Full wwPDB X-ray Structure Validation Report (i)

Jun 23, 2026 – 10:56 PM EDT

PDB ID	:	6O97 / pdb_00006o97
Title	:	Crystal structure of the Thermus thermophilus 70S ribosome in complex with propylamycin and bound to mRNA and A-, P-, and E-site tRNAs at 2.75A resolution
Authors	:	Matsushita, T.; Sati, G.C.; Kondasinghe, N.; Pirrone, M.G.; Kato, T.; Waduge, P.; Kumar, H.S.; Sanchon, A.C.; Dobosz-Bartoszek, M.; Shcherbakov, D.; Juhas, M.; Hobbie, S.N.; Schrepfer, T.; Chow, C.S.; Polikanov, Y.S.; Schacht, J.; Vasella, A.; Bottger, E.C.; Crich, D.
Deposited on	:	2019-03-13
Resolution	:	2.75 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references (1)) were used in the production of this report:

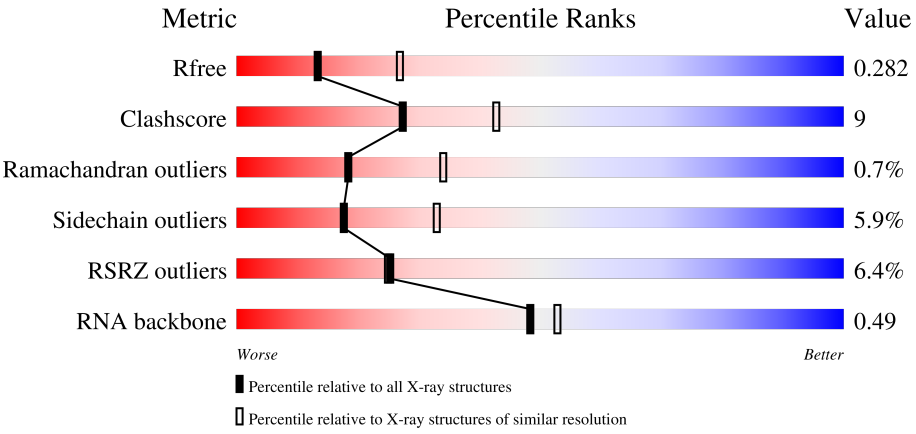
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 2.75 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	1009 (2.76-2.76)
Clashscore	190562	1044 (2.76-2.76)
Ramachandran outliers	187476	1024 (2.76-2.76)
Sidechain outliers	187428	1024 (2.76-2.76)
RSRZ outliers	180081	1009 (2.76-2.76)
RNA backbone	3983	1179 (3.00-2.52)

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

Mol	Chain	Length	Quality of chain
1	1A	2915	3% 60% 32% 7%

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Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

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Mol	Chain	Length	Quality of chain
1	2A	2915	3% 53% 35% 8%
2	1B	121	69% 26%
2	2B	121	% 52% 37% 10%
3	1D	276	% 74% 24%
3	2D	276	% 75% 24%
4	1E	206	74% 22%
4	2E	206	4% 74% 22%
5	1F	210	75% 20%
5	2F	210	4% 65% 28%
6	1G	182	8% 70% 26%
6	2G	182	12% 73% 25%
7	1H	180	3% 73% 23%
7	2H	180	22% 71% 24%
8	1I	148	4% 76% 19%
8	2I	148	5% 73% 22%
9	1N	140	% 77% 21%
9	2N	140	4% 66% 31%
10	1O	122	75% 25%
10	2O	122	3% 75% 25%
11	1P	150	73% 24%
11	2P	150	6% 78% 21%
12	1Q	141	2% 82% 16%
12	2Q	141	17% 68% 30%
13	1R	118	77% 21%
13	2R	118	2% 70% 26%

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Mol	Chain	Length	Quality of chain
14	1S	112	78% 15% 5%
14	2S	112	12% 75% 22%
15	1T	146	3% 63% 25% 10%
15	2T	146	% 55% 34% 10%
16	1U	118	% 86% 12%
16	2U	118	3% 75% 24%
17	1V	101	81% 15%
17	2V	101	7% 80% 18%
18	1W	113	75% 22%
18	2W	113	2% 81% 18%
19	1X	96	% 65% 34%
19	2X	96	4% 64% 32%
20	1Y	110	2% 65% 26% 6%
20	2Y	110	11% 70% 25%
21	1Z	206	8% 51% 21% 25%
21	2Z	206	21% 52% 23% 22%
22	10	85	6% 82% 13%
22	20	85	18% 74% 24%
23	11	98	% 77% 21%
23	21	98	3% 72% 24%
24	12	72	3% 85% 12%
24	22	72	10% 72% 25%
25	13	60	63% 28% 7%
25	23	60	5% 75% 23%
26	14	71	18% 52% 37% 8%

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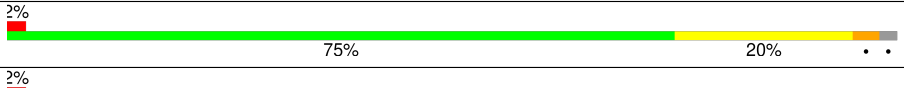
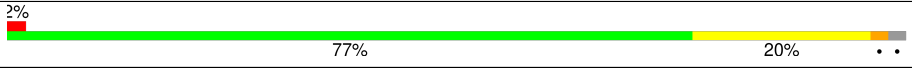
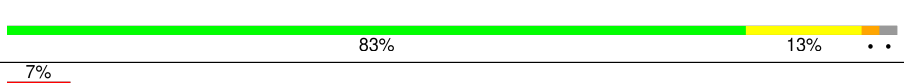
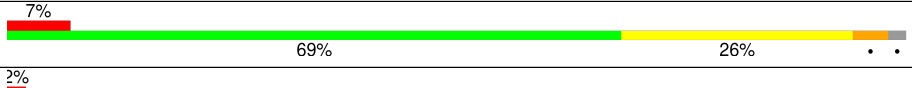
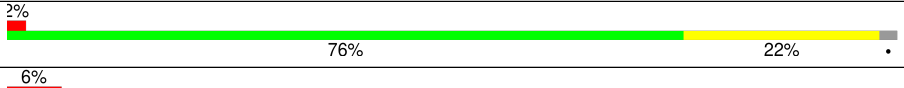
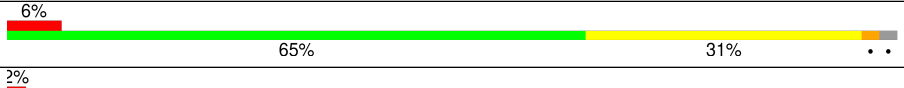
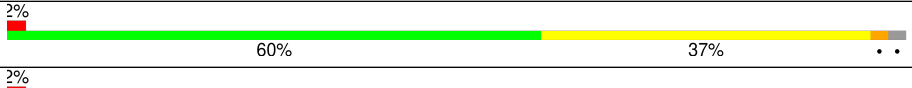
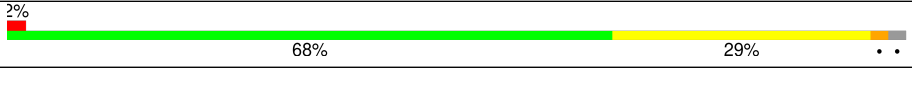
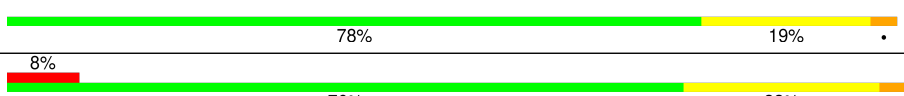
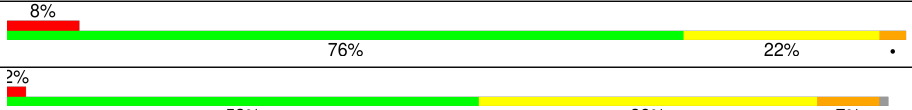
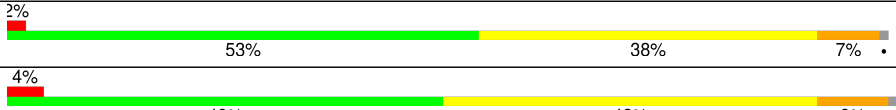
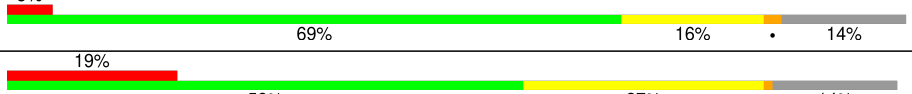
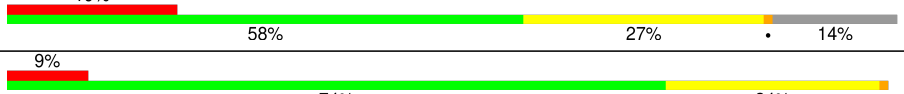
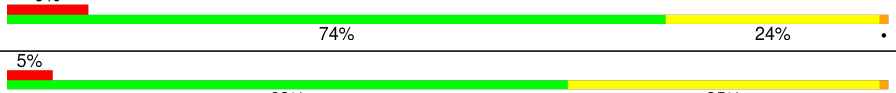
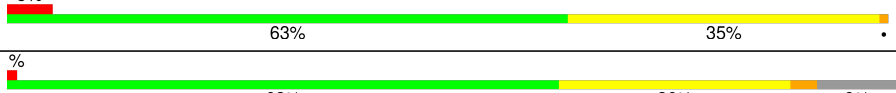
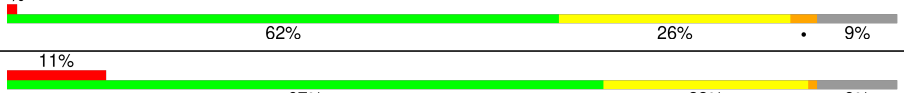
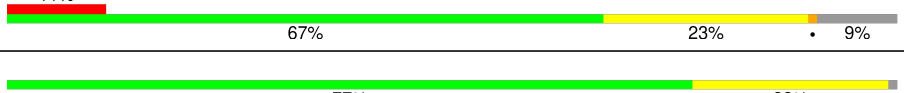
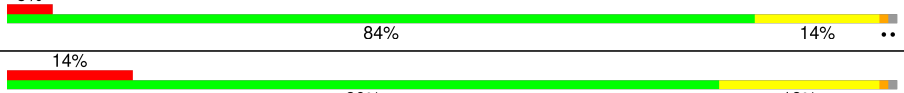
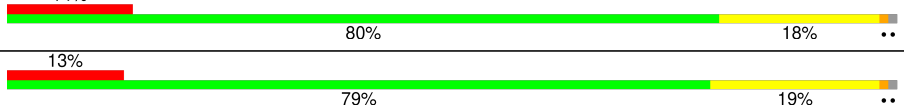
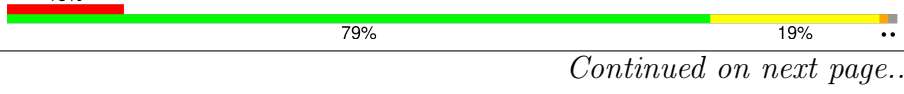
Mol	Chain	Length	Quality of chain
26	24	71	
27	15	60	
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	

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Mol	Chain	Length	Quality of chain
39	1h	138	2% 75% 21%
39	2h	138	7% 68% 30%
40	1i	128	18% 74% 23%
40	2i	128	38% 64% 34%
41	1j	105	21% 70% 18% 8%
41	2j	105	43% 62% 29% 9%
42	1k	129	2% 71% 18% 12%
42	2k	129	8% 63% 24% 12%
43	1l	132	2% 72% 17% 8%
43	2l	132	8% 71% 20% 8%
44	1m	126	12% 68% 26%
44	2m	126	23% 66% 30%
45	1n	61	10% 62% 34%
45	2n	61	52% 69% 30%
46	1o	89	3% 80% 17%
46	2o	89	9% 75% 21%
47	1p	88	17% 60% 33% 7%
47	2p	88	8% 66% 23% 5% 7%
48	1q	105	5% 67% 27% 6%
48	2q	105	7% 65% 30% 6%
49	1r	88	% 63% 14% 23%
49	2r	88	5% 56% 19% 23%
50	1s	93	9% 63% 26% 11%
50	2s	93	23% 55% 33% 11%
51	1t	106	12% 73% 16% 9%

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Mol	Chain	Length	Quality of chain
51	2t	106	13% 71% 15% 9%
52	1u	27	19% 52% 33% 15%
52	2u	27	37% 44% 41% 15%
53	1v	27	11% 33% 11% 52%
53	2v	27	19% 22% 19% 7% 52%
54	1w	76	22% 43% 30% 21%
54	1y	76	17% 34% 37% 21%
54	2w	76	29% 26% 49% 20%
54	2y	76	25% 36% 38% 21%
55	1x	77	5% 69% 21% 9%
55	2x	77	6% 48% 42% 9%

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
56	MG	1A	4053	-	-	-	X

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 300702 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			
22	20	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Molecule 53 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	13	Total	C	N	O	P	0	0	0
			276	124	48	91	13			
53	2v	13	Total	C	N	O	P	0	0	0
			276	124	48	91	13			

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

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	73	Total	C	N	O	P	S	0	0	0
			1568	700	282	512	73	1			
54	1y	73	Total	C	N	O	P	S	0	0	0
			1568	700	282	512	73	1			
54	2w	73	Total	C	N	O	P	S	0	0	0
			1568	700	282	512	73	1			
54	2y	73	Total	C	N	O	P	S	0	0	0
			1568	700	282	512	73	1			

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

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

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	1A	1134	Total	Mg	0	0
			1134	1134		
56	1B	36	Total	Mg	0	0
			36	36		
56	1D	13	Total	Mg	0	0
			13	13		
56	1E	7	Total	Mg	0	0
			7	7		
56	1F	10	Total	Mg	0	0
			10	10		
56	1G	5	Total	Mg	0	0
			5	5		
56	1I	1	Total	Mg	0	0
			1	1		
56	1N	7	Total	Mg	0	0
			7	7		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1O	4	Total Mg 4 4	0	0
56	1P	3	Total Mg 3 3	0	0
56	1Q	5	Total Mg 5 5	0	0
56	1R	4	Total Mg 4 4	0	0
56	1S	3	Total Mg 3 3	0	0
56	1T	2	Total Mg 2 2	0	0
56	1U	7	Total Mg 7 7	0	0
56	1V	2	Total Mg 2 2	0	0
56	1W	7	Total Mg 7 7	0	0
56	1X	5	Total Mg 5 5	0	0
56	1Y	5	Total Mg 5 5	0	0
56	1Z	5	Total Mg 5 5	0	0
56	10	5	Total Mg 5 5	0	0
56	11	2	Total Mg 2 2	0	0
56	12	2	Total Mg 2 2	0	0
56	13	1	Total Mg 1 1	0	0
56	14	1	Total Mg 1 1	0	0
56	15	3	Total Mg 3 3	0	0
56	16	2	Total Mg 2 2	0	0
56	17	4	Total Mg 4 4	0	0
56	18	4	Total Mg 4 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	19	1	Total Mg 1 1	0	0
56	1a	233	Total Mg 233 233	0	0
56	1b	2	Total Mg 2 2	0	0
56	1e	2	Total Mg 2 2	0	0
56	1f	2	Total Mg 2 2	0	0
56	1l	3	Total Mg 3 3	0	0
56	1n	1	Total Mg 1 1	0	0
56	1q	1	Total Mg 1 1	0	0
56	1t	1	Total Mg 1 1	0	0
56	1v	1	Total Mg 1 1	0	0
56	1w	8	Total Mg 8 8	0	0
56	1x	15	Total Mg 15 15	0	0
56	1y	6	Total Mg 6 6	0	0
56	2A	860	Total Mg 860 860	0	0
56	2B	18	Total Mg 18 18	0	0
56	2D	3	Total Mg 3 3	0	0
56	2E	8	Total Mg 8 8	0	0
56	2F	5	Total Mg 5 5	0	0
56	2G	1	Total Mg 1 1	0	0
56	2N	1	Total Mg 1 1	0	0
56	2O	2	Total Mg 2 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	2P	2	Total Mg 2 2	0	0
56	2Q	5	Total Mg 5 5	0	0
56	2R	3	Total Mg 3 3	0	0
56	2T	4	Total Mg 4 4	0	0
56	2U	4	Total Mg 4 4	0	0
56	2V	2	Total Mg 2 2	0	0
56	2W	1	Total Mg 1 1	0	0
56	2X	1	Total Mg 1 1	0	0
56	2Y	1	Total Mg 1 1	0	0
56	20	2	Total Mg 2 2	0	0
56	21	1	Total Mg 1 1	0	0
56	25	2	Total Mg 2 2	0	0
56	27	1	Total Mg 1 1	0	0
56	28	1	Total Mg 1 1	0	0
56	29	1	Total Mg 1 1	0	0
56	2a	231	Total Mg 231 231	0	0
56	2d	2	Total Mg 2 2	0	0
56	2e	1	Total Mg 1 1	0	0
56	2f	1	Total Mg 1 1	0	0
56	2i	1	Total Mg 1 1	0	0
56	2j	2	Total Mg 2 2	0	0

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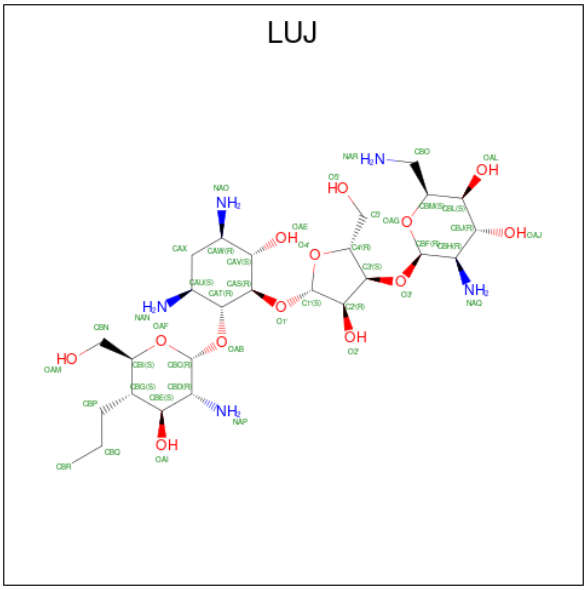
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	2k	1	Total Mg 1 1	0	0
56	2l	4	Total Mg 4 4	0	0
56	2q	3	Total Mg 3 3	0	0
56	2r	1	Total Mg 1 1	0	0
56	2t	1	Total Mg 1 1	0	0
56	2v	3	Total Mg 3 3	0	0
56	2x	5	Total Mg 5 5	0	0
56	2y	6	Total Mg 6 6	0	0

- Molecule 57 is (1R,2R,3S,4R,6S)-4,6-diamino-2-{[3-O-(2,6-diamino-2,6-dideoxy-beta-L-idopyranosyl)-beta-D-ribofuranosyl]oxy}-3-hydroxyc yclohexyl 2-amino-2,4-dideoxy-4-propyl-alpha-D-glucopyranoside (CCD ID: LUJ) (formula: $C_{26}H_{51}N_5O_{13}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	1A	1	Total C N O 42 24 5 13	0	0
57	1A	1	Total C N O 42 24 5 13	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	1a	1	Total C N O 44 26 5 13	0	0
57	2A	1	Total C N O 42 24 5 13	0	0
57	2A	1	Total C N O 42 24 5 13	0	0
57	2a	1	Total C N O 44 26 5 13	0	0

- Molecule 58 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1A	1	Total K 1 1	0	0
58	2A	1	Total K 1 1	0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1Y	1	Total Zn 1 1	0	0
59	14	1	Total Zn 1 1	0	0
59	15	1	Total Zn 1 1	0	0
59	16	1	Total Zn 1 1	0	0
59	19	1	Total Zn 1 1	0	0
59	1n	1	Total Zn 1 1	0	0
59	2Y	1	Total Zn 1 1	0	0
59	24	1	Total Zn 1 1	0	0
59	25	1	Total Zn 1 1	0	0
59	26	1	Total Zn 1 1	0	0
59	29	1	Total Zn 1 1	0	0

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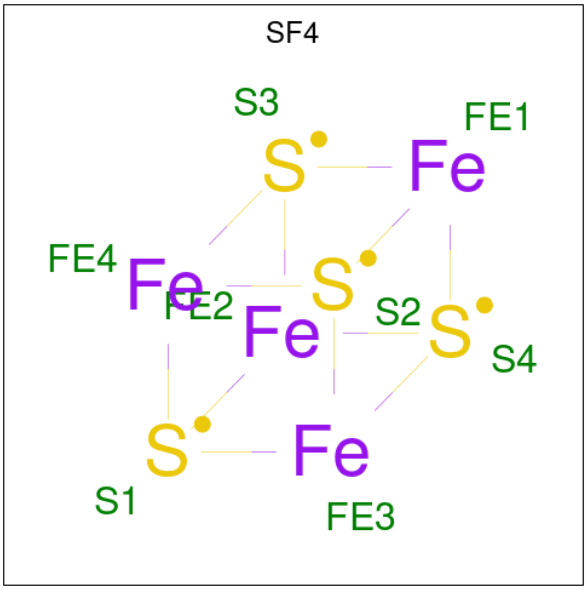
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	2n	1	Total Zn 1 1	0	0

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



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

- Molecule 61 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1A	2225	Total O 2225 2225	0	0
61	1B	69	Total O 69 69	0	0
61	1D	28	Total O 28 28	0	0
61	1E	27	Total O 27 27	0	0
61	1F	17	Total O 17 17	0	0
61	1G	6	Total O 6 6	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1H	1	Total O 1 1	0	0
61	1I	2	Total O 2 2	0	0
61	1N	3	Total O 3 3	0	0
61	1O	7	Total O 7 7	0	0
61	1P	26	Total O 26 26	0	0
61	1Q	12	Total O 12 12	0	0
61	1R	14	Total O 14 14	0	0
61	1S	4	Total O 4 4	0	0
61	1T	7	Total O 7 7	0	0
61	1U	13	Total O 13 13	0	0
61	1V	8	Total O 8 8	0	0
61	1W	9	Total O 9 9	0	0
61	1X	7	Total O 7 7	0	0
61	1Y	4	Total O 4 4	0	0
61	1Z	1	Total O 1 1	0	0
61	10	9	Total O 9 9	0	0
61	11	12	Total O 12 12	0	0
61	12	4	Total O 4 4	0	0
61	13	4	Total O 4 4	0	0
61	14	1	Total O 1 1	0	0
61	15	7	Total O 7 7	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	16	2	Total O 2 2	0	0
61	17	8	Total O 8 8	0	0
61	18	13	Total O 13 13	0	0
61	19	1	Total O 1 1	0	0
61	1a	438	Total O 438 438	0	0
61	1b	1	Total O 1 1	0	0
61	1d	1	Total O 1 1	0	0
61	1e	1	Total O 1 1	0	0
61	1g	1	Total O 1 1	0	0
61	1j	1	Total O 1 1	0	0
61	1l	8	Total O 8 8	0	0
61	1m	2	Total O 2 2	0	0
61	1n	1	Total O 1 1	0	0
61	1p	1	Total O 1 1	0	0
61	1q	3	Total O 3 3	0	0
61	1u	1	Total O 1 1	0	0
61	1v	4	Total O 4 4	0	0
61	1w	6	Total O 6 6	0	0
61	1x	17	Total O 17 17	0	0
61	1y	3	Total O 3 3	0	0
61	2A	1163	Total O 1163 1163	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2B	20	Total O 20 20	0	0
61	2D	23	Total O 23 23	0	0
61	2E	10	Total O 10 10	0	0
61	2F	13	Total O 13 13	0	0
61	2I	2	Total O 2 2	0	0
61	2N	1	Total O 1 1	0	0
61	2O	2	Total O 2 2	0	0
61	2P	6	Total O 6 6	0	0
61	2Q	1	Total O 1 1	0	0
61	2R	3	Total O 3 3	0	0
61	2T	2	Total O 2 2	0	0
61	2U	3	Total O 3 3	0	0
61	2V	2	Total O 2 2	0	0
61	2W	1	Total O 1 1	0	0
61	2X	2	Total O 2 2	0	0
61	2Z	1	Total O 1 1	0	0
61	20	3	Total O 3 3	0	0
61	21	9	Total O 9 9	0	0
61	23	1	Total O 1 1	0	0
61	25	3	Total O 3 3	0	0
61	27	3	Total O 3 3	0	0

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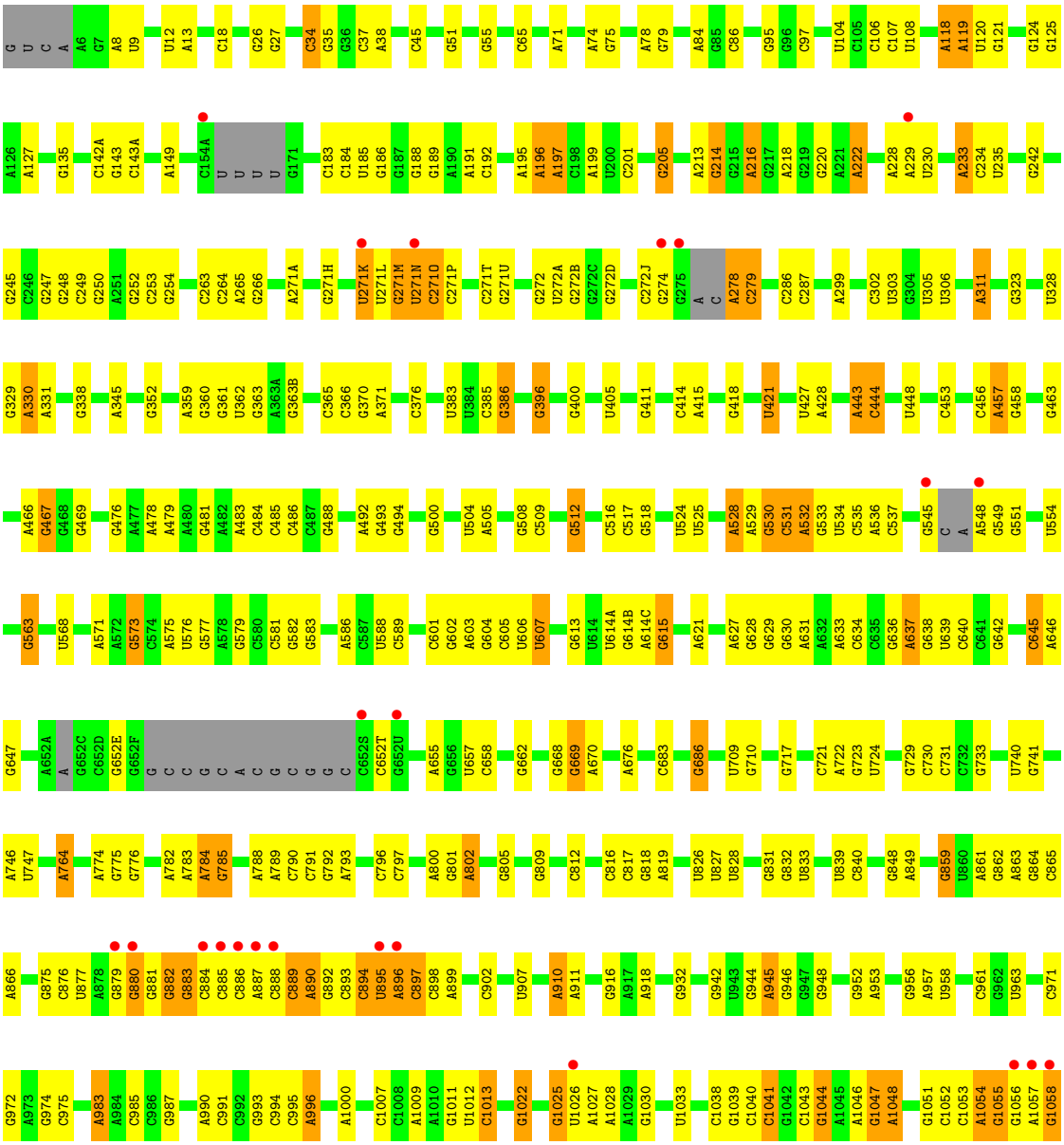
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	28	6	Total O 6 6	0	0
61	2a	322	Total O 322 322	0	0
61	2e	2	Total O 2 2	0	0
61	2f	1	Total O 1 1	0	0
61	2g	2	Total O 2 2	0	0
61	2j	4	Total O 4 4	0	0
61	2l	5	Total O 5 5	0	0
61	2o	2	Total O 2 2	0	0
61	2p	4	Total O 4 4	0	0
61	2q	1	Total O 1 1	0	0
61	2r	1	Total O 1 1	0	0
61	2t	4	Total O 4 4	0	0
61	2u	1	Total O 1 1	0	0
61	2v	3	Total O 3 3	0	0
61	2w	3	Total O 3 3	0	0
61	2x	7	Total O 7 7	0	0
61	2y	9	Total O 9 9	0	0

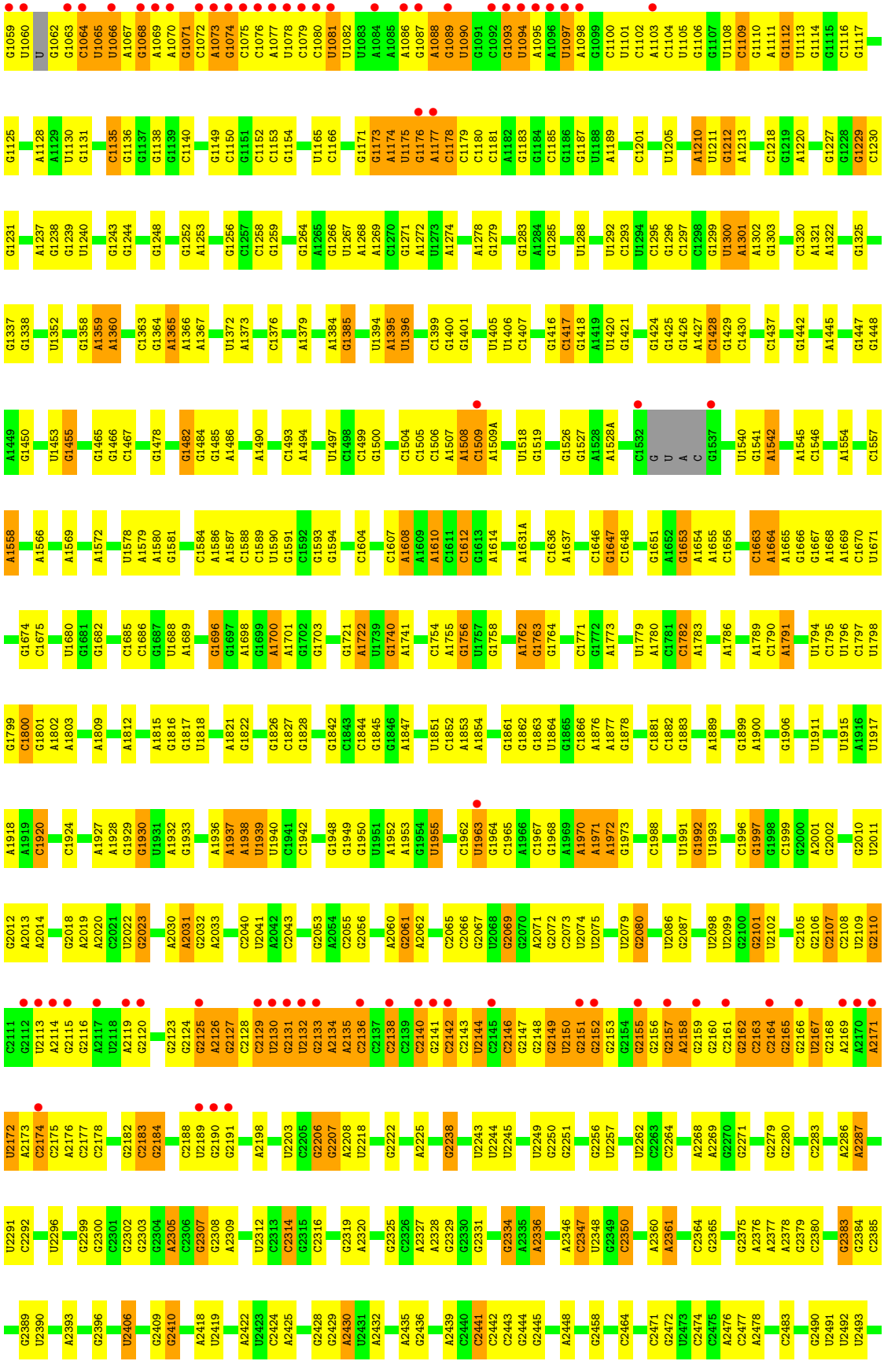
3 Residue-property plots (i)

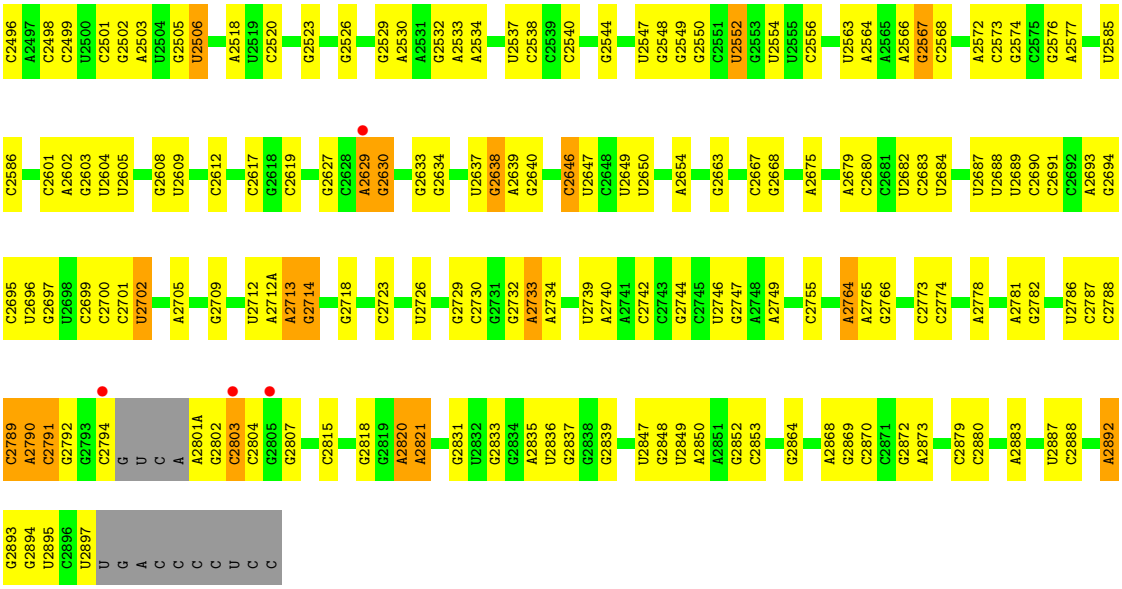
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

- Molecule 1: 23S Ribosomal RNA

Chain 1A:

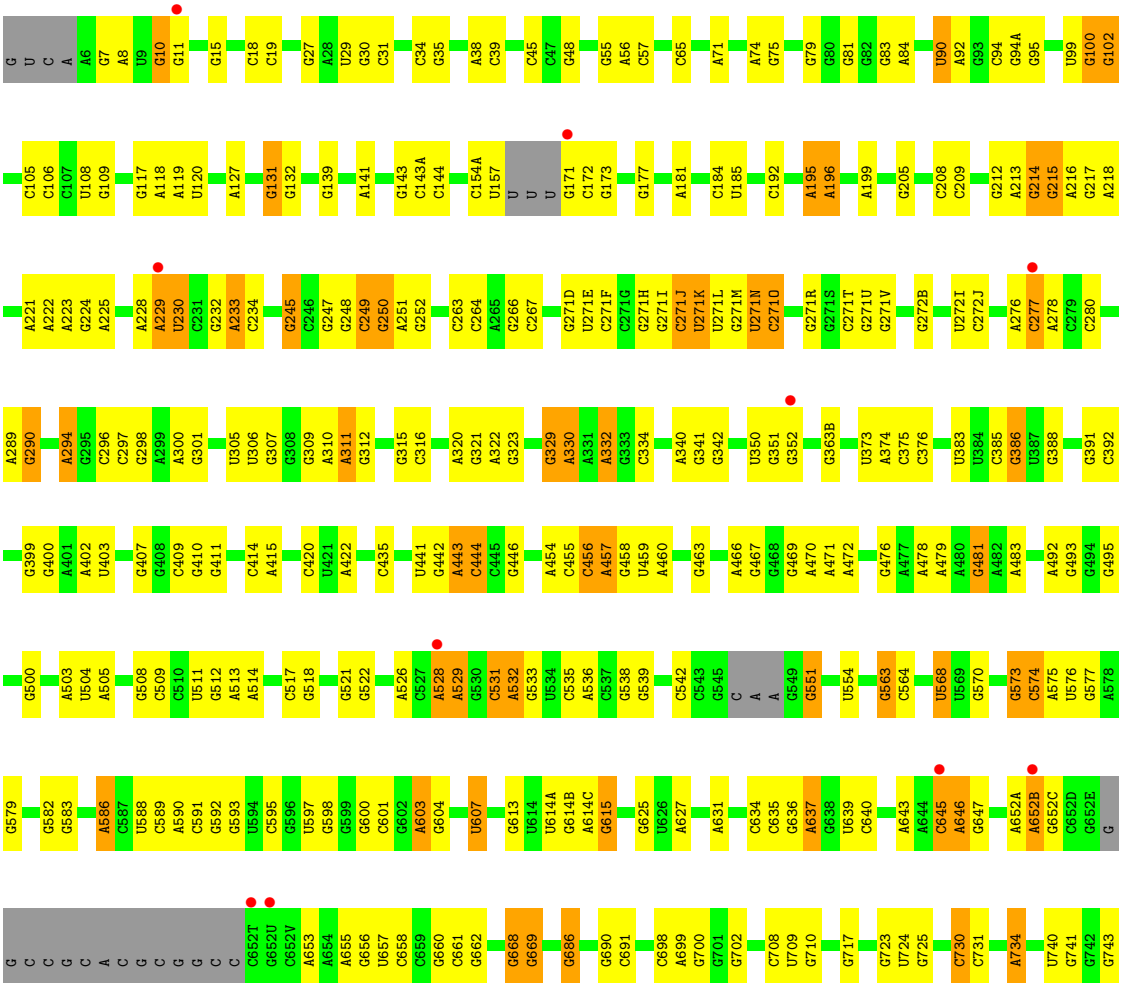


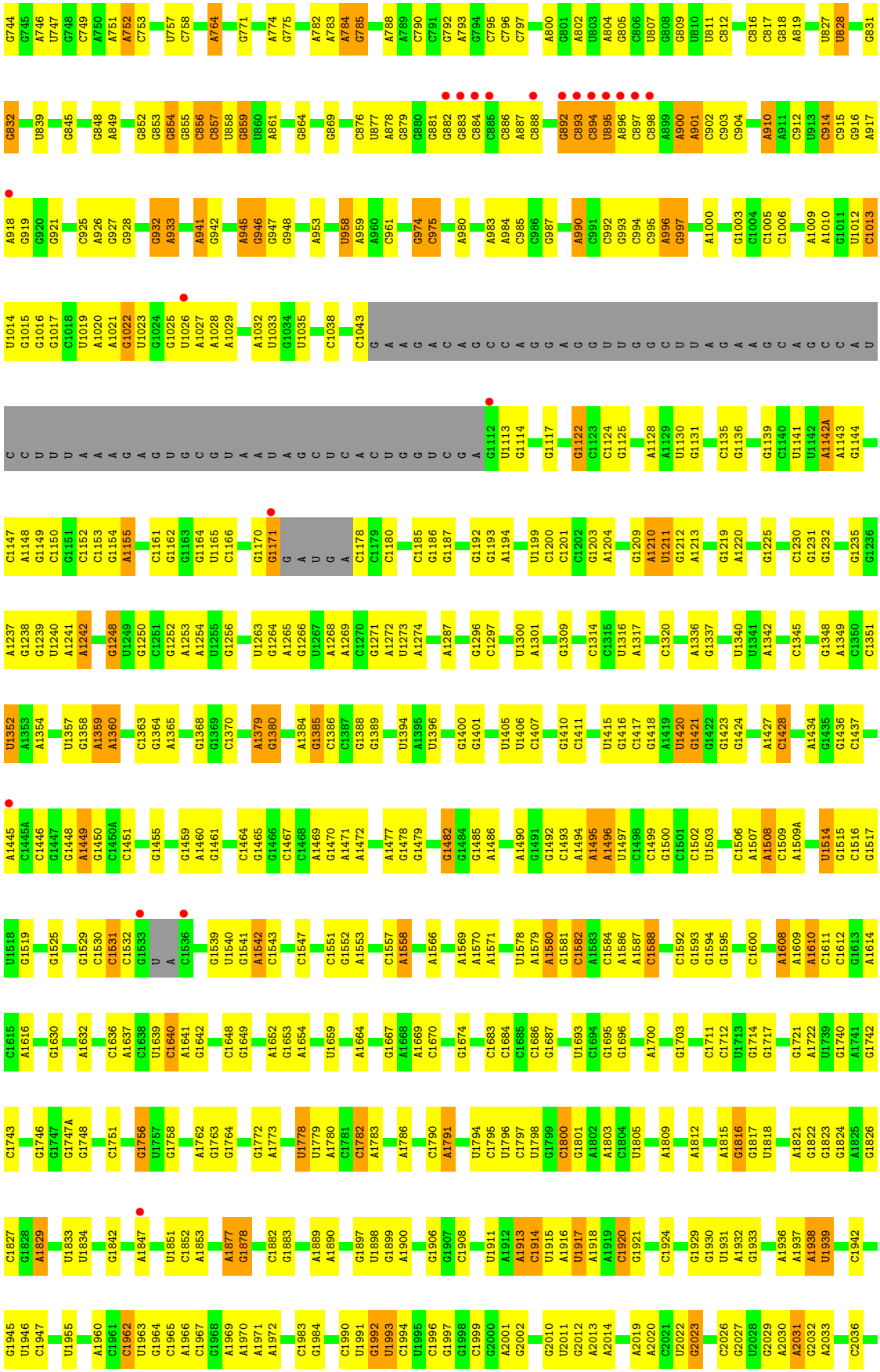


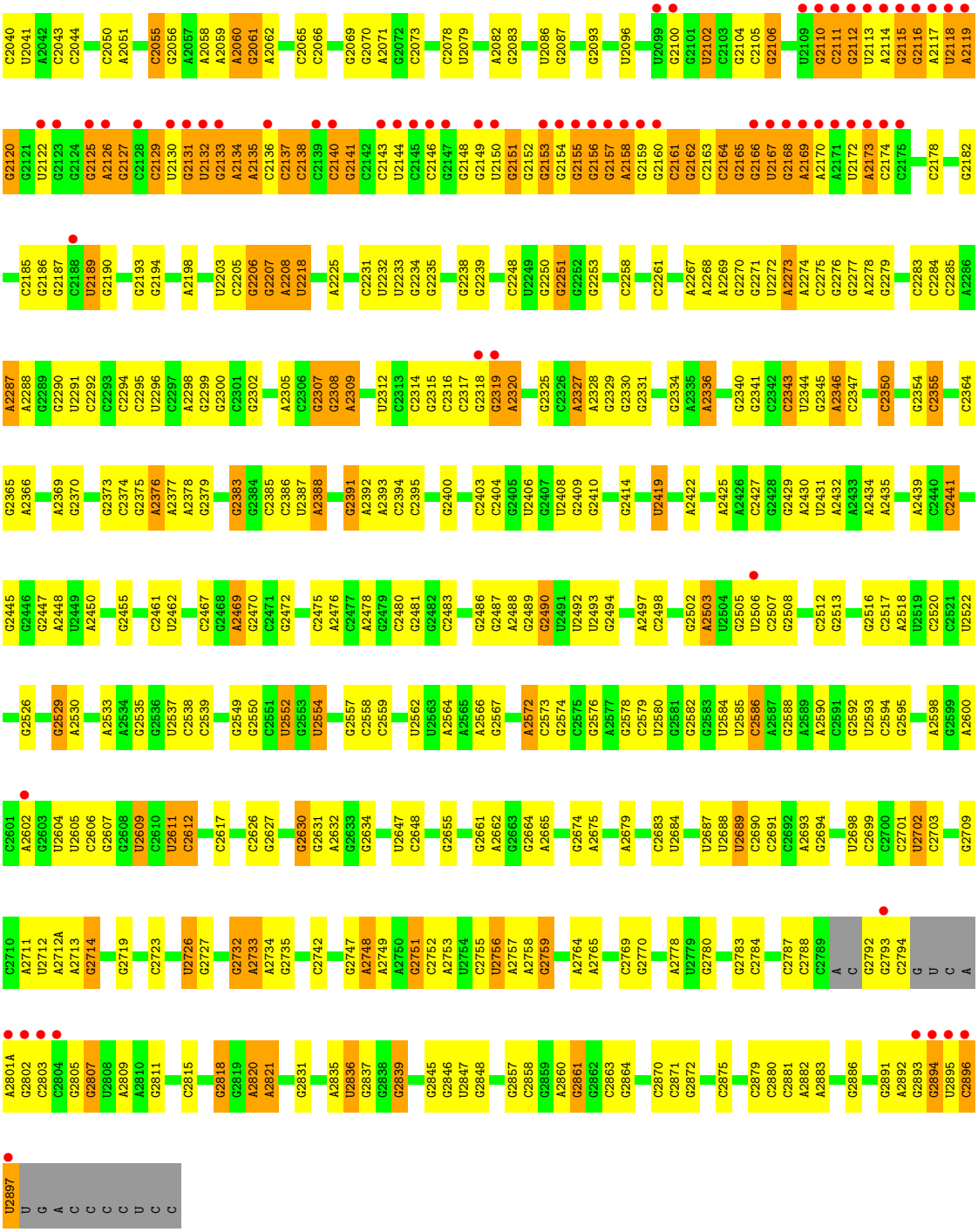


• Molecule 1: 23S Ribosomal RNA

Chain 2A:





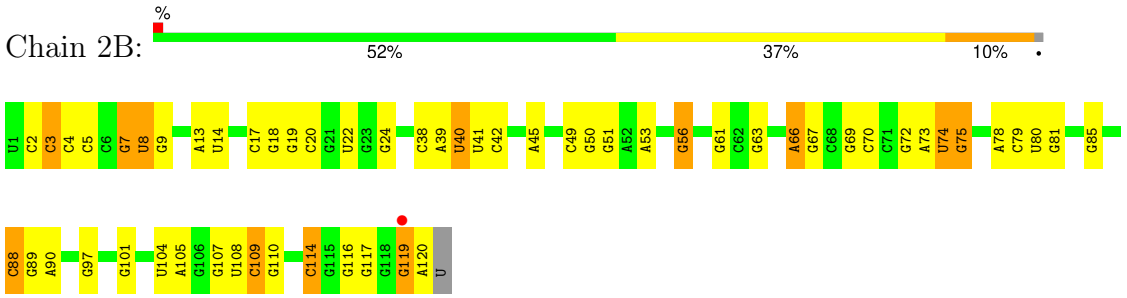


• Molecule 2: 5S Ribosomal RNA

Chain 1B:

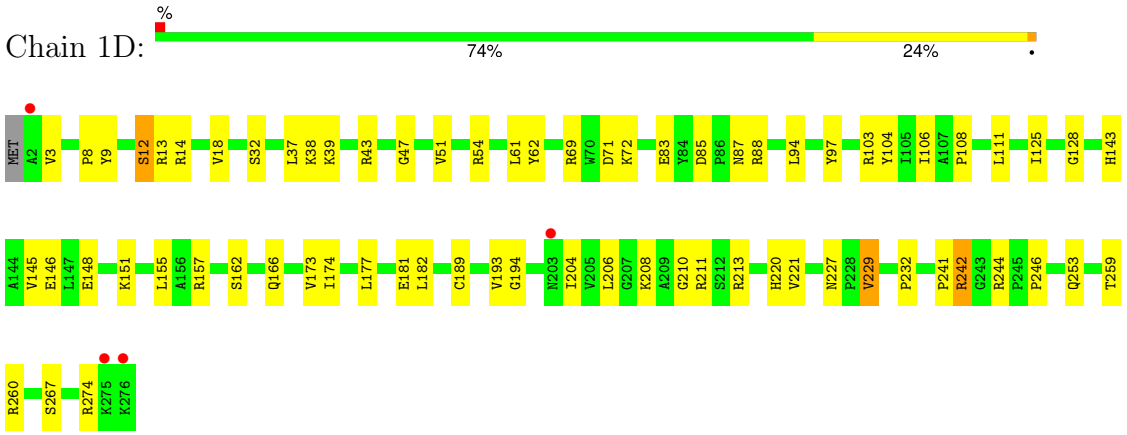
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



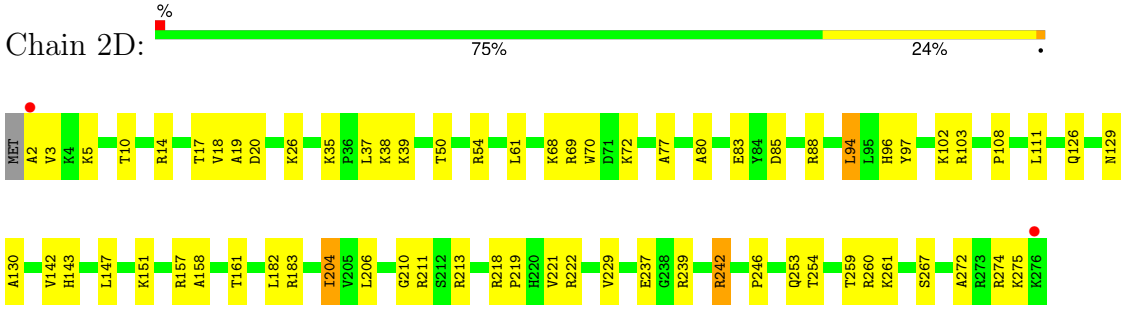
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



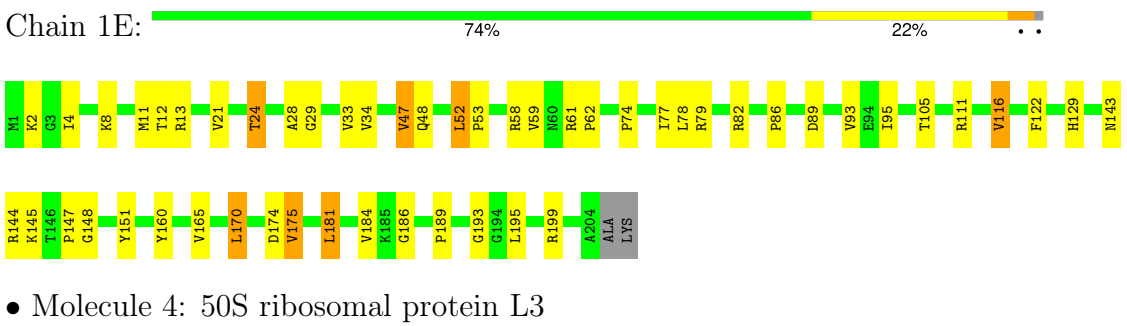
• Molecule 3: 50S ribosomal protein L2

Chain 2D:



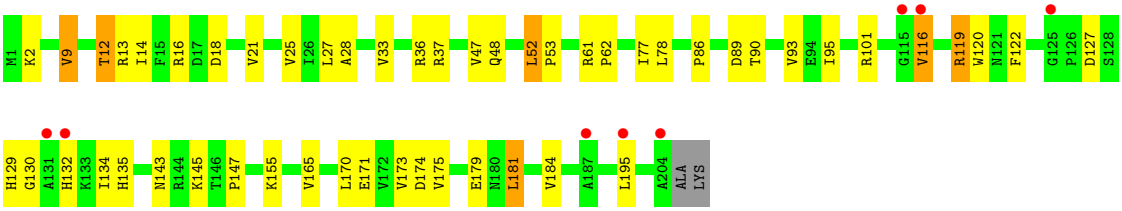
• Molecule 4: 50S ribosomal protein L3

Chain 1E:



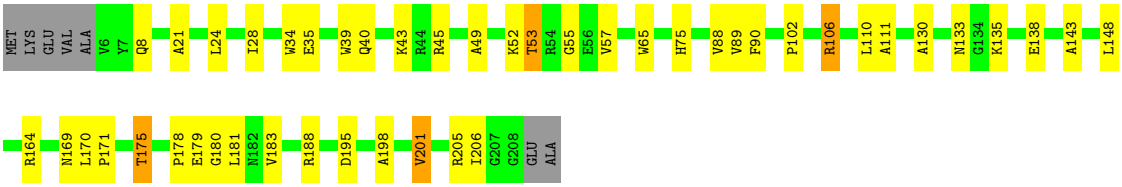
• Molecule 4: 50S ribosomal protein L3

Chain 2E:



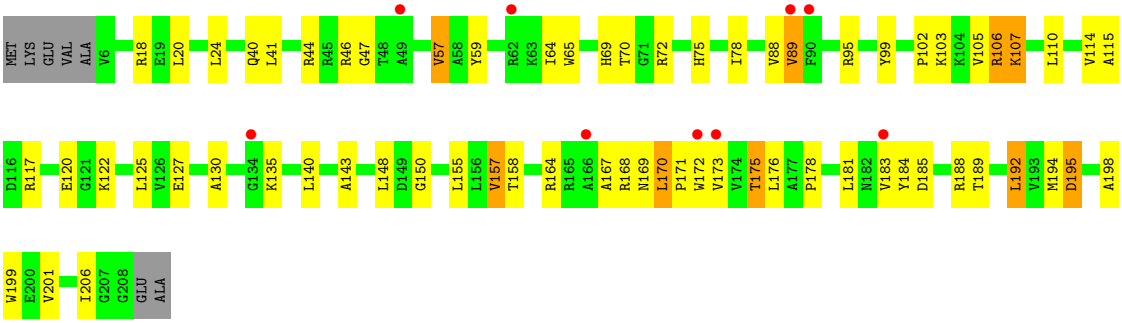
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



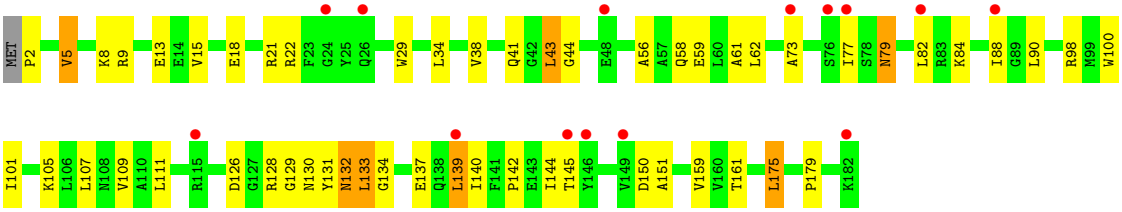
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



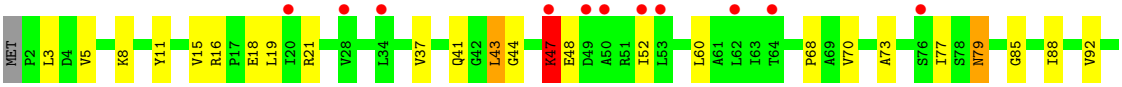
• Molecule 6: 50S ribosomal protein L5

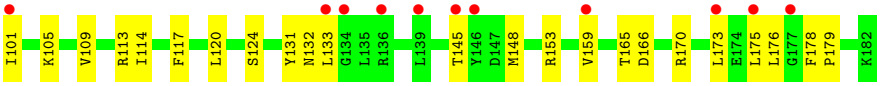
Chain 1G:



• Molecule 6: 50S ribosomal protein L5

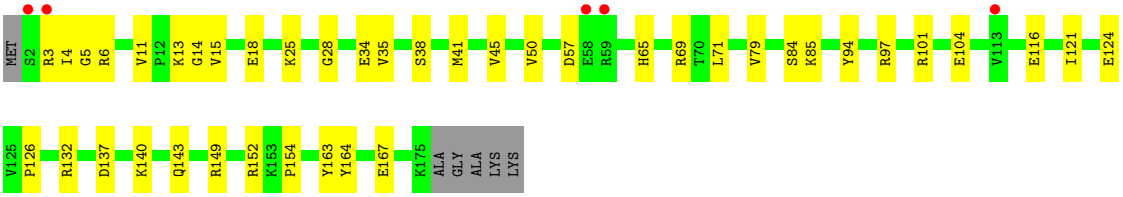
Chain 2G:





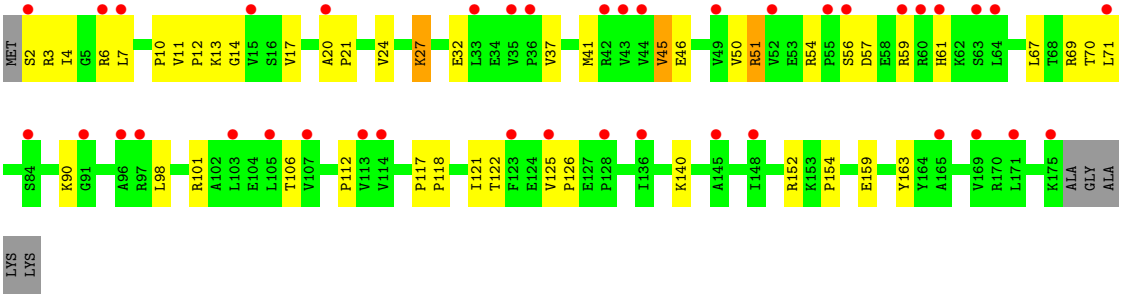
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



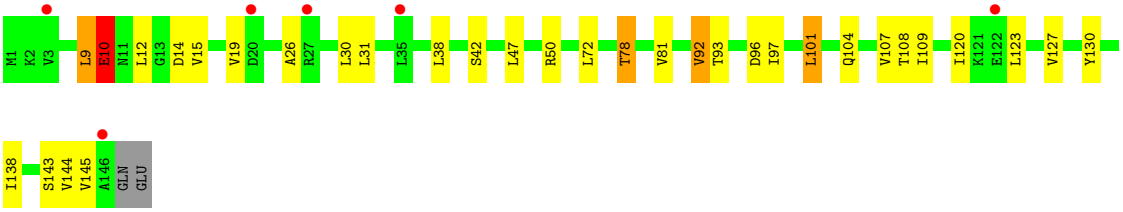
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



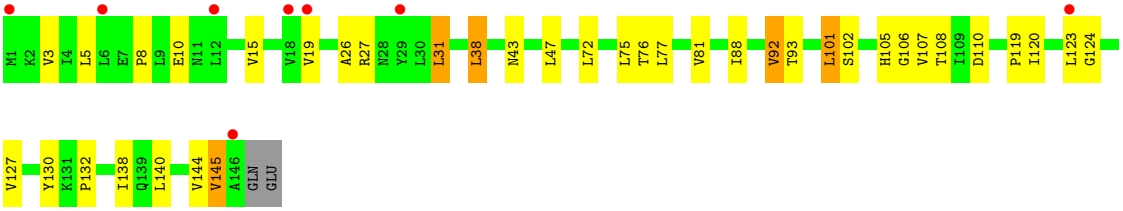
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



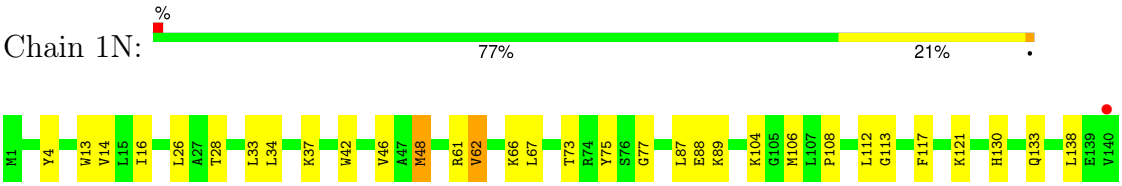
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



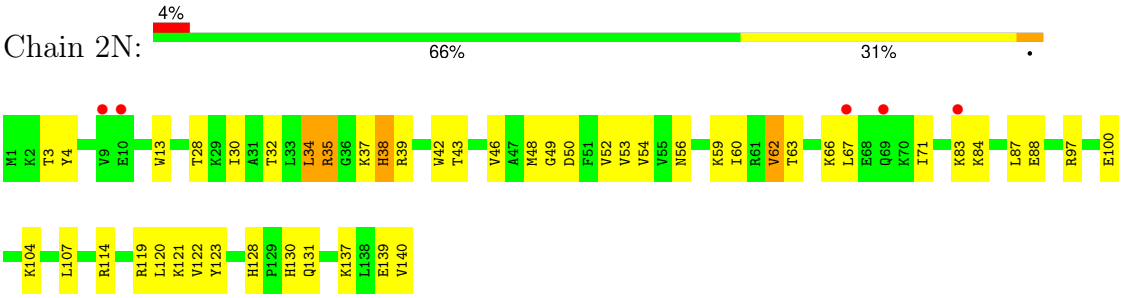
• Molecule 9: 50S ribosomal protein L13

Chain 1N:



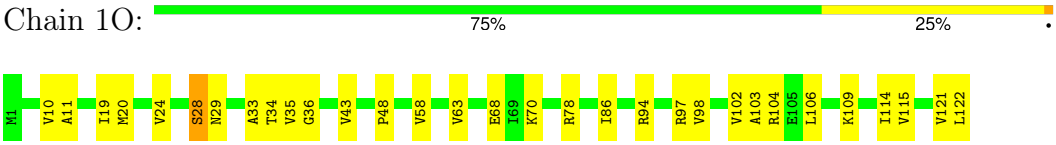
• Molecule 9: 50S ribosomal protein L13

Chain 2N:



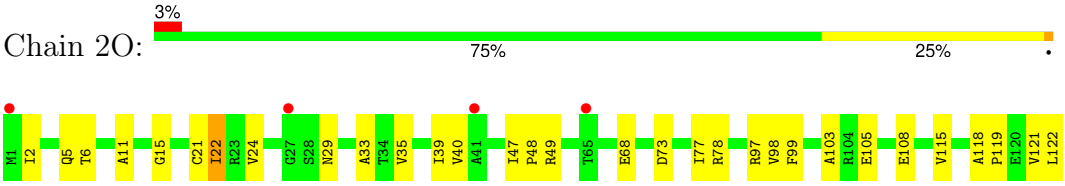
• Molecule 10: 50S ribosomal protein L14

Chain 1O:



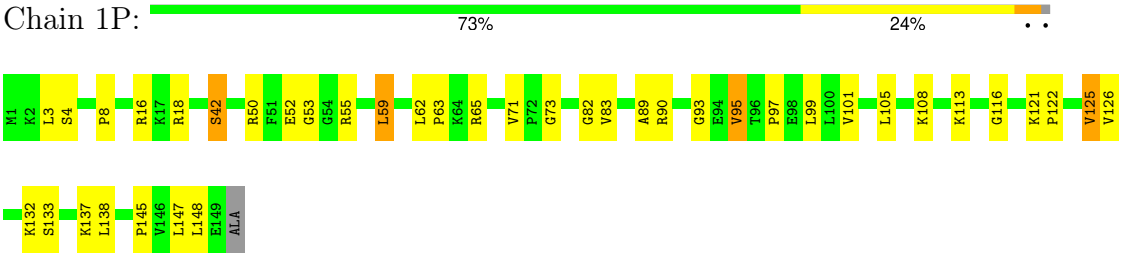
• Molecule 10: 50S ribosomal protein L14

Chain 2O:



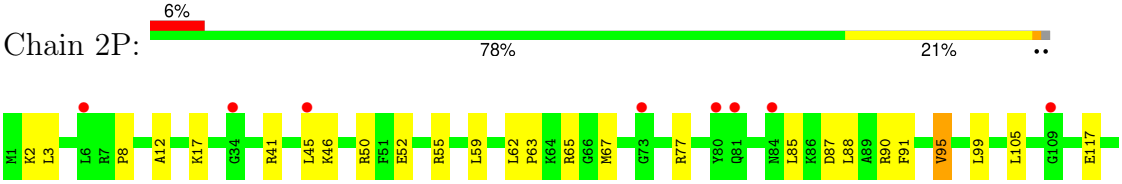
• Molecule 11: 50S ribosomal protein L15

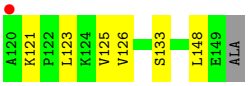
Chain 1P:



• Molecule 11: 50S ribosomal protein L15

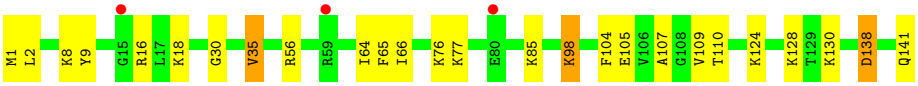
Chain 2P:





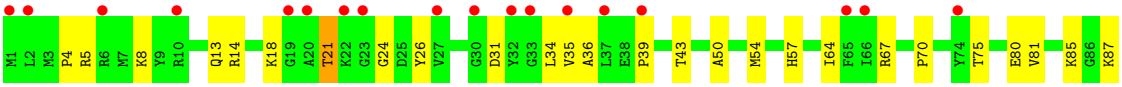
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



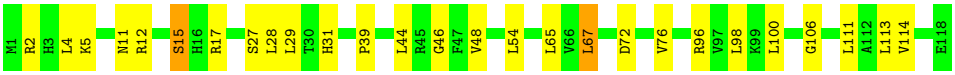
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



• Molecule 13: 50S ribosomal protein L17

Chain 1R:



• Molecule 13: 50S ribosomal protein L17

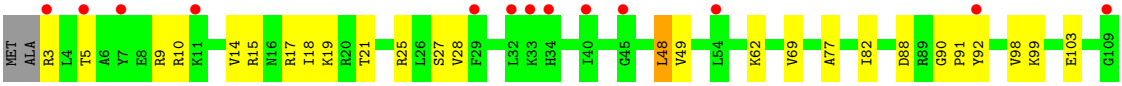
Chain 2R:

• Molecule 14: 50S ribosomal protein L18

Chain 1S:

• Molecule 14: 50S ribosomal protein L18

Chain 2S:

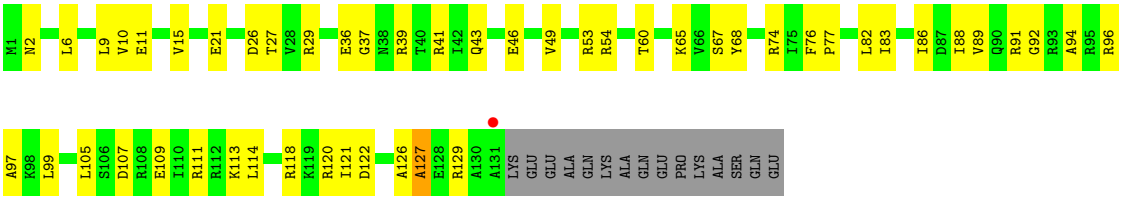


• Molecule 15: 50S ribosomal protein L19

Chain 1T:

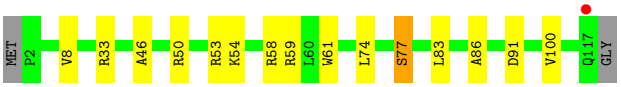
• Molecule 15: 50S ribosomal protein L19

Chain 2T:



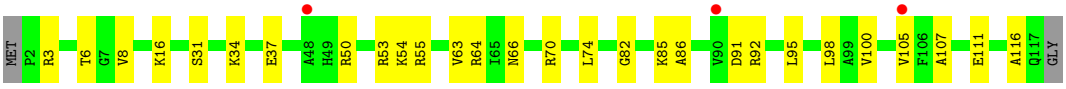
• Molecule 16: 50S ribosomal protein L20

Chain 1U:



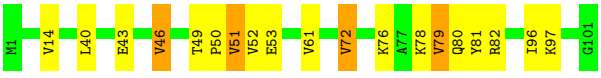
• Molecule 16: 50S ribosomal protein L20

Chain 2U:



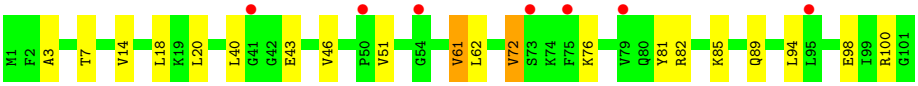
• Molecule 17: 50S ribosomal protein L21

Chain 1V:



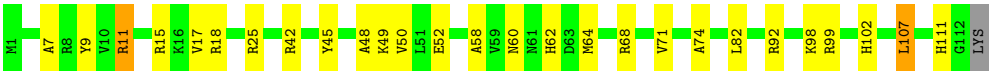
• Molecule 17: 50S ribosomal protein L21

Chain 2V:



• Molecule 18: 50S ribosomal protein L22

Chain 1W:



• Molecule 18: 50S ribosomal protein L22

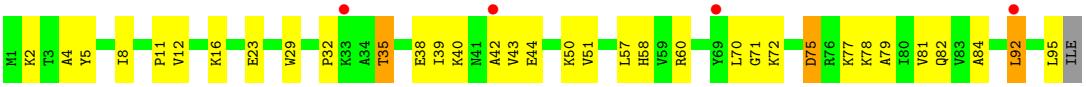
Chain 2W:

• Molecule 19: 50S ribosomal protein L23

Chain 1X:

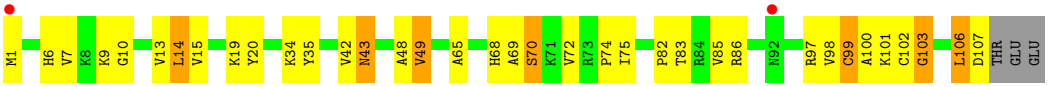
• Molecule 19: 50S ribosomal protein L23

Chain 2X:



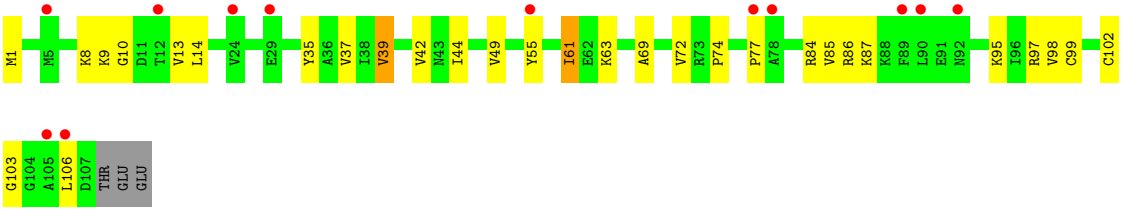
• Molecule 20: 50S ribosomal protein L24

Chain 1Y:



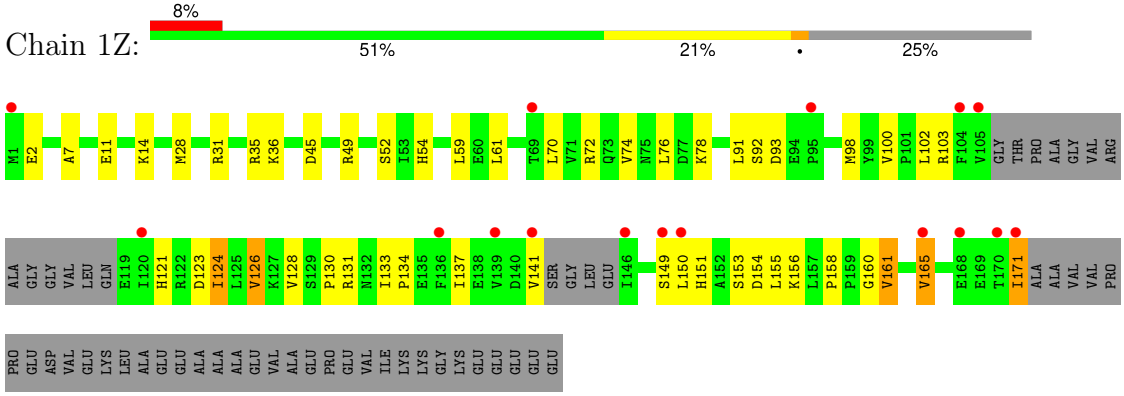
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



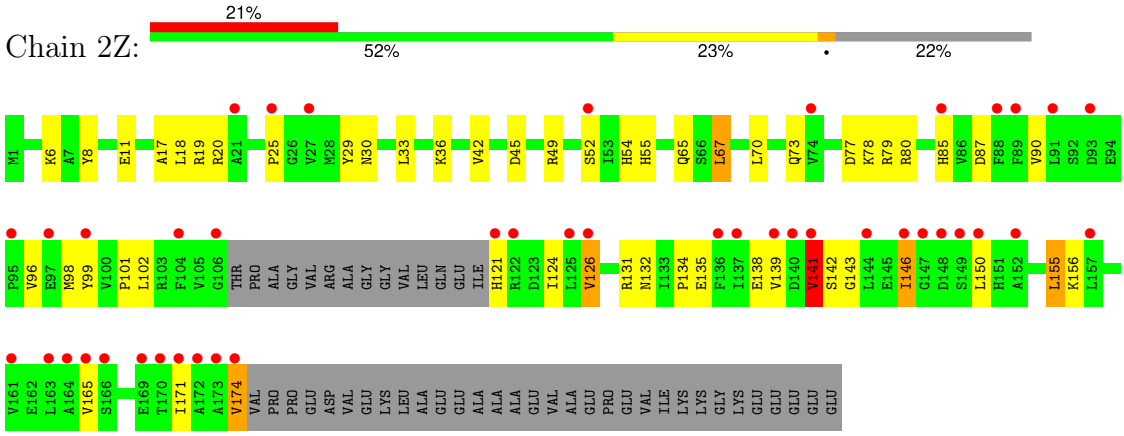
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



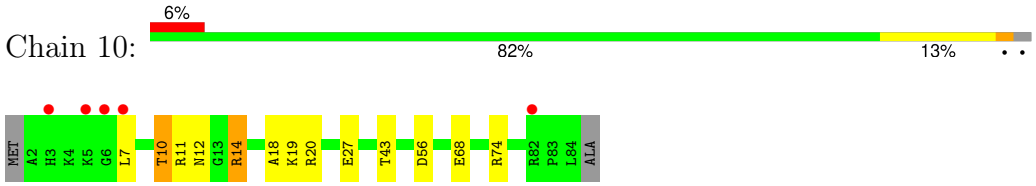
• Molecule 21: 50S ribosomal protein L25

Chain 2Z:



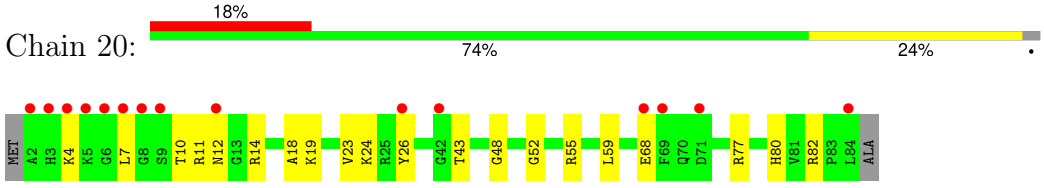
• Molecule 22: 50S ribosomal protein L27

Chain 10:



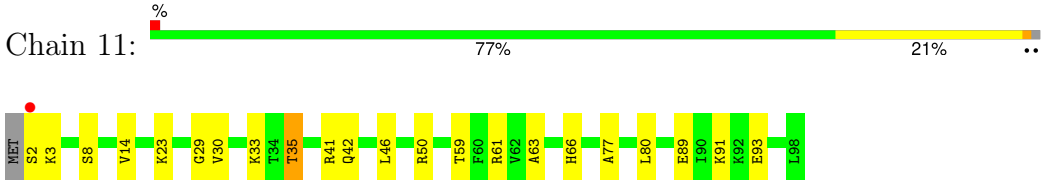
• Molecule 22: 50S ribosomal protein L27

Chain 20:



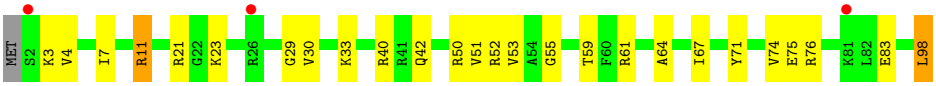
• Molecule 23: 50S ribosomal protein L28

Chain 11:



• Molecule 23: 50S ribosomal protein L28

Chain 21:

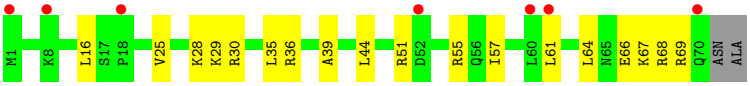


• Molecule 24: 50S ribosomal protein L29

Chain 12:

• Molecule 24: 50S ribosomal protein L29

Chain 22:

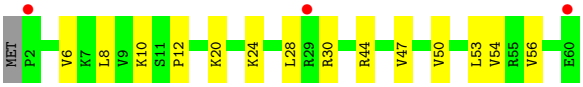


• Molecule 25: 50S ribosomal protein L30

Chain 13:

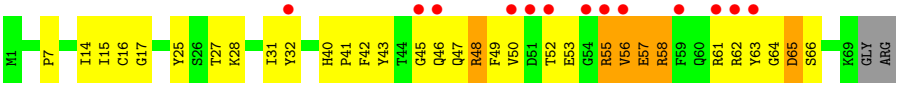
• Molecule 25: 50S ribosomal protein L30

Chain 23:



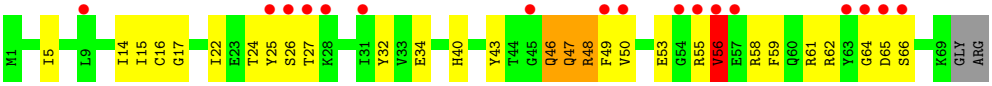
• Molecule 26: 50S ribosomal protein L31

Chain 14:



• Molecule 26: 50S ribosomal protein L31

Chain 24:

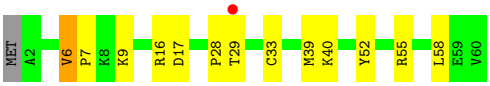


• Molecule 27: 50S ribosomal protein L32

Chain 15:

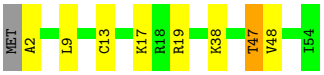
• Molecule 27: 50S ribosomal protein L32

Chain 25:



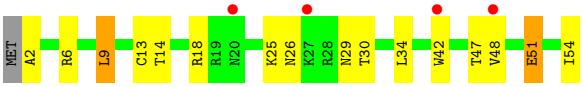
• Molecule 28: 50S ribosomal protein L33

Chain 16:



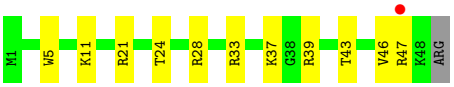
• Molecule 28: 50S ribosomal protein L33

Chain 26:



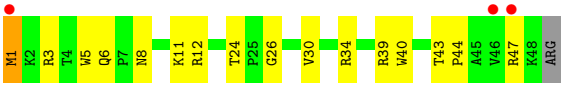
• Molecule 29: 50S ribosomal protein L34

Chain 17:



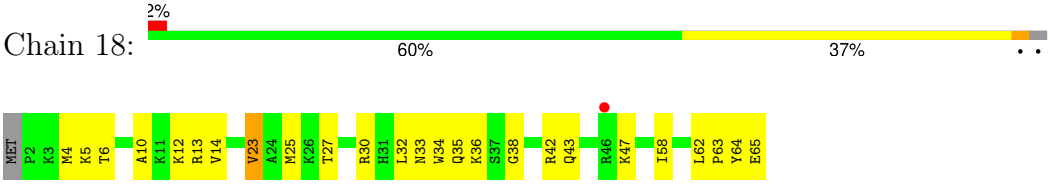
• Molecule 29: 50S ribosomal protein L34

Chain 27:



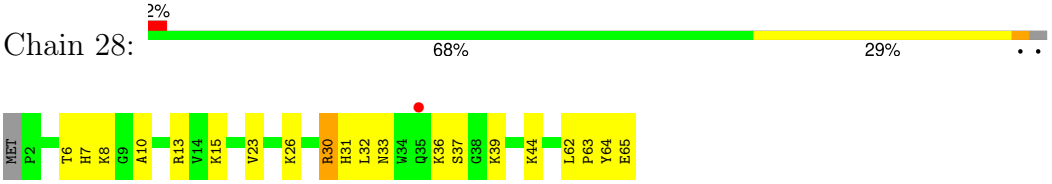
• Molecule 30: 50S ribosomal protein L35

Chain 18:



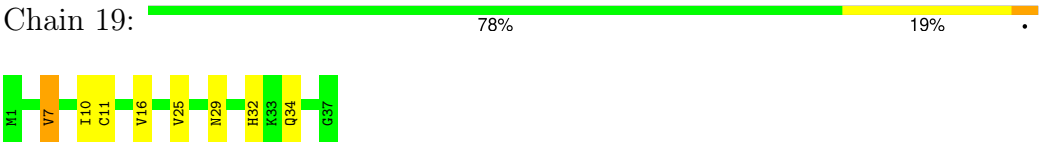
• Molecule 30: 50S ribosomal protein L35

Chain 28:



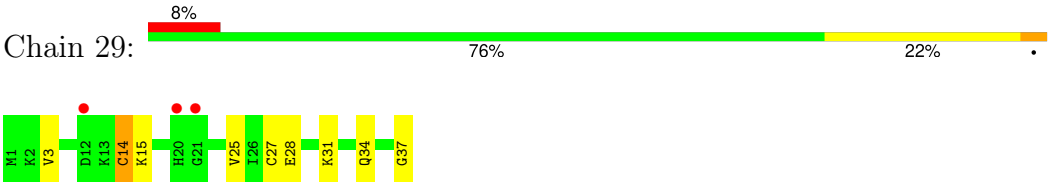
• Molecule 31: 50S ribosomal protein L36

Chain 19:



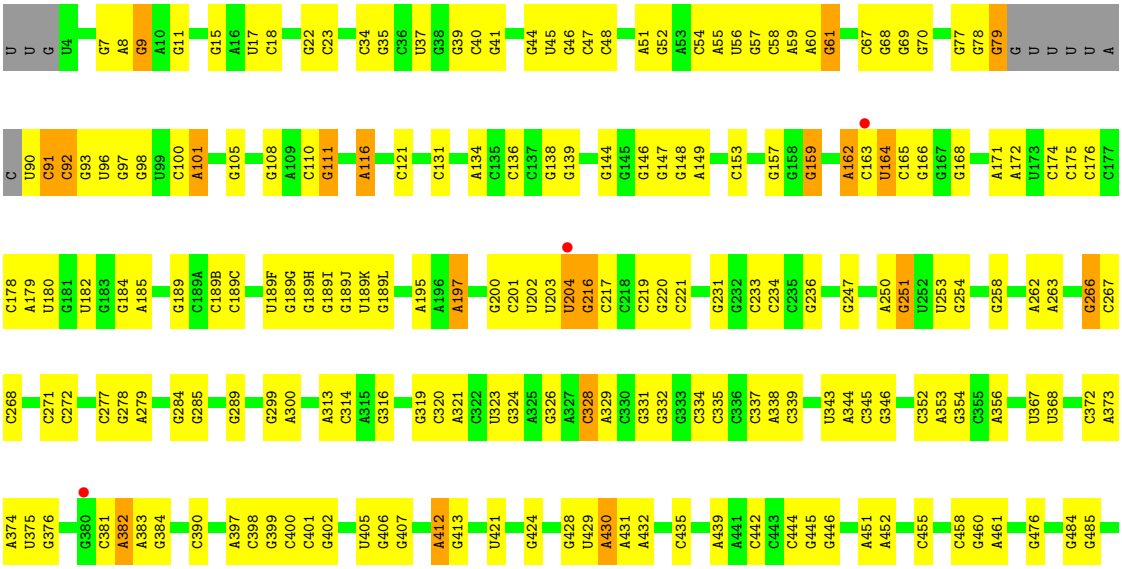
• Molecule 31: 50S ribosomal protein L36

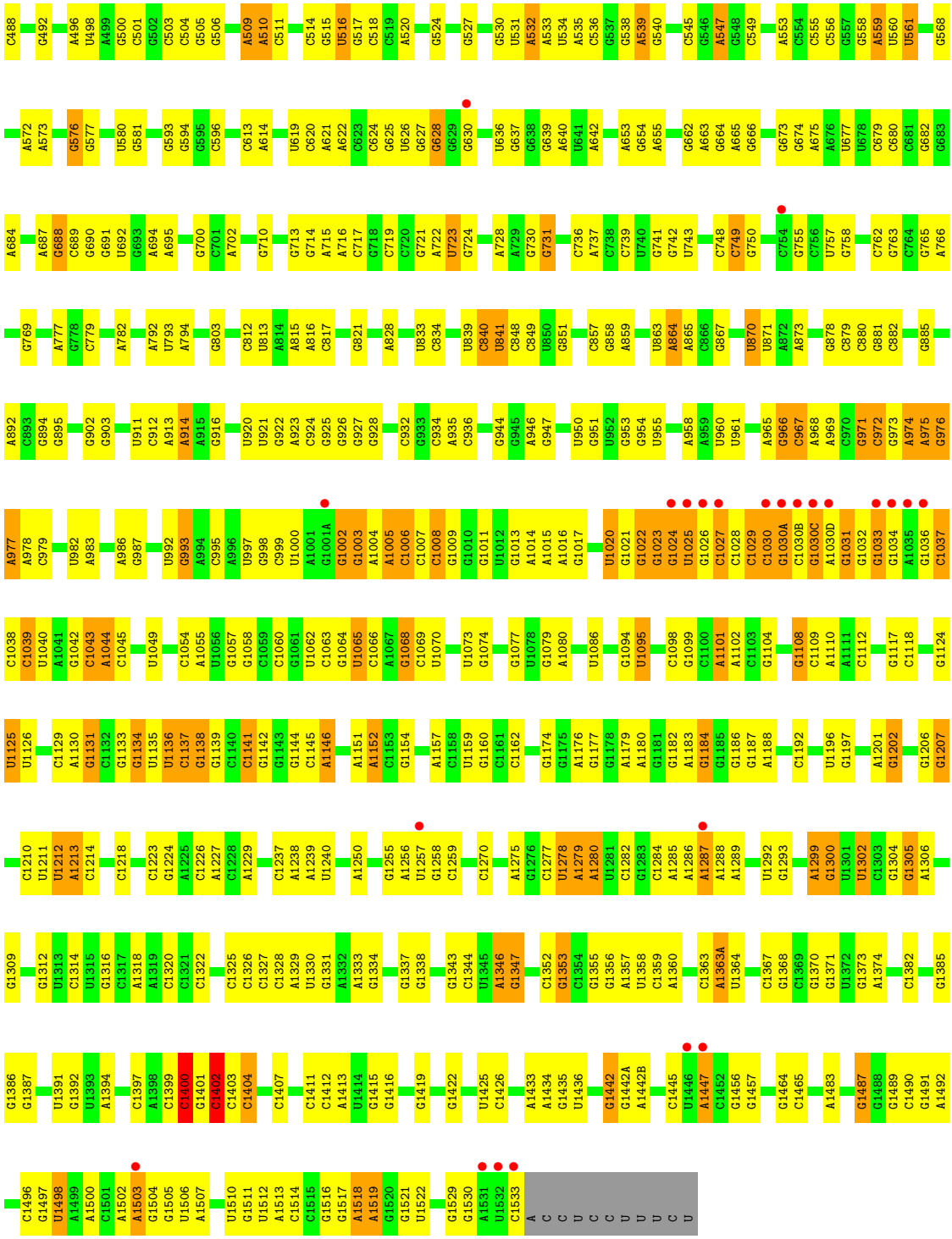
Chain 29:



• Molecule 32: 16S Ribosomal RNA

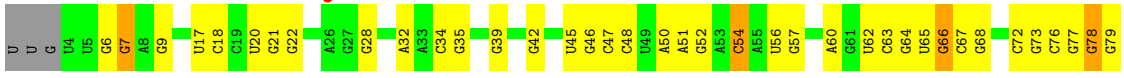
Chain 1a:

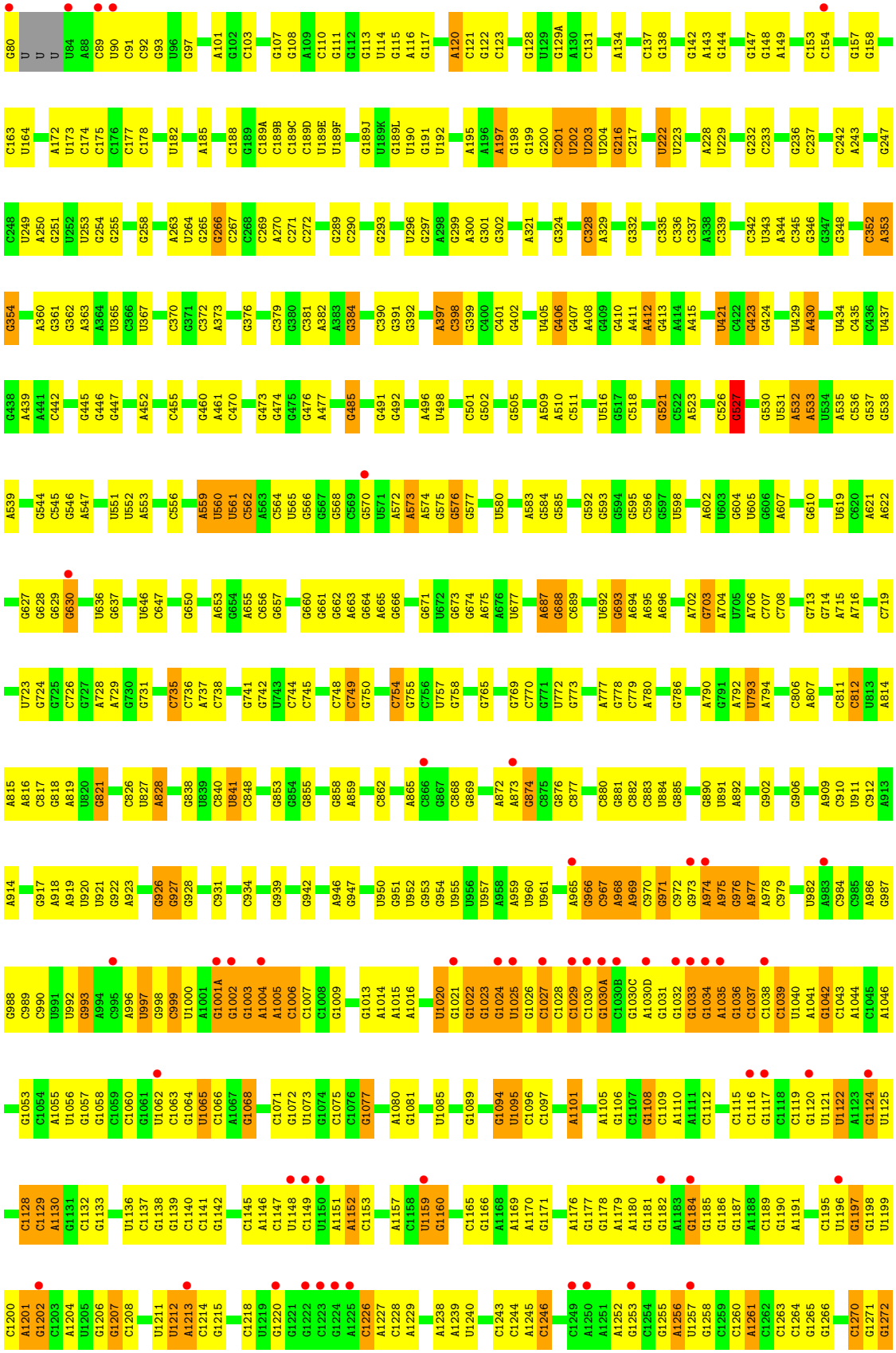




• Molecule 32: 16S Ribosomal RNA

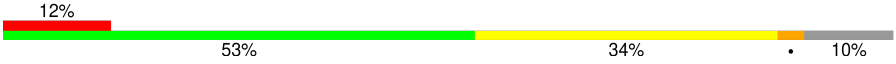
Chain 2a:

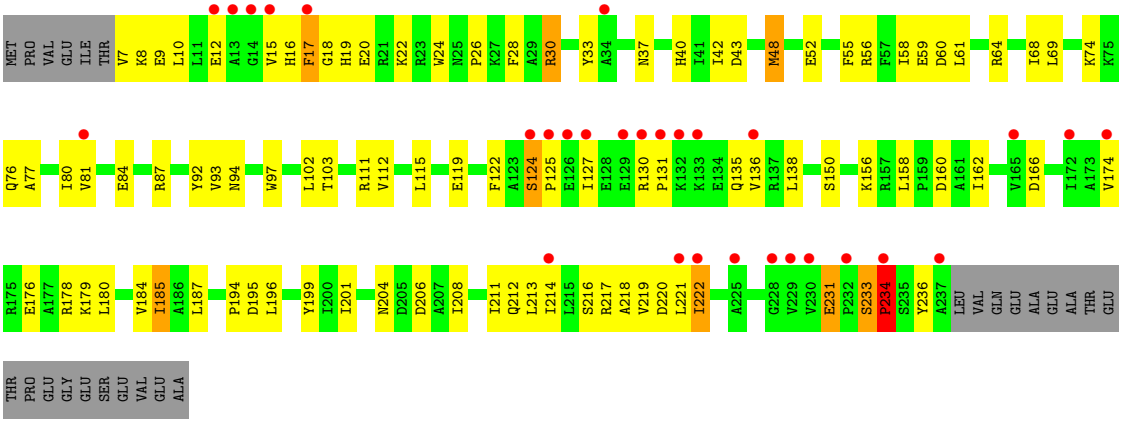




• Molecule 33: 30S ribosomal protein S2

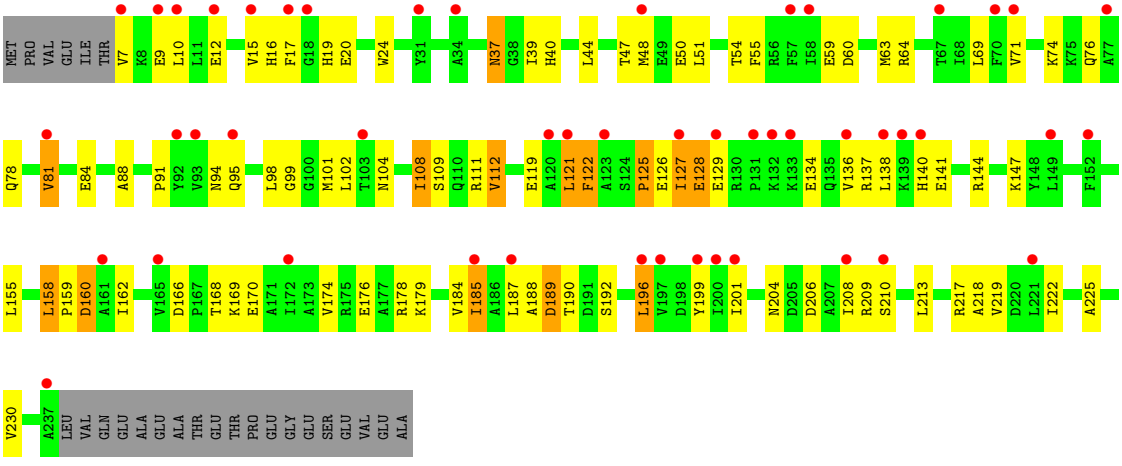
Chain 1b:





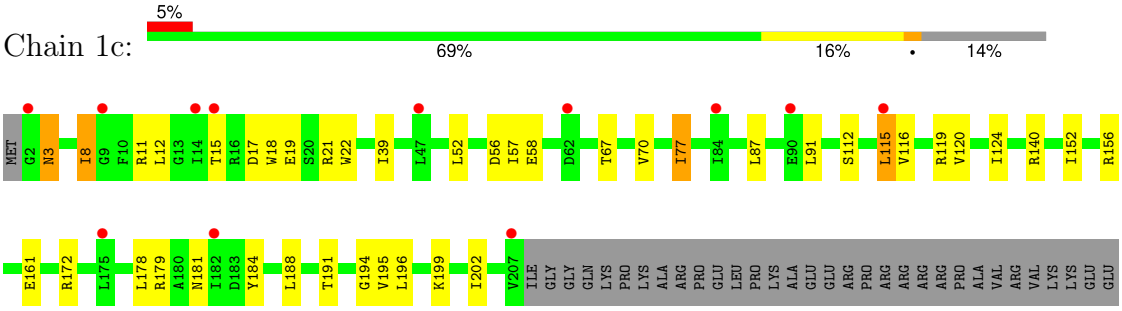
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



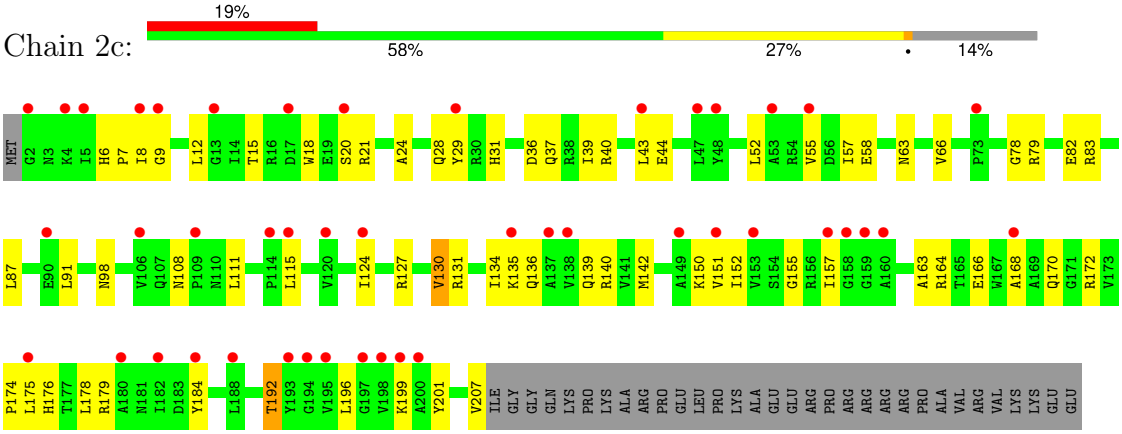
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



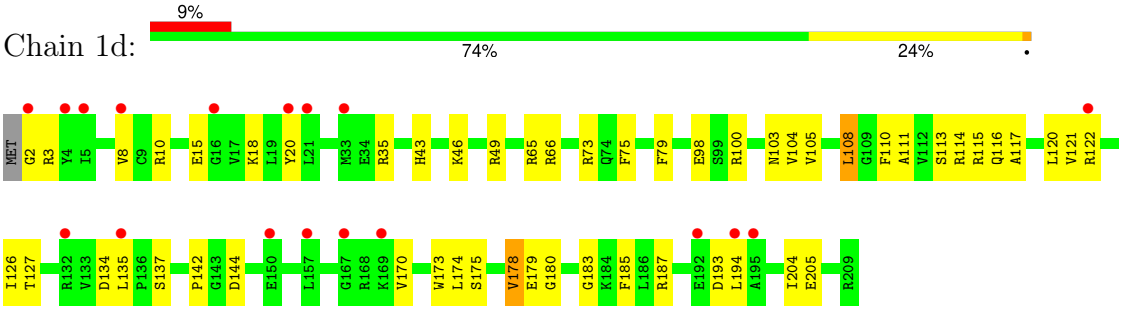
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



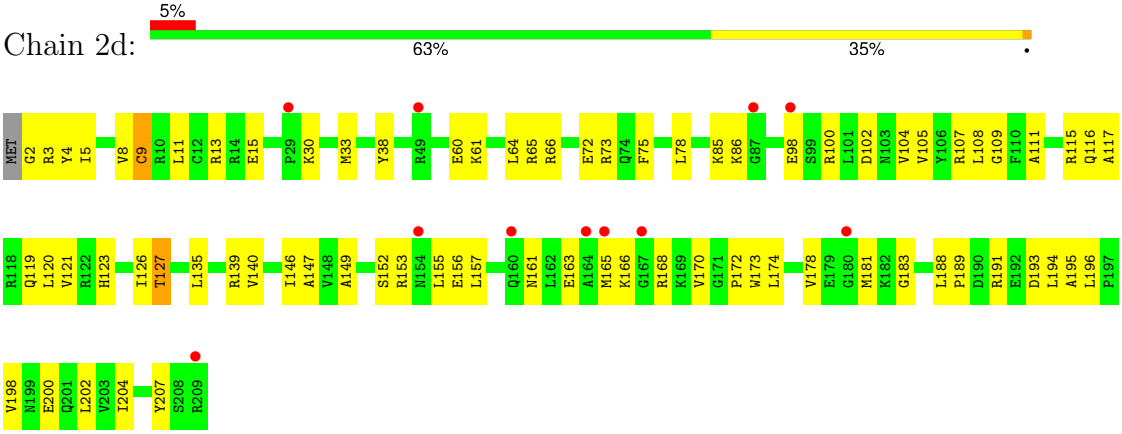
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



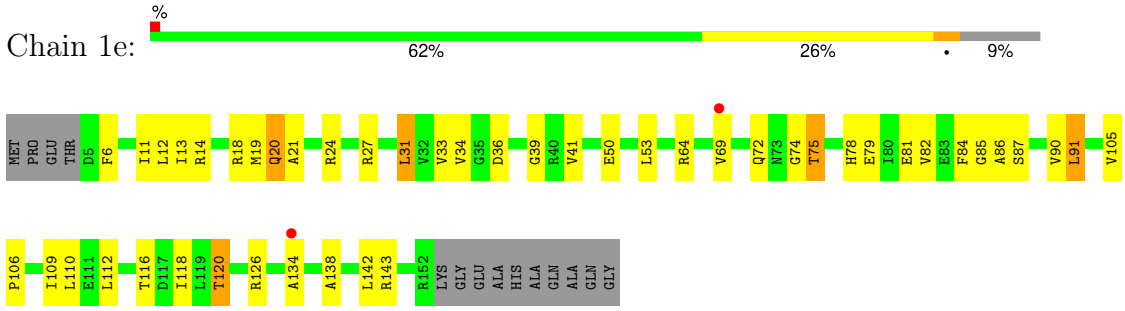
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



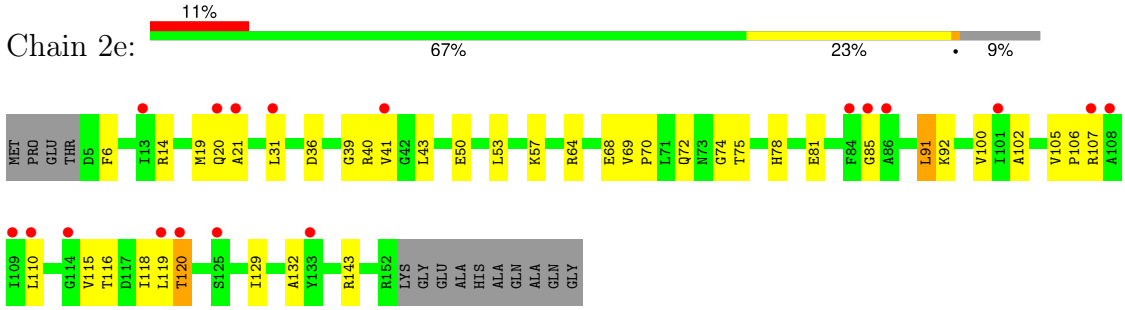
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



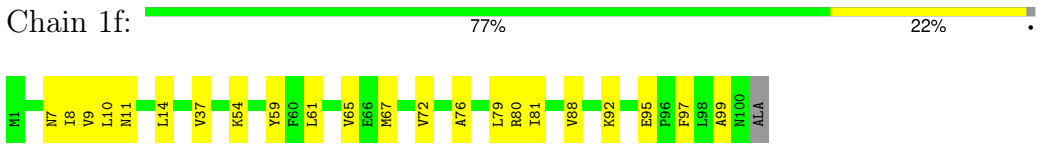
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



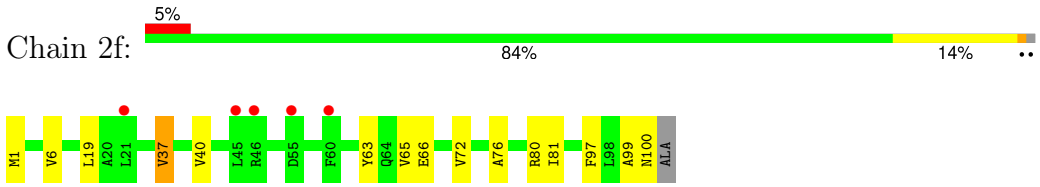
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



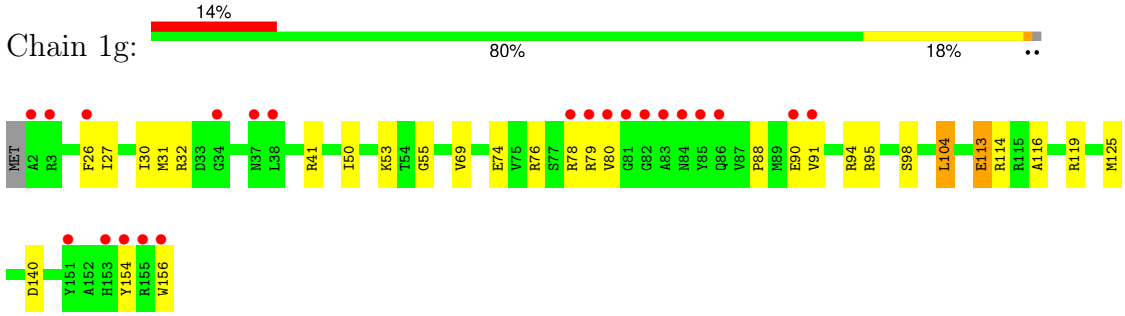
• Molecule 37: 30S ribosomal protein S6

Chain 2f:



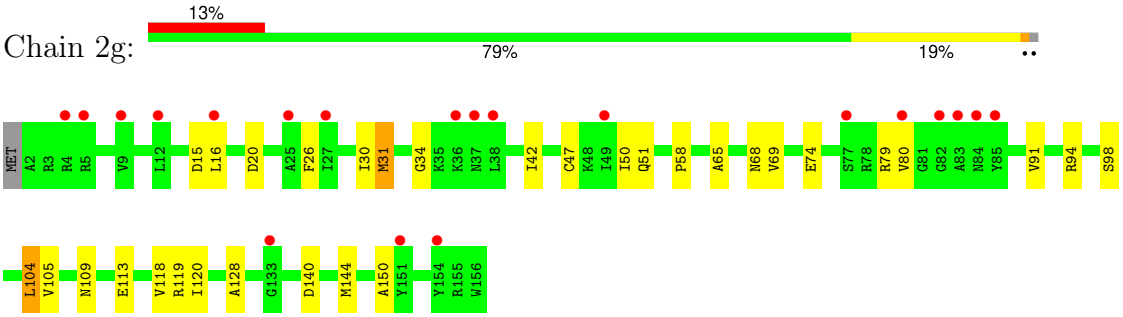
• Molecule 38: 30S ribosomal protein S7

Chain 1g:



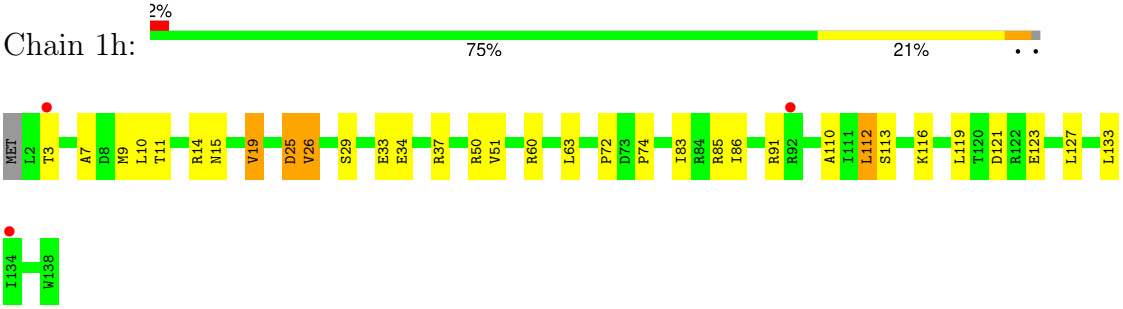
• Molecule 38: 30S ribosomal protein S7

Chain 2g:



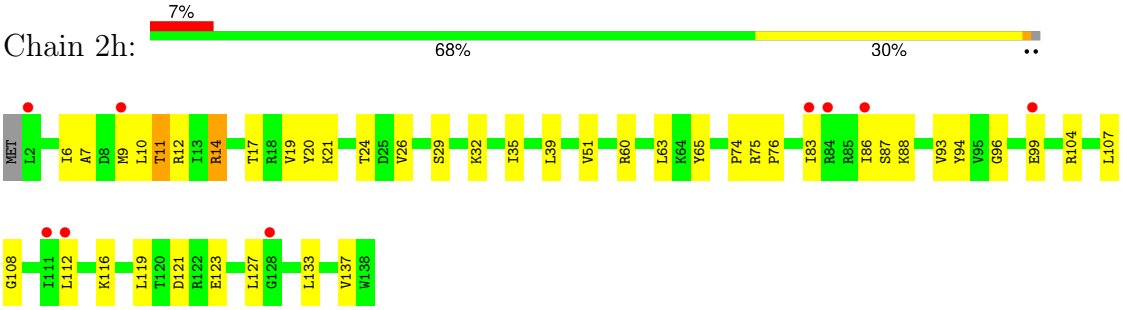
• Molecule 39: 30S ribosomal protein S8

Chain 1h:



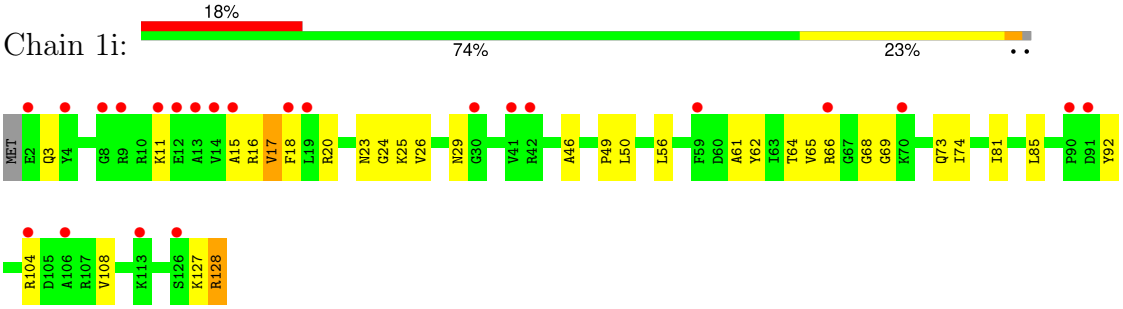
• Molecule 39: 30S ribosomal protein S8

Chain 2h:



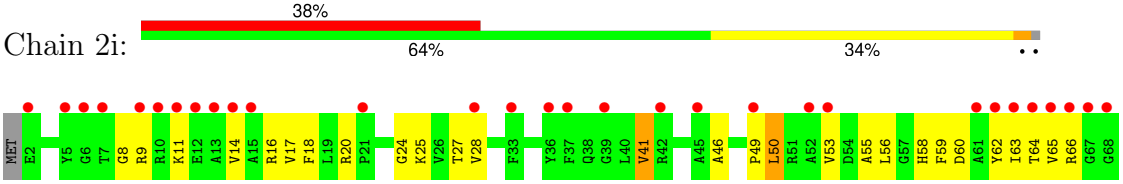
• Molecule 40: 30S ribosomal protein S9

Chain 1i:



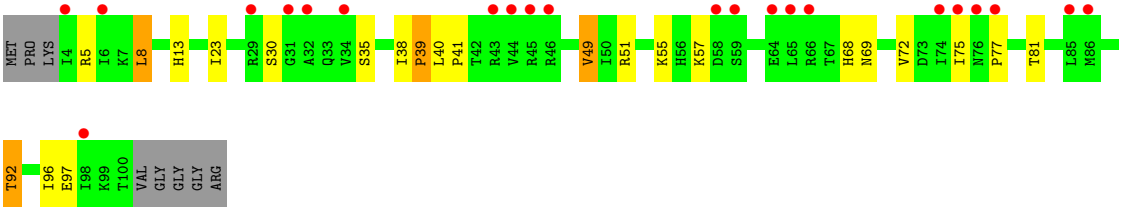
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



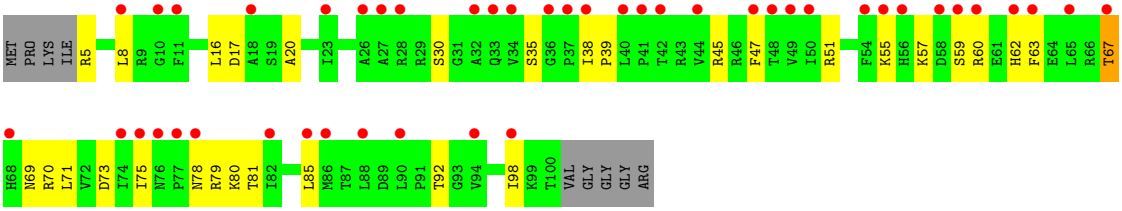
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



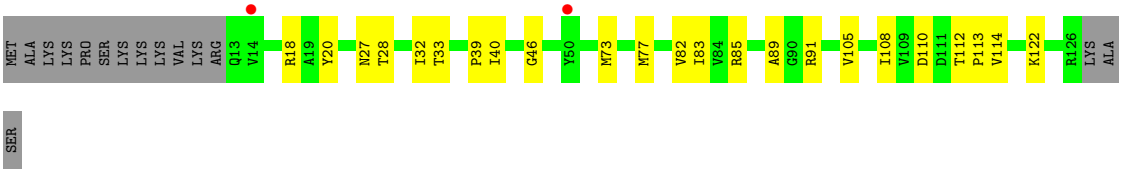
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



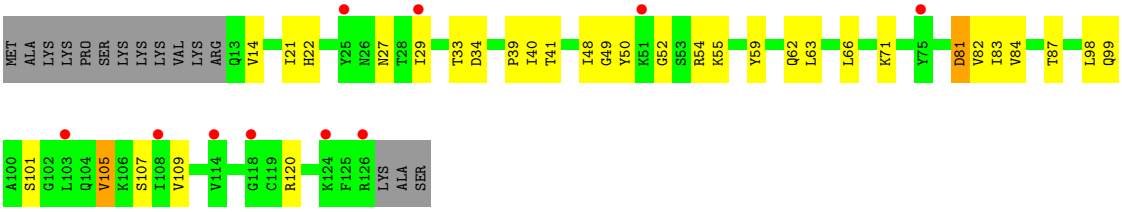
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



• Molecule 42: 30S ribosomal protein S11

Chain 2k:

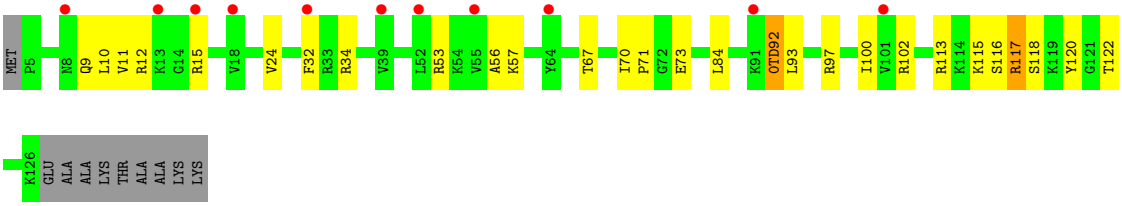


• Molecule 43: 30S ribosomal protein S12

Chain 1l:

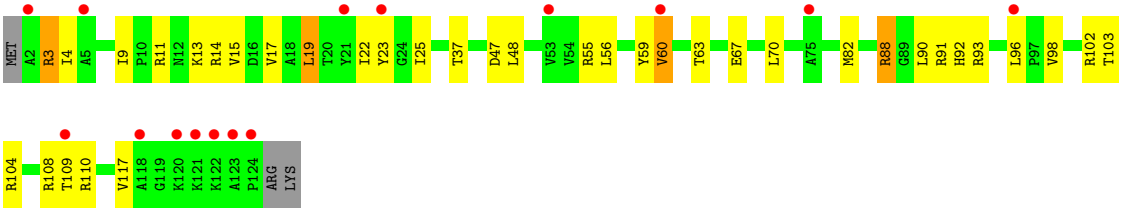
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



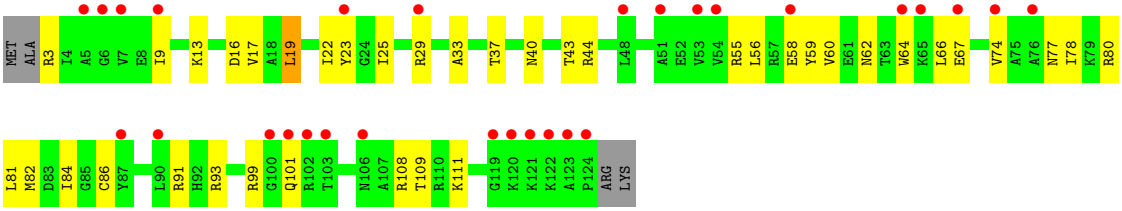
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



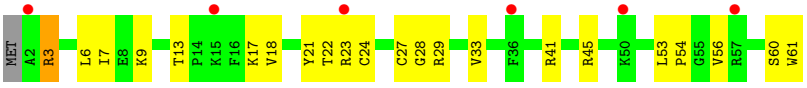
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



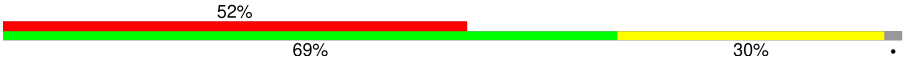
• Molecule 45: 30S ribosomal protein S14 type Z

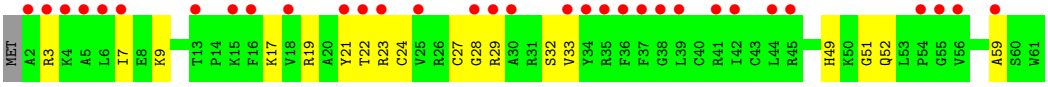
Chain 1n:



• Molecule 45: 30S ribosomal protein S14 type Z

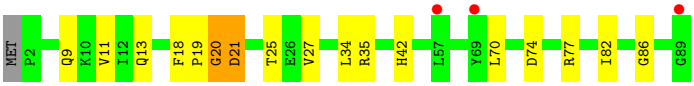
Chain 2n:





• Molecule 46: 30S ribosomal protein S15

Chain 1o:

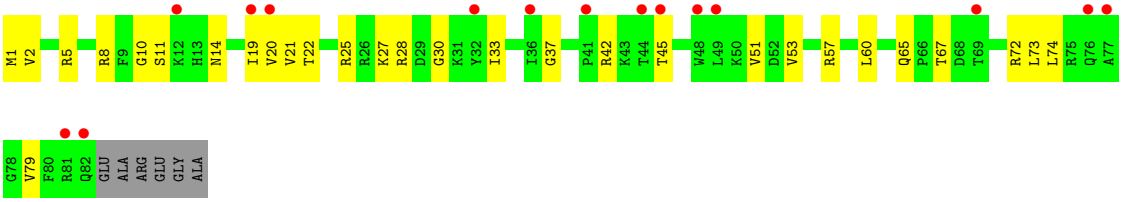


• Molecule 46: 30S ribosomal protein S15

Chain 2o:

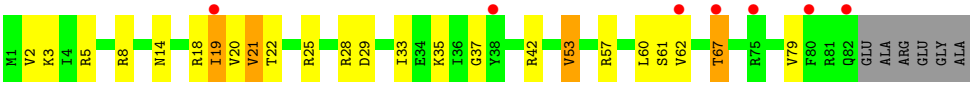
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



• Molecule 47: 30S ribosomal protein S16

Chain 2p:

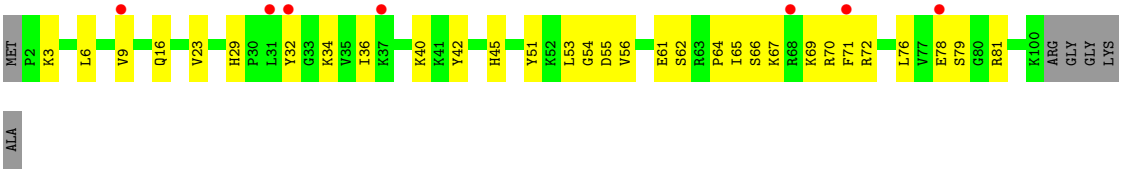


• Molecule 48: 30S ribosomal protein S17

Chain 1q:

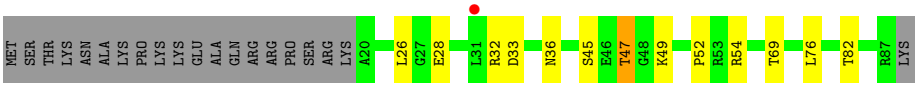
• Molecule 48: 30S ribosomal protein S17

Chain 2q:



• Molecule 49: 30S ribosomal protein S18

Chain 1r:



• Molecule 49: 30S ribosomal protein S18

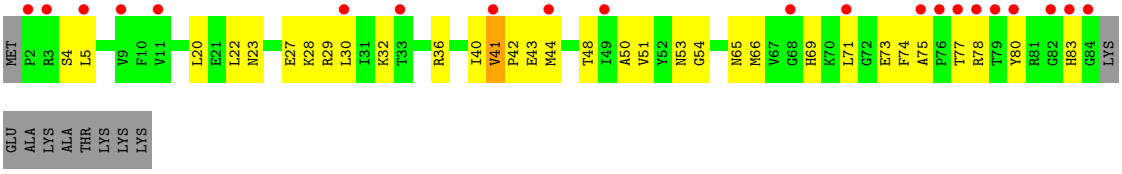
Chain 2r:

• Molecule 50: 30S ribosomal protein S19

Chain 1s:

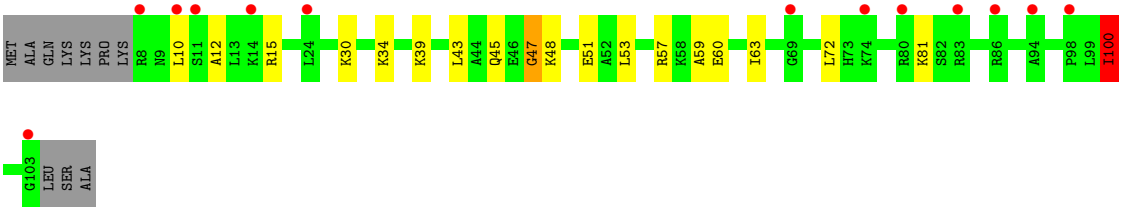
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



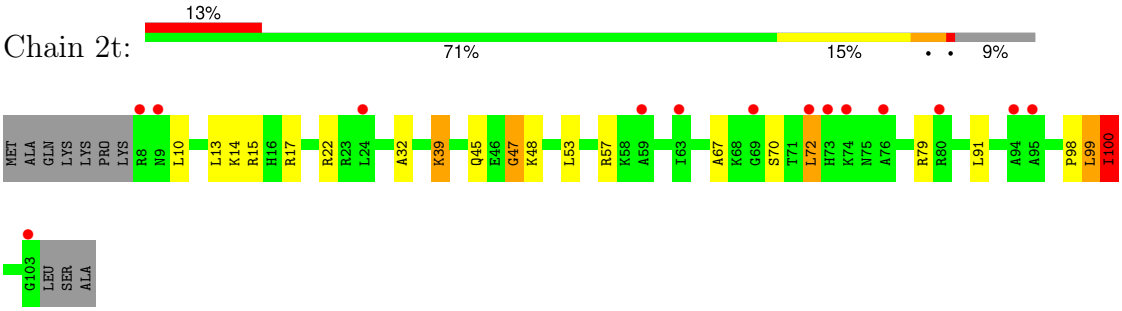
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



• Molecule 51: 30S ribosomal protein S20

Chain 2t:

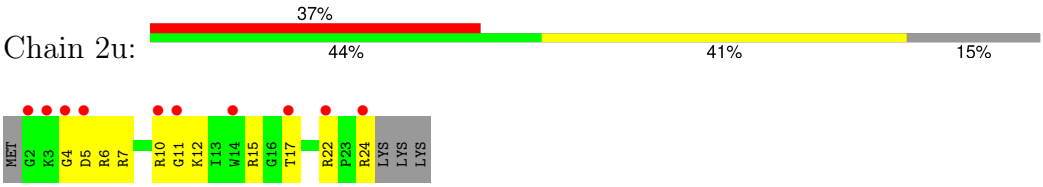


• Molecule 52: 30S ribosomal protein Thx

Chain 1u:

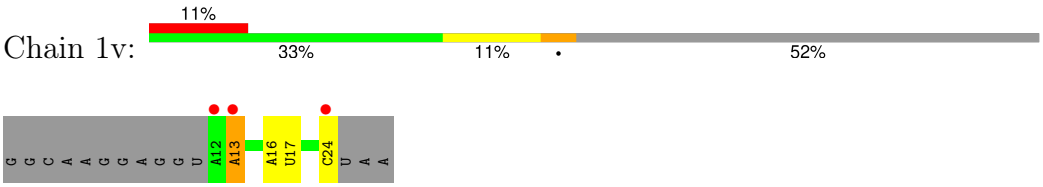
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



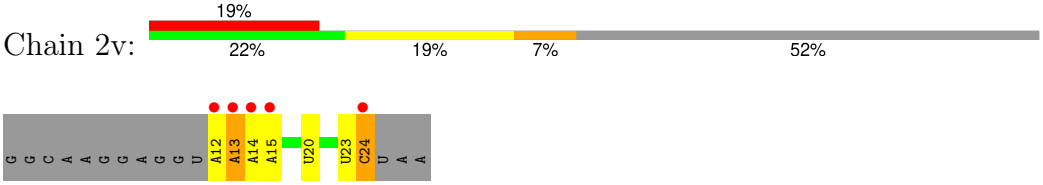
• Molecule 53: mRNA

Chain 1v:



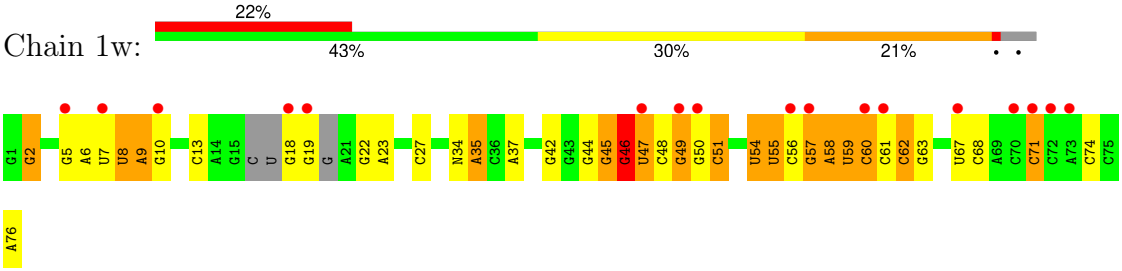
• Molecule 53: mRNA

Chain 2v:



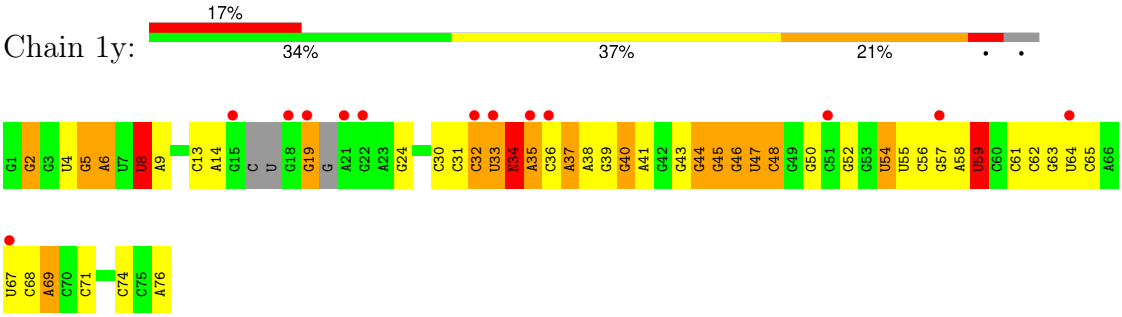
• Molecule 54: A-site and E-site tRNAs

Chain 1w:



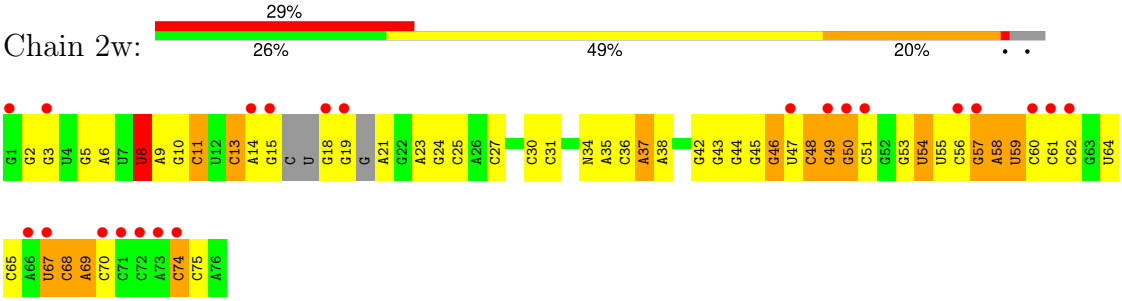
• Molecule 54: A-site and E-site tRNAs

Chain 1y:



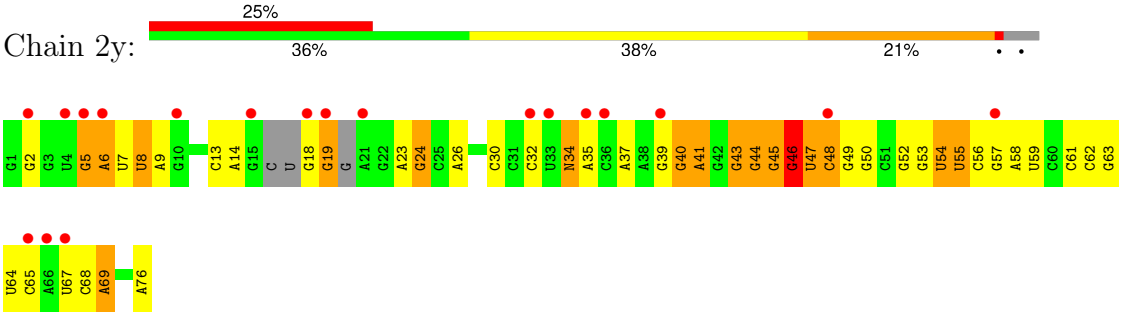
• Molecule 54: A-site and E-site tRNAs

Chain 2w:



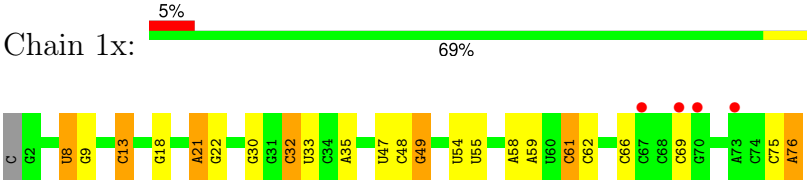
• Molecule 54: A-site and E-site tRNAs

Chain 2y:



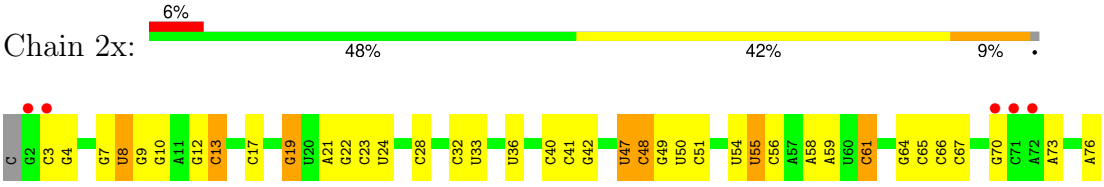
• Molecule 55: P-site tRNA

Chain 1x:



• Molecule 55: P-site tRNA

Chain 2x:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.02Å 447.76Å 618.39Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	254.43 – 2.75 254.43 – 2.75	Depositor EDS
% Data completeness (in resolution range)	99.5 (254.43-2.75) 99.5 (254.43-2.75)	Depositor EDS
R_{merge}	0.21	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.16 (at 2.73Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.235 , 0.284 0.237 , 0.282	Depositor DCC
R_{free} test set	74125 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	52.4	Xtriage
Anisotropy	0.169	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.32 , 60.0	EDS
L-test for twinning[2]	$< \|L\| > = 0.39$, $< L^2 > = 0.21$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.88	EDS
Total number of atoms	300702	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 1.66% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 5MC, 4OC, 5MU, 2MG, OMG, 0TD, 4SU, OMU, PSU, OMC, UR3, 2MA, MA6, MG, 7MG, LUJ, ZN, CM0, 6MZ, SF4, K, M2G

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	0.19	0/69011	0.36	0/107720
1	2A	0.15	0/67295	0.32	0/105042
2	1B	0.16	0/2882	0.32	0/4494
2	2B	0.13	0/2879	0.30	0/4487
3	1D	0.18	0/2186	0.43	0/2944
3	2D	0.16	0/2186	0.42	0/2944
4	1E	0.20	0/1592	0.42	0/2149
4	2E	0.15	0/1592	0.39	0/2149
5	1F	0.17	0/1619	0.40	0/2193
5	2F	0.15	0/1615	0.37	0/2188
6	1G	0.16	0/1448	0.38	0/1957
6	2G	0.15	0/1453	0.39	0/1963
7	1H	0.16	0/1356	0.37	0/1834
7	2H	0.14	0/1356	0.32	0/1834
8	1I	0.14	0/1112	0.35	0/1514
8	2I	0.13	0/1079	0.34	0/1475
9	1N	0.17	0/1144	0.38	0/1543
9	2N	0.15	0/1144	0.35	0/1543
10	1O	0.18	0/943	0.38	0/1269
10	2O	0.14	0/943	0.36	0/1269
11	1P	0.19	0/1152	0.41	0/1533
11	2P	0.16	0/1152	0.38	0/1533
12	1Q	0.20	0/1143	0.38	0/1527
12	2Q	0.14	0/1143	0.35	0/1527
13	1R	0.21	0/982	0.40	0/1312
13	2R	0.15	0/982	0.39	0/1312
14	1S	0.14	0/883	0.38	0/1176
14	2S	0.14	0/880	0.37	0/1172
15	1T	0.19	0/1105	0.48	1/1477 (0.1%)
15	2T	0.14	0/1097	0.38	0/1468
16	1U	0.20	0/977	0.40	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.15	0/977	0.37	0/1301
17	1V	0.19	0/782	0.39	0/1049
17	2V	0.14	0/782	0.35	0/1049
18	1W	0.19	0/897	0.37	0/1205
18	2W	0.14	0/897	0.34	0/1205
19	1X	0.19	0/764	0.45	0/1025
19	2X	0.14	0/764	0.37	0/1025
20	1Y	0.24	0/819	0.42	0/1095
20	2Y	0.14	0/819	0.39	0/1095
21	1Z	0.17	0/1267	0.44	0/1717
21	2Z	0.17	0/1299	0.41	0/1763
22	10	0.18	0/662	0.43	0/881
22	20	0.15	0/662	0.39	0/881
23	11	0.16	0/762	0.34	0/1014
23	21	0.15	0/762	0.37	0/1014
24	12	0.20	0/590	0.42	1/781 (0.1%)
24	22	0.14	0/590	0.34	0/781
25	13	0.18	0/474	0.39	0/635
25	23	0.13	0/469	0.35	0/630
26	14	0.21	0/565	0.54	0/761
26	24	0.17	0/545	0.52	0/737
27	15	0.22	0/469	0.44	0/635
27	25	0.18	0/469	0.44	0/635
28	16	0.19	0/460	0.40	0/613
28	26	0.16	0/456	0.41	0/608
29	17	0.19	0/426	0.45	0/561
29	27	0.18	0/426	0.45	0/561
30	18	0.19	0/525	0.37	0/691
30	28	0.14	0/525	0.35	0/691
31	19	0.18	0/310	0.51	0/407
31	29	0.13	0/310	0.36	0/407
32	1a	0.15	0/35795	0.32	0/55864
32	2a	0.14	0/35886	0.32	0/56005
33	1b	0.27	0/1881	0.51	2/2542 (0.1%)
33	2b	0.17	0/1860	0.42	0/2518
34	1c	0.15	0/1572	0.38	0/2126
34	2c	0.14	0/1566	0.36	0/2119
35	1d	0.18	0/1685	0.37	0/2262
35	2d	0.16	0/1704	0.38	0/2284
36	1e	0.15	0/1145	0.40	0/1543
36	2e	0.16	0/1149	0.42	0/1548
37	1f	0.13	0/823	0.33	0/1115
37	2f	0.15	0/829	0.35	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.15	0/1250	0.36	0/1679
38	2g	0.14	0/1254	0.35	0/1683
39	1h	0.14	0/1108	0.36	0/1494
39	2h	0.13	0/1108	0.37	0/1494
40	1i	0.16	0/1002	0.43	0/1346
40	2i	0.17	0/997	0.46	1/1343 (0.1%)
41	1j	0.14	0/722	0.37	0/982
41	2j	0.19	0/727	0.42	0/988
42	1k	0.13	0/844	0.32	0/1145
42	2k	0.15	0/848	0.33	0/1149
43	1l	0.15	0/937	0.36	0/1260
43	2l	0.16	0/937	0.41	0/1260
44	1m	0.15	0/969	0.39	0/1302
44	2m	0.16	0/961	0.38	0/1291
45	1n	0.15	0/501	0.37	0/664
45	2n	0.17	0/501	0.39	0/664
46	1o	0.15	0/739	0.35	0/985
46	2o	0.12	0/739	0.34	0/985
47	1p	0.13	0/697	0.41	0/939
47	2p	0.14	0/693	0.40	0/935
48	1q	0.13	0/836	0.37	0/1117
48	2q	0.15	0/836	0.36	0/1117
49	1r	0.14	0/560	0.37	0/746
49	2r	0.14	0/560	0.34	0/746
50	1s	0.20	0/667	0.45	0/900
50	2s	0.20	0/661	0.50	0/893
51	1t	0.16	0/730	0.44	0/965
51	2t	0.17	0/729	0.45	0/965
52	1u	0.15	0/203	0.37	0/266
52	2u	0.15	0/203	0.40	0/266
53	1v	0.18	0/308	0.31	0/477
53	2v	0.16	0/308	0.33	0/477
54	1w	0.30	2/1600 (0.1%)	0.39	0/2482
54	1y	0.30	3/1600 (0.2%)	0.38	0/2482
54	2w	0.22	0/1600	0.37	0/2482
54	2y	0.22	1/1600 (0.1%)	0.35	0/2482
55	1x	0.21	0/1725	0.35	0/2689
55	2x	0.20	0/1725	0.35	0/2689
All	All	0.17	6/316735 (0.0%)	0.35	5/474180 (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
26	14	0	1
33	1b	0	1
All	All	0	2

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1y	8	4SU	O3'-P	5.31	1.61	1.56
54	1w	59	U	C4-O4	5.27	1.34	1.23
54	1y	59	U	C4-O4	5.21	1.34	1.23
54	2y	8	4SU	O3'-P	5.19	1.61	1.56
54	1y	32	C	C4-N4	-5.08	1.23	1.33
54	1w	60	C	C4-N4	-5.07	1.23	1.33

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	2i	53	VAL	N-CA-C	-7.39	105.35	112.29
24	12	41	ILE	N-CA-C	-6.21	105.66	112.80
15	1T	89	VAL	N-CA-C	-5.61	106.86	113.42
33	1b	231	GLU	CA-C-N	-5.37	114.25	119.78
33	1b	231	GLU	C-N-CA	-5.37	114.25	119.78

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	14	63	TYR	Peptide
33	1b	124	SER	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1A	61852	0	31189	746	0
1	2A	60322	0	30428	786	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	1B	2577	0	1305	25	0
2	2B	2575	0	1303	29	0
3	1D	2136	0	2218	52	0
3	2D	2136	0	2218	54	0
4	1E	1559	0	1618	41	0
4	2E	1559	0	1618	37	0
5	1F	1584	0	1625	28	0
5	2F	1580	0	1619	43	0
6	1G	1423	0	1436	39	0
6	2G	1428	0	1438	30	0
7	1H	1330	0	1407	26	0
7	2H	1330	0	1407	28	0
8	1I	1097	0	1140	25	0
8	2I	1064	0	1082	17	0
9	1N	1117	0	1184	19	0
9	2N	1117	0	1184	28	0
10	1O	933	0	996	22	0
10	2O	933	0	996	20	0
11	1P	1135	0	1212	33	0
11	2P	1135	0	1212	25	0
12	1Q	1122	0	1179	18	0
12	2Q	1122	0	1179	32	0
13	1R	968	0	1033	19	0
13	2R	968	0	1033	28	0
14	1S	873	0	927	18	0
14	2S	870	0	923	20	0
15	1T	1091	0	1151	29	0
15	2T	1083	0	1136	38	0
16	1U	959	0	1019	13	0
16	2U	959	0	1019	20	0
17	1V	771	0	830	12	0
17	2V	771	0	830	12	0
18	1W	886	0	940	19	0
18	2W	886	0	940	13	0
19	1X	750	0	814	21	0
19	2X	750	0	814	21	0
20	1Y	806	0	881	20	0
20	2Y	806	0	881	16	0
21	1Z	1240	0	1240	29	0
21	2Z	1271	0	1273	36	0
22	10	653	0	674	13	0
22	20	653	0	674	19	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
23	11	755	0	826	19	0
23	21	755	0	826	22	0
24	12	588	0	643	5	0
24	22	588	0	643	11	0
25	13	469	0	518	13	0
25	23	464	0	514	6	0
26	14	552	0	533	23	0
26	24	532	0	503	20	0
27	15	455	0	465	12	0
27	25	455	0	465	9	0
28	16	453	0	472	5	0
28	26	449	0	469	10	0
29	17	418	0	467	7	0
29	27	418	0	467	11	0
30	18	517	0	582	23	0
30	28	517	0	582	18	0
31	19	307	0	335	6	0
31	29	307	0	335	7	0
32	1a	32246	0	16295	453	0
32	2a	32327	0	16338	514	0
33	1b	1846	0	1867	69	0
33	2b	1825	0	1828	67	0
34	1c	1548	0	1535	23	0
34	2c	1542	0	1517	46	0
35	1d	1655	0	1672	36	0
35	2d	1674	0	1714	52	0
36	1e	1129	0	1185	32	0
36	2e	1133	0	1191	26	0
37	1f	810	0	804	14	0
37	2f	816	0	808	8	0
38	1g	1231	0	1238	22	0
38	2g	1235	0	1249	23	0
39	1h	1088	0	1126	22	0
39	2h	1088	0	1126	30	0
40	1i	983	0	986	23	0
40	2i	978	0	966	32	0
41	1j	709	0	650	14	0
41	2j	714	0	672	21	0
42	1k	829	0	825	13	0
42	2k	833	0	836	20	0
43	1l	932	0	981	16	0
43	2l	932	0	981	24	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
44	1m	958	0	1002	31	0
44	2m	950	0	988	30	0
45	1n	492	0	529	17	0
45	2n	492	0	529	17	0
46	1o	728	0	760	11	0
46	2o	728	0	760	15	0
47	1p	681	0	697	16	0
47	2p	677	0	686	18	0
48	1q	823	0	891	20	0
48	2q	823	0	891	23	0
49	1r	555	0	618	10	0
49	2r	555	0	618	16	0
50	1s	652	0	662	17	0
50	2s	646	0	644	27	0
51	1t	728	0	798	10	0
51	2t	727	0	796	14	0
52	1u	199	0	208	9	0
52	2u	199	0	208	8	0
53	1v	276	0	139	3	0
53	2v	276	0	139	5	0
54	1w	1568	0	800	28	0
54	1y	1568	0	800	35	0
54	2w	1568	0	802	39	0
54	2y	1568	0	802	28	0
55	1x	1625	0	827	12	0
55	2x	1625	0	829	18	0
56	10	5	0	0	0	0
56	11	2	0	0	0	0
56	12	2	0	0	0	0
56	13	1	0	0	0	0
56	14	1	0	0	0	0
56	15	3	0	0	0	0
56	16	2	0	0	0	0
56	17	4	0	0	0	0
56	18	4	0	0	0	0
56	19	1	0	0	0	0
56	1A	1134	0	0	0	0
56	1B	36	0	0	0	0
56	1D	13	0	0	0	0
56	1E	7	0	0	0	0
56	1F	10	0	0	0	0
56	1G	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	1I	1	0	0	0	0
56	1N	7	0	0	0	0
56	1O	4	0	0	0	0
56	1P	3	0	0	0	0
56	1Q	5	0	0	0	0
56	1R	4	0	0	0	0
56	1S	3	0	0	0	0
56	1T	2	0	0	0	0
56	1U	7	0	0	0	0
56	1V	2	0	0	0	0
56	1W	7	0	0	0	0
56	1X	5	0	0	0	0
56	1Y	5	0	0	0	0
56	1Z	5	0	0	0	0
56	1a	233	0	0	0	0
56	1b	2	0	0	0	0
56	1e	2	0	0	0	0
56	1f	2	0	0	0	0
56	1l	3	0	0	0	0
56	1n	1	0	0	0	0
56	1q	1	0	0	0	0
56	1t	1	0	0	0	0
56	1v	1	0	0	0	0
56	1w	8	0	0	0	0
56	1x	15	0	0	0	0
56	1y	6	0	0	0	0
56	20	2	0	0	0	0
56	21	1	0	0	0	0
56	25	2	0	0	0	0
56	27	1	0	0	0	0
56	28	1	0	0	0	0
56	29	1	0	0	0	0
56	2A	860	0	0	0	0
56	2B	18	0	0	0	0
56	2D	3	0	0	0	0
56	2E	8	0	0	0	0
56	2F	5	0	0	0	0
56	2G	1	0	0	0	0
56	2N	1	0	0	0	0
56	2O	2	0	0	0	0
56	2P	2	0	0	0	0
56	2Q	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	2R	3	0	0	0	0
56	2T	4	0	0	0	0
56	2U	4	0	0	0	0
56	2V	2	0	0	0	0
56	2W	1	0	0	0	0
56	2X	1	0	0	0	0
56	2Y	1	0	0	0	0
56	2a	231	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	2i	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	2q	3	0	0	0	0
56	2r	1	0	0	0	0
56	2t	1	0	0	0	0
56	2v	3	0	0	0	0
56	2x	5	0	0	0	0
56	2y	6	0	0	0	0
57	1A	84	0	0	3	0
57	1a	44	0	0	1	0
57	2A	84	0	0	3	0
57	2a	44	0	0	1	0
58	1A	1	0	0	0	0
58	2A	1	0	0	0	0
59	14	1	0	0	0	0
59	15	1	0	0	0	0
59	16	1	0	0	0	0
59	19	1	0	0	0	0
59	1Y	1	0	0	0	0
59	1n	1	0	0	0	0
59	24	1	0	0	0	0
59	25	1	0	0	0	0
59	26	1	0	0	0	0
59	29	1	0	0	0	0
59	2Y	1	0	0	0	0
59	2n	1	0	0	0	0
60	1d	8	0	0	0	0
60	2d	8	0	0	0	0
61	10	9	0	0	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	11	12	0	0	0	0
61	12	4	0	0	0	0
61	13	4	0	0	0	0
61	14	1	0	0	0	0
61	15	7	0	0	0	0
61	16	2	0	0	0	0
61	17	8	0	0	1	0
61	18	13	0	0	1	0
61	19	1	0	0	0	0
61	1A	2225	0	0	74	0
61	1B	69	0	0	1	0
61	1D	28	0	0	2	0
61	1E	27	0	0	3	0
61	1F	17	0	0	0	0
61	1G	6	0	0	0	0
61	1H	1	0	0	0	0
61	1I	2	0	0	0	0
61	1N	3	0	0	1	0
61	1O	7	0	0	0	0
61	1P	26	0	0	2	0
61	1Q	12	0	0	0	0
61	1R	14	0	0	1	0
61	1S	4	0	0	0	0
61	1T	7	0	0	0	0
61	1U	13	0	0	0	0
61	1V	8	0	0	2	0
61	1W	9	0	0	1	0
61	1X	7	0	0	1	0
61	1Y	4	0	0	1	0
61	1Z	1	0	0	0	0
61	1a	438	0	0	14	0
61	1b	1	0	0	0	0
61	1d	1	0	0	0	0
61	1e	1	0	0	0	0
61	1g	1	0	0	1	0
61	1j	1	0	0	0	0
61	1l	8	0	0	0	0
61	1m	2	0	0	0	0
61	1n	1	0	0	0	0
61	1p	1	0	0	0	0
61	1q	3	0	0	0	0
61	1u	1	0	0	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	1v	4	0	0	0	0
61	1w	6	0	0	1	0
61	1x	17	0	0	1	0
61	1y	3	0	0	0	0
61	20	3	0	0	0	0
61	21	9	0	0	0	0
61	23	1	0	0	0	0
61	25	3	0	0	0	0
61	27	3	0	0	0	0
61	28	6	0	0	3	0
61	2A	1163	0	0	40	0
61	2B	20	0	0	0	0
61	2D	23	0	0	1	0
61	2E	10	0	0	2	0
61	2F	13	0	0	0	0
61	2I	2	0	0	0	0
61	2N	1	0	0	0	0
61	2O	2	0	0	0	0
61	2P	6	0	0	0	0
61	2Q	1	0	0	0	0
61	2R	3	0	0	0	0
61	2T	2	0	0	0	0
61	2U	3	0	0	0	0
61	2V	2	0	0	1	0
61	2W	1	0	0	0	0
61	2X	2	0	0	0	0
61	2Z	1	0	0	0	0
61	2a	322	0	0	11	0
61	2e	2	0	0	0	0
61	2f	1	0	0	0	0
61	2g	2	0	0	0	0
61	2j	4	0	0	2	0
61	2l	5	0	0	0	0
61	2o	2	0	0	0	0
61	2p	4	0	0	0	0
61	2q	1	0	0	0	0
61	2r	1	0	0	0	0
61	2t	4	0	0	0	0
61	2u	1	0	0	0	0
61	2v	3	0	0	0	0
61	2w	3	0	0	0	0
61	2x	7	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	2y	9	0	0	0	0
All	All	300702	0	196683	4265	0

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

All (4265) 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	1.30	1.28
1:2A:2137:C:N4	1:2A:2154:G:H1	1.51	1.08
1:1A:1082:U:O4	1:1A:1086:A:N1	1.89	1.06
54:1w:51:C:N4	54:1w:63:G:H1	1.58	1.02
32:2a:997:U:H3	32:2a:1044:A:N6	1.58	1.01
32:2a:987:G:H1	32:2a:1218:C:H42	1.07	1.01
1:2A:2104:G:H1	1:2A:2185:C:N4	1.59	1.01
32:2a:1089:G:H1	32:2a:1096:C:N4	1.59	0.99
32:2a:1002:G:H1	32:2a:1038:C:N4	1.60	0.98
32:1a:998:G:H1	32:1a:1043:C:N4	1.60	0.98
54:1w:22:G:N7	54:1w:46:7MG:N2	2.11	0.98
1:2A:2100:G:H1	1:2A:2189:U:H3	1.12	0.96
32:2a:1089:G:H1	32:2a:1096:C:H42	1.00	0.95
32:2a:1120:G:H1	32:2a:1153:C:H42	1.03	0.94
32:1a:998:G:H1	32:1a:1043:C:H42	0.98	0.94
54:2w:53:G:H1	54:2w:61:C:H42	1.16	0.93
1:1A:2133:G:HO2'	1:1A:2157:G:H1	1.07	0.93
32:1a:1030:C:H42	32:1a:1031:G:H1	1.02	0.93
28:26:34:LEU:H	28:26:51:GLU:HG2	1.32	0.92
55:2x:50:U:H3	55:2x:64:G:H1	1.08	0.92
1:2A:2138:C:N4	1:2A:2153:G:H1	1.67	0.91
32:1a:1004:A:N6	32:1a:1037:C:N3	2.18	0.91
32:2a:76:C:H42	32:2a:93:G:H1	1.18	0.90
32:2a:997:U:H3	32:2a:1044:A:H61	0.96	0.90
1:1A:1058:G:H1	1:1A:1080:C:N4	1.70	0.90
10:2O:48:PRO:HB3	32:2a:1422:G:H5"	1.53	0.89
32:1a:664:G:H22	32:1a:741:G:H1	1.21	0.88
1:1A:1058:G:N2	1:1A:1080:C:N3	2.21	0.88
1:2A:2138:C:N3	1:2A:2153:G:N2	2.22	0.87
1:1A:1054:A:H61	1:1A:1105:U:H3	1.23	0.87
1:1A:2807:G:N1	1:1A:2893:G:O6	2.08	0.87
32:2a:1120:G:H1	32:2a:1153:C:N4	1.73	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2101:G:H1	1:1A:2188:C:H42	1.23	0.85
32:2a:559:A:H4'	32:2a:560:U:H3'	1.57	0.85
54:2w:50:G:H1	54:2w:64:U:H3	1.21	0.85
36:1e:78:HIS:HE1	36:1e:143:ARG:H	1.24	0.85
46:2o:55:GLY:HA2	46:2o:58:MET:HE2	1.58	0.85
1:2A:2129:C:H42	1:2A:2159:G:H1	1.25	0.85
1:1A:1064:C:N3	1:1A:1074:G:O6	2.10	0.84
33:1b:84:GLU:OE2	33:1b:234:PRO:CD	2.24	0.84
1:2A:882:G:H1	1:2A:894:C:H42	1.22	0.84
10:2O:35:VAL:HG11	10:2O:103:ALA:HB3	1.59	0.84
32:1a:200:G:H1	32:1a:217:C:H42	1.25	0.84
55:1x:8:4SU:O2	55:1x:21:A:H2	1.61	0.84
1:1A:1065:U:O2	1:1A:1073:A:N6	2.10	0.83
22:20:10:THR:HG22	22:20:12:ASN:H	1.43	0.83
34:1c:58:GLU:HB3	41:1j:92:THR:HG21	1.59	0.83
32:2a:999:C:N4	32:2a:1042:G:H1	1.76	0.83
32:2a:999:C:H42	32:2a:1042:G:H1	1.26	0.82
1:2A:2345:G:H4'	1:2A:2346:A:H5"	1.61	0.82
1:2A:2807:G:N1	1:2A:2893:G:O6	2.13	0.82
1:1A:1054:A:N6	1:1A:1105:U:H3	1.77	0.82
1:1A:2124:G:H1	1:1A:2174:C:H42	1.22	0.82
1:2A:2104:G:H1	1:2A:2185:C:H42	0.83	0.81
14:1S:25:ARG:NH1	14:1S:42:ASP:OD1	2.13	0.81
1:2A:2138:C:H42	1:2A:2153:G:H1	1.21	0.81
26:14:16:CYS:SG	26:14:17:GLY:N	2.54	0.81
32:1a:975:A:H4'	32:1a:976:G:H5"	1.61	0.81
22:10:11:ARG:O	22:10:14:ARG:NH2	2.14	0.81
32:1a:1031:G:H2'	32:1a:1032:G:H8	1.46	0.81
1:1A:2099:U:H3	1:1A:2190:G:H1	1.26	0.80
1:1A:1264:G:OP1	27:15:19:ARG:NH2	2.14	0.80
32:1a:1314:C:OP2	50:1s:4:SER:OG	1.99	0.80
1:2A:994:C:OP1	16:2U:53:ARG:NH2	2.13	0.80
32:2a:1002:G:H1	32:2a:1038:C:H42	0.85	0.80
32:2a:987:G:H1	32:2a:1218:C:N4	1.78	0.80
36:1e:74:GLY:HA3	36:1e:116:THR:HG22	1.63	0.80
8:1I:92:VAL:HG13	8:1I:120:ILE:HB	1.63	0.80
1:2A:10:G:H1'	1:2A:2801(A):A:H62	1.45	0.80
1:2A:2592:G:N7	61:2A:3958:HOH:O	2.15	0.80
32:2a:1030(A):G:N2	32:2a:1030(D):A:OP2	2.13	0.80
32:1a:998:G:N2	32:1a:1043:C:N3	2.29	0.80
32:2a:1507:A:OP2	53:2v:13:A:N6	2.16	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1210:A:H4'	1:2A:1211:U:H5"	1.64	0.79
54:2w:54:5MU:O2	54:2w:58:A:N7	2.16	0.79
39:2h:12:ARG:HD2	39:2h:26:VAL:HG12	1.65	0.79
33:1b:84:GLU:OE2	33:1b:234:PRO:HD3	1.83	0.79
32:2a:953:G:H5'	32:2a:965:A:H61	1.46	0.79
32:2a:661:G:H1	32:2a:744:C:H42	1.31	0.79
33:1b:212:GLN:NE2	33:1b:234:PRO:O	2.15	0.78
54:2y:19:G:H1	54:2y:56:C:H42	1.31	0.78
32:1a:1030:C:N4	32:1a:1031:G:H1	1.80	0.78
54:1w:2:G:O6	54:1w:71:C:N3	2.16	0.78
32:2a:1055:A:N7	32:2a:1200:C:N4	2.31	0.78
10:1O:35:VAL:HG11	10:1O:103:ALA:HB3	1.65	0.78
11:1P:42:SER:O	61:1P:301:HOH:O	2.00	0.78
54:1w:51:C:H42	54:1w:63:G:H1	0.83	0.78
1:1A:2135:A:N6	1:1A:2156:G:O2'	2.16	0.78
32:1a:559:A:OP1	36:1e:126:ARG:NH2	2.16	0.78
1:2A:2129:C:N4	1:2A:2159:G:H1	1.80	0.78
1:2A:2137:C:N4	1:2A:2154:G:N1	2.32	0.78
32:1a:92:C:H2'	32:1a:93:G:H8	1.49	0.78
1:2A:83:G:H1	1:2A:102:G:HO2'	1.32	0.78
1:2A:2137:C:N3	1:2A:2154:G:N2	2.32	0.77
5:1F:53:THR:HG23	5:1F:55:GLY:H	1.49	0.77
1:1A:1918:A:N6	61:1A:4317:HOH:O	2.18	0.77
1:1A:2125:G:N1	1:1A:2172:U:OP1	2.18	0.77
1:2A:2507:C:O2'	54:2w:74:C:N4	2.18	0.77
54:2w:53:G:H1	54:2w:61:C:N4	1.82	0.77
1:2A:2508:G:H5'	54:2w:74:C:H42	1.49	0.77
54:1y:19:G:N2	54:1y:56:C:N3	2.33	0.76
32:1a:1027:C:C2	32:1a:1034:G:N2	2.53	0.76
32:2a:1244:C:H42	32:2a:1293:G:H1	1.32	0.76
1:2A:975:C:OP1	61:2A:3950:HOH:O	2.04	0.76
1:2A:1032:A:H61	1:2A:1122:G:H1	1.31	0.76
43:2l:117:ARG:HG2	43:2l:122:THR:HB	1.67	0.76
1:2A:2379:G:O2'	14:2S:17:ARG:NH1	2.15	0.76
1:1A:2136:C:N4	1:1A:2155:G:N1	2.33	0.76
1:1A:2136:C:N3	1:1A:2155:G:N2	2.33	0.76
16:2U:66:ASN:HD21	16:2U:70:ARG:HH21	1.34	0.76
32:2a:201:C:H42	32:2a:216:G:H1	1.33	0.76
40:2i:46:ALA:HB2	40:2i:74:ILE:HG23	1.67	0.76
54:2y:30:C:H42	54:2y:40:G:H1	1.33	0.76
1:1A:2690:C:OP2	13:1R:17:ARG:NH2	2.19	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:29:25:VAL:HB	31:29:34:GLN:HB2	1.68	0.76
54:2w:6:A:H61	54:2w:67:U:H3	1.32	0.76
1:1A:1229:G:N7	61:1A:4321:HOH:O	2.18	0.76
4:1E:28:ALA:HB3	4:1E:93:VAL:HG12	1.68	0.76
21:1Z:102:LEU:HD21	21:1Z:171:ILE:HD11	1.68	0.76
32:1a:8:A:N6	35:1d:205:GLU:O	2.18	0.76
1:1A:1183:G:O2'	25:13:29:ARG:NH1	2.20	0.75
1:1A:2131:G:H5"	1:1A:2132:U:H3'	1.68	0.75
32:1a:1086:U:H3	32:1a:1099:G:H22	1.34	0.75
54:1w:51:C:N3	54:1w:63:G:N2	2.32	0.75
11:1P:52:GLU:OE1	11:1P:55:ARG:NH1	2.19	0.75
33:2b:178:ARG:HH22	39:2h:74:PRO:HB3	1.50	0.75
32:2a:1013:G:N2	32:2a:1016:A:OP2	2.19	0.75
1:2A:65:C:O2	1:2A:456:C:N4	2.19	0.75
32:2a:1089:G:N2	32:2a:1096:C:N3	2.31	0.75
44:2m:19:LEU:HD21	44:2m:56:LEU:HD21	1.67	0.75
1:1A:2483:C:N3	12:1Q:124:LYS:NZ	2.35	0.75
1:2A:2287:A:H62	1:2A:2344:U:H3	1.32	0.75
54:1y:30:C:N4	54:1y:40:G:H1	1.85	0.75
32:2a:939:G:H1	32:2a:1344:C:H42	1.33	0.75
32:1a:407:G:H5"	35:1d:115:ARG:HG2	1.69	0.75
20:2Y:102:CYS:SG	20:2Y:103:GLY:N	2.60	0.74
2:2B:7:G:O6	2:2B:114:C:N4	2.18	0.74
1:1A:400:G:N7	61:1A:4334:HOH:O	2.20	0.74
1:2A:2150:U:H2'	1:2A:2151:G:H8	1.52	0.74
32:2a:975:A:H4'	32:2a:976:G:H5"	1.68	0.74
1:1A:9:U:H3	1:1A:2629:A:H2	1.35	0.74
17:1V:40:LEU:HB2	17:1V:46:VAL:HG13	1.70	0.74
1:2A:2133:G:O2'	1:2A:2157:G:N2	2.20	0.74
38:2g:113:GLU:HG2	38:2g:119:ARG:HG2	1.67	0.74
32:1a:739:C:HO2'	46:1o:42:HIS:HD1	1.32	0.74
32:1a:1002:G:H3'	32:1a:1003:G:H4'	1.67	0.74
1:1A:1058:G:N1	1:1A:1080:C:N4	2.30	0.74
23:11:50:ARG:HG2	23:11:59:THR:HG22	1.70	0.74
36:1e:18:ARG:HD3	36:1e:27:ARG:HH12	1.52	0.74
4:2E:48:GLN:HE21	4:2E:78:LEU:HB3	1.53	0.74
1:2A:1219:G:H1	1:2A:1230:C:H42	1.35	0.74
8:1I:78:THR:H	8:1I:104:GLN:HE22	1.35	0.74
39:2h:51:VAL:HG11	39:2h:60:ARG:HD2	1.69	0.74
1:2A:918:A:O2'	2:2B:97:G:N2	2.20	0.74
1:2A:1818:U:H2'	3:2D:157:ARG:HD2	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:517:C:OP1	27:15:16:ARG:NH2	2.21	0.73
1:1A:1064:C:O2	1:1A:1074:G:N1	2.16	0.73
26:14:64:GLY:O	26:14:66:SER:N	2.21	0.73
1:2A:81:G:H21	20:2Y:1:MET:HE2	1.52	0.73
33:1b:16:HIS:HB2	33:1b:204:ASN:HB3	1.71	0.73
44:1m:82:MET:HE3	44:1m:93:ARG:HG2	1.69	0.73
1:2A:1171:G:H22	1:2A:1178:C:H42	1.35	0.73
32:2a:876:G:OP1	39:2h:14:ARG:NH1	2.22	0.73
1:1A:1060:U:H3	1:1A:1088:A:H8	1.35	0.73
3:1D:12:SER:HB3	3:1D:208:LYS:HB3	1.68	0.73
4:1E:105:THR:OG1	4:1E:199:ARG:NH2	2.21	0.73
32:1a:148:G:H2'	32:1a:149:A:H8	1.53	0.73
32:2a:1002:G:N2	32:2a:1038:C:N3	2.32	0.73
1:2A:2104:G:N2	1:2A:2185:C:N3	2.32	0.73
32:2a:392:G:N7	61:2a:3321:HOH:O	2.21	0.72
41:1j:40:LEU:HB2	41:1j:69:ASN:HB2	1.71	0.72
1:1A:859:G:O2'	1:1A:916:G:O6	2.06	0.72
33:1b:52:GLU:HG2	33:1b:56:ARG:HH12	1.54	0.72
1:2A:987:G:O2'	1:2A:1000:A:N3	2.22	0.72
33:2b:55:PHE:HE1	33:2b:218:ALA:HA	1.53	0.72
3:1D:125:ILE:HB	37:1f:81:ILE:HD11	1.70	0.72
1:1A:249:C:O2	30:18:12:LYS:NZ	2.22	0.72
1:1A:279:C:H42	1:1A:361:G:H1	1.35	0.72
3:1D:8:PRO:HB3	3:1D:14:ARG:HB3	1.70	0.72
37:1f:95:GLU:O	49:1r:32:ARG:NH1	2.22	0.72
54:2w:11:C:H42	54:2w:24:G:H1	1.38	0.72
1:2A:2365:G:N7	30:28:39:LYS:NZ	2.38	0.72
1:1A:1798:U:OP2	3:1D:274:ARG:NH2	2.20	0.72
1:2A:1772:G:OP1	61:2A:3951:HOH:O	2.06	0.72
48:1q:67:LYS:O	48:1q:69:LYS:N	2.21	0.71
8:2I:93:THR:HG22	8:2I:119:PRO:HB3	1.71	0.71
1:1A:880:G:H2'	1:1A:881:G:H8	1.55	0.71
32:1a:982:U:H5"	45:1n:6:LEU:HD21	1.72	0.71
32:1a:1029:C:H41	32:1a:1030(A):G:H21	1.37	0.71
1:1A:488:G:O2'	18:1W:49:LYS:NZ	2.22	0.71
33:1b:233:SER:HB2	33:1b:234:PRO:CD	2.20	0.71
54:1y:30:C:H42	54:1y:40:G:H1	1.37	0.71
7:2H:106:THR:HG22	7:2H:112:PRO:HB3	1.72	0.71
33:2b:88:ALA:HB2	33:2b:219:VAL:HG13	1.72	0.71
55:2x:3:C:H42	55:2x:70:G:H1	1.39	0.71
32:1a:1031:G:H2'	32:1a:1032:G:C8	2.25	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:76:C:N4	32:2a:93:G:H1	1.88	0.71
32:1a:953:G:H5'	32:1a:965:A:H61	1.54	0.71
11:2P:91:PHE:O	11:2P:121:LYS:NZ	2.22	0.71
25:13:3:ARG:NH1	25:13:60:GLU:OE2	2.24	0.71
1:2A:1204:A:H2	1:2A:1241:A:H62	1.39	0.71
1:1A:2837:G:N7	61:1A:4351:HOH:O	2.24	0.71
32:1a:165:C:H2'	32:1a:166:G:H8	1.56	0.71
1:2A:2343:C:HO2'	1:2A:2373:G:HO2'	1.38	0.71
32:2a:999:C:N3	32:2a:1042:G:N2	2.37	0.71
1:1A:994:C:OP1	16:1U:53:ARG:NH2	2.24	0.70
1:1A:1466:G:HO2'	1:1A:1546:C:HO2'	1.36	0.70
19:1X:35:THR:HG22	19:1X:38:GLU:HB2	1.73	0.70
54:2w:53:G:N2	54:2w:61:C:N3	2.37	0.70
32:2a:1243:C:H42	32:2a:1294:G:H1	1.39	0.70
1:1A:880:G:H2'	1:1A:881:G:C8	2.27	0.70
44:1m:37:THR:O	44:1m:55:ARG:NH1	2.23	0.70
32:2a:1056:U:H5'	34:2c:163:ALA:HB2	1.72	0.70
1:1A:583:G:N7	61:1A:4345:HOH:O	2.23	0.70
1:1A:990:A:OP2	61:1A:4218:HOH:O	2.09	0.70
1:1A:1187:G:O6	61:1A:4275:HOH:O	2.07	0.70
21:2Z:65:GLN:HE21	21:2Z:67:LEU:HD21	1.57	0.70
26:24:64:GLY:O	26:24:66:SER:N	2.24	0.70
32:2a:1347:G:H22	32:2a:1373:G:H2'	1.57	0.70
43:1l:28:LYS:HB3	43:1l:33:ARG:HH21	1.57	0.70
32:2a:376:G:H5"	47:2p:5:ARG:HB2	1.74	0.70
1:1A:1299:G:OP1	61:1A:4303:HOH:O	2.09	0.70
1:2A:1022:G:N2	1:2A:1023:U:O4	2.25	0.70
41:1j:49:VAL:HB	45:1n:41:ARG:HB2	1.73	0.70
32:2a:54:C:N4	32:2a:353:A:OP2	2.25	0.70
1:1A:2124:G:H1	1:1A:2174:C:N4	1.90	0.69
22:20:11:ARG:O	22:20:14:ARG:NH2	2.25	0.69
1:1A:1062:G:H1	1:1A:1077:A:H61	1.39	0.69
3:2D:26:LYS:HB3	3:2D:83:GLU:HG2	1.74	0.69
27:25:33:CYS:HB2	27:25:40:LYS:HD3	1.72	0.69
37:2f:37:VAL:HA	37:2f:65:VAL:HG12	1.72	0.69
20:1Y:82:PRO:O	20:1Y:101:LYS:NZ	2.25	0.69
21:2Z:102:LEU:HD21	21:2Z:171:ILE:HD11	1.72	0.69
32:2a:1320:C:H1'	50:2s:73:GLU:HG2	1.73	0.69
1:2A:2690:C:OP2	13:2R:17:ARG:NH2	2.25	0.69
2:2B:22:U:H3	2:2B:61:G:H1	1.41	0.69
19:2X:43:VAL:HG21	19:2X:81:VAL:HG11	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:43:G:H2'	54:2w:44:G:C8	2.28	0.69
1:1A:512:G:N7	61:1A:4214:HOH:O	2.26	0.69
1:1A:1173:G:N1	1:1A:1176:G:OP2	2.25	0.69
32:1a:1008:C:N3	32:1a:1021:G:O6	2.26	0.69
1:1A:733:G:N7	61:1A:4363:HOH:O	2.25	0.69
1:1A:2292:C:OP1	14:1S:17:ARG:NH2	2.23	0.69
1:1A:2688:U:OP1	61:1A:4304:HOH:O	2.11	0.69
54:1w:18:G:O2'	54:1w:57:G:N2	2.22	0.69
54:1y:40:G:H2'	54:1y:41:A:H8	1.55	0.69
7:2H:3:ARG:HG2	7:2H:6:ARG:HE	1.58	0.69
32:2a:405:U:O4	35:2d:2:GLY:N	2.25	0.69
47:2p:14:ASN:OD1	47:2p:42:ARG:NH2	2.26	0.69
1:1A:1266:G:O5'	18:1W:15:ARG:NH2	2.26	0.69
1:1A:2101:G:H1	1:1A:2188:C:N4	1.90	0.69
44:1m:3:ARG:HE	44:1m:9:ILE:HG12	1.57	0.69
48:1q:66:SER:O	48:1q:70:ARG:NH1	2.26	0.69
32:2a:363:A:OP2	43:2l:34:ARG:NH1	2.26	0.69
32:1a:1402:4OC:HM22	32:1a:1403:C:H5'	1.75	0.69
1:1A:250:G:OP2	30:18:13:ARG:NH2	2.26	0.68
1:1A:2183:C:H2'	1:1A:2184:G:H8	1.57	0.68
3:1D:242:ARG:NH1	61:1D:401:HOH:O	2.26	0.68
1:2A:2137:C:H42	1:2A:2154:G:H1	1.37	0.68
1:2A:861:A:N6	1:2A:916:G:O2'	2.26	0.68
5:2F:41:LEU:HD22	5:2F:44:ARG:HH11	1.59	0.68
39:2h:116:LYS:HD3	39:2h:127:LEU:HD23	1.75	0.68
33:2b:63:MET:HG2	33:2b:225:ALA:HB1	1.75	0.68
7:1H:84:SER:OG	7:1H:132:ARG:NH1	2.27	0.68
1:1A:376:C:OP1	61:1A:4305:HOH:O	2.12	0.68
1:2A:2595:G:N7	61:2A:4003:HOH:O	2.26	0.68
17:1V:78:LYS:O	61:1V:301:HOH:O	2.12	0.68
32:1a:159:G:N2	32:1a:162:A:OP2	2.25	0.68
33:1b:84:GLU:HB3	33:1b:219:VAL:HG21	1.75	0.68
38:1g:78:ARG:NH1	38:1g:154:TYR:O	2.27	0.68
52:1u:5:ASP:OD2	61:1u:101:HOH:O	2.12	0.68
32:1a:79:G:N1	32:1a:90:U:N3	2.42	0.68
11:2P:62:LEU:O	30:28:13:ARG:NH1	2.26	0.68
23:21:51:VAL:HG11	23:21:74:VAL:HG21	1.75	0.68
1:1A:1447:G:N7	61:1A:4373:HOH:O	2.26	0.68
3:1D:242:ARG:HG3	3:1D:242:ARG:HH11	1.59	0.68
32:1a:1518:MA6:N6	32:1a:1519:MA6:H103	2.09	0.68
44:2m:58:GLU:O	44:2m:62:ASN:ND2	2.19	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:86:CYS:HB2	50:2s:73:GLU:HB3	1.75	0.68
1:1A:1093:G:H3'	1:1A:1094:U:H5"	1.75	0.67
24:12:14:ARG:O	24:12:67:LYS:NZ	2.25	0.67
32:1a:803:G:OP1	61:1a:1933:HOH:O	2.11	0.67
1:1A:2444:G:N7	61:1A:4371:HOH:O	2.26	0.67
32:1a:92:C:H2'	32:1a:93:G:C8	2.30	0.67
32:2a:1347:G:N2	32:2a:1373:G:H2'	2.09	0.67
40:2i:17:VAL:HG11	40:2i:81:ILE:HG22	1.74	0.67
32:2a:931:C:H42	32:2a:1386:G:H1	1.43	0.67
32:2a:1402:4OC:HM22	32:2a:1403:C:H5'	1.77	0.67
7:1H:164:TYR:HB2	7:1H:167:GLU:HB2	1.76	0.67
32:1a:1329:A:N7	52:1u:7:ARG:NH2	2.38	0.67
1:2A:783:A:OP2	61:2A:3952:HOH:O	2.12	0.67
34:2c:9:GLY:HA3	45:2n:49:HIS:HA	1.76	0.67
1:1A:833:U:O2	11:1P:55:ARG:NH2	2.28	0.67
1:1A:1395:A:OP1	61:1A:4201:HOH:O	2.13	0.67
1:2A:2150:U:H2'	1:2A:2151:G:C8	2.29	0.67
44:2m:82:MET:HE3	44:2m:93:ARG:HG2	1.76	0.67
33:1b:127:ILE:HD11	33:1b:130:ARG:HH21	1.59	0.67
54:2y:44:G:H3'	54:2y:45:G:C8	2.29	0.67
1:1A:1670:C:OP2	61:1A:4260:HOH:O	2.13	0.67
3:1D:38:LYS:NZ	3:1D:39:LYS:O	2.19	0.67
36:1e:20:GLN:NE2	36:1e:21:ALA:O	2.28	0.67
32:2a:812:C:N3	61:2a:3324:HOH:O	2.27	0.67
39:2h:9:MET:HG3	39:2h:26:VAL:HG11	1.75	0.67
1:1A:746:A:N7	61:1A:4386:HOH:O	2.28	0.67
13:1R:28:LEU:HD23	13:1R:48:VAL:HG21	1.76	0.67
1:2A:307:G:H21	1:2A:330:A:H62	1.43	0.67
1:2A:521:G:H2'	1:2A:522:G:H8	1.60	0.67
21:1Z:52:SER:HG	21:1Z:54:HIS:HD1	1.41	0.67
30:18:33:ASN:HA	30:18:36:LYS:HD2	1.75	0.67
1:2A:637:A:OP1	11:2P:133:SER:OG	2.11	0.67
1:2A:2116:G:N7	1:2A:2166:G:N2	2.33	0.67
1:2A:2576:G:OP1	61:2A:3953:HOH:O	2.13	0.67
54:1w:2:G:N1	54:1w:71:C:O2	2.19	0.67
1:2A:276:A:H5"	1:2A:277:C:H5'	1.75	0.67
1:2A:1783:A:HO2'	1:2A:2607:G:HO2'	1.42	0.67
32:2a:297:G:N2	32:2a:300:A:OP2	2.27	0.67
46:1o:18:PHE:O	46:1o:20:GLY:N	2.26	0.66
54:1y:36:C:H3'	54:1y:37:6MZ:H8	1.77	0.66
1:2A:1446:C:H42	1:2A:1465:G:H1	1.41	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2B:24:G:N7	2:2B:56:G:H2'	2.10	0.66
43:2l:32:PHE:HB3	43:2l:84:LEU:HD11	1.77	0.66
3:1D:85:ASP:OD2	3:1D:88:ARG:NH1	2.27	0.66
46:2o:11:VAL:HG21	46:2o:34:LEU:HD22	1.77	0.66
1:1A:1174:A:H4'	1:1A:1175:U:OP1	1.94	0.66
1:1A:2165:G:N2	1:1A:2171:A:O2'	2.28	0.66
1:1A:2441:C:OP2	1:1A:2586:C:O2'	2.13	0.66
55:1x:8:4SU:O2	55:1x:21:A:C2	2.46	0.66
1:1A:731:C:OP1	61:1A:4306:HOH:O	2.13	0.66
1:2A:2129:C:N3	1:2A:2159:G:N2	2.40	0.66
1:2A:2136:C:N4	1:2A:2155:G:H1	1.92	0.66
1:1A:2296:U:OP2	14:1S:9:ARG:NH2	2.27	0.66
3:2D:72:LYS:HG3	3:2D:103:ARG:HH21	1.60	0.66
32:2a:770:C:OP1	61:2a:3316:HOH:O	2.13	0.66
32:2a:1469:G:N7	61:2a:3329:HOH:O	2.28	0.66
34:2c:28:GLN:HG2	34:2c:31:HIS:HB2	1.77	0.66
32:1a:446:G:H1	32:1a:488:C:H42	1.42	0.66
1:1A:530:G:N1	1:1A:2023:G:OP1	2.28	0.66
1:1A:1055:G:H1	1:1A:1104:C:H42	1.43	0.66
1:1A:1113:U:H2'	1:1A:1114:G:H8	1.61	0.66
1:1A:1988:C:OP2	61:1A:4308:HOH:O	2.13	0.66
19:1X:43:VAL:HG21	19:1X:81:VAL:HG11	1.77	0.66
32:1a:510:A:OP2	35:1d:49:ARG:NH1	2.28	0.66
54:1y:4:U:H3	54:1y:69:A:H61	1.43	0.66
1:2A:2140:C:N4	1:2A:2151:G:H1	1.92	0.66
1:1A:271(M):G:N2	8:1I:50:ARG:HH12	1.93	0.66
1:1A:889:C:O2'	1:1A:890:A:O4'	2.14	0.66
32:1a:642:A:N3	39:1h:113:SER:OG	2.29	0.66
1:2A:2102:U:H3	1:2A:2187:G:H1	1.44	0.66
1:2A:2126:A:N6	1:2A:2162:G:O2'	2.29	0.66
4:2E:47:VAL:HG11	4:2E:86:PRO:HD2	1.78	0.66
7:2H:46:GLU:OE2	7:2H:51:ARG:NH2	2.29	0.66
7:2H:90:LYS:HD3	7:2H:159:GLU:HG2	1.78	0.66
15:2T:65:LYS:HE3	15:2T:67:SER:HB2	1.78	0.66
32:2a:976:G:H5'	32:2a:1358:U:O2'	1.96	0.66
34:2c:127:ARG:NH2	34:2c:192:THR:OG1	2.29	0.66
1:1A:2135:A:H61	1:1A:2156:G:HO2'	1.42	0.66
32:1a:538:G:H5"	43:1l:114:LYS:HB2	1.78	0.66
32:1a:999:C:H42	32:1a:1042:G:H1	1.43	0.66
54:1w:35:A:OP2	61:1w:201:HOH:O	2.12	0.66
1:1A:2409:G:N7	61:1A:4389:HOH:O	2.29	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:662:G:H1	32:1a:743:U:H3	1.43	0.65
48:2q:45:HIS:H	48:2q:72:ARG:HA	1.61	0.65
1:1A:2098:U:H3	1:1A:2191:G:H1	1.42	0.65
6:1G:142:PRO:HB2	26:14:31:ILE:HG21	1.79	0.65
32:1a:1353:G:OP1	52:1u:10:ARG:NH1	2.30	0.65
5:2F:24:LEU:HD23	5:2F:115:ALA:HA	1.78	0.65
32:2a:1346:A:N1	32:2a:1374:A:H5"	2.12	0.65
1:1A:2849:U:OP2	15:1T:95:ARG:NH1	2.29	0.65
1:2A:309:G:N3	1:2A:329:G:O2'	2.29	0.65
1:2A:1199:U:O2'	61:2A:3956:HOH:O	2.15	0.65
1:2A:2375:G:N2	1:2A:2378:A:OP2	2.26	0.65
19:2X:72:LYS:NZ	19:2X:75:ASP:OD1	2.25	0.65
25:23:8:LEU:HB2	25:23:28:LEU:HD13	1.77	0.65
1:1A:2789:C:O2'	1:1A:2790:A:O4'	2.14	0.65
32:2a:1004:A:H5"	32:2a:1024:G:H22	1.60	0.65
17:1V:76:LYS:HB2	17:1V:81:TYR:HB3	1.78	0.65
1:2A:2296:U:OP2	14:2S:9:ARG:NH2	2.30	0.65
9:2N:97:ARG:HA	9:2N:100:GLU:HB2	1.77	0.65
32:2a:1005:A:H5"	32:2a:1006:C:C5	2.32	0.65
33:2b:127:ILE:O	33:2b:129:GLU:N	2.29	0.65
1:2A:2114:A:N6	1:2A:2119:A:N7	2.44	0.65
32:2a:157:G:H2'	32:2a:158:G:H8	1.61	0.65
32:2a:692:U:O2'	32:2a:694:A:N7	2.23	0.65
32:2a:1373:G:H4'	38:2g:31:MET:HE1	1.77	0.65
1:1A:1071:G:H1'	1:1A:1089:G:H2'	1.79	0.65
1:1A:1604:C:OP2	61:1A:4201:HOH:O	2.15	0.65
1:1A:2428:G:OP1	61:1A:4236:HOH:O	2.14	0.65
1:2A:751:A:OP1	61:2A:3957:HOH:O	2.15	0.65
1:2A:2683:C:OP1	15:2T:53:ARG:NH2	2.29	0.65
19:2X:32:PRO:O	19:2X:77:LYS:NZ	2.30	0.65
1:1A:1030:G:OP2	12:1Q:128:LYS:NZ	2.30	0.65
1:1A:1047:G:H2'	1:1A:1110:G:H22	1.61	0.65
54:1w:62:C:H2'	54:1w:63:G:C8	2.32	0.65
1:2A:2857:G:N2	1:2A:2860:A:OP2	2.23	0.65
11:1P:116:GLY:O	11:1P:137:LYS:NZ	2.30	0.65
37:1f:11:ASN:HB3	37:1f:14:LEU:HG	1.79	0.65
1:2A:2441:C:OP2	1:2A:2586:C:O2'	2.14	0.65
1:1A:2585:U:OP1	61:1A:4310:HOH:O	2.15	0.64
3:1D:69:ARG:NH2	3:1D:128:GLY:O	2.30	0.64
20:1Y:102:CYS:SG	20:1Y:103:GLY:N	2.62	0.64
4:2E:143:ASN:HD22	4:2E:147:PRO:HD3	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:997:U:O2	32:2a:1044:A:N1	2.29	0.64
32:2a:1316:G:H5"	45:2n:17:LYS:HE3	1.79	0.64
12:1Q:85:LYS:HG2	22:10:7:LEU:HB3	1.77	0.64
1:2A:568:U:H5'	1:2A:945:A:N1	2.12	0.64
1:2A:852:G:H2'	1:2A:853:G:H8	1.61	0.64
1:2A:1019:U:H3	1:2A:1142(A):A:H62	1.46	0.64
1:2A:2218:U:N3	23:21:55:GLY:O	2.31	0.64
3:2D:69:ARG:HE	3:2D:130:ALA:HB2	1.62	0.64
32:2a:1296:C:OP1	44:2m:44:ARG:NH2	2.30	0.64
8:1I:130:TYR:HB3	8:1I:138:ILE:HB	1.77	0.64
30:18:6:THR:HG22	30:18:63:PRO:HD2	1.78	0.64
32:1a:1503:A:O2'	53:1v:13:A:N1	2.29	0.64
1:2A:882:G:H1	1:2A:894:C:N4	1.93	0.64
32:2a:660:G:H1	32:2a:745:C:H42	1.45	0.64
32:2a:1075:C:OP1	33:2b:179:LYS:NZ	2.30	0.64
1:2A:1363:C:O2'	1:2A:1809:A:N3	2.31	0.64
32:2a:539:A:OP2	43:2l:115:LYS:NZ	2.30	0.64
35:2d:166:LYS:HG2	35:2d:178:VAL:HG11	1.79	0.64
1:1A:1043:C:H2'	1:1A:1044:G:H5"	1.80	0.64
1:1A:1453:U:O2'	1:1A:1455:G:N7	2.28	0.64
32:1a:972:C:O2'	41:1j:55:LYS:O	2.15	0.64
33:1b:76:GLN:NE2	33:1b:206:ASP:OD1	2.30	0.64
54:1w:54:5MU:O2	54:1w:58:A:N7	2.31	0.64
36:2e:43:LEU:HD11	36:2e:132:ALA:HB1	1.80	0.64
48:2q:54:GLY:O	48:2q:81:ARG:N	2.29	0.64
1:1A:2705:A:N3	61:1A:4391:HOH:O	2.29	0.64
35:1d:105:VAL:HG13	35:1d:110:PHE:HB2	1.78	0.64
1:2A:2787:C:H1'	4:2E:62:PRO:HG3	1.80	0.64
32:2a:814:A:H2'	32:2a:816:A:H5"	1.78	0.64
33:2b:7:VAL:O	33:2b:217:ARG:NH2	2.28	0.64
35:2d:173:TRP:CD1	35:2d:189:PRO:HG3	2.33	0.64
40:2i:28:VAL:HG22	40:2i:63:ILE:HB	1.78	0.64
1:1A:729:G:C6	3:1D:208:LYS:HB2	2.33	0.64
1:1A:1385:G:O2'	1:1A:1396:U:O2	2.15	0.64
1:1A:2331:G:N7	61:1A:4401:HOH:O	2.30	0.64
31:19:25:VAL:HB	31:19:34:GLN:HB2	1.79	0.64
1:2A:2355:C:H4'	22:20:24:LYS:HG3	1.80	0.64
23:21:4:VAL:HG12	23:21:11:ARG:HB2	1.80	0.64
1:2A:392:C:H5"	1:2A:409:C:H5"	1.79	0.64
7:2H:27:LYS:NZ	7:2H:32:GLU:OE1	2.31	0.64
32:2a:544:G:OP2	35:2d:66:ARG:NH2	2.30	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:68:G:H1	32:1a:101:A:H61	1.46	0.64
12:2Q:109:VAL:HG22	12:2Q:113:GLN:HB3	1.79	0.64
16:2U:91:ASP:O	16:2U:95:LEU:HB2	1.98	0.64
54:1w:6:A:N6	54:1w:67:U:O4	2.31	0.63
34:2c:18:TRP:O	34:2c:21:ARG:NH2	2.30	0.63
1:2A:476:G:OP1	61:2A:3955:HOH:O	2.15	0.63
32:2a:1053:G:N7	32:2a:1200:C:H5"	2.13	0.63
32:2a:1151:A:O2'	32:2a:1152:A:O5'	2.15	0.63
41:2j:5:ARG:N	61:2j:302:HOH:O	2.31	0.63
1:1A:2140:C:H42	1:1A:2150:U:H3	1.45	0.63
20:2Y:8:LYS:HE3	20:2Y:97:ARG:HH11	1.64	0.63
32:2a:521:G:H4'	43:2l:73:GLU:HG2	1.80	0.63
31:19:16:VAL:HG22	31:19:25:VAL:HG22	1.81	0.63
11:2P:87:ASP:O	11:2P:90:ARG:NH1	2.31	0.63
32:2a:79:G:H1	32:2a:90:U:H3	1.44	0.63
33:2b:48:MET:HA	33:2b:51:LEU:HB2	1.81	0.63
1:1A:1771:C:OP1	61:1A:4312:HOH:O	2.15	0.63
1:2A:749:C:OP2	61:2A:3959:HOH:O	2.16	0.63
1:1A:2140:C:N3	1:1A:2151:G:O6	2.31	0.63
7:1H:149:ARG:NH2	7:1H:167:GLU:OE2	2.28	0.63
33:1b:212:GLN:O	33:1b:216:SER:OG	2.16	0.63
54:1w:45:G:O2'	54:1w:46:7MG:OP1	2.14	0.63
32:2a:1002:G:C2	32:2a:1003:G:H1'	2.34	0.63
1:2A:463:G:N2	1:2A:466:A:OP2	2.28	0.63
1:2A:643:A:N1	1:2A:2369:A:O2'	2.29	0.63
17:2V:72:VAL:HG13	17:2V:85:LYS:HB3	1.80	0.63
1:1A:1653:G:N2	61:1A:4413:HOH:O	2.31	0.63
10:2O:115:VAL:HG13	10:2O:121:VAL:HG21	1.80	0.63
11:2P:59:LEU:HD11	30:28:10:ALA:HB2	1.81	0.63
32:2a:407:G:H5"	35:2d:115:ARG:HB3	1.80	0.63
54:2y:6:A:H61	54:2y:67:U:H3	1.45	0.63
54:1w:18:G:HO2'	54:1w:57:G:H22	1.45	0.62
1:2A:400:G:N7	61:2A:4028:HOH:O	2.31	0.62
9:2N:137:LYS:NZ	9:2N:139:GLU:OE2	2.31	0.62
14:2S:15:ARG:HB3	14:2S:19:LYS:HE3	1.80	0.62
1:1A:895:U:H4'	1:1A:896:A:OP1	2.00	0.62
1:1A:2393:A:H5"	11:1P:63:PRO:HB3	1.80	0.62
32:1a:625:G:OP2	61:1a:1935:HOH:O	2.16	0.62
32:1a:1385:G:N7	61:1a:1953:HOH:O	2.31	0.62
54:1y:47:U:O2'	54:1y:50:G:OP1	2.15	0.62
1:2A:1420:U:O2'	1:2A:1421:G:OP1	2.16	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1331:G:O6	52:2u:7:ARG:NH1	2.32	0.62
44:2m:37:THR:O	44:2m:55:ARG:NH1	2.32	0.62
4:1E:77:ILE:HG21	4:1E:195:LEU:HD11	1.80	0.62
32:1a:999:C:N4	32:1a:1042:G:H1	1.97	0.62
4:2E:28:ALA:HB3	4:2E:93:VAL:HG12	1.79	0.62
5:2F:103:LYS:HA	5:2F:106:ARG:HG3	1.80	0.62
54:2y:30:C:N4	54:2y:40:G:H1	1.97	0.62
1:1A:2307:G:O6	61:1A:4311:HOH:O	2.15	0.62
1:1A:2638:G:P	4:1E:82:ARG:HH12	2.21	0.62
36:1e:78:HIS:CE1	36:1e:143:ARG:H	2.13	0.62
54:1w:7:U:O2'	54:1w:49:G:OP2	2.17	0.62
18:2W:34:ASN:OD1	18:2W:37:ARG:NH2	2.32	0.62
32:1a:880:C:OP1	43:1l:8:ASN:ND2	2.33	0.62
44:1m:91:ARG:HG2	44:1m:98:VAL:HA	1.80	0.62
19:2X:8:ILE:O	24:22:36:ARG:NH2	2.32	0.62
1:1A:1783:A:N7	61:1A:4408:HOH:O	2.31	0.62
32:1a:1391:U:H2'	32:1a:1392:G:C8	2.34	0.62
1:2A:323:G:OP2	57:2A:3851:LUJ:NAP	2.33	0.62
1:2A:857:C:OP2	22:20:77:ARG:NH2	2.32	0.62
1:2A:1434:A:H61	1:2A:1558:A:H62	1.45	0.62
6:2G:113:ARG:NH1	26:24:34:GLU:OE2	2.32	0.62
32:2a:263:A:OP1	51:2t:79:ARG:NH1	2.31	0.62
32:2a:748:C:H4'	32:2a:749:C:O5'	1.97	0.62
1:1A:1670:C:O2	4:1E:129:HIS:NE2	2.31	0.62
21:1Z:130:PRO:HA	21:1Z:133:ILE:HG13	1.82	0.62
32:1a:1445:C:O2'	32:1a:1447:A:N6	2.31	0.62
36:1e:11:ILE:HB	36:1e:31:LEU:HB3	1.80	0.62
1:2A:271(U):G:H2'	1:2A:271(V):G:H8	1.63	0.62
32:2a:661:G:N2	32:2a:744:C:N3	2.41	0.62
33:2b:69:LEU:HB3	33:2b:162:ILE:HG22	1.82	0.62
33:2b:98:LEU:HB2	33:2b:101:MET:HG3	1.82	0.62
1:1A:1842:G:O2'	3:1D:253:GLN:OE1	2.15	0.62
22:10:10:THR:HG23	22:10:12:ASN:H	1.65	0.62
32:1a:67:C:H2'	32:1a:68:G:C8	2.35	0.62
32:1a:343:U:O2'	32:1a:346:G:O6	2.17	0.62
44:1m:59:TYR:O	44:1m:63:THR:OG1	2.16	0.62
1:2A:1021:A:H62	1:2A:1141:U:H3	1.48	0.62
6:2G:11:TYR:HA	6:2G:15:VAL:HB	1.82	0.62
50:2s:77:THR:HG23	50:2s:78:ARG:HG3	1.82	0.62
26:14:41:PRO:HA	26:14:47:GLN:HB3	1.82	0.62
32:1a:1373:G:H4'	38:1g:31:MET:HE1	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:1q:45:HIS:H	48:1q:72:ARG:HA	1.65	0.62
51:1t:10:LEU:HG	51:1t:12:ALA:H	1.65	0.62
1:2A:1937:A:H1'	1:2A:1939:5MU:H72	1.82	0.62
1:2A:2010:G:H5"	18:2W:42:ARG:HB2	1.82	0.62
24:22:29:LYS:HG2	24:22:57:ILE:HD13	1.80	0.62
48:2q:9:VAL:HG12	48:2q:56:VAL:HG22	1.82	0.62
1:1A:615:G:OP2	5:1F:43:LYS:NZ	2.32	0.62
32:1a:922:G:H4'	36:1e:20:GLN:HA	1.81	0.62
33:1b:178:ARG:HH22	39:1h:74:PRO:HB3	1.65	0.62
1:2A:2140:C:H42	1:2A:2151:G:H1	1.47	0.62
1:2A:2508:G:H5'	54:2w:74:C:N4	2.13	0.62
1:1A:195:A:N7	61:1A:4241:HOH:O	2.31	0.61
6:1G:34:LEU:HD23	6:1G:161:THR:HG22	1.81	0.61
19:1X:57:LEU:HD11	19:1X:78:LYS:HE2	1.80	0.61
32:1a:116:A:OP1	61:1a:1936:HOH:O	2.16	0.61
54:1y:31:C:H42	54:1y:39:G:H1	1.47	0.61
4:2E:36:ARG:HG2	4:2E:47:VAL:HG12	1.82	0.61
1:1A:1090:U:C2	1:1A:1102:C:H1'	2.35	0.61
1:1A:2693:A:H2'	1:1A:2694:G:H8	1.65	0.61
11:1P:59:LEU:HD21	30:18:10:ALA:HA	1.82	0.61
1:2A:652(A):A:H3'	1:2A:652(B):A:H5"	1.82	0.61
32:2a:236:G:OP1	48:2q:40:LYS:NZ	2.33	0.61
34:2c:172:ARG:HH21	34:2c:174:PRO:HG3	1.64	0.61
1:1A:2430:A:N3	1:1A:2430:A:H2'	2.14	0.61
32:1a:1288:A:N3	32:1a:1352:C:O2'	2.33	0.61
32:1a:1491:G:N7	57:1a:1832:LUJ:O5'	2.33	0.61
33:1b:7:VAL:O	33:1b:217:ARG:NH2	2.32	0.61
10:1O:98:VAL:HG11	10:1O:114:ILE:HG23	1.82	0.61
32:1a:45:U:H2'	32:1a:46:G:C8	2.36	0.61
1:2A:994:C:O2'	1:2A:996:A:OP1	2.17	0.61
32:2a:922:G:H4'	36:2e:20:GLN:HA	1.81	0.61
32:2a:1226:C:O2'	44:2m:111:LYS:NZ	2.32	0.61
1:1A:2141:G:O6	1:1A:2150:U:O2	2.18	0.61
3:1D:18:VAL:HG12	3:1D:211:ARG:HH12	1.65	0.61
32:1a:407:G:OP1	35:1d:115:ARG:NH2	2.32	0.61
1:2A:301:G:OP2	20:2Y:84:ARG:NH2	2.34	0.61
1:2A:1379:A:H4'	1:2A:1380:G:OP2	1.99	0.61
1:2A:2839:G:H5'	13:2R:46:GLY:HA2	1.83	0.61
1:2A:2882:A:OP1	13:2R:96:ARG:NH1	2.32	0.61
2:2B:14:U:OP2	2:2B:70:C:O2'	2.17	0.61
1:1A:801:G:O6	5:1F:53:THR:OG1	2.17	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1131:G:OP1	40:1i:20:ARG:NH2	2.30	0.61
1:2A:2151:G:H2'	1:2A:2152:G:C8	2.35	0.61
1:2A:2152:G:C2	1:2A:2153:G:H1'	2.36	0.61
33:2b:162:ILE:HD11	33:2b:184:VAL:HG22	1.82	0.61
4:1E:47:VAL:HG11	4:1E:86:PRO:HD2	1.82	0.61
38:1g:53:LYS:HB2	38:1g:125:MET:HE1	1.83	0.61
1:2A:2022:U:O2'	1:2A:2617:C:H5'	2.01	0.61
42:2k:21:ILE:HD12	42:2k:84:VAL:HG22	1.81	0.61
44:2m:80:ARG:HD2	50:2s:65:ASN:HB2	1.82	0.61
32:1a:1030:C:N3	32:1a:1031:G:N2	2.48	0.61
33:1b:115:LEU:O	33:1b:119:GLU:N	2.30	0.61
1:2A:2113:U:H3	1:2A:2170:A:H61	1.48	0.61
3:2D:108:PRO:HB3	3:2D:143:HIS:HE1	1.65	0.61
33:2b:16:HIS:HB2	33:2b:204:ASN:HB3	1.82	0.61
50:2s:41:VAL:HG12	50:2s:44:MET:HG3	1.83	0.61
1:1A:944:G:N7	61:1A:4404:HOH:O	2.30	0.61
1:1A:1038:C:H42	1:1A:1117:G:H1	1.47	0.61
32:1a:1136:U:H5"	32:1a:1137:C:C4	2.36	0.61
1:2A:1794:U:H2'	1:2A:1795:C:C6	2.36	0.61
1:2A:2404:C:O3'	11:2P:77:ARG:NH2	2.33	0.61
25:23:12:PRO:HB2	25:23:20:LYS:HG2	1.82	0.61
32:2a:909:A:N3	32:2a:1413:A:O2'	2.30	0.61
27:15:40:LYS:NZ	27:15:41:PRO:O	2.33	0.61
32:1a:266:G:H5"	32:1a:268:C:H41	1.66	0.61
1:2A:538:G:H2'	1:2A:539:G:H8	1.65	0.61
8:2I:72:LEU:HD21	8:2I:107:VAL:HG11	1.83	0.61
32:2a:157:G:H1	32:2a:164:U:H3	1.49	0.61
54:2y:19:G:N2	54:2y:56:C:N3	2.44	0.61
1:1A:1815:A:OP1	61:1A:4315:HOH:O	2.16	0.60
1:1A:2384:G:N7	61:1A:4407:HOH:O	2.31	0.60
33:1b:185:ILE:HG22	33:1b:199:TYR:HB2	1.82	0.60
49:1r:52:PRO:HB2	49:1r:54:ARG:HG2	1.81	0.60
9:2N:49:GLY:O	9:2N:119:ARG:NH1	2.33	0.60
32:2a:1004:A:C8	32:2a:1005:A:H4'	2.36	0.60
1:1A:637:A:OP1	11:1P:133:SER:OG	2.16	0.60
1:1A:1039:G:H1	1:1A:1116:C:H42	1.47	0.60
1:2A:2137:C:H1'	1:2A:2138:C:H5'	1.83	0.60
33:2b:54:THR:HG23	33:2b:199:TYR:HB3	1.82	0.60
38:2g:94:ARG:NH1	38:2g:98:SER:OG	2.35	0.60
1:1A:1105:U:H2'	1:1A:1106:G:H8	1.66	0.60
26:14:58:ARG:HH21	50:1s:68:GLY:HA3	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1027:C:C4	32:1a:1034:G:C2	2.89	0.60
38:1g:113:GLU:HG2	38:1g:119:ARG:HG2	1.83	0.60
4:2E:179:GLU:HG3	15:2T:9:LEU:HD21	1.82	0.60
21:2Z:17:ALA:HB2	21:2Z:20:ARG:HH21	1.67	0.60
26:24:59:PHE:O	26:24:62:ARG:NH1	2.34	0.60
32:2a:998:G:H1	32:2a:1043:C:H42	1.49	0.60
1:1A:613:G:N2	1:1A:614(C):A:O2'	2.35	0.60
1:1A:784:A:O4'	3:1D:227:ASN:ND2	2.34	0.60
1:1A:993:G:OP1	16:1U:50:ARG:NH2	2.34	0.60
32:1a:324:G:N7	61:1a:1954:HOH:O	2.32	0.60
32:1a:455:C:H42	32:1a:476:G:H1	1.49	0.60
1:2A:574:C:OP2	61:2A:3960:HOH:O	2.16	0.60
1:2A:668:G:H5'	1:2A:669:G:OP2	2.01	0.60
14:2S:27:SER:HA	14:2S:88:ASP:HB3	1.83	0.60
1:1A:1173:G:O2'	1:1A:1174:A:O4'	2.19	0.60
32:1a:78:G:N2	32:1a:91:C:N3	2.50	0.60
45:1n:24:CYS:HB3	45:1n:29:ARG:H	1.67	0.60
32:2a:1270:C:OP2	52:2u:24:ARG:NH2	2.34	0.60
36:2e:92:LYS:HB3	36:2e:119:LEU:HB2	1.83	0.60
1:1A:2206:G:H8	1:1A:2207:G:N7	1.99	0.60
10:1O:48:PRO:HB3	32:1a:1422:G:H5"	1.83	0.60
23:11:2:SER:HB3	23:11:46:LEU:HD12	1.82	0.60
32:1a:1316:G:H5"	45:1n:17:LYS:HE3	1.84	0.60
51:1t:43:LEU:HD13	51:1t:51:GLU:HB3	1.82	0.60
1:2A:2693:A:H2'	1:2A:2694:G:H8	1.65	0.60
32:2a:533:A:O2'	32:2a:535:A:OP2	2.19	0.60
32:2a:923:A:O2'	32:2a:1399:C:OP2	2.18	0.60
32:2a:1077:G:N1	32:2a:1080:A:OP2	2.35	0.60
32:2a:1326:C:OP2	52:2u:15:ARG:NH1	2.34	0.60
34:2c:134:ILE:HG23	34:2c:151:VAL:HB	1.83	0.60
1:1A:816:C:OP2	61:1A:4314:HOH:O	2.16	0.60
54:1y:30:C:N3	54:1y:40:G:N2	2.49	0.60
54:1y:44:G:H3'	54:1y:45:G:H8	1.66	0.60
4:2E:77:ILE:HG21	4:2E:195:LEU:HD11	1.84	0.60
6:2G:15:VAL:HG22	6:2G:175:LEU:HB3	1.84	0.60
32:2a:714:G:H2'	32:2a:715:A:C8	2.36	0.60
5:1F:188:ARG:HA	11:1P:3:LEU:HD11	1.83	0.60
32:1a:1027:C:N3	32:1a:1034:G:N2	2.49	0.60
13:2R:67:LEU:HD13	13:2R:76:VAL:HG21	1.83	0.60
33:2b:189:ASP:OD1	33:2b:189:ASP:N	2.30	0.60
41:2j:98:ILE:O	61:2j:301:HOH:O	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:615:G:OP1	5:1F:40:GLN:NE2	2.35	0.60
1:1A:2135:A:N6	1:1A:2156:G:HO2'	1.97	0.60
32:1a:1457:G:OP1	51:1t:39:LYS:NZ	2.35	0.60
40:1i:49:PRO:HD2	40:1i:81:ILE:HD11	1.84	0.60
1:2A:2584:U:O4	61:2A:3962:HOH:O	2.17	0.60
32:2a:1166:G:N2	32:2a:1170:A:OP2	2.35	0.60
18:1W:71:VAL:HA	18:1W:107:LEU:HD12	1.82	0.60
32:1a:684:A:N6	61:1a:1948:HOH:O	2.28	0.60
32:1a:978:A:O2'	32:1a:1322:C:N3	2.33	0.60
39:1h:10:LEU:HD22	39:1h:83:ILE:HD11	1.82	0.60
39:1h:14:ARG:NH1	39:1h:83:ILE:O	2.35	0.60
1:2A:845:G:OP2	1:2A:845:G:N2	2.35	0.60
11:2P:52:GLU:OE1	11:2P:55:ARG:NH1	2.35	0.60
19:2X:4:ALA:HB1	19:2X:42:ALA:HA	1.83	0.60
32:2a:987:G:H2'	32:2a:988:G:C8	2.37	0.60
1:2A:2319:G:N2	14:2S:3:ARG:HD3	2.18	0.59
4:2E:12:THR:HG22	4:2E:13:ARG:H	1.67	0.59
4:2E:135:HIS:NE2	61:2E:402:HOH:O	2.30	0.59
15:2T:29:ARG:HG3	15:2T:46:GLU:HB2	1.84	0.59
32:2a:921:U:O2	36:2e:19:MET:HB2	2.02	0.59
1:1A:1506:C:H2'	1:1A:1507:A:H8	1.67	0.59
1:1A:2815:C:H5'	27:15:29:THR:HG21	1.84	0.59
9:1N:67:LEU:HD12	9:1N:87:LEU:HD13	1.85	0.59
13:1R:12:ARG:O	13:1R:17:ARG:NH1	2.34	0.59
33:1b:174:VAL:HG13	33:1b:184:VAL:HG11	1.84	0.59
1:2A:441:U:O2	5:2F:46:ARG:NH2	2.35	0.59
41:2j:47:PHE:HB2	41:2j:63:PHE:HB2	1.84	0.59
1:1A:1321:A:H2'	1:1A:1322:A:H8	1.67	0.59
1:2A:1826:G:H4'	3:2D:242:ARG:NH2	2.17	0.59
1:2A:1920:OMC:HM22	1:2A:1921:G:H5'	1.84	0.59
1:2A:2203:U:H4'	3:2D:151:LYS:HG3	1.84	0.59
32:2a:987:G:N2	32:2a:1218:C:N3	2.46	0.59
40:2i:49:PRO:HD2	40:2i:81:ILE:HD11	1.83	0.59
1:1A:2142:C:H2'	1:1A:2143:C:H6	1.66	0.59
8:1I:9:LEU:HD22	8:1I:12:LEU:HD12	1.84	0.59
32:1a:1009:G:O6	32:1a:1020:U:O2	2.20	0.59
32:1a:1284:C:H3'	32:1a:1285:A:H8	1.66	0.59
1:2A:764:A:H5'	3:2D:210:GLY:HA2	1.85	0.59
1:2A:1113:U:H2'	1:2A:1114:G:C8	2.36	0.59
2:2B:104:U:HO2'	21:2Z:29:TYR:HH	1.47	0.59
33:2b:16:HIS:HB3	33:2b:210:SER:HB2	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1786:A:H1'	1:1A:1938:A:N6	2.17	0.59
1:1A:2160:G:O6	1:1A:2161:C:N4	2.34	0.59
34:1c:152:ILE:HB	34:1c:199:LYS:HB2	1.84	0.59
1:2A:563:G:OP2	61:2A:3961:HOH:O	2.17	0.59
1:2A:2600:A:N6	61:2A:3942:HOH:O	2.32	0.59
32:2a:460:G:O6	61:2a:3317:HOH:O	2.16	0.59
32:2a:532:A:N6	32:2a:1206:G:O2'	2.35	0.59
32:2a:953:G:H5'	32:2a:965:A:N6	2.17	0.59
48:2q:66:SER:O	48:2q:70:ARG:NH1	2.36	0.59
54:2w:49:G:N2	54:2w:65:C:N3	2.51	0.59
40:1i:29:ASN:ND2	40:1i:65:VAL:O	2.23	0.59
1:1A:987:G:N7	61:1A:4411:HOH:O	2.31	0.59
1:1A:1696:G:N7	61:1A:4417:HOH:O	2.32	0.59
5:1F:164:ARG:HD2	5:1F:175:THR:HG23	1.84	0.59
1:1A:2286:A:H4'	1:1A:2287:A:O4'	2.02	0.59
21:1Z:52:SER:OG	21:1Z:54:HIS:ND1	2.30	0.59
32:1a:1027:C:N4	32:1a:1034:G:N1	2.50	0.59
1:2A:586:A:H5'	5:2F:89:VAL:HG21	1.84	0.59
1:2A:1816:G:O6	3:2D:35:LYS:NZ	2.24	0.59
1:2A:2299:G:H2'	1:2A:2300:G:H8	1.66	0.59
1:2A:2836:U:H2'	1:2A:2837:G:C8	2.38	0.59
32:2a:1272:G:N2	32:2a:1273:G:C4	2.70	0.59
32:2a:1427:U:H2'	32:2a:1428:A:C8	2.37	0.59
1:1A:882:G:H1	1:1A:894:C:H42	1.51	0.59
1:1A:2746:U:OP1	7:1H:85:LYS:NZ	2.30	0.59
32:1a:1399:C:H4'	32:1a:1400:5MC:H5"	1.83	0.59
45:1n:21:TYR:OH	45:1n:23:ARG:NH2	2.35	0.59
1:2A:784:A:OP2	61:2A:3952:HOH:O	2.17	0.59
1:2A:2061:G:H5"	1:2A:2503:2MA:C2	2.33	0.59
15:2T:41:ARG:NH1	32:2a:346:G:OP1	2.35	0.59
32:2a:137:C:H2'	32:2a:138:G:H8	1.67	0.59
32:2a:779:C:O2'	42:2k:120:ARG:NH1	2.35	0.59
32:2a:1105:A:H2'	32:2a:1106:G:H8	1.68	0.59
1:1A:1082:U:H3	1:1A:1086:A:H61	0.67	0.59
2:1B:105:A:OP1	21:1Z:72:ARG:NH1	2.36	0.59
7:1H:3:ARG:NH1	7:1H:4:ILE:H	2.00	0.59
11:1P:59:LEU:HD11	30:18:10:ALA:HB2	1.85	0.59
19:1X:60:ARG:HH22	29:17:47:ARG:HH12	1.49	0.59
1:2A:386:G:O2'	61:2A:3963:HOH:O	2.17	0.59
1:2A:2079:U:OP1	23:21:21:ARG:NH2	2.36	0.59
6:2G:79:ASN:N	6:2G:79:ASN:OD1	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:666:G:H5'	32:2a:726:C:H1'	1.84	0.59
32:2a:1095:U:OP1	32:2a:1108:G:N1	2.32	0.59
32:2a:1381:U:O4'	38:2g:79:ARG:NH2	2.34	0.59
34:2c:131:ARG:NH1	34:2c:166:GLU:OE1	2.34	0.59
37:2f:97:PHE:HD2	49:2r:31:LEU:HD11	1.68	0.59
41:2j:8:LEU:HB2	41:2j:70:ARG:HB2	1.84	0.59
9:2N:123:TYR:OH	9:2N:130:HIS:NE2	2.25	0.58
28:26:26:ASN:HB3	28:26:29:ASN:HB2	1.85	0.58
32:2a:473:G:H2'	32:2a:474:G:H8	1.68	0.58
1:1A:220:G:O2'	1:1A:233:A:N3	2.34	0.58
1:1A:1588:C:H2'	1:1A:1589:C:H6	1.68	0.58
3:1D:108:PRO:HD2	3:1D:111:LEU:HD22	1.85	0.58
1:2A:1266:G:O5'	18:2W:15:ARG:NH2	2.36	0.58
32:2a:580:U:H5"	46:2o:58:MET:HG2	1.85	0.58
32:2a:1106:G:H5"	34:2c:172:ARG:HB3	1.85	0.58
9:1N:13:TRP:CE2	9:1N:133:GLN:HG2	2.38	0.58
34:1c:87:LEU:O	34:1c:91:LEU:N	2.34	0.58
1:2A:2414:G:N2	11:2P:67:MET:SD	2.73	0.58
32:2a:200:G:H1	32:2a:217:C:H42	1.51	0.58
32:2a:1129:C:O2'	32:2a:1130:A:N7	2.29	0.58
32:2a:1244:C:N4	32:2a:1293:G:H1	2.01	0.58
32:2a:1294:G:H2'	32:2a:1295:G:C8	2.39	0.58
35:2d:163:GLU:HA	35:2d:166:LYS:HG3	1.85	0.58
1:1A:2432:A:C4	23:11:33:LYS:HG2	2.38	0.58
26:14:15:ILE:HB	26:14:32:TYR:HD1	1.68	0.58
54:1w:62:C:H2'	54:1w:63:G:H8	1.67	0.58
54:1y:19:G:N1	54:1y:56:C:N4	2.50	0.58
12:2Q:75:THR:HG21	12:2Q:87:LYS:HE3	1.84	0.58
21:2Z:33:LEU:HD21	21:2Z:90:VAL:HG21	1.86	0.58
32:2a:553:A:H5"	43:2l:24:VAL:HG21	1.84	0.58
1:1A:1011:G:OP1	16:1U:77:SER:OG	2.19	0.58
1:1A:1321:A:H2'	1:1A:1322:A:C8	2.38	0.58
1:2A:900:A:O2'	1:2A:901:A:OP1	2.20	0.58
12:2Q:39:PRO:HD3	12:2Q:99:PRO:HG3	1.86	0.58
26:24:15:ILE:HB	26:24:32:TYR:HD1	1.69	0.58
32:2a:328:C:H4'	32:2a:329:A:H5'	1.86	0.58
40:2i:76:ALA:O	40:2i:80:GLY:N	2.35	0.58
17:1V:14:VAL:HB	17:1V:96:ILE:HG13	1.85	0.58
39:1h:86:ILE:HG13	39:1h:133:LEU:HD22	1.86	0.58
32:2a:636:U:H2'	32:2a:637:G:C8	2.39	0.58
1:1A:185:U:H2'	1:1A:186:G:H8	1.69	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:1r:32:ARG:HA	49:1r:69:THR:HG21	1.86	0.58
1:2A:1796:U:H2'	1:2A:1797:C:C6	2.38	0.58
1:2A:2232:U:P	23:21:40:ARG:HH12	2.26	0.58
12:2Q:54:MET:HE3	12:2Q:64:ILE:HD13	1.85	0.58
32:2a:501:C:H2'	32:2a:502:G:C8	2.38	0.58
32:2a:939:G:H1	32:2a:1344:C:N4	2.01	0.58
1:1A:383:U:H2'	1:1A:385:C:H5	1.69	0.58
1:1A:2422:A:O4'	54:1y:76:A:N6	2.37	0.58
6:1G:18:GLU:OE2	6:1G:21:ARG:NH2	2.34	0.58
10:1O:36:GLY:HA3	10:1O:109:LYS:HD2	1.84	0.58
30:18:23:VAL:HG13	30:18:47:LYS:HB3	1.85	0.58
1:2A:686:G:N2	1:2A:788:A:H61	2.02	0.58
1:1A:534:U:H2'	1:1A:535:C:C6	2.39	0.58
1:1A:2134:A:O2'	1:1A:2135:A:OP1	2.19	0.58
1:1A:2379:G:O2'	14:1S:17:ARG:NH1	2.22	0.58
11:1P:89:ALA:O	11:1P:121:LYS:NZ	2.32	0.58
32:1a:78:G:C6	32:1a:91:C:N4	2.72	0.58
32:1a:78:G:N1	32:1a:91:C:N4	2.52	0.58
32:1a:189(B):C:H42	32:1a:189(I):G:H1	1.50	0.58
32:1a:1027:C:N4	32:1a:1034:G:C6	2.72	0.58
26:24:24:THR:OG1	26:24:25:TYR:N	2.32	0.58
32:2a:1316:G:N2	32:2a:1319:A:H5'	2.19	0.58
35:2d:108:LEU:HD21	35:2d:183:GLY:HA3	1.85	0.58
1:1A:2336:A:H61	22:10:43:THR:HG22	1.68	0.58
61:1A:4467:HOH:O	15:1T:98:LYS:NZ	2.37	0.58
19:1X:34:ALA:O	19:1X:77:LYS:NZ	2.31	0.58
32:1a:1292:U:H2'	32:1a:1293:G:C8	2.39	0.58
32:1a:1356:G:H2'	32:1a:1357:A:C8	2.38	0.58
32:1a:1435:G:H2'	32:1a:1436:U:C6	2.39	0.58
1:2A:918:A:H2	2:2B:81:G:H5'	1.69	0.58
1:2A:1265:A:H61	1:2A:2013:A:H5"	1.69	0.58
1:2A:1937:A:OP1	61:2A:3964:HOH:O	2.17	0.58
32:2a:335:C:O2'	32:2a:1433:A:N3	2.33	0.58
32:2a:576:G:O6	32:2a:880:C:O2'	2.16	0.58
34:2c:157:ILE:HD12	34:2c:164:ARG:HB3	1.86	0.58
32:1a:1104:G:H4'	33:1b:111:ARG:NH2	2.18	0.57
33:1b:92:TYR:HH	33:1b:150:SER:HG	1.51	0.57
40:1i:50:LEU:HD13	40:1i:56:LEU:HA	1.84	0.57
41:1j:8:LEU:HD22	41:1j:96:ILE:HG22	1.84	0.57
1:2A:2138:C:N4	1:2A:2153:G:N1	2.32	0.57
20:2Y:77:PRO:HD2	20:2Y:106:LEU:HD23	1.84	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1120:G:N2	32:2a:1153:C:N3	2.41	0.57
33:2b:37:ASN:HB2	33:2b:39:ILE:HD12	1.86	0.57
40:2i:65:VAL:HG11	40:2i:73:GLN:HB3	1.85	0.57
4:1E:8:LYS:O	4:1E:193:GLY:N	2.32	0.57
32:1a:973:G:H3'	32:1a:974:A:H5"	1.86	0.57
1:2A:332:A:O2'	1:2A:334:C:OP2	2.18	0.57
32:2a:573:A:N3	32:2a:883:C:O2'	2.36	0.57
35:2d:173:TRP:CD1	35:2d:174:LEU:HG	2.39	0.57
50:2s:27:GLU:HB2	50:2s:28:LYS:HA	1.86	0.57
6:1G:126:ASP:HB2	6:1G:130:ASN:H	1.68	0.57
15:1T:60:THR:HG22	15:1T:77:PRO:HA	1.85	0.57
32:1a:1162:C:H42	32:1a:1174:G:H1	1.52	0.57
1:2A:1022:G:H22	1:2A:1142(A):A:H2	1.51	0.57
1:2A:1170:G:O6	1:2A:1180:C:N4	2.37	0.57
1:2A:2394:C:N3	54:2y:76:A:O2'	2.34	0.57
6:2G:68:PRO:HB3	6:2G:92:VAL:HB	1.87	0.57
1:1A:1113:U:H2'	1:1A:1114:G:C8	2.39	0.57
24:12:10:LEU:O	24:12:14:ARG:HG2	2.03	0.57
32:1a:1008:C:O2	32:1a:1021:G:N1	2.36	0.57
1:2A:2159:G:H2'	1:2A:2160:G:H8	1.70	0.57
3:2D:206:LEU:O	3:2D:211:ARG:HD3	2.05	0.57
5:2F:178:PRO:HB3	5:2F:198:ALA:HA	1.87	0.57
43:2l:70:ILE:HG12	43:2l:100:ILE:HD12	1.86	0.57
44:2m:80:ARG:HH21	50:2s:69:HIS:HE1	1.51	0.57
1:1A:1052:C:H2'	1:1A:1053:C:H6	1.68	0.57
1:1A:1366:A:OP1	23:11:3:LYS:NZ	2.37	0.57
1:1A:1631(A):A:OP1	61:1A:4316:HOH:O	2.18	0.57
1:1A:2136:C:N3	1:1A:2155:G:C2	2.72	0.57
1:1A:2328:A:H2'	1:1A:2329:G:C8	2.39	0.57
26:14:61:ARG:HG3	26:14:62:ARG:N	2.20	0.57
38:1g:27:ILE:HA	38:1g:30:ILE:HD12	1.86	0.57
48:1q:22:LEU:HD11	48:1q:39:SER:HB3	1.85	0.57
54:1y:40:G:H2'	54:1y:41:A:C8	2.38	0.57
1:2A:2336:A:H61	22:20:43:THR:HG22	1.69	0.57
21:2Z:141:VAL:HG13	21:2Z:142:SER:H	1.69	0.57
30:28:6:THR:HG22	30:28:63:PRO:HD2	1.87	0.57
32:2a:580:U:OP2	61:2a:3318:HOH:O	2.17	0.57
1:1A:2334:G:O6	22:10:74:ARG:NH1	2.34	0.57
32:1a:1302:U:C5	44:1m:17:VAL:HG11	2.40	0.57
5:2F:143:ALA:HB1	5:2F:148:LEU:HB2	1.85	0.57
30:28:26:LYS:NZ	61:28:202:HOH:O	2.38	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:918:A:N3	2:1B:80:U:O2'	2.34	0.57
1:1A:1358:G:O2'	1:1A:1373:A:N6	2.37	0.57
1:1A:2550:G:OP1	61:1A:4260:HOH:O	2.17	0.57
3:1D:242:ARG:HD2	3:1D:246:PRO:HG3	1.86	0.57
30:18:62:LEU:HB3	30:18:65:GLU:HG2	1.86	0.57
1:2A:832:G:H5'	11:2P:45:LEU:HD21	1.86	0.57
9:2N:4:TYR:O	16:2U:64:ARG:NH2	2.31	0.57
32:2a:352:C:O2'	32:2a:354:G:OP1	2.21	0.57
32:2a:1319:A:H61	32:2a:1361:G:H21	1.51	0.57
50:2s:22:LEU:HD22	50:2s:27:GLU:HA	1.85	0.57
32:1a:37:U:O2'	32:1a:547:A:N1	2.36	0.57
32:1a:79:G:C2	32:1a:90:U:O2	2.57	0.57
1:2A:131:G:OP1	61:2A:3965:HOH:O	2.17	0.57
17:2V:76:LYS:HB2	17:2V:81:TYR:HB3	1.87	0.57
33:2b:121:LEU:HD21	33:2b:127:ILE:HD12	1.86	0.57
8:1I:101:LEU:HD22	8:1I:107:VAL:HB	1.85	0.57
32:2a:28:G:O2'	32:2a:296:U:OP1	2.18	0.57
32:2a:1073:U:O2	33:2b:104:ASN:ND2	2.37	0.57
33:2b:166:ASP:HB3	33:2b:169:LYS:HB3	1.87	0.57
1:1A:1800:C:OP1	3:1D:260:ARG:NH2	2.38	0.57
1:1A:2790:A:H5"	1:1A:2791:C:H5'	1.85	0.57
25:13:8:LEU:HG	25:13:31:LEU:HD23	1.86	0.57
54:1y:44:G:H3'	54:1y:45:G:C8	2.40	0.57
1:2A:2408:U:H2'	1:2A:2409:G:C8	2.40	0.57
21:2Z:138:GLU:HB2	21:2Z:156:LYS:HD3	1.85	0.57
30:28:33:ASN:HA	30:28:36:LYS:HD2	1.86	0.57
55:2x:66:C:H2'	55:2x:67:C:O4'	2.04	0.57
1:1A:639:U:H2'	1:1A:640:C:C6	2.40	0.56
1:1A:1071:G:H2'	1:1A:1072:C:H6	1.69	0.56
1:1A:2749:A:OP1	7:1H:3:ARG:NH1	2.38	0.56
15:1T:108:ARG:HH22	15:1T:112:ARG:HD3	1.69	0.56
32:1a:715:A:H2'	32:1a:716:A:C8	2.39	0.56
33:1b:97:TRP:HZ2	33:1b:102:LEU:HD13	1.70	0.56
34:1c:3:ASN:OD1	34:1c:3:ASN:N	2.38	0.56
38:1g:78:ARG:HG2	38:1g:79:ARG:H	1.68	0.56
32:2a:977:A:O2'	32:2a:979:C:OP2	2.20	0.56
32:2a:1060:C:H5"	41:2j:51:ARG:HG2	1.86	0.56
39:2h:7:ALA:O	39:2h:11:THR:OG1	2.23	0.56
1:1A:1588:C:H2'	1:1A:1589:C:C6	2.39	0.56
1:1A:2136:C:N4	1:1A:2155:G:C6	2.74	0.56
1:1A:2138:C:N4	1:1A:2153:G:H1	2.03	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:1W:25:ARG:NH2	18:1W:74:ALA:O	2.36	0.56
32:1a:157:G:H1	32:1a:164:U:H3	1.54	0.56
33:1b:178:ARG:HB3	39:1h:72:PRO:HA	1.86	0.56
1:2A:752:A:H3'	29:27:1:MET:HE1	1.87	0.56
1:2A:2137:C:C4	1:2A:2154:G:N1	2.70	0.56
4:2E:116:VAL:HG13	4:2E:122:PHE:HB2	1.86	0.56
54:2w:10:G:H1	54:2w:25:C:H42	1.51	0.56
1:1A:571:A:O2'	17:1V:78:LYS:HE2	2.05	0.56
1:1A:573:G:N2	1:1A:2031:A:OP2	2.37	0.56
1:1A:2142:C:H2'	1:1A:2143:C:C6	2.39	0.56
33:1b:52:GLU:O	33:1b:56:ARG:NH1	2.38	0.56
1:2A:18:C:O2'	1:2A:554:U:OP1	2.22	0.56
1:2A:2066:C:OP1	61:2A:3966:HOH:O	2.18	0.56
1:2A:2110:G:H3'	1:2A:2111:C:H5'	1.86	0.56
3:2D:108:PRO:HB3	3:2D:143:HIS:CE1	2.40	0.56
5:2F:185:ASP:HA	5:2F:188:ARG:HD3	1.87	0.56
26:24:64:GLY:C	26:24:66:SER:H	2.12	0.56
32:2a:134:A:H61	47:2p:25:ARG:NH1	2.03	0.56
32:2a:405:U:OP1	32:2a:406:G:O2'	2.19	0.56
32:2a:677:U:H3	32:2a:713:G:H22	1.54	0.56
32:2a:707:C:H2'	32:2a:708:C:H6	1.70	0.56
44:2m:23:TYR:HB3	44:2m:67:GLU:HA	1.87	0.56
19:1X:53:LYS:HB3	19:1X:82:GLN:HB3	1.87	0.56
50:1s:27:GLU:HB2	50:1s:28:LYS:HA	1.87	0.56
1:2A:223:A:O2'	1:2A:420:C:O2	2.22	0.56
17:2V:98:GLU:OE2	17:2V:100:ARG:NH1	2.38	0.56
32:2a:108:G:C6	51:2t:15:ARG:HG2	2.40	0.56
32:2a:1243:C:N4	32:2a:1294:G:H1	2.03	0.56
32:2a:1271:G:C2	32:2a:1272:G:C8	2.94	0.56
1:1A:1405:U:H2'	1:1A:1406:U:C6	2.41	0.56
1:1A:1932:A:H2'	1:1A:1933:G:O4'	2.06	0.56
3:1D:274:ARG:NH1	61:1D:404:HOH:O	2.37	0.56
14:1S:61:ASN:HD22	14:1S:64:GLU:H	1.54	0.56
1:2A:1824:G:N3	3:2D:254:THR:OG1	2.38	0.56
3:2D:242:ARG:N	3:2D:242:ARG:HH11	2.03	0.56
32:2a:1020:U:H2'	32:2a:1021:G:C8	2.41	0.56
32:1a:171:A:H2'	32:1a:172:A:C8	2.40	0.56
32:1a:613:C:H2'	32:1a:614:A:H8	1.70	0.56
32:1a:1002:G:H3'	32:1a:1003:G:C4'	2.35	0.56
32:1a:1510:U:H2'	32:1a:1511:G:C8	2.41	0.56
54:1y:2:G:O6	54:1y:71:C:N3	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:639:U:H2'	1:2A:640:C:C6	2.40	0.56
1:2A:2287:A:N6	1:2A:2344:U:H3	2.02	0.56
1:2A:2319:G:H22	14:2S:3:ARG:HD3	1.69	0.56
32:2a:1179:A:H2'	32:2a:1180:A:O4'	2.06	0.56
32:2a:1255:G:OP1	41:2j:45:ARG:NH2	2.38	0.56
34:2c:24:ALA:HB3	34:2c:29:TYR:HD1	1.70	0.56
38:2g:105:VAL:O	38:2g:109:ASN:ND2	2.32	0.56
1:1A:1082:U:N3	1:1A:1086:A:N6	2.14	0.56
12:1Q:18:LYS:O	12:1Q:98:LYS:NZ	2.37	0.56
15:1T:65:LYS:HE3	15:1T:67:SER:HB2	1.87	0.56
1:2A:2137:C:C2	1:2A:2154:G:N2	2.71	0.56
1:2A:2630:G:H2'	1:2A:2631:G:C8	2.41	0.56
6:2G:11:TYR:OH	6:2G:16:ARG:NH1	2.39	0.56
32:2a:185:A:H61	32:2a:192:U:H3	1.51	0.56
32:2a:1071:C:H2'	32:2a:1072:G:H8	1.71	0.56
3:1D:108:PRO:HB3	3:1D:143:HIS:CE1	2.41	0.56
13:1R:2:ARG:NH1	13:1R:5:LYS:O	2.38	0.56
32:1a:976:G:OP2	32:1a:1358:U:O2'	2.20	0.56
44:1m:23:TYR:HB3	44:1m:67:GLU:HA	1.88	0.56
1:2A:307:G:N1	1:2A:310:A:OP2	2.35	0.56
1:2A:2794:C:N4	1:2A:2802:G:O6	2.38	0.56
32:2a:536:C:N4	32:2a:537:G:O6	2.38	0.56
1:1A:1187:G:H5"	17:1V:81:TYR:CE1	2.41	0.56
1:1A:1688:U:O2	1:1A:1700:A:H5'	2.06	0.56
23:11:23:LYS:HB3	23:11:29:GLY:HA3	1.87	0.56
32:1a:108:G:C6	51:1t:15:ARG:HG2	2.41	0.56
32:1a:278:G:OP2	48:1q:92:ARG:NH2	2.39	0.56
1:2A:245:G:O6	30:28:8:LYS:NZ	2.38	0.56
1:2A:2327:A:H2'	1:2A:2328:A:C8	2.41	0.56
32:2a:390:C:H4'	47:2p:28:ARG:HH21	1.71	0.56
32:2a:437:U:H5'	35:2d:155:LEU:HD21	1.88	0.56
32:2a:728:A:OP1	46:2o:54:ARG:NH1	2.38	0.56
32:2a:1513:A:H2'	32:2a:1514:C:C6	2.40	0.56
50:2s:20:LEU:HD23	50:2s:23:ASN:HD22	1.71	0.56
1:1A:2375:G:O2'	1:1A:2377:A:N7	2.33	0.56
25:13:6:VAL:HG22	25:13:56:VAL:HG13	1.88	0.56
32:1a:1077:G:N2	32:1a:1080:A:OP2	2.37	0.56
33:1b:162:ILE:O	33:1b:185:ILE:HG12	2.06	0.56
39:1h:116:LYS:HD3	39:1h:127:LEU:HD23	1.88	0.56
1:2A:564:C:N4	61:2A:3993:HOH:O	2.35	0.56
15:2T:26:ASP:OD1	15:2T:120:ARG:NH2	2.32	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:17:U:H2'	32:2a:18:C:C6	2.41	0.56
32:2a:1029:C:N4	32:2a:1031:G:O6	2.38	0.56
32:1a:1305:G:N2	32:1a:1331:G:H1'	2.20	0.55
33:1b:158:LEU:HD21	33:1b:180:LEU:HD13	1.87	0.55
1:2A:1252:G:N2	16:2U:37:GLU:OE2	2.34	0.55
1:2A:1991:U:H2'	1:2A:1992:G:H5"	1.88	0.55
1:2A:2189:U:H2'	1:2A:2190:G:C8	2.41	0.55
23:21:83:GLU:OE1	23:21:83:GLU:N	2.38	0.55
32:2a:1305:G:N2	32:2a:1331:G:H1'	2.21	0.55
6:1G:179:PRO:HB2	26:14:42:PHE:HE2	1.72	0.55
50:1s:32:LYS:HA	50:1s:50:ALA:HB3	1.88	0.55
50:1s:63:THR:OG1	50:1s:65:ASN:OD1	2.25	0.55
1:2A:1600:C:OP1	19:2X:58:HIS:NE2	2.38	0.55
1:2A:1939:5MU:OP1	1:2A:2604:U:O2'	2.22	0.55
23:21:50:ARG:HG2	23:21:59:THR:HG22	1.88	0.55
32:2a:1202:G:O4'	45:2n:29:ARG:NH1	2.39	0.55
32:2a:1310:G:H5'	44:2m:77:ASN:ND2	2.20	0.55
41:2j:51:ARG:H	41:2j:60:ARG:HA	1.71	0.55
43:2l:71:PRO:O	43:2l:102:ARG:NH1	2.40	0.55
1:1A:272(D):G:N7	61:1A:4430:HOH:O	2.33	0.55
1:1A:586:A:N1	1:1A:809:G:O2'	2.38	0.55
1:1A:2693:A:H2'	1:1A:2694:G:C8	2.42	0.55
4:1E:89:ASP:OD1	4:1E:89:ASP:N	2.37	0.55
32:1a:1237:C:O2'	32:1a:1300:G:N2	2.39	0.55
33:1b:69:LEU:HD11	33:1b:93:VAL:HG23	1.89	0.55
1:2A:2134:A:O2'	1:2A:2159:G:N2	2.39	0.55
21:2Z:146:ILE:HD13	21:2Z:174:VAL:HG13	1.88	0.55
32:2a:336:C:H1'	32:2a:1468:A:H2	1.71	0.55
34:2c:136:GLN:HB3	34:2c:140:ARG:HH12	1.72	0.55
35:2d:157:LEU:O	35:2d:161:ASN:ND2	2.38	0.55
4:1E:59:VAL:HG21	4:1E:74:PRO:HB3	1.88	0.55
9:1N:121:LYS:HD3	9:1N:130:HIS:CE1	2.41	0.55
34:1c:8:ILE:HD13	34:1c:184:TYR:HB3	1.88	0.55
35:1d:178:VAL:C	35:1d:180:GLY:H	2.15	0.55
42:1k:33:THR:HA	42:1k:39:PRO:HA	1.89	0.55
1:2A:300:A:OP1	20:2Y:86:ARG:NH2	2.25	0.55
1:2A:1579:A:H2'	1:2A:1580:A:C8	2.41	0.55
32:2a:911:U:OP2	43:2l:97:ARG:NH2	2.39	0.55
33:2b:185:ILE:HG22	33:2b:199:TYR:HB2	1.88	0.55
34:2c:124:ILE:HG21	34:2c:130:VAL:HG13	1.89	0.55
34:2c:150:LYS:HE2	34:2c:152:ILE:HD11	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1B:14:U:O3'	2:1B:108:U:O2'	2.24	0.55
11:1P:63:PRO:HG2	30:18:25:MET:HB2	1.89	0.55
46:1o:25:THR:HG21	46:1o:70:LEU:HB2	1.88	0.55
47:1p:72:ARG:HH21	47:1p:73:LEU:HD21	1.71	0.55
1:2A:2161:C:H2'	1:2A:2162:G:O4'	2.07	0.55
1:2A:2472:G:H2'	1:2A:2475:C:H42	1.72	0.55
3:2D:242:ARG:HD3	3:2D:246:PRO:HG3	1.88	0.55
4:2E:89:ASP:N	4:2E:89:ASP:OD1	2.38	0.55
11:2P:121:LYS:HE2	11:2P:123:LEU:HD21	1.89	0.55
12:2Q:34:LEU:HB2	12:2Q:118:LEU:HD22	1.87	0.55
20:2Y:13:VAL:HG12	20:2Y:74:PRO:HA	1.88	0.55
1:1A:602:G:O2'	1:1A:655:A:N6	2.40	0.55
7:1H:3:ARG:NH2	7:1H:65:HIS:HB3	2.21	0.55
32:1a:677:U:H3	32:1a:713:G:H22	1.53	0.55
32:1a:1292:U:H2'	32:1a:1293:G:H8	1.71	0.55
33:1b:8:LYS:HD2	33:1b:48:MET:HG2	1.89	0.55
35:1d:111:ALA:HB2	35:1d:120:LEU:HD12	1.88	0.55
43:1l:76:ASN:ND2	43:1l:106:ASP:O	2.39	0.55
32:2a:628:G:N7	61:2a:3338:HOH:O	2.33	0.55
36:2e:110:LEU:HB3	36:2e:115:VAL:HB	1.89	0.55
1:1A:631:A:OP1	11:1P:65:ARG:NE	2.36	0.55
1:1A:2577:A:OP2	27:15:3:LYS:NZ	2.39	0.55
32:1a:284:G:H2'	32:1a:285:G:H8	1.71	0.55
32:1a:673:G:H2'	32:1a:674:G:C8	2.41	0.55
32:1a:974:A:OP2	45:1n:29:ARG:NH2	2.36	0.55
32:1a:1412:C:OP1	43:1l:57:LYS:NZ	2.35	0.55
40:1i:26:VAL:HG13	40:1i:61:ALA:HB3	1.88	0.55
3:2D:206:LEU:HD23	3:2D:211:ARG:HE	1.71	0.55
9:2N:104:LYS:HA	9:2N:107:LEU:HD12	1.89	0.55
32:2a:324:G:N7	61:2a:3337:HOH:O	2.33	0.55
32:2a:967:5MC:H2'	32:2a:968:A:C8	2.42	0.55
54:2y:19:G:H1	54:2y:56:C:N4	2.00	0.55
1:1A:2627:G:O2'	1:1A:2781:A:N1	2.35	0.55
26:14:64:GLY:C	26:14:66:SER:H	2.15	0.55
32:1a:60:A:H4'	32:1a:61:G:H5'	1.89	0.55
1:2A:2140:C:N3	1:2A:2151:G:N2	2.48	0.55
1:2A:2250:G:OP1	12:2Q:85:LYS:NZ	2.36	0.55
3:2D:80:ALA:HB3	3:2D:94:LEU:HB3	1.89	0.55
4:2E:9:VAL:HG22	4:2E:25:VAL:HB	1.88	0.55
50:2s:28:LYS:HB3	50:2s:29:ARG:HA	1.88	0.55
54:2w:49:G:N1	54:2w:65:C:N4	2.55	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:956:G:H5"	12:1Q:77:LYS:HD2	1.89	0.55
1:1A:1069:A:H2'	1:1A:1073:A:N7	2.22	0.55
5:1F:111:ALA:HB2	5:1F:206:ILE:HG21	1.89	0.55
32:1a:44:G:C2	32:1a:45:U:H1'	2.42	0.55
32:1a:279:A:C5	48:1q:98:LEU:HD23	2.42	0.55
32:1a:1391:U:H2'	32:1a:1392:G:H8	1.72	0.55
40:1i:65:VAL:HG11	40:1i:73:GLN:HB3	1.88	0.55
48:1q:53:LEU:HD23	48:1q:82:MET:HE1	1.89	0.55
1:2A:1502:C:H2'	1:2A:1503:U:H6	1.72	0.55
4:2E:127:ASP:OD2	61:2E:401:HOH:O	2.18	0.55
10:2O:11:ALA:O	10:2O:99:PHE:N	2.34	0.55
13:2R:33:ARG:NH2	13:2R:115:GLU:OE1	2.33	0.55
32:2a:410:G:OP1	35:2d:30:LYS:NZ	2.25	0.55
32:2a:501:C:H2'	32:2a:502:G:H8	1.70	0.55
54:2w:53:G:N1	54:2w:61:C:N4	2.43	0.55
1:1A:657:U:H2'	1:1A:658:C:C6	2.42	0.55
1:1A:2162:G:H1'	1:1A:2173:A:H1'	1.89	0.55
32:1a:769:G:H4'	32:1a:1513:A:H4'	1.89	0.55
36:1e:12:LEU:HB3	36:1e:31:LEU:HB2	1.89	0.55
40:1i:23:ASN:OD1	40:1i:23:ASN:N	2.39	0.55
46:1o:11:VAL:HG21	46:1o:34:LEU:HD22	1.87	0.55
1:2A:271(D):G:H1	1:2A:271(T):C:H42	1.54	0.55
1:2A:517:C:OP1	27:25:16:ARG:NH2	2.40	0.55
21:2Z:73:GLN:H	21:2Z:87:ASP:HB2	1.72	0.55
44:2m:60:VAL:HG12	44:2m:66:LEU:HD11	1.89	0.55
1:1A:1930:G:O2'	1:1A:1968:G:O6	2.21	0.54
1:1A:2011:U:OP1	18:1W:42:ARG:NH1	2.40	0.54
32:1a:381:C:H2'	32:1a:382:A:O4'	2.07	0.54
35:1d:108:LEU:HD21	35:1d:183:GLY:HA3	1.89	0.54
1:2A:521:G:H2'	1:2A:522:G:C8	2.42	0.54
32:2a:545:C:OP1	35:2d:61:LYS:NZ	2.31	0.54
1:1A:848:G:H2'	1:1A:849:A:C8	2.42	0.54
1:1A:2138:C:H42	1:1A:2153:G:H1	1.54	0.54
33:1b:87:ARG:NH2	33:1b:220:ASP:OD1	2.34	0.54
1:2A:1514:U:H2'	1:2A:1515:G:H8	1.73	0.54
5:2F:150:GLY:HA2	5:2F:172:TRP:CD2	2.43	0.54
9:2N:128:HIS:O	9:2N:131:GLN:NE2	2.41	0.54
32:2a:1274:G:N2	32:2a:1275:A:N7	2.43	0.54
2:1B:66:A:H61	2:1B:108:U:H2'	1.71	0.54
6:1G:131:TYR:HB3	6:1G:159:VAL:HG22	1.89	0.54
3:2D:108:PRO:HD2	3:2D:111:LEU:HD22	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:532:A:H2	32:2a:1055:A:H1'	1.71	0.54
32:2a:974:A:P	45:2n:29:ARG:HH21	2.31	0.54
32:2a:1271:G:N1	32:2a:1272:G:N7	2.56	0.54
32:2a:1518:MA6:N6	32:2a:1519:MA6:H103	2.22	0.54
36:2e:78:HIS:HD2	39:2h:104:ARG:HG3	1.73	0.54
39:2h:17:THR:HA	39:2h:65:TYR:HE1	1.72	0.54
41:2j:17:ASP:OD1	41:2j:70:ARG:NE	2.39	0.54
10:1O:86:ILE:HG22	10:1O:94:ARG:HD3	1.89	0.54
32:1a:674:G:H2'	32:1a:675:A:H8	1.72	0.54
1:2A:1639:U:H2'	1:2A:1640:C:H5"	1.88	0.54
1:2A:1714:G:H2'	1:2A:1717:G:H8	1.72	0.54
1:2A:1817:G:OP1	3:2D:88:ARG:NH2	2.40	0.54
10:1O:68:GLU:OE1	10:1O:78:ARG:NH1	2.36	0.54
10:1O:97:ARG:NH1	32:1a:339:C:OP2	2.31	0.54
48:1q:67:LYS:C	48:1q:69:LYS:H	2.13	0.54
1:2A:800:A:H8	1:2A:800:A:OP1	1.89	0.54
1:2A:1155:A:H5"	16:2U:55:ARG:HH11	1.71	0.54
1:2A:2258:C:O2'	1:2A:2427:C:OP2	2.24	0.54
2:2B:40:U:H1'	2:2B:45:A:H61	1.71	0.54
5:2F:120:GLU:HB2	5:2F:122:LYS:HG2	1.90	0.54
8:2I:3:VAL:HG12	8:2I:38:LEU:HA	1.88	0.54
19:2X:57:LEU:HD11	19:2X:78:LYS:HE2	1.89	0.54
32:2a:362:G:N2	32:2a:365:U:OP2	2.40	0.54
32:2a:978:A:N6	32:2a:1318:A:N7	2.55	0.54
38:2g:113:GLU:HG3	38:2g:118:VAL:HG12	1.88	0.54
54:2w:43:G:H2'	54:2w:44:G:H8	1.72	0.54
1:1A:1071:G:H2'	1:1A:1072:C:C6	2.42	0.54
1:1A:2106:G:H2'	1:1A:2107:C:C6	2.43	0.54
32:1a:539:A:OP2	43:1l:115:LYS:NZ	2.40	0.54
39:1h:7:ALA:HB2	39:1h:85:ARG:HG3	1.89	0.54
54:1w:45:G:HO2'	54:1w:46:7MG:P	2.30	0.54
1:2A:251:A:C5	1:2A:252:G:H1'	2.43	0.54
1:2A:881:G:H1	1:2A:895:U:H3	1.55	0.54
1:2A:1423:G:H2'	1:2A:1424:G:C8	2.43	0.54
1:2A:1711:C:H2'	1:2A:1712:C:H6	1.73	0.54
12:2Q:31:ASP:N	12:2Q:106:VAL:O	2.37	0.54
32:2a:987:G:H2'	32:2a:988:G:H8	1.73	0.54
32:2a:1316:G:H22	32:2a:1319:A:H5'	1.73	0.54
1:1A:668:G:N7	61:1A:4425:HOH:O	2.32	0.54
1:1A:2127:G:H2'	1:1A:2128:C:C6	2.43	0.54
21:1Z:92:SER:O	21:1Z:130:PRO:HG2	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:123:ASP:OD1	21:1Z:123:ASP:N	2.39	0.54
1:2A:27:G:N2	1:2A:512:G:H1'	2.23	0.54
1:2A:910:A:N1	1:2A:2277:G:H1'	2.22	0.54
1:2A:1506:C:H2'	1:2A:1507:A:H5'	1.89	0.54
1:2A:2529:G:O6	31:29:31:LYS:NZ	2.41	0.54
32:2a:1029:C:H42	32:2a:1032:G:H1	1.56	0.54
49:2r:52:PRO:HB2	49:2r:54:ARG:HG2	1.88	0.54
1:1A:1218:C:H42	1:1A:1231:G:H1	1.55	0.54
1:1A:2347:C:OP1	28:16:38:LYS:NZ	2.36	0.54
32:1a:1015:A:N3	32:1a:1218:C:O2'	2.39	0.54
50:1s:38:SER:HB2	50:1s:71:LEU:HD23	1.90	0.54
54:1w:5:G:H2'	54:1w:6:A:H8	1.73	0.54
1:2A:2493:U:O2'	12:2Q:80:GLU:OE2	2.21	0.54
32:2a:56:U:H2'	32:2a:57:G:C8	2.43	0.54
34:2c:87:LEU:O	34:2c:91:LEU:N	2.33	0.54
46:2o:25:THR:HG21	46:2o:70:LEU:HB2	1.89	0.54
1:1A:242:G:C8	30:18:5:LYS:HG2	2.43	0.54
1:1A:2563:U:H4'	10:1O:28:SER:HA	1.88	0.54
16:1U:50:ARG:HH12	17:1V:72:VAL:HA	1.72	0.54
32:1a:376:G:H5"	47:1p:5:ARG:HB2	1.89	0.54
1:2A:108:U:H2'	1:2A:109:G:C8	2.43	0.54
1:2A:2060:A:N3	61:2A:4045:HOH:O	2.34	0.54
5:2F:184:TYR:CE2	5:2F:188:ARG:HD2	2.43	0.54
32:2a:455:C:H42	32:2a:476:G:H1	1.54	0.54
38:2g:15:ASP:OD1	38:2g:20:ASP:N	2.37	0.54
47:2p:22:THR:HA	47:2p:33:ILE:HG13	1.90	0.54
1:1A:863:A:H2'	1:1A:864:G:C8	2.42	0.54
1:1A:1243:G:O2'	11:1P:4:SER:O	2.24	0.54
1:1A:1799:G:O2'	3:1D:181:GLU:OE2	2.22	0.54
3:1D:143:HIS:ND1	3:1D:194:GLY:O	2.38	0.54
4:1E:122:PHE:O	61:1E:401:HOH:O	2.18	0.54
15:1T:29:ARG:HG3	15:1T:46:GLU:HB2	1.90	0.54
15:1T:127:ALA:C	15:1T:129:ARG:H	2.15	0.54
32:1a:78:G:C2	32:1a:91:C:N3	2.76	0.54
32:1a:1151:A:O2'	32:1a:1152:A:O5'	2.26	0.54
54:1w:9:A:O2'	54:1w:10:G:N7	2.41	0.54
1:2A:1423:G:H2'	1:2A:1424:G:H8	1.72	0.54
32:2a:707:C:H2'	32:2a:708:C:C6	2.43	0.54
33:2b:187:LEU:HA	33:2b:201:ILE:HB	1.89	0.54
40:2i:16:ARG:HB2	40:2i:64:THR:HG23	1.90	0.54
48:2q:40:LYS:HD3	48:2q:42:TYR:CZ	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1185:C:OP2	61:1A:4320:HOH:O	2.18	0.53
1:1A:1499:C:H2'	1:1A:1500:G:H8	1.73	0.53
1:1A:2839:G:H5'	13:1R:46:GLY:HA2	1.90	0.53
1:1A:2887:U:H2'	1:1A:2888:C:C6	2.43	0.53
6:1G:126:ASP:N	6:1G:130:ASN:O	2.37	0.53
11:1P:63:PRO:HD3	30:18:27:THR:HG22	1.90	0.53
36:1e:84:PHE:HB2	36:1e:134:ALA:HB2	1.89	0.53
37:1f:8:ILE:HD11	37:1f:79:LEU:HD13	1.89	0.53
50:1s:50:ALA:HB1	50:1s:57:HIS:HB3	1.90	0.53
1:2A:483:A:O2'	20:2Y:49:VAL:O	2.21	0.53
1:2A:2278:A:OP2	22:20:12:ASN:ND2	2.39	0.53
1:2A:2295:C:OP1	14:2S:10:ARG:NH1	2.40	0.53
1:2A:2748:A:H5'	7:2H:4:ILE:HD12	1.89	0.53
16:2U:85:LYS:HB2	16:2U:116:ALA:HB1	1.89	0.53
32:2a:1187:G:H5'	40:2i:113:LYS:HE3	1.90	0.53
40:2i:8:GLY:HA3	40:2i:76:ALA:O	2.08	0.53
1:1A:483:A:O2'	20:1Y:49:VAL:O	2.25	0.53
2:1B:66:A:H61	2:1B:109:C:H5"	1.72	0.53
1:2A:740:U:H2'	1:2A:741:G:C8	2.43	0.53
1:2A:2291:U:H2'	1:2A:2292:C:C6	2.43	0.53
1:2A:2759:G:OP2	61:2A:3968:HOH:O	2.19	0.53
32:2a:769:G:H4'	32:2a:1513:A:H4'	1.90	0.53
32:2a:947:G:H4'	44:2m:109:THR:HG23	1.90	0.53
36:2e:105:VAL:HB	36:2e:106:PRO:HD3	1.90	0.53
1:1A:2314:C:H5"	6:1G:38:VAL:HG21	1.89	0.53
1:1A:2327:A:H2'	1:1A:2328:A:C8	2.43	0.53
3:1D:206:LEU:O	3:1D:211:ARG:HD3	2.09	0.53
18:1W:58:ALA:HB1	18:1W:64:MET:HB2	1.89	0.53
32:1a:1309:G:OP1	44:1m:88:ARG:NH2	2.41	0.53
39:1h:11:THR:OG1	39:1h:14:ARG:NH2	2.41	0.53
1:2A:793:A:OP2	1:2A:2071:A:O2'	2.25	0.53
1:2A:1237:A:OP1	61:2A:3967:HOH:O	2.18	0.53
1:2A:1826:G:H4'	3:2D:242:ARG:HH21	1.72	0.53
1:2A:2135:A:C8	1:2A:2136:C:H5	2.26	0.53
9:2N:30:ILE:HG23	9:2N:52:VAL:HG11	1.89	0.53
12:2Q:85:LYS:HD3	22:20:7:LEU:HD13	1.90	0.53
32:2a:22:G:H4'	32:2a:885:G:C8	2.43	0.53
32:2a:689:C:OP1	42:2k:27:ASN:ND2	2.38	0.53
40:2i:55:ALA:HA	40:2i:58:HIS:HD2	1.73	0.53
54:2w:11:C:N4	54:2w:24:G:H1	2.05	0.53
54:2y:26:A:N6	54:2y:44:G:C6	2.77	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1051:G:H2'	1:1A:1052:C:O4'	2.08	0.53
1:1A:2572:A:OP1	1:1A:2574:G:O2'	2.24	0.53
32:1a:284:G:H2'	32:1a:285:G:C8	2.43	0.53
36:1e:110:LEU:HD13	36:1e:118:ILE:HG21	1.89	0.53
54:1y:52:G:H1	54:1y:62:C:H42	1.56	0.53
1:2A:849:A:N6	1:2A:928:G:O2'	2.36	0.53
1:2A:1800:C:OP2	3:2D:183:ARG:NH2	2.42	0.53
6:2G:44:GLY:N	6:2G:88:ILE:O	2.41	0.53
32:2a:1065:U:H3	32:2a:1109:C:H5"	1.73	0.53
1:1A:97:C:OP1	24:12:2:LYS:NZ	2.41	0.53
1:1A:1213:A:N3	1:1A:1238:G:O2'	2.37	0.53
1:1A:2127:G:H2'	1:1A:2128:C:H6	1.73	0.53
20:1Y:15:VAL:HG21	20:1Y:42:VAL:HG11	1.88	0.53
32:1a:1305:G:H5"	52:1u:4:GLY:HA3	1.90	0.53
36:1e:85:GLY:C	36:1e:87:SER:H	2.16	0.53
38:1g:69:VAL:HG21	38:1g:104:LEU:HD11	1.90	0.53
39:1h:51:VAL:HG21	39:1h:60:ARG:HG3	1.90	0.53
46:1o:9:GLN:O	46:1o:13:GLN:N	2.37	0.53
15:2T:127:ALA:C	15:2T:129:ARG:H	2.16	0.53
32:1a:662:G:H2'	32:1a:663:A:C8	2.43	0.53
32:1a:1027:C:C4	32:1a:1034:G:N1	2.77	0.53
32:1a:1095:U:P	32:1a:1108:G:H1	2.31	0.53
38:1g:140:ASP:OD1	54:1y:41:A:O2'	2.26	0.53
1:2A:271(E):U:H2'	1:2A:271(F):C:C6	2.44	0.53
1:2A:1171:G:H22	1:2A:1178:C:N4	2.06	0.53
1:2A:1287:A:H8	13:2R:104:ARG:HD3	1.73	0.53
1:2A:1829:A:OP1	61:2A:3969:HOH:O	2.19	0.53
1:2A:1962:5MC:O2'	1:2A:1964:G:OP2	2.25	0.53
32:2a:663:A:O3'	49:2r:64:ARG:NH2	2.39	0.53
32:2a:931:C:N4	32:2a:1386:G:H1	2.06	0.53
34:2c:79:ARG:H	34:2c:82:GLU:HB3	1.73	0.53
39:2h:83:ILE:HB	39:2h:137:VAL:HG13	1.91	0.53
1:1A:1991:U:H2'	1:1A:1992:G:H5"	1.90	0.53
1:1A:2849:U:H4'	1:1A:2868:A:C2	2.44	0.53
3:1D:71:ASP:OD1	3:1D:71:ASP:N	2.40	0.53
4:1E:111:ARG:HD2	4:1E:160:TYR:CE2	2.44	0.53
10:1O:68:GLU:H	10:1O:68:GLU:CD	2.17	0.53
32:1a:334:C:HO2'	32:1a:1434:A:HO2'	1.56	0.53
32:1a:390:C:H4'	47:1p:28:ARG:HH21	1.74	0.53
32:1a:1327:C:H2'	32:1a:1328:C:C6	2.43	0.53
54:1y:6:A:H61	54:1y:67:U:H3	1.57	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:242:ARG:HH11	3:2D:242:ARG:H	1.55	0.53
11:2P:87:ASP:HB3	11:2P:105:LEU:HD13	1.90	0.53
21:2Z:17:ALA:HA	21:2Z:20:ARG:HE	1.74	0.53
24:22:66:GLU:HA	24:22:69:ARG:NH1	2.24	0.53
34:2c:58:GLU:HB3	41:2j:92:THR:HG21	1.91	0.53
1:1A:1794:U:H2'	1:1A:1795:C:C6	2.44	0.53
7:1H:124:GLU:HG2	7:1H:132:ARG:HB3	1.90	0.53
32:1a:178:C:H2'	32:1a:179:A:C8	2.43	0.53
32:1a:947:G:H4'	44:1m:109:THR:HG23	1.90	0.53
34:1c:39:ILE:HG23	34:1c:91:LEU:HD11	1.91	0.53
1:2A:816:C:OP1	1:2A:1185:C:O2'	2.21	0.53
1:2A:1815:A:P	3:2D:54:ARG:HH12	2.32	0.53
1:2A:2073:C:O2'	1:2A:2598:A:O2'	2.24	0.53
3:2D:108:PRO:HG2	3:2D:111:LEU:HB2	1.90	0.53
32:2a:21:G:H2'	32:2a:22:G:C8	2.44	0.53
1:1A:642:G:N2	1:1A:645:C:OP2	2.37	0.53
6:1G:101:ILE:HD13	26:14:25:TYR:HB2	1.91	0.53
14:1S:83:LYS:HB3	14:1S:111:GLU:HG3	1.91	0.53
32:1a:7:G:O2'	36:1e:120:THR:O	2.27	0.53
32:1a:134:A:H61	47:1p:25:ARG:NH1	2.06	0.53
32:1a:700:G:N7	61:1a:1960:HOH:O	2.34	0.53
32:1a:892:A:O2'	32:1a:1415:G:H4'	2.09	0.53
32:1a:950:U:H3'	44:1m:102:ARG:HH12	1.74	0.53
54:1y:58:A:O2'	54:1y:59:U:OP1	2.25	0.53
1:2A:2070:G:H2'	1:2A:2071:A:C8	2.44	0.53
32:2a:67:C:H2'	32:2a:68:G:C8	2.43	0.53
32:2a:920:U:H2'	32:2a:921:U:C6	2.44	0.53
1:1A:800:A:H8	1:1A:800:A:OP1	1.92	0.53
1:1A:1105:U:H2'	1:1A:1106:G:C8	2.44	0.53
1:1A:1798:U:H5'	3:1D:259:THR:HG22	1.91	0.53
1:1A:2291:U:H2'	1:1A:2292:C:C6	2.44	0.53
32:1a:870:U:H4'	32:1a:871:U:H5"	1.91	0.53
32:1a:1186:G:H21	45:1n:61:TRP:C	2.17	0.53
38:1g:78:ARG:HD2	38:1g:156:TRP:CE3	2.44	0.53
1:2A:1296:G:OP1	1:2A:2709:G:O2'	2.20	0.53
6:2G:41:GLN:HB3	6:2G:43:LEU:HD22	1.90	0.53
9:2N:38:HIS:NE2	9:2N:50:ASP:OD2	2.32	0.53
19:2X:11:PRO:HB3	19:2X:92:LEU:HD11	1.91	0.53
32:2a:973:G:H3'	32:2a:974:A:H5"	1.90	0.53
32:2a:1301:U:O2'	32:2a:1302:U:H5'	2.09	0.53
48:2q:29:HIS:N	48:2q:34:LYS:O	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1297:C:O2'	1:1A:1302:A:N1	2.40	0.52
1:1A:2114:A:N6	1:1A:2119:A:N7	2.57	0.52
6:1G:109:VAL:HG11	26:14:14:ILE:HG21	1.91	0.52
1:2A:579:G:O2'	1:2A:2019:A:OP1	2.23	0.52
1:2A:857:C:H1'	22:20:26:TYR:HE1	1.74	0.52
1:2A:1507:A:O2'	1:2A:1508:A:O4'	2.27	0.52
3:2D:274:ARG:O	3:2D:275:LYS:HD2	2.09	0.52
6:2G:173:LEU:HB3	6:2G:178:PHE:CG	2.44	0.52
23:21:23:LYS:HB3	23:21:29:GLY:HA3	1.89	0.52
30:28:15:LYS:NZ	61:28:201:HOH:O	2.27	0.52
32:2a:1005:A:H5"	32:2a:1006:C:H5	1.73	0.52
32:2a:1412:C:H2'	32:2a:1413:A:C8	2.44	0.52
44:2m:16:ASP:OD1	44:2m:17:VAL:N	2.43	0.52
1:1A:2701:C:H2'	1:1A:2702:U:H2'	1.92	0.52
1:1A:2718:G:O2'	1:1A:2847:U:OP1	2.26	0.52
6:1G:79:ASN:OD1	6:1G:79:ASN:N	2.41	0.52
12:1Q:138:ASP:N	12:1Q:138:ASP:OD1	2.42	0.52
32:1a:553:A:H5"	43:1l:24:VAL:HG21	1.92	0.52
32:1a:1060:C:OP1	45:1n:45:ARG:NH2	2.43	0.52
39:1h:34:GLU:OE1	39:1h:37:ARG:NH2	2.35	0.52
1:2A:796:C:H2'	1:2A:797:C:C6	2.45	0.52
1:2A:2143:C:H42	1:2A:2148:G:H1	1.55	0.52
34:2c:6:HIS:HB3	45:2n:49:HIS:ND1	2.24	0.52
35:2d:98:GLU:OE2	35:2d:107:ARG:NH2	2.33	0.52
49:2r:22:VAL:HB	49:2r:56:THR:HA	1.91	0.52
1:1A:588:U:H2'	1:1A:589:C:C6	2.44	0.52
1:1A:2222:G:OP2	61:1A:4323:HOH:O	2.19	0.52
32:1a:1033:G:H2'	32:1a:1034:G:H8	1.73	0.52
46:1o:82:ILE:O	46:1o:86:GLY:N	2.42	0.52
47:1p:8:ARG:HB3	47:1p:28:ARG:NH1	2.24	0.52
1:2A:132:G:O6	61:2A:3954:HOH:O	2.14	0.52
1:2A:2317:C:N4	1:2A:2318:G:O6	2.43	0.52
5:2F:140:LEU:HD11	5:2F:170:LEU:HD11	1.91	0.52
13:2R:97:VAL:HG22	13:2R:114:VAL:HG22	1.91	0.52
17:2V:18:LEU:HD21	17:2V:20:LEU:HB2	1.92	0.52
32:2a:147:G:H2'	32:2a:148:G:H8	1.74	0.52
38:2g:69:VAL:HG21	38:2g:104:LEU:HD11	1.92	0.52
40:2i:16:ARG:HH21	40:2i:18:PHE:HZ	1.58	0.52
42:2k:33:THR:HA	42:2k:39:PRO:HA	1.91	0.52
47:2p:28:ARG:NH1	47:2p:29:ASP:OD1	2.43	0.52
48:2q:67:LYS:HA	48:2q:70:ARG:HH12	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1048:A:OP2	1:1A:1109:C:N4	2.41	0.52
1:1A:2126:A:N6	1:1A:2162:G:O2'	2.40	0.52
1:1A:2163:C:OP1	1:1A:2165:G:N2	2.39	0.52
1:1A:2299:G:H2'	1:1A:2300:G:H8	1.73	0.52
1:1A:2821:A:N1	61:1A:4448:HOH:O	2.34	0.52
8:1I:93:THR:H	8:1I:96:ASP:HB2	1.74	0.52
23:11:77:ALA:HA	23:11:80:LEU:HD13	1.92	0.52
1:2A:859:G:O2'	1:2A:916:G:O6	2.27	0.52
1:2A:1266:G:O2'	1:2A:2012:G:O6	2.13	0.52
8:2I:110:ASP:N	8:2I:130:TYR:OH	2.43	0.52
12:2Q:24:GLY:HA2	12:2Q:67:ARG:NH2	2.24	0.52
32:2a:34:C:H2'	32:2a:35:G:C8	2.44	0.52
32:2a:950:U:H2'	32:2a:951:G:H8	1.74	0.52
33:2b:19:HIS:NE2	33:2b:206:ASP:HB2	2.24	0.52
42:2k:81:ASP:OD1	42:2k:107:SER:OG	2.25	0.52
1:1A:601:C:O2'	1:1A:605:C:OP1	2.23	0.52
1:1A:2206:G:H5"	1:1A:2207:G:C5	2.44	0.52
32:1a:742:G:OP2	46:1o:35:ARG:NH2	2.42	0.52
32:1a:1358:U:OP2	32:1a:1359:C:N4	2.40	0.52
32:2a:110:C:O2'	47:2p:25:ARG:O	2.27	0.52
32:2a:862:C:H1'	32:2a:874:G:H5"	1.91	0.52
1:1A:1796:U:H2'	1:1A:1797:C:C6	2.44	0.52
6:1G:126:ASP:HB3	6:1G:128:ARG:H	1.74	0.52
32:1a:1060:C:H5"	41:1j:51:ARG:HG2	1.92	0.52
33:1b:59:GLU:HB2	33:1b:221:LEU:HD21	1.91	0.52
34:1c:15:THR:HG21	34:1c:181:ASN:HA	1.91	0.52
44:1m:22:ILE:HB	44:1m:25:ILE:HD12	1.92	0.52
54:1y:5:G:H1	54:1y:68:C:H42	1.56	0.52
1:2A:2110:G:O2'	1:2A:2120:G:OP2	2.22	0.52
1:2A:2131:G:H1	1:2A:2158:A:N6	2.08	0.52
1:2A:2136:C:N4	1:2A:2155:G:N1	2.57	0.52
1:2A:2290:G:N2	1:2A:2373:G:O2'	2.41	0.52
6:2G:18:GLU:HG2	6:2G:175:LEU:HD21	1.92	0.52
28:26:9:LEU:HA	28:26:54:ILE:HB	1.91	0.52
32:2a:1129:C:OP1	40:2i:16:ARG:NH1	2.42	0.52
38:2g:150:ALA:HA	42:2k:59:TYR:HB3	1.90	0.52
33:1b:80:ILE:HD11	33:1b:212:GLN:HA	1.92	0.52
1:2A:1751:C:HO2'	1:2A:2861:G:HO2'	1.53	0.52
1:2A:2805:G:H2'	1:2A:2807:G:C8	2.44	0.52
50:2s:32:LYS:HA	50:2s:50:ALA:HB3	1.91	0.52
54:1y:8:4SU:H4'	54:1y:48:C:H4'	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:321:G:OP1	5:2F:135:LYS:NZ	2.40	0.52
1:2A:597:U:H2'	1:2A:598:G:C8	2.45	0.52
1:2A:1790:C:H5"	1:2A:1791:A:OP1	2.10	0.52
1:2A:2152:G:N3	1:2A:2153:G:H1'	2.24	0.52
1:2A:2163:C:C5	1:2A:2164:C:H1'	2.45	0.52
1:2A:2470:G:O6	1:2A:2481:G:N2	2.43	0.52
4:2E:119:ARG:HG2	4:2E:120:TRP:CD1	2.45	0.52
32:2a:343:U:O2'	32:2a:344:A:H2'	2.10	0.52
32:2a:523:A:H61	43:2l:92:0TD:CG	2.23	0.52
32:2a:811:C:N4	61:2a:3324:HOH:O	2.42	0.52
32:2a:1265:G:C2	32:2a:1271:G:C2	2.98	0.52
32:2a:1401:G:C2	32:2a:1402:4OC:H1'	2.45	0.52
54:2w:8:4SU:H1'	54:2w:48:C:H1'	1.91	0.52
54:2y:46:7MG:O2'	54:2y:48:C:OP2	2.28	0.52
1:1A:142(A):C:H2'	1:1A:143:G:O4'	2.10	0.52
1:1A:185:U:H2'	1:1A:186:G:C8	2.45	0.52
1:1A:453:C:O2	1:1A:457:A:O2'	2.27	0.52
1:1A:586:A:H5'	5:1F:89:VAL:HG21	1.92	0.52
1:1A:796:C:H2'	1:1A:797:C:C6	2.45	0.52
1:1A:2022:U:O2'	1:1A:2617:C:H5'	2.10	0.52
32:1a:138:G:H2'	32:1a:139:G:C8	2.44	0.52
32:1a:983:A:H1'	32:1a:1049:U:O2	2.10	0.52
1:2A:993:G:N3	17:2V:89:GLN:NE2	2.58	0.52
1:2A:1019:U:OP1	1:2A:1035:U:O2'	2.27	0.52
1:2A:1539:G:H2'	1:2A:1540:U:O4'	2.09	0.52
1:2A:2507:C:O2'	54:2w:75:C:O2	2.27	0.52
6:2G:101:ILE:HG22	6:2G:105:LYS:HE2	1.91	0.52
16:2U:50:ARG:O	16:2U:54:LYS:NZ	2.42	0.52
32:2a:523:A:N1	43:2l:92:0TD:H6	2.25	0.52
32:2a:838:G:H1	32:2a:848:C:H42	1.58	0.52
32:2a:1006:C:H2'	32:2a:1007:C:O4'	2.10	0.52
48:2q:67:LYS:C	48:2q:69:LYS:H	2.17	0.52
54:2y:52:G:H1	54:2y:62:C:H42	1.57	0.52
1:1A:668:G:H5'	1:1A:669:G:OP2	2.10	0.52
1:1A:1508:A:O2'	1:1A:1509:C:OP1	2.27	0.52
1:1A:2787:C:H1'	4:1E:62:PRO:HG3	1.92	0.52
4:1E:12:THR:HG21	15:1T:11:GLU:HG2	1.92	0.52
15:1T:11:GLU:OE1	15:1T:57:PHE:HB3	2.10	0.52
35:1d:98:GLU:OE1	35:1d:103:ASN:ND2	2.38	0.52
39:1h:110:ALA:HB3	39:1h:121:ASP:HB3	1.91	0.52
54:1y:4:U:H2'	54:1y:5:G:O4'	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:1231:G:H2'	1:2A:1232:G:C8	2.45	0.52
11:2P:95:VAL:HG13	11:2P:125:VAL:HA	1.92	0.52
6:1G:15:VAL:HG22	6:1G:175:LEU:HB3	1.93	0.51
40:1i:3:GLN:HE21	40:1i:20:ARG:CZ	2.23	0.51
1:2A:577:G:O2'	1:2A:1254:A:OP1	2.28	0.51
1:2A:1514:U:H2'	1:2A:1515:G:C8	2.45	0.51
6:2G:120:LEU:N	6:2G:179:PRO:O	2.33	0.51
7:2H:11:VAL:HG21	7:2H:50:VAL:HG23	1.91	0.51
18:2W:35:ILE:HG23	27:25:28:PRO:HD2	1.91	0.51
23:21:40:ARG:NH2	23:21:42:GLN:HG2	2.25	0.51
32:2a:1115:C:N3	32:2a:1185:G:O6	2.43	0.51
32:2a:1147:C:O2	40:2i:16:ARG:NH1	2.43	0.51
32:2a:1346:A:OP1	40:2i:120:ARG:NH1	2.33	0.51
33:2b:208:ILE:H	33:2b:208:ILE:HD12	1.75	0.51
50:2s:27:GLU:HB2	50:2s:28:LYS:HD3	1.92	0.51
1:1A:2853:C:H42	1:1A:2864:G:H1	1.58	0.51
32:1a:430:A:OP2	35:1d:8:VAL:HG12	2.10	0.51
32:1a:532:A:N6	32:1a:1206:G:O2'	2.43	0.51
33:1b:130:ARG:HH11	33:1b:138:LEU:HD11	1.75	0.51
43:1l:70:ILE:HG12	43:1l:100:ILE:HD12	1.91	0.51
50:1s:11:VAL:HG11	50:1s:16:LEU:HB2	1.91	0.51
1:2A:479:A:N3	1:2A:481:G:H5"	2.24	0.51
13:2R:2:ARG:NH1	13:2R:5:LYS:O	2.43	0.51
21:2Z:131:ARG:HG3	21:2Z:132:ASN:HD22	1.76	0.51
32:2a:1189:C:O2'	34:2c:176:HIS:ND1	2.40	0.51
33:2b:189:ASP:O	33:2b:192:SER:OG	2.28	0.51
34:2c:179:ARG:HB2	34:2c:207:VAL:HG22	1.92	0.51
37:2f:100:ASN:HD21	49:2r:23:LYS:HG2	1.74	0.51
39:2h:19:VAL:HG23	39:2h:21:LYS:HG2	1.92	0.51
48:2q:6:LEU:HB3	48:2q:23:VAL:HG11	1.92	0.51
1:1A:222:A:H5"	1:1A:421:U:OP1	2.10	0.51
1:1A:709:U:H2'	1:1A:710:G:C8	2.45	0.51
1:1A:793:A:OP2	1:1A:2071:A:O2'	2.27	0.51
1:1A:876:C:H2'	1:1A:877:U:O4'	2.11	0.51
9:1N:108:PRO:O	9:1N:113:GLY:HA3	2.10	0.51
32:1a:765:G:N1	32:1a:812:C:O2'	2.35	0.51
32:1a:1373:G:H4'	38:1g:31:MET:CE	2.39	0.51
34:1c:22:TRP:CZ2	45:1n:54:PRO:HG2	2.45	0.51
36:1e:39:GLY:HA2	36:1e:69:VAL:HG13	1.93	0.51
1:2A:106:C:O2	1:2A:294:A:O2'	2.28	0.51
1:2A:2522:U:O2'	1:2A:2647:U:OP1	2.28	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:25:16:ARG:NH1	27:25:17:ASP:OD1	2.43	0.51
32:2a:397:A:H3'	32:2a:397:A:N3	2.24	0.51
32:2a:1027:C:C4	32:2a:1034:G:O6	2.62	0.51
51:2t:45:GLN:HB3	51:2t:91:LEU:HD13	1.93	0.51
1:1A:245:G:O5'	11:1P:73:GLY:HA2	2.10	0.51
1:1A:1063:G:C5	1:1A:1064:C:N4	2.78	0.51
1:1A:2348:U:OP2	30:18:42:ARG:NH2	2.44	0.51
1:1A:2499:C:OP1	61:1A:4327:HOH:O	2.19	0.51
1:1A:2646:C:H2'	1:1A:2647:U:O4'	2.10	0.51
32:1a:1108:G:O6	61:1a:1934:HOH:O	2.13	0.51
32:1a:1162:C:N4	32:1a:1174:G:H1	2.07	0.51
32:1a:1305:G:H22	32:1a:1331:G:H1'	1.76	0.51
32:1a:1347:G:O2'	32:1a:1373:G:O6	2.15	0.51
34:1c:112:SER:HB3	34:1c:115:LEU:HD22	1.91	0.51
1:2A:340:A:H2'	1:2A:341:G:O4'	2.09	0.51
1:2A:984:A:H5"	1:2A:985:C:H5	1.75	0.51
1:2A:1782:C:H1'	1:2A:2609:U:H5"	1.93	0.51
1:2A:2483:C:N3	12:2Q:124:LYS:NZ	2.55	0.51
1:2A:2590:A:O3'	3:2D:239:ARG:NH2	2.43	0.51
32:2a:401:C:H2'	32:2a:402:G:C8	2.45	0.51
32:2a:939:G:O2'	32:2a:1375:A:N3	2.39	0.51
1:1A:271(H):G:H1	1:1A:271(P):C:H42	1.58	0.51
1:1A:2183:C:H2'	1:1A:2184:G:C8	2.43	0.51
1:1A:2537:U:H2'	1:1A:2538:C:C6	2.46	0.51
3:1D:37:LEU:HD13	3:1D:62:TYR:HB2	1.92	0.51
10:1O:24:VAL:HG13	10:1O:33:ALA:HB2	1.92	0.51
10:1O:104:ARG:HD3	15:1T:36:GLU:HG2	1.92	0.51
32:1a:236:G:OP1	48:1q:40:LYS:NZ	2.32	0.51
32:1a:516:PSU:O2	61:1a:1938:HOH:O	2.19	0.51
34:1c:17:ASP:OD2	34:1c:21:ARG:NH2	2.40	0.51
1:2A:108:U:H2'	1:2A:109:G:H8	1.75	0.51
1:2A:1005:C:H2'	1:2A:1006:C:C6	2.46	0.51
2:2B:8:U:O3'	14:2S:25:ARG:NH2	2.38	0.51
11:2P:50:ARG:HD3	30:28:7:HIS:CD2	2.46	0.51
32:2a:266:G:H2'	32:2a:266:G:N3	2.24	0.51
33:2b:47:THR:O	33:2b:51:LEU:N	2.31	0.51
33:2b:76:GLN:HE21	33:2b:206:ASP:HA	1.75	0.51
1:1A:1068:G:O2'	1:1A:1070:A:N7	2.40	0.51
1:1A:2464:C:H1'	61:1A:5662:HOH:O	2.11	0.51
1:1A:2701:C:OP1	61:1A:4330:HOH:O	2.19	0.51
19:1X:94:GLY:H	19:1X:95:LEU:HB2	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:266:G:H2'	32:1a:266:G:N3	2.26	0.51
1:2A:2112:G:C6	1:2A:2113:U:H1'	2.46	0.51
32:2a:715:A:H2'	32:2a:716:A:C8	2.46	0.51
32:2a:1310:G:H5'	44:2m:77:ASN:HD21	1.75	0.51
41:2j:69:ASN:O	41:2j:70:ARG:NH1	2.37	0.51
55:2x:47:U:H3'	55:2x:48:C:H5'	1.92	0.51
54:2y:40:G:H2'	54:2y:41:A:C8	2.46	0.51
1:1A:1009:A:OP2	9:1N:37:LYS:NZ	2.23	0.51
1:1A:1426:G:O2'	1:1A:1572:A:N6	2.42	0.51
1:1A:2567:G:H2'	1:1A:2568:C:C6	2.46	0.51
1:1A:2696:U:H2'	1:1A:2697:G:C8	2.46	0.51
3:1D:146:GLU:HB2	3:1D:189:CYS:HB3	1.93	0.51
22:10:14:ARG:NH2	61:10:203:HOH:O	2.43	0.51
44:1m:82:MET:O	44:1m:93:ARG:NH2	2.33	0.51
54:1y:4:U:H3	54:1y:69:A:N6	2.07	0.51
24:22:39:ALA:HB2	24:22:44:LEU:HD23	1.92	0.51
32:2a:736:C:H2'	32:2a:737:A:H8	1.75	0.51
32:2a:1271:G:C2	32:2a:1272:G:N7	2.79	0.51
1:1A:121:G:H4'	1:1A:149:A:H5'	1.93	0.51
1:1A:271(T):C:H2'	1:1A:271(U):G:H8	1.76	0.51
1:1A:1086:A:H4'	1:1A:1103:A:H2	1.74	0.51
1:1A:1593:G:H2'	1:1A:1594:G:C8	2.46	0.51
32:1a:328:C:H4'	32:1a:329:A:H5'	1.93	0.51
32:1a:624:C:O3'	47:1p:10:GLY:HA2	2.10	0.51
33:1b:10:LEU:H	33:1b:10:LEU:HD12	1.75	0.51
54:1w:46:7MG:H3'	54:1w:47:U:H5"	1.93	0.51
1:2A:247:G:H4'	1:2A:386:G:C5	2.46	0.51
1:2A:774:A:H2'	1:2A:774:A:N3	2.26	0.51
1:2A:2630:G:H2'	1:2A:2631:G:H8	1.75	0.51
4:2E:174:ASP:OD1	4:2E:175:VAL:N	2.41	0.51
34:2c:130:VAL:HB	34:2c:157:ILE:HG23	1.92	0.51
36:2e:68:GLU:HG3	36:2e:70:PRO:HD3	1.92	0.51
36:2e:110:LEU:HD13	36:2e:118:ILE:HG21	1.93	0.51
1:1A:581:C:OP1	16:1U:33:ARG:HG3	2.11	0.51
1:1A:1818:U:OP2	3:1D:157:ARG:HD2	2.11	0.51
1:1A:2108:C:H2'	1:1A:2109:U:H6	1.76	0.51
7:1H:3:ARG:HH21	7:1H:65:HIS:HB3	1.76	0.51
32:1a:1021:G:O2'	32:1a:1022:G:O5'	2.28	0.51
35:1d:15:GLU:OE2	35:1d:66:ARG:NH1	2.44	0.51
5:2F:184:TYR:CZ	5:2F:188:ARG:HD2	2.46	0.51
19:2X:35:THR:HG23	19:2X:38:GLU:HB2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:20:U:H2'	32:2a:21:G:O4'	2.11	0.51
32:2a:411:A:H2'	32:2a:412:A:H4'	1.92	0.51
32:2a:1119:C:H2'	32:2a:1120:G:C8	2.45	0.51
32:2a:1128:C:O2'	32:2a:1129:C:OP1	2.25	0.51
44:2m:84:ILE:HG13	44:2m:86:CYS:H	1.76	0.51
1:1A:184:C:H2'	1:1A:185:U:C6	2.46	0.51
1:1A:2079:U:O3'	23:11:35:THR:OG1	2.24	0.51
1:1A:2848:G:C8	15:1T:97:ALA:HB2	2.45	0.51
4:1E:2:LYS:HB2	4:1E:95:ILE:HD12	1.92	0.51
15:1T:108:ARG:NH2	15:1T:112:ARG:HD3	2.26	0.51
32:1a:67:C:O2'	32:1a:171:A:N3	2.39	0.51
32:1a:946:A:H2'	32:1a:947:G:C8	2.46	0.51
32:1a:1210:C:N4	32:1a:1211:U:O4	2.44	0.51
32:1a:1279:A:H5"	32:1a:1280:A:OP1	2.11	0.51
32:1a:1516:G:N2	32:1a:1519:MA6:OP2	2.44	0.51
33:1b:87:ARG:CZ	33:1b:233:SER:HB3	2.41	0.51
47:1p:51:VAL:HG12	47:1p:53:VAL:H	1.76	0.51
1:2A:1209:G:O2'	1:2A:1237:A:N1	2.39	0.51
1:2A:1248:G:C5	16:2U:3:ARG:HB2	2.46	0.51
4:2E:2:LYS:HB2	4:2E:95:ILE:HD12	1.92	0.51
5:2F:18:ARG:NH2	5:2F:127:GLU:OE1	2.38	0.51
5:2F:110:LEU:HD11	5:2F:181:LEU:HG	1.93	0.51
12:2Q:110:THR:HG23	12:2Q:113:GLN:HB2	1.92	0.51
32:2a:595:G:O2'	61:2a:3319:HOH:O	2.19	0.51
32:2a:736:C:H2'	32:2a:737:A:C8	2.46	0.51
32:2a:966:M2G:HM23	32:2a:967:5MC:H1'	1.92	0.51
37:2f:97:PHE:CD2	49:2r:31:LEU:HD11	2.46	0.51
48:2q:67:LYS:O	48:2q:69:LYS:N	2.44	0.51
50:2s:40:ILE:HG12	50:2s:71:LEU:HD12	1.91	0.51
54:2w:36:C:N4	54:2w:37:6MZ:H9	2.26	0.51
55:2x:23:C:H2'	55:2x:24:U:C6	2.46	0.51
1:1A:361:G:OP1	61:1A:4318:HOH:O	2.18	0.50
1:1A:1826:G:H4'	3:1D:242:ARG:NH1	2.26	0.50
1:1A:2577:A:OP1	61:1A:4331:HOH:O	2.20	0.50
4:1E:111:ARG:HD2	4:1E:160:TYR:CD2	2.46	0.50
32:1a:1330:U:H2'	32:1a:1331:G:H5'	1.93	0.50
35:1d:121:VAL:HG22	35:1d:126:ILE:HG13	1.92	0.50
48:1q:6:LEU:HD23	48:1q:23:VAL:HG11	1.94	0.50
1:2A:90:U:H1'	1:2A:92:A:C8	2.45	0.50
1:2A:582:G:H2'	1:2A:583:G:C8	2.46	0.50
1:2A:2753:A:N3	31:29:15:LYS:NZ	2.56	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:21:CYS:HB2	10:2O:39:ILE:HD12	1.93	0.50
25:23:44:ARG:HA	25:23:47:VAL:HB	1.93	0.50
32:2a:1007:C:N3	32:2a:1022:G:O6	2.44	0.50
32:2a:1120:G:H2'	32:2a:1121:U:C6	2.45	0.50
1:1A:197:A:N6	1:1A:2430:A:O2'	2.44	0.50
1:1A:1924:C:H4'	55:1x:13:C:O2'	2.11	0.50
13:1R:67:LEU:HD13	13:1R:76:VAL:HG21	1.93	0.50
18:1W:92:ARG:NH2	61:1W:301:HOH:O	2.41	0.50
20:1Y:34:LYS:NZ	61:1Y:301:HOH:O	2.44	0.50
32:1a:401:C:P	35:1d:73:ARG:HH21	2.35	0.50
32:1a:621:A:H2'	32:1a:622:A:C8	2.46	0.50
32:1a:1098:C:H2'	32:1a:1099:G:H8	1.76	0.50
38:1g:94:ARG:NH1	38:1g:98:SER:OG	2.44	0.50
1:2A:320:A:O2'	1:2A:322:A:OP2	2.25	0.50
1:2A:660:G:H5'	5:2F:99:TYR:CE1	2.46	0.50
1:2A:686:G:H21	1:2A:788:A:H61	1.58	0.50
1:2A:1652:A:OP1	13:2R:8:ARG:NH1	2.44	0.50
1:2A:2701:C:H2'	1:2A:2702:U:H2'	1.93	0.50
1:2A:2734:A:H2'	1:2A:2735:G:O4'	2.11	0.50
12:2Q:18:LYS:O	12:2Q:98:LYS:NZ	2.34	0.50
32:2a:656:C:O2'	46:2o:28:GLN:OE1	2.29	0.50
34:2c:37:GLN:NE2	45:2n:52:GLN:OE1	2.35	0.50
40:2i:9:ARG:H	40:2i:79:LEU:HD23	1.76	0.50
1:1A:27:G:N2	1:1A:512:G:H1'	2.27	0.50
1:1A:686:G:N2	1:1A:788:A:H61	2.09	0.50
1:1A:863:A:H2'	1:1A:864:G:H8	1.76	0.50
1:1A:875:G:H1	1:1A:902:C:H42	1.59	0.50
1:1A:1082:U:C4	1:1A:1086:A:N1	2.75	0.50
5:1F:179:GLU:HA	5:1F:205:ARG:HH22	1.76	0.50
15:1T:49:VAL:HG12	15:1T:63:VAL:HG22	1.93	0.50
16:1U:58:ARG:HA	16:1U:61:TRP:CE3	2.47	0.50
32:1a:277:C:OP1	48:1q:68:ARG:NH2	2.39	0.50
32:1a:335:C:O2'	32:1a:1433:A:N3	2.41	0.50
36:1e:82:VAL:HG21	36:1e:138:ALA:HA	1.92	0.50
46:1o:74:ASP:HB3	46:1o:77:ARG:HB2	1.94	0.50
1:2A:271(U):G:H2'	1:2A:271(V):G:C8	2.45	0.50
1:2A:918:A:N3	2:2B:80:U:O2'	2.42	0.50
1:2A:1015:G:H2'	1:2A:1016:G:C8	2.47	0.50
3:2D:237:GLU:OE2	61:2D:401:HOH:O	2.18	0.50
32:2a:1294:G:H2'	32:2a:1295:G:H8	1.77	0.50
41:2j:47:PHE:O	41:2j:63:PHE:N	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:2k:34:ASP:HB3	42:2k:40:ILE:HD11	1.93	0.50
1:1A:942:G:O2'	1:1A:1189:A:N3	2.38	0.50
1:1A:2390:U:P	30:18:35:GLN:HE22	2.34	0.50
32:1a:165:C:H2'	32:1a:166:G:C8	2.42	0.50
32:1a:857:C:H2'	32:1a:858:G:O4'	2.11	0.50
32:1a:1030(D):A:H2'	32:1a:1031:G:H4'	1.93	0.50
34:1c:56:ASP:O	34:1c:67:THR:N	2.44	0.50
1:2A:597:U:H2'	1:2A:598:G:H8	1.77	0.50
15:2T:26:ASP:HA	15:2T:92:GLY:H	1.76	0.50
32:2a:971:G:H1'	32:2a:1365:G:O2'	2.10	0.50
32:2a:998:G:N2	32:2a:1043:C:N3	2.56	0.50
32:2a:1001(A):G:H3'	32:2a:1002:G:O4'	2.11	0.50
33:2b:74:LYS:NZ	33:2b:206:ASP:OD1	2.32	0.50
35:2d:64:LEU:HB2	35:2d:198:VAL:HG11	1.94	0.50
35:2d:111:ALA:HB2	35:2d:120:LEU:HD12	1.92	0.50
1:1A:1268:A:H2'	1:1A:1269:A:O4'	2.11	0.50
8:1I:92:VAL:HG22	8:1I:120:ILE:HD12	1.94	0.50
32:1a:1239:A:H62	32:1a:1299:A:N6	2.09	0.50
33:1b:178:ARG:NH1	33:1b:196:LEU:O	2.45	0.50
1:2A:503:A:H4'	1:2A:504:U:H5"	1.93	0.50
6:2G:166:ASP:O	6:2G:170:ARG:N	2.41	0.50
6:2G:179:PRO:HG3	26:24:43:TYR:OH	2.12	0.50
9:2N:54:VAL:HB	9:2N:122:VAL:HG22	1.93	0.50
24:22:25:VAL:HG13	24:22:57:ILE:HG23	1.93	0.50
32:2a:190:U:H2'	32:2a:191:G:O4'	2.12	0.50
32:2a:881:G:H2'	32:2a:882:C:O4'	2.12	0.50
33:2b:24:TRP:CD1	33:2b:24:TRP:H	2.29	0.50
41:2j:8:LEU:HD12	41:2j:20:ALA:HB2	1.93	0.50
44:2m:82:MET:O	44:2m:93:ARG:NH2	2.28	0.50
1:1A:484:C:H2'	1:1A:485:C:C6	2.47	0.50
1:1A:2136:C:N4	1:1A:2155:G:H1	2.08	0.50
1:1A:2747:G:O6	1:1A:2755:C:H5"	2.12	0.50
4:1E:116:VAL:HG13	4:1E:122:PHE:HB2	1.92	0.50
13:1R:11:ASN:ND2	61:1R:304:HOH:O	2.44	0.50
33:1b:61:LEU:HD23	33:1b:68:ILE:HD11	1.93	0.50
1:2A:1149:G:H2'	1:2A:1150:C:C6	2.46	0.50
1:2A:1268:A:H2'	1:2A:1269:A:O4'	2.12	0.50
1:2A:2431:U:OP1	61:2A:3970:HOH:O	2.19	0.50
10:2O:15:GLY:O	10:2O:47:ILE:HG12	2.11	0.50
19:2X:12:VAL:HG22	19:2X:29:TRP:CE2	2.46	0.50
19:2X:44:GLU:HG3	19:2X:51:VAL:HG23	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1252:A:H2'	32:2a:1253:G:O4'	2.12	0.50
34:2c:78:GLY:HA3	34:2c:83:ARG:H	1.76	0.50
1:1A:274:G:H2'	1:1A:274:G:N3	2.26	0.50
1:1A:2030:A:OP2	61:1A:4332:HOH:O	2.20	0.50
1:1A:2533:A:H2'	1:1A:2534:A:O4'	2.12	0.50
32:1a:23:C:OP2	32:1a:561:U:N3	2.31	0.50
1:2A:564:C:N4	1:2A:573:G:OP1	2.41	0.50
1:2A:2136:C:N3	1:2A:2155:G:N2	2.50	0.50
1:2A:2572:A:OP1	1:2A:2574:G:O2'	2.24	0.50
14:2S:77:ALA:O	14:2S:82:ILE:N	2.43	0.50
18:2W:34:ASN:ND2	27:25:39:MET:HG3	2.26	0.50
23:21:53:VAL:HG22	23:21:74:VAL:HG13	1.94	0.50
32:2a:401:C:O2'	32:2a:621:A:N3	2.44	0.50
32:2a:1245:A:H2'	32:2a:1246:C:O4'	2.11	0.50
33:2b:15:VAL:HG21	33:2b:213:LEU:HD13	1.93	0.50
46:2o:18:PHE:O	46:2o:20:GLY:N	2.37	0.50
54:2w:54:5MU:C2	54:2w:58:A:N7	2.80	0.50
54:2y:44:G:H5'	54:2y:45:G:OP2	2.11	0.50
1:1A:881:G:C2	1:1A:882:G:H1'	2.46	0.50
1:1A:1108:U:H2'	1:1A:1109:C:O4'	2.12	0.50
3:1D:51:VAL:HG11	3:1D:54:ARG:HE	1.76	0.50
5:1F:110:LEU:HD11	5:1F:181:LEU:HG	1.93	0.50
15:1T:74:ARG:HG2	15:1T:76:PHE:CZ	2.47	0.50
38:1g:91:VAL:HG13	38:1g:95:ARG:HD3	1.94	0.50
41:1j:41:PRO:O	41:1j:69:ASN:ND2	2.42	0.50
1:2A:518:G:O5'	18:2W:18:ARG:NH1	2.45	0.50
1:2A:1231:G:H2'	1:2A:1232:G:H8	1.77	0.50
7:2H:41:MET:HE1	7:2H:54:ARG:HB3	1.92	0.50
23:21:7:ILE:HG23	23:21:98:LEU:HD11	1.94	0.50
32:2a:1376:U:H2'	32:2a:1377:A:C8	2.46	0.50
33:2b:16:HIS:HB2	33:2b:204:ASN:CB	2.42	0.50
36:2e:72:GLN:O	36:2e:75:THR:HG22	2.12	0.50
48:2q:78:GLU:OE1	48:2q:81:ARG:NH1	2.39	0.50
54:2y:63:G:H2'	54:2y:64:U:O4'	2.12	0.50
1:1A:740:U:H2'	1:1A:741:G:C8	2.47	0.50
1:1A:862:G:H2'	1:1A:863:A:O4'	2.12	0.50
1:1A:910:A:N3	1:1A:2264:C:O2'	2.40	0.50
1:1A:1052:C:H2'	1:1A:1053:C:C6	2.46	0.50
1:1A:2687:U:H2'	1:1A:2688:U:O4'	2.12	0.50
11:1P:62:LEU:O	30:18:13:ARG:HD3	2.12	0.50
30:18:62:LEU:HB3	30:18:65:GLU:CG	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:17:U:H2'	32:1a:18:C:C6	2.47	0.50
32:1a:1029:C:H41	32:1a:1030(A):G:N2	2.08	0.50
50:1s:31:ILE:O	50:1s:50:ALA:N	2.37	0.50
1:2A:1405:U:H2'	1:2A:1406:U:C6	2.46	0.50
13:2R:44:LEU:HD22	13:2R:48:VAL:HG23	1.93	0.50
32:2a:814:A:H5'	32:2a:1511:G:H4'	1.94	0.50
32:2a:1109:C:H2'	32:2a:1110:A:O4'	2.12	0.50
32:2a:1119:C:OP2	40:2i:9:ARG:NH1	2.44	0.50
42:2k:48:ILE:O	42:2k:50:TYR:N	2.45	0.50
1:1A:323:G:C8	5:1F:171:PRO:HG3	2.46	0.49
1:1A:636:G:OP1	11:1P:132:LYS:NZ	2.44	0.49
1:1A:1025:G:C4	1:1A:1135:C:H1'	2.46	0.49
1:1A:1094:U:H2'	1:1A:1095:A:C8	2.47	0.49
1:1A:1608:A:H1'	1:1A:1610:A:OP2	2.11	0.49
2:1B:31:C:H4'	6:1G:29:TRP:CH2	2.47	0.49
4:1E:11:MET:HG2	4:1E:24:THR:HB	1.93	0.49
32:1a:1030:C:H3'	32:1a:1030(A):G:H5"	1.94	0.49
32:1a:1125:U:H4'	41:1j:5:ARG:NH2	2.27	0.49
44:1m:3:ARG:HG3	44:1m:4:ILE:H	1.77	0.49
1:2A:2539:C:H4'	31:29:3:VAL:HG21	1.94	0.49
1:2A:2749:A:N3	7:2H:59:ARG:NH2	2.60	0.49
1:1A:1359:A:H2'	1:1A:1360:A:H5'	1.94	0.49
1:1A:1817:G:OP1	3:1D:88:ARG:NH2	2.44	0.49
1:1A:2523:G:H21	1:1A:2764:A:H1'	1.78	0.49
7:1H:35:VAL:HG11	7:1H:71:LEU:HB3	1.94	0.49
32:1a:405:U:OP2	35:1d:3:ARG:NH1	2.45	0.49
32:1a:627:G:H2'	32:1a:628:G:H8	1.77	0.49
32:1a:958:A:C2	50:1s:55:LYS:HB2	2.47	0.49
32:1a:1144:G:N2	32:1a:1146:A:H62	2.10	0.49
33:1b:179:LYS:HA	39:1h:72:PRO:HG3	1.95	0.49
33:1b:236:TYR:C	33:1b:236:TYR:CD2	2.90	0.49
1:2A:2393:A:H5"	11:2P:63:PRO:HB3	1.94	0.49
6:2G:47:LYS:HG3	6:2G:48:GLU:H	1.76	0.49
10:2O:48:PRO:HB2	10:2O:49:ARG:NH1	2.27	0.49
21:2Z:30:ASN:HB3	21:2Z:90:VAL:HB	1.92	0.49
26:24:14:ILE:HB	26:24:22:ILE:HB	1.93	0.49
32:2a:113:G:N3	32:2a:353:A:O2'	2.41	0.49
32:2a:1240:U:N3	38:2g:30:ILE:O	2.34	0.49
35:2d:100:ARG:NH2	35:2d:102:ASP:OD2	2.41	0.49
1:1A:338:G:N7	61:1A:4439:HOH:O	2.33	0.49
1:1A:1851:U:H2'	1:1A:1852:C:O4'	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:14:ASP:OD1	8:1I:15:VAL:N	2.45	0.49
15:1T:73:GLU:OE2	15:1T:103:ARG:NE	2.44	0.49
19:1X:12:VAL:HG21	19:1X:27:THR:HG22	1.94	0.49
30:18:63:PRO:HG2	30:18:64:TYR:CE2	2.48	0.49
32:1a:148:G:H2'	32:1a:149:A:C8	2.40	0.49
32:1a:750:G:O2'	46:1o:21:ASP:OD1	2.29	0.49
32:1a:953:G:H2'	32:1a:954:G:O4'	2.11	0.49
32:1a:1129:C:H4'	40:1i:16:ARG:HH22	1.77	0.49
32:1a:1255:G:H1	32:1a:1282:C:H42	1.59	0.49
33:1b:187:LEU:HA	33:1b:201:ILE:HB	1.94	0.49
39:1h:25:ASP:N	39:1h:25:ASP:OD1	2.45	0.49
1:2A:858:U:H1'	1:2A:2268:A:H2'	1.94	0.49
1:2A:1352:U:OP1	61:2A:3971:HOH:O	2.19	0.49
1:2A:2143:C:H2'	1:2A:2144:U:O4'	2.12	0.49
1:2A:2533:A:OP1	1:2A:2665:A:O2'	2.28	0.49
15:2T:94:ALA:HB1	15:2T:99:LEU:HD21	1.92	0.49
32:2a:398:C:H2'	32:2a:399:G:C8	2.47	0.49
34:2c:12:LEU:HD11	45:2n:51:GLY:HA2	1.94	0.49
40:2i:46:ALA:HA	40:2i:78:LYS:HB2	1.94	0.49
44:2m:40:ASN:HB3	44:2m:43:THR:HG23	1.94	0.49
49:2r:32:ARG:HA	49:2r:69:THR:HG21	1.94	0.49
54:2y:7:U:O2'	54:2y:49:G:OP2	2.19	0.49
1:1A:247:G:H4'	1:1A:386:G:C5	2.47	0.49
1:1A:764:A:O4'	3:1D:213:ARG:HG3	2.13	0.49
1:1A:2564:A:C2	1:1A:2647:U:H4'	2.47	0.49
6:1G:61:ALA:HB1	26:14:7:PRO:HG3	1.94	0.49
12:1Q:35:VAL:HG13	12:1Q:130:LYS:HB3	1.93	0.49
32:1a:1327:C:H2'	32:1a:1328:C:H6	1.77	0.49
1:2A:1264:G:H2'	1:2A:2014:A:N6	2.27	0.49
1:2A:2292:C:OP1	14:2S:17:ARG:NH2	2.39	0.49
10:2O:24:VAL:HG13	10:2O:33:ALA:HB2	1.94	0.49
32:2a:406:G:H21	35:2d:119:GLN:NE2	2.10	0.49
32:2a:1023:G:C5	32:2a:1024:G:H1'	2.47	0.49
32:2a:1080:A:H5'	36:2e:14:ARG:HH21	1.76	0.49
35:2d:119:GLN:HG3	35:2d:123:HIS:CD2	2.47	0.49
40:2i:65:VAL:HG21	40:2i:77:ILE:HD11	1.94	0.49
50:2s:30:LEU:HD11	50:2s:50:ALA:HB2	1.95	0.49
1:1A:218:A:C2	1:1A:235:U:H4'	2.48	0.49
1:1A:662:G:OP1	11:1P:16:ARG:NE	2.34	0.49
10:1O:34:THR:OG1	10:1O:35:VAL:N	2.44	0.49
14:1S:61:ASN:HD22	14:1S:64:GLU:HG3	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1Z:98:MET:HE2	21:1Z:100:VAL:HG22	1.94	0.49
26:14:55:ARG:H	26:14:56:VAL:HA	1.77	0.49
32:1a:22:G:H4'	32:1a:885:G:C8	2.46	0.49
32:1a:1413:A:H2	32:1a:1487:G:H22	1.59	0.49
35:1d:79:PHE:HE1	35:1d:204:ILE:HD13	1.78	0.49
1:2A:1385:G:O2'	1:2A:1396:U:O2	2.23	0.49
1:2A:1410:G:H2'	1:2A:1411:C:C6	2.47	0.49
8:2I:27:ARG:HG2	23:21:71:TYR:CZ	2.48	0.49
9:2N:34:LEU:HD21	9:2N:120:LEU:HB2	1.94	0.49
10:2O:2:ILE:HD12	10:2O:6:THR:HG21	1.95	0.49
15:2T:91:ARG:HB2	15:2T:121:ILE:HG12	1.95	0.49
21:2Z:79:ARG:HD2	21:2Z:80:ARG:HH21	1.77	0.49
55:2x:3:C:N4	55:2x:70:G:H1	2.06	0.49
1:1A:818:G:O6	61:1A:4325:HOH:O	2.19	0.49
1:1A:1153:C:H2'	1:1A:1154:G:O4'	2.13	0.49
1:1A:1165:U:H2'	1:1A:1166:C:C6	2.48	0.49
1:1A:2136:C:C2	1:1A:2155:G:N2	2.80	0.49
39:1h:91:ARG:HD3	48:1q:32:TYR:O	2.11	0.49
40:1i:46:ALA:HB2	40:1i:74:ILE:HG23	1.95	0.49
54:1y:19:G:H1	54:1y:56:C:N4	2.10	0.49
1:2A:807:U:OP2	11:2P:41:ARG:NH2	2.46	0.49
1:2A:2168:G:H2'	1:2A:2170:A:N7	2.27	0.49
1:2A:2314:C:H2'	1:2A:2315:G:H8	1.77	0.49
10:2O:119:PRO:HB2	15:2T:68:TYR:CE2	2.46	0.49
32:2a:998:G:H1	32:2a:1043:C:N4	2.09	0.49
32:2a:1327:C:H2'	32:2a:1328:C:C6	2.47	0.49
40:2i:28:VAL:HA	40:2i:63:ILE:O	2.13	0.49
1:1A:1406:U:H2'	1:1A:1407:C:C6	2.47	0.49
1:1A:1881:C:H2'	1:1A:1882:C:H6	1.77	0.49
6:1G:137:GLU:HB2	6:1G:140:ILE:HG12	1.94	0.49
26:14:58:ARG:HG2	50:1s:65:ASN:HA	1.93	0.49
32:1a:1004:A:H5'	32:1a:1024:G:N2	2.27	0.49
32:1a:1212:U:H5'	32:1a:1213:A:H5'	1.94	0.49
33:1b:16:HIS:CG	33:1b:17:PHE:N	2.80	0.49
38:1g:76:ARG:HD2	38:1g:156:TRP:HZ2	1.78	0.49
54:1w:5:G:H2'	54:1w:6:A:C8	2.48	0.49
54:1y:43:G:H2'	54:1y:44:G:O4'	2.12	0.49
1:2A:1711:C:H2'	1:2A:1712:C:C6	2.47	0.49
5:2F:65:TRP:HH2	5:2F:72:ARG:HH21	1.59	0.49
9:2N:71:ILE:HG21	9:2N:84:LYS:HB3	1.94	0.49
25:23:10:LYS:HB3	25:23:53:LEU:HA	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:24:58:ARG:HG3	50:2s:65:ASN:O	2.11	0.49
32:2a:703:G:H4'	32:2a:704:A:H5'	1.94	0.49
32:2a:1026:G:O6	32:2a:1036:G:N2	2.46	0.49
32:2a:1353:G:OP1	52:2u:10:ARG:NH1	2.45	0.49
33:2b:160:ASP:OD1	33:2b:160:ASP:N	2.46	0.49
1:1A:443:A:H1'	1:1A:1201:C:O4'	2.12	0.49
1:1A:1013:C:OP2	61:1A:4232:HOH:O	2.18	0.49
1:1A:2683:C:OP1	15:1T:53:ARG:NH2	2.44	0.49
1:1A:2839:G:OP1	61:1A:4329:HOH:O	2.19	0.49
11:1P:95:VAL:HG13	11:1P:125:VAL:HA	1.95	0.49
15:1T:73:GLU:OE1	15:1T:103:ARG:NH2	2.39	0.49
25:13:5:LYS:NZ	25:13:34:GLU:OE2	2.37	0.49
32:1a:399:G:H2'	32:1a:400:C:C6	2.48	0.49
38:1g:32:ARG:NH1	61:1g:201:HOH:O	2.39	0.49
38:1g:76:ARG:HD2	38:1g:156:TRP:CZ2	2.48	0.49
40:1i:17:VAL:HG11	40:1i:81:ILE:HG22	1.95	0.49
1:2A:55:G:O2'	1:2A:127:A:N1	2.42	0.49
1:2A:212:G:H2'	1:2A:213:A:O4'	2.13	0.49
1:2A:903:C:H2'	1:2A:904:C:C6	2.48	0.49
1:2A:918:A:C2	2:2B:81:G:H5'	2.47	0.49
1:2A:1945:G:O6	1:2A:1960:A:N6	2.46	0.49
6:2G:73:ALA:HB3	6:2G:85:GLY:H	1.76	0.49
32:2a:421:U:O2'	32:2a:423:G:N7	2.46	0.49
32:2a:473:G:H2'	32:2a:474:G:C8	2.46	0.49
32:2a:1510:U:H2'	32:2a:1511:G:C8	2.47	0.49
32:2a:1517:G:H3'	32:2a:1518:MA6:H8	1.95	0.49
50:2s:66:MET:HB2	50:2s:74:PHE:CZ	2.47	0.49
1:1A:1176:G:H1'	1:1A:1177:A:H5"	1.95	0.49
1:1A:1506:C:H2'	1:1A:1507:A:C8	2.47	0.49
1:1A:1970:A:OP1	61:1A:4333:HOH:O	2.20	0.49
1:1A:2243:U:H2'	1:1A:2244:U:C6	2.48	0.49
1:1A:2649:U:H2'	1:1A:2650:U:C6	2.48	0.49
30:18:23:VAL:HG11	30:18:47:LYS:HD3	1.95	0.49
32:1a:867:G:O2'	32:1a:873:A:N1	2.44	0.49
32:1a:1255:G:O2'	32:1a:1258:G:N3	2.44	0.49
37:1f:8:ILE:HG12	37:1f:88:VAL:HG22	1.95	0.49
40:1i:24:GLY:C	40:1i:25:LYS:HD2	2.38	0.49
45:1n:6:LEU:HB3	45:1n:23:ARG:HH12	1.78	0.49
1:2A:144:C:H5'	19:2X:2:LYS:HZ2	1.78	0.49
1:2A:1010:A:O2'	1:2A:1152:C:O2	2.28	0.49
1:2A:1530:C:O2'	1:2A:1531:C:O5'	2.30	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2483:C:OP1	54:2w:64:U:H4'	2.13	0.49
6:2G:11:TYR:HB2	6:2G:176:LEU:HD21	1.95	0.49
12:2Q:26:TYR:O	12:2Q:67:ARG:NH1	2.40	0.49
32:2a:530:G:N3	54:2w:35:A:O2'	2.42	0.49
32:2a:926:G:N2	53:2v:15:A:H5"	2.27	0.49
44:2m:78:ILE:HA	44:2m:81:LEU:HD12	1.94	0.49
1:1A:323:G:H5'	5:1F:169:ASN:HD21	1.78	0.49
1:1A:467:G:OP1	29:17:33:ARG:NH1	2.46	0.49
1:1A:971:C:H2'	1:1A:972:G:O4'	2.13	0.49
1:1A:1485:G:OP2	61:1A:4324:HOH:O	2.19	0.49
32:1a:69:G:H2'	32:1a:70:G:C8	2.48	0.49
32:1a:619:U:N3	35:1d:134:ASP:OD1	2.38	0.49
32:1a:662:G:H2'	32:1a:663:A:H8	1.78	0.49
1:2A:271(H):G:H2'	1:2A:271(I):G:C8	2.47	0.49
8:2I:43:ASN:ND2	23:21:75:GLU:OE2	2.46	0.49
11:2P:126:VAL:HG12	11:2P:148:LEU:HD23	1.95	0.49
16:2U:82:GLY:O	16:2U:86:ALA:N	2.35	0.49
32:2a:63:C:OP1	32:2a:384:G:N2	2.41	0.49
32:2a:64:G:H4'	32:2a:65:U:H3'	1.95	0.49
32:2a:673:G:H2'	32:2a:674:G:C8	2.47	0.49
32:2a:1005:A:H3'	32:2a:1006:C:C6	2.48	0.49
32:2a:1347:G:H5"	40:2i:107:ARG:HB3	1.95	0.49
32:2a:1438:G:H2'	32:2a:1439:C:C6	2.48	0.49
36:2e:31:LEU:HD11	36:2e:129:ILE:HA	1.95	0.49
39:2h:121:ASP:N	39:2h:121:ASP:OD1	2.45	0.49
55:2x:19:G:H1	55:2x:56:C:H42	1.60	0.49
1:1A:1292:U:H2'	1:1A:1293:C:C6	2.48	0.48
1:1A:2336:A:H61	22:10:43:THR:CG2	2.25	0.48
15:1T:29:ARG:HH21	15:1T:89:VAL:HG12	1.78	0.48
20:1Y:68:HIS:ND1	20:1Y:70:SER:HB3	2.28	0.48
22:10:18:ALA:HB3	22:10:20:ARG:NH1	2.27	0.48
1:2A:709:U:H2'	1:2A:710:G:C8	2.47	0.48
1:2A:1669:A:C8	10:2O:5:GLN:HG3	2.48	0.48
1:2A:1786:A:H1'	1:2A:1938:A:N6	2.27	0.48
1:2A:1918:A:O2'	1:2A:1920:OMC:N4	2.45	0.48
6:2G:131:TYR:HB3	6:2G:159:VAL:HG23	1.95	0.48
12:2Q:111:GLU:O	12:2Q:115:MET:HG2	2.13	0.48
32:2a:157:G:H2'	32:2a:158:G:C8	2.46	0.48
32:2a:336:C:H2'	32:2a:337:C:H6	1.76	0.48
32:2a:918:A:H2'	32:2a:919:A:C8	2.48	0.48
32:2a:1512:U:H2'	32:2a:1513:A:C8	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:33:ALA:HA	44:2m:59:TYR:HE2	1.77	0.48
1:1A:18:C:O2'	1:1A:554:U:OP1	2.31	0.48
1:1A:1587:A:H2'	1:1A:1588:C:C6	2.47	0.48
7:1H:137:ASP:HB3	7:1H:140:LYS:HB3	1.94	0.48
32:1a:34:C:H2'	32:1a:35:G:C8	2.47	0.48
32:1a:233:C:H2'	32:1a:234:C:H6	1.78	0.48
32:1a:1025:U:O2	32:1a:1036:G:O6	2.31	0.48
34:1c:191:THR:OG1	34:1c:194:GLY:O	2.29	0.48
51:1t:59:ALA:O	51:1t:63:ILE:HG13	2.13	0.48
54:1y:5:G:H1	54:1y:68:C:N4	2.11	0.48
1:2A:249:C:OP2	1:2A:2394:C:O2'	2.30	0.48
1:2A:1013:C:H2'	1:2A:1014:U:C6	2.48	0.48
1:2A:1019:U:O2'	1:2A:1021:A:H2	1.96	0.48
1:2A:1354:A:H5"	3:2D:38:LYS:HD3	1.95	0.48
1:2A:2168:G:H8	1:2A:2170:A:N7	2.11	0.48
1:2A:2882:A:OP1	13:2R:96:ARG:HD3	2.13	0.48
7:2H:154:PRO:HB3	7:2H:163:TYR:CE1	2.48	0.48
17:2V:43:GLU:OE1	17:2V:43:GLU:N	2.46	0.48
20:2Y:87:LYS:HD2	20:2Y:95:LYS:HD2	1.95	0.48
21:2Z:52:SER:OG	21:2Z:54:HIS:ND1	2.39	0.48
34:2c:131:ARG:NH2	36:2e:50:GLU:HG3	2.28	0.48
35:2d:5:ILE:HA	35:2d:115:ARG:HH22	1.78	0.48
35:2d:149:ALA:HB3	35:2d:152:SER:HB2	1.94	0.48
40:2i:50:LEU:HD13	40:2i:56:LEU:HA	1.94	0.48
42:2k:22:HIS:HB3	42:2k:29:ILE:HB	1.95	0.48
1:1A:1086:A:O2'	1:1A:1087:G:N7	2.45	0.48
1:1A:2683:C:O2	10:1O:70:LYS:NZ	2.33	0.48
2:1B:82:G:N2	61:1B:312:HOH:O	2.46	0.48
7:1H:101:ARG:NH2	7:1H:116:GLU:OE2	2.46	0.48
9:1N:16:ILE:HG21	9:1N:26:LEU:HD11	1.95	0.48
14:1S:20:ARG:HA	14:1S:20:ARG:HD2	1.56	0.48
19:1X:43:VAL:HG13	19:1X:47:PHE:HD2	1.79	0.48
32:1a:266:G:O3'	48:1q:67:LYS:HB2	2.13	0.48
32:1a:739:C:O2'	46:1o:42:HIS:ND1	2.34	0.48
32:1a:1226:C:H2'	44:1m:103:THR:HB	1.95	0.48
41:1j:30:SER:O	41:1j:81:THR:OG1	2.20	0.48
48:1q:59:ILE:HG22	48:1q:73:VAL:HA	1.95	0.48
1:2A:918:A:HO2'	2:2B:97:G:H22	1.58	0.48
1:2A:1423:G:OP1	1:2A:1492:G:O2'	2.31	0.48
3:2D:85:ASP:OD2	3:2D:88:ARG:NH1	2.43	0.48
32:2a:952:U:H2'	32:2a:953:G:C8	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1178:G:N2	32:2a:1180:A:H3'	2.27	0.48
39:2h:21:LYS:O	39:2h:65:TYR:OH	2.24	0.48
42:2k:48:ILE:HD13	42:2k:63:LEU:HB2	1.95	0.48
1:1A:747:U:O2	1:1A:2014:A:H1'	2.13	0.48
1:1A:1899:G:N3	1:1A:1899:G:H2'	2.29	0.48
1:1A:2105:C:H2'	1:1A:2106:G:C8	2.49	0.48
1:1A:2148:G:C2	1:1A:2149:G:H1'	2.49	0.48
32:1a:500:G:H2'	32:1a:501:C:C6	2.48	0.48
54:1y:33:U:O2'	54:1y:34:CM0:OP1	2.29	0.48
1:2A:192:C:O2'	1:2A:802:A:N3	2.44	0.48
1:2A:542:C:H42	1:2A:551:G:H1	1.61	0.48
1:2A:690:G:H2'	1:2A:691:C:C6	2.48	0.48
1:2A:1152:C:H2'	1:2A:1153:C:H6	1.79	0.48
1:2A:2011:U:H2'	1:2A:2012:G:O4'	2.13	0.48
1:2A:2166:G:H5'	1:2A:2167:U:OP2	2.14	0.48
5:2F:117:ARG:NH2	5:2F:189:THR:O	2.44	0.48
22:20:48:GLY:HA3	22:20:80:HIS:ND1	2.28	0.48
32:2a:35:G:O2'	43:2l:118:SER:O	2.24	0.48
32:2a:153:C:H2'	32:2a:154:C:C6	2.48	0.48
32:2a:662:G:H2'	32:2a:663:A:C8	2.48	0.48
34:2c:6:HIS:CD2	34:2c:8:ILE:H	2.31	0.48
35:2d:109:GLY:HA3	35:2d:165:MET:HG3	1.94	0.48
44:2m:84:ILE:HB	50:2s:74:PHE:HE1	1.79	0.48
1:1A:881:G:H1	1:1A:897:C:N4	2.10	0.48
1:1A:1653:G:H3'	13:1R:2:ARG:HD3	1.95	0.48
1:1A:1668:A:H4'	1:1A:1669:A:O5'	2.13	0.48
1:1A:1955:U:OP2	61:1A:4326:HOH:O	2.19	0.48
1:1A:2831:G:P	4:1E:58:ARG:HH21	2.36	0.48
7:1H:3:ARG:HH11	7:1H:4:ILE:H	1.61	0.48
30:18:4:MET:HE3	30:18:63:PRO:HG3	1.94	0.48
32:1a:178:C:H2'	32:1a:179:A:H8	1.79	0.48
32:1a:1498:UR3:O2'	53:1v:17:U:OP1	2.28	0.48
15:2T:74:ARG:HG2	15:2T:76:PHE:CZ	2.48	0.48
21:2Z:55:HIS:CE1	21:2Z:135:GLU:HG3	2.48	0.48
21:2Z:77:ASP:OD2	21:2Z:80:ARG:HG2	2.13	0.48
32:2a:430:A:OP1	35:2d:9:CYS:HB2	2.13	0.48
32:2a:1190:G:H5'	34:2c:176:HIS:HE1	1.79	0.48
34:2c:6:HIS:ND1	45:2n:49:HIS:HB3	2.29	0.48
39:2h:104:ARG:HB3	39:2h:107:LEU:HB2	1.95	0.48
44:2m:60:VAL:HG13	44:2m:64:TRP:CE3	2.48	0.48
1:1A:576:U:H2'	1:1A:577:G:C8	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1936:A:OP1	1:1A:1937:A:H5'	2.12	0.48
1:1A:2107:C:H42	1:1A:2182:G:H1	1.61	0.48
4:1E:170:LEU:HB3	4:1E:184:VAL:HG22	1.96	0.48
7:1H:11:VAL:HG21	7:1H:50:VAL:HG23	1.96	0.48
21:1Z:124:ILE:HD11	21:1Z:171:ILE:HD12	1.94	0.48
32:1a:171:A:H2'	32:1a:172:A:H8	1.78	0.48
32:1a:626:U:H2'	32:1a:627:G:C8	2.49	0.48
32:1a:1005:A:OP2	32:1a:1006:C:N4	2.46	0.48
33:1b:18:GLY:HA3	33:1b:42:ILE:HG13	1.95	0.48
47:1p:22:THR:HA	47:1p:33:ILE:HG13	1.96	0.48
1:2A:724:U:H2'	1:2A:725:G:O4'	2.14	0.48
1:2A:1924:C:H4'	55:2x:13:C:O2'	2.14	0.48
1:2A:2058:A:N7	61:2A:4056:HOH:O	2.35	0.48
1:2A:2467:C:H4'	12:2Q:123:HIS:CD2	2.49	0.48
13:2R:118:GLU:CD	13:2R:118:GLU:H	2.20	0.48
32:2a:56:U:H2'	32:2a:57:G:H8	1.77	0.48
32:2a:1376:U:OP1	38:2g:94:ARG:NH1	2.46	0.48
35:2d:153:ARG:HG3	35:2d:181:MET:SD	2.54	0.48
40:2i:20:ARG:HG3	40:2i:60:ASP:HB2	1.96	0.48
41:2j:30:SER:O	41:2j:81:THR:OG1	2.19	0.48
1:1A:832:G:OP1	61:1A:4328:HOH:O	2.19	0.48
1:1A:1518:U:H2'	1:1A:1519:G:O4'	2.14	0.48
1:1A:2127:G:N2	1:1A:2173:A:O2'	2.46	0.48
21:1Z:7:ALA:HB2	21:1Z:59:LEU:HD22	1.94	0.48
22:10:27:GLU:HG3	22:10:68:GLU:HA	1.95	0.48
25:13:37:LEU:HB3	25:13:43:ILE:HD13	1.96	0.48
32:1a:736:C:H2'	32:1a:737:A:C8	2.48	0.48
32:1a:976:G:H5'	32:1a:1358:U:O2'	2.13	0.48
34:1c:11:ARG:HB3	34:1c:15:THR:HB	1.93	0.48
36:1e:110:LEU:HD13	36:1e:118:ILE:HD13	1.95	0.48
1:2A:1485:G:H2'	1:2A:1486:A:C8	2.48	0.48
1:2A:2207:G:H3'	1:2A:2208:A:H5"	1.95	0.48
32:2a:149:A:H61	32:2a:172:A:H62	1.61	0.48
32:2a:598:U:H4'	39:2h:94:TYR:CG	2.49	0.48
32:2a:946:A:H2'	32:2a:947:G:C8	2.48	0.48
32:2a:999:C:N4	32:2a:1041:A:H61	2.12	0.48
32:2a:1004:A:N3	32:2a:1038:C:C2	2.81	0.48
33:2b:218:ALA:O	33:2b:222:ILE:HG23	2.13	0.48
34:2c:6:HIS:HD2	34:2c:8:ILE:H	1.60	0.48
1:1A:637:A:H4'	1:1A:638:G:O5'	2.14	0.48
1:1A:1009:A:P	9:1N:37:LYS:HZ3	2.33	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1086:A:H3'	1:1A:1086:A:N3	2.29	0.48
1:1A:1364:G:P	23:11:3:LYS:HG3	2.54	0.48
1:1A:1499:C:H2'	1:1A:1500:G:C8	2.49	0.48
1:1A:1866:C:H2'	1:1A:1876:A:O4'	2.13	0.48
1:1A:2167:U:O2	1:1A:2167:U:H2'	2.13	0.48
1:1A:2577:A:H5'	27:15:3:LYS:HZ3	1.79	0.48
3:1D:83:GLU:OE1	3:1D:104:TYR:OH	2.26	0.48
19:1X:44:GLU:HG3	19:1X:51:VAL:HG23	1.94	0.48
31:19:29:ASN:HD22	31:19:32:HIS:CE1	2.31	0.48
32:1a:971:G:N1	32:1a:1363(A):A:OP2	2.40	0.48
32:1a:1411:C:N4	61:1a:1988:HOH:O	2.45	0.48
40:1i:128:ARG:NH2	55:1x:35:A:OP2	2.44	0.48
1:2A:2135:A:H2'	1:2A:2136:C:C5	2.49	0.48
1:2A:2376:A:H2'	1:2A:2377:A:O4'	2.14	0.48
7:2H:45:VAL:HG12	7:2H:50:VAL:HG22	1.96	0.48
21:2Z:45:ASP:OD1	21:2Z:49:ARG:NE	2.44	0.48
32:2a:147:G:H2'	32:2a:148:G:C8	2.49	0.48
32:2a:806:C:H2'	32:2a:807:A:C8	2.48	0.48
35:2d:173:TRP:CZ3	35:2d:193:ASP:HB3	2.49	0.48
36:2e:100:VAL:O	36:2e:107:ARG:NH1	2.44	0.48
38:2g:65:ALA:O	38:2g:69:VAL:HG23	2.13	0.48
1:1A:826:U:H4'	11:1P:55:ARG:HB3	1.94	0.48
1:1A:883:G:H21	1:1A:893:C:H42	1.62	0.48
1:1A:1056:G:H4'	1:1A:1086:A:H8	1.79	0.48
1:1A:2377:A:H2'	1:1A:2378:A:C8	2.49	0.48
1:1A:2679:A:H4'	4:1E:165:VAL:HG11	1.95	0.48
3:1D:166:GLN:HB2	3:1D:174:ILE:HG22	1.96	0.48
4:1E:143:ASN:HD22	4:1E:147:PRO:HD2	1.79	0.48
9:1N:75:TYR:CE2	9:1N:77:GLY:HA2	2.49	0.48
14:1S:61:ASN:HB3	14:1S:64:GLU:HB2	1.95	0.48
25:13:59:VAL:O	25:13:60:GLU:HG2	2.14	0.48
32:1a:204:U:H4'	32:1a:216:G:O5'	2.14	0.48
54:1w:44:G:H3'	54:1w:45:G:H5"	1.95	0.48
1:2A:997:G:H5"	16:2U:92:ARG:NH1	2.29	0.48
1:2A:2391:G:O2'	1:2A:2422:A:N7	2.47	0.48
10:2O:105:GLU:N	10:2O:105:GLU:OE1	2.40	0.48
15:2T:60:THR:HG22	15:2T:77:PRO:HA	1.94	0.48
21:2Z:121:HIS:HB2	21:2Z:171:ILE:HG13	1.94	0.48
29:27:8:ASN:HB3	29:27:11:LYS:HB3	1.95	0.48
32:2a:34:C:H2'	32:2a:35:G:H8	1.79	0.48
48:2q:45:HIS:CD2	48:2q:65:ILE:HG12	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:8:A:H2'	1:1A:9:U:C6	2.49	0.48
1:1A:330:A:N7	1:1A:1210:A:O2'	2.34	0.48
1:1A:1612:C:O2'	29:17:5:TRP:O	2.32	0.48
1:1A:1783:A:H5'	1:1A:2608:G:H4'	1.96	0.48
1:1A:1790:C:H2'	1:1A:1791:A:C5	2.48	0.48
3:1D:62:TYR:HA	3:1D:87:ASN:OD1	2.13	0.48
27:15:11:THR:HG23	27:15:15:ARG:HB3	1.96	0.48
32:1a:96:U:H2'	32:1a:97:G:C8	2.48	0.48
48:1q:58:GLU:O	48:1q:74:LEU:N	2.39	0.48
1:2A:172:C:H2'	1:2A:173:G:H8	1.78	0.48
1:2A:2809:A:H62	1:2A:2891:G:H2'	1.78	0.48
10:2O:68:GLU:CD	10:2O:68:GLU:H	2.21	0.48
15:2T:83:ILE:HD13	15:2T:86:ILE:HD11	1.95	0.48
32:2a:128:G:O3'	48:2q:3:LYS:NZ	2.46	0.48
32:2a:1159:U:O2'	32:2a:1160:G:OP2	2.31	0.48
34:2c:7:PRO:HG2	34:2c:184:TYR:HB2	1.96	0.48
36:2e:53:LEU:O	36:2e:57:LYS:N	2.38	0.48
53:2v:13:A:H8	53:2v:13:A:OP2	1.97	0.48
54:2y:5:G:H1	54:2y:68:C:H42	1.61	0.48
1:1A:958:U:O2	2:1B:90:A:O2'	2.30	0.47
1:1A:1268:A:C2	1:1A:2013:A:C4	3.02	0.47
1:1A:1301:A:O2'	1:1A:1302:A:H3'	2.13	0.47
1:1A:1864:U:OP1	1:1A:2410:G:O2'	2.28	0.47
1:1A:2072:G:N2	61:1A:4572:HOH:O	2.46	0.47
1:1A:2477:C:N4	31:19:10:ILE:HG23	2.29	0.47
1:1A:2821:A:OP2	61:1A:4278:HOH:O	2.19	0.47
21:1Z:93:ASP:HA	21:1Z:131:ARG:HH22	1.79	0.47
28:16:13:CYS:SG	28:16:47:THR:HG21	2.54	0.47
32:1a:1292:U:P	38:1g:41:ARG:HH22	2.36	0.47
32:1a:1346:A:N1	32:1a:1374:A:H5"	2.29	0.47
1:2A:531:C:H4'	1:2A:532:A:H5"	1.96	0.47
1:2A:1388:G:H2'	1:2A:1389:G:H8	1.77	0.47
2:2B:49:C:H2'	2:2B:50:G:C8	2.49	0.47
6:2G:11:TYR:O	6:2G:16:ARG:HG3	2.14	0.47
7:2H:56:SER:HB3	7:2H:61:HIS:ND1	2.29	0.47
8:2I:77:LEU:HD13	8:2I:101:LEU:HD12	1.96	0.47
9:2N:35:ARG:HG2	9:2N:37:LYS:HG3	1.96	0.47
30:28:30:ARG:HD3	30:28:30:ARG:HA	1.50	0.47
32:2a:979:C:O2	45:2n:19:ARG:NE	2.47	0.47
32:2a:1176:A:H2'	32:2a:1177:G:O4'	2.14	0.47
41:2j:8:LEU:HB3	41:2j:16:LEU:HD11	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1210:A:H5"	1:1A:1212:G:O4'	2.14	0.47
61:1A:4748:HOH:O	13:1R:15:SER:HB2	2.15	0.47
12:1Q:65:PHE:HB2	12:1Q:105:GLU:HB2	1.96	0.47
42:1k:27:ASN:OD1	42:1k:28:THR:N	2.38	0.47
44:1m:108:ARG:HD3	44:1m:108:ARG:HA	1.64	0.47
1:2A:2355:C:O5'	1:2A:2355:C:H6	1.97	0.47
15:2T:6:LEU:O	15:2T:10:VAL:HG23	2.15	0.47
32:2a:60:A:OP1	32:2a:111:G:N2	2.47	0.47
36:2e:6:PHE:CD1	36:2e:36:ASP:HB3	2.49	0.47
37:2f:6:VAL:HB	37:2f:63:TYR:HB2	1.96	0.47
42:2k:62:GLN:O	42:2k:66:LEU:HG	2.14	0.47
45:2n:24:CYS:HB3	45:2n:29:ARG:H	1.79	0.47
1:1A:271(K):U:H1'	8:1I:50:ARG:CZ	2.44	0.47
1:1A:299:A:H5"	20:1Y:86:ARG:HH12	1.78	0.47
1:1A:1066:U:N3	1:1A:1069:A:OP2	2.46	0.47
1:1A:2126:A:H4'	1:1A:2127:G:OP1	2.14	0.47
4:1E:79:ARG:NH1	61:1E:407:HOH:O	2.46	0.47
7:1H:97:ARG:NE	7:1H:104:GLU:OE1	2.44	0.47
8:1I:12:LEU:HD22	8:1I:19:VAL:HG21	1.96	0.47
10:1O:63:VAL:HG12	10:1O:106:LEU:HD11	1.97	0.47
20:1Y:83:THR:HG21	20:1Y:99:CYS:HB2	1.97	0.47
29:17:21:ARG:NH1	61:17:201:HOH:O	2.37	0.47
32:1a:501:C:OP1	43:1l:117:ARG:NH2	2.47	0.47
32:1a:1036:G:H3'	32:1a:1037:C:C6	2.50	0.47
32:1a:1074:G:O2'	32:1a:1101:A:N1	2.36	0.47
32:1a:1218:C:OP2	45:1n:9:LYS:NZ	2.39	0.47
33:1b:55:PHE:HE1	33:1b:218:ALA:HA	1.78	0.47
33:1b:84:GLU:OE2	33:1b:234:PRO:HD2	2.11	0.47
33:1b:233:SER:HB2	33:1b:234:PRO:HD3	1.96	0.47
35:1d:173:TRP:CD1	35:1d:173:TRP:H	2.31	0.47
44:1m:23:TYR:HE2	44:1m:70:LEU:HD22	1.79	0.47
5:2F:167:ALA:HB1	5:2F:173:VAL:HG11	1.95	0.47
9:2N:67:LEU:HB3	9:2N:88:GLU:HG3	1.96	0.47
15:2T:105:LEU:HD22	15:2T:109:GLU:HB3	1.96	0.47
21:2Z:79:ARG:HD2	21:2Z:80:ARG:NH2	2.29	0.47
32:2a:583:A:OP2	61:2a:3320:HOH:O	2.20	0.47
35:2d:60:GLU:HG3	35:2d:202:LEU:HD12	1.95	0.47
43:2l:11:VAL:HG11	48:2q:36:ILE:HG21	1.96	0.47
50:2s:28:LYS:HB3	50:2s:29:ARG:CA	2.44	0.47
1:1A:214:G:N3	1:1A:216:A:O2'	2.39	0.47
1:1A:1418:G:N7	61:1A:4461:HOH:O	2.36	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2124:G:N2	1:1A:2174:C:N3	2.54	0.47
18:1W:82:LEU:HB2	18:1W:98:LYS:HB2	1.96	0.47
19:1X:31:HIS:NE2	61:1X:201:HOH:O	2.35	0.47
19:1X:61:GLY:HA3	19:1X:73:ARG:O	2.14	0.47
32:1a:56:U:H2'	32:1a:57:G:C8	2.49	0.47
1:2A:613:G:O2'	1:2A:614(C):A:N1	2.43	0.47
1:2A:1019:U:H3	1:2A:1142(A):A:N6	2.12	0.47
1:2A:1649:G:O2'	13:2R:107:ASP:OD2	2.26	0.47
1:2A:1882:C:H2'	1:2A:1883:G:O4'	2.15	0.47
1:2A:2314:C:H2'	1:2A:2315:G:C8	2.50	0.47
3:2D:260:ARG:HH12	3:2D:267:SER:HG	1.61	0.47
6:2G:5:VAL:HG23	6:2G:8:LYS:H	1.78	0.47
19:2X:5:TYR:CE2	24:22:30:ARG:HB2	2.49	0.47
29:27:1:MET:HE3	29:27:3:ARG:NH2	2.29	0.47
32:2a:137:C:H2'	32:2a:138:G:C8	2.48	0.47
32:2a:954:G:H2'	32:2a:955:U:O4'	2.15	0.47
32:2a:1068:G:H8	32:2a:1068:G:OP2	1.98	0.47
55:2x:40:C:H2'	55:2x:41:C:H6	1.79	0.47
1:1A:573:G:N1	1:1A:2031:A:OP2	2.47	0.47
1:1A:588:U:O4	1:1A:670:A:H1'	2.14	0.47
1:1A:1086:A:H4'	1:1A:1103:A:C2	2.49	0.47
1:1A:1295:C:H2'	1:1A:1296:G:H8	1.79	0.47
1:1A:2176:A:H2'	1:1A:2177:C:C6	2.50	0.47
4:1E:24:THR:HG22	4:1E:186:GLY:O	2.14	0.47
11:1P:97:PRO:HD3	11:1P:126:VAL:O	2.15	0.47
32:1a:688:G:H5'	42:1k:46:GLY:C	2.39	0.47
32:1a:974:A:H8	32:1a:974:A:OP1	1.98	0.47
32:1a:1013:G:N2	32:1a:1016:A:OP2	2.48	0.47
1:2A:848:G:C4	1:2A:933:A:H8	2.32	0.47
1:2A:854:G:H2'	1:2A:855:G:C8	2.49	0.47
1:2A:2529:G:H5"	1:2A:2530:A:H5"	1.96	0.47
1:2A:2632:A:O2'	1:2A:2811:G:O2'	2.24	0.47
32:2a:986:A:H1'	50:2s:54:GLY:O	2.15	0.47
1:1A:579:G:O2'	1:1A:2019:A:OP1	2.30	0.47
1:1A:582:G:H2'	1:1A:583:G:C8	2.50	0.47
1:1A:1300:U:H4'	1:1A:1301:A:H5"	1.97	0.47
1:1A:1465:G:O2'	1:1A:1545:A:N1	2.48	0.47
1:1A:2406:U:H2'	1:1A:2406:U:OP2	2.15	0.47
32:1a:1125:U:H4'	41:1j:5:ARG:HH22	1.80	0.47
35:1d:187:ARG:NH2	35:1d:193:ASP:OD2	2.47	0.47
39:1h:33:GLU:OE2	39:1h:50:ARG:NE	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:322:A:OP2	5:2F:169:ASN:HB2	2.14	0.47
1:2A:1636:C:H2'	1:2A:1637:A:C8	2.50	0.47
1:2A:1889:A:H2'	1:2A:1890:A:C8	2.49	0.47
1:2A:2870:C:H2'	1:2A:2871:C:O4'	2.14	0.47
4:2E:119:ARG:HG2	4:2E:120:TRP:NE1	2.29	0.47
8:2I:92:VAL:HG13	8:2I:120:ILE:HB	1.95	0.47
13:2R:12:ARG:HB3	13:2R:16:HIS:HB3	1.97	0.47
15:2T:107:ASP:OD2	15:2T:111:ARG:NH1	2.47	0.47
26:24:15:ILE:HB	26:24:32:TYR:CD1	2.48	0.47
32:2a:1056:U:OP1	34:2c:163:ALA:N	2.47	0.47
32:2a:1314:C:OP2	50:2s:4:SER:OG	2.25	0.47
43:2l:53:ARG:HG3	43:2l:93:LEU:HD21	1.96	0.47
54:2y:18:G:O2'	54:2y:19:G:H5'	2.15	0.47
1:1A:721:C:H2'	1:1A:722:A:C8	2.50	0.47
1:1A:1103:A:H8	1:1A:1103:A:O5'	1.97	0.47
1:1A:2031:A:C6	1:1A:2498:C:H1'	2.49	0.47
1:1A:2140:C:N4	1:1A:2149:G:O6	2.48	0.47
1:1A:2203:U:H4'	3:1D:151:LYS:HG3	1.97	0.47
1:1A:2312:U:H5'	6:1G:88:ILE:HD11	1.96	0.47
1:1A:2744:G:N2	7:1H:143:GLN:OE1	2.47	0.47
1:1A:2791:C:H2'	1:1A:2792:G:H8	1.79	0.47
2:1B:33:G:H5'	6:1G:2:PRO:HD3	1.97	0.47
2:1B:91:C:OP2	12:1Q:16:ARG:NH1	2.48	0.47
6:1G:129:GLY:O	6:1G:161:THR:OG1	2.32	0.47
10:1O:115:VAL:HG13	10:1O:121:VAL:HG21	1.95	0.47
18:1W:68:ARG:HH11	18:1W:111:HIS:HA	1.80	0.47
32:1a:18:C:OP1	36:1e:14:ARG:NH1	2.40	0.47
32:1a:944:G:N1	32:1a:1338:G:OP2	2.39	0.47
32:1a:1036:G:H5"	32:1a:1037:C:C5	2.50	0.47
32:1a:1367:C:H2'	32:1a:1368:G:O4'	2.15	0.47
32:1a:1386:G:H2'	32:1a:1387:G:H8	1.79	0.47
33:1b:55:PHE:CE1	33:1b:218:ALA:HA	2.49	0.47
39:1h:119:LEU:HB3	39:1h:123:GLU:HB2	1.97	0.47
42:1k:85:ARG:HD3	42:1k:113:PRO:HD3	1.95	0.47
43:1l:7:ILE:HD13	43:1l:10:LEU:HD12	1.97	0.47
1:2A:631:A:OP1	11:2P:65:ARG:NE	2.46	0.47
1:2A:910:A:C5	12:2Q:13:GLN:HG3	2.50	0.47
1:2A:995:C:O2	9:2N:3:THR:OG1	2.28	0.47
1:2A:1309:G:O2'	1:2A:1611:C:O2'	2.31	0.47
1:2A:1400:G:H2'	1:2A:1401:G:H8	1.80	0.47
1:2A:1714:G:H2'	1:2A:1717:G:C8	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2149:G:H2'	1:2A:2150:U:O4'	2.14	0.47
1:2A:2330:G:H2'	1:2A:2331:G:O4'	2.14	0.47
1:2A:2557:G:H2'	1:2A:2558:C:C6	2.49	0.47
1:2A:2564:A:OP1	1:2A:2648:C:H4'	2.15	0.47
1:2A:2848:G:C8	15:2T:97:ALA:HB2	2.49	0.47
4:2E:14:ILE:HD11	4:2E:173:VAL:HG11	1.95	0.47
5:2F:57:VAL:HG13	5:2F:59:TYR:H	1.79	0.47
12:2Q:97:VAL:HG21	12:2Q:103:MET:HE3	1.97	0.47
19:2X:50:LYS:O	19:2X:84:ALA:N	2.48	0.47
23:21:64:ALA:HA	23:21:67:ILE:HG13	1.96	0.47
32:2a:271:C:H2'	32:2a:272:C:C6	2.49	0.47
32:2a:765:G:N1	32:2a:812:C:O2'	2.37	0.47
32:2a:950:U:H2'	32:2a:951:G:C8	2.50	0.47
32:2a:1316:G:OP1	45:2n:17:LYS:NZ	2.34	0.47
33:2b:81:VAL:HG23	33:2b:94:ASN:HD21	1.80	0.47
33:2b:188:ALA:HB1	33:2b:192:SER:OG	2.14	0.47
34:2c:52:LEU:HD21	34:2c:55:VAL:HG23	1.96	0.47
44:2m:3:ARG:NH2	44:2m:9:ILE:O	2.45	0.47
44:2m:33:ALA:HA	44:2m:59:TYR:CE2	2.50	0.47
47:2p:8:ARG:HB3	47:2p:28:ARG:NH1	2.30	0.47
52:2u:5:ASP:O	52:2u:11:GLY:HA3	2.15	0.47
10:1O:11:ALA:O	10:1O:98:VAL:HA	2.15	0.47
32:1a:911:U:H2'	32:1a:912:C:C6	2.50	0.47
32:1a:966:M2G:HM13	32:1a:967:5MC:H1'	1.97	0.47
1:2A:576:U:H2'	1:2A:577:G:C8	2.49	0.47
1:2A:990:A:C6	1:2A:1186:G:H1'	2.50	0.47
1:2A:1608:A:H1'	1:2A:1610:A:OP2	2.15	0.47
1:2A:1693:U:H1'	3:2D:14:ARG:NH2	2.29	0.47
1:2A:2461:C:H2'	1:2A:2462:U:C6	2.49	0.47
3:2D:158:ALA:O	3:2D:161:THR:OG1	2.30	0.47
33:2b:51:LEU:HD21	33:2b:201:ILE:HG23	1.95	0.47
38:2g:74:GLU:HG2	38:2g:91:VAL:HG22	1.97	0.47
46:2o:33:THR:HG21	46:2o:85:LEU:HD22	1.97	0.47
47:2p:57:ARG:O	47:2p:61:SER:N	2.46	0.47
1:1A:783:A:O2'	1:1A:785:G:OP1	2.28	0.47
1:1A:948:G:N2	1:1A:985:C:OP2	2.48	0.47
1:1A:2334:G:H5'	14:1S:9:ARG:HG2	1.97	0.47
21:1Z:45:ASP:CG	21:1Z:49:ARG:HE	2.23	0.47
21:1Z:155:LEU:HD12	21:1Z:155:LEU:HA	1.82	0.47
36:1e:31:LEU:HD23	36:1e:31:LEU:HA	1.76	0.47
47:1p:74:LEU:O	47:1p:79:VAL:HG23	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:495:G:N3	18:2W:61:ASN:ND2	2.62	0.47
1:2A:747:U:O2	1:2A:2014:A:H1'	2.14	0.47
1:2A:933:A:OP1	25:23:24:LYS:NZ	2.46	0.47
1:2A:1153:C:OP1	16:2U:92:ARG:NH2	2.47	0.47
1:2A:2001:A:H2'	1:2A:2002:G:C8	2.50	0.47
1:2A:2693:A:H2'	1:2A:2694:G:C8	2.49	0.47
1:2A:2752:C:H2'	1:2A:2753:A:O4'	2.14	0.47
2:2B:66:A:N6	2:2B:109:C:H5"	2.30	0.47
8:2I:81:VAL:HG21	8:2I:88:ILE:HD13	1.96	0.47
15:2T:118:ARG:HG2	32:2a:1442(A):G:C8	2.49	0.47
26:24:48:ARG:HA	26:24:48:ARG:HD3	1.38	0.47
31:29:27:CYS:SG	31:29:28:GLU:N	2.88	0.47
32:2a:6:G:O2'	32:2a:7:G:H5"	2.15	0.47
32:2a:177:C:H2'	32:2a:178:C:C6	2.50	0.47
32:2a:336:C:H2'	32:2a:337:C:C6	2.49	0.47
32:2a:562:C:H1'	43:2l:15:ARG:HB3	1.96	0.47
32:2a:1148:U:H1'	40:2i:66:ARG:NH2	2.30	0.47
32:2a:1166:G:H1'	32:2a:1171:G:H22	1.80	0.47
33:2b:109:SER:O	33:2b:112:VAL:HG22	2.15	0.47
38:2g:16:LEU:HD22	40:2i:41:VAL:O	2.15	0.47
47:2p:18:ARG:HD3	47:2p:35:LYS:HD2	1.96	0.47
1:1A:2086:U:H2'	1:1A:2087:G:C8	2.50	0.47
6:1G:9:ARG:NH1	6:1G:13:GLU:OE2	2.48	0.47
11:1P:90:ARG:NH1	11:1P:105:LEU:HD11	2.30	0.47
32:1a:636:U:H2'	32:1a:637:G:C8	2.49	0.47
32:1a:864:A:H2'	32:1a:865:A:C8	2.50	0.47
32:1a:1223:C:P	50:1s:78:ARG:HH21	2.38	0.47
44:1m:91:ARG:HD3	44:1m:96:LEU:HB2	1.97	0.47
1:2A:2549:G:H2'	1:2A:2550:G:H8	1.80	0.47
2:2B:3:C:H1'	2:2B:119:G:N2	2.30	0.47
32:2a:662:G:H2'	32:2a:663:A:H8	1.80	0.47
32:2a:1435:G:H2'	32:2a:1436:U:C6	2.50	0.47
33:2b:84:GLU:HB3	33:2b:219:VAL:HG21	1.97	0.47
44:2m:13:LYS:HA	44:2m:44:ARG:HH11	1.79	0.47
54:2w:8:4SU:H3'	54:2w:13:C:H41	1.80	0.47
1:1A:486:C:O2'	18:1W:60:ASN:ND2	2.49	0.46
1:1A:1047:G:H2'	1:1A:1110:G:N2	2.29	0.46
1:1A:1152:C:H4'	16:1U:77:SER:HA	1.97	0.46
1:1A:1971:A:C4	3:1D:241:PRO:HD3	2.50	0.46
5:1F:143:ALA:HB1	5:1F:148:LEU:HB2	1.97	0.46
7:1H:4:ILE:O	7:1H:69:ARG:HD2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:38:SER:HB3	7:1H:41:MET:HG2	1.98	0.46
32:1a:674:G:H2'	32:1a:675:A:C8	2.51	0.46
36:1e:33:VAL:HG21	36:1e:109:ILE:HA	1.96	0.46
44:1m:56:LEU:O	44:1m:60:VAL:HG23	2.15	0.46
54:1w:54:5MU:C2	54:1w:58:A:N7	2.82	0.46
1:2A:1502:C:H2'	1:2A:1503:U:C6	2.50	0.46
1:2A:1794:U:H2'	1:2A:1795:C:H6	1.79	0.46
1:2A:1851:U:H2'	1:2A:1852:C:O4'	2.15	0.46
1:2A:2674:G:H2'	1:2A:2675:A:C8	2.50	0.46
1:2A:2788:C:OP1	4:2E:61:ARG:NH2	2.48	0.46
1:2A:2893:G:H5"	1:2A:2894:G:O4'	2.15	0.46
5:2F:64:ILE:HG21	5:2F:78:ILE:HG23	1.97	0.46
9:2N:34:LEU:HD23	9:2N:107:LEU:HD21	1.97	0.46
21:2Z:25:PRO:O	21:2Z:85:HIS:HA	2.15	0.46
32:2a:1263:C:C4	32:2a:1272:G:O6	2.68	0.46
32:2a:1346:A:H61	32:2a:1374:A:H3'	1.80	0.46
1:1A:458:G:O2'	1:1A:469:G:O6	2.32	0.46
1:1A:1756:G:H4'	1:1A:1758:G:O4'	2.14	0.46
1:1A:2162:G:H4'	1:1A:2172:U:H2'	1.96	0.46
2:1B:24:G:N7	2:1B:56:G:H2'	2.30	0.46
7:1H:25:LYS:HG2	7:1H:34:GLU:HG2	1.97	0.46
43:1l:113:ARG:HA	43:1l:113:ARG:HD2	1.54	0.46
44:1m:91:ARG:CD	44:1m:96:LEU:HB2	2.45	0.46
46:1o:18:PHE:CZ	46:1o:21:ASP:HB2	2.50	0.46
1:2A:538:G:H2'	1:2A:539:G:C8	2.49	0.46
1:2A:1394:U:O2	19:2X:16:LYS:NZ	2.41	0.46
1:2A:1400:G:H2'	1:2A:1401:G:C8	2.50	0.46
1:2A:1667:G:O2'	1:2A:1991:U:O4	2.26	0.46
1:2A:1946:U:H2'	1:2A:1947:C:C6	2.50	0.46
1:2A:2136:C:O2'	1:2A:2137:C:O5'	2.33	0.46
1:2A:2169:A:H2'	1:2A:2170:A:C8	2.49	0.46
7:2H:101:ARG:HH12	7:2H:122:THR:HG23	1.81	0.46
20:2Y:9:LYS:HA	20:2Y:10:GLY:HA2	1.59	0.46
32:2a:148:G:H2'	32:2a:149:A:H8	1.80	0.46
37:2f:1:MET:HB3	37:2f:66:GLU:HG2	1.96	0.46
38:2g:42:ILE:HG22	38:2g:120:ILE:HD12	1.97	0.46
1:1A:621:A:OP2	11:1P:108:LYS:NZ	2.47	0.46
1:1A:1789:A:H5"	3:1D:220:HIS:O	2.15	0.46
1:1A:1939:5MU:OP1	1:1A:2604:U:O2'	2.31	0.46
1:1A:2110:G:C2	1:1A:2120:G:H1'	2.50	0.46
1:1A:2238:G:N3	1:1A:2238:G:H2'	2.30	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:29:GLY:HA3	61:1E:408:HOH:O	2.14	0.46
6:1G:5:VAL:HG22	6:1G:8:LYS:H	1.80	0.46
21:1Z:149:SER:OG	21:1Z:150:LEU:N	2.46	0.46
32:1a:517:G:N2	32:1a:533:A:OP2	2.43	0.46
32:1a:979:C:OP1	32:1a:1223:C:N4	2.48	0.46
1:2A:614(A):U:O4	5:2F:175:THR:N	2.40	0.46
1:2A:912:C:OP1	12:2Q:8:LYS:NZ	2.40	0.46
1:2A:1449:A:O2'	1:2A:1529:G:N2	2.38	0.46
1:2A:2469:A:H2'	1:2A:2470:G:O4'	2.15	0.46
1:2A:2896:C:H2'	1:2A:2897:U:C6	2.51	0.46
10:2O:77:ILE:HB	15:2T:74:ARG:HD2	1.96	0.46
32:2a:1218:C:OP2	45:2n:9:LYS:NZ	2.38	0.46
34:2c:155:GLY:HA3	34:2c:196:LEU:HD22	1.95	0.46
35:2d:11:LEU:HD23	35:2d:66:ARG:HB3	1.98	0.46
55:2x:8:4SU:H1'	55:2x:48:C:O2	2.16	0.46
1:1A:370:G:H4'	1:1A:371:A:OP2	2.15	0.46
1:1A:1055:G:H1	1:1A:1104:C:N4	2.10	0.46
1:1A:1062:G:N2	1:1A:1088:A:C6	2.83	0.46
1:1A:2303:G:O2'	6:1G:132:ASN:ND2	2.44	0.46
1:1A:2492:U:H2'	1:1A:2493:U:C6	2.51	0.46
10:1O:68:GLU:HB3	10:1O:78:ARG:HB2	1.97	0.46
32:1a:343:U:O3'	32:1a:344:A:H8	1.98	0.46
32:1a:405:U:O4	35:1d:2:GLY:N	2.48	0.46
32:1a:878:G:H1'	39:1h:3:THR:HG21	1.97	0.46
32:1a:993:G:H2'	32:1a:995:C:H41	1.79	0.46
32:1a:1442:G:H2'	32:1a:1442:G:N3	2.30	0.46
48:1q:43:LEU:HD12	48:1q:68:ARG:HG2	1.96	0.46
1:2A:373:U:H2'	1:2A:374:A:H8	1.80	0.46
1:2A:414:C:H2'	1:2A:415:A:C8	2.51	0.46
1:2A:458:G:O2'	1:2A:469:G:O6	2.32	0.46
1:2A:586:A:N1	1:2A:809:G:O2'	2.38	0.46
1:2A:2030:A:H4'	1:2A:2031:A:C8	2.51	0.46
2:2B:51:G:N7	14:2S:62:LYS:NZ	2.56	0.46
24:22:51:ARG:O	24:22:55:ARG:HG2	2.14	0.46
32:2a:476:G:H2'	32:2a:477:A:H8	1.81	0.46
32:2a:559:A:H5'	32:2a:559:A:N3	2.30	0.46
32:2a:696:A:N3	32:2a:786:G:O2'	2.39	0.46
32:2a:779:C:H2'	32:2a:780:A:O4'	2.16	0.46
35:2d:119:GLN:HG3	35:2d:123:HIS:HD2	1.80	0.46
47:2p:19:ILE:H	47:2p:19:ILE:HG13	1.50	0.46
51:2t:57:ARG:HH12	51:2t:100:ILE:HD12	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:49:G:H1	54:2w:65:C:N4	2.14	0.46
1:1A:911:A:H2'	12:1Q:9:TYR:OH	2.15	0.46
1:1A:2572:A:N7	4:1E:145:LYS:HB2	2.30	0.46
26:14:15:ILE:HB	26:14:32:TYR:CD1	2.49	0.46
33:1b:156:LYS:HA	33:1b:156:LYS:HD2	1.78	0.46
1:2A:1336:A:H2'	1:2A:1337:G:C8	2.50	0.46
1:2A:1364:G:P	23:21:3:LYS:HG3	2.56	0.46
1:2A:2070:G:H2'	1:2A:2071:A:H8	1.79	0.46
1:2A:2284:C:P	28:26:6:ARG:HG3	2.56	0.46
2:2B:74:U:H2'	2:2B:75:G:O4'	2.15	0.46
4:2E:181:LEU:HD11	15:2T:6:LEU:HD23	1.98	0.46
6:2G:41:GLN:HG2	6:2G:43:LEU:HD13	1.96	0.46
26:24:16:CYS:SG	26:24:17:GLY:N	2.88	0.46
32:2a:741:G:H2'	32:2a:742:G:O4'	2.15	0.46
32:2a:1030(A):G:N2	32:2a:1030(C):G:H3'	2.30	0.46
33:2b:101:MET:HA	33:2b:108:ILE:HD12	1.97	0.46
35:2d:3:ARG:HG3	35:2d:5:ILE:HG23	1.97	0.46
35:2d:165:MET:SD	35:2d:168:ARG:NE	2.85	0.46
42:2k:98:LEU:O	42:2k:101:SER:OG	2.26	0.46
1:1A:65:C:H5'	19:1X:71:GLY:HA3	1.97	0.46
1:1A:252:G:OP1	11:1P:50:ARG:NH1	2.39	0.46
1:1A:1064:C:N3	1:1A:1074:G:C6	2.81	0.46
1:1A:1504:C:H2'	1:1A:1505:C:C6	2.51	0.46
1:1A:2245:U:O2'	1:1A:2436:G:OP2	2.34	0.46
20:1Y:9:LYS:HA	20:1Y:10:GLY:HA2	1.61	0.46
21:1Z:11:GLU:O	21:1Z:36:LYS:NZ	2.41	0.46
21:1Z:124:ILE:HG22	21:1Z:126:VAL:HG23	1.97	0.46
25:13:23:LEU:HD13	25:13:50:VAL:HG11	1.97	0.46
32:1a:34:C:H2'	32:1a:35:G:H8	1.81	0.46
32:1a:679:C:H2'	32:1a:680:C:C6	2.51	0.46
32:1a:920:U:H2'	32:1a:921:U:C6	2.50	0.46
32:1a:1003:G:H2'	32:1a:1004:A:N3	2.30	0.46
32:1a:1118:C:H1'	32:1a:1179:A:C4	2.51	0.46
33:1b:28:PHE:HD1	33:1b:194:PRO:HG3	1.80	0.46
34:1c:17:ASP:OD1	34:1c:18:TRP:N	2.49	0.46
44:1m:88:ARG:H	44:1m:88:ARG:HG2	1.48	0.46
1:2A:881:G:H2'	1:2A:882:G:C8	2.50	0.46
1:2A:2285:C:OP2	28:26:6:ARG:HD3	2.16	0.46
1:2A:2769:C:H2'	1:2A:2770:G:O4'	2.16	0.46
4:2E:170:LEU:HB3	4:2E:184:VAL:HG22	1.97	0.46
5:2F:24:LEU:HD21	5:2F:114:VAL:HG12	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2R:70:LEU:HD12	13:2R:76:VAL:HG22	1.98	0.46
32:2a:299:G:H8	32:2a:299:G:O5'	1.99	0.46
32:2a:381:C:H2'	32:2a:382:A:O4'	2.15	0.46
32:2a:841:U:OP2	32:2a:841:U:H6	1.98	0.46
32:2a:1288:A:N1	32:2a:1371:G:H1'	2.31	0.46
39:2h:104:ARG:HB3	39:2h:108:GLY:H	1.80	0.46
1:1A:396:G:H1'	23:11:42:GLN:HB3	1.97	0.46
1:1A:518:G:H4'	18:1W:18:ARG:NE	2.31	0.46
1:1A:816:C:H2'	1:1A:817:C:H6	1.80	0.46
1:1A:1400:G:H2'	1:1A:1401:G:C8	2.50	0.46
1:1A:1782:C:O2	1:1A:2608:G:O2'	2.34	0.46
1:1A:2316:C:O2'	6:1G:128:ARG:NH2	2.49	0.46
1:1A:2869:G:H2'	1:1A:2870:C:O4'	2.16	0.46
32:1a:11:G:O2'	32:1a:506:G:N2	2.48	0.46
1:2A:263:C:H2'	1:2A:264:C:O4'	2.15	0.46
1:2A:700:G:O2'	1:2A:1632:A:N3	2.48	0.46
1:2A:1983:C:H4'	1:2A:2606:C:H4'	1.97	0.46
1:2A:2492:U:H2'	1:2A:2493:U:C6	2.51	0.46
5:2F:157:VAL:HB	5:2F:194:MET:HG2	1.96	0.46
9:2N:53:VAL:HA	9:2N:121:LYS:O	2.15	0.46
15:2T:36:GLU:OE2	15:2T:41:ARG:NH2	2.49	0.46
32:2a:103:C:OP2	51:2t:14:LYS:HE2	2.16	0.46
32:2a:1239:A:H62	32:2a:1299:A:N6	2.14	0.46
1:1A:191:A:H2'	1:1A:192:C:C6	2.51	0.46
1:1A:784:A:C6	3:1D:229:VAL:HG11	2.50	0.46
1:1A:883:G:N2	1:1A:893:C:H42	2.13	0.46
1:1A:1427:A:H4'	1:1A:1428:C:O4'	2.16	0.46
1:1A:2128:C:C2	1:1A:2129:C:H1'	2.51	0.46
1:1A:2577:A:H5'	27:15:3:LYS:NZ	2.30	0.46
19:1X:50:LYS:HB3	19:1X:84:ALA:HB2	1.97	0.46
32:1a:1112:C:C4	34:1c:178:LEU:HD12	2.51	0.46
32:1a:1240:U:OP2	38:1g:116:ALA:N	2.45	0.46
1:2A:105:C:H2'	1:2A:106:C:C6	2.51	0.46
1:2A:708:C:H42	1:2A:723:G:H1	1.62	0.46
1:2A:795:C:H2'	1:2A:796:C:C6	2.51	0.46
1:2A:1316:U:H2'	1:2A:1317:A:H8	1.80	0.46
1:2A:1406:U:H2'	1:2A:1407:C:C6	2.50	0.46
1:2A:2127:G:N1	1:2A:2161:C:C2	2.84	0.46
1:2A:2863:C:H2'	1:2A:2864:G:C8	2.51	0.46
2:2B:4:C:H42	2:2B:117:G:H1	1.64	0.46
28:26:25:LYS:NZ	28:26:30:THR:O	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:28:30:ARG:NH1	61:28:203:HOH:O	2.48	0.46
32:2a:77:G:H2'	32:2a:78:G:C8	2.50	0.46
32:2a:142:G:H2'	32:2a:143:A:H8	1.81	0.46
32:2a:560:U:H4'	32:2a:561:U:O5'	2.16	0.46
34:2c:142:MET:HG3	34:2c:170:GLN:HB3	1.98	0.46
53:2v:12:A:N3	53:2v:12:A:H2'	2.31	0.46
55:2x:33:U:N3	55:2x:36:U:OP2	2.37	0.46
1:1A:124:G:OP1	1:1A:1376:C:O2'	2.30	0.46
1:1A:188:G:H5"	23:11:14:VAL:HG21	1.98	0.46
1:1A:323:G:OP2	57:1A:4099:LUJ:NAP	2.48	0.46
1:1A:443:A:C5	5:1F:45:ARG:HD2	2.51	0.46
1:1A:531:C:H4'	1:1A:532:A:H5"	1.97	0.46
1:1A:881:G:H1	1:1A:897:C:H42	1.63	0.46
1:1A:1325:G:OP1	1:1A:1647:G:O2'	2.24	0.46
1:1A:1853:A:H2'	1:1A:1854:A:C8	2.51	0.46
61:1A:5422:HOH:O	55:1x:76:A:H1'	2.15	0.46
2:1B:72:G:O2'	2:1B:105:A:N6	2.48	0.46
3:1D:9:TYR:CE1	3:1D:13:ARG:HG3	2.51	0.46
5:1F:133:ASN:N	5:1F:138:GLU:OE1	2.32	0.46
14:1S:10:ARG:O	14:1S:14:VAL:HG13	2.16	0.46
19:1X:72:LYS:NZ	19:1X:75:ASP:OD1	2.46	0.46
32:1a:175:C:H2'	32:1a:176:C:C6	2.51	0.46
32:1a:337:C:H2'	32:1a:338:A:C8	2.51	0.46
32:1a:719:C:O2'	49:1r:49:LYS:HB3	2.15	0.46
32:1a:1023:G:C2	32:1a:1024:G:H1'	2.51	0.46
32:1a:1355:G:H2'	32:1a:1356:G:C8	2.51	0.46
33:1b:33:TYR:HB2	33:1b:43:ASP:HB2	1.97	0.46
37:1f:37:VAL:HA	37:1f:65:VAL:HG12	1.97	0.46
42:1k:73:MET:HG2	42:1k:77:MET:O	2.15	0.46
45:1n:21:TYR:HE1	45:1n:23:ARG:HE	1.62	0.46
47:1p:14:ASN:HA	47:1p:42:ARG:NH2	2.31	0.46
1:2A:958:U:O2	2:2B:90:A:O2'	2.22	0.46
1:2A:1015:G:H2'	1:2A:1016:G:H8	1.80	0.46
1:2A:1023:U:O2'	1:2A:1122:G:H5'	2.16	0.46
1:2A:1783:A:N7	61:2A:4059:HOH:O	2.36	0.46
1:2A:2086:U:H2'	1:2A:2087:G:C8	2.51	0.46
1:2A:2447:G:N2	1:2A:2450:A:OP2	2.49	0.46
2:2B:72:G:O2'	2:2B:105:A:N6	2.49	0.46
12:2Q:36:ALA:HB2	12:2Q:103:MET:SD	2.56	0.46
32:2a:324:G:OP1	51:2t:22:ARG:HD2	2.16	0.46
32:2a:434:U:H2'	32:2a:435:C:C6	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:537:G:H2'	32:2a:538:G:H8	1.80	0.46
32:2a:1371:G:O3'	40:2i:69:GLY:HA3	2.15	0.46
35:2d:127:THR:HG23	35:2d:147:ALA:HB3	1.96	0.46
38:2g:26:PHE:O	38:2g:30:ILE:HG13	2.16	0.46
1:1A:78:A:H2'	1:1A:79:G:H8	1.81	0.46
1:1A:686:G:H21	1:1A:788:A:H61	1.63	0.46
1:1A:1296:G:OP1	1:1A:2709:G:O2'	2.24	0.46
1:1A:1359:A:H2	1:1A:1372:U:O4	1.99	0.46
1:1A:1429:G:H2'	1:1A:1430:C:C6	2.50	0.46
1:1A:1794:U:H2'	1:1A:1795:C:H6	1.80	0.46
1:1A:2123:G:H1	1:1A:2175:C:H42	1.64	0.46
1:1A:2168:G:O6	1:1A:2171:A:H5"	2.16	0.46
4:1E:12:THR:HG22	4:1E:13:ARG:H	1.80	0.46
8:1I:9:LEU:HB3	8:1I:12:LEU:HB2	1.98	0.46
15:1T:94:ALA:HB1	15:1T:99:LEU:HD21	1.98	0.46
15:1T:109:GLU:O	15:1T:113:LYS:HG2	2.15	0.46
32:1a:545:C:O2'	32:1a:549:C:OP1	2.33	0.46
32:1a:1095:U:OP1	32:1a:1108:G:N1	2.47	0.46
32:1a:1403:C:H2'	32:1a:1404:5MC:HM53	1.96	0.46
1:2A:249:C:H4'	1:2A:250:G:O5'	2.16	0.46
1:2A:570:G:H2'	1:2A:2030:A:C5	2.51	0.46
1:2A:783:A:O2'	1:2A:785:G:OP1	2.30	0.46
1:2A:947:G:H2'	1:2A:948:G:C8	2.51	0.46
3:2D:96:HIS:HD2	3:2D:102:LYS:HG2	1.81	0.46
32:2a:50:A:N1	32:2a:360:A:O2'	2.43	0.46
32:2a:570:G:O6	32:2a:865:A:N6	2.49	0.46
32:2a:575:G:O2'	32:2a:821:G:OP2	2.26	0.46
32:2a:1166:G:H2'	32:2a:1169:A:OP2	2.16	0.46
32:2a:1502:A:C8	32:2a:1505:G:N2	2.84	0.46
43:2l:9:GLN:HA	43:2l:12:ARG:HD3	1.98	0.46
1:1A:463:G:N2	1:1A:466:A:OP2	2.44	0.45
1:1A:1826:G:H2'	1:1A:1827:C:O4'	2.17	0.45
1:1A:2639:A:H2'	1:1A:2640:G:O4'	2.17	0.45
17:1V:50:PRO:HG2	17:1V:51:VAL:HG12	1.97	0.45
32:1a:313:A:H2'	32:1a:314:C:C6	2.50	0.45
32:1a:374:A:N1	32:1a:390:C:O2'	2.49	0.45
32:1a:1069:C:O2'	32:1a:1192:C:H1'	2.16	0.45
1:2A:457:A:H5"	61:2A:4527:HOH:O	2.15	0.45
1:2A:1993:U:H2'	1:2A:1994:C:O4'	2.16	0.45
1:2A:2117:A:O2'	1:2A:2118:U:H5"	2.16	0.45
1:2A:2131:G:H4'	1:2A:2132:U:H3'	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2507:C:H2'	1:2A:2508:G:O4'	2.16	0.45
6:2G:41:GLN:HE21	6:2G:153:ARG:HB3	1.81	0.45
8:2I:75:LEU:HD13	8:2I:105:HIS:CE1	2.51	0.45
11:2P:121:LYS:O	11:2P:123:LEU:N	2.48	0.45
18:2W:64:MET:HE3	18:2W:109:GLU:HG3	1.98	0.45
24:22:25:VAL:HG11	24:22:61:LEU:HD21	1.99	0.45
32:2a:646:U:H2'	32:2a:647:C:C6	2.51	0.45
32:2a:1299:A:H2'	32:2a:1299:A:N3	2.31	0.45
32:2a:1458:G:H5'	51:2t:32:ALA:HB2	1.98	0.45
39:2h:35:ILE:O	39:2h:39:LEU:HD12	2.16	0.45
54:2y:47:U:O2'	54:2y:50:G:OP1	2.34	0.45
1:1A:628:G:H2'	1:1A:629:G:C8	2.51	0.45
1:1A:1000:A:H62	1:1A:1154:G:H2'	1.81	0.45
1:1A:2188:C:H2'	1:1A:2189:U:O4'	2.16	0.45
1:1A:2695:C:H2'	1:1A:2696:U:C6	2.51	0.45
1:1A:2773:C:H2'	1:1A:2774:C:H6	1.81	0.45
4:1E:174:ASP:OD1	4:1E:175:VAL:N	2.48	0.45
8:1I:78:THR:H	8:1I:104:GLN:NE2	2.10	0.45
32:1a:254:G:N2	48:1q:16:GLN:OE1	2.49	0.45
32:1a:509:A:O2'	32:1a:510:A:OP1	2.25	0.45
32:1a:692:U:O2'	32:1a:694:A:N7	2.40	0.45
32:1a:1057:G:H2'	32:1a:1058:G:O4'	2.16	0.45
32:1a:1133:G:H2'	32:1a:1134:G:C8	2.52	0.45
38:1g:78:ARG:HD2	38:1g:156:TRP:HE3	1.80	0.45
55:1x:61:C:H2'	55:1x:62:C:H6	1.81	0.45
54:1y:31:C:N4	54:1y:39:G:H1	2.13	0.45
1:2A:297:C:H2'	1:2A:298:G:O4'	2.17	0.45
1:2A:1131:G:O6	1:2A:2040:C:H1'	2.17	0.45
1:2A:2115:G:H2'	1:2A:2116:G:H3'	1.97	0.45
1:2A:2309:A:H8	1:2A:2309:A:OP1	1.99	0.45
1:2A:2875:C:O2'	15:2T:2:ASN:OD1	2.25	0.45
3:2D:68:LYS:C	3:2D:70:TRP:H	2.23	0.45
21:2Z:11:GLU:O	21:2Z:36:LYS:NZ	2.42	0.45
24:22:39:ALA:HA	24:22:44:LEU:HB3	1.99	0.45
32:2a:390:C:O3'	47:2p:28:ARG:NH2	2.49	0.45
32:2a:532:A:C2	32:2a:1055:A:H1'	2.50	0.45
38:2g:31:MET:HE2	38:2g:34:GLY:HA2	1.98	0.45
45:2n:27:CYS:SG	45:2n:28:GLY:N	2.89	0.45
54:2y:68:C:H2'	54:2y:69:A:O4'	2.17	0.45
1:1A:524:U:H2'	1:1A:525:U:C6	2.51	0.45
1:1A:536:A:H2'	1:1A:537:C:C6	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:839:U:H2'	1:1A:840:C:C6	2.51	0.45
1:1A:1149:G:H2'	1:1A:1150:C:C6	2.51	0.45
1:1A:2010:G:H5"	18:1W:42:ARG:HB2	1.98	0.45
1:1A:2271:G:OP1	22:10:18:ALA:HB1	2.17	0.45
3:1D:148:GLU:OE1	3:1D:151:LYS:NZ	2.37	0.45
19:1X:94:GLY:H	19:1X:95:LEU:C	2.24	0.45
21:1Z:137:ILE:HA	21:1Z:156:LYS:HE2	1.98	0.45
25:13:7:LYS:HB2	25:13:34:GLU:HG3	1.98	0.45
25:13:19:GLN:OE1	25:13:52:HIS:NE2	2.40	0.45
32:1a:136:C:O2'	47:1p:65:GLN:NE2	2.36	0.45
37:1f:10:LEU:HD13	37:1f:61:LEU:HD13	1.99	0.45
54:1w:55:PSU:O2'	54:1w:57:G:N7	2.43	0.45
1:2A:320:A:H4'	1:2A:322:A:N7	2.31	0.45
1:2A:661:C:H2'	1:2A:662:G:C8	2.51	0.45
1:2A:927:G:O6	1:2A:928:G:N2	2.49	0.45
1:2A:1479:G:H5'	1:2A:1558:A:H2	1.81	0.45
1:2A:1557:C:OP2	1:2A:1558:A:O2'	2.18	0.45
1:2A:2291:U:O2'	1:2A:2374:C:O2	2.34	0.45
32:2a:198:G:H2'	32:2a:199:G:H8	1.80	0.45
32:2a:664:G:P	49:2r:64:ARG:HH21	2.40	0.45
32:2a:757:U:H2'	32:2a:758:G:O4'	2.16	0.45
35:2d:191:ARG:NH1	35:2d:191:ARG:O	2.49	0.45
35:2d:200:GLU:O	35:2d:204:ILE:HG12	2.17	0.45
36:2e:20:GLN:NE2	36:2e:21:ALA:O	2.49	0.45
36:2e:74:GLY:HA3	36:2e:116:THR:HG22	1.97	0.45
39:2h:86:ILE:HG13	39:2h:133:LEU:HD22	1.97	0.45
1:1A:1882:C:H2'	1:1A:1883:G:O4'	2.15	0.45
32:1a:271:C:H2'	32:1a:272:C:C6	2.51	0.45
32:1a:848:C:H2'	32:1a:849:C:C6	2.52	0.45
33:1b:58:ILE:HG23	33:1b:222:ILE:HG22	1.98	0.45
33:1b:74:LYS:HD2	33:1b:166:ASP:HB2	1.99	0.45
36:1e:6:PHE:HB3	36:1e:34:VAL:HG22	1.98	0.45
48:1q:9:VAL:O	48:1q:21:VAL:HA	2.17	0.45
54:1w:8:4SU:O5'	54:1w:8:4SU:H6	2.17	0.45
1:2A:698:C:H4'	1:2A:734:A:H61	1.82	0.45
1:2A:817:C:O2'	1:2A:839:U:H5"	2.17	0.45
1:2A:1670:C:O2	4:2E:129:HIS:NE2	2.42	0.45
1:2A:2157:G:O2'	1:2A:2158:A:OP2	2.30	0.45
1:2A:2815:C:H5'	27:25:29:THR:HG21	1.98	0.45
1:2A:2845:G:H5"	15:2T:54:ARG:O	2.17	0.45
3:2D:77:ALA:HA	3:2D:97:TYR:HA	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:2O:122:LEU:HD23	15:2T:43:GLN:NE2	2.31	0.45
26:24:26:SER:OG	26:24:27:THR:N	2.49	0.45
32:2a:343:U:HO2'	32:2a:344:A:H2'	1.80	0.45
32:2a:537:G:H2'	32:2a:538:G:C8	2.51	0.45
32:2a:1195:C:H2'	32:2a:1197:G:O4'	2.16	0.45
35:2d:13:ARG:HB3	35:2d:38:TYR:O	2.16	0.45
35:2d:72:GLU:OE2	35:2d:207:TYR:OH	2.34	0.45
1:1A:330:A:H8	1:1A:1210:A:C4	2.35	0.45
1:1A:466:A:N3	1:1A:683:C:H1'	2.32	0.45
1:1A:1363:C:O2'	1:1A:1809:A:N3	2.48	0.45
1:1A:2409:G:N3	61:1A:4468:HOH:O	2.36	0.45
2:1B:13:A:O2'	2:1B:15:A:H5"	2.17	0.45
5:1F:195:ASP:HB3	5:1F:198:ALA:H	1.80	0.45
6:1G:56:ALA:O	6:1G:59:GLU:HG2	2.16	0.45
7:1H:154:PRO:HB3	7:1H:163:TYR:CZ	2.52	0.45
9:1N:67:LEU:O	9:1N:88:GLU:HG3	2.16	0.45
9:1N:77:GLY:O	61:1N:301:HOH:O	2.21	0.45
32:1a:138:G:H2'	32:1a:139:G:H8	1.81	0.45
32:1a:189(K):U:H2'	32:1a:189(L):G:C8	2.52	0.45
32:1a:911:U:OP1	43:1l:95:GLY:HA2	2.17	0.45
32:1a:1004:A:H5'	32:1a:1024:G:H22	1.81	0.45
32:1a:1343:G:H2'	32:1a:1344:C:C6	2.52	0.45
37:1f:99:ALA:O	49:1r:28:GLU:HA	2.17	0.45
1:2A:233:A:H2'	1:2A:234:C:O4'	2.17	0.45
1:2A:478:A:N1	1:2A:500:G:H4'	2.32	0.45
1:2A:892:G:H3'	1:2A:893:C:H4'	1.97	0.45
1:2A:1165:U:H2'	1:2A:1166:C:C6	2.52	0.45
1:2A:2105:C:H2'	1:2A:2106:G:C8	2.52	0.45
1:2A:2340:G:H2'	1:2A:2341:G:H8	1.81	0.45
32:2a:188:C:H42	32:2a:189(L):G:H1	1.63	0.45
32:2a:674:G:H2'	32:2a:675:A:H8	1.81	0.45
35:2d:11:LEU:O	35:2d:15:GLU:HG2	2.17	0.45
39:2h:83:ILE:HG13	39:2h:137:VAL:HG22	1.96	0.45
40:2i:24:GLY:C	40:2i:25:LYS:HD2	2.42	0.45
1:1A:1040:C:H2'	1:1A:1041:C:O4'	2.16	0.45
1:1A:2130:U:H2'	1:1A:2158:A:N1	2.31	0.45
1:1A:2680:C:H5'	4:1E:189:PRO:HA	1.98	0.45
19:1X:41:ASN:O	19:1X:45:THR:HG23	2.16	0.45
20:1Y:86:ARG:HB2	20:1Y:98:VAL:HG23	1.98	0.45
26:14:58:ARG:HD2	26:14:58:ARG:N	2.30	0.45
32:1a:40:C:H2'	32:1a:41:G:H8	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:401:C:H2'	32:1a:402:G:C8	2.51	0.45
32:1a:444:C:H2'	32:1a:445:G:H8	1.82	0.45
32:1a:636:U:H2'	32:1a:637:G:H8	1.81	0.45
32:1a:924:C:H2'	32:1a:925:G:C8	2.51	0.45
32:1a:925:G:H1'	32:1a:1502:A:C4	2.52	0.45
32:1a:1098:C:C2	32:1a:1099:G:C8	3.05	0.45
32:1a:1109:C:H2'	32:1a:1110:A:O4'	2.16	0.45
38:1g:90:GLU:CD	38:1g:90:GLU:H	2.25	0.45
51:1t:53:LEU:HD12	51:1t:100:ILE:HG13	1.99	0.45
1:2A:603:A:N1	1:2A:625:G:O2'	2.47	0.45
1:2A:2152:G:C4	1:2A:2153:G:H1'	2.52	0.45
1:2A:2846:G:H2'	1:2A:2847:U:O4'	2.16	0.45
9:2N:42:TRP:HA	9:2N:48:MET:SD	2.57	0.45
12:2Q:57:HIS:CE1	12:2Q:116:GLU:HG2	2.52	0.45
32:2a:255:G:O6	32:2a:270:A:N6	2.49	0.45
32:2a:892:A:O2'	32:2a:1415:G:H4'	2.17	0.45
33:2b:60:ASP:O	33:2b:64:ARG:HG2	2.16	0.45
1:1A:55:G:O2'	1:1A:127:A:N1	2.46	0.45
1:1A:2206:G:OP2	1:1A:2206:G:H4'	2.15	0.45
16:1U:86:ALA:O	17:1V:49:THR:HG23	2.17	0.45
32:1a:936:C:O2	32:1a:1382:C:N4	2.41	0.45
32:1a:1003:G:C4	32:1a:1004:A:H2	2.34	0.45
32:1a:1300:G:N7	61:1a:1967:HOH:O	2.36	0.45
43:1l:54:LYS:HG2	43:1l:75:HIS:CD2	2.51	0.45
55:1x:32:5MC:HM52	55:1x:33:U:O4	2.17	0.45
1:2A:184:C:H2'	1:2A:185:U:C6	2.51	0.45
1:2A:590:A:H2'	1:2A:591:C:C6	2.52	0.45
1:2A:1009:A:OP2	9:2N:37:LYS:NZ	2.50	0.45
1:2A:2096:U:H3	1:2A:2193:G:H1	1.65	0.45
1:2A:2203:U:H2'	1:2A:2205:C:C6	2.52	0.45
1:2A:2386:C:H2'	1:2A:2387:U:C6	2.51	0.45
14:2S:28:VAL:HG11	14:2S:98:VAL:HG13	1.99	0.45
25:23:6:VAL:HG13	25:23:56:VAL:HG22	1.99	0.45
32:2a:202:U:H3'	32:2a:203:U:C5	2.51	0.45
32:2a:546:G:OP1	35:2d:73:ARG:HG2	2.17	0.45
32:2a:1265:G:C6	32:2a:1266:G:C6	3.05	0.45
35:2d:172:PRO:HD2	35:2d:173:TRP:CZ3	2.52	0.45
42:2k:41:THR:HG21	42:2k:71:LYS:HB2	1.98	0.45
1:1A:143:G:H2'	1:1A:143(A):C:C6	2.52	0.45
1:1A:2101:G:H2'	1:1A:2102:U:C6	2.51	0.45
61:1A:5527:HOH:O	55:1x:76:A:H3'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:10:10:THR:CG2	22:10:12:ASN:H	2.29	0.45
32:1a:431:A:H2'	32:1a:432:A:O4'	2.16	0.45
35:1d:79:PHE:CE1	35:1d:204:ILE:HD13	2.51	0.45
35:1d:111:ALA:HB1	35:1d:116:GLN:HG2	1.99	0.45
49:1r:33:ASP:OD2	49:1r:36:ASN:HB2	2.17	0.45
1:2A:656:G:H2'	1:2A:657:U:O4'	2.15	0.45
1:2A:1161:C:H2'	1:2A:1162:G:C8	2.52	0.45
1:2A:1428:C:N4	1:2A:1570:A:OP2	2.44	0.45
1:2A:2689:U:OP2	1:2A:2719:G:N2	2.36	0.45
1:2A:2831:G:H2'	61:2A:4405:HOH:O	2.16	0.45
3:2D:5:LYS:HG2	3:2D:17:THR:HG22	1.98	0.45
5:2F:164:ARG:O	5:2F:168:ARG:HB2	2.16	0.45
15:2T:11:GLU:O	15:2T:15:VAL:HG23	2.17	0.45
32:2a:173:U:H5"	32:2a:197:A:O4'	2.16	0.45
32:2a:253:U:H2'	32:2a:254:G:H8	1.82	0.45
32:2a:545:C:H5'	35:2d:72:GLU:HB2	1.99	0.45
32:2a:890:G:O2'	32:2a:906:G:O6	2.31	0.45
32:2a:1064:G:O2'	32:2a:1190:G:N2	2.49	0.45
32:2a:1101:A:C4	33:2b:99:GLY:HA3	2.52	0.45
32:2a:1198:G:H2'	32:2a:1199:U:C6	2.52	0.45
33:2b:170:GLU:O	33:2b:174:VAL:HG23	2.16	0.45
34:2c:63:ASN:HB3	34:2c:98:ASN:HB2	1.98	0.45
35:2d:104:VAL:HG21	35:2d:140:VAL:HG21	1.99	0.45
48:2q:61:GLU:HA	48:2q:71:PHE:CD1	2.52	0.45
1:1A:26:G:C6	1:1A:27:G:N1	2.85	0.45
1:1A:607:U:OP1	5:1F:102:PRO:HA	2.17	0.45
1:1A:1028:A:N6	1:1A:1125:G:H2'	2.31	0.45
1:1A:1424:G:H2'	1:1A:1425:G:O4'	2.17	0.45
5:1F:106:ARG:H	5:1F:106:ARG:HG2	1.44	0.45
5:1F:178:PRO:HB2	5:1F:201:VAL:HG21	1.98	0.45
21:1Z:28:MET:HE2	21:1Z:35:ARG:HB2	1.99	0.45
32:1a:271:C:H2'	32:1a:272:C:H6	1.81	0.45
32:1a:757:U:O2'	32:1a:879:C:O2	2.31	0.45
35:1d:174:LEU:HD23	35:1d:174:LEU:HA	1.82	0.45
40:1i:15:ALA:HB2	40:1i:65:VAL:HG13	1.98	0.45
1:2A:143(A):C:O2'	19:2X:2:LYS:NZ	2.50	0.45
1:2A:271(H):G:H2'	1:2A:271(I):G:H8	1.80	0.45
1:2A:446:G:OP1	16:2U:3:ARG:HD3	2.17	0.45
1:2A:1581:G:H2'	1:2A:1582:C:O4'	2.17	0.45
30:28:26:LYS:HB2	30:28:44:LYS:O	2.16	0.45
35:2d:105:VAL:HB	35:2d:117:ALA:HB1	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:2m:22:ILE:HB	44:2m:25:ILE:HD12	1.98	0.45
48:2q:51:TYR:HE1	48:2q:76:LEU:HB2	1.82	0.45
54:2y:40:G:H2'	54:2y:41:A:H8	1.80	0.45
1:1A:278:A:H2	1:1A:362:U:H3	1.65	0.45
1:1A:895:U:O2'	1:1A:896:A:H5'	2.16	0.45
1:1A:1680:U:O2'	1:1A:1763:G:N7	2.34	0.45
1:1A:2164:C:H2'	1:1A:2165:G:H5'	1.98	0.45
1:1A:2262:U:OP2	22:10:19:LYS:NZ	2.48	0.45
1:1A:2801(A):A:N3	1:1A:2895:U:H1'	2.32	0.45
2:1B:1:U:HO2'	2:1B:2:C:P	2.40	0.45
5:1F:34:TRP:CH2	11:1P:8:PRO:HB3	2.52	0.45
6:1G:107:LEU:HA	6:1G:111:LEU:HD12	1.98	0.45
32:1a:15:G:H4'	36:1e:24:ARG:HE	1.82	0.45
32:1a:153:C:H42	32:1a:168:G:H1	1.65	0.45
32:1a:200:G:H1	32:1a:217:C:N4	2.03	0.45
33:1b:131:PRO:O	33:1b:135:GLN:N	2.46	0.45
36:1e:105:VAL:HB	36:1e:106:PRO:HD3	1.99	0.45
45:1n:27:CYS:SG	45:1n:29:ARG:HB2	2.56	0.45
47:1p:60:LEU:HD12	47:1p:60:LEU:HA	1.84	0.45
51:1t:30:LYS:HB3	51:1t:34:LYS:HZ1	1.82	0.45
1:2A:757:U:OP2	57:2A:3852:LUJ:NAP	2.50	0.45
1:2A:1149:G:H2'	1:2A:1150:C:H6	1.81	0.45
1:2A:1614:A:P	1:2A:1614:A:H8	2.39	0.45
1:2A:2151:G:H2'	1:2A:2152:G:H8	1.79	0.45
1:2A:2369:A:H2'	1:2A:2370:G:H8	1.82	0.45
2:2B:78:A:H2'	2:2B:79:C:O4'	2.17	0.45
3:2D:18:VAL:HG12	3:2D:211:ARG:HH12	1.82	0.45
32:2a:72:C:N3	32:2a:97:G:O6	2.50	0.45
32:2a:107:G:H2'	32:2a:108:G:O4'	2.17	0.45
32:2a:189(A):C:H2'	32:2a:189(B):C:H6	1.82	0.45
32:2a:604:G:H2'	32:2a:605:U:O4'	2.17	0.45
32:2a:629:G:H2'	32:2a:630:G:O4'	2.16	0.45
33:2b:7:VAL:HG12	33:2b:9:GLU:HG2	1.99	0.45
38:2g:140:ASP:OD1	54:2y:41:A:O2'	2.33	0.45
1:1A:1779:U:H2'	61:1A:4408:HOH:O	2.16	0.44
1:1A:1799:G:C8	3:1D:177:LEU:HD12	2.53	0.44
1:1A:2136:C:C4	1:1A:2155:G:N1	2.85	0.44
1:1A:2803:C:H2'	1:1A:2804:C:C6	2.51	0.44
15:1T:88:ILE:H	15:1T:88:ILE:HG12	1.59	0.44
32:1a:593:G:H2'	32:1a:594:G:O4'	2.16	0.44
32:1a:1030(C):G:H2'	32:1a:1030(D):A:C8	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1179:A:H2'	32:1a:1180:A:O4'	2.17	0.44
1:2A:83:G:O2'	1:2A:102:G:N2	2.49	0.44
1:2A:743:G:O2'	1:2A:1659:U:OP1	2.34	0.44
1:2A:746:A:HO2'	1:2A:2611:U:HO2'	1.64	0.44
1:2A:921:G:H4'	1:2A:2269:A:C5	2.52	0.44
1:2A:2364:C:OP1	22:20:55:ARG:NH1	2.47	0.44
3:2D:19:ALA:HB2	3:2D:204:ILE:HD11	1.99	0.44
5:2F:155:LEU:HD11	5:2F:176:LEU:HD12	1.97	0.44
8:2I:5:LEU:HD11	8:2I:19:VAL:HG22	1.99	0.44
32:2a:360:A:H2'	32:2a:361:G:C8	2.52	0.44
32:2a:1062:U:H2'	32:2a:1063:C:C6	2.53	0.44
34:2c:44:GLU:HG2	34:2c:52:LEU:HD22	1.99	0.44
39:2h:24:THR:HG22	39:2h:63:LEU:HD11	1.99	0.44
40:2i:18:PHE:HD2	40:2i:62:TYR:HD2	1.65	0.44
54:2w:30:C:H2'	54:2w:31:C:C6	2.52	0.44
1:1A:86:C:H4'	1:1A:104:U:H1'	1.99	0.44
1:1A:1665:A:H2'	1:1A:1666:G:O4'	2.17	0.44
1:1A:2106:G:H1	1:1A:2183:C:H42	1.64	0.44
1:1A:2151:G:H2'	1:1A:2152:G:C8	2.52	0.44
1:1A:2848:G:H8	15:1T:97:ALA:HB2	1.82	0.44
7:1H:28:GLY:HA3	7:1H:79:VAL:HB	1.99	0.44
17:1V:80:GLN:HA	17:1V:82:ARG:NH1	2.32	0.44
23:11:89:GLU:O	23:11:93:GLU:HG2	2.18	0.44
32:1a:503:C:H2'	32:1a:504:C:C6	2.52	0.44
32:1a:924:C:O2'	32:1a:1502:A:N1	2.45	0.44
32:1a:1512:U:H2'	32:1a:1513:A:C8	2.53	0.44
36:1e:85:GLY:O	36:1e:87:SER:N	2.50	0.44
54:1y:52:G:H1	54:1y:62:C:N4	2.15	0.44
1:2A:657:U:H2'	1:2A:658:C:C6	2.52	0.44
1:2A:744:G:OP1	4:2E:132:HIS:ND1	2.49	0.44
1:2A:746:A:H2'	1:2A:2612:C:H5"	1.99	0.44
1:2A:925:C:H2'	1:2A:926:A:C8	2.53	0.44
1:2A:1239:G:H2'	1:2A:1240:U:O4'	2.17	0.44
1:2A:1364:G:OP2	23:21:61:ARG:NH2	2.47	0.44
1:2A:2114:A:O2'	1:2A:2167:U:H1'	2.17	0.44
1:2A:2284:C:OP2	28:26:2:ALA:N	2.51	0.44
6:2G:109:VAL:HG11	26:24:14:ILE:HG21	1.99	0.44
14:2S:10:ARG:HG2	14:2S:91:PRO:HA	1.99	0.44
32:2a:565:U:OP2	32:2a:566:G:O2'	2.34	0.44
32:2a:592:G:H2'	32:2a:593:G:C8	2.52	0.44
32:2a:972:C:H5'	41:2j:57:LYS:NZ	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1128:C:HO2'	32:2a:1129:C:P	2.41	0.44
32:2a:1323:G:H2'	32:2a:1324:A:C8	2.52	0.44
33:2b:16:HIS:CG	33:2b:17:PHE:N	2.84	0.44
35:2d:61:LYS:NZ	35:2d:72:GLU:OE1	2.41	0.44
1:1A:286:C:H2'	1:1A:287:C:C6	2.53	0.44
1:1A:2250:G:O2'	1:1A:2496:C:OP1	2.31	0.44
3:1D:208:LYS:HG3	3:1D:210:GLY:H	1.83	0.44
11:1P:18:ARG:NE	61:1P:307:HOH:O	2.48	0.44
28:16:2:ALA:HB2	30:18:34:TRP:CZ2	2.53	0.44
32:1a:1049:U:OP1	45:1n:3:ARG:HB2	2.17	0.44
36:1e:90:VAL:O	36:1e:120:THR:HA	2.17	0.44
1:2A:171:G:H2'	1:2A:172:C:C6	2.52	0.44
1:2A:946:G:OP1	61:2A:3973:HOH:O	2.21	0.44
1:2A:2023:G:H5'	1:2A:2617:C:H4'	1.99	0.44
12:2Q:85:LYS:HG2	22:20:7:LEU:HB3	2.00	0.44
20:2Y:35:TYR:CE2	20:2Y:69:ALA:HB3	2.53	0.44
21:2Z:54:HIS:CD2	21:2Z:101:PRO:HG3	2.53	0.44
32:2a:123:C:O2'	32:2a:290:C:O2	2.33	0.44
32:2a:996:A:H3'	32:2a:997:U:H5"	1.99	0.44
33:2b:122:PHE:HD1	33:2b:122:PHE:HA	1.67	0.44
34:2c:18:TRP:HE3	34:2c:18:TRP:H	1.65	0.44
51:2t:53:LEU:HB2	51:2t:100:ILE:HD11	1.99	0.44
55:2x:40:C:H2'	55:2x:41:C:C6	2.53	0.44
1:1A:816:C:H2'	1:1A:817:C:C6	2.52	0.44
1:1A:1183:G:HO2'	25:13:29:ARG:HH12	1.63	0.44
1:1A:1972:A:H2'	1:1A:1973:G:H8	1.82	0.44
1:1A:2331:G:O2'	1:1A:2336:A:N1	2.40	0.44
32:1a:654:G:H2'	32:1a:655:A:O4'	2.18	0.44
32:1a:1004:A:C8	32:1a:1038:C:C2	3.06	0.44
32:1a:1309:G:OP1	44:1m:92:HIS:HE1	2.00	0.44
33:1b:12:GLU:O	33:1b:15:VAL:HG22	2.17	0.44
34:1c:116:VAL:HG21	34:1c:202:ILE:HD11	1.99	0.44
35:1d:65:ARG:HG3	35:1d:75:PHE:CD1	2.52	0.44
37:1f:97:PHE:HB3	49:1r:32:ARG:HG3	2.00	0.44
38:1g:26:PHE:CE2	38:1g:30:ILE:HD11	2.53	0.44
1:2A:457:A:H61	1:2A:470:A:H5"	1.82	0.44
1:2A:646:A:H2'	1:2A:647:G:O4'	2.18	0.44
1:2A:893:C:H2'	1:2A:894:C:C5	2.53	0.44
1:2A:1482:G:H1	1:2A:1506:C:H42	1.65	0.44
1:2A:1551:C:H2'	1:2A:1552:G:O4'	2.16	0.44
1:2A:2343:C:O2'	1:2A:2373:G:O2'	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2820:A:O2'	1:2A:2821:A:OP1	2.34	0.44
4:2E:170:LEU:HB3	4:2E:184:VAL:CG2	2.48	0.44
7:2H:4:ILE:O	7:2H:69:ARG:HD2	2.17	0.44
9:2N:56:ASN:HB3	9:2N:59:LYS:HD2	1.98	0.44
10:2O:73:ASP:HB2	15:2T:82:LEU:HD12	1.99	0.44
14:2S:14:VAL:O	14:2S:18:ILE:HG12	2.16	0.44
41:2j:35:SER:HB3	41:2j:73:ASP:HB2	1.99	0.44
50:2s:51:VAL:HB	50:2s:75:ALA:HB2	1.98	0.44
52:2u:17:THR:O	52:2u:22:ARG:NH1	2.50	0.44
54:2w:36:C:H41	54:2w:37:6MZ:H9	1.82	0.44
54:2y:6:A:N6	54:2y:67:U:H3	2.14	0.44
1:1A:234:C:H2'	1:1A:235:U:H6	1.83	0.44
1:1A:1056:G:H5"	1:1A:1057:A:O4'	2.18	0.44
1:1A:1802:A:H2'	1:1A:1803:A:C8	2.53	0.44
1:1A:1803:A:O2'	3:1D:259:THR:HG21	2.17	0.44
1:1A:2305:A:H5"	6:1G:134:GLY:HA3	1.98	0.44
1:1A:2418:A:H2'	1:1A:2419:U:C6	2.52	0.44
1:1A:2781:A:H5"	1:1A:2782:G:H5'	2.00	0.44
21:1Z:103:ARG:N	21:1Z:137:ILE:O	2.49	0.44
32:1a:319:G:H2'	32:1a:320:C:O4'	2.18	0.44
32:1a:613:C:H2'	32:1a:614:A:C8	2.49	0.44
32:1a:627:G:H2'	32:1a:628:G:C8	2.53	0.44
32:1a:841:U:C5	32:1a:848:C:H1'	2.52	0.44
33:1b:58:ILE:CG2	33:1b:222:ILE:HG22	2.47	0.44
39:1h:9:MET:HG3	39:1h:26:VAL:HG11	1.99	0.44
1:2A:99:U:H4'	1:2A:100:G:H5'	1.97	0.44
1:2A:529:A:H62	1:2A:2041:U:H3	1.64	0.44
1:2A:661:C:H2'	1:2A:662:G:H8	1.82	0.44
1:2A:1469:A:H2'	1:2A:1470:G:O4'	2.18	0.44
1:2A:1495:A:H2'	1:2A:1496:A:C8	2.52	0.44
1:2A:2319:G:N2	14:2S:3:ARG:HA	2.32	0.44
1:2A:2557:G:H2'	1:2A:2558:C:H6	1.83	0.44
21:2Z:73:GLN:HB3	21:2Z:87:ASP:OD2	2.18	0.44
32:2a:264:U:O2	48:2q:64:PRO:HG2	2.18	0.44
32:2a:491:G:H2'	32:2a:492:G:O4'	2.16	0.44
32:2a:692:U:H2'	32:2a:694:A:OP2	2.18	0.44
32:2a:1004:A:C6	32:2a:1037:C:H1'	2.53	0.44
32:2a:1275:A:H3'	32:2a:1276:G:H8	1.82	0.44
32:2a:1366:C:H2'	32:2a:1367:C:C6	2.52	0.44
43:2l:10:LEU:HB3	48:2q:32:TYR:CE2	2.53	0.44
47:2p:19:ILE:N	47:2p:37:GLY:O	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:2w:53:G:C8	54:2w:54:5MU:H72	2.53	0.44
1:1A:192:C:O2'	1:1A:802:A:N3	2.46	0.44
1:1A:952:G:OP1	12:1Q:16:ARG:NH2	2.50	0.44
1:1A:1653:G:O3'	13:1R:2:ARG:HB2	2.18	0.44
1:1A:1689:A:OP2	1:1A:1698:A:N6	2.42	0.44
1:1A:2067:G:O2'	1:1A:2069:G:H5'	2.17	0.44
1:1A:2637:U:H5"	4:1E:82:ARG:NH1	2.33	0.44
1:1A:2705:A:O2'	1:1A:2852:G:OP1	2.26	0.44
9:1N:104:LYS:HB2	9:1N:117:PHE:CE1	2.52	0.44
20:1Y:14:LEU:HB2	20:1Y:75:ILE:HD11	2.00	0.44
32:1a:219:C:H2'	32:1a:220:G:O4'	2.18	0.44
32:1a:412:A:OP2	35:1d:35:ARG:NH2	2.49	0.44
32:1a:444:C:H2'	32:1a:445:G:C8	2.52	0.44
32:1a:530:G:N7	61:1a:1964:HOH:O	2.36	0.44
32:1a:580:U:H2'	32:1a:581:G:O4'	2.18	0.44
32:1a:782:A:H4'	32:1a:1514:C:O2'	2.17	0.44
32:1a:840:C:H4'	32:1a:841:U:OP1	2.17	0.44
44:1m:15:VAL:HG11	44:1m:48:LEU:HD21	1.98	0.44
1:2A:143:G:H2'	1:2A:143(A):C:C6	2.53	0.44
1:2A:250:G:C6	1:2A:251:A:C6	3.06	0.44
1:2A:385:C:O2'	1:2A:388:G:N2	2.50	0.44
1:2A:1203:G:O2'	1:2A:1242:A:N6	2.48	0.44
1:2A:1265:A:N6	1:2A:2013:A:H5"	2.32	0.44
1:2A:1823:G:OP1	3:2D:54:ARG:NH2	2.49	0.44
1:2A:2186:G:H2'	1:2A:2187:G:C8	2.53	0.44
2:2B:38:C:H2'	2:2B:39:A:H8	1.83	0.44
6:2G:37:VAL:HG22	6:2G:159:VAL:HG12	2.00	0.44
10:2O:97:ARG:NH1	32:2a:339:C:OP2	2.50	0.44
13:2R:79:LEU:HA	13:2R:83:ILE:HD12	1.98	0.44
17:2V:82:ARG:NH2	61:2V:301:HOH:O	2.51	0.44
21:2Z:98:MET:HE2	21:2Z:98:MET:HB2	1.88	0.44
32:2a:1057:G:H2'	32:2a:1058:G:O4'	2.18	0.44
32:2a:1263:C:H3'	32:2a:1263:C:H6	1.82	0.44
43:2l:113:ARG:HH21	43:2l:116:SER:HB2	1.82	0.44
54:2w:10:G:H1	54:2w:25:C:N4	2.14	0.44
1:1A:305:U:H2'	1:1A:306:U:C6	2.53	0.44
2:1B:1:U:O2'	2:1B:2:C:OP1	2.33	0.44
4:1E:181:LEU:HD12	4:1E:181:LEU:HA	1.78	0.44
5:1F:102:PRO:O	5:1F:106:ARG:HG2	2.17	0.44
10:1O:19:ILE:HG22	10:1O:43:VAL:HG22	1.99	0.44
23:11:8:SER:HB3	23:11:66:HIS:CD2	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:13:18:ASP:OD1	25:13:18:ASP:N	2.49	0.44
32:1a:197:A:C6	32:1a:221:C:H4'	2.52	0.44
32:1a:345:C:H5'	32:1a:346:G:C5	2.52	0.44
32:1a:558:G:OP2	32:1a:559:A:O2'	2.30	0.44
35:1d:122:ARG:HD2	35:1d:122:ARG:HA	1.71	0.44
43:1l:53:ARG:HB3	43:1l:69:TYR:HE1	1.83	0.44
50:1s:27:GLU:OE1	50:1s:27:GLU:N	2.43	0.44
1:2A:848:G:H2'	1:2A:849:A:C8	2.53	0.44
1:2A:1516:C:H2'	1:2A:1517:G:C8	2.53	0.44
1:2A:1916:A:H2'	1:2A:1917:PSU:O4'	2.17	0.44
1:2A:2140:C:C2	1:2A:2152:G:N2	2.86	0.44
1:2A:2233:U:H2'	1:2A:2234:G:C8	2.53	0.44
1:2A:2679:A:H4'	4:2E:165:VAL:HG11	1.99	0.44
1:2A:2839:G:H5'	13:2R:46:GLY:CA	2.48	0.44
12:2Q:39:PRO:HB3	12:2Q:99:PRO:HD3	1.98	0.44
13:2R:96:ARG:NH2	13:2R:117:VAL:HG13	2.33	0.44
17:2V:3:ALA:HB3	17:2V:14:VAL:HG23	2.00	0.44
32:2a:828:A:N6	32:2a:858:G:O2'	2.47	0.44
48:2q:55:ASP:HA	48:2q:79:SER:HA	1.98	0.44
54:2w:15:G:H22	54:2w:48:C:H42	1.64	0.44
1:1A:1274:A:N3	1:1A:1297:C:H1'	2.33	0.44
1:1A:1448:G:O2'	1:1A:1528(A):A:N1	2.43	0.44
1:1A:2376:A:H2'	1:1A:2377:A:O4'	2.17	0.44
1:1A:2820:A:C5	13:1R:4:LEU:HD11	2.53	0.44
5:1F:135:LYS:HB2	5:1F:138:GLU:CD	2.43	0.44
18:1W:62:HIS:O	18:1W:64:MET:HG3	2.18	0.44
20:1Y:19:LYS:HE3	20:1Y:20:TYR:CE2	2.53	0.44
23:11:59:THR:O	23:11:91:LYS:NZ	2.42	0.44
26:14:40:HIS:HB3	26:14:43:TYR:HD2	1.83	0.44
26:14:58:ARG:HD2	26:14:58:ARG:H	1.83	0.44
32:1a:189(B):C:H2'	32:1a:189(C):C:C6	2.52	0.44
32:1a:250:A:H4'	32:1a:251:G:O5'	2.17	0.44
32:1a:682:G:N7	61:1a:1917:HOH:O	2.51	0.44
32:1a:721:G:H4'	32:1a:722:A:O4'	2.17	0.44
32:1a:1287:A:H5'	32:1a:1288:A:OP2	2.18	0.44
32:1a:1356:G:H2'	32:1a:1357:A:H8	1.82	0.44
55:1x:75:C:H5'	61:1x:203:HOH:O	2.18	0.44
1:2A:289:A:H2'	1:2A:290:G:O4'	2.17	0.44
1:2A:323:G:C8	5:2F:171:PRO:HG3	2.51	0.44
1:2A:645:C:H5'	1:2A:646:A:OP2	2.17	0.44
1:2A:1199:U:H2'	1:2A:1200:C:C6	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2144:U:H1'	1:2A:2148:G:N2	2.33	0.44
3:2D:2:ALA:HA	3:2D:20:ASP:HB3	2.00	0.44
4:2E:16:ARG:NH1	4:2E:171:GLU:OE2	2.49	0.44
10:2O:22:ILE:HG12	10:2O:40:VAL:O	2.17	0.44
13:2R:1:MET:HE3	13:2R:1:MET:HB2	1.90	0.44
18:2W:88:ARG:NH1	18:2W:94:ASP:OD2	2.50	0.44
21:2Z:141:VAL:C	21:2Z:143:GLY:H	2.26	0.44
32:2a:737:A:H2'	32:2a:738:C:C6	2.53	0.44
32:2a:986:A:H2'	32:2a:987:G:O4'	2.17	0.44
32:2a:1376:U:P	38:2g:94:ARG:HH22	2.40	0.44
33:2b:51:LEU:HD22	33:2b:55:PHE:HE2	1.83	0.44
35:2d:146:ILE:HD12	35:2d:146:ILE:H	1.81	0.44
1:1A:135:G:N7	61:1A:4471:HOH:O	2.36	0.44
1:1A:414:C:H2'	1:1A:415:A:C8	2.53	0.44
6:1G:41:GLN:HG2	6:1G:43:LEU:HD13	2.00	0.44
21:1Z:158:PRO:O	21:1Z:161:VAL:HG12	2.17	0.44
33:1b:55:PHE:HD1	33:1b:221:LEU:HD13	1.83	0.44
40:1i:81:ILE:O	40:1i:85:LEU:N	2.46	0.44
1:2A:974:G:OP1	1:2A:1187:G:O2'	2.24	0.44
1:2A:2626:C:H2'	1:2A:2627:G:C8	2.53	0.44
1:2A:2784:C:H1'	4:2E:37:ARG:HH12	1.83	0.44
32:2a:149:A:N6	32:2a:172:A:H62	2.16	0.44
32:2a:706:A:H5"	42:2k:22:HIS:CE1	2.53	0.44
32:2a:969:A:H2'	32:2a:970:C:O4'	2.18	0.44
32:2a:1121:U:H2'	32:2a:1122:U:C6	2.53	0.44
32:2a:1184:G:OP1	32:2a:1184:G:H3'	2.18	0.44
32:2a:1427:U:H2'	32:2a:1428:A:H8	1.83	0.44
32:2a:1485:U:H2'	32:2a:1486:G:C8	2.52	0.44
50:2s:41:VAL:HG13	50:2s:43:GLU:H	1.83	0.44
1:1A:34:C:H5"	1:1A:35:G:OP2	2.17	0.43
1:1A:1048:A:N1	1:1A:1112:G:O2'	2.42	0.43
1:1A:1094:U:N3	1:1A:1097:U:OP2	2.51	0.43
1:1A:2552:OMU:O5'	1:1A:2552:OMU:H6	2.18	0.43
1:1A:2729:G:H2'	1:1A:2730:C:O4'	2.17	0.43
3:1D:232:PRO:HB3	3:1D:244:ARG:CZ	2.48	0.43
8:1I:72:LEU:HD12	8:1I:138:ILE:HG21	1.99	0.43
32:1a:184:G:H2'	32:1a:185:A:H8	1.82	0.43
32:1a:539:A:H2'	32:1a:540:G:C8	2.53	0.43
32:1a:1141:C:H2'	32:1a:1142:G:H5'	2.00	0.43
32:1a:1176:A:H2'	32:1a:1177:G:O4'	2.18	0.43
38:1g:74:GLU:O	38:1g:88:PRO:HA	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:11:LYS:HA	40:1i:108:VAL:HG12	2.00	0.43
44:1m:11:ARG:C	44:1m:13:LYS:H	2.26	0.43
47:1p:11:SER:H	47:1p:14:ASN:HD22	1.66	0.43
53:1v:16:A:H2'	53:1v:17:U:O4'	2.18	0.43
1:2A:229:A:H5'	1:2A:230:U:OP1	2.17	0.43
1:2A:305:U:H2'	1:2A:306:U:C6	2.53	0.43
1:2A:373:U:H2'	1:2A:374:A:C8	2.53	0.43
1:2A:932:G:H4'	1:2A:933:A:O5'	2.18	0.43
1:2A:994:C:H3'	16:2U:54:LYS:HE3	2.00	0.43
1:2A:1472:A:H61	1:2A:1519:G:H1'	1.83	0.43
1:2A:1747(A):G:H2'	1:2A:1748:G:H8	1.82	0.43
1:2A:2140:C:H3'	1:2A:2141:G:H5"	1.99	0.43
1:2A:2400:G:H4'	28:26:18:ARG:HG2	2.00	0.43
17:2V:61:VAL:HA	17:2V:94:LEU:HD23	1.99	0.43
26:24:53:GLU:HG2	26:24:56:VAL:HG13	2.00	0.43
32:2a:1304:G:O2'	32:2a:1333:A:N6	2.52	0.43
54:2y:67:U:H2'	54:2y:68:C:C6	2.53	0.43
1:1A:106:C:H1'	20:1Y:1:MET:HE2	2.00	0.43
1:1A:1218:C:N4	1:1A:1231:G:H1	2.15	0.43
1:1A:1541:G:H3'	1:1A:1542:A:H2'	2.00	0.43
1:1A:1685:C:H2'	1:1A:1686:C:H6	1.83	0.43
1:1A:2156:G:H2'	1:1A:2157:G:C2	2.53	0.43
3:1D:145:VAL:HB	3:1D:155:LEU:HB2	1.99	0.43
5:1F:39:TRP:O	5:1F:43:LYS:HG2	2.18	0.43
10:1O:122:LEU:HD13	15:1T:72:VAL:HG11	2.00	0.43
14:1S:39:ILE:HB	14:1S:49:VAL:HG12	1.99	0.43
26:14:56:VAL:HG23	26:14:57:GLU:H	1.84	0.43
32:1a:517:G:H22	32:1a:533:A:P	2.40	0.43
35:1d:178:VAL:HG12	35:1d:179:GLU:H	1.83	0.43
1:2A:330:A:H2	1:2A:1210:A:H2'	1.83	0.43
1:2A:730:C:H2'	1:2A:731:C:H6	1.83	0.43
1:2A:941:A:H3'	1:2A:942:G:H8	1.83	0.43
1:2A:1028:A:N3	1:2A:2486:G:O2'	2.44	0.43
1:2A:1612:C:O2'	29:27:5:TRP:O	2.33	0.43
1:2A:1637:A:H4'	1:2A:2711:A:O2'	2.18	0.43
1:2A:1778:U:OP1	61:2A:3972:HOH:O	2.21	0.43
6:2G:145:THR:HG22	6:2G:148:MET:HE3	2.00	0.43
15:2T:122:ASP:O	15:2T:126:ALA:N	2.45	0.43
21:2Z:99:TYR:HA	21:2Z:124:ILE:O	2.18	0.43
24:22:16:LEU:O	24:22:67:LYS:HE2	2.17	0.43
26:24:62:ARG:HD3	26:24:62:ARG:HA	1.79	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:222:U:H2'	32:2a:223:U:C6	2.53	0.43
32:2a:957:U:H2'	32:2a:959:A:OP2	2.18	0.43
32:2a:999:C:N4	32:2a:1042:G:N1	2.38	0.43
32:2a:1148:U:H2'	32:2a:1149:C:O4'	2.16	0.43
32:2a:1321:C:O2	50:2s:36:ARG:NH2	2.51	0.43
32:2a:1481:U:H2'	32:2a:1482:G:C8	2.53	0.43
33:2b:134:GLU:O	33:2b:138:LEU:HG	2.18	0.43
38:2g:68:ASN:HD22	38:2g:128:ALA:HA	1.83	0.43
41:2j:62:HIS:HB3	45:2n:59:ALA:HB3	2.00	0.43
1:1A:385:C:O2	11:1P:71:VAL:HG21	2.18	0.43
1:1A:991:C:OP2	61:1A:4218:HOH:O	2.21	0.43
1:1A:1039:G:H1	1:1A:1116:C:N4	2.14	0.43
1:1A:2667:C:H2'	1:1A:2668:G:O4'	2.18	0.43
1:1A:2791:C:H2'	1:1A:2792:G:C8	2.53	0.43
2:1B:79:C:H2'	2:1B:80:U:O4'	2.18	0.43
13:1R:67:LEU:HD13	13:1R:67:LEU:HA	1.82	0.43
32:1a:69:G:H1	32:1a:100:C:H42	1.67	0.43
32:1a:576:G:O6	32:1a:880:C:O2'	2.33	0.43
32:1a:748:C:H4'	32:1a:749:C:O5'	2.18	0.43
32:1a:841:U:P	32:1a:841:U:H6	2.42	0.43
32:1a:1068:G:H8	32:1a:1068:G:OP2	2.02	0.43
1:2A:443:A:H5"	1:2A:444:C:OP1	2.18	0.43
1:2A:817:C:H3'	1:2A:818:G:H8	1.83	0.43
1:2A:848:G:OP2	1:2A:928:G:N2	2.51	0.43
1:2A:856:C:H2'	1:2A:857:C:C6	2.53	0.43
1:2A:2140:C:N4	1:2A:2151:G:N1	2.53	0.43
2:2B:14:U:O4'	2:2B:107:G:N2	2.51	0.43
3:2D:69:ARG:HH21	3:2D:130:ALA:N	2.15	0.43
21:2Z:102:LEU:HD23	21:2Z:139:VAL:HG21	2.01	0.43
32:2a:778:G:H2'	32:2a:779:C:O4'	2.18	0.43
32:2a:877:C:H5"	39:2h:88:LYS:HD3	2.00	0.43
32:2a:1002:G:N3	32:2a:1003:G:H1'	2.33	0.43
32:2a:1525:G:H2'	32:2a:1526:G:O4'	2.18	0.43
33:2b:81:VAL:HG23	33:2b:94:ASN:ND2	2.33	0.43
34:2c:135:LYS:O	34:2c:139:GLN:HG2	2.18	0.43
54:2w:9:A:H8	54:2w:11:C:H41	1.65	0.43
55:2x:64:G:H2'	55:2x:65:C:C6	2.53	0.43
1:1A:278:A:H2'	1:1A:279:C:C6	2.53	0.43
1:1A:359:A:H2'	1:1A:360:G:O4'	2.19	0.43
1:1A:723:G:H2'	1:1A:724:U:O4'	2.19	0.43
1:1A:788:A:OP1	1:1A:791:C:N4	2.45	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:995:C:OP2	16:1U:54:LYS:NZ	2.50	0.43
1:1A:1252:G:O4'	16:1U:33:ARG:HD2	2.17	0.43
1:1A:2011:U:H2'	1:1A:2012:G:O4'	2.18	0.43
1:1A:2544:G:H1'	1:1A:2646:C:H4'	2.01	0.43
6:1G:18:GLU:O	6:1G:22:ARG:HG3	2.19	0.43
12:1Q:30:GLY:HA2	12:1Q:107:ALA:HB2	1.99	0.43
18:1W:9:TYR:H	18:1W:102:HIS:CE1	2.37	0.43
32:1a:688:G:H2'	32:1a:689:C:H6	1.83	0.43
32:1a:954:G:H2'	32:1a:955:U:O4'	2.19	0.43
32:1a:1129:C:OP1	40:1i:66:ARG:NH1	2.52	0.43
32:1a:1129:C:H1'	32:1a:1130:A:N7	2.34	0.43
32:1a:1394:A:N1	32:1a:1500:A:O2'	2.50	0.43
33:1b:76:GLN:H	33:1b:76:GLN:CD	2.25	0.43
45:1n:53:LEU:HD23	45:1n:53:LEU:HA	1.88	0.43
1:2A:29:U:H2'	1:2A:30:G:C8	2.53	0.43
1:2A:271(T):C:H2'	1:2A:271(U):G:C8	2.53	0.43
1:2A:588:U:H2'	1:2A:589:C:C6	2.53	0.43
1:2A:1593:G:H2'	1:2A:1594:G:C8	2.54	0.43
1:2A:1756:G:H4'	1:2A:1758:G:O4'	2.18	0.43
1:2A:1899:G:H2'	1:2A:1899:G:N3	2.32	0.43
1:2A:1999:C:H5"	1:2A:2723:C:O2'	2.18	0.43
1:2A:2432:A:C4	23:21:33:LYS:HG2	2.53	0.43
1:2A:2576:G:O2'	1:2A:2579:C:OP2	2.20	0.43
1:2A:2592:G:H2'	1:2A:2593:U:O4'	2.17	0.43
3:2D:37:LEU:HD12	3:2D:37:LEU:HA	1.85	0.43
7:2H:98:LEU:HD13	7:2H:125:VAL:HG23	2.00	0.43
21:2Z:155:LEU:HD12	21:2Z:155:LEU:HA	1.89	0.43
29:27:26:GLY:O	29:27:30:VAL:HG23	2.18	0.43
32:2a:772:U:H2'	32:2a:773:G:O4'	2.18	0.43
32:2a:1002:G:N1	32:2a:1003:G:H8	2.16	0.43
32:2a:1006:C:N4	32:2a:1022:G:O6	2.50	0.43
51:2t:98:PRO:O	51:2t:99:LEU:HB2	2.18	0.43
1:1A:568:U:O5'	1:1A:945:A:N6	2.52	0.43
1:1A:686:G:OP1	29:17:11:LYS:NZ	2.51	0.43
1:1A:1540:U:H2'	1:1A:1541:G:O4'	2.18	0.43
1:1A:1803:A:H4'	3:1D:259:THR:HG23	2.00	0.43
57:1A:4099:LUJ:OAL	57:1A:4099:LUJ:NAQ	2.51	0.43
61:1A:4395:HOH:O	13:1R:15:SER:HB3	2.18	0.43
5:1F:8:GLN:HE22	5:1F:21:ALA:HB2	1.82	0.43
14:1S:110:LEU:HD12	14:1S:110:LEU:HA	1.80	0.43
20:1Y:97:ARG:HB3	20:1Y:106:LEU:HD12	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:1m:19:LEU:HD12	44:1m:19:LEU:HA	1.79	0.43
44:1m:96:LEU:C	44:1m:110:ARG:HG2	2.44	0.43
55:1x:75:C:H5"	55:1x:76:A:OP2	2.18	0.43
1:2A:526:A:N3	1:2A:2044:C:H1'	2.33	0.43
1:2A:607:U:OP1	5:2F:102:PRO:HA	2.18	0.43
1:2A:992:C:O4'	17:2V:85:LYS:NZ	2.51	0.43
1:2A:1448:G:H4'	1:2A:1542:A:OP1	2.17	0.43
1:2A:2129:C:H5'	1:2A:2130:U:OP2	2.19	0.43
1:2A:2136:C:O2'	1:2A:2137:C:C6	2.69	0.43
4:2E:120:TRP:CD1	4:2E:155:LYS:HB3	2.54	0.43
12:2Q:35:VAL:HG12	12:2Q:130:LYS:O	2.17	0.43
21:2Z:150:LEU:O	21:2Z:171:ILE:HG22	2.18	0.43
23:21:3:LYS:HB2	23:21:61:ARG:NH2	2.33	0.43
32:2a:1494:G:OP1	57:2a:3232:LUJ:NAN	2.51	0.43
38:2g:47:CYS:O	38:2g:50:ILE:HG22	2.17	0.43
39:2h:87:SER:HB2	39:2h:93:VAL:H	1.82	0.43
41:2j:78:ASN:O	41:2j:80:LYS:N	2.51	0.43
44:2m:80:ARG:HH21	50:2s:69:HIS:CE1	2.32	0.43
45:2n:21:TYR:HE1	45:2n:23:ARG:HH21	1.65	0.43
1:1A:2695:C:H2'	1:1A:2696:U:H6	1.82	0.43
2:1B:8:U:O3'	14:1S:25:ARG:NH2	2.52	0.43
6:1G:43:LEU:HB3	6:1G:44:GLY:H	1.70	0.43
32:1a:79:G:C6	32:1a:90:U:N3	2.75	0.43
32:1a:110:C:H2'	32:1a:111:G:O4'	2.18	0.43
32:1a:710:G:H5"	37:1f:54:LYS:HD3	2.01	0.43
32:1a:757:U:H2'	32:1a:758:G:O4'	2.19	0.43
32:1a:953:G:N7	44:1m:104:ARG:NH2	2.57	0.43
32:1a:1144:G:H21	32:1a:1146:A:H62	1.66	0.43
32:1a:1206:G:H2'	32:1a:1207:2MG:O4'	2.17	0.43
34:1c:119:ARG:HE	34:1c:140:ARG:NH2	2.17	0.43
36:1e:72:GLN:O	36:1e:75:THR:HG22	2.19	0.43
51:1t:47:GLY:HA2	51:1t:48:LYS:C	2.44	0.43
1:2A:48:G:N1	1:2A:177:G:OP2	2.41	0.43
1:2A:223:A:N1	1:2A:407:G:O2'	2.47	0.43
1:2A:1124:C:H2'	1:2A:1125:G:O4'	2.19	0.43
1:2A:1316:U:H2'	1:2A:1317:A:C8	2.53	0.43
1:2A:1594:G:H2'	1:2A:1595:G:C8	2.53	0.43
2:2B:41:U:H5	6:2G:70:VAL:H	1.67	0.43
2:2B:88:C:H2'	2:2B:89:G:O4'	2.18	0.43
4:2E:179:GLU:HG3	15:2T:9:LEU:CD2	2.48	0.43
6:2G:15:VAL:HA	6:2G:175:LEU:HD23	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:20:52:GLY:O	22:20:59:LEU:HA	2.19	0.43
35:2d:155:LEU:HD23	35:2d:156:GLU:N	2.34	0.43
36:2e:100:VAL:HG22	36:2e:118:ILE:HG22	1.99	0.43
43:2l:71:PRO:HB2	43:2l:120:TYR:HE1	1.82	0.43
1:1A:528:A:O2'	1:1A:529:A:H5'	2.18	0.43
1:1A:774:A:N3	1:1A:774:A:H2'	2.34	0.43
1:1A:1131:G:O6	1:1A:2040:C:H1'	2.18	0.43
1:1A:1178:C:H2'	1:1A:1179:C:C6	2.54	0.43
1:1A:1844:C:H2'	1:1A:1845:G:H8	1.83	0.43
1:1A:2123:G:H2'	1:1A:2124:G:C8	2.54	0.43
1:1A:2364:C:H4'	22:10:56:ASP:OD1	2.19	0.43
2:1B:96:U:OP1	21:1Z:14:LYS:NZ	2.51	0.43
8:1I:78:THR:HA	8:1I:143:SER:O	2.19	0.43
32:1a:69:G:H2'	32:1a:70:G:H8	1.82	0.43
32:1a:691:G:H2'	32:1a:692:U:C6	2.53	0.43
32:1a:714:G:H2'	32:1a:715:A:C8	2.53	0.43
1:2A:2026:C:H2'	1:2A:2027:G:O4'	2.18	0.43
1:2A:2364:C:H2'	1:2A:2365:G:O4'	2.19	0.43
5:2F:102:PRO:HB2	5:2F:105:VAL:HG23	2.00	0.43
8:2I:130:TYR:HB3	8:2I:138:ILE:HB	2.00	0.43
19:2X:60:ARG:HH22	29:27:47:ARG:NH1	2.16	0.43
32:2a:62:U:O2'	32:2a:379:C:O2	2.32	0.43
32:2a:927:G:H2'	32:2a:928:G:O4'	2.18	0.43
43:2l:113:ARG:NH2	43:2l:116:SER:HB2	2.33	0.43
46:2o:43:LEU:HD11	46:2o:53:HIS:HA	2.01	0.43
1:1A:78:A:H2'	1:1A:79:G:C8	2.54	0.43
1:1A:265:A:N1	1:1A:427:U:O2'	2.46	0.43
1:1A:271(O):C:H2'	1:1A:271(P):C:C6	2.53	0.43
1:1A:657:U:H2'	1:1A:658:C:H6	1.81	0.43
1:1A:897:C:H1'	54:1w:56:C:H5	1.84	0.43
1:1A:1783:A:OP1	61:1A:4337:HOH:O	2.21	0.43
1:1A:2675:A:H5'	10:1O:29:ASN:O	2.18	0.43
1:1A:2682:U:O2'	4:1E:13:ARG:HD3	2.19	0.43
3:1D:71:ASP:OD2	3:1D:103:ARG:NH1	2.42	0.43
20:1Y:43:ASN:O	20:1Y:65:ALA:N	2.40	0.43
27:15:42:PRO:HB2	27:15:43:HIS:ND1	2.34	0.43
32:1a:236:G:H5"	48:1q:42:TYR:OH	2.19	0.43
32:1a:813:U:H5"	32:1a:903:G:O3'	2.18	0.43
32:1a:1037:C:O5'	32:1a:1037:C:H6	2.02	0.43
32:1a:1095:U:OP1	32:1a:1108:G:N2	2.50	0.43
32:1a:1112:C:H1'	34:1c:179:ARG:HH11	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1371:G:O3'	40:1i:69:GLY:HA3	2.18	0.43
1:2A:224:G:H2'	1:2A:225:A:O4'	2.19	0.43
1:2A:615:G:OP1	5:2F:40:GLN:NE2	2.51	0.43
1:2A:647:G:N3	1:2A:2350:C:O2'	2.51	0.43
1:2A:902:C:H2'	1:2A:903:C:C6	2.54	0.43
1:2A:1479:G:H5'	1:2A:1558:A:C2	2.54	0.43
1:2A:1683:C:H2'	1:2A:1684:C:C6	2.54	0.43
1:2A:2393:A:H2'	1:2A:2394:C:O4'	2.19	0.43
1:2A:2818:G:OP2	13:2R:42:LYS:NZ	2.39	0.43
11:2P:85:LEU:HA	11:2P:88:LEU:HD12	2.01	0.43
12:2Q:50:ALA:HB1	12:2Q:121:ALA:HB1	2.00	0.43
15:2T:27:THR:HB	15:2T:89:VAL:HG23	2.00	0.43
21:2Z:6:LYS:HE3	21:2Z:8:TYR:HE2	1.84	0.43
21:2Z:141:VAL:HG22	21:2Z:142:SER:N	2.34	0.43
32:2a:45:U:H2'	32:2a:46:G:C8	2.54	0.43
32:2a:693:G:H2'	32:2a:694:A:C8	2.54	0.43
33:2b:12:GLU:O	33:2b:15:VAL:HG22	2.17	0.43
33:2b:213:LEU:O	33:2b:217:ARG:HG2	2.19	0.43
39:2h:6:ILE:HD12	39:2h:35:ILE:HD12	2.00	0.43
1:1A:1366:A:H2'	1:1A:1367:A:O4'	2.19	0.43
1:1A:2364:C:H2'	1:1A:2365:G:O4'	2.18	0.43
1:1A:2788:C:OP1	4:1E:61:ARG:NH2	2.51	0.43
11:1P:121:LYS:HG2	11:1P:122:PRO:HD2	2.00	0.43
27:15:16:ARG:HD2	27:15:20:ARG:NH1	2.33	0.43
32:1a:9:G:H5"	36:1e:126:ARG:HD3	2.00	0.43
32:1a:253:U:H2'	32:1a:254:G:C8	2.54	0.43
32:1a:928:G:O2'	32:1a:1533:C:OP2	2.32	0.43
32:1a:975:A:H5'	32:1a:975:A:H8	1.84	0.43
32:1a:1064:G:H4'	32:1a:1065:U:OP1	2.18	0.43
32:1a:1135:U:O2'	32:1a:1138:G:O6	2.35	0.43
32:1a:1325:C:H2'	32:1a:1326:C:H6	1.84	0.43
33:1b:92:TYR:OH	33:1b:150:SER:OG	2.28	0.43
33:1b:103:THR:HA	33:1b:180:LEU:HD11	1.99	0.43
41:1j:13:HIS:HB3	41:1j:68:HIS:CD2	2.54	0.43
42:1k:82:VAL:HB	42:1k:108:ILE:HG12	2.01	0.43
54:1y:63:G:H2'	54:1y:64:U:O4'	2.18	0.43
1:2A:38:A:H2'	1:2A:39:C:C6	2.54	0.43
1:2A:471:A:H2'	1:2A:472:A:O4'	2.19	0.43
1:2A:918:A:C6	1:2A:919:G:H1'	2.54	0.43
1:2A:1147:C:H2'	1:2A:1148:A:H8	1.84	0.43
1:2A:1932:A:H2'	1:2A:1933:G:O4'	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2082:A:H2'	1:2A:2083:G:O4'	2.19	0.43
1:2A:2273:A:H2'	1:2A:2274:A:C8	2.53	0.43
9:2N:48:MET:HE2	9:2N:48:MET:HB3	1.91	0.43
32:2a:826:C:H2'	32:2a:827:U:C6	2.54	0.43
32:2a:911:U:H2'	32:2a:912:C:C6	2.54	0.43
33:2b:59:GLU:O	33:2b:63:MET:HG3	2.18	0.43
33:2b:91:PRO:HG2	33:2b:155:LEU:HD13	2.00	0.43
33:2b:162:ILE:O	33:2b:185:ILE:HG12	2.18	0.43
34:2c:134:ILE:HG22	34:2c:168:ALA:HB3	2.00	0.43
35:2d:78:LEU:HD22	35:2d:139:ARG:HH22	1.84	0.43
43:2l:113:ARG:NH2	43:2l:115:LYS:O	2.51	0.43
1:1A:606:U:H4'	1:1A:658:C:H4'	1.99	0.43
1:1A:1007:C:OP1	9:1N:37:LYS:NZ	2.48	0.43
1:1A:1230:C:H2'	1:1A:1231:G:C8	2.54	0.43
1:1A:1399:C:OP1	19:1X:25:LYS:NZ	2.50	0.43
1:1A:2101:G:N2	1:1A:2188:C:N3	2.55	0.43
1:1A:2630:G:N3	1:1A:2892:A:O2'	2.51	0.43
11:1P:95:VAL:HA	11:1P:99:LEU:HD23	2.01	0.43
12:1Q:1:MET:HB3	12:1Q:2:LEU:H	1.65	0.43
23:11:23:LYS:HB2	54:1y:74:C:H4'	2.00	0.43
32:1a:323:U:H2'	32:1a:324:G:O4'	2.19	0.43
32:1a:505:G:OP2	32:1a:535:A:H5'	2.19	0.43
32:1a:1039:C:H2'	32:1a:1040:U:C6	2.53	0.43
32:1a:1258:G:H2'	32:1a:1259:C:H6	1.84	0.43
36:1e:112:LEU:HD23	36:1e:112:LEU:HA	1.83	0.43
39:1h:112:LEU:HB3	39:1h:133:LEU:HA	2.01	0.43
42:1k:32:ILE:O	42:1k:40:ILE:N	2.49	0.43
43:1l:54:LYS:H	43:1l:54:LYS:HD2	1.84	0.43
1:2A:2751:G:H8	7:2H:2:SER:HA	1.83	0.43
5:2F:110:LEU:HD21	5:2F:181:LEU:HD23	2.01	0.43
8:2I:102:SER:O	8:2I:106:GLY:N	2.52	0.43
12:2Q:4:PRO:HD3	12:2Q:70:PRO:O	2.18	0.43
32:2a:592:G:H2'	32:2a:593:G:H8	1.84	0.43
32:2a:1038:C:H2'	32:2a:1039:C:C5	2.53	0.43
33:2b:94:ASN:HD22	33:2b:94:ASN:HA	1.61	0.43
34:2c:20:SER:HA	34:2c:57:ILE:HB	2.00	0.43
54:2w:44:G:H2'	54:2w:45:G:O4'	2.19	0.43
1:1A:323:G:H1'	1:1A:1205:U:O2	2.19	0.42
1:1A:957:A:N1	1:1A:2458:G:H4'	2.34	0.42
1:1A:1087:G:H2'	1:1A:1089:G:C8	2.53	0.42
1:1A:1183:G:HO2'	25:13:29:ARG:NH1	2.17	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:1721:G:H3'	1:1A:1722:A:H5"	2.01	0.42
12:1Q:66:ILE:HG12	12:1Q:104:PHE:HD1	1.84	0.42
20:1Y:86:ARG:HG3	20:1Y:100:ALA:HB2	2.01	0.42
32:1a:299:G:H2'	32:1a:300:A:C8	2.54	0.42
32:1a:723:U:O2'	32:1a:724:G:H5'	2.19	0.42
32:1a:986:A:H2'	32:1a:987:G:O4'	2.19	0.42
32:1a:1044:A:C5	32:1a:1045:C:H1'	2.54	0.42
52:1u:5:ASP:O	52:1u:11:GLY:HA3	2.19	0.42
1:2A:876:C:H2'	1:2A:877:U:H6	1.84	0.42
1:2A:892:G:H3'	1:2A:893:C:C4'	2.49	0.42
1:2A:1006:C:O4'	9:2N:28:THR:OG1	2.37	0.42
1:2A:1186:G:H2'	1:2A:1187:G:O4'	2.19	0.42
1:2A:1464:C:H2'	1:2A:1465:G:C8	2.54	0.42
1:2A:1742:G:H2'	1:2A:1743:C:O4'	2.18	0.42
1:2A:1779:U:H2'	61:2A:4059:HOH:O	2.18	0.42
1:2A:1798:U:H5'	3:2D:259:THR:HG23	2.01	0.42
1:2A:2164:C:C5	1:2A:2165:G:H1'	2.54	0.42
1:2A:2298:A:H62	1:2A:2318:G:H8	1.67	0.42
4:2E:181:LEU:HD12	4:2E:181:LEU:HA	1.72	0.42
8:2I:8:PRO:HD3	8:2I:15:VAL:HB	2.01	0.42
22:20:82:ARG:HE	22:20:82:ARG:HB2	1.66	0.42
32:2a:236:G:H2'	32:2a:237:C:O4'	2.19	0.42
32:2a:430:A:OP2	35:2d:8:VAL:HG12	2.18	0.42
32:2a:1034:G:C6	32:2a:1035:A:H1'	2.53	0.42
34:2c:39:ILE:O	34:2c:43:LEU:HG	2.19	0.42
1:1A:647:G:N3	1:1A:2350:C:O2'	2.52	0.42
1:1A:1038:C:N4	1:1A:1117:G:H1	2.15	0.42
1:1A:1337:G:H2'	1:1A:1338:G:O4'	2.19	0.42
1:1A:1372:U:H2'	1:1A:1373:A:O4'	2.18	0.42
1:1A:1482:G:H2'	1:1A:1484:G:H8	1.84	0.42
1:1A:2144:U:H3'	1:1A:2146:C:N4	2.33	0.42
1:1A:2471:C:H2'	1:1A:2472:G:O4'	2.19	0.42
3:1D:182:LEU:HD23	3:1D:182:LEU:HA	1.85	0.42
3:1D:242:ARG:NH1	3:1D:242:ARG:HG3	2.27	0.42
6:1G:150:ASP:OD1	6:1G:151:ALA:N	2.52	0.42
8:1I:109:ILE:HG23	8:1I:130:TYR:CE1	2.53	0.42
15:1T:24:PRO:HA	15:1T:49:VAL:HG23	2.01	0.42
26:14:46:GLN:O	26:14:46:GLN:HG2	2.19	0.42
32:1a:93:G:H2'	32:1a:96:U:O4'	2.18	0.42
32:1a:881:G:H2'	32:1a:882:C:O4'	2.18	0.42
37:1f:97:PHE:HB2	49:1r:32:ARG:CZ	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:56:A:H2'	1:2A:57:C:O4'	2.18	0.42
1:2A:1630:G:N7	61:2A:4063:HOH:O	2.37	0.42
1:2A:1821:A:H2'	1:2A:1822:G:C8	2.54	0.42
1:2A:2318:G:N2	14:2S:3:ARG:HE	2.17	0.42
5:2F:41:LEU:HA	5:2F:44:ARG:HD3	2.01	0.42
5:2F:47:GLY:HA3	5:2F:95:ARG:O	2.19	0.42
7:2H:3:ARG:NH1	7:2H:4:ILE:H	2.17	0.42
7:2H:10:PRO:O	7:2H:12:PRO:HD3	2.18	0.42
9:2N:67:LEU:HA	9:2N:87:LEU:HD22	2.01	0.42
11:2P:95:VAL:HA	11:2P:99:LEU:HD23	2.00	0.42
12:2Q:130:LYS:HB3	12:2Q:130:LYS:HE2	1.80	0.42
13:2R:24:GLN:HB3	13:2R:44:LEU:HD11	2.00	0.42
16:2U:98:LEU:HD22	16:2U:105:VAL:HG11	2.00	0.42
32:2a:779:C:HO2'	42:2k:120:ARG:HH11	1.62	0.42
32:2a:1022:G:H2'	32:2a:1023:G:O4'	2.19	0.42
35:2d:4:TYR:HD2	35:2d:115:ARG:HH12	1.68	0.42
39:2h:20:TYR:HA	39:2h:65:TYR:CE1	2.54	0.42
1:1A:37:C:H2'	1:1A:38:A:C8	2.54	0.42
1:1A:563:G:OP2	61:1A:4336:HOH:O	2.21	0.42
1:1A:1614:A:P	1:1A:1614:A:H8	2.43	0.42
1:1A:1920:OMC:O2'	32:1a:1496:C:H4'	2.20	0.42
1:1A:2125:G:N2	1:1A:2172:U:O5'	2.50	0.42
1:1A:2526:G:H5'	1:1A:2742:C:O2'	2.19	0.42
1:1A:2732:G:H3'	1:1A:2733:A:O4'	2.19	0.42
5:1F:65:TRP:CZ2	5:1F:75:HIS:HD2	2.38	0.42
13:1R:72:ASP:O	13:1R:76:VAL:HG23	2.19	0.42
20:1Y:6:HIS:H	20:1Y:6:HIS:CD2	2.37	0.42
21:1Z:126:VAL:HG13	21:1Z:161:VAL:HG23	2.01	0.42
32:1a:922:G:C6	32:1a:923:A:C6	3.07	0.42
32:1a:1187:G:H2'	32:1a:1188:A:C8	2.53	0.42
44:1m:90:LEU:HA	44:1m:93:ARG:HG3	2.00	0.42
1:2A:208:C:H2'	1:2A:209:C:C6	2.54	0.42
1:2A:391:G:O2'	1:2A:410:G:OP1	2.28	0.42
1:2A:816:C:H2'	1:2A:817:C:H6	1.85	0.42
1:2A:854:G:H2'	1:2A:855:G:H8	1.84	0.42
1:2A:1359:A:H2'	1:2A:1360:A:H5'	2.01	0.42
1:2A:2031:A:N3	1:2A:2455:G:O2'	2.37	0.42
1:2A:2055:C:O2	1:2A:2572:A:N6	2.53	0.42
1:2A:2684:U:OP1	15:2T:53:ARG:HD3	2.20	0.42
18:2W:12:ILE:O	18:2W:101:SER:OG	2.31	0.42
32:2a:526:C:H2'	32:2a:527:7MG:H4'	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:1531:A:H5”	32:2a:1532:U:C5	2.55	0.42
36:2e:40:ARG:HD3	36:2e:40:ARG:HA	1.87	0.42
51:2t:13:LEU:O	51:2t:17:ARG:HG3	2.19	0.42
55:2x:7:G:O2’	55:2x:49:G:OP2	2.23	0.42
55:2x:55:PSU:N3	55:2x:58:A:OP2	2.48	0.42
1:1A:27:G:C2	1:1A:512:G:N3	2.88	0.42
1:1A:234:C:H2’	1:1A:235:U:C6	2.53	0.42
1:1A:302:C:H2’	1:1A:303:U:C6	2.54	0.42
1:1A:1557:C:H5”	1:1A:1558:A:OP2	2.19	0.42
1:1A:2699:C:H2’	1:1A:2700:C:O4’	2.19	0.42
1:1A:2712:U:OP1	1:1A:2714:G:H4’	2.20	0.42
7:1H:3:ARG:NH1	7:1H:5:GLY:H	2.17	0.42
20:1Y:35:TYR:CE2	20:1Y:69:ALA:HB3	2.54	0.42
32:1a:730:G:C5	32:1a:731:G:H1’	2.54	0.42
32:1a:779:C:H5”	42:1k:122:LYS:HG3	2.01	0.42
32:1a:993:G:H2’	32:1a:993:G:N3	2.35	0.42
32:1a:1079:G:C6	32:1a:1080:A:N6	2.87	0.42
32:1a:1117:G:H5”	40:1i:104:ARG:CZ	2.50	0.42
32:1a:1250:A:H4’	40:1i:68:GLY:N	2.34	0.42
32:1a:1288:A:H2’	32:1a:1289:A:O4’	2.20	0.42
33:1b:87:ARG:NH2	33:1b:233:SER:HB3	2.34	0.42
35:1d:173:TRP:CZ3	35:1d:174:LEU:HG	2.54	0.42
36:1e:50:GLU:HB2	36:1e:53:LEU:HD13	2.01	0.42
1:2A:251:A:C4	1:2A:252:G:H1’	2.53	0.42
1:2A:2802:G:H2’	1:2A:2803:C:O4’	2.20	0.42
3:2D:126:GLN:O	3:2D:129:ASN:ND2	2.49	0.42
15:2T:39:ARG:HH12	15:2T:41:ARG:HD3	1.84	0.42
16:2U:107:ALA:O	16:2U:111:GLU:HG2	2.18	0.42
18:2W:10:VAL:HG12	18:2W:12:ILE:HG22	2.00	0.42
32:2a:447:G:O6	32:2a:485:G:O2’	2.26	0.42
33:2b:125:PRO:O	33:2b:126:GLU:HB3	2.19	0.42
46:2o:26:GLU:HG3	46:2o:81:LEU:HD22	2.01	0.42
49:2r:63:GLN:HE21	49:2r:63:GLN:HB2	1.72	0.42
50:2s:53:ASN:HB2	50:2s:77:THR:HA	2.00	0.42
50:2s:80:TYR:HE1	50:2s:83:HIS:CE1	2.37	0.42
51:2t:10:LEU:HD12	51:2t:10:LEU:HA	1.78	0.42
1:1A:1028:A:H61	1:1A:1125:G:H2’	1.85	0.42
1:1A:1364:G:OP2	23:11:61:ARG:NH2	2.53	0.42
1:1A:1651:G:H4’	13:1R:39:PRO:HG2	2.01	0.42
1:1A:1655:A:H3’	1:1A:1656:C:C6	2.54	0.42
1:1A:1927:A:H2’	1:1A:1928:A:C8	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1A:2141:G:H3'	1:1A:2142:C:O4'	2.19	0.42
1:1A:2312:U:OP1	6:1G:73:ALA:HA	2.19	0.42
1:1A:2850:A:N7	1:1A:2868:A:O2'	2.47	0.42
9:1N:4:TYR:CE2	16:1U:100:VAL:HG11	2.55	0.42
9:1N:61:ARG:HA	9:1N:61:ARG:HD3	1.74	0.42
16:1U:46:ALA:O	16:1U:50:ARG:HG3	2.19	0.42
26:14:46:GLN:HB2	26:14:48:ARG:HH21	1.85	0.42
32:1a:57:G:H2'	32:1a:58:C:C6	2.53	0.42
32:1a:262:A:C6	32:1a:263:A:C6	3.07	0.42
32:1a:442:C:H42	32:1a:492:G:H1	1.67	0.42
32:1a:841:U:C4	32:1a:848:C:H1'	2.54	0.42
32:1a:1401:G:C2	32:1a:1402:4OC:H1'	2.55	0.42
33:1b:22:LYS:H	33:1b:40:HIS:CE1	2.37	0.42
33:1b:55:PHE:HA	33:1b:58:ILE:HB	2.01	0.42
45:1n:23:ARG:HD2	45:1n:28:GLY:O	2.20	0.42
1:2A:65:C:H5'	19:2X:71:GLY:HA3	2.02	0.42
1:2A:492:A:H2'	1:2A:493:G:O4'	2.19	0.42
1:2A:511:U:H4'	1:2A:1235:G:H4'	2.01	0.42
1:2A:855:G:H2'	1:2A:856:C:C6	2.54	0.42
1:2A:864:G:H1'	1:2A:914:C:N4	2.34	0.42
1:2A:892:G:H2'	1:2A:892:G:N3	2.34	0.42
1:2A:992:C:H2'	1:2A:993:G:H8	1.84	0.42
1:2A:2203:U:H2'	1:2A:2205:C:H6	1.84	0.42
12:2Q:21:THR:O	21:2Z:78:LYS:HD3	2.19	0.42
14:2S:14:VAL:HG21	14:2S:90:GLY:O	2.20	0.42
32:2a:302:G:N3	32:2a:556:C:H4'	2.34	0.42
32:2a:1006:C:C4	32:2a:1007:C:C4	3.08	0.42
32:2a:1013:G:H2'	32:2a:1015:A:OP2	2.19	0.42
32:2a:1333:A:H2'	32:2a:1334:G:O4'	2.20	0.42
35:2d:65:ARG:HG3	35:2d:75:PHE:CG	2.54	0.42
39:2h:10:LEU:HD22	39:2h:83:ILE:HD11	2.00	0.42
46:2o:40:SER:O	46:2o:44:LYS:HG3	2.20	0.42
47:2p:60:LEU:HD12	47:2p:60:LEU:HA	1.88	0.42
49:2r:21:LYS:HA	49:2r:21:LYS:HD2	1.80	0.42
1:1A:493:G:H2'	1:1A:494:G:O4'	2.19	0.42
1:1A:529:A:H62	1:1A:2041:U:H3	1.65	0.42
1:1A:1080:C:H5'	1:1A:1081:U:OP2	2.19	0.42
1:1A:1821:A:H2'	1:1A:1822:G:C8	2.55	0.42
1:1A:2506:U:O2'	54:1w:76:A:H4'	2.19	0.42
1:1A:2530:A:O2'	1:1A:2532:G:OP2	2.26	0.42
4:1E:144:ARG:O	4:1E:148:GLY:HA2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1183:A:O2'	32:1a:1184:G:OP1	2.36	0.42
32:1a:1401:G:H2'	32:1a:1402:4OC:O4'	2.19	0.42
41:1j:23:ILE:HD13	41:1j:23:ILE:HA	1.94	0.42
41:1j:55:LYS:O	41:1j:57:LYS:N	2.53	0.42
1:2A:635:C:H2'	1:2A:636:G:O4'	2.18	0.42
1:2A:1897:G:H2'	1:2A:1898:U:C6	2.55	0.42
5:2F:64:ILE:HD11	5:2F:75:HIS:HB2	2.02	0.42
7:2H:24:VAL:HG13	7:2H:37:VAL:HG21	2.00	0.42
9:2N:38:HIS:CE1	9:2N:39:ARG:HG3	2.55	0.42
11:2P:8:PRO:HB2	11:2P:12:ALA:HB3	2.02	0.42
26:24:61:ARG:HG3	26:24:62:ARG:N	2.35	0.42
32:2a:91:C:H2'	32:2a:92:C:C6	2.54	0.42
32:2a:254:G:O2'	48:2q:16:GLN:O	2.36	0.42
32:2a:370:C:H42	32:2a:391:G:H1	1.68	0.42
32:2a:1186:G:H2'	32:2a:1187:G:O4'	2.20	0.42
32:2a:1272:G:N2	32:2a:1273:G:C5	2.84	0.42
32:2a:1476:G:H2'	32:2a:1477:C:C6	2.55	0.42
33:2b:185:ILE:HG22	33:2b:199:TYR:HD2	1.84	0.42
41:2j:81:THR:O	41:2j:85:LEU:HG	2.19	0.42
44:2m:37:THR:HG21	44:2m:56:LEU:HA	2.01	0.42
1:1A:483:A:O4'	20:1Y:48:ALA:HB1	2.19	0.42
1:1A:628:G:H2'	1:1A:629:G:H8	1.85	0.42
1:1A:1283:G:N2	1:1A:1285:G:H3'	2.35	0.42
1:1A:2183:C:HO2'	1:1A:2184:G:P	2.42	0.42
3:1D:260:ARG:NH1	3:1D:267:SER:OG	2.52	0.42
7:1H:121:ILE:HD11	7:1H:140:LYS:HG2	2.00	0.42
8:1I:109:ILE:HG23	8:1I:130:TYR:CZ	2.54	0.42
21:1Z:150:LEU:HG	21:1Z:151:HIS:H	1.84	0.42
32:1a:913:A:H4'	32:1a:914:A:O5'	2.20	0.42
32:1a:1201:A:H4'	32:1a:1202:G:O5'	2.20	0.42
33:1b:16:HIS:HD2	33:1b:204:ASN:H	1.66	0.42
34:1c:15:THR:OG1	34:1c:178:LEU:O	2.37	0.42
35:1d:18:LYS:HD2	35:1d:20:TYR:CZ	2.54	0.42
37:1f:9:VAL:HA	37:1f:59:TYR:O	2.19	0.42
39:1h:15:ASN:O	39:1h:19:VAL:HG22	2.19	0.42
51:1t:60:GLU:HG3	51:1t:81:LYS:HD2	2.02	0.42
54:1y:2:G:N1	54:1y:71:C:O2	2.45	0.42
1:2A:1009:A:H5"	16:2U:63:VAL:CG2	2.49	0.42
1:2A:1580:A:H3'	1:2A:1581:G:H8	1.85	0.42
1:2A:1686:C:H2'	1:2A:1687:G:O4'	2.19	0.42
1:2A:2019:A:N7	27:25:9:LYS:HE2	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2051:A:H5'	1:2A:2578:G:O4'	2.20	0.42
1:2A:2274:A:C5	1:2A:2276:G:C8	3.08	0.42
1:2A:2320:A:N3	1:2A:2320:A:H2'	2.34	0.42
1:2A:2537:U:H2'	1:2A:2538:C:C6	2.55	0.42
1:2A:2689:U:H4'	1:2A:2690:C:H5'	2.02	0.42
1:2A:2881:C:H2'	1:2A:2882:A:O4'	2.18	0.42
15:2T:113:LYS:O	15:2T:114:LEU:HD23	2.20	0.42
21:2Z:55:HIS:HE1	21:2Z:135:GLU:HG3	1.84	0.42
23:21:30:VAL:HG21	54:2y:76:A:H4'	2.01	0.42
30:28:63:PRO:HG2	30:28:64:TYR:CE2	2.55	0.42
32:2a:989:C:H2'	32:2a:990:C:C6	2.54	0.42
32:2a:1275:A:H2'	32:2a:1276:G:O4'	2.20	0.42
32:2a:1319:A:N6	32:2a:1361:G:H21	2.16	0.42
33:2b:137:ARG:O	33:2b:141:GLU:N	2.49	0.42
35:2d:111:ALA:HB1	35:2d:116:GLN:HB3	2.02	0.42
35:2d:191:ARG:HA	35:2d:191:ARG:HD2	1.84	0.42
39:2h:75:ARG:HA	39:2h:76:PRO:HD3	1.95	0.42
42:2k:99:GLN:HG2	42:2k:105:VAL:HG21	2.00	0.42
54:2w:48:C:C2	54:2w:59:U:H1'	2.54	0.42
1:1A:956:G:H2'	1:1A:957:A:H2'	2.01	0.42
1:1A:1288:U:O4	13:1R:106:GLY:HA3	2.20	0.42
1:1A:1740:G:H2'	1:1A:1741:A:C8	2.55	0.42
1:1A:1996:C:H4'	1:1A:1997:G:OP1	2.19	0.42
1:1A:2061:G:H2'	1:1A:2501:C:O2'	2.19	0.42
1:1A:2299:G:H2'	1:1A:2300:G:C8	2.55	0.42
1:1A:2347:C:H2'	1:1A:2348:U:C6	2.55	0.42
1:1A:2633:G:H2'	1:1A:2634:G:O4'	2.20	0.42
6:1G:131:TYR:HE2	6:1G:133:LEU:HD23	1.85	0.42
9:1N:62:VAL:HG13	9:1N:66:LYS:HD2	2.01	0.42
10:1O:20:MET:HE2	10:1O:20:MET:HB3	1.90	0.42
15:1T:99:LEU:HD13	15:1T:114:LEU:HD11	2.01	0.42
18:1W:45:TYR:OH	18:1W:49:LYS:HE3	2.20	0.42
32:1a:690:G:C6	32:1a:691:G:C6	3.08	0.42
32:1a:1002:G:C2	32:1a:1004:A:H1'	2.55	0.42
1:2A:196:A:N3	1:2A:196:A:H2'	2.35	0.42
1:2A:214:G:O2'	1:2A:215:G:O4'	2.33	0.42
1:2A:467:G:OP2	29:27:34:ARG:HD3	2.20	0.42
1:2A:573:G:O6	1:2A:2029:G:H2'	2.19	0.42
1:2A:945:A:H2	61:2A:4541:HOH:O	2.03	0.42
1:2A:1263:U:C4	1:2A:1264:G:C6	3.07	0.42
1:2A:1853:A:N1	1:2A:2087:G:H1'	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:2328:A:H2'	1:2A:2329:G:C8	2.54	0.42
1:2A:2712:U:OP1	1:2A:2714:G:H4'	2.19	0.42
5:2F:195:ASP:HB3	5:2F:198:ALA:H	1.85	0.42
9:2N:62:VAL:HG11	9:2N:66:LYS:HB2	2.01	0.42
32:2a:551:U:H2'	32:2a:552:U:C6	2.55	0.42
32:2a:660:G:H1	32:2a:745:C:N4	2.13	0.42
32:2a:736:C:H5"	49:2r:72:ARG:HE	1.85	0.42
32:2a:922:G:N3	32:2a:1398:A:H2	2.18	0.42
32:2a:1165:C:H2'	32:2a:1166:G:O4'	2.19	0.42
32:2a:1228:C:H2'	32:2a:1229:A:C8	2.54	0.42
40:2i:69:GLY:O	40:2i:73:GLN:HG3	2.20	0.42
47:2p:53:VAL:HG22	47:2p:79:VAL:HG22	2.02	0.42
1:1A:1066:U:H2'	1:1A:1068:G:OP2	2.20	0.42
1:1A:1278:A:O2'	13:1R:27:SER:HB3	2.20	0.42
1:1A:1364:G:P	23:11:61:ARG:HH12	2.42	0.42
1:1A:1417:C:H2'	1:1A:1418:G:O4'	2.20	0.42
12:1Q:141:GLN:NE2	21:1Z:74:VAL:O	2.51	0.42
32:1a:620:C:H2'	32:1a:621:A:O4'	2.19	0.42
32:1a:1284:C:H3'	32:1a:1285:A:C8	2.50	0.42
55:1x:49:G:C2	55:1x:66:C:C2	3.08	0.42
1:2A:195:A:H5"	1:2A:196:A:O5'	2.19	0.42
1:2A:321:G:C2	1:2A:341:G:H4'	2.55	0.42
1:2A:459:U:H5"	29:27:40:TRP:CD2	2.55	0.42
1:2A:1478:G:H2'	1:2A:1479:G:H8	1.84	0.42
1:2A:1833:U:OP1	61:2A:3975:HOH:O	2.22	0.42
1:2A:1877:A:H5'	1:2A:1878:G:OP2	2.19	0.42
2:2B:39:A:O2'	2:2B:40:U:H5'	2.19	0.42
4:2E:18:ASP:HB3	15:2T:82:LEU:HD21	2.00	0.42
7:2H:56:SER:OG	7:2H:57:ASP:N	2.53	0.42
14:2S:99:LYS:HE2	14:2S:103:GLU:OE2	2.20	0.42
32:2a:872:A:O2'	32:2a:873:A:H3'	2.19	0.42
32:2a:1094:G:O2'	32:2a:1108:G:N1	2.53	0.42
33:2b:60:ASP:HA	33:2b:63:MET:HE2	2.02	0.42
36:2e:78:HIS:HE1	36:2e:143:ARG:H	1.67	0.42
39:2h:96:GLY:H	39:2h:99:GLU:HB2	1.85	0.42
46:2o:54:ARG:O	46:2o:58:MET:HG3	2.19	0.42
1:1A:271(P):C:H4'	8:1I:42:SER:O	2.20	0.42
1:1A:2074:U:H2'	1:1A:2075:U:C6	2.55	0.42
1:1A:2138:C:N3	1:1A:2153:G:N2	2.67	0.42
1:1A:2346:A:C5	1:1A:2383:G:C2	3.07	0.42
2:1B:43:C:H4'	6:1G:98:ARG:HH21	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1I:109:ILE:HD12	8:1I:130:TYR:CZ	2.54	0.42
14:1S:65:VAL:O	14:1S:69:VAL:HG12	2.20	0.42
15:1T:33:LYS:HE3	15:1T:82:LEU:HD22	2.02	0.42
19:1X:94:GLY:N	19:1X:95:LEU:HB2	2.35	0.42
23:11:46:LEU:HA	23:11:63:ALA:HA	2.01	0.42
32:1a:833:U:H2'	32:1a:834:C:C6	2.54	0.42
32:1a:977:A:N6	32:1a:1224:G:O5'	2.52	0.42
32:1a:1360:A:H8	32:1a:1360:A:OP1	2.03	0.42
33:1b:127:ILE:O	33:1b:127:ILE:HG13	2.20	0.42
49:1r:45:SER:OG	49:1r:47:THR:HG23	2.19	0.42
52:1u:3:LYS:HB3	52:1u:14:TRP:CG	2.55	0.42
1:2A:30:G:H2'	1:2A:31:C:C6	2.55	0.42
1:2A:350:U:H2'	1:2A:351:G:O4'	2.20	0.42
1:2A:757:U:H2'	1:2A:758:C:O4'	2.20	0.42
1:2A:1128:A:N7	1:2A:2489:G:O2'	2.53	0.42
1:2A:1472:A:N6	1:2A:1519:G:H1'	2.35	0.42
1:2A:1908:C:O2'	55:2x:12:G:H5"	2.20	0.42
1:2A:2125:G:H1'	1:2A:2173:A:N6	2.35	0.42
1:2A:2270:G:H2'	1:2A:2271:G:O4'	2.20	0.42
1:2A:2687:U:H2'	1:2A:2688:U:O4'	2.20	0.42
1:2A:2698:U:H2'	1:2A:2699:C:C6	2.55	0.42
1:2A:2726:U:O2'	1:2A:2727:G:H8	2.02	0.42
2:2B:38:C:H2'	2:2B:39:A:C8	2.54	0.42
8:2I:26:ALA:O	8:2I:31:LEU:HB2	2.20	0.42
14:2S:92:TYR:HB3	14:2S:98:VAL:HG21	2.02	0.42
16:2U:16:LYS:HE2	16:2U:16:LYS:HB3	1.81	0.42
32:2a:232:G:H2'	32:2a:233:C:O4'	2.19	0.42
32:2a:1256:A:N6	32:2a:1278:U:O2'	2.47	0.42
32:2a:1261:A:H5'	32:2a:1284:C:OP1	2.19	0.42
42:2k:52:GLY:H	42:2k:55:LYS:HE3	1.85	0.42
43:2l:56:ALA:HB3	43:2l:100:ILE:HD11	2.01	0.42
49:2r:47:THR:O	49:2r:47:THR:OG1	2.36	0.42
54:2w:18:G:H22	54:2w:57:G:H3'	1.85	0.42
1:1A:2360:A:H2'	1:1A:2361:A:O4'	2.20	0.41
1:1A:2601:C:H2'	1:1A:2603:G:C8	2.55	0.41
4:1E:4:ILE:HD13	4:1E:28:ALA:HB1	2.01	0.41
4:1E:79:ARG:HA	4:1E:79:ARG:HD3	1.81	0.41
17:1V:79:VAL:HG23	61:1V:301:HOH:O	2.19	0.41
24:12:22:GLU:OE2	24:12:68:ARG:NH2	2.53	0.41
30:18:38:GLY:O	30:18:42:ARG:HB2	2.20	0.41
32:1a:1278:U:H5'	32:1a:1279:A:H5'	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:174:VAL:O	33:1b:178:ARG:HG2	2.20	0.41
36:1e:6:PHE:CD1	36:1e:36:ASP:HB3	2.55	0.41
1:2A:457:A:N6	1:2A:470:A:H5"	2.35	0.41
1:2A:1357:U:H2'	1:2A:1358:G:O4'	2.20	0.41
1:2A:1415:U:H3	1:2A:1587:A:H61	1.67	0.41
1:2A:2513:G:N2	4:2E:143:ASN:OD1	2.52	0.41
7:2H:101:ARG:NH2	7:2H:121:ILE:O	2.52	0.41
11:2P:63:PRO:HB2	30:28:30:ARG:NH2	2.35	0.41
20:2Y:86:ARG:HB2	20:2Y:98:VAL:HG23	2.01	0.41
30:28:62:LEU:HB3	30:28:65:GLU:HG2	2.02	0.41
32:2a:917:G:H2'	32:2a:918:A:O4'	2.20	0.41
32:2a:1511:G:H2'	32:2a:1512:U:O4'	2.20	0.41
38:2g:144:MET:HE2	38:2g:144:MET:HB3	1.98	0.41
1:1A:311:A:C6	1:1A:328:U:C4	3.08	0.41
1:1A:676:A:HO2'	1:1A:2442:C:HO2'	1.63	0.41
1:1A:861:A:N3	2:1B:79:C:O2'	2.50	0.41
1:1A:957:A:H5'	12:1Q:76:LYS:HG3	2.01	0.41
1:1A:1862:G:H2'	1:1A:1863:G:H8	1.85	0.41
1:1A:2540:C:O2'	1:1A:2740:A:N3	2.50	0.41
1:1A:2790:A:C5'	1:1A:2893:G:H21	2.34	0.41
26:14:40:HIS:HB3	26:14:43:TYR:CD2	2.55	0.41
32:1a:326:G:O6	61:1a:1937:HOH:O	2.18	0.41
32:1a:382:A:H2'	32:1a:383:A:C8	2.55	0.41
32:1a:1202:G:O4'	45:1n:29:ARG:NH1	2.48	0.41
32:1a:1229:A:O2'	55:1x:30:G:OP1	2.38	0.41
32:1a:1299:A:O2'	32:1a:1300:G:H4'	2.20	0.41
32:1a:1316:G:N2	32:1a:1318:A:H3'	2.35	0.41
35:1d:43:HIS:HA	35:1d:46:LYS:HE3	2.03	0.41
35:1d:114:ARG:HA	35:1d:117:ALA:HB3	2.02	0.41
52:1u:3:LYS:HB3	52:1u:14:TRP:CD1	2.55	0.41
52:1u:12:LYS:HB3	52:1u:17:THR:O	2.21	0.41
54:1y:37:6MZ:H2'	54:1y:38:A:C8	2.54	0.41
1:2A:296:C:O3'	20:2Y:95:LYS:NZ	2.52	0.41
1:2A:848:G:C2	1:2A:933:A:H1'	2.55	0.41
1:2A:1803:A:O2'	3:2D:259:THR:HG21	2.21	0.41
1:2A:2783:G:H2'	1:2A:2784:C:C6	2.55	0.41
1:2A:2870:C:H5"	13:2R:65:LEU:HD21	2.01	0.41
7:2H:117:PRO:HA	7:2H:118:PRO:HD3	1.91	0.41
12:2Q:31:ASP:HA	12:2Q:134:ARG:HH11	1.85	0.41
21:2Z:30:ASN:OD1	21:2Z:33:LEU:N	2.51	0.41
26:24:40:HIS:HB3	26:24:43:TYR:HD2	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:735:C:H2'	32:2a:736:C:C6	2.55	0.41
1:1A:263:C:H2'	1:1A:264:C:O4'	2.19	0.41
1:1A:271(M):G:H21	8:1I:50:ARG:HH12	1.68	0.41
1:1A:516:C:OP1	27:15:13:LYS:NZ	2.38	0.41
1:1A:831:G:N2	11:1P:53:GLY:O	2.52	0.41
1:1A:1138:G:N3	9:1N:106:MET:HE2	2.34	0.41
1:1A:1180:C:H2'	1:1A:1181:C:C6	2.55	0.41
1:1A:1485:G:C2	1:1A:1486:A:C4	3.08	0.41
1:1A:1636:C:H2'	1:1A:1637:A:C8	2.55	0.41
1:1A:2072:G:H2'	1:1A:2073:C:O4'	2.19	0.41
1:1A:2443:C:H2'	1:1A:2444:G:C8	2.55	0.41
1:1A:2836:U:H2'	1:1A:2837:G:C8	2.55	0.41
19:1X:84:ALA:HB3	19:1X:87:GLN:CD	2.45	0.41
21:1Z:128:VAL:HG23	21:1Z:160:GLY:O	2.20	0.41
21:1Z:150:LEU:HG	21:1Z:151:HIS:N	2.35	0.41
32:1a:944:G:O6	32:1a:1337:G:H8	2.02	0.41
32:1a:1328:C:H2'	32:1a:1329:A:O4'	2.21	0.41
33:1b:19:HIS:NE2	33:1b:20:GLU:HG3	2.35	0.41
44:1m:88:ARG:HB3	44:1m:98:VAL:HG13	2.02	0.41
54:1y:44:G:H5'	54:1y:45:G:OP2	2.20	0.41
1:2A:743:G:OP1	4:2E:130:GLY:HA2	2.21	0.41
1:2A:925:C:H2'	1:2A:926:A:H8	1.85	0.41
1:2A:1020:A:N1	1:2A:1141:U:O2'	2.53	0.41
1:2A:1805:U:O2	3:2D:50:THR:HB	2.20	0.41
1:2A:1966:A:H2	1:2A:2592:G:N3	2.18	0.41
1:2A:2019:A:H4'	16:2U:34:LYS:HD2	2.01	0.41
1:2A:2065:C:H4'	1:2A:2251:OMG:HM22	2.02	0.41
1:2A:2261:C:H1'	1:2A:2388:A:N3	2.34	0.41
1:2A:2272:U:H5"	1:2A:2273:A:OP1	2.20	0.41
1:2A:2490:G:H8	1:2A:2490:G:OP2	2.02	0.41
14:2S:48:LEU:HD23	14:2S:82:ILE:HD11	2.01	0.41
17:2V:40:LEU:HB2	17:2V:46:VAL:HG12	2.02	0.41
26:24:61:ARG:HH21	50:2s:42:PRO:HD3	1.85	0.41
32:2a:7:G:O2'	36:2e:120:THR:O	2.37	0.41
32:2a:1004:A:H5"	32:2a:1024:G:N2	2.32	0.41
32:2a:1071:C:H2'	32:2a:1072:G:C8	2.54	0.41
32:2a:1124:G:N7	32:2a:1145:C:O2'	2.50	0.41
32:2a:1388:C:H2'	32:2a:1389:C:O4'	2.19	0.41
34:2c:175:LEU:H	34:2c:175:LEU:HD12	1.84	0.41
1:1A:492:A:H2'	1:1A:493:G:O4'	2.21	0.41
1:1A:1056:G:O2'	1:1A:1086:A:H1'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:1H:13:LYS:HA	7:1H:14:GLY:HA2	1.57	0.41
7:1H:94:TYR:OH	7:1H:152:ARG:NH1	2.54	0.41
9:1N:138:LEU:HD23	9:1N:138:LEU:HA	1.88	0.41
15:1T:97:ALA:C	15:1T:98:LYS:HD2	2.45	0.41
24:12:53:LEU:HD23	24:12:53:LEU:HA	1.84	0.41
32:1a:146:G:C2	32:1a:147:G:C4	3.09	0.41
32:1a:189:G:C6	32:1a:189(L):G:C6	3.08	0.41
32:1a:1014:A:H4'	50:1s:14:HIS:CE1	2.54	0.41
32:1a:1101:A:N6	33:1b:176:GLU:OE2	2.53	0.41
32:1a:1425:U:H2'	32:1a:1426:C:C6	2.56	0.41
39:1h:86:ILE:HG21	39:1h:133:LEU:HD13	2.01	0.41
42:1k:77:MET:HE2	42:1k:77:MET:HB2	1.88	0.41
1:2A:172:C:H2'	1:2A:173:G:C8	2.55	0.41
1:2A:1187:G:H5'	17:2V:81:TYR:CE1	2.55	0.41
1:2A:1274:A:N3	1:2A:1297:C:H1'	2.36	0.41
1:2A:2065:C:H2'	1:2A:2066:C:C6	2.55	0.41
1:2A:2253:G:O6	22:20:4:LYS:NZ	2.53	0.41
1:2A:2558:C:H2'	1:2A:2559:C:O4'	2.21	0.41
57:2A:3851:LUJ:OAL	57:2A:3851:LUJ:NAQ	2.54	0.41
6:2G:124:SER:HB2	6:2G:131:TYR:CE1	2.55	0.41
20:2Y:39:VAL:HB	20:2Y:42:VAL:HB	2.03	0.41
20:2Y:55:TYR:CZ	20:2Y:61:ILE:HG21	2.56	0.41
32:2a:264:U:H2'	32:2a:265:G:O4'	2.21	0.41
32:2a:627:G:H2'	32:2a:628:G:O4'	2.20	0.41
32:2a:959:A:O2'	32:2a:984:C:O2'	2.33	0.41
32:2a:1029:C:N4	32:2a:1032:G:H1	2.19	0.41
32:2a:1289:A:N1	32:2a:1371:G:O2'	2.48	0.41
32:2a:1401:G:H2'	32:2a:1402:4OC:O4'	2.20	0.41
33:2b:24:TRP:H	33:2b:24:TRP:HD1	1.67	0.41
47:2p:3:LYS:O	47:2p:21:VAL:HA	2.21	0.41
55:2x:58:A:H4'	55:2x:59:A:OP1	2.20	0.41
1:1A:272(J):C:H2'	1:1A:274:G:C8	2.55	0.41
1:1A:444:C:H4'	5:1F:49:ALA:HB2	2.02	0.41
1:1A:952:G:P	12:1Q:16:ARG:HH21	2.43	0.41
1:1A:1054:A:H4'	1:1A:1054:A:OP1	2.21	0.41
1:1A:1663:C:O2'	1:1A:1664:A:O5'	2.31	0.41
1:1A:2001:A:H2'	1:1A:2002:G:C8	2.55	0.41
1:1A:2319:G:H22	14:1S:3:ARG:CD	2.33	0.41
2:1B:41:U:P	2:1B:43:C:H41	2.42	0.41
32:1a:374:A:C6	32:1a:375:U:C4	3.08	0.41
32:1a:514:C:H2'	32:1a:515:G:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:1a:1151:A:O4'	41:1j:39:PRO:HB2	2.20	0.41
33:1b:208:ILE:H	33:1b:208:ILE:HD12	1.85	0.41
35:1d:113:SER:O	35:1d:117:ALA:N	2.46	0.41
36:1e:79:GLU:HA	36:1e:91:LEU:O	2.20	0.41
47:1p:19:ILE:N	47:1p:37:GLY:O	2.54	0.41
54:1w:46:7MG:H3'	54:1w:47:U:C5'	2.50	0.41
1:2A:94(A):G:H2'	1:2A:95:G:O4'	2.20	0.41
1:2A:686:G:H8	29:27:6:GLN:O	2.04	0.41
1:2A:698:C:O2'	1:2A:734:A:N6	2.54	0.41
1:2A:2383:G:OP2	30:28:37:SER:HB2	2.20	0.41
1:2A:2392:A:OP2	30:28:31:HIS:NE2	2.53	0.41
1:2A:2512:C:H2'	1:2A:2513:G:O4'	2.19	0.41
1:2A:2732:G:H3'	1:2A:2733:A:O4'	2.21	0.41
1:2A:2747:G:O6	1:2A:2755:C:H5"	2.21	0.41
3:2D:97:TYR:HE2	3:2D:103:ARG:HB2	1.85	0.41
3:2D:182:LEU:HB2	3:2D:272:ALA:HB3	2.02	0.41
12:2Q:81:VAL:HB	22:20:7:LEU:HD21	2.02	0.41
27:25:52:TYR:O	27:25:55:ARG:HG2	2.21	0.41
32:2a:868:C:H2'	32:2a:869:G:O4'	2.21	0.41
32:2a:1032:G:H2'	32:2a:1033:G:O4'	2.20	0.41
32:2a:1212:U:H5'	32:2a:1213:A:O4'	2.19	0.41
32:2a:1265:G:N3	32:2a:1271:G:N2	2.68	0.41
40:2i:100:GLY:O	40:2i:103:THR:HG22	2.21	0.41
54:2w:30:C:H2'	54:2w:31:C:H6	1.85	0.41
54:2w:50:G:O6	54:2w:64:U:O4	2.37	0.41
1:1A:51:G:N3	1:1A:119:A:C2	2.88	0.41
1:1A:614(C):A:C4	5:1F:180:GLY:HA2	2.56	0.41
1:1A:1527:G:H3'	61:1A:4755:HOH:O	2.20	0.41
1:1A:1590:U:H2'	1:1A:1591:G:C8	2.55	0.41
1:1A:1655:A:H3'	1:1A:1656:C:H6	1.85	0.41
1:1A:1790:C:H5"	1:1A:1791:A:OP1	2.20	0.41
1:1A:2547:U:H2'	1:1A:2548:G:C8	2.56	0.41
1:1A:2831:G:H1'	1:1A:2883:A:H2'	2.01	0.41
6:1G:101:ILE:HG22	6:1G:105:LYS:HE2	2.03	0.41
6:1G:179:PRO:HB2	26:14:42:PHE:CE2	2.55	0.41
32:1a:262:A:H2'	32:1a:263:A:C8	2.56	0.41
32:1a:555:C:H2'	32:1a:556:C:C6	2.55	0.41
33:1b:24:TRP:CZ3	33:1b:26:PRO:HA	2.56	0.41
34:1c:12:LEU:HD23	34:1c:12:LEU:HA	1.91	0.41
35:1d:73:ARG:HD2	35:1d:73:ARG:HA	1.94	0.41
37:1f:76:ALA:O	37:1f:80:ARG:HG3	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:1i:16:ARG:HB2	40:1i:64:THR:HG23	2.02	0.41
1:2A:528:A:H8	9:2N:114:ARG:NH2	2.19	0.41
1:2A:1027:A:C2	1:2A:2488:A:H5'	2.56	0.41
1:2A:1388:G:H4'	1:2A:1525:G:O2'	2.20	0.41
1:2A:1803:A:N1	1:2A:1822:G:O2'	2.49	0.41
1:2A:2232:U:OP1	23:21:42:GLN:NE2	2.53	0.41
1:2A:2792:G:N3	1:2A:2792:G:H2'	2.36	0.41
1:2A:2848:G:H8	15:2T:97:ALA:HB2	1.85	0.41
13:2R:29:LEU:HD12	13:2R:29:LEU:HA	1.83	0.41
22:20:68:GLU:OE1	22:20:82:ARG:HD3	2.21	0.41
28:26:13:CYS:SG	28:26:47:THR:HG21	2.61	0.41
32:2a:147:G:H1	32:2a:175:C:H42	1.68	0.41
32:2a:446:G:H2'	32:2a:447:G:O4'	2.21	0.41
32:2a:537:G:H5"	43:2l:113:ARG:NH1	2.36	0.41
32:2a:719:C:O2'	49:2r:49:LYS:HB3	2.20	0.41
32:2a:1457:G:OP1	51:2t:39:LYS:NZ	2.42	0.41
33:2b:47:THR:HG22	33:2b:51:LEU:HG	2.03	0.41
37:2f:99:ALA:HB3	49:2r:29:PHE:CE2	2.56	0.41
51:2t:67:ALA:HA	51:2t:72:LEU:O	2.21	0.41
1:1A:1062:G:H5"	1:1A:1070:A:O2'	2.21	0.41
1:1A:1239:G:H2'	1:1A:1240:U:O4'	2.21	0.41
1:1A:1881:C:H2'	1:1A:1882:C:C6	2.56	0.41
1:1A:2291:U:OP1	1:1A:2380:C:O2'	2.35	0.41
2:1B:48:A:H2'	2:1B:49:C:C6	2.55	0.41
2:1B:88:C:H2'	2:1B:89:G:O4'	2.20	0.41
4:1E:48:GLN:NE2	4:1E:78:LEU:HD13	2.35	0.41
8:1I:10:GLU:H	8:1I:10:GLU:HG2	1.70	0.41
11:1P:82:GLY:HA2	11:1P:113:LYS:O	2.20	0.41
23:11:3:LYS:HB2	23:11:61:ARG:NH2	2.35	0.41
29:17:24:THR:O	29:17:28:ARG:HG3	2.20	0.41
32:1a:59:A:H3'	32:1a:331:G:H22	1.86	0.41
32:1a:863:U:O2'	32:1a:865:A:N7	2.51	0.41
32:1a:1073:U:H2'	32:1a:1074:G:H8	1.86	0.41
32:1a:1304:G:C6	32:1a:1305:G:N1	2.89	0.41
32:1a:1521:G:H2'	32:1a:1522:U:C6	2.56	0.41
35:1d:100:ARG:O	35:1d:104:VAL:HG23	2.20	0.41
35:1d:142:PRO:HA	35:1d:185:PHE:HD2	1.85	0.41
42:1k:110:ASP:OD1	42:1k:112:THR:OG1	2.33	0.41
47:1p:21:VAL:HG22	47:1p:33:ILE:HD12	2.03	0.41
54:1y:34:CM0:O9	54:1y:35:A:N6	2.54	0.41
1:2A:7:G:H4'	9:2N:13:TRP:CH2	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:117:G:OP2	1:2A:119:A:O2'	2.31	0.41
1:2A:702:G:C2	1:2A:731:C:C2	3.08	0.41
1:2A:828:U:H4'	1:2A:831:G:N1	2.36	0.41
1:2A:1161:C:H2'	1:2A:1162:G:H8	1.86	0.41
1:2A:1477:A:H2'	1:2A:1478:G:O4'	2.21	0.41
1:2A:2031:A:C6	1:2A:2498:C:H1'	2.56	0.41
1:2A:2307:G:H4'	1:2A:2308:G:O4'	2.20	0.41
1:2A:2497:A:H5"	61:2A:4136:HOH:O	2.20	0.41
1:2A:2820:A:C5	13:2R:4:LEU:HD11	2.55	0.41
1:2A:2896:C:H2'	1:2A:2897:U:H6	1.84	0.41
4:2E:120:TRP:CG	4:2E:155:LYS:HB3	2.56	0.41
5:2F:172:TRP:CD1	5:2F:172:TRP:H	2.37	0.41
8:2I:124:GLY:H	8:2I:144:VAL:HG23	1.86	0.41
10:2O:29:ASN:OD1	10:2O:29:ASN:N	2.53	0.41
21:2Z:77:ASP:OD1	21:2Z:80:ARG:NH1	2.54	0.41
26:24:46:GLN:O	26:24:47:GLN:C	2.63	0.41
32:2a:376:G:OP2	47:2p:67:THR:HG21	2.20	0.41
32:2a:1095:U:H2'	32:2a:1096:C:O4'	2.20	0.41
32:2a:1201:A:H4'	32:2a:1202:G:O5'	2.20	0.41
32:2a:1348:U:H2'	32:2a:1349:A:H8	1.86	0.41
34:2c:36:ASP:HA	34:2c:39:ILE:HD12	2.03	0.41
35:2d:121:VAL:HG22	35:2d:126:ILE:HG13	2.03	0.41
46:2o:85:LEU:HB3	46:2o:87:ILE:HG13	2.03	0.41
52:2u:6:ARG:O	52:2u:12:LYS:HE3	2.20	0.41
53:2v:23:U:H4'	53:2v:24:C:C2	2.56	0.41
54:2y:23:A:N6	54:2y:24:G:O6	2.54	0.41
1:1A:272:G:O2'	1:1A:421:U:OP2	2.32	0.41
1:1A:330:A:HO2'	1:1A:331:A:H8	1.65	0.41
1:1A:1041:C:H42	1:1A:1114:G:H1	1.69	0.41
1:1A:1258:C:H2'	1:1A:1259:G:O4'	2.20	0.41
1:1A:1952:A:C6	1:1A:1953:A:N1	2.89	0.41
1:1A:2079:U:H2'	1:1A:2080:G:O4'	2.20	0.41
5:1F:89:VAL:HG12	5:1F:90:PHE:CD2	2.55	0.41
8:1I:109:ILE:HD13	8:1I:109:ILE:HA	1.85	0.41
14:1S:51:ALA:HB3	14:1S:73:LEU:HB2	2.03	0.41
19:1X:64:LYS:HD3	19:1X:64:LYS:HA	1.88	0.41
21:1Z:154:ASP:OD1	21:1Z:154:ASP:N	2.52	0.41
32:1a:1016:A:H2'	32:1a:1017:G:O4'	2.21	0.41
32:1a:1030(B):C:H2'	32:1a:1030(C):G:H5'	2.01	0.41
32:1a:1277:C:O2'	32:1a:1279:A:H1'	2.20	0.41
32:1a:1305:G:H8	52:1u:5:ASP:HB2	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:1b:60:ASP:O	33:1b:64:ARG:HG2	2.20	0.41
35:1d:173:TRP:CE3	35:1d:174:LEU:HG	2.56	0.41
44:1m:3:ARG:NE	44:1m:9:ILE:HG12	2.30	0.41
48:1q:32:TYR:O	48:1q:34:LYS:N	2.49	0.41
1:2A:18:C:H2'	1:2A:19:C:C6	2.56	0.41
1:2A:271(J):C:O2'	1:2A:271(K):U:OP2	2.32	0.41
1:2A:320:A:H4'	1:2A:322:A:C8	2.56	0.41
1:2A:652(B):A:N6	1:2A:655:A:H1'	2.36	0.41
1:2A:752:A:H3'	29:27:1:MET:CE	2.50	0.41
1:2A:928:G:H3'	1:2A:928:G:H8	1.86	0.41
1:2A:1164:G:H2'	1:2A:1165:U:C6	2.56	0.41
1:2A:1192:G:OP2	11:2P:17:LYS:NZ	2.51	0.41
1:2A:1351:C:O2'	1:2A:1571:A:N3	2.44	0.41
1:2A:1448:G:H2'	1:2A:1449:A:C8	2.55	0.41
1:2A:1592:C:H2'	1:2A:1593:G:H8	1.85	0.41
1:2A:2378:A:C5	1:2A:2379:G:H1'	2.56	0.41
1:2A:2580:U:OP1	61:2A:3977:HOH:O	2.22	0.41
2:2B:5:C:H42	2:2B:116:G:H1	1.69	0.41
3:2D:96:HIS:CD2	3:2D:102:LYS:HG2	2.56	0.41
5:2F:107:LYS:HG3	5:2F:206:ILE:HA	2.02	0.41
32:2a:142:G:H2'	32:2a:143:A:C8	2.55	0.41
32:2a:407:G:H2'	32:2a:408:A:C8	2.55	0.41
32:2a:792:A:H4'	32:2a:793:U:C5'	2.51	0.41
33:2b:95:GLN:HE22	33:2b:147:LYS:HE2	1.86	0.41
36:2e:91:LEU:HG	36:2e:118:ILE:HD11	2.03	0.41
39:2h:119:LEU:HB3	39:2h:123:GLU:HB2	2.03	0.41
41:2j:67:THR:O	41:2j:67:THR:OG1	2.39	0.41
54:2y:43:G:H2'	54:2y:44:G:O4'	2.20	0.41
1:1A:107:C:H2'	1:1A:108:U:C6	2.56	0.41
1:1A:118:A:H3'	1:1A:119:A:C5'	2.51	0.41
1:1A:196:A:N3	1:1A:196:A:H2'	2.35	0.41
1:1A:271(M):G:O2'	1:1A:271(N):U:H5"	2.21	0.41
1:1A:365:C:H2'	1:1A:366:C:O4'	2.21	0.41
1:1A:630:G:N2	1:1A:633:A:OP2	2.48	0.41
1:1A:882:G:H3'	1:1A:883:G:H8	1.85	0.41
1:1A:971:C:O2'	1:1A:983:A:N3	2.45	0.41
1:1A:996:A:O3'	16:1U:91:ASP:HB2	2.20	0.41
1:1A:1062:G:H5"	1:1A:1070:A:H1'	2.03	0.41
1:1A:1682:G:H1'	1:1A:1762:A:C6	2.55	0.41
1:1A:2108:C:H2'	1:1A:2109:U:C6	2.55	0.41
1:1A:2786:U:H2'	1:1A:2787:C:H6	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:1E:11:MET:HE2	4:1E:11:MET:HB3	1.98	0.41
6:1G:34:LEU:HD12	6:1G:100:TRP:CH2	2.56	0.41
12:1Q:56:ARG:HD2	12:1Q:56:ARG:HA	1.71	0.41
13:1R:98:LEU:HB2	13:1R:113:LEU:HD11	2.02	0.41
15:1T:41:ARG:HH22	15:1T:43:GLN:NE2	2.19	0.41
18:1W:48:ALA:O	18:1W:52:GLU:HG2	2.20	0.41
20:1Y:13:VAL:HG12	20:1Y:74:PRO:HA	2.03	0.41
30:18:34:TRP:CG	30:18:35:GLN:N	2.88	0.41
32:1a:639:G:H2'	32:1a:640:A:H8	1.84	0.41
32:1a:921:U:O2	36:1e:19:MET:HB2	2.20	0.41
32:1a:977:A:H1'	32:1a:982:U:O4	2.21	0.41
32:1a:1126:U:O2	32:1a:1280:A:H2'	2.21	0.41
32:1a:1489:G:C6	32:1a:1490:C:C4	3.09	0.41
33:1b:213:LEU:HD22	33:1b:214:ILE:HD12	2.03	0.41
40:1i:18:PHE:HB2	40:1i:62:TYR:O	2.21	0.41
44:1m:14:ARG:HB2	44:1m:17:VAL:HG22	2.02	0.41
1:2A:196:A:C8	11:2P:46:LYS:HD2	2.55	0.41
1:2A:271(R):G:OP1	23:21:76:ARG:NH1	2.54	0.41
1:2A:311:A:H8	1:2A:311:A:OP1	2.03	0.41
1:2A:315:G:H2'	1:2A:316:C:C6	2.55	0.41
1:2A:535:C:H2'	1:2A:536:A:C8	2.56	0.41
1:2A:637:A:H2'	11:2P:117:GLU:OE1	2.21	0.41
1:2A:928:G:H3'	1:2A:928:G:C8	2.56	0.41
1:2A:1213:A:N3	1:2A:1238:G:O2'	2.46	0.41
1:2A:1418:G:OP1	1:2A:1588:C:O2'	2.39	0.41
1:2A:1499:C:H2'	1:2A:1500:G:C8	2.55	0.41
1:2A:1842:G:O2'	3:2D:253:GLN:OE1	2.37	0.41
1:2A:1913:A:C6	54:2w:38:A:H5'	2.56	0.41
1:2A:2078:C:C4	1:2A:2079:U:C4	3.09	0.41
1:2A:2369:A:H2'	1:2A:2370:G:C8	2.56	0.41
1:2A:2552:OMU:H2'	1:2A:2554:U:OP2	2.21	0.41
1:2A:2689:U:P	1:2A:2719:G:H22	2.43	0.41
2:2B:17:C:H2'	2:2B:18:G:O4'	2.20	0.41
4:2E:52:LEU:HA	4:2E:53:PRO:HD3	1.95	0.41
4:2E:101:ARG:CZ	4:2E:171:GLU:HB2	2.51	0.41
5:2F:192:LEU:HD22	5:2F:194:MET:HG3	2.03	0.41
7:2H:20:ALA:HB1	7:2H:21:PRO:HD2	2.02	0.41
8:2I:130:TYR:CE2	8:2I:132:PRO:HB3	2.56	0.41
13:2R:55:ALA:HA	13:2R:80:PHE:CE1	2.56	0.41
19:2X:39:ILE:HD13	19:2X:79:ALA:HB2	2.02	0.41
21:2Z:98:MET:O	21:2Z:126:VAL:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:20:19:LYS:HA	22:20:19:LYS:HD3	1.96	0.41
28:26:18:ARG:HD2	28:26:42:TRP:CG	2.56	0.41
29:27:12:ARG:NH2	29:27:44:PRO:HB3	2.36	0.41
32:2a:120:A:C6	32:2a:122:G:C2	3.09	0.41
32:2a:584:G:H2'	32:2a:585:G:C8	2.56	0.41
32:2a:656:C:H2'	32:2a:657:G:H8	1.86	0.41
32:2a:750:G:N3	46:2o:23:GLY:HA3	2.35	0.41
32:2a:884:U:H4'	32:2a:885:G:H5"	2.01	0.41
32:2a:909:A:H2'	32:2a:910:C:O4'	2.21	0.41
32:2a:976:G:OP1	45:2n:32:SER:N	2.54	0.41
32:2a:1063:C:H3'	32:2a:1064:G:H2'	2.02	0.41
33:2b:158:LEU:HA	33:2b:159:PRO:HD3	1.97	0.41
34:2c:108:ASN:HB3	34:2c:111:LEU:HB2	2.02	0.41
40:2i:50:LEU:H	40:2i:50:LEU:HG	1.70	0.41
42:2k:83:ILE:HA	42:2k:109:VAL:HG12	2.01	0.41
43:2l:57:LYS:HA	43:2l:67:THR:HA	2.03	0.41
48:2q:81:ARG:HA	48:2q:81:ARG:HD2	1.94	0.41
54:2w:8:4SU:O2'	54:2w:21:A:N1	2.54	0.41
55:2x:17:C:H5'	55:2x:61:C:OP1	2.20	0.41
1:1A:476:G:N1	1:1A:479:A:OP2	2.49	0.41
1:1A:1279:G:H4'	13:1R:31:HIS:CD2	2.56	0.41
1:1A:1394:U:H2'	1:1A:1395:A:O4'	2.21	0.41
1:1A:1999:C:H4'	1:1A:2723:C:O2	2.20	0.41
1:1A:2065:C:H2'	1:1A:2066:C:C6	2.56	0.41
1:1A:2206:G:H3'	1:1A:2207:G:C8	2.56	0.41
1:1A:2683:C:H2'	1:1A:2684:U:H6	1.86	0.41
61:1A:5262:HOH:O	4:1E:145:LYS:HD3	2.20	0.41
3:1D:43:ARG:HG2	3:1D:47:GLY:O	2.21	0.41
31:19:7:VAL:HG12	31:19:34:GLN:HB3	2.02	0.41
32:1a:428:G:OP2	35:1d:10:ARG:NH1	2.53	0.41
32:1a:458:C:H2'	32:1a:460:G:O4'	2.21	0.41
32:1a:762:C:H2'	32:1a:763:G:H8	1.85	0.41
34:1c:156:ARG:HH21	34:1c:161:GLU:HA	1.86	0.41
40:1i:127:LYS:O	40:1i:128:ARG:HG2	2.21	0.41
50:1s:41:VAL:HG22	50:1s:42:PRO:HD2	2.03	0.41
1:2A:857:C:H4'	22:20:23:VAL:HG21	2.03	0.41
1:2A:1153:C:H2'	1:2A:1154:G:O4'	2.21	0.41
1:2A:2271:G:OP1	22:20:18:ALA:HB1	2.21	0.41
7:2H:140:LYS:HE3	7:2H:140:LYS:HB2	1.80	0.41
13:2R:13:HIS:CE1	13:2R:16:HIS:HB2	2.56	0.41
15:2T:88:ILE:HG21	15:2T:91:ARG:NE	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:29:14:CYS:HA	31:29:27:CYS:HB2	2.03	0.41
32:2a:189(C):C:H2'	32:2a:189(D):C:O4'	2.19	0.41
32:2a:198:G:H2'	32:2a:199:G:C8	2.56	0.41
32:2a:790:A:N1	32:2a:1497:G:H5"	2.36	0.41
32:2a:976:G:C8	32:2a:1358:U:C2	3.09	0.41
36:2e:39:GLY:HA2	36:2e:69:VAL:HG13	2.02	0.41
36:2e:78:HIS:CD2	39:2h:104:ARG:HG3	2.54	0.41
39:2h:29:SER:HB3	39:2h:32:LYS:HG3	2.03	0.41
40:2i:24:GLY:HA2	40:2i:59:PHE:O	2.21	0.41
1:1A:183:C:N4	1:1A:213:A:H61	2.19	0.40
1:1A:253:C:H2'	1:1A:254:G:O4'	2.21	0.40
1:1A:330:A:N3	1:1A:330:A:H2'	2.37	0.40
1:1A:467:G:OP2	1:1A:467:G:H8	2.04	0.40
1:1A:478:A:N1	1:1A:500:G:H4'	2.36	0.40
1:1A:1060:U:C2	1:1A:1062:G:H1'	2.57	0.40
1:1A:1295:C:H2'	1:1A:1296:G:C8	2.56	0.40
1:1A:1668:A:N1	1:1A:1675:C:N4	2.67	0.40
1:1A:2018:G:H2'	1:1A:2019:A:C8	2.55	0.40
1:1A:2053:G:H5'	4:1E:144:ARG:O	2.21	0.40
1:1A:2115:G:H8	1:1A:2115:G:O5'	2.04	0.40
1:1A:2302:G:H2'	1:1A:2303:G:H8	1.87	0.40
1:1A:2472:G:O2'	1:1A:2478:A:N6	2.51	0.40
1:1A:2619:C:H4'	4:1E:151:TYR:O	2.21	0.40
4:1E:52:LEU:HA	4:1E:53:PRO:HD3	1.94	0.40
6:1G:58:GLN:O	6:1G:62:LEU:HG	2.21	0.40
17:1V:97:LYS:HA	17:1V:97:LYS:HD2	1.90	0.40
18:1W:7:ALA:HB2	18:1W:50:VAL:HG22	2.03	0.40
18:1W:11:ARG:NH1	18:1W:99:ARG:O	2.54	0.40
32:1a:999:C:N3	32:1a:1042:G:N2	2.64	0.40
32:1a:1145:C:H4'	32:1a:1146:A:H5'	2.03	0.40
32:1a:1226:C:H4'	50:1s:80:TYR:OH	2.21	0.40
36:1e:142:LEU:HD23	36:1e:142:LEU:HA	1.93	0.40
37:1f:65:VAL:HG21	37:1f:67:MET:HE2	2.02	0.40
54:1w:2:G:C6	54:1w:71:C:N3	2.86	0.40
1:2A:271(N):U:O2'	1:2A:271(O):C:H5'	2.21	0.40
1:2A:443:A:H1'	1:2A:1201:C:O4'	2.21	0.40
1:2A:764:A:O4'	3:2D:213:ARG:HG3	2.21	0.40
1:2A:1641:A:H2'	1:2A:1642:G:O4'	2.21	0.40
1:2A:1834:U:H4'	1:2A:1969:A:C6	2.56	0.40
1:2A:2059:A:O3'	5:2F:69:HIS:HA	2.21	0.40
3:2D:147:LEU:HD11	3:2D:183:ARG:NE	2.35	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2D:218:ARG:HB3	3:2D:219:PRO:HD2	2.03	0.40
32:2a:293:G:H5'	32:2a:610:G:C2	2.56	0.40
32:2a:299:G:C6	32:2a:300:A:C6	3.09	0.40
32:2a:942:G:C2	32:2a:1342:C:C2	3.09	0.40
32:2a:1097:C:O2'	32:2a:1169:A:N3	2.51	0.40
32:2a:1112:C:C4	34:2c:178:LEU:HD12	2.56	0.40
37:2f:76:ALA:O	37:2f:80:ARG:HG3	2.20	0.40
49:2r:37:VAL:O	49:2r:41:LYS:HG2	2.21	0.40
54:2y:52:G:H1	54:2y:62:C:N4	2.18	0.40
1:1A:1365:A:O4'	23:11:41:ARG:NH2	2.54	0.40
1:1A:1526:G:C6	1:1A:1527:G:C2	3.09	0.40
1:1A:1754:C:H2'	1:1A:1755:A:O4'	2.21	0.40
1:1A:1798:U:H5'	3:1D:259:THR:CG2	2.51	0.40
1:1A:1949:G:C6	1:1A:1950:G:C6	3.09	0.40
1:1A:1963:U:H4'	1:1A:1964:G:OP1	2.21	0.40
2:1B:4:C:H2'	2:1B:5:C:O4'	2.22	0.40
8:1I:26:ALA:HA	8:1I:30:LEU:HB2	2.03	0.40
8:1I:92:VAL:HG11	8:1I:144:VAL:HG11	2.02	0.40
11:1P:147:LEU:HD23	11:1P:148:LEU:N	2.36	0.40
21:1Z:31:ARG:H	21:1Z:31:ARG:HG3	1.72	0.40
32:1a:163:C:H2'	32:1a:164:U:C6	2.56	0.40
32:1a:894:G:C6	32:1a:895:G:C6	3.08	0.40
32:1a:1062:U:H2'	32:1a:1063:C:C6	2.56	0.40
33:1b:187:LEU:HD21	33:1b:204:ASN:O	2.20	0.40
49:1r:76:LEU:HD12	49:1r:76:LEU:HA	1.81	0.40
1:2A:217:G:H2'	1:2A:218:A:O4'	2.20	0.40
1:2A:2050:C:N4	1:2A:2051:A:C6	2.89	0.40
1:2A:2231:C:H2'	1:2A:2232:U:O4'	2.21	0.40
1:2A:2419:U:H5"	30:28:33:ASN:HB2	2.03	0.40
1:2A:2516:G:C6	1:2A:2517:C:C4	3.09	0.40
7:2H:13:LYS:HA	7:2H:14:GLY:HA2	1.74	0.40
7:2H:59:ARG:HA	7:2H:59:ARG:HD2	1.91	0.40
13:2R:28:LEU:HD23	13:2R:48:VAL:HG21	2.03	0.40
13:2R:96:ARG:HH21	13:2R:117:VAL:HG13	1.85	0.40
18:2W:6:ILE:HG22	18:2W:8:ARG:HG3	2.02	0.40
32:2a:269:C:H2'	32:2a:270:A:H8	1.86	0.40
32:2a:993:G:N3	32:2a:993:G:H2'	2.35	0.40
32:2a:1305:G:H5'	52:2u:4:GLY:HA3	2.03	0.40
32:2a:1442:G:H2'	32:2a:1442:G:N3	2.35	0.40
33:2b:95:GLN:NE2	33:2b:147:LYS:HE2	2.36	0.40
33:2b:196:LEU:HD12	33:2b:196:LEU:HA	1.84	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:2c:199:LYS:HB3	34:2c:201:TYR:CE2	2.56	0.40
35:2d:85:LYS:HG2	35:2d:86:LYS:H	1.85	0.40
44:2m:108:ARG:HA	44:2m:108:ARG:HD3	1.78	0.40
1:1A:189:G:H2'	1:1A:205:G:N2	2.37	0.40
1:1A:518:G:H4'	18:1W:18:ARG:HE	1.86	0.40
1:1A:1685:C:H2'	1:1A:1686:C:C6	2.56	0.40
1:1A:1948:G:H1'	32:1a:1483:A:H1'	2.04	0.40
1:1A:2576:G:H1'	61:1A:5158:HOH:O	2.21	0.40
1:1A:2712:U:O2'	1:1A:2713:A:H5'	2.21	0.40
6:1G:139:LEU:HA	6:1G:144:ILE:HB	2.03	0.40
7:1H:3:ARG:HG2	7:1H:6:ARG:NE	2.36	0.40
8:1I:97:ILE:O	8:1I:101:LEU:HB2	2.21	0.40
10:1O:102:VAL:HB	10:1O:106:LEU:HD12	2.03	0.40
11:1P:138:LEU:HD23	11:1P:145:PRO:HB3	2.03	0.40
14:1S:10:ARG:HG2	14:1S:91:PRO:HA	2.03	0.40
28:16:38:LYS:HE3	28:16:38:LYS:HB3	1.96	0.40
30:18:30:ARG:NH1	61:18:202:HOH:O	2.51	0.40
30:18:63:PRO:HG2	30:18:64:TYR:CD2	2.56	0.40
31:19:11:CYS:HB3	31:19:32:HIS:CE1	2.56	0.40
32:1a:356:A:N3	32:1a:368:U:O2'	2.42	0.40
32:1a:951:G:OP2	44:1m:102:ARG:NH1	2.54	0.40
32:1a:1284:C:OP2	32:1a:1285:A:O2'	2.36	0.40
32:1a:1464:G:H2'	32:1a:1465:C:C6	2.57	0.40
33:1b:77:ALA:HB2	33:1b:211:ILE:HD13	2.03	0.40
42:1k:18:ARG:HB2	42:1k:33:THR:OG1	2.21	0.40
42:1k:20:TYR:CZ	42:1k:83:ILE:HD12	2.57	0.40
42:1k:89:ALA:C	42:1k:91:ARG:H	2.29	0.40
47:1p:27:LYS:HG3	47:1p:30:GLY:HA3	2.03	0.40
50:1s:66:MET:HB2	50:1s:74:PHE:CZ	2.55	0.40
51:1t:57:ARG:HH12	51:1t:100:ILE:HD12	1.85	0.40
1:2A:479:A:O2'	1:2A:481:G:H5'	2.21	0.40
1:2A:1032:A:N6	1:2A:1122:G:H1	2.09	0.40
1:2A:1125:G:H5'	31:29:37:GLY:HA2	2.03	0.40
1:2A:1340:U:H3'	19:2X:57:LEU:HD22	2.04	0.40
1:2A:1449:A:HO2'	1:2A:1529:G:H21	1.59	0.40
1:2A:2156:G:H2'	1:2A:2157:G:C6	2.56	0.40
1:2A:2312:U:H5'	6:2G:88:ILE:HD11	2.02	0.40
1:2A:2375:G:O2'	1:2A:2377:A:N7	2.36	0.40
5:2F:125:LEU:HD11	5:2F:199:TRP:CE3	2.55	0.40
7:2H:7:LEU:O	7:2H:69:ARG:NE	2.43	0.40
10:2O:98:VAL:HG23	10:2O:118:ALA:HA	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:2X:95:LEU:H	19:2X:95:LEU:HD12	1.86	0.40
20:2Y:44:ILE:HA	20:2Y:63:LYS:O	2.22	0.40
24:22:64:LEU:O	24:22:68:ARG:HG3	2.22	0.40
32:2a:42:G:O2'	32:2a:622:A:N1	2.51	0.40
32:2a:66:G:H8	32:2a:66:G:OP1	2.04	0.40
32:2a:228:A:H2'	32:2a:229:U:C6	2.56	0.40
32:2a:391:G:C6	32:2a:392:G:C5	3.09	0.40
32:2a:445:G:H2'	32:2a:446:G:C8	2.56	0.40
32:2a:1005:A:H1'	32:2a:1025:U:N3	2.36	0.40
32:2a:1013:G:O2'	32:2a:1015:A:N7	2.42	0.40
32:2a:1204:A:OP1	45:2n:3:ARG:NH2	2.53	0.40
32:2a:1372:U:OP1	40:2i:72:GLY:N	2.44	0.40
42:2k:48:ILE:HG21	42:2k:63:LEU:HB3	2.03	0.40
49:2r:61:LYS:O	49:2r:65:ILE:HG12	2.21	0.40
54:2w:68:C:H2'	54:2w:69:A:H8	1.87	0.40
1:1A:107:C:H2'	1:1A:108:U:H6	1.86	0.40
1:1A:185:U:H4'	1:1A:218:A:H4'	2.03	0.40
1:1A:458:G:H8	29:17:37:LYS:O	2.04	0.40
1:1A:1607:C:H4'	1:1A:1608:A:O5'	2.21	0.40
1:1A:1927:A:C6	1:1A:1928:A:C6	3.10	0.40
1:1A:2256:G:H2'	1:1A:2257:U:O4'	2.20	0.40
3:1D:72:LYS:HD3	3:1D:97:TYR:CE1	2.56	0.40
6:1G:139:LEU:H	6:1G:139:LEU:HG	1.66	0.40
9:1N:42:TRP:HA	9:1N:48:MET:SD	2.61	0.40
15:1T:127:ALA:C	15:1T:129:ARG:N	2.79	0.40
28:16:17:LYS:HA	28:16:17:LYS:HD3	1.95	0.40
32:1a:1305:G:HO2'	32:1a:1306:A:P	2.45	0.40
32:1a:1333:A:H2'	32:1a:1334:G:O4'	2.22	0.40
32:1a:1518:MA6:H93	32:1a:1519:MA6:H92	2.02	0.40
33:1b:30:ARG:NH2	33:1b:195:ASP:OD1	2.55	0.40
34:1c:77:ILE:H	34:1c:77:ILE:HG12	1.75	0.40
1:2A:383:U:H2'	1:2A:385:C:H5	1.86	0.40
1:2A:600:G:H2'	1:2A:601:C:C6	2.57	0.40
1:2A:1348:G:O6	1:2A:1349:A:N6	2.54	0.40
1:2A:1913:A:H4'	1:2A:1914:C:O5'	2.20	0.40
1:2A:2655:G:O2'	1:2A:2664:G:O6	2.35	0.40
1:2A:2756:U:H3	1:2A:2758:A:H62	1.69	0.40
3:2D:38:LYS:HE2	3:2D:39:LYS:O	2.21	0.40
5:2F:41:LEU:HD22	5:2F:44:ARG:NH1	2.29	0.40
6:2G:114:ILE:HB	6:2G:117:PHE:HD1	1.87	0.40
9:2N:4:TYR:CE2	16:2U:100:VAL:HG11	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:2a:392:G:OP1	47:2p:8:ARG:NH2	2.54	0.40
32:2a:687:A:H4'	32:2a:688:G:O5'	2.21	0.40
32:2a:754:C:H5'	46:2o:72:ARG:HH12	1.86	0.40
32:2a:1264:C:C4	32:2a:1272:G:O6	2.74	0.40
32:2a:1356:G:N2	32:2a:1367:C:O2	2.55	0.40
33:2b:15:VAL:HB	33:2b:209:ARG:HB3	2.04	0.40
33:2b:40:HIS:HB2	33:2b:190:THR:HG21	2.02	0.40
33:2b:140:HIS:O	33:2b:144:ARG:HG3	2.22	0.40
35:2d:195:ALA:C	35:2d:196:LEU:HD12	2.46	0.40
38:2g:51:GLN:HG3	38:2g:58:PRO:HD3	2.02	0.40
44:2m:60:VAL:HG13	44:2m:64:TRP:HE3	1.86	0.40
48:2q:62:SER:OG	48:2q:72:ARG:HG2	2.22	0.40
51:2t:47:GLY:HA2	51:2t:48:LYS:C	2.47	0.40
1:1A:1022:G:C5	1:1A:1140:C:C4	3.09	0.40
57:1A:4100:LUJ:OAL	57:1A:4100:LUJ:NAQ	2.54	0.40
2:1B:15:A:H1'	2:1B:110:G:C5	2.56	0.40
9:1N:89:LYS:HE2	9:1N:89:LYS:HB2	1.93	0.40
21:1Z:121:HIS:HB3	21:1Z:123:ASP:O	2.21	0.40
27:15:16:ARG:NH1	27:15:17:ASP:OD1	2.55	0.40
32:1a:520:A:N1	32:1a:536:C:H1'	2.36	0.40
32:1a:1101:A:H4'	32:1a:1102:A:O5'	2.21	0.40
33:1b:124:SER:HB3	33:1b:125:PRO:HD2	2.03	0.40
34:1c:120:VAL:O	34:1c:124:ILE:HG23	2.20	0.40
38:1g:30:ILE:H	38:1g:30:ILE:HG13	1.77	0.40
43:1l:27:LEU:HD13	43:1l:98:TYR:CE1	2.56	0.40
1:2A:375:C:H2'	1:2A:376:C:C6	2.56	0.40
1:2A:460:A:C2	1:2A:470:A:C4	3.10	0.40
1:2A:730:C:H2'	1:2A:731:C:C6	2.57	0.40
1:2A:958:U:H5"	12:2Q:14:ARG:HD3	2.04	0.40
1:2A:1028:A:H2'	1:2A:1029:A:C8	2.56	0.40
1:2A:1193:G:H2'	1:2A:1194:A:H8	1.86	0.40
1:2A:1827:C:OP2	3:2D:222:ARG:HD2	2.22	0.40
1:2A:2206:G:H4'	1:2A:2206:G:OP2	2.21	0.40
1:2A:2526:G:H5'	1:2A:2742:C:O2'	2.22	0.40
1:2A:2593:U:H2'	1:2A:2594:C:C6	2.56	0.40
7:2H:152:ARG:HA	7:2H:152:ARG:HD3	1.83	0.40
12:2Q:43:THR:HA	12:2Q:94:VAL:HG12	2.03	0.40
15:2T:21:GLU:O	15:2T:91:ARG:NH1	2.50	0.40
15:2T:127:ALA:C	15:2T:129:ARG:N	2.80	0.40
18:2W:71:VAL:HA	18:2W:107:LEU:HD12	2.02	0.40
23:21:23:LYS:HE3	23:21:23:LYS:HB2	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:25:6:VAL:HG22	27:25:7:PRO:HD2	2.04	0.40
32:2a:114:U:H2'	32:2a:115:G:C8	2.55	0.40
32:2a:242:C:H2'	32:2a:243:A:H5'	2.03	0.40
32:2a:999:C:C4	32:2a:1000:U:C4	3.10	0.40
32:2a:1133:G:C6	32:2a:1142:G:C6	3.09	0.40
32:2a:1152:A:OP1	41:2j:70:ARG:NH2	2.54	0.40
32:2a:1291:G:C6	32:2a:1292:U:C4	3.09	0.40
33:2b:50:GLU:O	33:2b:54:THR:OG1	2.34	0.40
36:2e:102:ALA:H	36:2e:107:ARG:NH2	2.19	0.40
42:2k:54:ARG:HH12	54:2y:39:G:H4'	1.86	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	255 (93%)	17 (6%)	1 (0%)	30	50
3	2D	273/276 (99%)	261 (96%)	11 (4%)	1 (0%)	30	50
4	1E	202/206 (98%)	192 (95%)	9 (4%)	1 (0%)	24	43
4	2E	202/206 (98%)	196 (97%)	5 (2%)	1 (0%)	24	43
5	1F	201/210 (96%)	196 (98%)	4 (2%)	1 (0%)	24	43
5	2F	201/210 (96%)	196 (98%)	3 (2%)	2 (1%)	12	24
6	1G	179/182 (98%)	163 (91%)	15 (8%)	1 (1%)	21	38
6	2G	179/182 (98%)	162 (90%)	15 (8%)	2 (1%)	11	22
7	1H	172/180 (96%)	164 (95%)	7 (4%)	1 (1%)	21	38
7	2H	172/180 (96%)	157 (91%)	14 (8%)	1 (1%)	21	38
8	1I	144/148 (97%)	134 (93%)	9 (6%)	1 (1%)	18	34
8	2I	144/148 (97%)	133 (92%)	9 (6%)	2 (1%)	9	17

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
9	1N	138/140 (99%)	132 (96%)	6 (4%)	0	100 100
9	2N	138/140 (99%)	134 (97%)	4 (3%)	0	100 100
10	1O	120/122 (98%)	113 (94%)	7 (6%)	0	100 100
10	2O	120/122 (98%)	113 (94%)	7 (6%)	0	100 100
11	1P	147/150 (98%)	137 (93%)	9 (6%)	1 (1%)	18 34
11	2P	147/150 (98%)	140 (95%)	7 (5%)	0	100 100
12	1Q	139/141 (99%)	134 (96%)	5 (4%)	0	100 100
12	2Q	139/141 (99%)	130 (94%)	9 (6%)	0	100 100
13	1R	116/118 (98%)	112 (97%)	4 (3%)	0	100 100
13	2R	116/118 (98%)	112 (97%)	4 (3%)	0	100 100
14	1S	108/112 (96%)	105 (97%)	3 (3%)	0	100 100
14	2S	108/112 (96%)	101 (94%)	7 (6%)	0	100 100
15	1T	129/146 (88%)	121 (94%)	8 (6%)	0	100 100
15	2T	129/146 (88%)	122 (95%)	5 (4%)	2 (2%)	7 14
16	1U	114/118 (97%)	112 (98%)	2 (2%)	0	100 100
16	2U	114/118 (97%)	112 (98%)	2 (2%)	0	100 100
17	1V	99/101 (98%)	92 (93%)	5 (5%)	2 (2%)	6 11
17	2V	99/101 (98%)	93 (94%)	6 (6%)	0	100 100
18	1W	110/113 (97%)	109 (99%)	1 (1%)	0	100 100
18	2W	110/113 (97%)	110 (100%)	0	0	100 100
19	1X	93/96 (97%)	89 (96%)	4 (4%)	0	100 100
19	2X	93/96 (97%)	88 (95%)	5 (5%)	0	100 100
20	1Y	105/110 (96%)	100 (95%)	4 (4%)	1 (1%)	12 24
20	2Y	105/110 (96%)	98 (93%)	7 (7%)	0	100 100
21	1Z	148/206 (72%)	131 (88%)	14 (10%)	3 (2%)	6 11
21	2Z	156/206 (76%)	137 (88%)	15 (10%)	4 (3%)	4 7
22	10	81/85 (95%)	78 (96%)	3 (4%)	0	100 100
22	20	81/85 (95%)	78 (96%)	3 (4%)	0	100 100
23	11	95/98 (97%)	93 (98%)	2 (2%)	0	100 100
23	21	95/98 (97%)	92 (97%)	3 (3%)	0	100 100
24	12	68/72 (94%)	68 (100%)	0	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
24	22	68/72 (94%)	67 (98%)	1 (2%)	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	56 (98%)	0	1 (2%)	6 13
26	14	67/71 (94%)	54 (81%)	9 (13%)	4 (6%)	1 1
26	24	67/71 (94%)	54 (81%)	9 (13%)	4 (6%)	1 1
27	15	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
27	25	57/60 (95%)	53 (93%)	4 (7%)	0	100 100
28	16	51/54 (94%)	47 (92%)	4 (8%)	0	100 100
28	26	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
29	17	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	59 (95%)	3 (5%)	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
33	1b	229/256 (90%)	201 (88%)	23 (10%)	5 (2%)	5 10
33	2b	229/256 (90%)	203 (89%)	22 (10%)	4 (2%)	7 14
34	1c	204/239 (85%)	190 (93%)	14 (7%)	0	100 100
34	2c	204/239 (85%)	187 (92%)	16 (8%)	1 (0%)	24 43
35	1d	206/209 (99%)	200 (97%)	6 (3%)	0	100 100
35	2d	206/209 (99%)	200 (97%)	6 (3%)	0	100 100
36	1e	146/162 (90%)	137 (94%)	8 (6%)	1 (1%)	18 34
36	2e	146/162 (90%)	137 (94%)	8 (6%)	1 (1%)	18 34
37	1f	98/101 (97%)	93 (95%)	5 (5%)	0	100 100
37	2f	98/101 (97%)	95 (97%)	3 (3%)	0	100 100
38	1g	153/156 (98%)	147 (96%)	3 (2%)	3 (2%)	6 11
38	2g	153/156 (98%)	142 (93%)	10 (6%)	1 (1%)	18 34
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100 100
39	2h	135/138 (98%)	129 (96%)	6 (4%)	0	100 100
40	1i	125/128 (98%)	115 (92%)	10 (8%)	0	100 100
40	2i	125/128 (98%)	111 (89%)	13 (10%)	1 (1%)	16 30

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
41	1j	95/105 (90%)	83 (87%)	9 (10%)	3 (3%)	3 5
41	2j	94/105 (90%)	83 (88%)	7 (7%)	4 (4%)	2 3
42	1k	112/129 (87%)	106 (95%)	5 (4%)	1 (1%)	14 28
42	2k	112/129 (87%)	103 (92%)	7 (6%)	2 (2%)	6 13
43	1l	119/132 (90%)	114 (96%)	5 (4%)	0	100 100
43	2l	119/132 (90%)	113 (95%)	6 (5%)	0	100 100
44	1m	121/126 (96%)	111 (92%)	10 (8%)	0	100 100
44	2m	120/126 (95%)	109 (91%)	9 (8%)	2 (2%)	7 14
45	1n	58/61 (95%)	55 (95%)	3 (5%)	0	100 100
45	2n	58/61 (95%)	53 (91%)	5 (9%)	0	100 100
46	1o	86/89 (97%)	83 (96%)	1 (1%)	2 (2%)	5 9
46	2o	86/89 (97%)	82 (95%)	3 (4%)	1 (1%)	10 20
47	1p	80/88 (91%)	78 (98%)	2 (2%)	0	100 100
47	2p	80/88 (91%)	77 (96%)	2 (2%)	1 (1%)	9 18
48	1q	97/105 (92%)	93 (96%)	3 (3%)	1 (1%)	12 24
48	2q	97/105 (92%)	91 (94%)	6 (6%)	0	100 100
49	1r	66/88 (75%)	63 (96%)	3 (4%)	0	100 100
49	2r	66/88 (75%)	63 (96%)	3 (4%)	0	100 100
50	1s	81/93 (87%)	72 (89%)	9 (11%)	0	100 100
50	2s	81/93 (87%)	69 (85%)	12 (15%)	0	100 100
51	1t	94/106 (89%)	88 (94%)	4 (4%)	2 (2%)	5 11
51	2t	94/106 (89%)	87 (93%)	5 (5%)	2 (2%)	5 11
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	11370/12128 (94%)	10699 (94%)	596 (5%)	75 (1%)	18 34

All (75) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
7	1H	126	PRO
8	1I	10	GLU
26	14	65	ASP
33	1b	17	PHE
51	1t	100	ILE

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Mol	Chain	Res	Type
5	2F	130	ALA
7	2H	126	PRO
8	2I	10	GLU
26	24	55	ARG
26	24	56	VAL
33	2b	125	PRO
33	2b	128	GLU
5	1F	130	ALA
26	14	45	GLY
38	1g	114	ARG
41	1j	75	ILE
6	2G	47	LYS
21	2Z	146	ILE
26	24	47	GLN
26	24	65	ASP
41	2j	75	ILE
42	2k	49	GLY
17	1V	53	GLU
21	1Z	2	GLU
33	1b	234	PRO
33	2b	20	GLU
41	2j	79	ARG
4	1E	52	LEU
6	1G	84	LYS
20	1Y	103	GLY
26	14	53	GLU
33	1b	9	GLU
46	1o	20	GLY
51	1t	47	GLY
5	2F	89	VAL
51	2t	47	GLY
51	2t	100	ILE
3	1D	3	VAL
17	1V	43	GLU
26	14	55	ARG
33	1b	233	SER
36	1e	86	ALA
3	2D	3	VAL
8	2I	145	VAL
15	2T	37	GLY
21	2Z	141	VAL
41	2j	55	LYS

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Mol	Chain	Res	Type
44	2m	99	ARG
44	2m	101	GLN
46	2o	20	GLY
21	1Z	134	PRO
38	1g	80	VAL
4	2E	52	LEU
15	2T	127	ALA
33	2b	78	GLN
34	2c	66	VAL
36	2e	85	GLY
40	2i	11	LYS
21	1Z	165	VAL
33	1b	231	GLU
11	1P	93	GLY
38	2g	80	VAL
38	1g	55	GLY
41	1j	39	PRO
21	2Z	165	VAL
25	23	50	VAL
41	2j	39	PRO
42	1k	105	VAL
46	1o	19	PRO
48	1q	33	GLY
6	2G	52	ILE
21	2Z	134	PRO
42	2k	105	VAL
41	1j	77	PRO
47	2p	53	VAL

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	1D	215/218 (99%)	203 (94%)	12 (6%)	19 36
3	2D	215/218 (99%)	206 (96%)	9 (4%)	26 49
4	1E	164/166 (99%)	155 (94%)	9 (6%)	19 37

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
4	2E	164/166 (99%)	153 (93%)	11 (7%)	15 28
5	1F	160/166 (96%)	148 (92%)	12 (8%)	12 24
5	2F	159/166 (96%)	145 (91%)	14 (9%)	9 18
6	1G	143/156 (92%)	132 (92%)	11 (8%)	12 22
6	2G	143/156 (92%)	132 (92%)	11 (8%)	12 22
7	1H	144/148 (97%)	140 (97%)	4 (3%)	38 61
7	2H	144/148 (97%)	137 (95%)	7 (5%)	22 43
8	1I	113/124 (91%)	100 (88%)	13 (12%)	5 10
8	2I	105/124 (85%)	94 (90%)	11 (10%)	6 13
9	1N	118/119 (99%)	109 (92%)	9 (8%)	12 23
9	2N	118/119 (99%)	107 (91%)	11 (9%)	8 16
10	1O	100/100 (100%)	97 (97%)	3 (3%)	36 60
10	2O	100/100 (100%)	97 (97%)	3 (3%)	36 60
11	1P	115/116 (99%)	109 (95%)	6 (5%)	21 39
11	2P	115/116 (99%)	112 (97%)	3 (3%)	40 63
12	1Q	111/111 (100%)	104 (94%)	7 (6%)	16 30
12	2Q	111/111 (100%)	106 (96%)	5 (4%)	24 46
13	1R	101/101 (100%)	91 (90%)	10 (10%)	7 15
13	2R	101/101 (100%)	95 (94%)	6 (6%)	18 33
14	1S	86/88 (98%)	77 (90%)	9 (10%)	6 13
14	2S	85/88 (97%)	80 (94%)	5 (6%)	18 33
15	1T	115/127 (91%)	110 (96%)	5 (4%)	26 47
15	2T	113/127 (89%)	111 (98%)	2 (2%)	51 71
16	1U	93/94 (99%)	88 (95%)	5 (5%)	20 38
16	2U	93/94 (99%)	89 (96%)	4 (4%)	26 47
17	1V	80/82 (98%)	74 (92%)	6 (8%)	12 24
17	2V	80/82 (98%)	75 (94%)	5 (6%)	16 30
18	1W	90/92 (98%)	87 (97%)	3 (3%)	33 57
18	2W	90/92 (98%)	86 (96%)	4 (4%)	25 47
19	1X	77/78 (99%)	75 (97%)	2 (3%)	40 63
19	2X	77/78 (99%)	70 (91%)	7 (9%)	9 17

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
20	1Y	85/91 (93%)	75 (88%)	10 (12%)	5 9
20	2Y	85/91 (93%)	78 (92%)	7 (8%)	10 20
21	1Z	135/179 (75%)	123 (91%)	12 (9%)	9 17
21	2Z	137/179 (76%)	127 (93%)	10 (7%)	13 24
22	10	65/67 (97%)	63 (97%)	2 (3%)	35 59
22	20	65/67 (97%)	65 (100%)	0	100 100
23	11	80/83 (96%)	78 (98%)	2 (2%)	42 64
23	21	80/83 (96%)	77 (96%)	3 (4%)	29 52
24	12	65/67 (97%)	64 (98%)	1 (2%)	57 74
24	22	65/67 (97%)	63 (97%)	2 (3%)	35 59
25	13	51/52 (98%)	44 (86%)	7 (14%)	3 6
25	23	50/52 (96%)	48 (96%)	2 (4%)	28 50
26	14	59/63 (94%)	49 (83%)	10 (17%)	2 3
26	24	53/63 (84%)	47 (89%)	6 (11%)	5 11
27	15	50/52 (96%)	47 (94%)	3 (6%)	17 32
27	25	50/52 (96%)	48 (96%)	2 (4%)	28 50
28	16	51/52 (98%)	47 (92%)	4 (8%)	11 21
28	26	50/52 (96%)	46 (92%)	4 (8%)	11 20
29	17	41/42 (98%)	38 (93%)	3 (7%)	13 24
29	27	41/42 (98%)	37 (90%)	4 (10%)	7 15
30	18	54/55 (98%)	49 (91%)	5 (9%)	8 16
30	28	54/55 (98%)	51 (94%)	3 (6%)	19 36
31	19	34/34 (100%)	33 (97%)	1 (3%)	37 61
31	29	34/34 (100%)	33 (97%)	1 (3%)	37 61
33	1b	192/220 (87%)	180 (94%)	12 (6%)	16 30
33	2b	187/220 (85%)	164 (88%)	23 (12%)	4 8
34	1c	142/188 (76%)	130 (92%)	12 (8%)	10 18
34	2c	140/188 (74%)	135 (96%)	5 (4%)	31 55
35	1d	169/181 (93%)	160 (95%)	9 (5%)	20 39
35	2d	173/181 (96%)	166 (96%)	7 (4%)	28 50
36	1e	113/123 (92%)	104 (92%)	9 (8%)	11 20

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
36	2e	114/123 (93%)	109 (96%)	5 (4%)	25 47
37	1f	84/90 (93%)	81 (96%)	3 (4%)	31 55
37	2f	85/90 (94%)	80 (94%)	5 (6%)	18 33
38	1g	119/127 (94%)	116 (98%)	3 (2%)	42 64
38	2g	120/127 (94%)	118 (98%)	2 (2%)	53 71
39	1h	114/119 (96%)	108 (95%)	6 (5%)	20 39
39	2h	114/119 (96%)	111 (97%)	3 (3%)	40 63
40	1i	90/99 (91%)	87 (97%)	3 (3%)	33 57
40	2i	89/99 (90%)	82 (92%)	7 (8%)	11 21
41	1j	66/92 (72%)	59 (89%)	7 (11%)	6 13
41	2j	69/92 (75%)	65 (94%)	4 (6%)	18 34
42	1k	82/99 (83%)	81 (99%)	1 (1%)	63 78
42	2k	83/99 (84%)	79 (95%)	4 (5%)	23 44
43	1l	96/108 (89%)	87 (91%)	9 (9%)	8 16
43	2l	96/108 (89%)	95 (99%)	1 (1%)	68 81
44	1m	93/101 (92%)	87 (94%)	6 (6%)	15 29
44	2m	92/101 (91%)	88 (96%)	4 (4%)	26 47
45	1n	49/50 (98%)	41 (84%)	8 (16%)	2 3
45	2n	49/50 (98%)	46 (94%)	3 (6%)	17 31
46	1o	78/80 (98%)	76 (97%)	2 (3%)	40 63
46	2o	78/80 (98%)	77 (99%)	1 (1%)	61 76
47	1p	69/74 (93%)	63 (91%)	6 (9%)	9 18
47	2p	68/74 (92%)	62 (91%)	6 (9%)	9 18
48	1q	94/97 (97%)	92 (98%)	2 (2%)	47 67
48	2q	94/97 (97%)	93 (99%)	1 (1%)	65 79
49	1r	59/77 (77%)	56 (95%)	3 (5%)	21 40
49	2r	59/77 (77%)	57 (97%)	2 (3%)	32 57
50	1s	69/80 (86%)	67 (97%)	2 (3%)	37 61
50	2s	67/80 (84%)	64 (96%)	3 (4%)	24 46
51	1t	70/82 (85%)	67 (96%)	3 (4%)	26 47
51	2t	70/82 (85%)	65 (93%)	5 (7%)	13 25

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
52	1u	18/22 (82%)	18 (100%)	0	100 100
52	2u	18/22 (82%)	18 (100%)	0	100 100
All	All	9303/10064 (92%)	8758 (94%)	545 (6%)	18 33

All (545) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	12	SER
3	1D	32	SER
3	1D	61	LEU
3	1D	94	LEU
3	1D	106	ILE
3	1D	162	SER
3	1D	173	VAL
3	1D	193	VAL
3	1D	204	ILE
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
4	1E	21	VAL
4	1E	24	THR
4	1E	33	VAL
4	1E	34	VAL
4	1E	47	VAL
4	1E	116	VAL
4	1E	170	LEU
4	1E	175	VAL
4	1E	181	LEU
5	1F	24	LEU
5	1F	28	ILE
5	1F	35	GLU
5	1F	52	LYS
5	1F	53	THR
5	1F	57	VAL
5	1F	88	VAL
5	1F	106	ARG
5	1F	170	LEU
5	1F	175	THR
5	1F	183	VAL
5	1F	201	VAL
6	1G	5	VAL

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Mol	Chain	Res	Type
6	1G	43	LEU
6	1G	77	ILE
6	1G	79	ASN
6	1G	82	LEU
6	1G	90	LEU
6	1G	132	ASN
6	1G	133	LEU
6	1G	139	LEU
6	1G	145	THR
6	1G	175	LEU
7	1H	15	VAL
7	1H	18	GLU
7	1H	45	VAL
7	1H	57	ASP
8	1I	9	LEU
8	1I	10	GLU
8	1I	31	LEU
8	1I	38	LEU
8	1I	47	LEU
8	1I	78	THR
8	1I	81	VAL
8	1I	92	VAL
8	1I	101	LEU
8	1I	108	THR
8	1I	123	LEU
8	1I	127	VAL
8	1I	145	VAL
9	1N	14	VAL
9	1N	28	THR
9	1N	33	LEU
9	1N	34	LEU
9	1N	46	VAL
9	1N	48	MET
9	1N	62	VAL
9	1N	73	THR
9	1N	112	LEU
10	1O	10	VAL
10	1O	28	SER
10	1O	58	VAL
11	1P	42	SER
11	1P	59	LEU
11	1P	83	VAL

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Mol	Chain	Res	Type
11	1P	95	VAL
11	1P	101	VAL
11	1P	125	VAL
12	1Q	8	LYS
12	1Q	35	VAL
12	1Q	64	ILE
12	1Q	98	LYS
12	1Q	109	VAL
12	1Q	110	THR
12	1Q	138	ASP
13	1R	15	SER
13	1R	29	LEU
13	1R	44	LEU
13	1R	54	LEU
13	1R	65	LEU
13	1R	67	LEU
13	1R	96	ARG
13	1R	100	LEU
13	1R	111	LEU
13	1R	114	VAL
14	1S	3	ARG
14	1S	13	ARG
14	1S	14	VAL
14	1S	20	ARG
14	1S	25	ARG
14	1S	48	LEU
14	1S	69	VAL
14	1S	75	GLU
14	1S	110	LEU
15	1T	6	LEU
15	1T	28	VAL
15	1T	82	LEU
15	1T	88	ILE
15	1T	128	GLU
16	1U	8	VAL
16	1U	59	ARG
16	1U	74	LEU
16	1U	77	SER
16	1U	83	LEU
17	1V	46	VAL
17	1V	51	VAL
17	1V	52	VAL

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Mol	Chain	Res	Type
17	1V	61	VAL
17	1V	72	VAL
17	1V	79	VAL
18	1W	11	ARG
18	1W	17	VAL
18	1W	107	LEU
19	1X	33	LYS
19	1X	70	LEU
20	1Y	7	VAL
20	1Y	14	LEU
20	1Y	43	ASN
20	1Y	49	VAL
20	1Y	70	SER
20	1Y	72	VAL
20	1Y	85	VAL
20	1Y	99	CYS
20	1Y	106	LEU
20	1Y	107	ASP
21	1Z	61	LEU
21	1Z	70	LEU
21	1Z	76	LEU
21	1Z	78	LYS
21	1Z	91	LEU
21	1Z	124	ILE
21	1Z	126	VAL
21	1Z	141	VAL
21	1Z	153	SER
21	1Z	161	VAL
21	1Z	165	VAL
21	1Z	171	ILE
22	10	10	THR
22	10	14	ARG
23	11	30	VAL
23	11	35	THR
24	12	3	LEU
25	13	3	ARG
25	13	17	LYS
25	13	23	LEU
25	13	30	ARG
25	13	34	GLU
25	13	54	VAL
25	13	56	VAL

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Mol	Chain	Res	Type
26	14	27	THR
26	14	28	LYS
26	14	48	ARG
26	14	49	PHE
26	14	50	VAL
26	14	52	THR
26	14	56	VAL
26	14	57	GLU
26	14	58	ARG
26	14	65	ASP
27	15	6	VAL
27	15	16	ARG
27	15	29	THR
28	16	9	LEU
28	16	19	ARG
28	16	47	THR
28	16	48	VAL
29	17	39	ARG
29	17	43	THR
29	17	46	VAL
30	18	14	VAL
30	18	23	VAL
30	18	32	LEU
30	18	43	GLN
30	18	58	ILE
31	19	7	VAL
33	1b	30	ARG
33	1b	37	ASN
33	1b	48	MET
33	1b	81	VAL
33	1b	94	ASN
33	1b	112	VAL
33	1b	122	PHE
33	1b	136	VAL
33	1b	160	ASP
33	1b	185	ILE
33	1b	222	ILE
33	1b	234	PRO
34	1c	3	ASN
34	1c	8	ILE
34	1c	19	GLU
34	1c	52	LEU

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Mol	Chain	Res	Type
34	1c	57	ILE
34	1c	70	VAL
34	1c	77	ILE
34	1c	115	LEU
34	1c	172	ARG
34	1c	188	LEU
34	1c	195	VAL
34	1c	196	LEU
35	1d	108	LEU
35	1d	127	THR
35	1d	135	LEU
35	1d	137	SER
35	1d	144	ASP
35	1d	170	VAL
35	1d	175	SER
35	1d	178	VAL
35	1d	194	LEU
36	1e	13	ILE
36	1e	20	GLN
36	1e	31	LEU
36	1e	41	VAL
36	1e	64	ARG
36	1e	75	THR
36	1e	81	GLU
36	1e	91	LEU
36	1e	120	THR
37	1f	7	ASN
37	1f	72	VAL
37	1f	92	LYS
38	1g	50	ILE
38	1g	104	LEU
38	1g	113	GLU
39	1h	19	VAL
39	1h	25	ASP
39	1h	26	VAL
39	1h	29	SER
39	1h	63	LEU
39	1h	112	LEU
40	1i	17	VAL
40	1i	92	TYR
40	1i	128	ARG
41	1j	8	LEU

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Mol	Chain	Res	Type
41	1j	35	SER
41	1j	38	ILE
41	1j	49	VAL
41	1j	72	VAL
41	1j	92	THR
41	1j	97	GLU
42	1k	114	VAL
43	1l	27	LEU
43	1l	28	LYS
43	1l	54	LYS
43	1l	55	VAL
43	1l	58	VAL
43	1l	70	ILE
43	1l	83	VAL
43	1l	104	VAL
43	1l	113	ARG
44	1m	3	ARG
44	1m	19	LEU
44	1m	47	ASP
44	1m	60	VAL
44	1m	88	ARG
44	1m	117	VAL
45	1n	3	ARG
45	1n	7	ILE
45	1n	13	THR
45	1n	18	VAL
45	1n	22	THR
45	1n	33	VAL
45	1n	56	VAL
45	1n	60	SER
46	1o	21	ASP
46	1o	27	VAL
47	1p	1	MET
47	1p	2	VAL
47	1p	20	VAL
47	1p	45	THR
47	1p	57	ARG
47	1p	67	THR
48	1q	35	VAL
48	1q	53	LEU
49	1r	26	LEU
49	1r	47	THR

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Mol	Chain	Res	Type
49	1r	82	THR
50	1s	77	THR
50	1s	79	THR
51	1t	45	GLN
51	1t	72	LEU
51	1t	100	ILE
3	2D	10	THR
3	2D	61	LEU
3	2D	94	LEU
3	2D	142	VAL
3	2D	204	ILE
3	2D	221	VAL
3	2D	229	VAL
3	2D	242	ARG
3	2D	261	LYS
4	2E	9	VAL
4	2E	12	THR
4	2E	21	VAL
4	2E	27	LEU
4	2E	33	VAL
4	2E	90	THR
4	2E	116	VAL
4	2E	119	ARG
4	2E	134	ILE
4	2E	145	LYS
4	2E	181	LEU
5	2F	20	LEU
5	2F	57	VAL
5	2F	70	THR
5	2F	88	VAL
5	2F	106	ARG
5	2F	107	LYS
5	2F	157	VAL
5	2F	158	THR
5	2F	170	LEU
5	2F	175	THR
5	2F	183	VAL
5	2F	192	LEU
5	2F	195	ASP
5	2F	201	VAL
6	2G	3	LEU
6	2G	19	LEU

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Mol	Chain	Res	Type
6	2G	21	ARG
6	2G	43	LEU
6	2G	47	LYS
6	2G	60	LEU
6	2G	77	ILE
6	2G	79	ASN
6	2G	132	ASN
6	2G	133	LEU
6	2G	165	THR
7	2H	17	VAL
7	2H	27	LYS
7	2H	45	VAL
7	2H	51	ARG
7	2H	67	LEU
7	2H	70	THR
7	2H	71	LEU
8	2I	31	LEU
8	2I	38	LEU
8	2I	47	LEU
8	2I	76	THR
8	2I	92	VAL
8	2I	101	LEU
8	2I	108	THR
8	2I	123	LEU
8	2I	127	VAL
8	2I	140	LEU
8	2I	145	VAL
9	2N	32	THR
9	2N	34	LEU
9	2N	35	ARG
9	2N	38	HIS
9	2N	43	THR
9	2N	46	VAL
9	2N	60	ILE
9	2N	62	VAL
9	2N	63	THR
9	2N	83	LYS
9	2N	140	VAL
10	2O	22	ILE
10	2O	78	ARG
10	2O	108	GLU
11	2P	2	LYS

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Mol	Chain	Res	Type
11	2P	3	LEU
11	2P	95	VAL
12	2Q	5	ARG
12	2Q	21	THR
12	2Q	96	VAL
12	2Q	109	VAL
12	2Q	110	THR
13	2R	6	SER
13	2R	29	LEU
13	2R	44	LEU
13	2R	65	LEU
13	2R	67	LEU
13	2R	111	LEU
14	2S	5	THR
14	2S	21	THR
14	2S	48	LEU
14	2S	49	VAL
14	2S	69	VAL
15	2T	49	VAL
15	2T	96	ARG
16	2U	6	THR
16	2U	8	VAL
16	2U	31	SER
16	2U	74	LEU
17	2V	7	THR
17	2V	51	VAL
17	2V	61	VAL
17	2V	62	LEU
17	2V	72	VAL
18	2W	11	ARG
18	2W	23	LEU
18	2W	67	ASP
18	2W	107	LEU
19	2X	23	GLU
19	2X	35	THR
19	2X	40	LYS
19	2X	70	LEU
19	2X	75	ASP
19	2X	82	GLN
19	2X	92	LEU
20	2Y	14	LEU
20	2Y	37	VAL

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Mol	Chain	Res	Type
20	2Y	39	VAL
20	2Y	61	ILE
20	2Y	72	VAL
20	2Y	85	VAL
20	2Y	99	CYS
21	2Z	18	LEU
21	2Z	19	ARG
21	2Z	42	VAL
21	2Z	67	LEU
21	2Z	70	LEU
21	2Z	96	VAL
21	2Z	126	VAL
21	2Z	141	VAL
21	2Z	155	LEU
21	2Z	174	VAL
23	21	11	ARG
23	21	52	ARG
23	21	98	LEU
24	22	28	LYS
24	22	35	LEU
25	23	30	ARG
25	23	54	VAL
26	24	5	ILE
26	24	46	GLN
26	24	48	ARG
26	24	49	PHE
26	24	50	VAL
26	24	56	VAL
27	25	6	VAL
27	25	58	LEU
28	26	9	LEU
28	26	14	THR
28	26	48	VAL
28	26	51	GLU
29	27	1	MET
29	27	24	THR
29	27	39	ARG
29	27	43	THR
30	28	23	VAL
30	28	30	ARG
30	28	32	LEU
31	29	14	CYS

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Mol	Chain	Res	Type
33	2b	10	LEU
33	2b	37	ASN
33	2b	44	LEU
33	2b	71	VAL
33	2b	81	VAL
33	2b	102	LEU
33	2b	108	ILE
33	2b	111	ARG
33	2b	112	VAL
33	2b	119	GLU
33	2b	121	LEU
33	2b	122	PHE
33	2b	127	ILE
33	2b	128	GLU
33	2b	136	VAL
33	2b	158	LEU
33	2b	160	ASP
33	2b	168	THR
33	2b	176	GLU
33	2b	185	ILE
33	2b	189	ASP
33	2b	196	LEU
33	2b	230	VAL
34	2c	15	THR
34	2c	40	ARG
34	2c	115	LEU
34	2c	130	VAL
34	2c	192	THR
35	2d	9	CYS
35	2d	33	MET
35	2d	127	THR
35	2d	135	LEU
35	2d	170	VAL
35	2d	188	LEU
35	2d	194	LEU
36	2e	41	VAL
36	2e	64	ARG
36	2e	81	GLU
36	2e	91	LEU
36	2e	120	THR
37	2f	19	LEU
37	2f	37	VAL

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Mol	Chain	Res	Type
37	2f	40	VAL
37	2f	72	VAL
37	2f	81	ILE
38	2g	31	MET
38	2g	104	LEU
39	2h	11	THR
39	2h	14	ARG
39	2h	112	LEU
40	2i	14	VAL
40	2i	27	THR
40	2i	41	VAL
40	2i	50	LEU
40	2i	102	LEU
40	2i	104	ARG
40	2i	105	ASP
41	2j	38	ILE
41	2j	59	SER
41	2j	67	THR
41	2j	71	LEU
42	2k	14	VAL
42	2k	81	ASP
42	2k	82	VAL
42	2k	87	THR
43	2l	117	ARG
44	2m	19	LEU
44	2m	29	ARG
44	2m	74	VAL
44	2m	91	ARG
45	2n	7	ILE
45	2n	22	THR
45	2n	33	VAL
46	2o	87	ILE
47	2p	2	VAL
47	2p	19	ILE
47	2p	20	VAL
47	2p	21	VAL
47	2p	62	VAL
47	2p	67	THR
48	2q	53	LEU
49	2r	37	VAL
49	2r	47	THR
50	2s	5	LEU

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Mol	Chain	Res	Type
50	2s	41	VAL
50	2s	48	THR
51	2t	39	LYS
51	2t	70	SER
51	2t	72	LEU
51	2t	99	LEU
51	2t	100	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (121) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	116	GLN
3	1D	126	GLN
3	1D	201	HIS
5	1F	8	GLN
5	1F	169	ASN
8	1I	11	ASN
8	1I	104	GLN
8	1I	133	HIS
13	1R	31	HIS
13	1R	71	GLN
13	1R	91	GLN
14	1S	38	GLN
14	1S	61	ASN
15	1T	90	GLN
16	1U	81	HIS
18	1W	60	ASN
19	1X	31	HIS
20	1Y	6	HIS
20	1Y	43	ASN
21	1Z	34	ASN
21	1Z	73	GLN
21	1Z	75	ASN
21	1Z	151	HIS
22	10	50	ASN
23	11	19	GLN
23	11	56	GLN
24	12	9	GLN
26	14	60	GLN
30	18	35	GLN
30	18	43	GLN
33	1b	16	HIS

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Mol	Chain	Res	Type
33	1b	37	ASN
33	1b	94	ASN
33	1b	135	GLN
34	1c	37	GLN
34	1c	108	ASN
34	1c	110	ASN
34	1c	136	GLN
34	1c	139	GLN
35	1d	77	ASN
35	1d	116	GLN
35	1d	123	HIS
35	1d	125	HIS
36	1e	20	GLN
36	1e	78	HIS
37	1f	73	ASN
37	1f	94	GLN
37	1f	100	ASN
38	1g	28	ASN
38	1g	51	GLN
38	1g	86	GLN
38	1g	96	GLN
38	1g	110	GLN
40	1i	3	GLN
40	1i	73	GLN
40	1i	124	GLN
41	1j	56	HIS
41	1j	68	HIS
42	1k	93	GLN
43	1l	99	HIS
44	1m	92	HIS
46	1o	50	HIS
46	1o	62	GLN
47	1p	14	ASN
48	1q	26	GLN
50	1s	23	ASN
50	1s	47	HIS
50	1s	69	HIS
50	1s	83	HIS
51	1t	16	HIS
4	2E	48	GLN
5	2F	69	HIS
5	2F	75	HIS

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Mol	Chain	Res	Type
5	2F	203	GLN
6	2G	26	GLN
6	2G	41	GLN
8	2I	105	HIS
8	2I	133	HIS
9	2N	56	ASN
9	2N	131	GLN
12	2Q	13	GLN
12	2Q	123	HIS
13	2R	71	GLN
13	2R	91	GLN
15	2T	58	ASN
15	2T	79	HIS
16	2U	66	ASN
17	2V	80	GLN
18	2W	60	ASN
20	2Y	43	ASN
21	2Z	55	HIS
21	2Z	65	GLN
21	2Z	121	HIS
21	2Z	132	ASN
33	2b	37	ASN
33	2b	94	ASN
33	2b	212	GLN
34	2c	31	HIS
35	2d	77	ASN
35	2d	116	GLN
35	2d	119	GLN
35	2d	125	HIS
36	2e	72	GLN
36	2e	78	HIS
37	2f	100	ASN
38	2g	86	GLN
38	2g	148	ASN
39	2h	15	ASN
40	2i	58	HIS
41	2j	33	GLN
41	2j	56	HIS
43	2l	80	HIS
43	2l	99	HIS
44	2m	77	ASN
46	2o	53	HIS

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Mol	Chain	Res	Type
48	2q	45	HIS
49	2r	63	GLN
50	2s	23	ASN
50	2s	69	HIS
50	2s	83	HIS
51	2t	75	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	448 (15%)	19 (0%)
1	2A	2791/2915 (95%)	514 (18%)	19 (0%)
2	1B	120/121 (99%)	11 (9%)	1 (0%)
2	2B	118/121 (97%)	28 (23%)	0
32	1a	1497/1521 (98%)	251 (16%)	0
32	2a	1501/1521 (98%)	283 (18%)	0
53	1v	12/27 (44%)	2 (16%)	0
53	2v	12/27 (44%)	4 (33%)	0
54	1w	70/76 (92%)	24 (34%)	0
54	1y	70/76 (92%)	25 (35%)	0
54	2w	70/76 (92%)	28 (40%)	0
54	2y	70/76 (92%)	29 (41%)	0
55	1x	75/77 (97%)	13 (17%)	0
55	2x	75/77 (97%)	15 (20%)	0
All	All	9345/9626 (97%)	1675 (17%)	39 (0%)

All (1675) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	13	A
1	1A	34	C
1	1A	45	C
1	1A	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

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Mol	Chain	Res	Type
1	1A	125	G
1	1A	196	A
1	1A	197	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	228	A
1	1A	229	A
1	1A	230	U
1	1A	233	A
1	1A	248	G
1	1A	266	G
1	1A	271(A)	A
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	279	C
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	345	A
1	1A	352	G
1	1A	363	G
1	1A	363(B)	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	418	G
1	1A	421	U
1	1A	428	A
1	1A	443	A
1	1A	444	C
1	1A	448	U
1	1A	456	C

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Mol	Chain	Res	Type
1	1A	457	A
1	1A	467	G
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	508	G
1	1A	509	C
1	1A	512	G
1	1A	528	A
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	573	G
1	1A	575	A
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(A)	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	634	C
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(E)	G
1	1A	652(T)	C
1	1A	669	G
1	1A	686	G
1	1A	717	G
1	1A	730	C
1	1A	764	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G

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Mol	Chain	Res	Type
1	1A	789	A
1	1A	790	C
1	1A	792	G
1	1A	802	A
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	865	C
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	892	G
1	1A	894	C
1	1A	895	U
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	899	A
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	961	C
1	1A	963	U
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A

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Mol	Chain	Res	Type
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1025	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1041	C
1	1A	1044	G
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A
1	1A	1055	G
1	1A	1058	G
1	1A	1059	G
1	1A	1064	C
1	1A	1066	U
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	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1093	G
1	1A	1094	U
1	1A	1097	U
1	1A	1098	A
1	1A	1100	C
1	1A	1101	U
1	1A	1109	C
1	1A	1111	A
1	1A	1112	G
1	1A	1128	A
1	1A	1130	U
1	1A	1135	C

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Mol	Chain	Res	Type
1	1A	1136	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1211	U
1	1A	1212	G
1	1A	1220	A
1	1A	1227	G
1	1A	1229	G
1	1A	1237	A
1	1A	1244	G
1	1A	1248	G
1	1A	1253	A
1	1A	1256	G
1	1A	1267	U
1	1A	1271	G
1	1A	1272	A
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1320	C
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1379	A
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	1445	A
1	1A	1450	G

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Mol	Chain	Res	Type
1	1A	1455	G
1	1A	1467	C
1	1A	1478	G
1	1A	1482	G
1	1A	1490	A
1	1A	1493	C
1	1A	1494	A
1	1A	1497	U
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1542	A
1	1A	1554	A
1	1A	1558	A
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1579	A
1	1A	1580	A
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1610	A
1	1A	1612	C
1	1A	1646	C
1	1A	1647	G
1	1A	1648	C
1	1A	1654	A
1	1A	1664	A
1	1A	1667	G
1	1A	1671	U
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
1	1A	1722	A
1	1A	1740	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G

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Mol	Chain	Res	Type
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1812	A
1	1A	1816	G
1	1A	1828	G
1	1A	1847	A
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	1940	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

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Mol	Chain	Res	Type
1	1A	2062	A
1	1A	2069	G
1	1A	2080	G
1	1A	2101	G
1	1A	2107	C
1	1A	2110	G
1	1A	2113	U
1	1A	2116	G
1	1A	2125	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	2136	C
1	1A	2138	C
1	1A	2140	C
1	1A	2142	C
1	1A	2144	U
1	1A	2146	C
1	1A	2147	G
1	1A	2149	G
1	1A	2150	U
1	1A	2151	G
1	1A	2152	G
1	1A	2155	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2162	G
1	1A	2163	C
1	1A	2164	C
1	1A	2165	G
1	1A	2166	G
1	1A	2167	U
1	1A	2169	A
1	1A	2171	A
1	1A	2172	U
1	1A	2174	C

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Mol	Chain	Res	Type
1	1A	2178	C
1	1A	2184	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2218	U
1	1A	2225	A
1	1A	2238	G
1	1A	2249	U
1	1A	2268	A
1	1A	2269	A
1	1A	2279	G
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2305	A
1	1A	2307	G
1	1A	2308	G
1	1A	2309	A
1	1A	2314	C
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2361	A
1	1A	2383	G
1	1A	2385	C
1	1A	2389	G
1	1A	2396	G
1	1A	2406	U
1	1A	2410	G
1	1A	2424	C
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2445	G

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Mol	Chain	Res	Type
1	1A	2448	A
1	1A	2474	C
1	1A	2476	A
1	1A	2490	G
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2520	C
1	1A	2529	G
1	1A	2549	G
1	1A	2554	U
1	1A	2556	C
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2609	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2638	G
1	1A	2646	C
1	1A	2654	A
1	1A	2663	G
1	1A	2689	U
1	1A	2691	C
1	1A	2702	U
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2734	A
1	1A	2739	U
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2789	C
1	1A	2790	A

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Mol	Chain	Res	Type
1	1A	2791	C
1	1A	2794	C
1	1A	2802	G
1	1A	2803	C
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2872	G
1	1A	2873	A
1	1A	2879	C
1	1A	2880	C
1	1A	2892	A
1	1A	2894	G
1	1A	2897	U
2	1B	2	C
2	1B	15	A
2	1B	25	A
2	1B	35	U
2	1B	42	C
2	1B	50	G
2	1B	56	G
2	1B	73	A
2	1B	85	G
2	1B	110	G
2	1B	120	A
32	1a	9	G
32	1a	39	G
32	1a	47	C
32	1a	48	C
32	1a	51	A
32	1a	52	G
32	1a	54	C
32	1a	55	A
32	1a	61	G
32	1a	77	G
32	1a	79	G
32	1a	91	C
32	1a	92	C
32	1a	98	G
32	1a	101	A

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Mol	Chain	Res	Type
32	1a	105	G
32	1a	111	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	159	G
32	1a	162	A
32	1a	164	U
32	1a	174	C
32	1a	180	U
32	1a	182	U
32	1a	189(F)	U
32	1a	189(G)	G
32	1a	189(H)	G
32	1a	189(J)	G
32	1a	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	231	G
32	1a	247	G
32	1a	251	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	316	G
32	1a	321	A
32	1a	328	C
32	1a	332	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	382	A
32	1a	384	G

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Mol	Chain	Res	Type
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	430	A
32	1a	435	C
32	1a	439	A
32	1a	451	A
32	1a	452	A
32	1a	461	A
32	1a	484	G
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	524	G
32	1a	531	U
32	1a	532	A
32	1a	534	U
32	1a	539	A
32	1a	547	A
32	1a	559	A
32	1a	560	U
32	1a	561	U
32	1a	568	G
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	628	G
32	1a	630	G
32	1a	653	A
32	1a	665	A
32	1a	666	G

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Mol	Chain	Res	Type
32	1a	687	A
32	1a	688	G
32	1a	695	A
32	1a	702	A
32	1a	717	C
32	1a	723	U
32	1a	728	A
32	1a	731	G
32	1a	749	C
32	1a	755	G
32	1a	766	A
32	1a	777	A
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	816	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	839	U
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	859	A
32	1a	864	A
32	1a	870	U
32	1a	902	G
32	1a	914	A
32	1a	916	G
32	1a	926	G
32	1a	927	G
32	1a	932	C
32	1a	934	C
32	1a	935	A
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

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Mol	Chain	Res	Type
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	1000	U
32	1a	1002	G
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1007	C
32	1a	1008	C
32	1a	1011	G
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1033	G
32	1a	1037	C
32	1a	1039	C
32	1a	1043	C
32	1a	1044	A
32	1a	1054	C
32	1a	1055	A
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1070	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1108	G

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Mol	Chain	Res	Type
32	1a	1124	G
32	1a	1125	U
32	1a	1131	G
32	1a	1134	G
32	1a	1136	U
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
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	1182	G
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1212	U
32	1a	1213	A
32	1a	1214	C
32	1a	1227	A
32	1a	1238	A
32	1a	1256	A
32	1a	1257	U
32	1a	1270	C
32	1a	1275	A
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1305	G
32	1a	1312	G
32	1a	1320	C
32	1a	1346	A
32	1a	1347	G

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Mol	Chain	Res	Type
32	1a	1353	G
32	1a	1363	C
32	1a	1363(A)	A
32	1a	1364	U
32	1a	1370	G
32	1a	1397	C
32	1a	1400	5MC
32	1a	1402	4OC
32	1a	1416	G
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1442(B)	A
32	1a	1447	A
32	1a	1456	G
32	1a	1487	G
32	1a	1492	A
32	1a	1497	G
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1507	A
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
53	1v	24	C
54	1w	2	G
54	1w	9	A
54	1w	13	C
54	1w	19	G
54	1w	23	A
54	1w	27	C
54	1w	35	A
54	1w	42	G
54	1w	45	G
54	1w	46	7MG
54	1w	47	U
54	1w	48	C
54	1w	49	G
54	1w	50	G

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Mol	Chain	Res	Type
54	1w	51	C
54	1w	57	G
54	1w	58	A
54	1w	59	U
54	1w	60	C
54	1w	61	C
54	1w	62	C
54	1w	68	C
54	1w	71	C
54	1w	74	C
55	1x	9	G
55	1x	13	C
55	1x	18	G
55	1x	21	A
55	1x	22	G
55	1x	47	U
55	1x	48	C
55	1x	49	G
55	1x	58	A
55	1x	59	A
55	1x	61	C
55	1x	69	C
55	1x	76	A
54	1y	2	G
54	1y	5	G
54	1y	6	A
54	1y	8	4SU
54	1y	9	A
54	1y	13	C
54	1y	14	A
54	1y	19	G
54	1y	24	G
54	1y	32	C
54	1y	33	U
54	1y	34	CM0
54	1y	35	A
54	1y	40	G
54	1y	44	G
54	1y	45	G
54	1y	46	7MG
54	1y	47	U
54	1y	48	C

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Mol	Chain	Res	Type
54	1y	54	5MU
54	1y	57	G
54	1y	59	U
54	1y	61	C
54	1y	65	C
54	1y	69	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
1	2A	94	C
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	120	U
1	2A	131	G
1	2A	139	G
1	2A	141	A
1	2A	154(A)	C
1	2A	157	U
1	2A	181	A
1	2A	196	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	232	G

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Mol	Chain	Res	Type
1	2A	233	A
1	2A	245	G
1	2A	248	G
1	2A	249	C
1	2A	250	G
1	2A	266	G
1	2A	267	C
1	2A	271(J)	C
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(B)	G
1	2A	272(I)	U
1	2A	272(J)	C
1	2A	277	C
1	2A	278	A
1	2A	280	C
1	2A	290	G
1	2A	294	A
1	2A	311	A
1	2A	312	G
1	2A	329	G
1	2A	330	A
1	2A	332	A
1	2A	342	G
1	2A	352	G
1	2A	363(B)	G
1	2A	386	G
1	2A	399	G
1	2A	402	A
1	2A	403	U
1	2A	411	G
1	2A	422	A
1	2A	435	C
1	2A	442	G
1	2A	443	A
1	2A	444	C
1	2A	454	A
1	2A	455	C
1	2A	456	C

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Mol	Chain	Res	Type
1	2A	457	A
1	2A	481	G
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	513	A
1	2A	514	A
1	2A	528	A
1	2A	529	A
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	551	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	574	C
1	2A	575	A
1	2A	586	A
1	2A	592	G
1	2A	593	G
1	2A	595	C
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	653	A
1	2A	668	G
1	2A	669	G
1	2A	686	G
1	2A	699	A
1	2A	717	G
1	2A	730	C
1	2A	734	A

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Mol	Chain	Res	Type
1	2A	753	C
1	2A	764	A
1	2A	771	G
1	2A	775	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	790	C
1	2A	792	G
1	2A	804	A
1	2A	805	G
1	2A	811	U
1	2A	812	C
1	2A	819	A
1	2A	827	U
1	2A	828	U
1	2A	832	G
1	2A	854	G
1	2A	857	C
1	2A	859	G
1	2A	869	G
1	2A	878	A
1	2A	879	G
1	2A	883	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	892	G
1	2A	893	C
1	2A	894	C
1	2A	895	U
1	2A	896	A
1	2A	897	C
1	2A	898	C
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	914	C
1	2A	915	C
1	2A	917	A
1	2A	932	G

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Mol	Chain	Res	Type
1	2A	933	A
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	958	U
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	980	A
1	2A	983	A
1	2A	990	A
1	2A	996	A
1	2A	997	G
1	2A	1003	G
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1033	U
1	2A	1038	C
1	2A	1043	C
1	2A	1117	G
1	2A	1122	G
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1142(A)	A
1	2A	1143	A
1	2A	1144	G
1	2A	1155	A
1	2A	1171	G
1	2A	1210	A
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1225	G
1	2A	1242	A

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Mol	Chain	Res	Type
1	2A	1248	G
1	2A	1250	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1300	U
1	2A	1301	A
1	2A	1314	C
1	2A	1320	C
1	2A	1342	A
1	2A	1345	C
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1436	G
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1451	C
1	2A	1455	G
1	2A	1459	G
1	2A	1460	A
1	2A	1461	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G

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Mol	Chain	Res	Type
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1495	A
1	2A	1496	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1514	U
1	2A	1531	C
1	2A	1532	C
1	2A	1541	G
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1553	A
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1582	C
1	2A	1584	C
1	2A	1586	A
1	2A	1588	C
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1616	A
1	2A	1640	C
1	2A	1648	C
1	2A	1654	A
1	2A	1664	A
1	2A	1674	G
1	2A	1695	G
1	2A	1696	G
1	2A	1700	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G

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Mol	Chain	Res	Type
1	2A	1746	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1778	U
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1829	A
1	2A	1847	A
1	2A	1877	A
1	2A	1878	G
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1931	U
1	2A	1936	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1965	C
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1984	G
1	2A	1990	C
1	2A	1992	G
1	2A	1993	U
1	2A	1996	C
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G

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Mol	Chain	Res	Type
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
1	2A	2093	G
1	2A	2102	U
1	2A	2106	G
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2115	G
1	2A	2116	G
1	2A	2118	U
1	2A	2119	A
1	2A	2120	G
1	2A	2122	U
1	2A	2125	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2137	C
1	2A	2138	C
1	2A	2140	C
1	2A	2141	G
1	2A	2146	C
1	2A	2151	G
1	2A	2153	G
1	2A	2155	G
1	2A	2156	G
1	2A	2157	G

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Mol	Chain	Res	Type
1	2A	2158	A
1	2A	2161	C
1	2A	2162	G
1	2A	2164	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2169	A
1	2A	2172	U
1	2A	2173	A
1	2A	2174	C
1	2A	2178	C
1	2A	2182	G
1	2A	2189	U
1	2A	2194	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2235	G
1	2A	2238	G
1	2A	2239	G
1	2A	2248	C
1	2A	2267	A
1	2A	2273	A
1	2A	2275	C
1	2A	2279	G
1	2A	2283	C
1	2A	2287	A
1	2A	2288	A
1	2A	2294	C
1	2A	2302	G
1	2A	2305	A
1	2A	2307	G
1	2A	2308	G
1	2A	2309	A
1	2A	2316	C
1	2A	2319	G
1	2A	2320	A

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Mol	Chain	Res	Type
1	2A	2325	G
1	2A	2327	A
1	2A	2334	G
1	2A	2336	A
1	2A	2343	C
1	2A	2346	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2355	C
1	2A	2366	A
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2388	A
1	2A	2391	G
1	2A	2395	C
1	2A	2403	C
1	2A	2406	U
1	2A	2410	G
1	2A	2419	U
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2434	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2469	A
1	2A	2476	A
1	2A	2478	A
1	2A	2480	C
1	2A	2487	G
1	2A	2490	G
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2520	C

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Mol	Chain	Res	Type
1	2A	2529	G
1	2A	2535	G
1	2A	2554	U
1	2A	2562	U
1	2A	2566	A
1	2A	2567	G
1	2A	2572	A
1	2A	2573	C
1	2A	2582	G
1	2A	2585	U
1	2A	2586	C
1	2A	2588	G
1	2A	2602	A
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2630	G
1	2A	2634	G
1	2A	2661	G
1	2A	2662	A
1	2A	2689	U
1	2A	2691	C
1	2A	2702	U
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2732	G
1	2A	2733	A
1	2A	2748	A
1	2A	2751	G
1	2A	2757	A
1	2A	2759	G
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A
1	2A	2780	G
1	2A	2793	G
1	2A	2807	G
1	2A	2818	G
1	2A	2820	A

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Mol	Chain	Res	Type
1	2A	2821	A
1	2A	2835	A
1	2A	2836	U
1	2A	2839	G
1	2A	2858	C
1	2A	2861	G
1	2A	2872	G
1	2A	2879	C
1	2A	2880	C
1	2A	2883	A
1	2A	2886	G
1	2A	2892	A
1	2A	2894	G
1	2A	2895	U
1	2A	2896	C
1	2A	2897	U
2	2B	2	C
2	2B	3	C
2	2B	7	G
2	2B	8	U
2	2B	9	G
2	2B	13	A
2	2B	19	G
2	2B	20	C
2	2B	40	U
2	2B	42	C
2	2B	53	A
2	2B	56	G
2	2B	63	G
2	2B	66	A
2	2B	67	G
2	2B	69	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	85	G
2	2B	88	C
2	2B	101	G
2	2B	108	U
2	2B	109	C
2	2B	110	G
2	2B	114	C

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Mol	Chain	Res	Type
2	2B	119	G
2	2B	120	A
32	2a	7	G
32	2a	9	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	51	A
32	2a	52	G
32	2a	54	C
32	2a	66	G
32	2a	73	G
32	2a	78	G
32	2a	80	G
32	2a	89	C
32	2a	101	A
32	2a	116	A
32	2a	117	G
32	2a	120	A
32	2a	121	C
32	2a	129(A)	G
32	2a	131	C
32	2a	144	G
32	2a	163	C
32	2a	174	C
32	2a	182	U
32	2a	189(E)	U
32	2a	189(F)	U
32	2a	189(J)	G
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	222	U
32	2a	247	G
32	2a	249	U
32	2a	250	A
32	2a	251	G

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Mol	Chain	Res	Type
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	301	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	342	C
32	2a	345	C
32	2a	348	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	415	A
32	2a	421	U
32	2a	423	G
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	461	A
32	2a	470	C
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C

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Mol	Chain	Res	Type
32	2a	521	G
32	2a	527	7MG
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	562	C
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	574	A
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	602	A
32	2a	607	A
32	2a	619	U
32	2a	630	G
32	2a	650	G
32	2a	653	A
32	2a	655	A
32	2a	665	A
32	2a	671	G
32	2a	687	A
32	2a	688	G
32	2a	693	G
32	2a	695	A
32	2a	702	A
32	2a	703	G
32	2a	723	U
32	2a	724	G
32	2a	729	A
32	2a	731	G
32	2a	735	C
32	2a	749	C
32	2a	754	C
32	2a	755	G
32	2a	777	A

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Mol	Chain	Res	Type
32	2a	793	U
32	2a	794	A
32	2a	812	C
32	2a	815	A
32	2a	817	C
32	2a	818	G
32	2a	819	A
32	2a	821	G
32	2a	828	A
32	2a	840	C
32	2a	841	U
32	2a	853	G
32	2a	855	G
32	2a	859	A
32	2a	874	G
32	2a	891	U
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G
32	2a	934	C
32	2a	960	U
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	982	U
32	2a	992	U
32	2a	993	G
32	2a	997	U
32	2a	999	C
32	2a	1001(A)	G
32	2a	1002	G
32	2a	1003	G
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G

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Mol	Chain	Res	Type
32	2a	1014	A
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G
32	2a	1024	G
32	2a	1025	U
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1033	G
32	2a	1034	G
32	2a	1035	A
32	2a	1036	G
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1042	G
32	2a	1046	A
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1077	G
32	2a	1081	G
32	2a	1085	U
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1108	G
32	2a	1116	C
32	2a	1117	G
32	2a	1122	U
32	2a	1124	G
32	2a	1125	U
32	2a	1128	C
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G

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Mol	Chain	Res	Type
32	2a	1139	G
32	2a	1140	C
32	2a	1141	C
32	2a	1146	A
32	2a	1152	A
32	2a	1157	A
32	2a	1159	U
32	2a	1160	G
32	2a	1181	G
32	2a	1182	G
32	2a	1184	G
32	2a	1191	A
32	2a	1196	U
32	2a	1197	G
32	2a	1201	A
32	2a	1202	G
32	2a	1207	2MG
32	2a	1208	C
32	2a	1211	U
32	2a	1212	U
32	2a	1213	A
32	2a	1214	C
32	2a	1215	G
32	2a	1220	G
32	2a	1226	C
32	2a	1227	A
32	2a	1238	A
32	2a	1246	C
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1261	A
32	2a	1270	C
32	2a	1272	G
32	2a	1273	G
32	2a	1277	C
32	2a	1279	A
32	2a	1280	A
32	2a	1282	C
32	2a	1286	A
32	2a	1287	A

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Mol	Chain	Res	Type
32	2a	1299	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1323	G
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1378	C
32	2a	1402	4OC
32	2a	1404	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1487	G
32	2a	1492	A
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1519	MA6
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
53	2v	13	A
53	2v	14	A
53	2v	20	U
53	2v	24	C
54	2w	2	G
54	2w	3	G
54	2w	5	G
54	2w	8	4SU
54	2w	11	C

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Mol	Chain	Res	Type
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	23	A
54	2w	27	C
54	2w	42	G
54	2w	46	7MG
54	2w	47	U
54	2w	48	C
54	2w	49	G
54	2w	50	G
54	2w	51	C
54	2w	56	C
54	2w	57	G
54	2w	58	A
54	2w	59	U
54	2w	60	C
54	2w	62	C
54	2w	67	U
54	2w	68	C
54	2w	69	A
54	2w	70	C
54	2w	74	C
55	2x	4	G
55	2x	9	G
55	2x	10	G
55	2x	13	C
55	2x	19	G
55	2x	21	A
55	2x	22	G
55	2x	28	C
55	2x	42	G
55	2x	47	U
55	2x	48	C
55	2x	51	C
55	2x	61	C
55	2x	73	A
55	2x	76	A
54	2y	2	G
54	2y	5	G
54	2y	6	A
54	2y	8	4SU

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Mol	Chain	Res	Type
54	2y	9	A
54	2y	13	C
54	2y	14	A
54	2y	19	G
54	2y	24	G
54	2y	32	C
54	2y	34	CM0
54	2y	35	A
54	2y	40	G
54	2y	41	A
54	2y	43	G
54	2y	44	G
54	2y	45	G
54	2y	46	7MG
54	2y	47	U
54	2y	48	C
54	2y	53	G
54	2y	54	5MU
54	2y	55	PSU
54	2y	57	G
54	2y	58	A
54	2y	59	U
54	2y	61	C
54	2y	65	C
54	2y	69	A

All (39) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A
1	1A	895	U
1	1A	1047	G
1	1A	1065	U
1	1A	1067	A
1	1A	1174	A
1	1A	1176	G
1	1A	1210	A
1	1A	1442	G
1	1A	1508	A

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Mol	Chain	Res	Type
1	1A	1653	G
1	1A	1663	C
1	1A	1992	G
1	1A	2126	A
1	1A	2134	A
1	1A	2183	C
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	752	A
1	2A	827	U
1	2A	856	C
1	2A	893	C
1	2A	900	A
1	2A	1210	A
1	2A	1379	A
1	2A	1420	U
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1992	G
1	2A	2756	U

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

80 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	5MC	2A	1962	56,1	19,22,23	1.63	3 (15%)	26,32,35	1.11	2 (7%)
32	4OC	2a	1402	32	20,23,24	0.77	0	25,32,35	1.04	2 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
54	7MG	1w	46	54	23,26,27	1.39	2 (8%)	27,39,42	2.50	8 (29%)
55	PSU	1x	55	56,55	18,21,22	1.40	2 (11%)	21,30,33	2.00	3 (14%)
1	OMG	1A	2251	56,1,55	23,26,27	1.21	3 (13%)	32,38,41	2.05	6 (18%)
54	PSU	1y	55	54	18,21,22	1.40	2 (11%)	21,30,33	2.06	3 (14%)
32	UR3	1a	1498	32	19,22,23	1.00	2 (10%)	26,32,35	1.77	3 (11%)
54	6MZ	1w	37	54	22,25,26	1.53	4 (18%)	29,36,39	2.15	9 (31%)
32	MA6	2a	1518	32	23,26,27	1.60	4 (17%)	33,38,41	2.32	13 (39%)
1	OMU	2A	2552	56,1	19,22,23	1.29	3 (15%)	25,31,34	1.90	6 (24%)
54	4SU	2y	8	54	18,21,22	1.83	4 (22%)	25,30,33	1.90	5 (20%)
32	MA6	1a	1518	32	23,26,27	1.54	5 (21%)	33,38,41	2.28	12 (36%)
32	5MC	2a	1404	32	19,22,23	1.70	3 (15%)	26,32,35	1.18	3 (11%)
32	5MC	1a	1400	32	19,22,23	1.60	3 (15%)	26,32,35	1.10	2 (7%)
1	OMG	2A	2251	56,1,55	23,26,27	1.22	3 (13%)	32,38,41	1.96	6 (18%)
32	5MC	1a	1407	32	19,22,23	1.63	3 (15%)	26,32,35	1.18	3 (11%)
1	5MU	2A	1939	1	19,22,23	1.40	6 (31%)	27,32,35	2.15	6 (22%)
55	4SU	2x	8	56,55	18,21,22	2.00	5 (27%)	25,30,33	1.75	7 (28%)
32	2MG	1a	1207	32	23,26,27	1.25	2 (8%)	33,38,41	2.14	8 (24%)
1	5MU	1A	1939	56,1	19,22,23	1.42	6 (31%)	27,32,35	2.21	6 (22%)
32	MA6	1a	1519	32	23,26,27	1.55	4 (17%)	33,38,41	2.31	12 (36%)
32	7MG	2a	527	56,32	23,26,27	1.33	3 (13%)	27,39,42	2.60	6 (22%)
32	PSU	1a	516	56,32	18,21,22	1.39	2 (11%)	21,30,33	2.01	4 (19%)
54	CM0	1y	34	54	21,26,27	1.19	3 (14%)	26,37,40	1.88	4 (15%)
1	PSU	1A	1917	1	18,21,22	1.38	2 (11%)	21,30,33	1.99	4 (19%)
1	PSU	2A	1911	1	18,21,22	1.36	2 (11%)	21,30,33	1.95	3 (14%)
1	5MC	2A	1942	1	19,22,23	1.66	3 (15%)	26,32,35	1.11	2 (7%)
1	5MU	2A	1915	1	19,22,23	1.47	5 (26%)	27,32,35	2.09	6 (22%)
32	5MC	2a	1407	32	19,22,23	1.66	3 (15%)	26,32,35	1.13	3 (11%)
1	PSU	1A	1911	1	18,21,22	1.39	3 (16%)	21,30,33	2.07	4 (19%)
1	OMC	1A	1920	1	19,22,23	0.78	0	25,31,34	0.95	2 (8%)
54	PSU	2w	55	54	18,21,22	1.36	2 (11%)	21,30,33	1.96	4 (19%)
54	5MU	1y	54	54	19,22,23	1.45	5 (26%)	27,32,35	2.08	5 (18%)
1	OMU	1A	2552	56,1	19,22,23	1.29	3 (15%)	25,31,34	1.94	6 (24%)
54	7MG	1y	46	54	23,26,27	1.45	3 (13%)	27,39,42	2.79	6 (22%)
43	0TD	2l	92	43	8,9,10	4.60	1 (12%)	6,11,13	4.81	3 (50%)
43	0TD	1l	92	43	8,9,10	4.69	1 (12%)	6,11,13	7.21	3 (50%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
54	CM0	1w	34	54	21,26,27	1.16	3 (14%)	26,37,40	1.77	5 (19%)
1	PSU	1A	2605	56,1	18,21,22	1.39	3 (16%)	21,30,33	1.94	4 (19%)
32	7MG	1a	527	56,32	23,26,27	1.36	4 (17%)	27,39,42	2.60	6 (22%)
1	5MC	1A	1942	1	19,22,23	1.63	3 (15%)	26,32,35	1.18	3 (11%)
54	4SU	1y	8	54	18,21,22	1.88	5 (27%)	25,30,33	2.08	5 (20%)
54	6MZ	1y	37	54	22,25,26	1.54	4 (18%)	29,36,39	2.24	10 (34%)
55	5MU	2x	54	55	19,22,23	1.41	6 (31%)	27,32,35	2.03	6 (22%)
54	4SU	2w	8	54	18,21,22	1.79	4 (22%)	25,30,33	2.09	5 (20%)
1	PSU	2A	1917	1	18,21,22	1.37	2 (11%)	21,30,33	2.07	4 (19%)
54	5MU	2y	54	54	19,22,23	1.45	4 (21%)	27,32,35	2.01	8 (29%)
55	5MU	1x	54	55	19,22,23	1.41	5 (26%)	27,32,35	1.81	5 (18%)
55	4SU	1x	8	55	18,21,22	2.08	4 (22%)	25,30,33	1.72	7 (28%)
32	2MG	2a	1207	32	23,26,27	1.23	2 (8%)	33,38,41	2.23	7 (21%)
54	PSU	2y	55	54	18,21,22	1.40	2 (11%)	21,30,33	2.01	3 (14%)
32	M2G	2a	966	32	24,27,28	1.32	4 (16%)	33,40,43	1.88	6 (18%)
54	6MZ	2w	37	54	22,25,26	1.51	4 (18%)	29,36,39	2.10	8 (27%)
32	5MC	2a	967	32	19,22,23	1.74	3 (15%)	26,32,35	1.09	2 (7%)
32	M2G	1a	966	32	24,27,28	1.30	3 (12%)	33,40,43	1.83	5 (15%)
54	PSU	1w	55	54	18,21,22	1.41	1 (5%)	21,30,33	2.04	4 (19%)
1	2MA	2A	2503	1	22,25,26	1.47	5 (22%)	32,37,40	2.25	9 (28%)
32	5MC	1a	967	32	19,22,23	1.62	3 (15%)	26,32,35	1.18	3 (11%)
32	MA6	2a	1519	32	23,26,27	1.56	3 (13%)	33,38,41	2.30	12 (36%)
54	5MU	1w	54	54	19,22,23	1.40	5 (26%)	27,32,35	2.17	8 (29%)
55	5MC	1x	32	55	19,22,23	1.69	3 (15%)	26,32,35	1.20	3 (11%)
1	5MC	1A	1962	1	19,22,23	1.68	3 (15%)	26,32,35	1.15	3 (11%)
1	5MU	1A	1915	1	19,22,23	1.44	5 (26%)	27,32,35	2.07	6 (22%)
54	CM0	2y	34	54	21,26,27	1.17	2 (9%)	26,37,40	1.87	5 (19%)
1	OMC	2A	1920	1	19,22,23	0.80	0	25,31,34	0.99	1 (4%)
54	7MG	2y	46	54	23,26,27	1.40	4 (17%)	27,39,42	2.73	7 (25%)
32	5MC	2a	1400	32	19,22,23	1.72	3 (15%)	26,32,35	1.18	3 (11%)
32	5MC	1a	1404	32	19,22,23	1.67	3 (15%)	26,32,35	1.16	3 (11%)
54	4SU	1w	8	54	18,21,22	1.85	5 (27%)	25,30,33	2.04	5 (20%)
55	5MC	2x	32	55	19,22,23	1.74	3 (15%)	26,32,35	1.27	3 (11%)
1	2MA	1A	2503	56,1	22,25,26	1.47	5 (22%)	32,37,40	2.26	9 (28%)
54	6MZ	2y	37	54	22,25,26	1.55	4 (18%)	29,36,39	2.23	9 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
55	PSU	2x	55	55	18,21,22	1.33	2 (11%)	21,30,33	2.06	4 (19%)
32	4OC	1a	1402	32	20,23,24	0.76	0	25,32,35	0.90	1 (4%)
32	PSU	2a	516	32	18,21,22	1.34	2 (11%)	21,30,33	1.95	3 (14%)
1	PSU	2A	2605	1	18,21,22	1.37	3 (16%)	21,30,33	2.00	4 (19%)
54	5MU	2w	54	54	19,22,23	1.39	5 (26%)	27,32,35	1.91	6 (22%)
54	CM0	2w	34	54	21,26,27	1.18	4 (19%)	26,37,40	1.73	4 (15%)
54	7MG	2w	46	54	23,26,27	1.28	3 (13%)	27,39,42	2.65	6 (22%)
32	UR3	2a	1498	32	19,22,23	1.03	2 (10%)	26,32,35	1.79	4 (15%)

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	5MC	2A	1962	56,1	-	1/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	3/9/29/30	0/2/2/2
54	7MG	1w	46	54	-	2/7/37/38	0/3/3/3
55	PSU	1x	55	56,55	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	56,1,55	-	0/9/27/28	0/3/3/3
54	PSU	1y	55	54	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
54	6MZ	1w	37	54	-	0/9/27/28	0/3/3/3
32	MA6	2a	1518	32	-	3/11/29/30	0/3/3/3
1	OMU	2A	2552	56,1	-	0/9/27/28	0/2/2/2
54	4SU	2y	8	54	-	2/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	1/11/29/30	0/3/3/3
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	2/7/25/26	0/2/2/2
1	OMG	2A	2251	56,1,55	-	0/9/27/28	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	56,55	-	1/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/9/27/28	0/3/3/3
1	5MU	1A	1939	56,1	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	4/11/29/30	0/3/3/3
32	7MG	2a	527	56,32	-	3/7/37/38	0/3/3/3
32	PSU	1a	516	56,32	-	0/7/25/26	0/2/2/2
54	CM0	1y	34	54	-	4/12/30/31	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	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	-	1/9/27/28	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
54	5MU	1y	54	54	-	2/7/25/26	0/2/2/2
1	OMU	1A	2552	56,1	-	0/9/27/28	0/2/2/2
54	7MG	1y	46	54	-	5/7/37/38	0/3/3/3
43	0TD	2l	92	43	-	1/7/12/14	-
43	0TD	1l	92	43	-	3/7/12/14	-
54	CM0	1w	34	54	-	1/12/30/31	0/2/2/2
1	PSU	1A	2605	56,1	-	0/7/25/26	0/2/2/2
32	7MG	1a	527	56,32	-	3/7/37/38	0/3/3/3
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
54	4SU	1y	8	54	-	3/7/25/26	0/2/2/2
54	6MZ	1y	37	54	-	2/9/27/28	0/3/3/3
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	1/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
54	5MU	2y	54	54	-	3/7/25/26	0/2/2/2
55	5MU	1x	54	55	-	0/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	2/9/27/28	0/3/3/3
54	PSU	2y	55	54	-	3/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/11/29/30	0/3/3/3
54	6MZ	2w	37	54	-	2/9/27/28	0/3/3/3
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/11/29/30	0/3/3/3
54	PSU	1w	55	54	-	1/7/25/26	0/2/2/2
1	2MA	2A	2503	1	-	0/7/25/26	0/3/3/3
32	5MC	1a	967	32	-	2/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	6/11/29/30	0/3/3/3
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	2/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	CM0	2y	34	54	-	5/12/30/31	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
54	7MG	2y	46	54	-	5/7/37/38	0/3/3/3
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	56,1	-	1/7/25/26	0/3/3/3
54	6MZ	2y	37	54	-	2/9/27/28	0/3/3/3
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
54	CM0	2w	34	54	-	7/12/30/31	0/2/2/2
54	7MG	2w	46	54	-	0/7/37/38	0/3/3/3
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2

All (253) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.87	1.69	1.82
43	2l	92	0TD	CB-SB	-12.64	1.69	1.82
32	2a	967	5MC	C5-C4	6.37	1.48	1.44
32	2a	1400	5MC	C5-C4	6.36	1.48	1.44
55	2x	32	5MC	C5-C4	6.33	1.48	1.44
32	2a	1404	5MC	C5-C4	6.21	1.48	1.44
1	1A	1962	5MC	C5-C4	6.12	1.48	1.44
1	2A	1942	5MC	C5-C4	6.10	1.48	1.44
32	2a	1407	5MC	C5-C4	6.02	1.48	1.44
55	1x	32	5MC	C5-C4	5.99	1.48	1.44
32	1a	1404	5MC	C5-C4	5.96	1.48	1.44
32	1a	967	5MC	C5-C4	5.89	1.48	1.44
1	1A	1942	5MC	C5-C4	5.86	1.48	1.44
32	1a	1407	5MC	C5-C4	5.86	1.48	1.44
1	2A	1962	5MC	C5-C4	5.78	1.48	1.44
32	1a	1400	5MC	C5-C4	5.66	1.48	1.44
32	2a	1518	MA6	C5-C4	5.00	1.48	1.39
54	1w	8	4SU	C4-S4	-4.98	1.59	1.68
55	2x	8	4SU	C4-S4	-4.94	1.60	1.68
32	2a	1519	MA6	C5-C4	4.92	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1y	8	4SU	C4-S4	-4.87	1.60	1.68
55	1x	8	4SU	C4-S4	-4.87	1.60	1.68
54	2y	37	6MZ	C5-C4	4.86	1.47	1.39
54	1y	37	6MZ	C5-C4	4.82	1.47	1.39
54	2w	37	6MZ	C5-C4	4.80	1.47	1.39
54	1w	37	6MZ	C5-C4	4.79	1.47	1.39
54	2y	8	4SU	C4-S4	-4.77	1.60	1.68
32	1a	1518	MA6	C5-C4	4.73	1.47	1.39
32	1a	1519	MA6	C5-C4	4.69	1.47	1.39
54	2w	8	4SU	C4-S4	-4.66	1.60	1.68
1	1A	2503	2MA	C5-C4	4.41	1.46	1.39
1	2A	2503	2MA	C5-C4	4.38	1.46	1.39
55	1x	8	4SU	C4-N3	-4.31	1.33	1.37
54	1w	55	PSU	C6-C5	4.22	1.40	1.35
55	2x	8	4SU	C4-N3	-4.07	1.33	1.37
54	1w	46	7MG	C4-N9	-4.04	1.32	1.37
54	2w	55	PSU	C6-C5	3.94	1.39	1.35
54	1y	55	PSU	C6-C5	3.91	1.39	1.35
54	2y	55	PSU	C6-C5	3.75	1.39	1.35
55	1x	55	PSU	C6-C5	3.75	1.39	1.35
54	1y	46	7MG	C5-C4	3.64	1.48	1.37
54	1y	8	4SU	C4-N3	-3.64	1.33	1.37
32	2a	516	PSU	C6-C5	3.60	1.39	1.35
32	1a	516	PSU	C6-C5	3.59	1.39	1.35
54	2y	46	7MG	C5-C4	3.55	1.48	1.37
55	1x	8	4SU	C2-N3	-3.50	1.31	1.38
1	2A	1917	PSU	C6-C5	3.48	1.39	1.35
1	2A	2605	PSU	C6-C5	3.43	1.39	1.35
1	1A	1917	PSU	C6-C5	3.39	1.39	1.35
32	1a	527	7MG	C5-C4	3.36	1.48	1.37
55	2x	55	PSU	C6-C5	3.34	1.39	1.35
54	2w	46	7MG	C5-C4	3.33	1.47	1.37
32	2a	966	M2G	C5-C4	3.32	1.47	1.38
1	1A	1911	PSU	C6-C5	3.32	1.39	1.35
1	2A	1911	PSU	C6-C5	3.29	1.38	1.35
32	2a	527	7MG	C5-C4	3.28	1.47	1.37
32	2a	1207	2MG	C5-C4	3.28	1.47	1.38
55	1x	8	4SU	C5-C4	-3.27	1.38	1.42
54	2y	8	4SU	C4-N3	-3.25	1.34	1.37
1	1A	2605	PSU	C6-C5	3.22	1.38	1.35
32	2a	1518	MA6	C5-C6	3.21	1.49	1.41
32	1a	966	M2G	C5-C4	3.20	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1519	MA6	C5-C6	3.20	1.49	1.41
1	1A	2251	OMG	C5-C4	3.18	1.47	1.38
32	2a	527	7MG	C4-N9	-3.18	1.34	1.37
54	1w	46	7MG	C5-C4	3.17	1.47	1.37
55	1x	32	5MC	C6-C5	3.14	1.39	1.34
54	1w	8	4SU	C4-N3	-3.12	1.34	1.37
1	2A	2251	OMG	C5-C4	3.10	1.47	1.38
32	1a	1207	2MG	C5-C4	3.07	1.47	1.38
55	2x	8	4SU	C5-C4	-3.05	1.38	1.42
32	1a	527	7MG	C4-N9	-3.04	1.34	1.37
54	2y	37	6MZ	C5-C6	3.03	1.49	1.41
32	1a	1518	MA6	C5-C6	3.02	1.49	1.41
54	1w	8	4SU	C5-C4	-3.02	1.38	1.42
54	1y	54	5MU	C6-C5	3.01	1.39	1.34
54	1y	37	6MZ	C5-C6	3.00	1.49	1.41
1	2A	1915	5MU	C6-C5	2.99	1.39	1.34
1	1A	2552	OMU	C4-N3	-2.97	1.33	1.38
32	1a	966	M2G	C2-N2	2.96	1.40	1.35
32	2a	966	M2G	C2-N2	2.96	1.40	1.35
54	2w	54	5MU	C6-C5	2.95	1.39	1.34
32	1a	1519	MA6	C5-C6	2.94	1.48	1.41
1	2A	1962	5MC	C6-C5	2.91	1.39	1.34
54	2w	8	4SU	C4-N3	-2.88	1.34	1.37
55	2x	32	5MC	C6-C5	2.87	1.39	1.34
32	1a	1404	5MC	C6-C5	2.86	1.39	1.34
32	2a	1407	5MC	C6-C5	2.86	1.39	1.34
54	1y	46	7MG	C6-N1	-2.85	1.33	1.38
54	1w	37	6MZ	C5-C6	2.84	1.48	1.41
32	2a	1404	5MC	C6-C5	2.83	1.39	1.34
1	1A	1915	5MU	C6-C5	2.83	1.39	1.34
54	2y	54	5MU	C6-C5	2.83	1.39	1.34
55	2x	54	5MU	C6-C5	2.83	1.39	1.34
1	2A	1939	5MU	C6-C5	2.82	1.39	1.34
54	2y	54	5MU	C2-N1	2.81	1.42	1.38
32	2a	967	5MC	C6-C5	2.80	1.39	1.34
54	2w	37	6MZ	C5-C6	2.80	1.48	1.41
1	1A	2503	2MA	C5-C6	2.80	1.48	1.41
32	1a	1400	5MC	C6-C5	2.79	1.39	1.34
54	2y	8	4SU	C5-C4	-2.78	1.39	1.42
54	2w	8	4SU	C2-N1	2.77	1.42	1.38
55	1x	54	5MU	C4-N3	-2.76	1.33	1.38
1	1A	1939	5MU	C6-C5	2.76	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	1407	5MC	C6-C5	2.76	1.39	1.34
1	1A	2605	PSU	C4-N3	-2.75	1.33	1.38
1	2A	2552	OMU	C4-N3	-2.75	1.33	1.38
54	1w	34	CM0	C4-N3	-2.74	1.33	1.38
54	1y	8	4SU	C5-C4	-2.74	1.39	1.42
1	1A	1942	5MC	C6-C5	2.71	1.39	1.34
32	2a	1400	5MC	C6-C5	2.71	1.39	1.34
55	1x	54	5MU	C6-C5	2.71	1.39	1.34
1	1A	1911	PSU	C4-N3	-2.70	1.33	1.38
54	2w	34	CM0	C4-N3	-2.70	1.33	1.38
1	1A	1939	5MU	C4-N3	-2.70	1.33	1.38
54	2y	46	7MG	C6-N1	-2.69	1.33	1.38
1	2A	2251	OMG	C6-N1	-2.69	1.33	1.38
54	2w	8	4SU	C5-C4	-2.69	1.39	1.42
1	1A	1915	5MU	C2-N1	2.68	1.42	1.38
54	1y	34	CM0	C4-N3	-2.68	1.33	1.38
32	1a	967	5MC	C6-C5	2.68	1.39	1.34
1	1A	1962	5MC	C6-C5	2.67	1.39	1.34
54	1w	54	5MU	C6-C5	2.67	1.39	1.34
32	1a	1207	2MG	C6-N1	-2.66	1.33	1.38
1	2A	1911	PSU	C4-N3	-2.65	1.33	1.38
1	1A	1915	5MU	C4-N3	-2.65	1.33	1.38
1	2A	2605	PSU	C4-N3	-2.65	1.33	1.38
54	2w	46	7MG	C4-N9	-2.64	1.34	1.37
1	2A	2503	2MA	C5-C6	2.63	1.48	1.41
54	2y	54	5MU	C4-N3	-2.63	1.33	1.38
1	1A	1917	PSU	C4-N3	-2.63	1.33	1.38
1	2A	1915	5MU	C4-C5	2.62	1.49	1.44
55	2x	8	4SU	C2-N3	-2.61	1.33	1.38
54	2w	54	5MU	C4-N3	-2.60	1.34	1.38
54	2y	34	CM0	C4-N3	-2.59	1.34	1.38
54	1y	54	5MU	C2-N1	2.59	1.42	1.38
54	2y	55	PSU	C4-N3	-2.58	1.34	1.38
1	1A	2251	OMG	C6-N1	-2.58	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.58	1.34	1.38
1	2A	1942	5MC	C6-C5	2.57	1.38	1.34
1	2A	1939	5MU	C4-N3	-2.56	1.34	1.38
54	1y	54	5MU	C4-C5	2.55	1.49	1.44
54	1w	54	5MU	C4-C5	2.54	1.49	1.44
1	2A	1917	PSU	C4-N3	-2.53	1.34	1.38
32	1a	516	PSU	C4-N3	-2.53	1.34	1.38
55	2x	54	5MU	C4-N3	-2.52	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	55	PSU	C4-N3	-2.52	1.34	1.38
55	2x	55	PSU	C4-N3	-2.50	1.34	1.38
55	2x	54	5MU	C4-C5	2.50	1.48	1.44
54	1y	8	4SU	C2-N1	2.49	1.42	1.38
32	1a	966	M2G	C6-N1	-2.49	1.34	1.38
54	2y	37	6MZ	C8-N7	2.48	1.36	1.31
54	1y	46	7MG	C8-N9	2.46	1.47	1.45
54	1y	54	5MU	C4-N3	-2.45	1.34	1.38
54	1y	37	6MZ	C8-N7	2.44	1.36	1.31
32	1a	527	7MG	C6-N1	-2.43	1.34	1.38
1	2A	2552	OMU	C5-C4	2.42	1.49	1.43
54	2y	34	CM0	C2-N1	2.42	1.42	1.38
1	2A	1915	5MU	C2-N1	2.41	1.42	1.38
1	1A	2552	OMU	C5-C4	2.40	1.48	1.43
54	1y	34	CM0	C2-N1	2.40	1.42	1.38
32	2a	516	PSU	C4-N3	-2.39	1.34	1.38
32	2a	1498	UR3	C2-N1	2.39	1.41	1.38
1	1A	2552	OMU	C2-N3	-2.39	1.33	1.38
1	1A	1942	5MC	C6-N1	-2.39	1.33	1.38
54	1w	37	6MZ	C5-N7	-2.37	1.34	1.39
55	2x	8	4SU	C2-N1	2.37	1.42	1.38
54	1y	55	PSU	C4-N3	-2.36	1.34	1.38
1	2A	2251	OMG	C5-N7	-2.36	1.34	1.39
32	2a	1519	MA6	C8-N7	2.36	1.36	1.31
54	1w	37	6MZ	C8-N7	2.36	1.36	1.31
54	2y	54	5MU	C4-C5	2.36	1.48	1.44
54	1w	54	5MU	C4-N3	-2.35	1.34	1.38
54	1w	54	5MU	C2-N1	2.35	1.42	1.38
1	1A	1939	5MU	C6-N1	-2.35	1.34	1.38
32	2a	966	M2G	C6-N1	-2.35	1.34	1.38
1	2A	2503	2MA	C8-N7	2.34	1.36	1.31
32	1a	1519	MA6	C8-N7	2.34	1.36	1.31
1	2A	1939	5MU	C6-N1	-2.34	1.34	1.38
54	2w	37	6MZ	C8-N7	2.33	1.36	1.31
54	2w	55	PSU	C4-N3	-2.32	1.34	1.38
32	2a	1207	2MG	C6-N1	-2.31	1.34	1.38
32	1a	1518	MA6	C8-N7	2.31	1.36	1.31
32	2a	1518	MA6	C8-N7	2.30	1.36	1.31
1	1A	1962	5MC	C6-N1	-2.30	1.34	1.38
32	2a	527	7MG	C6-N1	-2.30	1.34	1.38
1	2A	2503	2MA	C5-N7	-2.30	1.34	1.39
32	1a	967	5MC	C6-N1	-2.29	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	1942	5MC	C6-N1	-2.29	1.34	1.38
54	2y	8	4SU	C2-N1	2.29	1.42	1.38
1	1A	1915	5MU	C4-C5	2.27	1.48	1.44
55	1x	54	5MU	C4-C5	2.27	1.48	1.44
55	2x	54	5MU	C2-N1	2.27	1.42	1.38
54	2w	54	5MU	C2-N1	2.26	1.42	1.38
32	2a	1404	5MC	C6-N1	-2.26	1.34	1.38
1	1A	1939	5MU	C4-C5	2.26	1.48	1.44
54	2w	34	CM0	C2-N1	2.25	1.42	1.38
55	1x	54	5MU	C2-N3	-2.24	1.34	1.38
54	1w	8	4SU	C2-N1	2.23	1.42	1.38
1	1A	1939	5MU	C2-N3	-2.23	1.34	1.38
54	2w	37	6MZ	C5-N7	-2.23	1.35	1.39
54	2y	46	7MG	C8-N9	2.22	1.47	1.45
32	2a	1400	5MC	C6-N1	-2.21	1.34	1.38
32	1a	1400	5MC	C6-N1	-2.20	1.34	1.38
54	1w	34	CM0	C2-N1	2.20	1.41	1.38
32	1a	1404	5MC	C6-N1	-2.20	1.34	1.38
1	2A	1939	5MU	C4-C5	2.20	1.48	1.44
55	1x	54	5MU	C2-N1	2.19	1.41	1.38
1	1A	2503	2MA	C8-N7	2.19	1.35	1.31
54	1w	54	5MU	C6-N1	-2.18	1.34	1.38
32	1a	1518	MA6	C5-N7	-2.18	1.35	1.39
32	1a	1498	UR3	C2-N1	2.17	1.41	1.38
1	1A	2251	OMG	C5-N7	-2.16	1.34	1.39
54	1w	34	CM0	C2-N3	-2.15	1.34	1.38
55	1x	32	5MC	C6-N1	-2.15	1.34	1.38
1	1A	2503	2MA	C4-N9	-2.15	1.33	1.37
1	2A	1939	5MU	C2-N3	-2.14	1.34	1.38
32	1a	1519	MA6	C5-N7	-2.14	1.35	1.39
32	2a	967	5MC	C6-N1	-2.13	1.34	1.38
54	2w	34	CM0	C2-N3	-2.13	1.34	1.38
1	2A	1915	5MU	C6-N1	-2.13	1.34	1.38
1	2A	2503	2MA	C4-N9	-2.12	1.33	1.37
1	1A	2503	2MA	C5-N7	-2.12	1.35	1.39
1	1A	2605	PSU	C2-N3	-2.11	1.34	1.37
1	2A	2605	PSU	C2-N3	-2.11	1.34	1.37
1	1A	1911	PSU	C2-N3	-2.10	1.34	1.37
55	2x	32	5MC	C6-N1	-2.10	1.34	1.38
54	1y	8	4SU	C2-N3	-2.10	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.10	1.34	1.38
54	1w	8	4SU	C2-N3	-2.09	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	54	5MU	C4-C5	2.09	1.48	1.44
54	2y	37	6MZ	C5-N7	-2.08	1.35	1.39
54	1y	37	6MZ	C5-N7	-2.08	1.35	1.39
32	1a	1407	5MC	C6-N1	-2.08	1.34	1.38
54	1y	54	5MU	C6-N1	-2.07	1.34	1.38
1	1A	1915	5MU	C2-N3	-2.07	1.34	1.38
54	1y	34	CM0	C2-N3	-2.07	1.34	1.38
1	2A	2552	OMU	C2-N3	-2.06	1.34	1.38
32	2a	1518	MA6	C5-N7	-2.06	1.35	1.39
55	2x	54	5MU	C6-N1	-2.05	1.34	1.38
1	1A	1939	5MU	C2-N1	2.05	1.41	1.38
1	2A	1939	5MU	C2-N1	2.04	1.41	1.38
32	2a	1407	5MC	C6-N1	-2.04	1.34	1.38
32	1a	1498	UR3	C6-C5	2.04	1.39	1.35
54	2w	54	5MU	C6-N1	-2.03	1.34	1.38
54	2w	46	7MG	C5-C6	2.03	1.48	1.43
54	2y	46	7MG	C4-N9	-2.03	1.35	1.37
32	2a	966	M2G	C5-N7	-2.02	1.35	1.39
55	2x	54	5MU	C2-N3	-2.02	1.34	1.38
32	1a	1518	MA6	C4-N9	-2.02	1.33	1.37
54	2w	34	CM0	C6-N1	-2.01	1.34	1.38
32	2a	1498	UR3	C6-C5	2.01	1.39	1.35
32	1a	527	7MG	C5-C6	2.00	1.48	1.43

All (414) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-17.14	71.55	102.36
43	2l	92	0TD	CSB-SB-CB	-10.96	82.66	102.36
54	1y	46	7MG	N9-C4-N3	10.14	140.32	125.46
54	2y	46	7MG	N9-C4-N3	9.83	139.87	125.46
32	1a	527	7MG	N9-C4-N3	8.96	138.59	125.46
54	2w	46	7MG	N9-C4-N3	8.89	138.49	125.46
32	2a	527	7MG	N9-C4-N3	8.75	138.28	125.46
1	2A	2503	2MA	C5-C4-N3	-7.79	118.98	127.18
54	1w	46	7MG	N9-C4-N3	7.71	136.76	125.46
1	1A	2503	2MA	C5-C4-N3	-7.55	119.22	127.18
32	1a	1498	UR3	C4-N3-C2	-7.15	118.82	124.58
32	2a	1207	2MG	C2-N3-C4	7.12	120.91	112.00
32	2a	1498	UR3	C4-N3-C2	-7.07	118.89	124.58
32	1a	1207	2MG	C2-N3-C4	6.79	120.50	112.00
1	1A	2251	OMG	C5-C4-N3	-6.56	117.95	128.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1917	PSU	N1-C2-N3	6.49	122.02	115.17
54	1y	55	PSU	N1-C2-N3	6.41	121.93	115.17
1	1A	1911	PSU	N1-C2-N3	6.37	121.88	115.17
55	2x	55	PSU	N1-C2-N3	6.32	121.84	115.17
1	2A	2251	OMG	C5-C4-N3	-6.31	118.35	128.39
32	1a	516	PSU	N1-C2-N3	6.31	121.82	115.17
32	2a	966	M2G	C5-C4-N3	-6.27	118.41	128.39
55	1x	55	PSU	N1-C2-N3	6.26	121.77	115.17
54	2y	55	PSU	N1-C2-N3	6.24	121.75	115.17
1	1A	1917	PSU	N1-C2-N3	6.21	121.72	115.17
1	2A	2605	PSU	N1-C2-N3	6.15	121.65	115.17
32	2a	1207	2MG	C5-C4-N3	-6.03	118.80	128.39
54	2y	37	6MZ	C5-C4-N3	-6.02	118.43	126.72
1	2A	1911	PSU	N1-C2-N3	6.00	121.50	115.17
1	1A	2605	PSU	N1-C2-N3	5.94	121.44	115.17
54	2w	37	6MZ	C5-C4-N3	-5.94	118.54	126.72
54	1w	37	6MZ	C5-C4-N3	-5.93	118.56	126.72
32	2a	516	PSU	N1-C2-N3	5.90	121.39	115.17
32	1a	966	M2G	C5-C4-N3	-5.89	119.01	128.39
1	2A	2503	2MA	N3-C4-N9	5.86	134.42	126.99
54	1y	8	4SU	C4-N3-C2	-5.82	121.74	127.31
1	1A	2503	2MA	N3-C4-N9	5.81	134.37	126.99
54	1w	55	PSU	N1-C2-N3	5.81	121.30	115.17
54	1y	37	6MZ	C5-C4-N3	-5.79	118.74	126.72
54	2w	55	PSU	N1-C2-N3	5.73	121.21	115.17
32	2a	1519	MA6	C5-C4-N3	-5.69	118.88	126.72
54	1w	46	7MG	N9-C8-N7	-5.66	95.37	103.37
32	1a	1207	2MG	C5-C4-N3	-5.64	119.41	128.39
54	1w	8	4SU	C5-C4-N3	5.60	119.96	114.75
32	1a	527	7MG	C5-C4-N3	-5.59	117.63	128.13
32	2a	527	7MG	N9-C8-N7	-5.58	95.48	103.37
54	1y	46	7MG	C5-C4-N3	-5.58	117.66	128.13
32	2a	1518	MA6	C5-C4-N3	-5.54	119.08	126.72
54	2w	46	7MG	C5-C4-N3	-5.54	117.73	128.13
1	1A	1939	5MU	C4-N3-C2	-5.52	120.10	127.34
54	2w	8	4SU	C4-N3-C2	-5.50	122.04	127.31
54	1w	8	4SU	C4-N3-C2	-5.47	122.08	127.31
32	1a	1518	MA6	C5-C4-N3	-5.44	119.22	126.72
54	2y	46	7MG	C5-C4-N3	-5.40	117.99	128.13
32	1a	1519	MA6	C5-C4-N3	-5.38	119.30	126.72
54	2w	34	CM0	C4-N3-C2	-5.38	120.29	127.34
1	1A	2552	OMU	N3-C2-N1	5.36	121.87	114.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2251	OMG	C2-N3-C4	5.34	121.50	112.30
54	2w	8	4SU	C5-C4-N3	5.33	119.71	114.75
54	2y	8	4SU	C5-C4-N3	5.31	119.69	114.75
54	1w	54	5MU	C4-N3-C2	-5.31	120.38	127.34
54	1y	34	CM0	N3-C2-N1	5.30	121.79	114.89
32	2a	527	7MG	C5-C4-N3	-5.28	118.22	128.13
1	2A	1939	5MU	C4-N3-C2	-5.26	120.44	127.34
54	1y	8	4SU	C5-C4-N3	5.26	119.64	114.75
54	1y	54	5MU	N3-C2-N1	5.26	121.73	114.89
54	1y	34	CM0	C4-N3-C2	-5.26	120.45	127.34
1	2A	1915	5MU	N3-C2-N1	5.23	121.70	114.89
54	2w	46	7MG	N9-C8-N7	-5.22	95.99	103.37
1	2A	1915	5MU	C4-N3-C2	-5.20	120.52	127.34
54	1w	54	5MU	N3-C2-N1	5.19	121.65	114.89
54	1w	34	CM0	N3-C2-N1	5.19	121.64	114.89
54	2y	34	CM0	C4-N3-C2	-5.18	120.55	127.34
54	2w	34	CM0	N3-C2-N1	5.14	121.58	114.89
32	1a	527	7MG	N9-C8-N7	-5.13	96.11	103.37
1	2A	2552	OMU	N3-C2-N1	5.09	121.52	114.89
55	2x	54	5MU	N3-C2-N1	5.09	121.51	114.89
54	2y	34	CM0	N3-C2-N1	5.08	121.50	114.89
1	2A	1939	5MU	N3-C2-N1	5.06	121.48	114.89
54	1w	34	CM0	C4-N3-C2	-5.06	120.71	127.34
54	1y	54	5MU	C4-N3-C2	-5.05	120.72	127.34
1	1A	1939	5MU	N3-C2-N1	5.05	121.46	114.89
54	2y	8	4SU	C4-N3-C2	-5.03	122.49	127.31
54	2y	46	7MG	N9-C8-N7	-4.98	96.32	103.37
32	2a	966	M2G	N9-C4-N3	4.90	135.75	125.95
1	2A	2251	OMG	C2-N3-C4	4.88	120.71	112.30
1	1A	1939	5MU	C5-C4-N3	4.87	119.56	115.32
1	1A	1915	5MU	N3-C2-N1	4.86	121.22	114.89
55	2x	54	5MU	C4-N3-C2	-4.84	120.99	127.34
1	1A	1915	5MU	C4-N3-C2	-4.84	121.00	127.34
1	2A	2251	OMG	N9-C4-N3	4.83	135.61	125.95
54	1y	46	7MG	N9-C8-N7	-4.78	96.60	103.37
54	2y	54	5MU	N3-C2-N1	4.78	121.11	114.89
1	1A	2552	OMU	C4-N3-C2	-4.78	120.68	126.61
1	1A	2251	OMG	N9-C4-N3	4.72	135.38	125.95
1	1A	1915	5MU	C5-C4-N3	4.65	119.36	115.32
54	2y	37	6MZ	N3-C4-N9	4.64	135.06	127.17
54	2w	37	6MZ	N3-C4-N9	4.64	135.05	127.17
54	2w	46	7MG	C2-N3-C4	4.64	120.29	112.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	8	4SU	C5-C4-N3	4.61	119.03	114.75
54	2w	54	5MU	N3-C2-N1	4.59	120.87	114.89
54	1w	46	7MG	C5-C4-N3	-4.59	119.51	128.13
32	1a	966	M2G	C2-N3-C4	4.58	120.98	112.51
54	2y	34	CM0	C7-O5-C5	4.56	123.29	117.48
54	2y	54	5MU	C4-N3-C2	-4.54	121.39	127.34
1	2A	2552	OMU	C4-N3-C2	-4.51	121.02	126.61
32	2a	966	M2G	C2-N3-C4	4.50	120.84	112.51
54	1y	37	6MZ	N3-C4-N9	4.50	134.82	127.17
54	1y	46	7MG	C2-N3-C4	4.47	120.01	112.30
1	2A	1939	5MU	O4-C4-C5	-4.47	119.80	124.92
54	2w	54	5MU	C4-N3-C2	-4.46	121.49	127.34
55	1x	8	4SU	C5-C4-N3	4.46	118.90	114.75
32	2a	1518	MA6	C2-N1-C6	4.46	122.72	111.83
32	1a	527	7MG	C2-N3-C4	4.44	119.94	112.30
54	1w	37	6MZ	N3-C4-N9	4.40	134.66	127.17
55	1x	54	5MU	N3-C2-N1	4.39	120.61	114.89
32	2a	1519	MA6	C4-C5-N7	-4.37	105.59	110.58
32	1a	1518	MA6	C2-N1-C6	4.36	122.49	111.83
1	2A	1939	5MU	C5-C4-N3	4.36	119.11	115.32
32	2a	1519	MA6	C9-N6-C6	-4.35	109.46	120.52
32	2a	1518	MA6	C4-C5-N7	-4.34	105.62	110.58
1	1A	1939	5MU	O4-C4-C5	-4.34	119.96	124.92
32	2a	527	7MG	C2-N3-C4	4.33	119.76	112.30
54	1w	55	PSU	O2-C2-N1	-4.30	118.35	122.79
32	1a	1519	MA6	C2-N1-C6	4.29	122.31	111.83
32	2a	1518	MA6	C9-N6-C6	-4.29	109.61	120.52
1	1A	1939	5MU	C5-C6-N1	-4.28	118.66	123.31
54	2y	46	7MG	C2-N3-C4	4.26	119.64	112.30
32	1a	966	M2G	N9-C4-N3	4.26	134.46	125.95
55	2x	55	PSU	C4-N3-C2	-4.24	120.53	126.37
54	1y	54	5MU	C5-C4-N3	4.24	119.01	115.32
54	1y	34	CM0	C7-O5-C5	4.24	122.88	117.48
32	1a	1519	MA6	C4-C5-N7	-4.23	105.74	110.58
1	2A	1915	5MU	C5-C4-N3	4.22	118.99	115.32
1	1A	1911	PSU	C4-N3-C2	-4.22	120.56	126.37
32	2a	1519	MA6	C2-N1-C6	4.22	122.13	111.83
54	1w	46	7MG	C2-N3-C4	4.21	119.56	112.30
54	1w	54	5MU	C5-C4-N3	4.19	118.97	115.32
1	2A	2605	PSU	C4-N3-C2	-4.17	120.63	126.37
54	1w	54	5MU	O4-C4-C5	-4.17	120.15	124.92
32	2a	1519	MA6	N3-C4-N9	4.14	134.20	127.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	8	4SU	C1'-N1-C2	4.11	124.98	117.59
55	1x	54	5MU	C4-N3-C2	-4.11	121.95	127.34
1	2A	1917	PSU	C4-N3-C2	-4.08	120.75	126.37
32	2a	1518	MA6	N3-C4-N9	4.08	134.10	127.17
32	1a	1518	MA6	C4-C5-N7	-4.07	105.92	110.58
54	2y	54	5MU	C5-C4-N3	4.07	118.86	115.32
32	1a	1519	MA6	C9-N6-C6	-4.06	110.19	120.52
32	1a	1518	MA6	C9-N6-C6	-4.05	110.21	120.52
32	1a	1519	MA6	N3-C4-N9	4.05	134.05	127.17
1	1A	2605	PSU	C4-N3-C2	-4.04	120.80	126.37
1	1A	1915	5MU	O4-C4-C5	-4.04	120.29	124.92
54	1y	55	PSU	O2-C2-N1	-4.04	118.62	122.79
1	1A	1917	PSU	C4-N3-C2	-4.02	120.83	126.37
1	2A	1939	5MU	C5-C6-N1	-4.00	118.97	123.31
32	2a	516	PSU	C4-N3-C2	-4.00	120.86	126.37
32	2a	1207	2MG	N9-C4-N3	4.00	133.95	125.95
54	2y	55	PSU	C4-N3-C2	-3.99	120.87	126.37
54	2w	54	5MU	O4-C4-C5	-3.97	120.37	124.92
55	2x	54	5MU	C5-C4-N3	3.96	118.77	115.32
55	1x	55	PSU	C4-N3-C2	-3.96	120.92	126.37
54	1w	8	4SU	C5-C4-S4	-3.95	119.79	124.31
54	2w	8	4SU	C5-C4-S4	-3.94	119.80	124.31
1	2A	1911	PSU	C4-N3-C2	-3.92	120.97	126.37
32	1a	516	PSU	C4-N3-C2	-3.92	120.97	126.37
32	1a	1518	MA6	N3-C4-N9	3.89	133.79	127.17
1	2A	1917	PSU	O2-C2-N1	-3.86	118.81	122.79
32	1a	1207	2MG	N9-C4-N3	3.85	133.65	125.95
1	2A	1915	5MU	C5-C6-N1	-3.85	119.14	123.31
54	2w	54	5MU	C5-C4-N3	3.83	118.65	115.32
54	1y	8	4SU	N3-C2-N1	3.82	119.86	114.89
54	2w	55	PSU	C4-N3-C2	-3.82	121.11	126.37
54	2y	37	6MZ	C2-N3-C4	3.80	121.11	111.83
54	1y	55	PSU	C4-N3-C2	-3.79	121.15	126.37
54	1y	37	6MZ	C2-N3-C4	3.77	121.03	111.83
55	1x	54	5MU	C5-C4-N3	3.76	118.60	115.32
54	1y	37	6MZ	C6-C5-N7	3.76	136.53	132.43
54	1y	54	5MU	O4-C4-C5	-3.75	120.62	124.92
54	2y	37	6MZ	C4-C5-N7	-3.74	106.30	110.58
55	2x	54	5MU	O4-C4-C5	-3.74	120.64	124.92
54	2w	37	6MZ	C2-N3-C4	3.71	120.89	111.83
1	1A	2503	2MA	C4-C5-N7	-3.70	106.35	110.58
54	1w	37	6MZ	C4-C5-N7	-3.69	106.37	110.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1519	MA6	C2-N3-C4	3.69	120.83	111.83
54	1w	55	PSU	C4-N3-C2	-3.68	121.30	126.37
1	2A	2503	2MA	C4-C5-N7	-3.68	106.38	110.58
32	1a	1207	2MG	C6-C5-N7	3.68	136.98	130.29
32	2a	1518	MA6	C2-N3-C4	3.67	120.80	111.83
1	1A	1962	5MC	C5-C6-N1	-3.67	119.33	123.31
54	1w	37	6MZ	C2-N3-C4	3.66	120.78	111.83
32	1a	1518	MA6	C2-N3-C4	3.65	120.75	111.83
54	1y	37	6MZ	C4-C5-N7	-3.65	106.41	110.58
32	2a	1207	2MG	C6-C5-N7	3.64	136.92	130.29
32	2a	1404	5MC	C5-C6-N1	-3.64	119.36	123.31
54	2y	54	5MU	O4-C4-C5	-3.60	120.80	124.92
1	1A	1911	PSU	O2-C2-N1	-3.60	119.08	122.79
54	1w	54	5MU	C5-C6-N1	-3.58	119.42	123.31
54	2y	37	6MZ	C6-C5-N7	3.56	136.31	132.43
32	1a	1519	MA6	C2-N3-C4	3.56	120.52	111.83
1	2A	1911	PSU	O2-C2-N1	-3.56	119.12	122.79
55	2x	55	PSU	O2-C2-N1	-3.54	119.14	122.79
54	2y	55	PSU	O2-C2-N1	-3.52	119.16	122.79
54	2w	37	6MZ	C4-C5-N7	-3.50	106.58	110.58
55	1x	8	4SU	C1'-N1-C2	3.49	123.86	117.59
54	2y	8	4SU	C5-C4-S4	-3.48	120.33	124.31
54	2w	55	PSU	O2-C2-N1	-3.48	119.20	122.79
1	2A	1915	5MU	O4-C4-C5	-3.48	120.94	124.92
32	2a	1400	5MC	C5-C6-N1	-3.48	119.53	123.31
55	1x	32	5MC	C5-C6-N1	-3.47	119.54	123.31
32	2a	516	PSU	O2-C2-N1	-3.47	119.21	122.79
32	1a	966	M2G	C6-C5-N7	3.45	136.56	130.29
1	2A	2552	OMU	C2'-C1'-N1	-3.44	107.71	114.24
54	2w	8	4SU	C1'-N1-C2	3.43	123.75	117.59
54	1w	37	6MZ	C6-C5-N7	3.40	136.14	132.43
32	1a	1518	MA6	N1-C2-N3	-3.40	123.44	128.58
32	1a	1498	UR3	C5-C4-N3	3.39	119.50	115.04
32	2a	1518	MA6	N1-C2-N3	-3.38	123.47	128.58
54	1y	46	7MG	C5-C4-N9	-3.38	102.01	106.33
55	1x	55	PSU	O2-C2-N1	-3.36	119.32	122.79
1	1A	1942	5MC	C5-C6-N1	-3.35	119.68	123.31
54	1y	37	6MZ	N1-C2-N3	-3.35	123.52	128.58
1	1A	1917	PSU	O2-C2-N1	-3.34	119.34	122.79
54	2w	8	4SU	N3-C2-N1	3.34	119.23	114.89
55	1x	54	5MU	O4-C4-C5	-3.33	121.11	124.92
32	1a	1519	MA6	N1-C2-N3	-3.32	123.56	128.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	516	PSU	O2-C2-N1	-3.31	119.37	122.79
54	2w	37	6MZ	C6-C5-N7	3.30	136.03	132.43
54	1y	37	6MZ	C9-N6-C6	-3.30	119.79	122.85
32	1a	1400	5MC	C5-C6-N1	-3.30	119.73	123.31
32	2a	1498	UR3	C5-C4-N3	3.28	119.36	115.04
43	1l	92	0TD	OD2-CG-CB	3.28	120.24	113.15
54	2y	46	7MG	C5-C4-N9	-3.28	102.14	106.33
43	2l	92	0TD	OD2-CG-CB	3.27	120.21	113.15
54	2y	37	6MZ	N1-C2-N3	-3.23	123.69	128.58
32	1a	967	5MC	C5-C6-N1	-3.23	119.81	123.31
1	2A	1962	5MC	C5-C6-N1	-3.23	119.81	123.31
32	1a	1407	5MC	C5-C6-N1	-3.22	119.81	123.31
54	1w	8	4SU	N3-C2-N1	3.22	119.08	114.89
54	1y	8	4SU	C1'-N1-C2	3.22	123.37	117.59
54	2w	54	5MU	C5-C6-N1	-3.21	119.83	123.31
32	2a	967	5MC	C5-C6-N1	-3.20	119.84	123.31
55	2x	54	5MU	C5-C6-N1	-3.19	119.85	123.31
32	1a	1404	5MC	C5-C4-N3	-3.19	118.48	121.75
54	2w	37	6MZ	N1-C2-N3	-3.16	123.80	128.58
55	2x	32	5MC	C5-C6-N1	-3.16	119.89	123.31
32	1a	1407	5MC	C5-C4-N3	-3.16	118.52	121.75
32	2a	1519	MA6	N1-C2-N3	-3.15	123.82	128.58
1	1A	2552	OMU	C5-C4-N3	3.11	119.16	114.80
55	1x	54	5MU	C5-C6-N1	-3.09	119.95	123.31
1	1A	2552	OMU	O2-C2-N1	-3.09	118.77	122.80
54	2y	37	6MZ	C9-N6-C6	-3.09	119.99	122.85
55	1x	32	5MC	C5-C4-N3	-3.08	118.59	121.75
1	2A	2552	OMU	O2-C2-N1	-3.08	118.79	122.80
32	1a	1519	MA6	C5-N7-C8	3.07	108.28	103.45
1	2A	1942	5MC	C5-C6-N1	-3.07	119.98	123.31
54	1y	8	4SU	C5-C4-S4	-3.07	120.80	124.31
1	1A	2552	OMU	C2'-C1'-N1	-3.06	108.43	114.24
32	1a	1518	MA6	C10-N6-C6	-3.06	112.73	120.52
55	2x	32	5MC	O2-C2-N3	-3.05	117.52	122.33
54	1w	37	6MZ	N1-C2-N3	-3.05	123.97	128.58
32	2a	1519	MA6	C5-N7-C8	3.04	108.23	103.45
1	2A	2605	PSU	O2-C2-N1	-3.04	119.66	122.79
54	1y	54	5MU	C5-C6-N1	-3.03	120.02	123.31
32	2a	1207	2MG	C4-C5-N7	-3.03	105.87	110.67
1	1A	2503	2MA	C4-N9-C8	3.03	108.92	105.74
1	1A	2251	OMG	C6-C5-N7	3.03	135.80	130.29
54	1w	37	6MZ	C9-N6-C6	-3.02	120.05	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	2w	46	7MG	C5-C6-N1	3.00	116.22	110.94
32	2a	1407	5MC	C5-C4-N3	-2.98	118.70	121.75
32	2a	1518	MA6	C5-N7-C8	2.98	108.13	103.45
1	2A	2503	2MA	N6-C6-N1	2.95	121.01	117.03
32	1a	1519	MA6	C4-N9-C8	2.95	108.83	105.74
55	2x	32	5MC	C5-C4-N3	-2.94	118.74	121.75
32	2a	1207	2MG	N1-C2-N2	2.93	119.55	116.56
32	2a	1407	5MC	C5-C6-N1	-2.92	120.14	123.31
1	1A	1915	5MU	C5-C6-N1	-2.90	120.16	123.31
1	1A	1942	5MC	C5-C4-N3	-2.89	118.79	121.75
32	1a	1404	5MC	C5-C6-N1	-2.88	120.19	123.31
32	1a	1207	2MG	C4-C5-N7	-2.86	106.14	110.67
1	2A	2552	OMU	C5-C4-N3	2.85	118.79	114.80
1	2A	1939	5MU	O2-C2-N1	-2.84	119.09	122.80
1	2A	2251	OMG	C6-C5-N7	2.83	135.43	130.29
32	2a	966	M2G	C6-C5-N7	2.82	135.43	130.29
54	2y	8	4SU	N3-C2-N1	2.82	118.56	114.89
54	2y	54	5MU	C1'-N1-C2	2.81	122.65	117.59
1	1A	2503	2MA	C2-N1-C6	2.79	122.39	118.10
32	1a	1207	2MG	N1-C2-N2	2.77	119.39	116.56
55	2x	8	4SU	C4-N3-C2	-2.77	124.66	127.31
32	1a	1400	5MC	C5-C4-N3	-2.77	118.92	121.75
1	1A	2503	2MA	N6-C6-N1	2.77	120.76	117.03
54	2y	54	5MU	C5-C6-N1	-2.76	120.32	123.31
1	2A	2503	2MA	C4-N9-C8	2.76	108.63	105.74
32	1a	967	5MC	C5-C4-N3	-2.75	118.93	121.75
1	1A	1939	5MU	O2-C2-N1	-2.74	119.23	122.80
32	1a	1518	MA6	C5-N7-C8	2.73	107.75	103.45
54	1w	34	CM0	O2-C2-N1	-2.73	119.24	122.80
1	1A	2605	PSU	O2-C2-N1	-2.73	119.97	122.79
1	2A	1962	5MC	C5-C4-N3	-2.72	118.96	121.75
54	2y	37	6MZ	C5-N7-C8	2.71	107.72	103.45
32	2a	1400	5MC	C5-C4-N3	-2.71	118.97	121.75
32	2a	527	7MG	C5-C6-N1	2.69	115.68	110.94
1	1A	2503	2MA	C5-N7-C8	2.69	107.68	103.45
1	2A	2503	2MA	C2-N1-C6	2.69	122.23	118.10
55	1x	8	4SU	C6-C5-C4	-2.68	117.63	119.95
54	1w	54	5MU	O2-C2-N1	-2.68	119.31	122.80
54	2w	54	5MU	O2-C2-N1	-2.66	119.34	122.80
54	2w	34	CM0	O2-C2-N1	-2.65	119.34	122.80
32	2a	1404	5MC	C5-C4-N3	-2.65	119.04	121.75
32	1a	527	7MG	C5-C6-N1	2.65	115.60	110.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1y	37	6MZ	C5-N7-C8	2.65	107.61	103.45
54	1y	34	CM0	O2-C2-N1	-2.64	119.36	122.80
54	1y	37	6MZ	C4-N9-C8	2.64	108.51	105.74
1	2A	1942	5MC	C5-C4-N3	-2.64	119.05	121.75
32	2a	967	5MC	C5-C4-N3	-2.62	119.07	121.75
1	2A	2503	2MA	C5-N7-C8	2.62	107.57	103.45
54	2y	8	4SU	C1'-N1-C2	2.61	122.28	117.59
32	2a	1518	MA6	C10-N6-C6	-2.61	113.88	120.52
55	1x	8	4SU	O2-C2-N3	-2.61	116.68	121.49
1	1A	2251	OMG	C4-C5-N7	-2.58	106.59	110.67
54	2w	34	CM0	C7-O5-C5	2.57	120.75	117.48
54	1w	46	7MG	C5-C6-N1	2.57	115.46	110.94
32	2a	1518	MA6	C4-N9-C8	2.56	108.43	105.74
54	1w	37	6MZ	C5-N7-C8	2.55	107.46	103.45
1	1A	2503	2MA	C6-C5-N7	2.55	137.00	132.09
54	1w	8	4SU	C1'-N1-C2	2.54	122.15	117.59
32	2a	1519	MA6	C4-N9-C8	2.53	108.40	105.74
1	2A	1920	OMC	O2-C2-N3	-2.53	118.34	122.33
54	2w	37	6MZ	C5-N7-C8	2.52	107.41	103.45
55	1x	8	4SU	O2-C2-N1	2.51	126.07	122.80
54	1w	55	PSU	C6-C5-C4	-2.50	116.48	118.17
32	2a	1519	MA6	C10-N6-C6	-2.49	114.18	120.52
1	1A	1962	5MC	C5-C4-N3	-2.49	119.20	121.75
54	2y	37	6MZ	C4-N9-C8	2.49	108.35	105.74
32	1a	1519	MA6	C10-N6-C6	-2.48	114.20	120.52
32	2a	1519	MA6	C6-C5-N7	2.48	137.40	133.43
32	2a	1207	2MG	N2-C2-N3	-2.48	117.35	120.51
54	2y	34	CM0	O2-C2-N1	-2.47	119.59	122.80
55	2x	54	5MU	O2-C2-N1	-2.46	119.59	122.80
32	1a	966	M2G	C4-C5-N7	-2.46	106.77	110.67
1	2A	1915	5MU	O2-C2-N1	-2.44	119.61	122.80
54	1w	34	CM0	C7-O5-C5	2.44	120.59	117.48
32	1a	1519	MA6	N9-C8-N7	-2.44	110.48	113.94
55	2x	55	PSU	C5-C6-N1	-2.44	118.76	122.14
1	2A	2251	OMG	C4-C5-N7	-2.43	106.81	110.67
32	1a	1519	MA6	C6-C5-N7	2.42	137.29	133.43
1	1A	1915	5MU	C1'-N1-C2	2.40	121.91	117.59
55	2x	8	4SU	C5-C4-S4	-2.40	121.57	124.31
32	1a	1402	4OC	C6-C5-C4	2.38	119.87	117.00
55	1x	8	4SU	C5-C4-S4	-2.38	121.59	124.31
32	2a	1518	MA6	C6-C5-N7	2.37	137.22	133.43
32	2a	1518	MA6	C10-N6-C9	-2.37	108.56	116.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1y	46	7MG	C4-C5-N7	2.36	108.16	105.38
32	1a	1518	MA6	C6-C5-N7	2.36	137.19	133.43
54	2w	37	6MZ	C4-N9-C8	2.35	108.21	105.74
1	2A	2503	2MA	C6-C5-N7	2.35	136.62	132.09
43	2l	92	0TD	OD1-CG-CB	-2.34	117.55	122.44
54	2w	46	7MG	O6-C6-C5	-2.33	121.91	127.62
1	1A	2503	2MA	N9-C8-N7	-2.32	110.64	113.94
32	2a	966	M2G	C4-C5-N7	-2.32	106.99	110.67
55	1x	32	5MC	O2-C2-N3	-2.31	118.68	122.33
32	1a	1518	MA6	C4-N9-C8	2.31	108.17	105.74
54	2y	54	5MU	C1'-N1-C6	-2.28	117.40	121.15
54	2y	46	7MG	C4-C5-N7	2.27	108.05	105.38
55	2x	8	4SU	C1'-N1-C6	-2.26	115.94	120.78
32	2a	1402	4OC	O2-C2-N3	-2.25	118.78	122.33
32	1a	516	PSU	O4'-C1'-C2'	2.24	108.26	105.15
32	1a	1404	5MC	O2-C2-N3	-2.24	118.80	122.33
54	1w	46	7MG	O6-C6-C5	-2.24	122.12	127.62
1	2A	2552	OMU	O4-C4-C5	-2.23	121.31	125.16
54	1w	34	CM0	O3'-C3'-C2'	2.22	118.94	111.82
32	1a	1518	MA6	C10-N6-C9	-2.22	109.04	116.18
32	1a	1207	2MG	CM2-N2-C2	-2.22	118.87	123.65
32	2a	527	7MG	C5-C4-N9	-2.22	103.49	106.33
55	2x	8	4SU	C6-C5-C4	-2.22	118.03	119.95
32	2a	1402	4OC	C6-C5-C4	2.20	119.65	117.00
1	2A	2503	2MA	N9-C8-N7	-2.19	110.82	113.94
32	2a	1400	5MC	O2-C2-N3	-2.19	118.88	122.33
54	2w	55	PSU	C6-C5-C4	-2.17	116.71	118.17
54	2y	54	5MU	O2-C2-N3	-2.17	117.49	121.49
1	1A	2251	OMG	O6-C6-C5	-2.17	120.81	126.53
32	2a	1519	MA6	N9-C8-N7	-2.17	110.86	113.94
32	2a	966	M2G	O6-C6-C5	-2.16	120.83	126.53
1	1A	2605	PSU	C5-C6-N1	-2.16	119.14	122.14
32	2a	1404	5MC	O2-C2-N3	-2.16	118.93	122.33
1	2A	2251	OMG	O6-C6-C5	-2.16	120.84	126.53
54	1w	54	5MU	C5M-C5-C4	2.13	121.05	118.78
1	2A	2605	PSU	C5-C6-N1	-2.12	119.19	122.14
1	1A	1920	OMC	O2-C2-N3	-2.12	118.98	122.33
1	2A	1917	PSU	C5-C6-N1	-2.11	119.21	122.14
32	1a	967	5MC	O2-C2-N3	-2.10	119.02	122.33
55	1x	8	4SU	C4-N3-C2	-2.09	125.31	127.31
43	1l	92	0TD	OD1-CG-CB	-2.08	118.08	122.44
54	1w	54	5MU	C5M-C5-C6	-2.08	120.04	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	37	6MZ	C4-N9-C8	2.08	107.92	105.74
32	2a	1518	MA6	N9-C8-N7	-2.07	111.00	113.94
1	1A	1911	PSU	C5-C6-N1	-2.06	119.28	122.14
54	2y	34	CM0	O5-C7-C8	-2.06	106.49	110.93
54	2y	46	7MG	C5-C6-N1	2.06	114.57	110.94
54	1y	37	6MZ	N9-C8-N7	-2.06	111.02	113.94
1	1A	1917	PSU	C5-C6-N1	-2.06	119.29	122.14
32	2a	1498	UR3	C3U-N3-C4	2.06	120.72	117.87
32	1a	1407	5MC	O2-C2-N3	-2.05	119.09	122.33
1	1A	2552	OMU	O4-C4-C5	-2.05	121.62	125.16
32	2a	1407	5MC	O2-C2-N3	-2.05	119.10	122.33
1	1A	1920	OMC	C1'-N1-C2	2.05	122.96	118.44
54	1w	46	7MG	C5-C4-N9	-2.03	103.73	106.33
32	2a	1498	UR3	C6-N1-C2	-2.03	120.14	121.80
54	1w	46	7MG	C6-C5-C4	-2.02	118.84	122.40
55	2x	8	4SU	O2-C2-N3	-2.02	117.75	121.49
1	1A	1962	5MC	CM5-C5-C6	-2.02	120.12	122.85
1	1A	1942	5MC	O2-C2-N3	-2.02	119.14	122.33
32	1a	1207	2MG	N2-C2-N3	-2.01	117.95	120.51
32	1a	1498	UR3	C3U-N3-C2	2.01	120.84	117.33
32	1a	527	7MG	C5-C4-N9	-2.00	103.77	106.33

There are no chirality outliers.

All (93) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
32	1a	1400	5MC	O4'-C4'-C5'-O5'
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	O-C-CA-CB
32	2a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	1y	37	6MZ	C5-C6-N6-C9
54	1y	37	6MZ	N1-C6-N6-C9
54	2w	37	6MZ	C5-C6-N6-C9
54	2w	37	6MZ	N1-C6-N6-C9
54	2y	37	6MZ	C5-C6-N6-C9
54	2y	37	6MZ	N1-C6-N6-C9
54	1w	46	7MG	O4'-C4'-C5'-O5'
54	1y	46	7MG	C4'-C5'-O5'-P
54	2y	46	7MG	C4'-C5'-O5'-P
54	1y	54	5MU	O4'-C4'-C5'-O5'
54	2y	54	5MU	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
1	1A	1915	5MU	C3'-C4'-C5'-O5'
1	1A	1915	5MU	O4'-C4'-C5'-O5'
32	1a	1400	5MC	C3'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	527	7MG	C3'-C4'-C5'-O5'
32	2a	1207	2MG	O4'-C4'-C5'-O5'
32	2a	1207	2MG	C3'-C4'-C5'-O5'
54	2y	8	4SU	O4'-C4'-C5'-O5'
54	1w	46	7MG	C3'-C4'-C5'-O5'
54	1y	46	7MG	C3'-C4'-C5'-O5'
54	2y	46	7MG	C3'-C4'-C5'-O5'
54	1y	54	5MU	C3'-C4'-C5'-O5'
54	2y	54	5MU	C3'-C4'-C5'-O5'
54	2y	55	PSU	O4'-C4'-C5'-O5'
32	1a	967	5MC	O4'-C4'-C5'-O5'
32	2a	527	7MG	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	2y	34	CM0	O5-C7-C8-O9
32	1a	1402	4OC	C3'-C4'-C5'-O5'
54	2y	8	4SU	C3'-C4'-C5'-O5'
54	1y	46	7MG	O4'-C4'-C5'-O5'
54	2y	46	7MG	O4'-C4'-C5'-O5'
54	2y	55	PSU	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C5-C6-N6-C10
32	2a	1518	MA6	C5-C6-N6-C9
32	2a	1518	MA6	C5-C6-N6-C10
32	2a	1519	MA6	C5-C6-N6-C9
54	2y	34	CM0	O5-C7-C8-O8
54	2y	34	CM0	C6-C5-O5-C7
54	1y	34	CM0	O4'-C4'-C5'-O5'
32	1a	527	7MG	C3'-C4'-C5'-O5'
54	2w	34	CM0	O4'-C4'-C5'-O5'
54	1y	34	CM0	O5-C7-C8-O8
54	2w	34	CM0	C6-C5-O5-C7
54	2w	34	CM0	C4-C5-O5-C7
54	2y	34	CM0	C4-C5-O5-C7
54	1y	34	CM0	C3'-C4'-C5'-O5'
54	2w	34	CM0	C3'-C4'-C5'-O5'
54	1y	34	CM0	O5-C7-C8-O9
54	1y	46	7MG	C2'-C1'-N9-C8

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Mol	Chain	Res	Type	Atoms
54	2w	34	CM0	C8-C7-O5-C5
54	2y	34	CM0	C8-C7-O5-C5
32	2a	1404	5MC	C3'-C4'-C5'-O5'
32	1a	1518	MA6	C5-C6-N6-C10
54	2y	46	7MG	C2'-C1'-N9-C8
32	2a	1404	5MC	O4'-C4'-C5'-O5'
43	2l	92	0TD	CG-CB-SB-CSB
54	2w	34	CM0	O5-C7-C8-O9
32	1a	967	5MC	C3'-C4'-C5'-O5'
54	2w	34	CM0	O5-C7-C8-O8
32	2a	527	7MG	C4'-C5'-O5'-P
54	1w	34	CM0	C8-C7-O5-C5
54	1w	55	PSU	O4'-C1'-C5-C4
54	2y	55	PSU	O4'-C1'-C5-C4
1	1A	2503	2MA	C4'-C5'-O5'-P
1	2A	1962	5MC	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C4'-C5'-O5'-P
32	2a	1518	MA6	N1-C6-N6-C9
32	2a	1519	MA6	N1-C6-N6-C9
32	2a	1402	4OC	C3'-C2'-O2'-CM2
32	2a	1519	MA6	C4'-C5'-O5'-P
54	1y	8	4SU	O4'-C4'-C5'-O5'
54	2y	46	7MG	O4'-C1'-N9-C8
54	1y	8	4SU	C2'-C1'-N1-C6
32	1a	527	7MG	C4'-C5'-O5'-P
54	2w	8	4SU	C2'-C1'-N1-C6
54	1y	46	7MG	O4'-C1'-N9-C8
32	2a	1519	MA6	C5-C6-N6-C10
32	1a	527	7MG	O4'-C4'-C5'-O5'
43	1l	92	0TD	CA-CB-CG-OD2
43	1l	92	0TD	CG-CB-SB-CSB
1	1A	1920	OMC	C2'-C1'-N1-C2
54	2y	54	5MU	C2'-C1'-N1-C2
55	2x	8	4SU	C2'-C1'-N1-C2
54	1y	8	4SU	C2'-C1'-N1-C2

There are no ring outliers.

42 monomers are involved in 62 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	2A	1962	5MC	1	0
32	2a	1402	4OC	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	1w	46	7MG	5	0
32	1a	1498	UR3	1	0
32	2a	1518	MA6	2	0
1	2A	2552	OMU	1	0
32	1a	1518	MA6	2	0
32	1a	1400	5MC	1	0
1	2A	2251	OMG	1	0
1	2A	1939	5MU	2	0
55	2x	8	4SU	1	0
32	1a	1207	2MG	1	0
1	1A	1939	5MU	1	0
32	1a	1519	MA6	3	0
32	2a	527	7MG	1	0
32	1a	516	PSU	1	0
54	1y	34	CM0	2	0
1	1A	1920	OMC	1	0
1	1A	2552	OMU	1	0
43	2l	92	0TD	2	0
54	1y	8	4SU	1	0
54	1y	37	6MZ	2	0
54	2w	8	4SU	3	0
1	2A	1917	PSU	1	0
55	1x	8	4SU	2	0
32	2a	966	M2G	1	0
54	2w	37	6MZ	2	0
32	2a	967	5MC	2	0
32	1a	966	M2G	1	0
54	1w	55	PSU	1	0
1	2A	2503	2MA	1	0
32	1a	967	5MC	1	0
32	2a	1519	MA6	1	0
54	1w	54	5MU	2	0
55	1x	32	5MC	1	0
1	2A	1920	OMC	2	0
54	2y	46	7MG	1	0
32	1a	1404	5MC	1	0
54	1w	8	4SU	1	0
55	2x	55	PSU	1	0
32	1a	1402	4OC	3	0
54	2w	54	5MU	3	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2778 ligands modelled in this entry, 2770 are monoatomic - leaving 8 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	LUJ	1a	1832	56	46,47,47	0.77	1 (2%)	60,69,69	1.21	3 (5%)
60	SF4	1d	501	35	0,12,12	-	-	-		
60	SF4	2d	303	35	0,12,12	-	-	-		
57	LUJ	1A	4099	-	44,45,47	0.79	1 (2%)	60,67,69	1.51	8 (13%)
57	LUJ	1A	4100	-	44,45,47	0.74	1 (2%)	60,67,69	1.14	3 (5%)
57	LUJ	2a	3232	-	46,47,47	0.83	3 (6%)	60,69,69	1.36	5 (8%)
57	LUJ	2A	3851	-	44,45,47	0.83	2 (4%)	60,67,69	1.57	9 (15%)
57	LUJ	2A	3852	-	44,45,47	0.76	1 (2%)	60,67,69	1.21	4 (6%)

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	LUJ	1a	1832	56	-	5/21/97/97	0/4/4/4
60	SF4	1d	501	35	-	-	0/6/5/5
60	SF4	2d	303	35	-	-	0/6/5/5
57	LUJ	1A	4099	-	-	6/18/94/97	0/4/4/4
57	LUJ	1A	4100	-	-	5/18/94/97	0/4/4/4
57	LUJ	2a	3232	-	-	6/21/97/97	0/4/4/4
57	LUJ	2A	3851	-	-	4/18/94/97	0/4/4/4
57	LUJ	2A	3852	-	-	4/18/94/97	0/4/4/4

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	2A	3851	LUJ	O4'-C1'	2.76	1.46	1.41
57	1A	4100	LUJ	O4'-C1'	2.71	1.46	1.41
57	2A	3851	LUJ	CBE-CBD	-2.34	1.50	1.53
57	1a	1832	LUJ	CBG-CBE	-2.30	1.50	1.53
57	2a	3232	LUJ	O4'-C1'	2.11	1.45	1.41
57	1A	4099	LUJ	OAB-CBC	2.11	1.47	1.41
57	2a	3232	LUJ	C1'-C2'	-2.09	1.50	1.52
57	2A	3852	LUJ	C1'-C2'	-2.07	1.50	1.52
57	2a	3232	LUJ	CBE-CBD	-2.02	1.51	1.53

All (32) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	2a	3232	LUJ	CBF-O3'-C3'	-6.50	102.56	117.98
57	1A	4099	LUJ	O1'-C1'-O4'	-5.62	105.63	111.37
57	1a	1832	LUJ	CBF-O3'-C3'	-5.47	105.01	117.98
57	2A	3851	LUJ	O1'-C1'-O4'	-5.34	105.91	111.37
57	2A	3852	LUJ	CBF-O3'-C3'	-4.91	106.35	117.98
57	2A	3851	LUJ	C1'-O1'-CAS	-4.30	107.78	117.98
57	1A	4099	LUJ	C1'-C2'-C3'	-4.21	97.04	102.10
57	1A	4100	LUJ	C2'-C3'-C4'	-4.15	95.98	103.24
57	2a	3232	LUJ	C1'-C2'-C3'	-4.14	97.13	102.10
57	1A	4100	LUJ	CBF-O3'-C3'	-4.08	108.30	117.98
57	2A	3851	LUJ	C2'-C3'-C4'	-4.06	96.12	103.24
57	1A	4099	LUJ	C1'-O1'-CAS	-3.90	108.73	117.98
57	1a	1832	LUJ	C2'-C3'-C4'	-3.82	96.55	103.24
57	2A	3852	LUJ	C1'-C2'-C3'	-3.64	97.73	102.10
57	1A	4100	LUJ	O1'-C1'-O4'	3.59	115.04	111.37
57	2A	3851	LUJ	CBP-CBG-CBE	-3.46	107.35	112.13
57	2A	3852	LUJ	O4'-C1'-C2'	-3.44	100.61	104.98
57	2a	3232	LUJ	C2'-C3'-C4'	-3.18	97.68	103.24
57	2A	3851	LUJ	OAB-CBC-OAF	2.97	118.50	110.69
57	1A	4099	LUJ	OAB-CBC-OAF	2.90	118.32	110.69
57	1A	4099	LUJ	C2'-C3'-C4'	-2.86	98.24	103.24
57	1a	1832	LUJ	C1'-C2'-C3'	-2.73	98.82	102.10
57	1A	4099	LUJ	CBP-CBG-CBE	-2.64	108.49	112.13
57	2A	3851	LUJ	C1'-C2'-C3'	-2.64	98.93	102.10
57	2A	3852	LUJ	C2'-C3'-C4'	-2.55	98.77	103.24
57	2A	3851	LUJ	CBC-OAB-CAT	2.44	123.77	117.98
57	1A	4099	LUJ	OAB-CAT-CAS	2.31	113.30	107.42
57	2a	3232	LUJ	O3'-CBF-CBH	2.19	111.66	108.08
57	2a	3232	LUJ	O4'-C1'-C2'	-2.18	102.21	104.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	2A	3851	LUJ	CBF-O3'-C3'	-2.11	112.97	117.98
57	1A	4099	LUJ	OAG-CBM-CBO	2.10	110.10	106.07
57	2A	3851	LUJ	O4'-C4'-C5'	2.04	113.52	109.22

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
57	1a	1832	LUJ	CBI-CBG-CBP-CBQ
57	1a	1832	LUJ	CBE-CBG-CBP-CBQ
57	2a	3232	LUJ	CBI-CBG-CBP-CBQ
57	2a	3232	LUJ	CBE-CBG-CBP-CBQ
57	2a	3232	LUJ	O4'-C4'-C5'-O5'
57	1A	4099	LUJ	OAF-CBC-OAB-CAT
57	2A	3852	LUJ	O4'-C4'-C5'-O5'
57	2A	3852	LUJ	C3'-C4'-C5'-O5'
57	2a	3232	LUJ	C3'-C4'-C5'-O5'
57	2A	3851	LUJ	OAF-CBC-OAB-CAT
57	1A	4100	LUJ	O4'-C4'-C5'-O5'
57	1a	1832	LUJ	OAF-CBI-CBN-OAM
57	1a	1832	LUJ	CBG-CBI-CBN-OAM
57	1A	4100	LUJ	C3'-C4'-C5'-O5'
57	1A	4100	LUJ	OAF-CBI-CBN-OAM
57	2a	3232	LUJ	CBG-CBP-CBQ-CBR
57	2A	3851	LUJ	OAG-CBF-O3'-C3'
57	1A	4099	LUJ	C2'-C3'-O3'-CBF
57	1A	4100	LUJ	CBG-CBI-CBN-OAM
57	2A	3852	LUJ	CAS-CAT-OAB-CBC
57	1A	4100	LUJ	OAF-CBC-OAB-CAT
57	2a	3232	LUJ	CAS-CAT-OAB-CBC
57	1a	1832	LUJ	CAS-CAT-OAB-CBC
57	1A	4099	LUJ	CAS-CAT-OAB-CBC
57	1A	4099	LUJ	OAG-CBF-O3'-C3'
57	1A	4099	LUJ	OAG-CBM-CBO-NAR
57	2A	3851	LUJ	OAG-CBM-CBO-NAR
57	2A	3852	LUJ	OAF-CBC-OAB-CAT
57	2A	3851	LUJ	CAS-CAT-OAB-CBC
57	1A	4099	LUJ	CAT-CAS-O1'-C1'

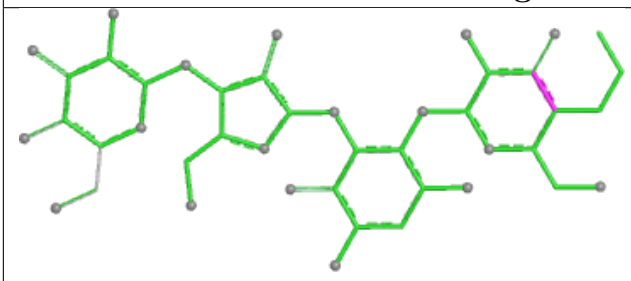
There are no ring outliers.

6 monomers are involved in 8 short contacts:

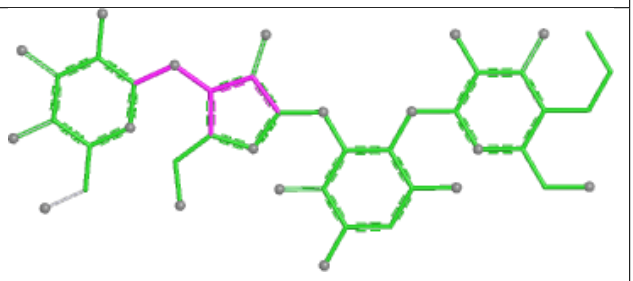
Mol	Chain	Res	Type	Clashes	Symm-Clashes
57	1a	1832	LUJ	1	0
57	1A	4099	LUJ	2	0
57	1A	4100	LUJ	1	0
57	2a	3232	LUJ	1	0
57	2A	3851	LUJ	2	0
57	2A	3852	LUJ	1	0

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

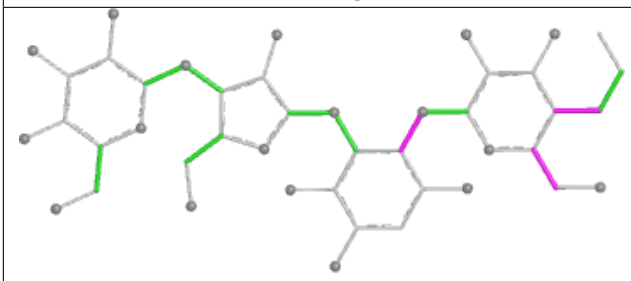
Ligand LUJ 1a 1832



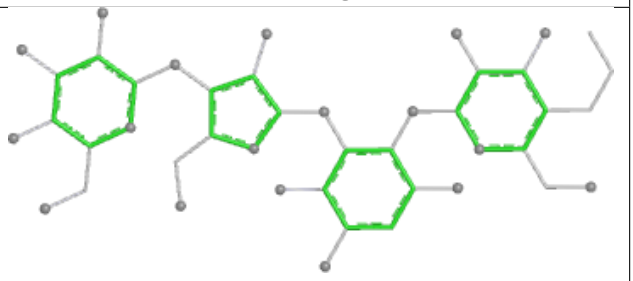
Bond lengths



Bond angles

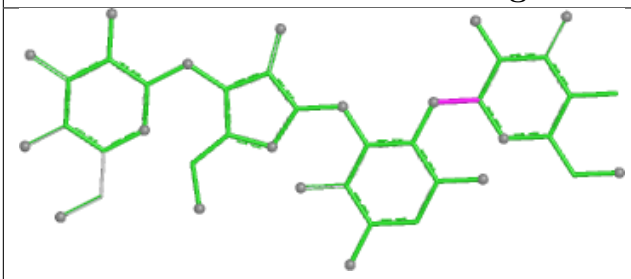


Torsions

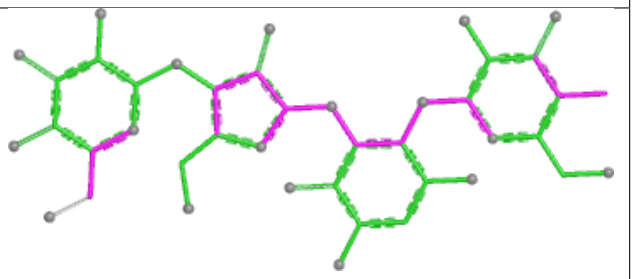


Rings

Ligand LUJ 1A 4099



Bond lengths



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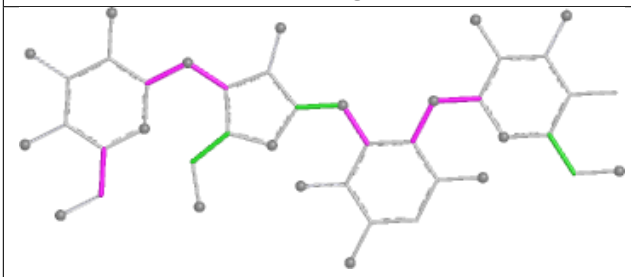
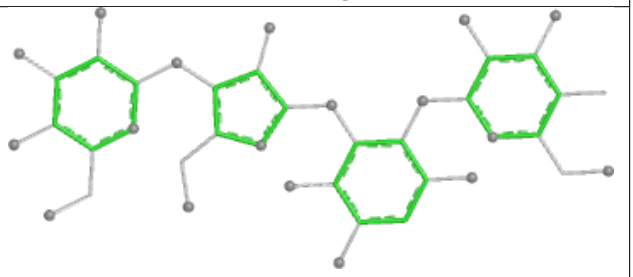
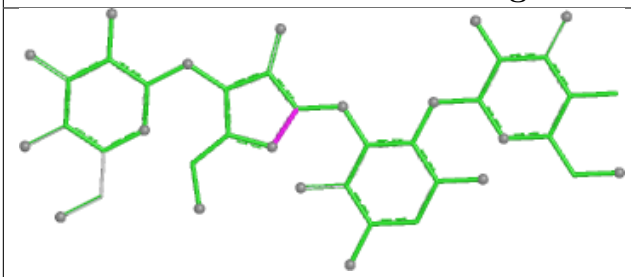


Torsions



Rings

Ligand LUJ 1A 4100



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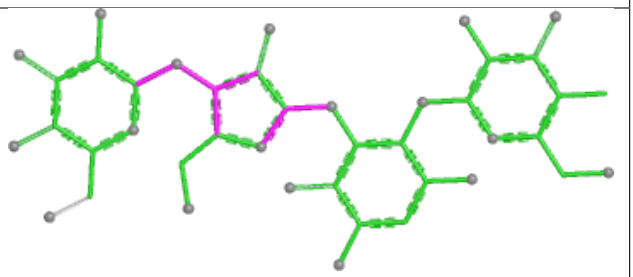

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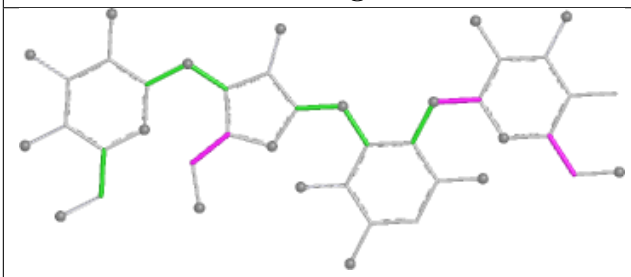
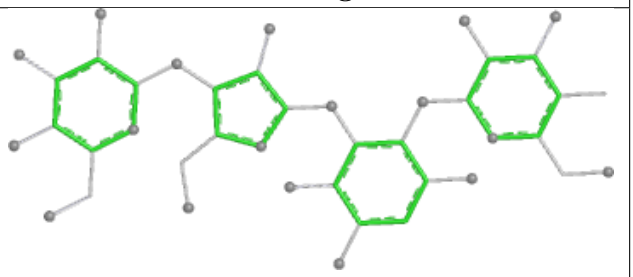
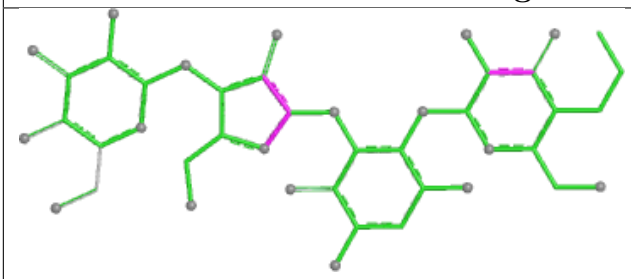


Torsions

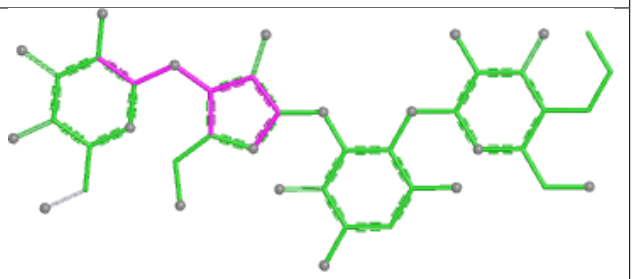


Rings

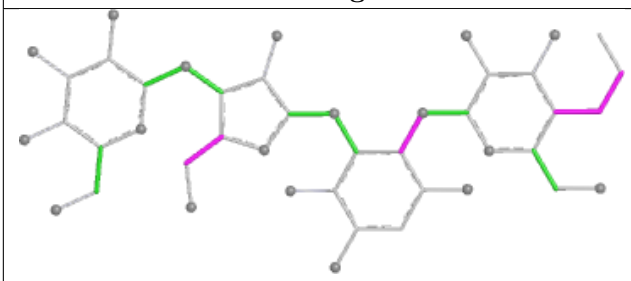
Ligand LUJ 2a 3232



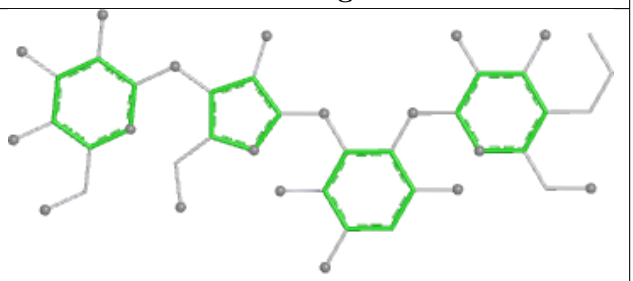
Bond lengths



Bond angles

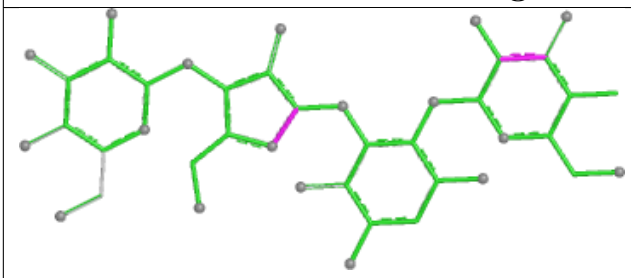


Torsions

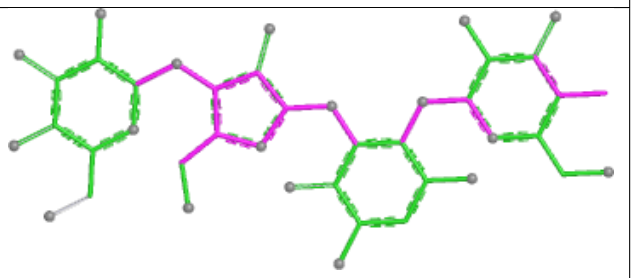


Rings

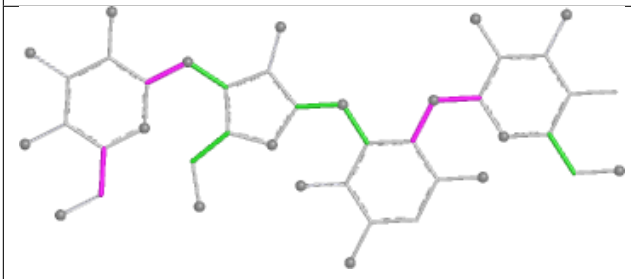
Ligand LUJ 2A 3851



Bond lengths



Bond angles



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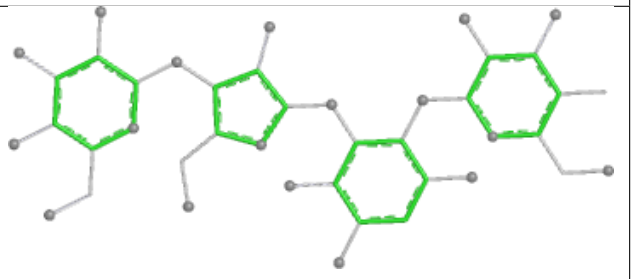
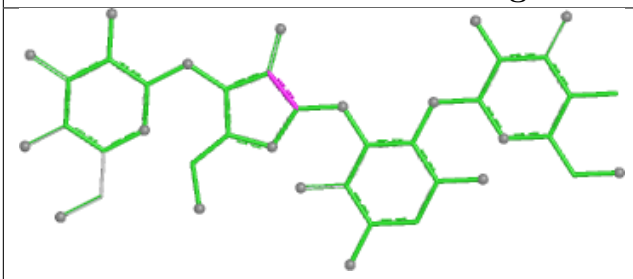
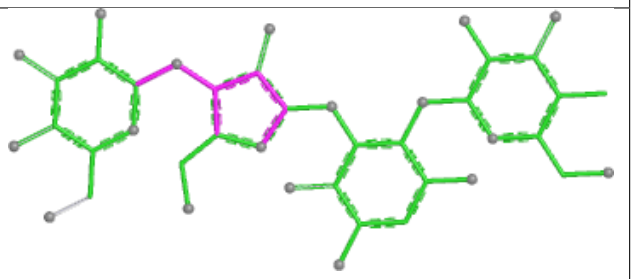


Rings

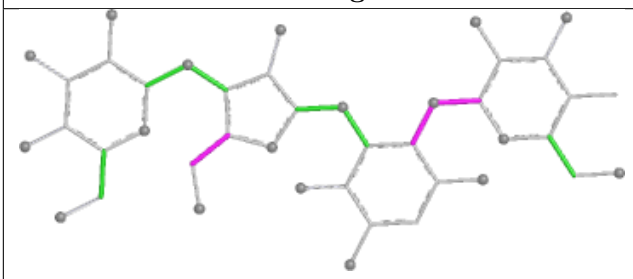
Ligand LUJ 2A 3852



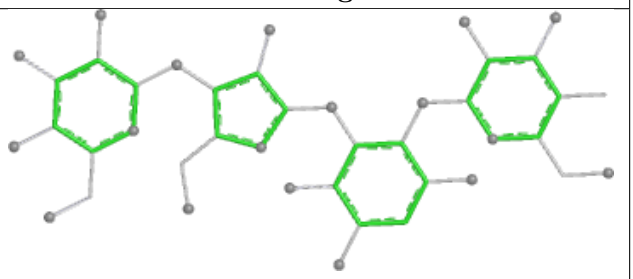
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2860/2915 (98%)	-0.38	97 (3%) 48 46	11, 28, 86, 98	0
1	2A	2789/2915 (95%)	0.17	95 (3%) 48 46	26, 53, 86, 100	0
2	1B	120/121 (99%)	-0.28	0 100 100	21, 40, 53, 74	0
2	2B	120/121 (99%)	0.76	1 (0%) 82 82	55, 70, 79, 87	0
3	1D	275/276 (99%)	-0.05	4 (1%) 72 71	13, 31, 45, 74	0
3	2D	275/276 (99%)	0.37	2 (0%) 84 84	24, 44, 58, 69	0
4	1E	204/206 (99%)	0.00	0 100 100	12, 33, 52, 69	0
4	2E	204/206 (99%)	0.58	8 (3%) 43 40	29, 55, 68, 76	0
5	1F	203/210 (96%)	0.03	0 100 100	13, 35, 60, 77	0
5	2F	203/210 (96%)	0.79	9 (4%) 39 38	31, 61, 75, 79	0
6	1G	181/182 (99%)	0.80	14 (7%) 19 19	34, 52, 66, 76	0
6	2G	181/182 (99%)	1.16	22 (12%) 8 7	57, 70, 78, 92	0
7	1H	174/180 (96%)	0.25	5 (2%) 53 52	31, 45, 57, 63	0
7	2H	174/180 (96%)	1.52	40 (22%) 2 2	63, 76, 84, 89	0
8	1I	146/148 (98%)	0.84	6 (4%) 41 39	38, 64, 75, 80	0
8	2I	146/148 (98%)	0.90	8 (5%) 30 30	53, 65, 74, 78	0
9	1N	140/140 (100%)	0.01	1 (0%) 84 84	18, 31, 51, 68	0
9	2N	140/140 (100%)	0.91	5 (3%) 46 44	43, 59, 70, 82	0
10	1O	122/122 (100%)	0.05	0 100 100	20, 34, 51, 57	0
10	2O	122/122 (100%)	0.63	4 (3%) 49 47	43, 55, 65, 67	0
11	1P	149/150 (99%)	0.13	0 100 100	13, 39, 62, 68	0
11	2P	149/150 (99%)	0.77	9 (6%) 27 28	34, 61, 73, 80	0
12	1Q	141/141 (100%)	0.07	3 (2%) 63 61	20, 33, 49, 65	0
12	2Q	141/141 (100%)	1.17	24 (17%) 4 3	43, 61, 71, 74	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.16	0 100 100	16, 27, 43, 55	0
13	2R	118/118 (100%)	0.39	2 (1%) 69 67	36, 49, 58, 62	0
14	1S	110/112 (98%)	0.20	0 100 100	29, 40, 52, 58	0
14	2S	110/112 (98%)	1.13	13 (11%) 9 7	52, 63, 75, 79	0
15	1T	131/146 (89%)	0.26	4 (3%) 51 49	26, 38, 61, 66	0
15	2T	131/146 (89%)	0.72	1 (0%) 82 82	45, 57, 72, 74	0
16	1U	116/118 (98%)	-0.18	1 (0%) 81 81	14, 23, 36, 60	0
16	2U	116/118 (98%)	0.78	3 (2%) 57 55	38, 57, 70, 78	0
17	1V	101/101 (100%)	-0.19	0 100 100	13, 31, 48, 62	0
17	2V	101/101 (100%)	0.93	7 (6%) 23 22	43, 64, 72, 77	0
18	1W	112/113 (99%)	-0.21	0 100 100	16, 24, 43, 70	0
18	2W	112/113 (99%)	0.41	2 (1%) 67 65	37, 46, 60, 75	0
19	1X	95/96 (98%)	-0.02	1 (1%) 78 77	17, 29, 48, 68	0
19	2X	95/96 (98%)	0.73	4 (4%) 40 39	41, 53, 65, 70	0
20	1Y	107/110 (97%)	0.41	2 (1%) 66 64	28, 43, 65, 70	0
20	2Y	107/110 (97%)	1.06	12 (11%) 10 9	56, 65, 77, 79	0
21	1Z	154/206 (74%)	0.95	16 (10%) 11 11	29, 56, 81, 89	0
21	2Z	160/206 (77%)	1.52	43 (26%) 1 1	55, 73, 87, 91	0
22	10	83/85 (97%)	0.22	5 (6%) 27 28	20, 28, 53, 69	0
22	20	83/85 (97%)	1.15	15 (18%) 3 3	39, 57, 71, 80	0
23	11	97/98 (98%)	0.24	1 (1%) 79 79	18, 36, 62, 69	0
23	21	97/98 (98%)	0.71	3 (3%) 51 49	30, 52, 69, 74	0
24	12	70/72 (97%)	0.28	2 (2%) 53 52	26, 40, 54, 68	0
24	22	70/72 (97%)	0.91	7 (10%) 12 12	50, 62, 71, 79	0
25	13	59/60 (98%)	-0.17	0 100 100	17, 28, 48, 62	0
25	23	59/60 (98%)	0.99	3 (5%) 33 33	50, 61, 75, 82	0
26	14	69/71 (97%)	1.21	13 (18%) 3 2	41, 68, 81, 85	0
26	24	69/71 (97%)	1.41	17 (24%) 2 1	71, 77, 85, 87	0
27	15	59/60 (98%)	-0.27	1 (1%) 69 67	12, 24, 44, 55	0
27	25	59/60 (98%)	0.39	1 (1%) 69 67	34, 47, 62, 67	0
28	16	53/54 (98%)	-0.01	0 100 100	26, 34, 45, 51	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.76	4 (7%) 20 20	42, 53, 63, 70	0
29	17	48/49 (97%)	-0.22	1 (2%) 63 61	14, 19, 50, 59	0
29	27	48/49 (97%)	0.23	3 (6%) 26 26	29, 38, 57, 71	0
30	18	64/65 (98%)	0.08	1 (1%) 70 69	18, 26, 35, 52	0
30	28	64/65 (98%)	0.66	1 (1%) 70 69	39, 49, 56, 66	0
31	19	37/37 (100%)	-0.03	0 100 100	22, 32, 46, 47	0
31	29	37/37 (100%)	1.06	3 (8%) 18 18	54, 66, 75, 77	0
32	1a	1488/1521 (97%)	0.32	27 (1%) 67 65	29, 57, 83, 98	0
32	2a	1491/1521 (98%)	0.63	66 (4%) 39 38	43, 69, 87, 100	0
33	1b	231/256 (90%)	1.13	30 (12%) 7 6	54, 70, 78, 84	0
33	2b	231/256 (90%)	1.46	49 (21%) 2 2	65, 78, 85, 92	0
34	1c	206/239 (86%)	0.98	12 (5%) 29 29	47, 63, 73, 78	0
34	2c	206/239 (86%)	1.44	45 (21%) 2 2	64, 75, 81, 88	0
35	1d	208/209 (99%)	0.92	18 (8%) 16 16	50, 60, 70, 76	0
35	2d	208/209 (99%)	0.89	11 (5%) 32 31	50, 64, 73, 82	0
36	1e	148/162 (91%)	0.62	2 (1%) 73 73	45, 56, 65, 71	0
36	2e	148/162 (91%)	1.15	18 (12%) 8 7	56, 70, 76, 82	0
37	1f	100/101 (99%)	0.33	0 100 100	41, 55, 64, 73	0
37	2f	100/101 (99%)	0.69	5 (5%) 34 34	50, 61, 69, 76	0
38	1g	155/156 (99%)	1.13	22 (14%) 6 5	52, 63, 75, 83	0
38	2g	155/156 (99%)	1.13	20 (12%) 7 6	61, 70, 79, 82	0
39	1h	137/138 (99%)	0.61	3 (2%) 62 60	48, 58, 64, 74	0
39	2h	137/138 (99%)	1.06	9 (6%) 24 24	61, 69, 75, 79	0
40	1i	127/128 (99%)	1.35	23 (18%) 3 3	44, 66, 75, 80	0
40	2i	127/128 (99%)	1.84	49 (38%) 1 0	66, 75, 82, 85	0
41	1j	97/105 (92%)	1.39	22 (22%) 2 2	49, 70, 80, 90	0
41	2j	96/105 (91%)	1.98	45 (46%) 0 0	64, 76, 83, 88	0
42	1k	114/129 (88%)	0.54	2 (1%) 67 65	37, 57, 66, 75	0
42	2k	114/129 (88%)	1.01	10 (8%) 15 15	51, 65, 74, 76	0
43	1l	121/132 (91%)	0.29	2 (1%) 69 67	36, 45, 56, 62	0
43	2l	121/132 (91%)	0.88	11 (9%) 15 14	49, 61, 69, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	123/126 (97%)	1.18	15 (12%) 8 7	47, 62, 72, 85	0
44	2m	122/126 (96%)	1.78	29 (23%) 2 1	64, 73, 81, 90	0
45	1n	60/61 (98%)	1.06	6 (10%) 12 12	48, 57, 65, 69	0
45	2n	60/61 (98%)	2.27	32 (53%) 0 0	66, 76, 80, 81	0
46	1o	88/89 (98%)	0.55	3 (3%) 48 46	41, 54, 66, 70	0
46	2o	88/89 (98%)	0.98	8 (9%) 15 14	56, 66, 73, 78	0
47	1p	82/88 (93%)	1.37	15 (18%) 3 2	48, 59, 70, 79	0
47	2p	82/88 (93%)	1.01	7 (8%) 16 17	53, 62, 69, 75	0
48	1q	99/105 (94%)	0.76	5 (5%) 33 33	42, 57, 65, 71	0
48	2q	99/105 (94%)	1.06	7 (7%) 22 22	55, 66, 74, 76	0
49	1r	68/88 (77%)	0.35	1 (1%) 72 71	48, 57, 67, 72	0
49	2r	68/88 (77%)	0.88	4 (5%) 28 28	55, 65, 75, 83	0
50	1s	83/93 (89%)	1.10	8 (9%) 13 13	50, 61, 72, 78	0
50	2s	83/93 (89%)	1.69	21 (25%) 1 1	67, 77, 82, 86	0
51	1t	96/106 (90%)	1.13	13 (13%) 7 5	46, 60, 72, 74	0
51	2t	96/106 (90%)	1.03	14 (14%) 6 5	53, 64, 75, 77	0
52	1u	23/27 (85%)	1.66	5 (21%) 2 2	55, 59, 64, 65	0
52	2u	23/27 (85%)	2.16	10 (43%) 0 0	67, 74, 78, 80	0
53	1v	13/27 (48%)	0.91	3 (23%) 2 1	40, 50, 82, 92	0
53	2v	13/27 (48%)	1.40	5 (38%) 1 0	56, 72, 92, 94	0
54	1w	67/76 (88%)	1.39	17 (25%) 1 1	44, 81, 92, 95	0
54	1y	67/76 (88%)	1.40	13 (19%) 3 2	31, 89, 96, 96	0
54	2w	67/76 (88%)	1.64	22 (32%) 1 1	65, 89, 95, 101	0
54	2y	67/76 (88%)	1.48	19 (28%) 1 1	49, 92, 97, 99	0
55	1x	72/77 (93%)	0.48	4 (5%) 30 30	30, 60, 74, 80	0
55	2x	72/77 (93%)	0.84	5 (6%) 23 22	50, 74, 82, 88	0
All	All	20878/21754 (95%)	0.48	1341 (6%) 25 25	11, 57, 82, 101	0

All (1341) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
44	2m	123	ALA	12.6
44	1m	124	PRO	10.8

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Mol	Chain	Res	Type	RSRZ
44	2m	124	PRO	10.7
44	2m	122	LYS	9.7
44	1m	123	ALA	8.2
23	21	2	SER	7.2
44	1m	122	LYS	5.8
1	2A	2112	G	5.5
44	2m	6	GLY	5.5
52	2u	14	TRP	5.4
38	1g	80	VAL	5.4
21	2Z	149	SER	5.3
21	1Z	141	VAL	5.3
26	14	56	VAL	5.3
38	1g	84	ASN	5.3
40	2i	14	VAL	5.3
33	2b	165	VAL	5.2
3	2D	2	ALA	5.2
22	20	3	HIS	5.2
55	2x	70	G	5.1
22	20	2	ALA	5.1
34	2c	198	VAL	5.1
41	2j	47	PHE	5.0
34	2c	2	GLY	5.0
45	1n	2	ALA	5.0
51	1t	103	GLY	4.9
38	1g	79	ARG	4.8
40	2i	10	ARG	4.8
45	2n	25	VAL	4.8
21	2Z	172	ALA	4.7
1	1A	2141	G	4.7
44	2m	102	ARG	4.7
45	2n	34	TYR	4.6
26	14	45	GLY	4.6
1	2A	2896	C	4.6
45	2n	2	ALA	4.6
45	2n	38	GLY	4.5
44	2m	121	LYS	4.5
50	1s	84	GLY	4.5
1	2A	2111	C	4.4
1	1A	1087	G	4.4
40	2i	11	LYS	4.4
1	2A	2113	U	4.4
50	2s	11	VAL	4.4

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Mol	Chain	Res	Type	RSRZ
1	2A	884	C	4.4
24	22	1	MET	4.3
35	1d	5	ILE	4.3
1	1A	1078	U	4.3
52	1u	2	GLY	4.3
32	2a	1202	G	4.3
22	20	7	LEU	4.2
12	2Q	104	PHE	4.2
33	2b	187	LEU	4.2
1	2A	2802	G	4.1
21	2Z	146	ILE	4.1
41	1j	76	ASN	4.1
34	2c	5	ILE	4.1
39	2h	99	GLU	4.0
21	2Z	171	ILE	4.0
26	14	63	TYR	4.0
26	24	56	VAL	4.0
1	1A	885	C	4.0
1	2A	885	C	4.0
44	2m	5	ALA	4.0
39	2h	2	LEU	4.0
5	2F	166	ALA	3.9
3	1D	276	LYS	3.9
40	2i	66	ARG	3.9
1	2A	2133	G	3.9
41	2j	63	PHE	3.9
32	1a	1531	A	3.9
7	1H	2	SER	3.9
21	1Z	146	ILE	3.9
41	2j	40	LEU	3.9
1	2A	2154	G	3.8
1	2A	2146	C	3.8
1	1A	2190	G	3.8
45	2n	33	VAL	3.8
32	1a	1532	U	3.8
1	1A	2142	C	3.8
32	2a	1116	C	3.8
45	2n	39	LEU	3.8
44	2m	119	GLY	3.8
32	2a	1030(A)	G	3.7
1	2A	2119	A	3.7
22	10	6	GLY	3.7

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Mol	Chain	Res	Type	RSRZ
23	11	2	SER	3.7
1	2A	2897	U	3.7
1	2A	2115	G	3.7
27	15	60	VAL	3.7
32	2a	1030(B)	C	3.7
38	1g	156	TRP	3.7
7	2H	2	SER	3.7
1	2A	2117	A	3.7
1	2A	2132	U	3.7
32	2a	1032	G	3.7
22	10	3	HIS	3.7
40	2i	102	LEU	3.7
19	2X	69	TYR	3.7
52	2u	2	GLY	3.7
50	2s	2	PRO	3.7
38	1g	153	HIS	3.6
12	2Q	22	LYS	3.6
1	2A	2155	G	3.6
32	2a	1033	G	3.6
1	1A	1064	C	3.6
1	2A	888	C	3.6
41	1j	77	PRO	3.6
21	2Z	170	THR	3.6
7	2H	63	SER	3.6
53	2v	24	C	3.6
34	2c	4	LYS	3.6
32	1a	1257	U	3.6
21	2Z	173	ALA	3.6
26	14	54	GLY	3.6
33	2b	133	LYS	3.6
50	2s	77	THR	3.6
40	2i	13	ALA	3.6
52	2u	11	GLY	3.6
38	2g	16	LEU	3.6
45	2n	3	ARG	3.5
1	2A	2174	C	3.5
54	2w	74	C	3.5
34	2c	197	GLY	3.5
39	1h	3	THR	3.5
22	20	71	ASP	3.5
4	2E	115	GLY	3.5
50	2s	84	GLY	3.5

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Mol	Chain	Res	Type	RSRZ
54	2w	56	C	3.5
55	2x	71	C	3.5
47	1p	76	GLN	3.5
1	2A	2116	G	3.5
1	2A	2125	G	3.5
6	2G	146	TYR	3.5
54	2w	15	G	3.5
34	2c	124	ILE	3.5
1	1A	1077	A	3.5
46	2o	87	ILE	3.5
1	1A	1176	G	3.5
36	2e	85	GLY	3.5
39	2h	83	ILE	3.4
7	2H	59	ARG	3.4
53	2v	12	A	3.4
34	1c	14	ILE	3.4
41	2j	50	ILE	3.4
40	2i	7	THR	3.4
50	2s	82	GLY	3.4
54	1w	70	C	3.4
7	2H	165	ALA	3.4
33	1b	126	GLU	3.4
33	2b	120	ALA	3.4
40	1i	19	LEU	3.4
1	2A	2118	U	3.4
1	1A	2133	G	3.4
1	2A	896	A	3.4
32	2a	873	A	3.4
36	2e	86	ALA	3.4
38	2g	37	ASN	3.4
40	2i	99	LEU	3.4
40	2i	106	ALA	3.4
6	1G	26	GLN	3.4
26	24	50	VAL	3.4
41	2j	74	ILE	3.4
22	10	5	LYS	3.4
41	2j	65	LEU	3.4
47	1p	81	ARG	3.4
38	2g	84	ASN	3.4
21	2Z	165	VAL	3.4
34	2c	195	VAL	3.4
38	2g	80	VAL	3.4

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Mol	Chain	Res	Type	RSRZ
44	2m	7	VAL	3.4
1	1A	1026	U	3.3
1	1A	2189	U	3.3
45	2n	22	THR	3.3
21	2Z	150	LEU	3.3
40	2i	9	ARG	3.3
55	1x	70	G	3.3
33	1b	132	LYS	3.3
33	2b	185	ILE	3.3
45	2n	42	ILE	3.3
1	1A	2132	U	3.3
1	2A	1026	U	3.3
36	2e	110	LEU	3.3
44	2m	29	ARG	3.3
21	2Z	164	ALA	3.3
21	2Z	74	VAL	3.3
21	2Z	174	VAL	3.3
33	1b	133	LYS	3.3
1	2A	2173	A	3.3
1	1A	2112	G	3.3
34	2c	48	TYR	3.3
1	1A	1060	U	3.3
40	1i	30	GLY	3.3
33	1b	229	VAL	3.3
53	2v	14	A	3.3
40	1i	9	ARG	3.3
40	2i	2	GLU	3.3
54	1y	19	G	3.3
34	2c	149	ALA	3.3
20	1Y	92	ASN	3.3
32	2a	1532	U	3.3
46	2o	60	VAL	3.3
1	2A	2175	C	3.2
54	2w	71	C	3.2
26	14	52	THR	3.2
41	2j	37	PRO	3.2
53	1v	13	A	3.2
45	2n	15	LYS	3.2
34	1c	2	GLY	3.2
38	1g	34	GLY	3.2
38	2g	82	GLY	3.2
40	2i	67	GLY	3.2

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Mol	Chain	Res	Type	RSRZ
3	1D	2	ALA	3.2
41	1j	66	ARG	3.2
48	1q	68	ARG	3.2
34	2c	137	ALA	3.2
34	2c	200	ALA	3.2
36	2e	133	TYR	3.2
45	2n	36	PHE	3.2
1	1A	1058	G	3.2
32	1a	630	G	3.2
38	1g	155	ARG	3.2
1	2A	2150	U	3.2
54	2y	33	U	3.2
21	1Z	170	THR	3.2
1	2A	2803	C	3.2
32	1a	1030	C	3.2
7	2H	123	PHE	3.2
33	1b	222	ILE	3.2
40	2i	105	ASP	3.2
7	2H	60	ARG	3.2
9	2N	83	LYS	3.2
22	10	7	LEU	3.2
1	1A	1089	G	3.2
1	2A	2894	G	3.2
32	2a	1117	G	3.2
32	2a	1220	G	3.2
40	2i	71	SER	3.2
26	14	59	PHE	3.2
26	24	63	TYR	3.2
54	1w	61	C	3.1
17	2V	73	SER	3.1
21	2Z	137	ILE	3.1
47	2p	19	ILE	3.1
40	2i	36	TYR	3.1
54	1w	49	G	3.1
1	1A	886	C	3.1
6	2G	34	LEU	3.1
37	2f	21	LEU	3.1
26	24	45	GLY	3.1
33	2b	237	ALA	3.1
41	2j	85	LEU	3.1
40	1i	2	GLU	3.1
33	1b	127	ILE	3.1

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Mol	Chain	Res	Type	RSRZ
33	1b	214	ILE	3.1
1	1A	896	A	3.1
1	2A	2319	G	3.1
21	2Z	106	GLY	3.1
54	1w	50	G	3.1
22	20	4	LYS	3.1
40	1i	66	ARG	3.1
1	1A	1509	C	3.1
32	2a	1030	C	3.1
33	2b	93	VAL	3.1
1	1A	2119	A	3.0
21	2Z	169	GLU	3.0
39	2h	128	GLY	3.0
45	2n	55	GLY	3.0
50	2s	68	GLY	3.0
38	1g	3	ARG	3.0
26	24	49	PHE	3.0
50	2s	9	VAL	3.0
1	2A	2156	G	3.0
7	2H	103	LEU	3.0
19	2X	92	LEU	3.0
14	2S	7	TYR	3.0
50	2s	80	TYR	3.0
1	2A	2169	A	3.0
1	1A	2113	U	3.0
20	2Y	12	THR	3.0
38	1g	78	ARG	3.0
41	1j	31	GLY	3.0
38	1g	2	ALA	3.0
40	1i	13	ALA	3.0
21	1Z	105	VAL	3.0
33	2b	15	VAL	3.0
7	2H	64	LEU	3.0
44	2m	87	TYR	3.0
32	1a	1027	C	3.0
54	1w	71	C	3.0
1	1A	1057	A	3.0
33	2b	201	ILE	3.0
21	2Z	152	ALA	3.0
50	2s	75	ALA	3.0
32	1a	204	U	3.0
40	1i	59	PHE	3.0

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Mol	Chain	Res	Type	RSRZ
41	2j	54	PHE	3.0
21	1Z	168	GLU	3.0
33	2b	140	HIS	3.0
40	2i	12	GLU	3.0
41	2j	41	PRO	3.0
44	2m	120	LYS	3.0
34	2c	193	TYR	3.0
6	1G	77	ILE	3.0
43	1l	7	ILE	3.0
50	2s	49	ILE	3.0
41	2j	42	THR	3.0
41	2j	48	THR	3.0
1	1A	1068	G	3.0
1	1A	2125	G	3.0
32	2a	89	C	3.0
7	2H	44	VAL	3.0
26	14	50	VAL	3.0
32	1a	1035	A	3.0
32	2a	1286	A	3.0
44	2m	90	LEU	2.9
33	1b	232	PRO	2.9
44	1m	121	LYS	2.9
14	2S	92	TYR	2.9
51	2t	103	GLY	2.9
4	2E	131	ALA	2.9
36	2e	84	PHE	2.9
33	2b	221	LEU	2.9
1	1A	275	G	2.9
1	1A	879	G	2.9
1	2A	229	A	2.9
45	1n	50	LYS	2.9
38	2g	4	ARG	2.9
45	2n	7	ILE	2.9
47	1p	19	ILE	2.9
22	20	8	GLY	2.9
40	2i	39	GLY	2.9
45	2n	13	THR	2.9
7	2H	125	VAL	2.9
44	2m	54	VAL	2.9
38	2g	12	LEU	2.9
45	2n	37	PHE	2.9
6	1G	182	LYS	2.9

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Mol	Chain	Res	Type	RSRZ
14	2S	33	LYS	2.9
1	1A	884	C	2.9
1	1A	1075	C	2.9
1	2A	2110	G	2.9
1	2A	2157	G	2.9
32	1a	1025	U	2.9
32	1a	1446	U	2.9
32	2a	630	G	2.9
41	2j	67	THR	2.9
15	1T	130	ALA	2.9
44	1m	2	ALA	2.9
45	2n	5	ALA	2.9
6	1G	82	LEU	2.9
12	2Q	35	VAL	2.9
21	2Z	126	VAL	2.9
24	22	60	LEU	2.9
33	2b	10	LEU	2.9
20	2Y	29	GLU	2.9
40	2i	128	ARG	2.9
41	2j	76	ASN	2.9
1	2A	277	C	2.9
1	2A	898	C	2.9
1	2A	2114	A	2.9
32	2a	1148	U	2.9
32	2a	1257	U	2.9
32	2a	1447	A	2.9
38	2g	85	TYR	2.9
55	1x	69	C	2.9
1	1A	2191	G	2.9
6	1G	48	GLU	2.8
8	2I	1	MET	2.8
13	2R	68	ARG	2.8
35	1d	122	ARG	2.8
51	1t	86	ARG	2.8
26	24	66	SER	2.8
33	2b	18	GLY	2.8
41	2j	88	LEU	2.8
45	2n	30	ALA	2.8
50	2s	71	LEU	2.8
1	1A	2117	A	2.8
1	2A	652(B)	A	2.8
1	2A	2895	U	2.8

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Mol	Chain	Res	Type	RSRZ
21	1Z	136	PHE	2.8
32	2a	1150	U	2.8
33	1b	165	VAL	2.8
43	2l	18	VAL	2.8
32	2a	1149	C	2.8
1	1A	2115	G	2.8
26	14	55	ARG	2.8
32	2a	570	G	2.8
46	2o	88	ARG	2.8
6	2G	20	ILE	2.8
33	2b	17	PHE	2.8
33	2b	152	PHE	2.8
1	1A	271(K)	U	2.8
41	2j	77	PRO	2.8
52	2u	24	ARG	2.8
32	1a	1030(D)	A	2.8
33	2b	200	ILE	2.8
42	2k	124	LYS	2.8
51	2t	74	LYS	2.8
1	1A	880	G	2.8
1	1A	1093	G	2.8
1	1A	2151	G	2.8
1	2A	883	G	2.8
1	2A	2147	G	2.8
6	1G	24	GLY	2.8
21	2Z	136	PHE	2.8
41	1j	34	VAL	2.8
43	1l	11	VAL	2.8
44	2m	74	VAL	2.8
47	2p	80	PHE	2.8
21	2Z	95	PRO	2.8
24	12	69	ARG	2.8
52	2u	22	ARG	2.8
1	1A	229	A	2.8
7	2H	136	ILE	2.8
32	1a	1447	A	2.8
32	2a	1285	A	2.8
14	2S	54	LEU	2.8
21	2Z	125	LEU	2.8
34	2c	9	GLY	2.8
35	1d	194	LEU	2.8
37	2f	55	ASP	2.8

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Mol	Chain	Res	Type	RSRZ
9	2N	9	VAL	2.8
33	2b	81	VAL	2.8
38	1g	26	PHE	2.8
50	2s	41	VAL	2.8
1	2A	652(U)	G	2.8
38	1g	154	TYR	2.8
42	2k	25	TYR	2.8
16	1U	117	GLN	2.7
47	2p	82	GLN	2.7
22	20	5	LYS	2.7
39	2h	86	ILE	2.7
32	2a	1196	U	2.7
6	2G	139	LEU	2.7
1	1A	2114	A	2.7
1	2A	2126	A	2.7
29	27	1	MET	2.7
53	1v	12	A	2.7
21	2Z	161	VAL	2.7
38	1g	91	VAL	2.7
43	2l	32	PHE	2.7
45	2n	16	PHE	2.7
6	1G	146	TYR	2.7
33	2b	199	TYR	2.7
43	2l	13	LYS	2.7
1	1A	2131	G	2.7
1	2A	2131	G	2.7
32	2a	1024	G	2.7
54	2w	57	G	2.7
33	2b	127	ILE	2.7
51	1t	10	LEU	2.7
6	1G	73	ALA	2.7
31	29	12	ASP	2.7
33	2b	136	VAL	2.7
33	2b	197	VAL	2.7
35	2d	164	ALA	2.7
40	2i	52	ALA	2.7
40	2i	86	VAL	2.7
40	2i	114	TYR	2.7
6	1G	88	ILE	2.7
6	2G	52	ILE	2.7
34	2c	188	LEU	2.7
51	2t	24	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
1	1A	1059	G	2.7
1	2A	2100	G	2.7
1	2A	2153	G	2.7
32	1a	1024	G	2.7
32	2a	80	G	2.7
35	1d	16	GLY	2.7
54	1y	57	G	2.7
54	2w	19	G	2.7
40	1i	12	GLU	2.7
6	2G	50	ALA	2.7
7	2H	49	VAL	2.7
8	1I	146	ALA	2.7
8	2I	19	VAL	2.7
33	1b	136	VAL	2.7
40	2i	61	ALA	2.7
32	2a	1030(D)	A	2.7
39	2h	111	ILE	2.7
41	1j	4	ILE	2.7
1	1A	1092	C	2.7
1	1A	2145	C	2.7
32	2a	866	C	2.7
54	2y	36	C	2.7
7	2H	105	LEU	2.7
12	2Q	2	LEU	2.7
34	2c	159	GLY	2.7
41	2j	36	GLY	2.7
7	2H	84	SER	2.7
34	1c	90	GLU	2.7
43	2l	8	ASN	2.7
8	1I	3	VAL	2.7
33	2b	70	PHE	2.7
40	1i	18	PHE	2.7
41	2j	26	ALA	2.7
52	2u	17	THR	2.7
50	1s	12	ASP	2.7
2	2B	119	G	2.6
44	2m	101	GLN	2.6
35	1d	4	TYR	2.6
45	2n	21	TYR	2.6
54	1w	47	U	2.6
39	2h	9	MET	2.6
8	2I	12	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
20	2Y	106	LEU	2.6
33	1b	221	LEU	2.6
12	2Q	33	GLY	2.6
22	20	68	GLU	2.6
33	1b	12	GLU	2.6
34	1c	9	GLY	2.6
34	2c	158	GLY	2.6
35	1d	167	GLY	2.6
1	2A	897	C	2.6
1	2A	2128	C	2.6
41	2j	55	LYS	2.6
7	2H	43	VAL	2.6
33	2b	123	ALA	2.6
40	1i	106	ALA	2.6
41	1j	32	ALA	2.6
41	2j	59	SER	2.6
7	2H	36	PRO	2.6
40	1i	91	ASP	2.6
21	1Z	120	ILE	2.6
41	1j	75	ILE	2.6
42	2k	75	TYR	2.6
1	1A	1066	U	2.6
1	1A	2159	G	2.6
32	2a	1034	G	2.6
32	2a	1224	G	2.6
4	2E	195	LEU	2.6
21	2Z	163	LEU	2.6
47	1p	49	LEU	2.6
7	1H	3	ARG	2.6
45	1n	57	ARG	2.6
51	2t	69	GLY	2.6
1	2A	918	A	2.6
54	2w	73	A	2.6
7	2H	113	VAL	2.6
28	26	48	VAL	2.6
35	2d	154	ASN	2.6
44	2m	53	VAL	2.6
33	2b	131	PRO	2.6
45	2n	59	ALA	2.6
49	2r	47	THR	2.6
1	2A	1536	C	2.6
21	1Z	171	ILE	2.6

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Mol	Chain	Res	Type	RSRZ
41	2j	75	ILE	2.6
21	2Z	144	LEU	2.6
38	2g	151	TYR	2.6
38	2g	154	TYR	2.6
12	2Q	6	ARG	2.6
14	2S	3	ARG	2.6
26	14	62	ARG	2.6
45	2n	41	ARG	2.6
26	24	28	LYS	2.6
54	1y	67	U	2.6
22	20	6	GLY	2.6
38	1g	81	GLY	2.6
51	1t	69	GLY	2.6
1	2A	2149	G	2.6
1	2A	2168	G	2.6
32	2a	973	G	2.6
32	2a	1021	G	2.6
34	2c	106	VAL	2.6
22	20	69	PHE	2.6
33	2b	57	PHE	2.6
50	2s	76	PRO	2.6
38	2g	77	SER	2.6
32	2a	1531	A	2.6
55	2x	72	A	2.6
35	2d	165	MET	2.6
33	2b	208	ILE	2.6
36	2e	109	ILE	2.6
41	1j	74	ILE	2.6
32	2a	1354	C	2.6
33	2b	138	LEU	2.6
54	2w	60	C	2.6
44	1m	23	TYR	2.6
50	1s	78	ARG	2.6
14	2S	34	HIS	2.6
50	2s	83	HIS	2.6
40	2i	115	GLY	2.6
7	2H	35	VAL	2.6
33	2b	71	VAL	2.6
34	2c	160	ALA	2.6
40	2i	123	PRO	2.6
51	1t	94	ALA	2.6
33	2b	95	GLN	2.6

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Mol	Chain	Res	Type	RSRZ
1	1A	2120	G	2.5
21	1Z	1	MET	2.5
41	1j	86	MET	2.5
41	1j	98	ILE	2.5
1	1A	1096	A	2.5
40	2i	79	LEU	2.5
6	1G	115	ARG	2.5
46	2o	68	ARG	2.5
52	2u	10	ARG	2.5
1	2A	2804	C	2.5
54	2w	61	C	2.5
42	2k	118	GLY	2.5
7	1H	113	VAL	2.5
33	1b	131	PRO	2.5
35	1d	8	VAL	2.5
42	2k	114	VAL	2.5
33	1b	17	PHE	2.5
36	2e	20	GLN	2.5
40	2i	101	PHE	2.5
6	1G	145	THR	2.5
41	1j	58	ASP	2.5
50	1s	13	ASP	2.5
47	1p	36	ILE	2.5
6	2G	62	LEU	2.5
15	1T	108	ARG	2.5
26	14	61	ARG	2.5
33	2b	121	LEU	2.5
41	1j	45	ARG	2.5
42	2k	126	ARG	2.5
1	1A	545	G	2.5
1	1A	2152	G	2.5
1	2A	1533	G	2.5
32	2a	1182	G	2.5
55	2x	2	G	2.5
32	2a	1225	A	2.5
33	2b	31	TYR	2.5
40	2i	62	TYR	2.5
46	1o	69	TYR	2.5
14	2S	109	GLY	2.5
38	1g	82	GLY	2.5
7	2H	55	PRO	2.5
35	2d	29	PRO	2.5

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Mol	Chain	Res	Type	RSRZ
20	2Y	24	VAL	2.5
7	2H	96	ALA	2.5
12	2Q	121	ALA	2.5
15	1T	131	ALA	2.5
20	2Y	78	ALA	2.5
44	1m	5	ALA	2.5
44	1m	118	ALA	2.5
32	2a	1363	C	2.5
54	1w	56	C	2.5
55	2x	3	C	2.5
7	2H	7	LEU	2.5
34	2c	17	ASP	2.5
35	2d	209	ARG	2.5
38	1g	38	LEU	2.5
40	2i	42	ARG	2.5
54	1y	33	U	2.5
33	1b	129	GLU	2.5
20	2Y	77	PRO	2.5
1	1A	548	A	2.5
1	1A	2170	A	2.5
1	2A	1445	A	2.5
16	2U	48	ALA	2.5
20	1Y	1	MET	2.5
21	2Z	141	VAL	2.5
34	1c	207	VAL	2.5
40	2i	65	VAL	2.5
41	2j	34	VAL	2.5
45	2n	18	VAL	2.5
54	1w	18	G	2.5
54	2w	18	G	2.5
40	2i	64	THR	2.5
7	2H	6	ARG	2.5
7	2H	56	SER	2.5
35	2d	49	ARG	2.5
37	2f	45	LEU	2.5
39	1h	92	ARG	2.5
45	2n	23	ARG	2.5
50	2s	78	ARG	2.5
51	1t	8	ARG	2.5
1	2A	2136	C	2.5
32	1a	754	C	2.5
32	1a	1533	C	2.5

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Mol	Chain	Res	Type	RSRZ
41	2j	58	ASP	2.5
44	2m	64	TRP	2.5
54	1y	36	C	2.5
1	1A	1097	U	2.5
6	2G	177	GLY	2.5
38	1g	85	TYR	2.5
45	2n	54	PRO	2.5
50	2s	44	MET	2.5
6	2G	28	VAL	2.5
7	2H	107	VAL	2.5
11	2P	81	GLN	2.5
41	2j	44	VAL	2.5
5	2F	49	ALA	2.5
8	2I	146	ALA	2.5
19	2X	42	ALA	2.5
41	2j	18	ALA	2.5
19	2X	33	LYS	2.4
8	1I	27	ARG	2.4
29	17	47	ARG	2.4
35	1d	157	LEU	2.4
40	2i	81	ILE	2.4
1	1A	1056	G	2.4
1	2A	2160	G	2.4
21	2Z	52	SER	2.4
32	1a	1033	G	2.4
54	1y	18	G	2.4
54	2y	2	G	2.4
38	1g	90	GLU	2.4
1	2A	2145	C	2.4
54	1w	72	C	2.4
1	2A	2167	U	2.4
10	2O	1	MET	2.4
34	2c	13	GLY	2.4
14	2S	11	LYS	2.4
50	1s	67	VAL	2.4
21	2Z	88	PHE	2.4
5	2F	62	ARG	2.4
6	2G	145	THR	2.4
33	1b	130	ARG	2.4
33	2b	103	THR	2.4
21	1Z	150	LEU	2.4
21	2Z	157	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
34	1c	115	LEU	2.4
36	2e	31	LEU	2.4
46	2o	3	ILE	2.4
33	1b	124	SER	2.4
1	1A	1095	A	2.4
8	1I	20	ASP	2.4
21	2Z	140	ASP	2.4
32	1a	1287	A	2.4
40	2i	91	ASP	2.4
35	1d	192	GLU	2.4
1	2A	171	G	2.4
32	1a	1030(C)	G	2.4
54	2y	39	G	2.4
12	2Q	30	GLY	2.4
17	2V	54	GLY	2.4
24	22	18	PRO	2.4
47	1p	12	LYS	2.4
1	2A	2143	C	2.4
5	2F	89	VAL	2.4
32	2a	1027	C	2.4
34	2c	55	VAL	2.4
34	2c	153	VAL	2.4
36	2e	41	VAL	2.4
44	1m	53	VAL	2.4
47	1p	82	GLN	2.4
48	2q	9	VAL	2.4
21	2Z	104	PHE	2.4
29	27	47	ARG	2.4
41	2j	32	ALA	2.4
11	2P	6	LEU	2.4
26	24	31	ILE	2.4
41	1j	85	LEU	2.4
44	2m	48	LEU	2.4
45	2n	44	LEU	2.4
50	1s	40	ILE	2.4
21	2Z	85	HIS	2.4
41	2j	68	HIS	2.4
6	2G	47	LYS	2.4
32	2a	974	A	2.4
33	2b	132	LYS	2.4
40	2i	127	LYS	2.4
54	2y	6	A	2.4

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Mol	Chain	Res	Type	RSRZ
55	1x	73	A	2.4
31	29	21	GLY	2.4
33	1b	125	PRO	2.4
24	22	70	GLN	2.4
4	2E	116	VAL	2.4
16	2U	90	VAL	2.4
48	1q	11	VAL	2.4
1	2A	2166	G	2.4
7	2H	20	ALA	2.4
26	14	32	TYR	2.4
32	1a	1036	G	2.4
36	2e	108	ALA	2.4
38	1g	83	ALA	2.4
40	1i	4	TYR	2.4
46	2o	64	ARG	2.4
54	1w	19	G	2.4
54	2w	49	G	2.4
1	1A	271(N)	U	2.4
21	1Z	69	THR	2.4
32	2a	1159	U	2.4
33	1b	172	ILE	2.4
1	1A	1076	C	2.4
54	2w	51	C	2.4
54	2w	70	C	2.4
33	2b	129	GLU	2.4
33	2b	210	SER	2.4
24	22	52	ASP	2.4
28	26	42	TRP	2.4
40	1i	70	LYS	2.4
45	2n	4	LYS	2.4
6	2G	134	GLY	2.4
26	24	55	ARG	2.4
35	1d	132	ARG	2.4
40	1i	42	ARG	2.4
41	2j	28	ARG	2.4
41	2j	60	ARG	2.4
48	2q	68	ARG	2.4
32	2a	965	A	2.4
7	2H	145	ALA	2.4
12	2Q	20	ALA	2.4
12	2Q	65	PHE	2.4
54	2y	21	A	2.4

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Mol	Chain	Res	Type	RSRZ
54	2y	66	A	2.4
21	2Z	21	ALA	2.4
38	2g	83	ALA	2.4
12	2Q	37	LEU	2.3
20	2Y	55	TYR	2.3
35	1d	135	LEU	2.3
44	1m	96	LEU	2.3
50	1s	71	LEU	2.3
14	2S	40	ILE	2.3
1	1A	1537	G	2.3
1	2A	1171	G	2.3
1	2A	2159	G	2.3
32	2a	1253	G	2.3
54	1w	57	G	2.3
35	2d	98	GLU	2.3
44	2m	58	GLU	2.3
1	1A	888	C	2.3
1	2A	652(T)	C	2.3
40	1i	126	SER	2.3
48	1q	13	ASP	2.3
52	2u	3	LYS	2.3
54	2y	32	C	2.3
21	2Z	25	PRO	2.3
40	1i	90	PRO	2.3
12	2Q	23	GLY	2.3
22	20	42	GLY	2.3
38	2g	133	GLY	2.3
40	2i	72	GLY	2.3
12	2Q	10	ARG	2.3
15	1T	115	ARG	2.3
51	1t	83	ARG	2.3
40	2i	28	VAL	2.3
41	1j	44	VAL	2.3
6	1G	139	LEU	2.3
8	2I	123	LEU	2.3
34	2c	53	ALA	2.3
36	2e	21	ALA	2.3
38	2g	25	ALA	2.3
41	1j	65	LEU	2.3
51	2t	72	LEU	2.3
40	2i	125	TYR	2.3
6	2G	64	THR	2.3

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Mol	Chain	Res	Type	RSRZ
47	1p	44	THR	2.3
47	2p	67	THR	2.3
50	2s	79	THR	2.3
3	1D	275	LYS	2.3
25	23	60	GLU	2.3
33	2b	12	GLU	2.3
35	1d	169	LYS	2.3
44	2m	67	GLU	2.3
1	1A	2130	U	2.3
1	2A	2099	U	2.3
1	2A	2130	U	2.3
6	2G	49	ASP	2.3
13	2R	69	ASP	2.3
52	1u	5	ASP	2.3
1	2A	2123	G	2.3
1	2A	2793	G	2.3
32	2a	1124	G	2.3
40	2i	49	PRO	2.3
54	1y	15	G	2.3
54	2w	3	G	2.3
9	2N	69	GLN	2.3
12	1Q	59	ARG	2.3
12	2Q	19	GLY	2.3
14	2S	45	GLY	2.3
26	24	54	GLY	2.3
38	1g	86	GLN	2.3
51	2t	8	ARG	2.3
54	2w	72	C	2.3
5	2F	173	VAL	2.3
33	2b	7	VAL	2.3
38	2g	9	VAL	2.3
48	1q	35	VAL	2.3
17	2V	95	LEU	2.3
21	1Z	104	PHE	2.3
4	2E	204	ALA	2.3
33	2b	161	ALA	2.3
41	2j	27	ALA	2.3
12	2Q	123	HIS	2.3
47	1p	45	THR	2.3
26	24	57	GLU	2.3
1	1A	1073	A	2.3
1	1A	1103	A	2.3

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Mol	Chain	Res	Type	RSRZ
32	2a	1035	A	2.3
34	2c	73	PRO	2.3
37	2f	46	ARG	2.3
11	2P	73	GLY	2.3
41	2j	33	GLN	2.3
52	1u	16	GLY	2.3
1	1A	1094	U	2.3
1	2A	2506	U	2.3
54	1w	67	U	2.3
54	2w	47	U	2.3
54	2w	67	U	2.3
7	2H	52	VAL	2.3
12	2Q	109	VAL	2.3
34	2c	47	LEU	2.3
33	1b	13	ALA	2.3
33	2b	77	ALA	2.3
33	2b	172	ILE	2.3
41	1j	6	ILE	2.3
51	2t	95	ALA	2.3
1	1A	1063	G	2.3
1	1A	1532	C	2.3
1	1A	2136	C	2.3
1	1A	2174	C	2.3
1	2A	11	G	2.3
21	2Z	121	HIS	2.3
31	29	20	HIS	2.3
32	2a	1184	G	2.3
54	2w	50	G	2.3
54	2y	65	C	2.3
12	2Q	103	MET	2.3
33	2b	48	MET	2.3
44	2m	23	TYR	2.3
9	2N	10	GLU	2.3
41	1j	64	GLU	2.3
21	1Z	149	SER	2.3
22	10	82	ARG	2.3
40	1i	104	ARG	2.3
43	2l	15	ARG	2.3
1	1A	1069	A	2.3
1	2A	2602	A	2.3
26	14	46	GLN	2.3
32	1a	1503	A	2.3

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Mol	Chain	Res	Type	RSRZ
40	2i	68	GLY	2.3
41	2j	10	GLY	2.3
54	1y	21	A	2.3
6	2G	159	VAL	2.3
6	2G	173	LEU	2.3
34	1c	47	LEU	2.3
36	1e	69	VAL	2.3
40	1i	14	VAL	2.3
43	2l	52	LEU	2.3
5	2F	90	PHE	2.3
40	2i	33	PHE	2.3
32	2a	1062	U	2.2
40	2i	15	ALA	2.2
33	2b	139	LYS	2.2
34	2c	199	LYS	2.2
26	24	27	THR	2.2
34	1c	15	THR	2.2
7	1H	58	GLU	2.2
12	2Q	32	TYR	2.2
1	1A	2164	C	2.2
1	2A	893	C	2.2
32	2a	1369	C	2.2
1	2A	892	G	2.2
1	2A	1112	G	2.2
1	2A	2318	G	2.2
11	2P	84	ASN	2.2
32	1a	1026	G	2.2
32	2a	1001(A)	G	2.2
54	2y	5	G	2.2
7	1H	59	ARG	2.2
7	2H	97	ARG	2.2
51	1t	80	ARG	2.2
12	2Q	99	PRO	2.2
26	24	65	ASP	2.2
34	1c	62	ASP	2.2
36	2e	125	SER	2.2
36	2e	114	GLY	2.2
40	2i	6	GLY	2.2
6	1G	149	VAL	2.2
7	2H	71	LEU	2.2
36	2e	119	LEU	2.2
47	1p	48	TRP	2.2

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Mol	Chain	Res	Type	RSRZ
33	1b	15	VAL	2.2
40	1i	41	VAL	2.2
40	2i	53	VAL	2.2
41	2j	49	VAL	2.2
20	2Y	89	PHE	2.2
32	2a	1250	A	2.2
33	1b	237	ALA	2.2
34	2c	182	ILE	2.2
41	2j	23	ILE	2.2
54	1y	35	A	2.2
1	1A	895	U	2.2
32	2a	84	U	2.2
32	2a	1358	U	2.2
34	2c	90	GLU	2.2
43	2l	64	TYR	2.2
44	2m	106	ASN	2.2
1	1A	1080	C	2.2
1	1A	2794	C	2.2
1	2A	2139	C	2.2
32	2a	1038	C	2.2
35	2d	160	GLN	2.2
21	2Z	148	ASP	2.2
1	2A	2893	G	2.2
35	1d	2	GLY	2.2
45	2n	28	GLY	2.2
33	2b	149	LEU	2.2
35	1d	21	LEU	2.2
21	2Z	139	VAL	2.2
33	1b	230	VAL	2.2
45	1n	15	LYS	2.2
47	2p	62	VAL	2.2
41	2j	62	HIS	2.2
41	2j	82	ILE	2.2
41	2j	86	MET	2.2
11	2P	120	ALA	2.2
34	2c	168	ALA	2.2
35	1d	195	ALA	2.2
44	2m	76	ALA	2.2
21	2Z	97	GLU	2.2
33	2b	67	THR	2.2
36	2e	120	THR	2.2
44	2m	103	THR	2.2

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Mol	Chain	Res	Type	RSRZ
1	2A	2109	U	2.2
25	23	29	ARG	2.2
30	18	46	ARG	2.2
36	2e	107	ARG	2.2
40	2i	5	TYR	2.2
54	1y	64	U	2.2
3	1D	203	ASN	2.2
7	2H	128	PRO	2.2
17	2V	50	PRO	2.2
33	1b	234	PRO	2.2
34	2c	109	PRO	2.2
5	2F	134	GLY	2.2
7	2H	175	LYS	2.2
8	1I	35	LEU	2.2
18	2W	112	GLY	2.2
35	2d	167	GLY	2.2
48	2q	37	LYS	2.2
51	1t	11	SER	2.2
51	1t	14	LYS	2.2
5	2F	183	VAL	2.2
7	2H	15	VAL	2.2
8	2I	18	VAL	2.2
12	2Q	1	MET	2.2
21	1Z	139	VAL	2.2
34	2c	138	VAL	2.2
35	1d	33	MET	2.2
43	2l	55	VAL	2.2
47	1p	20	VAL	2.2
12	2Q	66	ILE	2.2
34	1c	84	ILE	2.2
36	2e	13	ILE	2.2
38	2g	27	ILE	2.2
51	2t	63	ILE	2.2
53	1v	24	C	2.2
54	2y	48	C	2.2
10	2O	41	ALA	2.2
1	1A	1074	G	2.2
1	2A	882	G	2.2
32	1a	1030(A)	G	2.2
54	2w	1	G	2.2
54	2y	15	G	2.2
44	1m	109	THR	2.2

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Mol	Chain	Res	Type	RSRZ
7	2H	42	ARG	2.2
1	1A	1098	A	2.2
1	1A	2169	A	2.2
12	2Q	39	PRO	2.2
12	2Q	74	TYR	2.2
33	2b	92	TYR	2.2
34	2c	114	PRO	2.2
35	1d	20	TYR	2.2
1	2A	2172	U	2.2
3	2D	276	LYS	2.2
54	1w	7	U	2.2
54	2y	4	U	2.2
6	2G	53	LEU	2.2
6	2G	133	LEU	2.2
9	2N	67	LEU	2.2
20	2Y	90	LEU	2.2
21	2Z	147	GLY	2.2
34	2c	115	LEU	2.2
40	1i	8	GLY	2.2
46	1o	57	LEU	2.2
4	2E	132	HIS	2.2
16	2U	105	VAL	2.2
36	2e	101	ILE	2.2
38	2g	49	ILE	2.2
40	2i	63	ILE	2.2
40	2i	109	VAL	2.2
45	2n	56	VAL	2.2
49	2r	22	VAL	2.2
41	2j	11	PHE	2.2
49	2r	43	PHE	2.2
49	2r	67	ALA	2.1
8	1I	122	GLU	2.1
12	1Q	80	GLU	2.1
33	2b	9	GLU	2.1
21	2Z	122	ARG	2.1
32	1a	163	C	2.1
47	1p	69	THR	2.1
50	2s	33	THR	2.1
52	1u	15	ARG	2.1
54	1y	32	C	2.1
1	1A	2157	G	2.1
25	23	2	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	1222	G	2.1
54	1y	22	G	2.1
8	2I	29	TYR	2.1
24	22	8	LYS	2.1
34	2c	29	TYR	2.1
38	1g	151	TYR	2.1
42	2k	51	LYS	2.1
47	1p	32	TYR	2.1
21	2Z	91	LEU	2.1
41	2j	8	LEU	2.1
42	2k	103	LEU	2.1
1	2A	1847	A	2.1
1	2A	2158	A	2.1
11	2P	109	GLY	2.1
26	24	64	GLY	2.1
33	1b	228	GLY	2.1
44	2m	100	GLY	2.1
54	1w	73	A	2.1
1	1A	1963	U	2.1
1	2A	2144	U	2.1
26	14	51	ASP	2.1
32	2a	90	U	2.1
32	2a	1025	U	2.1
26	24	26	SER	2.1
34	2c	20	SER	2.1
41	2j	38	ILE	2.1
41	2j	94	VAL	2.1
41	2j	98	ILE	2.1
42	2k	108	ILE	2.1
44	1m	60	VAL	2.1
21	2Z	89	PHE	2.1
33	1b	34	ALA	2.1
34	2c	180	ALA	2.1
40	1i	15	ALA	2.1
44	2m	51	ALA	2.1
35	1d	150	GLU	2.1
18	2W	92	ARG	2.1
23	21	26	ARG	2.1
41	1j	46	ARG	2.1
47	2p	75	ARG	2.1
51	2t	80	ARG	2.1
27	25	29	THR	2.1

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Mol	Chain	Res	Type	RSRZ
23	21	81	LYS	2.1
40	1i	11	LYS	2.1
44	2m	65	LYS	2.1
47	1p	41	PRO	2.1
1	1A	652(S)	C	2.1
1	1A	2140	C	2.1
1	2A	894	C	2.1
22	20	12	ASN	2.1
24	12	70	GLN	2.1
7	2H	33	LEU	2.1
8	2I	6	LEU	2.1
11	2P	45	LEU	2.1
20	2Y	5	MET	2.1
28	26	20	ASN	2.1
33	2b	196	LEU	2.1
34	1c	175	LEU	2.1
34	2c	43	LEU	2.1
47	2p	38	TYR	2.1
49	1r	31	LEU	2.1
51	1t	24	LEU	2.1
4	2E	125	GLY	2.1
17	2V	79	VAL	2.1
32	1a	380	G	2.1
33	2b	58	ILE	2.1
34	2c	120	VAL	2.1
42	2k	29	ILE	2.1
43	2l	39	VAL	2.1
43	2l	101	VAL	2.1
52	2u	5	ASP	2.1
54	2y	10	G	2.1
54	2y	18	G	2.1
21	2Z	166	SER	2.1
1	1A	887	A	2.1
1	1A	1081	U	2.1
1	1A	2171	A	2.1
1	2A	2170	A	2.1
32	2a	1357	A	2.1
33	1b	225	ALA	2.1
40	2i	45	ALA	2.1
54	2w	14	A	2.1
54	2w	66	A	2.1
5	2F	172	TRP	2.1

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Mol	Chain	Res	Type	RSRZ
34	2c	135	LYS	2.1
44	1m	120	LYS	2.1
22	20	84	LEU	2.1
26	24	9	LEU	2.1
34	2c	175	LEU	2.1
39	2h	112	LEU	2.1
50	2s	5	LEU	2.1
38	1g	37	ASN	2.1
7	2H	61	HIS	2.1
11	2P	80	TYR	2.1
26	24	25	TYR	2.1
34	2c	194	GLY	2.1
44	1m	21	TYR	2.1
51	2t	73	HIS	2.1
1	1A	1072	C	2.1
1	1A	1079	C	2.1
1	1A	2129	C	2.1
1	2A	2140	C	2.1
7	2H	114	VAL	2.1
7	2H	148	ILE	2.1
21	1Z	165	VAL	2.1
32	2a	995	C	2.1
32	2a	1029	C	2.1
34	2c	8	ILE	2.1
42	1k	14	VAL	2.1
46	2o	12	ILE	2.1
54	2w	62	C	2.1
17	2V	75	PHE	2.1
37	2f	60	PHE	2.1
40	2i	75	ASP	2.1
45	1n	36	PHE	2.1
48	2q	71	PHE	2.1
6	2G	76	SER	2.1
6	2G	136	ARG	2.1
15	2T	131	ALA	2.1
39	2h	84	ARG	2.1
41	1j	29	ARG	2.1
41	1j	43	ARG	2.1
45	1n	23	ARG	2.1
45	2n	35	ARG	2.1
45	2n	45	ARG	2.1
50	2s	3	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
1	1A	2155	G	2.1
1	2A	352	G	2.1
28	26	27	LYS	2.1
32	1a	1034	G	2.1
32	2a	1002	G	2.1
32	2a	1120	G	2.1
43	2l	91	LYS	2.1
54	2y	19	G	2.1
1	1A	1177	A	2.1
1	2A	528	A	2.1
1	2A	2122	U	2.1
1	2A	2801(A)	A	2.1
10	2O	65	THR	2.1
32	2a	26	A	2.1
32	2a	983	A	2.1
32	2a	1004	A	2.1
53	2v	13	A	2.1
21	1Z	95	PRO	2.1
40	2i	21	PRO	2.1
51	1t	98	PRO	2.1
14	2S	32	LEU	2.1
20	2Y	92	ASN	2.1
10	2O	27	GLY	2.1
11	2P	34	GLY	2.1
12	1Q	15	GLY	2.1
33	1b	14	GLY	2.1
41	2j	56	HIS	2.1
46	2o	20	GLY	2.1
50	1s	14	HIS	2.1
22	20	26	TYR	2.1
34	1c	182	ILE	2.1
34	2c	157	ILE	2.1
34	2c	184	TYR	2.1
39	1h	134	ILE	2.1
42	1k	50	TYR	2.1
48	2q	32	TYR	2.1
7	2H	169	VAL	2.1
33	1b	81	VAL	2.1
33	1b	174	VAL	2.1
14	2S	29	PHE	2.1
21	2Z	93	ASP	2.0
20	2Y	105	ALA	2.0

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Mol	Chain	Res	Type	RSRZ
33	2b	34	ALA	2.0
36	1e	134	ALA	2.0
41	1j	59	SER	2.0
47	1p	77	ALA	2.0
51	2t	59	ALA	2.0
51	2t	76	ALA	2.0
51	2t	94	ALA	2.0
1	1A	154(A)	C	2.0
1	1A	2138	C	2.0
1	1A	2803	C	2.0
1	2A	645	C	2.0
32	2a	1223	C	2.0
38	2g	36	LYS	2.0
51	1t	74	LYS	2.0
54	1y	51	C	2.0
1	2A	895	U	2.0
6	2G	175	LEU	2.0
24	22	61	LEU	2.0
30	28	35	GLN	2.0
32	2a	1281	U	2.0
38	2g	38	LEU	2.0
48	2q	31	LEU	2.0
50	2s	30	LEU	2.0
1	1A	274	G	2.0
1	1A	652(U)	G	2.0
1	1A	1070	A	2.0
1	1A	1084	A	2.0
1	1A	2166	G	2.0
1	1A	2629	A	2.0
1	1A	2805	G	2.0
1	2A	2171	A	2.0
32	1a	1001(A)	G	2.0
53	2v	15	A	2.0
54	1w	5	G	2.0
54	1w	10	G	2.0
54	2y	57	G	2.0
41	2j	78	ASN	2.0
51	2t	9	ASN	2.0
6	2G	101	ILE	2.0
7	2H	91	GLY	2.0
35	2d	180	GLY	2.0
44	2m	9	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
52	2u	4	GLY	2.0
12	2Q	27	VAL	2.0
21	2Z	27	VAL	2.0
52	1u	21	TYR	2.0
38	2g	5	ARG	2.0
40	2i	37	PHE	2.0
45	2n	29	ARG	2.0
48	2q	78	GLU	2.0
4	2E	187	ALA	2.0
40	1i	113	LYS	2.0
44	1m	75	ALA	2.0
6	1G	76	SER	2.0
22	20	9	SER	2.0
14	2S	5	THR	2.0
1	1A	2161	C	2.0
1	2A	2188	C	2.0
7	2H	171	LEU	2.0
19	1X	95	LEU	2.0
32	1a	1030(B)	C	2.0
32	2a	154	C	2.0
32	2a	1249	C	2.0
41	2j	90	LEU	2.0
45	2n	6	LEU	2.0
48	1q	26	GLN	2.0
54	1w	60	C	2.0
55	1x	67	C	2.0
54	2y	67	U	2.0
17	2V	41	GLY	2.0
35	2d	87	GLY	2.0
46	1o	89	GLY	2.0
1	1A	1086	A	2.0
9	1N	140	VAL	2.0
29	27	46	VAL	2.0
32	2a	1213	A	2.0
34	2c	151	VAL	2.0
54	2y	35	A	2.0
21	2Z	99	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, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	6MZ	2y	37	23/24	0.34	0.19	82,87,100,116	0
54	7MG	2w	46	24/25	0.52	0.16	80,90,102,117	0
54	7MG	2y	46	24/25	0.53	0.16	87,98,104,119	0
54	CM0	2y	34	25/26	0.55	0.18	82,94,105,114	0
54	4SU	2y	8	20/21	0.55	0.14	92,97,104,113	0
54	PSU	2w	55	20/21	0.57	0.17	74,91,97,99	0
54	4SU	2w	8	20/21	0.60	0.16	84,94,99,102	0
54	4SU	1y	8	20/21	0.64	0.13	82,91,101,109	0
54	7MG	1y	46	24/25	0.65	0.16	82,91,96,99	0
54	CM0	1y	34	25/26	0.68	0.17	79,86,99,109	0
54	PSU	1w	55	20/21	0.69	0.16	63,85,89,91	0
54	7MG	1w	46	24/25	0.70	0.15	74,82,92,94	0
54	5MU	2y	54	21/22	0.71	0.13	82,90,102,115	0
54	PSU	2y	55	20/21	0.71	0.15	85,91,95,96	0
54	6MZ	1y	37	23/24	0.72	0.17	77,82,92,107	0
54	PSU	1y	55	20/21	0.74	0.14	79,88,95,98	0
54	5MU	2w	54	21/22	0.76	0.15	74,81,87,90	0
54	5MU	1y	54	21/22	0.79	0.12	70,80,88,93	0
54	4SU	1w	8	20/21	0.80	0.12	72,81,90,90	0
55	PSU	2x	55	20/21	0.84	0.10	67,73,86,93	0
55	5MU	1x	54	21/22	0.85	0.14	54,62,70,75	0
32	2MG	2a	1207	24/25	0.85	0.12	54,77,82,86	0
54	CM0	2w	34	25/26	0.86	0.13	60,71,78,90	0
55	4SU	2x	8	20/21	0.86	0.10	71,76,79,87	0
32	PSU	2a	516	20/21	0.86	0.11	63,68,72,80	0
55	5MU	2x	54	21/22	0.86	0.10	72,76,83,85	0
54	5MU	1w	54	21/22	0.86	0.12	52,67,79,83	0
43	0TD	1l	92	10/11	0.87	0.13	35,41,44,49	0
1	5MU	2A	1915	21/22	0.88	0.11	62,68,77,81	0
43	0TD	2l	92	10/11	0.89	0.13	56,61,66,79	0
32	5MC	2a	1407	21/22	0.90	0.15	46,54,61,74	0
32	M2G	2a	966	25/26	0.90	0.15	53,63,72,76	0
54	CM0	1w	34	25/26	0.90	0.14	53,60,68,73	0
55	4SU	1x	8	20/21	0.91	0.12	47,62,75,77	0
32	7MG	2a	527	24/25	0.91	0.12	54,62,69,71	0
1	PSU	2A	1917	20/21	0.91	0.10	48,58,66,68	0
32	5MC	2a	967	21/22	0.91	0.14	58,65,74,77	0
55	PSU	1x	55	20/21	0.91	0.10	50,62,65,72	0
1	5MU	1A	1915	21/22	0.91	0.12	46,52,58,60	0
32	5MC	2a	1400	21/22	0.92	0.14	56,62,67,67	0
55	5MC	2x	32	21/22	0.92	0.12	60,67,74,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	6MZ	2w	37	23/24	0.92	0.11	62,69,76,77	0
55	5MC	1x	32	21/22	0.93	0.12	36,49,52,56	0
1	PSU	2A	1911	20/21	0.94	0.09	53,58,60,63	0
32	4OC	2a	1402	22/23	0.94	0.11	45,58,61,62	0
32	5MC	2a	1404	21/22	0.94	0.10	46,51,57,58	0
32	PSU	1a	516	20/21	0.94	0.09	40,49,51,54	0
32	2MG	1a	1207	24/25	0.94	0.10	51,59,62,69	0
1	PSU	1A	1917	20/21	0.94	0.09	37,47,51,52	0
1	5MC	2A	1942	21/22	0.95	0.10	47,56,62,68	0
1	5MC	2A	1962	21/22	0.95	0.09	39,50,54,56	0
1	PSU	1A	1911	20/21	0.95	0.08	37,44,51,53	0
32	7MG	1a	527	24/25	0.95	0.09	28,38,44,47	0
32	MA6	2a	1518	24/25	0.95	0.13	43,54,61,63	0
32	MA6	2a	1519	24/25	0.95	0.15	43,57,63,65	0
54	6MZ	1w	37	23/24	0.95	0.10	40,46,53,54	0
32	M2G	1a	966	25/26	0.95	0.10	37,45,51,55	0
1	5MC	1A	1942	21/22	0.95	0.09	32,38,44,52	0
1	OMC	2A	1920	21/22	0.95	0.10	49,58,60,62	0
32	UR3	2a	1498	21/22	0.96	0.12	39,53,60,64	0
32	4OC	1a	1402	22/23	0.96	0.09	27,41,47,53	0
32	MA6	1a	1519	24/25	0.96	0.10	28,33,42,44	0
1	5MU	2A	1939	21/22	0.96	0.09	38,40,42,50	0
32	5MC	1a	967	21/22	0.96	0.08	40,46,50,53	0
1	OMC	1A	1920	21/22	0.96	0.08	30,40,46,51	0
1	OMG	2A	2251	24/25	0.96	0.08	33,39,43,46	0
1	2MA	2A	2503	23/24	0.96	0.09	25,29,36,40	0
32	5MC	1a	1400	21/22	0.96	0.10	30,40,46,48	0
32	5MC	1a	1407	21/22	0.97	0.09	31,35,39,44	0
1	OMU	2A	2552	21/22	0.97	0.07	27,37,43,48	0
1	PSU	2A	2605	20/21	0.97	0.07	29,38,42,46	0
32	MA6	1a	1518	24/25	0.97	0.09	26,33,37,43	0
1	5MC	1A	1962	21/22	0.97	0.08	26,32,35,45	0
1	OMU	1A	2552	21/22	0.97	0.07	18,26,30,31	0
1	5MU	1A	1939	21/22	0.97	0.08	15,23,26,36	0
32	5MC	1a	1404	21/22	0.97	0.08	28,31,36,37	0
32	UR3	1a	1498	21/22	0.98	0.07	26,33,37,41	0
1	2MA	1A	2503	23/24	0.98	0.06	11,14,17,18	0
1	OMG	1A	2251	24/25	0.98	0.05	14,19,20,21	0
1	PSU	1A	2605	20/21	0.98	0.07	16,22,30,30	0

6.3 Carbohydrates (i)

There are no oligosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3993	1/1	0.31	0.30	86,86,86,86	0
56	MG	1x	114	1/1	0.35	0.17	74,74,74,74	0
56	MG	2A	3649	1/1	0.49	0.17	50,50,50,50	0
56	MG	2a	3046	1/1	0.54	0.19	72,72,72,72	0
56	MG	2B	212	1/1	0.58	0.19	70,70,70,70	0
56	MG	2a	3106	1/1	0.58	0.21	74,74,74,74	0
56	MG	2y	105	1/1	0.59	0.21	85,85,85,85	0
56	MG	1a	1786	1/1	0.61	0.15	84,84,84,84	0
56	MG	2a	3049	1/1	0.61	0.21	73,73,73,73	0
56	MG	2A	3503	1/1	0.62	0.24	50,50,50,50	0
56	MG	1w	106	1/1	0.62	0.16	75,75,75,75	0
56	MG	2A	3662	1/1	0.62	0.29	67,67,67,67	0
56	MG	1a	1662	1/1	0.62	0.33	66,66,66,66	0
56	MG	2y	102	1/1	0.63	0.25	84,84,84,84	0
56	MG	1A	4053	1/1	0.63	0.61	62,62,62,62	0
56	MG	2a	3219	1/1	0.64	0.27	68,68,68,68	0
56	MG	2A	3355	1/1	0.64	0.20	63,63,63,63	0
56	MG	2A	3731	1/1	0.64	0.23	65,65,65,65	0
56	MG	2A	3722	1/1	0.65	0.19	53,53,53,53	0
56	MG	2y	101	1/1	0.65	0.22	67,67,67,67	0
56	MG	1y	104	1/1	0.65	0.22	70,70,70,70	0
56	MG	2A	3671	1/1	0.65	0.24	43,43,43,43	0
56	MG	1A	4044	1/1	0.66	0.17	46,46,46,46	0
56	MG	1A	3702	1/1	0.66	0.14	54,54,54,54	0
56	MG	2A	3735	1/1	0.67	0.18	59,59,59,59	0
56	MG	2A	3259	1/1	0.68	0.20	53,53,53,53	0
56	MG	1A	3629	1/1	0.68	0.23	77,77,77,77	0
56	MG	2A	3416	1/1	0.68	0.26	57,57,57,57	0
56	MG	2a	3187	1/1	0.68	0.22	57,57,57,57	0
56	MG	1a	1777	1/1	0.68	0.20	61,61,61,61	0
56	MG	2A	3635	1/1	0.68	0.23	72,72,72,72	0
56	MG	1B	218	1/1	0.68	0.19	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	3001	1/1	0.68	0.16	57,57,57,57	0
56	MG	2a	3224	1/1	0.69	0.20	69,69,69,69	0
56	MG	2A	3647	1/1	0.69	0.18	62,62,62,62	0
56	MG	2a	3204	1/1	0.69	0.13	57,57,57,57	0
56	MG	1A	4032	1/1	0.69	0.13	65,65,65,65	0
56	MG	2A	3024	1/1	0.70	0.16	67,67,67,67	0
56	MG	1a	1776	1/1	0.70	0.20	62,62,62,62	0
56	MG	2A	3268	1/1	0.70	0.23	69,69,69,69	0
56	MG	1x	112	1/1	0.70	0.28	67,67,67,67	0
56	MG	2a	3016	1/1	0.70	0.21	73,73,73,73	0
56	MG	1a	1782	1/1	0.71	0.12	70,70,70,70	0
56	MG	1A	3466	1/1	0.71	0.14	62,62,62,62	0
56	MG	2A	3836	1/1	0.71	0.15	49,49,49,49	0
56	MG	1y	105	1/1	0.71	0.18	73,73,73,73	0
56	MG	2A	3779	1/1	0.72	0.22	55,55,55,55	0
56	MG	1A	3948	1/1	0.72	0.20	69,69,69,69	0
56	MG	2A	3044	1/1	0.72	0.23	70,70,70,70	0
56	MG	2A	3333	1/1	0.72	0.19	63,63,63,63	0
56	MG	2y	104	1/1	0.72	0.19	59,59,59,59	0
56	MG	2A	3603	1/1	0.72	0.17	39,39,39,39	0
56	MG	1a	1672	1/1	0.73	0.14	51,51,51,51	0
56	MG	2A	3425	1/1	0.73	0.18	70,70,70,70	0
56	MG	2A	3712	1/1	0.74	0.14	55,55,55,55	0
56	MG	1A	3975	1/1	0.74	0.22	66,66,66,66	0
56	MG	2a	3077	1/1	0.74	0.26	66,66,66,66	0
56	MG	1B	231	1/1	0.74	0.20	49,49,49,49	0
56	MG	2A	3608	1/1	0.74	0.17	33,33,33,33	0
56	MG	2A	3766	1/1	0.74	0.17	76,76,76,76	0
56	MG	2A	3771	1/1	0.74	0.17	53,53,53,53	0
56	MG	1l	202	1/1	0.74	0.18	82,82,82,82	0
56	MG	2A	3367	1/1	0.74	0.24	47,47,47,47	0
56	MG	2A	3140	1/1	0.74	0.24	54,54,54,54	0
56	MG	1v	101	1/1	0.74	0.18	70,70,70,70	0
56	MG	2A	3477	1/1	0.74	0.27	59,59,59,59	0
56	MG	1a	1801	1/1	0.75	0.13	65,65,65,65	0
56	MG	1A	3837	1/1	0.75	0.16	48,48,48,48	0
56	MG	2A	3669	1/1	0.75	0.14	55,55,55,55	0
56	MG	1A	3779	1/1	0.75	0.16	59,59,59,59	0
56	MG	2A	3827	1/1	0.75	0.14	57,57,57,57	0
56	MG	1B	230	1/1	0.75	0.12	53,53,53,53	0
56	MG	2A	3841	1/1	0.75	0.18	42,42,42,42	0
56	MG	2B	206	1/1	0.75	0.19	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3721	1/1	0.75	0.24	40,40,40,40	0
56	MG	1A	4036	1/1	0.75	0.21	60,60,60,60	0
56	MG	1A	3821	1/1	0.75	0.15	41,41,41,41	0
56	MG	2a	3029	1/1	0.75	0.15	42,42,42,42	0
56	MG	2A	3571	1/1	0.76	0.16	56,56,56,56	0
56	MG	2A	3596	1/1	0.76	0.21	61,61,61,61	0
56	MG	1A	3865	1/1	0.76	0.26	42,42,42,42	0
56	MG	1B	234	1/1	0.76	0.20	65,65,65,65	0
56	MG	2A	3625	1/1	0.76	0.14	43,43,43,43	0
56	MG	1a	1603	1/1	0.76	0.22	65,65,65,65	0
56	MG	1A	3340	1/1	0.76	0.22	57,57,57,57	0
56	MG	2a	3228	1/1	0.76	0.21	60,60,60,60	0
56	MG	2a	3015	1/1	0.76	0.15	61,61,61,61	0
56	MG	2A	3318	1/1	0.76	0.23	77,77,77,77	0
56	MG	1a	1784	1/1	0.76	0.14	51,51,51,51	0
56	MG	2A	3778	1/1	0.76	0.14	74,74,74,74	0
56	MG	2A	3276	1/1	0.77	0.16	49,49,49,49	0
56	MG	1A	3735	1/1	0.77	0.16	68,68,68,68	0
56	MG	2A	3719	1/1	0.77	0.13	64,64,64,64	0
56	MG	2A	3720	1/1	0.77	0.17	62,62,62,62	0
56	MG	2a	3176	1/1	0.77	0.10	46,46,46,46	0
56	MG	2A	3106	1/1	0.77	0.30	60,60,60,60	0
56	MG	2a	3197	1/1	0.77	0.10	72,72,72,72	0
56	MG	1a	1762	1/1	0.77	0.26	60,60,60,60	0
56	MG	2B	209	1/1	0.77	0.16	72,72,72,72	0
56	MG	2A	3594	1/1	0.77	0.20	71,71,71,71	0
56	MG	1A	3442	1/1	0.77	0.16	55,55,55,55	0
56	MG	2a	3231	1/1	0.77	0.21	73,73,73,73	0
56	MG	2x	104	1/1	0.77	0.19	57,57,57,57	0
56	MG	2a	3008	1/1	0.77	0.23	58,58,58,58	0
56	MG	2A	3739	1/1	0.77	0.14	39,39,39,39	0
56	MG	2A	3667	1/1	0.77	0.12	56,56,56,56	0
56	MG	1A	3240	1/1	0.77	0.14	57,57,57,57	0
56	MG	1A	4110	1/1	0.78	0.13	30,30,30,30	0
56	MG	1a	1628	1/1	0.78	0.20	52,52,52,52	0
56	MG	2A	3725	1/1	0.78	0.19	50,50,50,50	0
56	MG	2A	3337	1/1	0.78	0.24	38,38,38,38	0
56	MG	1A	3919	1/1	0.78	0.11	25,25,25,25	0
56	MG	1A	3411	1/1	0.78	0.17	52,52,52,52	0
56	MG	2a	3097	1/1	0.78	0.19	66,66,66,66	0
56	MG	2A	3642	1/1	0.78	0.15	66,66,66,66	0
56	MG	1A	3759	1/1	0.78	0.12	14,14,14,14	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3424	1/1	0.78	0.29	62,62,62,62	0
56	MG	2a	3188	1/1	0.78	0.14	71,71,71,71	0
56	MG	1w	104	1/1	0.78	0.23	70,70,70,70	0
56	MG	2A	3232	1/1	0.78	0.20	65,65,65,65	0
56	MG	1A	3469	1/1	0.78	0.10	61,61,61,61	0
56	MG	2A	3670	1/1	0.78	0.15	63,63,63,63	0
56	MG	2A	3845	1/1	0.78	0.16	50,50,50,50	0
56	MG	1O	204	1/1	0.78	0.16	52,52,52,52	0
56	MG	2t	201	1/1	0.78	0.20	56,56,56,56	0
56	MG	2A	3684	1/1	0.78	0.22	64,64,64,64	0
56	MG	2A	3572	1/1	0.78	0.28	75,75,75,75	0
56	MG	2Q	202	1/1	0.78	0.22	60,60,60,60	0
56	MG	2A	3591	1/1	0.78	0.13	35,35,35,35	0
56	MG	1V	202	1/1	0.78	0.10	59,59,59,59	0
56	MG	2a	3095	1/1	0.79	0.31	69,69,69,69	0
56	MG	2A	3837	1/1	0.79	0.16	48,48,48,48	0
56	MG	1a	1706	1/1	0.79	0.23	57,57,57,57	0
56	MG	2a	3141	1/1	0.79	0.17	55,55,55,55	0
56	MG	2A	3641	1/1	0.79	0.12	70,70,70,70	0
56	MG	1A	4017	1/1	0.79	0.20	75,75,75,75	0
56	MG	2A	3314	1/1	0.79	0.11	60,60,60,60	0
56	MG	2A	3567	1/1	0.79	0.13	30,30,30,30	0
56	MG	1Z	304	1/1	0.79	0.09	52,52,52,52	0
56	MG	1A	3482	1/1	0.79	0.15	44,44,44,44	0
56	MG	1A	4045	1/1	0.79	0.18	51,51,51,51	0
56	MG	1E	302	1/1	0.79	0.26	52,52,52,52	0
56	MG	2A	3172	1/1	0.79	0.26	61,61,61,61	0
56	MG	2a	3027	1/1	0.79	0.16	67,67,67,67	0
56	MG	2A	3368	1/1	0.79	0.14	51,51,51,51	0
56	MG	2a	3043	1/1	0.79	0.10	49,49,49,49	0
56	MG	2A	3809	1/1	0.79	0.23	50,50,50,50	0
56	MG	1B	220	1/1	0.79	0.20	46,46,46,46	0
56	MG	1y	103	1/1	0.79	0.21	72,72,72,72	0
56	MG	1A	3353	1/1	0.80	0.18	56,56,56,56	0
56	MG	1A	3624	1/1	0.80	0.12	37,37,37,37	0
56	MG	2a	3166	1/1	0.80	0.14	59,59,59,59	0
56	MG	2A	3065	1/1	0.80	0.22	55,55,55,55	0
56	MG	2F	303	1/1	0.80	0.17	56,56,56,56	0
56	MG	1A	4052	1/1	0.80	0.12	21,21,21,21	0
56	MG	1x	108	1/1	0.80	0.18	61,61,61,61	0
56	MG	1A	3408	1/1	0.80	0.17	49,49,49,49	0
56	MG	2A	3212	1/1	0.80	0.14	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3379	1/1	0.80	0.17	52,52,52,52	0
56	MG	2A	3784	1/1	0.80	0.12	56,56,56,56	0
56	MG	2A	3702	1/1	0.80	0.10	29,29,29,29	0
56	MG	2j	201	1/1	0.80	0.15	74,74,74,74	0
56	MG	1A	3937	1/1	0.80	0.16	33,33,33,33	0
56	MG	2A	3828	1/1	0.80	0.14	57,57,57,57	0
56	MG	1B	204	1/1	0.80	0.16	50,50,50,50	0
56	MG	1a	1809	1/1	0.80	0.17	69,69,69,69	0
56	MG	1A	3238	1/1	0.80	0.15	50,50,50,50	0
56	MG	2A	3499	1/1	0.80	0.14	54,54,54,54	0
56	MG	2y	106	1/1	0.80	0.19	72,72,72,72	0
56	MG	2A	3086	1/1	0.81	0.31	59,59,59,59	0
56	MG	2A	3103	1/1	0.81	0.11	38,38,38,38	0
56	MG	2a	3017	1/1	0.81	0.18	66,66,66,66	0
56	MG	1a	1612	1/1	0.81	0.14	62,62,62,62	0
56	MG	2A	3539	1/1	0.81	0.13	40,40,40,40	0
56	MG	2A	3112	1/1	0.81	0.24	56,56,56,56	0
56	MG	1A	3465	1/1	0.81	0.17	56,56,56,56	0
56	MG	1a	1636	1/1	0.81	0.14	45,45,45,45	0
56	MG	2a	3071	1/1	0.81	0.23	51,51,51,51	0
56	MG	2A	3190	1/1	0.81	0.20	54,54,54,54	0
56	MG	2a	3093	1/1	0.81	0.12	53,53,53,53	0
56	MG	1b	302	1/1	0.81	0.16	64,64,64,64	0
56	MG	1f	202	1/1	0.81	0.13	59,59,59,59	0
56	MG	2a	3102	1/1	0.81	0.20	56,56,56,56	0
56	MG	2A	3241	1/1	0.81	0.17	55,55,55,55	0
56	MG	1A	3694	1/1	0.81	0.13	21,21,21,21	0
56	MG	1a	1667	1/1	0.81	0.16	48,48,48,48	0
56	MG	2A	3789	1/1	0.81	0.13	66,66,66,66	0
56	MG	2a	3186	1/1	0.81	0.18	77,77,77,77	0
56	MG	1E	305	1/1	0.81	0.15	49,49,49,49	0
56	MG	2A	3310	1/1	0.81	0.17	63,63,63,63	0
56	MG	1a	1675	1/1	0.81	0.25	68,68,68,68	0
56	MG	2a	3199	1/1	0.81	0.19	56,56,56,56	0
56	MG	1x	101	1/1	0.81	0.20	49,49,49,49	0
56	MG	1A	3595	1/1	0.81	0.09	35,35,35,35	0
56	MG	1a	1709	1/1	0.81	0.22	56,56,56,56	0
56	MG	1a	1735	1/1	0.81	0.22	62,62,62,62	0
56	MG	2A	3849	1/1	0.81	0.15	70,70,70,70	0
56	MG	1a	1748	1/1	0.81	0.14	45,45,45,45	0
56	MG	1T	202	1/1	0.81	0.15	53,53,53,53	0
56	MG	1A	3470	1/1	0.81	0.13	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2B	214	1/1	0.81	0.15	69,69,69,69	0
56	MG	1A	3756	1/1	0.81	0.10	43,43,43,43	0
56	MG	10	105	1/1	0.81	0.21	56,56,56,56	0
56	MG	2A	3708	1/1	0.81	0.16	53,53,53,53	0
56	MG	1A	3890	1/1	0.81	0.17	39,39,39,39	0
56	MG	1a	1679	1/1	0.82	0.17	44,44,44,44	0
56	MG	1A	4086	1/1	0.82	0.22	59,59,59,59	0
56	MG	2A	3624	1/1	0.82	0.20	37,37,37,37	0
56	MG	2A	3094	1/1	0.82	0.14	48,48,48,48	0
56	MG	2A	3776	1/1	0.82	0.21	63,63,63,63	0
56	MG	1A	3810	1/1	0.82	0.09	25,25,25,25	0
56	MG	1A	3197	1/1	0.82	0.11	34,34,34,34	0
56	MG	1A	3999	1/1	0.82	0.13	27,27,27,27	0
56	MG	1A	3827	1/1	0.82	0.18	55,55,55,55	0
56	MG	2A	3157	1/1	0.82	0.19	67,67,67,67	0
56	MG	1B	227	1/1	0.82	0.12	46,46,46,46	0
56	MG	2A	3411	1/1	0.82	0.27	64,64,64,64	0
56	MG	2a	3155	1/1	0.82	0.13	65,65,65,65	0
56	MG	2A	3177	1/1	0.82	0.14	62,62,62,62	0
56	MG	1A	3457	1/1	0.82	0.24	53,53,53,53	0
56	MG	2A	3202	1/1	0.82	0.15	56,56,56,56	0
56	MG	2A	3680	1/1	0.82	0.15	60,60,60,60	0
56	MG	1A	3266	1/1	0.82	0.10	43,43,43,43	0
56	MG	1A	3072	1/1	0.82	0.18	54,54,54,54	0
56	MG	2B	207	1/1	0.82	0.25	60,60,60,60	0
56	MG	2a	3202	1/1	0.82	0.24	64,64,64,64	0
56	MG	1A	3625	1/1	0.82	0.12	36,36,36,36	0
56	MG	1a	1670	1/1	0.82	0.13	59,59,59,59	0
56	MG	2A	3713	1/1	0.82	0.12	69,69,69,69	0
56	MG	1A	3432	1/1	0.82	0.17	55,55,55,55	0
56	MG	2F	305	1/1	0.82	0.14	53,53,53,53	0
56	MG	2A	3275	1/1	0.82	0.21	53,53,53,53	0
56	MG	1A	3806	1/1	0.82	0.35	22,22,22,22	0
56	MG	2a	3007	1/1	0.82	0.11	66,66,66,66	0
56	MG	2A	3278	1/1	0.82	0.21	58,58,58,58	0
56	MG	2A	3281	1/1	0.82	0.14	61,61,61,61	0
56	MG	2A	3727	1/1	0.82	0.14	58,58,58,58	0
56	MG	2A	3288	1/1	0.82	0.19	60,60,60,60	0
56	MG	2A	3734	1/1	0.82	0.13	51,51,51,51	0
56	MG	1A	3886	1/1	0.83	0.20	50,50,50,50	0
56	MG	2A	3273	1/1	0.83	0.17	57,57,57,57	0
56	MG	2A	3733	1/1	0.83	0.10	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3014	1/1	0.83	0.21	55,55,55,55	0
56	MG	1a	1793	1/1	0.83	0.12	69,69,69,69	0
56	MG	1A	3888	1/1	0.83	0.12	54,54,54,54	0
56	MG	1U	207	1/1	0.83	0.58	71,71,71,71	0
56	MG	2a	3055	1/1	0.83	0.19	58,58,58,58	0
56	MG	1A	4026	1/1	0.83	0.20	52,52,52,52	0
56	MG	2A	3306	1/1	0.83	0.14	49,49,49,49	0
56	MG	2a	3085	1/1	0.83	0.14	63,63,63,63	0
56	MG	1e	201	1/1	0.83	0.19	48,48,48,48	0
56	MG	1a	1693	1/1	0.83	0.11	66,66,66,66	0
56	MG	1A	3029	1/1	0.83	0.16	21,21,21,21	0
56	MG	1A	3360	1/1	0.83	0.20	46,46,46,46	0
56	MG	2A	3794	1/1	0.83	0.14	52,52,52,52	0
56	MG	2A	3138	1/1	0.83	0.18	57,57,57,57	0
56	MG	2A	3340	1/1	0.83	0.26	65,65,65,65	0
56	MG	2A	3659	1/1	0.83	0.13	40,40,40,40	0
56	MG	2A	3347	1/1	0.83	0.12	51,51,51,51	0
56	MG	1a	1717	1/1	0.83	0.16	53,53,53,53	0
56	MG	1A	3750	1/1	0.83	0.17	13,13,13,13	0
56	MG	1A	3445	1/1	0.83	0.09	51,51,51,51	0
56	MG	2A	3176	1/1	0.83	0.13	54,54,54,54	0
56	MG	1x	103	1/1	0.83	0.14	57,57,57,57	0
56	MG	2A	3184	1/1	0.83	0.31	53,53,53,53	0
56	MG	2A	3698	1/1	0.83	0.14	55,55,55,55	0
56	MG	2a	3210	1/1	0.83	0.14	64,64,64,64	0
56	MG	2a	3215	1/1	0.83	0.18	71,71,71,71	0
56	MG	1x	105	1/1	0.83	0.17	52,52,52,52	0
56	MG	1A	3951	1/1	0.83	0.10	47,47,47,47	0
56	MG	2B	216	1/1	0.83	0.28	74,74,74,74	0
56	MG	1A	3541	1/1	0.83	0.11	46,46,46,46	0
56	MG	2A	3480	1/1	0.83	0.23	67,67,67,67	0
56	MG	2j	202	1/1	0.83	0.10	70,70,70,70	0
56	MG	1A	3556	1/1	0.83	0.14	40,40,40,40	0
56	MG	1a	1666	1/1	0.83	0.22	56,56,56,56	0
56	MG	2a	3006	1/1	0.83	0.31	63,63,63,63	0
56	MG	2A	3248	1/1	0.83	0.15	51,51,51,51	0
56	MG	2A	3548	1/1	0.83	0.12	39,39,39,39	0
56	MG	2a	3014	1/1	0.83	0.16	39,39,39,39	0
56	MG	1I	201	1/1	0.83	0.13	54,54,54,54	0
56	MG	2A	3313	1/1	0.84	0.13	59,59,59,59	0
56	MG	1a	1712	1/1	0.84	0.16	49,49,49,49	0
56	MG	2A	3750	1/1	0.84	0.12	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3764	1/1	0.84	0.08	62,62,62,62	0
56	MG	1G	202	1/1	0.84	0.14	53,53,53,53	0
56	MG	2a	3035	1/1	0.84	0.23	62,62,62,62	0
56	MG	2A	3321	1/1	0.84	0.11	58,58,58,58	0
56	MG	2A	3628	1/1	0.84	0.10	35,35,35,35	0
56	MG	2A	3142	1/1	0.84	0.20	57,57,57,57	0
56	MG	1a	1733	1/1	0.84	0.33	57,57,57,57	0
56	MG	2A	3168	1/1	0.84	0.09	44,44,44,44	0
56	MG	2a	3075	1/1	0.84	0.28	53,53,53,53	0
56	MG	1B	206	1/1	0.84	0.21	46,46,46,46	0
56	MG	1a	1637	1/1	0.84	0.24	49,49,49,49	0
56	MG	2A	3359	1/1	0.84	0.17	61,61,61,61	0
56	MG	2A	3366	1/1	0.84	0.20	51,51,51,51	0
56	MG	1a	1653	1/1	0.84	0.08	58,58,58,58	0
56	MG	2a	3098	1/1	0.84	0.22	70,70,70,70	0
56	MG	1A	4040	1/1	0.84	0.21	59,59,59,59	0
56	MG	1a	1664	1/1	0.84	0.17	59,59,59,59	0
56	MG	2a	3124	1/1	0.84	0.27	68,68,68,68	0
56	MG	2a	3130	1/1	0.84	0.23	62,62,62,62	0
56	MG	2A	3200	1/1	0.84	0.16	46,46,46,46	0
56	MG	2A	3844	1/1	0.84	0.08	61,61,61,61	0
56	MG	2a	3156	1/1	0.84	0.12	49,49,49,49	0
56	MG	2a	3164	1/1	0.84	0.12	83,83,83,83	0
56	MG	1A	3121	1/1	0.84	0.29	29,29,29,29	0
56	MG	2a	3170	1/1	0.84	0.10	84,84,84,84	0
56	MG	1U	204	1/1	0.84	0.15	31,31,31,31	0
56	MG	2a	3180	1/1	0.84	0.19	83,83,83,83	0
56	MG	2A	3850	1/1	0.84	0.24	70,70,70,70	0
56	MG	1a	1669	1/1	0.84	0.19	52,52,52,52	0
56	MG	2A	3467	1/1	0.84	0.23	53,53,53,53	0
56	MG	2B	208	1/1	0.84	0.15	56,56,56,56	0
56	MG	1a	1790	1/1	0.84	0.14	52,52,52,52	0
56	MG	1A	3646	1/1	0.84	0.13	28,28,28,28	0
56	MG	1A	3869	1/1	0.84	0.12	29,29,29,29	0
56	MG	2A	3047	1/1	0.84	0.22	63,63,63,63	0
56	MG	2a	3214	1/1	0.84	0.09	57,57,57,57	0
56	MG	2E	307	1/1	0.84	0.14	57,57,57,57	0
56	MG	2E	308	1/1	0.84	0.09	48,48,48,48	0
56	MG	2a	3220	1/1	0.84	0.26	56,56,56,56	0
56	MG	2A	3052	1/1	0.84	0.23	52,52,52,52	0
56	MG	1A	3778	1/1	0.84	0.11	17,17,17,17	0
56	MG	2G	201	1/1	0.84	0.15	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3070	1/1	0.84	0.22	54,54,54,54	0
56	MG	1A	3344	1/1	0.84	0.13	32,32,32,32	0
56	MG	2r	101	1/1	0.84	0.10	62,62,62,62	0
56	MG	2a	3004	1/1	0.84	0.16	56,56,56,56	0
56	MG	1A	3962	1/1	0.84	0.16	37,37,37,37	0
56	MG	1a	1699	1/1	0.84	0.25	48,48,48,48	0
56	MG	1A	3969	1/1	0.84	0.14	43,43,43,43	0
56	MG	2y	103	1/1	0.84	0.12	65,65,65,65	0
56	MG	2a	3009	1/1	0.84	0.23	64,64,64,64	0
56	MG	2a	3013	1/1	0.84	0.10	56,56,56,56	0
56	MG	1a	1627	1/1	0.84	0.15	50,50,50,50	0
56	MG	2A	3519	1/1	0.85	0.11	37,37,37,37	0
56	MG	2A	3759	1/1	0.85	0.15	68,68,68,68	0
56	MG	2a	3045	1/1	0.85	0.25	67,67,67,67	0
56	MG	2A	3253	1/1	0.85	0.07	53,53,53,53	0
56	MG	1A	3391	1/1	0.85	0.18	58,58,58,58	0
56	MG	2A	3770	1/1	0.85	0.11	77,77,77,77	0
56	MG	2a	3062	1/1	0.85	0.15	55,55,55,55	0
56	MG	2a	3069	1/1	0.85	0.14	64,64,64,64	0
56	MG	2A	3553	1/1	0.85	0.14	48,48,48,48	0
56	MG	1A	3701	1/1	0.85	0.10	48,48,48,48	0
56	MG	1a	1812	1/1	0.85	0.14	63,63,63,63	0
56	MG	1U	206	1/1	0.85	0.12	36,36,36,36	0
56	MG	1A	3271	1/1	0.85	0.14	41,41,41,41	0
56	MG	1A	3190	1/1	0.85	0.12	49,49,49,49	0
56	MG	1A	3603	1/1	0.85	0.12	8,8,8,8	0
56	MG	2A	3107	1/1	0.85	0.21	48,48,48,48	0
56	MG	2A	3604	1/1	0.85	0.12	40,40,40,40	0
56	MG	2A	3298	1/1	0.85	0.22	60,60,60,60	0
56	MG	2a	3122	1/1	0.85	0.28	52,52,52,52	0
56	MG	2A	3830	1/1	0.85	0.14	45,45,45,45	0
56	MG	2A	3832	1/1	0.85	0.14	46,46,46,46	0
56	MG	1A	3017	1/1	0.85	0.14	49,49,49,49	0
56	MG	2A	3308	1/1	0.85	0.12	55,55,55,55	0
56	MG	2A	3121	1/1	0.85	0.27	63,63,63,63	0
56	MG	1w	103	1/1	0.85	0.15	60,60,60,60	0
56	MG	1A	3878	1/1	0.85	0.11	13,13,13,13	0
56	MG	1A	4005	1/1	0.85	0.09	69,69,69,69	0
56	MG	2A	3151	1/1	0.85	0.33	63,63,63,63	0
56	MG	2A	3329	1/1	0.85	0.09	58,58,58,58	0
56	MG	1a	1622	1/1	0.85	0.13	53,53,53,53	0
56	MG	2A	3334	1/1	0.85	0.17	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3666	1/1	0.85	0.18	59,59,59,59	0
56	MG	1A	4014	1/1	0.85	0.09	41,41,41,41	0
56	MG	1A	3884	1/1	0.85	0.13	54,54,54,54	0
56	MG	2A	3175	1/1	0.85	0.21	59,59,59,59	0
56	MG	2A	3351	1/1	0.85	0.15	58,58,58,58	0
56	MG	1A	3263	1/1	0.85	0.12	48,48,48,48	0
56	MG	1B	233	1/1	0.85	0.17	67,67,67,67	0
56	MG	2A	3179	1/1	0.85	0.09	44,44,44,44	0
56	MG	2a	3218	1/1	0.85	0.14	69,69,69,69	0
56	MG	1a	1640	1/1	0.85	0.13	59,59,59,59	0
56	MG	1A	4027	1/1	0.85	0.14	80,80,80,80	0
56	MG	2T	204	1/1	0.85	0.18	57,57,57,57	0
56	MG	2A	3374	1/1	0.85	0.10	48,48,48,48	0
56	MG	2A	3194	1/1	0.85	0.15	46,46,46,46	0
56	MG	2A	3382	1/1	0.85	0.10	48,48,48,48	0
56	MG	2A	3196	1/1	0.85	0.09	48,48,48,48	0
56	MG	1A	3225	1/1	0.85	0.17	54,54,54,54	0
56	MG	1A	3633	1/1	0.85	0.10	26,26,26,26	0
56	MG	1A	3912	1/1	0.85	0.18	64,64,64,64	0
56	MG	2A	3431	1/1	0.85	0.15	54,54,54,54	0
56	MG	2A	3214	1/1	0.85	0.19	54,54,54,54	0
56	MG	2A	3229	1/1	0.85	0.31	46,46,46,46	0
56	MG	1A	3805	1/1	0.85	0.12	37,37,37,37	0
56	MG	1A	3500	1/1	0.85	0.13	45,45,45,45	0
56	MG	1a	1794	1/1	0.85	0.12	60,60,60,60	0
56	MG	1a	1652	1/1	0.86	0.19	49,49,49,49	0
56	MG	1A	3663	1/1	0.86	0.10	17,17,17,17	0
56	MG	1a	1657	1/1	0.86	0.20	54,54,54,54	0
56	MG	2A	3178	1/1	0.86	0.15	48,48,48,48	0
56	MG	2a	3040	1/1	0.86	0.28	59,59,59,59	0
56	MG	1a	1660	1/1	0.86	0.16	48,48,48,48	0
56	MG	1e	202	1/1	0.86	0.10	64,64,64,64	0
56	MG	1A	3985	1/1	0.86	0.10	16,16,16,16	0
56	MG	2A	3193	1/1	0.86	0.21	59,59,59,59	0
56	MG	2A	3754	1/1	0.86	0.09	46,46,46,46	0
56	MG	2A	3476	1/1	0.86	0.14	45,45,45,45	0
56	MG	1A	3670	1/1	0.86	0.10	45,45,45,45	0
56	MG	1A	3687	1/1	0.86	0.14	25,25,25,25	0
56	MG	1A	3842	1/1	0.86	0.23	61,61,61,61	0
56	MG	1A	3862	1/1	0.86	0.22	31,31,31,31	0
56	MG	1A	3398	1/1	0.86	0.12	45,45,45,45	0
56	MG	1A	3544	1/1	0.86	0.14	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	3094	1/1	0.86	0.22	54,54,54,54	0
56	MG	1A	3160	1/1	0.86	0.12	55,55,55,55	0
56	MG	1A	3722	1/1	0.86	0.13	52,52,52,52	0
56	MG	1a	1688	1/1	0.86	0.20	57,57,57,57	0
56	MG	1A	3885	1/1	0.86	0.26	35,35,35,35	0
56	MG	2A	3798	1/1	0.86	0.10	25,25,25,25	0
56	MG	1A	3577	1/1	0.86	0.14	47,47,47,47	0
56	MG	1A	3100	1/1	0.86	0.08	52,52,52,52	0
56	MG	1A	3425	1/1	0.86	0.08	34,34,34,34	0
56	MG	1A	3621	1/1	0.86	0.11	26,26,26,26	0
56	MG	1a	1713	1/1	0.86	0.21	59,59,59,59	0
56	MG	1A	3052	1/1	0.86	0.17	52,52,52,52	0
56	MG	2a	3162	1/1	0.86	0.13	57,57,57,57	0
56	MG	1a	1718	1/1	0.86	0.32	56,56,56,56	0
56	MG	1A	4075	1/1	0.86	0.14	40,40,40,40	0
56	MG	2A	3286	1/1	0.86	0.20	56,56,56,56	0
56	MG	2A	3626	1/1	0.86	0.25	33,33,33,33	0
56	MG	2A	3048	1/1	0.86	0.16	48,48,48,48	0
56	MG	2A	3634	1/1	0.86	0.12	61,61,61,61	0
56	MG	2A	3291	1/1	0.86	0.15	43,43,43,43	0
56	MG	13	101	1/1	0.86	0.12	46,46,46,46	0
56	MG	2a	3191	1/1	0.86	0.14	66,66,66,66	0
56	MG	14	101	1/1	0.86	0.24	60,60,60,60	0
56	MG	1a	1749	1/1	0.86	0.12	57,57,57,57	0
56	MG	2B	210	1/1	0.86	0.09	47,47,47,47	0
56	MG	2A	3080	1/1	0.86	0.20	63,63,63,63	0
56	MG	1a	1752	1/1	0.86	0.22	65,65,65,65	0
56	MG	1a	1601	1/1	0.86	0.17	50,50,50,50	0
56	MG	1a	1767	1/1	0.86	0.22	60,60,60,60	0
56	MG	1A	3365	1/1	0.86	0.14	39,39,39,39	0
56	MG	2F	301	1/1	0.86	0.09	41,41,41,41	0
56	MG	1A	4101	1/1	0.86	0.11	44,44,44,44	0
56	MG	2A	3108	1/1	0.86	0.17	49,49,49,49	0
56	MG	1A	3939	1/1	0.86	0.13	49,49,49,49	0
56	MG	1A	3787	1/1	0.86	0.10	25,25,25,25	0
56	MG	2d	301	1/1	0.86	0.17	48,48,48,48	0
56	MG	2A	3124	1/1	0.86	0.10	47,47,47,47	0
56	MG	1a	1785	1/1	0.86	0.09	40,40,40,40	0
56	MG	1A	3242	1/1	0.86	0.08	46,46,46,46	0
56	MG	1A	3516	1/1	0.86	0.12	62,62,62,62	0
56	MG	1B	219	1/1	0.86	0.22	34,34,34,34	0
56	MG	1a	1639	1/1	0.86	0.12	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3714	1/1	0.86	0.16	51,51,51,51	0
56	MG	2A	3162	1/1	0.86	0.14	56,56,56,56	0
56	MG	1a	1795	1/1	0.86	0.14	58,58,58,58	0
56	MG	2A	3370	1/1	0.86	0.17	57,57,57,57	0
56	MG	1A	3518	1/1	0.86	0.08	43,43,43,43	0
57	LUJ	2A	3851	42/44	0.86	0.16	50,62,75,82	0
56	MG	1A	3817	1/1	0.87	0.13	33,33,33,33	0
56	MG	2A	3350	1/1	0.87	0.28	42,42,42,42	0
56	MG	2A	3677	1/1	0.87	0.15	72,72,72,72	0
56	MG	1A	3554	1/1	0.87	0.15	32,32,32,32	0
56	MG	1x	113	1/1	0.87	0.23	61,61,61,61	0
56	MG	2a	3010	1/1	0.87	0.13	61,61,61,61	0
56	MG	2A	3357	1/1	0.87	0.25	48,48,48,48	0
56	MG	1B	221	1/1	0.87	0.14	46,46,46,46	0
56	MG	1x	115	1/1	0.87	0.17	53,53,53,53	0
56	MG	2A	3710	1/1	0.87	0.15	52,52,52,52	0
56	MG	1A	3468	1/1	0.87	0.10	41,41,41,41	0
56	MG	2a	3019	1/1	0.87	0.18	58,58,58,58	0
56	MG	2A	3191	1/1	0.87	0.13	43,43,43,43	0
56	MG	2a	3028	1/1	0.87	0.28	71,71,71,71	0
56	MG	1A	3831	1/1	0.87	0.11	36,36,36,36	0
56	MG	1A	3420	1/1	0.87	0.22	45,45,45,45	0
56	MG	1a	1648	1/1	0.87	0.27	54,54,54,54	0
56	MG	2a	3041	1/1	0.87	0.23	55,55,55,55	0
56	MG	2A	3380	1/1	0.87	0.09	63,63,63,63	0
56	MG	1A	3390	1/1	0.87	0.12	45,45,45,45	0
56	MG	1A	3018	1/1	0.87	0.16	30,30,30,30	0
56	MG	2A	3726	1/1	0.87	0.14	58,58,58,58	0
56	MG	2a	3050	1/1	0.87	0.09	61,61,61,61	0
56	MG	1A	3726	1/1	0.87	0.15	55,55,55,55	0
56	MG	2A	3423	1/1	0.87	0.24	59,59,59,59	0
56	MG	2a	3065	1/1	0.87	0.10	38,38,38,38	0
56	MG	1A	3868	1/1	0.87	0.14	57,57,57,57	0
56	MG	2A	3223	1/1	0.87	0.14	52,52,52,52	0
56	MG	2A	3429	1/1	0.87	0.19	48,48,48,48	0
56	MG	1A	3489	1/1	0.87	0.11	55,55,55,55	0
56	MG	2a	3082	1/1	0.87	0.11	72,72,72,72	0
56	MG	1A	3334	1/1	0.87	0.20	47,47,47,47	0
56	MG	2a	3091	1/1	0.87	0.17	66,66,66,66	0
56	MG	2A	3234	1/1	0.87	0.23	53,53,53,53	0
56	MG	1A	3407	1/1	0.87	0.13	44,44,44,44	0
56	MG	2A	3478	1/1	0.87	0.17	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3242	1/1	0.87	0.20	61,61,61,61	0
56	MG	2A	3245	1/1	0.87	0.20	44,44,44,44	0
56	MG	2a	3100	1/1	0.87	0.13	61,61,61,61	0
56	MG	2a	3101	1/1	0.87	0.21	65,65,65,65	0
56	MG	1A	3335	1/1	0.87	0.08	48,48,48,48	0
56	MG	2A	3504	1/1	0.87	0.22	63,63,63,63	0
56	MG	2a	3107	1/1	0.87	0.19	48,48,48,48	0
56	MG	2A	3514	1/1	0.87	0.24	49,49,49,49	0
56	MG	1A	3522	1/1	0.87	0.09	28,28,28,28	0
56	MG	1A	3539	1/1	0.87	0.20	49,49,49,49	0
56	MG	2A	3545	1/1	0.87	0.15	27,27,27,27	0
56	MG	2A	3790	1/1	0.87	0.12	42,42,42,42	0
56	MG	2A	3267	1/1	0.87	0.15	44,44,44,44	0
56	MG	2A	3797	1/1	0.87	0.11	34,34,34,34	0
56	MG	1a	1671	1/1	0.87	0.14	58,58,58,58	0
56	MG	1A	3781	1/1	0.87	0.16	48,48,48,48	0
56	MG	2A	3824	1/1	0.87	0.12	76,76,76,76	0
56	MG	1A	3904	1/1	0.87	0.10	11,11,11,11	0
56	MG	1Y	202	1/1	0.87	0.13	53,53,53,53	0
56	MG	2A	3589	1/1	0.87	0.12	58,58,58,58	0
56	MG	2A	3831	1/1	0.87	0.12	49,49,49,49	0
56	MG	1a	1680	1/1	0.87	0.11	38,38,38,38	0
56	MG	2A	3114	1/1	0.87	0.09	60,60,60,60	0
56	MG	2a	3192	1/1	0.87	0.19	52,52,52,52	0
56	MG	2A	3118	1/1	0.87	0.10	45,45,45,45	0
56	MG	1A	3905	1/1	0.87	0.15	17,17,17,17	0
56	MG	2A	3289	1/1	0.87	0.17	57,57,57,57	0
56	MG	1A	3907	1/1	0.87	0.12	55,55,55,55	0
56	MG	2A	3613	1/1	0.87	0.10	32,32,32,32	0
56	MG	2A	3296	1/1	0.87	0.12	53,53,53,53	0
56	MG	2A	3857	1/1	0.87	0.21	56,56,56,56	0
56	MG	2A	3861	1/1	0.87	0.09	46,46,46,46	0
56	MG	11	102	1/1	0.87	0.12	61,61,61,61	0
56	MG	1t	201	1/1	0.87	0.19	44,44,44,44	0
56	MG	1A	3247	1/1	0.87	0.10	47,47,47,47	0
56	MG	2A	3632	1/1	0.87	0.15	54,54,54,54	0
56	MG	1a	1708	1/1	0.87	0.14	66,66,66,66	0
56	MG	2A	3155	1/1	0.87	0.10	56,56,56,56	0
56	MG	1A	3413	1/1	0.87	0.13	45,45,45,45	0
56	MG	2A	3317	1/1	0.87	0.09	49,49,49,49	0
56	MG	2A	3159	1/1	0.87	0.23	66,66,66,66	0
56	MG	1A	3674	1/1	0.87	0.13	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3651	1/1	0.87	0.22	51,51,51,51	0
56	MG	2A	3165	1/1	0.87	0.14	60,60,60,60	0
56	MG	2A	3660	1/1	0.87	0.10	47,47,47,47	0
56	MG	1A	3807	1/1	0.87	0.17	45,45,45,45	0
56	MG	1A	3809	1/1	0.87	0.11	12,12,12,12	0
56	MG	2A	3173	1/1	0.87	0.14	55,55,55,55	0
56	MG	2U	203	1/1	0.87	0.14	42,42,42,42	0
56	MG	1A	3682	1/1	0.87	0.11	15,15,15,15	0
56	MG	1A	3356	1/1	0.88	0.11	46,46,46,46	0
56	MG	2A	3304	1/1	0.88	0.13	64,64,64,64	0
56	MG	1A	3525	1/1	0.88	0.30	44,44,44,44	0
56	MG	1A	3531	1/1	0.88	0.12	43,43,43,43	0
56	MG	1a	1792	1/1	0.88	0.10	56,56,56,56	0
56	MG	2T	201	1/1	0.88	0.26	57,57,57,57	0
56	MG	2A	3312	1/1	0.88	0.11	47,47,47,47	0
56	MG	1A	3534	1/1	0.88	0.24	52,52,52,52	0
56	MG	1A	3943	1/1	0.88	0.12	69,69,69,69	0
56	MG	2a	3003	1/1	0.88	0.33	66,66,66,66	0
56	MG	2A	3316	1/1	0.88	0.11	45,45,45,45	0
56	MG	1a	1656	1/1	0.88	0.21	48,48,48,48	0
56	MG	1A	3815	1/1	0.88	0.15	48,48,48,48	0
56	MG	2A	3153	1/1	0.88	0.07	36,36,36,36	0
56	MG	1A	3295	1/1	0.88	0.27	47,47,47,47	0
56	MG	2A	3331	1/1	0.88	0.09	56,56,56,56	0
56	MG	2a	3012	1/1	0.88	0.14	51,51,51,51	0
56	MG	1A	3307	1/1	0.88	0.13	49,49,49,49	0
56	MG	1A	3203	1/1	0.88	0.12	54,54,54,54	0
56	MG	2A	3335	1/1	0.88	0.08	53,53,53,53	0
56	MG	1A	3970	1/1	0.88	0.17	67,67,67,67	0
56	MG	1A	3215	1/1	0.88	0.13	47,47,47,47	0
56	MG	1A	3979	1/1	0.88	0.17	52,52,52,52	0
56	MG	2A	3679	1/1	0.88	0.07	53,53,53,53	0
56	MG	1A	3983	1/1	0.88	0.10	21,21,21,21	0
56	MG	1A	3026	1/1	0.88	0.17	56,56,56,56	0
56	MG	2a	3034	1/1	0.88	0.18	54,54,54,54	0
56	MG	1A	3488	1/1	0.88	0.33	36,36,36,36	0
56	MG	2a	3038	1/1	0.88	0.14	57,57,57,57	0
56	MG	1A	3117	1/1	0.88	0.11	33,33,33,33	0
56	MG	1A	3599	1/1	0.88	0.12	37,37,37,37	0
56	MG	2a	3042	1/1	0.88	0.09	63,63,63,63	0
56	MG	2A	3365	1/1	0.88	0.16	57,57,57,57	0
56	MG	1w	105	1/1	0.88	0.20	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3731	1/1	0.88	0.10	13,13,13,13	0
56	MG	2A	3180	1/1	0.88	0.10	61,61,61,61	0
56	MG	1w	108	1/1	0.88	0.18	52,52,52,52	0
56	MG	2a	3053	1/1	0.88	0.20	67,67,67,67	0
56	MG	2A	3187	1/1	0.88	0.23	56,56,56,56	0
56	MG	2A	3377	1/1	0.88	0.19	58,58,58,58	0
56	MG	1a	1682	1/1	0.88	0.16	50,50,50,50	0
56	MG	1A	3496	1/1	0.88	0.09	37,37,37,37	0
56	MG	1A	3871	1/1	0.88	0.08	14,14,14,14	0
56	MG	2a	3072	1/1	0.88	0.11	51,51,51,51	0
56	MG	2A	3397	1/1	0.88	0.11	38,38,38,38	0
56	MG	2A	3400	1/1	0.88	0.30	49,49,49,49	0
56	MG	2a	3078	1/1	0.88	0.19	56,56,56,56	0
56	MG	2A	3403	1/1	0.88	0.19	45,45,45,45	0
56	MG	2A	3405	1/1	0.88	0.09	47,47,47,47	0
56	MG	1A	3875	1/1	0.88	0.11	34,34,34,34	0
56	MG	1a	1703	1/1	0.88	0.27	51,51,51,51	0
56	MG	2A	3745	1/1	0.88	0.12	49,49,49,49	0
56	MG	2A	3199	1/1	0.88	0.18	50,50,50,50	0
56	MG	1A	4031	1/1	0.88	0.09	42,42,42,42	0
56	MG	1A	3876	1/1	0.88	0.16	49,49,49,49	0
56	MG	2A	3208	1/1	0.88	0.10	57,57,57,57	0
56	MG	2A	3765	1/1	0.88	0.11	47,47,47,47	0
56	MG	1A	3611	1/1	0.88	0.12	38,38,38,38	0
56	MG	2A	3767	1/1	0.88	0.23	70,70,70,70	0
56	MG	2A	3432	1/1	0.88	0.09	48,48,48,48	0
56	MG	2a	3116	1/1	0.88	0.22	65,65,65,65	0
56	MG	2A	3445	1/1	0.88	0.49	49,49,49,49	0
56	MG	2A	3774	1/1	0.88	0.11	59,59,59,59	0
56	MG	1A	3612	1/1	0.88	0.12	46,46,46,46	0
56	MG	1A	3620	1/1	0.88	0.19	49,49,49,49	0
56	MG	2a	3154	1/1	0.88	0.10	77,77,77,77	0
56	MG	1A	3777	1/1	0.88	0.10	39,39,39,39	0
56	MG	1A	3448	1/1	0.88	0.20	41,41,41,41	0
56	MG	2A	3788	1/1	0.88	0.08	48,48,48,48	0
56	MG	2A	3016	1/1	0.88	0.11	41,41,41,41	0
56	MG	2A	3483	1/1	0.88	0.10	34,34,34,34	0
56	MG	2A	3489	1/1	0.88	0.29	64,64,64,64	0
56	MG	2a	3173	1/1	0.88	0.14	86,86,86,86	0
56	MG	1a	1722	1/1	0.88	0.27	42,42,42,42	0
56	MG	1a	1724	1/1	0.88	0.21	56,56,56,56	0
56	MG	15	103	1/1	0.88	0.09	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3813	1/1	0.88	0.10	41,41,41,41	0
56	MG	2A	3510	1/1	0.88	0.10	64,64,64,64	0
56	MG	2A	3513	1/1	0.88	0.13	47,47,47,47	0
56	MG	1a	1734	1/1	0.88	0.07	45,45,45,45	0
56	MG	2A	3049	1/1	0.88	0.31	60,60,60,60	0
56	MG	2A	3534	1/1	0.88	0.16	54,54,54,54	0
56	MG	2a	3201	1/1	0.88	0.10	58,58,58,58	0
56	MG	2A	3050	1/1	0.88	0.07	49,49,49,49	0
56	MG	18	104	1/1	0.88	0.21	47,47,47,47	0
56	MG	1A	3504	1/1	0.88	0.08	37,37,37,37	0
56	MG	2A	3271	1/1	0.88	0.25	66,66,66,66	0
56	MG	2A	3561	1/1	0.88	0.12	54,54,54,54	0
56	MG	2a	3216	1/1	0.88	0.13	61,61,61,61	0
56	MG	1A	4061	1/1	0.88	0.09	57,57,57,57	0
56	MG	2A	3847	1/1	0.88	0.22	50,50,50,50	0
56	MG	1a	1605	1/1	0.88	0.20	54,54,54,54	0
56	MG	1a	1760	1/1	0.88	0.10	50,50,50,50	0
56	MG	2a	3227	1/1	0.88	0.25	65,65,65,65	0
56	MG	2A	3582	1/1	0.88	0.09	51,51,51,51	0
56	MG	2a	3229	1/1	0.88	0.08	52,52,52,52	0
56	MG	2A	3277	1/1	0.88	0.14	61,61,61,61	0
56	MG	2B	201	1/1	0.88	0.21	64,64,64,64	0
56	MG	2B	204	1/1	0.88	0.13	68,68,68,68	0
56	MG	1A	4068	1/1	0.88	0.14	38,38,38,38	0
56	MG	2A	3280	1/1	0.88	0.14	53,53,53,53	0
56	MG	2A	3096	1/1	0.88	0.18	65,65,65,65	0
56	MG	2v	101	1/1	0.88	0.22	46,46,46,46	0
56	MG	1A	3451	1/1	0.88	0.13	43,43,43,43	0
56	MG	1A	4080	1/1	0.88	0.11	11,11,11,11	0
56	MG	1A	3627	1/1	0.88	0.10	15,15,15,15	0
56	MG	1A	3090	1/1	0.88	0.11	55,55,55,55	0
56	MG	2A	3615	1/1	0.88	0.12	42,42,42,42	0
56	MG	2E	302	1/1	0.88	0.11	30,30,30,30	0
56	MG	2A	3622	1/1	0.88	0.08	40,40,40,40	0
56	MG	1A	4103	1/1	0.88	0.09	17,17,17,17	0
56	MG	1a	1787	1/1	0.89	0.09	49,49,49,49	0
56	MG	2A	3465	1/1	0.89	0.19	37,37,37,37	0
56	MG	1A	3140	1/1	0.89	0.10	33,33,33,33	0
56	MG	2A	3474	1/1	0.89	0.18	43,43,43,43	0
56	MG	2A	3737	1/1	0.89	0.10	38,38,38,38	0
56	MG	2a	3036	1/1	0.89	0.17	46,46,46,46	0
56	MG	1A	3062	1/1	0.89	0.20	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3987	1/1	0.89	0.09	25,25,25,25	0
56	MG	2A	3746	1/1	0.89	0.11	62,62,62,62	0
56	MG	1A	3754	1/1	0.89	0.10	22,22,22,22	0
56	MG	1A	3537	1/1	0.89	0.05	25,25,25,25	0
56	MG	2A	3756	1/1	0.89	0.12	52,52,52,52	0
56	MG	2A	3120	1/1	0.89	0.15	61,61,61,61	0
56	MG	2a	3048	1/1	0.89	0.18	51,51,51,51	0
56	MG	1A	3436	1/1	0.89	0.28	41,41,41,41	0
56	MG	1A	3438	1/1	0.89	0.14	49,49,49,49	0
56	MG	2A	3136	1/1	0.89	0.22	34,34,34,34	0
56	MG	1A	3881	1/1	0.89	0.10	18,18,18,18	0
56	MG	2a	3056	1/1	0.89	0.14	46,46,46,46	0
56	MG	2A	3506	1/1	0.89	0.22	54,54,54,54	0
56	MG	2A	3290	1/1	0.89	0.16	59,59,59,59	0
56	MG	2a	3067	1/1	0.89	0.14	51,51,51,51	0
56	MG	1A	4023	1/1	0.89	0.14	70,70,70,70	0
56	MG	1A	3187	1/1	0.89	0.08	33,33,33,33	0
56	MG	2A	3148	1/1	0.89	0.18	56,56,56,56	0
56	MG	2A	3528	1/1	0.89	0.19	51,51,51,51	0
56	MG	2A	3300	1/1	0.89	0.08	32,32,32,32	0
56	MG	1A	3494	1/1	0.89	0.12	48,48,48,48	0
56	MG	2A	3305	1/1	0.89	0.12	52,52,52,52	0
56	MG	1A	3655	1/1	0.89	0.07	20,20,20,20	0
56	MG	1A	3392	1/1	0.89	0.08	46,46,46,46	0
56	MG	2A	3309	1/1	0.89	0.08	39,39,39,39	0
56	MG	2A	3156	1/1	0.89	0.12	74,74,74,74	0
56	MG	2A	3808	1/1	0.89	0.12	53,53,53,53	0
56	MG	1A	3561	1/1	0.89	0.09	35,35,35,35	0
56	MG	2A	3810	1/1	0.89	0.18	58,58,58,58	0
56	MG	1A	3229	1/1	0.89	0.10	10,10,10,10	0
56	MG	1a	1689	1/1	0.89	0.08	35,35,35,35	0
56	MG	1a	1690	1/1	0.89	0.09	33,33,33,33	0
56	MG	1A	3593	1/1	0.89	0.10	18,18,18,18	0
56	MG	1A	3343	1/1	0.89	0.18	24,24,24,24	0
56	MG	2a	3110	1/1	0.89	0.23	41,41,41,41	0
56	MG	2A	3319	1/1	0.89	0.16	60,60,60,60	0
56	MG	10	103	1/1	0.89	0.15	44,44,44,44	0
56	MG	2A	3323	1/1	0.89	0.06	41,41,41,41	0
56	MG	2a	3129	1/1	0.89	0.25	51,51,51,51	0
56	MG	1A	4050	1/1	0.89	0.10	30,30,30,30	0
56	MG	2A	3611	1/1	0.89	0.12	49,49,49,49	0
56	MG	2a	3143	1/1	0.89	0.12	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3692	1/1	0.89	0.09	45,45,45,45	0
56	MG	1A	3269	1/1	0.89	0.08	37,37,37,37	0
56	MG	1a	1711	1/1	0.89	0.19	48,48,48,48	0
56	MG	1A	3936	1/1	0.89	0.15	30,30,30,30	0
56	MG	1A	3601	1/1	0.89	0.09	20,20,20,20	0
56	MG	2A	3182	1/1	0.89	0.12	51,51,51,51	0
56	MG	2A	3346	1/1	0.89	0.21	59,59,59,59	0
56	MG	2A	3630	1/1	0.89	0.35	40,40,40,40	0
56	MG	2B	202	1/1	0.89	0.09	44,44,44,44	0
56	MG	2a	3179	1/1	0.89	0.10	46,46,46,46	0
56	MG	1A	3107	1/1	0.89	0.15	40,40,40,40	0
56	MG	2a	3182	1/1	0.89	0.27	62,62,62,62	0
56	MG	1A	3822	1/1	0.89	0.12	62,62,62,62	0
56	MG	1A	3947	1/1	0.89	0.09	44,44,44,44	0
56	MG	1A	4097	1/1	0.89	0.14	50,50,50,50	0
56	MG	1a	1727	1/1	0.89	0.09	58,58,58,58	0
56	MG	1A	3711	1/1	0.89	0.12	54,54,54,54	0
56	MG	2a	3194	1/1	0.89	0.08	49,49,49,49	0
56	MG	2A	3361	1/1	0.89	0.13	57,57,57,57	0
56	MG	2A	3364	1/1	0.89	0.07	40,40,40,40	0
56	MG	1a	1615	1/1	0.89	0.16	51,51,51,51	0
56	MG	2B	217	1/1	0.89	0.10	49,49,49,49	0
56	MG	1A	3294	1/1	0.89	0.23	47,47,47,47	0
56	MG	2A	3040	1/1	0.89	0.14	53,53,53,53	0
56	MG	2a	3211	1/1	0.89	0.11	60,60,60,60	0
56	MG	1a	1626	1/1	0.89	0.09	40,40,40,40	0
56	MG	1A	3723	1/1	0.89	0.09	31,31,31,31	0
56	MG	1B	201	1/1	0.89	0.15	42,42,42,42	0
56	MG	2A	3375	1/1	0.89	0.09	48,48,48,48	0
56	MG	1a	1759	1/1	0.89	0.10	42,42,42,42	0
56	MG	1a	1631	1/1	0.89	0.13	46,46,46,46	0
56	MG	1A	3129	1/1	0.89	0.13	28,28,28,28	0
56	MG	2A	3062	1/1	0.89	0.14	50,50,50,50	0
56	MG	1A	3844	1/1	0.89	0.08	18,18,18,18	0
56	MG	2A	3238	1/1	0.89	0.10	42,42,42,42	0
56	MG	2A	3239	1/1	0.89	0.09	52,52,52,52	0
56	MG	2A	3706	1/1	0.89	0.13	62,62,62,62	0
56	MG	1B	215	1/1	0.89	0.12	37,37,37,37	0
56	MG	2A	3078	1/1	0.89	0.25	54,54,54,54	0
56	MG	2k	201	1/1	0.89	0.21	56,56,56,56	0
56	MG	1A	3971	1/1	0.89	0.11	35,35,35,35	0
56	MG	2A	3419	1/1	0.89	0.15	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3422	1/1	0.89	0.29	45,45,45,45	0
56	MG	2v	103	1/1	0.89	0.10	69,69,69,69	0
56	MG	2x	102	1/1	0.89	0.19	62,62,62,62	0
56	MG	1A	3730	1/1	0.89	0.13	25,25,25,25	0
56	MG	1A	3528	1/1	0.89	0.09	37,37,37,37	0
56	MG	2A	3258	1/1	0.89	0.23	42,42,42,42	0
56	MG	1A	3980	1/1	0.89	0.20	72,72,72,72	0
56	MG	1B	224	1/1	0.89	0.09	55,55,55,55	0
56	MG	2A	3105	1/1	0.89	0.31	57,57,57,57	0
56	MG	2A	3439	1/1	0.89	0.08	63,63,63,63	0
56	MG	2a	3024	1/1	0.89	0.28	57,57,57,57	0
56	MG	2A	3447	1/1	0.90	0.28	34,34,34,34	0
56	MG	1A	3967	1/1	0.90	0.12	64,64,64,64	0
56	MG	2A	3854	1/1	0.90	0.24	39,39,39,39	0
56	MG	1N	201	1/1	0.90	0.29	42,42,42,42	0
56	MG	2A	3469	1/1	0.90	0.26	52,52,52,52	0
56	MG	1N	206	1/1	0.90	0.12	40,40,40,40	0
56	MG	1O	201	1/1	0.90	0.10	51,51,51,51	0
56	MG	1A	3495	1/1	0.90	0.09	37,37,37,37	0
56	MG	1P	203	1/1	0.90	0.21	45,45,45,45	0
56	MG	2A	3479	1/1	0.90	0.36	56,56,56,56	0
56	MG	1Q	204	1/1	0.90	0.15	53,53,53,53	0
56	MG	2A	3482	1/1	0.90	0.22	56,56,56,56	0
56	MG	1Q	205	1/1	0.90	0.11	65,65,65,65	0
56	MG	1A	3350	1/1	0.90	0.12	38,38,38,38	0
56	MG	1U	201	1/1	0.90	0.09	31,31,31,31	0
56	MG	2B	215	1/1	0.90	0.21	48,48,48,48	0
56	MG	2A	3500	1/1	0.90	0.10	42,42,42,42	0
56	MG	1A	3422	1/1	0.90	0.19	40,40,40,40	0
56	MG	1A	3501	1/1	0.90	0.15	46,46,46,46	0
56	MG	2E	303	1/1	0.90	0.08	40,40,40,40	0
56	MG	1A	3626	1/1	0.90	0.10	42,42,42,42	0
56	MG	1A	3351	1/1	0.90	0.09	36,36,36,36	0
56	MG	1A	3814	1/1	0.90	0.11	37,37,37,37	0
56	MG	1Y	203	1/1	0.90	0.15	43,43,43,43	0
56	MG	2A	3515	1/1	0.90	0.24	60,60,60,60	0
56	MG	1A	3984	1/1	0.90	0.09	25,25,25,25	0
56	MG	2O	202	1/1	0.90	0.13	48,48,48,48	0
56	MG	2A	3524	1/1	0.90	0.13	62,62,62,62	0
56	MG	2Q	203	1/1	0.90	0.09	45,45,45,45	0
56	MG	2Q	204	1/1	0.90	0.20	49,49,49,49	0
56	MG	1A	3505	1/1	0.90	0.15	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2T	202	1/1	0.90	0.10	46,46,46,46	0
56	MG	1A	3506	1/1	0.90	0.12	15,15,15,15	0
56	MG	2A	3536	1/1	0.90	0.09	30,30,30,30	0
56	MG	2V	202	1/1	0.90	0.10	47,47,47,47	0
56	MG	2A	3218	1/1	0.90	0.10	52,52,52,52	0
56	MG	2A	3542	1/1	0.90	0.10	39,39,39,39	0
56	MG	1A	3990	1/1	0.90	0.20	45,45,45,45	0
56	MG	1a	1804	1/1	0.90	0.10	40,40,40,40	0
56	MG	2A	3549	1/1	0.90	0.10	39,39,39,39	0
56	MG	1A	3427	1/1	0.90	0.15	45,45,45,45	0
56	MG	1A	3292	1/1	0.90	0.11	39,39,39,39	0
56	MG	1a	1815	1/1	0.90	0.09	59,59,59,59	0
56	MG	1a	1817	1/1	0.90	0.11	72,72,72,72	0
56	MG	1A	3099	1/1	0.90	0.16	37,37,37,37	0
56	MG	18	102	1/1	0.90	0.22	38,38,38,38	0
56	MG	2A	3586	1/1	0.90	0.09	55,55,55,55	0
56	MG	1A	4008	1/1	0.90	0.07	25,25,25,25	0
56	MG	2A	3247	1/1	0.90	0.27	48,48,48,48	0
56	MG	2a	3018	1/1	0.90	0.19	59,59,59,59	0
56	MG	2A	3592	1/1	0.90	0.17	64,64,64,64	0
56	MG	1A	4010	1/1	0.90	0.08	27,27,27,27	0
56	MG	1a	1602	1/1	0.90	0.28	54,54,54,54	0
56	MG	2A	3599	1/1	0.90	0.11	44,44,44,44	0
56	MG	2A	3255	1/1	0.90	0.20	58,58,58,58	0
56	MG	1A	4012	1/1	0.90	0.10	17,17,17,17	0
56	MG	1A	3829	1/1	0.90	0.07	37,37,37,37	0
56	MG	2A	3260	1/1	0.90	0.12	59,59,59,59	0
56	MG	2a	3037	1/1	0.90	0.13	50,50,50,50	0
56	MG	2A	3265	1/1	0.90	0.16	52,52,52,52	0
56	MG	1w	102	1/1	0.90	0.16	60,60,60,60	0
56	MG	1A	3665	1/1	0.90	0.09	19,19,19,19	0
56	MG	2A	3269	1/1	0.90	0.10	49,49,49,49	0
56	MG	1A	4021	1/1	0.90	0.09	60,60,60,60	0
56	MG	1A	3358	1/1	0.90	0.09	43,43,43,43	0
56	MG	1a	1623	1/1	0.90	0.23	42,42,42,42	0
56	MG	2a	3047	1/1	0.90	0.13	48,48,48,48	0
56	MG	1a	1624	1/1	0.90	0.24	42,42,42,42	0
56	MG	1A	3838	1/1	0.90	0.10	33,33,33,33	0
56	MG	1x	102	1/1	0.90	0.15	54,54,54,54	0
56	MG	2a	3052	1/1	0.90	0.16	43,43,43,43	0
56	MG	1A	3840	1/1	0.90	0.07	12,12,12,12	0
56	MG	1A	4028	1/1	0.90	0.08	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1x	106	1/1	0.90	0.19	59,59,59,59	0
56	MG	2a	3060	1/1	0.90	0.22	61,61,61,61	0
56	MG	1A	3526	1/1	0.90	0.16	58,58,58,58	0
56	MG	1A	3681	1/1	0.90	0.08	56,56,56,56	0
56	MG	1A	3847	1/1	0.90	0.09	36,36,36,36	0
56	MG	2a	3068	1/1	0.90	0.20	56,56,56,56	0
56	MG	1A	3848	1/1	0.90	0.33	26,26,26,26	0
56	MG	2A	3295	1/1	0.90	0.09	56,56,56,56	0
56	MG	2A	3661	1/1	0.90	0.11	35,35,35,35	0
56	MG	1A	3253	1/1	0.90	0.17	46,46,46,46	0
56	MG	2A	3663	1/1	0.90	0.06	39,39,39,39	0
56	MG	1A	3257	1/1	0.90	0.07	32,32,32,32	0
56	MG	1A	4048	1/1	0.90	0.09	41,41,41,41	0
56	MG	2A	3668	1/1	0.90	0.17	52,52,52,52	0
56	MG	1A	3688	1/1	0.90	0.17	39,39,39,39	0
56	MG	2A	3010	1/1	0.90	0.12	41,41,41,41	0
56	MG	1A	3447	1/1	0.90	0.18	63,63,63,63	0
56	MG	2A	3672	1/1	0.90	0.11	34,34,34,34	0
56	MG	2a	3096	1/1	0.90	0.12	46,46,46,46	0
56	MG	1A	3372	1/1	0.90	0.11	24,24,24,24	0
56	MG	2A	3020	1/1	0.90	0.27	54,54,54,54	0
56	MG	2A	3022	1/1	0.90	0.36	45,45,45,45	0
56	MG	1A	3696	1/1	0.90	0.15	37,37,37,37	0
56	MG	2A	3692	1/1	0.90	0.10	53,53,53,53	0
56	MG	1A	4066	1/1	0.90	0.23	62,62,62,62	0
56	MG	1a	1663	1/1	0.90	0.16	57,57,57,57	0
56	MG	1A	3324	1/1	0.90	0.21	41,41,41,41	0
56	MG	2a	3111	1/1	0.90	0.19	60,60,60,60	0
56	MG	1A	3453	1/1	0.90	0.16	37,37,37,37	0
56	MG	1A	3325	1/1	0.90	0.10	42,42,42,42	0
56	MG	1A	3462	1/1	0.90	0.11	49,49,49,49	0
56	MG	2a	3126	1/1	0.90	0.24	50,50,50,50	0
56	MG	2A	3320	1/1	0.90	0.08	58,58,58,58	0
56	MG	1A	3258	1/1	0.90	0.10	37,37,37,37	0
56	MG	2A	3715	1/1	0.90	0.14	47,47,47,47	0
56	MG	2A	3322	1/1	0.90	0.17	64,64,64,64	0
56	MG	2a	3146	1/1	0.90	0.11	72,72,72,72	0
56	MG	2A	3058	1/1	0.90	0.24	51,51,51,51	0
56	MG	1A	3032	1/1	0.90	0.34	18,18,18,18	0
56	MG	2A	3330	1/1	0.90	0.09	49,49,49,49	0
56	MG	2a	3157	1/1	0.90	0.11	58,58,58,58	0
56	MG	2A	3724	1/1	0.90	0.09	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3563	1/1	0.90	0.14	50,50,50,50	0
56	MG	2a	3165	1/1	0.90	0.14	73,73,73,73	0
56	MG	1a	1674	1/1	0.90	0.11	55,55,55,55	0
56	MG	2A	3071	1/1	0.90	0.19	47,47,47,47	0
56	MG	1A	3406	1/1	0.90	0.13	44,44,44,44	0
56	MG	1a	1678	1/1	0.90	0.08	43,43,43,43	0
56	MG	2A	3339	1/1	0.90	0.21	48,48,48,48	0
56	MG	1A	4116	1/1	0.90	0.21	31,31,31,31	0
56	MG	2A	3343	1/1	0.90	0.14	63,63,63,63	0
56	MG	2A	3087	1/1	0.90	0.17	59,59,59,59	0
56	MG	2A	3088	1/1	0.90	0.12	41,41,41,41	0
56	MG	2A	3349	1/1	0.90	0.15	49,49,49,49	0
56	MG	2A	3090	1/1	0.90	0.18	50,50,50,50	0
56	MG	1A	4118	1/1	0.90	0.38	35,35,35,35	0
56	MG	2a	3193	1/1	0.90	0.12	54,54,54,54	0
56	MG	1A	3894	1/1	0.90	0.11	52,52,52,52	0
56	MG	1A	3734	1/1	0.90	0.10	8,8,8,8	0
56	MG	1A	3583	1/1	0.90	0.17	32,32,32,32	0
56	MG	1B	209	1/1	0.90	0.12	46,46,46,46	0
56	MG	1a	1692	1/1	0.90	0.19	34,34,34,34	0
56	MG	1B	211	1/1	0.90	0.15	46,46,46,46	0
56	MG	2a	3208	1/1	0.90	0.17	66,66,66,66	0
56	MG	2A	3769	1/1	0.90	0.09	45,45,45,45	0
56	MG	1a	1695	1/1	0.90	0.25	37,37,37,37	0
56	MG	1a	1698	1/1	0.90	0.23	41,41,41,41	0
56	MG	2A	3115	1/1	0.90	0.09	54,54,54,54	0
56	MG	1A	3592	1/1	0.90	0.10	39,39,39,39	0
56	MG	1a	1702	1/1	0.90	0.24	49,49,49,49	0
56	MG	1A	3179	1/1	0.90	0.14	59,59,59,59	0
56	MG	1A	3342	1/1	0.90	0.50	30,30,30,30	0
56	MG	1A	3922	1/1	0.90	0.13	46,46,46,46	0
56	MG	2a	3225	1/1	0.90	0.11	60,60,60,60	0
56	MG	1A	3757	1/1	0.90	0.10	30,30,30,30	0
56	MG	2A	3139	1/1	0.90	0.15	53,53,53,53	0
56	MG	1A	3476	1/1	0.90	0.11	37,37,37,37	0
56	MG	1A	3772	1/1	0.90	0.11	61,61,61,61	0
56	MG	1A	3226	1/1	0.90	0.09	33,33,33,33	0
56	MG	2A	3150	1/1	0.90	0.09	40,40,40,40	0
56	MG	1A	3245	1/1	0.90	0.27	45,45,45,45	0
56	MG	2A	3413	1/1	0.90	0.16	53,53,53,53	0
56	MG	2q	201	1/1	0.90	0.20	56,56,56,56	0
56	MG	1A	3415	1/1	0.90	0.11	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3416	1/1	0.90	0.11	42,42,42,42	0
56	MG	2A	3421	1/1	0.90	0.26	43,43,43,43	0
56	MG	1D	312	1/1	0.90	0.13	21,21,21,21	0
56	MG	1A	3953	1/1	0.90	0.08	25,25,25,25	0
56	MG	1a	1729	1/1	0.90	0.32	42,42,42,42	0
56	MG	1a	1730	1/1	0.90	0.42	52,52,52,52	0
56	MG	1A	3782	1/1	0.90	0.16	52,52,52,52	0
56	MG	2A	3430	1/1	0.90	0.08	56,56,56,56	0
56	MG	1F	304	1/1	0.90	0.08	41,41,41,41	0
56	MG	1A	3965	1/1	0.90	0.14	52,52,52,52	0
56	MG	1a	1736	1/1	0.90	0.09	62,62,62,62	0
56	MG	1a	1740	1/1	0.90	0.12	61,61,61,61	0
57	LUJ	2A	3852	42/44	0.90	0.16	38,59,68,75	0
56	MG	1A	3319	1/1	0.91	0.16	42,42,42,42	0
56	MG	1A	4083	1/1	0.91	0.09	70,70,70,70	0
56	MG	1A	3808	1/1	0.91	0.09	39,39,39,39	0
56	MG	1A	4088	1/1	0.91	0.12	47,47,47,47	0
56	MG	1a	1750	1/1	0.91	0.13	49,49,49,49	0
56	MG	2A	3621	1/1	0.91	0.08	38,38,38,38	0
56	MG	20	102	1/1	0.91	0.22	59,59,59,59	0
56	MG	25	101	1/1	0.91	0.08	37,37,37,37	0
56	MG	2A	3109	1/1	0.91	0.21	46,46,46,46	0
56	MG	1A	4089	1/1	0.91	0.17	47,47,47,47	0
56	MG	1a	1756	1/1	0.91	0.30	67,67,67,67	0
56	MG	1a	1757	1/1	0.91	0.14	46,46,46,46	0
56	MG	1A	4092	1/1	0.91	0.12	45,45,45,45	0
56	MG	1a	1604	1/1	0.91	0.17	53,53,53,53	0
56	MG	1A	4095	1/1	0.91	0.09	44,44,44,44	0
56	MG	2A	3633	1/1	0.91	0.23	53,53,53,53	0
56	MG	2a	3011	1/1	0.91	0.31	58,58,58,58	0
56	MG	1A	3323	1/1	0.91	0.14	42,42,42,42	0
56	MG	1a	1772	1/1	0.91	0.24	49,49,49,49	0
56	MG	1A	3464	1/1	0.91	0.13	50,50,50,50	0
56	MG	1a	1621	1/1	0.91	0.14	44,44,44,44	0
56	MG	1A	3813	1/1	0.91	0.08	24,24,24,24	0
56	MG	1A	3209	1/1	0.91	0.16	40,40,40,40	0
56	MG	2A	3650	1/1	0.91	0.09	48,48,48,48	0
56	MG	2A	3143	1/1	0.91	0.18	37,37,37,37	0
56	MG	2A	3657	1/1	0.91	0.11	58,58,58,58	0
56	MG	2a	3026	1/1	0.91	0.14	34,34,34,34	0
56	MG	1A	3255	1/1	0.91	0.20	50,50,50,50	0
56	MG	1A	3678	1/1	0.91	0.09	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4133	1/1	0.91	0.30	24,24,24,24	0
56	MG	2a	3033	1/1	0.91	0.07	55,55,55,55	0
56	MG	1A	3819	1/1	0.91	0.23	47,47,47,47	0
56	MG	1B	203	1/1	0.91	0.17	33,33,33,33	0
56	MG	2A	3348	1/1	0.91	0.21	63,63,63,63	0
56	MG	1a	1633	1/1	0.91	0.28	57,57,57,57	0
56	MG	1a	1635	1/1	0.91	0.28	52,52,52,52	0
56	MG	1A	3150	1/1	0.91	0.19	38,38,38,38	0
56	MG	2A	3160	1/1	0.91	0.19	54,54,54,54	0
56	MG	1B	205	1/1	0.91	0.12	28,28,28,28	0
56	MG	1A	3547	1/1	0.91	0.13	43,43,43,43	0
56	MG	1A	3223	1/1	0.91	0.34	27,27,27,27	0
56	MG	1A	3412	1/1	0.91	0.10	48,48,48,48	0
56	MG	1A	3082	1/1	0.91	0.12	28,28,28,28	0
56	MG	1A	3836	1/1	0.91	0.07	44,44,44,44	0
56	MG	2A	3690	1/1	0.91	0.13	29,29,29,29	0
56	MG	1A	3414	1/1	0.91	0.09	44,44,44,44	0
56	MG	2A	3695	1/1	0.91	0.15	51,51,51,51	0
56	MG	1A	3565	1/1	0.91	0.10	45,45,45,45	0
56	MG	1a	1658	1/1	0.91	0.15	51,51,51,51	0
56	MG	2A	3373	1/1	0.91	0.12	46,46,46,46	0
56	MG	1A	3566	1/1	0.91	0.09	40,40,40,40	0
56	MG	1B	222	1/1	0.91	0.10	44,44,44,44	0
56	MG	2a	3064	1/1	0.91	0.11	34,34,34,34	0
56	MG	2A	3376	1/1	0.91	0.08	55,55,55,55	0
56	MG	1A	3841	1/1	0.91	0.16	31,31,31,31	0
56	MG	1A	3177	1/1	0.91	0.12	45,45,45,45	0
56	MG	2A	3185	1/1	0.91	0.19	48,48,48,48	0
56	MG	2A	3186	1/1	0.91	0.09	38,38,38,38	0
56	MG	2A	3390	1/1	0.91	0.22	32,32,32,32	0
56	MG	1w	101	1/1	0.91	0.24	49,49,49,49	0
56	MG	1a	1665	1/1	0.91	0.20	46,46,46,46	0
56	MG	1A	3267	1/1	0.91	0.10	47,47,47,47	0
56	MG	2a	3081	1/1	0.91	0.23	59,59,59,59	0
56	MG	1A	3591	1/1	0.91	0.09	28,28,28,28	0
56	MG	2A	3407	1/1	0.91	0.15	40,40,40,40	0
56	MG	2a	3090	1/1	0.91	0.17	56,56,56,56	0
56	MG	1A	3996	1/1	0.91	0.07	31,31,31,31	0
56	MG	1A	3007	1/1	0.91	0.10	33,33,33,33	0
56	MG	1A	3093	1/1	0.91	0.15	53,53,53,53	0
56	MG	1A	3728	1/1	0.91	0.17	41,41,41,41	0
56	MG	2A	3420	1/1	0.91	0.19	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3126	1/1	0.91	0.07	23,23,23,23	0
56	MG	2A	3205	1/1	0.91	0.22	48,48,48,48	0
56	MG	2a	3099	1/1	0.91	0.24	57,57,57,57	0
56	MG	2A	3741	1/1	0.91	0.12	50,50,50,50	0
56	MG	2A	3742	1/1	0.91	0.09	53,53,53,53	0
56	MG	1E	306	1/1	0.91	0.30	41,41,41,41	0
56	MG	2a	3103	1/1	0.91	0.10	63,63,63,63	0
56	MG	1x	104	1/1	0.91	0.17	55,55,55,55	0
56	MG	2A	3213	1/1	0.91	0.16	40,40,40,40	0
56	MG	1A	3596	1/1	0.91	0.13	23,23,23,23	0
56	MG	2A	3216	1/1	0.91	0.21	52,52,52,52	0
56	MG	1A	3001	1/1	0.91	0.12	32,32,32,32	0
56	MG	2a	3120	1/1	0.91	0.35	59,59,59,59	0
56	MG	2A	3220	1/1	0.91	0.10	39,39,39,39	0
56	MG	1G	204	1/1	0.91	0.09	55,55,55,55	0
56	MG	1A	3431	1/1	0.91	0.11	37,37,37,37	0
56	MG	2a	3127	1/1	0.91	0.30	45,45,45,45	0
56	MG	2A	3446	1/1	0.91	0.15	44,44,44,44	0
56	MG	1a	1684	1/1	0.91	0.23	50,50,50,50	0
56	MG	2a	3135	1/1	0.91	0.09	78,78,78,78	0
56	MG	2A	3450	1/1	0.91	0.17	44,44,44,44	0
56	MG	2A	3451	1/1	0.91	0.21	48,48,48,48	0
56	MG	2A	3455	1/1	0.91	0.08	42,42,42,42	0
56	MG	2A	3233	1/1	0.91	0.25	55,55,55,55	0
56	MG	1a	1685	1/1	0.91	0.18	51,51,51,51	0
56	MG	2A	3468	1/1	0.91	0.19	38,38,38,38	0
56	MG	2A	3781	1/1	0.91	0.09	70,70,70,70	0
56	MG	2A	3236	1/1	0.91	0.06	52,52,52,52	0
56	MG	1A	3354	1/1	0.91	0.15	44,44,44,44	0
56	MG	1A	3751	1/1	0.91	0.10	28,28,28,28	0
56	MG	1A	4024	1/1	0.91	0.14	70,70,70,70	0
56	MG	1a	1691	1/1	0.91	0.23	44,44,44,44	0
56	MG	2A	3006	1/1	0.91	0.14	49,49,49,49	0
56	MG	1A	3200	1/1	0.91	0.09	45,45,45,45	0
56	MG	2A	3481	1/1	0.91	0.16	32,32,32,32	0
56	MG	1P	202	1/1	0.91	0.06	22,22,22,22	0
56	MG	2a	3181	1/1	0.91	0.11	53,53,53,53	0
56	MG	2A	3251	1/1	0.91	0.17	53,53,53,53	0
56	MG	2A	3812	1/1	0.91	0.08	63,63,63,63	0
56	MG	2A	3486	1/1	0.91	0.18	50,50,50,50	0
56	MG	2A	3823	1/1	0.91	0.08	24,24,24,24	0
56	MG	2a	3189	1/1	0.91	0.11	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3297	1/1	0.91	0.21	27,27,27,27	0
56	MG	2A	3490	1/1	0.91	0.16	52,52,52,52	0
56	MG	2A	3493	1/1	0.91	0.24	36,36,36,36	0
56	MG	1A	3515	1/1	0.91	0.07	54,54,54,54	0
56	MG	1A	3302	1/1	0.91	0.18	35,35,35,35	0
56	MG	1S	203	1/1	0.91	0.09	63,63,63,63	0
56	MG	2A	3039	1/1	0.91	0.24	50,50,50,50	0
56	MG	1A	3766	1/1	0.91	0.07	22,22,22,22	0
56	MG	1a	1705	1/1	0.91	0.36	43,43,43,43	0
56	MG	2a	3205	1/1	0.91	0.23	61,61,61,61	0
56	MG	1A	3517	1/1	0.91	0.13	53,53,53,53	0
56	MG	1A	3892	1/1	0.91	0.16	37,37,37,37	0
56	MG	1A	3303	1/1	0.91	0.07	28,28,28,28	0
56	MG	2A	3517	1/1	0.91	0.08	45,45,45,45	0
56	MG	1A	3900	1/1	0.91	0.11	31,31,31,31	0
56	MG	2A	3051	1/1	0.91	0.21	45,45,45,45	0
56	MG	2A	3856	1/1	0.91	0.21	45,45,45,45	0
56	MG	1A	3519	1/1	0.91	0.06	45,45,45,45	0
56	MG	2A	3532	1/1	0.91	0.14	45,45,45,45	0
56	MG	2a	3221	1/1	0.91	0.24	61,61,61,61	0
56	MG	2a	3223	1/1	0.91	0.13	51,51,51,51	0
56	MG	2A	3053	1/1	0.91	0.13	44,44,44,44	0
56	MG	2A	3054	1/1	0.91	0.12	35,35,35,35	0
56	MG	2A	3279	1/1	0.91	0.23	48,48,48,48	0
56	MG	2A	3540	1/1	0.91	0.08	43,43,43,43	0
56	MG	1A	3369	1/1	0.91	0.12	36,36,36,36	0
56	MG	1a	1716	1/1	0.91	0.07	37,37,37,37	0
56	MG	2A	3283	1/1	0.91	0.08	39,39,39,39	0
56	MG	2A	3063	1/1	0.91	0.14	44,44,44,44	0
56	MG	1A	3049	1/1	0.91	0.13	22,22,22,22	0
56	MG	2A	3560	1/1	0.91	0.08	30,30,30,30	0
56	MG	2l	201	1/1	0.91	0.10	48,48,48,48	0
56	MG	1Y	204	1/1	0.91	0.06	41,41,41,41	0
56	MG	1Y	205	1/1	0.91	0.18	48,48,48,48	0
56	MG	1A	3911	1/1	0.91	0.13	64,64,64,64	0
56	MG	2A	3294	1/1	0.91	0.14	55,55,55,55	0
56	MG	1A	3632	1/1	0.91	0.08	33,33,33,33	0
56	MG	1a	1728	1/1	0.91	0.17	45,45,45,45	0
56	MG	2x	103	1/1	0.91	0.14	62,62,62,62	0
56	MG	1A	3310	1/1	0.91	0.17	41,41,41,41	0
56	MG	1A	3640	1/1	0.91	0.17	36,36,36,36	0
56	MG	2F	302	1/1	0.91	0.14	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	12	3701	1/1	0.91	0.06	25,25,25,25	0
56	MG	2A	3093	1/1	0.91	0.12	37,37,37,37	0
56	MG	1A	4073	1/1	0.91	0.16	37,37,37,37	0
56	MG	1A	3313	1/1	0.91	0.23	60,60,60,60	0
56	MG	2A	3600	1/1	0.91	0.14	52,52,52,52	0
56	MG	2A	3097	1/1	0.91	0.12	42,42,42,42	0
56	MG	2R	3001	1/1	0.92	0.36	46,46,46,46	0
56	MG	2A	3326	1/1	0.92	0.06	52,52,52,52	0
56	MG	2A	3617	1/1	0.92	0.13	47,47,47,47	0
56	MG	1a	1625	1/1	0.92	0.21	50,50,50,50	0
56	MG	1A	3680	1/1	0.92	0.08	20,20,20,20	0
56	MG	1A	4098	1/1	0.92	0.26	66,66,66,66	0
56	MG	1A	3367	1/1	0.92	0.24	51,51,51,51	0
56	MG	21	101	1/1	0.92	0.19	41,41,41,41	0
56	MG	1A	3368	1/1	0.92	0.24	58,58,58,58	0
56	MG	2A	3627	1/1	0.92	0.08	40,40,40,40	0
56	MG	2a	3002	1/1	0.92	0.14	44,44,44,44	0
56	MG	1A	3949	1/1	0.92	0.09	58,58,58,58	0
56	MG	1A	3573	1/1	0.92	0.22	18,18,18,18	0
56	MG	1A	3575	1/1	0.92	0.30	28,28,28,28	0
56	MG	1a	1800	1/1	0.92	0.08	28,28,28,28	0
56	MG	1A	3955	1/1	0.92	0.09	19,19,19,19	0
56	MG	1A	3956	1/1	0.92	0.16	61,61,61,61	0
56	MG	2A	3638	1/1	0.92	0.15	58,58,58,58	0
56	MG	1B	202	1/1	0.92	0.08	26,26,26,26	0
56	MG	1a	1643	1/1	0.92	0.10	54,54,54,54	0
56	MG	2A	3643	1/1	0.92	0.12	52,52,52,52	0
56	MG	2A	3646	1/1	0.92	0.07	47,47,47,47	0
56	MG	1A	3820	1/1	0.92	0.15	49,49,49,49	0
56	MG	1a	1649	1/1	0.92	0.22	53,53,53,53	0
56	MG	1a	1828	1/1	0.92	0.25	49,49,49,49	0
56	MG	1a	1834	1/1	0.92	0.06	54,54,54,54	0
56	MG	2A	3656	1/1	0.92	0.08	57,57,57,57	0
56	MG	2a	3022	1/1	0.92	0.06	40,40,40,40	0
56	MG	1A	3964	1/1	0.92	0.12	36,36,36,36	0
56	MG	2A	3358	1/1	0.92	0.13	49,49,49,49	0
56	MG	1A	3111	1/1	0.92	0.12	37,37,37,37	0
56	MG	1a	1654	1/1	0.92	0.11	35,35,35,35	0
56	MG	1A	3966	1/1	0.92	0.06	38,38,38,38	0
56	MG	1A	3244	1/1	0.92	0.10	49,49,49,49	0
56	MG	1A	3968	1/1	0.92	0.11	66,66,66,66	0
56	MG	1A	3825	1/1	0.92	0.13	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3159	1/1	0.92	0.17	36,36,36,36	0
56	MG	1A	3697	1/1	0.92	0.11	39,39,39,39	0
56	MG	2A	3372	1/1	0.92	0.08	39,39,39,39	0
56	MG	1A	3973	1/1	0.92	0.12	72,72,72,72	0
56	MG	1A	3699	1/1	0.92	0.10	53,53,53,53	0
56	MG	2A	3675	1/1	0.92	0.15	51,51,51,51	0
56	MG	1A	3336	1/1	0.92	0.08	39,39,39,39	0
56	MG	2A	3678	1/1	0.92	0.07	59,59,59,59	0
56	MG	1A	3060	1/1	0.92	0.15	59,59,59,59	0
56	MG	1A	3982	1/1	0.92	0.08	10,10,10,10	0
56	MG	1B	229	1/1	0.92	0.13	42,42,42,42	0
56	MG	1A	3704	1/1	0.92	0.15	52,52,52,52	0
56	MG	1A	3175	1/1	0.92	0.15	20,20,20,20	0
56	MG	1A	3512	1/1	0.92	0.20	40,40,40,40	0
56	MG	2A	3391	1/1	0.92	0.15	45,45,45,45	0
56	MG	2a	3054	1/1	0.92	0.06	60,60,60,60	0
56	MG	2A	3396	1/1	0.92	0.06	18,18,18,18	0
56	MG	1A	3597	1/1	0.92	0.14	47,47,47,47	0
56	MG	2A	3398	1/1	0.92	0.23	41,41,41,41	0
56	MG	2a	3061	1/1	0.92	0.17	58,58,58,58	0
56	MG	1B	236	1/1	0.92	0.08	31,31,31,31	0
56	MG	1x	107	1/1	0.92	0.09	74,74,74,74	0
56	MG	2A	3404	1/1	0.92	0.29	48,48,48,48	0
56	MG	2a	3066	1/1	0.92	0.07	40,40,40,40	0
56	MG	1A	3298	1/1	0.92	0.17	32,32,32,32	0
56	MG	1x	110	1/1	0.92	0.17	59,59,59,59	0
56	MG	1A	3036	1/1	0.92	0.21	26,26,26,26	0
56	MG	1A	3224	1/1	0.92	0.16	34,34,34,34	0
56	MG	2A	3414	1/1	0.92	0.14	55,55,55,55	0
56	MG	2a	3074	1/1	0.92	0.12	58,58,58,58	0
56	MG	2A	3211	1/1	0.92	0.23	49,49,49,49	0
56	MG	1A	3998	1/1	0.92	0.10	49,49,49,49	0
56	MG	1A	3853	1/1	0.92	0.10	34,34,34,34	0
56	MG	1A	4001	1/1	0.92	0.14	28,28,28,28	0
56	MG	1A	3859	1/1	0.92	0.12	20,20,20,20	0
56	MG	2a	3084	1/1	0.92	0.19	57,57,57,57	0
56	MG	2A	3217	1/1	0.92	0.11	47,47,47,47	0
56	MG	1A	3607	1/1	0.92	0.08	21,21,21,21	0
56	MG	2A	3219	1/1	0.92	0.12	45,45,45,45	0
56	MG	2a	3092	1/1	0.92	0.16	45,45,45,45	0
56	MG	2A	3002	1/1	0.92	0.25	44,44,44,44	0
56	MG	2A	3003	1/1	0.92	0.24	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3228	1/1	0.92	0.12	44,44,44,44	0
56	MG	2A	3004	1/1	0.92	0.23	48,48,48,48	0
56	MG	2A	3005	1/1	0.92	0.17	43,43,43,43	0
56	MG	2A	3744	1/1	0.92	0.09	38,38,38,38	0
56	MG	2A	3443	1/1	0.92	0.10	57,57,57,57	0
56	MG	2A	3444	1/1	0.92	0.06	38,38,38,38	0
56	MG	2A	3749	1/1	0.92	0.09	68,68,68,68	0
56	MG	1A	4009	1/1	0.92	0.09	14,14,14,14	0
56	MG	1A	3863	1/1	0.92	0.25	24,24,24,24	0
56	MG	2A	3235	1/1	0.92	0.09	47,47,47,47	0
56	MG	2A	3758	1/1	0.92	0.15	54,54,54,54	0
56	MG	2A	3449	1/1	0.92	0.28	49,49,49,49	0
56	MG	1A	3455	1/1	0.92	0.08	39,39,39,39	0
56	MG	1A	3065	1/1	0.92	0.07	22,22,22,22	0
56	MG	2a	3117	1/1	0.92	0.16	50,50,50,50	0
56	MG	1A	3260	1/1	0.92	0.13	35,35,35,35	0
56	MG	2A	3456	1/1	0.92	0.13	39,39,39,39	0
56	MG	2A	3021	1/1	0.92	0.17	52,52,52,52	0
56	MG	1A	3024	1/1	0.92	0.13	36,36,36,36	0
56	MG	2A	3244	1/1	0.92	0.09	49,49,49,49	0
56	MG	2a	3128	1/1	0.92	0.24	40,40,40,40	0
56	MG	2A	3773	1/1	0.92	0.12	65,65,65,65	0
56	MG	2A	3023	1/1	0.92	0.21	43,43,43,43	0
56	MG	1A	3355	1/1	0.92	0.09	34,34,34,34	0
56	MG	2a	3140	1/1	0.92	0.10	77,77,77,77	0
56	MG	2A	3026	1/1	0.92	0.10	43,43,43,43	0
56	MG	2A	3249	1/1	0.92	0.09	48,48,48,48	0
56	MG	2A	3030	1/1	0.92	0.13	36,36,36,36	0
56	MG	2a	3150	1/1	0.92	0.20	51,51,51,51	0
56	MG	2A	3037	1/1	0.92	0.21	47,47,47,47	0
56	MG	2A	3786	1/1	0.92	0.12	65,65,65,65	0
56	MG	1A	3134	1/1	0.92	0.41	23,23,23,23	0
56	MG	2A	3256	1/1	0.92	0.14	60,60,60,60	0
56	MG	2a	3160	1/1	0.92	0.08	46,46,46,46	0
56	MG	1A	3320	1/1	0.92	0.15	38,38,38,38	0
56	MG	2A	3793	1/1	0.92	0.10	31,31,31,31	0
56	MG	2A	3041	1/1	0.92	0.20	41,41,41,41	0
56	MG	1A	3418	1/1	0.92	0.12	37,37,37,37	0
56	MG	2a	3168	1/1	0.92	0.12	58,58,58,58	0
56	MG	2A	3261	1/1	0.92	0.08	52,52,52,52	0
56	MG	2A	3264	1/1	0.92	0.12	51,51,51,51	0
56	MG	2a	3174	1/1	0.92	0.15	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3046	1/1	0.92	0.20	55,55,55,55	0
56	MG	2a	3177	1/1	0.92	0.09	59,59,59,59	0
56	MG	1A	3359	1/1	0.92	0.14	37,37,37,37	0
56	MG	1A	3767	1/1	0.92	0.09	22,22,22,22	0
56	MG	1A	3771	1/1	0.92	0.08	20,20,20,20	0
56	MG	1A	4035	1/1	0.92	0.17	44,44,44,44	0
56	MG	1V	201	1/1	0.92	0.15	37,37,37,37	0
56	MG	2A	3507	1/1	0.92	0.12	31,31,31,31	0
56	MG	1A	3474	1/1	0.92	0.22	30,30,30,30	0
56	MG	1X	104	1/1	0.92	0.18	29,29,29,29	0
56	MG	1A	3192	1/1	0.92	0.26	40,40,40,40	0
56	MG	1A	4042	1/1	0.92	0.23	47,47,47,47	0
56	MG	1A	3477	1/1	0.92	0.09	31,31,31,31	0
56	MG	1A	3546	1/1	0.92	0.28	27,27,27,27	0
56	MG	2A	3839	1/1	0.92	0.09	41,41,41,41	0
56	MG	1A	3899	1/1	0.92	0.11	45,45,45,45	0
56	MG	2A	3842	1/1	0.92	0.10	56,56,56,56	0
56	MG	2A	3067	1/1	0.92	0.11	38,38,38,38	0
56	MG	1A	3651	1/1	0.92	0.08	39,39,39,39	0
56	MG	2A	3287	1/1	0.92	0.09	50,50,50,50	0
56	MG	2a	3206	1/1	0.92	0.17	56,56,56,56	0
56	MG	2A	3848	1/1	0.92	0.11	55,55,55,55	0
56	MG	1A	3652	1/1	0.92	0.07	34,34,34,34	0
56	MG	2A	3538	1/1	0.92	0.09	42,42,42,42	0
56	MG	2A	3075	1/1	0.92	0.10	42,42,42,42	0
56	MG	1A	3481	1/1	0.92	0.08	46,46,46,46	0
56	MG	1A	4054	1/1	0.92	0.15	50,50,50,50	0
56	MG	2A	3860	1/1	0.92	0.09	44,44,44,44	0
56	MG	1A	4056	1/1	0.92	0.09	44,44,44,44	0
56	MG	1A	3906	1/1	0.92	0.08	28,28,28,28	0
56	MG	1A	3791	1/1	0.92	0.08	31,31,31,31	0
56	MG	1A	4067	1/1	0.92	0.11	35,35,35,35	0
56	MG	2A	3554	1/1	0.92	0.14	53,53,53,53	0
56	MG	1A	3797	1/1	0.92	0.13	43,43,43,43	0
56	MG	1A	3657	1/1	0.92	0.10	18,18,18,18	0
56	MG	2A	3564	1/1	0.92	0.21	49,49,49,49	0
56	MG	1A	3913	1/1	0.92	0.09	61,61,61,61	0
56	MG	2a	3230	1/1	0.92	0.14	56,56,56,56	0
56	MG	2A	3568	1/1	0.92	0.11	44,44,44,44	0
56	MG	1A	4076	1/1	0.92	0.15	8,8,8,8	0
56	MG	2e	201	1/1	0.92	0.07	64,64,64,64	0
56	MG	2A	3100	1/1	0.92	0.15	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3101	1/1	0.92	0.12	47,47,47,47	0
56	MG	1A	3914	1/1	0.92	0.15	41,41,41,41	0
56	MG	2E	301	1/1	0.92	0.20	45,45,45,45	0
56	MG	1A	3553	1/1	0.92	0.14	47,47,47,47	0
56	MG	1a	1606	1/1	0.92	0.25	53,53,53,53	0
56	MG	1A	4085	1/1	0.92	0.12	37,37,37,37	0
56	MG	2A	3315	1/1	0.92	0.10	63,63,63,63	0
56	MG	2v	102	1/1	0.92	0.11	52,52,52,52	0
56	MG	1A	3424	1/1	0.92	0.09	39,39,39,39	0
56	MG	1a	1616	1/1	0.92	0.11	46,46,46,46	0
56	MG	1a	1773	1/1	0.92	0.14	59,59,59,59	0
56	MG	1A	3926	1/1	0.92	0.07	33,33,33,33	0
56	MG	1A	3006	1/1	0.92	0.09	34,34,34,34	0
56	MG	2N	201	1/1	0.92	0.13	57,57,57,57	0
56	MG	2O	201	1/1	0.92	0.08	50,50,50,50	0
56	MG	1a	1780	1/1	0.92	0.09	56,56,56,56	0
56	MG	2P	201	1/1	0.92	0.16	52,52,52,52	0
56	MG	2A	3609	1/1	0.92	0.10	43,43,43,43	0
57	LUJ	1A	4099	42/44	0.92	0.12	32,44,54,57	0
57	LUJ	1A	4100	42/44	0.92	0.14	23,39,54,62	0
56	MG	1A	3426	1/1	0.92	0.10	49,49,49,49	0
56	MG	1A	3493	1/1	0.92	0.11	22,22,22,22	0
58	K	2A	3434	1/1	0.92	0.09	67,67,67,67	0
56	MG	1A	3480	1/1	0.93	0.07	42,42,42,42	0
56	MG	2T	203	1/1	0.93	0.14	52,52,52,52	0
56	MG	1A	3251	1/1	0.93	0.10	28,28,28,28	0
56	MG	2U	202	1/1	0.93	0.17	57,57,57,57	0
56	MG	1a	1726	1/1	0.93	0.11	36,36,36,36	0
56	MG	2A	3605	1/1	0.93	0.09	38,38,38,38	0
56	MG	1A	3567	1/1	0.93	0.10	36,36,36,36	0
56	MG	1A	4011	1/1	0.93	0.08	23,23,23,23	0
56	MG	1A	3569	1/1	0.93	0.30	36,36,36,36	0
56	MG	27	101	1/1	0.93	0.38	41,41,41,41	0
56	MG	2A	3091	1/1	0.93	0.27	54,54,54,54	0
56	MG	1A	3860	1/1	0.93	0.06	27,27,27,27	0
56	MG	1a	1732	1/1	0.93	0.34	47,47,47,47	0
56	MG	1A	3305	1/1	0.93	0.12	32,32,32,32	0
56	MG	1A	3484	1/1	0.93	0.13	31,31,31,31	0
56	MG	2A	3623	1/1	0.93	0.07	45,45,45,45	0
56	MG	1A	3081	1/1	0.93	0.17	26,26,26,26	0
56	MG	2A	3325	1/1	0.93	0.18	60,60,60,60	0
56	MG	1A	3867	1/1	0.93	0.14	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3579	1/1	0.93	0.06	37,37,37,37	0
56	MG	1a	1742	1/1	0.93	0.07	48,48,48,48	0
56	MG	1A	3582	1/1	0.93	0.12	38,38,38,38	0
56	MG	1A	3254	1/1	0.93	0.28	45,45,45,45	0
56	MG	1A	4029	1/1	0.93	0.08	31,31,31,31	0
56	MG	1A	3725	1/1	0.93	0.26	51,51,51,51	0
56	MG	1A	3584	1/1	0.93	0.15	44,44,44,44	0
56	MG	1A	3587	1/1	0.93	0.17	37,37,37,37	0
56	MG	2A	3640	1/1	0.93	0.12	49,49,49,49	0
56	MG	10	102	1/1	0.93	0.14	42,42,42,42	0
56	MG	2a	3023	1/1	0.93	0.11	44,44,44,44	0
56	MG	1A	3118	1/1	0.93	0.29	31,31,31,31	0
56	MG	2A	3344	1/1	0.93	0.11	46,46,46,46	0
56	MG	2A	3644	1/1	0.93	0.10	47,47,47,47	0
56	MG	2A	3345	1/1	0.93	0.18	47,47,47,47	0
56	MG	1A	3882	1/1	0.93	0.09	15,15,15,15	0
56	MG	1a	1766	1/1	0.93	0.07	52,52,52,52	0
56	MG	1A	3883	1/1	0.93	0.12	56,56,56,56	0
56	MG	2A	3125	1/1	0.93	0.20	41,41,41,41	0
56	MG	2A	3654	1/1	0.93	0.11	57,57,57,57	0
56	MG	1A	3161	1/1	0.93	0.10	40,40,40,40	0
56	MG	1A	3361	1/1	0.93	0.11	50,50,50,50	0
56	MG	1a	1774	1/1	0.93	0.12	42,42,42,42	0
56	MG	1A	3362	1/1	0.93	0.12	42,42,42,42	0
56	MG	1A	3744	1/1	0.93	0.07	49,49,49,49	0
56	MG	1A	3216	1/1	0.93	0.24	32,32,32,32	0
56	MG	1A	3430	1/1	0.93	0.11	37,37,37,37	0
56	MG	1A	3366	1/1	0.93	0.23	30,30,30,30	0
56	MG	1A	3896	1/1	0.93	0.06	38,38,38,38	0
56	MG	1A	3897	1/1	0.93	0.08	40,40,40,40	0
56	MG	1A	4062	1/1	0.93	0.07	15,15,15,15	0
56	MG	1A	3755	1/1	0.93	0.10	16,16,16,16	0
56	MG	1A	3168	1/1	0.93	0.17	31,31,31,31	0
56	MG	2A	3371	1/1	0.93	0.07	44,44,44,44	0
56	MG	1a	1607	1/1	0.93	0.10	46,46,46,46	0
56	MG	1A	3901	1/1	0.93	0.26	27,27,27,27	0
56	MG	2A	3161	1/1	0.93	0.14	47,47,47,47	0
56	MG	2a	3058	1/1	0.93	0.08	55,55,55,55	0
56	MG	1A	3433	1/1	0.93	0.08	52,52,52,52	0
56	MG	1A	3508	1/1	0.93	0.10	18,18,18,18	0
56	MG	2A	3682	1/1	0.93	0.18	48,48,48,48	0
56	MG	2a	3063	1/1	0.93	0.09	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3765	1/1	0.93	0.13	36,36,36,36	0
56	MG	2A	3686	1/1	0.93	0.12	48,48,48,48	0
56	MG	1A	3095	1/1	0.93	0.09	35,35,35,35	0
56	MG	1A	3125	1/1	0.93	0.12	42,42,42,42	0
56	MG	2A	3381	1/1	0.93	0.16	44,44,44,44	0
56	MG	2A	3174	1/1	0.93	0.05	45,45,45,45	0
56	MG	2a	3070	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3384	1/1	0.93	0.18	47,47,47,47	0
56	MG	2A	3703	1/1	0.93	0.06	39,39,39,39	0
56	MG	2A	3387	1/1	0.93	0.23	46,46,46,46	0
56	MG	1a	1810	1/1	0.93	0.12	76,76,76,76	0
56	MG	1A	3769	1/1	0.93	0.13	33,33,33,33	0
56	MG	2A	3393	1/1	0.93	0.28	46,46,46,46	0
56	MG	1A	3618	1/1	0.93	0.07	22,22,22,22	0
56	MG	1A	4087	1/1	0.93	0.08	33,33,33,33	0
56	MG	2a	3083	1/1	0.93	0.13	49,49,49,49	0
56	MG	1a	1819	1/1	0.93	0.12	53,53,53,53	0
56	MG	1a	1823	1/1	0.93	0.12	76,76,76,76	0
56	MG	2a	3088	1/1	0.93	0.26	53,53,53,53	0
56	MG	1a	1825	1/1	0.93	0.08	58,58,58,58	0
56	MG	1A	3326	1/1	0.93	0.04	18,18,18,18	0
56	MG	1a	1829	1/1	0.93	0.15	37,37,37,37	0
56	MG	1A	3917	1/1	0.93	0.08	64,64,64,64	0
56	MG	2A	3408	1/1	0.93	0.10	57,57,57,57	0
56	MG	1b	301	1/1	0.93	0.21	76,76,76,76	0
56	MG	2A	3188	1/1	0.93	0.08	31,31,31,31	0
56	MG	2A	3729	1/1	0.93	0.16	38,38,38,38	0
56	MG	1a	1630	1/1	0.93	0.20	39,39,39,39	0
56	MG	1A	3378	1/1	0.93	0.06	39,39,39,39	0
56	MG	2A	3418	1/1	0.93	0.18	38,38,38,38	0
56	MG	1A	3623	1/1	0.93	0.08	33,33,33,33	0
56	MG	2A	3736	1/1	0.93	0.12	50,50,50,50	0
56	MG	1a	1634	1/1	0.93	0.26	59,59,59,59	0
56	MG	1A	3381	1/1	0.93	0.06	29,29,29,29	0
56	MG	1A	3930	1/1	0.93	0.07	31,31,31,31	0
56	MG	1A	3386	1/1	0.93	0.11	34,34,34,34	0
56	MG	1A	3389	1/1	0.93	0.07	35,35,35,35	0
56	MG	2a	3114	1/1	0.93	0.08	37,37,37,37	0
56	MG	2a	3115	1/1	0.93	0.30	49,49,49,49	0
56	MG	2A	3203	1/1	0.93	0.10	55,55,55,55	0
56	MG	2A	3204	1/1	0.93	0.09	46,46,46,46	0
56	MG	2a	3118	1/1	0.93	0.14	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3785	1/1	0.93	0.11	14,14,14,14	0
56	MG	1A	4113	1/1	0.93	0.30	32,32,32,32	0
56	MG	2a	3123	1/1	0.93	0.24	53,53,53,53	0
56	MG	1a	1645	1/1	0.93	0.09	54,54,54,54	0
56	MG	2a	3125	1/1	0.93	0.15	58,58,58,58	0
56	MG	1A	3020	1/1	0.93	0.06	26,26,26,26	0
56	MG	1A	3788	1/1	0.93	0.14	31,31,31,31	0
56	MG	1A	3454	1/1	0.93	0.27	33,33,33,33	0
56	MG	1A	3630	1/1	0.93	0.06	60,60,60,60	0
56	MG	1A	3631	1/1	0.93	0.15	29,29,29,29	0
56	MG	2a	3133	1/1	0.93	0.08	76,76,76,76	0
56	MG	1a	1655	1/1	0.93	0.16	45,45,45,45	0
56	MG	2A	3448	1/1	0.93	0.25	36,36,36,36	0
56	MG	1A	3227	1/1	0.93	0.21	31,31,31,31	0
56	MG	1A	3529	1/1	0.93	0.15	22,22,22,22	0
56	MG	1A	3638	1/1	0.93	0.09	27,27,27,27	0
56	MG	2a	3148	1/1	0.93	0.11	70,70,70,70	0
56	MG	2a	3149	1/1	0.93	0.10	57,57,57,57	0
56	MG	2A	3453	1/1	0.93	0.27	33,33,33,33	0
56	MG	2A	3227	1/1	0.93	0.18	39,39,39,39	0
56	MG	2A	3775	1/1	0.93	0.14	77,77,77,77	0
56	MG	1A	3960	1/1	0.93	0.08	18,18,18,18	0
56	MG	2A	3458	1/1	0.93	0.25	48,48,48,48	0
56	MG	2A	3461	1/1	0.93	0.12	44,44,44,44	0
56	MG	2a	3161	1/1	0.93	0.07	65,65,65,65	0
56	MG	1a	1661	1/1	0.93	0.10	36,36,36,36	0
56	MG	2A	3230	1/1	0.93	0.12	56,56,56,56	0
56	MG	1x	109	1/1	0.93	0.08	55,55,55,55	0
56	MG	1A	3182	1/1	0.93	0.10	36,36,36,36	0
56	MG	2A	3473	1/1	0.93	0.07	39,39,39,39	0
56	MG	1B	210	1/1	0.93	0.08	43,43,43,43	0
56	MG	2A	3475	1/1	0.93	0.13	44,44,44,44	0
56	MG	1A	3460	1/1	0.93	0.15	26,26,26,26	0
56	MG	2a	3175	1/1	0.93	0.10	51,51,51,51	0
56	MG	1A	3285	1/1	0.93	0.13	61,61,61,61	0
56	MG	1A	3463	1/1	0.93	0.10	42,42,42,42	0
56	MG	1A	3400	1/1	0.93	0.07	30,30,30,30	0
56	MG	1A	3542	1/1	0.93	0.06	28,28,28,28	0
56	MG	1A	3543	1/1	0.93	0.13	52,52,52,52	0
56	MG	2A	3243	1/1	0.93	0.09	47,47,47,47	0
56	MG	2a	3185	1/1	0.93	0.08	55,55,55,55	0
56	MG	1y	106	1/1	0.93	0.14	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3402	1/1	0.93	0.09	32,32,32,32	0
56	MG	1A	3667	1/1	0.93	0.09	32,32,32,32	0
56	MG	1A	3669	1/1	0.93	0.07	20,20,20,20	0
56	MG	2a	3190	1/1	0.93	0.08	56,56,56,56	0
56	MG	2A	3492	1/1	0.93	0.16	39,39,39,39	0
56	MG	1A	3184	1/1	0.93	0.08	30,30,30,30	0
56	MG	2A	3498	1/1	0.93	0.08	44,44,44,44	0
56	MG	1A	3977	1/1	0.93	0.12	42,42,42,42	0
56	MG	2a	3195	1/1	0.93	0.07	45,45,45,45	0
56	MG	2A	3835	1/1	0.93	0.14	59,59,59,59	0
56	MG	1A	3978	1/1	0.93	0.08	48,48,48,48	0
56	MG	1B	232	1/1	0.93	0.10	48,48,48,48	0
56	MG	2A	3838	1/1	0.93	0.14	51,51,51,51	0
56	MG	2a	3203	1/1	0.93	0.18	59,59,59,59	0
56	MG	1a	1681	1/1	0.93	0.10	32,32,32,32	0
56	MG	2A	3505	1/1	0.93	0.13	42,42,42,42	0
56	MG	1A	3826	1/1	0.93	0.15	56,56,56,56	0
56	MG	1A	3089	1/1	0.93	0.12	39,39,39,39	0
56	MG	2A	3508	1/1	0.93	0.14	52,52,52,52	0
56	MG	2A	3509	1/1	0.93	0.18	25,25,25,25	0
56	MG	2a	3213	1/1	0.93	0.10	57,57,57,57	0
56	MG	1A	3675	1/1	0.93	0.07	23,23,23,23	0
56	MG	1a	1686	1/1	0.93	0.14	49,49,49,49	0
56	MG	1a	1687	1/1	0.93	0.26	46,46,46,46	0
56	MG	2a	3217	1/1	0.93	0.12	57,57,57,57	0
56	MG	1D	301	1/1	0.93	0.10	34,34,34,34	0
56	MG	2A	3855	1/1	0.93	0.08	29,29,29,29	0
56	MG	1D	304	1/1	0.93	0.32	35,35,35,35	0
56	MG	2A	3032	1/1	0.93	0.15	45,45,45,45	0
56	MG	2A	3034	1/1	0.93	0.06	31,31,31,31	0
56	MG	2A	3525	1/1	0.93	0.07	46,46,46,46	0
56	MG	1D	306	1/1	0.93	0.07	31,31,31,31	0
56	MG	1A	3552	1/1	0.93	0.17	27,27,27,27	0
56	MG	1A	3103	1/1	0.93	0.07	19,19,19,19	0
56	MG	1A	3348	1/1	0.93	0.13	30,30,30,30	0
56	MG	1A	3555	1/1	0.93	0.22	38,38,38,38	0
56	MG	1a	1696	1/1	0.93	0.23	37,37,37,37	0
56	MG	1F	302	1/1	0.93	0.16	28,28,28,28	0
56	MG	1A	3839	1/1	0.93	0.12	14,14,14,14	0
56	MG	2i	201	1/1	0.93	0.28	49,49,49,49	0
56	MG	1F	305	1/1	0.93	0.06	31,31,31,31	0
56	MG	1F	308	1/1	0.93	0.11	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1F	310	1/1	0.93	0.12	40,40,40,40	0
56	MG	1A	3992	1/1	0.93	0.20	64,64,64,64	0
56	MG	1a	1707	1/1	0.93	0.22	45,45,45,45	0
56	MG	2q	203	1/1	0.93	0.06	70,70,70,70	0
56	MG	1A	3685	1/1	0.93	0.07	15,15,15,15	0
56	MG	1G	205	1/1	0.93	0.12	40,40,40,40	0
56	MG	2A	3563	1/1	0.93	0.11	52,52,52,52	0
56	MG	1A	3055	1/1	0.93	0.19	41,41,41,41	0
56	MG	2A	3566	1/1	0.93	0.09	60,60,60,60	0
56	MG	1A	3147	1/1	0.93	0.13	21,21,21,21	0
56	MG	1A	3092	1/1	0.93	0.20	42,42,42,42	0
56	MG	2A	3066	1/1	0.93	0.15	44,44,44,44	0
56	MG	1A	3845	1/1	0.93	0.10	16,16,16,16	0
56	MG	2A	3575	1/1	0.93	0.10	49,49,49,49	0
56	MG	2A	3069	1/1	0.93	0.16	52,52,52,52	0
56	MG	2A	3303	1/1	0.93	0.11	46,46,46,46	0
56	MG	1A	3846	1/1	0.93	0.10	31,31,31,31	0
56	MG	1A	4007	1/1	0.93	0.10	54,54,54,54	0
56	MG	2A	3072	1/1	0.93	0.11	52,52,52,52	0
56	MG	2A	3074	1/1	0.93	0.10	49,49,49,49	0
56	MG	1a	1721	1/1	0.93	0.20	38,38,38,38	0
56	MG	2A	3598	1/1	0.93	0.08	50,50,50,50	0
57	LUJ	2a	3232	44/44	0.93	0.12	40,55,62,65	0
56	MG	2A	3076	1/1	0.93	0.06	42,42,42,42	0
56	MG	2A	3145	1/1	0.94	0.13	33,33,33,33	0
56	MG	2A	3146	1/1	0.94	0.11	44,44,44,44	0
56	MG	1A	3988	1/1	0.94	0.07	75,75,75,75	0
56	MG	1A	3727	1/1	0.94	0.11	56,56,56,56	0
56	MG	1A	3114	1/1	0.94	0.17	22,22,22,22	0
56	MG	2a	3005	1/1	0.94	0.16	46,46,46,46	0
56	MG	2A	3152	1/1	0.94	0.09	46,46,46,46	0
56	MG	1A	3861	1/1	0.94	0.15	30,30,30,30	0
56	MG	2A	3154	1/1	0.94	0.13	53,53,53,53	0
56	MG	1A	3143	1/1	0.94	0.07	35,35,35,35	0
56	MG	1A	3610	1/1	0.94	0.12	25,25,25,25	0
56	MG	2A	3636	1/1	0.94	0.12	57,57,57,57	0
56	MG	1A	3116	1/1	0.94	0.07	24,24,24,24	0
56	MG	1A	3308	1/1	0.94	0.20	34,34,34,34	0
56	MG	1a	1659	1/1	0.94	0.14	50,50,50,50	0
56	MG	1A	4004	1/1	0.94	0.17	73,73,73,73	0
56	MG	1A	3615	1/1	0.94	0.06	29,29,29,29	0
56	MG	1A	3748	1/1	0.94	0.16	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3645	1/1	0.94	0.07	25,25,25,25	0
56	MG	1f	201	1/1	0.94	0.08	32,32,32,32	0
56	MG	2a	3020	1/1	0.94	0.12	60,60,60,60	0
56	MG	2A	3171	1/1	0.94	0.09	38,38,38,38	0
56	MG	2A	3648	1/1	0.94	0.09	39,39,39,39	0
56	MG	1A	3078	1/1	0.94	0.05	28,28,28,28	0
56	MG	1A	3874	1/1	0.94	0.12	22,22,22,22	0
56	MG	1l	203	1/1	0.94	0.14	48,48,48,48	0
56	MG	1A	3311	1/1	0.94	0.06	34,34,34,34	0
56	MG	1A	3753	1/1	0.94	0.06	25,25,25,25	0
56	MG	1A	3523	1/1	0.94	0.07	23,23,23,23	0
56	MG	1a	1668	1/1	0.94	0.17	34,34,34,34	0
56	MG	1A	3370	1/1	0.94	0.13	40,40,40,40	0
56	MG	2A	3378	1/1	0.94	0.07	43,43,43,43	0
56	MG	1A	3449	1/1	0.94	0.10	36,36,36,36	0
56	MG	1F	303	1/1	0.94	0.09	42,42,42,42	0
56	MG	2a	3039	1/1	0.94	0.17	49,49,49,49	0
56	MG	2A	3665	1/1	0.94	0.06	40,40,40,40	0
56	MG	2A	3183	1/1	0.94	0.20	52,52,52,52	0
56	MG	1A	3450	1/1	0.94	0.12	34,34,34,34	0
56	MG	1a	1673	1/1	0.94	0.11	43,43,43,43	0
56	MG	2A	3386	1/1	0.94	0.18	40,40,40,40	0
56	MG	1A	3758	1/1	0.94	0.06	19,19,19,19	0
56	MG	2A	3388	1/1	0.94	0.26	38,38,38,38	0
56	MG	1A	3371	1/1	0.94	0.17	41,41,41,41	0
56	MG	2A	3674	1/1	0.94	0.06	52,52,52,52	0
56	MG	1A	3761	1/1	0.94	0.12	19,19,19,19	0
56	MG	2A	3392	1/1	0.94	0.20	35,35,35,35	0
56	MG	1A	3452	1/1	0.94	0.08	27,27,27,27	0
56	MG	1G	203	1/1	0.94	0.07	61,61,61,61	0
56	MG	1A	3156	1/1	0.94	0.17	18,18,18,18	0
56	MG	1A	3317	1/1	0.94	0.10	30,30,30,30	0
56	MG	2a	3057	1/1	0.94	0.10	41,41,41,41	0
56	MG	1a	1683	1/1	0.94	0.13	60,60,60,60	0
56	MG	2A	3197	1/1	0.94	0.13	50,50,50,50	0
56	MG	2A	3198	1/1	0.94	0.06	47,47,47,47	0
56	MG	2A	3691	1/1	0.94	0.08	47,47,47,47	0
56	MG	1A	3538	1/1	0.94	0.20	47,47,47,47	0
56	MG	2A	3693	1/1	0.94	0.10	40,40,40,40	0
56	MG	1A	3198	1/1	0.94	0.11	17,17,17,17	0
56	MG	2A	3697	1/1	0.94	0.09	53,53,53,53	0
56	MG	1N	202	1/1	0.94	0.06	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1N	203	1/1	0.94	0.10	42,42,42,42	0
56	MG	1A	3385	1/1	0.94	0.21	27,27,27,27	0
56	MG	1A	3774	1/1	0.94	0.06	16,16,16,16	0
56	MG	2A	3415	1/1	0.94	0.15	36,36,36,36	0
56	MG	1A	3061	1/1	0.94	0.17	40,40,40,40	0
56	MG	1A	3120	1/1	0.94	0.07	23,23,23,23	0
56	MG	1A	3208	1/1	0.94	0.12	39,39,39,39	0
56	MG	2a	3076	1/1	0.94	0.18	56,56,56,56	0
56	MG	1A	3647	1/1	0.94	0.07	21,21,21,21	0
56	MG	1A	4047	1/1	0.94	0.07	46,46,46,46	0
56	MG	2A	3215	1/1	0.94	0.14	58,58,58,58	0
56	MG	1S	201	1/1	0.94	0.12	38,38,38,38	0
56	MG	1A	3042	1/1	0.94	0.12	25,25,25,25	0
56	MG	1A	3211	1/1	0.94	0.26	32,32,32,32	0
56	MG	2A	3428	1/1	0.94	0.09	50,50,50,50	0
56	MG	1a	1700	1/1	0.94	0.21	34,34,34,34	0
56	MG	1A	3908	1/1	0.94	0.15	46,46,46,46	0
56	MG	1A	3551	1/1	0.94	0.25	39,39,39,39	0
56	MG	2A	3224	1/1	0.94	0.21	56,56,56,56	0
56	MG	2A	3433	1/1	0.94	0.21	44,44,44,44	0
56	MG	1A	3656	1/1	0.94	0.06	9,9,9,9	0
56	MG	1A	3327	1/1	0.94	0.06	33,33,33,33	0
56	MG	1A	3331	1/1	0.94	0.12	36,36,36,36	0
56	MG	1A	3801	1/1	0.94	0.14	35,35,35,35	0
56	MG	1W	201	1/1	0.94	0.10	27,27,27,27	0
56	MG	1W	205	1/1	0.94	0.14	21,21,21,21	0
56	MG	1A	3803	1/1	0.94	0.10	55,55,55,55	0
56	MG	2A	3028	1/1	0.94	0.15	38,38,38,38	0
56	MG	1X	105	1/1	0.94	0.07	41,41,41,41	0
56	MG	1a	1715	1/1	0.94	0.06	48,48,48,48	0
56	MG	2a	3104	1/1	0.94	0.07	60,60,60,60	0
56	MG	1A	3212	1/1	0.94	0.08	36,36,36,36	0
56	MG	2A	3240	1/1	0.94	0.13	39,39,39,39	0
56	MG	2A	3036	1/1	0.94	0.15	51,51,51,51	0
56	MG	1A	3403	1/1	0.94	0.07	32,32,32,32	0
56	MG	2a	3112	1/1	0.94	0.10	39,39,39,39	0
56	MG	1A	3259	1/1	0.94	0.09	36,36,36,36	0
56	MG	2A	3463	1/1	0.94	0.18	37,37,37,37	0
56	MG	1a	1720	1/1	0.94	0.31	39,39,39,39	0
56	MG	2A	3761	1/1	0.94	0.09	54,54,54,54	0
56	MG	2A	3763	1/1	0.94	0.06	62,62,62,62	0
56	MG	1A	3934	1/1	0.94	0.14	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3246	1/1	0.94	0.07	43,43,43,43	0
56	MG	2A	3043	1/1	0.94	0.17	37,37,37,37	0
56	MG	1Z	302	1/1	0.94	0.10	45,45,45,45	0
56	MG	1A	3165	1/1	0.94	0.19	44,44,44,44	0
56	MG	1a	1725	1/1	0.94	0.18	32,32,32,32	0
56	MG	2A	3252	1/1	0.94	0.09	54,54,54,54	0
56	MG	1A	3166	1/1	0.94	0.08	34,34,34,34	0
56	MG	2A	3254	1/1	0.94	0.14	43,43,43,43	0
56	MG	1A	3478	1/1	0.94	0.08	50,50,50,50	0
56	MG	1A	3410	1/1	0.94	0.15	42,42,42,42	0
56	MG	2a	3134	1/1	0.94	0.08	60,60,60,60	0
56	MG	1A	3217	1/1	0.94	0.09	26,26,26,26	0
56	MG	1A	3218	1/1	0.94	0.08	28,28,28,28	0
56	MG	2A	3780	1/1	0.94	0.08	60,60,60,60	0
56	MG	12	3702	1/1	0.94	0.07	30,30,30,30	0
56	MG	2A	3485	1/1	0.94	0.17	47,47,47,47	0
56	MG	1A	3483	1/1	0.94	0.12	38,38,38,38	0
56	MG	2A	3487	1/1	0.94	0.17	42,42,42,42	0
56	MG	2A	3262	1/1	0.94	0.07	27,27,27,27	0
56	MG	1A	3950	1/1	0.94	0.06	32,32,32,32	0
56	MG	2A	3060	1/1	0.94	0.07	27,27,27,27	0
56	MG	2A	3061	1/1	0.94	0.17	48,48,48,48	0
56	MG	2A	3796	1/1	0.94	0.07	29,29,29,29	0
56	MG	1A	3220	1/1	0.94	0.08	34,34,34,34	0
56	MG	18	101	1/1	0.94	0.18	38,38,38,38	0
56	MG	2A	3801	1/1	0.94	0.08	41,41,41,41	0
56	MG	2A	3064	1/1	0.94	0.07	49,49,49,49	0
56	MG	1a	1737	1/1	0.94	0.10	48,48,48,48	0
56	MG	2A	3274	1/1	0.94	0.16	39,39,39,39	0
56	MG	2A	3811	1/1	0.94	0.07	25,25,25,25	0
56	MG	2a	3169	1/1	0.94	0.08	60,60,60,60	0
56	MG	1A	3347	1/1	0.94	0.05	32,32,32,32	0
56	MG	1A	4096	1/1	0.94	0.11	36,36,36,36	0
56	MG	1a	1743	1/1	0.94	0.06	48,48,48,48	0
56	MG	1A	3064	1/1	0.94	0.15	42,42,42,42	0
56	MG	2A	3825	1/1	0.94	0.08	53,53,53,53	0
56	MG	2A	3826	1/1	0.94	0.13	36,36,36,36	0
56	MG	1A	3689	1/1	0.94	0.08	22,22,22,22	0
56	MG	1A	3275	1/1	0.94	0.17	35,35,35,35	0
56	MG	2A	3512	1/1	0.94	0.08	64,64,64,64	0
56	MG	1a	1751	1/1	0.94	0.06	41,41,41,41	0
56	MG	1A	3059	1/1	0.94	0.07	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3833	1/1	0.94	0.15	40,40,40,40	0
56	MG	2A	3834	1/1	0.94	0.07	53,53,53,53	0
56	MG	2A	3284	1/1	0.94	0.18	53,53,53,53	0
56	MG	2A	3516	1/1	0.94	0.10	38,38,38,38	0
56	MG	1a	1753	1/1	0.94	0.12	45,45,45,45	0
56	MG	1A	3288	1/1	0.94	0.11	36,36,36,36	0
56	MG	2A	3521	1/1	0.94	0.10	33,33,33,33	0
56	MG	1A	3128	1/1	0.94	0.15	26,26,26,26	0
56	MG	2A	3081	1/1	0.94	0.18	56,56,56,56	0
56	MG	2A	3083	1/1	0.94	0.45	53,53,53,53	0
56	MG	2A	3531	1/1	0.94	0.12	39,39,39,39	0
56	MG	1A	4114	1/1	0.94	0.15	20,20,20,20	0
56	MG	2A	3292	1/1	0.94	0.09	37,37,37,37	0
56	MG	2A	3293	1/1	0.94	0.07	52,52,52,52	0
56	MG	1A	3589	1/1	0.94	0.07	21,21,21,21	0
56	MG	1a	1613	1/1	0.94	0.26	50,50,50,50	0
56	MG	1a	1763	1/1	0.94	0.09	34,34,34,34	0
56	MG	1A	3835	1/1	0.94	0.07	35,35,35,35	0
56	MG	2a	3207	1/1	0.94	0.15	44,44,44,44	0
56	MG	1A	4120	1/1	0.94	0.29	33,33,33,33	0
56	MG	2A	3858	1/1	0.94	0.15	60,60,60,60	0
56	MG	2A	3301	1/1	0.94	0.15	49,49,49,49	0
56	MG	1a	1618	1/1	0.94	0.08	38,38,38,38	0
56	MG	2A	3863	1/1	0.94	0.07	48,48,48,48	0
56	MG	1A	4121	1/1	0.94	0.27	27,27,27,27	0
56	MG	1A	4125	1/1	0.94	0.29	29,29,29,29	0
56	MG	1A	4129	1/1	0.94	0.07	33,33,33,33	0
56	MG	2A	3307	1/1	0.94	0.15	51,51,51,51	0
56	MG	1A	4130	1/1	0.94	0.29	19,19,19,19	0
56	MG	1a	1779	1/1	0.94	0.09	70,70,70,70	0
56	MG	1A	3700	1/1	0.94	0.10	31,31,31,31	0
56	MG	1A	4134	1/1	0.94	0.09	31,31,31,31	0
56	MG	1A	3091	1/1	0.94	0.09	14,14,14,14	0
56	MG	2A	3570	1/1	0.94	0.09	34,34,34,34	0
56	MG	1A	3043	1/1	0.94	0.12	33,33,33,33	0
56	MG	1A	3357	1/1	0.94	0.07	31,31,31,31	0
56	MG	2A	3573	1/1	0.94	0.08	22,22,22,22	0
56	MG	1A	3296	1/1	0.94	0.17	15,15,15,15	0
56	MG	2A	3580	1/1	0.94	0.13	45,45,45,45	0
56	MG	2A	3113	1/1	0.94	0.11	29,29,29,29	0
56	MG	2d	302	1/1	0.94	0.07	61,61,61,61	0
56	MG	2E	304	1/1	0.94	0.08	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3583	1/1	0.94	0.18	41,41,41,41	0
56	MG	1A	3713	1/1	0.94	0.16	51,51,51,51	0
56	MG	1A	3714	1/1	0.94	0.13	49,49,49,49	0
56	MG	2A	3117	1/1	0.94	0.12	54,54,54,54	0
56	MG	1A	3843	1/1	0.94	0.06	38,38,38,38	0
56	MG	2A	3119	1/1	0.94	0.09	50,50,50,50	0
56	MG	1A	3718	1/1	0.94	0.08	40,40,40,40	0
56	MG	1A	3183	1/1	0.94	0.08	32,32,32,32	0
56	MG	1a	1796	1/1	0.94	0.07	47,47,47,47	0
56	MG	2A	3327	1/1	0.94	0.24	53,53,53,53	0
56	MG	1A	3230	1/1	0.94	0.14	37,37,37,37	0
56	MG	2A	3127	1/1	0.94	0.10	40,40,40,40	0
56	MG	2A	3130	1/1	0.94	0.13	40,40,40,40	0
56	MG	1A	3724	1/1	0.94	0.07	25,25,25,25	0
56	MG	2Q	205	1/1	0.94	0.19	43,43,43,43	0
56	MG	1A	3233	1/1	0.94	0.39	29,29,29,29	0
56	MG	1a	1808	1/1	0.94	0.08	46,46,46,46	0
56	MG	2A	3612	1/1	0.94	0.16	42,42,42,42	0
56	MG	1A	3513	1/1	0.94	0.10	38,38,38,38	0
56	MG	2A	3614	1/1	0.94	0.13	45,45,45,45	0
56	MG	2A	3338	1/1	0.94	0.08	56,56,56,56	0
56	MG	1a	1646	1/1	0.94	0.14	41,41,41,41	0
56	MG	2A	3620	1/1	0.94	0.07	34,34,34,34	0
57	LUJ	1a	1832	44/44	0.94	0.11	29,39,44,48	0
56	MG	2W	201	1/1	0.94	0.04	25,25,25,25	0
56	MG	1A	3857	1/1	0.94	0.11	40,40,40,40	0
56	MG	2A	3341	1/1	0.94	0.06	49,49,49,49	0
56	MG	2A	3144	1/1	0.94	0.26	56,56,56,56	0
56	MG	1A	3503	1/1	0.95	0.09	45,45,45,45	0
56	MG	2A	3518	1/1	0.95	0.07	45,45,45,45	0
56	MG	1A	4127	1/1	0.95	0.28	27,27,27,27	0
56	MG	2A	3520	1/1	0.95	0.12	48,48,48,48	0
56	MG	1A	3617	1/1	0.95	0.06	14,14,14,14	0
56	MG	1A	3762	1/1	0.95	0.07	13,13,13,13	0
56	MG	1A	3921	1/1	0.95	0.09	39,39,39,39	0
56	MG	1A	3273	1/1	0.95	0.18	16,16,16,16	0
56	MG	2A	3530	1/1	0.95	0.15	29,29,29,29	0
56	MG	2B	218	1/1	0.95	0.09	40,40,40,40	0
56	MG	2D	303	1/1	0.95	0.07	29,29,29,29	0
56	MG	1A	3417	1/1	0.95	0.08	22,22,22,22	0
56	MG	1A	3098	1/1	0.95	0.07	51,51,51,51	0
56	MG	2A	3533	1/1	0.95	0.11	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3276	1/1	0.95	0.19	19,19,19,19	0
56	MG	2A	3009	1/1	0.95	0.12	47,47,47,47	0
56	MG	1A	3278	1/1	0.95	0.31	27,27,27,27	0
56	MG	2A	3257	1/1	0.95	0.16	46,46,46,46	0
56	MG	2A	3011	1/1	0.95	0.06	48,48,48,48	0
56	MG	1A	3349	1/1	0.95	0.07	41,41,41,41	0
56	MG	2F	304	1/1	0.95	0.14	46,46,46,46	0
56	MG	1A	3514	1/1	0.95	0.09	38,38,38,38	0
56	MG	2A	3017	1/1	0.95	0.06	29,29,29,29	0
56	MG	2A	3018	1/1	0.95	0.10	53,53,53,53	0
56	MG	2A	3263	1/1	0.95	0.09	51,51,51,51	0
56	MG	1B	208	1/1	0.95	0.24	56,56,56,56	0
56	MG	1A	3284	1/1	0.95	0.12	46,46,46,46	0
56	MG	1A	3945	1/1	0.95	0.11	49,49,49,49	0
56	MG	2A	3562	1/1	0.95	0.06	27,27,27,27	0
56	MG	1A	3628	1/1	0.95	0.07	8,8,8,8	0
56	MG	1B	212	1/1	0.95	0.06	27,27,27,27	0
56	MG	2A	3565	1/1	0.95	0.07	34,34,34,34	0
56	MG	2R	3003	1/1	0.95	0.08	40,40,40,40	0
56	MG	2A	3025	1/1	0.95	0.13	33,33,33,33	0
56	MG	2A	3272	1/1	0.95	0.15	42,42,42,42	0
56	MG	1A	3176	1/1	0.95	0.19	31,31,31,31	0
56	MG	2A	3569	1/1	0.95	0.06	24,24,24,24	0
56	MG	1A	3287	1/1	0.95	0.13	20,20,20,20	0
56	MG	1A	3034	1/1	0.95	0.12	25,25,25,25	0
56	MG	2A	3031	1/1	0.95	0.07	45,45,45,45	0
56	MG	1A	3783	1/1	0.95	0.10	14,14,14,14	0
56	MG	1A	3289	1/1	0.95	0.14	31,31,31,31	0
56	MG	2A	3578	1/1	0.95	0.09	51,51,51,51	0
56	MG	1A	3521	1/1	0.95	0.08	29,29,29,29	0
56	MG	1A	3634	1/1	0.95	0.07	26,26,26,26	0
56	MG	1A	3636	1/1	0.95	0.13	63,63,63,63	0
56	MG	1A	3961	1/1	0.95	0.08	26,26,26,26	0
56	MG	2A	3587	1/1	0.95	0.09	44,44,44,44	0
56	MG	1A	3792	1/1	0.95	0.05	22,22,22,22	0
56	MG	2A	3042	1/1	0.95	0.14	24,24,24,24	0
56	MG	1A	3796	1/1	0.95	0.31	20,20,20,20	0
56	MG	2A	3593	1/1	0.95	0.10	55,55,55,55	0
56	MG	1A	3290	1/1	0.95	0.06	32,32,32,32	0
56	MG	2A	3045	1/1	0.95	0.07	57,57,57,57	0
56	MG	1A	3798	1/1	0.95	0.11	31,31,31,31	0
56	MG	1A	3799	1/1	0.95	0.07	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3800	1/1	0.95	0.13	32,32,32,32	0
56	MG	1A	3639	1/1	0.95	0.08	32,32,32,32	0
56	MG	1A	3127	1/1	0.95	0.08	49,49,49,49	0
56	MG	1A	3644	1/1	0.95	0.09	24,24,24,24	0
56	MG	2A	3606	1/1	0.95	0.14	31,31,31,31	0
56	MG	1D	311	1/1	0.95	0.23	17,17,17,17	0
56	MG	1A	3293	1/1	0.95	0.07	21,21,21,21	0
56	MG	1D	313	1/1	0.95	0.14	23,23,23,23	0
56	MG	2A	3056	1/1	0.95	0.08	52,52,52,52	0
56	MG	2A	3057	1/1	0.95	0.15	47,47,47,47	0
56	MG	1a	1697	1/1	0.95	0.25	41,41,41,41	0
56	MG	1A	3180	1/1	0.95	0.08	31,31,31,31	0
56	MG	2a	3025	1/1	0.95	0.12	57,57,57,57	0
56	MG	1E	304	1/1	0.95	0.10	19,19,19,19	0
56	MG	1A	3441	1/1	0.95	0.10	23,23,23,23	0
56	MG	1a	1701	1/1	0.95	0.12	42,42,42,42	0
56	MG	1A	3057	1/1	0.95	0.06	30,30,30,30	0
56	MG	1A	3654	1/1	0.95	0.08	18,18,18,18	0
56	MG	1a	1704	1/1	0.95	0.12	46,46,46,46	0
56	MG	1A	3811	1/1	0.95	0.07	28,28,28,28	0
56	MG	1A	3444	1/1	0.95	0.09	49,49,49,49	0
56	MG	1A	3080	1/1	0.95	0.16	28,28,28,28	0
56	MG	1A	3536	1/1	0.95	0.12	30,30,30,30	0
56	MG	1F	309	1/1	0.95	0.07	36,36,36,36	0
56	MG	2A	3631	1/1	0.95	0.09	52,52,52,52	0
56	MG	1a	1710	1/1	0.95	0.16	36,36,36,36	0
56	MG	1A	3662	1/1	0.95	0.05	10,10,10,10	0
56	MG	1A	3986	1/1	0.95	0.08	18,18,18,18	0
56	MG	2a	3044	1/1	0.95	0.14	50,50,50,50	0
56	MG	2A	3077	1/1	0.95	0.08	41,41,41,41	0
56	MG	1A	3818	1/1	0.95	0.09	34,34,34,34	0
56	MG	2A	3637	1/1	0.95	0.09	54,54,54,54	0
56	MG	1A	3132	1/1	0.95	0.07	40,40,40,40	0
56	MG	2A	3639	1/1	0.95	0.07	44,44,44,44	0
56	MG	1A	3105	1/1	0.95	0.30	26,26,26,26	0
56	MG	2a	3051	1/1	0.95	0.12	54,54,54,54	0
56	MG	1A	3234	1/1	0.95	0.08	40,40,40,40	0
56	MG	1A	3540	1/1	0.95	0.16	41,41,41,41	0
56	MG	1a	1719	1/1	0.95	0.13	33,33,33,33	0
56	MG	1A	3994	1/1	0.95	0.09	40,40,40,40	0
56	MG	1A	3995	1/1	0.95	0.09	36,36,36,36	0
56	MG	1N	204	1/1	0.95	0.26	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1723	1/1	0.95	0.20	29,29,29,29	0
56	MG	2a	3059	1/1	0.95	0.05	48,48,48,48	0
56	MG	1N	205	1/1	0.95	0.10	52,52,52,52	0
56	MG	2A	3095	1/1	0.95	0.08	42,42,42,42	0
56	MG	1A	3824	1/1	0.95	0.09	33,33,33,33	0
56	MG	1A	3235	1/1	0.95	0.06	35,35,35,35	0
56	MG	2A	3653	1/1	0.95	0.07	38,38,38,38	0
56	MG	2A	3098	1/1	0.95	0.08	46,46,46,46	0
56	MG	2A	3655	1/1	0.95	0.08	31,31,31,31	0
56	MG	1O	203	1/1	0.95	0.17	56,56,56,56	0
56	MG	1A	3673	1/1	0.95	0.06	12,12,12,12	0
56	MG	1A	3058	1/1	0.95	0.10	39,39,39,39	0
56	MG	2A	3104	1/1	0.95	0.24	52,52,52,52	0
56	MG	1A	3110	1/1	0.95	0.09	33,33,33,33	0
56	MG	1a	1731	1/1	0.95	0.32	45,45,45,45	0
56	MG	1A	3044	1/1	0.95	0.05	26,26,26,26	0
56	MG	1A	3834	1/1	0.95	0.06	28,28,28,28	0
56	MG	1A	3679	1/1	0.95	0.09	7,7,7,7	0
56	MG	2A	3111	1/1	0.95	0.06	36,36,36,36	0
56	MG	1S	202	1/1	0.95	0.06	35,35,35,35	0
56	MG	2a	3080	1/1	0.95	0.13	47,47,47,47	0
56	MG	1A	3148	1/1	0.95	0.11	28,28,28,28	0
56	MG	1A	3045	1/1	0.95	0.14	27,27,27,27	0
56	MG	1a	1738	1/1	0.95	0.18	44,44,44,44	0
56	MG	2A	3360	1/1	0.95	0.08	45,45,45,45	0
56	MG	2A	3116	1/1	0.95	0.08	38,38,38,38	0
56	MG	2a	3087	1/1	0.95	0.12	44,44,44,44	0
56	MG	1A	3202	1/1	0.95	0.07	41,41,41,41	0
56	MG	1U	202	1/1	0.95	0.25	29,29,29,29	0
56	MG	1A	3458	1/1	0.95	0.09	20,20,20,20	0
56	MG	1a	1747	1/1	0.95	0.10	30,30,30,30	0
56	MG	1A	3459	1/1	0.95	0.13	44,44,44,44	0
56	MG	1A	3380	1/1	0.95	0.07	33,33,33,33	0
56	MG	2A	3683	1/1	0.95	0.08	16,16,16,16	0
56	MG	1A	3153	1/1	0.95	0.05	15,15,15,15	0
56	MG	2A	3126	1/1	0.95	0.10	29,29,29,29	0
56	MG	1A	3690	1/1	0.95	0.08	7,7,7,7	0
56	MG	2A	3129	1/1	0.95	0.16	30,30,30,30	0
56	MG	1A	3318	1/1	0.95	0.07	41,41,41,41	0
56	MG	2A	3131	1/1	0.95	0.12	39,39,39,39	0
56	MG	2A	3694	1/1	0.95	0.17	34,34,34,34	0
56	MG	2A	3132	1/1	0.95	0.13	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3133	1/1	0.95	0.07	46,46,46,46	0
56	MG	2A	3135	1/1	0.95	0.05	43,43,43,43	0
56	MG	2A	3699	1/1	0.95	0.07	52,52,52,52	0
56	MG	2A	3700	1/1	0.95	0.08	36,36,36,36	0
56	MG	1A	4025	1/1	0.95	0.07	40,40,40,40	0
56	MG	2A	3137	1/1	0.95	0.07	38,38,38,38	0
56	MG	1A	3206	1/1	0.95	0.30	27,27,27,27	0
56	MG	2A	3707	1/1	0.95	0.09	61,61,61,61	0
56	MG	1A	3154	1/1	0.95	0.05	32,32,32,32	0
56	MG	2A	3385	1/1	0.95	0.22	36,36,36,36	0
56	MG	1A	3321	1/1	0.95	0.08	39,39,39,39	0
56	MG	2A	3141	1/1	0.95	0.11	42,42,42,42	0
56	MG	1A	3698	1/1	0.95	0.05	34,34,34,34	0
56	MG	2A	3389	1/1	0.95	0.20	30,30,30,30	0
56	MG	1a	1761	1/1	0.95	0.10	50,50,50,50	0
56	MG	1A	3849	1/1	0.95	0.07	36,36,36,36	0
56	MG	1A	3852	1/1	0.95	0.06	44,44,44,44	0
56	MG	1A	3322	1/1	0.95	0.09	36,36,36,36	0
56	MG	2A	3723	1/1	0.95	0.08	43,43,43,43	0
56	MG	2A	3147	1/1	0.95	0.11	32,32,32,32	0
56	MG	1A	3048	1/1	0.95	0.06	21,21,21,21	0
56	MG	2A	3149	1/1	0.95	0.05	52,52,52,52	0
56	MG	1a	1771	1/1	0.95	0.07	45,45,45,45	0
56	MG	2A	3401	1/1	0.95	0.28	46,46,46,46	0
56	MG	2a	3136	1/1	0.95	0.11	70,70,70,70	0
56	MG	1A	3256	1/1	0.95	0.07	30,30,30,30	0
56	MG	1A	3572	1/1	0.95	0.28	33,33,33,33	0
56	MG	10	104	1/1	0.95	0.06	29,29,29,29	0
56	MG	2a	3144	1/1	0.95	0.06	74,74,74,74	0
56	MG	1A	3703	1/1	0.95	0.06	10,10,10,10	0
56	MG	2a	3147	1/1	0.95	0.10	71,71,71,71	0
56	MG	11	101	1/1	0.95	0.10	30,30,30,30	0
56	MG	1A	3471	1/1	0.95	0.05	34,34,34,34	0
56	MG	2A	3412	1/1	0.95	0.08	48,48,48,48	0
56	MG	2a	3151	1/1	0.95	0.06	50,50,50,50	0
56	MG	2a	3152	1/1	0.95	0.12	61,61,61,61	0
56	MG	1A	3399	1/1	0.95	0.07	37,37,37,37	0
56	MG	1A	3864	1/1	0.95	0.20	23,23,23,23	0
56	MG	2A	3743	1/1	0.95	0.12	51,51,51,51	0
56	MG	1a	1783	1/1	0.95	0.05	38,38,38,38	0
56	MG	2a	3159	1/1	0.95	0.06	64,64,64,64	0
56	MG	1A	3475	1/1	0.95	0.12	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3578	1/1	0.95	0.07	32,32,32,32	0
56	MG	2A	3748	1/1	0.95	0.07	48,48,48,48	0
56	MG	2A	3163	1/1	0.95	0.16	29,29,29,29	0
56	MG	1A	3715	1/1	0.95	0.07	38,38,38,38	0
56	MG	2A	3166	1/1	0.95	0.14	35,35,35,35	0
56	MG	2A	3167	1/1	0.95	0.05	39,39,39,39	0
56	MG	16	102	1/1	0.95	0.13	47,47,47,47	0
56	MG	2A	3169	1/1	0.95	0.13	37,37,37,37	0
56	MG	2A	3760	1/1	0.95	0.06	57,57,57,57	0
56	MG	1a	1788	1/1	0.95	0.06	65,65,65,65	0
56	MG	2A	3427	1/1	0.95	0.23	53,53,53,53	0
56	MG	1a	1789	1/1	0.95	0.07	66,66,66,66	0
56	MG	17	101	1/1	0.95	0.07	29,29,29,29	0
56	MG	2a	3178	1/1	0.95	0.08	42,42,42,42	0
56	MG	1A	3716	1/1	0.95	0.06	43,43,43,43	0
56	MG	1A	3019	1/1	0.95	0.08	30,30,30,30	0
56	MG	18	103	1/1	0.95	0.13	26,26,26,26	0
56	MG	1A	4060	1/1	0.95	0.09	51,51,51,51	0
56	MG	2a	3184	1/1	0.95	0.16	34,34,34,34	0
56	MG	2A	3437	1/1	0.95	0.09	42,42,42,42	0
56	MG	2A	3772	1/1	0.95	0.12	52,52,52,52	0
56	MG	19	101	1/1	0.95	0.15	47,47,47,47	0
56	MG	2A	3441	1/1	0.95	0.47	39,39,39,39	0
56	MG	1a	1799	1/1	0.95	0.07	54,54,54,54	0
56	MG	1A	3721	1/1	0.95	0.09	56,56,56,56	0
56	MG	1A	3401	1/1	0.95	0.10	30,30,30,30	0
56	MG	1a	1803	1/1	0.95	0.08	48,48,48,48	0
56	MG	1A	4064	1/1	0.95	0.09	54,54,54,54	0
56	MG	1A	4065	1/1	0.95	0.06	29,29,29,29	0
56	MG	2A	3783	1/1	0.95	0.15	59,59,59,59	0
56	MG	1A	3063	1/1	0.95	0.07	23,23,23,23	0
56	MG	2a	3198	1/1	0.95	0.16	52,52,52,52	0
56	MG	2A	3785	1/1	0.95	0.07	56,56,56,56	0
56	MG	1A	3213	1/1	0.95	0.08	32,32,32,32	0
56	MG	1A	3880	1/1	0.95	0.10	14,14,14,14	0
56	MG	1a	1611	1/1	0.95	0.09	50,50,50,50	0
56	MG	2A	3454	1/1	0.95	0.27	52,52,52,52	0
56	MG	2A	3792	1/1	0.95	0.08	63,63,63,63	0
56	MG	1A	4069	1/1	0.95	0.11	27,27,27,27	0
56	MG	1A	3585	1/1	0.95	0.10	35,35,35,35	0
56	MG	1a	1822	1/1	0.95	0.11	58,58,58,58	0
56	MG	2A	3459	1/1	0.95	0.21	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3586	1/1	0.95	0.14	39,39,39,39	0
56	MG	1A	3404	1/1	0.95	0.12	34,34,34,34	0
56	MG	2A	3464	1/1	0.95	0.21	53,53,53,53	0
56	MG	1A	3405	1/1	0.95	0.07	35,35,35,35	0
56	MG	2A	3466	1/1	0.95	0.25	39,39,39,39	0
56	MG	1a	1619	1/1	0.95	0.07	43,43,43,43	0
56	MG	1a	1833	1/1	0.95	0.17	39,39,39,39	0
56	MG	1a	1620	1/1	0.95	0.21	40,40,40,40	0
56	MG	2A	3820	1/1	0.95	0.05	52,52,52,52	0
56	MG	2A	3821	1/1	0.95	0.06	61,61,61,61	0
56	MG	1A	4082	1/1	0.95	0.06	31,31,31,31	0
56	MG	1A	3330	1/1	0.95	0.07	42,42,42,42	0
56	MG	1A	3214	1/1	0.95	0.15	32,32,32,32	0
56	MG	2A	3207	1/1	0.95	0.19	44,44,44,44	0
56	MG	1A	3332	1/1	0.95	0.05	34,34,34,34	0
56	MG	1A	3889	1/1	0.95	0.05	43,43,43,43	0
56	MG	2A	3829	1/1	0.95	0.08	34,34,34,34	0
56	MG	1A	3409	1/1	0.95	0.16	36,36,36,36	0
56	MG	1A	3737	1/1	0.95	0.11	30,30,30,30	0
56	MG	1A	3738	1/1	0.95	0.06	31,31,31,31	0
56	MG	1a	1629	1/1	0.95	0.30	41,41,41,41	0
56	MG	2f	201	1/1	0.95	0.08	48,48,48,48	0
56	MG	1A	4093	1/1	0.95	0.11	45,45,45,45	0
56	MG	2A	3484	1/1	0.95	0.14	40,40,40,40	0
56	MG	1A	3492	1/1	0.95	0.07	43,43,43,43	0
56	MG	1A	3745	1/1	0.95	0.11	41,41,41,41	0
56	MG	1A	3747	1/1	0.95	0.09	9,9,9,9	0
56	MG	2l	202	1/1	0.95	0.07	50,50,50,50	0
56	MG	2l	204	1/1	0.95	0.06	36,36,36,36	0
56	MG	1A	3011	1/1	0.95	0.10	28,28,28,28	0
56	MG	1A	3598	1/1	0.95	0.12	20,20,20,20	0
56	MG	2A	3491	1/1	0.95	0.27	48,48,48,48	0
56	MG	2A	3843	1/1	0.95	0.15	35,35,35,35	0
56	MG	1A	3053	1/1	0.95	0.05	25,25,25,25	0
56	MG	1a	1638	1/1	0.95	0.21	35,35,35,35	0
56	MG	1A	4104	1/1	0.95	0.15	24,24,24,24	0
56	MG	1A	4106	1/1	0.95	0.15	28,28,28,28	0
56	MG	1a	1641	1/1	0.95	0.32	49,49,49,49	0
56	MG	1a	1642	1/1	0.95	0.18	49,49,49,49	0
56	MG	1A	4109	1/1	0.95	0.23	31,31,31,31	0
56	MG	1A	3752	1/1	0.95	0.08	16,16,16,16	0
56	MG	1A	3122	1/1	0.95	0.18	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3337	1/1	0.95	0.12	42,42,42,42	0
56	MG	2A	3237	1/1	0.95	0.06	41,41,41,41	0
56	MG	2A	3859	1/1	0.95	0.06	39,39,39,39	0
56	MG	1A	3497	1/1	0.95	0.07	44,44,44,44	0
56	MG	1a	1651	1/1	0.95	0.10	45,45,45,45	0
56	MG	1A	3124	1/1	0.95	0.22	28,28,28,28	0
56	MG	1A	4119	1/1	0.95	0.06	21,21,21,21	0
56	MG	1A	3219	1/1	0.95	0.13	39,39,39,39	0
56	MG	1A	3502	1/1	0.95	0.05	33,33,33,33	0
58	K	1A	4137	1/1	0.95	0.07	49,49,49,49	0
56	MG	1y	101	1/1	0.95	0.05	30,30,30,30	0
56	MG	1A	3079	1/1	0.96	0.18	28,28,28,28	0
56	MG	2A	3099	1/1	0.96	0.11	39,39,39,39	0
56	MG	1Z	301	1/1	0.96	0.15	34,34,34,34	0
56	MG	2A	3576	1/1	0.96	0.06	33,33,33,33	0
56	MG	1A	3236	1/1	0.96	0.15	26,26,26,26	0
56	MG	2E	305	1/1	0.96	0.13	37,37,37,37	0
56	MG	1Z	303	1/1	0.96	0.07	26,26,26,26	0
56	MG	1A	4055	1/1	0.96	0.05	37,37,37,37	0
56	MG	1A	3097	1/1	0.96	0.09	35,35,35,35	0
56	MG	1A	4059	1/1	0.96	0.05	20,20,20,20	0
56	MG	1A	3887	1/1	0.96	0.13	29,29,29,29	0
56	MG	2A	3588	1/1	0.96	0.05	36,36,36,36	0
56	MG	1A	3155	1/1	0.96	0.07	28,28,28,28	0
56	MG	2A	3590	1/1	0.96	0.09	52,52,52,52	0
56	MG	2A	3324	1/1	0.96	0.18	50,50,50,50	0
56	MG	1A	3241	1/1	0.96	0.12	27,27,27,27	0
56	MG	2A	3110	1/1	0.96	0.11	30,30,30,30	0
56	MG	1A	3437	1/1	0.96	0.15	26,26,26,26	0
56	MG	2P	202	1/1	0.96	0.06	48,48,48,48	0
56	MG	2A	3595	1/1	0.96	0.11	34,34,34,34	0
56	MG	1A	3891	1/1	0.96	0.09	18,18,18,18	0
56	MG	1A	3028	1/1	0.96	0.06	25,25,25,25	0
56	MG	1A	3520	1/1	0.96	0.19	37,37,37,37	0
56	MG	2A	3332	1/1	0.96	0.09	33,33,33,33	0
56	MG	2R	3002	1/1	0.96	0.15	46,46,46,46	0
56	MG	2A	3601	1/1	0.96	0.07	49,49,49,49	0
56	MG	1A	3895	1/1	0.96	0.09	41,41,41,41	0
56	MG	15	101	1/1	0.96	0.27	31,31,31,31	0
56	MG	1A	3440	1/1	0.96	0.16	33,33,33,33	0
56	MG	2A	3336	1/1	0.96	0.21	49,49,49,49	0
56	MG	2A	3607	1/1	0.96	0.11	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1775	1/1	0.96	0.05	26,26,26,26	0
56	MG	2V	201	1/1	0.96	0.21	56,56,56,56	0
56	MG	1A	4071	1/1	0.96	0.11	38,38,38,38	0
56	MG	2A	3610	1/1	0.96	0.07	28,28,28,28	0
56	MG	1A	3157	1/1	0.96	0.12	21,21,21,21	0
56	MG	17	102	1/1	0.96	0.11	37,37,37,37	0
56	MG	17	104	1/1	0.96	0.05	21,21,21,21	0
56	MG	2A	3342	1/1	0.96	0.08	42,42,42,42	0
56	MG	28	101	1/1	0.96	0.17	42,42,42,42	0
56	MG	29	101	1/1	0.96	0.14	37,37,37,37	0
56	MG	1a	1781	1/1	0.96	0.05	64,64,64,64	0
56	MG	1A	4074	1/1	0.96	0.06	27,27,27,27	0
56	MG	2A	3618	1/1	0.96	0.06	44,44,44,44	0
56	MG	1A	3004	1/1	0.96	0.04	17,17,17,17	0
56	MG	1A	3443	1/1	0.96	0.09	27,27,27,27	0
56	MG	1A	4077	1/1	0.96	0.10	46,46,46,46	0
56	MG	1A	4079	1/1	0.96	0.09	30,30,30,30	0
56	MG	1A	3246	1/1	0.96	0.12	22,22,22,22	0
56	MG	1A	3770	1/1	0.96	0.07	34,34,34,34	0
56	MG	1A	3363	1/1	0.96	0.08	36,36,36,36	0
56	MG	2A	3352	1/1	0.96	0.10	36,36,36,36	0
56	MG	2A	3353	1/1	0.96	0.12	35,35,35,35	0
56	MG	1A	3635	1/1	0.96	0.05	29,29,29,29	0
56	MG	2A	3356	1/1	0.96	0.23	39,39,39,39	0
56	MG	1A	3446	1/1	0.96	0.18	35,35,35,35	0
56	MG	1A	3530	1/1	0.96	0.17	26,26,26,26	0
56	MG	1A	3304	1/1	0.96	0.16	42,42,42,42	0
56	MG	1a	1609	1/1	0.96	0.09	41,41,41,41	0
56	MG	1A	3532	1/1	0.96	0.11	39,39,39,39	0
56	MG	2A	3362	1/1	0.96	0.10	37,37,37,37	0
56	MG	2A	3363	1/1	0.96	0.14	52,52,52,52	0
56	MG	1a	1798	1/1	0.96	0.05	48,48,48,48	0
56	MG	1A	4090	1/1	0.96	0.12	32,32,32,32	0
56	MG	1A	3780	1/1	0.96	0.06	36,36,36,36	0
56	MG	1a	1614	1/1	0.96	0.13	46,46,46,46	0
56	MG	1A	3641	1/1	0.96	0.06	44,44,44,44	0
56	MG	2A	3369	1/1	0.96	0.09	46,46,46,46	0
56	MG	1A	3915	1/1	0.96	0.06	26,26,26,26	0
56	MG	2a	3032	1/1	0.96	0.14	40,40,40,40	0
56	MG	1a	1617	1/1	0.96	0.05	36,36,36,36	0
56	MG	1A	3642	1/1	0.96	0.07	29,29,29,29	0
56	MG	1A	3207	1/1	0.96	0.14	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3645	1/1	0.96	0.05	30,30,30,30	0
56	MG	1A	3535	1/1	0.96	0.13	20,20,20,20	0
56	MG	1A	3923	1/1	0.96	0.11	32,32,32,32	0
56	MG	2A	3652	1/1	0.96	0.12	35,35,35,35	0
56	MG	1A	3248	1/1	0.96	0.05	36,36,36,36	0
56	MG	1a	1820	1/1	0.96	0.06	51,51,51,51	0
56	MG	1A	3648	1/1	0.96	0.09	27,27,27,27	0
56	MG	1A	3932	1/1	0.96	0.06	41,41,41,41	0
56	MG	1a	1824	1/1	0.96	0.05	47,47,47,47	0
56	MG	2A	3658	1/1	0.96	0.09	64,64,64,64	0
56	MG	1A	3933	1/1	0.96	0.06	42,42,42,42	0
56	MG	1a	1826	1/1	0.96	0.06	66,66,66,66	0
56	MG	1a	1827	1/1	0.96	0.07	51,51,51,51	0
56	MG	1A	4111	1/1	0.96	0.18	59,59,59,59	0
56	MG	2A	3164	1/1	0.96	0.13	36,36,36,36	0
56	MG	2A	3664	1/1	0.96	0.08	47,47,47,47	0
56	MG	1A	3249	1/1	0.96	0.10	23,23,23,23	0
56	MG	1a	1830	1/1	0.96	0.09	49,49,49,49	0
56	MG	1A	3793	1/1	0.96	0.07	23,23,23,23	0
56	MG	1A	4115	1/1	0.96	0.13	26,26,26,26	0
56	MG	1A	3054	1/1	0.96	0.08	28,28,28,28	0
56	MG	1a	1632	1/1	0.96	0.08	25,25,25,25	0
56	MG	2A	3395	1/1	0.96	0.14	24,24,24,24	0
56	MG	1A	3653	1/1	0.96	0.06	29,29,29,29	0
56	MG	2A	3673	1/1	0.96	0.07	52,52,52,52	0
56	MG	1A	3940	1/1	0.96	0.05	42,42,42,42	0
56	MG	1A	3942	1/1	0.96	0.06	52,52,52,52	0
56	MG	2A	3676	1/1	0.96	0.10	36,36,36,36	0
56	MG	2A	3399	1/1	0.96	0.26	45,45,45,45	0
56	MG	1A	3085	1/1	0.96	0.09	25,25,25,25	0
56	MG	1l	201	1/1	0.96	0.17	30,30,30,30	0
56	MG	1A	3312	1/1	0.96	0.18	40,40,40,40	0
56	MG	1A	3210	1/1	0.96	0.08	36,36,36,36	0
56	MG	1q	201	1/1	0.96	0.09	39,39,39,39	0
56	MG	1A	3376	1/1	0.96	0.19	32,32,32,32	0
56	MG	1A	3660	1/1	0.96	0.09	9,9,9,9	0
56	MG	2A	3687	1/1	0.96	0.06	46,46,46,46	0
56	MG	2a	3073	1/1	0.96	0.13	49,49,49,49	0
56	MG	2A	3410	1/1	0.96	0.26	43,43,43,43	0
56	MG	1A	4132	1/1	0.96	0.18	24,24,24,24	0
56	MG	1A	3316	1/1	0.96	0.07	27,27,27,27	0
56	MG	1A	3379	1/1	0.96	0.14	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1644	1/1	0.96	0.05	46,46,46,46	0
56	MG	1A	3545	1/1	0.96	0.06	27,27,27,27	0
56	MG	1A	3954	1/1	0.96	0.05	60,60,60,60	0
56	MG	2A	3417	1/1	0.96	0.05	35,35,35,35	0
56	MG	1A	3163	1/1	0.96	0.06	22,22,22,22	0
56	MG	1A	3088	1/1	0.96	0.08	20,20,20,20	0
56	MG	2A	3701	1/1	0.96	0.06	32,32,32,32	0
56	MG	2a	3086	1/1	0.96	0.08	37,37,37,37	0
56	MG	1A	3957	1/1	0.96	0.08	37,37,37,37	0
56	MG	1A	3549	1/1	0.96	0.15	26,26,26,26	0
56	MG	2A	3705	1/1	0.96	0.08	45,45,45,45	0
56	MG	2A	3195	1/1	0.96	0.05	35,35,35,35	0
56	MG	1A	3550	1/1	0.96	0.24	26,26,26,26	0
56	MG	1A	3384	1/1	0.96	0.26	22,22,22,22	0
56	MG	2A	3709	1/1	0.96	0.09	42,42,42,42	0
56	MG	1A	3963	1/1	0.96	0.08	44,44,44,44	0
56	MG	2A	3426	1/1	0.96	0.23	33,33,33,33	0
56	MG	1A	3106	1/1	0.96	0.12	17,17,17,17	0
56	MG	1A	3066	1/1	0.96	0.08	36,36,36,36	0
56	MG	1A	3816	1/1	0.96	0.06	28,28,28,28	0
56	MG	2A	3717	1/1	0.96	0.04	42,42,42,42	0
56	MG	2A	3718	1/1	0.96	0.09	42,42,42,42	0
56	MG	1A	3172	1/1	0.96	0.08	23,23,23,23	0
56	MG	1A	3109	1/1	0.96	0.09	25,25,25,25	0
56	MG	1A	3467	1/1	0.96	0.17	44,44,44,44	0
56	MG	1A	3559	1/1	0.96	0.17	22,22,22,22	0
56	MG	2A	3436	1/1	0.96	0.05	35,35,35,35	0
56	MG	2a	3108	1/1	0.96	0.18	40,40,40,40	0
56	MG	2a	3109	1/1	0.96	0.09	46,46,46,46	0
56	MG	1A	3261	1/1	0.96	0.06	28,28,28,28	0
56	MG	2A	3209	1/1	0.96	0.15	39,39,39,39	0
56	MG	2A	3210	1/1	0.96	0.10	50,50,50,50	0
56	MG	2A	3442	1/1	0.96	0.08	44,44,44,44	0
56	MG	2A	3728	1/1	0.96	0.20	54,54,54,54	0
56	MG	1A	3562	1/1	0.96	0.18	25,25,25,25	0
56	MG	2A	3730	1/1	0.96	0.07	39,39,39,39	0
56	MG	1y	102	1/1	0.96	0.09	40,40,40,40	0
56	MG	2A	3732	1/1	0.96	0.08	35,35,35,35	0
56	MG	2a	3121	1/1	0.96	0.22	48,48,48,48	0
56	MG	1B	226	1/1	0.96	0.06	26,26,26,26	0
56	MG	1A	3027	1/1	0.96	0.15	17,17,17,17	0
56	MG	1B	228	1/1	0.96	0.13	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3976	1/1	0.96	0.06	61,61,61,61	0
56	MG	1A	3393	1/1	0.96	0.18	29,29,29,29	0
56	MG	1A	3396	1/1	0.96	0.10	24,24,24,24	0
56	MG	1A	3473	1/1	0.96	0.06	38,38,38,38	0
56	MG	2A	3452	1/1	0.96	0.09	38,38,38,38	0
56	MG	1A	3693	1/1	0.96	0.06	9,9,9,9	0
56	MG	2a	3131	1/1	0.96	0.16	46,46,46,46	0
56	MG	2a	3132	1/1	0.96	0.10	53,53,53,53	0
56	MG	1A	3264	1/1	0.96	0.08	40,40,40,40	0
56	MG	1A	3832	1/1	0.96	0.06	38,38,38,38	0
56	MG	2A	3225	1/1	0.96	0.11	48,48,48,48	0
56	MG	2A	3747	1/1	0.96	0.07	56,56,56,56	0
56	MG	2a	3139	1/1	0.96	0.11	68,68,68,68	0
56	MG	1A	3076	1/1	0.96	0.15	33,33,33,33	0
56	MG	1a	1676	1/1	0.96	0.18	46,46,46,46	0
56	MG	2A	3012	1/1	0.96	0.07	38,38,38,38	0
56	MG	2A	3752	1/1	0.96	0.08	59,59,59,59	0
56	MG	1A	3178	1/1	0.96	0.10	41,41,41,41	0
56	MG	2A	3755	1/1	0.96	0.07	76,76,76,76	0
56	MG	1A	3574	1/1	0.96	0.04	25,25,25,25	0
56	MG	1D	308	1/1	0.96	0.06	25,25,25,25	0
56	MG	1D	309	1/1	0.96	0.10	34,34,34,34	0
56	MG	1D	310	1/1	0.96	0.09	29,29,29,29	0
56	MG	1A	3328	1/1	0.96	0.07	36,36,36,36	0
56	MG	2A	3762	1/1	0.96	0.06	41,41,41,41	0
56	MG	1A	3329	1/1	0.96	0.05	33,33,33,33	0
56	MG	2A	3470	1/1	0.96	0.18	21,21,21,21	0
56	MG	2A	3472	1/1	0.96	0.16	30,30,30,30	0
56	MG	2a	3158	1/1	0.96	0.07	67,67,67,67	0
56	MG	1A	3136	1/1	0.96	0.08	31,31,31,31	0
56	MG	1A	3270	1/1	0.96	0.25	39,39,39,39	0
56	MG	2A	3768	1/1	0.96	0.07	61,61,61,61	0
56	MG	1A	3580	1/1	0.96	0.07	15,15,15,15	0
56	MG	1A	3112	1/1	0.96	0.08	39,39,39,39	0
56	MG	1A	3706	1/1	0.96	0.05	40,40,40,40	0
56	MG	2A	3029	1/1	0.96	0.07	38,38,38,38	0
56	MG	2a	3167	1/1	0.96	0.05	67,67,67,67	0
56	MG	1E	307	1/1	0.96	0.10	35,35,35,35	0
56	MG	1A	3709	1/1	0.96	0.10	27,27,27,27	0
56	MG	1A	3272	1/1	0.96	0.06	13,13,13,13	0
56	MG	1A	3181	1/1	0.96	0.05	24,24,24,24	0
56	MG	1A	4000	1/1	0.96	0.09	15,15,15,15	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1F	306	1/1	0.96	0.19	17,17,17,17	0
56	MG	1A	3486	1/1	0.96	0.20	39,39,39,39	0
56	MG	1A	4002	1/1	0.96	0.08	11,11,11,11	0
56	MG	1A	3113	1/1	0.96	0.18	36,36,36,36	0
56	MG	1G	201	1/1	0.96	0.15	28,28,28,28	0
56	MG	1A	3146	1/1	0.96	0.22	25,25,25,25	0
56	MG	1A	4006	1/1	0.96	0.05	76,76,76,76	0
56	MG	1A	3851	1/1	0.96	0.09	43,43,43,43	0
56	MG	2a	3183	1/1	0.96	0.08	41,41,41,41	0
56	MG	1A	3490	1/1	0.96	0.07	28,28,28,28	0
56	MG	2A	3494	1/1	0.96	0.16	31,31,31,31	0
56	MG	2A	3496	1/1	0.96	0.08	52,52,52,52	0
56	MG	1A	3338	1/1	0.96	0.12	35,35,35,35	0
56	MG	1A	3854	1/1	0.96	0.09	54,54,54,54	0
56	MG	2A	3795	1/1	0.96	0.08	39,39,39,39	0
56	MG	1A	3856	1/1	0.96	0.10	22,22,22,22	0
56	MG	2A	3501	1/1	0.96	0.06	57,57,57,57	0
56	MG	2A	3502	1/1	0.96	0.06	37,37,37,37	0
56	MG	2A	3799	1/1	0.96	0.07	48,48,48,48	0
56	MG	1A	3339	1/1	0.96	0.10	47,47,47,47	0
56	MG	2A	3807	1/1	0.96	0.06	64,64,64,64	0
56	MG	2a	3196	1/1	0.96	0.11	63,63,63,63	0
56	MG	1A	3858	1/1	0.96	0.07	30,30,30,30	0
56	MG	1A	3077	1/1	0.96	0.09	18,18,18,18	0
56	MG	1A	3594	1/1	0.96	0.08	36,36,36,36	0
56	MG	2A	3266	1/1	0.96	0.08	37,37,37,37	0
56	MG	1N	207	1/1	0.96	0.07	31,31,31,31	0
56	MG	2A	3055	1/1	0.96	0.05	45,45,45,45	0
56	MG	2A	3818	1/1	0.96	0.09	47,47,47,47	0
56	MG	2A	3819	1/1	0.96	0.09	47,47,47,47	0
56	MG	1A	4022	1/1	0.96	0.10	60,60,60,60	0
56	MG	1a	1714	1/1	0.96	0.18	44,44,44,44	0
56	MG	1O	202	1/1	0.96	0.15	37,37,37,37	0
56	MG	2A	3059	1/1	0.96	0.13	37,37,37,37	0
56	MG	1A	3341	1/1	0.96	0.22	38,38,38,38	0
56	MG	2a	3212	1/1	0.96	0.23	38,38,38,38	0
56	MG	1A	3279	1/1	0.96	0.10	39,39,39,39	0
56	MG	1A	3280	1/1	0.96	0.06	34,34,34,34	0
56	MG	1A	3228	1/1	0.96	0.08	55,55,55,55	0
56	MG	1A	3346	1/1	0.96	0.07	38,38,38,38	0
56	MG	1A	3033	1/1	0.96	0.24	28,28,28,28	0
56	MG	1R	202	1/1	0.96	0.13	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1R	204	1/1	0.96	0.16	32,32,32,32	0
56	MG	2A	3068	1/1	0.96	0.18	24,24,24,24	0
56	MG	2A	3527	1/1	0.96	0.09	57,57,57,57	0
56	MG	2a	3222	1/1	0.96	0.17	59,59,59,59	0
56	MG	1A	3286	1/1	0.96	0.11	33,33,33,33	0
56	MG	1A	4030	1/1	0.96	0.05	62,62,62,62	0
56	MG	1A	3606	1/1	0.96	0.09	38,38,38,38	0
56	MG	2a	3226	1/1	0.96	0.13	44,44,44,44	0
56	MG	1A	3189	1/1	0.96	0.19	23,23,23,23	0
56	MG	1A	4033	1/1	0.96	0.06	42,42,42,42	0
56	MG	2A	3840	1/1	0.96	0.05	47,47,47,47	0
56	MG	1A	3872	1/1	0.96	0.05	19,19,19,19	0
56	MG	2A	3535	1/1	0.96	0.07	43,43,43,43	0
56	MG	1A	3609	1/1	0.96	0.07	20,20,20,20	0
56	MG	1A	3231	1/1	0.96	0.10	24,24,24,24	0
56	MG	1A	3094	1/1	0.96	0.14	22,22,22,22	0
56	MG	2A	3079	1/1	0.96	0.07	26,26,26,26	0
56	MG	2A	3541	1/1	0.96	0.07	38,38,38,38	0
56	MG	1A	3507	1/1	0.96	0.07	18,18,18,18	0
56	MG	2A	3543	1/1	0.96	0.09	31,31,31,31	0
56	MG	2A	3544	1/1	0.96	0.05	50,50,50,50	0
56	MG	1A	3879	1/1	0.96	0.05	16,16,16,16	0
56	MG	2A	3546	1/1	0.96	0.11	31,31,31,31	0
56	MG	2A	3297	1/1	0.96	0.06	47,47,47,47	0
56	MG	2A	3082	1/1	0.96	0.12	36,36,36,36	0
56	MG	2q	202	1/1	0.96	0.07	52,52,52,52	0
56	MG	2A	3550	1/1	0.96	0.17	34,34,34,34	0
56	MG	2A	3299	1/1	0.96	0.05	44,44,44,44	0
56	MG	1A	4046	1/1	0.96	0.05	24,24,24,24	0
56	MG	2A	3556	1/1	0.96	0.06	31,31,31,31	0
56	MG	2A	3557	1/1	0.96	0.10	55,55,55,55	0
56	MG	2A	3558	1/1	0.96	0.06	27,27,27,27	0
56	MG	2B	203	1/1	0.96	0.09	34,34,34,34	0
56	MG	2A	3084	1/1	0.96	0.13	46,46,46,46	0
56	MG	2B	205	1/1	0.96	0.10	52,52,52,52	0
56	MG	2x	105	1/1	0.96	0.13	43,43,43,43	0
56	MG	1W	204	1/1	0.96	0.09	28,28,28,28	0
56	MG	1A	3613	1/1	0.96	0.08	16,16,16,16	0
56	MG	1W	207	1/1	0.96	0.08	15,15,15,15	0
56	MG	1A	3352	1/1	0.96	0.14	37,37,37,37	0
56	MG	1a	1741	1/1	0.96	0.21	36,36,36,36	0
56	MG	2B	211	1/1	0.96	0.19	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4049	1/1	0.96	0.07	31,31,31,31	0
56	MG	2B	213	1/1	0.96	0.09	56,56,56,56	0
56	MG	1Y	201	1/1	0.96	0.13	47,47,47,47	0
56	MG	1A	3509	1/1	0.96	0.22	25,25,25,25	0
56	MG	2A	3311	1/1	0.96	0.10	49,49,49,49	0
56	MG	1A	4051	1/1	0.96	0.12	13,13,13,13	0
56	MG	1A	3151	1/1	0.96	0.12	45,45,45,45	0
56	MG	2D	301	1/1	0.96	0.06	27,27,27,27	0
59	ZN	2n	501	1/1	0.96	0.07	84,84,84,84	0
56	MG	1A	3590	1/1	0.97	0.04	15,15,15,15	0
56	MG	2A	3740	1/1	0.97	0.05	42,42,42,42	0
56	MG	1A	3686	1/1	0.97	0.06	32,32,32,32	0
56	MG	2A	3523	1/1	0.97	0.05	28,28,28,28	0
56	MG	1A	3909	1/1	0.97	0.06	33,33,33,33	0
56	MG	1A	3910	1/1	0.97	0.05	67,67,67,67	0
56	MG	2A	3526	1/1	0.97	0.06	30,30,30,30	0
56	MG	2A	3328	1/1	0.97	0.07	33,33,33,33	0
56	MG	1A	3382	1/1	0.97	0.06	31,31,31,31	0
56	MG	1A	3802	1/1	0.97	0.13	52,52,52,52	0
56	MG	1A	3237	1/1	0.97	0.07	46,46,46,46	0
56	MG	1A	3282	1/1	0.97	0.12	34,34,34,34	0
56	MG	1A	3333	1/1	0.97	0.06	28,28,28,28	0
56	MG	1A	3916	1/1	0.97	0.05	56,56,56,56	0
56	MG	1A	3387	1/1	0.97	0.07	22,22,22,22	0
56	MG	1A	3918	1/1	0.97	0.07	46,46,46,46	0
56	MG	1A	3051	1/1	0.97	0.12	40,40,40,40	0
56	MG	1A	4057	1/1	0.97	0.05	34,34,34,34	0
56	MG	1A	4058	1/1	0.97	0.04	34,34,34,34	0
56	MG	1A	3025	1/1	0.97	0.07	38,38,38,38	0
56	MG	1A	3695	1/1	0.97	0.06	25,25,25,25	0
56	MG	1A	3158	1/1	0.97	0.47	24,24,24,24	0
56	MG	1A	3925	1/1	0.97	0.05	12,12,12,12	0
56	MG	2A	3158	1/1	0.97	0.10	60,60,60,60	0
56	MG	1A	3812	1/1	0.97	0.05	18,18,18,18	0
56	MG	1P	201	1/1	0.97	0.17	19,19,19,19	0
56	MG	1A	3927	1/1	0.97	0.04	48,48,48,48	0
56	MG	1A	3205	1/1	0.97	0.06	26,26,26,26	0
56	MG	1Q	203	1/1	0.97	0.05	45,45,45,45	0
56	MG	1A	3101	1/1	0.97	0.17	21,21,21,21	0
56	MG	1A	3602	1/1	0.97	0.05	26,26,26,26	0
56	MG	1A	3395	1/1	0.97	0.10	29,29,29,29	0
56	MG	1x	111	1/1	0.97	0.14	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3559	1/1	0.97	0.06	33,33,33,33	0
56	MG	2A	3354	1/1	0.97	0.08	45,45,45,45	0
56	MG	2A	3777	1/1	0.97	0.06	58,58,58,58	0
56	MG	2a	3079	1/1	0.97	0.10	40,40,40,40	0
56	MG	1R	203	1/1	0.97	0.06	32,32,32,32	0
56	MG	1A	3605	1/1	0.97	0.12	29,29,29,29	0
56	MG	1A	3456	1/1	0.97	0.12	31,31,31,31	0
56	MG	1A	3010	1/1	0.97	0.11	20,20,20,20	0
56	MG	2A	3782	1/1	0.97	0.15	50,50,50,50	0
56	MG	1A	3608	1/1	0.97	0.08	26,26,26,26	0
56	MG	1A	3941	1/1	0.97	0.04	46,46,46,46	0
56	MG	1A	3104	1/1	0.97	0.06	25,25,25,25	0
56	MG	1A	3527	1/1	0.97	0.19	27,27,27,27	0
56	MG	2a	3089	1/1	0.97	0.09	46,46,46,46	0
56	MG	1U	203	1/1	0.97	0.21	22,22,22,22	0
56	MG	1A	3944	1/1	0.97	0.05	41,41,41,41	0
56	MG	1A	4081	1/1	0.97	0.06	31,31,31,31	0
56	MG	1A	3291	1/1	0.97	0.10	44,44,44,44	0
56	MG	1A	3712	1/1	0.97	0.07	28,28,28,28	0
56	MG	2A	3574	1/1	0.97	0.06	40,40,40,40	0
56	MG	1A	4084	1/1	0.97	0.05	32,32,32,32	0
56	MG	1A	3162	1/1	0.97	0.20	25,25,25,25	0
56	MG	2A	3007	1/1	0.97	0.08	45,45,45,45	0
56	MG	2A	3008	1/1	0.97	0.08	30,30,30,30	0
56	MG	1W	203	1/1	0.97	0.16	40,40,40,40	0
56	MG	2A	3800	1/1	0.97	0.06	35,35,35,35	0
56	MG	1A	3461	1/1	0.97	0.11	19,19,19,19	0
56	MG	2A	3189	1/1	0.97	0.06	39,39,39,39	0
56	MG	1A	3828	1/1	0.97	0.07	37,37,37,37	0
56	MG	1W	206	1/1	0.97	0.16	23,23,23,23	0
56	MG	1A	3083	1/1	0.97	0.08	23,23,23,23	0
56	MG	2A	3015	1/1	0.97	0.11	38,38,38,38	0
56	MG	1X	101	1/1	0.97	0.05	26,26,26,26	0
56	MG	1A	3952	1/1	0.97	0.04	29,29,29,29	0
56	MG	1A	3041	1/1	0.97	0.12	20,20,20,20	0
56	MG	2A	3019	1/1	0.97	0.04	35,35,35,35	0
56	MG	2a	3113	1/1	0.97	0.07	49,49,49,49	0
56	MG	2A	3383	1/1	0.97	0.13	35,35,35,35	0
56	MG	1A	3717	1/1	0.97	0.06	27,27,27,27	0
56	MG	2A	3822	1/1	0.97	0.04	37,37,37,37	0
56	MG	2A	3597	1/1	0.97	0.05	66,66,66,66	0
56	MG	1A	3833	1/1	0.97	0.06	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	3119	1/1	0.97	0.14	44,44,44,44	0
56	MG	2A	3201	1/1	0.97	0.08	49,49,49,49	0
56	MG	1A	4094	1/1	0.97	0.09	38,38,38,38	0
56	MG	1A	3345	1/1	0.97	0.26	20,20,20,20	0
56	MG	2A	3602	1/1	0.97	0.07	20,20,20,20	0
56	MG	1A	3619	1/1	0.97	0.05	17,17,17,17	0
56	MG	1A	3958	1/1	0.97	0.05	30,30,30,30	0
56	MG	2A	3206	1/1	0.97	0.09	45,45,45,45	0
56	MG	1A	3250	1/1	0.97	0.07	31,31,31,31	0
56	MG	1A	3086	1/1	0.97	0.18	30,30,30,30	0
56	MG	2A	3394	1/1	0.97	0.21	34,34,34,34	0
56	MG	1A	4102	1/1	0.97	0.08	26,26,26,26	0
56	MG	1Z	305	1/1	0.97	0.05	32,32,32,32	0
56	MG	10	101	1/1	0.97	0.04	24,24,24,24	0
56	MG	1A	3622	1/1	0.97	0.06	9,9,9,9	0
56	MG	2A	3033	1/1	0.97	0.05	19,19,19,19	0
56	MG	1A	3252	1/1	0.97	0.10	39,39,39,39	0
56	MG	2A	3035	1/1	0.97	0.09	35,35,35,35	0
56	MG	2A	3402	1/1	0.97	0.11	38,38,38,38	0
56	MG	1A	4105	1/1	0.97	0.07	31,31,31,31	0
56	MG	2A	3619	1/1	0.97	0.12	44,44,44,44	0
56	MG	1A	3003	1/1	0.97	0.08	17,17,17,17	0
56	MG	2A	3038	1/1	0.97	0.10	40,40,40,40	0
56	MG	2A	3406	1/1	0.97	0.21	53,53,53,53	0
56	MG	1A	3301	1/1	0.97	0.15	34,34,34,34	0
56	MG	1A	3169	1/1	0.97	0.23	19,19,19,19	0
56	MG	1A	3135	1/1	0.97	0.05	30,30,30,30	0
56	MG	1A	3068	1/1	0.97	0.11	13,13,13,13	0
56	MG	1A	3732	1/1	0.97	0.09	15,15,15,15	0
56	MG	2A	3226	1/1	0.97	0.08	45,45,45,45	0
56	MG	2A	3629	1/1	0.97	0.16	53,53,53,53	0
56	MG	1A	3070	1/1	0.97	0.16	20,20,20,20	0
56	MG	1A	3141	1/1	0.97	0.20	25,25,25,25	0
56	MG	15	102	1/1	0.97	0.12	28,28,28,28	0
56	MG	2A	3862	1/1	0.97	0.05	34,34,34,34	0
56	MG	1A	4117	1/1	0.97	0.11	21,21,21,21	0
56	MG	1a	1739	1/1	0.97	0.09	51,51,51,51	0
56	MG	16	101	1/1	0.97	0.06	32,32,32,32	0
56	MG	1A	3736	1/1	0.97	0.05	45,45,45,45	0
56	MG	2a	3163	1/1	0.97	0.04	62,62,62,62	0
56	MG	1A	3142	1/1	0.97	0.11	17,17,17,17	0
56	MG	1A	3850	1/1	0.97	0.07	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1a	1744	1/1	0.97	0.09	50,50,50,50	0
56	MG	1a	1746	1/1	0.97	0.07	36,36,36,36	0
56	MG	17	103	1/1	0.97	0.07	21,21,21,21	0
56	MG	1A	3015	1/1	0.97	0.06	25,25,25,25	0
56	MG	1A	4124	1/1	0.97	0.05	27,27,27,27	0
56	MG	2a	3171	1/1	0.97	0.07	61,61,61,61	0
56	MG	1A	3739	1/1	0.97	0.07	53,53,53,53	0
56	MG	1A	3741	1/1	0.97	0.07	32,32,32,32	0
56	MG	1A	3221	1/1	0.97	0.10	12,12,12,12	0
56	MG	1A	3981	1/1	0.97	0.06	51,51,51,51	0
56	MG	1A	3855	1/1	0.97	0.06	23,23,23,23	0
56	MG	1A	3479	1/1	0.97	0.09	26,26,26,26	0
56	MG	1a	1758	1/1	0.97	0.10	43,43,43,43	0
56	MG	1A	3262	1/1	0.97	0.24	33,33,33,33	0
56	MG	1A	4136	1/1	0.97	0.10	29,29,29,29	0
56	MG	2A	3440	1/1	0.97	0.17	48,48,48,48	0
56	MG	1A	3144	1/1	0.97	0.21	32,32,32,32	0
56	MG	1A	3419	1/1	0.97	0.08	27,27,27,27	0
56	MG	1A	3315	1/1	0.97	0.17	14,14,14,14	0
56	MG	1a	1764	1/1	0.97	0.07	47,47,47,47	0
56	MG	1a	1608	1/1	0.97	0.25	45,45,45,45	0
56	MG	1A	3421	1/1	0.97	0.05	30,30,30,30	0
56	MG	2A	3073	1/1	0.97	0.10	47,47,47,47	0
56	MG	1a	1768	1/1	0.97	0.10	46,46,46,46	0
56	MG	1a	1610	1/1	0.97	0.12	19,19,19,19	0
56	MG	1A	3485	1/1	0.97	0.17	33,33,33,33	0
56	MG	1A	3991	1/1	0.97	0.11	47,47,47,47	0
56	MG	1A	3073	1/1	0.97	0.05	27,27,27,27	0
56	MG	1A	3487	1/1	0.97	0.15	38,38,38,38	0
56	MG	1A	3423	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3265	1/1	0.97	0.07	30,30,30,30	0
56	MG	1A	3364	1/1	0.97	0.14	38,38,38,38	0
56	MG	2A	3457	1/1	0.97	0.19	39,39,39,39	0
56	MG	2a	3200	1/1	0.97	0.09	56,56,56,56	0
56	MG	1A	3075	1/1	0.97	0.16	22,22,22,22	0
56	MG	1B	217	1/1	0.97	0.05	18,18,18,18	0
56	MG	2A	3460	1/1	0.97	0.14	31,31,31,31	0
56	MG	2A	3270	1/1	0.97	0.07	38,38,38,38	0
56	MG	2A	3085	1/1	0.97	0.04	24,24,24,24	0
56	MG	1A	3870	1/1	0.97	0.05	29,29,29,29	0
56	MG	1A	3649	1/1	0.97	0.06	11,11,11,11	0
56	MG	1A	3021	1/1	0.97	0.04	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2a	3209	1/1	0.97	0.18	46,46,46,46	0
56	MG	1A	3764	1/1	0.97	0.05	58,58,58,58	0
56	MG	1A	3429	1/1	0.97	0.16	19,19,19,19	0
56	MG	2A	3092	1/1	0.97	0.13	44,44,44,44	0
56	MG	1B	223	1/1	0.97	0.10	45,45,45,45	0
56	MG	2U	201	1/1	0.97	0.13	29,29,29,29	0
56	MG	1A	3568	1/1	0.97	0.33	30,30,30,30	0
56	MG	2A	3685	1/1	0.97	0.08	28,28,28,28	0
56	MG	2U	204	1/1	0.97	0.03	37,37,37,37	0
56	MG	1B	225	1/1	0.97	0.06	31,31,31,31	0
56	MG	1A	3149	1/1	0.97	0.06	25,25,25,25	0
56	MG	2A	3688	1/1	0.97	0.13	45,45,45,45	0
56	MG	2Y	201	1/1	0.97	0.10	25,25,25,25	0
56	MG	1a	1791	1/1	0.97	0.06	62,62,62,62	0
56	MG	1A	3570	1/1	0.97	0.21	30,30,30,30	0
56	MG	2A	3285	1/1	0.97	0.13	37,37,37,37	0
56	MG	25	102	1/1	0.97	0.04	38,38,38,38	0
56	MG	1A	3185	1/1	0.97	0.12	18,18,18,18	0
56	MG	1A	3031	1/1	0.97	0.11	17,17,17,17	0
56	MG	1A	3658	1/1	0.97	0.06	28,28,28,28	0
56	MG	1A	3773	1/1	0.97	0.06	37,37,37,37	0
56	MG	1a	1797	1/1	0.97	0.07	46,46,46,46	0
56	MG	1A	3498	1/1	0.97	0.06	34,34,34,34	0
56	MG	1A	3188	1/1	0.97	0.17	30,30,30,30	0
56	MG	1A	4015	1/1	0.97	0.05	23,23,23,23	0
56	MG	1B	235	1/1	0.97	0.07	37,37,37,37	0
56	MG	1A	3576	1/1	0.97	0.05	31,31,31,31	0
56	MG	2A	3488	1/1	0.97	0.06	42,42,42,42	0
56	MG	1A	4020	1/1	0.97	0.15	59,59,59,59	0
56	MG	1a	1805	1/1	0.97	0.09	49,49,49,49	0
56	MG	1a	1807	1/1	0.97	0.06	52,52,52,52	0
56	MG	1D	302	1/1	0.97	0.14	26,26,26,26	0
56	MG	1A	3435	1/1	0.97	0.16	34,34,34,34	0
56	MG	2l	203	1/1	0.97	0.06	50,50,50,50	0
56	MG	1A	3666	1/1	0.97	0.05	20,20,20,20	0
56	MG	2A	3302	1/1	0.97	0.16	52,52,52,52	0
56	MG	2A	3497	1/1	0.97	0.05	45,45,45,45	0
56	MG	1D	307	1/1	0.97	0.23	28,28,28,28	0
56	MG	2A	3716	1/1	0.97	0.09	65,65,65,65	0
56	MG	1A	3096	1/1	0.97	0.12	17,17,17,17	0
56	MG	1A	3274	1/1	0.97	0.12	19,19,19,19	0
56	MG	2a	3021	1/1	0.97	0.04	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3374	1/1	0.97	0.09	28,28,28,28	0
56	MG	2x	101	1/1	0.97	0.07	45,45,45,45	0
56	MG	1A	3672	1/1	0.97	0.06	33,33,33,33	0
56	MG	1A	3893	1/1	0.97	0.21	18,18,18,18	0
56	MG	2A	3123	1/1	0.97	0.06	43,43,43,43	0
56	MG	1A	3786	1/1	0.97	0.07	13,13,13,13	0
56	MG	1A	3581	1/1	0.97	0.05	38,38,38,38	0
56	MG	1A	3152	1/1	0.97	0.17	31,31,31,31	0
56	MG	1A	3790	1/1	0.97	0.06	34,34,34,34	0
56	MG	2a	3030	1/1	0.97	0.19	48,48,48,48	0
56	MG	1A	3119	1/1	0.97	0.05	21,21,21,21	0
56	MG	1A	3277	1/1	0.97	0.45	31,31,31,31	0
56	MG	2A	3511	1/1	0.97	0.07	37,37,37,37	0
56	MG	1F	301	1/1	0.97	0.07	30,30,30,30	0
56	MG	1A	3022	1/1	0.97	0.06	11,11,11,11	0
56	MG	1a	1831	1/1	0.97	0.05	41,41,41,41	0
56	MG	2A	3134	1/1	0.97	0.14	38,38,38,38	0
56	MG	1A	3002	1/1	0.97	0.09	33,33,33,33	0
56	MG	1A	4037	1/1	0.97	0.06	47,47,47,47	0
56	MG	1A	3510	1/1	0.97	0.26	33,33,33,33	0
59	ZN	14	102	1/1	0.97	0.05	94,94,94,94	0
59	ZN	24	501	1/1	0.97	0.08	113,113,113,113	0
59	ZN	29	102	1/1	0.97	0.06	69,69,69,69	0
56	MG	1A	3511	1/1	0.97	0.07	32,32,32,32	0
56	MG	1a	1770	1/1	0.98	0.03	34,34,34,34	0
56	MG	1A	3989	1/1	0.98	0.08	61,61,61,61	0
56	MG	1A	3222	1/1	0.98	0.03	20,20,20,20	0
56	MG	1A	3306	1/1	0.98	0.03	24,24,24,24	0
56	MG	1A	3069	1/1	0.98	0.04	14,14,14,14	0
56	MG	2A	3181	1/1	0.98	0.17	32,32,32,32	0
56	MG	1a	1647	1/1	0.98	0.16	28,28,28,28	0
56	MG	1A	3014	1/1	0.98	0.11	25,25,25,25	0
56	MG	1A	3309	1/1	0.98	0.13	34,34,34,34	0
56	MG	1a	1778	1/1	0.98	0.05	49,49,49,49	0
56	MG	1a	1650	1/1	0.98	0.05	42,42,42,42	0
56	MG	1A	3056	1/1	0.98	0.07	28,28,28,28	0
56	MG	1A	3643	1/1	0.98	0.04	26,26,26,26	0
56	MG	1A	3186	1/1	0.98	0.18	18,18,18,18	0
56	MG	1Q	201	1/1	0.98	0.12	22,22,22,22	0
56	MG	2A	3495	1/1	0.98	0.05	55,55,55,55	0
56	MG	1Q	202	1/1	0.98	0.04	25,25,25,25	0
56	MG	2A	3192	1/1	0.98	0.07	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	4107	1/1	0.98	0.19	21,21,21,21	0
56	MG	1A	4108	1/1	0.98	0.12	16,16,16,16	0
56	MG	1A	3008	1/1	0.98	0.03	12,12,12,12	0
56	MG	2a	3105	1/1	0.98	0.08	66,66,66,66	0
56	MG	2A	3853	1/1	0.98	0.08	36,36,36,36	0
56	MG	1A	3108	1/1	0.98	0.14	29,29,29,29	0
56	MG	1A	3314	1/1	0.98	0.10	20,20,20,20	0
56	MG	1A	4112	1/1	0.98	0.12	43,43,43,43	0
56	MG	1A	3074	1/1	0.98	0.04	15,15,15,15	0
56	MG	1A	3130	1/1	0.98	0.04	34,34,34,34	0
56	MG	1A	3733	1/1	0.98	0.05	28,28,28,28	0
56	MG	1T	201	1/1	0.98	0.08	34,34,34,34	0
56	MG	1A	3191	1/1	0.98	0.04	29,29,29,29	0
56	MG	1A	3823	1/1	0.98	0.10	18,18,18,18	0
56	MG	1A	3232	1/1	0.98	0.16	22,22,22,22	0
56	MG	1A	3131	1/1	0.98	0.11	11,11,11,11	0
56	MG	1A	3193	1/1	0.98	0.17	23,23,23,23	0
56	MG	1A	3524	1/1	0.98	0.18	32,32,32,32	0
56	MG	1A	4122	1/1	0.98	0.12	21,21,21,21	0
56	MG	1a	1802	1/1	0.98	0.07	56,56,56,56	0
56	MG	1A	4123	1/1	0.98	0.10	32,32,32,32	0
56	MG	1A	3196	1/1	0.98	0.04	21,21,21,21	0
56	MG	1A	3588	1/1	0.98	0.03	24,24,24,24	0
56	MG	1a	1806	1/1	0.98	0.04	58,58,58,58	0
56	MG	1W	202	1/1	0.98	0.09	23,23,23,23	0
56	MG	2A	3689	1/1	0.98	0.05	25,25,25,25	0
56	MG	1a	1677	1/1	0.98	0.09	56,56,56,56	0
56	MG	2A	3522	1/1	0.98	0.06	39,39,39,39	0
56	MG	1A	4126	1/1	0.98	0.05	25,25,25,25	0
56	MG	1A	3830	1/1	0.98	0.10	37,37,37,37	0
56	MG	1a	1811	1/1	0.98	0.04	40,40,40,40	0
56	MG	1A	3743	1/1	0.98	0.04	27,27,27,27	0
56	MG	2A	3696	1/1	0.98	0.03	38,38,38,38	0
56	MG	2A	3221	1/1	0.98	0.09	43,43,43,43	0
56	MG	2D	302	1/1	0.98	0.09	39,39,39,39	0
56	MG	2a	3138	1/1	0.98	0.08	77,77,77,77	0
56	MG	2A	3222	1/1	0.98	0.13	44,44,44,44	0
56	MG	2A	3529	1/1	0.98	0.12	43,43,43,43	0
56	MG	1a	1813	1/1	0.98	0.06	38,38,38,38	0
56	MG	1a	1814	1/1	0.98	0.04	32,32,32,32	0
56	MG	1A	4018	1/1	0.98	0.04	21,21,21,21	0
56	MG	1a	1816	1/1	0.98	0.05	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2E	306	1/1	0.98	0.17	39,39,39,39	0
56	MG	1A	4131	1/1	0.98	0.14	20,20,20,20	0
56	MG	1a	1818	1/1	0.98	0.05	68,68,68,68	0
56	MG	1A	3016	1/1	0.98	0.18	38,38,38,38	0
56	MG	2A	3537	1/1	0.98	0.03	47,47,47,47	0
56	MG	1X	103	1/1	0.98	0.10	19,19,19,19	0
56	MG	2a	3153	1/1	0.98	0.05	61,61,61,61	0
56	MG	2A	3231	1/1	0.98	0.06	46,46,46,46	0
56	MG	2A	3711	1/1	0.98	0.06	40,40,40,40	0
56	MG	1A	3920	1/1	0.98	0.04	25,25,25,25	0
56	MG	1A	3659	1/1	0.98	0.03	21,21,21,21	0
56	MG	1A	3472	1/1	0.98	0.10	34,34,34,34	0
56	MG	1A	3661	1/1	0.98	0.05	13,13,13,13	0
56	MG	2A	3089	1/1	0.98	0.06	34,34,34,34	0
56	MG	1A	3133	1/1	0.98	0.05	15,15,15,15	0
56	MG	2Q	201	1/1	0.98	0.07	51,51,51,51	0
56	MG	1A	3009	1/1	0.98	0.04	16,16,16,16	0
56	MG	2A	3547	1/1	0.98	0.11	31,31,31,31	0
56	MG	1A	3239	1/1	0.98	0.14	29,29,29,29	0
56	MG	1A	3929	1/1	0.98	0.04	19,19,19,19	0
56	MG	1A	3201	1/1	0.98	0.07	30,30,30,30	0
56	MG	2A	3551	1/1	0.98	0.06	58,58,58,58	0
56	MG	1a	1694	1/1	0.98	0.22	39,39,39,39	0
56	MG	1B	207	1/1	0.98	0.05	35,35,35,35	0
56	MG	2A	3555	1/1	0.98	0.05	38,38,38,38	0
56	MG	2a	3172	1/1	0.98	0.05	59,59,59,59	0
56	MG	1A	3931	1/1	0.98	0.05	38,38,38,38	0
56	MG	1A	3281	1/1	0.98	0.15	37,37,37,37	0
56	MG	1A	3533	1/1	0.98	0.12	12,12,12,12	0
56	MG	1A	3373	1/1	0.98	0.04	20,20,20,20	0
56	MG	1A	3047	1/1	0.98	0.10	30,30,30,30	0
56	MG	2A	3102	1/1	0.98	0.15	39,39,39,39	0
56	MG	2A	3250	1/1	0.98	0.05	47,47,47,47	0
56	MG	1B	213	1/1	0.98	0.04	41,41,41,41	0
56	MG	1B	214	1/1	0.98	0.09	29,29,29,29	0
56	MG	2X	101	1/1	0.98	0.11	49,49,49,49	0
56	MG	1A	3283	1/1	0.98	0.09	30,30,30,30	0
56	MG	20	101	1/1	0.98	0.05	55,55,55,55	0
56	MG	1B	216	1/1	0.98	0.09	22,22,22,22	0
56	MG	2A	3738	1/1	0.98	0.14	33,33,33,33	0
56	MG	1A	3938	1/1	0.98	0.04	30,30,30,30	0
56	MG	1A	4039	1/1	0.98	0.05	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3377	1/1	0.98	0.04	12,12,12,12	0
56	MG	1A	4041	1/1	0.98	0.10	24,24,24,24	0
56	MG	1A	3760	1/1	0.98	0.03	29,29,29,29	0
56	MG	2A	3409	1/1	0.98	0.22	48,48,48,48	0
56	MG	1A	3035	1/1	0.98	0.05	13,13,13,13	0
56	MG	1A	3676	1/1	0.98	0.06	14,14,14,14	0
56	MG	1A	3243	1/1	0.98	0.05	32,32,32,32	0
56	MG	1A	3604	1/1	0.98	0.07	25,25,25,25	0
56	MG	2A	3577	1/1	0.98	0.10	43,43,43,43	0
56	MG	1A	3164	1/1	0.98	0.13	26,26,26,26	0
56	MG	2A	3751	1/1	0.98	0.04	42,42,42,42	0
56	MG	1w	107	1/1	0.98	0.03	59,59,59,59	0
56	MG	2A	3753	1/1	0.98	0.10	51,51,51,51	0
56	MG	1A	3946	1/1	0.98	0.05	53,53,53,53	0
56	MG	1A	3138	1/1	0.98	0.16	9,9,9,9	0
56	MG	1A	3434	1/1	0.98	0.06	36,36,36,36	0
56	MG	2A	3757	1/1	0.98	0.05	32,32,32,32	0
56	MG	1A	3684	1/1	0.98	0.05	10,10,10,10	0
56	MG	2A	3122	1/1	0.98	0.04	31,31,31,31	0
56	MG	1A	3139	1/1	0.98	0.06	30,30,30,30	0
56	MG	1A	3383	1/1	0.98	0.12	20,20,20,20	0
56	MG	1A	3013	1/1	0.98	0.21	13,13,13,13	0
56	MG	1A	3115	1/1	0.98	0.12	26,26,26,26	0
56	MG	1A	3776	1/1	0.98	0.03	22,22,22,22	0
56	MG	2A	3128	1/1	0.98	0.13	39,39,39,39	0
56	MG	1A	3491	1/1	0.98	0.17	17,17,17,17	0
56	MG	1A	3548	1/1	0.98	0.06	25,25,25,25	0
56	MG	1A	3691	1/1	0.98	0.04	9,9,9,9	0
56	MG	1D	303	1/1	0.98	0.13	34,34,34,34	0
56	MG	1A	3439	1/1	0.98	0.16	30,30,30,30	0
56	MG	2A	3282	1/1	0.98	0.09	42,42,42,42	0
56	MG	1A	3616	1/1	0.98	0.04	28,28,28,28	0
56	MG	2A	3435	1/1	0.98	0.14	19,19,19,19	0
56	MG	2a	3031	1/1	0.98	0.22	40,40,40,40	0
56	MG	1A	4063	1/1	0.98	0.05	37,37,37,37	0
56	MG	1A	3170	1/1	0.98	0.22	33,33,33,33	0
56	MG	2A	3438	1/1	0.98	0.13	33,33,33,33	0
56	MG	1A	3866	1/1	0.98	0.17	25,25,25,25	0
56	MG	1A	3171	1/1	0.98	0.05	17,17,17,17	0
56	MG	1A	3050	1/1	0.98	0.19	30,30,30,30	0
56	MG	1A	3173	1/1	0.98	0.09	10,10,10,10	0
56	MG	1A	3037	1/1	0.98	0.13	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3001	1/1	0.98	0.22	34,34,34,34	0
56	MG	1E	301	1/1	0.98	0.10	20,20,20,20	0
56	MG	1A	4070	1/1	0.98	0.07	19,19,19,19	0
56	MG	1E	303	1/1	0.98	0.10	24,24,24,24	0
56	MG	1A	3038	1/1	0.98	0.04	47,47,47,47	0
56	MG	2A	3787	1/1	0.98	0.07	47,47,47,47	0
56	MG	2A	3616	1/1	0.98	0.16	50,50,50,50	0
56	MG	1A	4072	1/1	0.98	0.04	41,41,41,41	0
56	MG	1A	3789	1/1	0.98	0.04	43,43,43,43	0
56	MG	2A	3791	1/1	0.98	0.08	35,35,35,35	0
56	MG	1A	3499	1/1	0.98	0.11	35,35,35,35	0
56	MG	1A	3557	1/1	0.98	0.05	34,34,34,34	0
56	MG	1a	1745	1/1	0.98	0.04	32,32,32,32	0
56	MG	1A	3558	1/1	0.98	0.07	22,22,22,22	0
56	MG	1A	3972	1/1	0.98	0.06	62,62,62,62	0
56	MG	2A	3013	1/1	0.98	0.04	27,27,27,27	0
56	MG	1A	3877	1/1	0.98	0.04	35,35,35,35	0
56	MG	1A	3974	1/1	0.98	0.06	35,35,35,35	0
56	MG	1A	3145	1/1	0.98	0.23	23,23,23,23	0
56	MG	1F	307	1/1	0.98	0.13	15,15,15,15	0
56	MG	2A	3802	1/1	0.98	0.07	34,34,34,34	0
56	MG	2A	3803	1/1	0.98	0.04	65,65,65,65	0
56	MG	2A	3804	1/1	0.98	0.05	33,33,33,33	0
56	MG	2A	3805	1/1	0.98	0.04	50,50,50,50	0
56	MG	1A	3795	1/1	0.98	0.03	17,17,17,17	0
56	MG	1A	3560	1/1	0.98	0.15	21,21,21,21	0
56	MG	1a	1754	1/1	0.98	0.03	29,29,29,29	0
56	MG	1A	3705	1/1	0.98	0.07	35,35,35,35	0
56	MG	1A	3394	1/1	0.98	0.10	27,27,27,27	0
56	MG	1A	3708	1/1	0.98	0.04	33,33,33,33	0
56	MG	1A	3039	1/1	0.98	0.05	18,18,18,18	0
56	MG	2A	3816	1/1	0.98	0.05	44,44,44,44	0
56	MG	2A	3817	1/1	0.98	0.04	58,58,58,58	0
56	MG	1A	3300	1/1	0.98	0.06	17,17,17,17	0
56	MG	1A	3564	1/1	0.98	0.26	21,21,21,21	0
56	MG	2A	3471	1/1	0.98	0.08	25,25,25,25	0
56	MG	2A	3027	1/1	0.98	0.04	38,38,38,38	0
56	MG	1A	3084	1/1	0.98	0.10	26,26,26,26	0
56	MG	2A	3170	1/1	0.98	0.11	35,35,35,35	0
56	MG	1A	4091	1/1	0.98	0.05	36,36,36,36	0
56	MG	1A	3804	1/1	0.98	0.07	19,19,19,19	0
59	ZN	2Y	202	1/1	0.98	0.04	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3102	1/1	0.98	0.06	23,23,23,23	0
59	ZN	25	103	1/1	0.98	0.03	51,51,51,51	0
59	ZN	26	501	1/1	0.98	0.04	53,53,53,53	0
56	MG	1A	3030	1/1	0.98	0.08	9,9,9,9	0
56	MG	1A	3123	1/1	0.98	0.05	34,34,34,34	0
60	SF4	2d	303	8/8	0.98	0.04	55,66,68,68	0
56	MG	1A	3677	1/1	0.99	0.03	20,20,20,20	0
56	MG	1A	3749	1/1	0.99	0.07	29,29,29,29	0
56	MG	1A	3388	1/1	0.99	0.05	18,18,18,18	0
56	MG	1A	3600	1/1	0.99	0.06	33,33,33,33	0
56	MG	1A	3924	1/1	0.99	0.03	31,31,31,31	0
56	MG	1A	3650	1/1	0.99	0.04	10,10,10,10	0
56	MG	1A	3794	1/1	0.99	0.02	18,18,18,18	0
56	MG	1A	3012	1/1	0.99	0.04	16,16,16,16	0
56	MG	1A	3928	1/1	0.99	0.06	15,15,15,15	0
56	MG	1a	1755	1/1	0.99	0.03	29,29,29,29	0
56	MG	1A	3194	1/1	0.99	0.09	11,11,11,11	0
56	MG	1a	1821	1/1	0.99	0.03	57,57,57,57	0
56	MG	1A	3683	1/1	0.99	0.05	26,26,26,26	0
56	MG	1A	3195	1/1	0.99	0.06	17,17,17,17	0
56	MG	1A	3087	1/1	0.99	0.06	17,17,17,17	0
56	MG	1A	4034	1/1	0.99	0.02	26,26,26,26	0
56	MG	2a	3137	1/1	0.99	0.03	64,64,64,64	0
56	MG	1A	3719	1/1	0.99	0.04	13,13,13,13	0
56	MG	1A	3046	1/1	0.99	0.05	16,16,16,16	0
56	MG	1A	3935	1/1	0.99	0.04	31,31,31,31	0
56	MG	1A	4038	1/1	0.99	0.03	13,13,13,13	0
56	MG	2a	3142	1/1	0.99	0.04	61,61,61,61	0
56	MG	2A	3552	1/1	0.99	0.04	23,23,23,23	0
56	MG	1a	1765	1/1	0.99	0.05	52,52,52,52	0
56	MG	2a	3145	1/1	0.99	0.03	53,53,53,53	0
56	MG	1A	3375	1/1	0.99	0.07	32,32,32,32	0
56	MG	2A	3846	1/1	0.99	0.08	32,32,32,32	0
56	MG	1A	3174	1/1	0.99	0.03	13,13,13,13	0
56	MG	1A	3199	1/1	0.99	0.08	12,12,12,12	0
56	MG	1a	1769	1/1	0.99	0.04	37,37,37,37	0
56	MG	1A	3763	1/1	0.99	0.03	21,21,21,21	0
56	MG	1A	4043	1/1	0.99	0.04	31,31,31,31	0
56	MG	2A	3704	1/1	0.99	0.04	27,27,27,27	0
56	MG	1A	3397	1/1	0.99	0.13	22,22,22,22	0
56	MG	1A	3137	1/1	0.99	0.05	16,16,16,16	0
56	MG	1A	3067	1/1	0.99	0.09	13,13,13,13	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1A	3023	1/1	0.99	0.07	21,21,21,21	0
56	MG	1A	3768	1/1	0.99	0.03	21,21,21,21	0
56	MG	1A	3729	1/1	0.99	0.03	37,37,37,37	0
56	MG	1n	101	1/1	0.99	0.17	26,26,26,26	0
56	MG	1A	3637	1/1	0.99	0.10	21,21,21,21	0
56	MG	1A	3664	1/1	0.99	0.07	13,13,13,13	0
56	MG	1A	3167	1/1	0.99	0.06	29,29,29,29	0
56	MG	1A	3997	1/1	0.99	0.03	31,31,31,31	0
56	MG	1A	3614	1/1	0.99	0.04	39,39,39,39	0
56	MG	1R	201	1/1	0.99	0.04	29,29,29,29	0
56	MG	1A	3903	1/1	0.99	0.02	16,16,16,16	0
56	MG	1A	3204	1/1	0.99	0.03	24,24,24,24	0
56	MG	1A	3775	1/1	0.99	0.03	28,28,28,28	0
56	MG	1A	3668	1/1	0.99	0.09	36,36,36,36	0
56	MG	1A	4003	1/1	0.99	0.03	24,24,24,24	0
56	MG	1A	3005	1/1	0.99	0.04	29,29,29,29	0
56	MG	2A	3579	1/1	0.99	0.06	28,28,28,28	0
56	MG	1A	3571	1/1	0.99	0.06	25,25,25,25	0
56	MG	2A	3581	1/1	0.99	0.06	51,51,51,51	0
56	MG	1D	305	1/1	0.99	0.04	10,10,10,10	0
56	MG	1A	3671	1/1	0.99	0.08	14,14,14,14	0
56	MG	2A	3585	1/1	0.99	0.04	29,29,29,29	0
56	MG	1A	3040	1/1	0.99	0.17	21,21,21,21	0
56	MG	1A	3740	1/1	0.99	0.03	30,30,30,30	0
56	MG	1A	3959	1/1	0.99	0.06	34,34,34,34	0
56	MG	1U	205	1/1	0.99	0.07	13,13,13,13	0
56	MG	2A	3806	1/1	0.99	0.02	40,40,40,40	0
56	MG	1A	3299	1/1	0.99	0.07	15,15,15,15	0
56	MG	1A	3071	1/1	0.99	0.10	20,20,20,20	0
56	MG	1A	3784	1/1	0.99	0.08	11,11,11,11	0
56	MG	1A	3268	1/1	0.99	0.16	15,15,15,15	0
56	MG	1A	4128	1/1	0.99	0.03	18,18,18,18	0
56	MG	1A	3707	1/1	0.99	0.04	39,39,39,39	0
56	MG	1A	4016	1/1	0.99	0.07	22,22,22,22	0
56	MG	2A	3814	1/1	0.99	0.06	22,22,22,22	0
59	ZN	1Y	206	1/1	0.99	0.02	61,61,61,61	0
56	MG	2A	3815	1/1	0.99	0.04	59,59,59,59	0
59	ZN	16	103	1/1	0.99	0.04	35,35,35,35	0
56	MG	1A	3746	1/1	0.99	0.04	23,23,23,23	0
56	MG	1A	3428	1/1	0.99	0.02	28,28,28,28	0
56	MG	1A	4019	1/1	0.99	0.02	47,47,47,47	0
56	MG	1A	3873	1/1	0.99	0.03	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	2A	3462	1/1	0.99	0.08	26,26,26,26	0
56	MG	1A	4135	1/1	0.99	0.04	15,15,15,15	0
60	SF4	1d	501	8/8	0.99	0.04	38,50,55,61	0
56	MG	1X	102	1/1	0.99	0.05	17,17,17,17	0
59	ZN	15	104	1/1	1.00	0.05	38,38,38,38	0
56	MG	2A	3681	1/1	1.00	0.02	44,44,44,44	0
59	ZN	19	102	1/1	1.00	0.03	33,33,33,33	0
59	ZN	1n	102	1/1	1.00	0.02	47,47,47,47	0
56	MG	1A	3710	1/1	1.00	0.04	13,13,13,13	0
56	MG	1A	4078	1/1	1.00	0.09	6,6,6,6	0
56	MG	1A	3902	1/1	1.00	0.02	18,18,18,18	0
56	MG	1A	4013	1/1	1.00	0.02	26,26,26,26	0
56	MG	1A	3898	1/1	1.00	0.05	28,28,28,28	0
56	MG	1A	3742	1/1	1.00	0.04	22,22,22,22	0
56	MG	1A	3720	1/1	1.00	0.06	9,9,9,9	0
56	MG	2A	3584	1/1	1.00	0.09	31,31,31,31	0

6.5 Other polymers (i)

There are no such residues in this entry.