	21:2Z:87:ASP:HB2	1.83	0.42
32:2a:1128:C:O2'	32:2a:1147:C:N3	2.41	0.42
32:2a:1387:G:H2'	32:2a:1388:C:H6	1.83	0.42
38:2g:69:VAL:O	38:2g:69:VAL:HG12	2.20	0.42
39:2h:73:ASP:OD1	39:2h:75:ARG:NE	2.37	0.42
39:2h:114:THR:C	39:2h:116:LYS:N	2.77	0.42
50:2s:21:GLU:HA	50:2s:24:ALA:HB3	2.00	0.42
54:2w:65:G:C6	54:2w:66:U:H1'	2.54	0.42
55:2x:19:G:H5''	55:2x:60:U:O4	2.20	0.42
1:1A:251:A:H2'	1:1A:252:G:O4'	2.19	0.42
1:1A:483:A:H5''	20:1Y:50:ARG:HG2	2.01	0.42
1:1A:1021:A:H3'	1:1A:1021:A:N3	2.34	0.42
1:1A:1028:A:N3	1:1A:2486:G:O2'	2.49	0.42
1:1A:1655:A:O3'	4:1E:115:GLY:HA3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1798:U:OP2	3:1D:274:ARG:NH2	2.25	0.42
1:1A:1952:A:C6	1:1A:1953:A:N1	2.88	0.42
1:1A:2128:C:H42	1:1A:2160:G:H1	1.66	0.42
1:1A:2206:G:H5''	1:1A:2207:G:N7	2.35	0.42
1:1A:2233:U:H2'	1:1A:2234:G:C8	2.54	0.42
1:1A:2474:C:OP2	1:1A:2475:C:N4	2.38	0.42
2:1B:78:A:C2	2:1B:100:A:C4	3.07	0.42
3:1D:68:LYS:C	3:1D:70:TRP:H	2.27	0.42
5:1F:135:LYS:HB2	5:1F:138:GLU:CD	2.45	0.42
6:1G:106:LEU:HA	6:1G:110:ALA:HB3	2.01	0.42
12:1Q:32:TYR:HB2	12:1Q:106:VAL:HG23	2.02	0.42
21:1Z:126:VAL:HG11	21:1Z:161:VAL:HG13	2.01	0.42
32:1a:649:G:H2'	32:1a:650:G:H8	1.83	0.42
32:1a:993:G:H2'	32:1a:993:G:N3	2.34	0.42
32:1a:1239:A:C4	32:1a:1298:C:N4	2.87	0.42
33:1b:176:GLU:O	33:1b:180:LEU:HD12	2.19	0.42
46:1o:39:LEU:HD12	46:1o:59:MET:HE1	2.00	0.42
1:2A:41:C:H2'	1:2A:42:G:C8	2.53	0.42
1:2A:868:U:C4	1:2A:869:G:N7	2.87	0.42
1:2A:1219:G:H1	1:2A:1230:C:H42	1.67	0.42
1:2A:1272:A:H3'	1:2A:1273:U:H5''	2.02	0.42
1:2A:2103:C:H42	1:2A:2186:G:H1	1.66	0.42
1:2A:2137:C:N3	1:2A:2155:G:C6	2.88	0.42
1:2A:2331:G:O2'	22:20:43:THR:HG22	2.20	0.42
1:2A:2343:C:HO2'	1:2A:2373:G:HO2'	1.66	0.42
1:2A:2757:A:C2	7:2H:63:SER:HB2	2.54	0.42
4:2E:7:VAL:HG12	4:2E:27:LEU:HB3	2.01	0.42
6:2G:49:ASP:OD1	6:2G:49:ASP:N	2.52	0.42
6:2G:70:VAL:HA	6:2G:90:LEU:HD23	2.01	0.42
9:2N:38:HIS:ND1	9:2N:39:ARG:HG3	2.34	0.42
10:2O:120:GLU:HB2	15:2T:68:TYR:HE2	1.84	0.42
15:2T:26:ASP:O	15:2T:49:VAL:HG22	2.19	0.42
32:2a:61:G:C5	32:2a:107:G:C2	3.07	0.42
32:2a:259:G:H2'	32:2a:260:G:O4'	2.19	0.42
32:2a:302:G:O2'	32:2a:556:C:H5''	2.20	0.42
32:2a:931:C:N4	32:2a:1386:G:H1	2.13	0.42
32:2a:1107:C:O2	32:2a:1191:A:O2'	2.36	0.42
32:2a:1178:G:OP1	40:2i:93:ARG:HD2	2.20	0.42
32:2a:1241:G:H1	32:2a:1296:C:H42	1.67	0.42
32:2a:1347:G:H22	32:2a:1374:A:P	2.42	0.42
33:2b:15:VAL:O	33:2b:17:PHE:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:2b:34:ALA:HB3	33:2b:41:ILE:HB	2.00	0.42
34:2c:125:GLU:O	34:2c:190:ARG:NH2	2.52	0.42
35:2d:92:VAL:O	35:2d:96:LEU:HG	2.19	0.42
38:2g:22:LEU:HG	38:2g:62:PHE:CZ	2.54	0.42
38:2g:99:LEU:HD23	38:2g:102:ARG:HH12	1.85	0.42
42:2k:54:ARG:NH1	54:2y:39:PSU:O2'	2.52	0.42
46:2o:33:THR:HG21	46:2o:85:LEU:HD22	2.01	0.42
51:2t:50:GLU:HG3	51:2t:100:ILE:HD13	2.01	0.42
54:2y:63:G:H2'	54:2y:64:A:O4'	2.19	0.42
1:1A:1058:G:N2	1:1A:1081:U:O2	2.52	0.42
1:1A:1078:U:H5'	1:1A:1079:C:OP2	2.20	0.42
1:1A:1269:A:N7	61:1A:4396:HOH:O	2.37	0.42
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.19	0.42
1:1A:1826:G:H2'	1:1A:1827:C:O4'	2.19	0.42
1:1A:2820:A:O2'	1:1A:2821:A:OP1	2.32	0.42
4:1E:6:GLY:HA2	4:1E:28:ALA:HA	2.02	0.42
4:1E:96:PHE:O	4:1E:175:VAL:HG11	2.20	0.42
18:1W:68:ARG:NH1	18:1W:112:GLY:H	2.18	0.42
31:19:2:LYS:HD3	31:19:4:ARG:NH2	2.35	0.42
32:1a:225:C:H2'	32:1a:226:G:C8	2.53	0.42
32:1a:279:A:C8	48:1q:98:LEU:HD23	2.54	0.42
32:1a:324:G:N2	32:1a:327:A:OP2	2.51	0.42
32:1a:624:C:O3'	47:1p:10:GLY:HA2	2.20	0.42
32:1a:892:A:O2'	32:1a:1415:G:H4'	2.20	0.42
32:1a:1026:G:C8	32:1a:1027:C:O2	2.73	0.42
33:1b:25:ASN:O	33:1b:27:LYS:N	2.52	0.42
38:1g:23:VAL:HG13	38:1g:43:PHE:CZ	2.55	0.42
38:1g:92:SER:O	38:1g:96:GLN:N	2.39	0.42
46:1o:43:LEU:HD12	46:1o:56:LEU:HD22	2.02	0.42
1:2A:1319:G:C6	1:2A:1320:C:N4	2.88	0.42
1:2A:1475:G:C2	1:2A:1517:G:C2	3.08	0.42
1:2A:1798:U:H5'	3:2D:259:THR:CG2	2.45	0.42
1:2A:1816:G:H3'	3:2D:62:TYR:CE1	2.55	0.42
1:2A:1913:A:H4'	1:2A:1914:C:C5'	2.50	0.42
1:2A:2053:G:OP1	4:2E:144:ARG:HG3	2.19	0.42
1:2A:2314:C:H2'	1:2A:2315:G:H8	1.82	0.42
2:2B:11:C:H3'	2:2B:12:C:H6	1.83	0.42
2:2B:83:G:H1	2:2B:94:C:N4	2.17	0.42
9:2N:71:ILE:HA	9:2N:86:PRO:HA	2.00	0.42
13:2R:96:ARG:HH22	13:2R:117:VAL:HG13	1.84	0.42
15:2T:55:ASN:ND2	15:2T:58:ASN:HB2	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:2Y:6:HIS:H	20:2Y:6:HIS:CD2	2.36	0.42
32:2a:502:G:H2'	32:2a:503:C:O4'	2.20	0.42
32:2a:558:G:OP1	61:2a:3321:HOH:O	2.21	0.42
32:2a:564:C:O2'	39:2h:91:ARG:NH1	2.49	0.42
32:2a:772:U:H2'	32:2a:773:G:O4'	2.19	0.42
32:2a:1014:A:H8	32:2a:1014:A:O5'	2.03	0.42
32:2a:1026:G:H3'	32:2a:1026:G:N3	2.35	0.42
33:2b:178:ARG:NH1	39:2h:68:ARG:HH22	2.15	0.42
36:2e:72:GLN:C	36:2e:73:ASN:HD22	2.28	0.42
39:2h:123:GLU:O	39:2h:127:LEU:HB2	2.20	0.42
43:2l:23:LYS:HB2	43:2l:23:LYS:HE3	1.87	0.42
47:2p:22:THR:HA	47:2p:33:ILE:HG13	2.01	0.42
48:2q:15:MET:HB3	48:2q:18:THR:HB	2.01	0.42
1:1A:443:A:C5	5:1F:45:ARG:HD2	2.55	0.42
1:1A:478:A:C6	1:1A:480:A:C6	3.07	0.42
1:1A:1011:G:P	16:1U:77:SER:HG	2.38	0.42
1:1A:1427:A:H4'	1:1A:1428:C:O4'	2.20	0.42
1:1A:1914:C:H2'	1:1A:1915:5MU:O4'	2.19	0.42
1:1A:2104:G:H2'	1:1A:2105:C:C6	2.55	0.42
1:1A:2197:U:H1'	1:1A:2198:A:C8	2.54	0.42
1:1A:2820:A:OP2	13:1R:2:ARG:NH2	2.52	0.42
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.54	0.42
2:1B:41:U:H5	6:1G:70:VAL:N	2.17	0.42
6:1G:22:ARG:NH1	6:1G:175:LEU:HD21	2.34	0.42
7:1H:125:VAL:HG13	7:1H:131:VAL:HG22	2.00	0.42
10:1O:35:VAL:HG21	10:1O:69:ILE:HD13	2.02	0.42
13:1R:98:LEU:HD12	27:15:57:VAL:HG11	2.02	0.42
21:1Z:124:ILE:HG23	21:1Z:126:VAL:HG23	2.02	0.42
24:12:58:ALA:O	24:12:62:THR:OG1	2.34	0.42
32:1a:43:C:H42	32:1a:399:G:H1	1.67	0.42
32:1a:926:G:O2'	53:1v:13:A:H1'	2.19	0.42
35:1d:111:ALA:HB2	35:1d:120:LEU:HD12	2.02	0.42
38:1g:65:ALA:O	38:1g:69:VAL:HG23	2.20	0.42
39:1h:32:LYS:HG2	39:1h:32:LYS:H	1.65	0.42
43:1l:76:ASN:ND2	43:1l:106:ASP:O	2.48	0.42
54:1w:46:G7M:H3'	54:1w:47:U:H5''	2.01	0.42
1:2A:176:G:O2'	1:2A:177:G:H5'	2.19	0.42
1:2A:244:A:C2	1:2A:255:A:C4	3.08	0.42
1:2A:555:U:O2'	1:2A:556:G:N7	2.51	0.42
1:2A:784:A:N6	3:2D:229:VAL:HG11	2.34	0.42
1:2A:985:C:H2'	1:2A:986:C:H6	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1799:G:O2'	3:2D:181:GLU:OE2	2.24	0.42
8:2I:77:LEU:HD21	8:2I:79:ILE:HD11	2.00	0.42
21:2Z:28:MET:HG2	21:2Z:88:PHE:HB2	2.02	0.42
21:2Z:99:TYR:HB3	21:2Z:123:ASP:OD1	2.20	0.42
21:2Z:152:ALA:HB2	21:2Z:169:GLU:HB3	2.01	0.42
32:2a:176:C:H2'	32:2a:177:C:C6	2.54	0.42
32:2a:1280:A:OP2	41:2j:43:ARG:NH1	2.52	0.42
32:2a:1318:A:OP1	50:2s:3:ARG:NH1	2.53	0.42
32:2a:1356:G:N2	32:2a:1367:C:C2	2.88	0.42
38:2g:108:ALA:O	38:2g:119:ARG:HD2	2.20	0.42
51:2t:87:LYS:O	51:2t:91:LEU:HG	2.19	0.42
1:1A:305:U:H2'	1:1A:306:U:C6	2.55	0.42
1:1A:306:U:H2'	1:1A:307:G:O4'	2.20	0.42
1:1A:1093:G:H3'	1:1A:1094:U:H5''	2.02	0.42
1:1A:1645:G:H5''	1:1A:1646:C:H5'	2.02	0.42
1:1A:2709:G:H2'	1:1A:2710:C:C6	2.55	0.42
1:1A:2787:C:H2'	1:1A:2788:C:C6	2.55	0.42
1:1A:2790:A:H5''	1:1A:2791:C:H5''	2.01	0.42
2:1B:1:U:HO2'	2:1B:2:C:P	2.42	0.42
21:1Z:7:ALA:HB2	21:1Z:59:LEU:HD22	2.02	0.42
21:1Z:132:ASN:HD22	21:1Z:160:GLY:HA3	1.84	0.42
32:1a:51:A:N7	32:1a:114:U:O2'	2.50	0.42
32:1a:109:A:C6	32:1a:326:G:C6	3.08	0.42
32:1a:584:G:H5'	48:1q:91:ARG:NH2	2.35	0.42
32:1a:736:C:H2'	32:1a:737:A:C8	2.55	0.42
32:1a:774:G:H2'	32:1a:775:G:O4'	2.20	0.42
36:1e:48:ALA:HB3	36:1e:54:ALA:HB2	2.01	0.42
41:1j:78:ASN:C	41:1j:80:LYS:H	2.28	0.42
44:1m:78:ILE:HG22	44:1m:82:MET:HE2	2.01	0.42
47:1p:60:LEU:HD12	47:1p:60:LEU:HA	1.87	0.42
51:1t:47:GLY:N	51:1t:48:LYS:HB2	2.35	0.42
1:2A:271(R):G:OP1	23:21:76:ARG:NE	2.52	0.42
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.20	0.42
1:2A:707:G:H2'	1:2A:708:C:O4'	2.19	0.42
1:2A:721:C:H2'	1:2A:722:A:C8	2.55	0.42
1:2A:744:G:H2'	1:2A:745:G:O4'	2.19	0.42
1:2A:1263:U:OP2	61:2A:5760:HOH:O	2.22	0.42
1:2A:1637:A:H4'	1:2A:2711:A:O2'	2.20	0.42
1:2A:2110:G:H3'	1:2A:2111:C:H5'	2.02	0.42
5:2F:132:VAL:HA	5:2F:138:GLU:HB3	2.02	0.42
5:2F:172:TRP:H	5:2F:172:TRP:CD1	2.37	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:2G:179:PRO:HB2	26:24:42:PHE:HE2	1.84	0.42
13:2R:104:ARG:HG3	13:2R:111:LEU:HD21	2.01	0.42
28:26:40:CYS:O	28:26:44:ARG:N	2.49	0.42
30:28:39:LYS:O	30:28:43:GLN:HG3	2.19	0.42
32:2a:1049:U:H4'	32:2a:1050:G:H5''	2.01	0.42
32:2a:1059:C:OP2	34:2c:199:LYS:NZ	2.53	0.42
32:2a:1122:U:H2'	32:2a:1123:A:C8	2.53	0.42
32:2a:1155:G:H2'	32:2a:1156:G:C8	2.55	0.42
32:2a:1280:A:O2'	32:2a:1281:U:H5'	2.19	0.42
32:2a:1507:A:OP2	53:2v:13:A:N6	2.53	0.42
41:2j:64:GLU:HG2	45:2n:59:ALA:HB2	2.02	0.42
48:2q:45:HIS:H	48:2q:72:ARG:HA	1.85	0.42
51:2t:58:LYS:HA	51:2t:58:LYS:HD2	1.88	0.42
54:2w:10:G:N2	54:2w:11:C:C2	2.88	0.42
54:2y:67:C:H2'	54:2y:68:C:C6	2.55	0.42
1:1A:234:C:H2'	1:1A:235:U:H6	1.84	0.42
1:1A:245:G:O5'	11:1P:73:GLY:HA2	2.20	0.42
1:1A:1003:G:N2	1:1A:1153:C:C2	2.88	0.42
1:1A:1041:C:N4	1:1A:1114:G:H1	2.17	0.42
1:1A:1466:G:H2'	1:1A:1547:C:N4	2.35	0.42
1:1A:2462:U:H1'	1:1A:2491:U:O4	2.19	0.42
1:1A:2639:A:O3'	9:1N:97:ARG:NH2	2.50	0.42
4:1E:182:LEU:HD12	4:1E:182:LEU:HA	1.92	0.42
7:1H:164:TYR:HB2	7:1H:167:GLU:HB2	2.01	0.42
11:1P:90:ARG:NH1	11:1P:105:LEU:HD11	2.34	0.42
15:1T:91:ARG:HB2	15:1T:121:ILE:HG13	2.01	0.42
25:13:6:VAL:CG1	25:13:54:VAL:HG21	2.49	0.42
32:1a:946:A:O2'	32:1a:1333:A:N3	2.43	0.42
32:1a:1034:G:N2	32:1a:1035:A:N3	2.68	0.42
32:1a:1035:A:O5'	32:1a:1035:A:H8	2.02	0.42
32:1a:1122:U:H2'	32:1a:1123:A:O4'	2.19	0.42
32:1a:1342:C:O3'	40:1i:125:TYR:HB3	2.20	0.42
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	2.01	0.42
35:1d:61:LYS:HD2	35:1d:207:TYR:OH	2.20	0.42
35:1d:156:GLU:OE1	35:1d:156:GLU:N	2.46	0.42
35:1d:173:TRP:CE2	35:1d:189:PRO:HG3	2.55	0.42
35:1d:187:ARG:NH1	35:1d:190:ASP:OD1	2.52	0.42
48:1q:9:VAL:HG11	48:1q:84:LEU:HD12	2.00	0.42
1:2A:20:C:OP1	16:2U:22:LYS:NZ	2.40	0.42
1:2A:672:C:OP2	11:2P:42:SER:OG	2.32	0.42
1:2A:886:C:O2'	1:2A:890:A:N1	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1541:G:OP2	1:2A:1542:A:O2'	2.25	0.42
1:2A:1865:G:N2	1:2A:1877:A:OP2	2.50	0.42
1:2A:1919:A:O3'	32:2a:1517:G:H1'	2.19	0.42
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	2.01	0.42
5:2F:140:LEU:HD13	5:2F:140:LEU:HA	1.92	0.42
6:2G:148:MET:HE2	6:2G:148:MET:HB3	1.89	0.42
10:2O:36:GLY:HA2	10:2O:106:LEU:HD23	2.01	0.42
14:2S:5:THR:OG1	14:2S:8:GLU:HG2	2.20	0.42
24:22:65:ASN:O	24:22:69:ARG:HG3	2.19	0.42
32:2a:940:C:H2'	32:2a:941:G:C8	2.55	0.42
33:2b:24:TRP:H	33:2b:24:TRP:HD1	1.67	0.42
36:2e:78:HIS:HB3	39:2h:107:LEU:HD12	2.01	0.42
41:2j:12:ASP:HB3	41:2j:15:THR:OG1	2.20	0.42
51:2t:56:MET:HE3	51:2t:85:MET:HG2	2.02	0.42
55:2x:44:A:H2'	55:2x:45:G:O4'	2.20	0.42
1:1A:109:G:H2'	1:1A:110:G:O4'	2.20	0.42
1:1A:271(X):G:C2	1:1A:271(Y):U:O4	2.73	0.42
1:1A:459:U:H4'	29:17:40:TRP:CZ3	2.55	0.42
1:1A:1095:A:C8	1:1A:1096:A:C8	3.08	0.42
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.55	0.42
1:1A:1319:G:C2	1:1A:1334:G:C5	3.08	0.42
1:1A:1815:A:P	3:1D:54:ARG:HH22	2.41	0.42
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.36	0.42
1:1A:2139:C:H2'	1:1A:2140:C:O4'	2.20	0.42
1:1A:2315:G:H2'	1:1A:2316:C:H6	1.82	0.42
1:1A:2667:C:H2'	1:1A:2668:G:O4'	2.19	0.42
5:1F:60:SER:OG	5:1F:61:GLY:N	2.53	0.42
26:14:15:ILE:O	26:14:33:VAL:N	2.37	0.42
32:1a:162:A:N7	32:1a:163:C:H1'	2.34	0.42
32:1a:438:G:H4'	35:1d:123:HIS:CE1	2.55	0.42
32:1a:923:A:H2'	32:1a:924:C:O4'	2.20	0.42
33:1b:70:PHE:O	33:1b:92:TYR:HA	2.20	0.42
36:1e:131:ILE:HD13	36:1e:131:ILE:HA	1.92	0.42
39:1h:81:HIS:N	39:1h:138:TRP:O	2.53	0.42
40:1i:127:LYS:O	40:1i:128:ARG:HG2	2.20	0.42
43:1l:7:ILE:HD13	43:1l:7:ILE:HA	1.90	0.42
51:1t:53:LEU:O	51:1t:57:ARG:HG3	2.20	0.42
54:1y:43:C:H2'	54:1y:44:G:C8	2.55	0.42
1:2A:625:G:N7	11:2P:107:LYS:NZ	2.62	0.42
1:2A:1261:C:OP2	18:2W:83:LYS:NZ	2.34	0.42
1:2A:1713:U:H2'	1:2A:1714:G:C8	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1957:C:H2'	1:2A:1958:C:C6	2.54	0.42
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.35	0.42
1:2A:2137:C:O2'	1:2A:2138:C:OP2	2.36	0.42
1:2A:2156:G:H2'	1:2A:2157:G:C5	2.55	0.42
7:2H:90:LYS:HD2	7:2H:159:GLU:HG2	2.02	0.42
12:2Q:60:ARG:NH1	54:2w:54:5MU:OP2	2.52	0.42
13:2R:88:ARG:NH2	13:2R:89:ASP:OD1	2.52	0.42
32:2a:36:C:O2'	32:2a:501:C:H5''	2.20	0.42
32:2a:754:C:P	46:2o:72:ARG:HH22	2.43	0.42
32:2a:975:A:H5''	32:2a:1363(A):A:N6	2.34	0.42
32:2a:987:G:H1	32:2a:1218:C:N4	2.15	0.42
40:2i:51:ARG:H	40:2i:51:ARG:HG3	1.57	0.42
54:2y:31:A:H2'	54:2y:32:PSU:O4'	2.20	0.42
1:1A:228:A:C8	1:1A:229:A:H5'	2.52	0.41
1:1A:466:A:N3	1:1A:683:C:H1'	2.34	0.41
1:1A:936:C:H2'	1:1A:937:U:C6	2.55	0.41
1:1A:1359:A:N3	1:1A:1359:A:H5'	2.35	0.41
1:1A:1541:G:H2'	1:1A:1542:A:C8	2.55	0.41
1:1A:1665:A:H2'	1:1A:1666:G:O4'	2.19	0.41
1:1A:1668:A:H4'	1:1A:1669:A:O5'	2.20	0.41
1:1A:1881:C:H2'	1:1A:1882:C:C6	2.53	0.41
1:1A:1963:U:H4'	1:1A:1964:G:OP1	2.20	0.41
5:1F:18:ARG:H	5:1F:18:ARG:HG3	1.71	0.41
9:1N:75:TYR:HA	9:1N:81:GLY:O	2.20	0.41
13:1R:26:LYS:HE2	13:1R:70:LEU:O	2.20	0.41
28:16:18:ARG:HD2	28:16:42:TRP:CG	2.54	0.41
32:1a:134:A:N1	47:1p:25:ARG:NH1	2.68	0.41
32:1a:240:C:H2'	32:1a:241:C:H6	1.85	0.41
32:1a:479:C:H2'	32:1a:480:U:C6	2.55	0.41
32:1a:767:A:H2'	32:1a:768:A:O4'	2.18	0.41
32:1a:1089:G:H1	32:1a:1096:C:H42	1.68	0.41
41:1j:81:THR:C	41:1j:83:GLU:N	2.78	0.41
47:1p:69:THR:O	47:1p:73:LEU:HG	2.20	0.41
48:1q:45:HIS:CD2	48:1q:47:PRO:HG3	2.54	0.41
50:1s:71:LEU:HD23	50:1s:71:LEU:HA	1.85	0.41
1:2A:751:A:OP1	61:2A:5758:HOH:O	2.21	0.41
1:2A:1670:C:C5	1:2A:1671:U:C4	3.08	0.41
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.55	0.41
1:2A:2037:G:H2'	1:2A:2038:G:C8	2.55	0.41
1:2A:2335:A:O2'	1:2A:2336:A:H5''	2.20	0.41
1:2A:2740:A:H2'	1:2A:2741:A:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2P:63:PRO:HB2	30:28:30:ARG:HH21	1.85	0.41
32:2a:44:G:H2'	32:2a:45:U:O4'	2.20	0.41
32:2a:532:A:C2	32:2a:1055:A:H1'	2.54	0.41
32:2a:1072:G:N2	33:2b:107:THR:HG21	2.35	0.41
32:2a:1291:G:C6	32:2a:1292:U:C4	3.07	0.41
32:2a:1347:G:HO2'	32:2a:1373:G:H1	1.68	0.41
33:2b:80:ILE:HD11	33:2b:212:GLN:CA	2.49	0.41
42:2k:51:LYS:HA	42:2k:55:LYS:HE3	2.03	0.41
42:2k:81:ASP:OD1	42:2k:106:LYS:HB2	2.20	0.41
55:2x:75:C:H2'	55:2x:76:A:C8	2.55	0.41
54:2y:37:MIA:H2'	54:2y:38:A:O4'	2.20	0.41
1:1A:64:A:O3'	19:1X:71:GLY:HA3	2.20	0.41
1:1A:303:U:H2'	1:1A:304:G:C8	2.54	0.41
1:1A:1645:G:H5''	1:1A:1646:C:O4'	2.20	0.41
1:1A:2236:C:H2'	1:1A:2237:G:O4'	2.20	0.41
1:1A:2335:A:O2'	1:1A:2336:A:OP2	2.30	0.41
1:1A:2418:A:H2'	1:1A:2419:U:O4'	2.20	0.41
1:1A:2593:U:H2'	1:1A:2594:C:C6	2.55	0.41
7:1H:164:TYR:O	7:1H:167:GLU:HB3	2.20	0.41
12:1Q:29:PHE:HB3	12:1Q:65:PHE:CE1	2.55	0.41
23:11:18:ILE:HG12	23:11:37:ILE:HG12	2.02	0.41
25:13:31:LEU:HD23	25:13:31:LEU:HA	1.94	0.41
32:1a:407:G:H5''	35:1d:115:ARG:CG	2.44	0.41
32:1a:881:G:H2'	32:1a:882:C:O4'	2.20	0.41
32:1a:1326:C:OP1	52:1u:12:LYS:NZ	2.52	0.41
32:1a:1452:C:H4'	32:1a:1457:G:C8	2.55	0.41
33:1b:101:MET:HG3	33:1b:108:ILE:HG21	2.02	0.41
40:1i:14:VAL:HG22	40:1i:66:ARG:O	2.20	0.41
42:1k:93:GLN:HA	42:1k:96:ARG:NH1	2.35	0.41
47:1p:20:VAL:HG21	47:1p:32:TYR:CD2	2.56	0.41
47:1p:72:ARG:HA	47:1p:75:ARG:HB3	2.02	0.41
1:2A:218:A:C2	1:2A:235:U:H4'	2.55	0.41
1:2A:817:C:O2'	1:2A:839:U:H5''	2.20	0.41
1:2A:963:U:O4	1:2A:964:C:N4	2.53	0.41
1:2A:2823:A:OP1	4:2E:159:HIS:NE2	2.52	0.41
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	2.02	0.41
3:2D:121:PRO:HB3	3:2D:135:PHE:CE2	2.55	0.41
5:2F:178:PRO:HG2	5:2F:179:GLU:CD	2.45	0.41
11:2P:95:VAL:HG13	11:2P:125:VAL:HG12	2.01	0.41
16:2U:52:ARG:HA	16:2U:55:ARG:HG3	2.01	0.41
18:2W:19:LEU:HB3	27:25:25:LEU:HG	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:22:3:LEU:O	24:22:7:ARG:HG3	2.20	0.41
32:2a:1029:C:N4	32:2a:1032:G:C6	2.88	0.41
36:2e:94:ALA:HB1	36:2e:98:THR:HG21	2.02	0.41
41:2j:42:THR:O	41:2j:44:VAL:HG23	2.21	0.41
54:2w:29:G:H2'	54:2w:29:G:N3	2.35	0.41
1:1A:41:C:H2'	1:1A:42:G:O4'	2.19	0.41
1:1A:242:G:C8	30:18:5:LYS:HG2	2.55	0.41
1:1A:495:G:C6	1:1A:496:G:C5	3.08	0.41
1:1A:819:A:C4	1:1A:1189:A:C2	3.08	0.41
1:1A:1814:G:H4'	3:1D:51:VAL:HG21	2.02	0.41
1:1A:2202:C:H2'	1:1A:2203:U:O4'	2.20	0.41
4:1E:14:ILE:HB	15:1T:14:TYR:CZ	2.55	0.41
5:1F:184:TYR:CE1	11:1P:3:LEU:HD21	2.55	0.41
6:1G:82:LEU:HD21	6:1G:88:ILE:HG21	2.03	0.41
8:1I:79:ILE:HD13	8:1I:92:VAL:HG21	2.01	0.41
19:1X:18:TYR:C	19:1X:20:GLY:H	2.29	0.41
19:1X:93:GLU:H	19:1X:93:GLU:HG2	1.70	0.41
21:1Z:98:MET:HE3	21:1Z:98:MET:HB2	1.84	0.41
32:1a:156:G:H1	32:1a:165:C:H42	1.68	0.41
32:1a:535:A:H5''	61:1a:1924:HOH:O	2.21	0.41
32:1a:598:U:H4'	39:1h:94:TYR:CD2	2.55	0.41
32:1a:689:C:H2'	32:1a:690:G:O4'	2.20	0.41
32:1a:1284:C:H3'	32:1a:1285:A:C8	2.55	0.41
32:1a:1503:A:O2'	53:1v:13:A:N1	2.53	0.41
48:1q:24:GLU:HA	48:1q:39:SER:HA	2.02	0.41
54:1y:40:C:H2'	54:1y:41:C:H6	1.85	0.41
1:2A:271(G):C:H2'	1:2A:271(H):G:C8	2.55	0.41
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.56	0.41
1:2A:1127:A:N7	1:2A:2488:A:O2'	2.51	0.41
1:2A:1247:A:OP2	11:2P:16:ARG:NH2	2.54	0.41
1:2A:1270:C:H5''	1:2A:1271:G:O5'	2.21	0.41
1:2A:1637:A:H5'	1:2A:1760:A:O2'	2.20	0.41
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.55	0.41
6:2G:163:ALA:HB1	6:2G:168:GLU:HB2	2.02	0.41
8:2I:81:VAL:HG21	8:2I:88:ILE:HD13	2.03	0.41
11:2P:84:ASN:HB3	11:2P:86:LYS:HG2	2.03	0.41
20:2Y:6:HIS:HB2	20:2Y:85:VAL:HG21	2.03	0.41
22:20:24:LYS:HA	22:20:24:LYS:HD3	1.84	0.41
25:23:18:ASP:OD1	25:23:18:ASP:N	2.51	0.41
28:26:26:ASN:O	28:26:29:ASN:N	2.53	0.41
32:2a:520:A:C2	32:2a:536:C:H1'	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:745:C:H2'	32:2a:746:A:C8	2.55	0.41
32:2a:826:C:H4'	39:2h:12:ARG:HG2	2.02	0.41
32:2a:1181:G:O2'	32:2a:1182:G:N7	2.54	0.41
32:2a:1226:C:OP2	44:2m:103:THR:HG21	2.21	0.41
32:2a:1362:C:H2'	32:2a:1363:C:H5''	2.01	0.41
33:2b:48:MET:O	33:2b:52:GLU:N	2.50	0.41
33:2b:72:GLY:O	33:2b:94:ASN:HA	2.21	0.41
35:2d:173:TRP:CD2	35:2d:189:PRO:HB3	2.56	0.41
44:2m:65:LYS:HE2	44:2m:65:LYS:HB2	1.82	0.41
1:1A:1053:C:H42	1:1A:1106:G:H1	1.68	0.41
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.20	0.41
1:1A:2149:G:N1	1:1A:2150:U:O2	2.52	0.41
1:1A:2820:A:HO2'	1:1A:2821:A:P	2.42	0.41
3:1D:206:LEU:HA	3:1D:206:LEU:HD23	1.79	0.41
4:1E:105:THR:OG1	4:1E:166:THR:OG1	2.23	0.41
7:1H:72:ILE:O	7:1H:76:VAL:HG22	2.21	0.41
10:1O:37:ASP:OD1	10:1O:109:LYS:NZ	2.52	0.41
11:1P:59:LEU:HD21	30:18:10:ALA:HB2	2.01	0.41
12:1Q:68:ILE:HG21	12:1Q:103:MET:HG2	2.02	0.41
12:1Q:68:ILE:HG23	12:1Q:103:MET:HA	2.02	0.41
16:1U:85:LYS:HA	16:1U:85:LYS:HD2	1.78	0.41
20:1Y:15:VAL:HG21	20:1Y:42:VAL:HG11	2.02	0.41
21:1Z:150:LEU:HD12	21:1Z:151:HIS:H	1.84	0.41
32:1a:445:G:H2'	32:1a:446:G:C8	2.55	0.41
32:1a:735:C:H2'	32:1a:736:C:H6	1.85	0.41
34:1c:44:GLU:HA	34:1c:52:LEU:HD13	2.02	0.41
35:1d:17:VAL:HG12	35:1d:18:LYS:O	2.21	0.41
37:1f:82:ARG:HB2	37:1f:85:VAL:HG23	2.01	0.41
41:1j:81:THR:C	41:1j:83:GLU:H	2.28	0.41
47:1p:49:LEU:HD12	47:1p:50:LYS:N	2.35	0.41
49:1r:31:LEU:O	49:1r:69:THR:HG21	2.20	0.41
1:2A:271(D):G:H1	1:2A:271(T):C:H42	1.68	0.41
1:2A:375:C:H2'	1:2A:376:C:H6	1.83	0.41
1:2A:831:G:O5'	1:2A:831:G:H8	2.03	0.41
1:2A:849:A:C2	25:23:24:LYS:HD2	2.55	0.41
1:2A:1912:A:C8	1:2A:1918:A:C2	3.09	0.41
1:2A:2272:U:H5''	1:2A:2273:A:OP1	2.20	0.41
1:2A:2400:G:H2'	1:2A:2401:U:H6	1.84	0.41
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	2.02	0.41
2:2B:90:A:N7	2:2B:91:C:H1'	2.35	0.41
4:2E:36:ARG:NH2	4:2E:88:GLY:O	2.49	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2F:143:ALA:HB1	5:2F:148:LEU:HB2	2.02	0.41
7:2H:137:ASP:OD1	7:2H:140:LYS:N	2.42	0.41
14:2S:19:LYS:C	14:2S:21:THR:H	2.28	0.41
23:21:40:ARG:HE	23:21:40:ARG:HB2	1.57	0.41
28:26:38:LYS:HB2	28:26:49:HIS:CE1	2.54	0.41
32:2a:514:C:H2'	32:2a:515:G:H8	1.85	0.41
32:2a:1057:G:O3'	34:2c:197:GLY:HA3	2.20	0.41
32:2a:1326:C:H2'	32:2a:1327:C:H6	1.86	0.41
32:2a:1471:G:H2'	32:2a:1472:U:C6	2.55	0.41
33:2b:27:LYS:O	33:2b:194:PRO:HG2	2.20	0.41
33:2b:233:SER:HB2	33:2b:234:PRO:HD2	2.02	0.41
34:2c:72:LYS:C	34:2c:74:GLY:H	2.29	0.41
36:2e:28:PHE:O	36:2e:47:LYS:HA	2.21	0.41
36:2e:47:LYS:HE2	36:2e:47:LYS:HB2	1.80	0.41
38:2g:42:ILE:HD13	38:2g:116:ALA:HB3	2.02	0.41
54:2y:15:G:N2	54:2y:48:C:H42	2.18	0.41
1:1A:118:A:C8	1:1A:119:A:C8	3.08	0.41
1:1A:728:G:H4'	3:1D:13:ARG:HE	1.85	0.41
1:1A:1178:C:O5'	1:1A:1178:C:H6	2.04	0.41
1:1A:1396:U:H6	1:1A:1396:U:H2'	1.69	0.41
1:1A:1405:U:H2'	1:1A:1406:U:H6	1.80	0.41
1:1A:1423:G:H2'	1:1A:1424:G:C8	2.55	0.41
1:1A:1530:C:H2'	1:1A:1531:C:C6	2.55	0.41
1:1A:1778:U:H2'	1:1A:1784:A:N6	2.36	0.41
1:1A:2028:U:H2'	1:1A:2029:G:O4'	2.21	0.41
1:1A:2238:G:N3	1:1A:2238:G:H2'	2.34	0.41
1:1A:2563:U:H4'	10:1O:28:SER:HA	2.03	0.41
5:1F:144:LYS:HE3	5:1F:144:LYS:HB2	1.84	0.41
8:1I:81:VAL:HG21	8:1I:123:LEU:HD11	2.03	0.41
15:1T:41:ARG:NH2	15:1T:43:GLN:HE21	2.19	0.41
19:1X:57:LEU:HA	61:1X:203:HOH:O	2.21	0.41
32:1a:768:A:OP1	32:1a:804:U:H4'	2.20	0.41
32:1a:952:U:H2'	32:1a:953:G:H8	1.85	0.41
32:1a:1104:G:OP1	33:1b:111:ARG:HD2	2.20	0.41
32:1a:1346:A:H5''	40:1i:120:ARG:HH12	1.85	0.41
33:1b:54:THR:HG23	33:1b:199:TYR:HB3	2.03	0.41
34:1c:36:ASP:O	34:1c:40:ARG:HG3	2.21	0.41
34:1c:138:VAL:HG23	34:1c:151:VAL:HG23	2.02	0.41
35:1d:39:PRO:O	35:1d:44:GLY:HA3	2.20	0.41
37:1f:99:ALA:HB1	49:1r:23:LYS:HE3	2.03	0.41
39:1h:6:ILE:HD11	39:1h:31:PHE:CD2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:3:ARG:HG2	44:1m:8:GLU:HG3	2.02	0.41
1:2A:601:C:O2	1:2A:605:C:H4'	2.21	0.41
1:2A:704:G:N3	1:2A:726:G:C2	2.88	0.41
1:2A:1153:C:H2'	1:2A:1154:G:O4'	2.20	0.41
1:2A:1370:C:N4	1:2A:1371:G:C6	2.88	0.41
1:2A:1770:G:H4'	1:2A:1938:A:OP1	2.20	0.41
1:2A:2118:U:OP1	1:2A:2148:G:H4'	2.20	0.41
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.21	0.41
31:29:8:LYS:O	31:29:34:GLN:NE2	2.40	0.41
32:2a:97:G:H2'	32:2a:98:G:O4'	2.19	0.41
32:2a:203:U:OP2	32:2a:203:U:H2'	2.20	0.41
32:2a:769:G:H4'	32:2a:1513:A:H4'	2.02	0.41
32:2a:790:A:H2'	32:2a:791:G:C8	2.55	0.41
32:2a:1051:C:C4	32:2a:1052:U:C4	3.09	0.41
32:2a:1343:G:H2'	32:2a:1344:C:C6	2.55	0.41
32:2a:1404:5MC:O2	32:2a:1519:MA6:O2'	2.33	0.41
33:2b:187:LEU:HA	33:2b:201:ILE:HB	2.03	0.41
40:2i:7:THR:O	40:2i:83:ARG:NH1	2.53	0.41
40:2i:18:PHE:HD2	40:2i:62:TYR:HD2	1.68	0.41
48:2q:45:HIS:CD2	48:2q:47:PRO:HG3	2.55	0.41
51:2t:10:LEU:HA	51:2t:10:LEU:HD12	1.88	0.41
54:2w:63:G:H2'	54:2w:64:A:C8	2.55	0.41
55:2x:36:U:H2'	55:2x:37:A:O4'	2.20	0.41
54:2y:64:A:H2'	54:2y:65:G:H5'	2.02	0.41
1:1A:568:U:OP1	1:1A:945:A:N6	2.46	0.41
1:1A:636:G:N7	11:1P:113:LYS:HE2	2.36	0.41
1:1A:2722:G:OP2	61:1A:4275:HOH:O	2.22	0.41
1:1A:2893:G:H5''	1:1A:2894:G:O4'	2.20	0.41
61:1A:4303:HOH:O	13:1R:64:ARG:NH1	2.33	0.41
5:1F:117:ARG:NH2	5:1F:189:THR:O	2.53	0.41
32:1a:106:C:O2'	32:1a:379:C:H5''	2.21	0.41
32:1a:741:G:H2'	32:1a:742:G:O4'	2.21	0.41
32:1a:1456:G:O2'	51:1t:39:LYS:HE3	2.21	0.41
32:1a:1489:G:C6	32:1a:1490:C:C4	3.09	0.41
33:1b:10:LEU:HA	33:1b:48:MET:CE	2.49	0.41
33:1b:76:GLN:O	33:1b:211:ILE:HD12	2.21	0.41
54:1y:20:U:O2'	54:1y:21:A:H4'	2.21	0.41
54:1y:56:C:H2'	54:1y:57:G:O4'	2.20	0.41
1:2A:274:G:H2'	1:2A:275:G:C8	2.56	0.41
1:2A:871:U:OP1	12:2Q:5:ARG:HG3	2.20	0.41
1:2A:1576:U:H2'	1:2A:1577:C:C6	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1639:U:C2'	1:2A:1640:C:H5''	2.47	0.41
1:2A:1790:C:H2'	1:2A:1791:A:C4	2.55	0.41
1:2A:1862:G:H2'	1:2A:1863:G:C8	2.55	0.41
1:2A:2503:2MA:C8	57:2A:3879:TYK:H8A2	2.51	0.41
1:2A:2802:G:H2'	1:2A:2803:C:O4'	2.19	0.41
1:2A:2884:U:H2'	1:2A:2885:C:O4'	2.21	0.41
5:2F:33:LEU:HD12	5:2F:33:LEU:HA	1.82	0.41
5:2F:101:LEU:O	5:2F:106:ARG:NH1	2.46	0.41
6:2G:19:LEU:HA	6:2G:22:ARG:HB3	2.03	0.41
10:2O:29:ASN:N	10:2O:29:ASN:OD1	2.54	0.41
11:2P:79:ARG:HB3	11:2P:110:TYR:CD1	2.56	0.41
13:2R:72:ASP:HB3	13:2R:75:LEU:HB3	2.02	0.41
16:2U:13:LYS:HE3	16:2U:13:LYS:HB3	1.85	0.41
16:2U:81:HIS:CD2	16:2U:84:LYS:HE2	2.53	0.41
19:2X:26:TYR:HB3	19:2X:92:LEU:HD12	2.02	0.41
24:22:15:LYS:HB2	24:22:15:LYS:HE3	1.89	0.41
32:2a:19:C:H5''	36:2e:86:ALA:HB3	2.02	0.41
32:2a:109:A:H2'	32:2a:326:G:N2	2.36	0.41
32:2a:1027:C:O2'	32:2a:1034:G:N2	2.54	0.41
32:2a:1306:A:N6	32:2a:1331:G:O4'	2.53	0.41
32:2a:1360:A:H8	32:2a:1360:A:OP1	2.02	0.41
32:2a:1515:C:H2'	32:2a:1516:G:H8	1.85	0.41
32:2a:1515:C:H2'	32:2a:1516:G:C8	2.55	0.41
33:2b:27:LYS:HB2	33:2b:194:PRO:HD2	2.03	0.41
33:2b:27:LYS:HD2	33:2b:193:ASP:OD1	2.21	0.41
34:2c:135:LYS:O	34:2c:139:GLN:HB2	2.20	0.41
35:2d:180:GLY:O	35:2d:181:MET:HG2	2.20	0.41
37:2f:61:LEU:HD13	37:2f:63:TYR:OH	2.20	0.41
38:2g:67:GLU:HA	38:2g:70:LYS:HD2	2.02	0.41
1:1A:459:U:H4'	29:17:40:TRP:CH2	2.56	0.41
1:1A:652(D):C:H42	1:1A:652(U):G:H1	1.66	0.41
1:1A:759:G:OP2	61:1A:4271:HOH:O	2.21	0.41
1:1A:1260:G:C6	1:1A:1261:C:C4	3.09	0.41
1:1A:1357:U:H2'	1:1A:1358:G:O4'	2.21	0.41
1:1A:1504:C:H2'	1:1A:1505:C:C6	2.56	0.41
1:1A:2780:G:OP1	9:1N:118:LYS:HE2	2.20	0.41
3:1D:108:PRO:HG2	3:1D:111:LEU:HB2	2.03	0.41
6:1G:134:GLY:O	6:1G:135:LEU:HD12	2.21	0.41
12:1Q:57:HIS:HD2	12:1Q:117:ALA:HB2	1.84	0.41
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.55	0.41
25:13:30:ARG:NH2	61:13:201:HOH:O	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:13:37:LEU:HB3	25:13:43:ILE:HD13	2.02	0.41
32:1a:72:C:H2'	32:1a:73:G:C8	2.55	0.41
32:1a:152:A:C8	32:1a:153:C:C5	3.08	0.41
32:1a:256:U:H2'	32:1a:257:G:O4'	2.21	0.41
32:1a:263:A:OP1	51:1t:79:ARG:NH1	2.52	0.41
32:1a:977:A:O2'	32:1a:981:U:N3	2.46	0.41
32:1a:1054:C:C4	54:1w:34:G:H1'	2.56	0.41
34:1c:73:PRO:HB3	34:1c:103:VAL:HG11	2.01	0.41
34:1c:150:LYS:HG3	34:1c:169:ALA:HB2	2.02	0.41
35:1d:12:CYS:CB	59:1d:302:SF4:S2	3.09	0.41
38:1g:37:ASN:O	38:1g:41:ARG:HG3	2.20	0.41
54:1w:23:A:H2'	54:1w:24:G:C8	2.56	0.41
1:2A:142(A):C:H2'	1:2A:143:G:O4'	2.21	0.41
1:2A:263:C:H2'	1:2A:264:C:O4'	2.20	0.41
1:2A:2530:A:O2'	1:2A:2532:G:OP2	2.30	0.41
4:2E:4:ILE:HD11	4:2E:29:GLY:HA2	2.03	0.41
28:26:34:LEU:H	28:26:51:GLU:CB	2.33	0.41
31:29:16:VAL:HG22	31:29:25:VAL:HG22	2.03	0.41
33:2b:48:MET:SD	33:2b:49:GLU:N	2.94	0.41
37:2f:75:LEU:O	37:2f:79:LEU:HG	2.21	0.41
40:2i:50:LEU:H	40:2i:50:LEU:HG	1.55	0.41
43:2l:102:ARG:HE	43:2l:102:ARG:HB3	1.58	0.41
44:2m:30:ALA:O	44:2m:34:LEU:HG	2.21	0.41
49:2r:24:ALA:O	49:2r:26:LEU:N	2.47	0.41
54:2y:23:A:C6	54:2y:24:G:C5	3.09	0.41
1:1A:583:G:N2	1:1A:1258:C:C2	2.88	0.41
1:1A:1027:A:C6	1:1A:1126:A:C4	3.09	0.41
1:1A:1911:PSU:O2	1:1A:1918:A:H2'	2.20	0.41
1:1A:2155:G:H3'	1:1A:2156:G:C8	2.52	0.41
10:1O:2:ILE:HD12	10:1O:6:THR:HG21	2.02	0.41
21:1Z:55:HIS:CE1	21:1Z:135:GLU:HG2	2.56	0.41
32:1a:142:G:O2'	32:1a:195:A:N6	2.53	0.41
32:1a:271:C:H2'	32:1a:272:C:C6	2.56	0.41
32:1a:1066:C:O2'	32:1a:1067:A:H5'	2.21	0.41
32:1a:1361:G:H2'	32:1a:1362:C:O4'	2.21	0.41
34:1c:5:ILE:HD12	41:1j:51:ARG:HH12	1.85	0.41
37:1f:69:GLU:H	37:1f:69:GLU:CD	2.29	0.41
1:2A:861:A:H2'	1:2A:862:G:O4'	2.20	0.41
1:2A:2143:C:N4	1:2A:2148:G:H1	2.18	0.41
1:2A:2849:U:H4'	1:2A:2868:A:C2	2.55	0.41
3:2D:60:ARG:HD3	3:2D:86:PRO:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:2H:3:ARG:NH2	7:2H:65:HIS:HB3	2.36	0.41
19:2X:43:VAL:HG21	19:2X:81:VAL:HG11	2.03	0.41
28:26:38:LYS:HE3	28:26:38:LYS:HB3	1.79	0.41
32:2a:157:G:C2	32:2a:165:C:C2	3.09	0.41
32:2a:418:C:H2'	32:2a:419:C:C6	2.56	0.41
32:2a:716:A:C6	32:2a:717:C:N3	2.89	0.41
32:2a:1016:A:N6	32:2a:1017:G:N3	2.69	0.41
32:2a:1144:G:H21	32:2a:1146:A:H62	1.69	0.41
32:2a:1194:U:H4'	36:2e:22:GLY:CA	2.51	0.41
32:2a:1288:A:N3	32:2a:1352:C:O2'	2.47	0.41
32:2a:1289:A:P	52:2u:10:ARG:HH22	2.43	0.41
32:2a:1430:C:H2'	32:2a:1431:C:H6	1.86	0.41
37:2f:99:ALA:HB2	49:2r:31:LEU:HD11	2.01	0.41
38:2g:20:ASP:HB3	38:2g:23:VAL:HG23	2.01	0.41
38:2g:97:GLN:O	38:2g:101:LEU:HG	2.20	0.41
39:2h:7:ALA:O	39:2h:11:THR:OG1	2.37	0.41
44:2m:4:ILE:HG12	44:2m:5:ALA:N	2.35	0.41
1:1A:123:G:OP2	61:1A:4276:HOH:O	2.22	0.41
1:1A:194:G:C2	1:1A:202:U:H1'	2.55	0.41
1:1A:303:U:H2'	1:1A:304:G:H8	1.86	0.41
1:1A:336:C:P	20:1Y:84:ARG:HG2	2.61	0.41
1:1A:609:A:H2'	1:1A:610:G:O4'	2.20	0.41
1:1A:1062:G:H1	1:1A:1077:A:H61	1.67	0.41
1:1A:1179:C:H2'	1:1A:1180:C:H6	1.86	0.41
1:1A:1675:C:H2'	1:1A:1676:A:O4'	2.20	0.41
1:1A:1680:U:O2	1:1A:1763:G:H3'	2.21	0.41
1:1A:1999:C:H5''	1:1A:2723:C:O2'	2.21	0.41
1:1A:2110:G:H2'	1:1A:2110:G:OP2	2.20	0.41
1:1A:2120:G:O2'	1:1A:2121:G:H5'	2.20	0.41
1:1A:2393:A:H5''	11:1P:63:PRO:HB3	2.01	0.41
2:1B:55:U:H2'	2:1B:56:G:O4'	2.21	0.41
2:1B:60:C:C2	2:1B:61:G:C8	3.08	0.41
3:1D:245:PRO:HA	3:1D:246:PRO:HD3	1.96	0.41
3:1D:261:LYS:NZ	3:1D:263:ARG:HH21	2.18	0.41
6:1G:34:LEU:HD23	6:1G:161:THR:HG22	2.02	0.41
9:1N:4:TYR:CD2	16:1U:100:VAL:HG11	2.55	0.41
25:13:3:ARG:HB2	25:13:59:VAL:HG23	2.02	0.41
32:1a:115:G:H4'	32:1a:116:A:O5'	2.19	0.41
32:1a:230:G:C2	32:1a:231:G:H1'	2.56	0.41
32:1a:271:C:H2'	32:1a:272:C:H6	1.86	0.41
32:1a:452:A:H4'	47:1p:72:ARG:NH1	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:453:A:C6	32:1a:454:C:C4	3.08	0.41
32:1a:507:C:OP2	32:1a:508:C:O2'	2.30	0.41
32:1a:956:U:H2'	32:1a:957:U:O4'	2.21	0.41
32:1a:1098:C:H2'	32:1a:1099:G:O4'	2.21	0.41
32:1a:1338:G:C6	32:1a:1339:A:C6	3.08	0.41
32:1a:1456:G:N2	51:1t:51:GLU:OE2	2.37	0.41
32:1a:1504:G:OP1	32:1a:1507:A:H4'	2.21	0.41
35:1d:79:PHE:HE1	35:1d:204:ILE:HD13	1.86	0.41
35:1d:142:PRO:HA	35:1d:185:PHE:HD2	1.85	0.41
51:1t:22:ARG:C	51:1t:26:ASN:HD22	2.27	0.41
1:2A:30:G:C5	1:2A:31:C:C4	3.09	0.41
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.20	0.41
1:2A:521:G:H2'	1:2A:522:G:C8	2.56	0.41
1:2A:659:C:H2'	1:2A:660:G:C8	2.55	0.41
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.56	0.41
1:2A:990:A:C6	1:2A:1186:G:H1'	2.55	0.41
1:2A:1188:U:C4'	17:2V:79:VAL:HG22	2.51	0.41
1:2A:1411:C:N4	1:2A:1591:G:H1	2.06	0.41
1:2A:1604:C:H5''	61:2A:6166:HOH:O	2.21	0.41
1:2A:2055:C:H5'	1:2A:2056:G:O5'	2.21	0.41
1:2A:2343:C:O2'	1:2A:2373:G:O2'	2.31	0.41
1:2A:2564:A:OP1	1:2A:2648:C:H4'	2.20	0.41
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.21	0.41
1:2A:2745:C:C4	1:2A:2746:U:C4	3.09	0.41
1:2A:2751:G:O2'	1:2A:2752:C:O5'	2.32	0.41
2:2B:33:G:C2	2:2B:50:G:C2	3.09	0.41
3:2D:29:PRO:HA	3:2D:83:GLU:OE1	2.21	0.41
3:2D:142:VAL:HG23	3:2D:193:VAL:HA	2.02	0.41
4:2E:35:GLN:OE1	4:2E:66:HIS:HE1	2.04	0.41
4:2E:111:ARG:HA	13:2R:1:MET:SD	2.61	0.41
5:2F:166:ALA:C	5:2F:168:ARG:H	2.28	0.41
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.75	0.41
7:2H:101:ARG:HH12	7:2H:122:THR:HG22	1.85	0.41
8:2I:72:LEU:HA	8:2I:75:LEU:HG	2.02	0.41
11:2P:1:MET:HE2	11:2P:1:MET:HB2	1.76	0.41
17:2V:1:MET:HE1	17:2V:40:LEU:HB3	2.02	0.41
22:20:18:ALA:HB3	22:20:20:ARG:HH12	1.85	0.41
24:22:24:LEU:HD23	24:22:60:LEU:HD21	2.03	0.41
26:24:15:ILE:HB	26:24:32:TYR:CD1	2.55	0.41
32:2a:10:A:OP2	36:2e:126:ARG:HD2	2.20	0.41
32:2a:120:A:C6	32:2a:122:G:C2	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:167:G:H2'	32:2a:168:G:C8	2.55	0.41
32:2a:171:A:H2'	32:2a:172:A:C8	2.55	0.41
32:2a:173:U:H5''	32:2a:197:A:O4'	2.21	0.41
32:2a:376:G:O3'	47:2p:5:ARG:HD2	2.20	0.41
32:2a:519:C:H2'	32:2a:520:A:O4'	2.21	0.41
32:2a:590:C:H2'	32:2a:591:U:C6	2.56	0.41
32:2a:674:G:H2'	32:2a:675:A:H8	1.86	0.41
32:2a:938:A:C6	32:2a:939:G:C5	3.09	0.41
32:2a:976:G:P	45:2n:32:SER:H	2.44	0.41
32:2a:992:U:H3	32:2a:1044:A:H62	1.67	0.41
32:2a:1261:A:C6	32:2a:1262:C:C2	3.09	0.41
32:2a:1305:G:H5'	52:2u:4:GLY:HA3	2.02	0.41
34:2c:182:ILE:HG12	34:2c:203:PHE:HD1	1.85	0.41
42:2k:33:THR:HA	42:2k:39:PRO:HA	2.02	0.41
43:2l:24:VAL:HB	43:2l:27:LEU:HD22	2.03	0.41
44:2m:79:LYS:HE3	44:2m:79:LYS:HB3	1.98	0.41
44:2m:81:LEU:HA	44:2m:84:ILE:HG12	2.02	0.41
44:2m:81:LEU:HB3	44:2m:86:CYS:SG	2.61	0.41
44:2m:89:GLY:O	44:2m:93:ARG:HG2	2.21	0.41
44:2m:97:PRO:HA	44:2m:110:ARG:HD3	2.03	0.41
47:2p:1:MET:O	47:2p:24:ALA:N	2.48	0.41
47:2p:3:LYS:O	47:2p:21:VAL:HA	2.21	0.41
1:1A:218:A:N7	61:1A:4397:HOH:O	2.37	0.41
1:1A:226:G:N2	1:1A:228:A:H62	2.19	0.41
1:1A:760:G:H2'	1:1A:761:A:O4'	2.20	0.41
1:1A:994:C:OP2	16:1U:54:LYS:NZ	2.45	0.41
57:1A:4107:TYK:H4	57:1A:4107:TYK:H71	1.91	0.41
11:1P:46:LYS:HE2	11:1P:51:PHE:CD1	2.56	0.41
26:14:61:ARG:HH21	50:1s:41:VAL:HA	1.86	0.41
30:18:42:ARG:NH1	61:18:201:HOH:O	2.31	0.41
32:1a:300:A:H2'	32:1a:301:G:O4'	2.20	0.41
32:1a:507:C:H3'	32:1a:508:C:H2'	2.03	0.41
32:1a:620:C:H2'	32:1a:621:A:O4'	2.20	0.41
32:1a:782:A:H4'	32:1a:1514:C:O2'	2.21	0.41
32:1a:952:U:H2'	32:1a:953:G:C8	2.55	0.41
32:1a:1061:G:C4	32:1a:1197:G:N2	2.89	0.41
32:1a:1261:A:H3'	32:1a:1262:C:H6	1.84	0.41
32:1a:1272:G:H2'	32:1a:1273:G:O4'	2.20	0.41
32:1a:1349:A:C2	32:1a:1374:A:C4	3.09	0.41
49:1r:24:ALA:O	49:1r:26:LEU:N	2.45	0.41
1:2A:446:G:OP1	16:2U:3:ARG:NH1	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:750:A:O2'	1:2A:752:A:OP1	2.36	0.41
1:2A:1297:C:OP1	1:2A:2710:C:H4'	2.21	0.41
1:2A:1710:C:H2'	1:2A:1711:C:C6	2.56	0.41
1:2A:1759:A:H1'	1:2A:2711:A:C2	2.56	0.41
1:2A:2379:G:O2'	14:2S:17:ARG:NH2	2.54	0.41
1:2A:2498:C:H3'	61:2A:5708:HOH:O	2.21	0.41
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.55	0.41
1:2A:2626:C:H2'	1:2A:2627:G:O4'	2.20	0.41
7:2H:3:ARG:HG2	7:2H:6:ARG:HG2	2.03	0.41
11:2P:90:ARG:H	11:2P:90:ARG:HG3	1.34	0.41
13:2R:118:GLU:CD	13:2R:118:GLU:H	2.27	0.41
19:2X:36:LYS:O	19:2X:39:ILE:N	2.54	0.41
21:2Z:51:ALA:O	21:2Z:52:SER:HB3	2.19	0.41
22:20:69:PHE:CE2	22:20:79:VAL:HG22	2.56	0.41
22:20:82:ARG:HA	22:20:83:PRO:HD3	1.95	0.41
32:2a:134:A:N6	47:2p:25:ARG:HH12	2.19	0.41
32:2a:656:C:HO2'	46:2o:28:GLN:CD	2.24	0.41
32:2a:1116:C:H2'	32:2a:1117:G:O4'	2.21	0.41
34:2c:39:ILE:O	34:2c:43:LEU:HG	2.21	0.41
41:2j:8:LEU:HD21	41:2j:20:ALA:HB2	2.03	0.41
46:2o:5:LYS:H	46:2o:5:LYS:HD3	1.85	0.41
51:2t:54:LYS:HB3	51:2t:54:LYS:HE2	1.86	0.41
1:1A:238:C:H2'	1:1A:239:U:O4'	2.21	0.40
1:1A:271(J):C:O3'	1:1A:271(K):U:H3'	2.20	0.40
1:1A:771:G:OP1	29:17:14:LYS:HE2	2.20	0.40
1:1A:947:G:H2'	1:1A:948:G:C8	2.57	0.40
1:1A:1075:C:O2	1:1A:1076:C:H2'	2.21	0.40
1:1A:1526:G:C6	1:1A:1527:G:C2	3.09	0.40
1:1A:1652:A:H2'	1:1A:1653:G:H5'	2.03	0.40
1:1A:1762:A:H2'	61:1A:5564:HOH:O	2.20	0.40
5:1F:165:ARG:HG2	5:1F:168:ARG:HH21	1.85	0.40
6:1G:155:MET:HE2	6:1G:155:MET:HB3	1.84	0.40
20:1Y:19:LYS:HE2	20:1Y:20:TYR:CE2	2.56	0.40
32:1a:109:A:C8	32:1a:326:G:H2'	2.56	0.40
32:1a:279:A:C5	48:1q:98:LEU:HD23	2.56	0.40
32:1a:434:U:H2'	32:1a:435:C:C6	2.56	0.40
32:1a:958:A:C6	32:1a:959:A:N1	2.89	0.40
33:1b:21:ARG:O	33:1b:21:ARG:HG2	2.19	0.40
33:1b:102:LEU:HB3	33:1b:180:LEU:HD13	2.02	0.40
36:1e:152:ARG:NH2	39:1h:107:LEU:O	2.54	0.40
39:1h:96:GLY:N	39:1h:99:GLU:OE1	2.50	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:1l:24:VAL:HB	43:1l:27:LEU:HD22	2.02	0.40
49:1r:74:ARG:HG2	49:1r:79:LEU:HB2	2.02	0.40
54:1y:51:U:H2'	54:1y:52:G:C8	2.57	0.40
1:2A:27:G:C2	1:2A:512:G:N3	2.89	0.40
1:2A:280:C:C2	1:2A:361:G:C2	3.09	0.40
1:2A:328:U:H4'	20:2Y:68:HIS:CD2	2.56	0.40
1:2A:1131:G:C8	1:2A:2025:C:H4'	2.55	0.40
1:2A:1274:A:N3	1:2A:1297:C:H1'	2.36	0.40
1:2A:1796:U:H2'	1:2A:1797:C:H6	1.84	0.40
1:2A:1818:U:O2'	3:2D:154:LYS:O	2.36	0.40
1:2A:1916:A:H2'	1:2A:1917:PSU:O4'	2.21	0.40
1:2A:2135:A:C5	1:2A:2136:C:H5	2.39	0.40
1:2A:2469:A:H5''	1:2A:2470:G:OP2	2.22	0.40
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.86	0.40
3:2D:213:ARG:HD2	3:2D:217:ARG:O	2.22	0.40
5:2F:25:PRO:HD2	5:2F:115:ALA:HB2	2.03	0.40
7:2H:46:GLU:N	7:2H:49:VAL:O	2.54	0.40
21:2Z:124:ILE:HD13	21:2Z:163:LEU:HD11	2.02	0.40
32:2a:512:U:H2'	32:2a:513:C:H6	1.86	0.40
32:2a:517:G:H22	32:2a:533:A:P	2.44	0.40
32:2a:1228:C:H2'	32:2a:1229:A:H8	1.85	0.40
32:2a:1240:U:OP2	38:2g:116:ALA:N	2.47	0.40
32:2a:1401:G:H2'	32:2a:1402:4OC:O4'	2.21	0.40
32:2a:1478:C:H2'	32:2a:1479:C:C6	2.56	0.40
33:2b:16:HIS:HB2	33:2b:204:ASN:ND2	2.36	0.40
33:2b:71:VAL:HG11	33:2b:164:VAL:HG13	2.02	0.40
34:2c:8:ILE:C	34:2c:10:PHE:H	2.29	0.40
34:2c:13:GLY:HA3	45:2n:57:ARG:NH2	2.36	0.40
34:2c:104:GLN:HG3	34:2c:105:GLU:N	2.36	0.40
38:2g:57:GLU:HG3	38:2g:60:LYS:H	1.86	0.40
41:2j:6:ILE:O	41:2j:71:LEU:HA	2.21	0.40
41:2j:74:ILE:HG22	61:2j:301:HOH:O	2.20	0.40
42:2k:98:LEU:O	42:2k:101:SER:OG	2.40	0.40
43:2l:124:LYS:HA	43:2l:125:PRO:HD3	1.96	0.40
48:2q:51:TYR:HE1	48:2q:76:LEU:HB2	1.85	0.40
1:1A:383:U:O2	1:1A:385:C:N4	2.54	0.40
1:1A:467:G:P	29:17:33:ARG:HH12	2.44	0.40
1:1A:534:U:H2'	1:1A:535:C:C6	2.56	0.40
1:1A:629:G:H5''	1:1A:650:C:O2'	2.21	0.40
1:1A:859:G:O2'	1:1A:916:G:O6	2.29	0.40
1:1A:1435:G:H2'	1:1A:1436:G:O4'	2.20	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1503:U:H2'	1:1A:1504:C:C6	2.56	0.40
1:1A:1803:A:H61	1:1A:1814:G:H1'	1.86	0.40
14:1S:34:HIS:O	14:1S:97:ARG:NH2	2.55	0.40
19:1X:25:LYS:HA	19:1X:81:VAL:O	2.21	0.40
32:1a:21:G:OP1	61:1a:1920:HOH:O	2.22	0.40
32:1a:256:U:H2'	32:1a:257:G:C8	2.57	0.40
32:1a:509:A:H2'	32:1a:510:A:C8	2.56	0.40
32:1a:727:G:N2	32:1a:730:G:OP2	2.38	0.40
32:1a:1118:C:H1'	32:1a:1179:A:C5	2.56	0.40
32:1a:1176:A:H2'	32:1a:1177:G:C8	2.56	0.40
32:1a:1260:C:O5'	32:1a:1284:C:H4'	2.21	0.40
32:1a:1417:G:H22	32:1a:1482:G:H2'	1.86	0.40
34:1c:6:HIS:HA	34:1c:7:PRO:HD3	1.97	0.40
34:1c:101:LEU:HD12	34:1c:101:LEU:HA	1.87	0.40
36:1e:71:LEU:HD11	36:1e:113:ALA:O	2.21	0.40
42:1k:17:GLY:O	42:1k:80:VAL:HA	2.21	0.40
1:2A:411:G:OP2	1:2A:2406:U:O2'	2.37	0.40
1:2A:569:U:C4	1:2A:570:G:C6	3.09	0.40
1:2A:897:C:H1'	54:2w:56:C:C5	2.49	0.40
1:2A:990:A:N6	1:2A:1186:G:H1'	2.36	0.40
1:2A:1163:G:OP1	17:2V:24:LYS:NZ	2.52	0.40
1:2A:1184:G:C6	1:2A:1185:C:C4	3.09	0.40
1:2A:1358:G:O2'	1:2A:1359:A:H5''	2.22	0.40
3:2D:123:ALA:HB3	3:2D:131:LEU:HG	2.03	0.40
5:2F:156:LEU:HD21	5:2F:163:VAL:HG12	2.04	0.40
6:2G:171:ALA:O	6:2G:175:LEU:HG	2.21	0.40
7:2H:54:ARG:HG2	7:2H:65:HIS:ND1	2.36	0.40
19:2X:72:LYS:HG2	19:2X:73:ARG:O	2.21	0.40
20:2Y:5:MET:HE2	20:2Y:5:MET:HB2	1.88	0.40
26:24:14:ILE:O	26:24:15:ILE:HD13	2.21	0.40
32:2a:427:U:OP1	35:2d:13:ARG:NH1	2.50	0.40
32:2a:762:C:H2'	32:2a:763:G:C8	2.56	0.40
32:2a:806:C:H2'	32:2a:807:A:H8	1.86	0.40
32:2a:857:C:H2'	32:2a:858:G:O4'	2.21	0.40
32:2a:1010:G:C2	32:2a:1020:U:H1'	2.57	0.40
32:2a:1030(A):G:N3	32:2a:1030(C):G:C8	2.86	0.40
33:2b:100:GLY:HA2	33:2b:103:THR:OG1	2.22	0.40
33:2b:195:ASP:OD1	33:2b:195:ASP:N	2.53	0.40
35:2d:127:THR:HG22	35:2d:132:ARG:HA	2.03	0.40
37:2f:2:ARG:O	37:2f:66:GLU:HA	2.21	0.40
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:2h:77:GLU:HG3	39:2h:78:GLN:N	2.34	0.40
1:1A:7:G:H2'	1:1A:8:A:C8	2.56	0.40
1:1A:53:A:H2'	1:1A:54:G:O4'	2.21	0.40
1:1A:384:U:H2'	1:1A:385:C:H6	1.85	0.40
1:1A:1022:G:N7	9:1N:66:LYS:HE2	2.37	0.40
1:1A:2040:C:H2'	1:1A:2041:U:O4'	2.22	0.40
1:1A:2077:A:O2'	1:1A:2078:C:H5'	2.21	0.40
1:1A:2287:A:O2'	1:1A:2288:A:H3'	2.21	0.40
1:1A:2365:G:H4'	22:10:60:PHE:CZ	2.57	0.40
1:1A:2503:2MA:H3'	1:1A:2503:2MA:OP2	2.21	0.40
1:1A:2786:U:O2'	4:1E:62:PRO:O	2.30	0.40
1:1A:2839:G:H5'	13:1R:46:GLY:CA	2.50	0.40
3:1D:26:LYS:HB3	3:1D:83:GLU:HG2	2.03	0.40
5:1F:152:GLU:OE1	5:1F:191:ARG:HD2	2.21	0.40
6:1G:43:LEU:C	6:1G:45:GLU:H	2.29	0.40
8:1I:130:TYR:N	8:1I:138:ILE:O	2.40	0.40
20:1Y:38:ILE:HD11	20:1Y:66:PRO:HG3	2.03	0.40
21:1Z:154:ASP:O	21:1Z:155:LEU:HD22	2.21	0.40
25:13:31:LEU:O	25:13:32:GLN:HB2	2.21	0.40
28:16:18:ARG:HD2	28:16:42:TRP:CD1	2.56	0.40
28:16:26:ASN:HD21	28:16:28:ARG:NH2	2.20	0.40
32:1a:404:U:H2'	32:1a:405:U:C6	2.55	0.40
32:1a:912:C:O2'	32:1a:913:A:H5'	2.22	0.40
32:1a:1060:C:OP1	45:1n:45:ARG:NH2	2.43	0.40
32:1a:1220:G:N2	50:1s:54:GLY:O	2.42	0.40
32:1a:1318:A:H5''	50:1s:3:ARG:NH1	2.36	0.40
39:1h:17:THR:O	39:1h:78:GLN:NE2	2.49	0.40
43:1l:55:VAL:HG13	43:1l:69:TYR:HA	2.04	0.40
46:1o:18:PHE:C	46:1o:20:GLY:H	2.29	0.40
54:1w:43:C:H2'	54:1w:44:G:C8	2.56	0.40
55:1x:23:C:H2'	55:1x:24:U:H6	1.86	0.40
1:2A:36:G:H4'	1:2A:451:C:C2	2.56	0.40
1:2A:48:G:N1	1:2A:177:G:OP2	2.50	0.40
1:2A:144:C:H2'	1:2A:145:G:H8	1.87	0.40
1:2A:674:G:C1'	5:2F:74:ARG:HD3	2.49	0.40
1:2A:855:G:C5	1:2A:856:C:C4	3.09	0.40
1:2A:921:G:H2'	1:2A:922:U:C6	2.56	0.40
1:2A:1187:G:OP2	1:2A:1187:G:H8	2.04	0.40
1:2A:1477:A:C2	1:2A:1515:G:C2	3.10	0.40
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.57	0.40
3:2D:58:HIS:HD1	3:2D:59:LYS:N	2.19	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:232:PRO:HB3	3:2D:244:ARG:CZ	2.51	0.40
4:2E:111:ARG:HD3	4:2E:160:TYR:CD2	2.57	0.40
7:2H:19:VAL:HG12	7:2H:20:ALA:H	1.87	0.40
32:2a:1058:G:C2	32:2a:1059:C:C2	3.09	0.40
32:2a:1161:C:H2'	32:2a:1162:C:C6	2.57	0.40
32:2a:1219:U:P	45:2n:19:ARG:HH12	2.41	0.40
32:2a:1338:G:H2'	32:2a:1339:A:C8	2.56	0.40
34:2c:9:GLY:HA3	45:2n:49:HIS:HA	2.02	0.40
36:2e:84:PHE:N	36:2e:87:SER:O	2.54	0.40
47:2p:69:THR:O	47:2p:73:LEU:HG	2.21	0.40
49:2r:37:VAL:O	49:2r:41:LYS:HG2	2.20	0.40
50:2s:3:ARG:HE	50:2s:7:LYS:CB	2.33	0.40
54:2w:9:A:H5'	54:2w:46:G7M:N3	2.37	0.40
1:1A:700:G:O2'	1:1A:1632:A:N3	2.44	0.40
1:1A:1012:U:O4	9:1N:25:ARG:HA	2.21	0.40
1:1A:1069:A:H4'	1:1A:1070:A:H8	1.87	0.40
1:1A:1680:U:H2'	1:1A:1681:G:O4'	2.22	0.40
1:1A:1740:G:H2'	1:1A:1741:A:C8	2.57	0.40
1:1A:2106:G:H2'	1:1A:2107:C:C6	2.57	0.40
1:1A:2108:C:H2'	1:1A:2109:U:C6	2.56	0.40
1:1A:2376:A:N3	14:1S:106:ARG:NH2	2.69	0.40
1:1A:2825:C:H2'	1:1A:2826:A:O4'	2.21	0.40
14:1S:110:LEU:HD12	14:1S:110:LEU:HA	1.84	0.40
32:1a:358:U:H2'	32:1a:359:U:H6	1.86	0.40
32:1a:408:A:H2'	32:1a:409:G:O4'	2.21	0.40
32:1a:560:U:H5'	32:1a:566:G:N2	2.37	0.40
32:1a:668:G:H21	46:1o:46:HIS:CE1	2.39	0.40
33:1b:22:LYS:HG2	33:1b:40:HIS:CE1	2.49	0.40
35:1d:140:VAL:HG12	35:1d:144:ASP:OD2	2.21	0.40
35:1d:178:VAL:C	35:1d:180:GLY:N	2.79	0.40
38:1g:144:MET:HE3	38:1g:144:MET:HB3	1.95	0.40
42:1k:82:VAL:HB	42:1k:108:ILE:HG12	2.03	0.40
51:1t:67:ALA:HB1	51:1t:74:LYS:HD2	2.02	0.40
54:1w:18:G:H4'	54:1w:60:U:C6	2.57	0.40
1:2A:29:U:H2'	1:2A:30:G:C8	2.57	0.40
1:2A:780:G:H8	1:2A:780:G:O5'	2.04	0.40
1:2A:1478:G:N2	1:2A:1514:U:C2	2.90	0.40
1:2A:2064:C:H1'	1:2A:2450:A:C2	2.56	0.40
1:2A:2615:U:N1	27:25:7:PRO:HA	2.36	0.40
1:2A:2629:A:H1'	1:2A:2630:G:H5''	2.04	0.40
1:2A:2760:C:H2'	1:2A:2761:G:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:66:A:H61	2:2B:109:C:H5''	1.84	0.40
3:2D:106:ILE:H	3:2D:106:ILE:HG12	1.45	0.40
4:2E:50:GLY:HA3	4:2E:75:VAL:HG11	2.02	0.40
8:2I:75:LEU:HD13	8:2I:105:HIS:CD2	2.57	0.40
8:2I:93:THR:H	8:2I:96:ASP:HB2	1.86	0.40
14:2S:87:PHE:CE1	14:2S:102:ALA:HB2	2.56	0.40
15:2T:109:GLU:HG2	15:2T:112:ARG:HH22	1.87	0.40
19:2X:1:MET:HE3	24:22:26:ARG:HE	1.87	0.40
23:21:67:ILE:N	23:21:68:PRO:HD2	2.37	0.40
28:26:10:LEU:O	28:26:11:LEU:HD23	2.21	0.40
29:27:26:GLY:O	29:27:30:VAL:HG23	2.22	0.40
32:2a:604:G:H2'	32:2a:605:U:O4'	2.21	0.40
32:2a:1013:G:H2'	32:2a:1015:A:OP2	2.22	0.40
32:2a:1082:G:N7	61:2a:3343:HOH:O	2.37	0.40
32:2a:1118:C:H1'	32:2a:1179:A:C4	2.57	0.40
32:2a:1431:C:H2'	32:2a:1432:G:O4'	2.22	0.40
38:2g:38:LEU:HD13	38:2g:38:LEU:HA	1.97	0.40
40:2i:26:VAL:HG12	40:2i:61:ALA:HB3	2.03	0.40
41:2j:8:LEU:HG	41:2j:70:ARG:HB2	2.01	0.40
46:2o:7:GLU:O	46:2o:11:VAL:HG23	2.22	0.40
47:2p:37:GLY:HA3	47:2p:50:LYS:O	2.20	0.40
48:2q:16:GLN:HE21	48:2q:16:GLN:HB3	1.66	0.40
50:2s:14:HIS:O	50:2s:18:LYS:HG3	2.22	0.40
54:2y:34:G:C2	54:2y:35:A:C4	3.10	0.40
54:2y:55:PSU:H6	54:2y:55:PSU:H2'	1.70	0.40
1:1A:35:G:H2'	1:1A:36:G:O4'	2.22	0.40
1:1A:204:A:H8	1:1A:204:A:OP1	2.05	0.40
1:1A:620:G:N3	1:1A:620:G:H2'	2.36	0.40
1:1A:1164:G:H2'	1:1A:1165:U:C6	2.57	0.40
1:1A:2183:C:HO2'	1:1A:2184:G:P	2.42	0.40
1:1A:2572:A:N7	4:1E:145:LYS:HB2	2.36	0.40
1:1A:2776:A:H4'	1:1A:2777:G:H5''	2.04	0.40
3:1D:66:ASP:HB2	3:1D:103:ARG:HD3	2.03	0.40
4:1E:9:VAL:HG13	15:1T:3:ARG:HG2	2.04	0.40
5:1F:109:GLY:HA2	5:1F:112:MET:HE2	2.03	0.40
14:1S:5:THR:OG1	14:1S:8:GLU:HG3	2.21	0.40
15:1T:13:ARG:HB3	15:1T:14:TYR:CE2	2.55	0.40
21:1Z:1:MET:HE2	21:1Z:135:GLU:HG3	2.04	0.40
32:1a:284:G:H2'	32:1a:285:G:H8	1.86	0.40
32:1a:300:A:H1'	32:1a:565:U:O2	2.21	0.40
32:1a:472:A:H2'	32:1a:473:G:O4'	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:766:A:C8	32:1a:814:A:N6	2.89	0.40
32:1a:1054:C:C4	32:1a:1196:U:H5	2.40	0.40
32:1a:1260:C:O2	32:1a:1274:G:N2	2.44	0.40
39:1h:20:TYR:HA	39:1h:65:TYR:CZ	2.56	0.40
54:1w:18:G:H4'	54:1w:60:U:C5	2.57	0.40
54:1w:28:G:H2'	54:1w:29:G:C8	2.57	0.40
54:1y:6:G:C6	54:1y:7:A:C6	3.10	0.40
1:2A:272(E):G:C2	1:2A:364:C:C2	3.10	0.40
1:2A:806:C:O2	1:2A:2444:G:O2'	2.40	0.40
1:2A:810:U:C4	11:2P:29:LYS:O	2.75	0.40
1:2A:966:G:H2'	1:2A:967:C:C6	2.56	0.40
1:2A:1425:G:C6	1:2A:1426:G:C6	3.09	0.40
1:2A:1546:C:H5'	1:2A:1547:C:H5'	2.03	0.40
1:2A:2127:G:H2'	1:2A:2128:C:C6	2.57	0.40
2:2B:7:G:N2	14:2S:38:GLN:HE22	1.96	0.40
4:2E:105:THR:HG21	4:2E:164:ARG:CZ	2.52	0.40
5:2F:144:LYS:C	5:2F:146:ALA:H	2.29	0.40
6:2G:97:ASP:HA	6:2G:100:TRP:HD1	1.86	0.40
6:2G:106:LEU:O	6:2G:110:ALA:HB3	2.21	0.40
7:2H:38:SER:C	7:2H:40:GLU:H	2.29	0.40
9:2N:121:LYS:HD3	9:2N:130:HIS:CE1	2.56	0.40
12:2Q:79:LEU:HD23	12:2Q:79:LEU:HA	1.85	0.40
26:24:3:GLU:O	26:24:5:ILE:HG23	2.20	0.40
32:2a:200:G:H1	32:2a:217:C:N4	2.20	0.40
32:2a:382:A:H2'	32:2a:383:A:H8	1.85	0.40
32:2a:614:A:C2	32:2a:627:G:C2	3.10	0.40
32:2a:670:G:H2'	32:2a:671:G:O4'	2.21	0.40
32:2a:1055:A:C6	32:2a:1206:G:C5	3.10	0.40
32:2a:1081:G:H5'	36:2e:18:ARG:HB3	2.03	0.40
32:2a:1233:G:H2'	32:2a:1234:C:C6	2.57	0.40
32:2a:1396:A:O4'	32:2a:1398:A:H1'	2.22	0.40
32:2a:1401:G:OP1	53:2v:18:G:O2'	2.26	0.40
35:2d:180:GLY:C	35:2d:181:MET:HG2	2.46	0.40
38:2g:51:GLN:O	38:2g:55:GLY:HA2	2.22	0.40
51:2t:43:LEU:HD12	51:2t:55:ILE:HG13	2.04	0.40

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

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2136:C:O3'	32:2a:1000:U:O2'[3_654]	2.15	0.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:1V:49:THR:OG1	27:15:60:VAL:O[4_545]	2.19	0.01

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%)	258 (94%)	15 (6%)	0	100	100
3	2D	273/276 (99%)	252 (92%)	21 (8%)	0	100	100
4	1E	202/206 (98%)	191 (95%)	10 (5%)	1 (0%)	24	48
4	2E	202/206 (98%)	186 (92%)	13 (6%)	3 (2%)	8	22
5	1F	200/210 (95%)	194 (97%)	5 (2%)	1 (0%)	24	48
5	2F	200/210 (95%)	183 (92%)	15 (8%)	2 (1%)	12	32
6	1G	179/182 (98%)	160 (89%)	16 (9%)	3 (2%)	7	19
6	2G	179/182 (98%)	153 (86%)	20 (11%)	6 (3%)	3	7
7	1H	172/180 (96%)	157 (91%)	15 (9%)	0	100	100
7	2H	172/180 (96%)	152 (88%)	18 (10%)	2 (1%)	10	27
8	1I	144/148 (97%)	131 (91%)	12 (8%)	1 (1%)	18	41
8	2I	144/148 (97%)	120 (83%)	23 (16%)	1 (1%)	18	41
9	1N	138/140 (99%)	133 (96%)	5 (4%)	0	100	100
9	2N	138/140 (99%)	132 (96%)	6 (4%)	0	100	100
10	1O	120/122 (98%)	110 (92%)	10 (8%)	0	100	100
10	2O	120/122 (98%)	111 (92%)	8 (7%)	1 (1%)	16	37
11	1P	147/150 (98%)	130 (88%)	17 (12%)	0	100	100
11	2P	147/150 (98%)	130 (88%)	16 (11%)	1 (1%)	18	41
12	1Q	139/141 (99%)	128 (92%)	11 (8%)	0	100	100
12	2Q	139/141 (99%)	129 (93%)	8 (6%)	2 (1%)	9	23

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	1R	116/118 (98%)	109 (94%)	7 (6%)	0	100	100
13	2R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
14	1S	108/112 (96%)	100 (93%)	8 (7%)	0	100	100
14	2S	108/112 (96%)	100 (93%)	7 (6%)	1 (1%)	14	35
15	1T	129/146 (88%)	118 (92%)	10 (8%)	1 (1%)	16	37
15	2T	129/146 (88%)	122 (95%)	6 (5%)	1 (1%)	16	37
16	1U	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
16	2U	114/118 (97%)	111 (97%)	3 (3%)	0	100	100
17	1V	99/101 (98%)	93 (94%)	4 (4%)	2 (2%)	6	16
17	2V	99/101 (98%)	94 (95%)	4 (4%)	1 (1%)	12	32
18	1W	110/113 (97%)	110 (100%)	0	0	100	100
18	2W	110/113 (97%)	109 (99%)	1 (1%)	0	100	100
19	1X	93/96 (97%)	86 (92%)	5 (5%)	2 (2%)	5	14
19	2X	93/96 (97%)	83 (89%)	10 (11%)	0	100	100
20	1Y	105/110 (96%)	97 (92%)	7 (7%)	1 (1%)	12	32
20	2Y	105/110 (96%)	94 (90%)	10 (10%)	1 (1%)	12	32
21	1Z	148/206 (72%)	126 (85%)	17 (12%)	5 (3%)	3	7
21	2Z	156/206 (76%)	124 (80%)	25 (16%)	7 (4%)	2	4
22	10	81/85 (95%)	76 (94%)	4 (5%)	1 (1%)	10	27
22	20	81/85 (95%)	73 (90%)	8 (10%)	0	100	100
23	11	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	11	29
23	21	95/98 (97%)	92 (97%)	3 (3%)	0	100	100
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
24	22	68/72 (94%)	63 (93%)	5 (7%)	0	100	100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
25	23	57/60 (95%)	52 (91%)	5 (9%)	0	100	100
26	14	67/71 (94%)	52 (78%)	8 (12%)	7 (10%)	0	0
26	24	67/71 (94%)	43 (64%)	18 (27%)	6 (9%)	0	0
27	15	57/60 (95%)	57 (100%)	0	0	100	100
27	25	57/60 (95%)	51 (90%)	6 (10%)	0	100	100
28	16	51/54 (94%)	50 (98%)	1 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
28	26	51/54 (94%)	46 (90%)	5 (10%)	0	100	100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	61 (98%)	1 (2%)	0	100	100
31	19	35/37 (95%)	32 (91%)	3 (9%)	0	100	100
31	29	35/37 (95%)	33 (94%)	2 (6%)	0	100	100
33	1b	229/256 (90%)	184 (80%)	38 (17%)	7 (3%)	3	8
33	2b	229/256 (90%)	189 (82%)	32 (14%)	8 (4%)	3	6
34	1c	204/239 (85%)	184 (90%)	16 (8%)	4 (2%)	6	16
34	2c	204/239 (85%)	167 (82%)	31 (15%)	6 (3%)	3	9
35	1d	206/209 (99%)	185 (90%)	19 (9%)	2 (1%)	12	32
35	2d	206/209 (99%)	186 (90%)	19 (9%)	1 (0%)	24	48
36	1e	146/162 (90%)	123 (84%)	20 (14%)	3 (2%)	5	15
36	2e	146/162 (90%)	132 (90%)	12 (8%)	2 (1%)	9	23
37	1f	98/101 (97%)	89 (91%)	9 (9%)	0	100	100
37	2f	98/101 (97%)	91 (93%)	6 (6%)	1 (1%)	12	32
38	1g	153/156 (98%)	137 (90%)	15 (10%)	1 (1%)	18	41
38	2g	153/156 (98%)	135 (88%)	15 (10%)	3 (2%)	6	16
39	1h	135/138 (98%)	121 (90%)	12 (9%)	2 (2%)	8	22
39	2h	135/138 (98%)	118 (87%)	15 (11%)	2 (2%)	8	22
40	1i	125/128 (98%)	105 (84%)	18 (14%)	2 (2%)	7	20
40	2i	125/128 (98%)	104 (83%)	18 (14%)	3 (2%)	4	12
41	1j	95/105 (90%)	81 (85%)	8 (8%)	6 (6%)	1	2
41	2j	94/105 (90%)	76 (81%)	12 (13%)	6 (6%)	1	1
42	1k	112/129 (87%)	93 (83%)	16 (14%)	3 (3%)	4	10
42	2k	112/129 (87%)	97 (87%)	12 (11%)	3 (3%)	4	10
43	1l	119/132 (90%)	113 (95%)	6 (5%)	0	100	100
43	2l	119/132 (90%)	111 (93%)	8 (7%)	0	100	100
44	1m	121/126 (96%)	104 (86%)	16 (13%)	1 (1%)	16	37
44	2m	120/126 (95%)	96 (80%)	22 (18%)	2 (2%)	7	19

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	1n	58/61 (95%)	52 (90%)	5 (9%)	1 (2%)	7	19
45	2n	58/61 (95%)	48 (83%)	10 (17%)	0	100	100
46	1o	86/89 (97%)	78 (91%)	7 (8%)	1 (1%)	10	27
46	2o	86/89 (97%)	78 (91%)	7 (8%)	1 (1%)	10	27
47	1p	80/88 (91%)	72 (90%)	8 (10%)	0	100	100
47	2p	80/88 (91%)	74 (92%)	6 (8%)	0	100	100
48	1q	97/105 (92%)	90 (93%)	5 (5%)	2 (2%)	5	15
48	2q	97/105 (92%)	86 (89%)	9 (9%)	2 (2%)	5	15
49	1r	66/88 (75%)	60 (91%)	6 (9%)	0	100	100
49	2r	66/88 (75%)	62 (94%)	4 (6%)	0	100	100
50	1s	81/93 (87%)	69 (85%)	11 (14%)	1 (1%)	10	27
50	2s	81/93 (87%)	63 (78%)	16 (20%)	2 (2%)	4	11
51	1t	94/106 (89%)	84 (89%)	5 (5%)	5 (5%)	1	3
51	2t	94/106 (89%)	81 (86%)	9 (10%)	4 (4%)	2	4
52	1u	21/27 (78%)	21 (100%)	0	0	100	100
52	2u	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
All	All	11368/12128 (94%)	10247 (90%)	973 (9%)	148 (1%)	9	25

All (148) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
23	11	3	LYS
26	14	58	ARG
26	14	62	ARG
34	1c	66	VAL
38	1g	80	VAL
40	1i	54	ASP
41	1j	79	ARG
44	1m	67	GLU
5	2F	130	ALA
6	2G	96	ARG
6	2G	126	ASP
26	24	49	PHE
33	2b	16	HIS
33	2b	17	PHE

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Mol	Chain	Res	Type
33	2b	123	ALA
38	2g	80	VAL
40	2i	54	ASP
50	2s	12	ASP
15	1T	37	GLY
17	1V	43	GLU
19	1X	93	GLU
20	1Y	54	LYS
21	1Z	53	ILE
21	1Z	153	SER
21	1Z	156	LYS
26	14	45	GLY
26	14	49	PHE
26	14	53	GLU
33	1b	101	MET
33	1b	126	GLU
36	1e	72	GLN
39	1h	54	ASP
41	1j	55	LYS
48	1q	33	GLY
48	1q	81	ARG
50	1s	81	ARG
51	1t	10	LEU
6	2G	45	GLU
6	2G	84	LYS
11	2P	45	LEU
17	2V	79	VAL
21	2Z	153	SER
26	24	30	GLU
33	2b	74	LYS
34	2c	51	GLY
34	2c	91	LEU
34	2c	156	ARG
38	2g	55	GLY
40	2i	121	ARG
41	2j	79	ARG
42	2k	49	GLY
42	2k	77	MET
51	2t	95	ALA
4	1E	52	LEU
8	1I	11	ASN
21	1Z	52	SER

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Mol	Chain	Res	Type
21	1Z	60	GLU
22	10	4	LYS
33	1b	20	GLU
33	1b	230	VAL
33	1b	231	GLU
34	1c	107	GLN
35	1d	173	TRP
36	1e	85	GLY
45	1n	60	SER
51	1t	100	ILE
4	2E	52	LEU
6	2G	124	SER
7	2H	47	GLU
8	2I	10	GLU
10	2O	5	GLN
12	2Q	24	GLY
12	2Q	28	ALA
15	2T	55	ASN
21	2Z	66	SER
26	24	45	GLY
34	2c	181	ASN
34	2c	204	LEU
39	2h	34	GLU
40	2i	45	ALA
44	2m	67	GLU
46	2o	5	LYS
48	2q	68	ARG
51	2t	47	GLY
51	2t	99	LEU
6	1G	43	LEU
33	1b	124	SER
33	1b	125	PRO
34	1c	65	ALA
40	1i	29	ASN
42	1k	105	VAL
51	1t	95	ALA
51	1t	102	GLY
5	2F	167	ALA
14	2S	84	GLN
20	2Y	21	LYS
21	2Z	52	SER
26	24	38	LYS

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Mol	Chain	Res	Type
26	24	63	TYR
37	2f	71	ARG
41	2j	51	ARG
41	2j	78	ASN
42	2k	91	ARG
6	1G	47	LYS
17	1V	79	VAL
26	14	48	ARG
36	1e	126	ARG
39	1h	133	LEU
41	1j	75	ILE
41	1j	78	ASN
42	1k	117	ASN
4	2E	113	PHE
4	2E	144	ARG
6	2G	3	LEU
21	2Z	152	ALA
21	2Z	165	VAL
33	2b	22	LYS
39	2h	68	ARG
41	2j	39	PRO
46	1o	19	PRO
26	24	47	GLN
51	2t	10	LEU
6	1G	24	GLY
41	1j	91	PRO
7	2H	12	PRO
33	2b	125	PRO
36	2e	96	PRO
41	2j	91	PRO
44	2m	7	VAL
19	1X	94	GLY
42	1k	49	GLY
21	2Z	147	GLY
38	2g	17	VAL
51	1t	47	GLY
34	2c	99	VAL
35	2d	37	PRO
36	2e	69	VAL
41	2j	75	ILE
50	2s	9	VAL
26	14	56	VAL

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Mol	Chain	Res	Type
34	1c	145	GLY
41	1j	77	PRO
33	2b	108	ILE
33	2b	231	GLU
48	2q	30	PRO
35	1d	178	VAL
21	2Z	171	ILE

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%)	200 (93%)	15 (7%)	14	34
3	2D	215/218 (99%)	201 (94%)	14 (6%)	15	37
4	1E	164/166 (99%)	150 (92%)	14 (8%)	10	25
4	2E	164/166 (99%)	151 (92%)	13 (8%)	11	28
5	1F	160/166 (96%)	142 (89%)	18 (11%)	5	14
5	2F	159/166 (96%)	142 (89%)	17 (11%)	6	16
6	1G	143/156 (92%)	130 (91%)	13 (9%)	9	22
6	2G	143/156 (92%)	122 (85%)	21 (15%)	3	8
7	1H	144/148 (97%)	125 (87%)	19 (13%)	4	10
7	2H	144/148 (97%)	127 (88%)	17 (12%)	5	13
8	1I	113/124 (91%)	94 (83%)	19 (17%)	2	6
8	2I	105/124 (85%)	91 (87%)	14 (13%)	4	10
9	1N	118/119 (99%)	109 (92%)	9 (8%)	12	30
9	2N	118/119 (99%)	108 (92%)	10 (8%)	10	25
10	1O	100/100 (100%)	95 (95%)	5 (5%)	22	48
10	2O	100/100 (100%)	92 (92%)	8 (8%)	11	28
11	1P	115/116 (99%)	103 (90%)	12 (10%)	7	17
11	2P	115/116 (99%)	97 (84%)	18 (16%)	2	7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
12	1Q	111/111 (100%)	102 (92%)	9 (8%)	11	27
12	2Q	111/111 (100%)	102 (92%)	9 (8%)	11	27
13	1R	101/101 (100%)	94 (93%)	7 (7%)	14	34
13	2R	101/101 (100%)	95 (94%)	6 (6%)	18	42
14	1S	86/88 (98%)	80 (93%)	6 (7%)	14	34
14	2S	85/88 (97%)	74 (87%)	11 (13%)	4	10
15	1T	115/127 (91%)	109 (95%)	6 (5%)	21	47
15	2T	113/127 (89%)	107 (95%)	6 (5%)	20	46
16	1U	93/94 (99%)	90 (97%)	3 (3%)	34	64
16	2U	93/94 (99%)	89 (96%)	4 (4%)	26	54
17	1V	80/82 (98%)	74 (92%)	6 (8%)	12	31
17	2V	80/82 (98%)	73 (91%)	7 (9%)	9	23
18	1W	90/92 (98%)	88 (98%)	2 (2%)	45	74
18	2W	90/92 (98%)	84 (93%)	6 (7%)	15	36
19	1X	77/78 (99%)	73 (95%)	4 (5%)	21	47
19	2X	77/78 (99%)	74 (96%)	3 (4%)	28	57
20	1Y	85/91 (93%)	75 (88%)	10 (12%)	5	13
20	2Y	85/91 (93%)	74 (87%)	11 (13%)	4	10
21	1Z	135/179 (75%)	119 (88%)	16 (12%)	5	13
21	2Z	137/179 (76%)	116 (85%)	21 (15%)	3	7
22	10	65/67 (97%)	59 (91%)	6 (9%)	8	22
22	20	65/67 (97%)	60 (92%)	5 (8%)	12	30
23	11	80/83 (96%)	71 (89%)	9 (11%)	5	14
23	21	80/83 (96%)	74 (92%)	6 (8%)	12	31
24	12	65/67 (97%)	59 (91%)	6 (9%)	8	22
24	22	65/67 (97%)	58 (89%)	7 (11%)	6	16
25	13	51/52 (98%)	47 (92%)	4 (8%)	11	29
25	23	50/52 (96%)	46 (92%)	4 (8%)	11	28
26	14	59/63 (94%)	51 (86%)	8 (14%)	3	9
26	24	53/63 (84%)	40 (76%)	13 (24%)	1	2
27	15	50/52 (96%)	45 (90%)	5 (10%)	7	19

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
27	25	50/52 (96%)	46 (92%)	4 (8%)	11	28
28	16	51/52 (98%)	46 (90%)	5 (10%)	7	19
28	26	50/52 (96%)	44 (88%)	6 (12%)	5	12
29	17	41/42 (98%)	39 (95%)	2 (5%)	22	49
29	27	41/42 (98%)	39 (95%)	2 (5%)	22	49
30	18	54/55 (98%)	50 (93%)	4 (7%)	13	32
30	28	54/55 (98%)	52 (96%)	2 (4%)	30	59
31	19	34/34 (100%)	33 (97%)	1 (3%)	37	67
31	29	34/34 (100%)	28 (82%)	6 (18%)	2	5
33	1b	192/220 (87%)	167 (87%)	25 (13%)	4	10
33	2b	187/220 (85%)	163 (87%)	24 (13%)	4	11
34	1c	142/188 (76%)	127 (89%)	15 (11%)	6	17
34	2c	140/188 (74%)	122 (87%)	18 (13%)	4	10
35	1d	169/181 (93%)	151 (89%)	18 (11%)	6	16
35	2d	173/181 (96%)	156 (90%)	17 (10%)	7	19
36	1e	113/123 (92%)	99 (88%)	14 (12%)	4	11
36	2e	114/123 (93%)	103 (90%)	11 (10%)	8	20
37	1f	84/90 (93%)	79 (94%)	5 (6%)	17	41
37	2f	85/90 (94%)	79 (93%)	6 (7%)	13	33
38	1g	119/127 (94%)	105 (88%)	14 (12%)	5	13
38	2g	120/127 (94%)	106 (88%)	14 (12%)	5	13
39	1h	114/119 (96%)	101 (89%)	13 (11%)	5	14
39	2h	114/119 (96%)	102 (90%)	12 (10%)	6	17
40	1i	90/99 (91%)	78 (87%)	12 (13%)	4	10
40	2i	89/99 (90%)	74 (83%)	15 (17%)	2	6
41	1j	66/92 (72%)	61 (92%)	5 (8%)	12	30
41	2j	69/92 (75%)	65 (94%)	4 (6%)	18	42
42	1k	82/99 (83%)	75 (92%)	7 (8%)	10	25
42	2k	83/99 (84%)	75 (90%)	8 (10%)	8	20
43	1l	96/108 (89%)	88 (92%)	8 (8%)	10	26
43	2l	96/108 (89%)	89 (93%)	7 (7%)	13	32

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
44	1m	93/101 (92%)	82 (88%)	11 (12%)	5	13
44	2m	92/101 (91%)	78 (85%)	14 (15%)	3	7
45	1n	49/50 (98%)	43 (88%)	6 (12%)	5	12
45	2n	49/50 (98%)	45 (92%)	4 (8%)	10	27
46	1o	78/80 (98%)	73 (94%)	5 (6%)	16	38
46	2o	78/80 (98%)	72 (92%)	6 (8%)	12	30
47	1p	69/74 (93%)	62 (90%)	7 (10%)	7	18
47	2p	68/74 (92%)	58 (85%)	10 (15%)	3	8
48	1q	94/97 (97%)	85 (90%)	9 (10%)	8	20
48	2q	94/97 (97%)	86 (92%)	8 (8%)	10	25
49	1r	59/77 (77%)	56 (95%)	3 (5%)	21	48
49	2r	59/77 (77%)	51 (86%)	8 (14%)	3	9
50	1s	69/80 (86%)	63 (91%)	6 (9%)	9	24
50	2s	67/80 (84%)	60 (90%)	7 (10%)	7	17
51	1t	70/82 (85%)	65 (93%)	5 (7%)	13	33
51	2t	70/82 (85%)	62 (89%)	8 (11%)	5	14
52	1u	18/22 (82%)	14 (78%)	4 (22%)	1	3
52	2u	18/22 (82%)	17 (94%)	1 (6%)	19	44
All	All	9303/10064 (92%)	8395 (90%)	908 (10%)	7	19

All (908) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	12	SER
3	1D	32	SER
3	1D	37	LEU
3	1D	68	LYS
3	1D	99	ASP
3	1D	106	ILE
3	1D	111	LEU
3	1D	113	VAL
3	1D	140	THR
3	1D	193	VAL
3	1D	211	ARG
3	1D	217	ARG
3	1D	229	VAL

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Mol	Chain	Res	Type
3	1D	242	ARG
3	1D	253	GLN
4	1E	13	ARG
4	1E	21	VAL
4	1E	34	VAL
4	1E	73	GLU
4	1E	75	VAL
4	1E	89	ASP
4	1E	116	VAL
4	1E	152	LYS
4	1E	154	LYS
4	1E	163	GLU
4	1E	175	VAL
4	1E	178	GLU
4	1E	185	LYS
4	1E	195	LEU
5	1F	18	ARG
5	1F	19	GLU
5	1F	24	LEU
5	1F	28	ILE
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	64	ILE
5	1F	70	THR
5	1F	74	ARG
5	1F	88	VAL
5	1F	89	VAL
5	1F	106	ARG
5	1F	132	VAL
5	1F	175	THR
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
6	1G	3	LEU
6	1G	5	VAL
6	1G	7	LEU
6	1G	28	VAL
6	1G	31	VAL
6	1G	43	LEU
6	1G	59	GLU
6	1G	62	LEU

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Mol	Chain	Res	Type
6	1G	72	ARG
6	1G	79	ASN
6	1G	82	LEU
6	1G	152	LEU
6	1G	159	VAL
7	1H	13	LYS
7	1H	15	VAL
7	1H	23	ARG
7	1H	33	LEU
7	1H	43	VAL
7	1H	44	VAL
7	1H	50	VAL
7	1H	59	ARG
7	1H	67	LEU
7	1H	68	THR
7	1H	76	VAL
7	1H	88	LEU
7	1H	95	ARG
7	1H	103	LEU
7	1H	107	VAL
7	1H	119	GLU
7	1H	125	VAL
7	1H	129	THR
7	1H	134	SER
8	1I	5	LEU
8	1I	9	LEU
8	1I	15	VAL
8	1I	38	LEU
8	1I	44	LEU
8	1I	61	ARG
8	1I	75	LEU
8	1I	76	THR
8	1I	77	LEU
8	1I	86	THR
8	1I	92	VAL
8	1I	99	GLU
8	1I	108	THR
8	1I	109	ILE
8	1I	114	LEU
8	1I	123	LEU
8	1I	127	VAL
8	1I	129	THR

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Mol	Chain	Res	Type
8	1I	144	VAL
9	1N	9	VAL
9	1N	14	VAL
9	1N	32	THR
9	1N	33	LEU
9	1N	46	VAL
9	1N	54	VAL
9	1N	67	LEU
9	1N	71	ILE
9	1N	73	THR
10	1O	10	VAL
10	1O	22	ILE
10	1O	77	ILE
10	1O	89	ASN
10	1O	106	LEU
11	1P	3	LEU
11	1P	29	LYS
11	1P	40	SER
11	1P	46	LYS
11	1P	75	ILE
11	1P	79	ARG
11	1P	83	VAL
11	1P	86	LYS
11	1P	95	VAL
11	1P	119	GLU
11	1P	125	VAL
11	1P	133	SER
12	1Q	7	MET
12	1Q	35	VAL
12	1Q	55	VAL
12	1Q	79	LEU
12	1Q	81	VAL
12	1Q	106	VAL
12	1Q	109	VAL
12	1Q	110	THR
12	1Q	130	LYS
13	1R	29	LEU
13	1R	33	ARG
13	1R	36	THR
13	1R	38	VAL
13	1R	79	LEU
13	1R	91	GLN

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Mol	Chain	Res	Type
13	1R	114	VAL
14	1S	14	VAL
14	1S	25	ARG
14	1S	46	VAL
14	1S	83	LYS
14	1S	85	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	30	VAL
15	1T	50	ILE
15	1T	85	LYS
15	1T	89	VAL
15	1T	96	ARG
16	1U	74	LEU
16	1U	77	SER
16	1U	95	LEU
17	1V	46	VAL
17	1V	52	VAL
17	1V	56	SER
17	1V	61	VAL
17	1V	79	VAL
17	1V	85	LYS
18	1W	11	ARG
18	1W	17	VAL
19	1X	23	GLU
19	1X	57	LEU
19	1X	80	ILE
19	1X	82	GLN
20	1Y	7	VAL
20	1Y	8	LYS
20	1Y	11	ASP
20	1Y	43	ASN
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	88	LYS
20	1Y	91	GLU
20	1Y	99	CYS
20	1Y	107	ASP
21	1Z	18	LEU
21	1Z	42	VAL
21	1Z	49	ARG
21	1Z	56	VAL

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Mol	Chain	Res	Type
21	1Z	70	LEU
21	1Z	76	LEU
21	1Z	86	VAL
21	1Z	91	LEU
21	1Z	126	VAL
21	1Z	132	ASN
21	1Z	135	GLU
21	1Z	138	GLU
21	1Z	140	ASP
21	1Z	141	VAL
21	1Z	155	LEU
21	1Z	171	ILE
22	10	3	HIS
22	10	7	LEU
22	10	9	SER
22	10	30	VAL
22	10	44	ARG
22	10	49	LYS
23	11	46	LEU
23	11	52	ARG
23	11	56	GLN
23	11	59	THR
23	11	78	LYS
23	11	80	LEU
23	11	83	GLU
23	11	86	SER
23	11	95	LEU
24	12	3	LEU
24	12	19	VAL
24	12	41	ILE
24	12	45	SER
24	12	50	ILE
24	12	70	GLN
25	13	23	LEU
25	13	55	ARG
25	13	56	VAL
25	13	60	GLU
26	14	16	CYS
26	14	33	VAL
26	14	37	SER
26	14	49	PHE
26	14	50	VAL

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Mol	Chain	Res	Type
26	14	52	THR
26	14	63	TYR
26	14	65	ASP
27	15	6	VAL
27	15	16	ARG
27	15	29	THR
27	15	40	LYS
27	15	58	LEU
28	16	6	ARG
28	16	7	ILE
28	16	14	THR
28	16	44	ARG
28	16	48	VAL
29	17	35	ARG
29	17	46	VAL
30	18	14	VAL
30	18	15	LYS
30	18	34	TRP
30	18	50	LEU
31	19	3	VAL
33	1b	7	VAL
33	1b	8	LYS
33	1b	11	LEU
33	1b	21	ARG
33	1b	24	TRP
33	1b	35	GLU
33	1b	47	THR
33	1b	54	THR
33	1b	64	ARG
33	1b	74	LYS
33	1b	80	ILE
33	1b	82	ARG
33	1b	93	VAL
33	1b	94	ASN
33	1b	101	MET
33	1b	111	ARG
33	1b	112	VAL
33	1b	117	GLU
33	1b	127	ILE
33	1b	138	LEU
33	1b	164	VAL
33	1b	169	LYS

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Mol	Chain	Res	Type
33	1b	187	LEU
33	1b	208	ILE
33	1b	229	VAL
34	1c	3	ASN
34	1c	64	VAL
34	1c	66	VAL
34	1c	70	VAL
34	1c	72	LYS
34	1c	82	GLU
34	1c	89	GLU
34	1c	103	VAL
34	1c	116	VAL
34	1c	119	ARG
34	1c	128	PHE
34	1c	138	VAL
34	1c	173	VAL
34	1c	182	ILE
34	1c	195	VAL
35	1d	3	ARG
35	1d	10	ARG
35	1d	31	CYS
35	1d	53	ASP
35	1d	70	ILE
35	1d	91	SER
35	1d	105	VAL
35	1d	127	THR
35	1d	134	ASP
35	1d	135	LEU
35	1d	137	SER
35	1d	140	VAL
35	1d	158	ILE
35	1d	177	ASP
35	1d	178	VAL
35	1d	186	LEU
35	1d	194	LEU
35	1d	202	LEU
36	1e	8	GLU
36	1e	24	ARG
36	1e	41	VAL
36	1e	51	VAL
36	1e	56	GLN
36	1e	67	VAL

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Mol	Chain	Res	Type
36	1e	73	ASN
36	1e	75	THR
36	1e	78	HIS
36	1e	79	GLU
36	1e	120	THR
36	1e	131	ILE
36	1e	151	LEU
36	1e	152	ARG
37	1f	19	LEU
37	1f	39	LYS
37	1f	55	ASP
37	1f	72	VAL
37	1f	78	GLU
38	1g	12	LEU
38	1g	30	ILE
38	1g	59	LEU
38	1g	61	VAL
38	1g	76	ARG
38	1g	79	ARG
38	1g	92	SER
38	1g	97	GLN
38	1g	98	SER
38	1g	104	LEU
38	1g	113	GLU
38	1g	120	ILE
38	1g	131	LYS
38	1g	135	VAL
39	1h	2	LEU
39	1h	13	ILE
39	1h	29	SER
39	1h	32	LYS
39	1h	51	VAL
39	1h	52	ASP
39	1h	54	ASP
39	1h	60	ARG
39	1h	77	GLU
39	1h	82	HIS
39	1h	85	ARG
39	1h	112	LEU
39	1h	127	LEU
40	1i	27	THR
40	1i	56	LEU

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Mol	Chain	Res	Type
40	1i	65	VAL
40	1i	71	SER
40	1i	81	ILE
40	1i	87	GLN
40	1i	92	TYR
40	1i	96	LEU
40	1i	105	ASP
40	1i	109	VAL
40	1i	110	GLU
40	1i	128	ARG
41	1j	23	ILE
41	1j	34	VAL
41	1j	66	ARG
41	1j	92	THR
41	1j	100	THR
42	1k	31	THR
42	1k	33	THR
42	1k	48	ILE
42	1k	66	LEU
42	1k	96	ARG
42	1k	109	VAL
42	1k	114	VAL
43	1l	6	THR
43	1l	18	VAL
43	1l	27	LEU
43	1l	33	ARG
43	1l	36	VAL
43	1l	55	VAL
43	1l	58	VAL
43	1l	89	ARG
44	1m	14	ARG
44	1m	15	VAL
44	1m	17	VAL
44	1m	43	THR
44	1m	52	GLU
44	1m	60	VAL
44	1m	73	GLU
44	1m	109	THR
44	1m	114	ARG
44	1m	117	VAL
44	1m	121	LYS
45	1n	6	LEU

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Mol	Chain	Res	Type
45	1n	7	ILE
45	1n	18	VAL
45	1n	33	VAL
45	1n	35	ARG
45	1n	56	VAL
46	1o	3	ILE
46	1o	7	GLU
46	1o	39	LEU
46	1o	40	SER
46	1o	87	ILE
47	1p	5	ARG
47	1p	20	VAL
47	1p	40	ASP
47	1p	45	THR
47	1p	49	LEU
47	1p	62	VAL
47	1p	67	THR
48	1q	9	VAL
48	1q	12	SER
48	1q	19	VAL
48	1q	35	VAL
48	1q	43	LEU
48	1q	52	LYS
48	1q	62	SER
48	1q	63	ARG
48	1q	72	ARG
49	1r	26	LEU
49	1r	47	THR
49	1r	74	ARG
50	1s	5	LEU
50	1s	12	ASP
50	1s	17	GLU
50	1s	37	ARG
50	1s	49	ILE
50	1s	66	MET
51	1t	10	LEU
51	1t	25	ARG
51	1t	56	MET
51	1t	62	LEU
51	1t	72	LEU
52	1u	7	ARG
52	1u	9	ARG

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Mol	Chain	Res	Type
52	1u	17	THR
52	1u	20	LYS
3	2D	3	VAL
3	2D	34	VAL
3	2D	37	LEU
3	2D	106	ILE
3	2D	111	LEU
3	2D	113	VAL
3	2D	138	VAL
3	2D	142	VAL
3	2D	171	ASP
3	2D	217	ARG
3	2D	242	ARG
3	2D	260	ARG
3	2D	271	ILE
3	2D	276	LYS
4	2E	12	THR
4	2E	14	ILE
4	2E	21	VAL
4	2E	38	THR
4	2E	49	LEU
4	2E	73	GLU
4	2E	75	VAL
4	2E	89	ASP
4	2E	104	VAL
4	2E	116	VAL
4	2E	134	ILE
4	2E	178	GLU
4	2E	195	LEU
5	2F	28	ILE
5	2F	32	LEU
5	2F	33	LEU
5	2F	37	VAL
5	2F	44	ARG
5	2F	53	THR
5	2F	70	THR
5	2F	88	VAL
5	2F	106	ARG
5	2F	140	LEU
5	2F	158	THR
5	2F	161	GLU
5	2F	165	ARG

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Mol	Chain	Res	Type
5	2F	170	LEU
5	2F	183	VAL
5	2F	192	LEU
5	2F	196	LEU
6	2G	3	LEU
6	2G	5	VAL
6	2G	7	LEU
6	2G	31	VAL
6	2G	43	LEU
6	2G	49	ASP
6	2G	60	LEU
6	2G	70	VAL
6	2G	79	ASN
6	2G	91	ARG
6	2G	92	VAL
6	2G	111	LEU
6	2G	130	ASN
6	2G	133	LEU
6	2G	135	LEU
6	2G	140	ILE
6	2G	145	THR
6	2G	157	ILE
6	2G	159	VAL
6	2G	162	THR
6	2G	165	THR
7	2H	15	VAL
7	2H	27	LYS
7	2H	35	VAL
7	2H	45	VAL
7	2H	49	VAL
7	2H	63	SER
7	2H	72	ILE
7	2H	84	SER
7	2H	86	GLU
7	2H	88	LEU
7	2H	98	LEU
7	2H	103	LEU
7	2H	114	VAL
7	2H	122	THR
7	2H	129	THR
7	2H	134	SER
7	2H	136	ILE

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Mol	Chain	Res	Type
8	2I	15	VAL
8	2I	38	LEU
8	2I	40	THR
8	2I	43	ASN
8	2I	51	ILE
8	2I	58	LEU
8	2I	74	ASN
8	2I	77	LEU
8	2I	92	VAL
8	2I	125	GLU
8	2I	127	VAL
8	2I	139	GLN
8	2I	144	VAL
8	2I	145	VAL
9	2N	9	VAL
9	2N	33	LEU
9	2N	38	HIS
9	2N	43	THR
9	2N	46	VAL
9	2N	58	ASP
9	2N	62	VAL
9	2N	68	GLU
9	2N	85	ILE
9	2N	118	LYS
10	2O	10	VAL
10	2O	13	ASN
10	2O	42	SER
10	2O	63	VAL
10	2O	69	ILE
10	2O	75	SER
10	2O	77	ILE
10	2O	108	GLU
11	2P	3	LEU
11	2P	4	SER
11	2P	15	ARG
11	2P	29	LYS
11	2P	35	HIS
11	2P	36	LYS
11	2P	42	SER
11	2P	45	LEU
11	2P	58	THR
11	2P	65	ARG

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Mol	Chain	Res	Type
11	2P	83	VAL
11	2P	86	LYS
11	2P	90	ARG
11	2P	95	VAL
11	2P	99	LEU
11	2P	101	VAL
11	2P	119	GLU
11	2P	133	SER
12	2Q	1	MET
12	2Q	22	LYS
12	2Q	38	GLU
12	2Q	60	ARG
12	2Q	75	THR
12	2Q	103	MET
12	2Q	109	VAL
12	2Q	110	THR
12	2Q	139	GLU
13	2R	29	LEU
13	2R	30	THR
13	2R	36	THR
13	2R	79	LEU
13	2R	95	THR
13	2R	118	GLU
14	2S	13	ARG
14	2S	36	TYR
14	2S	46	VAL
14	2S	48	LEU
14	2S	49	VAL
14	2S	58	LEU
14	2S	76	LYS
14	2S	78	LEU
14	2S	84	GLN
14	2S	85	VAL
14	2S	110	LEU
15	2T	6	LEU
15	2T	15	VAL
15	2T	27	THR
15	2T	46	GLU
15	2T	89	VAL
15	2T	96	ARG
16	2U	6	THR
16	2U	53	ARG

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Mol	Chain	Res	Type
16	2U	55	ARG
16	2U	74	LEU
17	2V	7	THR
17	2V	14	VAL
17	2V	33	VAL
17	2V	52	VAL
17	2V	61	VAL
17	2V	79	VAL
17	2V	98	GLU
18	2W	11	ARG
18	2W	17	VAL
18	2W	67	ASP
18	2W	68	ARG
18	2W	92	ARG
18	2W	96	ILE
19	2X	54	VAL
19	2X	57	LEU
19	2X	81	VAL
20	2Y	3	VAL
20	2Y	11	ASP
20	2Y	14	LEU
20	2Y	42	VAL
20	2Y	49	VAL
20	2Y	55	TYR
20	2Y	72	VAL
20	2Y	85	VAL
20	2Y	90	LEU
20	2Y	99	CYS
20	2Y	106	LEU
21	2Z	24	LEU
21	2Z	32	HIS
21	2Z	33	LEU
21	2Z	35	ARG
21	2Z	38	TYR
21	2Z	42	VAL
21	2Z	50	GLN
21	2Z	52	SER
21	2Z	70	LEU
21	2Z	84	GLU
21	2Z	96	VAL
21	2Z	100	VAL
21	2Z	129	SER

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Mol	Chain	Res	Type
21	2Z	144	LEU
21	2Z	153	SER
21	2Z	154	ASP
21	2Z	161	VAL
21	2Z	165	VAL
21	2Z	170	THR
21	2Z	171	ILE
21	2Z	174	VAL
22	20	7	LEU
22	20	14	ARG
22	20	30	VAL
22	20	63	VAL
22	20	68	GLU
23	21	40	ARG
23	21	56	GLN
23	21	59	THR
23	21	80	LEU
23	21	95	LEU
23	21	98	LEU
24	22	35	LEU
24	22	49	LYS
24	22	53	LEU
24	22	55	ARG
24	22	60	LEU
24	22	64	LEU
24	22	70	GLN
25	23	23	LEU
25	23	31	LEU
25	23	53	LEU
25	23	54	VAL
26	24	9	LEU
26	24	10	VAL
26	24	26	SER
26	24	27	THR
26	24	34	GLU
26	24	37	SER
26	24	44	THR
26	24	46	GLN
26	24	56	VAL
26	24	59	PHE
26	24	60	GLN
26	24	62	ARG

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Mol	Chain	Res	Type
26	24	63	TYR
27	25	6	VAL
27	25	16	ARG
27	25	29	THR
27	25	58	LEU
28	26	5	VAL
28	26	6	ARG
28	26	9	LEU
28	26	19	ARG
28	26	30	THR
28	26	48	VAL
29	27	24	THR
29	27	46	VAL
30	28	23	VAL
30	28	46	ARG
31	29	6	SER
31	29	7	VAL
31	29	9	ARG
31	29	15	LYS
31	29	26	ILE
31	29	28	GLU
33	2b	7	VAL
33	2b	8	LYS
33	2b	10	LEU
33	2b	11	LEU
33	2b	16	HIS
33	2b	22	LYS
33	2b	35	GLU
33	2b	56	ARG
33	2b	67	THR
33	2b	68	ILE
33	2b	93	VAL
33	2b	94	ASN
33	2b	109	SER
33	2b	118	LEU
33	2b	127	ILE
33	2b	135	GLN
33	2b	140	HIS
33	2b	144	ARG
33	2b	168	THR
33	2b	179	LYS
33	2b	185	ILE

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Mol	Chain	Res	Type
33	2b	196	LEU
33	2b	204	ASN
33	2b	230	VAL
34	2c	10	PHE
34	2c	17	ASP
34	2c	21	ARG
34	2c	44	GLU
34	2c	47	LEU
34	2c	49	SER
34	2c	52	LEU
34	2c	57	ILE
34	2c	70	VAL
34	2c	101	LEU
34	2c	115	LEU
34	2c	153	VAL
34	2c	165	THR
34	2c	166	GLU
34	2c	179	ARG
34	2c	191	THR
34	2c	199	LYS
34	2c	207	VAL
35	2d	5	ILE
35	2d	10	ARG
35	2d	17	VAL
35	2d	47	ARG
35	2d	49	ARG
35	2d	76	ARG
35	2d	118	ARG
35	2d	135	LEU
35	2d	148	VAL
35	2d	150	GLU
35	2d	166	LYS
35	2d	168	ARG
35	2d	170	VAL
35	2d	175	SER
35	2d	184	LYS
35	2d	198	VAL
35	2d	205	GLU
36	2e	12	LEU
36	2e	13	ILE
36	2e	20	GLN
36	2e	25	ARG

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Mol	Chain	Res	Type
36	2e	32	VAL
36	2e	38	GLN
36	2e	41	VAL
36	2e	47	LYS
36	2e	112	LEU
36	2e	131	ILE
36	2e	149	GLU
37	2f	45	LEU
37	2f	48	LEU
37	2f	63	TYR
37	2f	70	ASP
37	2f	72	VAL
37	2f	89	MET
38	2g	9	VAL
38	2g	15	ASP
38	2g	24	THR
38	2g	33	ASP
38	2g	38	LEU
38	2g	76	ARG
38	2g	78	ARG
38	2g	79	ARG
38	2g	90	GLU
38	2g	98	SER
38	2g	104	LEU
38	2g	113	GLU
38	2g	119	ARG
38	2g	146	GLU
39	2h	10	LEU
39	2h	24	THR
39	2h	51	VAL
39	2h	52	ASP
39	2h	77	GLU
39	2h	88	LYS
39	2h	98	LYS
39	2h	99	GLU
39	2h	122	ARG
39	2h	127	LEU
39	2h	133	LEU
39	2h	137	VAL
40	2i	40	LEU
40	2i	41	VAL
40	2i	50	LEU

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Mol	Chain	Res	Type
40	2i	51	ARG
40	2i	53	VAL
40	2i	54	ASP
40	2i	63	ILE
40	2i	64	THR
40	2i	65	VAL
40	2i	86	VAL
40	2i	87	GLN
40	2i	89	ASN
40	2i	102	LEU
40	2i	108	VAL
40	2i	110	GLU
41	2j	38	ILE
41	2j	49	VAL
41	2j	84	GLN
41	2j	98	ILE
42	2k	14	VAL
42	2k	24	SER
42	2k	82	VAL
42	2k	84	VAL
42	2k	105	VAL
42	2k	107	SER
42	2k	109	VAL
42	2k	114	VAL
43	2l	18	VAL
43	2l	37	CYS
43	2l	42	THR
43	2l	54	LYS
43	2l	55	VAL
43	2l	67	THR
43	2l	97	ARG
44	2m	4	ILE
44	2m	11	ARG
44	2m	14	ARG
44	2m	15	VAL
44	2m	19	LEU
44	2m	39	ILE
44	2m	47	ASP
44	2m	60	VAL
44	2m	64	TRP
44	2m	65	LYS
44	2m	81	LEU

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Mol	Chain	Res	Type
44	2m	86	CYS
44	2m	103	THR
44	2m	117	VAL
45	2n	6	LEU
45	2n	7	ILE
45	2n	33	VAL
45	2n	35	ARG
46	2o	5	LYS
46	2o	7	GLU
46	2o	39	LEU
46	2o	68	ARG
46	2o	83	GLU
46	2o	87	ILE
47	2p	2	VAL
47	2p	20	VAL
47	2p	21	VAL
47	2p	28	ARG
47	2p	35	LYS
47	2p	42	ARG
47	2p	62	VAL
47	2p	67	THR
47	2p	69	THR
47	2p	74	LEU
48	2q	5	VAL
48	2q	14	LYS
48	2q	41	LYS
48	2q	56	VAL
48	2q	60	ILE
48	2q	63	ARG
48	2q	83	ASP
48	2q	93	GLN
49	2r	21	LYS
49	2r	26	LEU
49	2r	37	VAL
49	2r	46	GLU
49	2r	47	THR
49	2r	66	LEU
49	2r	84	LYS
49	2r	86	VAL
50	2s	21	GLU
50	2s	22	LEU
50	2s	27	GLU

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Mol	Chain	Res	Type
50	2s	48	THR
50	2s	60	VAL
50	2s	71	LEU
50	2s	77	THR
51	2t	24	LEU
51	2t	35	THR
51	2t	37	SER
51	2t	41	ILE
51	2t	51	GLU
51	2t	62	LEU
51	2t	71	THR
51	2t	100	ILE
52	2u	7	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (141) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	96	HIS
4	1E	48	GLN
4	1E	85	ASN
5	1F	8	GLN
5	1F	69	HIS
5	1F	203	GLN
6	1G	26	GLN
6	1G	108	ASN
7	1H	74	ASN
8	1I	28	ASN
8	1I	74	ASN
8	1I	105	HIS
10	1O	89	ASN
12	1Q	12	GLN
12	1Q	57	HIS
13	1R	31	HIS
13	1R	61	HIS
13	1R	71	GLN
16	1U	94	ASN
19	1X	31	HIS
20	1Y	6	HIS
20	1Y	43	ASN
21	1Z	34	ASN
21	1Z	55	HIS
21	1Z	73	GLN

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Mol	Chain	Res	Type
21	1Z	121	HIS
21	1Z	132	ASN
23	11	56	GLN
24	12	38	GLN
26	14	46	GLN
31	19	20	HIS
33	1b	40	HIS
33	1b	78	GLN
34	1c	6	HIS
34	1c	162	GLN
35	1d	42	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	123	HIS
35	1d	201	GLN
36	1e	73	ASN
37	1f	32	ASN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	96	GLN
39	1h	15	ASN
40	1i	3	GLN
40	1i	31	GLN
40	1i	124	GLN
41	1j	56	HIS
42	1k	116	HIS
43	1l	99	HIS
44	1m	40	ASN
45	1n	49	HIS
46	1o	46	HIS
46	1o	62	GLN
48	1q	16	GLN
48	1q	26	GLN
50	1s	23	ASN
50	1s	47	HIS
50	1s	83	HIS
51	1t	73	HIS
51	1t	75	ASN
3	2D	112	GLN
4	2E	48	GLN
5	2F	69	HIS

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Mol	Chain	Res	Type
5	2F	75	HIS
5	2F	203	GLN
6	2G	26	GLN
6	2G	66	GLN
6	2G	132	ASN
7	2H	139	GLN
8	2I	133	HIS
10	2O	3	GLN
10	2O	13	ASN
10	2O	89	ASN
10	2O	90	GLN
12	2Q	57	HIS
12	2Q	89	ASN
12	2Q	113	GLN
13	2R	31	HIS
13	2R	61	HIS
13	2R	71	GLN
14	2S	34	HIS
14	2S	38	GLN
15	2T	43	GLN
15	2T	55	ASN
15	2T	90	GLN
16	2U	72	HIS
16	2U	81	HIS
17	2V	80	GLN
18	2W	60	ASN
19	2X	31	HIS
20	2Y	43	ASN
21	2Z	34	ASN
21	2Z	55	HIS
21	2Z	73	GLN
21	2Z	151	HIS
22	20	3	HIS
22	20	70	GLN
23	21	56	GLN
24	22	38	GLN
24	22	56	GLN
24	22	70	GLN
25	23	32	GLN
30	28	35	GLN
33	2b	25	ASN
33	2b	40	HIS

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Mol	Chain	Res	Type
33	2b	78	GLN
33	2b	212	GLN
34	2c	6	HIS
34	2c	98	ASN
35	2d	45	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	125	HIS
36	2e	73	ASN
36	2e	127	ASN
36	2e	130	ASN
36	2e	141	GLN
37	2f	73	ASN
38	2g	28	ASN
38	2g	37	ASN
38	2g	64	GLN
38	2g	148	ASN
39	2h	15	ASN
40	2i	3	GLN
40	2i	31	GLN
40	2i	89	ASN
40	2i	124	GLN
41	2j	13	HIS
43	2l	99	HIS
44	2m	62	ASN
44	2m	77	ASN
44	2m	106	ASN
46	2o	62	GLN
48	2q	16	GLN
50	2s	23	ASN
50	2s	69	HIS

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	472 (16%)	36 (1%)
1	2A	2791/2915 (95%)	518 (18%)	25 (0%)
2	1B	120/121 (99%)	12 (10%)	1 (0%)
2	2B	118/121 (97%)	30 (25%)	0
32	1a	1497/1521 (98%)	270 (18%)	0

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
32	2a	1501/1521 (98%)	301 (20%)	0
53	1v	12/24 (50%)	2 (16%)	0
53	2v	12/24 (50%)	3 (25%)	0
54	1w	72/76 (94%)	18 (25%)	0
54	1y	72/76 (94%)	27 (37%)	0
54	2w	69/76 (90%)	22 (31%)	0
54	2y	70/76 (92%)	28 (40%)	0
55	1x	75/77 (97%)	12 (16%)	0
55	2x	75/77 (97%)	17 (22%)	0
All	All	9348/9620 (97%)	1732 (18%)	62 (0%)

All (1732) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	10	G
1	1A	11	G
1	1A	12	U
1	1A	27	G
1	1A	34	C
1	1A	45	C
1	1A	55	G
1	1A	58	G
1	1A	63	U
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	126	A
1	1A	139(A)	G
1	1A	182	A
1	1A	196	A
1	1A	199	A
1	1A	201	C
1	1A	205	G
1	1A	214	G
1	1A	216	A
1	1A	222	A
1	1A	223	A

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Mol	Chain	Res	Type
1	1A	225	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	264	C
1	1A	269	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(B)	G
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	283	A
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	342	G
1	1A	352	G
1	1A	363	G
1	1A	363(A)	A
1	1A	363(B)	G
1	1A	363(E)	U
1	1A	370	G
1	1A	380	U
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	428	A
1	1A	435	C
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	504	U

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Mol	Chain	Res	Type
1	1A	505	A
1	1A	509	C
1	1A	512	G
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	551	G
1	1A	563	G
1	1A	568	U
1	1A	573	G
1	1A	574	C
1	1A	575	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	686	G
1	1A	717	G
1	1A	730	C
1	1A	740	U
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	790	C

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Mol	Chain	Res	Type
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	855	G
1	1A	859	G
1	1A	866	A
1	1A	879	G
1	1A	880	G
1	1A	882	G
1	1A	883	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	887	A
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	907	U
1	1A	910	A
1	1A	915	C
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	949	C
1	1A	953	A
1	1A	959	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1005	C
1	1A	1008	C
1	1A	1012	U
1	1A	1013	C

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Mol	Chain	Res	Type
1	1A	1022	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1038	C
1	1A	1044	G
1	1A	1046	A
1	1A	1047	G
1	1A	1054	A
1	1A	1055	G
1	1A	1058	G
1	1A	1068	G
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1083	U
1	1A	1084	A
1	1A	1085	A
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1091	G
1	1A	1094	U
1	1A	1100	C
1	1A	1101	U
1	1A	1103	A
1	1A	1110	G
1	1A	1111	A
1	1A	1112	G
1	1A	1116	C
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A

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Mol	Chain	Res	Type
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1205	U
1	1A	1211	U
1	1A	1212	G
1	1A	1218	C
1	1A	1227	G
1	1A	1236	G
1	1A	1244	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1288	U
1	1A	1298	C
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1320	C
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1372	U
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1437	C
1	1A	1439	A
1	1A	1445	A
1	1A	1446	C

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Mol	Chain	Res	Type
1	1A	1450	G
1	1A	1455	G
1	1A	1461	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1496	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1540	U
1	1A	1541	G
1	1A	1543	C
1	1A	1554	A
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1580	A
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1607	C
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1648	C
1	1A	1654	A
1	1A	1664	A
1	1A	1674	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1739	U
1	1A	1746	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C

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Mol	Chain	Res	Type
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1802	A
1	1A	1812	A
1	1A	1816	G
1	1A	1828	G
1	1A	1829	A
1	1A	1847	A
1	1A	1858	G
1	1A	1861	G
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1946	U
1	1A	1955	U
1	1A	1963	U
1	1A	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2062	A

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Mol	Chain	Res	Type
1	1A	2069	G
1	1A	2082	A
1	1A	2093	G
1	1A	2096	U
1	1A	2110	G
1	1A	2111	C
1	1A	2112	G
1	1A	2113	U
1	1A	2114	A
1	1A	2116	G
1	1A	2118	U
1	1A	2121	G
1	1A	2122	U
1	1A	2123	G
1	1A	2127	G
1	1A	2129	C
1	1A	2130	U
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2141	G
1	1A	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2155	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2165	G
1	1A	2166	G
1	1A	2168	G
1	1A	2171	A
1	1A	2172	U
1	1A	2178	C
1	1A	2181	G
1	1A	2182	G

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Mol	Chain	Res	Type
1	1A	2183	C
1	1A	2184	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2219	G
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2278	A
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2289	G
1	1A	2294	C
1	1A	2296	U
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2361	A
1	1A	2383	G
1	1A	2385	C
1	1A	2396	G
1	1A	2400	G
1	1A	2406	U
1	1A	2407	G
1	1A	2409	G
1	1A	2424	C
1	1A	2425	A
1	1A	2428	G
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U

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Mol	Chain	Res	Type
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2468	G
1	1A	2474	C
1	1A	2476	A
1	1A	2478	A
1	1A	2490	G
1	1A	2498	C
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2549	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2578	G
1	1A	2585	U
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2641	G
1	1A	2654	A
1	1A	2670	A
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2702	U
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A

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Mol	Chain	Res	Type
1	1A	2757	A
1	1A	2758	A
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2769	C
1	1A	2778	A
1	1A	2780	G
1	1A	2789	C
1	1A	2790	A
1	1A	2791	C
1	1A	2793	G
1	1A	2794	C
1	1A	2802	G
1	1A	2805	G
1	1A	2820	A
1	1A	2821	A
1	1A	2835	A
1	1A	2872	G
1	1A	2876	G
1	1A	2880	C
1	1A	2892	A
1	1A	2894	G
1	1A	2895	U
2	1B	2	C
2	1B	5	C
2	1B	15	A
2	1B	24	G
2	1B	35	U
2	1B	52	A
2	1B	56	G
2	1B	73	A
2	1B	85	G
2	1B	106	G
2	1B	110	G
2	1B	118	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	47	C
32	1a	48	C

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Mol	Chain	Res	Type
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	66	G
32	1a	69	G
32	1a	79	G
32	1a	91	C
32	1a	96	U
32	1a	98	G
32	1a	101	A
32	1a	105	G
32	1a	111	G
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	151	A
32	1a	163	C
32	1a	174	C
32	1a	183	G
32	1a	189	G
32	1a	189(F)	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	220	G
32	1a	222	U
32	1a	247	G
32	1a	251	G
32	1a	254	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	328	C
32	1a	332	G

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Mol	Chain	Res	Type
32	1a	342	C
32	1a	344	A
32	1a	345	C
32	1a	348	G
32	1a	351	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	381	C
32	1a	384	G
32	1a	390	C
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	421	U
32	1a	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	458	C
32	1a	461	A
32	1a	471	G
32	1a	477	A
32	1a	483	C
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	508	C
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	524	G
32	1a	528	C
32	1a	531	U

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Mol	Chain	Res	Type
32	1a	532	A
32	1a	534	U
32	1a	536	C
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	562	C
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	608	A
32	1a	616	G
32	1a	630	G
32	1a	653	A
32	1a	659	U
32	1a	665	A
32	1a	683	G
32	1a	687	A
32	1a	688	G
32	1a	693	G
32	1a	695	A
32	1a	702	A
32	1a	703	G
32	1a	723	U
32	1a	731	G
32	1a	734	G
32	1a	749	C
32	1a	755	G
32	1a	759	A
32	1a	766	A
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

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Mol	Chain	Res	Type
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	853	G
32	1a	859	A
32	1a	860	A
32	1a	872	A
32	1a	884	U
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	916	G
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	942	G
32	1a	955	U
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	972	C
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	982	U
32	1a	992	U
32	1a	993	G
32	1a	996	A
32	1a	997	U
32	1a	1000	U
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1007	C
32	1a	1009	G
32	1a	1010	G
32	1a	1020	U
32	1a	1022	G
32	1a	1024	G

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Mol	Chain	Res	Type
32	1a	1025	U
32	1a	1026	G
32	1a	1028	C
32	1a	1029	C
32	1a	1030(A)	G
32	1a	1030(B)	C
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1039	C
32	1a	1043	C
32	1a	1044	A
32	1a	1046	A
32	1a	1053	G
32	1a	1054	C
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1096	C
32	1a	1101	A
32	1a	1104	G
32	1a	1108	G
32	1a	1123	A
32	1a	1125	U
32	1a	1132	C
32	1a	1134	G
32	1a	1135	U
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	1154	G
32	1a	1157	A
32	1a	1159	U
32	1a	1160	G
32	1a	1184	G
32	1a	1196	U

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Mol	Chain	Res	Type
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	1236	A
32	1a	1238	A
32	1a	1250	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1260	C
32	1a	1270	C
32	1a	1275	A
32	1a	1276	G
32	1a	1277	C
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1320	C
32	1a	1322	C
32	1a	1338	G
32	1a	1346	A
32	1a	1347	G
32	1a	1363	C
32	1a	1364	U
32	1a	1370	G
32	1a	1380	U
32	1a	1390	U
32	1a	1397	C
32	1a	1419	G
32	1a	1422	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1446	U

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Mol	Chain	Res	Type
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1475	G
32	1a	1487	G
32	1a	1492	A
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
53	1v	24	A
54	1w	2	C
54	1w	6	G
54	1w	7	A
54	1w	14	A
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	24	G
54	1w	25	C
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	62	C
54	1w	68	C
54	1w	70	G
54	1w	73	A
54	1w	74	C
54	1w	76	A
55	1x	3	C
55	1x	9	G
55	1x	13	C
55	1x	14	A
55	1x	18	G
55	1x	19	G
55	1x	21	A
55	1x	46	G
55	1x	47	U
55	1x	61	C

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Mol	Chain	Res	Type
55	1x	69	C
55	1x	76	A
54	1y	6	G
54	1y	8	4SU
54	1y	11	C
54	1y	13	C
54	1y	19	G
54	1y	20	U
54	1y	21	A
54	1y	26	A
54	1y	31	A
54	1y	34	G
54	1y	35	A
54	1y	36	A
54	1y	44	G
54	1y	45	U
54	1y	46	G7M
54	1y	47	U
54	1y	48	C
54	1y	49	C
54	1y	53	G
54	1y	56	C
54	1y	57	G
54	1y	59	U
54	1y	61	C
54	1y	65	G
54	1y	69	G
54	1y	70	G
54	1y	73	A
1	2A	8	A
1	2A	10	G
1	2A	11	G
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	79	G
1	2A	84	A
1	2A	90	U

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Mol	Chain	Res	Type
1	2A	94	C
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	120	U
1	2A	125	G
1	2A	140	G
1	2A	149	A
1	2A	154(A)	C
1	2A	157	U
1	2A	172	C
1	2A	173	G
1	2A	181	A
1	2A	196	A
1	2A	199	A
1	2A	200	U
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	228	A
1	2A	229	A
1	2A	233	A
1	2A	248	G
1	2A	249	C
1	2A	250	G
1	2A	265	A
1	2A	266	G
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
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	281	G
1	2A	289	A
1	2A	294	A

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Mol	Chain	Res	Type
1	2A	311	A
1	2A	312	G
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	332	A
1	2A	342	G
1	2A	352	G
1	2A	354	G
1	2A	356	G
1	2A	362	U
1	2A	363	G
1	2A	363(B)	G
1	2A	363(E)	U
1	2A	380	U
1	2A	386	G
1	2A	391	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	416	C
1	2A	421	U
1	2A	444	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	499	U
1	2A	501	A
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	518	G
1	2A	529	A
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	563	G
1	2A	568	U
1	2A	573	G

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Mol	Chain	Res	Type
1	2A	575	A
1	2A	586	A
1	2A	588	U
1	2A	593	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	620	G
1	2A	627	A
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	669	G
1	2A	686	G
1	2A	699	A
1	2A	701	G
1	2A	717	G
1	2A	726	G
1	2A	730	C
1	2A	734	A
1	2A	740	U
1	2A	752	A
1	2A	753	C
1	2A	764	A
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	790	C
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	827	U

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Mol	Chain	Res	Type
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	878	A
1	2A	879	G
1	2A	880	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	894	C
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
1	2A	932	G
1	2A	933	A
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	950	G
1	2A	953	A
1	2A	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	1012	U
1	2A	1013	C

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Mol	Chain	Res	Type
1	2A	1017	G
1	2A	1020	A
1	2A	1022	G
1	2A	1025	G
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1043	C
1	2A	1114	G
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1143	A
1	2A	1144	G
1	2A	1166	C
1	2A	1170	G
1	2A	1171	G
1	2A	1188	U
1	2A	1211	U
1	2A	1218	C
1	2A	1220	A
1	2A	1229	G
1	2A	1237	A
1	2A	1244	G
1	2A	1252	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1284	A
1	2A	1300	U
1	2A	1301	A
1	2A	1314	C
1	2A	1320	C
1	2A	1327	C
1	2A	1345	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A

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Mol	Chain	Res	Type
1	2A	1368	G
1	2A	1370	C
1	2A	1379	A
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1437	C
1	2A	1441	G
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1455	G
1	2A	1460	A
1	2A	1461	G
1	2A	1465	G
1	2A	1467	C
1	2A	1471	A
1	2A	1478	G
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
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	1520	G
1	2A	1525	G
1	2A	1531	C
1	2A	1541	G
1	2A	1558	A
1	2A	1560	G
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U

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Mol	Chain	Res	Type
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1586	A
1	2A	1603	A
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1616	A
1	2A	1639	U
1	2A	1640	C
1	2A	1648	C
1	2A	1653	G
1	2A	1654	A
1	2A	1667	G
1	2A	1674	G
1	2A	1695	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1739	U
1	2A	1740	G
1	2A	1746	G
1	2A	1756	G
1	2A	1758	G
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1774	C
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	1812	A
1	2A	1816	G
1	2A	1835	G
1	2A	1839	G

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Mol	Chain	Res	Type
1	2A	1847	A
1	2A	1848	A
1	2A	1857	G
1	2A	1877	A
1	2A	1878	G
1	2A	1895	C
1	2A	1896	G
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1931	U
1	2A	1936	A
1	2A	1937	A
1	2A	1938	A
1	2A	1940	U
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1984	G
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	2032	G
1	2A	2033	A
1	2A	2036	C
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

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Mol	Chain	Res	Type
1	2A	2093	G
1	2A	2099	U
1	2A	2103	C
1	2A	2105	C
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2115	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	2130	U
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2137	C
1	2A	2138	C
1	2A	2140	C
1	2A	2142	C
1	2A	2146	C
1	2A	2150	U
1	2A	2151	G
1	2A	2152	G
1	2A	2153	G
1	2A	2155	G
1	2A	2156	G
1	2A	2157	G
1	2A	2161	C
1	2A	2162	G
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2172	U
1	2A	2174	C

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Mol	Chain	Res	Type
1	2A	2178	C
1	2A	2185	C
1	2A	2189	U
1	2A	2192	G
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2273	A
1	2A	2275	C
1	2A	2278	A
1	2A	2279	G
1	2A	2283	C
1	2A	2287	A
1	2A	2297	C
1	2A	2303	G
1	2A	2305	A
1	2A	2307	G
1	2A	2308	G
1	2A	2309	A
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G
1	2A	2327	A
1	2A	2334	G
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2358	G
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2391	G
1	2A	2396	G
1	2A	2403	C
1	2A	2406	U
1	2A	2410	G

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Mol	Chain	Res	Type
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2434	A
1	2A	2435	A
1	2A	2438	U
1	2A	2439	A
1	2A	2441	C
1	2A	2447	G
1	2A	2448	A
1	2A	2469	A
1	2A	2476	A
1	2A	2487	G
1	2A	2490	G
1	2A	2491	U
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2507	C
1	2A	2518	A
1	2A	2520	C
1	2A	2525	G
1	2A	2529	G
1	2A	2534	A
1	2A	2535	G
1	2A	2549	G
1	2A	2554	U
1	2A	2555	U
1	2A	2566	A
1	2A	2567	G
1	2A	2572	A
1	2A	2585	U
1	2A	2586	C
1	2A	2602	A
1	2A	2609	U
1	2A	2610	C
1	2A	2611	U
1	2A	2612	C
1	2A	2630	G
1	2A	2634	G
1	2A	2645	G

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Mol	Chain	Res	Type
1	2A	2654	A
1	2A	2669	G
1	2A	2673	G
1	2A	2686	G
1	2A	2689	U
1	2A	2690	C
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2718	G
1	2A	2726	U
1	2A	2733	A
1	2A	2751	G
1	2A	2752	C
1	2A	2757	A
1	2A	2758	A
1	2A	2761	G
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2780	G
1	2A	2789	C
1	2A	2793	G
1	2A	2802	G
1	2A	2803	C
1	2A	2804	C
1	2A	2808	U
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2836	U
1	2A	2839	G
1	2A	2872	G
1	2A	2873	A
1	2A	2880	C
1	2A	2892	A
1	2A	2894	G
1	2A	2895	U

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Mol	Chain	Res	Type
1	2A	2897	U
2	2B	2	C
2	2B	8	U
2	2B	9	G
2	2B	10	C
2	2B	13	A
2	2B	19	G
2	2B	31	C
2	2B	34	U
2	2B	40	U
2	2B	41	U
2	2B	42	C
2	2B	45	A
2	2B	53	A
2	2B	56	G
2	2B	63	G
2	2B	65	C
2	2B	67	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	84	C
2	2B	85	G
2	2B	88	C
2	2B	89	G
2	2B	106	G
2	2B	108	U
2	2B	110	G
2	2B	114	C
2	2B	116	G
2	2B	120	A
32	2a	6	G
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	65	U
32	2a	66	G

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Mol	Chain	Res	Type
32	2a	70	G
32	2a	73	G
32	2a	78	G
32	2a	89	C
32	2a	98	G
32	2a	101	A
32	2a	116	A
32	2a	120	A
32	2a	121	C
32	2a	127	G
32	2a	131	C
32	2a	144	G
32	2a	163	C
32	2a	174	C
32	2a	180	U
32	2a	182	U
32	2a	185	A
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	189(K)	U
32	2a	195	A
32	2a	197	A
32	2a	201	C
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	266	G
32	2a	267	C
32	2a	279	A
32	2a	289	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	340	U
32	2a	342	C
32	2a	350	G
32	2a	351	G
32	2a	352	C

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Mol	Chain	Res	Type
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	414	A
32	2a	422	C
32	2a	423	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	470	C
32	2a	471	G
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	527	G7M
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	560	U
32	2a	561	U
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	575	G
32	2a	576	G

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Mol	Chain	Res	Type
32	2a	577	G
32	2a	596	C
32	2a	607	A
32	2a	630	G
32	2a	653	A
32	2a	665	A
32	2a	666	G
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	702	A
32	2a	703	G
32	2a	721	G
32	2a	723	U
32	2a	725	G
32	2a	731	G
32	2a	733	A
32	2a	749	C
32	2a	755	G
32	2a	777	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	816	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	834	C
32	2a	840	C
32	2a	841	U
32	2a	848	C
32	2a	851	G
32	2a	855	G
32	2a	859	A
32	2a	870	U
32	2a	874	G
32	2a	880	C
32	2a	885	G
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G

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Mol	Chain	Res	Type
32	2a	931	C
32	2a	934	C
32	2a	935	A
32	2a	942	G
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	979	C
32	2a	982	U
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	994	A
32	2a	995	C
32	2a	996	A
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1001(A)	G
32	2a	1002	G
32	2a	1003	G
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1017	G
32	2a	1021	G
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G

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Mol	Chain	Res	Type
32	2a	1031	G
32	2a	1032	G
32	2a	1036	G
32	2a	1037	C
32	2a	1038	C
32	2a	1039	C
32	2a	1040	U
32	2a	1044	A
32	2a	1045	C
32	2a	1051	C
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C
32	2a	1067	A
32	2a	1068	G
32	2a	1077	G
32	2a	1079	G
32	2a	1081	G
32	2a	1086	U
32	2a	1087	G
32	2a	1091	U
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1104	G
32	2a	1108	G
32	2a	1109	C
32	2a	1113	C
32	2a	1115	C
32	2a	1117	G
32	2a	1121	U
32	2a	1122	U
32	2a	1125	U
32	2a	1126	U
32	2a	1129	C
32	2a	1130	A
32	2a	1134	G
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C

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Mol	Chain	Res	Type
32	2a	1141	C
32	2a	1146	A
32	2a	1148	U
32	2a	1149	C
32	2a	1152	A
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1160	G
32	2a	1161	C
32	2a	1172	C
32	2a	1174	G
32	2a	1176	A
32	2a	1182	G
32	2a	1183	A
32	2a	1184	G
32	2a	1185	G
32	2a	1193	G
32	2a	1196	U
32	2a	1197	G
32	2a	1202	G
32	2a	1210	C
32	2a	1211	U
32	2a	1213	A
32	2a	1214	C
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1262	C
32	2a	1268	A
32	2a	1270	C
32	2a	1272	G
32	2a	1275	A
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A

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Mol	Chain	Res	Type
32	2a	1282	C
32	2a	1286	A
32	2a	1287	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1306	A
32	2a	1311	G
32	2a	1323	G
32	2a	1338	G
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1357	A
32	2a	1358	U
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1378	C
32	2a	1380	U
32	2a	1381	U
32	2a	1397	C
32	2a	1404	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1452	C
32	2a	1492	A
32	2a	1494	G
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G
53	2v	13	A
53	2v	14	A
53	2v	24	A
54	2w	5	G

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Mol	Chain	Res	Type
54	2w	8	4SU
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	25	C
54	2w	27	G
54	2w	29	G
54	2w	46	G7M
54	2w	47	U
54	2w	48	C
54	2w	62	C
54	2w	64	A
54	2w	65	G
54	2w	67	C
54	2w	69	G
54	2w	70	G
54	2w	73	A
54	2w	74	C
54	2w	75	C
54	2w	76	A
55	2x	9	G
55	2x	10	G
55	2x	13	C
55	2x	18	G
55	2x	19	G
55	2x	20	U
55	2x	21	A
55	2x	22	G
55	2x	28	C
55	2x	46	G
55	2x	47	U
55	2x	51	C
55	2x	52	G
55	2x	56	C
55	2x	61	C
55	2x	63	G
55	2x	76	A
54	2y	2	C
54	2y	14	A
54	2y	15	G
54	2y	19	G

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Mol	Chain	Res	Type
54	2y	23	A
54	2y	25	C
54	2y	27	G
54	2y	37	MIA
54	2y	40	C
54	2y	42	C
54	2y	45	U
54	2y	46	G7M
54	2y	48	C
54	2y	49	C
54	2y	53	G
54	2y	54	5MU
54	2y	55	PSU
54	2y	56	C
54	2y	57	G
54	2y	58	A
54	2y	59	U
54	2y	63	G
54	2y	65	G
54	2y	67	C
54	2y	68	C
54	2y	69	G
54	2y	70	G
54	2y	73	A

All (62) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	573	G
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	895	U
1	1A	974	G
1	1A	1065	U
1	1A	1067	A
1	1A	1078	U

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Mol	Chain	Res	Type
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1210	A
1	1A	1379	A
1	1A	1420	U
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1653	G
1	1A	1929	G
1	1A	1992	G
1	1A	2134	A
1	1A	2170	A
1	1A	2181	G
1	1A	2183	C
1	1A	2406	U
1	1A	2430	A
1	1A	2439	A
1	1A	2629	A
1	1A	2689	U
1	1A	2756	U
2	1B	1	U
1	2A	195	A
1	2A	228	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	528	A
1	2A	746	A
1	2A	752	A
1	2A	774	A
1	2A	827	U
1	2A	839	U
1	2A	856	C
1	2A	900	A
1	2A	1210	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1530	C
1	2A	1653	G

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Mol	Chain	Res	Type
1	2A	1913	A
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2689	U
1	2A	2756	U

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

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$
1	OMG	2A	2251	1,55	23,26,27	1.21	3 (13%)	32,38,41	1.96	6 (18%)
32	G7M	1a	527	32	23,26,27	1.52	3 (13%)	34,39,42	1.71	5 (14%)
1	PSU	2A	1911	1	18,21,22	1.36	2 (11%)	21,30,33	2.07	3 (14%)
32	MA6	1a	1519	32	23,26,27	0.47	0	33,38,41	2.09	8 (24%)
32	5MC	1a	1407	32	19,22,23	1.63	3 (15%)	26,32,35	1.17	4 (15%)
1	OMG	1A	2251	1,55,56	23,26,27	1.27	3 (13%)	32,38,41	1.92	6 (18%)
1	5MC	2A	1962	1,56	19,22,23	1.61	3 (15%)	26,32,35	1.11	2 (7%)
1	2MA	1A	2503	1,56	22,25,26	1.45	4 (18%)	32,37,40	2.25	9 (28%)
54	MIA	2w	37	54	24,27,32	2.09	6 (25%)	32,39,47	2.28	9 (28%)
32	5MC	1a	1404	32	19,22,23	1.71	3 (15%)	26,32,35	1.15	2 (7%)
32	MA6	2a	1518	32	23,26,27	0.41	0	33,38,41	1.98	9 (27%)
1	5MC	1A	1962	1,56	19,22,23	1.58	3 (15%)	26,32,35	1.14	2 (7%)
54	PSU	1y	55	54	18,21,22	1.36	2 (11%)	21,30,33	2.07	4 (19%)
55	PSU	2x	55	55	18,21,22	1.37	2 (11%)	21,30,33	2.00	3 (14%)
1	2MA	2A	2503	1,56	22,25,26	1.45	5 (22%)	32,37,40	2.26	9 (28%)
54	PSU	1y	39	54	18,21,22	1.40	2 (11%)	21,30,33	1.83	4 (19%)
1	PSU	2A	1917	1	18,21,22	1.32	2 (11%)	21,30,33	1.97	4 (19%)
55	4SU	1x	8	55	18,21,22	2.19	5 (27%)	25,30,33	1.58	5 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
54	G7M	2y	46	54	23,26,27	1.61	3 (13%)	34,39,42	1.93	4 (11%)
1	5MU	1A	1915	1	19,22,23	1.46	5 (26%)	27,32,35	2.06	8 (29%)
1	5MC	1A	1942	1,56	19,22,23	1.50	3 (15%)	26,32,35	1.18	2 (7%)
32	UR3	2a	1498	32	19,22,23	1.00	1 (5%)	26,32,35	1.71	3 (11%)
54	G7M	2w	46	54	23,26,27	1.48	3 (13%)	34,39,42	1.63	5 (14%)
54	MIA	2y	37	54	21,24,32	1.58	3 (14%)	30,35,47	2.03	10 (33%)
54	MIA	1y	37	54	21,24,32	1.64	4 (19%)	30,35,47	2.00	7 (23%)
32	5MC	2a	1404	32	19,22,23	1.61	3 (15%)	26,32,35	1.22	3 (11%)
54	4SU	2w	8	54	18,21,22	1.75	4 (22%)	25,30,33	2.29	5 (20%)
32	5MC	1a	967	32	19,22,23	1.73	3 (15%)	26,32,35	1.13	2 (7%)
32	5MC	1a	1400	32	19,22,23	1.69	3 (15%)	26,32,35	1.13	2 (7%)
55	5MC	2x	32	55	19,22,23	1.70	3 (15%)	26,32,35	1.19	3 (11%)
43	0TD	2l	92	43	8,9,10	4.63	2 (25%)	6,11,13	2.40	3 (50%)
55	5MU	2x	54	55	19,22,23	1.36	5 (26%)	27,32,35	2.02	7 (25%)
32	UR3	1a	1498	32	19,22,23	1.02	1 (5%)	26,32,35	1.87	3 (11%)
54	5MU	2w	54	54	19,22,23	1.35	4 (21%)	27,32,35	1.71	6 (22%)
54	PSU	2y	55	54	18,21,22	1.37	2 (11%)	21,30,33	1.90	5 (23%)
32	2MG	2a	1207	32	23,26,27	1.24	3 (13%)	33,38,41	2.14	7 (21%)
54	PSU	2w	39	54	18,21,22	1.41	2 (11%)	21,30,33	1.74	3 (14%)
32	4OC	1a	1402	32	20,23,24	0.78	0	25,32,35	1.00	1 (4%)
54	PSU	1y	32	54	18,21,22	1.39	2 (11%)	21,30,33	1.82	3 (14%)
1	5MU	1A	1939	1,56	19,22,23	1.49	6 (31%)	27,32,35	2.24	6 (22%)
32	PSU	1a	516	32,56	18,21,22	1.39	2 (11%)	21,30,33	1.97	4 (19%)
54	PSU	2y	32	54	18,21,22	1.35	2 (11%)	21,30,33	1.91	3 (14%)
1	PSU	1A	1911	1	18,21,22	1.33	2 (11%)	21,30,33	2.13	4 (19%)
1	OMC	1A	1920	1	19,22,23	0.83	0	25,31,34	0.92	1 (4%)
32	2MG	1a	1207	32	23,26,27	1.22	2 (8%)	33,38,41	2.19	9 (27%)
54	PSU	1w	32	56,54	18,21,22	1.34	2 (11%)	21,30,33	1.97	3 (14%)
32	5MC	2a	1407	32	19,22,23	1.65	3 (15%)	26,32,35	1.32	3 (11%)
54	5MU	2y	54	54	19,22,23	1.51	4 (21%)	27,32,35	2.00	8 (29%)
32	PSU	2a	516	32	18,21,22	1.36	2 (11%)	21,30,33	2.01	5 (23%)
32	M2G	1a	966	32	24,27,28	1.31	4 (16%)	33,40,43	1.84	6 (18%)
1	2MU	1A	2552	1,56	19,22,24	1.32	3 (15%)	25,31,36	1.85	5 (20%)
54	PSU	1w	39	54	18,21,22	1.34	2 (11%)	21,30,33	1.94	4 (19%)
54	PSU	2w	32	54	18,21,22	1.36	3 (16%)	21,30,33	1.88	3 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
32	5MC	2a	1400	32	19,22,23	1.70	3 (15%)	26,32,35	1.23	3 (11%)
54	PSU	2w	55	54	18,21,22	1.42	2 (11%)	21,30,33	2.00	3 (14%)
1	PSU	1A	1917	1	18,21,22	1.32	2 (11%)	21,30,33	1.90	4 (19%)
1	2MU	2A	2552	1,56	19,22,24	1.30	2 (10%)	25,31,36	1.80	5 (20%)
55	PSU	1x	55	55,56	18,21,22	1.36	2 (11%)	21,30,33	1.95	4 (19%)
54	4SU	1y	8	56,54	18,21,22	1.72	4 (22%)	25,30,33	2.17	4 (16%)
54	5MU	1w	54	54	19,22,23	1.40	5 (26%)	27,32,35	2.01	7 (25%)
1	5MC	2A	1942	1	19,22,23	1.67	2 (10%)	26,32,35	1.05	2 (7%)
54	MIA	1w	37	54	28,31,32	2.40	7 (25%)	38,44,47	2.61	12 (31%)
43	0TD	1l	92	43	8,9,10	4.51	1 (12%)	6,11,13	7.45	2 (33%)
54	4SU	1w	8	54	18,21,22	1.81	4 (22%)	25,30,33	1.92	6 (24%)
32	4OC	2a	1402	32,56	20,23,24	0.79	0	25,32,35	0.90	1 (4%)
55	5MC	1x	32	55	19,22,23	1.74	3 (15%)	26,32,35	1.19	2 (7%)
54	G7M	1w	46	54	23,26,27	1.53	4 (17%)	34,39,42	1.59	4 (11%)
54	PSU	1w	55	54	18,21,22	1.37	2 (11%)	21,30,33	2.04	3 (14%)
1	5MU	2A	1939	1,56	19,22,23	1.36	5 (26%)	27,32,35	2.25	6 (22%)
54	PSU	2y	39	54	18,21,22	1.38	2 (11%)	21,30,33	1.90	3 (14%)
54	5MU	1y	54	54	19,22,23	1.50	6 (31%)	27,32,35	2.25	8 (29%)
1	5MU	2A	1915	1	19,22,23	1.47	6 (31%)	27,32,35	2.16	5 (18%)
1	PSU	2A	2605	1	18,21,22	1.31	3 (16%)	21,30,33	2.06	4 (19%)
32	5MC	2a	967	32	19,22,23	1.77	3 (15%)	26,32,35	1.10	2 (7%)
32	G7M	2a	527	32,56	23,26,27	1.48	4 (17%)	34,39,42	1.78	5 (14%)
32	M2G	2a	966	32	24,27,28	1.26	3 (12%)	33,40,43	1.89	6 (18%)
54	4SU	2y	8	54	18,21,22	1.86	5 (27%)	25,30,33	2.18	5 (20%)
1	PSU	1A	2605	1,56	18,21,22	1.43	4 (22%)	21,30,33	2.04	4 (19%)
54	G7M	1y	46	54	23,26,27	1.51	4 (17%)	34,39,42	1.68	4 (11%)
55	4SU	2x	8	55	18,21,22	2.06	6 (33%)	25,30,33	1.37	3 (12%)
32	MA6	2a	1519	32	23,26,27	0.40	0	33,38,41	2.11	9 (27%)
55	5MU	1x	54	55,56	19,22,23	1.43	5 (26%)	27,32,35	1.92	6 (22%)
1	OMC	2A	1920	1	19,22,23	0.82	0	25,31,34	0.98	1 (4%)
32	MA6	1a	1518	32	23,26,27	0.42	0	33,38,41	2.01	10 (30%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	OMG	2A	2251	1,55	-	0/9/27/28	0/3/3/3
32	G7M	1a	527	32	-	3/7/25/26	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/11/29/30	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	1,55,56	-	0/9/27/28	0/3/3/3
1	5MC	2A	1962	1,56	-	1/7/25/26	0/2/2/2
1	2MA	1A	2503	1,56	-	1/7/25/26	0/3/3/3
54	MIA	2w	37	54	-	4/11/29/34	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/11/29/30	0/3/3/3
1	5MC	1A	1962	1,56	-	2/7/25/26	0/2/2/2
54	PSU	1y	55	54	-	1/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	1,56	-	2/7/25/26	0/3/3/3
54	PSU	1y	39	54	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	2/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
54	G7M	2y	46	54	-	2/7/25/26	0/3/3/3
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1,56	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
54	G7M	2w	46	54	-	3/7/25/26	0/3/3/3
54	MIA	2y	37	54	-	0/7/25/34	0/3/3/3
54	MIA	1y	37	54	-	0/7/25/34	0/3/3/3
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	1/7/12/14	-
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
54	PSU	2y	55	54	-	4/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	1/9/27/28	0/3/3/3
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
54	PSU	1y	32	54	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	1,56	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	32,56	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	PSU	2y	32	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	0/9/27/28	0/2/2/2
32	2MG	1a	1207	32	-	0/9/27/28	0/3/3/3
54	PSU	1w	32	56,54	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
54	5MU	2y	54	54	-	4/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
1	2MU	1A	2552	1,56	-	0/9/27/28	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	3/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
1	2MU	2A	2552	1,56	-	0/9/27/28	0/2/2/2
55	PSU	1x	55	55,56	-	0/7/25/26	0/2/2/2
54	4SU	1y	8	56,54	-	3/7/25/26	0/2/2/2
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	2/15/33/34	0/3/3/3
43	0TD	1l	92	43	-	2/7/12/14	-
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	32,56	-	2/9/29/30	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
54	G7M	1w	46	54	-	1/7/25/26	0/3/3/3
54	PSU	1w	55	54	-	2/7/25/26	0/2/2/2
1	5MU	2A	1939	1,56	-	0/7/25/26	0/2/2/2
54	PSU	2y	39	54	-	0/7/25/26	0/2/2/2
54	5MU	1y	54	54	-	2/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	1/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	32,56	-	2/7/25/26	0/3/3/3
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
54	4SU	2y	8	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	1,56	-	0/7/25/26	0/2/2/2
54	G7M	1y	46	54	-	1/7/25/26	0/3/3/3
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/11/29/30	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
55	5MU	1x	54	55,56	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	MA6	1a	1518	32	-	0/11/29/30	0/3/3/3

All (246) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.58	1.69	1.82
43	1l	92	0TD	CB-SB	-12.34	1.69	1.82
54	1w	37	MIA	C2-S10	-7.20	1.69	1.75
54	1w	37	MIA	C13-C14	7.11	1.53	1.32
54	2w	37	MIA	C2-S10	-6.73	1.70	1.75
32	2a	967	5MC	C5-C4	6.56	1.49	1.44
32	1a	967	5MC	C5-C4	6.40	1.49	1.44
55	1x	32	5MC	C5-C4	6.35	1.48	1.44
32	2a	1400	5MC	C5-C4	6.19	1.48	1.44
32	1a	1400	5MC	C5-C4	6.11	1.48	1.44
55	2x	32	5MC	C5-C4	6.07	1.48	1.44
1	2A	1942	5MC	C5-C4	6.06	1.48	1.44
32	1a	1404	5MC	C5-C4	6.05	1.48	1.44
32	1a	1407	5MC	C5-C4	6.01	1.48	1.44
32	2a	1407	5MC	C5-C4	5.82	1.48	1.44
1	2A	1962	5MC	C5-C4	5.77	1.48	1.44
32	2a	1404	5MC	C5-C4	5.65	1.48	1.44
1	1A	1962	5MC	C5-C4	5.59	1.48	1.44
54	1y	37	MIA	C5-C4	5.22	1.48	1.39
1	1A	1942	5MC	C5-C4	5.14	1.48	1.44
54	2y	37	MIA	C5-C4	4.99	1.48	1.39
54	2w	37	MIA	C5-C4	4.98	1.48	1.39
54	2y	8	4SU	C4-S4	-4.95	1.59	1.68
55	1x	8	4SU	C4-N3	-4.87	1.32	1.37
54	1w	37	MIA	C5-C4	4.85	1.47	1.39
55	2x	8	4SU	C4-N3	-4.83	1.32	1.37
54	2w	8	4SU	C4-S4	-4.81	1.60	1.68
32	1a	527	G7M	C5-N7	-4.78	1.33	1.39
54	1w	8	4SU	C4-S4	-4.78	1.60	1.68
55	1x	8	4SU	C4-S4	-4.74	1.60	1.68
54	2y	46	G7M	C5-N7	-4.65	1.33	1.39
54	1y	8	4SU	C4-S4	-4.62	1.60	1.68
54	1w	46	G7M	C5-N7	-4.57	1.33	1.39
55	2x	8	4SU	C4-S4	-4.55	1.60	1.68
32	2a	527	G7M	C5-N7	-4.35	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1y	46	G7M	C5-N7	-4.29	1.34	1.39
54	2w	46	G7M	C5-N7	-4.29	1.34	1.39
1	2A	2503	2MA	C5-C4	4.20	1.46	1.39
1	1A	2503	2MA	C5-C4	4.16	1.46	1.39
54	1y	32	PSU	C6-C5	4.13	1.39	1.35
54	2w	55	PSU	C6-C5	4.10	1.39	1.35
54	1y	39	PSU	C6-C5	3.99	1.39	1.35
55	1x	8	4SU	C2-N3	-3.96	1.31	1.38
54	1w	55	PSU	C6-C5	3.95	1.39	1.35
54	2w	39	PSU	C6-C5	3.91	1.39	1.35
55	2x	55	PSU	C6-C5	3.89	1.39	1.35
54	2y	32	PSU	C6-C5	3.80	1.39	1.35
32	1a	516	PSU	C6-C5	3.75	1.39	1.35
54	2y	46	G7M	C5-C4	3.70	1.47	1.38
54	2y	39	PSU	C6-C5	3.69	1.39	1.35
32	2a	516	PSU	C6-C5	3.68	1.39	1.35
54	2w	32	PSU	C6-C5	3.57	1.39	1.35
1	2A	1911	PSU	C6-C5	3.55	1.39	1.35
54	1y	46	G7M	C5-C4	3.54	1.47	1.38
54	1y	55	PSU	C6-C5	3.44	1.39	1.35
54	2w	46	G7M	C5-C4	3.39	1.46	1.38
54	1w	46	G7M	C5-C4	3.38	1.46	1.38
55	1x	55	PSU	C6-C5	3.37	1.39	1.35
54	2y	54	5MU	C2-N1	3.37	1.43	1.38
32	2a	527	G7M	C5-C4	3.35	1.46	1.38
55	1x	8	4SU	C5-C4	-3.35	1.38	1.42
54	1w	39	PSU	C6-C5	3.34	1.39	1.35
54	1w	32	PSU	C6-C5	3.34	1.39	1.35
1	2A	1917	PSU	C6-C5	3.26	1.38	1.35
32	2a	1207	2MG	C5-C4	3.26	1.47	1.38
54	2y	8	4SU	C4-N3	-3.25	1.34	1.37
32	1a	527	G7M	C5-C4	3.24	1.46	1.38
32	1a	966	M2G	C5-C4	3.19	1.47	1.38
1	2A	2251	OMG	C5-C4	3.18	1.47	1.38
54	2y	55	PSU	C6-C5	3.18	1.38	1.35
32	2a	1404	5MC	C6-C5	3.13	1.39	1.34
54	1w	8	4SU	C4-N3	-3.11	1.34	1.37
32	1a	1207	2MG	C5-C4	3.08	1.47	1.38
1	1A	1911	PSU	C6-C5	3.07	1.38	1.35
1	1A	1939	5MU	C6-C5	3.07	1.39	1.34
1	1A	2251	OMG	C5-C4	3.06	1.47	1.38
32	2a	966	M2G	C5-C4	3.06	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	1404	5MC	C6-C5	3.04	1.39	1.34
1	2A	1915	5MU	C6-C5	3.02	1.39	1.34
54	1y	8	4SU	C4-N3	-3.02	1.34	1.37
1	1A	2552	2MU	C4-N3	-2.98	1.33	1.38
1	1A	1917	PSU	C6-C5	2.97	1.38	1.35
54	2y	37	MIA	C5-C6	2.95	1.49	1.41
54	1w	37	MIA	C5-C6	2.95	1.49	1.41
55	2x	8	4SU	C5-C4	-2.95	1.39	1.42
54	1y	54	5MU	C4-C5	2.95	1.49	1.44
55	1x	54	5MU	C6-C5	2.94	1.39	1.34
55	2x	32	5MC	C6-C5	2.93	1.39	1.34
54	1y	37	MIA	C5-C6	2.93	1.49	1.41
1	1A	1915	5MU	C2-N1	2.93	1.43	1.38
1	1A	1942	5MC	C6-C5	2.92	1.39	1.34
54	2w	8	4SU	C4-N3	-2.92	1.34	1.37
32	1a	1400	5MC	C6-C5	2.91	1.39	1.34
1	2A	2605	PSU	C6-C5	2.89	1.38	1.35
54	2y	54	5MU	C6-C5	2.89	1.39	1.34
1	1A	1939	5MU	C4-N3	-2.89	1.33	1.38
1	2A	1942	5MC	C6-C5	2.89	1.39	1.34
1	1A	2251	OMG	C6-N1	-2.88	1.33	1.38
54	1w	8	4SU	C5-C4	-2.87	1.39	1.42
32	1a	966	M2G	C2-N2	2.86	1.40	1.35
55	1x	32	5MC	C6-C5	2.82	1.39	1.34
55	2x	8	4SU	C2-N3	-2.82	1.33	1.38
54	2w	54	5MU	C6-C5	2.82	1.39	1.34
54	1y	54	5MU	C6-C5	2.82	1.39	1.34
54	2w	37	MIA	C5-C6	2.82	1.48	1.41
1	2A	1939	5MU	C4-N3	-2.80	1.33	1.38
32	2a	1407	5MC	C6-C5	2.80	1.39	1.34
1	1A	1915	5MU	C6-C5	2.77	1.39	1.34
32	2a	1400	5MC	C6-C5	2.77	1.39	1.34
1	2A	1939	5MU	C6-C5	2.75	1.39	1.34
1	2A	1962	5MC	C6-C5	2.75	1.39	1.34
1	1A	2605	PSU	C6-C5	2.75	1.38	1.35
32	2a	967	5MC	C6-C5	2.73	1.39	1.34
1	1A	2605	PSU	C4-N3	-2.69	1.33	1.38
32	1a	967	5MC	C6-C5	2.69	1.39	1.34
1	2A	2251	OMG	C6-N1	-2.68	1.33	1.38
54	2y	8	4SU	C2-N1	2.67	1.42	1.38
1	2A	1915	5MU	C2-N1	2.67	1.42	1.38
54	1w	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	1y	54	5MU	C4-N3	-2.67	1.33	1.38
54	1y	55	PSU	C4-N3	-2.66	1.33	1.38
1	2A	1915	5MU	C4-C5	2.66	1.49	1.44
55	2x	54	5MU	C6-C5	2.65	1.38	1.34
54	2y	54	5MU	C4-N3	-2.63	1.33	1.38
1	1A	1962	5MC	C6-N1	-2.62	1.33	1.38
54	2y	39	PSU	C4-N3	-2.60	1.34	1.38
54	2y	8	4SU	C5-C4	-2.60	1.39	1.42
54	2w	39	PSU	C4-N3	-2.60	1.34	1.38
54	1y	39	PSU	C4-N3	-2.60	1.34	1.38
54	1w	32	PSU	C4-N3	-2.59	1.34	1.38
54	2w	54	5MU	C4-N3	-2.59	1.34	1.38
32	2a	966	M2G	C2-N2	2.58	1.39	1.35
54	2y	55	PSU	C4-N3	-2.58	1.34	1.38
32	1a	1207	2MG	C6-N1	-2.58	1.34	1.38
54	1w	37	MIA	C8-N7	2.56	1.36	1.31
54	2y	46	G7M	C6-N1	-2.56	1.34	1.38
54	1w	39	PSU	C4-N3	-2.56	1.34	1.38
1	1A	1911	PSU	C4-N3	-2.56	1.34	1.38
1	2A	2503	2MA	C5-C6	2.55	1.48	1.41
1	1A	2503	2MA	C4-N9	-2.55	1.32	1.37
1	1A	2605	PSU	C2-N1	-2.55	1.33	1.36
55	2x	54	5MU	C4-N3	-2.54	1.34	1.38
55	1x	54	5MU	C4-N3	-2.52	1.34	1.38
55	1x	54	5MU	C4-C5	2.51	1.48	1.44
1	1A	1915	5MU	C4-C5	2.51	1.48	1.44
54	1y	54	5MU	C2-N1	2.50	1.42	1.38
1	1A	1915	5MU	C4-N3	-2.49	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.49	1.34	1.38
54	1w	54	5MU	C4-N3	-2.49	1.34	1.38
1	2A	2552	2MU	C5-C4	2.49	1.49	1.43
1	2A	2605	PSU	C4-N3	-2.48	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.48	1.34	1.38
1	1A	1962	5MC	C6-C5	2.47	1.38	1.34
1	2A	1911	PSU	C4-N3	-2.47	1.34	1.38
1	2A	2503	2MA	C4-N9	-2.46	1.32	1.37
1	1A	1917	PSU	C4-N3	-2.46	1.34	1.38
1	2A	2552	2MU	C4-N3	-2.45	1.34	1.38
54	1w	54	5MU	C4-C5	2.44	1.48	1.44
1	1A	2503	2MA	C5-N7	-2.44	1.34	1.39
54	1y	37	MIA	C8-N7	2.44	1.36	1.31
1	1A	2251	OMG	C5-N7	-2.44	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	1498	UR3	C2-N1	2.43	1.41	1.38
32	1a	516	PSU	C4-N3	-2.43	1.34	1.38
55	1x	55	PSU	C4-N3	-2.43	1.34	1.38
1	1A	2552	2MU	C5-C4	2.42	1.49	1.43
54	1w	46	G7M	C6-N1	-2.42	1.34	1.38
54	1w	8	4SU	C2-N1	2.42	1.42	1.38
54	2w	8	4SU	C2-N1	2.42	1.42	1.38
32	1a	1407	5MC	C6-C5	2.42	1.38	1.34
1	1A	2503	2MA	C5-C6	2.42	1.47	1.41
54	2w	8	4SU	C5-C4	-2.41	1.39	1.42
1	1A	1939	5MU	C2-N3	-2.39	1.33	1.38
54	2w	32	PSU	C4-N3	-2.38	1.34	1.38
32	2a	516	PSU	C4-N3	-2.37	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.37	1.34	1.38
54	1w	54	5MU	C2-N1	2.36	1.42	1.38
54	2y	54	5MU	C4-C5	2.36	1.48	1.44
32	2a	1207	2MG	C6-N1	-2.36	1.34	1.38
32	2a	527	G7M	C6-N1	-2.36	1.34	1.38
54	2w	55	PSU	C4-N3	-2.35	1.34	1.38
32	1a	527	G7M	C6-N1	-2.35	1.34	1.38
54	2y	32	PSU	C4-N3	-2.34	1.34	1.38
32	1a	1407	5MC	C6-N1	-2.34	1.34	1.38
55	2x	55	PSU	C4-N3	-2.33	1.34	1.38
54	2y	37	MIA	C8-N7	2.33	1.36	1.31
54	2w	37	MIA	C5-N7	-2.32	1.34	1.39
55	1x	32	5MC	C6-N1	-2.32	1.34	1.38
1	1A	1939	5MU	C6-N1	-2.31	1.34	1.38
54	1y	8	4SU	C5-C4	-2.31	1.39	1.42
1	2A	1939	5MU	C6-N1	-2.31	1.34	1.38
54	1y	54	5MU	C6-N1	-2.31	1.34	1.38
1	1A	1939	5MU	C4-C5	2.30	1.48	1.44
32	2a	1400	5MC	C6-N1	-2.30	1.34	1.38
32	1a	966	M2G	C6-N1	-2.30	1.34	1.38
54	2w	37	MIA	C8-N7	2.29	1.36	1.31
32	2a	1407	5MC	C6-N1	-2.27	1.34	1.38
1	1A	1939	5MU	C2-N1	2.27	1.42	1.38
1	2A	1962	5MC	C6-N1	-2.26	1.34	1.38
54	1w	55	PSU	C4-N3	-2.25	1.34	1.38
54	1w	46	G7M	C4-N9	-2.25	1.32	1.38
1	2A	2605	PSU	C2-N3	-2.23	1.33	1.37
54	1y	8	4SU	C2-N1	2.23	1.42	1.38
32	1a	967	5MC	C6-N1	-2.22	1.34	1.38

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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
55	1x	54	5MU	C2-N1	2.22	1.41	1.38
55	2x	54	5MU	C2-N1	2.20	1.41	1.38
32	2a	966	M2G	C6-N1	-2.20	1.34	1.38
55	2x	8	4SU	O2-C2	2.19	1.26	1.23
1	2A	2251	OMG	C5-N7	-2.18	1.34	1.39
43	2l	92	0TD	CB-CA	2.16	1.55	1.54
55	2x	54	5MU	C4-C5	2.16	1.48	1.44
1	2A	1939	5MU	C2-N3	-2.15	1.34	1.38
1	1A	2605	PSU	C2-N3	-2.15	1.33	1.37
54	1w	37	MIA	C5-N7	-2.14	1.35	1.39
54	1y	46	G7M	C6-N1	-2.14	1.34	1.38
54	1y	54	5MU	C2-N3	-2.13	1.34	1.38
54	1y	32	PSU	C4-N3	-2.13	1.34	1.38
55	2x	8	4SU	C2-N1	2.13	1.41	1.38
32	1a	966	M2G	C5-N7	-2.11	1.34	1.39
1	1A	1942	5MC	C6-N1	-2.11	1.34	1.38
54	2w	54	5MU	C2-N3	-2.10	1.34	1.38
1	2A	2503	2MA	C5-N7	-2.10	1.35	1.39
54	1y	46	G7M	C5-C6	2.10	1.49	1.43
55	2x	54	5MU	C6-N1	-2.09	1.34	1.38
32	2a	967	5MC	C6-N1	-2.08	1.34	1.38
54	1y	37	MIA	C5-N7	-2.08	1.35	1.39
54	2w	54	5MU	C4-C5	2.08	1.48	1.44
54	2y	8	4SU	C2-N3	-2.07	1.34	1.38
1	2A	1939	5MU	C4-C5	2.07	1.48	1.44
1	1A	1915	5MU	C6-N1	-2.07	1.34	1.38
54	1w	54	5MU	C6-N1	-2.06	1.34	1.38
54	2w	46	G7M	C6-N1	-2.06	1.35	1.38
32	2a	1207	2MG	C2-N3	2.06	1.35	1.32
1	2A	2503	2MA	C8-N7	2.06	1.35	1.31
32	2a	527	G7M	C5-C6	2.06	1.48	1.43
54	2w	32	PSU	C4-C5	2.05	1.50	1.44
1	1A	2552	2MU	C2-N3	-2.05	1.34	1.38
54	1w	37	MIA	C4-N9	-2.05	1.33	1.37
32	2a	1498	UR3	C6-C5	2.05	1.39	1.35
1	2A	1915	5MU	C6-N1	-2.05	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.03	1.34	1.38
55	1x	8	4SU	O2-C2	2.03	1.26	1.23
55	1x	54	5MU	C6-N1	-2.03	1.34	1.38
54	2w	37	MIA	C2-N1	2.01	1.37	1.34
1	2A	1915	5MU	C2-N3	-2.01	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	2x	32	5MC	C6-N1	-2.00	1.34	1.38

All (393) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	1l	92	0TD	CSB-SB-CB	-17.77	70.41	102.36
54	1w	37	MIA	C12-C13-C14	-8.35	112.02	127.01
54	2w	37	MIA	C5-C4-N3	-7.83	118.93	127.18
32	1a	1498	UR3	C4-N3-C2	-7.53	118.52	124.58
1	2A	2503	2MA	C5-C4-N3	-7.40	119.39	127.18
54	1w	37	MIA	C5-C4-N3	-7.33	119.46	127.18
1	1A	2503	2MA	C5-C4-N3	-7.09	119.71	127.18
32	2a	1498	UR3	C4-N3-C2	-6.78	119.12	124.58
54	2w	8	4SU	C4-N3-C2	-6.71	120.89	127.31
32	1a	1207	2MG	C2-N3-C4	6.70	120.38	112.00
54	1y	8	4SU	C4-N3-C2	-6.69	120.90	127.31
32	2a	1207	2MG	C2-N3-C4	6.65	120.32	112.00
1	2A	1911	PSU	N1-C2-N3	6.59	122.12	115.17
54	2y	46	G7M	N9-C4-N3	6.53	139.01	125.95
54	1y	55	PSU	N1-C2-N3	6.45	121.98	115.17
1	1A	1911	PSU	N1-C2-N3	6.37	121.89	115.17
32	2a	516	PSU	N1-C2-N3	6.34	121.85	115.17
54	1w	32	PSU	N1-C2-N3	6.26	121.78	115.17
55	2x	55	PSU	N1-C2-N3	6.22	121.72	115.17
1	1A	2605	PSU	N1-C2-N3	6.21	121.72	115.17
54	2w	37	MIA	N3-C4-N9	6.16	134.80	126.99
54	2w	55	PSU	N1-C2-N3	6.16	121.66	115.17
32	1a	966	M2G	C5-C4-N3	-6.12	118.65	128.39
1	2A	1917	PSU	N1-C2-N3	6.11	121.62	115.17
1	2A	2605	PSU	N1-C2-N3	6.11	121.62	115.17
1	2A	2251	OMG	C5-C4-N3	-6.07	118.73	128.39
1	2A	2503	2MA	N3-C4-N9	6.06	134.68	126.99
54	1w	39	PSU	N1-C2-N3	6.05	121.55	115.17
54	2y	8	4SU	C4-N3-C2	-6.04	121.53	127.31
32	1a	516	PSU	N1-C2-N3	6.03	121.53	115.17
54	1w	55	PSU	N1-C2-N3	5.98	121.48	115.17
55	1x	55	PSU	N1-C2-N3	5.94	121.44	115.17
54	2y	32	PSU	N1-C2-N3	5.92	121.42	115.17
32	2a	966	M2G	C5-C4-N3	-5.91	118.98	128.39
1	1A	2251	OMG	C5-C4-N3	-5.89	119.01	128.39
54	2w	8	4SU	C5-C4-N3	5.88	120.22	114.75
54	2y	39	PSU	N1-C2-N3	5.85	121.34	115.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	2w	32	PSU	N1-C2-N3	5.82	121.31	115.17
54	1y	54	5MU	N3-C2-N1	5.81	122.45	114.89
1	1A	2503	2MA	N3-C4-N9	5.80	134.35	126.99
32	2a	1207	2MG	C5-C4-N3	-5.80	119.16	128.39
54	1y	37	MIA	C5-C4-N3	-5.76	118.79	126.72
1	1A	1917	PSU	N1-C2-N3	5.74	121.22	115.17
54	2y	46	G7M	C5-C4-N3	-5.73	117.32	128.15
1	1A	2552	2MU	N3-C2-N1	5.73	122.35	114.89
32	2a	527	G7M	N9-C4-N3	5.71	137.36	125.95
54	1y	32	PSU	N1-C2-N3	5.64	121.11	115.17
54	1y	54	5MU	C4-N3-C2	-5.60	120.00	127.34
54	2y	8	4SU	C5-C4-N3	5.60	119.96	114.75
54	1y	39	PSU	N1-C2-N3	5.57	121.05	115.17
54	2y	37	MIA	C5-C4-N3	-5.57	119.05	126.72
1	2A	1939	5MU	C4-N3-C2	-5.52	120.11	127.34
32	1a	527	G7M	N9-C4-N3	5.49	136.94	125.95
32	2a	527	G7M	C5-C4-N3	-5.48	117.80	128.15
1	1A	1939	5MU	C4-N3-C2	-5.47	120.16	127.34
54	2y	55	PSU	N1-C2-N3	5.45	120.92	115.17
54	2w	39	PSU	N1-C2-N3	5.44	120.91	115.17
32	1a	1207	2MG	C5-C4-N3	-5.41	119.78	128.39
54	1y	46	G7M	N9-C4-N3	5.40	136.75	125.95
54	1y	8	4SU	C5-C4-N3	5.35	119.73	114.75
54	1w	37	MIA	N3-C4-N9	5.30	133.71	126.99
1	2A	1915	5MU	C4-N3-C2	-5.29	120.40	127.34
1	2A	1939	5MU	N3-C2-N1	5.28	121.77	114.89
54	1y	46	G7M	C5-C4-N3	-5.26	118.21	128.15
32	1a	527	G7M	C5-C4-N3	-5.25	118.22	128.15
1	1A	1939	5MU	N3-C2-N1	5.15	121.60	114.89
54	1w	46	G7M	N9-C4-N3	5.14	136.24	125.95
1	1A	1915	5MU	N3-C2-N1	5.12	121.56	114.89
32	1a	1518	MA6	N1-C2-N3	-5.06	120.92	128.58
32	1a	1519	MA6	N1-C2-N3	-5.05	120.93	128.58
54	2w	46	G7M	N9-C4-N3	5.03	136.02	125.95
32	2a	1518	MA6	N1-C2-N3	-5.02	120.98	128.58
54	2y	46	G7M	C2-N3-C4	5.02	120.95	112.30
1	1A	2251	OMG	C2-N3-C4	5.02	120.94	112.30
1	1A	1939	5MU	C5-C4-N3	5.00	119.67	115.32
54	1w	8	4SU	C5-C4-N3	5.00	119.40	114.75
55	1x	54	5MU	N3-C2-N1	4.98	121.38	114.89
1	2A	1915	5MU	N3-C2-N1	4.95	121.33	114.89
1	2A	2552	2MU	N3-C2-N1	4.93	121.31	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1915	5MU	C5-C4-N3	4.91	119.59	115.32
32	2a	527	G7M	C2-N3-C4	4.91	120.75	112.30
32	2a	1519	MA6	N1-C2-N3	-4.87	121.20	128.58
55	2x	54	5MU	N3-C2-N1	4.87	121.23	114.89
54	1w	54	5MU	C4-N3-C2	-4.84	120.99	127.34
1	1A	2552	2MU	C4-N3-C2	-4.80	120.66	126.61
1	1A	1915	5MU	C4-N3-C2	-4.80	121.05	127.34
32	2a	1519	MA6	C5-C4-N3	-4.79	120.13	126.72
54	2w	46	G7M	C5-C4-N3	-4.77	119.13	128.15
1	2A	2251	OMG	N9-C4-N3	4.76	135.47	125.95
1	2A	2251	OMG	C2-N3-C4	4.72	120.44	112.30
55	2x	54	5MU	C4-N3-C2	-4.70	121.18	127.34
1	2A	1939	5MU	C5-C4-N3	4.69	119.40	115.32
54	1y	46	G7M	C2-N3-C4	4.69	120.37	112.30
54	1w	54	5MU	N3-C2-N1	4.67	120.97	114.89
54	1w	8	4SU	C4-N3-C2	-4.64	122.87	127.31
54	1y	37	MIA	N3-C4-N9	4.62	135.03	127.17
32	1a	966	M2G	N9-C4-N3	4.59	135.14	125.95
54	2y	37	MIA	N3-C4-N9	4.58	134.95	127.17
32	1a	527	G7M	C2-N3-C4	4.54	120.12	112.30
1	1A	1911	PSU	C4-N3-C2	-4.54	120.12	126.37
1	2A	1939	5MU	O4-C4-C5	-4.52	119.74	124.92
54	1w	46	G7M	C5-C4-N3	-4.51	119.63	128.15
55	1x	54	5MU	C4-N3-C2	-4.50	121.44	127.34
32	1a	966	M2G	C2-N3-C4	4.50	120.82	112.51
32	2a	966	M2G	C2-N3-C4	4.49	120.81	112.51
54	2w	46	G7M	C2-N3-C4	4.48	120.01	112.30
1	1A	2251	OMG	N9-C4-N3	4.44	134.83	125.95
1	2A	2605	PSU	C4-N3-C2	-4.43	120.26	126.37
1	1A	1939	5MU	C5-C6-N1	-4.42	118.51	123.31
54	2y	54	5MU	N3-C2-N1	4.38	120.59	114.89
54	1w	54	5MU	C5-C4-N3	4.35	119.11	115.32
32	2a	1518	MA6	C5-C4-N3	-4.33	120.75	126.72
1	2A	2552	2MU	C4-N3-C2	-4.32	121.25	126.61
1	1A	1939	5MU	O4-C4-C5	-4.32	119.98	124.92
32	2a	966	M2G	N9-C4-N3	4.25	134.45	125.95
54	1y	8	4SU	N3-C2-N1	4.24	120.41	114.89
32	1a	1518	MA6	C5-C4-N3	-4.19	120.95	126.72
54	1y	54	5MU	C5-C4-N3	4.16	118.94	115.32
54	1y	55	PSU	C4-N3-C2	-4.16	120.64	126.37
1	2A	1915	5MU	O4-C4-C5	-4.16	120.16	124.92
54	1w	55	PSU	O2-C2-N1	-4.13	118.53	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1939	5MU	C5-C6-N1	-4.10	118.86	123.31
54	2y	54	5MU	C4-N3-C2	-4.09	121.97	127.34
32	1a	1519	MA6	C2-N1-C6	4.09	121.81	111.83
32	1a	1518	MA6	C2-N1-C6	4.08	121.79	111.83
32	2a	1519	MA6	C4-C5-N7	-4.06	105.94	110.58
1	1A	2503	2MA	N6-C6-N1	4.05	122.49	117.03
32	1a	1207	2MG	C6-C5-N7	4.04	137.65	130.29
55	2x	54	5MU	C5-C4-N3	4.04	118.83	115.32
32	2a	516	PSU	C4-N3-C2	-4.04	120.81	126.37
54	2y	55	PSU	C4-N3-C2	-4.03	120.81	126.37
54	1w	46	G7M	C2-N3-C4	4.03	119.24	112.30
1	2A	1911	PSU	C4-N3-C2	-4.03	120.82	126.37
55	2x	54	5MU	O4-C4-C5	-4.02	120.32	124.92
32	2a	1518	MA6	C2-N1-C6	4.02	121.64	111.83
32	1a	1519	MA6	C5-C4-N3	-4.02	121.19	126.72
1	1A	1915	5MU	C5-C4-N3	3.99	118.80	115.32
54	2w	8	4SU	N3-C2-N1	3.99	120.09	114.89
55	2x	55	PSU	C4-N3-C2	-3.97	120.90	126.37
32	2a	1207	2MG	N9-C4-N3	3.97	133.89	125.95
1	1A	2605	PSU	O2-C2-N1	-3.96	118.71	122.79
54	2w	54	5MU	N3-C2-N1	3.96	120.04	114.89
54	1w	37	MIA	C6-C5-N7	3.95	136.74	132.43
32	1a	1519	MA6	C4-C5-N7	-3.95	106.07	110.58
54	2w	8	4SU	C5-C4-S4	-3.94	119.80	124.31
55	1x	55	PSU	C4-N3-C2	-3.94	120.94	126.37
1	1A	1911	PSU	O2-C2-N1	-3.94	118.73	122.79
1	1A	2605	PSU	C4-N3-C2	-3.93	120.96	126.37
54	2y	54	5MU	C5-C4-N3	3.92	118.73	115.32
1	1A	1962	5MC	C5-C6-N1	-3.92	119.06	123.31
1	2A	1917	PSU	C4-N3-C2	-3.92	120.98	126.37
32	2a	1519	MA6	C5-N7-C8	3.92	109.60	103.45
32	1a	1519	MA6	C5-N7-C8	3.90	109.58	103.45
54	1y	54	5MU	C5-C6-N1	-3.89	119.08	123.31
54	1w	39	PSU	C4-N3-C2	-3.89	121.01	126.37
54	2y	8	4SU	C5-C4-S4	-3.88	119.88	124.31
54	2y	8	4SU	N3-C2-N1	3.87	119.93	114.89
32	2a	1519	MA6	C2-N1-C6	3.87	121.28	111.83
32	1a	516	PSU	C4-N3-C2	-3.85	121.07	126.37
54	2w	54	5MU	O4-C4-C5	-3.84	120.53	124.92
54	1w	32	PSU	C4-N3-C2	-3.82	121.11	126.37
1	1A	1917	PSU	C4-N3-C2	-3.82	121.11	126.37
54	1w	54	5MU	O4-C4-C5	-3.81	120.55	124.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	967	5MC	C5-C6-N1	-3.80	119.19	123.31
54	2w	55	PSU	C4-N3-C2	-3.79	121.15	126.37
54	1w	55	PSU	C4-N3-C2	-3.76	121.19	126.37
55	1x	32	5MC	C5-C6-N1	-3.76	119.23	123.31
54	2y	39	PSU	C4-N3-C2	-3.75	121.20	126.37
54	2w	32	PSU	C4-N3-C2	-3.75	121.20	126.37
1	2A	1915	5MU	C5-C6-N1	-3.74	119.25	123.31
54	2y	32	PSU	C4-N3-C2	-3.74	121.22	126.37
54	2y	54	5MU	O4-C4-C5	-3.73	120.65	124.92
54	2w	54	5MU	C4-N3-C2	-3.73	122.45	127.34
54	1w	37	MIA	C4-C5-N7	-3.71	106.34	110.58
54	1y	37	MIA	C2-N3-C4	3.68	120.82	111.83
54	2w	54	5MU	C5-C4-N3	3.68	118.52	115.32
54	2w	55	PSU	O2-C2-N1	-3.67	119.01	122.79
55	2x	55	PSU	O2-C2-N1	-3.67	119.01	122.79
1	2A	1917	PSU	O2-C2-N1	-3.66	119.01	122.79
54	2y	37	MIA	C2-N3-C4	3.66	120.77	111.83
32	2a	1404	5MC	C5-C6-N1	-3.66	119.34	123.31
32	1a	1404	5MC	C5-C6-N1	-3.65	119.35	123.31
55	1x	8	4SU	O2-C2-N1	3.64	127.53	122.80
54	1w	8	4SU	C5-C4-S4	-3.63	120.15	124.31
43	2l	92	0TD	CSB-SB-CB	-3.63	95.84	102.36
1	1A	1915	5MU	O4-C4-C5	-3.63	120.76	124.92
32	1a	1518	MA6	C5-N7-C8	3.63	109.16	103.45
54	2y	37	MIA	N3-C2-N1	-3.63	123.09	128.58
32	2a	1519	MA6	C2-N3-C4	3.60	120.62	111.83
54	1y	39	PSU	C4-N3-C2	-3.58	121.44	126.37
32	2a	1207	2MG	C6-C5-N7	3.57	136.79	130.29
54	1w	37	MIA	C15-C14-C13	-3.57	111.95	122.66
32	2a	1400	5MC	C5-C6-N1	-3.56	119.44	123.31
1	2A	2503	2MA	C4-N9-C8	3.56	109.48	105.74
1	1A	1942	5MC	C5-C4-N3	-3.56	118.11	121.75
54	1y	55	PSU	O2-C2-N1	-3.56	119.12	122.79
32	1a	1207	2MG	N9-C4-N3	3.55	133.05	125.95
55	1x	54	5MU	C5-C4-N3	3.54	118.40	115.32
54	1w	37	MIA	C16-C14-C13	-3.53	112.05	122.66
55	1x	8	4SU	C5-C4-N3	3.53	118.04	114.75
1	2A	1911	PSU	O2-C2-N1	-3.53	119.15	122.79
32	2a	966	M2G	C6-C5-N7	3.51	136.69	130.29
32	1a	1400	5MC	C5-C6-N1	-3.51	119.50	123.31
43	2l	92	0TD	OD2-CG-CB	3.51	120.73	113.15
54	2y	54	5MU	C1'-N1-C2	3.50	123.88	117.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	967	5MC	C5-C6-N1	-3.49	119.52	123.31
54	1y	37	MIA	N3-C2-N1	-3.49	123.30	128.58
54	1w	32	PSU	O2-C2-N1	-3.47	119.21	122.79
55	1x	8	4SU	C6-C5-C4	-3.47	116.95	119.95
54	1y	8	4SU	C5-C4-S4	-3.46	120.35	124.31
54	2y	37	MIA	C4-C5-N7	-3.46	106.63	110.58
32	2a	1518	MA6	C2-N3-C4	3.46	120.28	111.83
54	2w	37	MIA	C4-C5-N7	-3.44	106.65	110.58
32	1a	1518	MA6	N9-C8-N7	-3.43	109.07	113.94
32	2a	1518	MA6	C5-N7-C8	3.43	108.84	103.45
54	1y	37	MIA	C4-C5-N7	-3.43	106.66	110.58
55	1x	54	5MU	O4-C4-C5	-3.41	121.01	124.92
32	1a	1519	MA6	N9-C8-N7	-3.41	109.10	113.94
55	2x	8	4SU	C1'-N1-C2	3.40	123.71	117.59
32	1a	1518	MA6	C2-N3-C4	3.40	120.14	111.83
54	1y	32	PSU	C4-N3-C2	-3.37	121.72	126.37
55	2x	8	4SU	C5-C4-N3	3.37	117.88	114.75
32	2a	516	PSU	O2-C2-N1	-3.37	119.32	122.79
1	2A	1962	5MC	C5-C6-N1	-3.36	119.66	123.31
32	2a	1407	5MC	C5-C4-N3	-3.36	118.31	121.75
32	1a	1498	UR3	C5-C4-N3	3.36	119.46	115.04
32	1a	1519	MA6	C2-N3-C4	3.35	120.00	111.83
54	2w	39	PSU	C4-N3-C2	-3.33	121.78	126.37
54	1w	37	MIA	C2-N3-C4	3.33	121.01	112.29
1	2A	2552	2MU	O2-C2-N1	-3.33	118.47	122.80
32	1a	1518	MA6	C4-C5-N7	-3.32	106.78	110.58
1	1A	1917	PSU	O2-C2-N1	-3.32	119.36	122.79
1	2A	2503	2MA	C4-C5-N7	-3.31	106.80	110.58
32	2a	1519	MA6	N9-C8-N7	-3.31	109.24	113.94
54	1w	54	5MU	C5-C6-N1	-3.29	119.74	123.31
32	2a	1518	MA6	C4-C5-N7	-3.28	106.83	110.58
54	2w	37	MIA	C2-N3-C4	3.28	120.88	112.29
1	1A	2503	2MA	C2-N1-C6	3.28	123.14	118.10
1	2A	1939	5MU	O2-C2-N1	-3.25	118.56	122.80
32	1a	516	PSU	O2-C2-N1	-3.24	119.44	122.79
54	1w	39	PSU	O2-C2-N1	-3.23	119.46	122.79
32	2a	1498	UR3	C5-C4-N3	3.22	119.28	115.04
54	1y	32	PSU	O2-C2-N1	-3.21	119.47	122.79
1	1A	2503	2MA	C4-N9-C8	3.21	109.10	105.74
54	1y	54	5MU	O4-C4-C5	-3.20	121.25	124.92
32	1a	1407	5MC	C5-C6-N1	-3.20	119.84	123.31
1	1A	2251	OMG	C6-C5-N7	3.20	136.11	130.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	2605	PSU	O2-C2-N1	-3.19	119.50	122.79
32	1a	1207	2MG	N1-C2-N2	3.19	119.82	116.56
1	1A	2503	2MA	C4-C5-N7	-3.19	106.94	110.58
54	1w	8	4SU	N3-C2-N1	3.16	119.00	114.89
43	1l	92	0TD	OD2-CG-CB	3.14	119.94	113.15
1	2A	1942	5MC	C5-C6-N1	-3.11	119.94	123.31
32	1a	1207	2MG	C4-C5-N7	-3.09	105.78	110.67
32	2a	1518	MA6	N9-C8-N7	-3.09	109.56	113.94
1	1A	2552	2MU	O2-C2-N1	-3.07	118.80	122.80
54	1w	8	4SU	C1'-N1-C2	3.07	123.10	117.59
54	2y	39	PSU	O2-C2-N1	-3.05	119.64	122.79
55	1x	55	PSU	O2-C2-N1	-3.05	119.64	122.79
55	2x	32	5MC	C5-C6-N1	-3.04	120.01	123.31
32	1a	1404	5MC	C5-C4-N3	-3.00	118.68	121.75
32	2a	1407	5MC	O2-C2-N3	-2.99	117.62	122.33
1	2A	2251	OMG	C6-C5-N7	2.99	135.73	130.29
55	2x	32	5MC	C5-C4-N3	-2.98	118.70	121.75
55	1x	8	4SU	C1'-N1-C2	2.98	122.94	117.59
1	2A	2503	2MA	N6-C6-N1	2.97	121.03	117.03
54	2y	55	PSU	O2-C2-N1	-2.96	119.73	122.79
54	2y	32	PSU	O2-C2-N1	-2.96	119.73	122.79
54	2y	54	5MU	C1'-N1-C6	-2.95	116.29	121.15
55	1x	32	5MC	C5-C4-N3	-2.92	118.76	121.75
32	1a	966	M2G	C6-C5-N7	2.91	135.59	130.29
55	1x	54	5MU	C5-C6-N1	-2.90	120.16	123.31
54	2w	8	4SU	C1'-N1-C2	2.89	122.79	117.59
54	2w	37	MIA	C6-C5-N7	2.87	135.55	132.43
54	2w	32	PSU	O2-C2-N1	-2.86	119.84	122.79
54	2y	37	MIA	C4-N9-C8	2.85	108.73	105.74
32	2a	1207	2MG	C4-C5-N7	-2.84	106.17	110.67
32	1a	1518	MA6	N3-C4-N9	2.82	131.96	127.17
55	2x	54	5MU	C5-C6-N1	-2.82	120.25	123.31
32	2a	1404	5MC	C5-C4-N3	-2.78	118.90	121.75
32	2a	1518	MA6	N3-C4-N9	2.78	131.90	127.17
32	2a	1519	MA6	N3-C4-N9	2.78	131.89	127.17
32	1a	1407	5MC	C5-C4-N3	-2.78	118.91	121.75
55	1x	54	5MU	O2-C2-N1	-2.77	119.19	122.80
32	1a	1400	5MC	C5-C4-N3	-2.76	118.92	121.75
1	2A	1942	5MC	C5-C4-N3	-2.76	118.93	121.75
32	2a	966	M2G	C4-C5-N7	-2.76	106.30	110.67
1	1A	1942	5MC	C5-C6-N1	-2.73	120.35	123.31
1	1A	1939	5MU	O2-C2-N1	-2.69	119.30	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	1y	54	5MU	O2-C2-N1	-2.67	119.32	122.80
32	2a	1400	5MC	C5-C4-N3	-2.67	119.02	121.75
32	2a	1407	5MC	C5-C6-N1	-2.66	120.43	123.31
32	1a	1402	4OC	C6-C5-C4	2.65	120.20	117.00
54	2w	54	5MU	C5-C6-N1	-2.63	120.46	123.31
1	1A	1915	5MU	C5M-C5-C4	2.63	121.59	118.78
54	2y	37	MIA	C5-N7-C8	2.63	107.58	103.45
54	2y	54	5MU	C5-C6-N1	-2.60	120.49	123.31
43	2l	92	0TD	OD1-CG-CB	-2.59	117.01	122.44
55	2x	32	5MC	O2-C2-N3	-2.59	118.24	122.33
1	2A	1962	5MC	C5-C4-N3	-2.58	119.11	121.75
1	2A	2552	2MU	C5-C4-N3	2.58	118.41	114.80
54	1w	37	MIA	C2-N1-C6	2.57	122.42	117.54
32	1a	1207	2MG	N2-C2-N3	-2.56	117.25	120.51
32	2a	1400	5MC	O2-C2-N3	-2.55	118.31	122.33
54	2y	54	5MU	O2-C2-N3	-2.55	116.79	121.49
32	1a	527	G7M	O6-C6-C5	-2.54	122.34	128.01
54	2w	46	G7M	O6-C6-C5	-2.53	122.37	128.01
54	1y	37	MIA	C5-N7-C8	2.53	107.42	103.45
1	1A	1962	5MC	C5-C4-N3	-2.52	119.17	121.75
1	1A	2552	2MU	C5-C4-N3	2.50	118.30	114.80
32	2a	967	5MC	C5-C4-N3	-2.50	119.19	121.75
1	2A	2503	2MA	C2-N1-C6	2.50	121.94	118.10
55	1x	8	4SU	O2-C2-N3	-2.49	116.89	121.49
32	2a	1519	MA6	C4-C5-C6	2.48	118.47	115.91
54	2w	37	MIA	C5-N7-C8	2.48	107.34	103.45
54	1w	37	MIA	C5-N7-C8	2.47	107.34	103.45
1	2A	2503	2MA	C5-N7-C8	2.45	107.31	103.45
54	2w	39	PSU	O2-C2-N1	-2.45	120.26	122.79
1	2A	2503	2MA	N9-C8-N7	-2.44	110.48	113.94
32	2a	527	G7M	O6-C6-C5	-2.43	122.58	128.01
32	2a	527	G7M	C5-C6-N1	2.42	116.84	111.84
1	2A	1920	OMC	O2-C2-N3	-2.41	118.53	122.33
54	1y	37	MIA	C4-N9-C8	2.41	108.27	105.74
54	1w	46	G7M	O6-C6-C5	-2.41	122.64	128.01
54	2w	37	MIA	C4-N9-C8	2.40	108.25	105.74
54	1w	37	MIA	N3-C2-N1	-2.39	122.63	127.00
1	2A	2503	2MA	C6-C5-N7	2.39	136.69	132.09
54	1w	37	MIA	C4-N9-C8	2.39	108.25	105.74
1	1A	1915	5MU	C5-C6-N1	-2.39	120.72	123.31
32	1a	967	5MC	C5-C4-N3	-2.38	119.32	121.75
1	2A	2552	2MU	O4-C4-C5	-2.36	121.09	125.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	966	M2G	C4-C5-N7	-2.36	106.93	110.67
54	1y	39	PSU	O2-C2-N1	-2.36	120.36	122.79
32	2a	1404	5MC	O2-C2-N3	-2.36	118.61	122.33
54	2w	37	MIA	C2-N1-C6	2.34	121.99	117.54
1	1A	1911	PSU	C5-C6-N1	-2.34	118.89	122.14
54	1y	54	5MU	C5M-C5-C6	-2.32	119.71	122.85
1	2A	2251	OMG	C4-C5-N7	-2.32	106.99	110.67
32	1a	1207	2MG	CM2-N2-C2	-2.32	118.67	123.65
1	1A	2251	OMG	C4-C5-N7	-2.31	107.01	110.67
54	2y	8	4SU	C1'-N1-C2	2.31	121.74	117.59
32	1a	1407	5MC	CM5-C5-C6	-2.29	119.75	122.85
55	2x	8	4SU	C6-C5-C4	-2.28	117.97	119.95
1	2A	2605	PSU	C5-C6-N1	-2.28	118.98	122.14
1	1A	2503	2MA	C5-N7-C8	2.27	107.02	103.45
32	1a	1519	MA6	N3-C4-N9	2.24	130.98	127.17
1	1A	2552	2MU	O4-C4-C5	-2.23	121.32	125.16
1	1A	1917	PSU	C5-C6-N1	-2.23	119.05	122.14
54	2w	37	MIA	N3-C2-N1	-2.22	122.94	127.00
54	2y	46	G7M	O6-C6-C5	-2.22	123.05	128.01
54	1y	54	5MU	C5M-C5-C4	2.22	121.15	118.78
1	2A	2251	OMG	O6-C6-C5	-2.22	120.67	126.53
55	2x	54	5MU	O2-C2-N1	-2.21	119.92	122.80
54	1y	39	PSU	C6-C5-C4	-2.21	116.68	118.17
32	1a	516	PSU	O4'-C1'-C2'	2.21	108.21	105.15
1	1A	2251	OMG	O6-C6-C5	-2.20	120.72	126.53
32	2a	1498	UR3	C3U-N3-C4	2.19	120.91	117.87
32	1a	1407	5MC	O2-C2-N3	-2.19	118.88	122.33
32	1a	1498	UR3	C3U-N3-C2	2.18	121.14	117.33
54	2y	55	PSU	C6-C5-C4	-2.18	116.70	118.17
32	2a	1207	2MG	N2-C2-N3	-2.18	117.74	120.51
55	1x	55	PSU	C5-C6-N1	-2.17	119.13	122.14
32	2a	516	PSU	O4'-C1'-C2'	2.17	108.15	105.15
32	1a	527	G7M	C5-C6-N1	2.17	116.32	111.84
54	1y	46	G7M	O6-C6-C5	-2.17	123.18	128.01
32	1a	966	M2G	O6-C6-C5	-2.15	120.86	126.53
1	1A	2605	PSU	C5-C6-N1	-2.14	119.16	122.14
54	2y	55	PSU	C5-C6-N1	-2.14	119.17	122.14
54	2y	37	MIA	C2-N1-C6	2.13	122.23	118.73
32	2a	1402	4OC	C6-C5-C4	2.13	119.56	117.00
54	1w	8	4SU	C6-N1-C2	-2.12	118.42	121.00
32	2a	1207	2MG	N1-C2-N2	2.12	118.72	116.56
1	1A	1915	5MU	C5M-C5-C6	-2.12	119.99	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	2a	966	M2G	O6-C6-C5	-2.11	120.97	126.53
32	2a	1518	MA6	C4-C5-C6	2.10	118.09	115.91
32	1a	1207	2MG	C8-N7-C5	2.09	107.98	104.26
1	1A	2503	2MA	C6-C5-N7	2.08	136.09	132.09
1	1A	1920	OMC	O2-C2-N3	-2.07	119.06	122.33
32	2a	516	PSU	C5-C6-N1	-2.07	119.27	122.14
54	2w	54	5MU	O2-C2-N1	-2.07	120.10	122.80
54	1w	54	5MU	C5M-C5-C4	2.07	120.99	118.78
1	1A	2503	2MA	N9-C8-N7	-2.07	111.01	113.94
32	1a	1518	MA6	C4-N9-C8	2.06	107.91	105.74
54	1w	54	5MU	O2-C2-N1	-2.06	120.11	122.80
55	2x	54	5MU	C5M-C5-C4	2.05	120.97	118.78
54	2w	46	G7M	C5-C6-N1	2.03	116.04	111.84
54	1y	55	PSU	C5-C6-N1	-2.03	119.32	122.14
54	2y	37	MIA	N9-C8-N7	-2.03	111.06	113.94
1	1A	1915	5MU	C1'-N1-C2	2.03	121.23	117.59
54	1w	39	PSU	C5-C6-N1	-2.02	119.33	122.14
1	2A	1917	PSU	C5-C6-N1	-2.01	119.34	122.14
54	2y	37	MIA	C6-C5-N7	2.01	135.97	132.09
32	1a	1518	MA6	C4-C5-C6	2.01	117.98	115.91

There are no chirality outliers.

All (62) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
43	1l	92	0TD	O-C-CA-CB
54	1w	37	MIA	C12-C13-C14-C15
54	1w	37	MIA	C12-C13-C14-C16
54	1y	8	4SU	O4'-C4'-C5'-O5'
32	2a	1207	2MG	N3-C2-N2-CM2
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	2w	37	MIA	C5-C6-N6-C12
54	2w	37	MIA	N1-C6-N6-C12
54	2w	37	MIA	N1-C2-S10-C11
54	2w	37	MIA	N3-C2-S10-C11
54	2y	54	5MU	O4'-C4'-C5'-O5'
32	1a	1519	MA6	O4'-C4'-C5'-O5'
54	2y	54	5MU	C3'-C4'-C5'-O5'
54	1w	46	G7M	C4'-C5'-O5'-P
32	1a	1402	4OC	O4'-C4'-C5'-O5'
54	1y	8	4SU	C3'-C4'-C5'-O5'
1	2A	1917	PSU	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
54	1y	54	5MU	O4'-C4'-C5'-O5'
32	2a	1404	5MC	O4'-C4'-C5'-O5'
54	2y	46	G7M	O4'-C1'-N9-C4
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
1	2A	2503	2MA	C3'-C4'-C5'-O5'
32	2a	1402	4OC	O4'-C4'-C5'-O5'
54	2w	46	G7M	C3'-C4'-C5'-O5'
1	2A	1915	5MU	O4'-C4'-C5'-O5'
54	2w	46	G7M	C4'-C5'-O5'-P
54	1w	55	PSU	O4'-C1'-C5-C4
54	1y	55	PSU	O4'-C1'-C5-C4
32	1a	1402	4OC	C3'-C4'-C5'-O5'
1	2A	1917	PSU	C3'-C4'-C5'-O5'
32	1a	527	G7M	O4'-C4'-C5'-O5'
54	2y	55	PSU	O4'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
32	1a	527	G7M	C4'-C5'-O5'-P
54	1y	8	4SU	C4'-C5'-O5'-P
54	1y	46	G7M	C4'-C5'-O5'-P
1	2A	1962	5MC	O4'-C4'-C5'-O5'
54	2w	46	G7M	O4'-C4'-C5'-O5'
54	2y	46	G7M	O4'-C1'-N9-C8
32	2a	1400	5MC	C2'-C1'-N1-C6
32	2a	1519	MA6	C4'-C5'-O5'-P
32	2a	1400	5MC	O4'-C4'-C5'-O5'
54	2y	54	5MU	C2'-C1'-N1-C6
32	2a	1400	5MC	O4'-C1'-N1-C6
54	1w	55	PSU	O4'-C1'-C5-C6
54	2y	55	PSU	O4'-C1'-C5-C6
1	1A	1962	5MC	C2'-C1'-N1-C6
54	2y	54	5MU	C2'-C1'-N1-C2
43	1l	92	0TD	CG-CB-SB-CSB
43	2l	92	0TD	CG-CB-SB-CSB
54	2y	55	PSU	C2'-C1'-C5-C6
32	1a	1519	MA6	C4'-C5'-O5'-P
1	1A	1962	5MC	O4'-C1'-N1-C6

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Mol	Chain	Res	Type	Atoms
54	1y	54	5MU	C3'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
54	2y	55	PSU	C3'-C4'-C5'-O5'

There are no ring outliers.

42 monomers are involved in 60 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	1a	1519	MA6	2	0
1	1A	2251	OMG	1	0
1	1A	2503	2MA	2	0
32	2a	1518	MA6	4	0
55	2x	55	PSU	1	0
1	2A	2503	2MA	2	0
54	1y	39	PSU	1	0
1	2A	1917	PSU	1	0
55	1x	8	4SU	3	0
1	1A	1915	5MU	1	0
32	2a	1498	UR3	1	0
54	2w	46	G7M	1	0
54	2y	37	MIA	1	0
54	1y	37	MIA	1	0
32	2a	1404	5MC	2	0
54	2w	8	4SU	1	0
32	1a	967	5MC	1	0
43	2l	92	0TD	1	0
54	2w	54	5MU	2	0
54	2y	55	PSU	7	0
32	2a	1207	2MG	1	0
32	1a	1402	4OC	1	0
1	1A	1939	5MU	1	0
54	2y	32	PSU	1	0
1	1A	1911	PSU	1	0
32	1a	966	M2G	1	0
54	1w	39	PSU	1	0
1	2A	2552	2MU	2	0
55	1x	55	PSU	1	0
54	1y	8	4SU	1	0
54	1w	37	MIA	1	0
43	1l	92	0TD	2	0
54	1w	8	4SU	1	0
32	2a	1402	4OC	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	1w	46	G7M	1	0
1	2A	1939	5MU	1	0
54	2y	39	PSU	1	0
32	2a	967	5MC	1	0
32	2a	966	M2G	1	0
54	2y	8	4SU	1	0
32	2a	1519	MA6	2	0
32	1a	1518	MA6	3	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2807 ligands modelled in this entry, 2803 are monoatomic - leaving 4 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
57	TYK	2A	3879	1	67,67,67	1.83	5 (7%)	87,97,97	1.38	13 (14%)
59	SF4	2d	303	35	0,12,12	-	-	-	-	-
57	TYK	1A	4107	1	67,67,67	1.75	8 (11%)	87,97,97	1.26	13 (14%)
59	SF4	1d	302	35	0,12,12	-	-	-	-	-

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	TYK	2A	3879	1	-	4/67/126/126	0/3/4/4
59	SF4	2d	303	35	-	-	0/6/5/5
57	TYK	1A	4107	1	-	2/67/126/126	0/3/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	SF4	1d	302	35	-	-	0/6/5/5

All (13) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	2A	3879	TYK	C8-C9	-8.87	1.37	1.51
57	1A	4107	TYK	C8-C9	-7.71	1.39	1.51
57	2A	3879	TYK	C14-C13	-7.35	1.37	1.50
57	1A	4107	TYK	C14-C13	-7.15	1.38	1.50
57	2A	3879	TYK	C2-C1	-4.99	1.41	1.50
57	1A	4107	TYK	C2-C1	-4.22	1.42	1.50
57	2A	3879	TYK	C11-C12	-3.41	1.38	1.46
57	1A	4107	TYK	O1C-C1C	3.33	1.45	1.40
57	1A	4107	TYK	C11-C12	-2.83	1.39	1.46
57	1A	4107	TYK	O1A-C1A	2.43	1.48	1.41
57	1A	4107	TYK	C2A-C3A	-2.18	1.50	1.53
57	2A	3879	TYK	O4A-C1B	2.12	1.47	1.41
57	1A	4107	TYK	C11-C10	2.11	1.39	1.33

All (26) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	2A	3879	TYK	C10-C11-C12	-4.01	120.30	126.23
57	2A	3879	TYK	C23-O1C-C1C	-3.67	105.93	113.80
57	2A	3879	TYK	C3B-C2B-C1B	-3.47	108.32	114.77
57	2A	3879	TYK	C18-C4-C3	-3.29	105.84	111.09
57	2A	3879	TYK	C6B-C5B-C4B	-2.74	108.04	112.58
57	1A	4107	TYK	C3B-C2B-C1B	-2.60	109.94	114.77
57	1A	4107	TYK	O20-C20-C19	-2.55	117.96	125.38
57	1A	4107	TYK	O15-C15-C16	-2.52	102.89	106.90
57	1A	4107	TYK	C22-C12-C11	2.44	121.81	118.09
57	1A	4107	TYK	C1A-O5A-C5A	-2.41	109.52	113.63
57	2A	3879	TYK	O20-C20-C19	-2.37	118.48	125.38
57	1A	4107	TYK	C6-C5-C4	-2.32	108.61	114.14
57	1A	4107	TYK	C2A-C3A-N3A	-2.30	104.38	113.39
57	1A	4107	TYK	C15-O15-C1	2.30	122.19	117.81
57	2A	3879	TYK	C14-C13-C12	-2.28	121.59	128.15
57	2A	3879	TYK	C1A-O5A-C5A	-2.26	109.78	113.63
57	2A	3879	TYK	C8C-O3C-C3C	-2.19	108.86	114.47
57	2A	3879	TYK	C2A-C3A-N3A	-2.11	105.15	113.39
57	2A	3879	TYK	O4A-C1B-O5B	2.10	116.73	109.97
57	1A	4107	TYK	C10-C11-C12	-2.09	123.14	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	2A	3879	TYK	C7-C8-C9	-2.06	105.73	110.64
57	1A	4107	TYK	C17-C16-C15	-2.05	107.78	113.23
57	1A	4107	TYK	O4A-C1B-C2B	2.05	112.42	108.99
57	1A	4107	TYK	O1A-C5-C4	2.02	110.61	108.23
57	1A	4107	TYK	C1A-O1A-C5	-2.00	113.23	117.98
57	2A	3879	TYK	O1A-C5-C4	2.00	110.59	108.23

There are no chirality outliers.

All (6) torsion outliers are listed below:

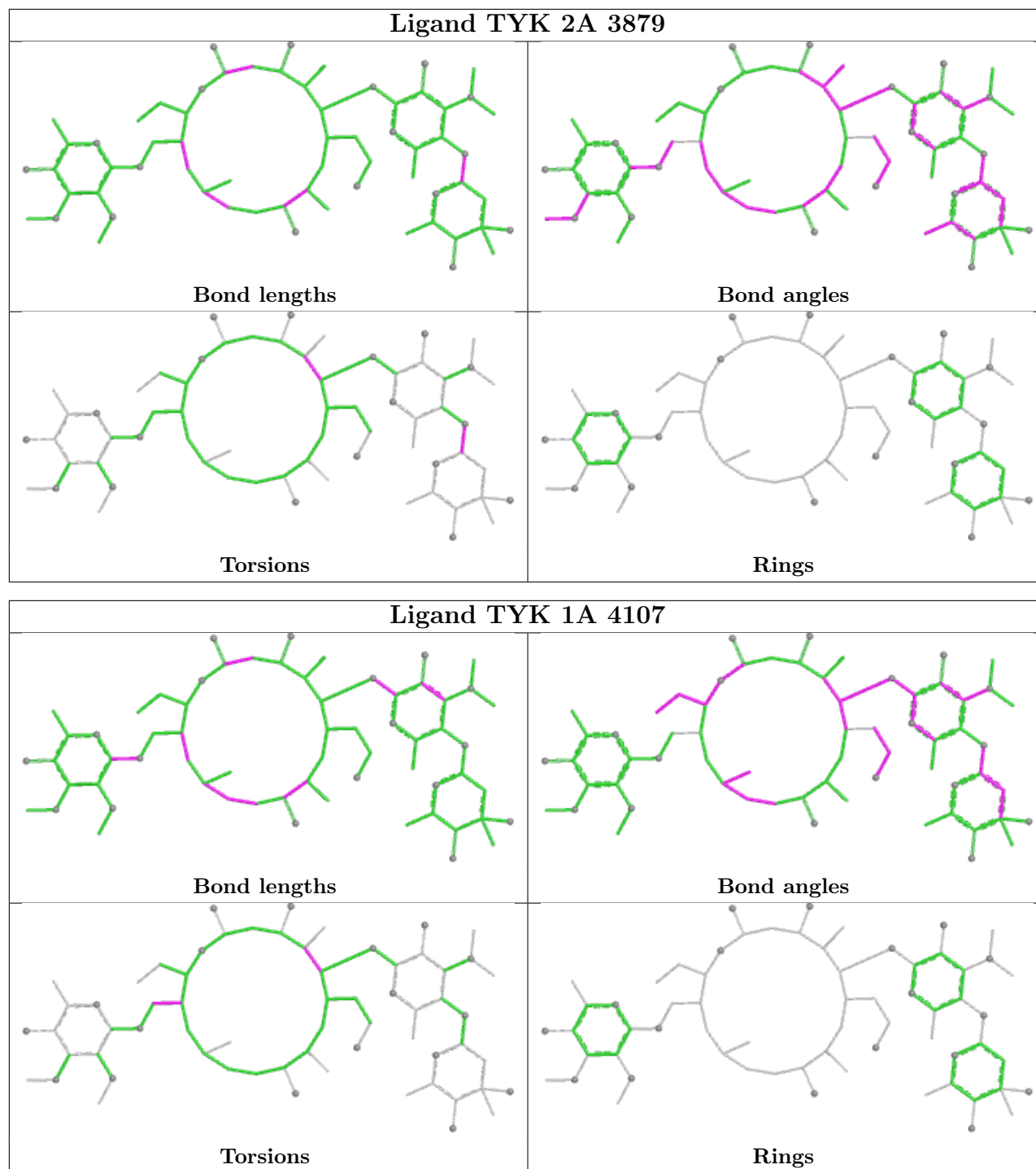
Mol	Chain	Res	Type	Atoms
57	1A	4107	TYK	C15-C14-C23-O1C
57	2A	3879	TYK	C2B-C1B-O4A-C4A
57	2A	3879	TYK	C18-C4-C5-C6
57	1A	4107	TYK	C18-C4-C5-C6
57	2A	3879	TYK	C3-C4-C5-C6
57	2A	3879	TYK	O5B-C1B-O4A-C4A

There are no ring outliers.

3 monomers are involved in 15 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
57	2A	3879	TYK	4	0
57	1A	4107	TYK	6	0
59	1d	302	SF4	5	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [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%)	-0.40	125 (4%)	39	35	14, 32, 85, 95	0
1	2A	2789/2915 (95%)	0.18	125 (4%)	38	34	30, 51, 84, 99	0
2	1B	120/121 (99%)	-0.29	0	100	100	27, 46, 59, 76	0
2	2B	120/121 (99%)	1.00	8 (6%)	24	21	55, 71, 78, 84	0
3	1D	275/276 (99%)	-0.15	3 (1%)	78	76	17, 32, 45, 65	0
3	2D	275/276 (99%)	0.34	5 (1%)	67	65	29, 45, 56, 75	0
4	1E	204/206 (99%)	-0.12	1 (0%)	87	86	14, 34, 54, 69	0
4	2E	204/206 (99%)	0.42	1 (0%)	87	86	31, 51, 64, 72	0
5	1F	202/210 (96%)	-0.04	1 (0%)	87	86	15, 37, 59, 77	0
5	2F	202/210 (96%)	0.45	2 (0%)	79	78	29, 59, 70, 77	0
6	1G	181/182 (99%)	0.46	9 (4%)	34	30	39, 53, 66, 78	0
6	2G	181/182 (99%)	1.37	35 (19%)	3	3	61, 70, 75, 86	0
7	1H	174/180 (96%)	0.17	3 (1%)	69	67	35, 46, 58, 68	0
7	2H	174/180 (96%)	1.40	28 (16%)	4	4	58, 73, 81, 88	0
8	1I	146/148 (98%)	0.66	7 (4%)	35	32	38, 64, 74, 78	0
8	2I	146/148 (98%)	0.96	5 (3%)	48	44	46, 62, 71, 77	0
9	1N	140/140 (100%)	-0.04	1 (0%)	84	83	20, 34, 53, 65	0
9	2N	140/140 (100%)	0.61	5 (3%)	46	42	40, 57, 68, 76	0
10	1O	122/122 (100%)	-0.03	0	100	100	24, 36, 50, 53	0
10	2O	122/122 (100%)	0.46	0	100	100	42, 52, 64, 68	0
11	1P	149/150 (99%)	0.11	3 (2%)	65	62	17, 40, 62, 70	0
11	2P	149/150 (99%)	0.65	1 (0%)	84	83	37, 58, 74, 81	0
12	1Q	141/141 (100%)	-0.07	1 (0%)	84	83	24, 38, 52, 68	0
12	2Q	141/141 (100%)	1.03	17 (12%)	8	7	46, 61, 70, 74	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	1R	118/118 (100%)	-0.21	0 100 100	18, 32, 43, 53	0
13	2R	118/118 (100%)	0.22	0 100 100	37, 47, 55, 62	0
14	1S	110/112 (98%)	0.05	0 100 100	34, 46, 55, 63	0
14	2S	110/112 (98%)	1.13	14 (12%) 8 7	55, 65, 74, 79	0
15	1T	131/146 (89%)	0.08	2 (1%) 72 70	25, 39, 60, 65	0
15	2T	131/146 (89%)	0.61	2 (1%) 72 70	45, 54, 67, 74	0
16	1U	116/118 (98%)	-0.31	1 (0%) 81 80	18, 25, 40, 59	0
16	2U	116/118 (98%)	0.57	1 (0%) 81 80	39, 56, 67, 74	0
17	1V	101/101 (100%)	-0.21	0 100 100	18, 34, 51, 65	0
17	2V	101/101 (100%)	0.80	3 (2%) 52 49	39, 62, 69, 83	0
18	1W	112/113 (99%)	-0.27	1 (0%) 81 80	19, 27, 43, 69	0
18	2W	112/113 (99%)	0.23	1 (0%) 81 80	35, 43, 58, 82	0
19	1X	95/96 (98%)	0.06	1 (1%) 78 76	22, 34, 55, 64	0
19	2X	95/96 (98%)	0.71	3 (3%) 50 46	42, 54, 66, 78	0
20	1Y	107/110 (97%)	0.33	0 100 100	31, 44, 58, 70	0
20	2Y	107/110 (97%)	0.89	8 (7%) 20 17	51, 62, 73, 77	0
21	1Z	154/206 (74%)	0.74	9 (5%) 29 25	32, 58, 76, 82	0
21	2Z	160/206 (77%)	1.39	30 (18%) 3 3	63, 72, 79, 86	0
22	10	83/85 (97%)	0.25	7 (8%) 17 14	26, 33, 59, 73	0
22	20	83/85 (97%)	1.28	14 (16%) 4 3	38, 59, 74, 83	0
23	11	97/98 (98%)	0.08	1 (1%) 79 78	23, 38, 62, 68	0
23	21	97/98 (98%)	0.63	5 (5%) 33 29	34, 47, 65, 67	0
24	12	70/72 (97%)	0.11	1 (1%) 73 72	30, 42, 55, 59	0
24	22	70/72 (97%)	0.61	1 (1%) 73 72	50, 60, 67, 73	0
25	13	59/60 (98%)	-0.23	0 100 100	19, 32, 55, 63	0
25	23	59/60 (98%)	0.67	1 (1%) 69 67	48, 59, 69, 74	0
26	14	69/71 (97%)	1.23	14 (20%) 3 2	48, 67, 77, 81	0
26	24	69/71 (97%)	1.58	14 (20%) 3 2	64, 77, 84, 87	0
27	15	59/60 (98%)	-0.14	1 (1%) 69 67	17, 29, 52, 59	0
27	25	59/60 (98%)	0.38	0 100 100	33, 46, 64, 76	0
28	16	53/54 (98%)	-0.26	0 100 100	29, 37, 50, 57	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	26	53/54 (98%)	0.64	2 (3%) 44 40	46, 55, 61, 62	0
29	17	48/49 (97%)	-0.27	1 (2%) 63 61	17, 24, 52, 60	0
29	27	48/49 (97%)	0.11	4 (8%) 17 14	29, 36, 58, 68	0
30	18	64/65 (98%)	-0.31	0 100 100	23, 29, 36, 48	0
30	28	64/65 (98%)	0.56	1 (1%) 70 68	42, 50, 55, 59	0
31	19	37/37 (100%)	-0.16	0 100 100	22, 32, 52, 59	0
31	29	37/37 (100%)	0.90	2 (5%) 31 27	54, 61, 68, 72	0
32	1a	1488/1521 (97%)	0.50	58 (3%) 43 39	31, 60, 83, 97	0
32	2a	1491/1521 (98%)	0.84	135 (9%) 15 12	43, 68, 86, 96	0
33	1b	231/256 (90%)	1.31	37 (16%) 5 4	50, 69, 78, 85	0
33	2b	231/256 (90%)	1.52	63 (27%) 1 1	59, 75, 81, 84	0
34	1c	206/239 (86%)	1.05	25 (12%) 8 7	48, 66, 75, 82	0
34	2c	206/239 (86%)	1.65	68 (33%) 1 1	65, 74, 80, 84	0
35	1d	208/209 (99%)	1.13	29 (13%) 6 5	45, 63, 72, 80	0
35	2d	208/209 (99%)	0.84	7 (3%) 48 44	50, 61, 70, 75	0
36	1e	148/162 (91%)	0.60	2 (1%) 73 72	42, 57, 66, 71	0
36	2e	148/162 (91%)	1.10	15 (10%) 12 10	57, 68, 74, 80	0
37	1f	100/101 (99%)	0.63	0 100 100	51, 60, 67, 73	0
37	2f	100/101 (99%)	0.88	4 (4%) 42 38	51, 62, 69, 75	0
38	1g	155/156 (99%)	0.77	10 (6%) 25 22	52, 62, 73, 82	0
38	2g	155/156 (99%)	1.14	14 (9%) 15 13	61, 70, 78, 85	0
39	1h	137/138 (99%)	0.68	6 (4%) 39 35	47, 58, 64, 71	0
39	2h	137/138 (99%)	0.96	8 (5%) 29 25	60, 67, 74, 78	0
40	1i	127/128 (99%)	1.26	17 (13%) 7 6	50, 67, 75, 78	0
40	2i	127/128 (99%)	1.92	56 (44%) 0 0	63, 74, 79, 82	0
41	1j	97/105 (92%)	1.28	10 (10%) 12 10	53, 70, 79, 86	0
41	2j	96/105 (91%)	1.88	35 (36%) 1 0	67, 76, 83, 85	0
42	1k	114/129 (88%)	0.53	3 (2%) 57 54	38, 57, 67, 71	0
42	2k	114/129 (88%)	1.11	12 (10%) 11 9	50, 65, 71, 74	0
43	1l	121/132 (91%)	0.34	2 (1%) 69 67	36, 49, 58, 65	0
43	2l	121/132 (91%)	0.96	7 (5%) 29 25	49, 63, 70, 74	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	1m	123/126 (97%)	0.92	9 (7%) 21 18	47, 62, 69, 73	0
44	2m	122/126 (96%)	1.71	40 (32%) 1 1	64, 73, 77, 81	0
45	1n	60/61 (98%)	0.99	3 (5%) 34 30	53, 61, 67, 71	0
45	2n	60/61 (98%)	2.37	36 (60%) 0 0	70, 76, 82, 85	0
46	1o	88/89 (98%)	0.79	6 (6%) 23 20	42, 57, 70, 77	0
46	2o	88/89 (98%)	0.91	6 (6%) 23 20	53, 64, 73, 76	0
47	1p	82/88 (93%)	1.50	22 (26%) 1 1	47, 62, 70, 77	0
47	2p	82/88 (93%)	0.88	6 (7%) 21 18	50, 59, 67, 72	0
48	1q	99/105 (94%)	0.80	5 (5%) 33 29	45, 58, 69, 72	0
48	2q	99/105 (94%)	0.98	5 (5%) 33 29	51, 64, 71, 75	0
49	1r	68/88 (77%)	0.61	1 (1%) 72 70	46, 58, 67, 69	0
49	2r	68/88 (77%)	0.97	5 (7%) 20 18	51, 63, 71, 75	0
50	1s	83/93 (89%)	0.94	7 (8%) 17 14	49, 64, 73, 79	0
50	2s	83/93 (89%)	1.75	29 (34%) 1 1	70, 77, 81, 86	0
51	1t	96/106 (90%)	1.09	12 (12%) 8 7	51, 63, 69, 72	0
51	2t	96/106 (90%)	0.93	5 (5%) 33 29	51, 62, 72, 80	0
52	1u	23/27 (85%)	1.05	1 (4%) 40 36	57, 59, 64, 67	0
52	2u	23/27 (85%)	1.81	10 (43%) 0 0	64, 71, 75, 78	0
53	1v	13/24 (54%)	0.72	1 (7%) 19 17	42, 55, 75, 87	0
53	2v	13/24 (54%)	1.68	4 (30%) 1 1	63, 74, 87, 91	0
54	1w	67/76 (88%)	1.27	11 (16%) 4 4	55, 79, 89, 95	0
54	1y	67/76 (88%)	1.09	6 (8%) 15 13	33, 83, 90, 93	0
54	2w	65/76 (85%)	1.62	19 (29%) 1 1	74, 85, 92, 97	0
54	2y	66/76 (86%)	1.35	11 (16%) 4 3	49, 87, 92, 95	0
55	1x	72/77 (93%)	0.29	0 100 100	26, 55, 74, 83	0
55	2x	72/77 (93%)	0.86	2 (2%) 55 51	44, 71, 80, 89	0
All	All	20873/21748 (95%)	0.48	1416 (6%) 23 20	14, 57, 80, 99	0

All (1416) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
21	2Z	172	ALA	6.3
36	2e	22	GLY	6.0

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Mol	Chain	Res	Type	RSRZ
22	20	7	LEU	5.9
38	2g	84	ASN	5.8
32	2a	1033	G	5.8
54	2w	76	A	5.7
38	1g	80	VAL	5.3
44	2m	102	ARG	5.3
45	2n	2	ALA	5.2
41	2j	32	ALA	5.0
54	1w	1	G	4.9
23	1l	2	SER	4.9
35	1d	167	GLY	4.9
45	2n	7	ILE	4.8
45	2n	13	THR	4.8
40	2i	102	LEU	4.8
34	2c	2	GLY	4.7
45	2n	39	LEU	4.7
41	2j	55	LYS	4.7
21	1Z	141	VAL	4.6
44	2m	124	PRO	4.6
40	2i	109	VAL	4.6
1	2A	2174	C	4.5
45	2n	25	VAL	4.5
32	1a	1001(A)	G	4.5
1	2A	2173	A	4.5
7	2H	174	GLY	4.4
32	1a	1002	G	4.4
38	2g	83	ALA	4.4
1	2A	2112	G	4.3
34	1c	39	ILE	4.3
33	2b	237	ALA	4.2
41	2j	40	LEU	4.2
1	2A	2896	C	4.2
1	1A	2119	A	4.2
1	2A	896	A	4.2
7	1H	2	SER	4.2
1	2A	2133	G	4.2
22	10	6	GLY	4.1
1	2A	2119	A	4.1
32	2a	1030(B)	C	4.1
32	2a	1117	G	4.1
3	2D	2	ALA	4.1
33	2b	161	ALA	4.1

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Mol	Chain	Res	Type	RSRZ
44	1m	123	ALA	4.1
35	1d	170	VAL	4.1
1	2A	2113	U	4.1
21	2Z	21	ALA	4.1
1	2A	2793	G	4.0
1	2A	2149	G	4.0
1	2A	2153	G	4.0
1	1A	1078	U	4.0
44	2m	60	VAL	4.0
1	2A	2145	C	4.0
54	2w	75	C	4.0
12	2Q	121	ALA	4.0
26	14	55	ARG	4.0
44	2m	6	GLY	4.0
1	2A	2155	G	4.0
32	1a	1023	G	4.0
47	1p	82	GLN	4.0
32	1a	1001	A	4.0
7	2H	52	VAL	4.0
33	1b	15	VAL	4.0
1	2A	2156	G	3.9
38	2g	82	GLY	3.9
1	2A	1536	C	3.9
32	2a	1149	C	3.9
26	14	56	VAL	3.9
1	2A	2157	G	3.9
44	1m	2	ALA	3.9
34	2c	9	GLY	3.9
32	2a	1286	A	3.9
54	1w	76	A	3.9
1	2A	2138	C	3.9
3	2D	275	LYS	3.9
51	1t	69	GLY	3.9
1	1A	2159	G	3.9
1	2A	2802	G	3.9
1	2A	2146	C	3.9
3	1D	276	LYS	3.8
22	20	5	LYS	3.8
1	2A	2137	C	3.8
45	2n	8	GLU	3.8
34	2c	157	ILE	3.8
34	2c	137	ALA	3.8

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Mol	Chain	Res	Type	RSRZ
1	2A	2160	G	3.8
51	2t	47	GLY	3.8
40	2i	10	ARG	3.8
1	1A	2113	U	3.8
32	2a	1031	G	3.8
41	2j	41	PRO	3.8
22	10	7	LEU	3.8
41	1j	86	MET	3.8
32	2a	1030	C	3.8
7	2H	2	SER	3.8
32	2a	1030(D)	A	3.7
32	1a	1532	U	3.7
34	2c	65	ALA	3.7
40	1i	15	ALA	3.7
32	2a	1116	C	3.7
32	2a	1217	C	3.7
40	2i	9	ARG	3.7
26	24	51	ASP	3.7
34	2c	202	ILE	3.7
1	2A	2126	A	3.7
1	2A	2125	G	3.7
26	24	56	VAL	3.7
1	1A	885	C	3.7
40	1i	2	GLU	3.7
1	2A	2154	G	3.6
21	2Z	173	ALA	3.6
23	2I	2	SER	3.6
8	2I	145	VAL	3.6
33	1b	9	GLU	3.6
32	1a	1257	U	3.6
34	2c	4	LYS	3.6
1	2A	885	C	3.6
32	1a	1030(A)	G	3.6
54	2w	72	C	3.6
33	1b	12	GLU	3.6
34	2c	149	ALA	3.6
50	2s	80	TYR	3.6
1	2A	886	C	3.6
1	2A	2893	G	3.6
33	1b	120	ALA	3.6
45	1n	2	ALA	3.6
44	1m	124	PRO	3.6

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Mol	Chain	Res	Type	RSRZ
20	2Y	57	GLN	3.6
1	1A	1064	C	3.5
1	1A	1076	C	3.5
32	1a	1030(B)	C	3.5
26	24	59	PHE	3.5
7	2H	35	VAL	3.5
50	2s	35	SER	3.5
1	2A	2169	A	3.5
41	2j	42	THR	3.5
22	10	2	ALA	3.5
41	2j	36	GLY	3.5
1	1A	2803	C	3.5
1	1A	1059	G	3.5
22	20	84	LEU	3.5
32	1a	1024	G	3.5
32	2a	1030(A)	G	3.5
32	2a	1034	G	3.5
32	2a	1150	U	3.5
54	2w	73	A	3.5
54	2y	36	A	3.5
45	2n	11	LYS	3.5
33	2b	152	PHE	3.5
33	2b	187	LEU	3.5
34	1c	47	LEU	3.5
35	1d	194	LEU	3.5
54	1w	75	C	3.5
54	2w	3	C	3.5
21	1Z	146	ILE	3.5
1	1A	2165	G	3.5
1	1A	2793	G	3.5
22	20	6	GLY	3.5
6	2G	74	LYS	3.4
1	1A	2792	G	3.4
32	1a	1447	A	3.4
32	2a	994	A	3.4
50	2s	9	VAL	3.4
40	2i	11	LYS	3.4
8	2I	146	ALA	3.4
34	1c	65	ALA	3.4
29	27	47	ARG	3.4
41	2j	54	PHE	3.4
32	2a	1002	G	3.4

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Mol	Chain	Res	Type	RSRZ
34	2c	124	ILE	3.4
22	20	4	LYS	3.4
36	2e	23	GLY	3.4
50	2s	76	PRO	3.4
41	2j	65	LEU	3.4
12	2Q	6	ARG	3.4
26	14	58	ARG	3.4
40	2i	17	VAL	3.4
41	2j	47	PHE	3.4
1	1A	898	C	3.4
33	1b	39	ILE	3.4
54	1w	73	A	3.4
6	1G	48	GLU	3.4
34	1c	76	VAL	3.4
1	1A	1080	C	3.3
1	2A	2136	C	3.3
1	2A	2150	U	3.3
54	1w	74	C	3.3
21	2Z	170	THR	3.3
1	1A	1057	A	3.3
32	2a	1220	G	3.3
26	14	50	VAL	3.3
6	2G	146	TYR	3.3
1	2A	2114	A	3.3
26	14	63	TYR	3.3
46	1o	57	LEU	3.3
20	2Y	5	MET	3.3
12	2Q	28	ALA	3.3
33	1b	237	ALA	3.3
40	2i	94	ALA	3.3
34	2c	198	VAL	3.3
40	2i	63	ILE	3.3
1	1A	1095	A	3.3
32	2a	1251	A	3.3
1	2A	883	G	3.3
1	2A	2318	G	3.3
32	2a	1032	G	3.3
40	2i	103	THR	3.3
45	2n	14	PRO	3.3
22	10	3	HIS	3.3
40	2i	67	GLY	3.3
45	2n	38	GLY	3.3

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Mol	Chain	Res	Type	RSRZ
33	2b	218	ALA	3.3
34	2c	189	ALA	3.3
1	1A	1081	U	3.3
33	2b	112	VAL	3.3
33	2b	165	VAL	3.3
44	2m	106	ASN	3.3
55	2x	47	U	3.3
1	1A	886	C	3.2
1	2A	2139	C	3.2
32	1a	1028	C	3.2
21	2Z	150	LEU	3.2
33	2b	125	PRO	3.2
44	2m	90	LEU	3.2
41	2j	10	GLY	3.2
54	1w	71	G	3.2
34	2c	8	ILE	3.2
40	2i	86	VAL	3.2
1	1A	1094	U	3.2
1	2A	2804	C	3.2
48	1q	98	LEU	3.2
18	2W	112	GLY	3.2
38	1g	81	GLY	3.2
33	1b	62	ALA	3.2
7	2H	19	VAL	3.2
35	1d	154	ASN	3.2
54	2y	57	G	3.2
1	2A	2118	U	3.2
33	2b	121	LEU	3.2
39	1h	2	LEU	3.2
40	2i	7	THR	3.2
1	1A	2138	C	3.2
21	2Z	171	ILE	3.2
1	1A	1077	A	3.2
1	1A	2114	A	3.2
32	1a	1286	A	3.2
50	1s	5	LEU	3.2
52	2u	23	PRO	3.2
1	1A	1087	G	3.2
1	1A	2190	G	3.2
1	2A	2159	G	3.2
32	2a	1224	G	3.2
32	2a	1356	G	3.2

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Mol	Chain	Res	Type	RSRZ
54	2y	34	G	3.2
26	14	17	GLY	3.2
40	2i	39	GLY	3.2
49	1r	73	ALA	3.2
21	2Z	174	VAL	3.2
1	1A	2145	C	3.1
44	2m	122	LYS	3.1
53	2v	13	A	3.1
20	2Y	77	PRO	3.1
33	1b	19	HIS	3.1
41	1j	36	GLY	3.1
45	2n	28	GLY	3.1
22	20	2	ALA	3.1
34	2c	152	ILE	3.1
12	2Q	104	PHE	3.1
32	1a	1032	G	3.1
32	1a	1034	G	3.1
32	1a	1036	G	3.1
54	2y	19	G	3.1
44	2m	88	ARG	3.1
1	2A	2803	C	3.1
49	2r	66	LEU	3.1
51	1t	13	LEU	3.1
26	24	30	GLU	3.1
1	1A	2135	A	3.1
1	2A	2117	A	3.1
40	2i	84	ALA	3.1
44	2m	75	ALA	3.1
38	2g	80	VAL	3.1
1	1A	2897	U	3.1
45	2n	29	ARG	3.1
42	2k	25	TYR	3.1
50	2s	16	LEU	3.1
1	2A	2115	G	3.1
35	1d	179	GLU	3.1
40	2i	117	HIS	3.1
1	2A	884	C	3.1
1	2A	2789	C	3.1
19	2X	94	GLY	3.1
6	2G	52	ILE	3.1
33	2b	207	ALA	3.1
47	1p	43	LYS	3.1

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Mol	Chain	Res	Type	RSRZ
27	15	60	VAL	3.1
38	2g	5	ARG	3.1
40	2i	14	VAL	3.1
38	1g	85	TYR	3.1
1	1A	1060	U	3.1
1	2A	2130	U	3.1
54	1y	20	U	3.1
50	1s	13	ASP	3.1
1	2A	2805	G	3.1
17	2V	41	GLY	3.1
32	1a	1003	G	3.1
38	1g	82	GLY	3.1
44	2m	123	ALA	3.1
33	2b	48	MET	3.1
32	1a	1006	C	3.1
21	1Z	166	SER	3.1
32	1a	1035	A	3.0
41	2j	77	PRO	3.0
22	10	5	LYS	3.0
34	2c	158	GLY	3.0
51	1t	103	GLY	3.0
6	2G	50	ALA	3.0
40	2i	82	ALA	3.0
45	2n	20	ALA	3.0
45	2n	37	PHE	3.0
1	1A	1058	G	3.0
1	1A	1176	G	3.0
32	2a	1184	G	3.0
40	1i	19	LEU	3.0
44	2m	87	TYR	3.0
45	2n	21	TYR	3.0
54	2w	74	C	3.0
1	1A	2170	A	3.0
53	2v	14	A	3.0
54	1y	35	A	3.0
45	2n	4	LYS	3.0
1	2A	1026	U	3.0
32	2a	1532	U	3.0
21	2Z	147	GLY	3.0
44	2m	100	GLY	3.0
34	2c	187	ALA	3.0
22	20	45	PHE	3.0

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Mol	Chain	Res	Type	RSRZ
26	14	49	PHE	3.0
34	2c	151	VAL	3.0
34	2c	204	LEU	3.0
45	2n	53	LEU	3.0
34	2c	109	PRO	3.0
42	2k	117	ASN	3.0
1	1A	2112	G	3.0
1	2A	2319	G	3.0
26	24	28	LYS	3.0
33	2b	132	LYS	3.0
1	1A	1075	C	3.0
1	2A	2128	C	3.0
33	1b	58	ILE	3.0
33	2b	185	ILE	3.0
42	2k	49	GLY	3.0
1	1A	2150	U	3.0
6	2G	180	PHE	3.0
33	1b	17	PHE	3.0
26	24	66	SER	3.0
38	1g	153	HIS	3.0
50	2s	12	ASP	3.0
7	2H	41	MET	3.0
21	2Z	146	ILE	3.0
33	2b	42	ILE	3.0
33	2b	211	ILE	3.0
34	2c	145	GLY	3.0
36	2e	74	GLY	3.0
1	2A	2120	G	3.0
32	1a	630	G	3.0
32	2a	1058	G	3.0
54	2y	18	G	3.0
1	1A	897	C	3.0
32	2a	1029	C	3.0
32	2a	1354	C	3.0
32	2a	1004	A	3.0
21	2Z	125	LEU	2.9
1	2A	2109	U	2.9
50	2s	14	HIS	2.9
50	2s	53	ASN	2.9
38	2g	85	TYR	2.9
21	2Z	137	ILE	2.9
1	2A	2131	G	2.9

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Mol	Chain	Res	Type	RSRZ
3	2D	38	LYS	2.9
32	1a	1030(C)	G	2.9
32	2a	1036	G	2.9
32	2a	1115	C	2.9
54	2w	71	G	2.9
41	2j	59	SER	2.9
40	2i	83	ARG	2.9
33	2b	31	TYR	2.9
36	2e	118	ILE	2.9
39	2h	128	GLY	2.9
21	2Z	86	VAL	2.9
45	2n	18	VAL	2.9
34	1c	94	LEU	2.9
41	2j	91	PRO	2.9
1	1A	1096	A	2.9
1	2A	652(B)	A	2.9
1	2A	2134	A	2.9
32	1a	1005	A	2.9
32	2a	969	A	2.9
1	1A	2132	U	2.9
1	1A	2162	G	2.9
1	2A	882	G	2.9
34	2c	62	ASP	2.9
50	2s	79	THR	2.9
6	1G	50	ALA	2.9
6	2G	120	LEU	2.9
9	2N	9	VAL	2.9
22	20	30	VAL	2.9
33	2b	71	VAL	2.9
41	2j	63	PHE	2.9
22	20	3	HIS	2.9
33	1b	129	GLU	2.9
6	2G	2	PRO	2.9
35	1d	173	TRP	2.9
33	2b	208	ILE	2.9
2	2B	120	A	2.9
1	1A	2802	G	2.9
1	1A	2805	G	2.9
1	2A	652(U)	G	2.9
32	2a	1003	G	2.9
33	2b	164	VAL	2.9
34	2c	188	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
36	2e	123	LEU	2.9
41	2j	72	VAL	2.9
44	2m	96	LEU	2.9
45	2n	44	LEU	2.9
26	14	59	PHE	2.9
52	2u	15	ARG	2.8
47	1p	48	TRP	2.8
14	2S	45	GLY	2.8
47	1p	68	ASP	2.8
21	2Z	99	TYR	2.8
33	2b	123	ALA	2.8
34	2c	178	LEU	2.8
41	2j	85	LEU	2.8
1	1A	896	A	2.8
32	2a	1148	U	2.8
32	2a	1045	C	2.8
33	1b	131	PRO	2.8
1	1A	1062	G	2.8
1	1A	2115	G	2.8
1	1A	2131	G	2.8
32	2a	1216	G	2.8
45	2n	12	ARG	2.8
7	2H	72	ILE	2.8
6	1G	146	TYR	2.8
20	2Y	106	LEU	2.8
33	1b	236	TYR	2.8
38	1g	83	ALA	2.8
45	2n	5	ALA	2.8
26	24	49	PHE	2.8
34	2c	195	VAL	2.8
50	1s	9	VAL	2.8
1	1A	899	A	2.8
32	2a	1016	A	2.8
1	1A	2146	C	2.8
1	2A	888	C	2.8
1	2A	2140	C	2.8
32	2a	1038	C	2.8
34	2c	5	ILE	2.8
40	2i	126	SER	2.8
1	1A	2133	G	2.8
32	2a	1048	G	2.8
34	2c	181	ASN	2.8

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Mol	Chain	Res	Type	RSRZ
7	2H	64	LEU	2.8
34	1c	2	GLY	2.8
34	2c	87	LEU	2.8
5	2F	21	ALA	2.8
21	2Z	121	HIS	2.8
34	1c	207	VAL	2.8
12	2Q	115	MET	2.8
32	1a	1025	U	2.8
1	1A	1092	C	2.8
1	1A	2164	C	2.8
1	1A	2794	C	2.8
54	2y	56	C	2.8
33	2b	38	GLY	2.8
33	2b	203	GLY	2.8
34	2c	194	GLY	2.8
35	1d	16	GLY	2.8
21	2Z	141	VAL	2.8
36	2e	17	ALA	2.8
41	1j	100	THR	2.8
41	2j	34	VAL	2.8
47	1p	1	MET	2.8
1	2A	2110	G	2.8
1	2A	2166	G	2.8
32	2a	993	G	2.8
32	2a	1026	G	2.8
35	1d	153	ARG	2.8
40	2i	5	TYR	2.8
33	2b	234	PRO	2.7
44	1m	122	LYS	2.7
1	1A	1097	U	2.7
32	2a	1219	U	2.7
45	2n	61	TRP	2.7
46	1o	66	LEU	2.7
1	2A	2801(A)	A	2.7
22	20	8	GLY	2.7
21	1Z	1	MET	2.7
32	2a	1092	A	2.7
1	1A	884	C	2.7
1	1A	2143	C	2.7
32	1a	1030	C	2.7
35	1d	195	ALA	2.7
36	2e	84	PHE	2.7

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Mol	Chain	Res	Type	RSRZ
39	2h	3	THR	2.7
42	2k	126	ARG	2.7
47	1p	81	ARG	2.7
54	1w	3	C	2.7
21	1Z	159	PRO	2.7
47	2p	82	GLN	2.7
41	2j	14	LYS	2.7
1	1A	880	G	2.7
1	1A	2141	G	2.7
1	2A	2168	G	2.7
32	2a	1089	G	2.7
32	2a	1120	G	2.7
26	24	15	ILE	2.7
33	2b	162	ILE	2.7
1	1A	1065	U	2.7
1	2A	271(L)	U	2.7
45	2n	49	HIS	2.7
15	2T	130	ALA	2.7
34	1c	190	ARG	2.7
45	2n	3	ARG	2.7
45	2n	10	ALA	2.7
1	1A	229	A	2.7
1	2A	2176	A	2.7
32	2a	1001	A	2.7
32	2a	1035	A	2.7
40	2i	49	PRO	2.7
53	2v	12	A	2.7
43	2l	69	TYR	2.7
1	1A	888	C	2.7
1	2A	2175	C	2.7
32	2a	1203	C	2.7
54	1w	72	C	2.7
7	2H	7	LEU	2.7
34	2c	196	LEU	2.7
32	2a	1221	G	2.7
19	1X	68	ARG	2.7
6	2G	160	VAL	2.7
12	2Q	53	ALA	2.7
40	1i	91	ASP	2.7
32	1a	204	U	2.7
6	1G	26	GLN	2.7
34	1c	193	TYR	2.7

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Mol	Chain	Res	Type	RSRZ
40	1i	4	TYR	2.7
40	2i	125	TYR	2.7
1	2A	2310	A	2.7
32	1a	1030(D)	A	2.7
1	1A	2896	C	2.7
1	2A	645	C	2.7
14	2S	32	LEU	2.7
50	2s	71	LEU	2.7
33	1b	36	ARG	2.7
36	2e	114	GLY	2.7
45	2n	31	ARG	2.7
50	2s	8	GLY	2.7
21	2Z	149	SER	2.7
33	2b	12	GLU	2.7
40	1i	126	SER	2.7
7	2H	45	VAL	2.7
40	2i	106	ALA	2.7
42	1k	14	VAL	2.7
33	2b	131	PRO	2.7
32	2a	1030(C)	G	2.6
32	2a	1253	G	2.6
54	2w	70	G	2.6
40	2i	36	TYR	2.6
1	2A	2320	A	2.6
32	1a	1531	A	2.6
40	2i	40	LEU	2.6
41	1j	88	LEU	2.6
38	2g	81	GLY	2.6
1	1A	889	C	2.6
1	1A	2142	C	2.6
32	1a	1027	C	2.6
32	2a	1119	C	2.6
32	2a	1214	C	2.6
7	2H	102	ALA	2.6
21	2Z	166	SER	2.6
44	2m	28	ALA	2.6
46	2o	60	VAL	2.6
47	2p	48	TRP	2.6
48	2q	9	VAL	2.6
52	2u	14	TRP	2.6
33	2b	57	PHE	2.6
47	1p	47	ASP	2.6

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Mol	Chain	Res	Type	RSRZ
33	2b	101	MET	2.6
33	2b	200	ILE	2.6
40	2i	114	TYR	2.6
1	2A	2132	U	2.6
32	2a	1156	G	2.6
32	2a	1202	G	2.6
44	2m	91	ARG	2.6
47	1p	78	GLY	2.6
1	1A	2169	A	2.6
32	1a	1503	A	2.6
32	2a	949	A	2.6
6	2G	159	VAL	2.6
12	2Q	106	VAL	2.6
7	2H	128	PRO	2.6
33	1b	232	PRO	2.6
40	2i	45	ALA	2.6
6	2G	49	ASP	2.6
32	1a	1029	C	2.6
34	2c	182	ILE	2.6
19	2X	69	TYR	2.6
34	2c	201	TYR	2.6
50	2s	15	LEU	2.6
6	2G	118	ARG	2.6
54	1w	20	U	2.6
5	1F	207	GLY	2.6
50	2s	84	GLY	2.6
1	1A	1055	G	2.6
1	1A	1056	G	2.6
1	1A	1093	G	2.6
1	2A	879	G	2.6
32	1a	1026	G	2.6
32	2a	1047	G	2.6
8	1I	146	ALA	2.6
34	2c	129	ALA	2.6
34	2c	207	VAL	2.6
47	1p	41	PRO	2.6
47	1p	77	ALA	2.6
35	1d	83	SER	2.6
41	2j	48	THR	2.6
32	2a	965	A	2.6
32	2a	983	A	2.6
32	2a	1151	A	2.6

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Mol	Chain	Res	Type	RSRZ
32	2a	1250	A	2.6
37	2f	52	ILE	2.6
12	2Q	10	ARG	2.6
24	12	69	ARG	2.6
33	2b	236	TYR	2.6
1	1A	2130	U	2.6
4	2E	204	ALA	2.6
7	2H	21	PRO	2.6
7	2H	43	VAL	2.6
29	27	45	ALA	2.6
34	2c	60	ALA	2.6
34	2c	76	VAL	2.6
34	2c	130	VAL	2.6
34	2c	133	ALA	2.6
46	2o	19	PRO	2.6
51	1t	95	ALA	2.6
1	1A	2110	G	2.5
1	2A	906	G	2.5
32	2a	1001(A)	G	2.5
32	2a	1373	G	2.5
51	1t	55	ILE	2.5
1	1A	887	A	2.5
41	2j	8	LEU	2.5
53	2v	24	A	2.5
12	1Q	5	ARG	2.5
35	1d	169	LYS	2.5
50	2s	70	LYS	2.5
1	2A	277	C	2.5
32	1a	1137	C	2.5
32	2a	1007	C	2.5
32	2a	1210	C	2.5
32	2a	1260	C	2.5
12	2Q	61	GLY	2.5
52	2u	16	GLY	2.5
7	2H	145	ALA	2.5
33	2b	163	PHE	2.5
34	2c	170	GLN	2.5
38	2g	152	ALA	2.5
40	1i	46	ALA	2.5
41	2j	69	ASN	2.5
52	2u	8	THR	2.5
45	2n	32	SER	2.5

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Mol	Chain	Res	Type	RSRZ
40	2i	91	ASP	2.5
6	2G	20	ILE	2.5
6	2G	88	ILE	2.5
38	2g	42	ILE	2.5
47	2p	33	ILE	2.5
44	2m	70	LEU	2.5
44	2m	120	LYS	2.5
18	1W	111	HIS	2.5
1	1A	10	G	2.5
1	2A	2116	G	2.5
32	2a	1017	G	2.5
55	2x	70	G	2.5
32	2a	1252	A	2.5
33	1b	227	GLY	2.5
34	2c	205	GLY	2.5
6	2G	15	VAL	2.5
33	2b	81	VAL	2.5
40	2i	26	VAL	2.5
33	2b	17	PHE	2.5
35	1d	32	ALA	2.5
44	2m	76	ALA	2.5
1	2A	2143	C	2.5
26	14	18	CYS	2.5
39	1h	3	THR	2.5
43	2l	50	SER	2.5
26	14	69	LYS	2.5
1	1A	1066	U	2.5
3	1D	262	ARG	2.5
40	2i	20	ARG	2.5
44	2m	78	ILE	2.5
22	10	84	LEU	2.5
32	2a	1196	U	2.5
25	23	60	GLU	2.5
26	14	54	GLY	2.5
1	1A	1089	G	2.5
1	1A	2894	G	2.5
1	2A	1847	A	2.5
1	2A	2151	G	2.5
34	1c	99	VAL	2.5
34	2c	68	VAL	2.5
34	2c	106	VAL	2.5
34	2c	116	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
21	2Z	104	PHE	2.5
40	1i	106	ALA	2.5
11	2P	15	ARG	2.5
14	2S	35	ILE	2.5
33	2b	11	LEU	2.5
38	2g	32	ARG	2.5
41	1j	4	ILE	2.5
50	2s	36	ARG	2.5
1	1A	2111	C	2.5
1	1A	2129	C	2.5
1	1A	2804	C	2.5
1	2A	1509	C	2.5
20	2Y	107	ASP	2.5
32	1a	91	C	2.5
32	2a	1018	C	2.5
6	1G	35	GLU	2.5
32	1a	560	U	2.5
32	2a	1205	U	2.5
26	24	29	PRO	2.5
33	2b	199	TYR	2.5
34	2c	48	TYR	2.5
46	1o	69	TYR	2.5
44	2m	7	VAL	2.5
45	2n	33	VAL	2.5
40	2i	119	ALA	2.5
8	2I	108	THR	2.4
1	2A	229	A	2.4
1	2A	2158	A	2.4
1	2A	2170	A	2.4
32	2a	946	A	2.4
36	1e	73	ASN	2.4
34	2c	52	LEU	2.4
37	2f	21	LEU	2.4
40	2i	74	ILE	2.4
41	2j	90	LEU	2.4
1	1A	2166	G	2.4
1	2A	352	G	2.4
1	2A	880	G	2.4
32	2a	945	G	2.4
32	2a	1053	G	2.4
40	1i	105	ASP	2.4
32	2a	1043	C	2.4

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Mol	Chain	Res	Type	RSRZ
54	2w	4	C	2.4
1	2A	2585	U	2.4
14	2S	92	TYR	2.4
48	2q	95	TYR	2.4
3	2D	98	VAL	2.4
16	1U	117	GLN	2.4
28	26	5	VAL	2.4
43	2l	43	VAL	2.4
14	2S	29	PHE	2.4
33	1b	34	ALA	2.4
40	1i	59	PHE	2.4
40	2i	33	PHE	2.4
45	2n	16	PHE	2.4
6	2G	139	LEU	2.4
7	2H	67	LEU	2.4
33	2b	10	LEU	2.4
38	1g	84	ASN	2.4
50	1s	20	LEU	2.4
34	2c	176	HIS	2.4
1	1A	2117	A	2.4
32	2a	1531	A	2.4
50	1s	12	ASP	2.4
33	1b	126	GLU	2.4
40	2i	110	GLU	2.4
1	1A	1063	G	2.4
32	2a	973	G	2.4
22	20	76	GLY	2.4
33	1b	125	PRO	2.4
38	1g	132	GLY	2.4
1	2A	2164	C	2.4
7	2H	24	VAL	2.4
32	1a	1037	C	2.4
32	2a	1060	C	2.4
7	2H	156	ALA	2.4
34	2c	61	ALA	2.4
47	1p	5	ARG	2.4
16	2U	62	ILE	2.4
21	2Z	144	LEU	2.4
22	20	37	LEU	2.4
35	1d	158	ILE	2.4
40	2i	27	THR	2.4
41	2j	74	ILE	2.4

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Mol	Chain	Res	Type	RSRZ
51	1t	10	LEU	2.4
33	1b	40	HIS	2.4
48	2q	99	SER	2.4
1	2A	901	A	2.4
1	2A	2171	A	2.4
29	27	48	LYS	2.4
32	2a	1357	A	2.4
54	2y	35	A	2.4
35	1d	180	GLY	2.4
40	1i	14	VAL	2.4
49	2r	86	VAL	2.4
1	1A	275	G	2.4
1	2A	11	G	2.4
1	2A	859	G	2.4
6	2G	151	ALA	2.4
15	1T	130	ALA	2.4
21	1Z	99	TYR	2.4
26	24	42	PHE	2.4
40	2i	13	ALA	2.4
45	1n	5	ALA	2.4
45	2n	34	TYR	2.4
45	2n	36	PHE	2.4
6	1G	139	LEU	2.4
33	1b	11	LEU	2.4
34	1c	101	LEU	2.4
1	1A	1175	U	2.4
47	1p	19	ILE	2.4
1	1A	2136	C	2.4
32	1a	72	C	2.4
32	1a	221	C	2.4
32	2a	1066	C	2.4
54	2w	2	C	2.4
44	2m	92	HIS	2.4
11	1P	119	GLU	2.4
3	2D	276	LYS	2.4
44	1m	121	LYS	2.4
7	2H	22	GLY	2.4
26	24	54	GLY	2.4
33	1b	136	VAL	2.4
40	1i	10	ARG	2.4
40	2i	93	ARG	2.4
47	1p	75	ARG	2.4

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Mol	Chain	Res	Type	RSRZ
1	1A	1177	A	2.4
1	2A	899	A	2.4
1	2A	900	A	2.4
44	2m	72	ALA	2.4
46	2o	16	ALA	2.4
49	2r	60	ALA	2.4
26	24	44	THR	2.3
1	1A	11	G	2.3
1	1A	879	G	2.3
1	1A	2168	G	2.3
1	1A	2189	U	2.3
1	2A	614(B)	G	2.3
1	2A	2147	G	2.3
54	2w	15	G	2.3
2	2B	4	C	2.3
32	1a	454	C	2.3
32	2a	1112	C	2.3
50	2s	38	SER	2.3
21	2Z	159	PRO	2.3
21	2Z	167	PRO	2.3
42	2k	119	CYS	2.3
35	1d	87	GLY	2.3
38	2g	4	ARG	2.3
40	2i	16	ARG	2.3
46	1o	88	ARG	2.3
47	1p	76	GLN	2.3
12	2Q	52	VAL	2.3
21	1Z	150	LEU	2.3
33	1b	162	ILE	2.3
52	2u	13	ILE	2.3
26	24	63	TYR	2.3
1	1A	1069	A	2.3
14	2S	34	HIS	2.3
21	2Z	69	THR	2.3
32	2a	974	A	2.3
53	1v	12	A	2.3
7	1H	175	LYS	2.3
21	2Z	153	SER	2.3
1	1A	1082	U	2.3
32	1a	65	U	2.3
32	1a	203	U	2.3
32	2a	997	U	2.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1012	U	2.3
1	2A	1533	G	2.3
21	2Z	68	PRO	2.3
1	2A	2111	C	2.3
2	2B	5	C	2.3
35	1d	201	GLN	2.3
54	2w	13	C	2.3
21	2Z	139	VAL	2.3
34	1c	70	VAL	2.3
28	26	36	LEU	2.3
34	1c	60	ALA	2.3
34	2c	53	ALA	2.3
34	2c	168	ALA	2.3
41	1j	65	LEU	2.3
44	2m	30	ALA	2.3
44	2m	34	LEU	2.3
50	2s	22	LEU	2.3
44	2m	103	THR	2.3
50	2s	63	THR	2.3
52	2u	17	THR	2.3
22	10	4	LYS	2.3
29	17	48	LYS	2.3
34	1c	90	GLU	2.3
51	2t	34	LYS	2.3
32	1a	149	A	2.3
32	2a	1179	A	2.3
26	14	51	ASP	2.3
39	2h	67	PRO	2.3
40	2i	98	PRO	2.3
40	2i	105	ASP	2.3
52	2u	24	ARG	2.3
52	2u	11	GLY	2.3
1	1A	12	U	2.3
1	1A	271(K)	U	2.3
1	2A	2167	U	2.3
1	2A	2897	U	2.3
2	2B	1	U	2.3
32	2a	1235	U	2.3
6	2G	28	VAL	2.3
7	2H	169	VAL	2.3
8	1I	145	VAL	2.3
14	2S	14	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
33	1b	229	VAL	2.3
33	2b	184	VAL	2.3
44	2m	15	VAL	2.3
6	2G	53	LEU	2.3
11	1P	99	LEU	2.3
21	2Z	136	PHE	2.3
33	2b	51	LEU	2.3
40	2i	18	PHE	2.3
45	2n	6	LEU	2.3
41	1j	32	ALA	2.3
50	2s	75	ALA	2.3
1	1A	2100	G	2.3
1	1A	2156	G	2.3
1	1A	2188	C	2.3
1	1A	2791	C	2.3
1	2A	2304	G	2.3
32	1a	1033	G	2.3
54	1y	44	G	2.3
54	2y	5	G	2.3
33	1b	132	LYS	2.3
34	1c	191	THR	2.3
41	2j	87	THR	2.3
44	2m	31	LYS	2.3
6	2G	11	TYR	2.3
43	2l	64	TYR	2.3
45	1n	34	TYR	2.3
6	2G	35	GLU	2.3
39	1h	15	ASN	2.3
7	2H	39	PRO	2.3
44	2m	99	ARG	2.3
48	1q	99	SER	2.3
1	1A	278	A	2.3
1	1A	2134	A	2.3
1	1A	2801(A)	A	2.3
26	24	45	GLY	2.3
32	2a	1447	A	2.3
34	2c	139	GLN	2.3
33	2b	14	GLY	2.3
35	1d	23	GLY	2.3
40	2i	68	GLY	2.3
52	1u	2	GLY	2.3
9	2N	140	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
23	2l	46	LEU	2.3
33	2b	61	LEU	2.3
34	2c	138	VAL	2.3
36	2e	69	VAL	2.3
41	2j	88	LEU	2.3
41	2j	94	VAL	2.3
42	2k	105	VAL	2.3
50	2s	5	LEU	2.3
34	2c	203	PHE	2.3
7	1H	92	ILE	2.2
32	2a	1199	U	2.2
34	1c	77	ILE	2.2
34	2c	24	ALA	2.2
36	2e	109	ILE	2.2
41	1j	75	ILE	2.2
47	1p	24	ALA	2.2
48	1q	36	ILE	2.2
12	2Q	7	MET	2.2
35	1d	84	LYS	2.2
39	2h	136	GLU	2.2
1	1A	652(S)	C	2.2
1	1A	2161	C	2.2
1	2A	652(V)	C	2.2
1	2A	1043	C	2.2
32	1a	1038	C	2.2
32	1a	1039	C	2.2
32	2a	1037	C	2.2
54	1w	4	C	2.2
1	1A	1068	G	2.2
1	1A	2124	G	2.2
1	2A	881	G	2.2
1	2A	2148	G	2.2
32	2a	1024	G	2.2
32	2a	1177	G	2.2
35	2d	154	ASN	2.2
41	1j	76	ASN	2.2
35	2d	49	ARG	2.2
40	2i	107	ARG	2.2
51	1t	8	ARG	2.2
8	2I	111	PRO	2.2
40	2i	123	PRO	2.2
31	29	12	ASP	2.2

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Mol	Chain	Res	Type	RSRZ
34	1c	107	GLN	2.2
44	2m	101	GLN	2.2
33	2b	66	GLY	2.2
33	2b	227	GLY	2.2
7	2H	71	LEU	2.2
7	2H	87	LEU	2.2
34	2c	47	LEU	2.2
34	2c	167	TRP	2.2
34	2c	64	VAL	2.2
40	2i	28	VAL	2.2
41	2j	44	VAL	2.2
1	1A	2173	A	2.2
1	2A	2135	A	2.2
20	2Y	89	PHE	2.2
20	2Y	65	ALA	2.2
33	2b	140	HIS	2.2
51	2t	59	ALA	2.2
54	2w	31	A	2.2
32	2a	1122	U	2.2
44	1m	58	GLU	2.2
44	2m	50	GLU	2.2
48	1q	20	THR	2.2
35	1d	20	TYR	2.2
42	1k	25	TYR	2.2
42	2k	75	TYR	2.2
34	2c	190	ARG	2.2
35	1d	118	ARG	2.2
38	1g	79	ARG	2.2
47	1p	25	ARG	2.2
6	2G	17	PRO	2.2
6	2G	142	PRO	2.2
22	20	83	PRO	2.2
41	2j	37	PRO	2.2
1	2A	34	C	2.2
1	2A	889	C	2.2
32	2a	1019	C	2.2
32	2a	1054	C	2.2
32	2a	1262	C	2.2
34	2c	107	GLN	2.2
35	2d	45	GLN	2.2
54	1y	56	C	2.2
6	2G	76	SER	2.2

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Mol	Chain	Res	Type	RSRZ
1	2A	892	G	2.2
1	2A	916	G	2.2
1	2A	2186	G	2.2
1	2A	2308	G	2.2
7	2H	82	GLY	2.2
32	1a	1009	G	2.2
32	1a	1031	G	2.2
32	2a	485	G	2.2
35	1d	6	GLY	2.2
44	2m	112	GLY	2.2
50	2s	54	GLY	2.2
33	1b	187	LEU	2.2
33	2b	69	LEU	2.2
33	2b	142	LEU	2.2
3	1D	38	LYS	2.2
9	1N	9	VAL	2.2
47	1p	59	TRP	2.2
33	1b	55	PHE	2.2
33	2b	222	ILE	2.2
33	2b	223	ILE	2.2
35	1d	70	ILE	2.2
34	1c	92	ALA	2.2
34	2c	180	ALA	2.2
35	2d	164	ALA	2.2
44	2m	51	ALA	2.2
1	1A	1088	A	2.2
1	1A	2158	A	2.2
1	1A	2790	A	2.2
33	2b	67	THR	2.2
40	1i	103	THR	2.2
49	2r	47	THR	2.2
1	2A	2144	U	2.2
7	2H	83	TYR	2.2
32	1a	1000	U	2.2
44	1m	99	ARG	2.2
46	1o	72	ARG	2.2
46	2o	88	ARG	2.2
33	2b	92	TYR	2.2
40	2i	62	TYR	2.2
54	2w	66	U	2.2
46	1o	19	PRO	2.2
17	2V	101	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
19	2X	92	LEU	2.2
33	1b	10	LEU	2.2
42	2k	51	LYS	2.2
44	1m	26	GLY	2.2
45	2n	9	LYS	2.2
21	2Z	128	VAL	2.2
33	2b	7	VAL	2.2
33	2b	136	VAL	2.2
34	1c	64	VAL	2.2
36	2e	115	VAL	2.2
32	2a	990	C	2.2
32	2a	1039	C	2.2
32	2a	1369	C	2.2
33	2b	70	PHE	2.2
33	2b	127	ILE	2.2
34	1c	57	ILE	2.2
44	2m	9	ILE	2.2
47	2p	19	ILE	2.2
54	1w	2	C	2.2
54	2w	67	C	2.2
20	2Y	105	ALA	2.2
41	2j	18	ALA	2.2
1	1A	2160	G	2.2
1	2A	1537	G	2.2
1	2A	2127	G	2.2
2	2B	116	G	2.2
23	2I	75	GLU	2.2
32	2a	1124	G	2.2
32	2a	1182	G	2.2
40	2i	12	GLU	2.2
36	2e	116	THR	2.2
6	2G	83	ARG	2.2
45	2n	23	ARG	2.2
1	1A	548	A	2.2
1	1A	1073	A	2.2
8	1I	89	TYR	2.2
26	14	32	TYR	2.2
32	2a	250	A	2.2
33	1b	199	TYR	2.2
34	1c	73	PRO	2.2
35	1d	4	TYR	2.2
41	2j	76	ASN	2.2

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Mol	Chain	Res	Type	RSRZ
1	1A	1026	U	2.2
1	2A	2172	U	2.2
1	2A	2895	U	2.2
7	2H	175	LYS	2.2
31	29	15	LYS	2.2
6	1G	82	LEU	2.2
21	2Z	157	LEU	2.2
33	1b	14	GLY	2.2
33	2b	118	LEU	2.2
33	2b	213	LEU	2.2
40	2i	79	LEU	2.2
47	1p	37	GLY	2.2
47	1p	49	LEU	2.2
36	2e	10	MET	2.2
4	1E	47	VAL	2.2
6	2G	39	ILE	2.2
7	2H	44	VAL	2.2
8	1I	120	ILE	2.2
33	1b	200	ILE	2.2
34	2c	66	VAL	2.2
47	2p	2	VAL	2.2
50	2s	58	VAL	2.2
40	2i	101	PHE	2.2
44	2m	64	TRP	2.1
6	2G	128	ARG	2.1
26	14	52	THR	2.1
32	1a	848	C	2.1
32	2a	1027	C	2.1
32	2a	1244	C	2.1
34	2c	172	ARG	2.1
50	2s	77	THR	2.1
1	1A	1537	G	2.1
1	1A	2807	G	2.1
1	2A	10	G	2.1
1	2A	171	G	2.1
32	1a	181	G	2.1
32	1a	380	G	2.1
32	2a	971	G	2.1
32	2a	1530	G	2.1
39	2h	27	PRO	2.1
54	2y	63	G	2.1
41	2j	78	ASN	2.1

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Mol	Chain	Res	Type	RSRZ
5	2F	196	LEU	2.1
8	2I	38	LEU	2.1
41	1j	40	LEU	2.1
44	2m	48	LEU	2.1
1	1A	1054	A	2.1
1	1A	1067	A	2.1
2	2B	25	A	2.1
32	2a	996	A	2.1
32	2a	1041	A	2.1
32	2a	1287	A	2.1
38	2g	34	GLY	2.1
14	2S	40	ILE	2.1
33	2b	80	ILE	2.1
39	1h	45	ILE	2.1
40	2i	81	ILE	2.1
54	2y	33	U	2.1
51	1t	70	SER	2.1
12	2Q	29	PHE	2.1
6	1G	83	ARG	2.1
41	2j	43	ARG	2.1
52	2u	10	ARG	2.1
43	1l	6	THR	2.1
46	2o	4	THR	2.1
47	1p	67	THR	2.1
14	2S	83	LYS	2.1
33	2b	133	LYS	2.1
33	2b	232	PRO	2.1
1	1A	2174	C	2.1
32	2a	931	C	2.1
32	2a	948	C	2.1
32	2a	972	C	2.1
6	2G	3	LEU	2.1
21	2Z	33	LEU	2.1
35	1d	174	LEU	2.1
36	2e	119	LEU	2.1
34	2c	41	GLY	2.1
40	2i	6	GLY	2.1
43	2l	95	GLY	2.1
50	1s	26	GLY	2.1
50	2s	68	GLY	2.1
51	1t	47	GLY	2.1
1	1A	2148	G	2.1

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Mol	Chain	Res	Type	RSRZ
1	2A	2141	G	2.1
1	2A	2162	G	2.1
1	2A	2807	G	2.1
6	2G	126	ASP	2.1
12	2Q	109	VAL	2.1
23	2I	62	VAL	2.1
32	2a	1087	G	2.1
34	1c	116	VAL	2.1
34	2c	141	VAL	2.1
37	2f	6	VAL	2.1
39	1h	4	ASP	2.1
39	2h	35	ILE	2.1
42	2k	32	ILE	2.1
43	2l	18	VAL	2.1
44	2m	54	VAL	2.1
54	2w	19	G	2.1
54	2w	34	G	2.1
35	1d	110	PHE	2.1
39	2h	31	PHE	2.1
1	1A	1098	A	2.1
1	1A	2167	U	2.1
1	2A	9	U	2.1
2	2B	29	A	2.1
15	2T	126	ALA	2.1
32	2a	991	U	2.1
34	2c	71	ALA	2.1
42	2k	89	ALA	2.1
6	2G	51	ARG	2.1
34	1c	79	ARG	2.1
40	2i	128	ARG	2.1
33	2b	22	LYS	2.1
6	2G	122	PRO	2.1
9	2N	44	PRO	2.1
21	2Z	158	PRO	2.1
33	1b	167	PRO	2.1
45	2n	54	PRO	2.1
50	2s	2	PRO	2.1
40	1i	50	LEU	2.1
9	2N	45	ASN	2.1
33	1b	18	GLY	2.1
36	1e	85	GLY	2.1
38	2g	154	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
42	2k	118	GLY	2.1
8	1I	142	VAL	2.1
32	2a	1028	C	2.1
32	2a	1059	C	2.1
32	2a	1226	C	2.1
32	2a	1322	C	2.1
32	2a	1452	C	2.1
33	2b	39	ILE	2.1
33	2b	201	ILE	2.1
40	1i	65	VAL	2.1
42	2k	48	ILE	2.1
45	2n	56	VAL	2.1
54	1y	68	C	2.1
6	2G	125	PHE	2.1
12	2Q	58	PHE	2.1
15	1T	131	ALA	2.1
22	20	72	ARG	2.1
47	1p	7	ALA	2.1
48	2q	92	ARG	2.1
51	1t	12	ALA	2.1
1	1A	2152	G	2.1
1	1A	2182	G	2.1
1	1A	2207	G	2.1
1	2A	271(M)	G	2.1
1	2A	2894	G	2.1
32	1a	73	G	2.1
32	1a	148	G	2.1
32	2a	630	G	2.1
32	2a	953	G	2.1
32	2a	1009	G	2.1
32	2a	1190	G	2.1
32	2a	1215	G	2.1
32	2a	1310	G	2.1
33	1b	24	TRP	2.1
1	1A	1070	A	2.1
1	1A	2109	U	2.1
1	2A	528	A	2.1
1	2A	866	A	2.1
1	2A	895	U	2.1
32	1a	223	U	2.1
32	2a	964	A	2.1
32	2a	1121	U	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	1125	U	2.1
40	1i	7	THR	2.1
41	2j	100	THR	2.1
54	2w	12	U	2.1
48	1q	28	PRO	2.1
40	2i	124	GLN	2.1
35	1d	188	LEU	2.1
40	2i	19	LEU	2.1
45	2n	47	LEU	2.1
51	2t	99	LEU	2.1
6	2G	85	GLY	2.1
9	2N	113	GLY	2.1
34	1c	96	GLY	2.1
34	2c	51	GLY	2.1
41	2j	52	GLY	2.1
41	2j	56	HIS	2.1
43	2l	88	GLY	2.1
51	1t	102	GLY	2.1
34	1c	84	ILE	2.1
38	1g	154	TYR	2.1
40	2i	92	TYR	2.1
44	2m	21	TYR	2.1
50	2s	40	ILE	2.1
8	1I	92	VAL	2.1
29	27	46	VAL	2.1
34	2c	75	VAL	2.1
34	2c	99	VAL	2.1
34	2c	153	VAL	2.1
40	1i	41	VAL	2.1
6	1G	80	PHE	2.1
12	2Q	139	GLU	2.0
14	2S	23	ARG	2.0
33	1b	13	ALA	2.0
33	2b	173	ALA	2.0
36	2e	86	ALA	2.0
39	1h	87	SER	2.0
1	1A	2140	C	2.0
1	2A	897	C	2.0
2	2B	2	C	2.0
32	1a	154	C	2.0
32	1a	479	C	2.0
32	2a	979	C	2.0

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Mol	Chain	Res	Type	RSRZ
6	2G	29	TRP	2.0
30	28	34	TRP	2.0
33	1b	97	TRP	2.0
14	2S	4	LEU	2.0
14	2S	58	LEU	2.0
35	1d	155	LEU	2.0
39	2h	2	LEU	2.0
1	2A	545	G	2.0
32	1a	216	G	2.0
32	2a	195	A	2.0
32	2a	838	G	2.0
32	2a	926	G	2.0
32	2a	1042	G	2.0
32	2a	1154	G	2.0
54	1y	19	G	2.0
54	2w	7	A	2.0
44	1m	106	ASN	2.0
51	2t	9	ASN	2.0
46	2o	20	GLY	2.0
14	2S	49	VAL	2.0
17	2V	12	TYR	2.0
33	1b	165	VAL	2.0
40	2i	65	VAL	2.0
42	1k	75	TYR	2.0
24	22	69	ARG	2.0
44	2m	29	ARG	2.0
44	2m	110	ARG	2.0
7	2H	85	LYS	2.0
12	2Q	22	LYS	2.0
12	2Q	107	ALA	2.0
23	21	63	ALA	2.0
48	2q	87	LYS	2.0
21	1Z	153	SER	2.0
37	2f	93	SER	2.0
6	2G	145	THR	2.0
1	1A	2178	C	2.0
1	2A	652(T)	C	2.0
11	1P	105	LEU	2.0
21	1Z	125	LEU	2.0
32	1a	1008	C	2.0
32	2a	1223	C	2.0
32	2a	1320	C	2.0

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Mol	Chain	Res	Type	RSRZ
34	2c	43	LEU	2.0
35	1d	19	LEU	2.0
35	2d	78	LEU	2.0
43	1l	9	GLN	2.0
49	2r	85	LEU	2.0
50	1s	71	LEU	2.0
51	1t	72	LEU	2.0
54	2y	62	C	2.0
1	1A	1083	U	2.0
32	1a	1136	U	2.0
32	2a	1358	U	2.0
8	1I	106	GLY	2.0
14	2S	60	GLY	2.0
35	2d	23	GLY	2.0
35	2d	146	ILE	2.0
38	2g	148	ASN	2.0
44	2m	25	ILE	2.0
50	2s	31	ILE	2.0
32	1a	143	A	2.0
32	2a	1110	A	2.0
33	2b	21	ARG	2.0
47	1p	2	VAL	2.0
47	2p	8	ARG	2.0
50	2s	41	VAL	2.0
50	2s	45	VAL	2.0
6	2G	12	TYR	2.0
34	2c	193	TYR	2.0
35	1d	38	TYR	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	G7M	2w	46	24/25	0.63	0.15	80,90,96,109	0
54	G7M	1w	46	24/25	0.64	0.17	69,79,94,113	0
54	G7M	1y	46	24/25	0.66	0.16	77,87,100,106	0
54	PSU	2y	55	20/21	0.67	0.18	83,90,100,105	0
54	4SU	2w	8	20/21	0.69	0.15	83,90,102,110	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	5MU	2y	54	21/22	0.70	0.19	82,87,95,111	0
54	G7M	2y	46	24/25	0.71	0.15	77,86,90,100	0
54	PSU	2w	55	20/21	0.72	0.15	74,85,94,95	0
54	5MU	1y	54	21/22	0.72	0.14	75,79,90,97	0
54	PSU	1y	55	20/21	0.76	0.15	79,86,93,101	0
54	4SU	1y	8	20/21	0.77	0.12	79,86,92,95	0
54	MIA	2y	37	22/30	0.78	0.14	69,78,85,91	0
54	4SU	2y	8	20/21	0.78	0.12	79,87,100,106	0
32	2MG	2a	1207	24/25	0.79	0.17	70,78,84,88	0
54	PSU	2y	32	20/21	0.81	0.13	61,76,85,89	0
54	PSU	1y	32	20/21	0.82	0.13	67,75,82,83	0
54	MIA	1y	37	22/30	0.84	0.14	70,76,80,89	0
54	PSU	2y	39	20/21	0.85	0.12	72,75,93,95	0
54	5MU	2w	54	21/22	0.85	0.13	68,77,83,89	0
54	PSU	1y	39	20/21	0.86	0.12	68,74,83,84	0
43	0TD	2l	92	10/11	0.87	0.15	56,61,65,71	0
55	4SU	2x	8	20/21	0.87	0.12	74,78,83,87	0
54	PSU	1w	55	20/21	0.87	0.12	62,73,80,80	0
55	PSU	2x	55	20/21	0.88	0.11	68,74,78,81	0
54	4SU	1w	8	20/21	0.88	0.10	71,76,84,85	0
1	5MU	2A	1915	21/22	0.89	0.13	62,69,73,75	0
32	M2G	2a	966	25/26	0.90	0.16	61,67,77,80	0
54	PSU	2w	32	20/21	0.90	0.14	68,80,86,87	0
55	5MC	2x	32	21/22	0.90	0.14	64,70,72,79	0
55	5MU	2x	54	21/22	0.90	0.12	67,75,80,83	0
54	MIA	2w	37	25/30	0.91	0.14	60,73,79,85	0
55	PSU	1x	55	20/21	0.91	0.10	55,61,66,68	0
32	PSU	2a	516	20/21	0.91	0.11	62,73,80,82	0
32	G7M	2a	527	24/25	0.91	0.12	56,61,66,71	0
43	0TD	1l	92	10/11	0.91	0.12	46,50,51,59	0
32	4OC	2a	1402	22/23	0.92	0.12	48,59,62,71	0
1	PSU	2A	1911	20/21	0.92	0.09	56,59,63,64	0
55	4SU	1x	8	20/21	0.92	0.11	54,60,65,66	0
1	PSU	2A	1917	20/21	0.92	0.10	56,63,69,70	0
55	5MU	1x	54	21/22	0.92	0.11	59,62,66,72	0
54	PSU	2w	39	20/21	0.92	0.13	67,76,80,81	0
32	2MG	1a	1207	24/25	0.92	0.12	59,62,66,70	0
54	5MU	1w	54	21/22	0.92	0.09	60,67,71,74	0
54	PSU	1w	32	20/21	0.92	0.11	60,66,72,75	0
32	5MC	2a	1400	21/22	0.92	0.15	57,65,70,74	0
32	5MC	2a	1404	21/22	0.93	0.11	45,51,54,57	0
32	5MC	2a	967	21/22	0.93	0.12	61,66,74,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
32	UR3	2a	1498	21/22	0.94	0.12	41,55,58,63	0
1	5MU	1A	1915	21/22	0.94	0.10	36,48,59,64	0
1	OMC	2A	1920	21/22	0.94	0.10	49,58,62,67	0
32	5MC	2a	1407	21/22	0.94	0.10	42,52,56,57	0
32	MA6	2a	1519	24/25	0.95	0.12	44,59,64,67	0
32	G7M	1a	527	24/25	0.95	0.10	42,46,50,54	0
32	M2G	1a	966	25/26	0.95	0.10	43,48,58,60	0
55	5MC	1x	32	21/22	0.95	0.10	46,48,53,62	0
54	MIA	1w	37	29/30	0.95	0.12	48,56,62,68	0
1	5MC	2A	1942	21/22	0.95	0.10	48,53,57,58	0
1	2MU	2A	2552	21/23	0.95	0.10	31,40,44,50	0
1	PSU	1A	1911	20/21	0.95	0.10	33,44,52,54	0
32	PSU	1a	516	20/21	0.95	0.09	50,55,59,60	0
32	MA6	2a	1518	24/25	0.95	0.10	51,59,64,66	0
1	5MC	1A	1942	21/22	0.96	0.11	32,40,46,48	0
1	5MU	2A	1939	21/22	0.96	0.09	33,36,40,42	0
1	PSU	1A	1917	20/21	0.96	0.09	38,46,54,55	0
1	5MC	2A	1962	21/22	0.96	0.09	33,45,51,56	0
54	PSU	1w	39	20/21	0.96	0.08	37,57,64,66	0
32	5MC	1a	967	21/22	0.96	0.09	45,49,55,56	0
32	5MC	1a	1400	21/22	0.97	0.08	40,44,46,50	0
1	OMG	2A	2251	24/25	0.97	0.09	35,40,44,45	0
32	4OC	1a	1402	22/23	0.97	0.08	33,39,41,45	0
1	PSU	2A	2605	20/21	0.97	0.08	28,37,43,53	0
32	5MC	1a	1407	21/22	0.97	0.08	31,38,41,42	0
32	UR3	1a	1498	21/22	0.97	0.08	30,37,41,44	0
32	MA6	1a	1519	24/25	0.97	0.09	30,37,40,54	0
1	PSU	1A	2605	20/21	0.98	0.06	17,20,31,34	0
32	5MC	1a	1404	21/22	0.98	0.07	32,33,38,41	0
1	5MU	1A	1939	21/22	0.98	0.07	20,28,30,33	0
1	OMC	1A	1920	21/22	0.98	0.07	31,39,46,47	0
32	MA6	1a	1518	24/25	0.98	0.08	27,37,42,42	0
1	5MC	1A	1962	21/22	0.98	0.07	25,30,35,41	0
1	2MA	2A	2503	23/24	0.98	0.07	25,31,35,36	0
1	OMG	1A	2251	24/25	0.98	0.06	17,19,22,29	0
1	2MA	1A	2503	23/24	0.98	0.07	13,17,19,23	0
1	2MU	1A	2552	21/23	0.98	0.07	19,22,28,30	0

6.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

6.4 Ligands ⓘ

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	1A	4100	1/1	0.21	0.31	76,76,76,76	0
56	MG	2A	3090	1/1	0.58	0.24	60,60,60,60	0
56	MG	2A	3635	1/1	0.59	0.26	76,76,76,76	0
56	MG	1A	3875	1/1	0.65	0.15	68,68,68,68	0
56	MG	2a	3214	1/1	0.67	0.26	64,64,64,64	0
56	MG	2a	3227	1/1	0.67	0.16	66,66,66,66	0
56	MG	2A	3415	1/1	0.68	0.27	67,67,67,67	0
56	MG	2A	3821	1/1	0.68	0.13	58,58,58,58	0
56	MG	2a	3154	1/1	0.70	0.15	60,60,60,60	0
56	MG	1A	3166	1/1	0.71	0.19	59,59,59,59	0
56	MG	2A	3669	1/1	0.71	0.21	79,79,79,79	0
56	MG	2A	3685	1/1	0.71	0.18	58,58,58,58	0
56	MG	2A	3805	1/1	0.71	0.13	75,75,75,75	0
56	MG	2a	3187	1/1	0.72	0.16	61,61,61,61	0
56	MG	2a	3188	1/1	0.72	0.14	65,65,65,65	0
56	MG	1w	104	1/1	0.72	0.22	70,70,70,70	0
56	MG	2A	3632	1/1	0.72	0.17	68,68,68,68	0
56	MG	2y	104	1/1	0.72	0.13	80,80,80,80	0
56	MG	1y	103	1/1	0.73	0.18	66,66,66,66	0
56	MG	2A	3867	1/1	0.73	0.19	33,33,33,33	0
56	MG	1A	3938	1/1	0.74	0.17	51,51,51,51	0
56	MG	2A	3529	1/1	0.74	0.19	62,62,62,62	0
56	MG	2A	3554	1/1	0.74	0.14	42,42,42,42	0
56	MG	2A	3100	1/1	0.74	0.20	64,64,64,64	0
56	MG	2A	3296	1/1	0.74	0.18	69,69,69,69	0
56	MG	2a	3130	1/1	0.74	0.28	60,60,60,60	0
56	MG	2a	3167	1/1	0.75	0.13	75,75,75,75	0
56	MG	1A	3979	1/1	0.75	0.14	64,64,64,64	0
56	MG	2j	201	1/1	0.75	0.11	69,69,69,69	0
56	MG	2A	3538	1/1	0.75	0.28	61,61,61,61	0
56	MG	2F	307	1/1	0.76	0.17	52,52,52,52	0
56	MG	2A	3766	1/1	0.76	0.10	48,48,48,48	0
56	MG	2A	3661	1/1	0.76	0.20	68,68,68,68	0
56	MG	1A	3520	1/1	0.76	0.14	56,56,56,56	0
56	MG	1x	110	1/1	0.76	0.20	66,66,66,66	0
56	MG	1A	4060	1/1	0.77	0.14	31,31,31,31	0
56	MG	2A	3178	1/1	0.77	0.21	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3055	1/1	0.77	0.19	70,70,70,70	0
56	MG	1A	3880	1/1	0.77	0.15	45,45,45,45	0
56	MG	1A	3359	1/1	0.78	0.18	50,50,50,50	0
56	MG	2A	3566	1/1	0.78	0.16	42,42,42,42	0
56	MG	2a	3228	1/1	0.78	0.17	77,77,77,77	0
56	MG	2a	3074	1/1	0.78	0.30	67,67,67,67	0
56	MG	2A	3597	1/1	0.78	0.13	54,54,54,54	0
56	MG	1A	3203	1/1	0.79	0.14	59,59,59,59	0
56	MG	2A	3478	1/1	0.79	0.12	71,71,71,71	0
56	MG	2A	3526	1/1	0.79	0.14	40,40,40,40	0
56	MG	1A	3538	1/1	0.79	0.18	59,59,59,59	0
56	MG	1A	3892	1/1	0.79	0.16	37,37,37,37	0
56	MG	1A	3931	1/1	0.79	0.18	53,53,53,53	0
56	MG	1a	1635	1/1	0.79	0.21	66,66,66,66	0
56	MG	1a	1717	1/1	0.79	0.18	57,57,57,57	0
56	MG	2A	3179	1/1	0.79	0.16	59,59,59,59	0
56	MG	1w	102	1/1	0.79	0.26	68,68,68,68	0
56	MG	1A	3504	1/1	0.80	0.17	47,47,47,47	0
56	MG	2A	3333	1/1	0.80	0.13	62,62,62,62	0
56	MG	2A	3345	1/1	0.80	0.16	64,64,64,64	0
56	MG	2A	3379	1/1	0.80	0.26	68,68,68,68	0
56	MG	1A	3789	1/1	0.80	0.17	49,49,49,49	0
56	MG	2A	3440	1/1	0.80	0.22	56,56,56,56	0
56	MG	2a	3186	1/1	0.80	0.14	66,66,66,66	0
56	MG	1B	212	1/1	0.80	0.14	62,62,62,62	0
56	MG	1A	3946	1/1	0.80	0.17	38,38,38,38	0
56	MG	2A	3767	1/1	0.80	0.12	40,40,40,40	0
56	MG	1A	3833	1/1	0.80	0.14	58,58,58,58	0
56	MG	2A	3810	1/1	0.80	0.23	77,77,77,77	0
56	MG	1d	301	1/1	0.80	0.31	58,58,58,58	0
56	MG	2l	204	1/1	0.80	0.12	59,59,59,59	0
56	MG	1A	4023	1/1	0.80	0.16	39,39,39,39	0
56	MG	2A	3306	1/1	0.81	0.12	71,71,71,71	0
56	MG	2A	3311	1/1	0.81	0.16	53,53,53,53	0
56	MG	2A	3327	1/1	0.81	0.13	52,52,52,52	0
56	MG	1A	3695	1/1	0.81	0.11	43,43,43,43	0
56	MG	1a	1810	1/1	0.81	0.13	66,66,66,66	0
56	MG	2Q	203	1/1	0.81	0.15	49,49,49,49	0
56	MG	2A	3350	1/1	0.81	0.24	66,66,66,66	0
56	MG	2A	3353	1/1	0.81	0.18	66,66,66,66	0
56	MG	1A	3740	1/1	0.81	0.16	37,37,37,37	0
56	MG	1a	1628	1/1	0.81	0.14	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	2a	3166	1/1	0.81	0.19	50,50,50,50	0
56	MG	1A	3835	1/1	0.81	0.23	58,58,58,58	0
56	MG	2A	3463	1/1	0.81	0.25	65,65,65,65	0
56	MG	2A	3689	1/1	0.81	0.14	63,63,63,63	0
56	MG	2A	3713	1/1	0.81	0.14	56,56,56,56	0
56	MG	2a	3213	1/1	0.81	0.19	56,56,56,56	0
56	MG	2A	3744	1/1	0.81	0.14	55,55,55,55	0
56	MG	2A	3760	1/1	0.81	0.13	58,58,58,58	0
56	MG	2A	3475	1/1	0.81	0.10	51,51,51,51	0
56	MG	1a	1680	1/1	0.81	0.23	59,59,59,59	0
56	MG	2A	3787	1/1	0.81	0.14	64,64,64,64	0
56	MG	2A	3798	1/1	0.81	0.18	54,54,54,54	0
56	MG	1A	3823	1/1	0.82	0.21	81,81,81,81	0
56	MG	2A	3545	1/1	0.82	0.14	68,68,68,68	0
56	MG	2A	3313	1/1	0.82	0.13	59,59,59,59	0
56	MG	1a	1693	1/1	0.82	0.14	60,60,60,60	0
56	MG	1A	3543	1/1	0.82	0.09	44,44,44,44	0
56	MG	2A	3620	1/1	0.82	0.14	39,39,39,39	0
56	MG	1x	113	1/1	0.82	0.23	51,51,51,51	0
56	MG	2a	3018	1/1	0.82	0.26	66,66,66,66	0
56	MG	2a	3025	1/1	0.82	0.14	56,56,56,56	0
56	MG	1a	1777	1/1	0.82	0.18	64,64,64,64	0
56	MG	1y	104	1/1	0.82	0.24	72,72,72,72	0
56	MG	1a	1781	1/1	0.82	0.14	76,76,76,76	0
56	MG	2A	3684	1/1	0.82	0.17	63,63,63,63	0
56	MG	2A	3414	1/1	0.82	0.23	57,57,57,57	0
56	MG	1a	1788	1/1	0.82	0.35	67,67,67,67	0
56	MG	2a	3185	1/1	0.82	0.16	65,65,65,65	0
56	MG	1a	1803	1/1	0.82	0.17	56,56,56,56	0
56	MG	2A	3737	1/1	0.82	0.12	55,55,55,55	0
56	MG	1a	1805	1/1	0.82	0.16	57,57,57,57	0
56	MG	2A	3753	1/1	0.82	0.13	55,55,55,55	0
56	MG	2A	3261	1/1	0.82	0.23	55,55,55,55	0
56	MG	1A	3764	1/1	0.82	0.18	54,54,54,54	0
56	MG	2A	3304	1/1	0.82	0.24	52,52,52,52	0
56	MG	2A	3773	1/1	0.82	0.22	60,60,60,60	0
56	MG	1A	3473	1/1	0.82	0.19	54,54,54,54	0
56	MG	2v	102	1/1	0.82	0.26	64,64,64,64	0
56	MG	2A	3790	1/1	0.82	0.17	58,58,58,58	0
56	MG	2A	3089	1/1	0.83	0.22	60,60,60,60	0
56	MG	2A	3633	1/1	0.83	0.15	46,46,46,46	0
56	MG	2B	216	1/1	0.83	0.19	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	1A	3399	1/1	0.83	0.11	62,62,62,62	0
56	MG	2G	201	1/1	0.83	0.28	69,69,69,69	0
56	MG	1A	3799	1/1	0.83	0.12	27,27,27,27	0
56	MG	2A	3663	1/1	0.83	0.11	50,50,50,50	0
56	MG	2A	3403	1/1	0.83	0.22	59,59,59,59	0
56	MG	2A	3125	1/1	0.83	0.13	52,52,52,52	0
56	MG	2a	3069	1/1	0.83	0.22	60,60,60,60	0
56	MG	1a	1641	1/1	0.83	0.20	64,64,64,64	0
56	MG	2a	3096	1/1	0.83	0.15	61,61,61,61	0
56	MG	2a	3115	1/1	0.83	0.15	67,67,67,67	0
56	MG	2a	3119	1/1	0.83	0.26	59,59,59,59	0
56	MG	1a	1656	1/1	0.83	0.30	61,61,61,61	0
56	MG	2A	3457	1/1	0.83	0.16	45,45,45,45	0
56	MG	2A	3720	1/1	0.83	0.14	38,38,38,38	0
56	MG	2A	3201	1/1	0.83	0.20	59,59,59,59	0
56	MG	2A	3742	1/1	0.83	0.14	56,56,56,56	0
56	MG	1A	3550	1/1	0.83	0.12	64,64,64,64	0
56	MG	1A	3920	1/1	0.83	0.13	26,26,26,26	0
56	MG	1a	1713	1/1	0.83	0.17	74,74,74,74	0
56	MG	1A	3756	1/1	0.83	0.16	45,45,45,45	0
56	MG	1a	1763	1/1	0.83	0.17	68,68,68,68	0
56	MG	2a	3217	1/1	0.83	0.18	72,72,72,72	0
56	MG	2a	3221	1/1	0.83	0.26	74,74,74,74	0
56	MG	1A	3673	1/1	0.83	0.16	55,55,55,55	0
56	MG	1X	106	1/1	0.83	0.10	51,51,51,51	0
56	MG	2A	3332	1/1	0.83	0.11	52,52,52,52	0
56	MG	2A	3042	1/1	0.83	0.27	59,59,59,59	0
56	MG	2A	3065	1/1	0.83	0.20	49,49,49,49	0
56	MG	2A	3622	1/1	0.83	0.11	39,39,39,39	0
56	MG	1U	211	1/1	0.84	0.37	52,52,52,52	0
56	MG	2A	3213	1/1	0.84	0.17	61,61,61,61	0
56	MG	2A	3607	1/1	0.84	0.20	53,53,53,53	0
56	MG	2A	3412	1/1	0.84	0.11	57,57,57,57	0
56	MG	1A	3524	1/1	0.84	0.21	55,55,55,55	0
56	MG	2A	3768	1/1	0.84	0.15	60,60,60,60	0
56	MG	1A	3812	1/1	0.84	0.16	36,36,36,36	0
56	MG	1A	4010	1/1	0.84	0.09	11,11,11,11	0
56	MG	1A	3349	1/1	0.84	0.26	55,55,55,55	0
56	MG	2A	3055	1/1	0.84	0.21	60,60,60,60	0
56	MG	2a	3178	1/1	0.84	0.16	69,69,69,69	0
56	MG	2A	3801	1/1	0.84	0.24	66,66,66,66	0
56	MG	1A	4052	1/1	0.84	0.11	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3766	1/1	0.84	0.11	57,57,57,57	0
56	MG	1A	3642	1/1	0.84	0.12	33,33,33,33	0
56	MG	2a	3211	1/1	0.84	0.24	68,68,68,68	0
56	MG	2A	3865	1/1	0.84	0.10	46,46,46,46	0
56	MG	1n	102	1/1	0.84	0.16	62,62,62,62	0
56	MG	1A	3842	1/1	0.84	0.15	37,37,37,37	0
56	MG	2A	3708	1/1	0.84	0.19	58,58,58,58	0
56	MG	2a	3222	1/1	0.84	0.14	68,68,68,68	0
56	MG	2a	3226	1/1	0.84	0.20	62,62,62,62	0
56	MG	1B	221	1/1	0.84	0.10	43,43,43,43	0
56	MG	2A	3553	1/1	0.84	0.17	60,60,60,60	0
56	MG	2a	3004	1/1	0.84	0.24	57,57,57,57	0
56	MG	1x	102	1/1	0.84	0.29	57,57,57,57	0
56	MG	2A	3560	1/1	0.84	0.14	51,51,51,51	0
56	MG	2w	104	1/1	0.84	0.40	73,73,73,73	0
56	MG	2y	102	1/1	0.84	0.12	73,73,73,73	0
56	MG	2a	3039	1/1	0.84	0.25	65,65,65,65	0
56	MG	2y	106	1/1	0.84	0.14	81,81,81,81	0
56	MG	2A	3400	1/1	0.85	0.14	68,68,68,68	0
56	MG	2a	3002	1/1	0.85	0.11	63,63,63,63	0
56	MG	1A	3061	1/1	0.85	0.16	47,47,47,47	0
56	MG	2A	3665	1/1	0.85	0.13	56,56,56,56	0
56	MG	1A	3899	1/1	0.85	0.16	43,43,43,43	0
56	MG	2a	3027	1/1	0.85	0.12	61,61,61,61	0
56	MG	2A	3675	1/1	0.85	0.23	61,61,61,61	0
56	MG	1A	3908	1/1	0.85	0.29	41,41,41,41	0
56	MG	1A	3526	1/1	0.85	0.14	47,47,47,47	0
56	MG	2A	3239	1/1	0.85	0.15	54,54,54,54	0
56	MG	2A	3707	1/1	0.85	0.11	67,67,67,67	0
56	MG	1A	3831	1/1	0.85	0.12	41,41,41,41	0
56	MG	2A	3268	1/1	0.85	0.21	77,77,77,77	0
56	MG	2a	3121	1/1	0.85	0.18	66,66,66,66	0
56	MG	2a	3125	1/1	0.85	0.14	50,50,50,50	0
56	MG	2A	3278	1/1	0.85	0.09	55,55,55,55	0
56	MG	2a	3135	1/1	0.85	0.37	67,67,67,67	0
56	MG	2a	3148	1/1	0.85	0.10	56,56,56,56	0
56	MG	1a	1776	1/1	0.85	0.15	57,57,57,57	0
56	MG	2a	3157	1/1	0.85	0.12	57,57,57,57	0
56	MG	2A	3490	1/1	0.85	0.10	49,49,49,49	0
56	MG	1A	3558	1/1	0.85	0.20	41,41,41,41	0
56	MG	2A	3305	1/1	0.85	0.15	53,53,53,53	0
56	MG	1a	1779	1/1	0.85	0.15	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3605	1/1	0.85	0.10	42,42,42,42	0
56	MG	1Y	202	1/1	0.85	0.15	58,58,58,58	0
56	MG	1A	3947	1/1	0.85	0.10	34,34,34,34	0
56	MG	2A	3329	1/1	0.85	0.20	56,56,56,56	0
56	MG	1A	3636	1/1	0.85	0.12	23,23,23,23	0
56	MG	2A	3573	1/1	0.85	0.11	31,31,31,31	0
56	MG	2A	3577	1/1	0.85	0.14	67,67,67,67	0
56	MG	1A	3530	1/1	0.85	0.20	52,52,52,52	0
56	MG	1A	3373	1/1	0.85	0.17	54,54,54,54	0
56	MG	1e	201	1/1	0.85	0.08	59,59,59,59	0
56	MG	2A	3621	1/1	0.85	0.13	41,41,41,41	0
56	MG	2A	3136	1/1	0.85	0.14	49,49,49,49	0
56	MG	2a	3233	1/1	0.85	0.21	61,61,61,61	0
56	MG	2A	3367	1/1	0.85	0.12	59,59,59,59	0
56	MG	2A	3878	1/1	0.85	0.11	63,63,63,63	0
56	MG	2B	210	1/1	0.85	0.14	57,57,57,57	0
56	MG	2B	214	1/1	0.85	0.14	73,73,73,73	0
56	MG	2A	3153	1/1	0.85	0.15	60,60,60,60	0
56	MG	2A	3399	1/1	0.85	0.23	54,54,54,54	0
56	MG	2A	3647	1/1	0.85	0.19	49,49,49,49	0
56	MG	2A	3696	1/1	0.86	0.12	50,50,50,50	0
56	MG	2A	3703	1/1	0.86	0.15	52,52,52,52	0
56	MG	1A	3546	1/1	0.86	0.10	37,37,37,37	0
56	MG	1A	3026	1/1	0.86	0.15	45,45,45,45	0
56	MG	16	105	1/1	0.86	0.09	51,51,51,51	0
56	MG	2a	3085	1/1	0.86	0.14	49,49,49,49	0
56	MG	2a	3087	1/1	0.86	0.20	55,55,55,55	0
56	MG	1A	4047	1/1	0.86	0.10	52,52,52,52	0
56	MG	2A	3491	1/1	0.86	0.16	43,43,43,43	0
56	MG	2A	3023	1/1	0.86	0.20	60,60,60,60	0
56	MG	1A	3936	1/1	0.86	0.16	47,47,47,47	0
56	MG	2A	3747	1/1	0.86	0.14	59,59,59,59	0
56	MG	1a	1795	1/1	0.86	0.14	58,58,58,58	0
56	MG	1A	3251	1/1	0.86	0.14	50,50,50,50	0
56	MG	2A	3069	1/1	0.86	0.29	55,55,55,55	0
56	MG	1A	3413	1/1	0.86	0.15	64,64,64,64	0
56	MG	1a	1661	1/1	0.86	0.15	59,59,59,59	0
56	MG	2a	3163	1/1	0.86	0.15	66,66,66,66	0
56	MG	2A	3099	1/1	0.86	0.19	58,58,58,58	0
56	MG	1B	208	1/1	0.86	0.13	56,56,56,56	0
56	MG	2a	3174	1/1	0.86	0.17	58,58,58,58	0
56	MG	2A	3108	1/1	0.86	0.12	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3791	1/1	0.86	0.14	66,66,66,66	0
56	MG	2A	3348	1/1	0.86	0.21	61,61,61,61	0
56	MG	1A	3467	1/1	0.86	0.11	63,63,63,63	0
56	MG	1h	201	1/1	0.86	0.08	62,62,62,62	0
56	MG	2a	3197	1/1	0.86	0.19	67,67,67,67	0
56	MG	2a	3203	1/1	0.86	0.20	71,71,71,71	0
56	MG	2A	3807	1/1	0.86	0.13	70,70,70,70	0
56	MG	2A	3362	1/1	0.86	0.24	52,52,52,52	0
56	MG	1l	201	1/1	0.86	0.12	59,59,59,59	0
56	MG	2A	3371	1/1	0.86	0.13	60,60,60,60	0
56	MG	1A	3973	1/1	0.86	0.16	27,27,27,27	0
56	MG	2A	3876	1/1	0.86	0.14	66,66,66,66	0
56	MG	1D	310	1/1	0.86	0.33	49,49,49,49	0
56	MG	2A	3194	1/1	0.86	0.12	49,49,49,49	0
56	MG	1a	1757	1/1	0.86	0.21	66,66,66,66	0
56	MG	2a	3229	1/1	0.86	0.20	66,66,66,66	0
56	MG	1w	106	1/1	0.86	0.15	75,75,75,75	0
56	MG	2A	3221	1/1	0.86	0.18	55,55,55,55	0
56	MG	1A	3912	1/1	0.86	0.11	39,39,39,39	0
56	MG	2A	3243	1/1	0.86	0.15	52,52,52,52	0
56	MG	2A	3448	1/1	0.86	0.17	48,48,48,48	0
56	MG	2w	106	1/1	0.86	0.10	72,72,72,72	0
56	MG	2A	3246	1/1	0.86	0.15	56,56,56,56	0
56	MG	2A	3461	1/1	0.86	0.19	75,75,75,75	0
56	MG	2A	3690	1/1	0.86	0.15	67,67,67,67	0
56	MG	1S	202	1/1	0.87	0.14	49,49,49,49	0
56	MG	2a	3009	1/1	0.87	0.18	68,68,68,68	0
56	MG	1T	202	1/1	0.87	0.12	46,46,46,46	0
56	MG	1a	1773	1/1	0.87	0.12	58,58,58,58	0
56	MG	1U	210	1/1	0.87	0.17	49,49,49,49	0
56	MG	2A	3354	1/1	0.87	0.10	60,60,60,60	0
56	MG	2a	3052	1/1	0.87	0.16	54,54,54,54	0
56	MG	2A	3357	1/1	0.87	0.21	65,65,65,65	0
56	MG	1A	3821	1/1	0.87	0.11	42,42,42,42	0
56	MG	2A	3365	1/1	0.87	0.12	56,56,56,56	0
56	MG	1A	3470	1/1	0.87	0.11	62,62,62,62	0
56	MG	1A	4058	1/1	0.87	0.15	49,49,49,49	0
56	MG	2A	3118	1/1	0.87	0.17	66,66,66,66	0
56	MG	1a	1786	1/1	0.87	0.12	74,74,74,74	0
56	MG	2a	3118	1/1	0.87	0.25	61,61,61,61	0
56	MG	10	104	1/1	0.87	0.10	51,51,51,51	0
56	MG	15	105	1/1	0.87	0.11	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3124	1/1	0.87	0.10	49,49,49,49	0
56	MG	1A	3898	1/1	0.87	0.09	41,41,41,41	0
56	MG	1a	1604	1/1	0.87	0.10	55,55,55,55	0
56	MG	1a	1806	1/1	0.87	0.10	70,70,70,70	0
56	MG	2a	3146	1/1	0.87	0.12	65,65,65,65	0
56	MG	1a	1609	1/1	0.87	0.16	50,50,50,50	0
56	MG	2A	3209	1/1	0.87	0.08	62,62,62,62	0
56	MG	1A	3089	1/1	0.87	0.09	41,41,41,41	0
56	MG	1a	1629	1/1	0.87	0.17	56,56,56,56	0
56	MG	2a	3165	1/1	0.87	0.25	60,60,60,60	0
56	MG	1a	1634	1/1	0.87	0.17	65,65,65,65	0
56	MG	2A	3470	1/1	0.87	0.10	60,60,60,60	0
56	MG	1A	3426	1/1	0.87	0.14	55,55,55,55	0
56	MG	1l	202	1/1	0.87	0.12	66,66,66,66	0
56	MG	2A	3254	1/1	0.87	0.16	61,61,61,61	0
56	MG	1B	211	1/1	0.87	0.13	57,57,57,57	0
56	MG	1A	3254	1/1	0.87	0.11	53,53,53,53	0
56	MG	2A	3271	1/1	0.87	0.13	55,55,55,55	0
56	MG	1B	214	1/1	0.87	0.09	54,54,54,54	0
56	MG	1a	1667	1/1	0.87	0.20	62,62,62,62	0
56	MG	2A	3549	1/1	0.87	0.09	37,37,37,37	0
56	MG	2A	3298	1/1	0.87	0.17	48,48,48,48	0
56	MG	2A	3300	1/1	0.87	0.14	53,53,53,53	0
56	MG	2A	3301	1/1	0.87	0.19	58,58,58,58	0
56	MG	1a	1676	1/1	0.87	0.12	45,45,45,45	0
56	MG	1A	3721	1/1	0.87	0.14	29,29,29,29	0
56	MG	2A	3830	1/1	0.87	0.09	66,66,66,66	0
56	MG	1A	3541	1/1	0.87	0.11	60,60,60,60	0
56	MG	1a	1695	1/1	0.87	0.13	47,47,47,47	0
56	MG	2A	3599	1/1	0.87	0.25	63,63,63,63	0
56	MG	2a	3231	1/1	0.87	0.26	58,58,58,58	0
56	MG	1a	1702	1/1	0.87	0.33	57,57,57,57	0
56	MG	2B	205	1/1	0.87	0.15	52,52,52,52	0
56	MG	2A	3613	1/1	0.87	0.17	57,57,57,57	0
56	MG	2A	3614	1/1	0.87	0.18	57,57,57,57	0
56	MG	2w	101	1/1	0.87	0.27	61,61,61,61	0
56	MG	2A	3001	1/1	0.87	0.36	60,60,60,60	0
56	MG	1I	201	1/1	0.87	0.14	63,63,63,63	0
56	MG	2w	107	1/1	0.87	0.20	74,74,74,74	0
56	MG	1O	201	1/1	0.87	0.12	62,62,62,62	0
56	MG	2y	103	1/1	0.87	0.11	56,56,56,56	0
56	MG	2A	3627	1/1	0.87	0.19	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	2y	105	1/1	0.87	0.12	69,69,69,69	0
56	MG	1a	1726	1/1	0.87	0.14	44,44,44,44	0
56	MG	1w	105	1/1	0.88	0.10	58,58,58,58	0
56	MG	1a	1700	1/1	0.88	0.23	42,42,42,42	0
56	MG	1A	3621	1/1	0.88	0.20	42,42,42,42	0
56	MG	2A	3275	1/1	0.88	0.15	58,58,58,58	0
56	MG	1A	3367	1/1	0.88	0.15	54,54,54,54	0
56	MG	2A	3292	1/1	0.88	0.11	67,67,67,67	0
56	MG	2A	3293	1/1	0.88	0.12	62,62,62,62	0
56	MG	2A	3562	1/1	0.88	0.13	42,42,42,42	0
56	MG	2E	301	1/1	0.88	0.18	50,50,50,50	0
56	MG	2E	308	1/1	0.88	0.11	52,52,52,52	0
56	MG	2F	302	1/1	0.88	0.10	58,58,58,58	0
56	MG	1A	3529	1/1	0.88	0.11	44,44,44,44	0
56	MG	2A	3567	1/1	0.88	0.13	69,69,69,69	0
56	MG	1A	3656	1/1	0.88	0.12	58,58,58,58	0
56	MG	2W	202	1/1	0.88	0.09	44,44,44,44	0
56	MG	25	104	1/1	0.88	0.12	46,46,46,46	0
56	MG	26	101	1/1	0.88	0.14	52,52,52,52	0
56	MG	1A	3661	1/1	0.88	0.08	21,21,21,21	0
56	MG	1a	1759	1/1	0.88	0.16	58,58,58,58	0
56	MG	2A	3016	1/1	0.88	0.18	60,60,60,60	0
56	MG	2a	3012	1/1	0.88	0.32	62,62,62,62	0
56	MG	2A	3018	1/1	0.88	0.13	53,53,53,53	0
56	MG	2A	3612	1/1	0.88	0.12	57,57,57,57	0
56	MG	1A	4044	1/1	0.88	0.19	47,47,47,47	0
56	MG	2a	3038	1/1	0.88	0.13	69,69,69,69	0
56	MG	1A	3671	1/1	0.88	0.10	20,20,20,20	0
56	MG	2a	3041	1/1	0.88	0.23	56,56,56,56	0
56	MG	2a	3050	1/1	0.88	0.10	56,56,56,56	0
56	MG	2A	3617	1/1	0.88	0.14	48,48,48,48	0
56	MG	2a	3053	1/1	0.88	0.16	62,62,62,62	0
56	MG	2A	3051	1/1	0.88	0.08	41,41,41,41	0
56	MG	2a	3057	1/1	0.88	0.17	59,59,59,59	0
56	MG	2a	3060	1/1	0.88	0.28	70,70,70,70	0
56	MG	2A	3316	1/1	0.88	0.15	53,53,53,53	0
56	MG	1A	3271	1/1	0.88	0.17	57,57,57,57	0
56	MG	2a	3083	1/1	0.88	0.10	55,55,55,55	0
56	MG	1A	3683	1/1	0.88	0.12	31,31,31,31	0
56	MG	1A	3380	1/1	0.88	0.22	63,63,63,63	0
56	MG	2A	3071	1/1	0.88	0.16	60,60,60,60	0
56	MG	2A	3076	1/1	0.88	0.08	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	3715	1/1	0.88	0.12	40,40,40,40	0
56	MG	2A	3660	1/1	0.88	0.15	55,55,55,55	0
56	MG	1A	3480	1/1	0.88	0.12	45,45,45,45	0
56	MG	1a	1630	1/1	0.88	0.25	51,51,51,51	0
56	MG	1a	1794	1/1	0.88	0.16	48,48,48,48	0
56	MG	1A	3730	1/1	0.88	0.11	25,25,25,25	0
56	MG	2A	3360	1/1	0.88	0.12	66,66,66,66	0
56	MG	2a	3140	1/1	0.88	0.10	56,56,56,56	0
56	MG	2a	3141	1/1	0.88	0.14	64,64,64,64	0
56	MG	2A	3111	1/1	0.88	0.15	55,55,55,55	0
56	MG	2A	3363	1/1	0.88	0.14	50,50,50,50	0
56	MG	2A	3686	1/1	0.88	0.11	66,66,66,66	0
56	MG	2A	3114	1/1	0.88	0.22	60,60,60,60	0
56	MG	1a	1799	1/1	0.88	0.12	60,60,60,60	0
56	MG	2A	3695	1/1	0.88	0.14	52,52,52,52	0
56	MG	1A	3737	1/1	0.88	0.17	32,32,32,32	0
56	MG	2A	3378	1/1	0.88	0.09	50,50,50,50	0
56	MG	2A	3704	1/1	0.88	0.18	62,62,62,62	0
56	MG	1A	3542	1/1	0.88	0.10	56,56,56,56	0
56	MG	2a	3179	1/1	0.88	0.16	60,60,60,60	0
56	MG	1a	1650	1/1	0.88	0.31	55,55,55,55	0
56	MG	2A	3154	1/1	0.88	0.12	51,51,51,51	0
56	MG	2A	3164	1/1	0.88	0.12	43,43,43,43	0
56	MG	2A	3725	1/1	0.88	0.10	59,59,59,59	0
56	MG	2A	3173	1/1	0.88	0.17	74,74,74,74	0
56	MG	2A	3740	1/1	0.88	0.10	54,54,54,54	0
56	MG	2A	3175	1/1	0.88	0.10	42,42,42,42	0
56	MG	1A	3489	1/1	0.88	0.18	51,51,51,51	0
56	MG	2A	3746	1/1	0.88	0.11	43,43,43,43	0
56	MG	2A	3430	1/1	0.88	0.10	44,44,44,44	0
56	MG	2A	3751	1/1	0.88	0.13	54,54,54,54	0
56	MG	2A	3434	1/1	0.88	0.18	49,49,49,49	0
56	MG	2A	3755	1/1	0.88	0.15	39,39,39,39	0
56	MG	2A	3435	1/1	0.88	0.10	56,56,56,56	0
56	MG	2A	3438	1/1	0.88	0.23	53,53,53,53	0
56	MG	1A	3491	1/1	0.88	0.11	48,48,48,48	0
56	MG	1A	3312	1/1	0.88	0.28	64,64,64,64	0
56	MG	1A	3214	1/1	0.88	0.15	61,61,61,61	0
56	MG	2a	3234	1/1	0.88	0.15	58,58,58,58	0
56	MG	2A	3782	1/1	0.88	0.10	55,55,55,55	0
56	MG	1R	204	1/1	0.88	0.17	49,49,49,49	0
56	MG	2A	3212	1/1	0.88	0.23	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	1681	1/1	0.88	0.27	66,66,66,66	0
56	MG	1a	1691	1/1	0.88	0.17	55,55,55,55	0
56	MG	1p	101	1/1	0.88	0.10	38,38,38,38	0
56	MG	1w	101	1/1	0.88	0.11	60,60,60,60	0
56	MG	1A	3232	1/1	0.88	0.14	53,53,53,53	0
56	MG	2A	3503	1/1	0.88	0.15	62,62,62,62	0
56	MG	2A	3525	1/1	0.88	0.20	47,47,47,47	0
56	MG	1T	201	1/1	0.88	0.15	44,44,44,44	0
56	MG	2A	3863	1/1	0.88	0.10	42,42,42,42	0
56	MG	2A	3853	1/1	0.89	0.12	66,66,66,66	0
56	MG	2A	3497	1/1	0.89	0.17	61,61,61,61	0
56	MG	2A	3207	1/1	0.89	0.11	54,54,54,54	0
56	MG	1A	3618	1/1	0.89	0.19	49,49,49,49	0
56	MG	1T	203	1/1	0.89	0.16	55,55,55,55	0
56	MG	1A	3913	1/1	0.89	0.09	18,18,18,18	0
56	MG	1A	3749	1/1	0.89	0.13	52,52,52,52	0
56	MG	2A	3238	1/1	0.89	0.12	64,64,64,64	0
56	MG	1A	3189	1/1	0.89	0.07	41,41,41,41	0
56	MG	1A	3935	1/1	0.89	0.09	53,53,53,53	0
56	MG	2B	218	1/1	0.89	0.17	62,62,62,62	0
56	MG	1A	3622	1/1	0.89	0.22	53,53,53,53	0
56	MG	2E	303	1/1	0.89	0.06	41,41,41,41	0
56	MG	2A	3251	1/1	0.89	0.13	55,55,55,55	0
56	MG	1A	3383	1/1	0.89	0.09	47,47,47,47	0
56	MG	2A	3563	1/1	0.89	0.15	41,41,41,41	0
56	MG	1A	3640	1/1	0.89	0.09	24,24,24,24	0
56	MG	18	103	1/1	0.89	0.09	48,48,48,48	0
56	MG	2R	201	1/1	0.89	0.16	56,56,56,56	0
56	MG	2V	201	1/1	0.89	0.32	49,49,49,49	0
56	MG	1A	3798	1/1	0.89	0.09	25,25,25,25	0
56	MG	2X	101	1/1	0.89	0.15	60,60,60,60	0
56	MG	1A	3287	1/1	0.89	0.07	39,39,39,39	0
56	MG	1a	1623	1/1	0.89	0.14	50,50,50,50	0
56	MG	1A	3976	1/1	0.89	0.09	34,34,34,34	0
56	MG	1A	3474	1/1	0.89	0.14	56,56,56,56	0
56	MG	1A	3988	1/1	0.89	0.08	18,18,18,18	0
56	MG	2a	3010	1/1	0.89	0.23	67,67,67,67	0
56	MG	1A	4002	1/1	0.89	0.10	58,58,58,58	0
56	MG	1A	3816	1/1	0.89	0.10	77,77,77,77	0
56	MG	2a	3021	1/1	0.89	0.16	58,58,58,58	0
56	MG	1A	4019	1/1	0.89	0.14	45,45,45,45	0
56	MG	1A	3405	1/1	0.89	0.25	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2a	3028	1/1	0.89	0.28	59,59,59,59	0
56	MG	2a	3033	1/1	0.89	0.10	59,59,59,59	0
56	MG	1A	4026	1/1	0.89	0.10	26,26,26,26	0
56	MG	1A	3670	1/1	0.89	0.13	48,48,48,48	0
56	MG	2a	3040	1/1	0.89	0.16	58,58,58,58	0
56	MG	2A	3626	1/1	0.89	0.11	37,37,37,37	0
56	MG	1A	3829	1/1	0.89	0.12	18,18,18,18	0
56	MG	1A	3409	1/1	0.89	0.33	35,35,35,35	0
56	MG	2A	3005	1/1	0.89	0.32	55,55,55,55	0
56	MG	2A	3318	1/1	0.89	0.23	55,55,55,55	0
56	MG	2a	3056	1/1	0.89	0.15	69,69,69,69	0
56	MG	2A	3319	1/1	0.89	0.30	55,55,55,55	0
56	MG	2A	3648	1/1	0.89	0.13	33,33,33,33	0
56	MG	2a	3061	1/1	0.89	0.08	59,59,59,59	0
56	MG	1A	4053	1/1	0.89	0.19	48,48,48,48	0
56	MG	1A	3041	1/1	0.89	0.14	38,38,38,38	0
56	MG	1A	3345	1/1	0.89	0.09	51,51,51,51	0
56	MG	2A	3031	1/1	0.89	0.15	62,62,62,62	0
56	MG	1a	1692	1/1	0.89	0.29	62,62,62,62	0
56	MG	2a	3094	1/1	0.89	0.16	61,61,61,61	0
56	MG	1A	4073	1/1	0.89	0.09	47,47,47,47	0
56	MG	2a	3102	1/1	0.89	0.15	48,48,48,48	0
56	MG	1A	3518	1/1	0.89	0.16	51,51,51,51	0
56	MG	1A	4102	1/1	0.89	0.09	54,54,54,54	0
56	MG	1A	3843	1/1	0.89	0.10	28,28,28,28	0
56	MG	1a	1705	1/1	0.89	0.25	45,45,45,45	0
56	MG	1A	3869	1/1	0.89	0.11	42,42,42,42	0
56	MG	1a	1715	1/1	0.89	0.10	45,45,45,45	0
56	MG	2a	3128	1/1	0.89	0.29	63,63,63,63	0
56	MG	1A	3710	1/1	0.89	0.16	47,47,47,47	0
56	MG	2A	3702	1/1	0.89	0.12	44,44,44,44	0
56	MG	1a	1725	1/1	0.89	0.12	47,47,47,47	0
56	MG	1A	3713	1/1	0.89	0.10	45,45,45,45	0
56	MG	2A	3104	1/1	0.89	0.16	54,54,54,54	0
56	MG	1a	1733	1/1	0.89	0.24	55,55,55,55	0
56	MG	2A	3712	1/1	0.89	0.23	69,69,69,69	0
56	MG	2A	3109	1/1	0.89	0.13	55,55,55,55	0
56	MG	2A	3383	1/1	0.89	0.19	57,57,57,57	0
56	MG	2A	3721	1/1	0.89	0.14	49,49,49,49	0
56	MG	2A	3390	1/1	0.89	0.22	63,63,63,63	0
56	MG	2A	3726	1/1	0.89	0.07	50,50,50,50	0
56	MG	2a	3170	1/1	0.89	0.14	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3729	1/1	0.89	0.15	55,55,55,55	0
56	MG	2A	3736	1/1	0.89	0.13	50,50,50,50	0
56	MG	1a	1755	1/1	0.89	0.23	61,61,61,61	0
56	MG	1B	217	1/1	0.89	0.09	43,43,43,43	0
56	MG	2A	3741	1/1	0.89	0.10	50,50,50,50	0
56	MG	1A	3883	1/1	0.89	0.08	13,13,13,13	0
56	MG	2A	3743	1/1	0.89	0.12	51,51,51,51	0
56	MG	2A	3408	1/1	0.89	0.18	66,66,66,66	0
56	MG	1A	3432	1/1	0.89	0.10	52,52,52,52	0
56	MG	2a	3206	1/1	0.89	0.21	58,58,58,58	0
56	MG	2A	3132	1/1	0.89	0.15	71,71,71,71	0
56	MG	1a	1768	1/1	0.89	0.10	61,61,61,61	0
56	MG	2A	3426	1/1	0.89	0.19	35,35,35,35	0
56	MG	2a	3215	1/1	0.89	0.17	61,61,61,61	0
56	MG	1E	308	1/1	0.89	0.09	16,16,16,16	0
56	MG	2A	3757	1/1	0.89	0.09	54,54,54,54	0
56	MG	2A	3759	1/1	0.89	0.10	47,47,47,47	0
56	MG	1G	204	1/1	0.89	0.09	54,54,54,54	0
56	MG	1A	3897	1/1	0.89	0.10	34,34,34,34	0
56	MG	2A	3171	1/1	0.89	0.23	72,72,72,72	0
56	MG	1A	3565	1/1	0.89	0.12	53,53,53,53	0
56	MG	1O	206	1/1	0.89	0.20	57,57,57,57	0
56	MG	2A	3449	1/1	0.89	0.14	65,65,65,65	0
56	MG	2A	3454	1/1	0.89	0.12	45,45,45,45	0
56	MG	1a	1782	1/1	0.89	0.15	55,55,55,55	0
56	MG	1A	3570	1/1	0.89	0.10	54,54,54,54	0
56	MG	2t	201	1/1	0.89	0.17	47,47,47,47	0
56	MG	2A	3793	1/1	0.89	0.09	63,63,63,63	0
56	MG	2A	3185	1/1	0.89	0.20	50,50,50,50	0
56	MG	2A	3189	1/1	0.89	0.10	58,58,58,58	0
56	MG	2A	3190	1/1	0.89	0.19	60,60,60,60	0
56	MG	2A	3193	1/1	0.89	0.09	53,53,53,53	0
56	MG	2A	3482	1/1	0.89	0.18	56,56,56,56	0
56	MG	2A	3811	1/1	0.89	0.12	57,57,57,57	0
56	MG	1A	3906	1/1	0.89	0.15	41,41,41,41	0
56	MG	1A	3448	1/1	0.89	0.11	39,39,39,39	0
56	MG	2A	3831	1/1	0.89	0.14	38,38,38,38	0
58	ZN	24	501	1/1	0.89	0.15	134,134,134,134	0
60	K	2A	3473	1/1	0.89	0.17	75,75,75,75	0
56	MG	1A	3952	1/1	0.90	0.10	50,50,50,50	0
56	MG	1A	3960	1/1	0.90	0.12	46,46,46,46	0
56	MG	1A	3968	1/1	0.90	0.08	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	3629	1/1	0.90	0.23	54,54,54,54	0
56	MG	2A	3630	1/1	0.90	0.10	47,47,47,47	0
56	MG	1A	3264	1/1	0.90	0.15	53,53,53,53	0
56	MG	25	102	1/1	0.90	0.14	45,45,45,45	0
56	MG	1A	3229	1/1	0.90	0.09	41,41,41,41	0
56	MG	2A	3351	1/1	0.90	0.09	49,49,49,49	0
56	MG	2A	3352	1/1	0.90	0.08	48,48,48,48	0
56	MG	1A	3553	1/1	0.90	0.24	55,55,55,55	0
56	MG	2a	3008	1/1	0.90	0.18	57,57,57,57	0
56	MG	2A	3650	1/1	0.90	0.13	53,53,53,53	0
56	MG	2A	3656	1/1	0.90	0.10	39,39,39,39	0
56	MG	1A	3516	1/1	0.90	0.11	37,37,37,37	0
56	MG	2A	3113	1/1	0.90	0.15	50,50,50,50	0
56	MG	1Z	3701	1/1	0.90	0.08	51,51,51,51	0
56	MG	2A	3115	1/1	0.90	0.17	53,53,53,53	0
56	MG	2A	3117	1/1	0.90	0.14	50,50,50,50	0
56	MG	1A	3995	1/1	0.90	0.10	39,39,39,39	0
56	MG	13	104	1/1	0.90	0.12	53,53,53,53	0
56	MG	1A	3428	1/1	0.90	0.11	38,38,38,38	0
56	MG	1A	4003	1/1	0.90	0.09	50,50,50,50	0
56	MG	1A	4007	1/1	0.90	0.16	57,57,57,57	0
56	MG	2A	3381	1/1	0.90	0.18	59,59,59,59	0
56	MG	2a	3042	1/1	0.90	0.25	65,65,65,65	0
56	MG	1A	3050	1/1	0.90	0.16	25,25,25,25	0
56	MG	1a	1797	1/1	0.90	0.15	53,53,53,53	0
56	MG	2A	3397	1/1	0.90	0.14	58,58,58,58	0
56	MG	1a	1608	1/1	0.90	0.10	42,42,42,42	0
56	MG	1A	3841	1/1	0.90	0.11	42,42,42,42	0
56	MG	1A	3581	1/1	0.90	0.26	64,64,64,64	0
56	MG	1A	3599	1/1	0.90	0.14	57,57,57,57	0
56	MG	2A	3409	1/1	0.90	0.20	66,66,66,66	0
56	MG	2a	3064	1/1	0.90	0.09	70,70,70,70	0
56	MG	2a	3065	1/1	0.90	0.12	55,55,55,55	0
56	MG	1A	3853	1/1	0.90	0.09	19,19,19,19	0
56	MG	1a	1821	1/1	0.90	0.27	55,55,55,55	0
56	MG	2a	3076	1/1	0.90	0.20	56,56,56,56	0
56	MG	1a	1824	1/1	0.90	0.18	54,54,54,54	0
56	MG	2A	3723	1/1	0.90	0.12	59,59,59,59	0
56	MG	2A	3423	1/1	0.90	0.24	42,42,42,42	0
56	MG	1A	3858	1/1	0.90	0.06	27,27,27,27	0
56	MG	1A	3717	1/1	0.90	0.07	39,39,39,39	0
56	MG	2a	3099	1/1	0.90	0.22	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	1A	3437	1/1	0.90	0.10	50,50,50,50	0
56	MG	2a	3114	1/1	0.90	0.14	65,65,65,65	0
56	MG	1A	3728	1/1	0.90	0.08	20,20,20,20	0
56	MG	2A	3739	1/1	0.90	0.17	62,62,62,62	0
56	MG	1a	1646	1/1	0.90	0.14	53,53,53,53	0
56	MG	2A	3208	1/1	0.90	0.07	32,32,32,32	0
56	MG	1A	3615	1/1	0.90	0.15	33,33,33,33	0
56	MG	1A	3884	1/1	0.90	0.15	47,47,47,47	0
56	MG	2a	3126	1/1	0.90	0.15	62,62,62,62	0
56	MG	1a	1660	1/1	0.90	0.17	63,63,63,63	0
56	MG	2A	3745	1/1	0.90	0.10	58,58,58,58	0
56	MG	2A	3455	1/1	0.90	0.21	50,50,50,50	0
56	MG	1A	3733	1/1	0.90	0.08	22,22,22,22	0
56	MG	2A	3458	1/1	0.90	0.24	64,64,64,64	0
56	MG	2A	3224	1/1	0.90	0.14	62,62,62,62	0
56	MG	2A	3226	1/1	0.90	0.13	58,58,58,58	0
56	MG	1A	4101	1/1	0.90	0.16	56,56,56,56	0
56	MG	1a	1670	1/1	0.90	0.13	49,49,49,49	0
56	MG	1A	3616	1/1	0.90	0.13	50,50,50,50	0
56	MG	2A	3763	1/1	0.90	0.13	43,43,43,43	0
56	MG	1A	3375	1/1	0.90	0.10	46,46,46,46	0
56	MG	2A	3249	1/1	0.90	0.24	60,60,60,60	0
56	MG	1A	3378	1/1	0.90	0.09	42,42,42,42	0
56	MG	2A	3769	1/1	0.90	0.14	56,56,56,56	0
56	MG	2A	3253	1/1	0.90	0.09	58,58,58,58	0
56	MG	2A	3780	1/1	0.90	0.09	48,48,48,48	0
56	MG	1a	1683	1/1	0.90	0.19	64,64,64,64	0
56	MG	2A	3504	1/1	0.90	0.30	52,52,52,52	0
56	MG	2A	3505	1/1	0.90	0.11	41,41,41,41	0
56	MG	1x	115	1/1	0.90	0.13	62,62,62,62	0
56	MG	2a	3191	1/1	0.90	0.08	64,64,64,64	0
56	MG	1A	3001	1/1	0.90	0.06	34,34,34,34	0
56	MG	2a	3199	1/1	0.90	0.13	50,50,50,50	0
56	MG	2A	3796	1/1	0.90	0.15	64,64,64,64	0
56	MG	1A	3533	1/1	0.90	0.23	33,33,33,33	0
56	MG	2a	3207	1/1	0.90	0.18	60,60,60,60	0
56	MG	2a	3209	1/1	0.90	0.14	58,58,58,58	0
56	MG	1A	3324	1/1	0.90	0.14	54,54,54,54	0
56	MG	1A	3769	1/1	0.90	0.10	43,43,43,43	0
56	MG	2A	3291	1/1	0.90	0.12	62,62,62,62	0
56	MG	2A	3808	1/1	0.90	0.12	58,58,58,58	0
56	MG	1B	230	1/1	0.90	0.14	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	3770	1/1	0.90	0.11	47,47,47,47	0
56	MG	2A	3020	1/1	0.90	0.15	55,55,55,55	0
56	MG	2a	3223	1/1	0.90	0.14	58,58,58,58	0
56	MG	2A	3297	1/1	0.90	0.27	68,68,68,68	0
56	MG	1A	3925	1/1	0.90	0.16	54,54,54,54	0
56	MG	2A	3843	1/1	0.90	0.13	41,41,41,41	0
56	MG	2A	3851	1/1	0.90	0.10	55,55,55,55	0
56	MG	2a	3230	1/1	0.90	0.11	60,60,60,60	0
56	MG	1E	310	1/1	0.90	0.11	58,58,58,58	0
56	MG	2A	3041	1/1	0.90	0.16	54,54,54,54	0
56	MG	1A	3341	1/1	0.90	0.17	52,52,52,52	0
56	MG	2A	3575	1/1	0.90	0.08	40,40,40,40	0
56	MG	2j	202	1/1	0.90	0.07	58,58,58,58	0
56	MG	1A	3172	1/1	0.90	0.14	53,53,53,53	0
56	MG	2A	3586	1/1	0.90	0.14	62,62,62,62	0
56	MG	2A	3053	1/1	0.90	0.13	54,54,54,54	0
56	MG	2A	3598	1/1	0.90	0.09	51,51,51,51	0
56	MG	2B	213	1/1	0.90	0.15	55,55,55,55	0
56	MG	2A	3309	1/1	0.90	0.13	49,49,49,49	0
56	MG	1A	3261	1/1	0.90	0.37	46,46,46,46	0
56	MG	2x	103	1/1	0.90	0.20	59,59,59,59	0
56	MG	1A	3810	1/1	0.90	0.08	21,21,21,21	0
56	MG	1a	1732	1/1	0.90	0.23	43,43,43,43	0
56	MG	1A	3667	1/1	0.90	0.08	44,44,44,44	0
56	MG	2E	304	1/1	0.90	0.15	58,58,58,58	0
56	MG	1a	1735	1/1	0.90	0.17	60,60,60,60	0
56	MG	2A	3084	1/1	0.90	0.19	60,60,60,60	0
56	MG	1A	3669	1/1	0.90	0.09	39,39,39,39	0
56	MG	1A	4040	1/1	0.91	0.07	41,41,41,41	0
56	MG	1A	3410	1/1	0.91	0.12	43,43,43,43	0
56	MG	1A	4045	1/1	0.91	0.08	69,69,69,69	0
56	MG	2A	3874	1/1	0.91	0.11	45,45,45,45	0
56	MG	1x	108	1/1	0.91	0.14	49,49,49,49	0
56	MG	1A	3854	1/1	0.91	0.10	35,35,35,35	0
56	MG	2B	204	1/1	0.91	0.14	71,71,71,71	0
56	MG	2A	3252	1/1	0.91	0.10	55,55,55,55	0
56	MG	1A	3190	1/1	0.91	0.10	56,56,56,56	0
56	MG	1A	3120	1/1	0.91	0.12	55,55,55,55	0
56	MG	2A	3257	1/1	0.91	0.10	42,42,42,42	0
56	MG	2B	215	1/1	0.91	0.08	52,52,52,52	0
56	MG	2A	3258	1/1	0.91	0.16	62,62,62,62	0
56	MG	1a	1665	1/1	0.91	0.16	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	2B	221	1/1	0.91	0.12	59,59,59,59	0
56	MG	2A	3267	1/1	0.91	0.14	49,49,49,49	0
56	MG	1A	3329	1/1	0.91	0.13	52,52,52,52	0
56	MG	1A	3876	1/1	0.91	0.09	53,53,53,53	0
56	MG	2A	3565	1/1	0.91	0.11	33,33,33,33	0
56	MG	2E	309	1/1	0.91	0.10	42,42,42,42	0
56	MG	2A	3273	1/1	0.91	0.07	59,59,59,59	0
56	MG	2F	303	1/1	0.91	0.12	39,39,39,39	0
56	MG	1A	3332	1/1	0.91	0.18	52,52,52,52	0
56	MG	1A	4088	1/1	0.91	0.11	36,36,36,36	0
56	MG	2A	3280	1/1	0.91	0.15	34,34,34,34	0
56	MG	2A	3283	1/1	0.91	0.12	54,54,54,54	0
56	MG	2R	202	1/1	0.91	0.10	46,46,46,46	0
56	MG	2A	3579	1/1	0.91	0.11	53,53,53,53	0
56	MG	2A	3287	1/1	0.91	0.09	42,42,42,42	0
56	MG	2A	3588	1/1	0.91	0.10	29,29,29,29	0
56	MG	2I	101	1/1	0.91	0.23	44,44,44,44	0
56	MG	2A	3596	1/1	0.91	0.16	53,53,53,53	0
56	MG	2A	3289	1/1	0.91	0.10	41,41,41,41	0
56	MG	1A	3130	1/1	0.91	0.15	44,44,44,44	0
56	MG	1A	3137	1/1	0.91	0.06	39,39,39,39	0
56	MG	1A	3449	1/1	0.91	0.08	42,42,42,42	0
56	MG	2a	3005	1/1	0.91	0.13	54,54,54,54	0
56	MG	2A	3608	1/1	0.91	0.08	28,28,28,28	0
56	MG	2A	3024	1/1	0.91	0.17	46,46,46,46	0
56	MG	2A	3029	1/1	0.91	0.21	54,54,54,54	0
56	MG	1A	3554	1/1	0.91	0.11	26,26,26,26	0
56	MG	2A	3299	1/1	0.91	0.14	52,52,52,52	0
56	MG	2A	3040	1/1	0.91	0.10	47,47,47,47	0
56	MG	1A	3152	1/1	0.91	0.25	33,33,33,33	0
56	MG	2A	3302	1/1	0.91	0.09	49,49,49,49	0
56	MG	2A	3624	1/1	0.91	0.16	43,43,43,43	0
56	MG	2a	3031	1/1	0.91	0.19	46,46,46,46	0
56	MG	1A	3562	1/1	0.91	0.08	39,39,39,39	0
56	MG	2a	3034	1/1	0.91	0.25	67,67,67,67	0
56	MG	1A	3468	1/1	0.91	0.12	60,60,60,60	0
56	MG	1A	3907	1/1	0.91	0.13	25,25,25,25	0
56	MG	1a	1703	1/1	0.91	0.19	41,41,41,41	0
56	MG	2A	3056	1/1	0.91	0.13	56,56,56,56	0
56	MG	1A	3742	1/1	0.91	0.08	40,40,40,40	0
56	MG	2a	3043	1/1	0.91	0.13	62,62,62,62	0
56	MG	2a	3044	1/1	0.91	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	3049	1/1	0.91	0.09	63,63,63,63	0
56	MG	1B	222	1/1	0.91	0.09	41,41,41,41	0
56	MG	1A	3566	1/1	0.91	0.13	50,50,50,50	0
56	MG	1B	231	1/1	0.91	0.15	53,53,53,53	0
56	MG	2A	3649	1/1	0.91	0.16	44,44,44,44	0
56	MG	2A	3321	1/1	0.91	0.09	57,57,57,57	0
56	MG	1A	3350	1/1	0.91	0.17	45,45,45,45	0
56	MG	2A	3087	1/1	0.91	0.08	49,49,49,49	0
56	MG	1A	3571	1/1	0.91	0.13	49,49,49,49	0
56	MG	1A	3924	1/1	0.91	0.16	55,55,55,55	0
56	MG	2A	3664	1/1	0.91	0.11	67,67,67,67	0
56	MG	2A	3097	1/1	0.91	0.12	50,50,50,50	0
56	MG	2a	3071	1/1	0.91	0.17	45,45,45,45	0
56	MG	2A	3668	1/1	0.91	0.14	59,59,59,59	0
56	MG	1E	311	1/1	0.91	0.22	37,37,37,37	0
56	MG	1F	309	1/1	0.91	0.12	44,44,44,44	0
56	MG	2A	3680	1/1	0.91	0.08	43,43,43,43	0
56	MG	1a	1739	1/1	0.91	0.34	59,59,59,59	0
56	MG	1A	3237	1/1	0.91	0.18	45,45,45,45	0
56	MG	1A	3930	1/1	0.91	0.09	45,45,45,45	0
56	MG	1N	204	1/1	0.91	0.20	39,39,39,39	0
56	MG	1A	3164	1/1	0.91	0.27	35,35,35,35	0
56	MG	2a	3112	1/1	0.91	0.14	60,60,60,60	0
56	MG	1A	3933	1/1	0.91	0.20	39,39,39,39	0
56	MG	1P	204	1/1	0.91	0.07	33,33,33,33	0
56	MG	1A	3476	1/1	0.91	0.17	42,42,42,42	0
56	MG	1A	3773	1/1	0.91	0.13	40,40,40,40	0
56	MG	1A	3080	1/1	0.91	0.15	49,49,49,49	0
56	MG	2A	3706	1/1	0.91	0.07	47,47,47,47	0
56	MG	2A	3368	1/1	0.91	0.08	58,58,58,58	0
56	MG	2A	3369	1/1	0.91	0.11	57,57,57,57	0
56	MG	2a	3127	1/1	0.91	0.14	56,56,56,56	0
56	MG	2A	3128	1/1	0.91	0.14	61,61,61,61	0
56	MG	2A	3372	1/1	0.91	0.08	47,47,47,47	0
56	MG	2A	3376	1/1	0.91	0.09	46,46,46,46	0
56	MG	1A	3942	1/1	0.91	0.18	26,26,26,26	0
56	MG	1A	3791	1/1	0.91	0.10	11,11,11,11	0
56	MG	2A	3141	1/1	0.91	0.15	50,50,50,50	0
56	MG	2A	3151	1/1	0.91	0.14	55,55,55,55	0
56	MG	2A	3385	1/1	0.91	0.17	51,51,51,51	0
56	MG	1A	3485	1/1	0.91	0.12	49,49,49,49	0
56	MG	1A	3948	1/1	0.91	0.17	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	2A	3155	1/1	0.91	0.11	52,52,52,52	0
56	MG	2A	3163	1/1	0.91	0.18	53,53,53,53	0
56	MG	1A	3487	1/1	0.91	0.15	59,59,59,59	0
56	MG	2A	3406	1/1	0.91	0.09	48,48,48,48	0
56	MG	2A	3169	1/1	0.91	0.11	61,61,61,61	0
56	MG	2a	3177	1/1	0.91	0.12	48,48,48,48	0
56	MG	1A	3800	1/1	0.91	0.09	38,38,38,38	0
56	MG	1A	3374	1/1	0.91	0.10	41,41,41,41	0
56	MG	2A	3413	1/1	0.91	0.08	59,59,59,59	0
56	MG	1Z	3702	1/1	0.91	0.14	53,53,53,53	0
56	MG	2A	3748	1/1	0.91	0.09	57,57,57,57	0
56	MG	2A	3750	1/1	0.91	0.14	56,56,56,56	0
56	MG	1a	1800	1/1	0.91	0.16	38,38,38,38	0
56	MG	2a	3196	1/1	0.91	0.13	68,68,68,68	0
56	MG	1A	3972	1/1	0.91	0.12	31,31,31,31	0
56	MG	2a	3198	1/1	0.91	0.12	53,53,53,53	0
56	MG	2A	3424	1/1	0.91	0.24	36,36,36,36	0
56	MG	2A	3756	1/1	0.91	0.09	53,53,53,53	0
56	MG	1A	3096	1/1	0.91	0.12	49,49,49,49	0
56	MG	2A	3428	1/1	0.91	0.22	49,49,49,49	0
56	MG	2a	3208	1/1	0.91	0.14	51,51,51,51	0
56	MG	1A	3176	1/1	0.91	0.08	33,33,33,33	0
56	MG	16	102	1/1	0.91	0.12	51,51,51,51	0
56	MG	2A	3765	1/1	0.91	0.12	54,54,54,54	0
56	MG	2A	3192	1/1	0.91	0.11	53,53,53,53	0
56	MG	1A	3511	1/1	0.91	0.12	62,62,62,62	0
56	MG	1A	3265	1/1	0.91	0.11	31,31,31,31	0
56	MG	2a	3218	1/1	0.91	0.08	42,42,42,42	0
56	MG	2a	3219	1/1	0.91	0.14	71,71,71,71	0
56	MG	2A	3441	1/1	0.91	0.14	47,47,47,47	0
56	MG	1A	3269	1/1	0.91	0.15	44,44,44,44	0
56	MG	2A	3203	1/1	0.91	0.16	49,49,49,49	0
56	MG	2a	3225	1/1	0.91	0.12	57,57,57,57	0
56	MG	2A	3205	1/1	0.91	0.10	60,60,60,60	0
56	MG	2A	3784	1/1	0.91	0.09	48,48,48,48	0
56	MG	2A	3785	1/1	0.91	0.10	64,64,64,64	0
56	MG	1A	3389	1/1	0.91	0.10	38,38,38,38	0
56	MG	1A	3521	1/1	0.91	0.09	50,50,50,50	0
56	MG	1A	3187	1/1	0.91	0.07	53,53,53,53	0
56	MG	1a	1627	1/1	0.91	0.17	36,36,36,36	0
56	MG	2A	3462	1/1	0.91	0.32	51,51,51,51	0
56	MG	1A	3402	1/1	0.91	0.14	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	2A	3219	1/1	0.91	0.26	57,57,57,57	0
56	MG	2I	202	1/1	0.91	0.11	56,56,56,56	0
56	MG	1A	3114	1/1	0.91	0.24	35,35,35,35	0
56	MG	2A	3476	1/1	0.91	0.09	52,52,52,52	0
56	MG	1A	3300	1/1	0.91	0.09	37,37,37,37	0
56	MG	1A	3846	1/1	0.91	0.12	44,44,44,44	0
56	MG	2A	3227	1/1	0.91	0.22	59,59,59,59	0
56	MG	2A	3230	1/1	0.91	0.11	46,46,46,46	0
56	MG	2A	3494	1/1	0.91	0.11	50,50,50,50	0
56	MG	2x	102	1/1	0.91	0.07	52,52,52,52	0
56	MG	2A	3496	1/1	0.91	0.09	61,61,61,61	0
56	MG	2A	3832	1/1	0.91	0.13	30,30,30,30	0
56	MG	2A	3839	1/1	0.91	0.08	51,51,51,51	0
56	MG	1A	4030	1/1	0.91	0.13	36,36,36,36	0
56	MG	2A	3847	1/1	0.91	0.18	48,48,48,48	0
56	MG	2A	3499	1/1	0.91	0.28	54,54,54,54	0
56	MG	2A	3500	1/1	0.91	0.26	49,49,49,49	0
56	MG	2A	3862	1/1	0.91	0.11	50,50,50,50	0
56	MG	1A	3647	1/1	0.92	0.11	11,11,11,11	0
56	MG	1A	3958	1/1	0.92	0.07	22,22,22,22	0
56	MG	2A	3487	1/1	0.92	0.08	45,45,45,45	0
56	MG	1S	203	1/1	0.92	0.11	70,70,70,70	0
56	MG	2A	3218	1/1	0.92	0.18	45,45,45,45	0
56	MG	1A	3654	1/1	0.92	0.10	35,35,35,35	0
56	MG	1a	1804	1/1	0.92	0.14	47,47,47,47	0
56	MG	2A	3869	1/1	0.92	0.12	50,50,50,50	0
56	MG	2A	3222	1/1	0.92	0.18	53,53,53,53	0
56	MG	2A	3223	1/1	0.92	0.09	52,52,52,52	0
56	MG	2A	3877	1/1	0.92	0.07	45,45,45,45	0
56	MG	1A	3306	1/1	0.92	0.14	32,32,32,32	0
56	MG	1A	3307	1/1	0.92	0.17	54,54,54,54	0
56	MG	1A	3664	1/1	0.92	0.10	54,54,54,54	0
56	MG	2B	206	1/1	0.92	0.13	50,50,50,50	0
56	MG	2B	208	1/1	0.92	0.17	52,52,52,52	0
56	MG	1A	3024	1/1	0.92	0.14	44,44,44,44	0
56	MG	2A	3513	1/1	0.92	0.09	47,47,47,47	0
56	MG	2A	3514	1/1	0.92	0.13	47,47,47,47	0
56	MG	2A	3518	1/1	0.92	0.09	32,32,32,32	0
56	MG	2A	3524	1/1	0.92	0.15	54,54,54,54	0
56	MG	1a	1822	1/1	0.92	0.11	59,59,59,59	0
56	MG	2B	219	1/1	0.92	0.14	49,49,49,49	0
56	MG	2B	220	1/1	0.92	0.22	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	1X	105	1/1	0.92	0.07	40,40,40,40	0
56	MG	2D	306	1/1	0.92	0.09	52,52,52,52	0
56	MG	2A	3240	1/1	0.92	0.17	38,38,38,38	0
56	MG	2A	3242	1/1	0.92	0.08	43,43,43,43	0
56	MG	2A	3542	1/1	0.92	0.13	44,44,44,44	0
56	MG	1A	3196	1/1	0.92	0.16	44,44,44,44	0
56	MG	1A	3981	1/1	0.92	0.09	33,33,33,33	0
56	MG	1f	201	1/1	0.92	0.11	42,42,42,42	0
56	MG	1A	3326	1/1	0.92	0.12	33,33,33,33	0
56	MG	1A	3991	1/1	0.92	0.10	37,37,37,37	0
56	MG	1A	3834	1/1	0.92	0.06	43,43,43,43	0
56	MG	1n	101	1/1	0.92	0.22	44,44,44,44	0
56	MG	2A	3256	1/1	0.92	0.14	66,66,66,66	0
56	MG	1A	3997	1/1	0.92	0.14	55,55,55,55	0
56	MG	1A	3999	1/1	0.92	0.07	60,60,60,60	0
56	MG	2A	3260	1/1	0.92	0.17	49,49,49,49	0
56	MG	1A	4001	1/1	0.92	0.09	30,30,30,30	0
56	MG	2Z	301	1/1	0.92	0.09	68,68,68,68	0
56	MG	20	102	1/1	0.92	0.13	52,52,52,52	0
56	MG	1A	3545	1/1	0.92	0.09	42,42,42,42	0
56	MG	1A	3327	1/1	0.92	0.12	43,43,43,43	0
56	MG	1A	4004	1/1	0.92	0.10	74,74,74,74	0
56	MG	1A	3153	1/1	0.92	0.17	31,31,31,31	0
56	MG	1A	4008	1/1	0.92	0.09	67,67,67,67	0
56	MG	2A	3277	1/1	0.92	0.08	40,40,40,40	0
56	MG	1x	104	1/1	0.92	0.11	53,53,53,53	0
56	MG	2a	3006	1/1	0.92	0.11	42,42,42,42	0
56	MG	2a	3007	1/1	0.92	0.15	54,54,54,54	0
56	MG	1A	3185	1/1	0.92	0.08	45,45,45,45	0
56	MG	2A	3604	1/1	0.92	0.18	50,50,50,50	0
56	MG	1a	1626	1/1	0.92	0.23	53,53,53,53	0
56	MG	2A	3284	1/1	0.92	0.19	56,56,56,56	0
56	MG	2A	3610	1/1	0.92	0.09	49,49,49,49	0
56	MG	1A	4014	1/1	0.92	0.09	34,34,34,34	0
56	MG	2a	3024	1/1	0.92	0.09	38,38,38,38	0
56	MG	2A	3288	1/1	0.92	0.10	40,40,40,40	0
56	MG	2a	3026	1/1	0.92	0.09	50,50,50,50	0
56	MG	1A	4015	1/1	0.92	0.09	29,29,29,29	0
56	MG	1A	3340	1/1	0.92	0.07	46,46,46,46	0
56	MG	1A	3218	1/1	0.92	0.07	36,36,36,36	0
56	MG	1a	1632	1/1	0.92	0.10	55,55,55,55	0
56	MG	1A	3226	1/1	0.92	0.10	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	2A	3007	1/1	0.92	0.13	43,43,43,43	0
56	MG	1A	4028	1/1	0.92	0.07	66,66,66,66	0
56	MG	1a	1637	1/1	0.92	0.13	43,43,43,43	0
56	MG	1A	3054	1/1	0.92	0.12	38,38,38,38	0
56	MG	2A	3022	1/1	0.92	0.20	46,46,46,46	0
56	MG	1A	3860	1/1	0.92	0.11	41,41,41,41	0
56	MG	1A	4042	1/1	0.92	0.12	60,60,60,60	0
56	MG	1A	3505	1/1	0.92	0.10	48,48,48,48	0
56	MG	2A	3638	1/1	0.92	0.08	30,30,30,30	0
56	MG	2A	3642	1/1	0.92	0.18	39,39,39,39	0
56	MG	2A	3643	1/1	0.92	0.19	47,47,47,47	0
56	MG	2A	3645	1/1	0.92	0.09	43,43,43,43	0
56	MG	1A	3722	1/1	0.92	0.12	16,16,16,16	0
56	MG	2A	3039	1/1	0.92	0.14	46,46,46,46	0
56	MG	1A	3425	1/1	0.92	0.07	36,36,36,36	0
56	MG	1A	3512	1/1	0.92	0.16	54,54,54,54	0
56	MG	2A	3651	1/1	0.92	0.09	41,41,41,41	0
56	MG	2A	3655	1/1	0.92	0.11	44,44,44,44	0
56	MG	1a	1666	1/1	0.92	0.09	50,50,50,50	0
56	MG	2a	3070	1/1	0.92	0.14	49,49,49,49	0
56	MG	2A	3047	1/1	0.92	0.15	41,41,41,41	0
56	MG	1A	3279	1/1	0.92	0.11	44,44,44,44	0
56	MG	2A	3052	1/1	0.92	0.15	66,66,66,66	0
56	MG	2a	3080	1/1	0.92	0.13	53,53,53,53	0
56	MG	2A	3325	1/1	0.92	0.13	49,49,49,49	0
56	MG	1A	3734	1/1	0.92	0.10	17,17,17,17	0
56	MG	2A	3667	1/1	0.92	0.12	42,42,42,42	0
56	MG	2a	3088	1/1	0.92	0.16	53,53,53,53	0
56	MG	2a	3093	1/1	0.92	0.12	72,72,72,72	0
56	MG	1a	1671	1/1	0.92	0.18	56,56,56,56	0
56	MG	1A	3886	1/1	0.92	0.13	57,57,57,57	0
56	MG	1A	4064	1/1	0.92	0.14	28,28,28,28	0
56	MG	2A	3343	1/1	0.92	0.10	55,55,55,55	0
56	MG	2a	3108	1/1	0.92	0.19	63,63,63,63	0
56	MG	2a	3109	1/1	0.92	0.09	48,48,48,48	0
56	MG	2a	3110	1/1	0.92	0.14	65,65,65,65	0
56	MG	1A	4066	1/1	0.92	0.09	24,24,24,24	0
56	MG	2A	3346	1/1	0.92	0.06	54,54,54,54	0
56	MG	1A	3597	1/1	0.92	0.19	30,30,30,30	0
56	MG	2a	3117	1/1	0.92	0.20	73,73,73,73	0
56	MG	2A	3349	1/1	0.92	0.23	64,64,64,64	0
56	MG	1A	4076	1/1	0.92	0.14	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	3694	1/1	0.92	0.12	46,46,46,46	0
56	MG	1A	3598	1/1	0.92	0.23	33,33,33,33	0
56	MG	2A	3086	1/1	0.92	0.07	40,40,40,40	0
56	MG	2A	3698	1/1	0.92	0.07	37,37,37,37	0
56	MG	1A	3351	1/1	0.92	0.09	39,39,39,39	0
56	MG	1A	3743	1/1	0.92	0.09	37,37,37,37	0
56	MG	1a	1696	1/1	0.92	0.21	61,61,61,61	0
56	MG	2a	3133	1/1	0.92	0.16	45,45,45,45	0
56	MG	2A	3093	1/1	0.92	0.08	41,41,41,41	0
56	MG	2a	3138	1/1	0.92	0.12	64,64,64,64	0
56	MG	1A	3900	1/1	0.92	0.12	28,28,28,28	0
56	MG	1A	4105	1/1	0.92	0.17	50,50,50,50	0
56	MG	2a	3143	1/1	0.92	0.10	62,62,62,62	0
56	MG	2A	3711	1/1	0.92	0.10	24,24,24,24	0
56	MG	2a	3147	1/1	0.92	0.16	64,64,64,64	0
56	MG	2A	3364	1/1	0.92	0.13	56,56,56,56	0
56	MG	2a	3153	1/1	0.92	0.10	73,73,73,73	0
56	MG	1B	207	1/1	0.92	0.14	41,41,41,41	0
56	MG	2A	3715	1/1	0.92	0.10	52,52,52,52	0
56	MG	2A	3719	1/1	0.92	0.10	29,29,29,29	0
56	MG	2A	3366	1/1	0.92	0.10	55,55,55,55	0
56	MG	2A	3101	1/1	0.92	0.15	49,49,49,49	0
56	MG	1a	1704	1/1	0.92	0.18	53,53,53,53	0
56	MG	2a	3169	1/1	0.92	0.08	55,55,55,55	0
56	MG	1A	3903	1/1	0.92	0.10	29,29,29,29	0
56	MG	1a	1709	1/1	0.92	0.17	43,43,43,43	0
56	MG	1a	1710	1/1	0.92	0.34	61,61,61,61	0
56	MG	2A	3112	1/1	0.92	0.18	57,57,57,57	0
56	MG	1a	1711	1/1	0.92	0.15	48,48,48,48	0
56	MG	2a	3180	1/1	0.92	0.10	54,54,54,54	0
56	MG	1A	3745	1/1	0.92	0.20	50,50,50,50	0
56	MG	1A	3747	1/1	0.92	0.13	55,55,55,55	0
56	MG	1a	1716	1/1	0.92	0.11	49,49,49,49	0
56	MG	1B	213	1/1	0.92	0.17	50,50,50,50	0
56	MG	2A	3386	1/1	0.92	0.12	46,46,46,46	0
56	MG	2A	3389	1/1	0.92	0.26	53,53,53,53	0
56	MG	1A	3430	1/1	0.92	0.14	48,48,48,48	0
56	MG	1A	3614	1/1	0.92	0.08	34,34,34,34	0
56	MG	1a	1730	1/1	0.92	0.14	46,46,46,46	0
56	MG	1B	220	1/1	0.92	0.10	50,50,50,50	0
56	MG	1A	3280	1/1	0.92	0.13	43,43,43,43	0
56	MG	2A	3404	1/1	0.92	0.13	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3145	1/1	0.92	0.13	56,56,56,56	0
56	MG	1A	3522	1/1	0.92	0.13	31,31,31,31	0
56	MG	1A	3365	1/1	0.92	0.12	50,50,50,50	0
56	MG	1a	1752	1/1	0.92	0.10	41,41,41,41	0
56	MG	2A	3758	1/1	0.92	0.07	35,35,35,35	0
56	MG	1a	1753	1/1	0.92	0.10	46,46,46,46	0
56	MG	2A	3159	1/1	0.92	0.08	58,58,58,58	0
56	MG	1A	3620	1/1	0.92	0.10	46,46,46,46	0
56	MG	2A	3418	1/1	0.92	0.13	43,43,43,43	0
56	MG	1B	233	1/1	0.92	0.10	63,63,63,63	0
56	MG	1D	301	1/1	0.92	0.12	55,55,55,55	0
56	MG	1A	3929	1/1	0.92	0.10	41,41,41,41	0
56	MG	1a	1767	1/1	0.92	0.09	57,57,57,57	0
56	MG	2A	3770	1/1	0.92	0.09	47,47,47,47	0
56	MG	1A	3525	1/1	0.92	0.09	42,42,42,42	0
56	MG	2A	3779	1/1	0.92	0.12	65,65,65,65	0
56	MG	2A	3431	1/1	0.92	0.14	54,54,54,54	0
56	MG	1a	1770	1/1	0.92	0.19	46,46,46,46	0
56	MG	1A	3780	1/1	0.92	0.08	39,39,39,39	0
56	MG	2A	3180	1/1	0.92	0.18	58,58,58,58	0
56	MG	1a	1774	1/1	0.92	0.17	55,55,55,55	0
56	MG	2d	302	1/1	0.92	0.11	59,59,59,59	0
56	MG	1A	3783	1/1	0.92	0.14	46,46,46,46	0
56	MG	1A	3188	1/1	0.92	0.24	67,67,67,67	0
56	MG	2A	3191	1/1	0.92	0.17	55,55,55,55	0
56	MG	2A	3450	1/1	0.92	0.18	51,51,51,51	0
56	MG	2r	101	1/1	0.92	0.10	56,56,56,56	0
56	MG	2r	102	1/1	0.92	0.11	54,54,54,54	0
56	MG	1G	203	1/1	0.92	0.09	41,41,41,41	0
56	MG	2A	3800	1/1	0.92	0.11	37,37,37,37	0
56	MG	1A	3088	1/1	0.92	0.22	37,37,37,37	0
56	MG	2w	103	1/1	0.92	0.10	54,54,54,54	0
56	MG	1A	3792	1/1	0.92	0.12	38,38,38,38	0
56	MG	2A	3200	1/1	0.92	0.28	63,63,63,63	0
56	MG	1A	3794	1/1	0.92	0.13	18,18,18,18	0
56	MG	1A	3639	1/1	0.92	0.09	50,50,50,50	0
56	MG	2A	3204	1/1	0.92	0.16	54,54,54,54	0
56	MG	2x	104	1/1	0.92	0.14	48,48,48,48	0
56	MG	2A	3464	1/1	0.92	0.15	46,46,46,46	0
56	MG	2A	3823	1/1	0.92	0.10	61,61,61,61	0
56	MG	2A	3466	1/1	0.92	0.11	40,40,40,40	0
56	MG	1A	3455	1/1	0.92	0.09	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3472	1/1	0.92	0.07	45,45,45,45	0
56	MG	1A	3532	1/1	0.92	0.14	37,37,37,37	0
56	MG	1a	1796	1/1	0.92	0.14	47,47,47,47	0
56	MG	1A	4024	1/1	0.93	0.12	20,20,20,20	0
56	MG	2A	3852	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3489	1/1	0.93	0.07	56,56,56,56	0
56	MG	2A	3854	1/1	0.93	0.11	64,64,64,64	0
56	MG	2A	3861	1/1	0.93	0.10	51,51,51,51	0
56	MG	1a	1605	1/1	0.93	0.12	50,50,50,50	0
56	MG	1A	3606	1/1	0.93	0.13	32,32,32,32	0
56	MG	2A	3492	1/1	0.93	0.11	57,57,57,57	0
56	MG	1A	3613	1/1	0.93	0.23	56,56,56,56	0
56	MG	2A	3495	1/1	0.93	0.13	47,47,47,47	0
56	MG	2A	3871	1/1	0.93	0.07	52,52,52,52	0
56	MG	1a	1611	1/1	0.93	0.07	57,57,57,57	0
56	MG	1a	1613	1/1	0.93	0.12	48,48,48,48	0
56	MG	1w	103	1/1	0.93	0.14	50,50,50,50	0
56	MG	1A	3889	1/1	0.93	0.13	44,44,44,44	0
56	MG	1a	1624	1/1	0.93	0.22	47,47,47,47	0
56	MG	2A	3250	1/1	0.93	0.16	56,56,56,56	0
56	MG	1a	1625	1/1	0.93	0.12	55,55,55,55	0
56	MG	2A	3506	1/1	0.93	0.14	53,53,53,53	0
56	MG	2B	209	1/1	0.93	0.19	53,53,53,53	0
56	MG	2A	3509	1/1	0.93	0.19	58,58,58,58	0
56	MG	2A	3510	1/1	0.93	0.11	54,54,54,54	0
56	MG	1A	3103	1/1	0.93	0.11	56,56,56,56	0
56	MG	1A	3234	1/1	0.93	0.21	26,26,26,26	0
56	MG	2A	3515	1/1	0.93	0.15	35,35,35,35	0
56	MG	2A	3517	1/1	0.93	0.14	55,55,55,55	0
56	MG	1x	105	1/1	0.93	0.13	56,56,56,56	0
56	MG	1A	3192	1/1	0.93	0.09	35,35,35,35	0
56	MG	1x	109	1/1	0.93	0.18	65,65,65,65	0
56	MG	2D	301	1/1	0.93	0.12	41,41,41,41	0
56	MG	1A	3754	1/1	0.93	0.10	45,45,45,45	0
56	MG	2A	3259	1/1	0.93	0.18	49,49,49,49	0
56	MG	2E	302	1/1	0.93	0.13	52,52,52,52	0
56	MG	2A	3532	1/1	0.93	0.15	32,32,32,32	0
56	MG	2A	3536	1/1	0.93	0.06	38,38,38,38	0
56	MG	1A	3246	1/1	0.93	0.09	26,26,26,26	0
56	MG	2A	3539	1/1	0.93	0.08	31,31,31,31	0
56	MG	1A	3901	1/1	0.93	0.07	33,33,33,33	0
56	MG	2A	3264	1/1	0.93	0.17	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	3265	1/1	0.93	0.12	43,43,43,43	0
56	MG	2A	3266	1/1	0.93	0.07	42,42,42,42	0
56	MG	2P	201	1/1	0.93	0.25	46,46,46,46	0
56	MG	2P	202	1/1	0.93	0.06	52,52,52,52	0
56	MG	2Q	202	1/1	0.93	0.08	44,44,44,44	0
56	MG	1y	101	1/1	0.93	0.18	41,41,41,41	0
56	MG	1A	3757	1/1	0.93	0.05	47,47,47,47	0
56	MG	1A	4057	1/1	0.93	0.16	40,40,40,40	0
56	MG	2T	201	1/1	0.93	0.11	49,49,49,49	0
56	MG	1A	3759	1/1	0.93	0.10	45,45,45,45	0
56	MG	2A	3274	1/1	0.93	0.15	54,54,54,54	0
56	MG	1A	4059	1/1	0.93	0.15	58,58,58,58	0
56	MG	1A	3438	1/1	0.93	0.13	44,44,44,44	0
56	MG	20	101	1/1	0.93	0.17	45,45,45,45	0
56	MG	2A	3569	1/1	0.93	0.08	31,31,31,31	0
56	MG	2A	3012	1/1	0.93	0.07	34,34,34,34	0
56	MG	23	101	1/1	0.93	0.16	54,54,54,54	0
56	MG	25	101	1/1	0.93	0.25	53,53,53,53	0
56	MG	2A	3279	1/1	0.93	0.07	48,48,48,48	0
56	MG	1A	3440	1/1	0.93	0.19	51,51,51,51	0
56	MG	2A	3282	1/1	0.93	0.07	53,53,53,53	0
56	MG	28	102	1/1	0.93	0.18	47,47,47,47	0
56	MG	28	104	1/1	0.93	0.17	53,53,53,53	0
56	MG	2A	3580	1/1	0.93	0.09	37,37,37,37	0
56	MG	2A	3584	1/1	0.93	0.10	44,44,44,44	0
56	MG	1A	3444	1/1	0.93	0.12	36,36,36,36	0
56	MG	1a	1659	1/1	0.93	0.21	58,58,58,58	0
56	MG	2A	3589	1/1	0.93	0.12	54,54,54,54	0
56	MG	2A	3591	1/1	0.93	0.08	33,33,33,33	0
56	MG	2A	3595	1/1	0.93	0.22	58,58,58,58	0
56	MG	2A	3285	1/1	0.93	0.10	45,45,45,45	0
56	MG	1A	4072	1/1	0.93	0.06	18,18,18,18	0
56	MG	1A	3623	1/1	0.93	0.24	37,37,37,37	0
56	MG	2a	3019	1/1	0.93	0.12	59,59,59,59	0
56	MG	1a	1662	1/1	0.93	0.10	54,54,54,54	0
56	MG	2a	3023	1/1	0.93	0.28	65,65,65,65	0
56	MG	1a	1663	1/1	0.93	0.10	53,53,53,53	0
56	MG	1A	3624	1/1	0.93	0.17	54,54,54,54	0
56	MG	2A	3036	1/1	0.93	0.12	43,43,43,43	0
56	MG	2A	3294	1/1	0.93	0.06	50,50,50,50	0
56	MG	1A	3922	1/1	0.93	0.07	22,22,22,22	0
56	MG	2a	3030	1/1	0.93	0.06	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	4089	1/1	0.93	0.10	20,20,20,20	0
56	MG	1A	4095	1/1	0.93	0.14	47,47,47,47	0
56	MG	1A	4097	1/1	0.93	0.08	49,49,49,49	0
56	MG	2a	3037	1/1	0.93	0.17	46,46,46,46	0
56	MG	1a	1672	1/1	0.93	0.20	48,48,48,48	0
56	MG	1A	3923	1/1	0.93	0.11	22,22,22,22	0
56	MG	1A	3778	1/1	0.93	0.21	52,52,52,52	0
56	MG	1A	3625	1/1	0.93	0.16	39,39,39,39	0
56	MG	1A	3631	1/1	0.93	0.16	49,49,49,49	0
56	MG	1B	202	1/1	0.93	0.18	38,38,38,38	0
56	MG	2A	3060	1/1	0.93	0.20	53,53,53,53	0
56	MG	2a	3048	1/1	0.93	0.08	59,59,59,59	0
56	MG	2A	3063	1/1	0.93	0.20	57,57,57,57	0
56	MG	1A	3087	1/1	0.93	0.16	21,21,21,21	0
56	MG	2A	3315	1/1	0.93	0.27	57,57,57,57	0
56	MG	1A	3314	1/1	0.93	0.24	40,40,40,40	0
56	MG	2a	3054	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3070	1/1	0.93	0.08	46,46,46,46	0
56	MG	1B	210	1/1	0.93	0.14	41,41,41,41	0
56	MG	2A	3073	1/1	0.93	0.16	59,59,59,59	0
56	MG	2A	3324	1/1	0.93	0.10	44,44,44,44	0
56	MG	1A	3454	1/1	0.93	0.11	41,41,41,41	0
56	MG	1A	3323	1/1	0.93	0.15	36,36,36,36	0
56	MG	1A	3252	1/1	0.93	0.11	49,49,49,49	0
56	MG	2A	3330	1/1	0.93	0.16	60,60,60,60	0
56	MG	1A	3184	1/1	0.93	0.10	29,29,29,29	0
56	MG	1A	3940	1/1	0.93	0.15	46,46,46,46	0
56	MG	2A	3341	1/1	0.93	0.09	57,57,57,57	0
56	MG	2A	3657	1/1	0.93	0.09	51,51,51,51	0
56	MG	2a	3078	1/1	0.93	0.15	55,55,55,55	0
56	MG	2A	3342	1/1	0.93	0.13	56,56,56,56	0
56	MG	2a	3081	1/1	0.93	0.18	60,60,60,60	0
56	MG	1A	3381	1/1	0.93	0.13	50,50,50,50	0
56	MG	2a	3084	1/1	0.93	0.23	62,62,62,62	0
56	MG	2A	3091	1/1	0.93	0.10	40,40,40,40	0
56	MG	1A	3945	1/1	0.93	0.08	15,15,15,15	0
56	MG	2A	3347	1/1	0.93	0.13	54,54,54,54	0
56	MG	2a	3092	1/1	0.93	0.21	51,51,51,51	0
56	MG	2A	3666	1/1	0.93	0.10	58,58,58,58	0
56	MG	2A	3096	1/1	0.93	0.12	59,59,59,59	0
56	MG	1A	3803	1/1	0.93	0.08	18,18,18,18	0
56	MG	2a	3098	1/1	0.93	0.14	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	1B	224	1/1	0.93	0.07	46,46,46,46	0
56	MG	2a	3100	1/1	0.93	0.11	58,58,58,58	0
56	MG	1B	226	1/1	0.93	0.08	36,36,36,36	0
56	MG	2a	3104	1/1	0.93	0.15	62,62,62,62	0
56	MG	2a	3105	1/1	0.93	0.18	53,53,53,53	0
56	MG	1B	228	1/1	0.93	0.07	59,59,59,59	0
56	MG	2A	3103	1/1	0.93	0.17	50,50,50,50	0
56	MG	1A	3804	1/1	0.93	0.09	47,47,47,47	0
56	MG	2A	3356	1/1	0.93	0.14	48,48,48,48	0
56	MG	2A	3687	1/1	0.93	0.07	61,61,61,61	0
56	MG	2A	3688	1/1	0.93	0.09	36,36,36,36	0
56	MG	1A	3208	1/1	0.93	0.07	42,42,42,42	0
56	MG	1B	232	1/1	0.93	0.08	69,69,69,69	0
56	MG	2A	3692	1/1	0.93	0.14	43,43,43,43	0
56	MG	2A	3693	1/1	0.93	0.17	57,57,57,57	0
56	MG	2a	3123	1/1	0.93	0.27	59,59,59,59	0
56	MG	2A	3361	1/1	0.93	0.08	47,47,47,47	0
56	MG	1A	3950	1/1	0.93	0.11	34,34,34,34	0
56	MG	1A	3951	1/1	0.93	0.09	54,54,54,54	0
56	MG	1A	3095	1/1	0.93	0.19	44,44,44,44	0
56	MG	2A	3700	1/1	0.93	0.09	65,65,65,65	0
56	MG	1A	3154	1/1	0.93	0.12	37,37,37,37	0
56	MG	1A	3959	1/1	0.93	0.07	35,35,35,35	0
56	MG	1A	3337	1/1	0.93	0.07	35,35,35,35	0
56	MG	2A	3705	1/1	0.93	0.12	47,47,47,47	0
56	MG	1a	1740	1/1	0.93	0.11	55,55,55,55	0
56	MG	2A	3121	1/1	0.93	0.14	56,56,56,56	0
56	MG	1A	3481	1/1	0.93	0.10	27,27,27,27	0
56	MG	2a	3144	1/1	0.93	0.15	76,76,76,76	0
56	MG	1A	3825	1/1	0.93	0.14	46,46,46,46	0
56	MG	2A	3131	1/1	0.93	0.07	46,46,46,46	0
56	MG	1A	3220	1/1	0.93	0.10	42,42,42,42	0
56	MG	1A	3224	1/1	0.93	0.10	40,40,40,40	0
56	MG	1a	1758	1/1	0.93	0.12	53,53,53,53	0
56	MG	1A	3121	1/1	0.93	0.08	30,30,30,30	0
56	MG	2A	3150	1/1	0.93	0.16	52,52,52,52	0
56	MG	1a	1761	1/1	0.93	0.10	44,44,44,44	0
56	MG	2A	3387	1/1	0.93	0.06	48,48,48,48	0
56	MG	2A	3152	1/1	0.93	0.16	46,46,46,46	0
56	MG	2A	3728	1/1	0.93	0.11	39,39,39,39	0
56	MG	1a	1762	1/1	0.93	0.11	52,52,52,52	0
56	MG	2A	3391	1/1	0.93	0.10	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	3176	1/1	0.93	0.16	40,40,40,40	0
56	MG	2A	3393	1/1	0.93	0.09	55,55,55,55	0
56	MG	2A	3738	1/1	0.93	0.12	48,48,48,48	0
56	MG	1A	3694	1/1	0.93	0.10	17,17,17,17	0
56	MG	2A	3398	1/1	0.93	0.15	60,60,60,60	0
56	MG	1a	1765	1/1	0.93	0.19	52,52,52,52	0
56	MG	1A	3985	1/1	0.93	0.07	40,40,40,40	0
56	MG	2A	3162	1/1	0.93	0.11	60,60,60,60	0
56	MG	1A	3347	1/1	0.93	0.12	53,53,53,53	0
56	MG	1A	3989	1/1	0.93	0.08	43,43,43,43	0
56	MG	2A	3407	1/1	0.93	0.09	62,62,62,62	0
56	MG	2A	3166	1/1	0.93	0.18	51,51,51,51	0
56	MG	1R	205	1/1	0.93	0.16	34,34,34,34	0
56	MG	1A	3569	1/1	0.93	0.11	57,57,57,57	0
56	MG	1A	3503	1/1	0.93	0.09	51,51,51,51	0
56	MG	1A	3417	1/1	0.93	0.09	45,45,45,45	0
56	MG	1A	3998	1/1	0.93	0.09	52,52,52,52	0
56	MG	2A	3416	1/1	0.93	0.09	50,50,50,50	0
56	MG	1a	1780	1/1	0.93	0.08	51,51,51,51	0
56	MG	2A	3419	1/1	0.93	0.21	41,41,41,41	0
56	MG	2A	3421	1/1	0.93	0.18	43,43,43,43	0
56	MG	1A	3573	1/1	0.93	0.14	33,33,33,33	0
56	MG	2A	3762	1/1	0.93	0.22	60,60,60,60	0
56	MG	1U	205	1/1	0.93	0.22	38,38,38,38	0
56	MG	2A	3187	1/1	0.93	0.18	49,49,49,49	0
56	MG	1a	1783	1/1	0.93	0.11	49,49,49,49	0
56	MG	1A	3577	1/1	0.93	0.41	35,35,35,35	0
56	MG	1A	3421	1/1	0.93	0.09	39,39,39,39	0
56	MG	1a	1790	1/1	0.93	0.18	77,77,77,77	0
56	MG	2a	3224	1/1	0.93	0.23	62,62,62,62	0
56	MG	1W	202	1/1	0.93	0.12	34,34,34,34	0
56	MG	2A	3772	1/1	0.93	0.08	40,40,40,40	0
56	MG	2A	3437	1/1	0.93	0.23	46,46,46,46	0
56	MG	1W	205	1/1	0.93	0.12	28,28,28,28	0
56	MG	1A	3590	1/1	0.93	0.14	53,53,53,53	0
56	MG	1A	3729	1/1	0.93	0.08	36,36,36,36	0
56	MG	2A	3202	1/1	0.93	0.10	39,39,39,39	0
56	MG	1A	4005	1/1	0.93	0.13	68,68,68,68	0
56	MG	1A	3422	1/1	0.93	0.12	42,42,42,42	0
56	MG	2A	3453	1/1	0.93	0.23	43,43,43,43	0
56	MG	1A	3873	1/1	0.93	0.13	39,39,39,39	0
56	MG	2A	3206	1/1	0.93	0.10	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	2l	201	1/1	0.93	0.07	59,59,59,59	0
56	MG	1A	3424	1/1	0.93	0.09	34,34,34,34	0
56	MG	10	106	1/1	0.93	0.07	40,40,40,40	0
56	MG	10	107	1/1	0.93	0.16	63,63,63,63	0
56	MG	12	101	1/1	0.93	0.09	44,44,44,44	0
56	MG	1A	4011	1/1	0.93	0.07	21,21,21,21	0
56	MG	2v	101	1/1	0.93	0.13	51,51,51,51	0
56	MG	2A	3217	1/1	0.93	0.12	51,51,51,51	0
56	MG	15	102	1/1	0.93	0.18	32,32,32,32	0
56	MG	2w	102	1/1	0.93	0.11	59,59,59,59	0
56	MG	2A	3809	1/1	0.93	0.11	47,47,47,47	0
56	MG	2A	3468	1/1	0.93	0.10	36,36,36,36	0
56	MG	1A	3058	1/1	0.93	0.12	36,36,36,36	0
56	MG	1A	3877	1/1	0.93	0.11	48,48,48,48	0
56	MG	1A	3601	1/1	0.93	0.07	34,34,34,34	0
56	MG	2A	3824	1/1	0.93	0.10	34,34,34,34	0
56	MG	2A	3826	1/1	0.93	0.09	35,35,35,35	0
56	MG	1A	3285	1/1	0.93	0.16	54,54,54,54	0
56	MG	2A	3477	1/1	0.93	0.16	48,48,48,48	0
56	MG	1a	1601	1/1	0.93	0.18	60,60,60,60	0
56	MG	2A	3479	1/1	0.93	0.12	52,52,52,52	0
56	MG	2A	3842	1/1	0.93	0.12	60,60,60,60	0
58	ZN	14	501	1/1	0.93	0.14	110,110,110,110	0
56	MG	1a	1602	1/1	0.93	0.13	48,48,48,48	0
56	MG	2A	3486	1/1	0.93	0.17	41,41,41,41	0
56	MG	1U	207	1/1	0.94	0.14	34,34,34,34	0
56	MG	1A	3797	1/1	0.94	0.10	36,36,36,36	0
56	MG	2A	3229	1/1	0.94	0.07	31,31,31,31	0
56	MG	1A	3982	1/1	0.94	0.07	37,37,37,37	0
56	MG	2A	3233	1/1	0.94	0.27	43,43,43,43	0
56	MG	2A	3875	1/1	0.94	0.10	57,57,57,57	0
56	MG	2A	3508	1/1	0.94	0.11	46,46,46,46	0
56	MG	1A	3165	1/1	0.94	0.13	34,34,34,34	0
56	MG	1A	3986	1/1	0.94	0.06	32,32,32,32	0
56	MG	2B	202	1/1	0.94	0.07	53,53,53,53	0
56	MG	2B	203	1/1	0.94	0.15	63,63,63,63	0
56	MG	1a	1811	1/1	0.94	0.10	56,56,56,56	0
56	MG	1a	1812	1/1	0.94	0.15	46,46,46,46	0
56	MG	1A	3083	1/1	0.94	0.24	28,28,28,28	0
56	MG	1A	3407	1/1	0.94	0.07	37,37,37,37	0
56	MG	2A	3248	1/1	0.94	0.17	48,48,48,48	0
56	MG	1A	3519	1/1	0.94	0.15	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	2B	211	1/1	0.94	0.16	52,52,52,52	0
56	MG	1Z	3700	1/1	0.94	0.13	57,57,57,57	0
56	MG	1A	3309	1/1	0.94	0.07	39,39,39,39	0
56	MG	1A	3805	1/1	0.94	0.09	12,12,12,12	0
56	MG	1A	3626	1/1	0.94	0.20	52,52,52,52	0
56	MG	1A	3628	1/1	0.94	0.08	32,32,32,32	0
56	MG	1A	4000	1/1	0.94	0.09	62,62,62,62	0
56	MG	1A	3814	1/1	0.94	0.14	48,48,48,48	0
56	MG	2A	3540	1/1	0.94	0.13	48,48,48,48	0
56	MG	1A	3815	1/1	0.94	0.09	23,23,23,23	0
56	MG	2D	302	1/1	0.94	0.16	42,42,42,42	0
56	MG	2A	3544	1/1	0.94	0.15	53,53,53,53	0
56	MG	13	105	1/1	0.94	0.11	19,19,19,19	0
56	MG	2A	3547	1/1	0.94	0.09	43,43,43,43	0
56	MG	1t	201	1/1	0.94	0.26	50,50,50,50	0
56	MG	2A	3552	1/1	0.94	0.11	38,38,38,38	0
56	MG	1v	101	1/1	0.94	0.18	58,58,58,58	0
56	MG	2A	3262	1/1	0.94	0.10	57,57,57,57	0
56	MG	1A	3227	1/1	0.94	0.08	46,46,46,46	0
56	MG	2A	3561	1/1	0.94	0.11	32,32,32,32	0
56	MG	2F	304	1/1	0.94	0.11	49,49,49,49	0
56	MG	1A	3168	1/1	0.94	0.13	23,23,23,23	0
56	MG	1A	3523	1/1	0.94	0.11	30,30,30,30	0
56	MG	1A	3317	1/1	0.94	0.16	33,33,33,33	0
56	MG	1A	3641	1/1	0.94	0.11	50,50,50,50	0
56	MG	1A	3830	1/1	0.94	0.08	10,10,10,10	0
56	MG	1w	107	1/1	0.94	0.09	45,45,45,45	0
56	MG	1A	3319	1/1	0.94	0.20	46,46,46,46	0
56	MG	1a	1603	1/1	0.94	0.10	43,43,43,43	0
56	MG	1A	3231	1/1	0.94	0.09	37,37,37,37	0
56	MG	2U	201	1/1	0.94	0.08	49,49,49,49	0
56	MG	1A	3651	1/1	0.94	0.09	29,29,29,29	0
56	MG	1a	1606	1/1	0.94	0.11	51,51,51,51	0
56	MG	1A	3527	1/1	0.94	0.08	44,44,44,44	0
56	MG	1x	112	1/1	0.94	0.18	50,50,50,50	0
56	MG	2A	3587	1/1	0.94	0.16	70,70,70,70	0
56	MG	1A	4022	1/1	0.94	0.10	45,45,45,45	0
56	MG	20	103	1/1	0.94	0.12	54,54,54,54	0
56	MG	1A	3022	1/1	0.94	0.13	36,36,36,36	0
56	MG	1A	3002	1/1	0.94	0.11	52,52,52,52	0
56	MG	23	102	1/1	0.94	0.10	59,59,59,59	0
56	MG	23	104	1/1	0.94	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	2A	3592	1/1	0.94	0.16	44,44,44,44	0
56	MG	1a	1621	1/1	0.94	0.16	50,50,50,50	0
56	MG	1a	1622	1/1	0.94	0.20	52,52,52,52	0
56	MG	1A	3123	1/1	0.94	0.16	32,32,32,32	0
56	MG	27	101	1/1	0.94	0.25	44,44,44,44	0
56	MG	1A	3844	1/1	0.94	0.07	35,35,35,35	0
56	MG	1A	3244	1/1	0.94	0.10	44,44,44,44	0
56	MG	2a	3001	1/1	0.94	0.18	60,60,60,60	0
56	MG	2A	3009	1/1	0.94	0.11	44,44,44,44	0
56	MG	2a	3003	1/1	0.94	0.07	62,62,62,62	0
56	MG	2A	3606	1/1	0.94	0.14	52,52,52,52	0
56	MG	2A	3010	1/1	0.94	0.11	45,45,45,45	0
56	MG	2A	3295	1/1	0.94	0.13	56,56,56,56	0
56	MG	1A	4031	1/1	0.94	0.10	27,27,27,27	0
56	MG	2A	3611	1/1	0.94	0.14	53,53,53,53	0
56	MG	2A	3013	1/1	0.94	0.10	50,50,50,50	0
56	MG	1A	4033	1/1	0.94	0.09	27,27,27,27	0
56	MG	1A	4039	1/1	0.94	0.08	65,65,65,65	0
56	MG	2a	3013	1/1	0.94	0.20	62,62,62,62	0
56	MG	2a	3014	1/1	0.94	0.13	48,48,48,48	0
56	MG	2a	3017	1/1	0.94	0.06	51,51,51,51	0
56	MG	1A	3429	1/1	0.94	0.12	29,29,29,29	0
56	MG	2A	3619	1/1	0.94	0.08	58,58,58,58	0
56	MG	2a	3020	1/1	0.94	0.10	71,71,71,71	0
56	MG	1A	3127	1/1	0.94	0.19	35,35,35,35	0
56	MG	1A	4043	1/1	0.94	0.09	55,55,55,55	0
56	MG	1A	3249	1/1	0.94	0.14	35,35,35,35	0
56	MG	2A	3026	1/1	0.94	0.27	43,43,43,43	0
56	MG	1A	3436	1/1	0.94	0.06	38,38,38,38	0
56	MG	2A	3308	1/1	0.94	0.09	60,60,60,60	0
56	MG	2A	3628	1/1	0.94	0.08	54,54,54,54	0
56	MG	2A	3030	1/1	0.94	0.12	43,43,43,43	0
56	MG	2A	3310	1/1	0.94	0.18	45,45,45,45	0
56	MG	1A	4046	1/1	0.94	0.08	34,34,34,34	0
56	MG	2A	3032	1/1	0.94	0.09	45,45,45,45	0
56	MG	2a	3036	1/1	0.94	0.18	44,44,44,44	0
56	MG	2A	3035	1/1	0.94	0.13	42,42,42,42	0
56	MG	2A	3636	1/1	0.94	0.10	28,28,28,28	0
56	MG	1a	1640	1/1	0.94	0.11	32,32,32,32	0
56	MG	2A	3641	1/1	0.94	0.07	33,33,33,33	0
56	MG	2A	3038	1/1	0.94	0.09	29,29,29,29	0
56	MG	1A	3861	1/1	0.94	0.12	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1644	1/1	0.94	0.16	61,61,61,61	0
56	MG	2A	3646	1/1	0.94	0.11	35,35,35,35	0
56	MG	2A	3322	1/1	0.94	0.22	57,57,57,57	0
56	MG	2A	3323	1/1	0.94	0.14	51,51,51,51	0
56	MG	1A	4050	1/1	0.94	0.09	49,49,49,49	0
56	MG	1A	3865	1/1	0.94	0.08	49,49,49,49	0
56	MG	2A	3326	1/1	0.94	0.15	51,51,51,51	0
56	MG	2A	3043	1/1	0.94	0.06	45,45,45,45	0
56	MG	2A	3045	1/1	0.94	0.23	65,65,65,65	0
56	MG	1A	3677	1/1	0.94	0.08	28,28,28,28	0
56	MG	2A	3658	1/1	0.94	0.19	61,61,61,61	0
56	MG	2a	3058	1/1	0.94	0.05	56,56,56,56	0
56	MG	2A	3659	1/1	0.94	0.22	46,46,46,46	0
56	MG	2A	3331	1/1	0.94	0.31	63,63,63,63	0
56	MG	2a	3063	1/1	0.94	0.10	48,48,48,48	0
56	MG	1A	3870	1/1	0.94	0.09	61,61,61,61	0
56	MG	1A	3678	1/1	0.94	0.07	27,27,27,27	0
56	MG	2a	3067	1/1	0.94	0.09	63,63,63,63	0
56	MG	1A	3128	1/1	0.94	0.25	36,36,36,36	0
56	MG	1A	3688	1/1	0.94	0.07	40,40,40,40	0
56	MG	1A	4061	1/1	0.94	0.12	38,38,38,38	0
56	MG	2a	3073	1/1	0.94	0.15	50,50,50,50	0
56	MG	2A	3344	1/1	0.94	0.06	37,37,37,37	0
56	MG	2A	3059	1/1	0.94	0.14	41,41,41,41	0
56	MG	1a	1664	1/1	0.94	0.07	45,45,45,45	0
56	MG	2a	3079	1/1	0.94	0.21	52,52,52,52	0
56	MG	2A	3670	1/1	0.94	0.07	51,51,51,51	0
56	MG	2A	3061	1/1	0.94	0.07	52,52,52,52	0
56	MG	2A	3062	1/1	0.94	0.12	50,50,50,50	0
56	MG	2A	3682	1/1	0.94	0.13	44,44,44,44	0
56	MG	1A	3690	1/1	0.94	0.09	24,24,24,24	0
56	MG	2a	3086	1/1	0.94	0.12	44,44,44,44	0
56	MG	1A	3879	1/1	0.94	0.08	44,44,44,44	0
56	MG	1A	4071	1/1	0.94	0.08	38,38,38,38	0
56	MG	1a	1669	1/1	0.94	0.17	56,56,56,56	0
56	MG	1A	3692	1/1	0.94	0.07	28,28,28,28	0
56	MG	1A	3006	1/1	0.94	0.10	42,42,42,42	0
56	MG	1A	3549	1/1	0.94	0.18	31,31,31,31	0
56	MG	2A	3078	1/1	0.94	0.13	45,45,45,45	0
56	MG	2A	3081	1/1	0.94	0.15	46,46,46,46	0
56	MG	2A	3083	1/1	0.94	0.11	44,44,44,44	0
56	MG	2a	3101	1/1	0.94	0.16	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	1a	1674	1/1	0.94	0.13	43,43,43,43	0
56	MG	1A	4077	1/1	0.94	0.06	35,35,35,35	0
56	MG	1a	1677	1/1	0.94	0.16	47,47,47,47	0
56	MG	2a	3106	1/1	0.94	0.18	48,48,48,48	0
56	MG	1a	1678	1/1	0.94	0.07	54,54,54,54	0
56	MG	1A	4080	1/1	0.94	0.16	59,59,59,59	0
56	MG	1A	3885	1/1	0.94	0.16	47,47,47,47	0
56	MG	2a	3111	1/1	0.94	0.12	52,52,52,52	0
56	MG	1A	3696	1/1	0.94	0.07	28,28,28,28	0
56	MG	2A	3095	1/1	0.94	0.11	50,50,50,50	0
56	MG	1a	1684	1/1	0.94	0.10	47,47,47,47	0
56	MG	1a	1689	1/1	0.94	0.17	48,48,48,48	0
56	MG	2A	3374	1/1	0.94	0.06	47,47,47,47	0
56	MG	1A	4094	1/1	0.94	0.14	45,45,45,45	0
56	MG	1A	3887	1/1	0.94	0.09	26,26,26,26	0
56	MG	1A	3699	1/1	0.94	0.07	26,26,26,26	0
56	MG	1A	3702	1/1	0.94	0.08	28,28,28,28	0
56	MG	1A	3706	1/1	0.94	0.10	12,12,12,12	0
56	MG	2A	3384	1/1	0.94	0.14	30,30,30,30	0
56	MG	1A	3133	1/1	0.94	0.14	31,31,31,31	0
56	MG	1A	3442	1/1	0.94	0.09	31,31,31,31	0
56	MG	1A	4106	1/1	0.94	0.09	45,45,45,45	0
56	MG	1A	3257	1/1	0.94	0.09	31,31,31,31	0
56	MG	1B	203	1/1	0.94	0.20	52,52,52,52	0
56	MG	1a	1708	1/1	0.94	0.24	48,48,48,48	0
56	MG	2a	3139	1/1	0.94	0.15	71,71,71,71	0
56	MG	2A	3731	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3733	1/1	0.94	0.08	35,35,35,35	0
56	MG	2A	3735	1/1	0.94	0.13	52,52,52,52	0
56	MG	1A	3556	1/1	0.94	0.17	52,52,52,52	0
56	MG	2A	3395	1/1	0.94	0.10	46,46,46,46	0
56	MG	1A	3348	1/1	0.94	0.10	36,36,36,36	0
56	MG	1A	3561	1/1	0.94	0.21	38,38,38,38	0
56	MG	1a	1712	1/1	0.94	0.14	51,51,51,51	0
56	MG	2A	3123	1/1	0.94	0.21	59,59,59,59	0
56	MG	2A	3401	1/1	0.94	0.09	55,55,55,55	0
56	MG	2a	3158	1/1	0.94	0.09	68,68,68,68	0
56	MG	1A	3725	1/1	0.94	0.08	19,19,19,19	0
56	MG	2a	3164	1/1	0.94	0.10	65,65,65,65	0
56	MG	2A	3126	1/1	0.94	0.08	61,61,61,61	0
56	MG	2A	3127	1/1	0.94	0.17	46,46,46,46	0
56	MG	1A	3040	1/1	0.94	0.14	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	1A	3563	1/1	0.94	0.17	53,53,53,53	0
56	MG	1A	3262	1/1	0.94	0.15	31,31,31,31	0
56	MG	1a	1721	1/1	0.94	0.22	59,59,59,59	0
56	MG	1a	1722	1/1	0.94	0.32	54,54,54,54	0
56	MG	1A	3146	1/1	0.94	0.09	39,39,39,39	0
56	MG	1A	3148	1/1	0.94	0.10	19,19,19,19	0
56	MG	1A	3268	1/1	0.94	0.07	36,36,36,36	0
56	MG	1A	3201	1/1	0.94	0.09	48,48,48,48	0
56	MG	1A	3369	1/1	0.94	0.08	52,52,52,52	0
56	MG	1a	1734	1/1	0.94	0.13	51,51,51,51	0
56	MG	1A	3926	1/1	0.94	0.13	27,27,27,27	0
56	MG	1a	1737	1/1	0.94	0.19	55,55,55,55	0
56	MG	2a	3190	1/1	0.94	0.20	63,63,63,63	0
56	MG	2A	3425	1/1	0.94	0.12	43,43,43,43	0
56	MG	2a	3194	1/1	0.94	0.09	58,58,58,58	0
56	MG	2A	3160	1/1	0.94	0.07	53,53,53,53	0
56	MG	1A	3576	1/1	0.94	0.14	28,28,28,28	0
56	MG	1A	3202	1/1	0.94	0.05	28,28,28,28	0
56	MG	1a	1742	1/1	0.94	0.14	58,58,58,58	0
56	MG	2A	3432	1/1	0.94	0.25	45,45,45,45	0
56	MG	1A	3580	1/1	0.94	0.19	33,33,33,33	0
56	MG	2A	3771	1/1	0.94	0.09	28,28,28,28	0
56	MG	1A	3068	1/1	0.94	0.11	43,43,43,43	0
56	MG	1A	3585	1/1	0.94	0.09	50,50,50,50	0
56	MG	2A	3777	1/1	0.94	0.11	64,64,64,64	0
56	MG	2a	3212	1/1	0.94	0.11	59,59,59,59	0
56	MG	2A	3172	1/1	0.94	0.07	44,44,44,44	0
56	MG	1A	3479	1/1	0.94	0.10	48,48,48,48	0
56	MG	2A	3781	1/1	0.94	0.10	70,70,70,70	0
56	MG	2a	3216	1/1	0.94	0.14	58,58,58,58	0
56	MG	1D	308	1/1	0.94	0.06	35,35,35,35	0
56	MG	2A	3176	1/1	0.94	0.09	47,47,47,47	0
56	MG	1A	3596	1/1	0.94	0.08	37,37,37,37	0
56	MG	1E	304	1/1	0.94	0.11	26,26,26,26	0
56	MG	2A	3789	1/1	0.94	0.12	52,52,52,52	0
56	MG	2A	3451	1/1	0.94	0.10	37,37,37,37	0
56	MG	1E	307	1/1	0.94	0.09	41,41,41,41	0
56	MG	1A	3101	1/1	0.94	0.05	58,58,58,58	0
56	MG	1A	3376	1/1	0.94	0.09	41,41,41,41	0
56	MG	1A	3007	1/1	0.94	0.06	30,30,30,30	0
56	MG	1E	312	1/1	0.94	0.13	45,45,45,45	0
56	MG	1a	1769	1/1	0.94	0.11	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	1A	3160	1/1	0.94	0.07	42,42,42,42	0
56	MG	1A	3602	1/1	0.94	0.08	30,30,30,30	0
56	MG	1A	3288	1/1	0.94	0.05	30,30,30,30	0
56	MG	2A	3197	1/1	0.94	0.18	48,48,48,48	0
56	MG	1A	3776	1/1	0.94	0.08	42,42,42,42	0
56	MG	1N	201	1/1	0.94	0.23	43,43,43,43	0
56	MG	2A	3813	1/1	0.94	0.08	67,67,67,67	0
56	MG	2k	201	1/1	0.94	0.15	49,49,49,49	0
56	MG	2A	3815	1/1	0.94	0.10	41,41,41,41	0
56	MG	2A	3818	1/1	0.94	0.06	45,45,45,45	0
56	MG	1A	3292	1/1	0.94	0.13	26,26,26,26	0
56	MG	2q	202	1/1	0.94	0.17	60,60,60,60	0
56	MG	1A	3498	1/1	0.94	0.13	41,41,41,41	0
56	MG	1O	205	1/1	0.94	0.09	47,47,47,47	0
56	MG	2A	3825	1/1	0.94	0.11	43,43,43,43	0
56	MG	1A	3953	1/1	0.94	0.09	46,46,46,46	0
56	MG	1A	3956	1/1	0.94	0.10	66,66,66,66	0
56	MG	1a	1785	1/1	0.94	0.08	63,63,63,63	0
56	MG	1Q	206	1/1	0.94	0.16	36,36,36,36	0
56	MG	2A	3833	1/1	0.94	0.14	54,54,54,54	0
56	MG	1A	3781	1/1	0.94	0.06	30,30,30,30	0
56	MG	1A	3499	1/1	0.94	0.08	47,47,47,47	0
56	MG	1a	1792	1/1	0.94	0.15	36,36,36,36	0
56	MG	2A	3845	1/1	0.94	0.09	38,38,38,38	0
56	MG	2A	3846	1/1	0.94	0.07	40,40,40,40	0
56	MG	1A	3786	1/1	0.94	0.13	25,25,25,25	0
56	MG	2y	101	1/1	0.94	0.13	59,59,59,59	0
56	MG	2A	3850	1/1	0.94	0.08	58,58,58,58	0
56	MG	1A	3788	1/1	0.94	0.10	55,55,55,55	0
56	MG	1A	3386	1/1	0.94	0.14	51,51,51,51	0
56	MG	1A	3105	1/1	0.94	0.14	30,30,30,30	0
56	MG	1A	3395	1/1	0.94	0.24	51,51,51,51	0
56	MG	1A	3301	1/1	0.94	0.21	48,48,48,48	0
56	MG	1a	1802	1/1	0.94	0.08	52,52,52,52	0
56	MG	2A	3225	1/1	0.94	0.43	44,44,44,44	0
56	MG	1a	1823	1/1	0.95	0.12	34,34,34,34	0
56	MG	1A	3256	1/1	0.95	0.15	40,40,40,40	0
56	MG	2A	3241	1/1	0.95	0.09	39,39,39,39	0
56	MG	2A	3527	1/1	0.95	0.15	47,47,47,47	0
56	MG	1A	3994	1/1	0.95	0.10	38,38,38,38	0
56	MG	1A	3414	1/1	0.95	0.16	44,44,44,44	0
56	MG	2A	3244	1/1	0.95	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	3537	1/1	0.95	0.10	53,53,53,53	0
56	MG	2A	3245	1/1	0.95	0.09	59,59,59,59	0
56	MG	1A	3627	1/1	0.95	0.16	29,29,29,29	0
56	MG	2B	212	1/1	0.95	0.10	52,52,52,52	0
56	MG	1f	202	1/1	0.95	0.19	58,58,58,58	0
56	MG	1A	3513	1/1	0.95	0.11	38,38,38,38	0
56	MG	1A	3416	1/1	0.95	0.10	41,41,41,41	0
56	MG	1A	3633	1/1	0.95	0.07	23,23,23,23	0
56	MG	2B	217	1/1	0.95	0.12	49,49,49,49	0
56	MG	2A	3546	1/1	0.95	0.07	42,42,42,42	0
56	MG	1A	3635	1/1	0.95	0.07	39,39,39,39	0
56	MG	1A	3140	1/1	0.95	0.09	28,28,28,28	0
56	MG	1A	3420	1/1	0.95	0.06	34,34,34,34	0
56	MG	1A	3144	1/1	0.95	0.10	32,32,32,32	0
56	MG	1A	3338	1/1	0.95	0.14	41,41,41,41	0
56	MG	1A	3817	1/1	0.95	0.09	39,39,39,39	0
56	MG	1A	3819	1/1	0.95	0.06	52,52,52,52	0
56	MG	1A	3042	1/1	0.95	0.12	22,22,22,22	0
56	MG	1A	3644	1/1	0.95	0.07	30,30,30,30	0
56	MG	2A	3564	1/1	0.95	0.10	46,46,46,46	0
56	MG	18	104	1/1	0.95	0.12	34,34,34,34	0
56	MG	18	105	1/1	0.95	0.12	51,51,51,51	0
56	MG	1A	4013	1/1	0.95	0.07	17,17,17,17	0
56	MG	1A	3200	1/1	0.95	0.14	26,26,26,26	0
56	MG	1A	3104	1/1	0.95	0.08	33,33,33,33	0
56	MG	1A	3653	1/1	0.95	0.05	23,23,23,23	0
56	MG	2A	3270	1/1	0.95	0.10	44,44,44,44	0
56	MG	2N	201	1/1	0.95	0.09	40,40,40,40	0
56	MG	1A	4020	1/1	0.95	0.07	38,38,38,38	0
56	MG	2A	3272	1/1	0.95	0.07	54,54,54,54	0
56	MG	2P	203	1/1	0.95	0.07	53,53,53,53	0
56	MG	1A	3427	1/1	0.95	0.06	37,37,37,37	0
56	MG	1a	1607	1/1	0.95	0.09	51,51,51,51	0
56	MG	1A	3150	1/1	0.95	0.15	40,40,40,40	0
56	MG	1A	3034	1/1	0.95	0.17	27,27,27,27	0
56	MG	1A	4025	1/1	0.95	0.15	29,29,29,29	0
56	MG	2T	202	1/1	0.95	0.17	54,54,54,54	0
56	MG	1A	3270	1/1	0.95	0.16	48,48,48,48	0
56	MG	1a	1615	1/1	0.95	0.10	51,51,51,51	0
56	MG	1A	3431	1/1	0.95	0.13	33,33,33,33	0
56	MG	2W	203	1/1	0.95	0.09	57,57,57,57	0
56	MG	1A	4029	1/1	0.95	0.06	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	2X	102	1/1	0.95	0.13	44,44,44,44	0
56	MG	2A	3004	1/1	0.95	0.14	38,38,38,38	0
56	MG	1A	3082	1/1	0.95	0.16	23,23,23,23	0
56	MG	1A	3435	1/1	0.95	0.16	43,43,43,43	0
56	MG	2A	3008	1/1	0.95	0.08	55,55,55,55	0
56	MG	1A	4032	1/1	0.95	0.06	22,22,22,22	0
56	MG	2A	3290	1/1	0.95	0.10	48,48,48,48	0
56	MG	1A	3272	1/1	0.95	0.21	54,54,54,54	0
56	MG	1A	4036	1/1	0.95	0.05	28,28,28,28	0
56	MG	1A	3672	1/1	0.95	0.09	10,10,10,10	0
56	MG	1A	3851	1/1	0.95	0.06	35,35,35,35	0
56	MG	1A	3539	1/1	0.95	0.06	42,42,42,42	0
56	MG	1a	1631	1/1	0.95	0.15	43,43,43,43	0
56	MG	1A	3352	1/1	0.95	0.14	32,32,32,32	0
56	MG	2A	3618	1/1	0.95	0.11	58,58,58,58	0
56	MG	1A	3856	1/1	0.95	0.11	31,31,31,31	0
56	MG	1A	3117	1/1	0.95	0.10	31,31,31,31	0
56	MG	1A	3859	1/1	0.95	0.09	38,38,38,38	0
56	MG	1a	1639	1/1	0.95	0.20	52,52,52,52	0
56	MG	2A	3623	1/1	0.95	0.07	35,35,35,35	0
56	MG	1A	3679	1/1	0.95	0.06	33,33,33,33	0
56	MG	2A	3625	1/1	0.95	0.12	37,37,37,37	0
56	MG	1A	4049	1/1	0.95	0.05	33,33,33,33	0
56	MG	1a	1643	1/1	0.95	0.12	59,59,59,59	0
56	MG	2A	3033	1/1	0.95	0.16	39,39,39,39	0
56	MG	1A	3051	1/1	0.95	0.10	25,25,25,25	0
56	MG	1A	3862	1/1	0.95	0.16	57,57,57,57	0
56	MG	2A	3631	1/1	0.95	0.10	37,37,37,37	0
56	MG	1A	3686	1/1	0.95	0.08	48,48,48,48	0
56	MG	2a	3016	1/1	0.95	0.11	55,55,55,55	0
56	MG	1A	3867	1/1	0.95	0.08	32,32,32,32	0
56	MG	2A	3634	1/1	0.95	0.06	26,26,26,26	0
56	MG	1a	1657	1/1	0.95	0.09	45,45,45,45	0
56	MG	1a	1658	1/1	0.95	0.14	51,51,51,51	0
56	MG	1A	3053	1/1	0.95	0.07	44,44,44,44	0
56	MG	2a	3022	1/1	0.95	0.09	51,51,51,51	0
56	MG	2A	3640	1/1	0.95	0.12	46,46,46,46	0
56	MG	1A	3443	1/1	0.95	0.07	32,32,32,32	0
56	MG	2A	3044	1/1	0.95	0.08	44,44,44,44	0
56	MG	1A	3871	1/1	0.95	0.07	38,38,38,38	0
56	MG	1A	3872	1/1	0.95	0.07	40,40,40,40	0
56	MG	2A	3050	1/1	0.95	0.14	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	1A	3036	1/1	0.95	0.07	29,29,29,29	0
56	MG	1A	3445	1/1	0.95	0.08	40,40,40,40	0
56	MG	2a	3032	1/1	0.95	0.18	51,51,51,51	0
56	MG	1A	4069	1/1	0.95	0.09	32,32,32,32	0
56	MG	1A	3446	1/1	0.95	0.07	55,55,55,55	0
56	MG	2A	3328	1/1	0.95	0.12	47,47,47,47	0
56	MG	2A	3652	1/1	0.95	0.10	49,49,49,49	0
56	MG	2A	3654	1/1	0.95	0.16	60,60,60,60	0
56	MG	1A	3447	1/1	0.95	0.08	39,39,39,39	0
56	MG	2A	3058	1/1	0.95	0.15	53,53,53,53	0
56	MG	1A	3698	1/1	0.95	0.08	18,18,18,18	0
56	MG	1A	4075	1/1	0.95	0.06	33,33,33,33	0
56	MG	1A	3371	1/1	0.95	0.07	44,44,44,44	0
56	MG	2A	3336	1/1	0.95	0.07	38,38,38,38	0
56	MG	2a	3047	1/1	0.95	0.08	51,51,51,51	0
56	MG	1A	3225	1/1	0.95	0.09	32,32,32,32	0
56	MG	1A	4078	1/1	0.95	0.10	42,42,42,42	0
56	MG	1A	4079	1/1	0.95	0.16	35,35,35,35	0
56	MG	1A	3705	1/1	0.95	0.05	15,15,15,15	0
56	MG	1A	4083	1/1	0.95	0.07	37,37,37,37	0
56	MG	1A	3560	1/1	0.95	0.08	24,24,24,24	0
56	MG	1A	3450	1/1	0.95	0.08	49,49,49,49	0
56	MG	2A	3074	1/1	0.95	0.09	43,43,43,43	0
56	MG	1a	1682	1/1	0.95	0.16	56,56,56,56	0
56	MG	1A	4093	1/1	0.95	0.17	42,42,42,42	0
56	MG	2a	3059	1/1	0.95	0.24	46,46,46,46	0
56	MG	2A	3679	1/1	0.95	0.06	40,40,40,40	0
56	MG	2A	3079	1/1	0.95	0.15	51,51,51,51	0
56	MG	2a	3062	1/1	0.95	0.15	64,64,64,64	0
56	MG	1A	3452	1/1	0.95	0.08	34,34,34,34	0
56	MG	2A	3683	1/1	0.95	0.06	47,47,47,47	0
56	MG	2A	3082	1/1	0.95	0.14	45,45,45,45	0
56	MG	1a	1686	1/1	0.95	0.12	31,31,31,31	0
56	MG	1A	3124	1/1	0.95	0.10	32,32,32,32	0
56	MG	1A	3125	1/1	0.95	0.10	23,23,23,23	0
56	MG	1A	3895	1/1	0.95	0.07	46,46,46,46	0
56	MG	2A	3088	1/1	0.95	0.09	41,41,41,41	0
56	MG	1A	3461	1/1	0.95	0.15	35,35,35,35	0
56	MG	2a	3075	1/1	0.95	0.07	46,46,46,46	0
56	MG	1A	3568	1/1	0.95	0.12	52,52,52,52	0
56	MG	2a	3077	1/1	0.95	0.13	45,45,45,45	0
56	MG	1A	4103	1/1	0.95	0.17	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	1a	1698	1/1	0.95	0.06	53,53,53,53	0
56	MG	1A	3462	1/1	0.95	0.13	34,34,34,34	0
56	MG	1a	1701	1/1	0.95	0.22	45,45,45,45	0
56	MG	2a	3082	1/1	0.95	0.16	50,50,50,50	0
56	MG	2A	3697	1/1	0.95	0.18	56,56,56,56	0
56	MG	1A	3465	1/1	0.95	0.10	56,56,56,56	0
56	MG	2A	3699	1/1	0.95	0.06	54,54,54,54	0
56	MG	1B	201	1/1	0.95	0.10	38,38,38,38	0
56	MG	1A	3171	1/1	0.95	0.13	19,19,19,19	0
56	MG	1A	3902	1/1	0.95	0.11	30,30,30,30	0
56	MG	2a	3089	1/1	0.95	0.19	53,53,53,53	0
56	MG	2a	3090	1/1	0.95	0.12	59,59,59,59	0
56	MG	2a	3091	1/1	0.95	0.15	47,47,47,47	0
56	MG	2A	3102	1/1	0.95	0.09	37,37,37,37	0
56	MG	2A	3375	1/1	0.95	0.14	49,49,49,49	0
56	MG	1B	206	1/1	0.95	0.12	36,36,36,36	0
56	MG	2a	3095	1/1	0.95	0.15	40,40,40,40	0
56	MG	1A	3018	1/1	0.95	0.08	32,32,32,32	0
56	MG	2a	3097	1/1	0.95	0.12	59,59,59,59	0
56	MG	1A	3904	1/1	0.95	0.17	25,25,25,25	0
56	MG	2A	3710	1/1	0.95	0.14	56,56,56,56	0
56	MG	1A	3731	1/1	0.95	0.07	31,31,31,31	0
56	MG	2A	3110	1/1	0.95	0.14	49,49,49,49	0
56	MG	1A	3574	1/1	0.95	0.09	42,42,42,42	0
56	MG	2a	3103	1/1	0.95	0.17	54,54,54,54	0
56	MG	1A	3469	1/1	0.95	0.15	33,33,33,33	0
56	MG	1A	3910	1/1	0.95	0.06	23,23,23,23	0
56	MG	1A	3735	1/1	0.95	0.06	42,42,42,42	0
56	MG	1A	3175	1/1	0.95	0.16	42,42,42,42	0
56	MG	2A	3116	1/1	0.95	0.06	48,48,48,48	0
56	MG	1a	1720	1/1	0.95	0.18	50,50,50,50	0
56	MG	2A	3392	1/1	0.95	0.10	43,43,43,43	0
56	MG	1B	218	1/1	0.95	0.08	36,36,36,36	0
56	MG	2a	3113	1/1	0.95	0.13	58,58,58,58	0
56	MG	2A	3394	1/1	0.95	0.11	50,50,50,50	0
56	MG	1A	3915	1/1	0.95	0.12	21,21,21,21	0
56	MG	2A	3732	1/1	0.95	0.08	54,54,54,54	0
56	MG	1A	3738	1/1	0.95	0.07	28,28,28,28	0
56	MG	1A	3472	1/1	0.95	0.08	43,43,43,43	0
56	MG	2a	3120	1/1	0.95	0.28	67,67,67,67	0
56	MG	1a	1727	1/1	0.95	0.09	37,37,37,37	0
56	MG	1a	1729	1/1	0.95	0.21	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	1B	223	1/1	0.95	0.08	51,51,51,51	0
56	MG	1A	3741	1/1	0.95	0.09	49,49,49,49	0
56	MG	1A	3023	1/1	0.95	0.05	21,21,21,21	0
56	MG	2A	3133	1/1	0.95	0.06	35,35,35,35	0
56	MG	2A	3135	1/1	0.95	0.06	36,36,36,36	0
56	MG	1A	3583	1/1	0.95	0.21	40,40,40,40	0
56	MG	2a	3132	1/1	0.95	0.18	58,58,58,58	0
56	MG	2A	3137	1/1	0.95	0.11	36,36,36,36	0
56	MG	2a	3134	1/1	0.95	0.21	49,49,49,49	0
56	MG	2A	3411	1/1	0.95	0.05	41,41,41,41	0
56	MG	1B	229	1/1	0.95	0.09	55,55,55,55	0
56	MG	1A	3183	1/1	0.95	0.05	25,25,25,25	0
56	MG	2A	3146	1/1	0.95	0.11	51,51,51,51	0
56	MG	2A	3148	1/1	0.95	0.19	37,37,37,37	0
56	MG	1a	1738	1/1	0.95	0.26	47,47,47,47	0
56	MG	2A	3752	1/1	0.95	0.12	53,53,53,53	0
56	MG	1A	3241	1/1	0.95	0.13	62,62,62,62	0
56	MG	2A	3754	1/1	0.95	0.10	52,52,52,52	0
56	MG	1A	3591	1/1	0.95	0.19	38,38,38,38	0
56	MG	2A	3420	1/1	0.95	0.14	35,35,35,35	0
56	MG	1A	3752	1/1	0.95	0.08	29,29,29,29	0
56	MG	1a	1744	1/1	0.95	0.10	52,52,52,52	0
56	MG	1a	1748	1/1	0.95	0.09	34,34,34,34	0
56	MG	2a	3162	1/1	0.95	0.11	53,53,53,53	0
56	MG	1A	3388	1/1	0.95	0.18	46,46,46,46	0
56	MG	2A	3761	1/1	0.95	0.13	55,55,55,55	0
56	MG	1A	3755	1/1	0.95	0.10	40,40,40,40	0
56	MG	1a	1754	1/1	0.95	0.10	50,50,50,50	0
56	MG	1A	3315	1/1	0.95	0.09	35,35,35,35	0
56	MG	1D	311	1/1	0.95	0.16	29,29,29,29	0
56	MG	2A	3165	1/1	0.95	0.20	46,46,46,46	0
56	MG	2a	3171	1/1	0.95	0.13	54,54,54,54	0
56	MG	2A	3433	1/1	0.95	0.24	49,49,49,49	0
56	MG	1E	301	1/1	0.95	0.12	30,30,30,30	0
56	MG	1A	3062	1/1	0.95	0.14	44,44,44,44	0
56	MG	1A	3484	1/1	0.95	0.06	47,47,47,47	0
56	MG	1A	3761	1/1	0.95	0.06	30,30,30,30	0
56	MG	1A	3396	1/1	0.95	0.10	48,48,48,48	0
56	MG	2a	3184	1/1	0.95	0.09	50,50,50,50	0
56	MG	2A	3776	1/1	0.95	0.07	51,51,51,51	0
56	MG	1A	3398	1/1	0.95	0.16	37,37,37,37	0
56	MG	2A	3444	1/1	0.95	0.17	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3446	1/1	0.95	0.18	40,40,40,40	0
56	MG	2a	3189	1/1	0.95	0.10	49,49,49,49	0
56	MG	1a	1766	1/1	0.95	0.12	46,46,46,46	0
56	MG	1A	3768	1/1	0.95	0.18	44,44,44,44	0
56	MG	2a	3192	1/1	0.95	0.24	55,55,55,55	0
56	MG	2A	3783	1/1	0.95	0.07	53,53,53,53	0
56	MG	1F	306	1/1	0.95	0.08	39,39,39,39	0
56	MG	1A	3488	1/1	0.95	0.06	52,52,52,52	0
56	MG	1G	202	1/1	0.95	0.06	46,46,46,46	0
56	MG	2A	3186	1/1	0.95	0.07	50,50,50,50	0
56	MG	1A	3132	1/1	0.95	0.10	59,59,59,59	0
56	MG	2A	3456	1/1	0.95	0.23	52,52,52,52	0
56	MG	1A	3771	1/1	0.95	0.08	47,47,47,47	0
56	MG	1A	3607	1/1	0.95	0.07	31,31,31,31	0
56	MG	2A	3460	1/1	0.95	0.11	50,50,50,50	0
56	MG	2a	3210	1/1	0.95	0.20	54,54,54,54	0
56	MG	1A	3774	1/1	0.95	0.11	12,12,12,12	0
56	MG	1N	202	1/1	0.95	0.06	46,46,46,46	0
56	MG	2A	3802	1/1	0.95	0.12	41,41,41,41	0
56	MG	2A	3803	1/1	0.95	0.09	49,49,49,49	0
56	MG	2A	3804	1/1	0.95	0.07	49,49,49,49	0
56	MG	1A	3955	1/1	0.95	0.06	35,35,35,35	0
56	MG	1A	3775	1/1	0.95	0.13	26,26,26,26	0
56	MG	2A	3196	1/1	0.95	0.08	48,48,48,48	0
56	MG	1O	203	1/1	0.95	0.14	43,43,43,43	0
56	MG	2a	3220	1/1	0.95	0.07	54,54,54,54	0
56	MG	2A	3198	1/1	0.95	0.11	48,48,48,48	0
56	MG	1A	3608	1/1	0.95	0.06	42,42,42,42	0
56	MG	1a	1784	1/1	0.95	0.11	43,43,43,43	0
56	MG	1A	3777	1/1	0.95	0.07	12,12,12,12	0
56	MG	2A	3816	1/1	0.95	0.09	48,48,48,48	0
56	MG	1A	3610	1/1	0.95	0.14	34,34,34,34	0
56	MG	2A	3819	1/1	0.95	0.09	61,61,61,61	0
56	MG	1Q	204	1/1	0.95	0.09	44,44,44,44	0
56	MG	1A	3964	1/1	0.95	0.10	45,45,45,45	0
56	MG	1a	1791	1/1	0.95	0.12	61,61,61,61	0
56	MG	2A	3485	1/1	0.95	0.10	56,56,56,56	0
56	MG	1R	203	1/1	0.95	0.25	42,42,42,42	0
56	MG	1a	1793	1/1	0.95	0.12	50,50,50,50	0
56	MG	2d	301	1/1	0.95	0.17	46,46,46,46	0
56	MG	1A	3967	1/1	0.95	0.07	29,29,29,29	0
56	MG	2e	201	1/1	0.95	0.08	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	2g	201	1/1	0.95	0.16	64,64,64,64	0
56	MG	1A	3490	1/1	0.95	0.10	40,40,40,40	0
56	MG	1A	3401	1/1	0.95	0.09	42,42,42,42	0
56	MG	2A	3215	1/1	0.95	0.09	41,41,41,41	0
56	MG	2A	3216	1/1	0.95	0.10	48,48,48,48	0
56	MG	1A	3493	1/1	0.95	0.20	52,52,52,52	0
56	MG	2l	203	1/1	0.95	0.08	62,62,62,62	0
56	MG	1A	3186	1/1	0.95	0.08	41,41,41,41	0
56	MG	2m	201	1/1	0.95	0.21	61,61,61,61	0
56	MG	1A	3787	1/1	0.95	0.05	42,42,42,42	0
56	MG	2A	3220	1/1	0.95	0.13	49,49,49,49	0
56	MG	2A	3849	1/1	0.95	0.13	61,61,61,61	0
56	MG	1A	3980	1/1	0.95	0.06	59,59,59,59	0
56	MG	2A	3502	1/1	0.95	0.20	45,45,45,45	0
56	MG	1U	204	1/1	0.95	0.05	26,26,26,26	0
56	MG	1A	3100	1/1	0.95	0.07	34,34,34,34	0
56	MG	1A	3500	1/1	0.95	0.06	33,33,33,33	0
56	MG	2A	3856	1/1	0.95	0.08	37,37,37,37	0
56	MG	2A	3858	1/1	0.95	0.06	55,55,55,55	0
56	MG	2A	3860	1/1	0.95	0.13	28,28,28,28	0
56	MG	1A	3067	1/1	0.95	0.09	31,31,31,31	0
56	MG	1a	1809	1/1	0.95	0.13	38,38,38,38	0
56	MG	1A	3138	1/1	0.95	0.11	23,23,23,23	0
56	MG	1A	3328	1/1	0.95	0.15	42,42,42,42	0
56	MG	1A	3509	1/1	0.95	0.11	46,46,46,46	0
56	MG	2A	3868	1/1	0.95	0.14	41,41,41,41	0
56	MG	2A	3232	1/1	0.95	0.14	37,37,37,37	0
56	MG	1W	207	1/1	0.95	0.08	18,18,18,18	0
56	MG	2A	3873	1/1	0.95	0.15	59,59,59,59	0
56	MG	2A	3516	1/1	0.95	0.17	48,48,48,48	0
56	MG	2A	3237	1/1	0.95	0.26	55,55,55,55	0
56	MG	1A	3990	1/1	0.95	0.06	38,38,38,38	0
56	MG	2A	3522	1/1	0.95	0.12	40,40,40,40	0
56	MG	1A	3584	1/1	0.96	0.08	35,35,35,35	0
56	MG	1A	3267	1/1	0.96	0.07	37,37,37,37	0
56	MG	1A	3368	1/1	0.96	0.06	58,58,58,58	0
56	MG	2A	3157	1/1	0.96	0.08	42,42,42,42	0
56	MG	1A	3939	1/1	0.96	0.09	34,34,34,34	0
56	MG	1A	3198	1/1	0.96	0.15	30,30,30,30	0
56	MG	1A	3594	1/1	0.96	0.15	23,23,23,23	0
56	MG	2A	3859	1/1	0.96	0.08	51,51,51,51	0
56	MG	2A	3469	1/1	0.96	0.11	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	1D	305	1/1	0.96	0.13	33,33,33,33	0
56	MG	2A	3471	1/1	0.96	0.08	47,47,47,47	0
56	MG	1D	306	1/1	0.96	0.11	29,29,29,29	0
56	MG	1A	3595	1/1	0.96	0.25	33,33,33,33	0
56	MG	2A	3866	1/1	0.96	0.07	44,44,44,44	0
56	MG	1A	3471	1/1	0.96	0.10	40,40,40,40	0
56	MG	2A	3167	1/1	0.96	0.13	34,34,34,34	0
56	MG	2A	3168	1/1	0.96	0.07	55,55,55,55	0
56	MG	1A	3370	1/1	0.96	0.06	37,37,37,37	0
56	MG	2A	3170	1/1	0.96	0.08	45,45,45,45	0
56	MG	2A	3483	1/1	0.96	0.07	40,40,40,40	0
56	MG	2A	3484	1/1	0.96	0.11	42,42,42,42	0
56	MG	1a	1741	1/1	0.96	0.15	39,39,39,39	0
56	MG	1A	3767	1/1	0.96	0.05	41,41,41,41	0
56	MG	1A	3949	1/1	0.96	0.07	44,44,44,44	0
56	MG	2B	201	1/1	0.96	0.15	52,52,52,52	0
56	MG	1A	3199	1/1	0.96	0.26	29,29,29,29	0
56	MG	1a	1749	1/1	0.96	0.06	32,32,32,32	0
56	MG	1A	3112	1/1	0.96	0.12	23,23,23,23	0
56	MG	1E	309	1/1	0.96	0.14	19,19,19,19	0
56	MG	1A	3113	1/1	0.96	0.14	39,39,39,39	0
56	MG	2A	3182	1/1	0.96	0.08	43,43,43,43	0
56	MG	1A	3477	1/1	0.96	0.08	40,40,40,40	0
56	MG	1A	3954	1/1	0.96	0.11	41,41,41,41	0
56	MG	1F	303	1/1	0.96	0.06	33,33,33,33	0
56	MG	1A	3005	1/1	0.96	0.08	36,36,36,36	0
56	MG	2A	3501	1/1	0.96	0.14	53,53,53,53	0
56	MG	1F	308	1/1	0.96	0.10	40,40,40,40	0
56	MG	1A	3273	1/1	0.96	0.06	28,28,28,28	0
56	MG	1F	310	1/1	0.96	0.11	31,31,31,31	0
56	MG	1a	1764	1/1	0.96	0.12	33,33,33,33	0
56	MG	1G	201	1/1	0.96	0.07	36,36,36,36	0
56	MG	1A	3957	1/1	0.96	0.07	30,30,30,30	0
56	MG	1A	3274	1/1	0.96	0.12	51,51,51,51	0
56	MG	1A	3379	1/1	0.96	0.06	39,39,39,39	0
56	MG	2A	3511	1/1	0.96	0.07	34,34,34,34	0
56	MG	1A	3609	1/1	0.96	0.11	31,31,31,31	0
56	MG	2D	305	1/1	0.96	0.24	40,40,40,40	0
56	MG	1A	3115	1/1	0.96	0.06	31,31,31,31	0
56	MG	1a	1772	1/1	0.96	0.09	43,43,43,43	0
56	MG	1A	3611	1/1	0.96	0.19	40,40,40,40	0
56	MG	1A	3204	1/1	0.96	0.11	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1775	1/1	0.96	0.07	41,41,41,41	0
56	MG	2E	307	1/1	0.96	0.07	26,26,26,26	0
56	MG	1N	205	1/1	0.96	0.15	48,48,48,48	0
56	MG	1A	3970	1/1	0.96	0.05	44,44,44,44	0
56	MG	1a	1778	1/1	0.96	0.22	54,54,54,54	0
56	MG	1A	3205	1/1	0.96	0.12	18,18,18,18	0
56	MG	2A	3211	1/1	0.96	0.10	51,51,51,51	0
56	MG	2F	306	1/1	0.96	0.11	47,47,47,47	0
56	MG	2A	3528	1/1	0.96	0.07	33,33,33,33	0
56	MG	1A	3084	1/1	0.96	0.10	22,22,22,22	0
56	MG	2A	3531	1/1	0.96	0.06	54,54,54,54	0
56	MG	2O	201	1/1	0.96	0.09	46,46,46,46	0
56	MG	1A	3974	1/1	0.96	0.09	41,41,41,41	0
56	MG	2A	3535	1/1	0.96	0.06	43,43,43,43	0
56	MG	2A	3214	1/1	0.96	0.10	43,43,43,43	0
56	MG	1P	203	1/1	0.96	0.25	29,29,29,29	0
56	MG	1A	3387	1/1	0.96	0.12	47,47,47,47	0
56	MG	1Q	203	1/1	0.96	0.04	33,33,33,33	0
56	MG	1A	3617	1/1	0.96	0.21	40,40,40,40	0
56	MG	2A	3541	1/1	0.96	0.13	47,47,47,47	0
56	MG	1A	3213	1/1	0.96	0.07	37,37,37,37	0
56	MG	2A	3543	1/1	0.96	0.10	39,39,39,39	0
56	MG	1a	1787	1/1	0.96	0.09	70,70,70,70	0
56	MG	1R	202	1/1	0.96	0.18	38,38,38,38	0
56	MG	1a	1789	1/1	0.96	0.14	53,53,53,53	0
56	MG	1A	3290	1/1	0.96	0.20	25,25,25,25	0
56	MG	1A	3494	1/1	0.96	0.08	38,38,38,38	0
56	MG	2Y	201	1/1	0.96	0.11	48,48,48,48	0
56	MG	1A	3983	1/1	0.96	0.12	39,39,39,39	0
56	MG	1S	201	1/1	0.96	0.13	43,43,43,43	0
56	MG	1A	3984	1/1	0.96	0.06	38,38,38,38	0
56	MG	2A	3556	1/1	0.96	0.12	28,28,28,28	0
56	MG	2A	3228	1/1	0.96	0.07	42,42,42,42	0
56	MG	1A	3495	1/1	0.96	0.06	31,31,31,31	0
56	MG	1A	3795	1/1	0.96	0.09	37,37,37,37	0
56	MG	23	103	1/1	0.96	0.14	53,53,53,53	0
56	MG	2A	3231	1/1	0.96	0.07	36,36,36,36	0
56	MG	1A	3796	1/1	0.96	0.06	19,19,19,19	0
56	MG	1A	3497	1/1	0.96	0.21	38,38,38,38	0
56	MG	25	103	1/1	0.96	0.07	42,42,42,42	0
56	MG	2A	3236	1/1	0.96	0.07	35,35,35,35	0
56	MG	1U	203	1/1	0.96	0.10	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3568	1/1	0.96	0.07	51,51,51,51	0
56	MG	28	101	1/1	0.96	0.14	59,59,59,59	0
56	MG	1A	3392	1/1	0.96	0.05	35,35,35,35	0
56	MG	28	103	1/1	0.96	0.10	37,37,37,37	0
56	MG	2A	3571	1/1	0.96	0.08	40,40,40,40	0
56	MG	1A	3393	1/1	0.96	0.07	28,28,28,28	0
56	MG	2A	3574	1/1	0.96	0.09	51,51,51,51	0
56	MG	1A	3291	1/1	0.96	0.10	40,40,40,40	0
56	MG	1U	208	1/1	0.96	0.11	34,34,34,34	0
56	MG	1A	3501	1/1	0.96	0.06	41,41,41,41	0
56	MG	1A	3156	1/1	0.96	0.19	35,35,35,35	0
56	MG	1V	204	1/1	0.96	0.08	39,39,39,39	0
56	MG	2A	3585	1/1	0.96	0.08	55,55,55,55	0
56	MG	1A	3299	1/1	0.96	0.13	41,41,41,41	0
56	MG	1A	3809	1/1	0.96	0.08	32,32,32,32	0
56	MG	2a	3011	1/1	0.96	0.06	49,49,49,49	0
56	MG	1a	1813	1/1	0.96	0.08	52,52,52,52	0
56	MG	1a	1814	1/1	0.96	0.14	51,51,51,51	0
56	MG	2A	3590	1/1	0.96	0.13	40,40,40,40	0
56	MG	1a	1815	1/1	0.96	0.06	48,48,48,48	0
56	MG	1a	1816	1/1	0.96	0.07	51,51,51,51	0
56	MG	1a	1817	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3118	1/1	0.96	0.19	22,22,22,22	0
56	MG	1X	104	1/1	0.96	0.19	34,34,34,34	0
56	MG	2A	3255	1/1	0.96	0.12	60,60,60,60	0
56	MG	1A	3506	1/1	0.96	0.13	33,33,33,33	0
56	MG	2A	3603	1/1	0.96	0.17	47,47,47,47	0
56	MG	1A	3813	1/1	0.96	0.07	35,35,35,35	0
56	MG	1b	301	1/1	0.96	0.05	70,70,70,70	0
56	MG	1Y	201	1/1	0.96	0.10	44,44,44,44	0
56	MG	1A	3508	1/1	0.96	0.06	42,42,42,42	0
56	MG	1e	202	1/1	0.96	0.10	51,51,51,51	0
56	MG	2a	3029	1/1	0.96	0.14	51,51,51,51	0
56	MG	1A	3400	1/1	0.96	0.14	38,38,38,38	0
56	MG	1A	3162	1/1	0.96	0.13	25,25,25,25	0
56	MG	1A	3302	1/1	0.96	0.08	44,44,44,44	0
56	MG	10	102	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3222	1/1	0.96	0.11	28,28,28,28	0
56	MG	2a	3035	1/1	0.96	0.11	38,38,38,38	0
56	MG	10	105	1/1	0.96	0.08	45,45,45,45	0
56	MG	2A	3269	1/1	0.96	0.15	48,48,48,48	0
56	MG	1A	4009	1/1	0.96	0.09	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	3086	1/1	0.96	0.11	22,22,22,22	0
56	MG	11	101	1/1	0.96	0.20	29,29,29,29	0
56	MG	11	102	1/1	0.96	0.06	47,47,47,47	0
56	MG	11	103	1/1	0.96	0.07	43,43,43,43	0
56	MG	1A	3822	1/1	0.96	0.09	20,20,20,20	0
56	MG	2A	3276	1/1	0.96	0.22	50,50,50,50	0
56	MG	2a	3046	1/1	0.96	0.20	55,55,55,55	0
56	MG	12	102	1/1	0.96	0.12	39,39,39,39	0
56	MG	13	103	1/1	0.96	0.08	30,30,30,30	0
56	MG	1A	3646	1/1	0.96	0.05	31,31,31,31	0
56	MG	1A	3063	1/1	0.96	0.12	46,46,46,46	0
56	MG	2a	3051	1/1	0.96	0.07	52,52,52,52	0
56	MG	2A	3281	1/1	0.96	0.06	36,36,36,36	0
56	MG	13	106	1/1	0.96	0.07	35,35,35,35	0
56	MG	1A	3064	1/1	0.96	0.05	29,29,29,29	0
56	MG	1A	4016	1/1	0.96	0.06	52,52,52,52	0
56	MG	1A	4018	1/1	0.96	0.09	53,53,53,53	0
56	MG	1x	106	1/1	0.96	0.23	52,52,52,52	0
56	MG	1A	3412	1/1	0.96	0.18	38,38,38,38	0
56	MG	18	102	1/1	0.96	0.16	38,38,38,38	0
56	MG	1A	3066	1/1	0.96	0.11	29,29,29,29	0
56	MG	1x	111	1/1	0.96	0.06	36,36,36,36	0
56	MG	1A	4021	1/1	0.96	0.06	36,36,36,36	0
56	MG	1A	3091	1/1	0.96	0.11	32,32,32,32	0
56	MG	1x	114	1/1	0.96	0.13	60,60,60,60	0
56	MG	19	101	1/1	0.96	0.07	41,41,41,41	0
56	MG	1A	3230	1/1	0.96	0.09	44,44,44,44	0
56	MG	1A	3663	1/1	0.96	0.05	16,16,16,16	0
56	MG	1A	3836	1/1	0.96	0.08	19,19,19,19	0
56	MG	1A	3838	1/1	0.96	0.08	43,43,43,43	0
56	MG	2a	3072	1/1	0.96	0.13	42,42,42,42	0
56	MG	2A	3002	1/1	0.96	0.27	45,45,45,45	0
56	MG	1A	3839	1/1	0.96	0.05	17,17,17,17	0
56	MG	1A	3318	1/1	0.96	0.15	38,38,38,38	0
56	MG	2A	3303	1/1	0.96	0.13	46,46,46,46	0
56	MG	2A	3006	1/1	0.96	0.20	50,50,50,50	0
56	MG	1A	3419	1/1	0.96	0.08	36,36,36,36	0
56	MG	1A	3668	1/1	0.96	0.05	36,36,36,36	0
56	MG	1A	3094	1/1	0.96	0.06	18,18,18,18	0
56	MG	1A	3173	1/1	0.96	0.08	49,49,49,49	0
56	MG	2A	3662	1/1	0.96	0.10	43,43,43,43	0
56	MG	2A	3011	1/1	0.96	0.08	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1612	1/1	0.96	0.06	57,57,57,57	0
56	MG	2A	3312	1/1	0.96	0.08	53,53,53,53	0
56	MG	1A	3849	1/1	0.96	0.05	40,40,40,40	0
56	MG	2A	3014	1/1	0.96	0.12	49,49,49,49	0
56	MG	1a	1614	1/1	0.96	0.07	55,55,55,55	0
56	MG	2A	3317	1/1	0.96	0.09	40,40,40,40	0
56	MG	1A	3528	1/1	0.96	0.19	41,41,41,41	0
56	MG	2A	3671	1/1	0.96	0.10	49,49,49,49	0
56	MG	2A	3673	1/1	0.96	0.08	48,48,48,48	0
56	MG	2A	3674	1/1	0.96	0.10	34,34,34,34	0
56	MG	1a	1616	1/1	0.96	0.08	46,46,46,46	0
56	MG	2A	3676	1/1	0.96	0.07	45,45,45,45	0
56	MG	2A	3677	1/1	0.96	0.07	44,44,44,44	0
56	MG	2A	3320	1/1	0.96	0.10	39,39,39,39	0
56	MG	2A	3021	1/1	0.96	0.06	37,37,37,37	0
56	MG	1a	1620	1/1	0.96	0.06	44,44,44,44	0
56	MG	1A	3852	1/1	0.96	0.09	45,45,45,45	0
56	MG	1A	4041	1/1	0.96	0.09	40,40,40,40	0
56	MG	2A	3025	1/1	0.96	0.20	44,44,44,44	0
56	MG	1A	3027	1/1	0.96	0.10	65,65,65,65	0
56	MG	2A	3028	1/1	0.96	0.20	47,47,47,47	0
56	MG	1A	3325	1/1	0.96	0.07	42,42,42,42	0
56	MG	1A	3674	1/1	0.96	0.10	52,52,52,52	0
56	MG	2a	3107	1/1	0.96	0.06	61,61,61,61	0
56	MG	1A	3531	1/1	0.96	0.08	25,25,25,25	0
56	MG	1A	3236	1/1	0.96	0.06	40,40,40,40	0
56	MG	1A	3129	1/1	0.96	0.24	32,32,32,32	0
56	MG	1A	3680	1/1	0.96	0.08	37,37,37,37	0
56	MG	2A	3334	1/1	0.96	0.07	53,53,53,53	0
56	MG	2A	3335	1/1	0.96	0.13	43,43,43,43	0
56	MG	1A	3681	1/1	0.96	0.07	41,41,41,41	0
56	MG	2A	3338	1/1	0.96	0.12	46,46,46,46	0
56	MG	2a	3116	1/1	0.96	0.15	48,48,48,48	0
56	MG	2A	3037	1/1	0.96	0.06	37,37,37,37	0
56	MG	1A	3864	1/1	0.96	0.05	40,40,40,40	0
56	MG	1A	3535	1/1	0.96	0.14	50,50,50,50	0
56	MG	1A	3537	1/1	0.96	0.06	36,36,36,36	0
56	MG	1A	3239	1/1	0.96	0.08	39,39,39,39	0
56	MG	1A	3689	1/1	0.96	0.07	39,39,39,39	0
56	MG	1A	3178	1/1	0.96	0.34	28,28,28,28	0
56	MG	1A	3330	1/1	0.96	0.05	28,28,28,28	0
56	MG	1A	4062	1/1	0.96	0.06	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	2A	3709	1/1	0.96	0.08	59,59,59,59	0
56	MG	2A	3046	1/1	0.96	0.10	49,49,49,49	0
56	MG	2a	3129	1/1	0.96	0.22	46,46,46,46	0
56	MG	1A	4063	1/1	0.96	0.05	34,34,34,34	0
56	MG	2a	3131	1/1	0.96	0.25	58,58,58,58	0
56	MG	2A	3048	1/1	0.96	0.08	41,41,41,41	0
56	MG	2A	3049	1/1	0.96	0.07	20,20,20,20	0
56	MG	2A	3714	1/1	0.96	0.09	50,50,50,50	0
56	MG	1A	3057	1/1	0.96	0.12	19,19,19,19	0
56	MG	2a	3136	1/1	0.96	0.07	60,60,60,60	0
56	MG	2A	3716	1/1	0.96	0.07	37,37,37,37	0
56	MG	2A	3718	1/1	0.96	0.10	43,43,43,43	0
56	MG	1a	1645	1/1	0.96	0.07	55,55,55,55	0
56	MG	1A	4065	1/1	0.96	0.09	22,22,22,22	0
56	MG	2A	3358	1/1	0.96	0.21	42,42,42,42	0
56	MG	1a	1649	1/1	0.96	0.14	49,49,49,49	0
56	MG	1A	3874	1/1	0.96	0.06	32,32,32,32	0
56	MG	1a	1651	1/1	0.96	0.13	49,49,49,49	0
56	MG	2A	3057	1/1	0.96	0.13	38,38,38,38	0
56	MG	2a	3150	1/1	0.96	0.11	38,38,38,38	0
56	MG	2a	3152	1/1	0.96	0.10	46,46,46,46	0
56	MG	1a	1655	1/1	0.96	0.12	50,50,50,50	0
56	MG	1A	4067	1/1	0.96	0.25	45,45,45,45	0
56	MG	2a	3156	1/1	0.96	0.08	58,58,58,58	0
56	MG	1A	3335	1/1	0.96	0.08	45,45,45,45	0
56	MG	1A	3070	1/1	0.96	0.06	12,12,12,12	0
56	MG	2a	3161	1/1	0.96	0.12	60,60,60,60	0
56	MG	1A	3433	1/1	0.96	0.05	47,47,47,47	0
56	MG	1A	3878	1/1	0.96	0.08	41,41,41,41	0
56	MG	2A	3064	1/1	0.96	0.15	58,58,58,58	0
56	MG	1A	3071	1/1	0.96	0.07	18,18,18,18	0
56	MG	2A	3373	1/1	0.96	0.07	41,41,41,41	0
56	MG	2A	3066	1/1	0.96	0.20	47,47,47,47	0
56	MG	2a	3168	1/1	0.96	0.07	62,62,62,62	0
56	MG	1A	3339	1/1	0.96	0.09	31,31,31,31	0
56	MG	1A	3551	1/1	0.96	0.18	36,36,36,36	0
56	MG	2A	3377	1/1	0.96	0.17	57,57,57,57	0
56	MG	2a	3173	1/1	0.96	0.10	45,45,45,45	0
56	MG	1A	3552	1/1	0.96	0.15	37,37,37,37	0
56	MG	1A	3708	1/1	0.96	0.06	15,15,15,15	0
56	MG	1A	3102	1/1	0.96	0.10	41,41,41,41	0
56	MG	2A	3382	1/1	0.96	0.23	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	3079	1/1	0.96	0.10	26,26,26,26	0
56	MG	1A	4084	1/1	0.96	0.07	44,44,44,44	0
56	MG	2a	3181	1/1	0.96	0.22	52,52,52,52	0
56	MG	2a	3182	1/1	0.96	0.16	47,47,47,47	0
56	MG	1A	4087	1/1	0.96	0.08	28,28,28,28	0
56	MG	2A	3080	1/1	0.96	0.08	41,41,41,41	0
56	MG	1A	3888	1/1	0.96	0.10	23,23,23,23	0
56	MG	2A	3388	1/1	0.96	0.20	41,41,41,41	0
56	MG	1A	3342	1/1	0.96	0.22	49,49,49,49	0
56	MG	1A	3344	1/1	0.96	0.09	35,35,35,35	0
56	MG	1A	3720	1/1	0.96	0.06	33,33,33,33	0
56	MG	2A	3085	1/1	0.96	0.07	37,37,37,37	0
56	MG	1A	3896	1/1	0.96	0.05	33,33,33,33	0
56	MG	2a	3193	1/1	0.96	0.06	53,53,53,53	0
56	MG	1A	4096	1/1	0.96	0.08	46,46,46,46	0
56	MG	2a	3195	1/1	0.96	0.07	62,62,62,62	0
56	MG	1a	1679	1/1	0.96	0.06	46,46,46,46	0
56	MG	1A	3559	1/1	0.96	0.18	36,36,36,36	0
56	MG	1A	4098	1/1	0.96	0.07	29,29,29,29	0
56	MG	2A	3764	1/1	0.96	0.06	48,48,48,48	0
56	MG	2a	3201	1/1	0.96	0.12	68,68,68,68	0
56	MG	2a	3202	1/1	0.96	0.05	41,41,41,41	0
56	MG	1A	3253	1/1	0.96	0.07	43,43,43,43	0
56	MG	2a	3205	1/1	0.96	0.15	51,51,51,51	0
56	MG	1A	3723	1/1	0.96	0.08	21,21,21,21	0
56	MG	1A	3139	1/1	0.96	0.26	25,25,25,25	0
56	MG	2A	3402	1/1	0.96	0.10	38,38,38,38	0
56	MG	1a	1685	1/1	0.96	0.19	47,47,47,47	0
56	MG	1A	3727	1/1	0.96	0.07	28,28,28,28	0
56	MG	2A	3405	1/1	0.96	0.10	48,48,48,48	0
56	MG	1a	1687	1/1	0.96	0.11	32,32,32,32	0
56	MG	1a	1688	1/1	0.96	0.15	53,53,53,53	0
56	MG	1A	4104	1/1	0.96	0.05	46,46,46,46	0
56	MG	1a	1690	1/1	0.96	0.09	58,58,58,58	0
56	MG	2A	3410	1/1	0.96	0.09	60,60,60,60	0
56	MG	1A	3010	1/1	0.96	0.10	32,32,32,32	0
56	MG	1A	3142	1/1	0.96	0.07	33,33,33,33	0
56	MG	1A	3052	1/1	0.96	0.07	42,42,42,42	0
56	MG	1a	1694	1/1	0.96	0.13	43,43,43,43	0
56	MG	1A	3193	1/1	0.96	0.14	29,29,29,29	0
56	MG	1A	3263	1/1	0.96	0.06	36,36,36,36	0
56	MG	2A	3786	1/1	0.96	0.17	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	1697	1/1	0.96	0.11	36,36,36,36	0
56	MG	1B	204	1/1	0.96	0.13	39,39,39,39	0
56	MG	1A	3355	1/1	0.96	0.09	49,49,49,49	0
56	MG	1A	3356	1/1	0.96	0.14	27,27,27,27	0
56	MG	2A	3422	1/1	0.96	0.16	46,46,46,46	0
56	MG	2A	3794	1/1	0.96	0.04	46,46,46,46	0
56	MG	1A	3358	1/1	0.96	0.04	45,45,45,45	0
56	MG	2A	3797	1/1	0.96	0.05	52,52,52,52	0
56	MG	1B	209	1/1	0.96	0.13	31,31,31,31	0
56	MG	2A	3799	1/1	0.96	0.13	68,68,68,68	0
56	MG	1A	3194	1/1	0.96	0.15	27,27,27,27	0
56	MG	1A	3457	1/1	0.96	0.11	39,39,39,39	0
56	MG	2A	3427	1/1	0.96	0.17	36,36,36,36	0
56	MG	1A	3917	1/1	0.96	0.08	36,36,36,36	0
56	MG	2A	3429	1/1	0.96	0.17	30,30,30,30	0
56	MG	1A	3361	1/1	0.96	0.21	26,26,26,26	0
56	MG	1A	3363	1/1	0.96	0.11	23,23,23,23	0
56	MG	1B	215	1/1	0.96	0.06	46,46,46,46	0
56	MG	1A	3578	1/1	0.96	0.17	31,31,31,31	0
56	MG	2A	3129	1/1	0.96	0.11	46,46,46,46	0
56	MG	2A	3130	1/1	0.96	0.09	36,36,36,36	0
56	MG	2A	3436	1/1	0.96	0.13	47,47,47,47	0
56	MG	2q	201	1/1	0.96	0.08	58,58,58,58	0
56	MG	2A	3814	1/1	0.96	0.08	56,56,56,56	0
56	MG	1A	3744	1/1	0.96	0.05	32,32,32,32	0
56	MG	1a	1714	1/1	0.96	0.27	52,52,52,52	0
56	MG	1B	219	1/1	0.96	0.07	31,31,31,31	0
56	MG	2A	3134	1/1	0.96	0.14	41,41,41,41	0
56	MG	2A	3442	1/1	0.96	0.14	46,46,46,46	0
56	MG	1A	3579	1/1	0.96	0.10	33,33,33,33	0
56	MG	2A	3445	1/1	0.96	0.16	46,46,46,46	0
56	MG	1A	3746	1/1	0.96	0.07	13,13,13,13	0
56	MG	1a	1718	1/1	0.96	0.13	56,56,56,56	0
56	MG	2w	105	1/1	0.96	0.13	67,67,67,67	0
56	MG	1a	1719	1/1	0.96	0.13	41,41,41,41	0
56	MG	2A	3142	1/1	0.96	0.16	38,38,38,38	0
56	MG	2x	101	1/1	0.96	0.15	66,66,66,66	0
56	MG	1A	3463	1/1	0.96	0.25	43,43,43,43	0
56	MG	2A	3452	1/1	0.96	0.09	32,32,32,32	0
56	MG	2A	3834	1/1	0.96	0.07	38,38,38,38	0
56	MG	1A	3109	1/1	0.96	0.19	28,28,28,28	0
56	MG	2A	3841	1/1	0.96	0.09	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3751	1/1	0.96	0.06	42,42,42,42	0
56	MG	2A	3149	1/1	0.96	0.11	40,40,40,40	0
56	MG	2A	3844	1/1	0.96	0.10	47,47,47,47	0
56	MG	1a	1723	1/1	0.96	0.28	44,44,44,44	0
57	TYK	2A	3879	64/64	0.96	0.09	26,33,41,50	0
56	MG	1A	3366	1/1	0.96	0.06	38,38,38,38	0
56	MG	1A	3934	1/1	0.96	0.22	22,22,22,22	0
56	MG	2A	3459	1/1	0.96	0.24	43,43,43,43	0
56	MG	1A	3693	1/1	0.97	0.05	18,18,18,18	0
56	MG	2A	3578	1/1	0.97	0.04	33,33,33,33	0
56	MG	1A	4074	1/1	0.97	0.10	42,42,42,42	0
56	MG	1A	3141	1/1	0.97	0.11	30,30,30,30	0
56	MG	1A	3074	1/1	0.97	0.09	36,36,36,36	0
56	MG	1A	3108	1/1	0.97	0.20	44,44,44,44	0
56	MG	1A	3075	1/1	0.97	0.05	22,22,22,22	0
56	MG	2E	310	1/1	0.97	0.09	47,47,47,47	0
56	MG	1A	3195	1/1	0.97	0.19	27,27,27,27	0
56	MG	1A	3881	1/1	0.97	0.07	50,50,50,50	0
56	MG	1a	1638	1/1	0.97	0.22	38,38,38,38	0
56	MG	2F	305	1/1	0.97	0.10	37,37,37,37	0
56	MG	2A	3019	1/1	0.97	0.07	28,28,28,28	0
56	MG	1A	4082	1/1	0.97	0.07	36,36,36,36	0
56	MG	1A	3439	1/1	0.97	0.06	39,39,39,39	0
56	MG	2A	3593	1/1	0.97	0.12	34,34,34,34	0
56	MG	2A	3594	1/1	0.97	0.12	39,39,39,39	0
56	MG	1A	3343	1/1	0.97	0.09	35,35,35,35	0
56	MG	1a	1642	1/1	0.97	0.16	42,42,42,42	0
56	MG	1A	4086	1/1	0.97	0.04	43,43,43,43	0
56	MG	1A	3441	1/1	0.97	0.13	39,39,39,39	0
56	MG	1A	3557	1/1	0.97	0.11	17,17,17,17	0
56	MG	2A	3602	1/1	0.97	0.06	41,41,41,41	0
56	MG	2A	3027	1/1	0.97	0.06	35,35,35,35	0
56	MG	1A	3709	1/1	0.97	0.05	24,24,24,24	0
56	MG	1a	1647	1/1	0.97	0.08	40,40,40,40	0
56	MG	2T	203	1/1	0.97	0.12	39,39,39,39	0
56	MG	1a	1648	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	4091	1/1	0.97	0.10	37,37,37,37	0
56	MG	2V	202	1/1	0.97	0.08	49,49,49,49	0
56	MG	2A	3609	1/1	0.97	0.14	56,56,56,56	0
56	MG	1A	4092	1/1	0.97	0.05	35,35,35,35	0
56	MG	1A	3111	1/1	0.97	0.04	21,21,21,21	0
56	MG	1a	1653	1/1	0.97	0.11	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	2A	3307	1/1	0.97	0.07	31,31,31,31	0
56	MG	1A	3711	1/1	0.97	0.09	45,45,45,45	0
56	MG	1A	3891	1/1	0.97	0.06	59,59,59,59	0
56	MG	1A	3258	1/1	0.97	0.07	49,49,49,49	0
56	MG	1A	3894	1/1	0.97	0.06	35,35,35,35	0
56	MG	1A	3346	1/1	0.97	0.13	36,36,36,36	0
56	MG	1A	4099	1/1	0.97	0.08	35,35,35,35	0
56	MG	2A	3314	1/1	0.97	0.04	53,53,53,53	0
56	MG	1A	3260	1/1	0.97	0.06	51,51,51,51	0
56	MG	1A	3197	1/1	0.97	0.23	29,29,29,29	0
56	MG	1A	3078	1/1	0.97	0.15	27,27,27,27	0
56	MG	1A	3564	1/1	0.97	0.12	40,40,40,40	0
56	MG	1A	3030	1/1	0.97	0.15	33,33,33,33	0
56	MG	1A	3724	1/1	0.97	0.05	49,49,49,49	0
56	MG	1A	3032	1/1	0.97	0.19	20,20,20,20	0
56	MG	1a	1668	1/1	0.97	0.09	44,44,44,44	0
56	MG	1A	3567	1/1	0.97	0.06	32,32,32,32	0
56	MG	1A	3019	1/1	0.97	0.21	43,43,43,43	0
56	MG	1A	3354	1/1	0.97	0.07	38,38,38,38	0
56	MG	1A	3453	1/1	0.97	0.16	35,35,35,35	0
56	MG	29	101	1/1	0.97	0.09	59,59,59,59	0
56	MG	1a	1673	1/1	0.97	0.04	34,34,34,34	0
56	MG	1A	3266	1/1	0.97	0.04	31,31,31,31	0
56	MG	2A	3637	1/1	0.97	0.13	53,53,53,53	0
56	MG	1a	1675	1/1	0.97	0.07	56,56,56,56	0
56	MG	2A	3639	1/1	0.97	0.06	36,36,36,36	0
56	MG	1A	3572	1/1	0.97	0.12	22,22,22,22	0
56	MG	1A	3035	1/1	0.97	0.07	38,38,38,38	0
56	MG	1A	3357	1/1	0.97	0.12	28,28,28,28	0
56	MG	1A	3458	1/1	0.97	0.13	33,33,33,33	0
56	MG	1A	3916	1/1	0.97	0.07	37,37,37,37	0
56	MG	1A	3459	1/1	0.97	0.09	40,40,40,40	0
56	MG	1A	3919	1/1	0.97	0.09	17,17,17,17	0
56	MG	1A	3739	1/1	0.97	0.07	34,34,34,34	0
56	MG	2A	3340	1/1	0.97	0.06	56,56,56,56	0
56	MG	2a	3015	1/1	0.97	0.13	51,51,51,51	0
56	MG	1A	3460	1/1	0.97	0.13	32,32,32,32	0
56	MG	2A	3067	1/1	0.97	0.10	40,40,40,40	0
56	MG	1A	3157	1/1	0.97	0.10	33,33,33,33	0
56	MG	2A	3653	1/1	0.97	0.08	38,38,38,38	0
56	MG	1A	3159	1/1	0.97	0.06	28,28,28,28	0
56	MG	1A	3360	1/1	0.97	0.12	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	3582	1/1	0.97	0.10	42,42,42,42	0
56	MG	1A	3927	1/1	0.97	0.08	46,46,46,46	0
56	MG	1A	3464	1/1	0.97	0.19	27,27,27,27	0
56	MG	2A	3077	1/1	0.97	0.09	26,26,26,26	0
56	MG	1A	3020	1/1	0.97	0.04	30,30,30,30	0
56	MG	1A	3466	1/1	0.97	0.10	25,25,25,25	0
56	MG	1B	225	1/1	0.97	0.07	52,52,52,52	0
56	MG	1A	3932	1/1	0.97	0.07	34,34,34,34	0
56	MG	1B	227	1/1	0.97	0.04	39,39,39,39	0
56	MG	1A	3748	1/1	0.97	0.12	22,22,22,22	0
56	MG	1A	3588	1/1	0.97	0.07	49,49,49,49	0
56	MG	1A	3750	1/1	0.97	0.12	34,34,34,34	0
56	MG	2A	3359	1/1	0.97	0.05	38,38,38,38	0
56	MG	1a	1699	1/1	0.97	0.16	35,35,35,35	0
56	MG	1A	3362	1/1	0.97	0.16	34,34,34,34	0
56	MG	1A	3085	1/1	0.97	0.12	30,30,30,30	0
56	MG	1A	3593	1/1	0.97	0.09	32,32,32,32	0
56	MG	1B	234	1/1	0.97	0.05	33,33,33,33	0
56	MG	1A	3209	1/1	0.97	0.08	19,19,19,19	0
56	MG	1D	303	1/1	0.97	0.09	10,10,10,10	0
56	MG	2A	3094	1/1	0.97	0.05	33,33,33,33	0
56	MG	2A	3678	1/1	0.97	0.13	50,50,50,50	0
56	MG	1a	1706	1/1	0.97	0.26	48,48,48,48	0
56	MG	2a	3045	1/1	0.97	0.05	46,46,46,46	0
56	MG	1D	304	1/1	0.97	0.05	28,28,28,28	0
56	MG	2A	3681	1/1	0.97	0.13	46,46,46,46	0
56	MG	2A	3370	1/1	0.97	0.09	50,50,50,50	0
56	MG	1A	3210	1/1	0.97	0.09	28,28,28,28	0
56	MG	1A	3211	1/1	0.97	0.10	40,40,40,40	0
56	MG	1A	3758	1/1	0.97	0.05	46,46,46,46	0
56	MG	1A	3277	1/1	0.97	0.05	28,28,28,28	0
56	MG	1A	3278	1/1	0.97	0.04	28,28,28,28	0
56	MG	1A	3059	1/1	0.97	0.09	40,40,40,40	0
56	MG	1A	3765	1/1	0.97	0.08	43,43,43,43	0
56	MG	2A	3105	1/1	0.97	0.06	48,48,48,48	0
56	MG	2A	3691	1/1	0.97	0.07	46,46,46,46	0
56	MG	2A	3106	1/1	0.97	0.05	39,39,39,39	0
56	MG	2A	3107	1/1	0.97	0.05	33,33,33,33	0
56	MG	1E	305	1/1	0.97	0.07	35,35,35,35	0
56	MG	1A	3600	1/1	0.97	0.07	33,33,33,33	0
56	MG	1A	3122	1/1	0.97	0.14	38,38,38,38	0
56	MG	1A	3372	1/1	0.97	0.11	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	1A	3604	1/1	0.97	0.09	30,30,30,30	0
56	MG	1A	3281	1/1	0.97	0.09	49,49,49,49	0
56	MG	2a	3066	1/1	0.97	0.07	38,38,38,38	0
56	MG	1A	3282	1/1	0.97	0.12	36,36,36,36	0
56	MG	2A	3701	1/1	0.97	0.05	54,54,54,54	0
56	MG	1F	302	1/1	0.97	0.09	33,33,33,33	0
56	MG	1a	1724	1/1	0.97	0.14	31,31,31,31	0
56	MG	1A	3772	1/1	0.97	0.08	32,32,32,32	0
56	MG	1F	304	1/1	0.97	0.15	25,25,25,25	0
56	MG	2A	3120	1/1	0.97	0.07	41,41,41,41	0
56	MG	1A	3283	1/1	0.97	0.10	34,34,34,34	0
56	MG	2A	3122	1/1	0.97	0.10	51,51,51,51	0
56	MG	1a	1728	1/1	0.97	0.13	35,35,35,35	0
56	MG	2A	3124	1/1	0.97	0.14	50,50,50,50	0
56	MG	1A	3483	1/1	0.97	0.12	34,34,34,34	0
56	MG	1A	3284	1/1	0.97	0.15	27,27,27,27	0
56	MG	1A	3215	1/1	0.97	0.07	30,30,30,30	0
56	MG	1A	3966	1/1	0.97	0.04	23,23,23,23	0
56	MG	1A	3216	1/1	0.97	0.11	36,36,36,36	0
56	MG	1A	3003	1/1	0.97	0.04	22,22,22,22	0
56	MG	1a	1736	1/1	0.97	0.25	45,45,45,45	0
56	MG	1A	3779	1/1	0.97	0.04	47,47,47,47	0
56	MG	1A	3219	1/1	0.97	0.06	35,35,35,35	0
56	MG	1A	3167	1/1	0.97	0.07	36,36,36,36	0
56	MG	2A	3722	1/1	0.97	0.11	50,50,50,50	0
56	MG	1A	3782	1/1	0.97	0.08	33,33,33,33	0
56	MG	1N	203	1/1	0.97	0.13	45,45,45,45	0
56	MG	1A	3975	1/1	0.97	0.06	45,45,45,45	0
56	MG	2A	3139	1/1	0.97	0.08	46,46,46,46	0
56	MG	1A	3385	1/1	0.97	0.10	34,34,34,34	0
56	MG	2A	3730	1/1	0.97	0.07	35,35,35,35	0
56	MG	1a	1747	1/1	0.97	0.09	58,58,58,58	0
56	MG	2A	3144	1/1	0.97	0.07	33,33,33,33	0
56	MG	1A	3978	1/1	0.97	0.07	42,42,42,42	0
56	MG	2A	3734	1/1	0.97	0.05	38,38,38,38	0
56	MG	1O	202	1/1	0.97	0.14	49,49,49,49	0
56	MG	1a	1750	1/1	0.97	0.11	25,25,25,25	0
56	MG	1a	1751	1/1	0.97	0.10	34,34,34,34	0
56	MG	1A	3011	1/1	0.97	0.09	31,31,31,31	0
56	MG	1O	204	1/1	0.97	0.07	48,48,48,48	0
56	MG	1A	3294	1/1	0.97	0.23	27,27,27,27	0
56	MG	1A	3298	1/1	0.97	0.07	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1P	202	1/1	0.97	0.12	23,23,23,23	0
56	MG	1A	3169	1/1	0.97	0.09	26,26,26,26	0
56	MG	1A	3790	1/1	0.97	0.08	39,39,39,39	0
56	MG	1A	3390	1/1	0.97	0.14	36,36,36,36	0
56	MG	1A	3391	1/1	0.97	0.08	47,47,47,47	0
56	MG	1A	3015	1/1	0.97	0.21	32,32,32,32	0
56	MG	1A	3987	1/1	0.97	0.05	34,34,34,34	0
56	MG	1A	3126	1/1	0.97	0.23	28,28,28,28	0
56	MG	1A	3502	1/1	0.97	0.05	26,26,26,26	0
56	MG	1A	3043	1/1	0.97	0.16	27,27,27,27	0
56	MG	1R	206	1/1	0.97	0.10	29,29,29,29	0
56	MG	1A	3303	1/1	0.97	0.08	35,35,35,35	0
56	MG	1A	3092	1/1	0.97	0.12	28,28,28,28	0
56	MG	1a	1771	1/1	0.97	0.09	48,48,48,48	0
56	MG	1A	3632	1/1	0.97	0.09	38,38,38,38	0
56	MG	1A	3996	1/1	0.97	0.06	40,40,40,40	0
56	MG	1A	3801	1/1	0.97	0.13	23,23,23,23	0
56	MG	2A	3174	1/1	0.97	0.12	36,36,36,36	0
56	MG	1A	3802	1/1	0.97	0.07	20,20,20,20	0
56	MG	1U	201	1/1	0.97	0.07	26,26,26,26	0
56	MG	2A	3447	1/1	0.97	0.15	45,45,45,45	0
56	MG	1A	3065	1/1	0.97	0.13	41,41,41,41	0
56	MG	1A	3634	1/1	0.97	0.07	29,29,29,29	0
56	MG	1A	3308	1/1	0.97	0.05	36,36,36,36	0
56	MG	2A	3181	1/1	0.97	0.04	36,36,36,36	0
56	MG	1A	3806	1/1	0.97	0.09	20,20,20,20	0
56	MG	2A	3183	1/1	0.97	0.15	48,48,48,48	0
56	MG	2A	3184	1/1	0.97	0.06	37,37,37,37	0
56	MG	1A	3808	1/1	0.97	0.08	51,51,51,51	0
56	MG	1A	3046	1/1	0.97	0.08	33,33,33,33	0
56	MG	1A	3638	1/1	0.97	0.07	17,17,17,17	0
56	MG	2A	3775	1/1	0.97	0.18	55,55,55,55	0
56	MG	1U	212	1/1	0.97	0.07	36,36,36,36	0
56	MG	2a	3142	1/1	0.97	0.08	50,50,50,50	0
56	MG	1V	201	1/1	0.97	0.34	25,25,25,25	0
56	MG	1A	4006	1/1	0.97	0.04	43,43,43,43	0
56	MG	1V	206	1/1	0.97	0.07	39,39,39,39	0
56	MG	1W	201	1/1	0.97	0.07	33,33,33,33	0
56	MG	1A	3510	1/1	0.97	0.10	33,33,33,33	0
56	MG	2a	3149	1/1	0.97	0.09	42,42,42,42	0
56	MG	1W	203	1/1	0.97	0.14	44,44,44,44	0
56	MG	2A	3465	1/1	0.97	0.06	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	3311	1/1	0.97	0.17	33,33,33,33	0
56	MG	1W	206	1/1	0.97	0.07	34,34,34,34	0
56	MG	2a	3155	1/1	0.97	0.09	67,67,67,67	0
56	MG	2A	3199	1/1	0.97	0.11	45,45,45,45	0
56	MG	2A	3788	1/1	0.97	0.05	33,33,33,33	0
56	MG	1A	3403	1/1	0.97	0.27	44,44,44,44	0
56	MG	2a	3159	1/1	0.97	0.10	39,39,39,39	0
56	MG	1X	101	1/1	0.97	0.23	25,25,25,25	0
56	MG	1X	102	1/1	0.97	0.13	28,28,28,28	0
56	MG	2A	3792	1/1	0.97	0.07	46,46,46,46	0
56	MG	1A	3180	1/1	0.97	0.10	23,23,23,23	0
56	MG	1A	3643	1/1	0.97	0.10	37,37,37,37	0
56	MG	2A	3795	1/1	0.97	0.12	42,42,42,42	0
56	MG	1a	1798	1/1	0.97	0.06	42,42,42,42	0
56	MG	1A	3514	1/1	0.97	0.10	22,22,22,22	0
56	MG	1A	3645	1/1	0.97	0.08	12,12,12,12	0
56	MG	2A	3480	1/1	0.97	0.17	28,28,28,28	0
56	MG	2A	3481	1/1	0.97	0.13	35,35,35,35	0
56	MG	1A	3515	1/1	0.97	0.10	31,31,31,31	0
56	MG	1A	3313	1/1	0.97	0.17	22,22,22,22	0
56	MG	2a	3175	1/1	0.97	0.10	53,53,53,53	0
56	MG	2A	3210	1/1	0.97	0.09	40,40,40,40	0
56	MG	1A	4017	1/1	0.97	0.05	49,49,49,49	0
56	MG	1A	3649	1/1	0.97	0.12	27,27,27,27	0
56	MG	2A	3806	1/1	0.97	0.14	64,64,64,64	0
56	MG	10	101	1/1	0.97	0.15	43,43,43,43	0
56	MG	2A	3488	1/1	0.97	0.09	40,40,40,40	0
56	MG	1a	1807	1/1	0.97	0.09	36,36,36,36	0
56	MG	2a	3183	1/1	0.97	0.08	40,40,40,40	0
56	MG	1A	3408	1/1	0.97	0.30	32,32,32,32	0
56	MG	10	103	1/1	0.97	0.13	32,32,32,32	0
56	MG	2A	3812	1/1	0.97	0.07	63,63,63,63	0
56	MG	1A	3826	1/1	0.97	0.07	41,41,41,41	0
56	MG	1A	3652	1/1	0.97	0.04	20,20,20,20	0
56	MG	1A	3233	1/1	0.97	0.15	31,31,31,31	0
56	MG	1A	3182	1/1	0.97	0.10	17,17,17,17	0
56	MG	2A	3817	1/1	0.97	0.07	53,53,53,53	0
56	MG	1A	3655	1/1	0.97	0.06	45,45,45,45	0
56	MG	2A	3498	1/1	0.97	0.11	38,38,38,38	0
56	MG	2A	3820	1/1	0.97	0.09	49,49,49,49	0
56	MG	1A	3411	1/1	0.97	0.08	45,45,45,45	0
56	MG	1A	3316	1/1	0.97	0.09	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1819	1/1	0.97	0.17	43,43,43,43	0
56	MG	1a	1820	1/1	0.97	0.13	27,27,27,27	0
56	MG	1A	3662	1/1	0.97	0.08	24,24,24,24	0
56	MG	2a	3200	1/1	0.97	0.09	63,63,63,63	0
56	MG	2A	3827	1/1	0.97	0.08	35,35,35,35	0
56	MG	2A	3828	1/1	0.97	0.05	32,32,32,32	0
56	MG	2A	3829	1/1	0.97	0.08	43,43,43,43	0
56	MG	1A	3837	1/1	0.97	0.09	24,24,24,24	0
56	MG	1A	3235	1/1	0.97	0.16	25,25,25,25	0
56	MG	1A	3048	1/1	0.97	0.07	22,22,22,22	0
56	MG	2A	3507	1/1	0.97	0.09	47,47,47,47	0
56	MG	1A	3665	1/1	0.97	0.12	23,23,23,23	0
56	MG	2A	3837	1/1	0.97	0.08	50,50,50,50	0
56	MG	1b	302	1/1	0.97	0.12	58,58,58,58	0
56	MG	1A	3666	1/1	0.97	0.08	13,13,13,13	0
56	MG	15	101	1/1	0.97	0.18	29,29,29,29	0
56	MG	2A	3234	1/1	0.97	0.11	35,35,35,35	0
56	MG	2A	3235	1/1	0.97	0.11	42,42,42,42	0
56	MG	1A	4034	1/1	0.97	0.07	19,19,19,19	0
56	MG	15	104	1/1	0.97	0.06	27,27,27,27	0
56	MG	1A	3415	1/1	0.97	0.07	36,36,36,36	0
56	MG	16	101	1/1	0.97	0.06	37,37,37,37	0
56	MG	2A	3520	1/1	0.97	0.10	21,21,21,21	0
56	MG	1A	4037	1/1	0.97	0.04	32,32,32,32	0
56	MG	16	103	1/1	0.97	0.08	46,46,46,46	0
56	MG	1A	3049	1/1	0.97	0.11	35,35,35,35	0
56	MG	18	101	1/1	0.97	0.08	33,33,33,33	0
56	MG	2A	3855	1/1	0.97	0.07	64,64,64,64	0
56	MG	1A	3320	1/1	0.97	0.12	41,41,41,41	0
56	MG	1A	3848	1/1	0.97	0.04	17,17,17,17	0
56	MG	1A	3322	1/1	0.97	0.05	36,36,36,36	0
56	MG	2A	3530	1/1	0.97	0.07	36,36,36,36	0
56	MG	2A	3247	1/1	0.97	0.12	42,42,42,42	0
56	MG	1A	3850	1/1	0.97	0.28	29,29,29,29	0
56	MG	2A	3534	1/1	0.97	0.10	29,29,29,29	0
56	MG	2A	3864	1/1	0.97	0.10	32,32,32,32	0
56	MG	1A	3238	1/1	0.97	0.05	36,36,36,36	0
56	MG	1A	3136	1/1	0.97	0.04	29,29,29,29	0
56	MG	1A	3240	1/1	0.97	0.17	35,35,35,35	0
56	MG	2f	201	1/1	0.97	0.12	40,40,40,40	0
56	MG	1A	3423	1/1	0.97	0.17	39,39,39,39	0
56	MG	1A	3855	1/1	0.97	0.06	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	2A	3870	1/1	0.97	0.09	48,48,48,48	0
56	MG	1A	3676	1/1	0.97	0.07	19,19,19,19	0
56	MG	1A	3069	1/1	0.97	0.09	28,28,28,28	0
56	MG	1x	103	1/1	0.97	0.06	58,58,58,58	0
56	MG	1A	3534	1/1	0.97	0.11	29,29,29,29	0
56	MG	1A	4056	1/1	0.97	0.04	36,36,36,36	0
56	MG	1A	3242	1/1	0.97	0.24	24,24,24,24	0
56	MG	1x	107	1/1	0.97	0.09	51,51,51,51	0
56	MG	1A	3017	1/1	0.97	0.09	48,48,48,48	0
56	MG	2A	3548	1/1	0.97	0.07	56,56,56,56	0
56	MG	1A	3245	1/1	0.97	0.17	34,34,34,34	0
56	MG	2A	3551	1/1	0.97	0.06	39,39,39,39	0
56	MG	2A	3263	1/1	0.97	0.08	57,57,57,57	0
56	MG	1A	3682	1/1	0.97	0.04	20,20,20,20	0
56	MG	2B	207	1/1	0.97	0.10	55,55,55,55	0
56	MG	1A	3008	1/1	0.97	0.07	19,19,19,19	0
56	MG	1A	3866	1/1	0.97	0.05	32,32,32,32	0
56	MG	2A	3557	1/1	0.97	0.05	46,46,46,46	0
56	MG	1A	3684	1/1	0.97	0.07	35,35,35,35	0
56	MG	1a	1617	1/1	0.97	0.06	36,36,36,36	0
56	MG	1a	1618	1/1	0.97	0.07	53,53,53,53	0
56	MG	1a	1619	1/1	0.97	0.07	40,40,40,40	0
56	MG	1y	102	1/1	0.97	0.04	45,45,45,45	0
56	MG	1A	3868	1/1	0.97	0.10	41,41,41,41	0
56	MG	1A	3540	1/1	0.97	0.09	46,46,46,46	0
56	MG	1A	3687	1/1	0.97	0.06	41,41,41,41	0
56	MG	1A	3247	1/1	0.97	0.21	31,31,31,31	0
56	MG	2A	3003	1/1	0.97	0.18	47,47,47,47	0
56	MG	1A	4068	1/1	0.97	0.09	31,31,31,31	0
56	MG	1A	3334	1/1	0.97	0.17	22,22,22,22	0
56	MG	1A	3072	1/1	0.97	0.21	27,27,27,27	0
57	TYK	1A	4107	64/64	0.97	0.08	13,21,29,34	0
56	MG	2D	303	1/1	0.97	0.22	41,41,41,41	0
56	MG	2D	304	1/1	0.97	0.08	28,28,28,28	0
56	MG	1A	3250	1/1	0.97	0.07	48,48,48,48	0
60	K	1x	101	1/1	0.97	0.07	62,62,62,62	0
56	MG	2A	3576	1/1	0.97	0.09	43,43,43,43	0
56	MG	1X	103	1/1	0.98	0.05	42,42,42,42	0
56	MG	1A	3321	1/1	0.98	0.03	25,25,25,25	0
56	MG	1A	3038	1/1	0.98	0.14	28,28,28,28	0
56	MG	2A	3601	1/1	0.98	0.03	29,29,29,29	0
56	MG	1A	3110	1/1	0.98	0.14	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1X	107	1/1	0.98	0.12	32,32,32,32	0
56	MG	2A	3396	1/1	0.98	0.04	38,38,38,38	0
56	MG	2A	3605	1/1	0.98	0.09	41,41,41,41	0
56	MG	1A	3824	1/1	0.98	0.04	34,34,34,34	0
56	MG	1A	4090	1/1	0.98	0.04	31,31,31,31	0
56	MG	1Y	203	1/1	0.98	0.17	39,39,39,39	0
56	MG	2a	3068	1/1	0.98	0.04	47,47,47,47	0
56	MG	1A	3028	1/1	0.98	0.16	25,25,25,25	0
56	MG	1A	3217	1/1	0.98	0.17	26,26,26,26	0
56	MG	2A	3034	1/1	0.98	0.07	38,38,38,38	0
56	MG	1A	3828	1/1	0.98	0.07	15,15,15,15	0
56	MG	1A	3612	1/1	0.98	0.28	38,38,38,38	0
56	MG	1A	3716	1/1	0.98	0.04	20,20,20,20	0
56	MG	2A	3615	1/1	0.98	0.07	41,41,41,41	0
56	MG	1A	3456	1/1	0.98	0.05	44,44,44,44	0
56	MG	1a	1731	1/1	0.98	0.10	33,33,33,33	0
56	MG	1A	3832	1/1	0.98	0.04	29,29,29,29	0
56	MG	1A	3718	1/1	0.98	0.04	18,18,18,18	0
56	MG	1A	3719	1/1	0.98	0.04	17,17,17,17	0
56	MG	1A	3961	1/1	0.98	0.05	28,28,28,28	0
56	MG	1A	3962	1/1	0.98	0.06	32,32,32,32	0
56	MG	1A	3174	1/1	0.98	0.10	29,29,29,29	0
56	MG	1A	3965	1/1	0.98	0.09	17,17,17,17	0
56	MG	1A	3029	1/1	0.98	0.08	28,28,28,28	0
56	MG	1A	3056	1/1	0.98	0.09	32,32,32,32	0
56	MG	2A	3835	1/1	0.98	0.11	33,33,33,33	0
56	MG	2A	3417	1/1	0.98	0.09	39,39,39,39	0
56	MG	2A	3838	1/1	0.98	0.15	32,32,32,32	0
56	MG	13	101	1/1	0.98	0.06	25,25,25,25	0
56	MG	2A	3840	1/1	0.98	0.04	37,37,37,37	0
56	MG	13	102	1/1	0.98	0.09	31,31,31,31	0
56	MG	1A	3177	1/1	0.98	0.10	34,34,34,34	0
56	MG	1a	1745	1/1	0.98	0.09	35,35,35,35	0
56	MG	1a	1746	1/1	0.98	0.07	39,39,39,39	0
56	MG	2A	3054	1/1	0.98	0.05	42,42,42,42	0
56	MG	1A	3223	1/1	0.98	0.04	36,36,36,36	0
56	MG	1A	3971	1/1	0.98	0.04	31,31,31,31	0
56	MG	1A	3840	1/1	0.98	0.18	17,17,17,17	0
56	MG	1A	3536	1/1	0.98	0.10	20,20,20,20	0
56	MG	1A	3726	1/1	0.98	0.04	25,25,25,25	0
56	MG	15	103	1/1	0.98	0.17	32,32,32,32	0
56	MG	1A	3394	1/1	0.98	0.06	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3016	1/1	0.98	0.16	38,38,38,38	0
56	MG	1A	3333	1/1	0.98	0.06	24,24,24,24	0
56	MG	2A	3644	1/1	0.98	0.14	52,52,52,52	0
56	MG	1A	3847	1/1	0.98	0.10	49,49,49,49	0
56	MG	1A	3179	1/1	0.98	0.14	33,33,33,33	0
56	MG	1A	3013	1/1	0.98	0.13	23,23,23,23	0
56	MG	17	101	1/1	0.98	0.07	25,25,25,25	0
56	MG	2A	3068	1/1	0.98	0.09	28,28,28,28	0
56	MG	1A	3275	1/1	0.98	0.05	28,28,28,28	0
56	MG	2A	3439	1/1	0.98	0.21	45,45,45,45	0
56	MG	1A	3143	1/1	0.98	0.09	17,17,17,17	0
56	MG	1A	3544	1/1	0.98	0.12	41,41,41,41	0
56	MG	2A	3072	1/1	0.98	0.06	41,41,41,41	0
56	MG	1B	216	1/1	0.98	0.11	42,42,42,42	0
56	MG	1A	3736	1/1	0.98	0.06	18,18,18,18	0
56	MG	2A	3075	1/1	0.98	0.12	33,33,33,33	0
56	MG	1A	3629	1/1	0.98	0.10	38,38,38,38	0
56	MG	2A	3872	1/1	0.98	0.10	30,30,30,30	0
56	MG	2a	3122	1/1	0.98	0.12	53,53,53,53	0
56	MG	1A	3228	1/1	0.98	0.11	37,37,37,37	0
56	MG	1A	3073	1/1	0.98	0.05	12,12,12,12	0
56	MG	1A	3857	1/1	0.98	0.04	33,33,33,33	0
56	MG	1A	3547	1/1	0.98	0.06	28,28,28,28	0
56	MG	1A	3404	1/1	0.98	0.24	24,24,24,24	0
56	MG	1A	3992	1/1	0.98	0.04	37,37,37,37	0
56	MG	1A	3993	1/1	0.98	0.06	19,19,19,19	0
56	MG	1A	3145	1/1	0.98	0.06	37,37,37,37	0
56	MG	1A	3406	1/1	0.98	0.11	17,17,17,17	0
56	MG	1A	3093	1/1	0.98	0.08	44,44,44,44	0
56	MG	1A	3475	1/1	0.98	0.11	38,38,38,38	0
56	MG	1A	3147	1/1	0.98	0.19	28,28,28,28	0
56	MG	1A	3555	1/1	0.98	0.14	32,32,32,32	0
56	MG	2A	3672	1/1	0.98	0.04	28,28,28,28	0
56	MG	2a	3137	1/1	0.98	0.08	48,48,48,48	0
56	MG	1A	3044	1/1	0.98	0.10	29,29,29,29	0
56	MG	1A	3149	1/1	0.98	0.06	28,28,28,28	0
56	MG	2A	3092	1/1	0.98	0.12	48,48,48,48	0
56	MG	1A	3060	1/1	0.98	0.08	25,25,25,25	0
56	MG	1B	235	1/1	0.98	0.07	39,39,39,39	0
56	MG	1A	3286	1/1	0.98	0.11	33,33,33,33	0
56	MG	2A	3467	1/1	0.98	0.13	56,56,56,56	0
56	MG	2a	3145	1/1	0.98	0.04	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	1D	302	1/1	0.98	0.12	23,23,23,23	0
56	MG	1A	3482	1/1	0.98	0.15	24,24,24,24	0
56	MG	2A	3098	1/1	0.98	0.07	47,47,47,47	0
56	MG	1A	3151	1/1	0.98	0.15	20,20,20,20	0
56	MG	1A	3648	1/1	0.98	0.10	30,30,30,30	0
56	MG	2a	3151	1/1	0.98	0.09	44,44,44,44	0
56	MG	1A	3191	1/1	0.98	0.12	28,28,28,28	0
56	MG	1A	3650	1/1	0.98	0.12	54,54,54,54	0
56	MG	2A	3286	1/1	0.98	0.10	46,46,46,46	0
56	MG	1D	309	1/1	0.98	0.25	22,22,22,22	0
56	MG	1A	3289	1/1	0.98	0.07	19,19,19,19	0
56	MG	1A	3486	1/1	0.98	0.10	38,38,38,38	0
56	MG	1A	3077	1/1	0.98	0.12	37,37,37,37	0
56	MG	1E	303	1/1	0.98	0.07	31,31,31,31	0
56	MG	2a	3160	1/1	0.98	0.07	58,58,58,58	0
56	MG	1A	4012	1/1	0.98	0.10	26,26,26,26	0
56	MG	1A	3763	1/1	0.98	0.04	21,21,21,21	0
56	MG	1a	1633	1/1	0.98	0.08	19,19,19,19	0
56	MG	2E	306	1/1	0.98	0.10	40,40,40,40	0
56	MG	1E	306	1/1	0.98	0.07	20,20,20,20	0
56	MG	1A	3097	1/1	0.98	0.10	25,25,25,25	0
56	MG	1a	1636	1/1	0.98	0.17	45,45,45,45	0
56	MG	1A	3418	1/1	0.98	0.04	44,44,44,44	0
56	MG	2F	301	1/1	0.98	0.09	41,41,41,41	0
56	MG	1A	3882	1/1	0.98	0.10	36,36,36,36	0
56	MG	1A	3353	1/1	0.98	0.05	38,38,38,38	0
56	MG	1A	3657	1/1	0.98	0.06	23,23,23,23	0
56	MG	2A	3493	1/1	0.98	0.05	25,25,25,25	0
56	MG	1a	1808	1/1	0.98	0.05	40,40,40,40	0
56	MG	2A	3119	1/1	0.98	0.08	31,31,31,31	0
56	MG	1A	3659	1/1	0.98	0.03	15,15,15,15	0
56	MG	1E	313	1/1	0.98	0.05	23,23,23,23	0
56	MG	1F	301	1/1	0.98	0.09	30,30,30,30	0
56	MG	1A	3660	1/1	0.98	0.05	19,19,19,19	0
56	MG	1A	3099	1/1	0.98	0.09	19,19,19,19	0
56	MG	1A	3293	1/1	0.98	0.22	29,29,29,29	0
56	MG	2Q	201	1/1	0.98	0.05	45,45,45,45	0
56	MG	1F	305	1/1	0.98	0.11	22,22,22,22	0
56	MG	1A	3155	1/1	0.98	0.04	23,23,23,23	0
56	MG	1F	307	1/1	0.98	0.05	39,39,39,39	0
56	MG	1A	3297	1/1	0.98	0.10	32,32,32,32	0
56	MG	1A	3045	1/1	0.98	0.06	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1a	1652	1/1	0.98	0.04	45,45,45,45	0
56	MG	1A	3033	1/1	0.98	0.17	18,18,18,18	0
56	MG	1a	1654	1/1	0.98	0.10	47,47,47,47	0
56	MG	1A	3575	1/1	0.98	0.07	17,17,17,17	0
56	MG	1A	3158	1/1	0.98	0.10	25,25,25,25	0
56	MG	2W	201	1/1	0.98	0.27	40,40,40,40	0
56	MG	1A	3025	1/1	0.98	0.07	32,32,32,32	0
56	MG	2A	3724	1/1	0.98	0.05	32,32,32,32	0
56	MG	1A	3081	1/1	0.98	0.12	30,30,30,30	0
56	MG	2A	3138	1/1	0.98	0.21	38,38,38,38	0
56	MG	2A	3727	1/1	0.98	0.05	58,58,58,58	0
56	MG	1A	3248	1/1	0.98	0.10	19,19,19,19	0
56	MG	1A	3364	1/1	0.98	0.24	28,28,28,28	0
56	MG	1A	3304	1/1	0.98	0.12	12,12,12,12	0
56	MG	2A	3519	1/1	0.98	0.07	42,42,42,42	0
56	MG	1A	4035	1/1	0.98	0.03	27,27,27,27	0
56	MG	2A	3521	1/1	0.98	0.07	57,57,57,57	0
56	MG	1A	3305	1/1	0.98	0.04	32,32,32,32	0
56	MG	1A	3784	1/1	0.98	0.05	35,35,35,35	0
56	MG	1A	4038	1/1	0.98	0.08	30,30,30,30	0
56	MG	1A	3785	1/1	0.98	0.05	34,34,34,34	0
56	MG	1A	3905	1/1	0.98	0.16	24,24,24,24	0
56	MG	1A	3675	1/1	0.98	0.12	19,19,19,19	0
56	MG	1A	3161	1/1	0.98	0.08	28,28,28,28	0
56	MG	1A	3507	1/1	0.98	0.15	35,35,35,35	0
56	MG	1A	3909	1/1	0.98	0.04	42,42,42,42	0
56	MG	1A	3434	1/1	0.98	0.21	30,30,30,30	0
56	MG	2A	3337	1/1	0.98	0.09	52,52,52,52	0
56	MG	2A	3156	1/1	0.98	0.04	33,33,33,33	0
56	MG	2A	3339	1/1	0.98	0.06	43,43,43,43	0
56	MG	1A	3911	1/1	0.98	0.06	31,31,31,31	0
56	MG	1P	205	1/1	0.98	0.13	34,34,34,34	0
56	MG	2A	3749	1/1	0.98	0.09	47,47,47,47	0
56	MG	1Q	201	1/1	0.98	0.06	22,22,22,22	0
56	MG	2A	3161	1/1	0.98	0.15	32,32,32,32	0
56	MG	1Q	202	1/1	0.98	0.05	34,34,34,34	0
56	MG	1A	3586	1/1	0.98	0.12	26,26,26,26	0
56	MG	1A	3587	1/1	0.98	0.04	18,18,18,18	0
56	MG	1Q	205	1/1	0.98	0.07	38,38,38,38	0
56	MG	1A	3914	1/1	0.98	0.12	29,29,29,29	0
56	MG	1A	3021	1/1	0.98	0.04	15,15,15,15	0
56	MG	1A	3589	1/1	0.98	0.08	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3163	1/1	0.98	0.17	32,32,32,32	0
56	MG	1A	3918	1/1	0.98	0.04	39,39,39,39	0
56	MG	2A	3550	1/1	0.98	0.04	38,38,38,38	0
56	MG	1A	3009	1/1	0.98	0.06	23,23,23,23	0
56	MG	1A	3685	1/1	0.98	0.04	48,48,48,48	0
56	MG	2A	3355	1/1	0.98	0.12	41,41,41,41	0
56	MG	1A	3921	1/1	0.98	0.07	17,17,17,17	0
56	MG	1A	3592	1/1	0.98	0.07	21,21,21,21	0
56	MG	1A	3131	1/1	0.98	0.04	20,20,20,20	0
56	MG	2A	3558	1/1	0.98	0.09	34,34,34,34	0
56	MG	1A	3206	1/1	0.98	0.06	24,24,24,24	0
56	MG	2A	3177	1/1	0.98	0.09	36,36,36,36	0
56	MG	1A	3255	1/1	0.98	0.12	23,23,23,23	0
56	MG	1A	3207	1/1	0.98	0.08	26,26,26,26	0
56	MG	1U	202	1/1	0.98	0.22	31,31,31,31	0
56	MG	2A	3774	1/1	0.98	0.09	45,45,45,45	0
56	MG	1A	3691	1/1	0.98	0.04	19,19,19,19	0
56	MG	1A	3928	1/1	0.98	0.04	23,23,23,23	0
56	MG	1A	3106	1/1	0.98	0.04	28,28,28,28	0
56	MG	1U	206	1/1	0.98	0.16	29,29,29,29	0
56	MG	1A	3517	1/1	0.98	0.07	33,33,33,33	0
56	MG	1A	3037	1/1	0.98	0.12	18,18,18,18	0
56	MG	2A	3572	1/1	0.98	0.09	36,36,36,36	0
56	MG	1A	3377	1/1	0.98	0.06	41,41,41,41	0
56	MG	2A	3188	1/1	0.98	0.09	41,41,41,41	0
56	MG	1A	3259	1/1	0.98	0.04	40,40,40,40	0
56	MG	1A	3134	1/1	0.98	0.05	25,25,25,25	0
56	MG	1A	3811	1/1	0.98	0.04	21,21,21,21	0
56	MG	1V	202	1/1	0.98	0.13	25,25,25,25	0
56	MG	1A	3603	1/1	0.98	0.07	37,37,37,37	0
56	MG	1V	205	1/1	0.98	0.06	30,30,30,30	0
56	MG	2A	3581	1/1	0.98	0.07	41,41,41,41	0
56	MG	2A	3195	1/1	0.98	0.05	41,41,41,41	0
56	MG	1a	1707	1/1	0.98	0.20	50,50,50,50	0
56	MG	2A	3380	1/1	0.98	0.07	45,45,45,45	0
56	MG	1A	3701	1/1	0.98	0.07	17,17,17,17	0
56	MG	1A	3135	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	3704	1/1	0.98	0.05	18,18,18,18	0
56	MG	2A	3017	1/1	0.98	0.09	32,32,32,32	0
56	MG	1A	3170	1/1	0.98	0.05	24,24,24,24	0
56	MG	1A	4081	1/1	0.98	0.07	21,21,21,21	0
56	MG	1A	3382	1/1	0.98	0.21	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
58	ZN	2Y	202	1/1	0.98	0.04	83,83,83,83	0
56	MG	1A	3818	1/1	0.98	0.04	26,26,26,26	0
58	ZN	25	105	1/1	0.98	0.05	74,74,74,74	0
58	ZN	2n	501	1/1	0.98	0.04	86,86,86,86	0
56	MG	1A	3707	1/1	0.98	0.06	20,20,20,20	0
56	MG	1A	4085	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	3107	1/1	0.99	0.03	20,20,20,20	0
56	MG	1A	3619	1/1	0.99	0.04	32,32,32,32	0
56	MG	1A	3969	1/1	0.99	0.05	28,28,28,28	0
56	MG	1E	302	1/1	0.99	0.06	28,28,28,28	0
56	MG	1A	4027	1/1	0.99	0.03	21,21,21,21	0
56	MG	1U	209	1/1	0.99	0.06	23,23,23,23	0
56	MG	1A	3031	1/1	0.99	0.18	22,22,22,22	0
56	MG	1A	3863	1/1	0.99	0.07	35,35,35,35	0
56	MG	1a	1610	1/1	0.99	0.06	17,17,17,17	0
56	MG	1k	201	1/1	0.99	0.12	36,36,36,36	0
56	MG	2A	3555	1/1	0.99	0.07	41,41,41,41	0
56	MG	1a	1756	1/1	0.99	0.10	28,28,28,28	0
56	MG	1A	3098	1/1	0.99	0.05	29,29,29,29	0
56	MG	1m	3001	1/1	0.99	0.04	53,53,53,53	0
56	MG	2A	3559	1/1	0.99	0.07	26,26,26,26	0
56	MG	1A	3397	1/1	0.99	0.08	18,18,18,18	0
56	MG	1A	3004	1/1	0.99	0.06	19,19,19,19	0
56	MG	1a	1760	1/1	0.99	0.04	39,39,39,39	0
56	MG	1A	3090	1/1	0.99	0.08	29,29,29,29	0
56	MG	2A	3857	1/1	0.99	0.03	28,28,28,28	0
56	MG	1A	3658	1/1	0.99	0.06	33,33,33,33	0
56	MG	2A	3474	1/1	0.99	0.13	20,20,20,20	0
56	MG	1A	3977	1/1	0.99	0.03	30,30,30,30	0
56	MG	1A	3820	1/1	0.99	0.03	24,24,24,24	0
56	MG	1A	3732	1/1	0.99	0.07	17,17,17,17	0
56	MG	1A	3047	1/1	0.99	0.04	30,30,30,30	0
56	MG	2A	3570	1/1	0.99	0.09	51,51,51,51	0
56	MG	2a	3204	1/1	0.99	0.05	65,65,65,65	0
56	MG	2A	3140	1/1	0.99	0.12	39,39,39,39	0
56	MG	1W	204	1/1	0.99	0.04	22,22,22,22	0
56	MG	1A	3451	1/1	0.99	0.09	26,26,26,26	0
56	MG	2A	3143	1/1	0.99	0.11	37,37,37,37	0
56	MG	1A	3478	1/1	0.99	0.03	31,31,31,31	0
56	MG	1A	3221	1/1	0.99	0.06	33,33,33,33	0
56	MG	1A	3697	1/1	0.99	0.04	29,29,29,29	0
56	MG	2A	3147	1/1	0.99	0.14	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	3827	1/1	0.99	0.04	17,17,17,17	0
56	MG	1A	3331	1/1	0.99	0.07	40,40,40,40	0
56	MG	1A	3630	1/1	0.99	0.11	12,12,12,12	0
56	MG	2A	3582	1/1	0.99	0.10	30,30,30,30	0
56	MG	2A	3583	1/1	0.99	0.09	35,35,35,35	0
56	MG	1A	3700	1/1	0.99	0.08	12,12,12,12	0
56	MG	2A	3778	1/1	0.99	0.09	38,38,38,38	0
56	MG	1A	3310	1/1	0.99	0.07	28,28,28,28	0
56	MG	1B	205	1/1	0.99	0.04	37,37,37,37	0
56	MG	1A	4048	1/1	0.99	0.03	38,38,38,38	0
56	MG	1A	3014	1/1	0.99	0.04	19,19,19,19	0
56	MG	1A	3703	1/1	0.99	0.04	18,18,18,18	0
56	MG	1A	4051	1/1	0.99	0.08	35,35,35,35	0
56	MG	2A	3158	1/1	0.99	0.09	30,30,30,30	0
56	MG	1A	3076	1/1	0.99	0.04	23,23,23,23	0
56	MG	1A	3055	1/1	0.99	0.07	27,27,27,27	0
56	MG	1A	4054	1/1	0.99	0.04	23,23,23,23	0
56	MG	1A	3336	1/1	0.99	0.03	21,21,21,21	0
56	MG	1A	3181	1/1	0.99	0.06	30,30,30,30	0
56	MG	2a	3232	1/1	0.99	0.07	48,48,48,48	0
56	MG	1A	3637	1/1	0.99	0.07	30,30,30,30	0
56	MG	1A	3384	1/1	0.99	0.11	31,31,31,31	0
56	MG	1A	3941	1/1	0.99	0.04	29,29,29,29	0
56	MG	2A	3600	1/1	0.99	0.03	26,26,26,26	0
56	MG	1A	3793	1/1	0.99	0.06	28,28,28,28	0
56	MG	1A	3943	1/1	0.99	0.04	19,19,19,19	0
56	MG	1A	3944	1/1	0.99	0.02	22,22,22,22	0
56	MG	1P	201	1/1	0.99	0.14	26,26,26,26	0
56	MG	1A	3890	1/1	0.99	0.16	26,26,26,26	0
56	MG	1A	3276	1/1	0.99	0.10	26,26,26,26	0
56	MG	2A	3512	1/1	0.99	0.07	44,44,44,44	0
56	MG	1A	3295	1/1	0.99	0.11	33,33,33,33	0
56	MG	1A	3893	1/1	0.99	0.03	27,27,27,27	0
56	MG	1A	3712	1/1	0.99	0.03	18,18,18,18	0
56	MG	1A	3753	1/1	0.99	0.06	13,13,13,13	0
56	MG	1A	4070	1/1	0.99	0.09	23,23,23,23	0
56	MG	1a	1801	1/1	0.99	0.03	46,46,46,46	0
56	MG	2A	3015	1/1	0.99	0.08	34,34,34,34	0
56	MG	2E	305	1/1	0.99	0.07	27,27,27,27	0
56	MG	1A	3845	1/1	0.99	0.10	48,48,48,48	0
56	MG	2A	3616	1/1	0.99	0.06	35,35,35,35	0
56	MG	1A	3548	1/1	0.99	0.11	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
56	MG	1A	3714	1/1	0.99	0.07	17,17,17,17	0
56	MG	2A	3523	1/1	0.99	0.06	31,31,31,31	0
56	MG	1R	201	1/1	0.99	0.08	31,31,31,31	0
56	MG	1A	3296	1/1	0.99	0.04	33,33,33,33	0
56	MG	1A	3116	1/1	0.99	0.07	33,33,33,33	0
56	MG	1A	3492	1/1	0.99	0.11	40,40,40,40	0
56	MG	1A	3243	1/1	0.99	0.11	18,18,18,18	0
56	MG	1A	3760	1/1	0.99	0.04	31,31,31,31	0
56	MG	1A	3012	1/1	0.99	0.03	21,21,21,21	0
56	MG	1A	3762	1/1	0.99	0.04	17,17,17,17	0
56	MG	2A	3822	1/1	0.99	0.03	26,26,26,26	0
56	MG	2A	3443	1/1	0.99	0.11	43,43,43,43	0
56	MG	2A	3533	1/1	0.99	0.04	44,44,44,44	0
56	MG	17	102	1/1	0.99	0.07	23,23,23,23	0
56	MG	17	103	1/1	0.99	0.04	35,35,35,35	0
56	MG	1A	3807	1/1	0.99	0.04	22,22,22,22	0
56	MG	1A	3212	1/1	0.99	0.08	29,29,29,29	0
56	MG	1A	3963	1/1	0.99	0.04	14,14,14,14	0
56	MG	1a	1818	1/1	0.99	0.02	46,46,46,46	0
58	ZN	1Y	204	1/1	0.99	0.03	67,67,67,67	0
56	MG	1A	3496	1/1	0.99	0.05	35,35,35,35	0
58	ZN	1n	103	1/1	0.99	0.03	58,58,58,58	0
56	MG	1a	1743	1/1	0.99	0.07	38,38,38,38	0
56	MG	2a	3172	1/1	0.99	0.09	41,41,41,41	0
56	MG	1D	307	1/1	0.99	0.14	37,37,37,37	0
58	ZN	26	102	1/1	0.99	0.04	57,57,57,57	0
58	ZN	29	102	1/1	0.99	0.03	64,64,64,64	0
56	MG	1A	3039	1/1	0.99	0.14	29,29,29,29	0
59	SF4	1d	302	8/8	0.99	0.04	51,55,66,66	0
59	SF4	2d	303	8/8	0.99	0.04	53,64,70,73	0
56	MG	1A	3119	1/1	0.99	0.11	27,27,27,27	0
56	MG	2A	3836	1/1	0.99	0.07	27,27,27,27	0
56	MG	1A	3937	1/1	1.00	0.07	27,27,27,27	0
56	MG	2A	3717	1/1	1.00	0.02	27,27,27,27	0
58	ZN	15	106	1/1	1.00	0.02	52,52,52,52	0
58	ZN	16	104	1/1	1.00	0.02	28,28,28,28	0
58	ZN	19	102	1/1	1.00	0.03	39,39,39,39	0
56	MG	1V	203	1/1	1.00	0.11	27,27,27,27	0
56	MG	1A	4055	1/1	1.00	0.02	16,16,16,16	0
56	MG	2A	3848	1/1	1.00	0.05	27,27,27,27	0

6.5 Other polymers [i](#)

There are no such residues in this entry.