



Full wwPDB X-ray Structure Validation Report ⓘ

Feb 23, 2024 – 02:35 AM EST

PDB ID : 4V7R
Title : Yeast 80S ribosome.
Authors : Ben-Shem, A.; Jenner, L.; Yusupova, G.; Yusupov, M.
Deposited on : 2010-07-23
Resolution : 4.00 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.36
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36

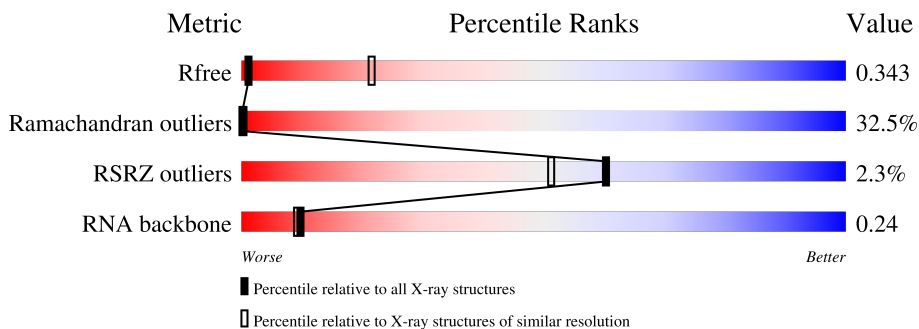
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 4.00 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.




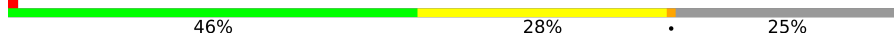





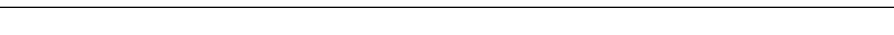
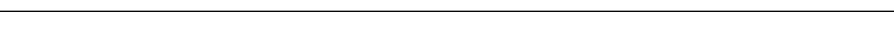
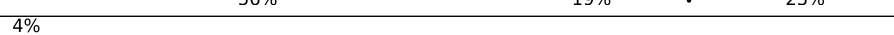
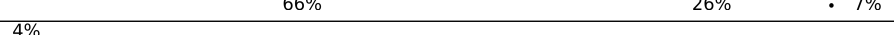
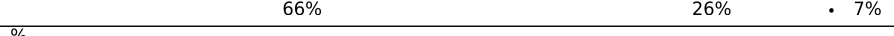













Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1087 (4.30-3.70)
Ramachandran outliers	138981	1108 (4.30-3.70)
RSRZ outliers	127900	1028 (4.34-3.66)
RNA backbone	3102	1048 (5.00-3.00)

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

Mol	Chain	Length	Quality of chain
1	A1	1800	
1	C1	1800	
2	AA	252	
2	CA	252	
3	AB	254	
3	CB	254	
4	AC	240	

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Mol	Chain	Length	Quality of chain
4	CC	240	
5	AD	225	
5	CD	225	
6	AE	197	
6	CE	197	
7	AF	156	
7	CF	156	
8	AG	151	
8	CG	151	
9	AH	137	
9	CH	137	
10	AI	142	
10	CI	142	
11	AJ	143	
11	CJ	143	
12	AK	136	
12	CK	136	
13	AL	146	
13	CL	146	
14	AM	144	
14	CM	144	
15	AN	121	
15	CN	121	
16	AO	130	
16	CO	130	

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Mol	Chain	Length	Quality of chain
17	AP	145	51% 26% 20%
17	CP	145	51% 26% 20%
18	AQ	108	46% 14% 38%
18	CQ	108	43% 15% 42%
19	AR	67	6% 45% 25% 30%
19	CR	67	7% 43% 27% 30%
20	AS	56	43% 27% 30%
20	CS	56	41% 29% 30%
21	AT	319	4% 78% 19% ..
21	CT	319	4% 78% 19% ..
22	Aa	20	100%
22	Bo	20	95% 5%
22	Ca	20	100%
23	Ab	105	99%
23	Cb	105	99%
24	Ac	93	99%
24	Cc	93	100%
25	Ad	35	100%
25	Cd	35	100%
26	Ae	21	100%
26	Bj	21	100%
26	Dj	21	100%
27	Af	11	100%
28	Ah	41	100%
28	Ch	41	100%






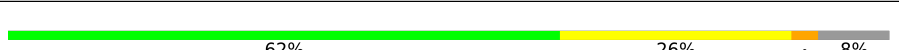
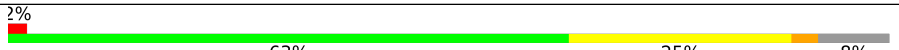

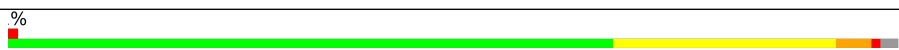

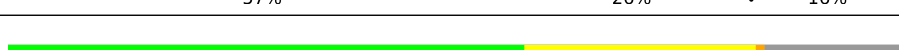


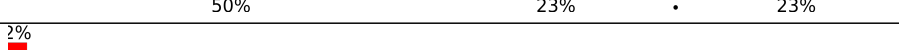
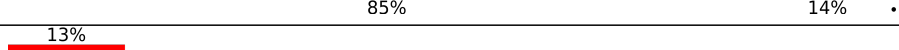
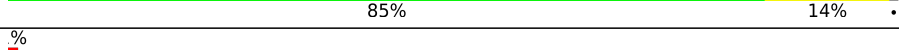






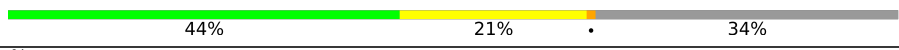
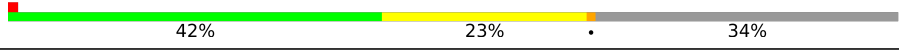

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Mol	Chain	Length	Quality of chain
29	B1	3396	
29	D1	3396	
30	B2	121	
30	D2	121	
31	B3	158	
31	D3	158	
32	BA	217	
32	DA	217	
33	BB	254	
33	DB	254	
34	BC	387	
34	DC	387	
35	BD	362	
35	DD	362	
36	BE	297	
36	DE	297	
37	BF	176	
37	DF	176	
38	BG	244	
38	DG	244	
39	BH	256	
39	DH	256	
40	BI	191	
40	DI	191	
41	BJ	221	

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Mol	Chain	Length	Quality of chain
41	DJ	221	
42	BK	174	
42	DK	174	
43	BN	138	
43	DN	138	
44	BO	204	
44	DO	204	
45	BP	199	
45	DP	199	
46	BQ	184	
46	DQ	184	
47	BR	186	
47	DR	186	
48	BS	189	
48	DS	189	
49	BT	160	
49	DT	160	
50	BU	137	
50	DU	137	
51	BV	155	
51	DV	155	
52	BW	142	
52	DW	142	
53	BX	127	
53	DX	127	








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Mol	Chain	Length	Quality of chain
54	BY	149	2% 55% 40% 5%
54	DY	149	% 57% 39% .
55	BZ	105	2% 73% 20% 7%
55	DZ	105	3% 76% 17% 7%
56	Ba	113	46% 30% 24%
56	Da	113	45% 31% 24%
57	Bb	130	52% 39% 5% .
57	Db	130	% 56% 36% . . .
58	Bc	120	44% 11% . 43%
58	Dc	120	% 47% 8% . 43%
59	Bd	88	45% 35% . 18%
59	Dd	88	47% 35% 18%
60	Be	51	65% 29% 6%
60	De	51	67% 27% 6%
61	Bf	106	3% 63% 25% . 10%
61	Df	106	9% 63% 25% . 10%
62	Bg	92	% 64% 26% 10%
62	Dg	92	63% 27% 10%
63	Bh	44	100%
63	Dh	44	100%
64	Bi	12	100%
64	Di	12	100%
65	Bk	16	100%
65	Dk	16	100%
66	Bl	19	100%

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Mol	Chain	Length	Quality of chain
67	Bm	9	 100%
68	Bn	27	 100%
69	Bp	8	 100%
70	Bq	17	 100%
71	Br	23	 100%
72	DL	165	 % 50% 31% 16%
73	DM	312	 % 26% 15% 58%

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
74	OHX	A1	1930	-	-	-	X
74	OHX	A1	1983	-	-	-	X
74	OHX	B1	3548	-	-	-	X
74	OHX	B1	3571	-	-	-	X
74	OHX	B1	3602	-	-	-	X
74	OHX	D1	3573	-	-	-	X
74	OHX	D1	3586	-	-	-	X
74	OHX	D1	3593	-	-	-	X
74	OHX	D1	3605	-	-	-	X
74	OHX	D3	211	-	-	-	X

2 Entry composition

There are 74 unique types of molecules in this entry. The entry contains 309610 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 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	A1	1789	Total	C	N	O	P	0	0	0
			38107	17037	6732	12549	1789			
1	C1	1789	Total	C	N	O	P	0	0	0
			38107	17037	6732	12549	1789			

- Molecule 2 is a protein called 40S ribosomal protein S0-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
2	AA	220	Total	C	N	O	0	0	0
			1090	650	220	220			
2	CA	220	Total	C	N	O	0	0	0
			1090	650	220	220			

- Molecule 3 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
3	AB	219	Total	C	N	O	0	0	0
			1074	636	219	219			
3	CB	219	Total	C	N	O	0	0	0
			1074	636	219	219			

- Molecule 4 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
4	AC	189	Total	C	N	O	0	0	0
			928	550	189	189			
4	CC	189	Total	C	N	O	0	0	0
			928	550	189	189			

- Molecule 5 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	AD	169	Total	C	N	O	0	0	0
			836	498	169	169			
5	CD	169	Total	C	N	O	0	0	0
			836	498	169	169			

- Molecule 6 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
6	AE	157	Total	C	N	O	0	0	0
			777	463	157	157			
6	CE	157	Total	C	N	O	0	0	0
			777	463	157	157			

- Molecule 7 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
7	AF	77	Total	C	N	O	0	0	0
			382	228	77	77			
7	CF	77	Total	C	N	O	0	0	0
			382	228	77	77			

- Molecule 8 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
8	AG	117	Total	C	N	O	0	0	0
			580	346	117	117			
8	CG	117	Total	C	N	O	0	0	0
			580	346	117	117			

- Molecule 9 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AH	128	Total	C	N	O	0	0	0
			627	371	128	128			
9	CH	128	Total	C	N	O	0	0	0
			627	371	128	128			

- Molecule 10 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	AI	121	Total	C	N	O	0	0	0
			596	354	121	121			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
10	CI	121	596	354	121	121	0	0	0

- Molecule 11 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
11	AJ	134	658	390	134	134	0	0	0
11	CJ	134	658	390	134	134	0	0	0

- Molecule 12 is a protein called 40S ribosomal protein S17-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
12	AK	67	332	198	67	67	0	0	0
12	CK	67	332	198	67	67	0	0	0

- Molecule 13 is a protein called 40S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
13	AL	120	591	351	120	120	0	0	0
13	CL	120	591	351	120	120	0	0	0

- Molecule 14 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
14	AM	106	521	309	106	106	0	0	0
14	CM	106	521	309	106	106	0	0	0

- Molecule 15 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
15	AN	111	551	329	111	111	0	0	0
15	CN	111	551	329	111	111	0	0	0

- Molecule 16 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
16	AO	127	Total 622	C 368	N 127	O 127	0	0	0
16	CO	127	Total 622	C 368	N 127	O 127	0	0	0

- Molecule 17 is a protein called 40S ribosomal protein S23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
17	AP	116	Total 566	C 334	N 116	O 116	0	0	0
17	CP	116	Total 566	C 334	N 116	O 116	0	0	0

- Molecule 18 is a protein called 40S ribosomal protein S25-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
18	AQ	67	Total 332	C 198	N 67	O 67	0	0	0
18	CQ	63	Total 312	C 186	N 63	O 63	0	0	0

- Molecule 19 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
19	AR	47	Total 230	C 136	N 47	O 47	0	0	0
19	CR	47	Total 230	C 136	N 47	O 47	0	0	0

- Molecule 20 is a protein called 40S ribosomal protein S29-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
20	AS	39	Total 190	C 112	N 39	O 39	0	0	0
20	CS	39	Total 190	C 112	N 39	O 39	0	0	0

- Molecule 21 is a protein called Guanine nucleotide-binding protein subunit beta-like protein; RACK-1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AT	313	Total	C	N	O	0	0	0
			1543	917	313	313			
21	CT	313	Total	C	N	O	0	0	0
			1543	917	313	313			

- Molecule 22 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
22	Aa	20	Total	C	N	O	0	0	0
			100	60	20	20			
22	Bo	20	Total	C	N	O	0	0	0
			100	60	20	20			
22	Ca	20	Total	C	N	O	0	0	0
			100	60	20	20			

- Molecule 23 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
23	Ab	105	Total	C	N	O	0	0	0
			525	315	105	105			
23	Cb	105	Total	C	N	O	0	0	0
			525	315	105	105			

- Molecule 24 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
24	Ac	93	Total	C	N	O	0	0	0
			465	279	93	93			
24	Cc	93	Total	C	N	O	0	0	0
			465	279	93	93			

- Molecule 25 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	Ad	35	Total	C	N	O	0	0	0
			175	105	35	35			
25	Cd	35	Total	C	N	O	0	0	0
			175	105	35	35			

- Molecule 26 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
26	Ae	21	Total	C	N	O	0	0	0
			105	63	21	21			
26	Bj	21	Total	C	N	O	0	0	0
			105	63	21	21			
26	Dj	21	Total	C	N	O	0	0	0
			105	63	21	21			

- Molecule 27 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	Af	11	Total	C	N	O	0	0	0
			55	33	11	11			

- Molecule 28 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
28	Ah	41	Total	C	N	O	0	0	0
			205	123	41	41			
28	Ch	41	Total	C	N	O	0	0	0
			205	123	41	41			

- Molecule 29 is a RNA chain called 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	B1	3206	Total	C	N	O	P	0	0	0
			68577	30632	12365	22374	3206			
29	D1	3206	Total	C	N	O	P	0	0	0
			68577	30632	12365	22374	3206			

- Molecule 30 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	B2	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			
30	D2	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			

- Molecule 31 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	B3	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O	P			
31	D3	158	3353	1500	586	1109	158	0	0	0

- Molecule 32 is a protein called 60S ribosomal protein L1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				
32	BA	213	1055	629	213	213		0	0	0
32	DA	213	1055	629	213	213		0	0	0

- Molecule 33 is a protein called 60S ribosomal protein L2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				
33	BB	234	1106	638	234	234		0	0	0
33	DB	234	1106	638	234	234		0	0	0

- Molecule 34 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				
34	BC	364	1791	1063	364	364		0	0	0
34	DC	364	1791	1063	364	364		0	0	0

- Molecule 35 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				
35	BD	268	1312	776	268	268		0	0	0
35	DD	268	1312	776	268	268		0	0	0

- Molecule 36 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				
36	BE	287	1412	838	287	287		0	0	0
36	DE	287	1412	838	287	287		0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BE	112	ARG	LYS	conflict	UNP P26321
DE	112	ARG	LYS	conflict	UNP P26321

- Molecule 37 is a protein called 60S ribosomal protein L6-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
37	BF	176	Total	C	N	O	0	0	0
			873	521	176	176			
37	DF	176	Total	C	N	O	0	0	0
			873	521	176	176			

- Molecule 38 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
38	BG	215	Total	C	N	O	0	0	0
			1061	631	215	215			
38	DG	215	Total	C	N	O	0	0	0
			1061	631	215	215			

- Molecule 39 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	BH	173	Total	C	N	O	0	0	0
			856	510	173	173			
39	DH	173	Total	C	N	O	0	0	0
			856	510	173	173			

- Molecule 40 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	BI	191	Total	C	N	O	0	0	0
			942	560	191	191			
40	DI	191	Total	C	N	O	0	0	0
			942	560	191	191			

- Molecule 41 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	BJ	208	Total	C	N	O	0	0	0
			1027	611	208	208			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	DJ	208	Total	C	N	O	0	0	0
			1027	611	208	208			

- Molecule 42 is a protein called 60S ribosomal protein L11-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
42	BK	165	Total	C	N	O	0	0	0
			810	480	165	165			
42	DK	165	Total	C	N	O	0	0	0
			810	480	165	165			

- Molecule 43 is a protein called 60S ribosomal protein L14-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
43	BN	120	Total	C	N	O	0	0	0
			593	353	120	120			
43	DN	120	Total	C	N	O	0	0	0
			593	353	120	120			

- Molecule 44 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
44	BO	187	Total	C	N	O	0	0	0
			923	549	187	187			
44	DO	187	Total	C	N	O	0	0	0
			923	549	187	187			

- Molecule 45 is a protein called 60S ribosomal protein L16-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	BP	196	Total	C	N	O	0	0	0
			967	575	196	196			
45	DP	196	Total	C	N	O	0	0	0
			967	575	196	196			

- Molecule 46 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
46	BQ	154	Total	C	N	O	0	0	0
			761	453	154	154			
46	DQ	154	Total	C	N	O	0	0	0
			761	453	154	154			

- Molecule 47 is a protein called 60S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
47	BR	143	Total 706	C 420	N 143	O 143	0	0	0
47	DR	143	Total 706	C 420	N 143	O 143	0	0	0

- Molecule 48 is a protein called 60S ribosomal protein L19.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
48	BS	188	Total 931	C 555	N 188	O 188	0	0	0
48	DS	188	Total 931	C 555	N 188	O 188	0	0	0

- Molecule 49 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
49	BT	119	Total 586	C 348	N 119	O 119	0	0	0
49	DT	119	Total 586	C 348	N 119	O 119	0	0	0

- Molecule 50 is a protein called 60S ribosomal protein L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
50	BU	129	Total 631	C 373	N 129	O 129	0	0	0
50	DU	129	Total 631	C 373	N 129	O 129	0	0	0

- Molecule 51 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
51	BV	59	Total 291	C 173	N 59	O 59	0	0	0
51	DV	59	Total 291	C 173	N 59	O 59	0	0	0

- Molecule 52 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
52	BW	94	Total	C	N	O	0	0	0
			468	280	94	94			
52	DW	94	Total	C	N	O	0	0	0
			468	280	94	94			

- Molecule 53 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
53	BX	107	Total	C	N	O	0	0	0
			530	316	107	107			
53	DX	107	Total	C	N	O	0	0	0
			530	316	107	107			

- Molecule 54 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
54	BY	149	Total	C	N	O	0	0	0
			727	429	149	149			
54	DY	149	Total	C	N	O	0	0	0
			727	429	149	149			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BY	38	GLU	GLN	conflict	UNP P02406
DY	38	GLU	GLN	conflict	UNP P02406

- Molecule 55 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
55	BZ	98	Total	C	N	O	0	0	0
			481	285	98	98			
55	DZ	98	Total	C	N	O	0	0	0
			481	285	98	98			

- Molecule 56 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
56	Ba	86	Total	C	N	O	0	0	0
			425	253	86	86			
56	Da	86	Total	C	N	O	0	0	0
			425	253	86	86			

- Molecule 57 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
57	Bb	125	Total	C	N	O	0	0	0
			618	368	125	125			
57	Db	125	Total	C	N	O	0	0	0
			618	368	125	125			

- Molecule 58 is a protein called 60S ribosomal protein L35.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
58	Bc	68	Total	C	N	O	0	0	0
			339	203	68	68			
58	Dc	68	Total	C	N	O	0	0	0
			339	203	68	68			

- Molecule 59 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
59	Bd	72	Total	C	N	O	0	0	0
			352	208	72	72			
59	Dd	72	Total	C	N	O	0	0	0
			352	208	72	72			

- Molecule 60 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
60	Be	48	Total	C	N	O	0	0	0
			240	144	48	48			
60	De	48	Total	C	N	O	0	0	0
			240	144	48	48			

- Molecule 61 is a protein called 60S ribosomal protein L42.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
61	Bf	95	Total	C	N	O	0	0	0
			467	277	95	95			
61	Df	95	Total	C	N	O	0	0	0
			467	277	95	95			

- Molecule 62 is a protein called 60S ribosomal protein L43.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
62	Bg	83	Total	C	N	O	0	0	0
			407	241	83	83			
62	Dg	83	Total	C	N	O	0	0	0
			407	241	83	83			

- Molecule 63 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
63	Bh	44	Total	C	N	O	0	0	0
			220	132	44	44			
63	Dh	44	Total	C	N	O	0	0	0
			220	132	44	44			

- Molecule 64 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
64	Bi	12	Total	C	N	O	0	0	0
			60	36	12	12			
64	Di	12	Total	C	N	O	0	0	0
			60	36	12	12			

- Molecule 65 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
65	Bk	16	Total	C	N	O	0	0	0
			80	48	16	16			
65	Dk	16	Total	C	N	O	0	0	0
			80	48	16	16			

- Molecule 66 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
66	Bl	19	Total	C	N	O	0	0	0
			95	57	19	19			

- Molecule 67 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
67	Bm	9	Total	C	N	O	0	0	0
			45	27	9	9			

- Molecule 68 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
68	Bn	27	135	81	27	27	0	0	0

- Molecule 69 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
69	Bp	8	40	24	8	8	0	0	0

- Molecule 70 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
70	Bq	17	85	51	17	17	0	0	0

- Molecule 71 is a protein called Unassigned secondary structure.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
71	Br	23	115	69	23	23	0	0	0

- Molecule 72 is a protein called 60S ribosomal protein L12.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
72	DL	138	679	403	138	138	0	0	0

- Molecule 73 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
73	DM	130	641	381	130	130	0	0	0

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
DM	83	TYR	ASN	conflict	UNP P05317

- Molecule 74 is osmium (III) hexammine (three-letter code: OHX) (formula: H₁₂N₆O_s).

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		
74	B1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0
74	B1	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B1	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B2	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	B3	1	7	6	1	0	0
74	BC	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	BO	1	7	6	1	0	0
74	BT	1	7	6	1	0	0
74	Bd	1	7	6	1	0	0
74	Bd	1	7	6	1	0	0
74	Bg	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0
74	C1	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0
74	C1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	C1	1	7	6	1	0	0
74	CI	1	7	6	1	0	0
74	CS	1	7	6	1	0	0
74	CS	1	7	6	1	0	0
74	CT	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		
74	D1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D1	1	7	6	1	0	0
74	D2	1	7	6	1	0	0

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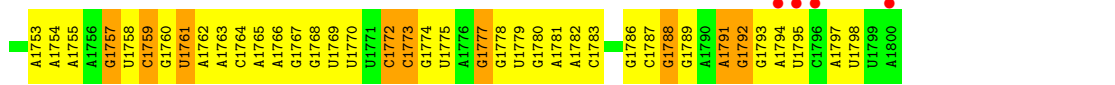
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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74	D2	1	7	6	1	0	0
74	D2	1	7	6	1	0	0
74	D2	1	7	6	1	0	0
74	D2	1	7	6	1	0	0
74	D2	1	7	6	1	0	0
74	D2	1	7	6	1	0	0
74	D2	1	7	6	1	0	0
74	D2	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	D3	1	7	6	1	0	0
74	DC	1	7	6	1	0	0

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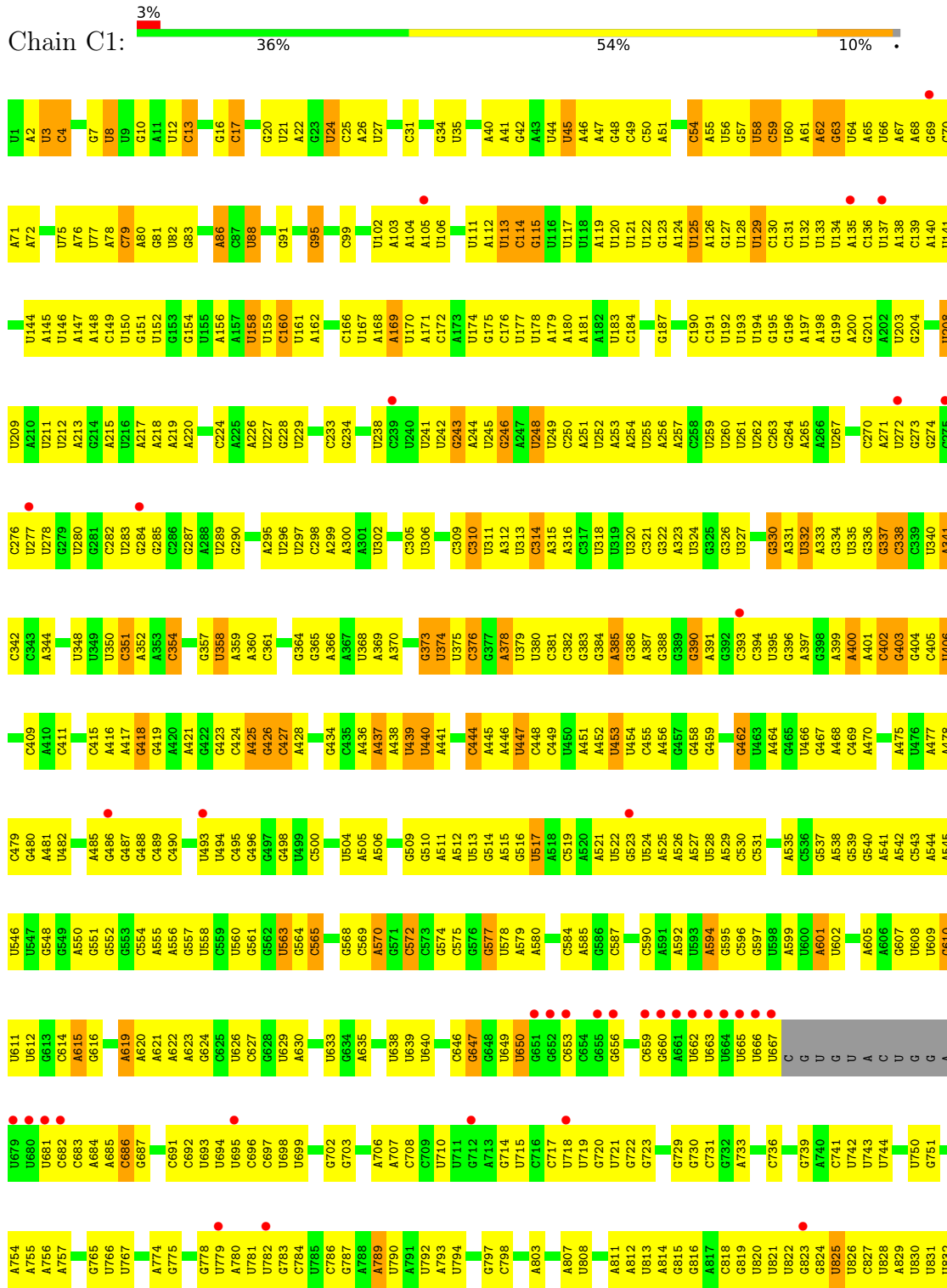
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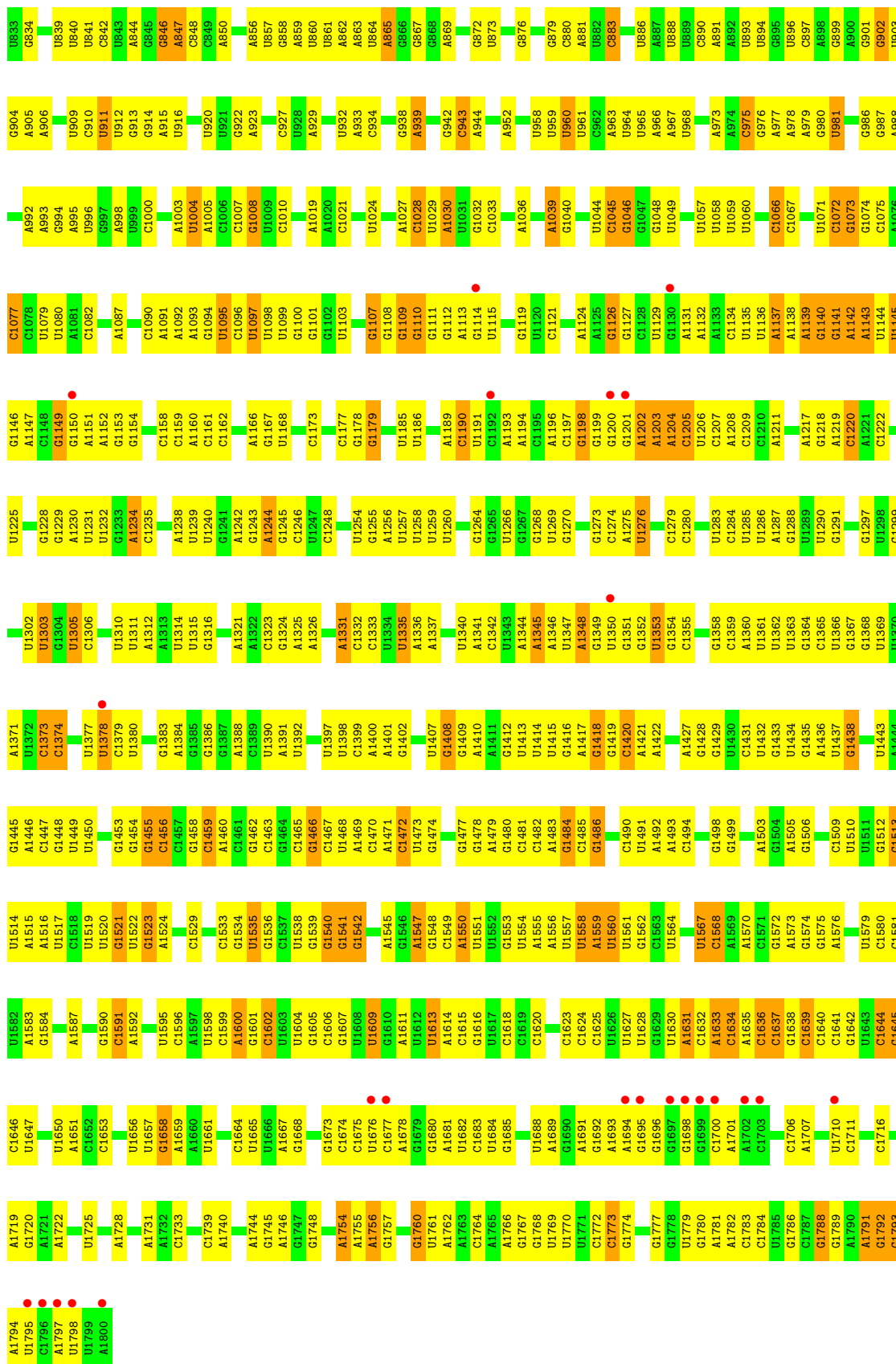
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
74	DE	1	7	6	1	0	0
74	DJ	1	7	6	1	0	0
74	DO	1	7	6	1	0	0
74	DO	1	7	6	1	0	0
74	DT	1	7	6	1	0	0
74	Dd	1	7	6	1	0	0
74	Dd	1	7	6	1	0	0
74	Dg	1	7	6	1	0	0

U688	U689	U700	U701	U702	U703	U704	U705	U706	U707	U708	U709	U710	U711	U712	U713	U714	U715	U716	U717	U718	U719	U720	U721	U722	U723	U724	U725	U726	U727	U728	U729	U730	U731	U732	U733	U734	U735	U736	U737	U738	U739	U740	U741	U742	U743	U744	U745	U746	U747	U748	U749	U750	U751	U752	U753	U754	U755	U756	U757	U758	U759	U760	U761	U762	U763	U764	U765	U766	U767	U768	U769	U770	U771	U772	U773	U774	U775	U776	U777	U778	U779																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
A780	U781	U782	U783	C784	U785	U786	U787	U788	U789	U790	U791	U792	U793	U794	U795	U796	U797	U798	U799	U800	U801	U802	U803	U804	U805	U806	U807	U808	U809	U810	U811	U812	U813	U814	U815	U816	U817	U818	U819	U820	U821	U822	U823	U824	U825	U826	U827	U828	U829	U830	U831	U832	U833	U834	U835	U836	U837	U838	U839	U840	U841	U842	U843	U844	U845	U846	U847	U848	U849	U850	U851	U852	U853	U854	U855	U856	U857	U858	U859	U860	U861	U862	U863	U864	U865	U866	U867	U868	U869	U870	U871	U872	U873	U874	U875	U876	U877	U878	U879	U880	U881	U882	U883	U884	U885	U886	U887	U888	U889	U890	U891	U892	U893	U894	U895	U896	U897	U898	U899	U900	U901	U902	U903	U904	U905	U906	U907	U908	U909	U910	U911	U912	U913	U914	U915	U916	U917	U918	U919	U920	U921	U922	U923	U924	U925	U926	U927	U928	U929	U930	U931	U932	U933	U934	U935	U936	U937	U938	U939	U940	U941	U942	U943	U944	U945	U946	U947	U948	U949	U950	U951	U952	U953	U954	U955	U956	U957	U958	U959	U960	U961	U962	U963	U964	U965	U966	U967	U968	U969	U970	U971	U972	U973	U974	U975	U976	U977	U978	U979	U980	U981	U982	U983	U984	U985	U986	U987	U988	U989	U990	U991	U992	U993	U994	U995	U996	U997	U998	U999	U1000	U1001	U1002	U1003	U1004	U1005	U1006	U1007	U1008	U1009	U1010	U1011	U1012	U1013	U1014	U1015	U1016	U1017	U1018	U1019	U1020	U1021	U1022	U1023	U1024	U1025	U1026	U1027	U1028	U1029	U1030	U1031	U1032	U1033	U1034	U1035	U1036	U1037	U1038	U1039	U1040	U1041	U1042	U1043	U1044	U1045	U1046	U1047	U1048	U1049	U1050	U1051	U1052	U1053	U1054	U1055	U1056	U1057	U1058	U1059	U1060	U1061	U1062	U1063	U1064	U1065	U1066	U1067	U1068	U1069	U1070	U1071	U1072	U1073	U1074	U1075	U1076	U1077	U1078	U1079	U1080	U1081	U1082	U1083	U1084	U1085	U1086	U1087	U1088	U1089	U1090	U1091	U1092	U1093	U1094	U1095	U1096	U1097	U1098	U1099	U1100	U1101	U1102	U1103	U1104	U1105	U1106	U1107	U1108	U1109	U1110	U1111	U1112	U1113	U1114	U1115	U1116	U1117	U1118	U1119	U1120	U1121	U1122	U1123	U1124	U1125	U1126	U1127	U1128	U1129	U1130	U1131	U1132	U1133	U1134	U1135	U1136	U1137	U1138	U1139	U1140	U1141	U1142	U1143	U1144	U1145	U1146	U1147	U1148	U1149	U1150	U1151	U1152	U1153	U1154	U1155	U1156	U1157	U1158	U1159	U1160	U1161	U1162	U1163	U1164	U1165	U1166	U1167	U1168	U1169	U1170	U1171	U1172	U1173	U1174	U1175	U1176	U1177	U1178	U1179	U1180	U1181	U1182	U1183	U1184	U1185	U1186	U1187	U1188	U1189	U1190	U1191	U1192	U1193	U1194	U1195	U1196	U1197	U1198	U1199	U1200	U1201	U1202	U1203	U1204	U1205	U1206	U1207	U1208	U1209	U1210	U1211	U1212	U1213	U1214	U1215	U1216	U1217	U1218	U1219	U1220	U1221	U1222	U1223	U1224	U1225	U1226	U1227	U1228	U1229	U1230	U1231	U1232	U1233	U1234	U1235	U1236	U1237	U1238	U1239	U1240	U1241	U1242	U1243	U1244	U1245	U1246	U1247	U1248	U1249	U1250	U1251	U1252	U1253	U1254	U1255	U1256	U1257	U1258	U1259	U1260	U1261	U1262	U1263	U1264	U1265	U1266	U1267	U1268	U1269	U1270	U1271	U1272	U1273	U1274	U1275	U1276	U1277	U1278	U1279	U1280	U1281	U1282	U1283	U1284	U1285	U1286	U1287	U1288	U1289	U1290	U1291	U1292	U1293	U1294	U1295	U1296	U1297	U1298	U1299	U1300	U1301	U1302	U1303	U1304	U1305	U1306	U1307	U1308	U1309	U1310	U1311	U1312	U1313	U1314	U1315	U1316	U1317	U1318	U1319	U1320	U1321	U1322	U1323	U1324	U1325	U1326	U1327	U1328	U1329	U1330	U1331	U1332	U1333	U1334	U1335	U1336	U1337	U1338	U1339	U1340	U1341	U1342	U1343	U1344	U1345	U1346	U1347	U1348	U1349	U1350	U1351	U1352	U1353	U1354	U1355	U1356	U1357	U1358	U1359	U1360	U1361	U1362	U1363	U1364	U1365	U1366	U1367	U1368	U1369	U1370	U1371	U1372	U1373	U1374	U1375	U1376	U1377	U1378	U1379	U1380	U1381	U1382	U1383	U1384	U1385	U1386	U1387	U1388	U1389	U1390	U1391	U1392	U1393	U1394	U1395	U1396	U1397	U1398	U1399	U1400	U1401	U1402	U1403	U1404	U1405	U1406	U1407	U1408	U1409	U1410	U1411	U1412	U1413	U1414	U1415	U1416	U1417	U1418	U1419	U1420	U1421	U1422	U1423	U1424	U1425	U1426	U1427	U1428	U1429	U1430	U1431	U1432	U1433	U1434	U1435	U1436	U1437	U1438	U1439	U1440	U1441	U1442	U1443	U1444	U1445	U1446	U1447	U1448	U1449	U1450	U1451	U1452	U1453	U1454	U1455	U1456	U1457	U1458	U1459	U1460	U1461	U1462	U1463	U1464	U1465	U1466	U1467	U1468	U1469	U1470	U1471	U1472	U1473	U1474	U1475	U1476	U1477	U1478	U1479	U1480	U1481	U1482	U1483	U1484	U1485	U1486	U1487	U1488	U1489	U1490	U1491	U1492	U1493	U1494	U1495	U1496	U1497	U1498	U1499	U1500	U1501	U1502	U1503	U1504	U1505	U1506	U1507	U1508	U1509	U1510	U1511	U1512	U1513	U1514	U1515	U1516	U1517	U1518	U1519	U1520	U1521	U1522	U1523	U1524	U1525	U1526	U1527	U1528	U1529	U1530	U1531	U1532	U1533	U1534	U1535	U1536	U1537	U1538	U1539	U1540	U1541	U1542	U1543	U1544	U1545	U1546	U1547	U1548	U1549	U1550	U1551	U1552	U1553	U1554	U1555	U1556	U1557	U1558	U1559	U1560	U1561	U1562	U1563	U1564	U1565	U1566	U1567	U1568	U1569	U1570	U1571	U1572	U1573	U1574	U1575	U1576	U1577	U1578	U1579	U1580	U1581	U1582	U1583	U1584	U1585	U1586	U1587	U1588	U1589	U1590	U1591	U1592	U1593	U1594	U1595	U1596	U1597	U1598	U1599	U1600	U1601	U1602	U1603	U1604	U1605	U1606	U1607	U1608	U1609	U1610	U1611	U1612	U1613	U1614	U1615	U1616	U1617	U1618	U1619	U1620	U1621	U1622	U1623	U1624	U1625	U1626	U1627	U1628	U1629	U1630	U1631	U1632	U1633	U1634	U1635	U1636	U1637	U1638	U1639	U1640	U1641	U1642	U1643	U1644	U1645	U1646	U1647	U1648	U1649	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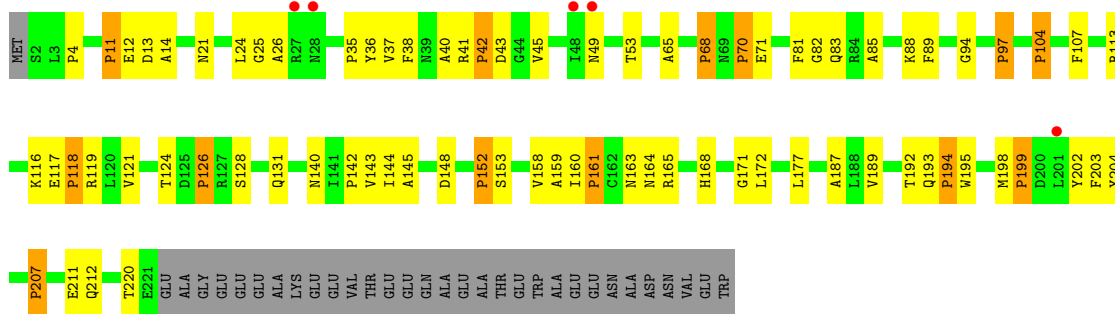


● Molecule 1: 18S ribosomal RNA

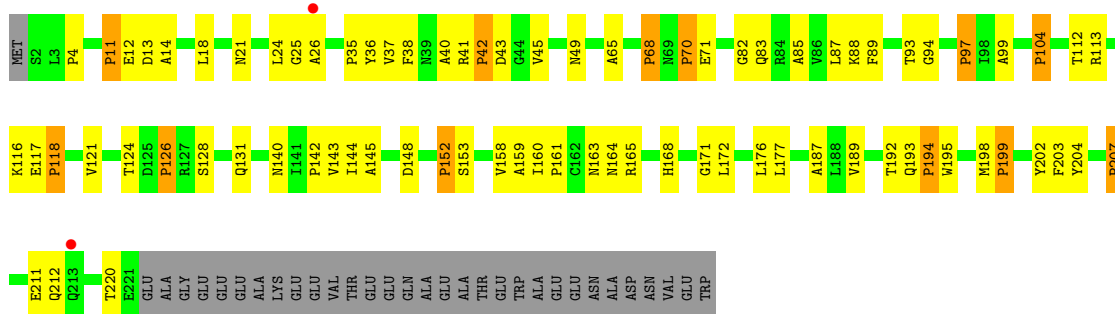




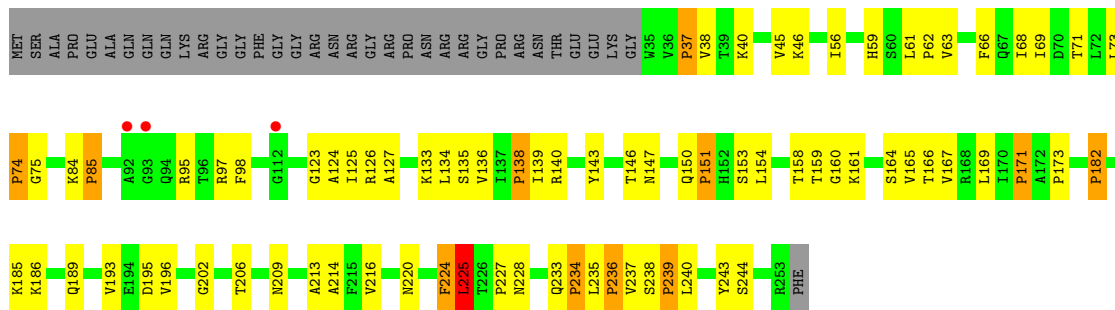
● Molecule 2: 40S ribosomal protein S0-A



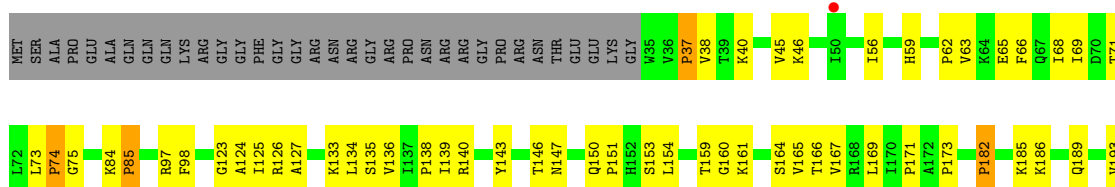
• Molecule 2: 40S ribosomal protein S0-A



• Molecule 3: 40S ribosomal protein S2

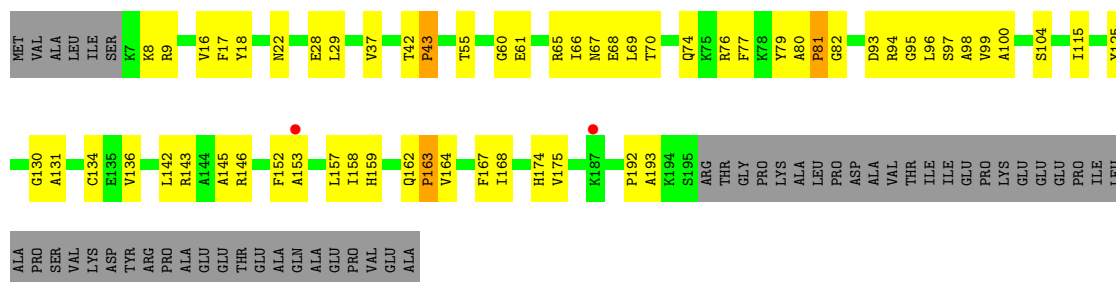


• Molecule 3: 40S ribosomal protein S2

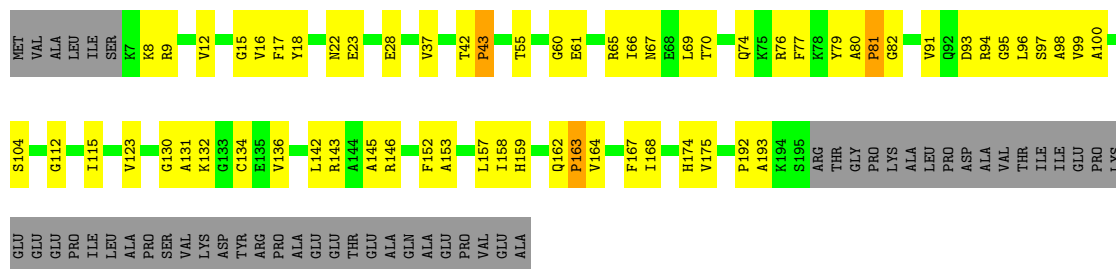




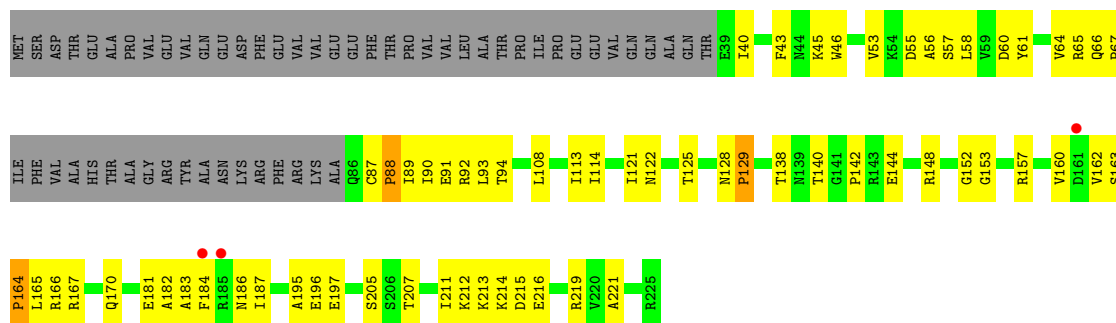
- Molecule 4: 40S ribosomal protein S3



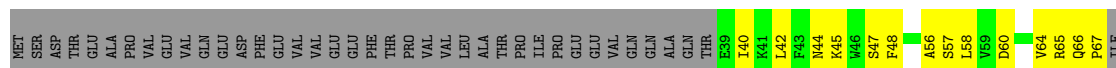
- Molecule 4: 40S ribosomal protein S3

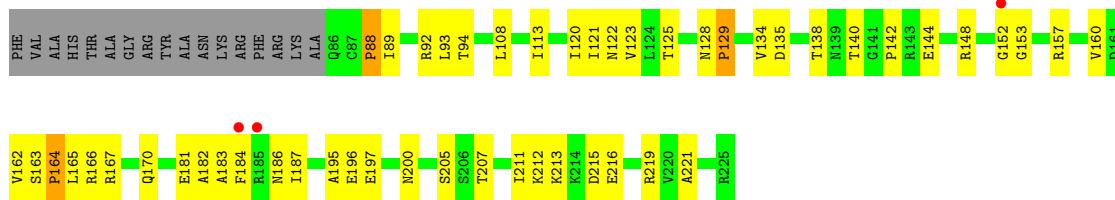


- Molecule 5: 40S ribosomal protein S5

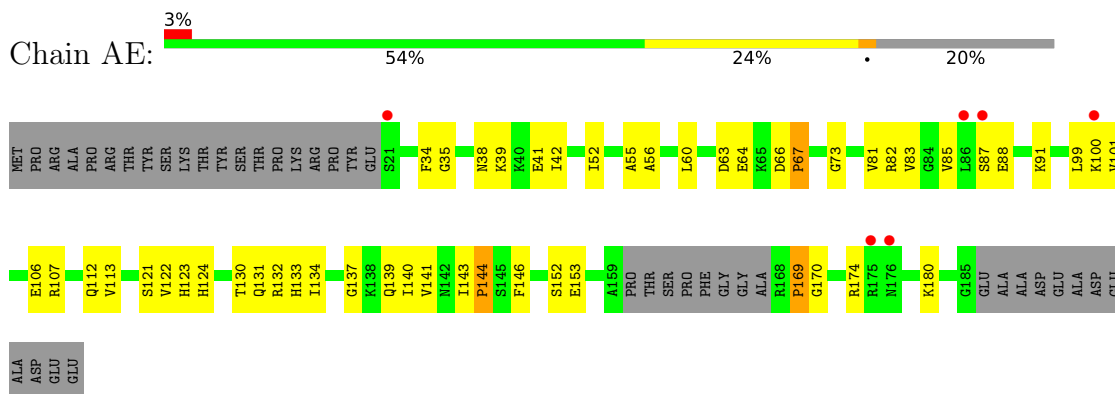


- Molecule 5: 40S ribosomal protein S5

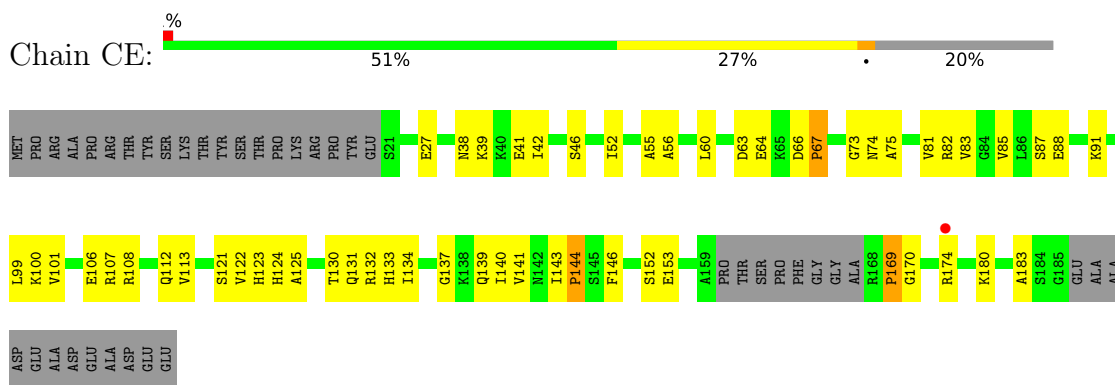




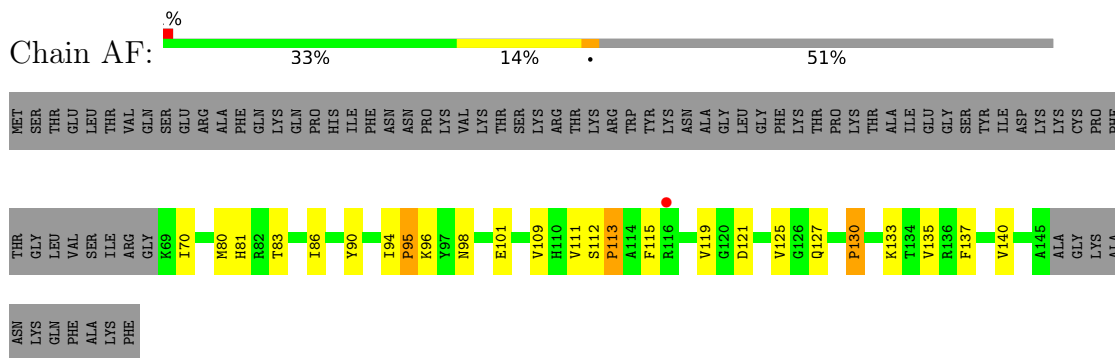
• Molecule 6: 40S ribosomal protein S9-A



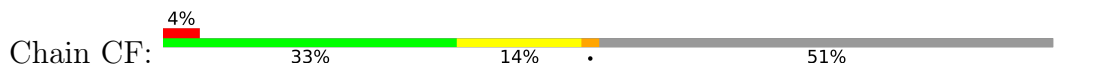
• Molecule 6: 40S ribosomal protein S9-A

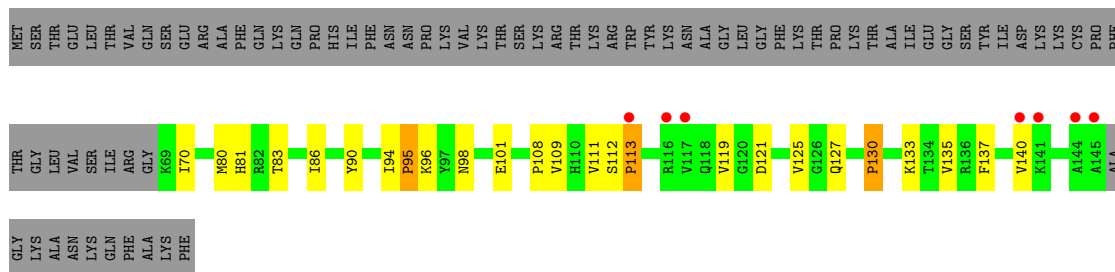


• Molecule 7: 40S ribosomal protein S11

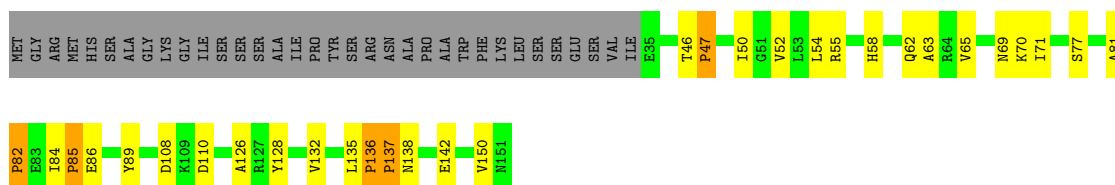


• Molecule 7: 40S ribosomal protein S11

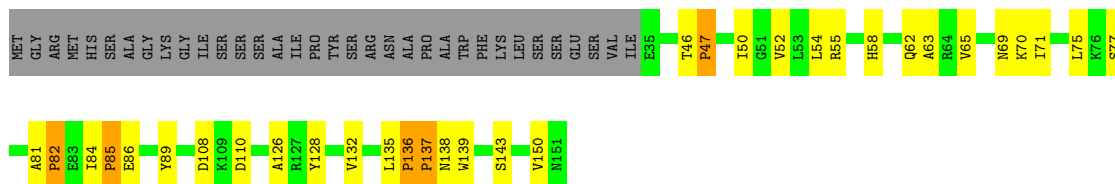




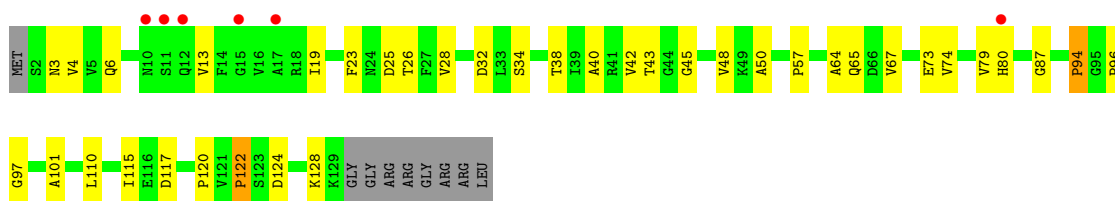
• Molecule 8: 40S ribosomal protein S13



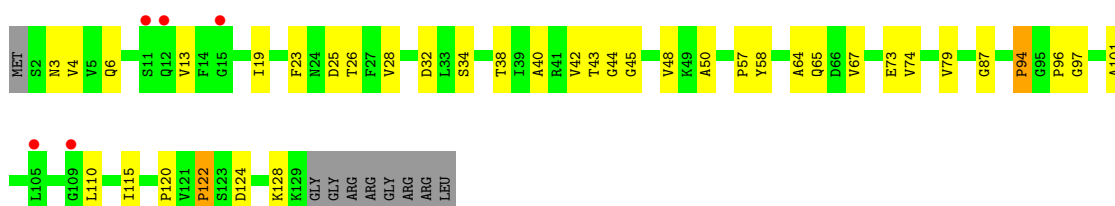
• Molecule 8: 40S ribosomal protein S13



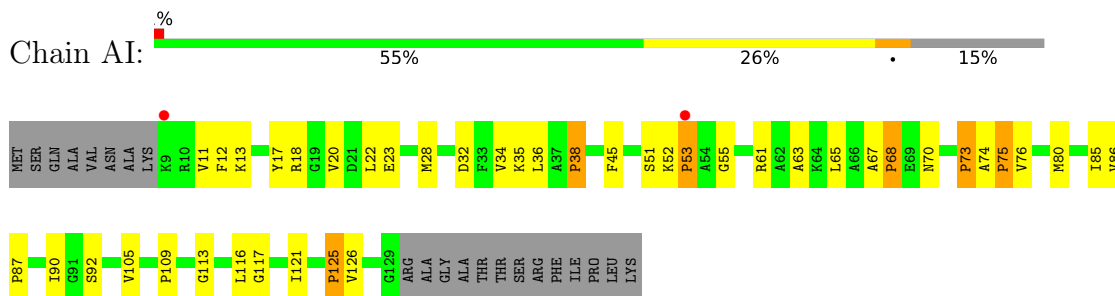
• Molecule 9: 40S ribosomal protein S14-A



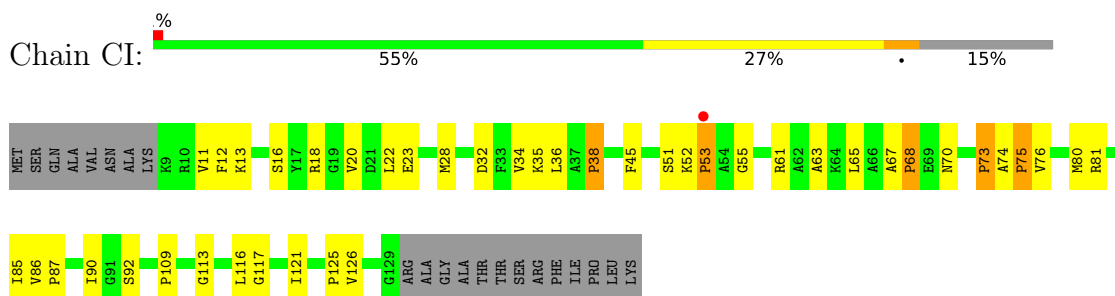
• Molecule 9: 40S ribosomal protein S14-A



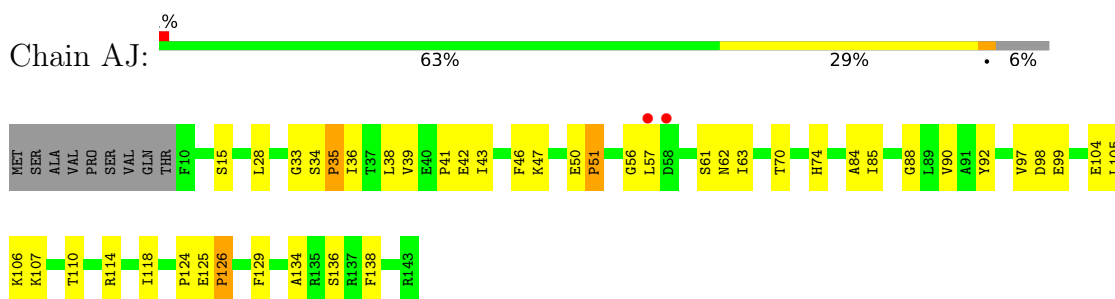
- Molecule 10: 40S ribosomal protein S15



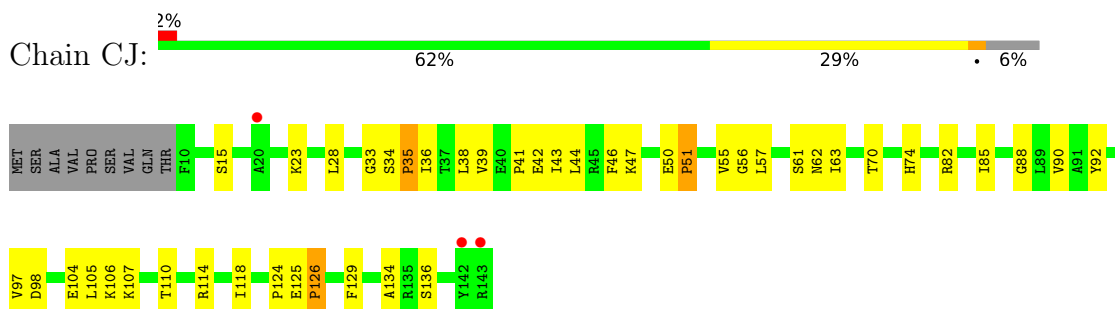
- Molecule 10: 40S ribosomal protein S15



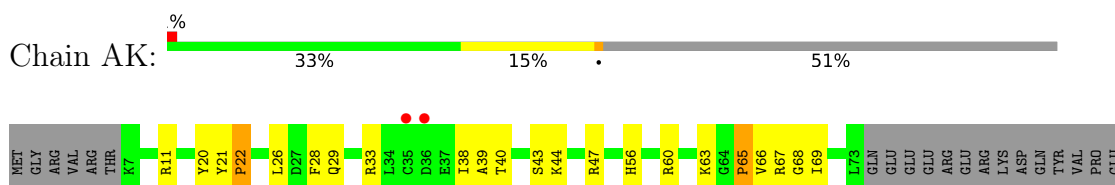
- Molecule 11: 40S ribosomal protein S16



- Molecule 11: 40S ribosomal protein S16

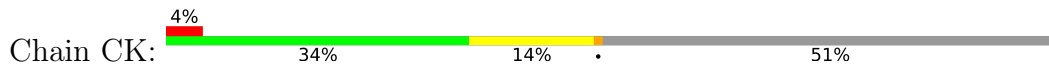


- Molecule 12: 40S ribosomal protein S17-A



VAL SER ALA LEU VAL ASP ASP SER ARG VAL SER ARG VAL SER ASP ASP ASN VAL ASP ASN GLN THR THR ASP ASP LEU VAL LYS LYS SER LEU LEU GLY LEU LYS LEU PRO LEU SER SER VAL ILE ILE VAL ASN VAL SER ALA GLN ASP ASP ARG ARG ARG ARG TYR ARG LYS ARG VAL

• Molecule 12: 40S ribosomal protein S17-A



MET GLY ARG VAL ARG THR K7 R11 Y21 P22 L26 D27 F28 Q29 T30 N31 C35 D36 E37 I38 A39 T40 K44 R47 H66 K59 R60 K63 G64 P65 V66 R67 G68 I69 L73 GLN GLU GLU ARG ARG ARG LYS LYS ASP TYR VAL PRO GLU VAL

SER ALA LEU ASP VAL SER ARG ASN GLY VAL LEU ASN VAL ASP ASN GLN THR THR ASP LEU VAL LYS SER LEU GLY LYS LEU PRO LEU SER VAL ILE ASN VAL SER ALA GLN ARG ASP ARG ARG TYR ARG LYS ARG VAL

• Molecule 13: 40S ribosomal protein S18



MET SER LEU VAL VAL GLN GLU GLN PHE GLN HIS ILE L15 R16 L17 L18 K27 I28 V29 K36 M44 L45 V46 C47 K56 R57 A58 L61 E65 L66 Q71 I72 M73 Q74 N75 P76 Y79 K80 I81 P82 A83 W84 F85 L86 ASN ARG GLN ASN ASP ILE

THR D94 Y98 H99 L101 A102 V105 K117 K118 I119 R120 G135 Q136 T141 GLY ARG ARG ARG ALA

• Molecule 13: 40S ribosomal protein S18



MET SER LEU VAL VAL GLN GLN SER PHE GLN HIS ILE L15 L18 L27 I28 V29 K36 M44 L45 V46 C47 K56 R57 A58 L61 E65 L66 Q71 I72 M73 Q74 N75 P76 Y79 K80 I81 P82 A83 W84 F85 L86 ASN ARG GLN ASN ASP ILE THR

D94 G95 K96 D97 Y98 H99 L100 A102 K117 K118 I119 R120 G135 Q136 K139 T140 T141 GLY ARG ARG ARG ALA

• Molecule 14: 40S ribosomal protein S19-A

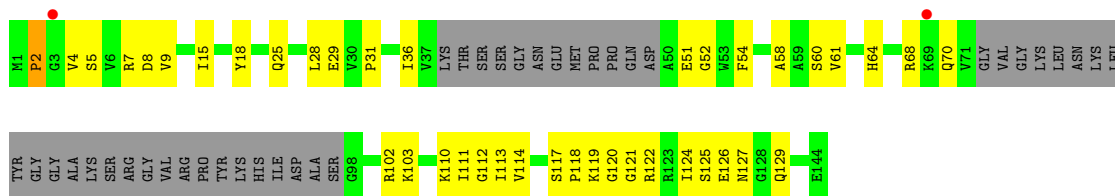


K1 F2 G3 V4 S5 D8 V9 Q25 Q26 Q27 L28 E29 P30 P31 I36 V37 LYS THR SER SER GLY ASN GLU MET PRO PRO GLN ASP E50 E51 G52 W53 F54 A58 V61 R68 K69 Q70 V71 GLY VAL GLY LYS LEU ASN LYS LEU TYR GLY GLY ALA LYS SER ARG

GLY VAL PRO TYR HIS ASP SER G98 R102 K103 K110 I111 G112 H113 V114 S117 P118 K119 G120 G121 R122 R123 I124 S125 E126 N127 Q128 R134 E144

• Molecule 14: 40S ribosomal protein S19-A

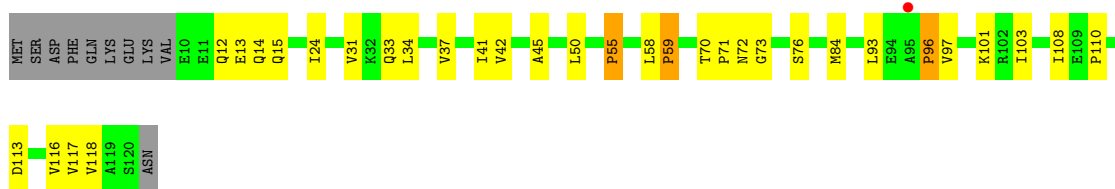




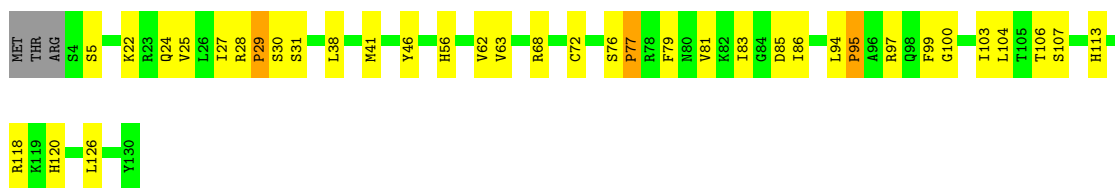
• Molecule 15: 40S ribosomal protein S20



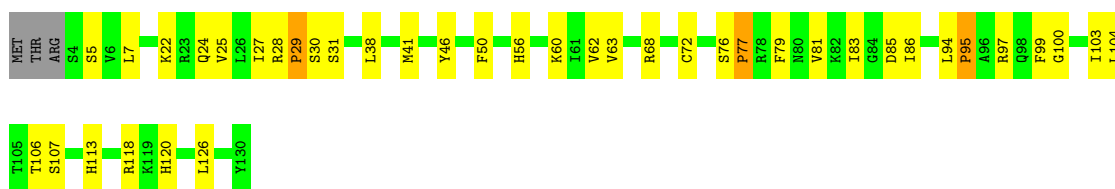
• Molecule 15: 40S ribosomal protein S20



• Molecule 16: 40S ribosomal protein S22-A

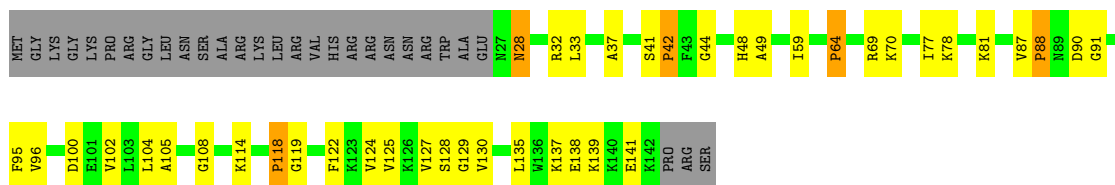


• Molecule 16: 40S ribosomal protein S22-A



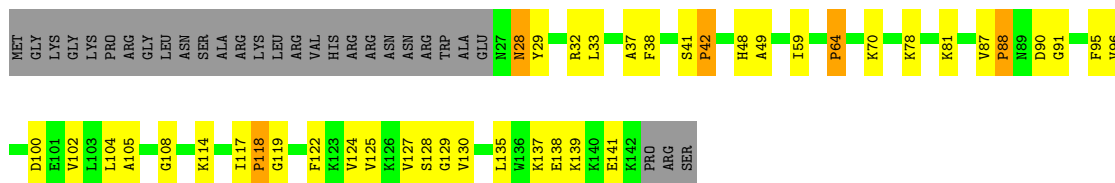
• Molecule 17: 40S ribosomal protein S23

Chain AP:  51% 26% 20%



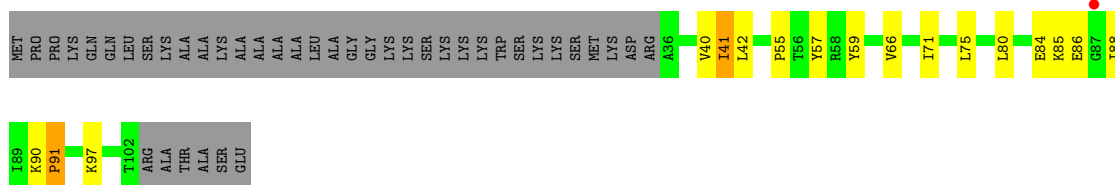
- Molecule 17: 40S ribosomal protein S23

Chain CP:  51% 26% 20%



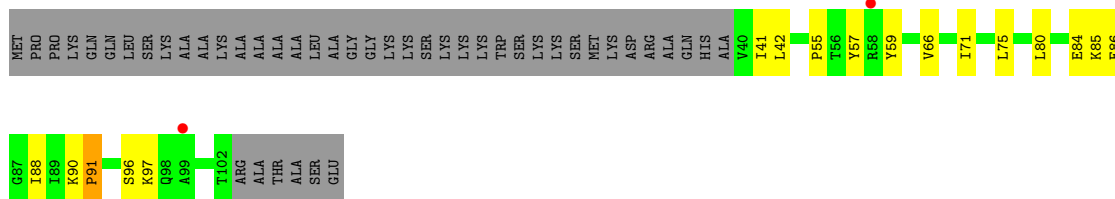
- Molecule 18: 40S ribosomal protein S25-A

Chain AQ:  46% 14% 38%



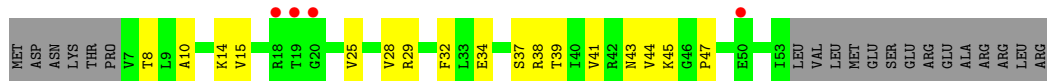
- Molecule 18: 40S ribosomal protein S25-A

Chain CQ:  43% 15% 42%

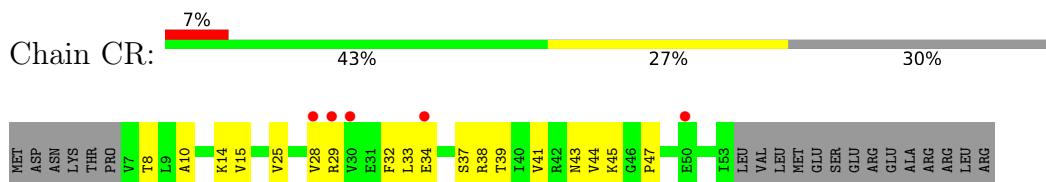


- Molecule 19: 40S ribosomal protein S28-A

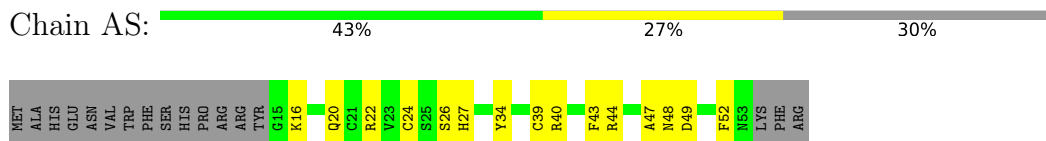
Chain AR:  45% 25% 30%



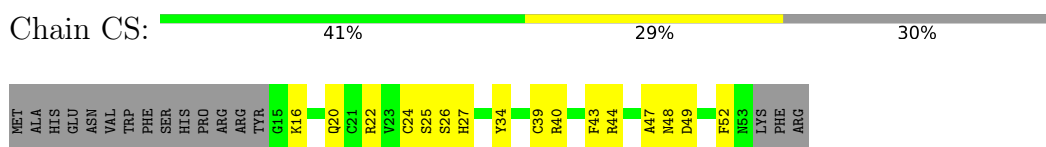
- Molecule 19: 40S ribosomal protein S28-A



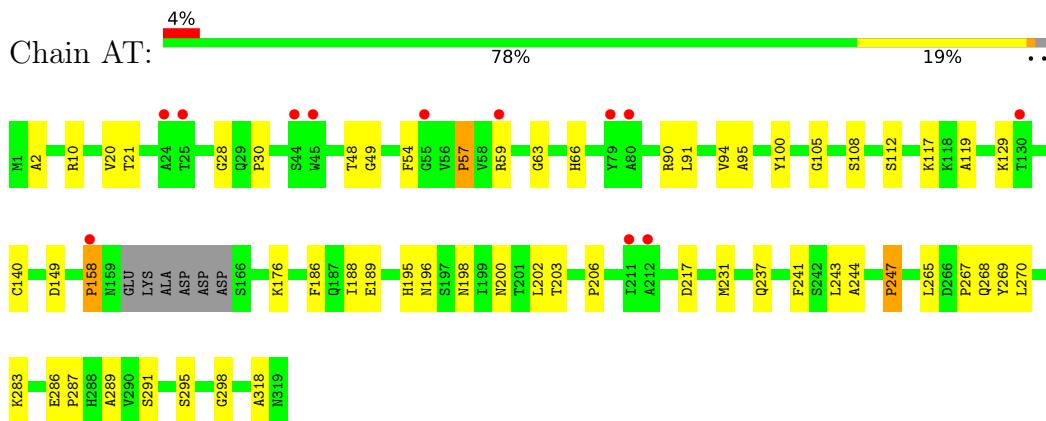
- Molecule 20: 40S ribosomal protein S29-A



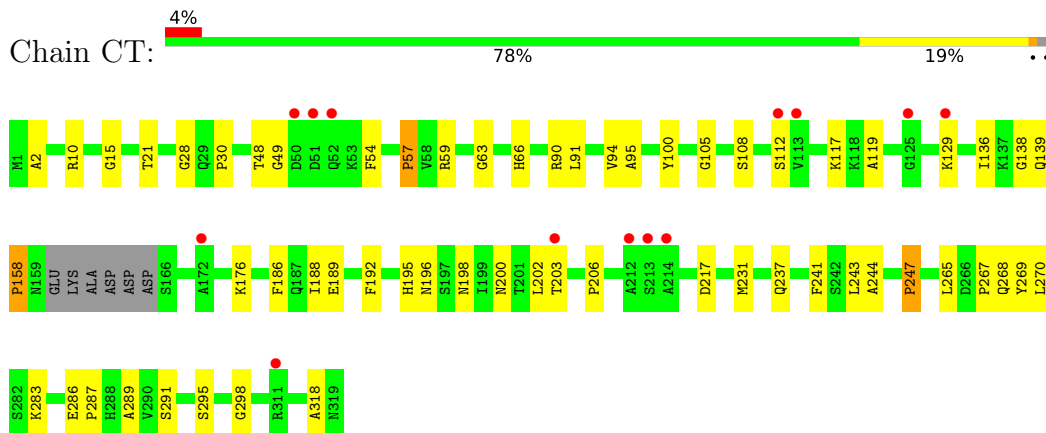
- Molecule 20: 40S ribosomal protein S29-A



- Molecule 21: Guanine nucleotide-binding protein subunit beta-like protein; RACK-1



- Molecule 21: Guanine nucleotide-binding protein subunit beta-like protein; RACK-1



- Molecule 22: Unassigned secondary structure

Chain Aa:  100%

There are no outlier residues recorded for this chain.

- Molecule 22: Unassigned secondary structure

Chain Bb:  95% 5%



- Molecule 22: Unassigned secondary structure

Chain Ca:  100%

There are no outlier residues recorded for this chain.

- Molecule 23: Unassigned secondary structure

Chain Ab:  99%



- Molecule 23: Unassigned secondary structure

Chain Cb:  99%



- Molecule 24: Unassigned secondary structure

Chain Ac:  99%



- Molecule 24: Unassigned secondary structure

Chain Cc:  100%

There are no outlier residues recorded for this chain.

- Molecule 25: Unassigned secondary structure

Chain Ad:  100%

There are no outlier residues recorded for this chain.

- Molecule 25: Unassigned secondary structure

Chain Cd:  100%

There are no outlier residues recorded for this chain.

- Molecule 26: Unassigned secondary structure

Chain Ae:  100%

There are no outlier residues recorded for this chain.

- Molecule 26: Unassigned secondary structure

Chain Bj:  100%

There are no outlier residues recorded for this chain.

- Molecule 26: Unassigned secondary structure

Chain Dj:  100%

There are no outlier residues recorded for this chain.

- Molecule 27: Unassigned secondary structure

Chain Af:  100%

There are no outlier residues recorded for this chain.

- Molecule 28: Unassigned secondary structure

Chain Ah:  100%

There are no outlier residues recorded for this chain.

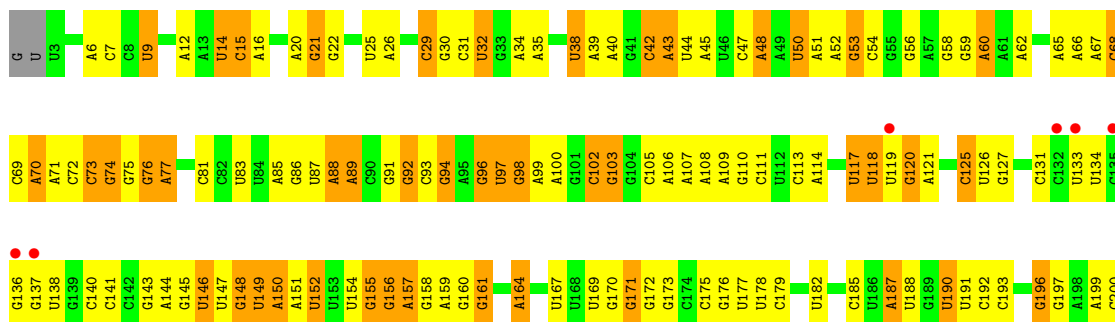
- Molecule 28: Unassigned secondary structure

Chain Ch:  100%

There are no outlier residues recorded for this chain.

- Molecule 29: 25S ribosomal RNA

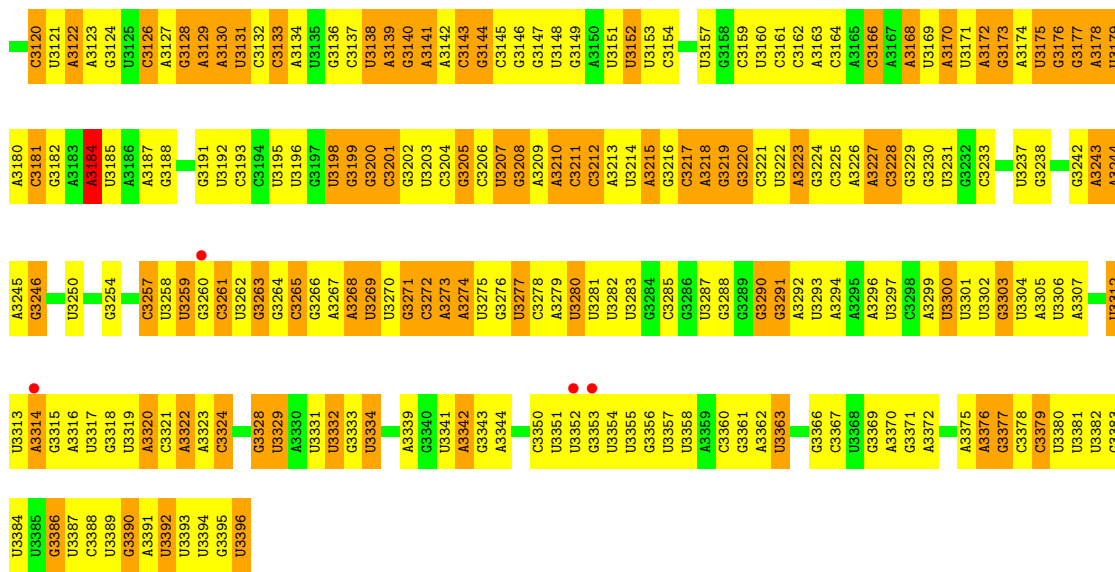
Chain B1:  2% 29% 47% 19% 6%



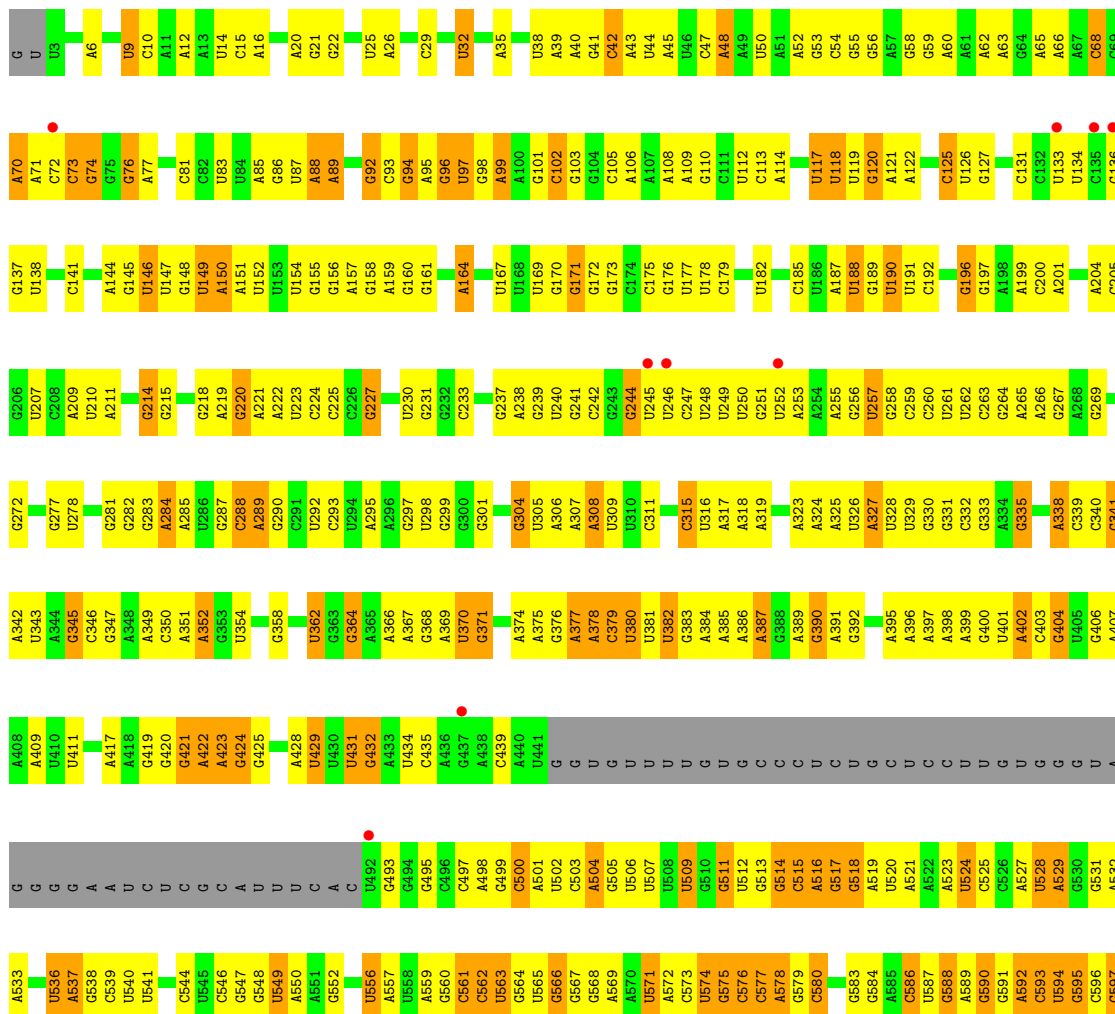
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U1124	U1056	U987	U922	U862	C731	U731	U662	A603	A529	A402	C339	A268	A203
U1125	C923	U988	C923	C863	C732	C732	G604	A604	A530	C403	C340	G269	A204
	G924	C924	G924	C864	C733	C733	A605	U605	A531	G404	G341	U270	C205
	C927	U989	G924	U865	C734	C734	A606	U606	A532	U405	A342	G271	G206
U1128	A1061	A992	C927	U866	C735	C735	C607	A607	A533	G406	U343	G272	U207
A1129	A1062	U993	U930	C867	A736	A736	G608	A608	U536	A408	G344	C208	A209
A1130	G1063	G994	U931	C868	U737	U737	G609	G609	U537	A409	C346	U210	U210
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C1132	A1065	A996	U932	C802	U739	U739	G611	G611	G539	A417	C350	G282	G214
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G1134	U1067	U998	G934	C804	U741	U741	G612	G612	U541	A419	A352	U217	G216
A1135	C1068	G999	U935	G805	C742	C742	U613	U613	U542	A420	A353	U286	U217
A1136	U1071	C1000	A936	U806	A744	A744	C614	C614	C544	G421	A354	U287	G218
C1137	U1072	G1001	G937	A807	C745	C745	U615	U615	U545	G422	U354	G288	G218
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G1139	U1073	U1003	U939	C809	U747	U747	U617	U617	U546	A424	A358	G290	A221
G1140	U1074	U1004	G940	U810	U748	U748	G618	G618	U547	G425	U359	U292	U223
G1141	A1075	G1005	G941	U811	C749	C749	A619	A619	U548	G426	A360	U293	U224
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U1144	U1078	C881	U944	U814	C752	C752	G684	G684	U551	U429	A363	U296	C226
A1145	A1079	A882	C944	C815	C753	C753	G685	G685	U552	U430	A364	U297	C227
C1146	A1080	A883	U945	U816	G754	G754	G686	G686	U553	U431	A365	U298	U228
G1147	U1081	U885	G947	U817	A755	A755	G625	G625	U554	U432	A366	U299	G229
G1148	U1082	C886	C948	C818	U756	U756	U626	U626	U555	G433	A367	U300	U230
G1149	U1083	U887	C949	U819	C757	C757	A691	A691	G560	A434	A368	U301	G231
A1150	A1084	C888	U950	U820	C758	C758	A692	A692	G561	U435	A369	U302	G237
C1151	U1085	A888	G951	U821	U759	U759	A693	A693	G562	G436	A370	U303	A238
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C1155	U1093	C893	U955	C827	U764	U764	A699	A699	U567	U441	A375	U307	C243
G1156	A1094	C894	U956	A827	C765	C765	G703	G703	U568	G	A376	U308	G244
G1157	U1095	A895	C957	U828	U766	U766	U704	U704	U569	G	A377	C311	U245
A1158	U1096	A896	C958	U829	U767	U767	A705	A705	G570	G	A378	U315	U246
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A1163	G1101	G901	G963	U834	A771	A771	U710	U710	U575	G	A383	U320	G258
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A1169	C1107	G907	C969	U839	U777	U777	A716	A716	G583	G	A389	U326	U265
A1170	U1041	G908	A970	C840	U778	U778	C717	C717	G584	C	A390	U327	G266
G1171	U1042	U909	G971	U841	G779	G779	G718	G718	U585	C	A391	U328	U267
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G1174	U1112	G912	C975	U844	U782	U782	G721	G721	G588	C	A394	U331	C260
C1175	G1113	U913	C976	A845	U783	U783	U722	U722	U589	G	A395	U332	U261
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G1178	G1115	A980	G980	G853	G786	G786	G725	G725	A592	C	A398	U335	G264
A1179	U1050	U981	U981	G854	U787	U787	G726	G726	U593	C	A399	U336	A265
A1180	C1117	U1051	G984	U848	G788	G788	U727	U727	U594	C	A399	U336	A265
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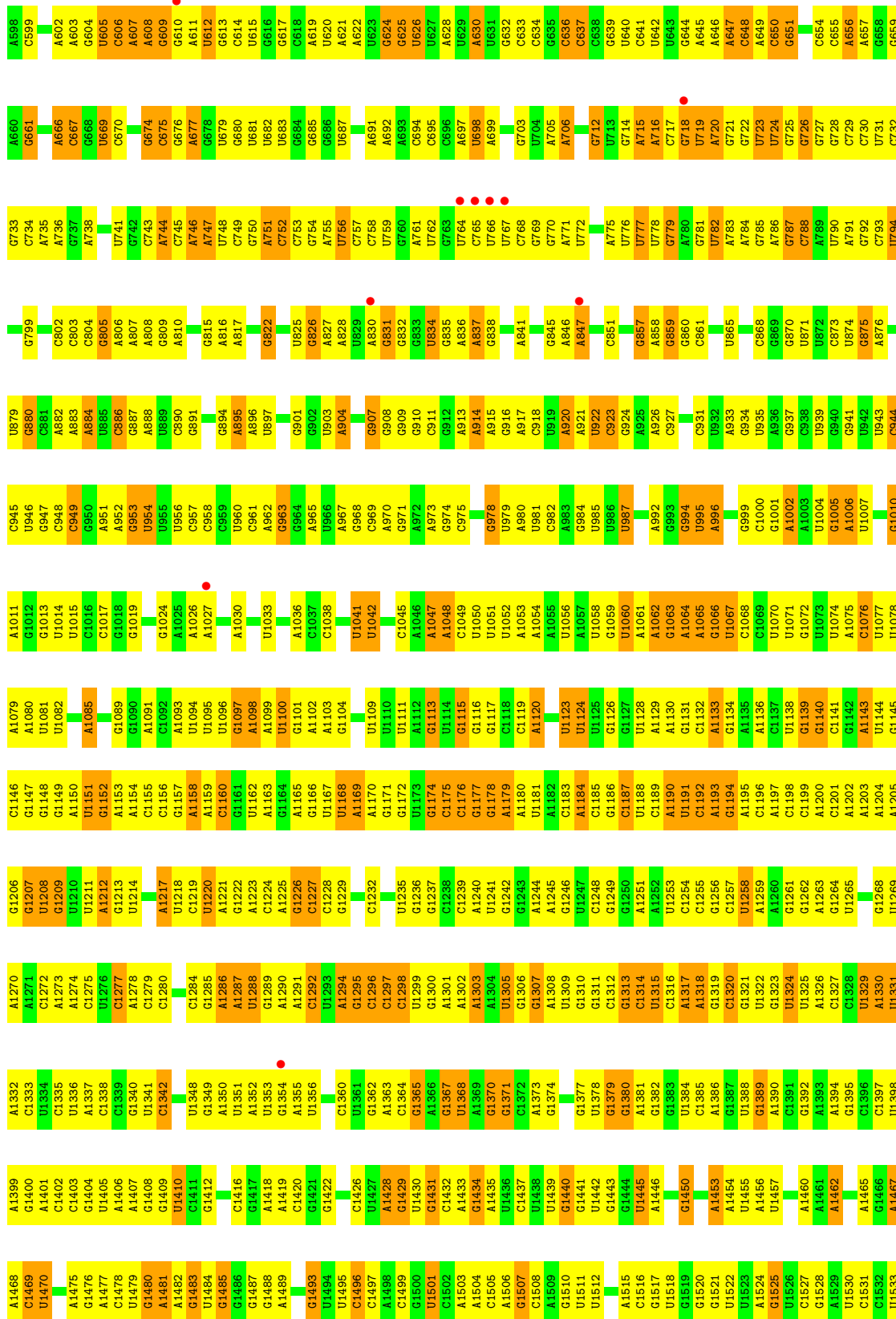
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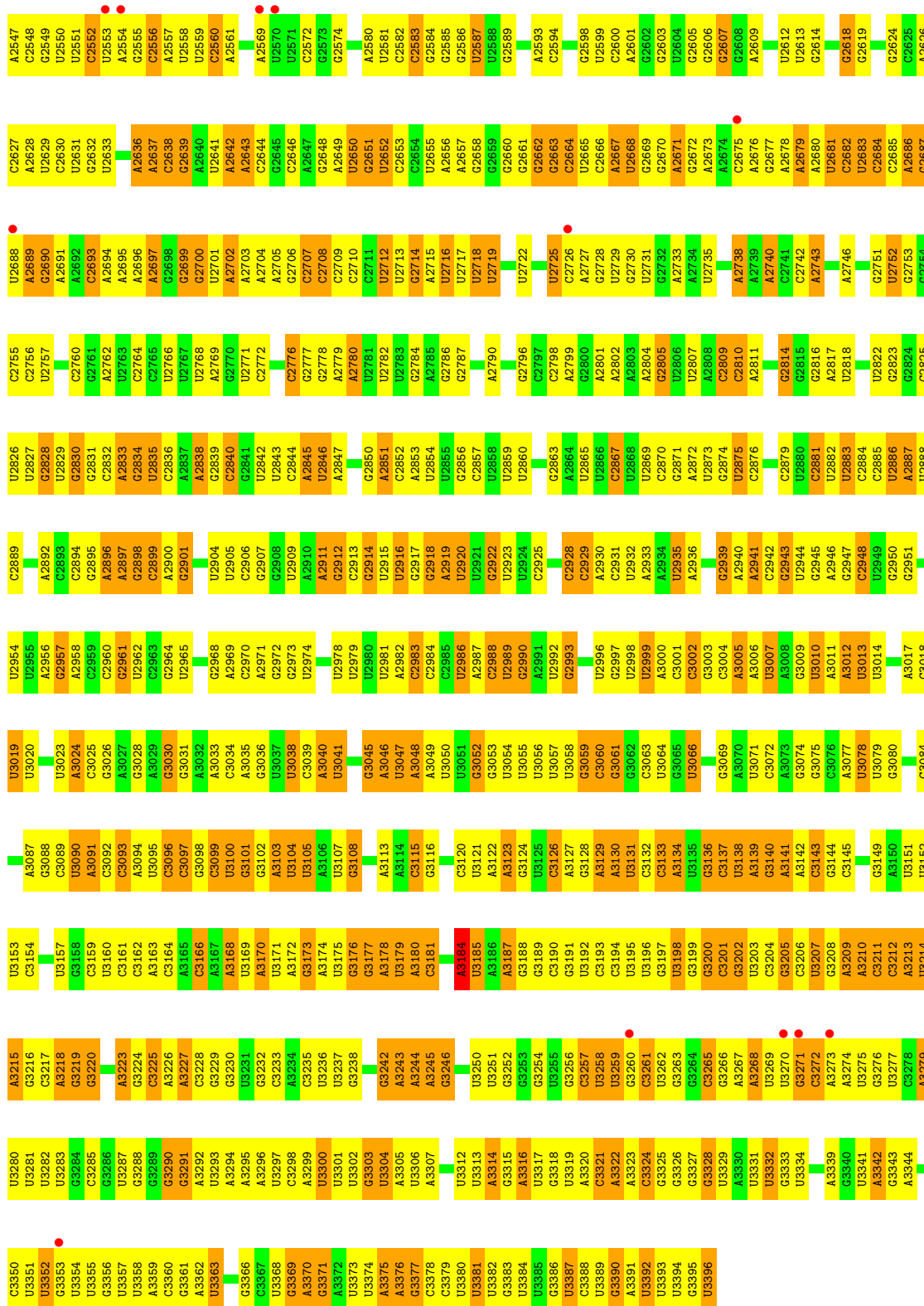
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U2292	A2295	A2296	U2297	U2298	A2299	G2300	U2301	G2370	A2302	A2303	C2304	C2305	C2306	G2307	C2308	A2309	U2310	G2311	A2312	G2350	A2314	A2315	G2253	U2254	A2255	A2256	U2257	U2258	A2259	U2260	G2261	A2262	U2263	U2264	U2265	U2266	U2267	A2270	A2271	G2272	G2273	U2274	A2275	G2276	G2277	C2278	A2279	A2280	A2281	U2282	G2283	U2286	U2287	G2288	U2289	G2290	A2291																																																
C2360	A2361	C2362	C2363	C2364	C2365	C2366	G2369	G2370	G2371	A2372	A2373	C2374	G2375	G2376	G2377	G2378	U2379	U2380	G2381	G2382	C2383	A2384	G2385	A2386	A2390	G2391	C2392	U2393	G2394	G2395	G2396	G2397	A2398	A2399	G2400	A2401	A2402	G2403	A2404	C2405	U2410	U2411	U2412	A2413	G2414	C2415	U2416	U2417	U2418	A2419	U2420	U2421	C2422	U2423	A2424	C2359																																																	
G2429	A2432	U2433	U2434	U2435	U2436	A2437	A2438	A2439	C2443	A2444	A2445	U2446	A2447	U2448	A2449	G2450	G2451	G2452	G2453	A2454	U2455	G2456	G2457	A2458	A2459	U2460	C2461	G2462	G2463	U2464	G2465	G2466	G2467	A2468	G2469	C2470	U2471	U2472	U2473	A2474	G2475	C2479	A2484	U2485	A2486	U2487	A2488	U2489	C2490	U2491	U2492	U2493	A2494	A2495	C2496	G2496																																																	
U2498	U2499	A2500	U2433	U2434	U2435	U2436	U2504	U2508	A2511	U2512	U2513	U2514	U2515	U2516	U2517	A2520	U2521	G2522	G2523	G2524	U2525	G2526	G2527	G2528	U2460	A2529	U2530	C2531	A2536	C2539	U2540	U2541	U2542	U2543	A2547	C2548	U2549	U2550	U2551	C2552	U2553	A2554	G2555	C2556	U2557	U2558	U2559	C2560	A2561	A2569	C2572	G2573																																																					
G2574	A2580	U2581	C2582	C2583	G2584	C2585	G2586	U2587	U2588	G2589	A2593	C2594	U2597	U2598	U2599	G2600	A2601	G2602	G2603	U2604	G2605	G2606	G2607	G2608	A2609	G2610	U2611	U2612	U2613	G2614	G2618	G2619	G2624	C2625	A2626	C2627	A2628	U2629	C2630	U2631	G2632	U2633	A2636	A2637	C2638	U2639	U2640	U2641	A2642	A2643	C2644	U2645	C2646																																																				
A2647	G2648	A2649	U2650	G2651	U2652	C2653	G2654	U2655	A2656	A2657	G2658	G2662	G2663	C2664	U2665	G2666	A2667	U2668	G2669	G2670	U2671	G2672	A2673	G2674	C2675	U2676	A2677	G2678	U2679	U2680	U2681	U2682	U2683	C2684	A2685	A2686	G2687	U2688	A2689	G2690	A2691	A2692	C2693	A2694	A2695	A2696	A2697	G2698	G2699	G2700	U2701	U2702	A2703	A2704	C2707	C2708	C2709																																																
C2710	C2711	U2712	U2713	U2714	C2715	U2716	U2717	U2718	U2719	U2725	C2726	A2727	G2728	A2729	G2730	U2731	C2732	A2733	A2804	G2805	U2806	U2807	A2808	C2809	A2810	C2811	A2812	U2813	U2814	U2822	C2823	U2824	C2825	U2826	U2827	U2828	U2829	G2830	A2833	U2834	U2835	U2836	A2837	A2838	G2839	C2840	G2841	U2842	U2843	C2844	A2845	U2846	A2847																																																				
G2848	C2849	G2850	A2851	U2852	A2853	C2854	C2857	U2858	U2859	U2860	U2865	U2866	C2867	U2868	U2869	C2870	G2871	A2872	U2873	G2874	U2875	G2878	C2879	U2880	C2881	U2882	U2883	C2884	G2885	U2886	A2887	U2888	C2889	A2890	U2891	A2892	C2893	C2894	G2895	A2896	A2897	G2898	C2899	A2900	U2901	A2902	U2905	C2906	G2907	U2908	U2909	G3002	G3003	G3004	A3005	A3006	U3007	U3008	G3009	U3010	A3011	A3012	U3013	U3014	A3017	U3019	U3020	U3023	A3024	C3025	G3028	A3029	G3030	G3031	A3032	A3033	C3034	A3035	G3036	U3037	U3038	C3039	A3040	U3041	U3042	G3043	G3044	G3045	A3046	U3047	C2983	C3115													
U2916	G2917	G2918	A2919	U2920	U2921	G2922	U2923	U2924	C2928	G2929	A2930	C2931	U2932	U2935	A2936	G2939	A2940	A2941	C2942	G2943	U2944	G2945	A2946	G2947	C2948	G2951	U2954	U2955	G2956	A2957	A2958	C2959	C2960	G2961	U2962	C2963	G2964	U2965	G2968	A2969	C2970	A2971	G2972	G2973	G2977	U2978	U2979	U2980	U2981	A2982	U2983	C2984	C3052	C3053	C3054	C3055	C3056	C3057	C3058	G3059	C3060	G3061	G3062	C3063	U3064	U3066	G3069	U3070	C3072	A3073	G3074	G3075	U3076	A3077	U3078	U3079	G3080	C3084	C3089	U3090	A3091	C3092	C3093	A3094	U3095	C3096	C3097	G3098	A3099	U3100	C3101	G3102	A3103	U3104	U3105	A3106	U3107	G3108	G3109	C3110	U3111	G3112	A3113	A3114	C3115



• Molecule 29: 25S ribosomal RNA

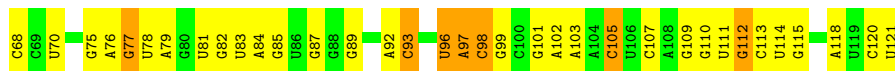
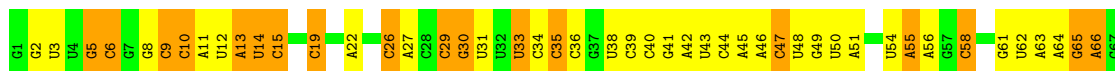




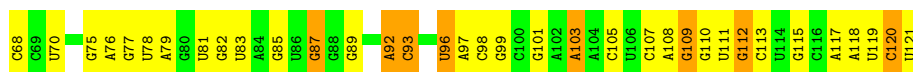
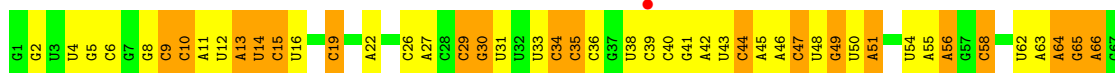


• Molecule 30: 5S ribosomal RNA

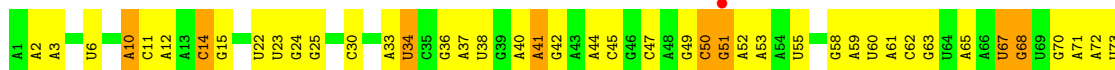




• Molecule 30: 5S ribosomal RNA



• Molecule 31: 5.8S ribosomal RNA

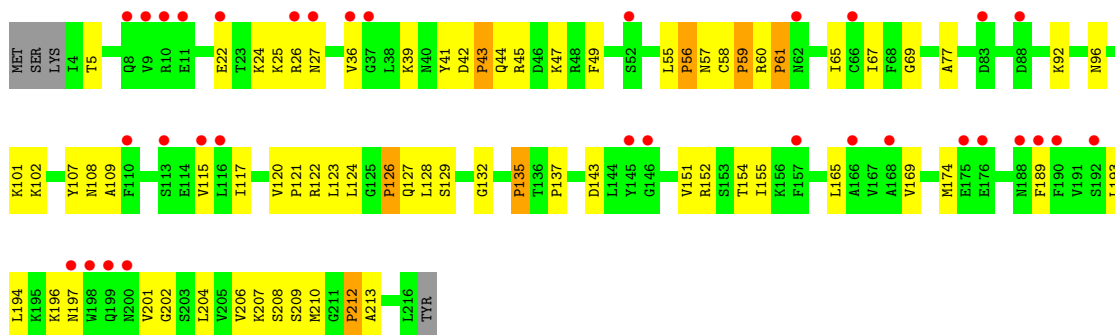


• Molecule 31: 5.8S ribosomal RNA

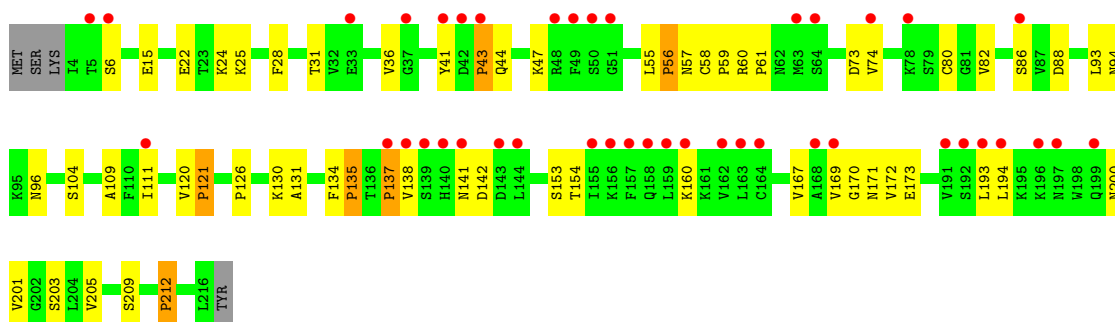
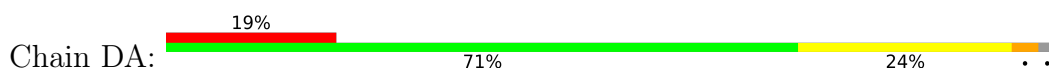


• Molecule 32: 60S ribosomal protein L1

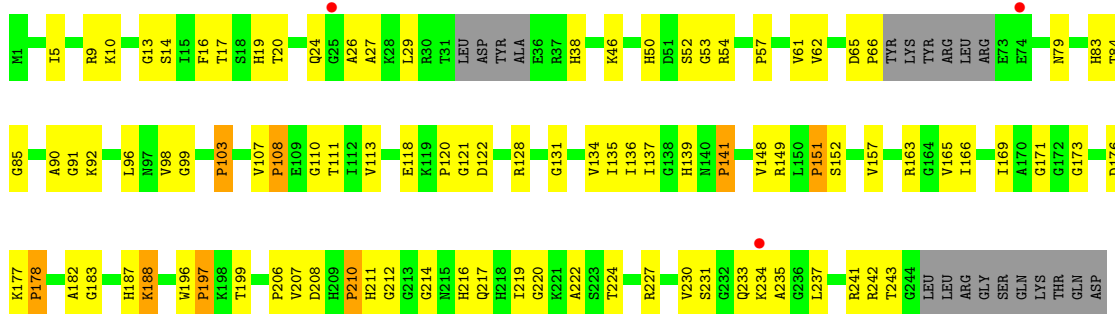




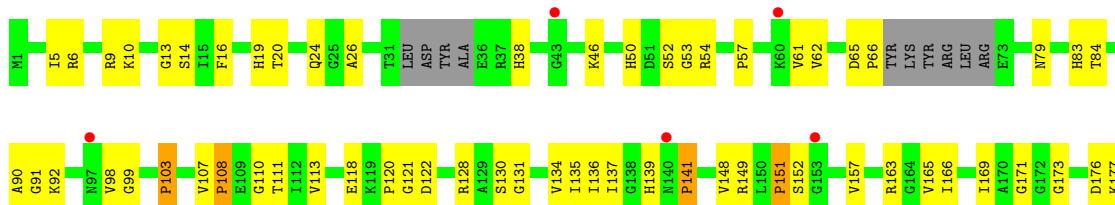
- Molecule 32: 60S ribosomal protein L1



- Molecule 33: 60S ribosomal protein L2

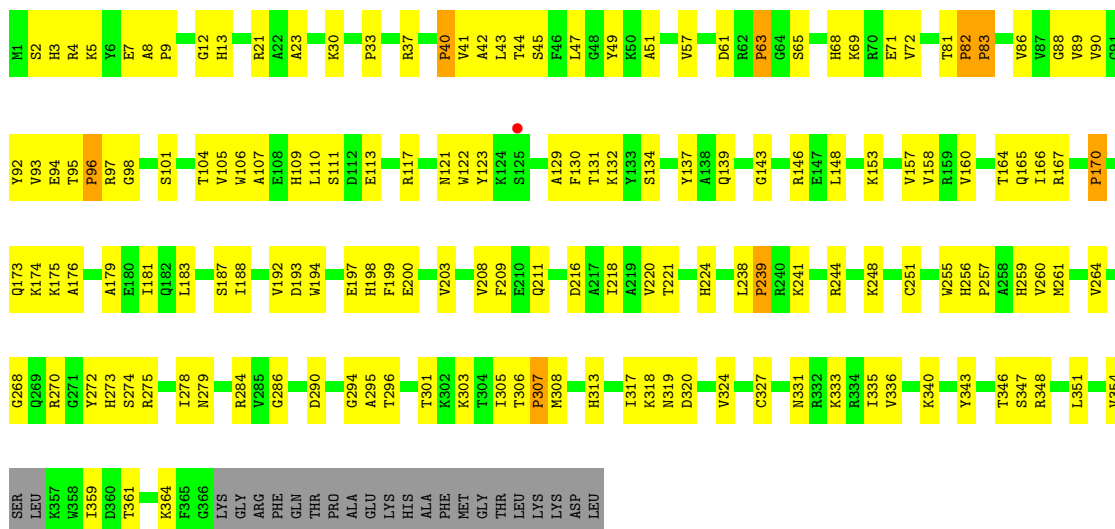


- Molecule 33: 60S ribosomal protein L2

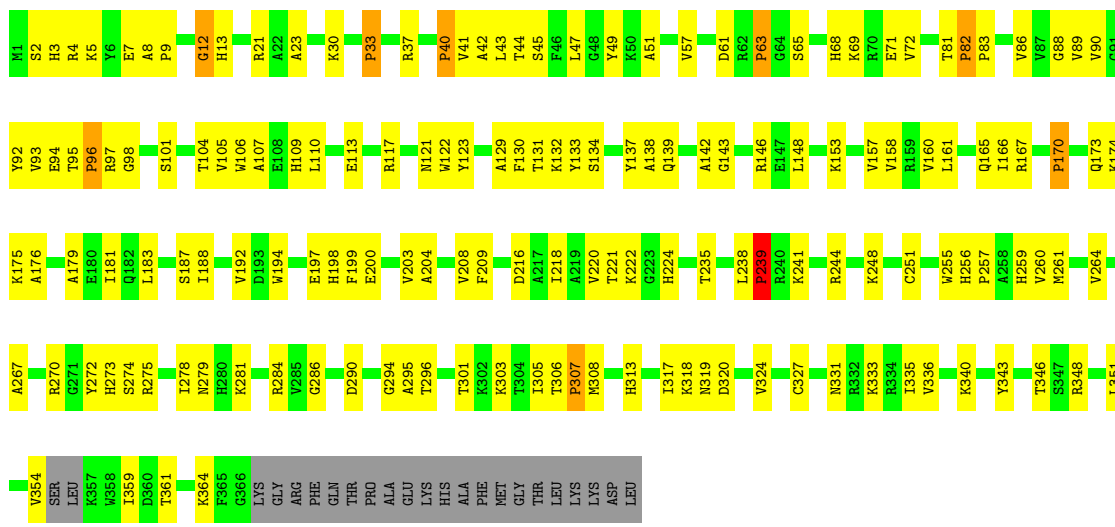




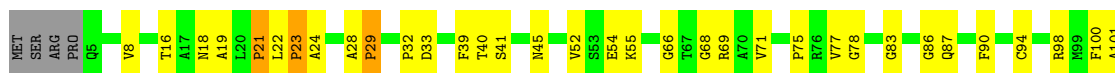
• Molecule 34: 60S ribosomal protein L3

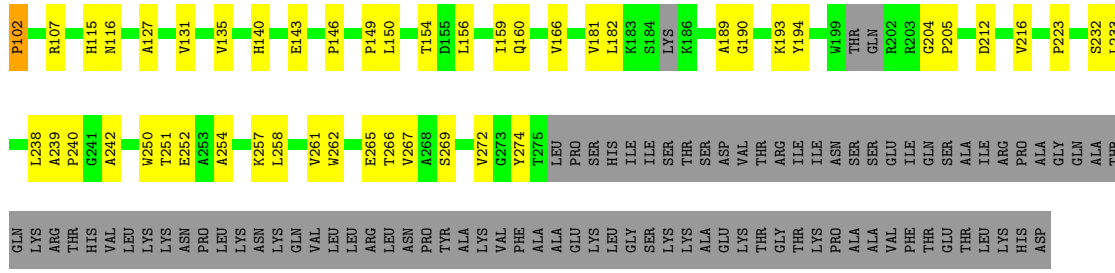


• Molecule 34: 60S ribosomal protein L3

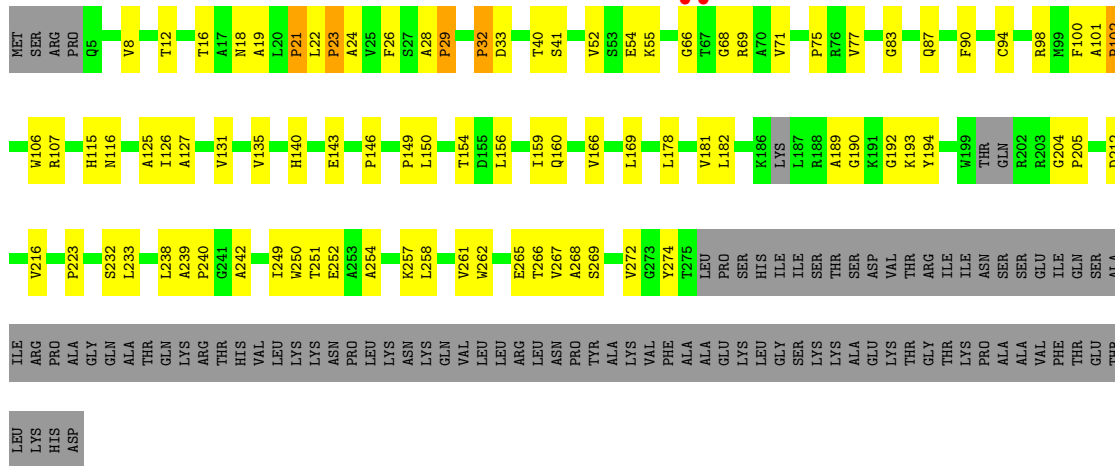


• Molecule 35: 60S ribosomal protein L4-A

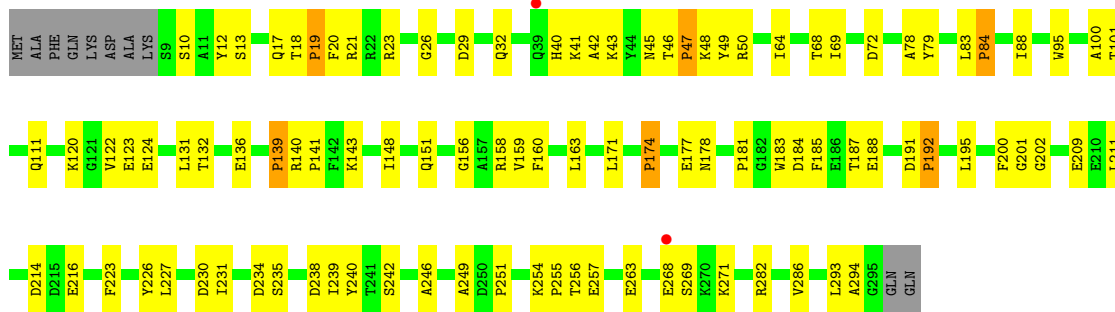




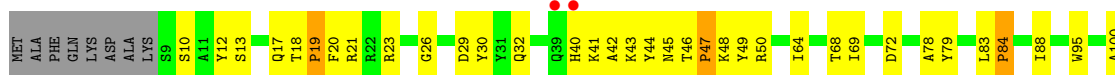
• Molecule 35: 60S ribosomal protein L4-A

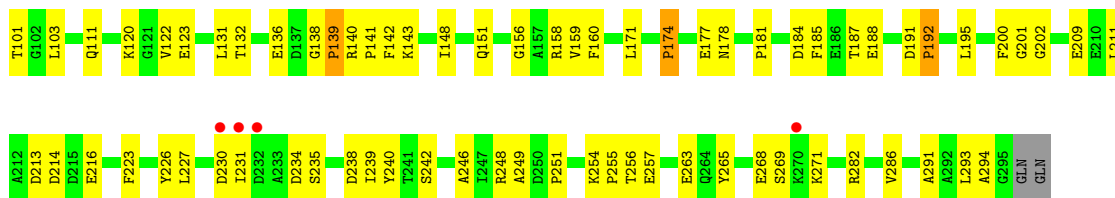


• Molecule 36: 60S ribosomal protein L5

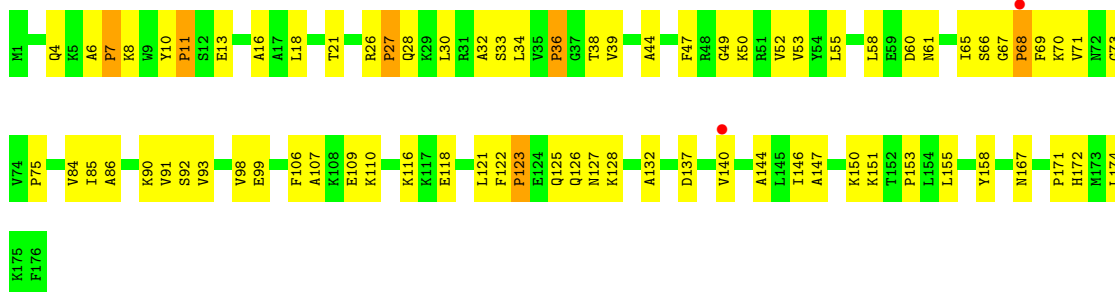


• Molecule 36: 60S ribosomal protein L5

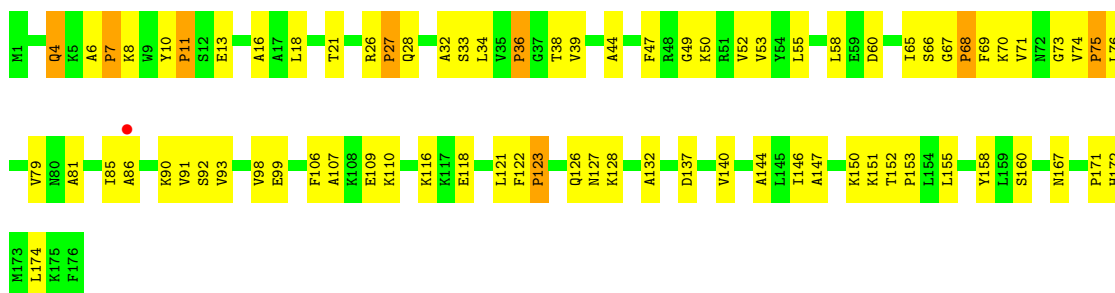




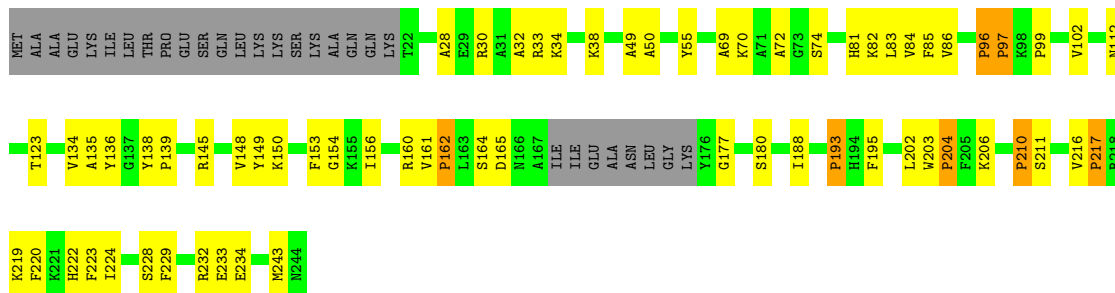
• Molecule 37: 60S ribosomal protein L6-A



• Molecule 37: 60S ribosomal protein L6-A

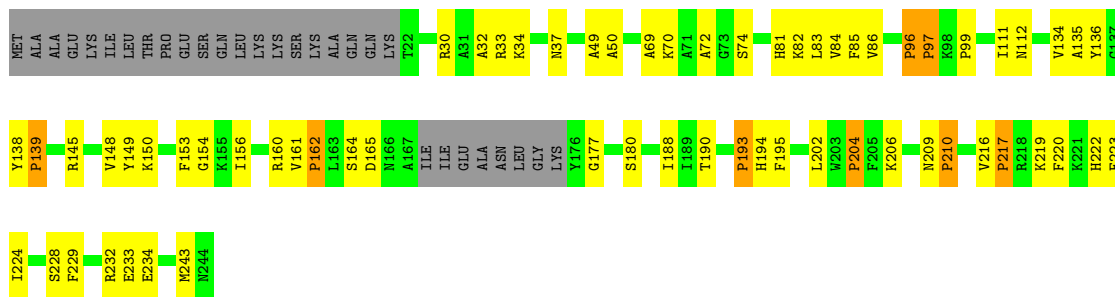


• Molecule 38: 60S ribosomal protein L7-A

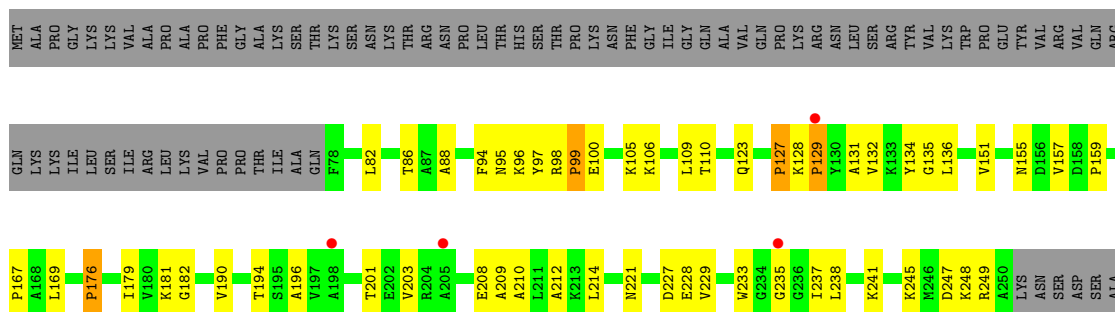


• Molecule 38: 60S ribosomal protein L7-A

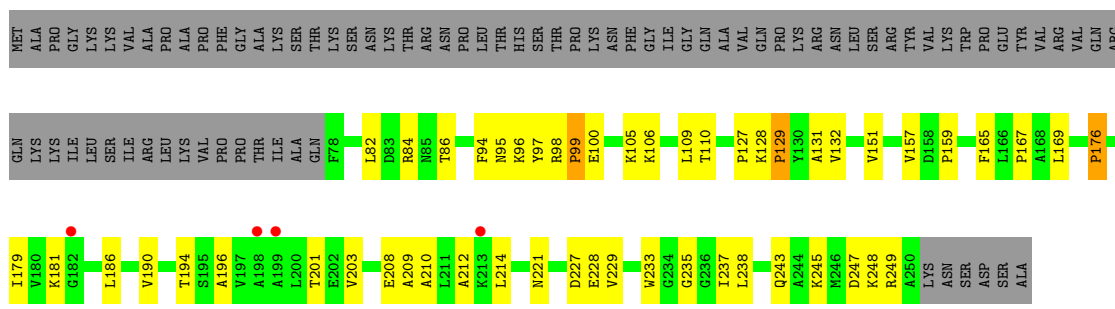




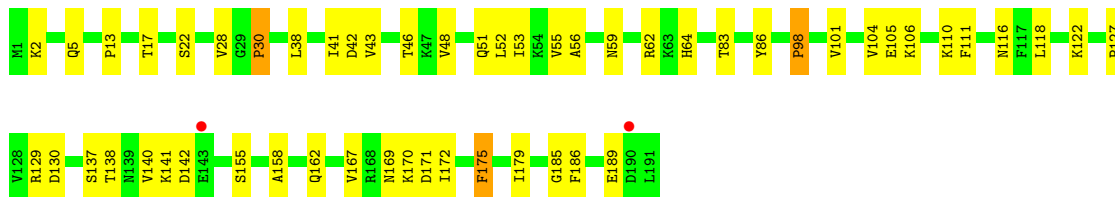
• Molecule 39: 60S ribosomal protein L8-A



• Molecule 39: 60S ribosomal protein L8-A

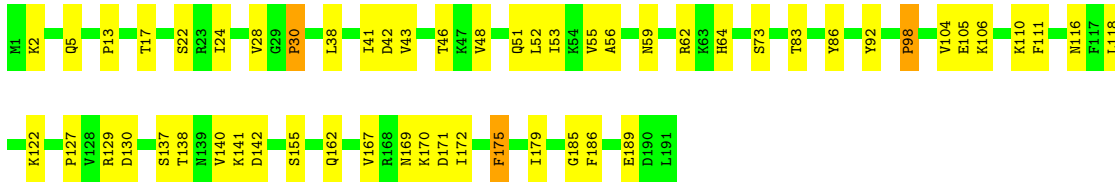


• Molecule 40: 60S ribosomal protein L9-A



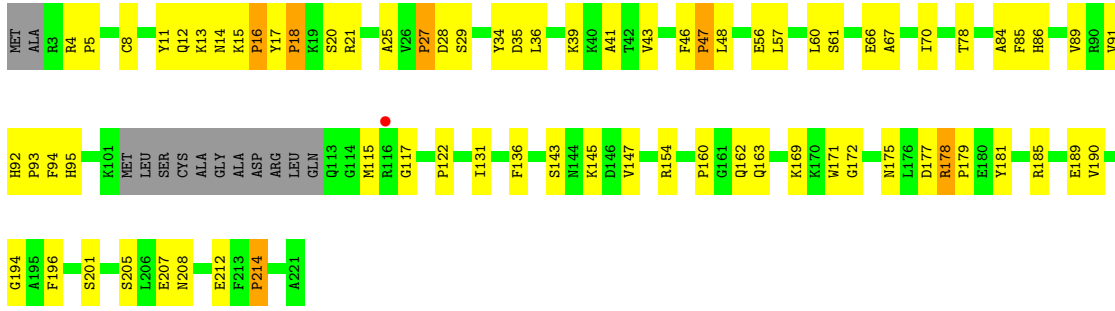
• Molecule 40: 60S ribosomal protein L9-A





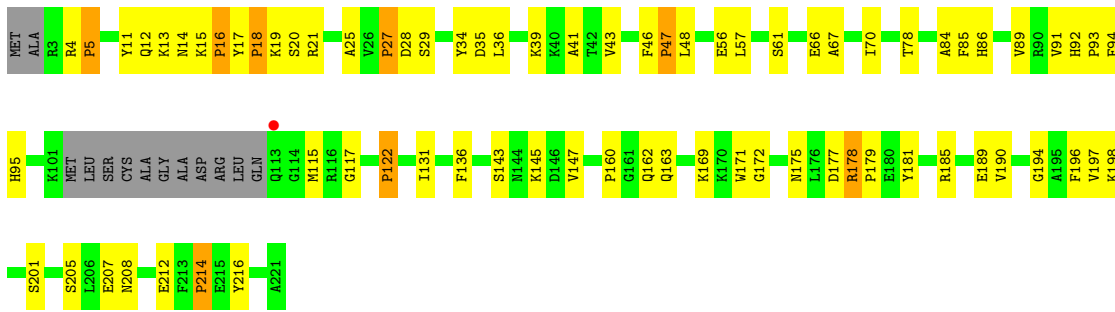
- Molecule 41: 60S ribosomal protein L10

Chain BJ: 61% 31% 6%



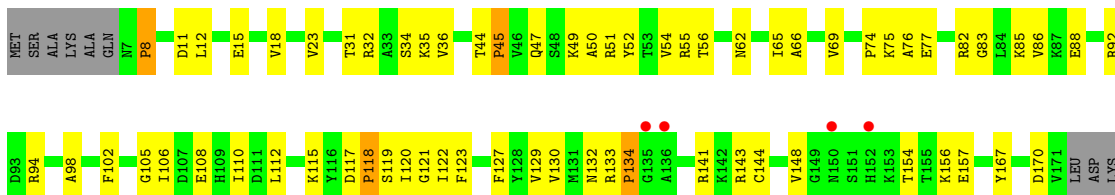
- Molecule 41: 60S ribosomal protein L10

Chain DJ: 60% 30% 6%



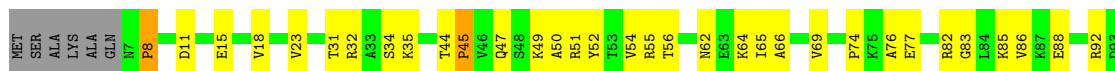
- Molecule 42: 60S ribosomal protein L11-A

Chain BK: 57% 36% 5%



- Molecule 42: 60S ribosomal protein L11-A

Chain DK: 59% 34% 5%



- Molecule 43: 60S ribosomal protein L14-A

Chain BN: 51% 34% 13%



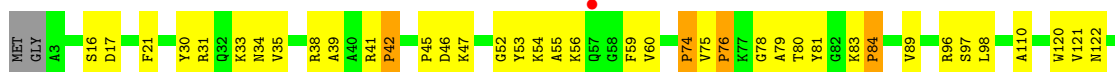
- Molecule 43: 60S ribosomal protein L14-A

Chain DN: 48% 37% 13%



- Molecule 44: 60S ribosomal protein L15-A

Chain BO: 62% 26% 8%

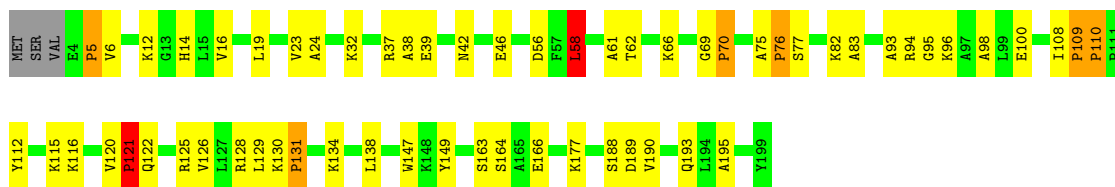


- Molecule 44: 60S ribosomal protein L15-A

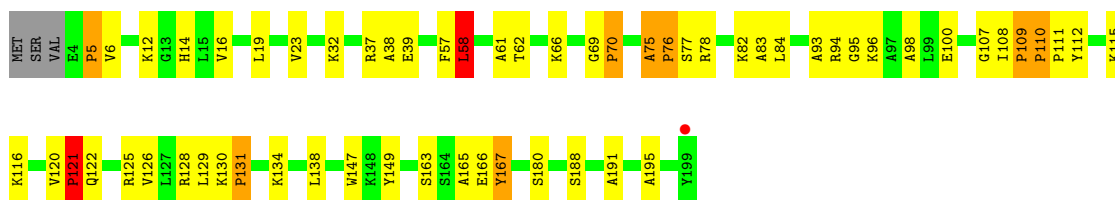
Chain DO: 63% 25% 8%



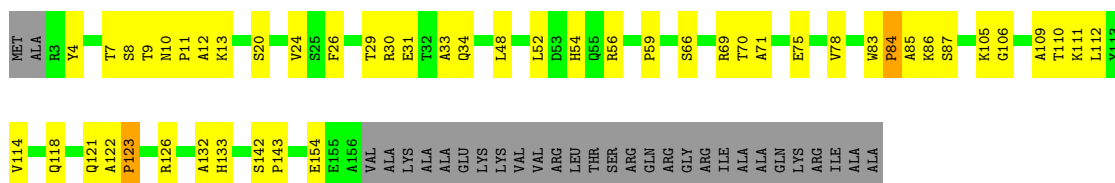
- Molecule 45: 60S ribosomal protein L16-A



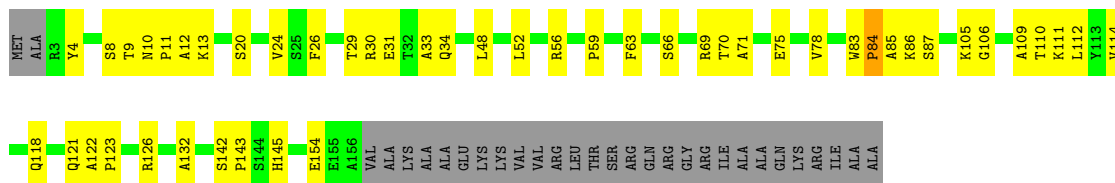
● Molecule 45: 60S ribosomal protein L16-A



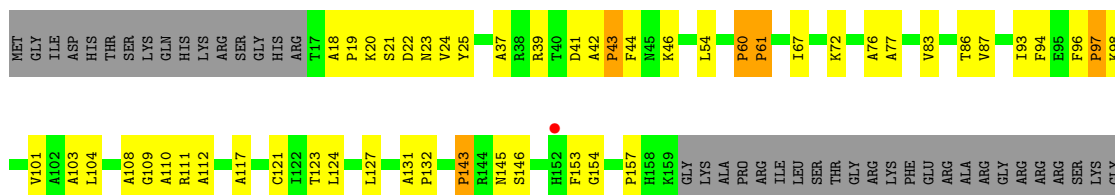
● Molecule 46: 60S ribosomal protein L17-A



● Molecule 46: 60S ribosomal protein L17-A



● Molecule 47: 60S ribosomal protein L18



PHE
LYS
VAL

- Molecule 47: 60S ribosomal protein L18

Chain DR: 2% 50% 23% 23%

MET	GLY	ILE	ASP	G109	HIS	THR	SER	LYS	GLN	HIS	HIS	LYS	ARG	SER	GLY	HIS	ARG	T117	A18	P19	K20	S21	D22	N23	V24	A37	R38	R39	T40	D41	A42	F43	F44	M45	K46	P60	P61	I67	K72	A76	A77	V83	V87	I93	F94	E95	F96	P97	K98	V101	A102	A103
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L104	A108	G109	A110	R111	A112	A117	E120	C121	T122	T123	L124	L127	A128	A131	P132	P143	R144	N145	S146	A149	H152	F153	G154	P157	H158	K159	GLY	LYS	PRO	ARG	ILE	LEU	SER	THR	GLY	ARG	LYS	PHE	GLU	ARG	ALA	ALA	ARG	ILE	LEU	LEU	THR	GLY	ARG	LYS	PHE	GLU	ARG	ALA	ALA	ARG	GLY	ARG	ARG	ARG	ARG	LYS	GLY
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PHE
LYS
VAL

- Molecule 48: 60S ribosomal protein L19

Chain BS: 2% 85% 14%

MET	A2	N3	K8	A12	V17	G18	K19	R20	D25	P26	A33	K53	A54	V55	K60	A67	R71	E72	G77	P90	R97	R104	L105	L106	H121	K128	H134	K135	N130	K133	H134	K135	E140	I143	D152	A153	A159	D182	A183	A189
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- Molecule 48: 60S ribosomal protein L19

Chain DS: 13% 85% 14%

MET	A2	N3	A13	S13	V17	G18	K19	R20	D25	P26	N27	R38	V55	K60	R71	E72	P90	I96	R104	L105	L106	H121	K128	G129	N130	K133	H134	K135	E140	I143	A147	M155	E157	E158	A159	E160	R163	L164	K165	M166	R167
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A168	A169	R170	D171	R172	A174	Q175	R176	V177	A178	E179	K180	R181	D182	L185	K186	E187	D188	A189
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- Molecule 49: 60S ribosomal protein L21-A

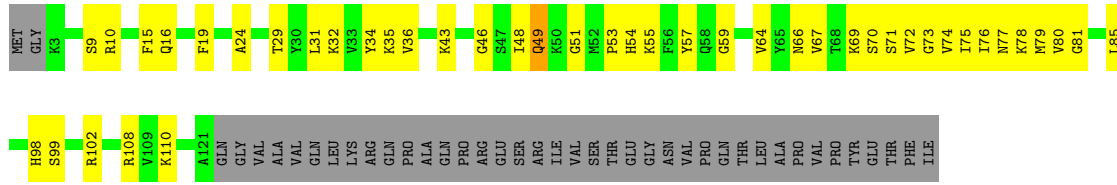
Chain BT: 46% 28% 26%

MET	GLY	K3	S9	R10	T11	R12	Y13	M14	F15	Q16	F19	A24	L27	S28	T29	Y30	L31	K32	Y33	K35	V36	I42	K43	G46	S47	I48	Q49	K50	G51	M52	P53	H54	K55	F56	Y57	G58	G59	V64	Y65	N66	V67	T68	K69	S70	S71	V72	G73	V74	I75	I76	N77
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K78	K79	W80	G81	L85	H98	S99	R108	V109	K110	A121	GLN	GLY	VAL	ALA	VAL	GLN	LEU	L31	LYS	ARG	GLN	PRO	K35	V36	I42	K43	G46	S47	I48	Q49	K50	G51	M52	P53	H54	K55	F56	Y57	G58	G59	V64	Y65	N66	V67	T68	K69	S70	S71	V72	G73	V74	I75	I76	N77
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- Molecule 49: 60S ribosomal protein L21-A

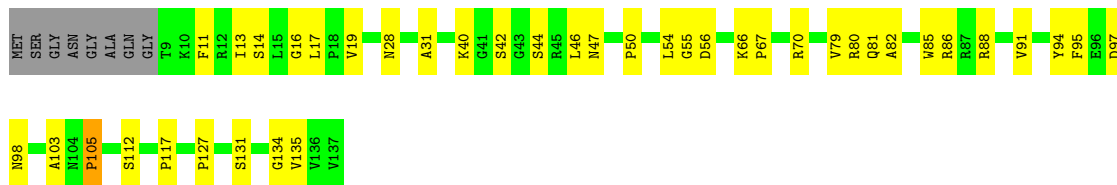
Chain DT: 47% 27% 26%



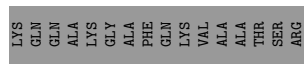
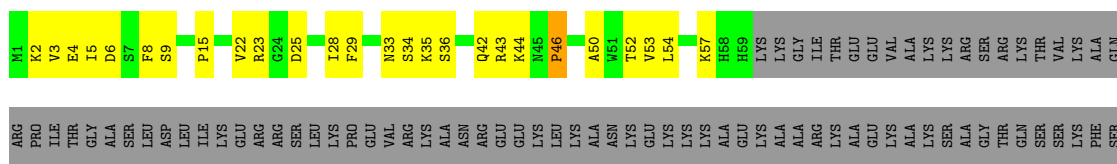
● Molecule 50: 60S ribosomal protein L23



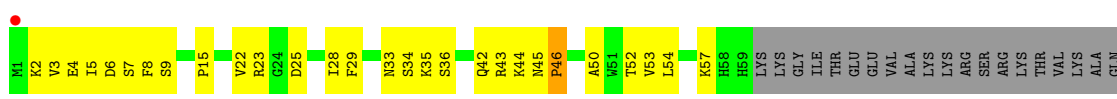
● Molecule 50: 60S ribosomal protein L23



● Molecule 51: 60S ribosomal protein L24-A

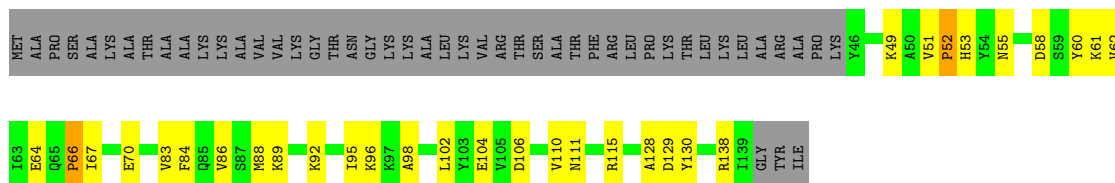


● Molecule 51: 60S ribosomal protein L24-A

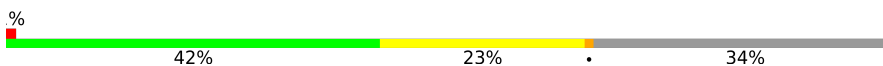


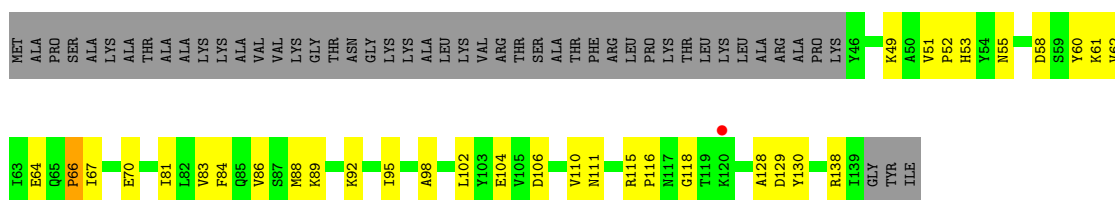
- Molecule 52: 60S ribosomal protein L25

Chain BW: 



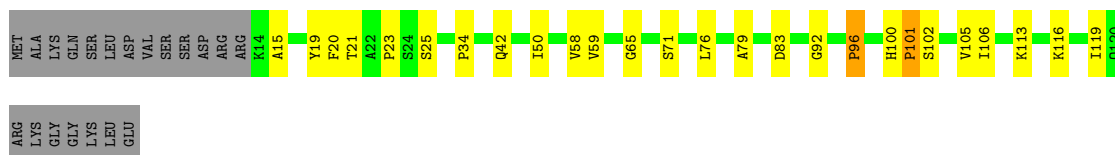
- Molecule 52: 60S ribosomal protein L25

Chain DW: 



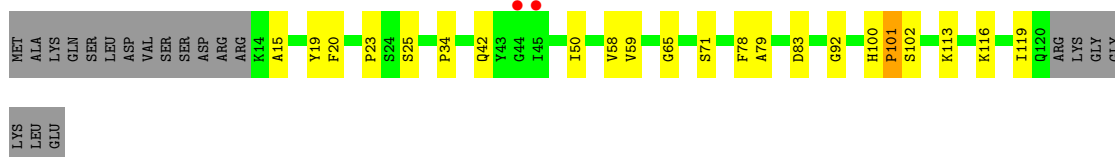
- Molecule 53: 60S ribosomal protein L26-A

Chain BX: 



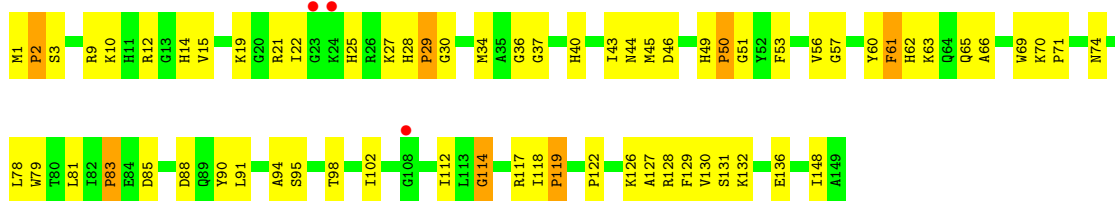
- Molecule 53: 60S ribosomal protein L26-A

Chain DX: 

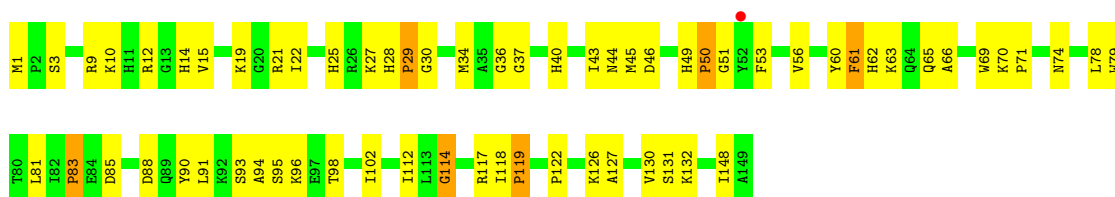


- Molecule 54: 60S ribosomal protein L28

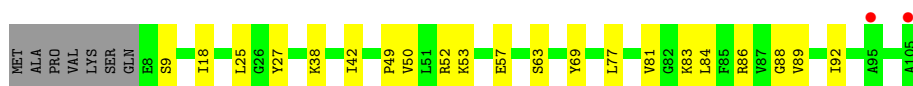
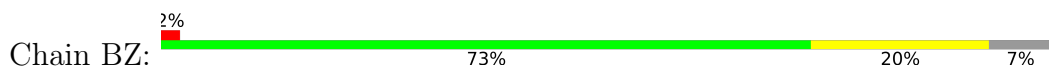
Chain BY: 



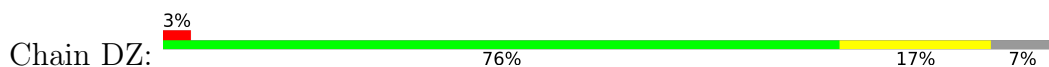
• Molecule 54: 60S ribosomal protein L28



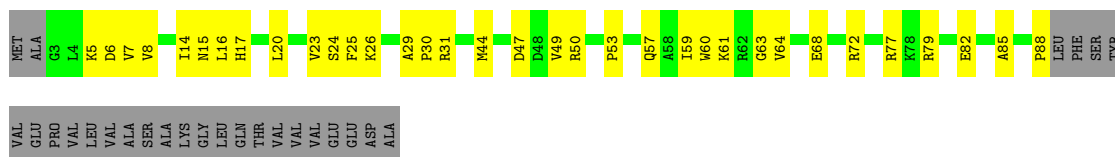
• Molecule 55: 60S ribosomal protein L30



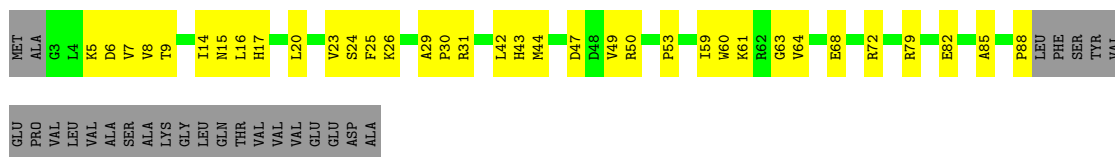
• Molecule 55: 60S ribosomal protein L30



• Molecule 56: 60S ribosomal protein L31-A



• Molecule 56: 60S ribosomal protein L31-A

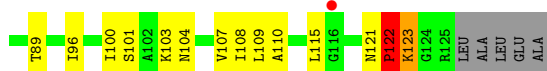
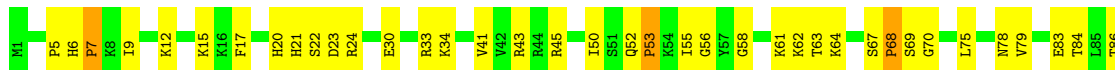


• Molecule 57: 60S ribosomal protein L32

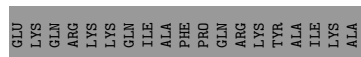
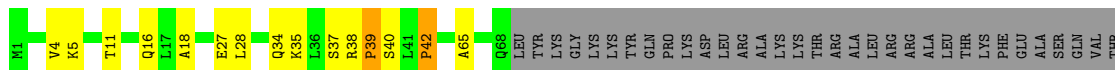




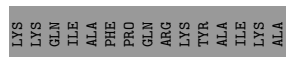
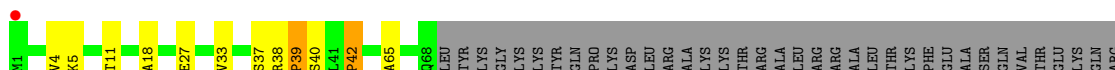
• Molecule 57: 60S ribosomal protein L32



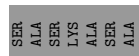
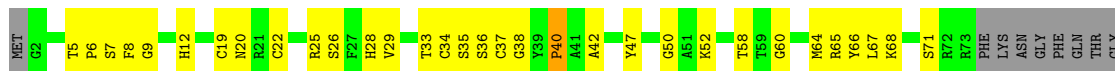
• Molecule 58: 60S ribosomal protein L35



• Molecule 58: 60S ribosomal protein L35

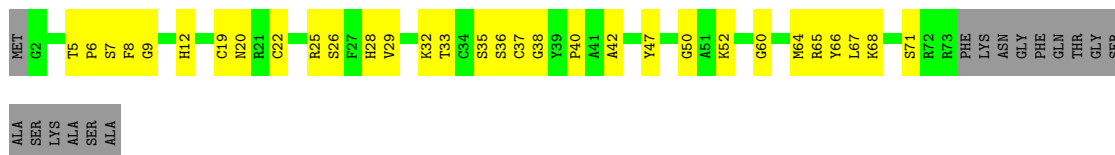


• Molecule 59: 60S ribosomal protein L37-A



• Molecule 59: 60S ribosomal protein L37-A

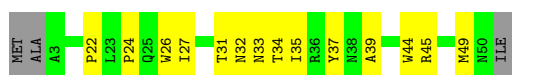




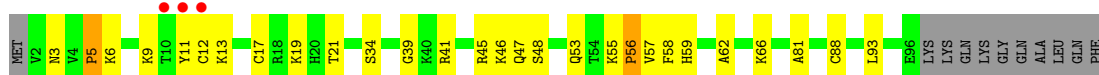
• Molecule 60: 60S ribosomal protein L39



• Molecule 60: 60S ribosomal protein L39



• Molecule 61: 60S ribosomal protein L42



• Molecule 61: 60S ribosomal protein L42



• Molecule 62: 60S ribosomal protein L43



• Molecule 62: 60S ribosomal protein L43





- Molecule 63: Unassigned secondary structure

Chain Bh:  100%

There are no outlier residues recorded for this chain.

- Molecule 63: Unassigned secondary structure

Chain Dh:  100%

There are no outlier residues recorded for this chain.

- Molecule 64: Unassigned secondary structure

Chain Bi:  100%

There are no outlier residues recorded for this chain.

- Molecule 64: Unassigned secondary structure

Chain Di:  100%

There are no outlier residues recorded for this chain.

- Molecule 65: Unassigned secondary structure

Chain Bk:  100%

There are no outlier residues recorded for this chain.

- Molecule 65: Unassigned secondary structure

Chain Dk:  100%

There are no outlier residues recorded for this chain.

- Molecule 66: Unassigned secondary structure

Chain Bl:  100%

There are no outlier residues recorded for this chain.

- Molecule 67: Unassigned secondary structure

Chain Bm:  100%

There are no outlier residues recorded for this chain.

- Molecule 68: Unassigned secondary structure

Chain Bn:  100%

There are no outlier residues recorded for this chain.

- Molecule 69: Unassigned secondary structure

Chain Bp:  100%

There are no outlier residues recorded for this chain.

- Molecule 70: Unassigned secondary structure

Chain Bq:  100%

There are no outlier residues recorded for this chain.

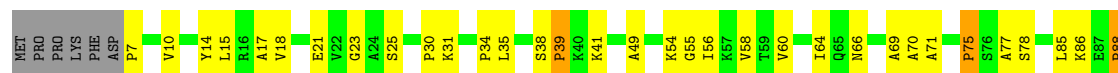
- Molecule 71: Unassigned secondary structure

Chain Br:  100%

There are no outlier residues recorded for this chain.

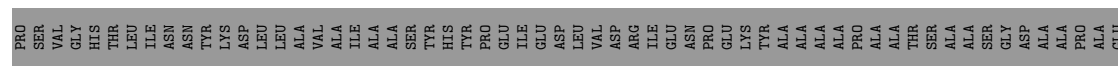
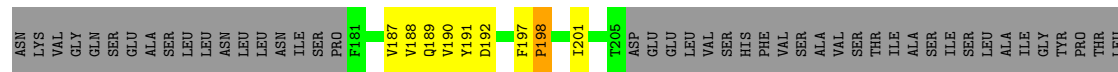
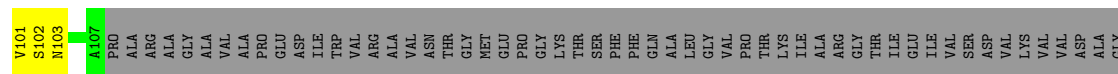
- Molecule 72: 60S ribosomal protein L12

Chain DL:  %
50% 31% 16%



- Molecule 73: 60S acidic ribosomal protein P0

Chain DM:  %
26% 15% 58%



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	437.11Å 288.38Å 306.56Å 90.00° 99.13° 90.00°	Depositor
Resolution (Å)	268.00 – 4.00 268.66 – 4.00	Depositor EDS
% Data completeness (in resolution range)	(Not available) (268.00-4.00) 97.9 (268.66-4.00)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.57 (at 4.02Å)	Xtrriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.278 , 0.341 0.283 , 0.343	Depositor DCC
R_{free} test set	12353 reflections (2.00%)	wwPDB-VP
Wilson B-factor (Å ²)	147.1	Xtrriage
Anisotropy	0.257	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.16 , 252.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.42$, $\langle L^2 \rangle = 0.25$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.87	EDS
Total number of atoms	309610	wwPDB-VP
Average B, all atoms (Å ²)	139.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.68% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: OHX

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	A1	0.77	20/42619 (0.0%)	1.32	552/66408 (0.8%)
1	C1	0.83	25/42619 (0.1%)	1.37	627/66408 (0.9%)
2	AA	0.45	0/1089	0.86	16/1517 (1.1%)
2	CA	0.50	0/1089	0.87	15/1517 (1.0%)
3	AB	0.54	0/1073	0.91	13/1488 (0.9%)
3	CB	0.56	0/1073	0.91	10/1488 (0.7%)
4	AC	0.50	0/927	0.68	4/1286 (0.3%)
4	CC	0.47	0/927	0.67	4/1286 (0.3%)
5	AD	0.45	0/834	0.71	5/1159 (0.4%)
5	CD	0.50	0/834	0.79	5/1159 (0.4%)
6	AE	0.49	0/775	0.70	3/1077 (0.3%)
6	CE	0.53	0/775	0.73	3/1077 (0.3%)
7	AF	0.60	0/381	0.88	3/530 (0.6%)
7	CF	0.59	0/381	0.90	4/530 (0.8%)
8	AG	0.51	0/579	0.78	5/806 (0.6%)
8	CG	0.52	0/579	0.79	5/806 (0.6%)
9	AH	0.43	0/626	0.71	4/867 (0.5%)
9	CH	0.44	0/626	0.72	4/867 (0.5%)
10	AI	0.45	0/595	0.90	8/826 (1.0%)
10	CI	0.52	0/595	0.91	7/826 (0.8%)
11	AJ	0.49	0/657	0.78	5/911 (0.5%)
11	CJ	0.55	0/657	0.81	5/911 (0.5%)
12	AK	0.44	0/331	0.74	2/460 (0.4%)
12	CK	0.41	0/331	0.70	2/460 (0.4%)
13	AL	0.47	0/589	0.70	2/816 (0.2%)
13	CL	0.50	0/589	0.72	2/816 (0.2%)
14	AM	0.54	0/518	0.83	3/715 (0.4%)
14	CM	0.68	1/518 (0.2%)	0.89	3/715 (0.4%)
15	AN	0.51	0/550	0.84	5/766 (0.7%)
15	CN	0.52	0/550	0.86	5/766 (0.7%)
16	AO	0.53	0/621	0.83	3/860 (0.3%)
16	CO	0.56	0/621	0.85	3/860 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AP	0.61	0/565	0.92	4/781 (0.5%)
17	CP	0.68	0/565	0.97	5/781 (0.6%)
18	AQ	0.41	0/331	0.68	2/460 (0.4%)
18	CQ	0.44	0/311	0.74	2/432 (0.5%)
19	AR	0.40	0/229	0.63	1/316 (0.3%)
19	CR	0.42	0/229	0.68	1/316 (0.3%)
20	AS	0.54	0/189	0.70	0/260
20	CS	0.58	0/189	0.73	0/260
21	AT	0.43	0/1541	0.61	8/2141 (0.4%)
21	CT	0.45	0/1541	0.61	8/2141 (0.4%)
29	B1	1.11	229/76764 (0.3%)	1.79	2866/119684 (2.4%)
29	D1	1.08	218/76764 (0.3%)	1.75	2607/119684 (2.2%)
30	B2	1.06	8/2883 (0.3%)	1.70	90/4491 (2.0%)
30	D2	1.17	10/2883 (0.3%)	1.84	112/4491 (2.5%)
31	B3	0.91	6/3746 (0.2%)	1.41	64/5832 (1.1%)
31	D3	0.79	1/3746 (0.0%)	1.28	40/5832 (0.7%)
32	BA	0.34	0/1054	0.63	9/1468 (0.6%)
32	DA	0.33	0/1054	0.61	9/1468 (0.6%)
33	BB	0.62	0/1103	0.92	11/1501 (0.7%)
33	DB	0.53	0/1103	0.87	11/1501 (0.7%)
34	BC	0.70	0/1790	1.05	9/2487 (0.4%)
34	DC	0.76	0/1790	1.08	12/2487 (0.5%)
35	BD	0.67	0/1311	0.95	9/1817 (0.5%)
35	DD	0.55	0/1311	0.90	12/1817 (0.7%)
36	BE	0.53	0/1411	0.93	9/1960 (0.5%)
36	DE	0.59	0/1411	0.97	9/1960 (0.5%)
37	BF	0.76	0/872	1.20	10/1215 (0.8%)
37	DF	0.85	0/872	1.21	12/1215 (1.0%)
38	BG	0.73	0/1059	1.06	8/1471 (0.5%)
38	DG	0.75	0/1059	1.05	9/1471 (0.6%)
39	BH	0.48	0/855	0.79	6/1190 (0.5%)
39	DH	0.45	0/855	0.76	6/1190 (0.5%)
40	BI	0.64	0/941	0.86	4/1308 (0.3%)
40	DI	0.73	0/941	0.92	5/1308 (0.4%)
41	BJ	0.66	0/1025	0.89	8/1424 (0.6%)
41	DJ	0.71	0/1025	0.91	9/1424 (0.6%)
42	BK	0.56	0/809	0.86	5/1122 (0.4%)
42	DK	0.61	0/809	0.87	4/1122 (0.4%)
43	BN	0.71	0/592	1.05	6/823 (0.7%)
43	DN	0.82	0/592	1.14	6/823 (0.7%)
44	BO	0.59	0/922	0.88	7/1282 (0.5%)
44	DO	0.51	0/922	0.86	7/1282 (0.5%)
45	BP	0.80	0/966	1.12	10/1343 (0.7%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
45	DP	0.84	1/966 (0.1%)	1.14	12/1343 (0.9%)
46	BQ	0.72	0/760	0.94	5/1057 (0.5%)
46	DQ	0.65	0/760	0.87	4/1057 (0.4%)
47	BR	0.70	0/705	1.00	6/980 (0.6%)
47	DR	0.60	0/705	0.94	7/980 (0.7%)
48	BS	0.52	0/930	0.63	2/1295 (0.2%)
48	DS	0.48	0/930	0.58	2/1295 (0.2%)
49	BT	0.68	0/585	0.85	0/812
49	DT	0.70	0/585	0.87	0/812
50	BU	0.63	0/630	0.86	5/872 (0.6%)
50	DU	0.75	0/630	0.93	5/872 (0.6%)
51	BV	0.54	0/290	0.84	2/402 (0.5%)
51	DV	0.58	0/290	0.85	2/402 (0.5%)
52	BW	0.55	0/467	0.84	2/651 (0.3%)
52	DW	0.49	0/467	0.81	3/651 (0.5%)
53	BX	0.55	0/529	0.78	4/736 (0.5%)
53	DX	0.49	0/529	0.74	3/736 (0.4%)
54	BY	0.70	0/726	1.10	9/1004 (0.9%)
54	DY	0.62	0/726	1.03	8/1004 (0.8%)
55	BZ	0.49	0/480	0.62	1/665 (0.2%)
55	DZ	0.46	0/480	0.62	1/665 (0.2%)
56	Ba	0.62	0/424	0.94	3/589 (0.5%)
56	Da	0.59	0/424	0.92	3/589 (0.5%)
57	Bb	0.72	0/617	1.13	6/858 (0.7%)
57	Db	0.61	0/617	1.07	6/858 (0.7%)
58	Bc	0.53	0/338	0.82	2/471 (0.4%)
58	Dc	0.45	0/338	0.74	2/471 (0.4%)
59	Bd	0.63	0/351	0.97	2/485 (0.4%)
59	Dd	0.54	0/351	0.89	2/485 (0.4%)
60	Be	0.59	0/239	0.85	2/333 (0.6%)
60	De	0.46	0/239	0.79	2/333 (0.6%)
61	Bf	0.47	0/466	0.68	2/646 (0.3%)
61	Df	0.39	0/466	0.66	2/646 (0.3%)
62	Bg	0.53	0/406	0.74	1/562 (0.2%)
62	Dg	0.49	0/406	0.67	0/562
72	DL	0.42	0/678	0.75	7/941 (0.7%)
73	DM	0.48	0/639	0.76	4/886 (0.5%)
All	All	0.92	519/326627 (0.2%)	1.50	7498/496371 (1.5%)

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
3	AB	0	2
3	CB	0	2
17	AP	0	1
17	CP	0	1
18	AQ	0	1
18	CQ	0	1
22	Bo	0	1
23	Ab	0	1
23	Cb	0	1
24	Ac	0	1
29	B1	0	3
29	D1	0	3
34	BC	0	5
34	DC	0	6
35	BD	0	1
35	DD	0	2
36	BE	0	1
36	DE	0	1
37	BF	0	4
37	DF	0	4
38	BG	0	1
38	DG	0	1
42	BK	0	1
42	DK	0	1
44	DO	0	1
45	BP	0	4
45	DP	0	5
49	BT	0	1
49	DT	0	1
51	BV	0	1
51	DV	0	1
54	BY	0	2
54	DY	0	2
56	Ba	0	1
56	Da	0	1
57	Bb	0	1
57	Db	0	1
All	All	0	68

All (519) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	D1	3243	A	N9-C4	13.96	1.46	1.37

Continued on next page...

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	D1	308	A	C6-N1	-13.36	1.26	1.35
29	B1	3184	A	C6-N1	-12.55	1.26	1.35
29	B1	308	A	C6-N1	-11.80	1.27	1.35
29	D1	2845	A	C6-N1	-11.64	1.27	1.35
29	B1	1951	C	C4-N4	-11.40	1.23	1.33
29	D1	3184	A	C6-N1	-11.23	1.27	1.35
29	D1	1951	C	C4-N4	-11.22	1.23	1.33
29	B1	2845	A	C6-N1	-11.09	1.27	1.35
29	D1	607	A	N9-C4	10.74	1.44	1.37
1	A1	1421	A	N9-C4	10.64	1.44	1.37
29	D1	1884	A	C6-N1	-10.64	1.28	1.35
29	D1	3176	G	N9-C4	-10.62	1.29	1.38
30	D2	13	A	N9-C4	-10.46	1.31	1.37
29	B1	2663	G	C6-N1	-10.41	1.32	1.39
29	B1	3176	G	N9-C4	-10.33	1.29	1.38
29	B1	505	G	N9-C4	-10.28	1.29	1.38
29	B1	1884	A	C6-N1	-10.08	1.28	1.35
29	B1	3243	A	N9-C4	10.08	1.43	1.37
29	B1	2520	A	C6-N1	-10.00	1.28	1.35
29	D1	505	G	N9-C4	-9.88	1.30	1.38
1	A1	825	U	C2-O2	-9.58	1.13	1.22
29	B1	588	G	C6-N1	-9.46	1.32	1.39
1	C1	825	U	C2-O2	-9.38	1.14	1.22
29	B1	45	A	N9-C4	-9.27	1.32	1.37
29	B1	607	A	N9-C4	9.24	1.43	1.37
29	D1	505	G	N3-C4	-9.20	1.29	1.35
30	D2	46	A	N9-C4	9.07	1.43	1.37
29	B1	2358	A	N9-C4	-8.98	1.32	1.37
1	C1	1421	A	N9-C4	8.97	1.43	1.37
29	D1	2362	C	N3-C4	-8.96	1.27	1.33
29	B1	505	G	N3-C4	-8.92	1.29	1.35
29	D1	3243	A	N3-C4	8.90	1.40	1.34
30	B2	13	A	N9-C4	-8.89	1.32	1.37
29	D1	2643	A	N9-C4	-8.74	1.32	1.37
29	D1	2377	G	N9-C4	-8.73	1.30	1.38
29	B1	2662	G	C6-N1	-8.72	1.33	1.39
29	D1	518	G	N9-C4	-8.66	1.31	1.38
29	D1	1317	A	C5-C6	-8.64	1.33	1.41
29	D1	2520	A	C6-N1	-8.60	1.29	1.35
29	B1	1887	A	N9-C4	-8.57	1.32	1.37
29	D1	513	G	N9-C4	-8.54	1.31	1.38
29	D1	647	A	N9-C4	-8.43	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	B1	588	G	N3-C4	-8.37	1.29	1.35
29	B1	2636	A	N3-C4	-8.29	1.29	1.34
29	B1	2377	G	N3-C4	-8.21	1.29	1.35
29	B1	1158	A	N9-C4	-8.07	1.33	1.37
29	D1	1099	A	N9-C4	-8.06	1.33	1.37
29	B1	2601	A	N9-C4	-8.00	1.33	1.37
29	D1	1363	A	N9-C4	-7.98	1.33	1.37
29	D1	1381	A	N9-C4	-7.97	1.33	1.37
29	D1	94	G	N9-C4	-7.96	1.31	1.38
29	B1	2362	C	N3-C4	-7.88	1.28	1.33
29	B1	1381	A	N9-C4	-7.85	1.33	1.37
29	D1	45	A	N9-C4	-7.83	1.33	1.37
29	B1	1363	A	N9-C4	-7.83	1.33	1.37
29	D1	3370	A	N9-C4	-7.82	1.33	1.37
29	B1	1319	G	N9-C4	-7.75	1.31	1.38
29	D1	422	A	C5-C4	-7.72	1.33	1.38
29	B1	1482	A	N9-C4	7.64	1.42	1.37
29	D1	424	G	N7-C5	-7.56	1.34	1.39
29	B1	2377	G	N9-C4	-7.53	1.31	1.38
29	D1	1006	A	N3-C4	-7.51	1.30	1.34
29	D1	746	A	N9-C4	7.50	1.42	1.37
29	B1	3139	A	N9-C4	-7.42	1.33	1.37
29	D1	1915	A	N9-C4	-7.42	1.33	1.37
29	B1	652	G	C6-N1	-7.38	1.34	1.39
29	B1	1148	G	N7-C5	-7.37	1.34	1.39
29	D1	1317	A	N9-C4	-7.37	1.33	1.37
29	B1	3000	A	N9-C4	-7.33	1.33	1.37
29	B1	2969	A	N9-C4	-7.26	1.33	1.37
29	B1	1507	G	N9-C4	-7.25	1.32	1.38
29	B1	3323	A	N9-C4	-7.24	1.33	1.37
29	D1	3376	A	N9-C4	7.21	1.42	1.37
29	D1	3024	A	N9-C4	-7.20	1.33	1.37
29	B1	965	A	N9-C4	-7.19	1.33	1.37
29	B1	26	A	N9-C4	7.18	1.42	1.37
29	B1	1303	A	N9-C4	-7.16	1.33	1.37
29	D1	3139	A	N9-C4	-7.15	1.33	1.37
29	B1	513	G	N1-C2	-7.14	1.32	1.37
29	D1	3323	A	N9-C4	-7.14	1.33	1.37
30	B2	13	A	C2-N3	-7.11	1.27	1.33
29	B1	3273	A	N9-C4	7.11	1.42	1.37
30	B2	46	A	N9-C4	7.06	1.42	1.37
29	D1	3141	A	N9-C4	7.03	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	D1	537	A	C6-N1	-7.02	1.30	1.35
29	B1	3396	U	N1-C2	7.01	1.44	1.38
29	D1	1148	G	N7-C5	-7.00	1.35	1.39
29	B1	70	A	N9-C4	7.00	1.42	1.37
29	D1	422	A	N3-C4	-7.00	1.30	1.34
29	D1	3176	G	N3-C4	-7.00	1.30	1.35
29	D1	513	G	C2-N2	-6.97	1.27	1.34
29	B1	537	A	C6-N1	-6.95	1.30	1.35
29	D1	589	A	N9-C4	6.94	1.42	1.37
29	D1	1041	U	N1-C2	-6.93	1.32	1.38
29	B1	1434	G	C6-N1	6.93	1.44	1.39
29	D1	2362	C	C2-N3	-6.92	1.30	1.35
29	D1	1329	U	N1-C2	-6.92	1.32	1.38
29	D1	1006	A	N9-C4	-6.91	1.33	1.37
29	B1	220	G	N9-C4	-6.88	1.32	1.38
29	D1	1006	A	N7-C5	-6.85	1.35	1.39
29	B1	1371	G	C6-N1	-6.83	1.34	1.39
29	D1	1887	A	N9-C4	-6.81	1.33	1.37
29	B1	3176	G	N3-C4	-6.81	1.30	1.35
29	D1	424	G	C5-C6	-6.81	1.35	1.42
29	B1	657	A	N9-C4	-6.80	1.33	1.37
29	B1	638	C	N1-C6	-6.79	1.33	1.37
29	B1	513	G	N9-C4	-6.77	1.32	1.38
30	D2	66	A	N9-C4	-6.76	1.33	1.37
29	B1	1190	A	N9-C4	6.74	1.41	1.37
29	D1	514	G	N9-C4	-6.74	1.32	1.38
29	D1	2377	G	N3-C4	-6.70	1.30	1.35
29	B1	882	A	C6-N1	-6.69	1.30	1.35
29	D1	1507	G	N9-C4	-6.69	1.32	1.38
29	B1	3243	A	N3-C4	6.68	1.38	1.34
29	B1	3008	A	N9-C4	-6.66	1.33	1.37
29	B1	2362	C	C2-N3	-6.64	1.30	1.35
29	D1	513	G	N1-C2	-6.64	1.32	1.37
1	A1	391	A	N9-C4	-6.63	1.33	1.37
29	D1	904	A	N9-C4	-6.61	1.33	1.37
29	D1	1143	A	N9-C4	-6.60	1.33	1.37
29	D1	2667	A	N9-C4	6.59	1.41	1.37
29	B1	417	A	N9-C4	-6.58	1.33	1.37
29	D1	3005	A	N3-C4	-6.58	1.30	1.34
29	D1	3180	A	N9-C4	6.56	1.41	1.37
29	D1	513	G	C2-N3	-6.56	1.27	1.32
1	A1	243	G	C1'-N9	-6.55	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	B1	1148	G	C5-C6	-6.55	1.35	1.42
29	D1	2887	A	N9-C4	-6.55	1.33	1.37
29	B1	89	A	C5-C6	-6.54	1.35	1.41
29	D1	941	G	N1-C2	-6.53	1.32	1.37
29	D1	1303	A	N9-C4	-6.52	1.33	1.37
30	B2	96	U	C2-N3	-6.52	1.33	1.37
29	D1	2296	A	N3-C4	-6.49	1.30	1.34
29	B1	1410	U	C2-N3	-6.48	1.33	1.37
29	D1	417	A	N9-C4	-6.48	1.33	1.37
29	B1	421	G	N3-C4	-6.44	1.30	1.35
1	C1	939	A	N9-C4	6.44	1.41	1.37
29	B1	513	G	C2-N2	-6.42	1.28	1.34
29	B1	3176	G	C2-N3	-6.40	1.27	1.32
29	D1	518	G	N3-C4	-6.40	1.30	1.35
29	D1	422	A	N9-C4	-6.39	1.34	1.37
29	B1	2642	A	N3-C4	-6.36	1.31	1.34
29	B1	715	A	N9-C4	6.36	1.41	1.37
29	D1	1150	A	N9-C4	-6.36	1.34	1.37
29	D1	1147	G	C5-C6	-6.34	1.36	1.42
29	D1	3137	C	N3-C4	-6.34	1.29	1.33
29	D1	70	A	N9-C4	6.34	1.41	1.37
29	B1	2360	C	N1-C6	-6.30	1.33	1.37
29	B1	1503	A	N9-C4	-6.30	1.34	1.37
29	B1	357	A	N9-C4	-6.29	1.34	1.37
29	D1	509	U	N1-C2	6.28	1.44	1.38
29	D1	2296	A	N9-C4	-6.28	1.34	1.37
29	B1	2961	G	N9-C4	6.28	1.43	1.38
29	D1	505	G	C2-N3	-6.27	1.27	1.32
29	D1	2835	U	C4-C5	-6.26	1.38	1.43
29	B1	1148	G	N9-C4	-6.26	1.32	1.38
29	D1	3212	C	N3-C4	-6.26	1.29	1.33
1	C1	243	G	C1'-N9	-6.25	1.38	1.46
29	B1	34	A	N3-C4	-6.23	1.31	1.34
29	D1	1951	C	N3-C4	6.22	1.38	1.33
29	D1	3376	A	N7-C5	6.22	1.43	1.39
29	B1	899	U	C2-N3	-6.22	1.33	1.37
29	B1	3177	G	N3-C4	-6.21	1.31	1.35
29	B1	1097	G	C5-C6	6.21	1.48	1.42
29	D1	3322	A	N9-C4	-6.21	1.34	1.37
31	B3	34	U	N1-C2	6.20	1.44	1.38
29	B1	3210	A	N9-C4	-6.19	1.34	1.37
29	D1	3210	A	N9-C4	-6.19	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	B1	718	G	N9-C4	6.19	1.43	1.38
29	D1	3176	G	C6-N1	-6.18	1.35	1.39
29	B1	1061	A	N9-C4	-6.18	1.34	1.37
29	B1	513	G	C2-N3	-6.17	1.27	1.32
29	D1	3177	G	N3-C4	-6.16	1.31	1.35
29	B1	3173	G	N9-C4	-6.16	1.33	1.38
29	D1	746	A	O3'-P	6.16	1.68	1.61
29	D1	3113	A	N9-C4	-6.16	1.34	1.37
30	D2	113	C	N1-C6	-6.15	1.33	1.37
29	D1	2358	A	N9-C4	-6.15	1.34	1.37
29	D1	706	A	N9-C4	-6.14	1.34	1.37
29	B1	1951	C	N3-C4	6.13	1.38	1.33
29	B1	2662	G	C6-O6	-6.12	1.18	1.24
29	D1	1317	A	N7-C5	-6.11	1.35	1.39
29	B1	2939	G	C6-N1	-6.11	1.35	1.39
29	B1	505	G	C2-N3	-6.11	1.27	1.32
29	B1	2283	G	N9-C8	6.11	1.42	1.37
29	D1	39	A	N9-C4	-6.10	1.34	1.37
29	D1	389	A	C6-N1	-6.10	1.31	1.35
29	B1	590	G	N9-C4	-6.10	1.33	1.38
29	B1	1506	A	C5-C6	-6.10	1.35	1.41
29	D1	189	G	C6-N1	-6.09	1.35	1.39
29	B1	3391	A	C6-N1	6.08	1.39	1.35
29	D1	3178	A	N9-C4	-6.07	1.34	1.37
29	D1	1174	G	N1-C2	-6.07	1.32	1.37
29	D1	2296	A	N7-C5	-6.06	1.35	1.39
29	D1	965	A	N9-C4	-6.05	1.34	1.37
29	D1	1911	A	N9-C4	-6.05	1.34	1.37
29	B1	60	A	N9-C4	-6.05	1.34	1.37
29	B1	94	G	N9-C4	-6.05	1.33	1.38
31	D3	3	A	N9-C4	-6.04	1.34	1.37
29	B1	3141	A	N9-C4	6.04	1.41	1.37
29	D1	1371	G	C6-N1	-6.02	1.35	1.39
29	B1	1610	G	C5-C6	-6.02	1.36	1.42
1	C1	1132	A	N9-C4	-6.00	1.34	1.37
29	D1	3035	A	N9-C4	6.00	1.41	1.37
29	D1	2601	A	N9-C4	-5.99	1.34	1.37
29	D1	1126	G	C6-N1	-5.98	1.35	1.39
29	D1	3168	A	C6-N1	-5.98	1.31	1.35
29	D1	2951	G	N9-C4	-5.97	1.33	1.38
29	D1	3219	G	C5-C6	-5.97	1.36	1.42
29	D1	1006	A	C6-N1	-5.97	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	B1	826	G	C5-C4	-5.96	1.34	1.38
29	B1	1410	U	C4-O4	-5.96	1.18	1.23
29	B1	428	A	N7-C5	-5.95	1.35	1.39
1	C1	1137	A	N9-C4	-5.95	1.34	1.37
29	D1	646	A	N9-C4	-5.94	1.34	1.37
1	A1	1030	A	N9-C4	-5.94	1.34	1.37
29	D1	2302	G	N9-C4	-5.94	1.33	1.38
29	B1	3266	G	N3-C4	5.93	1.39	1.35
29	D1	2831	G	C5-C4	-5.93	1.34	1.38
29	D1	1172	G	N9-C8	-5.92	1.33	1.37
29	D1	666	A	N9-C4	-5.92	1.34	1.37
29	B1	1157	G	N3-C4	-5.92	1.31	1.35
31	B3	33	A	N9-C4	-5.92	1.34	1.37
29	D1	3137	C	C2-N3	-5.92	1.31	1.35
29	B1	666	A	N9-C4	-5.91	1.34	1.37
29	B1	746	A	O3'-P	5.90	1.68	1.61
29	B1	628	A	N9-C4	-5.90	1.34	1.37
29	B1	3230	G	C6-N1	-5.89	1.35	1.39
29	B1	2642	A	N9-C4	-5.89	1.34	1.37
29	B1	2956	A	N7-C5	-5.89	1.35	1.39
29	D1	3386	G	N7-C5	-5.89	1.35	1.39
29	D1	3297	U	N1-C2	5.88	1.43	1.38
1	A1	337	G	C5-C6	-5.88	1.36	1.42
29	B1	421	G	N7-C5	-5.88	1.35	1.39
29	B1	2663	G	C6-O6	-5.88	1.18	1.24
1	C1	129	U	C1'-N1	5.88	1.57	1.48
29	B1	2737	C	N1-C6	-5.87	1.33	1.37
29	B1	746	A	N9-C4	5.86	1.41	1.37
29	B1	3177	G	N9-C4	-5.85	1.33	1.38
29	D1	1433	A	N3-C4	-5.85	1.31	1.34
29	D1	2670	G	C6-N1	-5.85	1.35	1.39
29	D1	2918	G	N1-C2	-5.85	1.33	1.37
29	B1	272	G	C6-N1	-5.84	1.35	1.39
29	D1	994	G	N9-C8	-5.84	1.33	1.37
29	D1	1179	A	N7-C5	-5.83	1.35	1.39
29	B1	3074	G	C6-N1	-5.83	1.35	1.39
29	B1	219	A	N9-C4	-5.81	1.34	1.37
29	B1	3297	U	N1-C2	5.80	1.43	1.38
29	B1	3322	A	N9-C4	-5.80	1.34	1.37
1	C1	1030	A	N9-C4	-5.80	1.34	1.37
29	B1	589	A	N9-C4	5.80	1.41	1.37
29	B1	875	G	C6-N1	-5.80	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	B1	3218	A	N9-C4	5.79	1.41	1.37
29	D1	513	G	C6-N1	-5.79	1.35	1.39
29	D1	99	A	N3-C4	-5.79	1.31	1.34
29	D1	3244	A	N7-C5	5.79	1.42	1.39
29	D1	1174	G	N3-C4	-5.78	1.31	1.35
1	C1	635	A	N9-C4	-5.78	1.34	1.37
30	B2	66	A	N9-C4	-5.77	1.34	1.37
29	D1	1320	C	N1-C6	-5.77	1.33	1.37
1	C1	62	A	P-OP2	-5.76	1.39	1.49
29	D1	1318	A	C5-C4	-5.76	1.34	1.38
29	B1	103	G	C6-N1	5.75	1.43	1.39
29	B1	916	G	N7-C5	-5.75	1.35	1.39
29	B1	841	A	N9-C4	5.74	1.41	1.37
29	B1	2172	A	N9-C4	-5.74	1.34	1.37
30	D2	108	A	N9-C4	-5.73	1.34	1.37
29	D1	2670	G	N3-C4	-5.73	1.31	1.35
29	D1	2706	G	C6-N1	-5.72	1.35	1.39
29	B1	3009	G	N3-C4	-5.72	1.31	1.35
1	A1	572	C	N1-C2	5.72	1.45	1.40
1	C1	326	G	C6-N1	-5.72	1.35	1.39
29	B1	1150	A	N9-C4	-5.71	1.34	1.37
29	B1	2396	G	N7-C5	-5.71	1.35	1.39
31	B3	97	A	N9-C4	-5.70	1.34	1.37
29	D1	1156	C	N1-C6	-5.70	1.33	1.37
1	A1	1455	G	C5-C6	5.70	1.48	1.42
29	D1	1928	G	N9-C4	-5.70	1.33	1.38
29	D1	996	A	N9-C4	-5.69	1.34	1.37
30	B2	5	G	N9-C4	-5.68	1.33	1.38
1	C1	621	A	C5-C4	-5.68	1.34	1.38
29	D1	2317	A	N3-C4	-5.68	1.31	1.34
29	D1	3391	A	C6-N1	5.68	1.39	1.35
29	D1	1892	G	N3-C4	-5.67	1.31	1.35
29	D1	1188	U	C2-N3	-5.67	1.33	1.37
29	B1	425	G	C6-N1	-5.67	1.35	1.39
1	C1	373	G	N9-C4	-5.66	1.33	1.38
29	B1	630	A	C5-C6	-5.66	1.35	1.41
29	D1	507	U	C2-N3	-5.66	1.33	1.37
1	C1	1602	C	N1-C6	-5.65	1.33	1.37
29	D1	1150	A	N3-C4	-5.65	1.31	1.34
29	D1	2150	G	C6-N1	-5.64	1.35	1.39
29	B1	357	A	N3-C4	-5.64	1.31	1.34
31	B3	3	A	N9-C4	-5.64	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	D1	590	G	N9-C4	-5.63	1.33	1.38
29	B1	644	G	N3-C4	-5.62	1.31	1.35
29	D1	3272	C	N3-C4	5.62	1.37	1.33
29	D1	2380	U	N1-C2	-5.62	1.33	1.38
1	A1	337	G	N7-C5	-5.62	1.35	1.39
29	B1	1059	G	N9-C4	-5.62	1.33	1.38
29	B1	517	G	N3-C4	-5.61	1.31	1.35
29	D1	1174	G	C5-C4	-5.60	1.34	1.38
30	D2	103	A	N9-C4	-5.59	1.34	1.37
1	C1	592	A	N9-C4	-5.59	1.34	1.37
29	B1	341	G	N7-C5	-5.59	1.35	1.39
29	B1	1156	C	N1-C6	-5.59	1.33	1.37
29	B1	1377	G	C6-N1	-5.59	1.35	1.39
30	D2	13	A	C2-N3	-5.59	1.28	1.33
29	B1	2357	A	N3-C4	-5.58	1.31	1.34
29	B1	2123	G	C6-N1	-5.58	1.35	1.39
29	D1	941	G	N3-C4	-5.58	1.31	1.35
30	D2	113	C	N3-C4	-5.57	1.30	1.33
29	B1	1175	C	C2-N3	-5.57	1.31	1.35
29	B1	2958	A	N9-C4	-5.56	1.34	1.37
29	B1	2990	G	C5-C6	-5.56	1.36	1.42
29	D1	1380	G	N3-C4	-5.55	1.31	1.35
29	B1	39	A	N9-C4	-5.55	1.34	1.37
29	B1	3103	A	N9-C4	5.55	1.41	1.37
29	D1	94	G	N3-C4	-5.54	1.31	1.35
29	B1	2951	G	N9-C4	-5.54	1.33	1.38
29	D1	512	U	C4-O4	5.53	1.28	1.23
29	B1	996	A	N9-C4	-5.53	1.34	1.37
31	B3	131	A	N9-C4	-5.53	1.34	1.37
1	C1	1550	A	N9-C4	-5.53	1.34	1.37
29	D1	647	A	N3-C4	-5.53	1.31	1.34
29	B1	2327	U	C2-N3	-5.53	1.33	1.37
29	B1	941	G	N1-C2	-5.52	1.33	1.37
29	D1	2689	A	N9-C4	5.52	1.41	1.37
29	B1	660	A	N9-C4	-5.51	1.34	1.37
29	D1	3342	A	C6-N6	-5.50	1.29	1.33
29	B1	685	G	C6-N1	-5.49	1.35	1.39
29	D1	2333	C	N1-C6	-5.47	1.33	1.37
29	B1	783	A	P-O5'	5.46	1.65	1.59
29	B1	3035	A	N9-C4	5.46	1.41	1.37
29	B1	588	G	N1-C2	-5.45	1.33	1.37
29	B1	1901	A	N3-C4	-5.45	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	B1	662	U	C2-N3	-5.45	1.33	1.37
29	D1	1151	U	C2-N3	5.44	1.41	1.37
29	D1	1152	G	N9-C4	-5.44	1.33	1.38
29	B1	103	G	N9-C4	-5.44	1.33	1.38
29	B1	1401	A	N9-C4	-5.44	1.34	1.37
29	D1	2294	U	C2-N3	-5.44	1.33	1.37
29	B1	2991	A	N9-C4	-5.43	1.34	1.37
29	B1	2663	G	C5-C4	-5.43	1.34	1.38
29	D1	3124	G	N7-C5	-5.43	1.35	1.39
29	B1	904	A	N9-C4	-5.43	1.34	1.37
29	D1	1188	U	N3-C4	-5.43	1.33	1.38
1	A1	1421	A	N3-C4	5.42	1.38	1.34
29	B1	2147	A	N9-C4	-5.42	1.34	1.37
29	B1	2902	A	N9-C4	-5.42	1.34	1.37
29	B1	1891	A	C5-C6	-5.42	1.36	1.41
29	D1	2919	A	N7-C5	-5.41	1.36	1.39
29	D1	88	A	N9-C4	-5.41	1.34	1.37
30	B2	55	A	N9-C4	5.41	1.41	1.37
29	B1	48	A	N9-C4	-5.40	1.34	1.37
29	D1	595	G	C5-C6	-5.40	1.36	1.42
29	D1	3017	A	C6-N1	-5.40	1.31	1.35
29	D1	3040	A	N3-C4	-5.40	1.31	1.34
1	A1	45	U	C5-C6	-5.40	1.29	1.34
29	D1	994	G	C5-C4	-5.40	1.34	1.38
29	D1	2892	A	N9-C4	-5.40	1.34	1.37
29	D1	747	A	O3'-P	5.39	1.67	1.61
29	D1	370	U	N1-C2	-5.39	1.33	1.38
29	B1	3307	A	N9-C4	-5.38	1.34	1.37
29	D1	1381	A	N3-C4	-5.38	1.31	1.34
29	B1	389	A	C6-N1	-5.38	1.31	1.35
29	B1	1401	A	C6-N1	-5.38	1.31	1.35
29	B1	1151	U	C4-O4	5.38	1.27	1.23
29	B1	1915	A	N3-C4	-5.38	1.31	1.34
29	B1	390	G	N9-C4	-5.37	1.33	1.38
29	B1	651	G	N3-C4	-5.37	1.31	1.35
29	D1	1322	U	C4-O4	5.37	1.27	1.23
29	D1	95	A	N9-C4	-5.37	1.34	1.37
29	B1	2341	A	N9-C4	-5.37	1.34	1.37
29	B1	2320	A	N9-C4	-5.36	1.34	1.37
29	B1	654	C	N1-C6	-5.36	1.33	1.37
29	D1	3295	A	N9-C4	-5.36	1.34	1.37
29	B1	2358	A	N3-C4	-5.36	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A1	610	G	N7-C5	-5.36	1.36	1.39
29	D1	3173	G	N9-C4	-5.36	1.33	1.38
1	C1	45	U	C2-N3	5.35	1.41	1.37
29	B1	2968	G	C6-N1	-5.35	1.35	1.39
29	D1	2879	C	N1-C2	-5.34	1.34	1.40
29	D1	2895	G	N3-C4	-5.34	1.31	1.35
29	B1	1371	G	C6-O6	-5.34	1.19	1.24
29	B1	505	G	C5-C4	-5.33	1.34	1.38
1	A1	426	G	C6-N1	-5.33	1.35	1.39
29	B1	3266	G	C5-C6	5.33	1.47	1.42
29	B1	1333	C	N1-C6	-5.33	1.33	1.37
29	D1	2916	U	C2-N3	5.33	1.41	1.37
29	B1	1205	A	N3-C4	-5.32	1.31	1.34
29	D1	2667	A	P-O5'	5.32	1.65	1.59
29	B1	2520	A	N1-C2	-5.32	1.29	1.34
1	A1	127	G	C1'-N9	-5.31	1.39	1.46
29	D1	1327	C	N3-C4	-5.31	1.30	1.33
29	D1	746	A	N3-C4	5.31	1.38	1.34
29	D1	417	A	N3-C4	-5.30	1.31	1.34
29	D1	2757	U	N1-C2	-5.30	1.33	1.38
1	A1	1746	A	N9-C4	-5.29	1.34	1.37
29	B1	2932	U	C2-N3	-5.28	1.34	1.37
29	B1	2357	A	C6-N1	-5.28	1.31	1.35
30	D2	64	A	N9-C4	5.27	1.41	1.37
29	B1	3122	A	N9-C4	-5.26	1.34	1.37
29	B1	514	G	N9-C4	-5.26	1.33	1.38
29	B1	1319	G	C5-C4	-5.26	1.34	1.38
29	B1	500	C	C2-O2	-5.26	1.19	1.24
29	B1	3168	A	C6-N1	-5.26	1.31	1.35
29	B1	1157	G	C6-N1	-5.25	1.35	1.39
29	B1	1444	G	N7-C5	-5.25	1.36	1.39
29	D1	2957	G	N9-C4	-5.25	1.33	1.38
29	B1	374	A	N9-C4	-5.24	1.34	1.37
29	B1	1751	G	N9-C4	5.23	1.42	1.38
29	B1	2279	A	N7-C5	-5.23	1.36	1.39
29	D1	2665	U	C2-N3	-5.23	1.34	1.37
29	B1	209	A	N3-C4	-5.23	1.31	1.34
29	D1	2876	C	N1-C6	-5.23	1.34	1.37
29	D1	512	U	N3-C4	5.22	1.43	1.38
1	A1	555	A	N9-C4	5.22	1.41	1.37
29	B1	357	A	C6-N1	-5.22	1.31	1.35
29	B1	2643	A	N9-C4	-5.22	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A1	615	A	N9-C4	5.21	1.41	1.37
29	B1	714	G	N9-C4	-5.21	1.33	1.38
29	B1	985	U	P-O5'	-5.21	1.54	1.59
29	B1	1891	A	N7-C5	-5.21	1.36	1.39
1	A1	453	U	P-OP1	-5.21	1.40	1.49
29	D1	3218	A	N9-C4	5.21	1.41	1.37
29	B1	1148	G	N3-C4	-5.19	1.31	1.35
29	D1	423	A	P-O5'	5.19	1.65	1.59
29	D1	1302	A	C5-C4	-5.19	1.35	1.38
29	D1	3266	G	N3-C4	5.19	1.39	1.35
29	D1	1174	G	C6-N1	-5.18	1.35	1.39
29	D1	2914	G	C6-N1	-5.18	1.35	1.39
31	B3	37	A	N9-C4	-5.18	1.34	1.37
29	D1	1099	A	N3-C4	-5.18	1.31	1.34
1	C1	127	G	C1'-N9	-5.17	1.39	1.46
29	B1	1898	G	N3-C4	-5.17	1.31	1.35
29	B1	900	G	N9-C8	-5.16	1.34	1.37
14	CM	60	SER	CA-CB	-5.16	1.45	1.52
29	B1	2302	G	C6-N1	-5.15	1.35	1.39
29	B1	2369	G	N7-C5	-5.15	1.36	1.39
29	D1	3366	G	N9-C4	-5.15	1.33	1.38
1	C1	453	U	P-OP2	-5.15	1.40	1.49
30	D2	117	A	N9-C4	-5.14	1.34	1.37
29	D1	1434	G	N9-C4	-5.14	1.33	1.38
29	D1	2300	G	N9-C8	-5.14	1.34	1.37
29	B1	651	G	N1-C2	-5.13	1.33	1.37
29	B1	3314	A	N9-C4	5.13	1.41	1.37
29	D1	1212	A	C6-N1	-5.13	1.31	1.35
29	D1	2913	C	N1-C2	-5.13	1.35	1.40
29	D1	3303	G	N9-C4	5.13	1.42	1.38
29	D1	3053	G	N3-C4	-5.13	1.31	1.35
29	D1	3024	A	N3-C4	-5.13	1.31	1.34
1	C1	1110	G	C6-N1	-5.13	1.35	1.39
29	D1	3266	G	C2-N3	5.13	1.36	1.32
1	C1	342	C	N1-C6	-5.13	1.34	1.37
1	A1	95	G	N9-C4	-5.12	1.33	1.38
29	B1	513	G	N3-C4	-5.12	1.31	1.35
29	D1	3036	G	C6-N1	-5.12	1.35	1.39
29	D1	3266	G	C5-C6	5.12	1.47	1.42
29	B1	651	G	N9-C4	-5.11	1.33	1.38
29	B1	949	C	N3-C4	-5.11	1.30	1.33
29	B1	1915	A	N9-C4	-5.11	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	DP	167	TYR	CA-CB	-5.11	1.42	1.53
29	B1	2910	A	C5-C4	-5.11	1.35	1.38
29	B1	3029	A	N9-C4	-5.11	1.34	1.37
1	C1	336	G	C6-N1	-5.11	1.35	1.39
29	B1	3009	G	N9-C4	-5.10	1.33	1.38
29	D1	2856	G	C5-C6	-5.10	1.37	1.42
29	B1	3032	A	N9-C4	-5.10	1.34	1.37
29	B1	1429	G	N1-C2	-5.10	1.33	1.37
29	B1	1318	A	C5-C4	-5.09	1.35	1.38
29	D1	1312	C	C2-O2	-5.08	1.19	1.24
29	D1	2390	A	N3-C4	-5.08	1.31	1.34
29	D1	1156	C	C4-C5	-5.08	1.38	1.43
29	D1	783	A	P-O5'	5.08	1.64	1.59
29	D1	2913	C	C2-N3	-5.08	1.31	1.35
29	B1	3342	A	C6-N6	-5.07	1.29	1.33
29	D1	1318	A	N3-C4	-5.07	1.31	1.34
29	B1	1330	A	N9-C4	-5.07	1.34	1.37
29	B1	750	G	C5-C6	5.07	1.47	1.42
29	D1	1179	A	C5-C6	-5.07	1.36	1.41
29	D1	390	G	N9-C4	-5.07	1.33	1.38
29	D1	2338	C	N3-C4	-5.06	1.30	1.33
29	D1	2377	G	C5-C4	-5.06	1.34	1.38
29	B1	512	U	C4-O4	5.06	1.27	1.23
1	A1	1421	A	C5-C6	5.06	1.45	1.41
29	B1	2830	G	N3-C4	-5.06	1.31	1.35
29	D1	1319	G	N9-C4	-5.06	1.33	1.38
29	B1	3212	C	N1-C2	-5.06	1.35	1.40
29	B1	1506	A	C6-N1	-5.05	1.32	1.35
29	D1	529	A	N9-C4	-5.05	1.34	1.37
29	D1	2986	U	N1-C6	-5.05	1.33	1.38
29	B1	511	G	N9-C4	-5.05	1.33	1.38
29	B1	609	G	C5-C4	5.05	1.41	1.38
29	D1	1380	G	N9-C4	-5.05	1.33	1.38
29	B1	2131	A	N7-C5	-5.04	1.36	1.39
29	D1	1047	A	N3-C4	-5.04	1.31	1.34
29	B1	1197	A	N3-C4	5.04	1.37	1.34
29	B1	3272	C	N3-C4	5.04	1.37	1.33
30	B2	13	A	N1-C2	-5.04	1.29	1.34
29	B1	366	A	N9-C4	-5.03	1.34	1.37
29	D1	2939	G	N1-C2	-5.03	1.33	1.37
29	D1	2389	C	N1-C6	-5.03	1.34	1.37
29	D1	1330	A	N9-C4	-5.03	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	B1	863	C	N1-C6	-5.03	1.34	1.37
1	C1	373	G	N3-C4	-5.03	1.31	1.35
29	D1	1067	U	C2-N3	5.02	1.41	1.37
29	B1	1419	A	C6-N1	-5.02	1.32	1.35
1	C1	911	U	P-OP2	-5.02	1.40	1.49
1	C1	869	A	N9-C4	5.02	1.40	1.37
29	D1	3177	G	C6-N1	-5.02	1.36	1.39
29	B1	1410	U	N3-C4	-5.01	1.33	1.38
29	B1	1048	A	N9-C4	-5.01	1.34	1.37
29	B1	1434	G	N1-C2	5.01	1.41	1.37
29	D1	3245	A	C5-C6	-5.01	1.36	1.41
29	D1	2895	G	C6-N1	-5.01	1.36	1.39
29	B1	1098	A	N9-C4	-5.00	1.34	1.37
29	D1	3185	U	C2-N3	-5.00	1.34	1.37

All (7498) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	244	G	N1-C6-O6	43.40	145.94	119.90
29	B1	244	G	N1-C6-O6	41.87	145.02	119.90
29	D1	2845	A	N1-C6-N6	40.75	143.05	118.60
29	D1	2845	A	C6-N1-C2	39.78	142.47	118.60
29	B1	2845	A	N1-C6-N6	39.33	142.20	118.60
29	B1	2845	A	C6-N1-C2	38.60	141.76	118.60
29	D1	2845	A	C5-C6-N1	-36.02	99.69	117.70
29	B1	2845	A	C5-C6-N1	-33.95	100.72	117.70
29	D1	244	G	C5-C6-O6	-33.52	108.49	128.60
29	B1	244	G	C5-C6-O6	-32.38	109.17	128.60
29	B1	3184	A	C5-C6-N1	-31.90	101.75	117.70
1	C1	1455	G	N1-C6-O6	31.77	138.96	119.90
29	B1	2520	A	N1-C6-N6	31.72	137.63	118.60
29	B1	3184	A	N1-C6-N6	31.42	137.45	118.60
29	D1	3184	A	N1-C6-N6	30.18	136.71	118.60
29	D1	2520	A	N1-C6-N6	29.90	136.54	118.60
29	B1	308	A	C5-C6-N1	-29.85	102.78	117.70
29	B1	3184	A	C6-N1-C2	29.39	136.24	118.60
29	B1	1884	A	C5-C6-N1	-28.91	103.25	117.70
29	B1	1884	A	C6-N1-C2	28.79	135.87	118.60
29	D1	3184	A	C5-C6-N1	-28.75	103.32	117.70
1	A1	1455	G	N3-C2-N2	-28.67	99.83	119.90
29	B1	2520	A	C6-N1-C2	28.55	135.73	118.60
1	C1	1455	G	N3-C2-N2	-28.46	99.98	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	1455	G	N1-C6-O6	28.06	136.74	119.90
29	D1	3184	A	C6-N1-C2	27.52	135.11	118.60
29	D1	2520	A	C6-N1-C2	26.71	134.62	118.60
29	B1	1884	A	N1-C6-N6	26.19	134.32	118.60
29	B1	308	A	C6-N1-C2	26.12	134.28	118.60
29	D1	1884	A	C6-N1-C2	25.89	134.13	118.60
29	D1	308	A	C5-C6-N1	-25.70	104.85	117.70
1	C1	1455	G	N1-C2-N2	25.68	139.31	116.20
29	D1	1884	A	C5-C6-N1	-25.59	104.90	117.70
29	D1	308	A	C6-N1-C2	25.24	133.74	118.60
29	D1	3212	C	N1-C2-O2	-25.07	103.86	118.90
29	B1	308	A	N1-C6-N6	24.99	133.60	118.60
1	A1	1455	G	N1-C2-N2	23.87	137.69	116.20
29	D1	1884	A	N1-C6-N6	23.83	132.90	118.60
29	D1	308	A	N1-C6-N6	23.49	132.69	118.60
29	D1	2520	A	C5-C6-N1	-22.93	106.23	117.70
29	B1	2845	A	N1-C2-N3	-22.84	117.88	129.30
29	B1	2520	A	C5-C6-N1	-22.45	106.47	117.70
1	C1	1455	G	C5-C6-O6	-22.26	115.24	128.60
29	B1	3212	C	N1-C2-O2	-21.82	105.81	118.90
1	C1	1455	G	C5-C6-N1	-21.57	100.71	111.50
29	D1	2845	A	N1-C2-N3	-21.57	118.52	129.30
29	D1	3176	G	N3-C4-N9	-21.18	113.29	126.00
29	B1	2520	A	N1-C2-N3	-21.05	118.78	129.30
29	B1	3179	U	N3-C4-O4	20.74	133.91	119.40
29	D1	505	G	N3-C2-N2	-20.40	105.62	119.90
29	D1	505	G	N3-C4-N9	-20.21	113.88	126.00
29	D1	272	G	N1-C6-O6	20.16	132.00	119.90
29	B1	2362	C	N1-C2-O2	-19.90	106.96	118.90
29	D1	2520	A	N1-C2-N3	-19.83	119.39	129.30
1	A1	1455	G	C5-C6-O6	-19.72	116.77	128.60
1	A1	1455	G	C5-C6-N1	-19.63	101.69	111.50
29	B1	272	G	N1-C6-O6	19.57	131.64	119.90
29	D1	1884	A	N1-C2-N3	-19.52	119.54	129.30
29	B1	505	G	N3-C2-N2	-19.43	106.30	119.90
29	B1	607	A	C8-N9-C4	-19.38	98.05	105.80
29	B1	505	G	N3-C4-N9	-19.22	114.47	126.00
29	D1	1951	C	N3-C4-C5	-19.21	114.22	121.90
29	D1	3179	U	N3-C4-O4	19.12	132.78	119.40
29	B1	3212	C	C2-N1-C1'	-19.08	97.81	118.80
29	B1	3176	G	N3-C4-N9	-18.90	114.66	126.00
29	B1	1951	C	N3-C4-C5	-18.48	114.51	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1434	G	N1-C6-O6	18.25	130.85	119.90
29	D1	3184	A	N1-C2-N3	-17.93	120.34	129.30
29	B1	3184	A	N1-C2-N3	-17.82	120.39	129.30
29	D1	2362	C	N1-C2-O2	-17.75	108.25	118.90
29	B1	3212	C	C6-N1-C1'	17.66	142.00	120.80
29	D1	308	A	N1-C2-N3	-17.66	120.47	129.30
29	D1	3212	C	C2-N1-C1'	-17.65	99.38	118.80
29	D1	518	G	N3-C4-C5	17.65	137.42	128.60
29	B1	1884	A	N1-C2-N3	-17.17	120.72	129.30
29	D1	1342	C	C6-N1-C2	17.14	127.16	120.30
29	B1	3179	U	N3-C2-O2	17.01	134.11	122.20
29	B1	2362	C	N3-C2-O2	17.00	133.80	121.90
29	B1	3176	G	N3-C4-C5	16.99	137.09	128.60
29	D1	3212	C	C6-N1-C1'	16.91	141.10	120.80
29	D1	1317	A	N1-C6-N6	16.74	128.65	118.60
29	D1	3176	G	N3-C4-C5	16.57	136.88	128.60
29	D1	3243	A	C2-N3-C4	16.55	118.88	110.60
1	C1	1455	G	C6-N1-C2	16.49	135.00	125.10
29	D1	2906	C	N1-C2-O2	-16.39	109.07	118.90
29	B1	3179	U	N1-C2-O2	-16.32	111.38	122.80
1	C1	825	U	N1-C2-N3	16.29	124.68	114.90
29	D1	607	A	C8-N9-C4	-16.27	99.29	105.80
1	C1	45	U	C2-N1-C1'	16.13	137.06	117.70
29	D1	518	G	C2-N3-C4	-16.11	103.85	111.90
29	D1	3025	C	C6-N1-C2	16.05	126.72	120.30
1	A1	825	U	N1-C2-N3	16.02	124.51	114.90
29	B1	3179	U	C5-C4-O4	-15.97	116.32	125.90
29	D1	3168	A	C6-N1-C2	15.88	128.13	118.60
29	B1	503	C	N1-C2-O2	-15.81	109.41	118.90
29	B1	308	A	N1-C2-N3	-15.78	121.41	129.30
29	D1	3179	U	C5-C4-O4	-15.77	116.44	125.90
29	B1	3168	A	C6-N1-C2	15.66	128.00	118.60
29	B1	3168	A	N1-C6-N6	15.61	127.96	118.60
29	D1	3168	A	N1-C6-N6	15.34	127.80	118.60
29	D1	513	G	N3-C4-N9	-15.31	116.81	126.00
29	B1	3257	C	C2-N1-C1'	-15.19	102.09	118.80
1	A1	45	U	C2-N1-C1'	15.19	135.92	117.70
29	D1	244	G	C5-C6-N1	-15.10	103.95	111.50
29	D1	3179	U	N1-C2-O2	-15.02	112.29	122.80
29	D1	505	G	N1-C2-N2	14.86	129.58	116.20
29	B1	606	C	C2-N1-C1'	14.84	135.12	118.80
1	C1	517	U	C2-N1-C1'	-14.80	99.93	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3179	U	N3-C2-O2	14.77	132.54	122.20
29	D1	2681	U	C2-N1-C1'	14.74	135.39	117.70
29	B1	244	G	C5-C6-N1	-14.66	104.17	111.50
29	D1	518	G	N3-C4-N9	-14.64	117.21	126.00
1	A1	1647	U	N3-C2-O2	14.64	132.45	122.20
29	B1	513	G	N3-C4-N9	-14.62	117.23	126.00
29	B1	505	G	N1-C2-N2	14.60	129.34	116.20
29	B1	2681	U	C2-N1-C1'	14.49	135.09	117.70
29	D1	513	G	N3-C4-C5	14.37	135.79	128.60
29	B1	1367	G	C5-C6-N1	-14.33	104.34	111.50
29	B1	102	C	C2-N1-C1'	14.32	134.55	118.80
29	D1	1450	G	N1-C6-O6	14.21	128.42	119.90
29	D1	505	G	N9-C4-C5	14.13	111.05	105.40
29	D1	1187	C	C6-N1-C2	14.11	125.95	120.30
1	A1	517	U	C2-N1-C1'	-14.08	100.80	117.70
29	D1	3219	G	C4-C5-N7	14.04	116.42	110.80
29	D1	1951	C	C2-N3-C4	14.01	126.91	119.90
29	D1	2689	A	C8-N9-C4	-14.00	100.20	105.80
29	B1	1951	C	C2-N3-C4	13.99	126.90	119.90
29	B1	32	U	C2-N1-C1'	-13.96	100.95	117.70
29	B1	577	C	N3-C2-O2	13.93	131.65	121.90
1	C1	1455	G	N1-C2-N3	-13.93	115.54	123.90
29	B1	3219	G	C4-C5-N7	13.83	116.33	110.80
29	D1	32	U	C2-N1-C1'	-13.79	101.16	117.70
1	A1	572	C	N1-C2-O2	13.75	127.15	118.90
29	B1	2689	A	C8-N9-C4	-13.74	100.30	105.80
29	D1	513	G	C2-N3-C4	-13.72	105.04	111.90
29	D1	2879	C	N3-C2-O2	13.69	131.49	121.90
29	B1	3219	G	N1-C6-O6	13.60	128.06	119.90
29	D1	3219	G	N1-C6-O6	13.55	128.03	119.90
1	A1	1437	U	C2-N1-C1'	-13.38	101.64	117.70
1	A1	1455	G	C6-N1-C2	13.37	133.12	125.10
29	D1	1317	A	C4-C5-N7	13.31	117.35	110.70
1	A1	610	G	C6-C5-N7	-13.30	122.42	130.40
29	D1	3176	G	N3-C2-N2	-13.31	110.59	119.90
29	B1	2990	G	N1-C6-O6	13.29	127.88	119.90
29	D1	2362	C	N3-C2-O2	13.29	131.21	121.90
1	C1	1647	U	N3-C2-O2	13.27	131.49	122.20
29	B1	1434	G	C5-C6-N1	-13.27	104.87	111.50
29	B1	32	U	C5-C6-N1	-13.25	116.07	122.70
1	A1	572	C	C2-N1-C1'	13.20	133.31	118.80
29	D1	2681	U	C6-N1-C1'	-13.13	102.81	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2681	U	C6-N1-C1'	-13.12	102.83	121.20
29	D1	3272	C	C6-N1-C2	-13.11	115.06	120.30
29	D1	514	G	N3-C4-N9	-12.98	118.21	126.00
29	B1	505	G	N3-C4-C5	12.94	135.07	128.60
29	D1	1434	G	N1-C6-O6	12.93	127.66	119.90
29	B1	3168	A	N1-C2-N3	-12.93	122.84	129.30
29	D1	2835	U	C5-C4-O4	-12.90	118.16	125.90
29	D1	606	C	C2-N1-C1'	12.90	132.99	118.80
29	B1	607	A	N7-C8-N9	12.89	120.25	113.80
29	D1	607	A	N7-C8-N9	12.89	120.25	113.80
30	D2	66	A	C6-N1-C2	12.89	126.33	118.60
29	B1	1507	G	N3-C4-C5	12.88	135.04	128.60
29	D1	505	G	N3-C4-C5	12.88	135.04	128.60
1	C1	1647	U	N3-C4-O4	12.87	128.41	119.40
29	B1	3001	C	C6-N1-C2	12.86	125.45	120.30
29	D1	3296	A	N1-C6-N6	12.84	126.30	118.60
1	A1	1647	U	C5-C4-O4	-12.83	118.20	125.90
29	D1	505	G	C5-C6-N1	-12.82	105.09	111.50
29	B1	3296	A	N1-C6-N6	12.81	126.29	118.60
29	B1	102	C	N1-C2-O2	12.79	126.58	118.90
1	A1	1234	A	N1-C6-N6	12.79	126.28	118.60
29	D1	3168	A	C5-C6-N1	-12.79	111.31	117.70
29	B1	1507	G	N3-C4-N9	-12.78	118.33	126.00
29	B1	3243	A	C2-N3-C4	12.77	116.99	110.60
29	B1	2520	A	C5-C6-N6	-12.74	113.50	123.70
1	C1	1647	U	C5-C4-O4	-12.74	118.26	125.90
29	B1	2845	A	C5-C6-N6	-12.71	113.53	123.70
29	D1	556	U	C5-C4-O4	12.66	133.50	125.90
29	D1	1192	C	C2-N1-C1'	12.65	132.72	118.80
29	B1	3297	U	N3-C2-O2	-12.64	113.35	122.20
29	D1	102	C	C2-N1-C1'	12.64	132.70	118.80
29	D1	424	G	C6-C5-N7	-12.60	122.84	130.40
29	B1	505	G	N9-C4-C5	12.60	110.44	105.40
29	D1	2667	A	C2-N3-C4	12.58	116.89	110.60
29	D1	3205	G	N1-C6-O6	-12.56	112.36	119.90
29	B1	3025	C	C6-N1-C2	12.56	125.32	120.30
1	A1	45	U	C5-C4-O4	-12.52	118.39	125.90
29	B1	335	G	N1-C6-O6	12.50	127.40	119.90
30	B2	13	A	C4-C5-C6	-12.50	110.75	117.00
1	A1	1647	U	N3-C4-O4	12.49	128.14	119.40
29	D1	94	G	N3-C4-N9	-12.48	118.51	126.00
29	D1	272	G	C5-C6-N1	-12.46	105.27	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1507	G	N3-C4-N9	-12.44	118.53	126.00
29	D1	3257	C	C2-N1-C1'	-12.44	105.12	118.80
1	C1	1234	A	N1-C6-N6	12.41	126.05	118.60
29	B1	577	C	N1-C2-O2	-12.39	111.46	118.90
30	B2	96	U	C5-C6-N1	-12.36	116.52	122.70
29	B1	2906	C	N1-C2-O2	-12.34	111.49	118.90
29	B1	556	U	C5-C4-O4	12.33	133.30	125.90
29	B1	723	U	C5-C4-O4	-12.30	118.52	125.90
29	B1	3192	U	N1-C2-O2	-12.27	114.21	122.80
29	B1	1751	G	N1-C6-O6	-12.26	112.54	119.90
29	B1	2663	G	N1-C6-O6	-12.26	112.54	119.90
29	D1	1190	A	C5-C6-N1	12.26	123.83	117.70
29	D1	3392	U	C2-N3-C4	-12.26	119.65	127.00
29	B1	272	G	C5-C6-N1	-12.25	105.38	111.50
29	B1	3296	A	C5-C6-N6	-12.23	113.92	123.70
29	B1	577	C	N3-C4-N4	12.19	126.53	118.00
29	B1	1097	G	C4-C5-N7	-12.17	105.93	110.80
29	D1	2916	U	C5-C4-O4	-12.17	118.60	125.90
29	D1	1367	G	C5-C6-N1	-12.15	105.43	111.50
1	A1	45	U	C6-N1-C1'	-12.13	104.22	121.20
29	D1	507	U	N3-C2-O2	-12.12	113.72	122.20
29	B1	3176	G	N3-C2-N2	-12.11	111.42	119.90
29	D1	2879	C	N1-C2-O2	-12.10	111.64	118.90
29	D1	3212	C	C2-N3-C4	-12.06	113.87	119.90
29	B1	2958	A	C8-N9-C4	12.02	110.61	105.80
30	D2	112	G	N1-C6-O6	-12.02	112.69	119.90
29	D1	2845	A	C5-C6-N6	-11.99	114.11	123.70
29	D1	3192	U	N1-C2-O2	-11.99	114.41	122.80
29	B1	3392	U	C2-N3-C4	-11.98	119.81	127.00
29	D1	3212	C	N1-C2-N3	11.95	127.57	119.20
29	D1	518	G	C5-C6-N1	-11.94	105.53	111.50
29	D1	3184	A	C5-C6-N6	-11.93	114.15	123.70
29	B1	969	C	C6-N1-C2	11.91	125.06	120.30
29	D1	2358	A	C8-N9-C4	11.90	110.56	105.80
1	A1	610	G	C4-N9-C1'	11.90	141.97	126.50
29	D1	1317	A	N9-C4-C5	-11.89	101.04	105.80
29	D1	963	G	C6-C5-N7	-11.88	123.27	130.40
29	D1	3176	G	C2-N3-C4	-11.84	105.98	111.90
29	B1	1887	A	C2-N3-C4	-11.83	104.69	110.60
1	C1	45	U	C6-N1-C1'	-11.79	104.70	121.20
1	C1	62	A	N1-C6-N6	-11.78	111.53	118.60
29	D1	3297	U	N3-C2-O2	-11.75	113.97	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	517	U	C6-N1-C1'	11.75	137.65	121.20
29	D1	3303	G	C4-C5-N7	-11.73	106.11	110.80
29	B1	3168	A	C5-C6-N1	-11.73	111.83	117.70
29	D1	389	A	C5-C6-N6	11.72	133.08	123.70
29	B1	588	G	C4-C5-N7	-11.71	106.11	110.80
31	B3	34	U	N3-C2-O2	-11.71	114.00	122.20
1	C1	1437	U	C2-N1-C1'	-11.67	103.69	117.70
29	B1	500	C	C2-N1-C1'	11.67	131.63	118.80
30	B2	66	A	C6-N1-C2	11.66	125.59	118.60
29	D1	1146	C	C6-N1-C2	11.65	124.96	120.30
29	B1	421	G	C6-C5-N7	-11.65	123.41	130.40
1	A1	1455	G	N1-C2-N3	-11.64	116.92	123.90
29	B1	1402	C	C6-N1-C2	11.64	124.95	120.30
29	B1	1151	U	N3-C4-C5	-11.63	107.62	114.60
29	D1	1450	G	C4-C5-N7	11.63	115.45	110.80
29	B1	606	C	N3-C4-N4	11.62	126.14	118.00
29	B1	557	A	C5-C6-N1	-11.61	111.89	117.70
29	D1	3219	G	C5-C6-O6	-11.61	121.64	128.60
29	B1	668	G	C8-N9-C4	11.61	111.04	106.40
29	B1	644	G	C5-C6-N1	-11.60	105.70	111.50
1	A1	62	A	N1-C6-N6	-11.59	111.65	118.60
29	D1	2330	C	C6-N1-C2	11.59	124.94	120.30
29	B1	2395	G	C8-N9-C4	-11.59	101.77	106.40
29	B1	718	G	N3-C4-C5	-11.58	122.81	128.60
29	B1	606	C	C6-N1-C1'	-11.57	106.92	120.80
29	D1	3363	U	N1-C2-O2	11.56	130.90	122.80
29	B1	3257	C	C6-N1-C1'	11.56	134.67	120.80
29	D1	3297	U	C2-N1-C1'	11.55	131.56	117.70
1	A1	437	A	C5-C6-N6	-11.54	114.47	123.70
29	D1	424	G	N1-C6-O6	11.52	126.81	119.90
29	B1	1192	C	C2-N1-C1'	11.51	131.46	118.80
29	B1	2358	A	C8-N9-C4	11.51	110.41	105.80
29	B1	3176	G	C4-N9-C1'	-11.51	111.54	126.50
1	C1	45	U	C5-C4-O4	-11.49	119.01	125.90
29	B1	3177	G	N3-C4-N9	-11.48	119.11	126.00
29	D1	606	C	C6-N1-C1'	-11.48	107.02	120.80
29	D1	1190	A	C2-N3-C4	11.47	116.33	110.60
29	B1	514	G	N3-C4-N9	-11.44	119.14	126.00
29	B1	2667	A	C2-N3-C4	11.44	116.32	110.60
29	D1	3272	C	C5-C6-N1	11.42	126.71	121.00
29	D1	1192	C	C6-N1-C2	-11.41	115.74	120.30
29	D1	3243	A	C5-C6-N6	-11.40	114.58	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	509	U	N3-C2-O2	-11.40	114.22	122.20
29	D1	2520	A	C5-C6-N6	-11.37	114.60	123.70
29	D1	2906	C	N3-C2-O2	11.36	129.85	121.90
29	D1	1323	G	C8-N9-C4	-11.35	101.86	106.40
29	D1	577	C	N3-C4-N4	11.26	125.88	118.00
29	B1	1148	G	C6-C5-N7	-11.23	123.66	130.40
29	D1	45	A	C8-N9-C4	11.21	110.28	105.80
29	D1	2377	G	N3-C4-N9	-11.21	119.27	126.00
29	B1	389	A	C5-C6-N6	11.20	132.66	123.70
29	D1	3177	G	N9-C4-C5	11.19	109.88	105.40
29	B1	586	C	N1-C2-O2	-11.18	112.19	118.90
29	D1	2682	C	C6-N1-C2	11.17	124.77	120.30
1	A1	1455	G	C4-C5-N7	-11.15	106.34	110.80
29	B1	3268	A	C8-N9-C4	11.14	110.26	105.80
29	D1	2278	C	N1-C2-O2	11.14	125.59	118.90
29	B1	589	A	C8-N9-C4	-11.14	101.34	105.80
29	B1	1506	A	C8-N9-C4	-11.14	101.34	105.80
30	D2	66	A	C5-C6-N1	-11.12	112.14	117.70
29	D1	1175	C	N3-C4-C5	11.12	126.35	121.90
1	C1	572	C	N1-C2-O2	11.10	125.56	118.90
1	A1	337	G	C4-C5-N7	11.10	115.24	110.80
29	B1	32	U	C2-N3-C4	-11.09	120.35	127.00
29	B1	963	G	C6-C5-N7	-11.08	123.75	130.40
29	D1	1147	G	N1-C6-O6	11.06	126.54	119.90
29	B1	338	A	C8-N9-C4	-11.06	101.38	105.80
29	D1	3176	G	N9-C4-C5	11.06	109.82	105.40
29	D1	390	G	N3-C4-N9	-11.05	119.37	126.00
29	D1	3168	A	N1-C2-N3	-11.03	123.79	129.30
30	D2	113	C	C2-N3-C4	-11.03	114.39	119.90
30	D2	112	G	N9-C4-C5	11.02	109.81	105.40
29	D1	1450	G	C6-C5-N7	-11.02	123.79	130.40
30	D2	111	U	C2-N1-C1'	11.02	130.92	117.70
1	A1	437	A	C6-N1-C2	-11.01	111.99	118.60
29	B1	656	A	C5-C6-N1	11.01	123.21	117.70
29	B1	3297	U	C2-N1-C1'	10.99	130.89	117.70
29	B1	644	G	C2-N3-C4	-10.99	106.41	111.90
1	C1	650	U	C5-C4-O4	-10.99	119.31	125.90
29	B1	513	G	C2-N3-C4	-10.97	106.41	111.90
29	D1	3266	G	C2-N3-C4	10.97	117.38	111.90
29	D1	389	A	N1-C6-N6	-10.96	112.02	118.60
29	B1	3184	A	C5-C6-N6	-10.96	114.93	123.70
1	C1	610	G	C4-N9-C1'	10.96	140.75	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	503	C	N1-C2-O2	-10.95	112.33	118.90
29	B1	390	G	N3-C4-N9	-10.94	119.44	126.00
29	B1	886	C	C6-N1-C2	10.93	124.67	120.30
29	D1	3177	G	N3-C4-N9	-10.93	119.44	126.00
29	D1	2362	C	C5-C6-N1	-10.93	115.53	121.00
29	B1	1148	G	N1-C6-O6	10.93	126.46	119.90
1	C1	572	C	C2-N1-C1'	10.93	130.82	118.80
29	D1	3176	G	N1-C2-N2	10.91	126.02	116.20
29	B1	1097	G	N9-C4-C5	10.89	109.76	105.40
29	B1	513	G	N3-C4-C5	10.87	134.04	128.60
29	D1	3176	G	C5-C6-N1	-10.87	106.07	111.50
29	D1	2667	A	C5-C6-N1	10.86	123.13	117.70
29	B1	2916	U	C5-C4-O4	-10.86	119.39	125.90
29	D1	2993	G	C5-C6-O6	10.86	135.11	128.60
1	C1	1639	C	C6-N1-C2	10.84	124.64	120.30
29	D1	556	U	N3-C4-O4	-10.84	111.81	119.40
29	D1	847	A	N1-C2-N3	10.84	134.72	129.30
29	D1	3212	C	C5-C6-N1	-10.82	115.59	121.00
30	D2	13	A	C4-C5-C6	-10.82	111.59	117.00
1	A1	1639	C	C6-N1-C2	10.82	124.63	120.30
29	D1	2993	G	C4-C5-N7	-10.81	106.47	110.80
29	B1	612	U	C5-C4-O4	-10.81	119.41	125.90
1	A1	517	U	C6-N1-C1'	10.79	136.31	121.20
1	A1	650	U	C5-C4-O4	-10.79	119.42	125.90
29	B1	3219	G	C6-C5-N7	-10.79	123.93	130.40
30	D2	13	A	N1-C6-N6	-10.78	112.13	118.60
29	B1	3077	A	C8-N9-C4	-10.77	101.49	105.80
29	B1	3090	U	C5-C6-N1	10.77	128.08	122.70
29	D1	3296	A	C5-C6-N6	-10.74	115.10	123.70
29	D1	1507	G	N3-C4-C5	10.74	133.97	128.60
29	B1	3322	A	C6-N1-C2	10.73	125.04	118.60
29	D1	3303	G	N3-C4-C5	-10.73	123.23	128.60
29	B1	3143	C	C5-C6-N1	10.71	126.36	121.00
29	B1	606	C	C5-C4-N4	-10.70	112.71	120.20
29	D1	272	G	C5-C6-O6	-10.68	122.19	128.60
29	B1	638	C	C2-N3-C4	-10.67	114.57	119.90
29	B1	504	A	N1-C6-N6	10.65	124.99	118.60
30	D2	113	C	C5-C6-N1	-10.65	115.68	121.00
1	C1	437	A	C5-C6-N6	-10.64	115.19	123.70
29	D1	2835	U	C5-C6-N1	10.64	128.02	122.70
29	B1	556	U	N3-C4-O4	-10.63	111.96	119.40
31	B3	92	A	C6-N1-C2	10.63	124.98	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2377	G	N3-C4-N9	-10.62	119.63	126.00
29	B1	3266	G	C2-N3-C4	10.62	117.21	111.90
29	B1	640	U	N1-C2-O2	-10.62	115.37	122.80
29	B1	505	G	N1-C6-O6	10.61	126.27	119.90
29	D1	1317	A	C6-C5-N7	-10.61	124.87	132.30
29	D1	3272	C	N3-C4-N4	10.61	125.43	118.00
29	B1	1067	U	C5-C4-O4	-10.60	119.54	125.90
29	B1	94	G	N3-C4-N9	-10.60	119.64	126.00
29	D1	2667	A	N1-C6-N6	-10.60	112.24	118.60
29	B1	588	G	N1-C2-N3	10.60	130.26	123.90
29	D1	577	C	N3-C2-O2	10.58	129.31	121.90
29	B1	3179	U	N3-C4-C5	-10.57	108.26	114.60
1	A1	610	G	C8-N9-C1'	-10.56	113.27	127.00
29	D1	518	G	N1-C6-O6	10.56	126.24	119.90
29	B1	518	G	N3-C4-C5	10.56	133.88	128.60
29	D1	1147	G	C4-C5-N7	10.56	115.02	110.80
31	D3	92	A	C6-N1-C2	10.55	124.93	118.60
29	B1	1190	A	C2-N3-C4	10.54	115.87	110.60
29	B1	500	C	C6-N1-C2	-10.54	116.08	120.30
29	B1	2939	G	C5-C6-O6	10.53	134.92	128.60
29	B1	2331	C	N1-C2-O2	-10.53	112.58	118.90
1	A1	358	U	N3-C2-O2	-10.52	114.84	122.20
1	A1	572	C	C5-C6-N1	10.51	126.25	121.00
29	B1	1917	C	C6-N1-C2	10.50	124.50	120.30
30	B2	13	A	N1-C6-N6	-10.50	112.30	118.60
29	D1	3243	A	N1-C2-N3	-10.50	124.05	129.30
29	D1	3132	C	C6-N1-C2	10.50	124.50	120.30
29	B1	3303	G	N3-C4-C5	-10.49	123.36	128.60
29	B1	3176	G	N1-C2-N2	10.48	125.64	116.20
29	B1	1508	C	C6-N1-C2	-10.48	116.11	120.30
29	D1	1320	C	N3-C4-N4	10.46	125.33	118.00
29	D1	3025	C	C5-C6-N1	-10.46	115.77	121.00
29	D1	2681	U	C5-C4-O4	-10.45	119.63	125.90
29	B1	2993	G	N1-C6-O6	-10.44	113.64	119.90
29	B1	3392	U	C2-N1-C1'	10.44	130.23	117.70
29	B1	963	G	N3-C4-N9	10.43	132.26	126.00
29	B1	1362	G	C8-N9-C4	10.43	110.57	106.40
29	D1	1169	A	N1-C6-N6	-10.43	112.34	118.60
30	B2	15	C	C6-N1-C1'	-10.42	108.29	120.80
29	B1	272	G	C5-C6-O6	-10.41	122.35	128.60
29	D1	2993	G	N9-C4-C5	10.40	109.56	105.40
29	D1	3176	G	C4-N9-C1'	-10.40	112.97	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2365	C	C6-N1-C2	10.40	124.46	120.30
29	D1	1317	A	C5-N7-C8	-10.40	98.70	103.90
1	A1	686	C	C2-N3-C4	-10.38	114.71	119.90
29	B1	1525	G	C8-N9-C1'	-10.39	113.50	127.00
29	D1	3137	C	C5-C6-N1	-10.38	115.81	121.00
29	B1	2391	G	C8-N9-C4	10.37	110.55	106.40
29	D1	963	G	C4-C5-N7	10.36	114.94	110.80
29	D1	3257	C	C6-N1-C1'	10.34	133.21	120.80
1	C1	1073	G	N3-C4-N9	10.34	132.20	126.00
29	B1	2195	C	N3-C4-C5	10.33	126.03	121.90
29	B1	421	G	C2-N3-C4	-10.32	106.74	111.90
29	D1	2333	C	C6-N1-C2	10.31	124.43	120.30
1	C1	686	C	C2-N3-C4	-10.31	114.74	119.90
29	D1	2876	C	C5-C6-N1	-10.30	115.85	121.00
29	B1	2990	G	C5-C6-O6	-10.29	122.43	128.60
29	B1	3176	G	C8-N9-C1'	10.28	140.37	127.00
29	B1	3257	C	N1-C2-O2	-10.28	112.73	118.90
29	D1	2913	C	C2-N1-C1'	-10.28	107.50	118.80
29	B1	3223	A	N1-C2-N3	-10.27	124.16	129.30
29	D1	726	G	N3-C4-C5	-10.27	123.46	128.60
29	B1	389	A	N1-C6-N6	-10.27	112.44	118.60
29	B1	1507	G	C8-N9-C1'	10.27	140.35	127.00
29	D1	2664	C	N3-C4-C5	10.25	126.00	121.90
1	A1	437	A	N1-C6-N6	10.25	124.75	118.60
29	B1	3130	A	N1-C6-N6	10.25	124.75	118.60
29	B1	3272	C	C6-N1-C2	-10.24	116.20	120.30
31	D3	34	U	N3-C2-O2	-10.24	115.03	122.20
1	C1	1653	C	C6-N1-C2	10.23	124.39	120.30
29	D1	1507	G	C8-N9-C1'	10.23	140.31	127.00
29	D1	3243	A	N3-C4-N9	10.22	135.58	127.40
29	B1	1148	G	C4-C5-N7	10.21	114.88	110.80
30	B2	112	G	N1-C6-O6	-10.20	113.78	119.90
29	B1	2993	G	N9-C4-C5	10.20	109.48	105.40
1	C1	437	A	C6-N1-C2	-10.20	112.48	118.60
29	B1	379	C	N3-C4-N4	10.19	125.13	118.00
29	D1	500	C	C2-N1-C1'	10.18	130.00	118.80
29	D1	1188	U	N3-C4-O4	-10.17	112.28	119.40
1	C1	869	A	C6-N1-C2	-10.16	112.50	118.60
29	B1	1317	A	N1-C6-N6	10.16	124.69	118.60
29	B1	102	C	C6-N1-C1'	-10.15	108.61	120.80
29	B1	1610	G	C4-C5-N7	10.15	114.86	110.80
29	B1	586	C	N3-C2-O2	10.15	129.01	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2378	C	C6-N1-C2	-10.15	116.24	120.30
29	B1	2879	C	N1-C2-O2	-10.13	112.82	118.90
29	D1	1067	U	C5-C4-O4	-10.13	119.82	125.90
29	D1	3176	G	C5-C6-O6	10.12	134.67	128.60
1	A1	1647	U	N1-C2-O2	-10.10	115.73	122.80
30	B2	96	U	C2-N3-C4	-10.10	120.94	127.00
29	B1	588	G	N9-C4-C5	10.10	109.44	105.40
29	D1	3244	A	C8-N9-C4	10.10	109.84	105.80
29	D1	1302	A	C2-N3-C4	10.09	115.64	110.60
29	B1	1434	G	N9-C4-C5	-10.09	101.37	105.40
29	B1	1434	G	C2-N3-C4	-10.08	106.86	111.90
1	C1	647	G	C6-N1-C2	-10.08	119.05	125.10
1	C1	610	G	C8-N9-C1'	-10.07	113.91	127.00
30	D2	15	C	C2-N1-C1'	10.07	129.88	118.80
34	DC	96	PRO	N-CA-CB	10.07	115.38	103.30
29	B1	3363	U	N1-C2-O2	10.06	129.84	122.80
29	D1	3243	A	N3-C4-C5	-10.06	119.76	126.80
30	D2	66	A	C5-C6-N6	10.05	131.74	123.70
29	B1	589	A	C2-N3-C4	10.05	115.62	110.60
29	B1	428	A	N1-C6-N6	10.05	124.63	118.60
29	D1	272	G	C6-N1-C2	10.04	131.12	125.10
29	B1	2681	U	C5-C4-O4	-10.03	119.88	125.90
29	B1	2289	U	C2-N3-C4	-10.03	120.98	127.00
29	D1	577	C	N1-C2-O2	-10.03	112.89	118.90
29	B1	515	C	N1-C2-O2	-10.02	112.89	118.90
29	B1	3219	G	C5-N7-C8	-10.02	99.29	104.30
29	B1	2993	G	C4-C5-N7	-9.99	106.80	110.80
29	D1	1434	G	C5-C6-N1	-9.99	106.50	111.50
29	B1	2892	A	N1-C6-N6	9.99	124.59	118.60
29	B1	2245	C	C6-N1-C2	-9.99	116.30	120.30
29	B1	1363	A	C8-N9-C4	9.98	109.79	105.80
29	B1	2115	G	C4-C5-N7	9.98	114.79	110.80
1	C1	437	A	N1-C6-N6	9.97	124.58	118.60
29	D1	3322	A	C6-N1-C2	9.97	124.58	118.60
1	A1	647	G	C6-N1-C2	-9.97	119.12	125.10
29	B1	513	G	C5-C6-O6	9.96	134.57	128.60
29	D1	402	A	N1-C6-N6	9.96	124.57	118.60
29	B1	3272	C	C5-C6-N1	9.95	125.98	121.00
29	D1	886	C	C6-N1-C2	9.95	124.28	120.30
29	B1	2689	A	N7-C8-N9	9.95	118.77	113.80
30	D2	15	C	C6-N1-C1'	-9.95	108.86	120.80
29	B1	192	C	N1-C2-O2	-9.95	112.93	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	D2	112	G	C4-C5-N7	-9.95	106.82	110.80
29	B1	3244	A	C8-N9-C4	9.94	109.78	105.80
29	B1	1367	G	N1-C6-O6	9.94	125.86	119.90
29	D1	3324	C	N3-C2-O2	-9.94	114.94	121.90
29	D1	515	C	N1-C2-O2	-9.93	112.94	118.90
1	A1	869	A	C6-N1-C2	-9.93	112.64	118.60
1	A1	610	G	N1-C6-O6	9.92	125.85	119.90
29	D1	3298	C	N3-C4-C5	9.91	125.86	121.90
29	D1	505	G	N1-C6-O6	9.90	125.84	119.90
29	D1	379	C	N3-C4-N4	9.90	124.93	118.00
29	D1	593	C	N1-C2-O2	9.89	124.84	118.90
29	B1	676	G	N3-C4-C5	-9.89	123.66	128.60
29	D1	2339	C	N3-C2-O2	-9.89	114.98	121.90
1	C1	825	U	C5-C4-O4	9.89	131.83	125.90
30	D2	13	A	C6-C5-N7	9.88	139.21	132.30
1	C1	825	U	C4-C5-C6	9.86	125.62	119.70
29	B1	370	U	N1-C2-O2	-9.85	115.90	122.80
29	B1	588	G	N1-C6-O6	-9.85	113.99	119.90
29	D1	1151	U	C6-N1-C2	-9.85	115.09	121.00
29	D1	3219	G	N9-C4-C5	-9.85	101.46	105.40
29	D1	3386	G	C6-C5-N7	-9.85	124.49	130.40
29	B1	1175	C	C2-N3-C4	-9.85	114.98	119.90
29	B1	3181	C	C4-C5-C6	-9.84	112.48	117.40
29	B1	73	C	C6-N1-C2	-9.83	116.37	120.30
29	B1	421	G	N1-C6-O6	9.83	125.80	119.90
29	D1	1147	G	C2-N3-C4	-9.83	106.98	111.90
29	D1	2929	C	C5-C4-N4	-9.83	113.32	120.20
29	D1	507	U	N1-C2-O2	9.82	129.68	122.80
29	B1	2391	G	N9-C4-C5	-9.82	101.47	105.40
29	B1	2398	A	N1-C6-N6	9.82	124.49	118.60
29	D1	3198	U	C2-N1-C1'	9.81	129.48	117.70
29	B1	656	A	C6-N1-C2	-9.81	112.72	118.60
29	D1	596	C	C6-N1-C2	-9.81	116.38	120.30
29	B1	1339	C	C6-N1-C2	-9.80	116.38	120.30
1	C1	1463	C	C6-N1-C2	9.80	124.22	120.30
29	B1	853	G	N1-C6-O6	-9.80	114.02	119.90
1	C1	939	A	C8-N9-C4	-9.79	101.89	105.80
29	B1	1056	U	C2-N1-C1'	9.78	129.44	117.70
29	B1	3095	U	N3-C2-O2	9.78	129.04	122.20
29	B1	832	G	N1-C6-O6	9.76	125.76	119.90
29	B1	1877	U	C2-N1-C1'	9.76	129.41	117.70
29	B1	832	G	C5-C6-O6	-9.75	122.75	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1884	A	C5-C6-N6	-9.75	115.90	123.70
30	D2	47	C	C2-N1-C1'	9.75	129.53	118.80
29	D1	513	G	C5-C6-O6	9.75	134.45	128.60
29	B1	1507	G	C4-N9-C1'	-9.75	113.83	126.50
29	D1	3176	G	C8-N9-C1'	9.74	139.66	127.00
29	B1	2283	G	C8-N9-C4	-9.73	102.51	106.40
29	B1	638	C	C5-C6-N1	-9.73	116.13	121.00
29	D1	2671	A	C5-C6-N6	-9.73	115.92	123.70
29	D1	503	C	C2-N3-C4	-9.73	115.04	119.90
29	B1	630	A	N1-C6-N6	9.71	124.43	118.60
29	B1	2377	G	N3-C2-N2	-9.71	113.10	119.90
30	B2	13	A	C6-C5-N7	9.71	139.10	132.30
29	D1	1548	C	C6-N1-C2	9.71	124.18	120.30
29	D1	1047	A	N1-C6-N6	-9.70	112.78	118.60
29	D1	2993	G	N1-C6-O6	-9.69	114.09	119.90
29	D1	1877	U	C2-N1-C1'	9.69	129.33	117.70
29	D1	3227	A	C6-N1-C2	9.69	124.41	118.60
29	D1	1434	G	C2-N3-C4	-9.69	107.06	111.90
29	D1	3137	C	C2-N3-C4	-9.68	115.06	119.90
29	B1	3303	G	C4-C5-N7	-9.68	106.93	110.80
29	B1	3390	G	N3-C4-N9	9.68	131.81	126.00
29	D1	424	G	C4-C5-N7	9.67	114.67	110.80
1	C1	572	C	C6-N1-C1'	-9.66	109.21	120.80
29	B1	1525	G	C4-N9-C1'	9.66	139.05	126.50
1	C1	1045	C	N1-C2-O2	9.66	124.69	118.90
29	D1	2689	A	N7-C8-N9	9.66	118.63	113.80
45	BP	131	PRO	N-CA-CB	9.65	114.89	103.30
29	B1	723	U	C2-N1-C1'	9.65	129.28	117.70
29	B1	3226	A	C5-C6-N6	9.65	131.42	123.70
29	B1	640	U	N3-C4-O4	9.64	126.15	119.40
29	D1	676	G	N3-C4-C5	-9.64	123.78	128.60
1	A1	1045	C	N1-C2-O2	9.64	124.68	118.90
29	D1	424	G	C5-C6-O6	-9.64	122.82	128.60
29	D1	3212	C	N3-C4-N4	-9.63	111.26	118.00
1	A1	1455	G	N9-C4-C5	9.63	109.25	105.40
29	B1	2186	U	C5-C4-O4	9.63	131.68	125.90
30	D2	46	A	C8-N9-C4	-9.62	101.95	105.80
1	A1	1090	C	C6-N1-C2	-9.62	116.45	120.30
29	D1	1329	U	N1-C2-O2	-9.62	116.07	122.80
29	B1	1047	A	N1-C6-N6	-9.62	112.83	118.60
30	B2	66	A	C5-C6-N6	9.61	131.39	123.70
29	D1	3181	C	N3-C4-C5	9.62	125.75	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1450	G	C5-C6-O6	-9.61	122.83	128.60
1	A1	647	G	C5-C6-O6	-9.60	122.84	128.60
29	B1	3243	A	C5-C6-N6	-9.60	116.02	123.70
1	A1	1437	U	C6-N1-C1'	9.58	134.61	121.20
29	B1	389	A	C6-N1-C2	9.57	124.34	118.60
29	D1	3223	A	C6-N1-C2	9.57	124.34	118.60
29	B1	1333	C	C6-N1-C2	9.57	124.13	120.30
30	D2	13	A	N3-C4-N9	-9.56	119.75	127.40
29	B1	3193	C	N1-C2-O2	-9.55	113.17	118.90
29	B1	505	G	C8-N9-C1'	9.54	139.40	127.00
29	D1	3200	G	C5-C6-O6	9.54	134.32	128.60
29	D1	1320	C	C2-N1-C1'	9.54	129.29	118.80
29	D1	3390	G	N3-C4-N9	9.53	131.72	126.00
29	B1	92	G	C4-N9-C1'	9.53	138.88	126.50
29	D1	1295	G	C8-N9-C4	9.52	110.21	106.40
29	D1	2809	C	C6-N1-C2	9.52	124.11	120.30
1	C1	1234	A	C6-N1-C2	9.52	124.31	118.60
29	B1	501	A	C8-N9-C4	9.51	109.61	105.80
29	D1	3176	G	C4-C5-N7	-9.51	106.99	110.80
29	B1	963	G	C4-N9-C1'	9.51	138.87	126.50
29	D1	1220	U	C3'-C2'-C1'	-9.51	93.89	101.50
1	C1	865	A	C8-N9-C4	9.51	109.60	105.80
29	D1	561	C	N1-C2-O2	-9.51	113.20	118.90
30	D2	13	A	C4-N9-C1'	-9.50	109.20	126.30
29	D1	2990	G	C5-C6-O6	-9.50	122.90	128.60
29	B1	744	A	N1-C6-N6	-9.50	112.90	118.60
29	B1	517	G	N9-C4-C5	9.50	109.20	105.40
29	D1	32	U	C5-C6-N1	-9.49	117.95	122.70
29	B1	3219	G	C5-C6-O6	-9.48	122.91	128.60
29	D1	503	C	N1-C2-N3	9.48	125.84	119.20
29	D1	1342	C	N3-C4-C5	9.48	125.69	121.90
29	B1	3392	U	N3-C2-O2	-9.47	115.57	122.20
29	B1	3227	A	C6-N1-C2	9.47	124.28	118.60
29	B1	3198	U	C2-N1-C1'	9.46	129.05	117.70
29	B1	2993	G	C5-C6-O6	9.46	134.27	128.60
29	B1	3272	C	N3-C4-N4	9.46	124.62	118.00
29	B1	3243	A	N1-C2-N3	-9.45	124.57	129.30
29	D1	1327	C	C2-N3-C4	-9.45	115.17	119.90
29	B1	661	G	C5-C6-N1	-9.45	106.78	111.50
29	D1	2916	U	N3-C4-O4	9.45	126.01	119.40
29	D1	886	C	C5-C6-N1	-9.44	116.28	121.00
29	D1	3001	C	C6-N1-C2	9.44	124.08	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	B2	46	A	C8-N9-C4	-9.44	102.02	105.80
29	B1	102	C	N3-C2-O2	-9.44	115.29	121.90
29	B1	589	A	N3-C4-C5	-9.44	120.19	126.80
29	D1	514	G	N9-C4-C5	9.43	109.17	105.40
30	B2	15	C	C2-N1-C1'	9.43	129.17	118.80
29	B1	3200	G	C5-C6-O6	9.43	134.26	128.60
29	B1	2708	C	N3-C4-C5	9.43	125.67	121.90
30	B2	47	C	C2-N1-C1'	9.42	129.17	118.80
1	A1	1073	G	N3-C4-N9	9.40	131.64	126.00
29	D1	687	U	C2-N1-C1'	-9.40	106.42	117.70
1	A1	1620	C	C6-N1-C2	-9.40	116.54	120.30
29	D1	3257	C	N1-C2-O2	-9.40	113.26	118.90
29	B1	2671	A	C5-C6-N6	-9.40	116.18	123.70
29	D1	3266	G	N3-C4-C5	-9.39	123.90	128.60
29	B1	3266	G	N3-C4-C5	-9.39	123.91	128.60
29	B1	1317	A	N9-C4-C5	-9.39	102.04	105.80
29	B1	1506	A	C5-N7-C8	-9.39	99.21	103.90
29	B1	1056	U	C5-C4-O4	-9.38	120.27	125.90
1	C1	388	G	C8-N9-C4	-9.38	102.65	106.40
29	B1	1097	G	C5-C6-O6	9.37	134.22	128.60
29	B1	1434	G	C6-C5-N7	-9.36	124.79	130.40
29	B1	2278	C	N1-C2-O2	9.36	124.51	118.90
29	B1	3243	A	N3-C4-N9	9.35	134.88	127.40
29	B1	927	C	N1-C2-O2	-9.35	113.29	118.90
29	B1	1506	A	N7-C8-N9	9.34	118.47	113.80
29	B1	2331	C	C6-N1-C2	9.34	124.04	120.30
29	D1	890	C	N3-C4-C5	9.34	125.64	121.90
29	D1	2683	U	C5-C4-O4	-9.34	120.30	125.90
29	B1	227	G	C8-N9-C4	9.34	110.13	106.40
29	B1	503	C	N1-C2-N3	9.33	125.73	119.20
29	D1	3268	A	C8-N9-C4	9.33	109.53	105.80
29	B1	3177	G	N9-C4-C5	9.32	109.13	105.40
29	B1	3212	C	C5-C6-N1	-9.32	116.34	121.00
1	A1	1620	C	C2-N1-C1'	9.30	129.03	118.80
29	B1	503	C	C2-N3-C4	-9.30	115.25	119.90
29	D1	3177	G	C8-N9-C4	-9.29	102.68	106.40
29	B1	606	C	C5-C6-N1	9.29	125.64	121.00
29	B1	2894	C	C6-N1-C2	9.29	124.01	120.30
29	B1	1450	G	N1-C6-O6	9.28	125.47	119.90
29	B1	2362	C	N3-C4-N4	9.28	124.50	118.00
29	D1	1317	A	C5-C6-N6	-9.28	116.28	123.70
29	B1	687	U	C2-N1-C1'	-9.27	106.57	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1364	C	C6-N1-C2	9.27	124.01	120.30
29	D1	1589	A	N7-C8-N9	9.27	118.44	113.80
29	D1	3213	A	N1-C6-N6	9.27	124.16	118.60
1	A1	572	C	C6-N1-C2	-9.26	116.59	120.30
1	C1	1109	G	C5-C6-O6	-9.26	123.04	128.60
29	D1	723	U	C5-C4-O4	-9.26	120.34	125.90
29	B1	3184	A	C4-C5-C6	9.25	121.62	117.00
29	B1	338	A	N9-C4-C5	9.24	109.50	105.80
29	B1	3391	A	C5-C6-N6	-9.24	116.31	123.70
29	B1	2906	C	N3-C2-O2	9.24	128.37	121.90
1	C1	825	U	C6-N1-C2	-9.24	115.46	121.00
29	D1	29	C	N1-C2-O2	-9.24	113.36	118.90
29	D1	2380	U	N1-C2-O2	-9.24	116.33	122.80
1	A1	1045	C	N3-C2-O2	-9.23	115.44	121.90
30	B2	112	G	N9-C4-C5	9.23	109.09	105.40
29	B1	3106	A	N1-C6-N6	9.23	124.14	118.60
1	C1	1132	A	C2-N3-C4	-9.23	105.98	110.60
29	D1	308	A	C5-C6-N6	-9.23	116.32	123.70
1	A1	364	G	C5-C6-O6	9.22	134.13	128.60
29	D1	1212	A	C8-N9-C4	-9.21	102.11	105.80
29	D1	345	G	C5-C6-N1	-9.21	106.90	111.50
29	D1	575	G	N3-C2-N2	-9.21	113.46	119.90
29	D1	2879	C	C6-N1-C2	9.20	123.98	120.30
29	B1	640	U	C5-C6-N1	9.20	127.30	122.70
29	B1	103	G	N1-C6-O6	9.19	125.42	119.90
29	D1	3212	C	N3-C2-O2	9.19	128.33	121.90
29	D1	963	G	N3-C4-N9	9.19	131.51	126.00
29	D1	2339	C	N1-C2-O2	9.19	124.41	118.90
29	D1	3181	C	C6-N1-C1'	-9.19	109.78	120.80
29	B1	1317	A	C5-C6-N6	-9.18	116.35	123.70
1	A1	846	G	C5-C6-O6	9.18	134.11	128.60
29	B1	607	A	N9-C4-C5	9.18	109.47	105.80
29	B1	3212	C	N1-C2-N3	9.18	125.63	119.20
29	B1	1395	G	N1-C6-O6	-9.18	114.39	119.90
30	D2	112	G	C8-N9-C4	-9.18	102.73	106.40
29	D1	32	U	C6-N1-C1'	9.17	134.04	121.20
29	D1	1661	G	N3-C4-N9	9.17	131.50	126.00
29	D1	1288	U	C5-C4-O4	-9.17	120.40	125.90
1	C1	62	A	C5-C6-N6	9.16	131.03	123.70
29	D1	1507	G	C4-N9-C1'	-9.16	114.59	126.50
1	C1	1073	G	N3-C4-C5	-9.16	124.02	128.60
29	D1	3245	A	N1-C6-N6	9.16	124.09	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	825	U	C5-C4-O4	9.15	131.39	125.90
29	B1	410	U	N3-C4-C5	-9.15	109.11	114.60
29	B1	2398	A	C5-C6-N6	-9.15	116.38	123.70
29	B1	2961	G	N3-C4-C5	-9.14	124.03	128.60
29	B1	3212	C	N3-C4-N4	-9.14	111.60	118.00
29	D1	3181	C	C4-C5-C6	-9.13	112.83	117.40
29	B1	1175	C	C5-C6-N1	-9.13	116.44	121.00
29	B1	3212	C	N3-C2-O2	9.12	128.28	121.90
1	C1	1541	G	C4-N9-C1'	9.12	138.35	126.50
1	A1	1234	A	C6-N1-C2	9.11	124.07	118.60
29	B1	640	U	N3-C2-O2	9.11	128.58	122.20
29	D1	514	G	C6-C5-N7	9.09	135.86	130.40
29	D1	2687	G	C2-N3-C4	9.09	116.44	111.90
29	D1	94	G	N3-C4-C5	9.08	133.14	128.60
29	B1	630	A	N9-C4-C5	-9.07	102.17	105.80
29	D1	514	G	C4-N9-C1'	-9.07	114.70	126.50
29	B1	75	G	N1-C6-O6	9.07	125.34	119.90
29	D1	1165	A	C5-C6-N1	-9.07	113.17	117.70
29	D1	1056	U	C2-N1-C1'	9.05	128.56	117.70
29	D1	102	C	C6-N1-C1'	-9.05	109.94	120.80
29	B1	3221	C	C6-N1-C2	-9.05	116.68	120.30
29	B1	3219	G	N9-C4-C5	-9.04	101.78	105.40
29	D1	1166	G	C8-N9-C4	9.04	110.02	106.40
1	A1	610	G	C4-C5-N7	9.04	114.42	110.80
29	B1	577	C	C5-C4-N4	-9.04	113.88	120.20
29	B1	272	G	C6-N1-C2	9.03	130.52	125.10
34	BC	96	PRO	N-CA-CB	9.03	114.14	103.30
29	B1	1501	U	C2-N3-C4	-9.03	121.58	127.00
1	A1	62	A	C5-C6-N6	9.02	130.92	123.70
29	B1	70	A	C8-N9-C4	-9.02	102.19	105.80
29	D1	514	G	C8-N9-C1'	9.02	138.72	127.00
29	D1	421	G	C2-N3-C4	-9.02	107.39	111.90
29	B1	1148	G	C5-C6-O6	-9.01	123.19	128.60
29	B1	1425	U	C5-C6-N1	-9.01	118.20	122.70
29	B1	588	G	C5-C6-O6	9.01	134.00	128.60
30	D2	112	G	N3-C4-C5	-9.01	124.10	128.60
29	B1	2277	C	C5-C6-N1	-9.00	116.50	121.00
29	D1	3205	G	N3-C4-C5	-9.00	124.10	128.60
30	D2	15	C	N1-C2-O2	8.99	124.30	118.90
29	D1	505	G	C4-C5-N7	-8.99	107.20	110.80
1	A1	686	C	N1-C2-O2	-8.99	113.51	118.90
29	D1	2919	A	C8-N9-C4	-8.99	102.20	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2828	G	C5-C6-O6	-8.97	123.22	128.60
29	B1	3176	G	C2-N3-C4	-8.97	107.42	111.90
29	B1	3001	C	C5-C6-N1	-8.96	116.52	121.00
29	D1	2935	U	C5-C6-N1	-8.96	118.22	122.70
29	D1	379	C	C5-C4-N4	-8.96	113.93	120.20
29	D1	1056	U	C5-C4-O4	-8.95	120.53	125.90
1	A1	846	G	N1-C6-O6	-8.95	114.53	119.90
29	B1	1320	C	C2-N1-C1'	8.95	128.64	118.80
29	D1	1187	C	C5-C6-N1	-8.95	116.53	121.00
29	D1	1152	G	N1-C6-O6	8.94	125.27	119.90
29	D1	2262	A	C8-N9-C4	-8.94	102.22	105.80
29	D1	1190	A	C6-N1-C2	-8.94	113.24	118.60
29	B1	750	G	N1-C6-O6	-8.93	114.54	119.90
29	B1	1429	G	N3-C4-N9	8.93	131.36	126.00
29	D1	1124	U	N3-C2-O2	-8.93	115.95	122.20
30	D2	47	C	N3-C4-C5	8.93	125.47	121.90
1	A1	572	C	C6-N1-C1'	-8.93	110.09	120.80
29	B1	2312	A	C8-N9-C4	-8.92	102.23	105.80
29	B1	2835	U	C2-N1-C1'	8.92	128.40	117.70
29	D1	92	G	C4-N9-C1'	8.92	138.09	126.50
29	D1	2671	A	C6-N1-C2	-8.92	113.25	118.60
29	D1	2830	G	C5-C6-N1	-8.91	107.04	111.50
29	B1	1387	G	C5-N7-C8	-8.91	99.85	104.30
29	D1	1457	U	C5-C6-N1	-8.91	118.25	122.70
1	A1	825	U	C4-C5-C6	8.90	125.04	119.70
29	D1	746	A	C2-N3-C4	8.90	115.05	110.60
29	D1	1333	C	C5-C4-N4	-8.89	113.97	120.20
29	B1	1589	A	C8-N9-C4	-8.89	102.25	105.80
29	B1	966	U	C5-C4-O4	-8.88	120.57	125.90
29	D1	1147	G	C6-C5-N7	-8.88	125.07	130.40
29	D1	504	A	N1-C6-N6	8.88	123.93	118.60
29	B1	1192	C	C6-N1-C1'	-8.88	110.15	120.80
29	B1	1884	A	C5-C6-N6	-8.87	116.60	123.70
29	D1	676	G	N3-C4-N9	8.87	131.32	126.00
29	B1	118	U	N1-C2-O2	8.87	129.01	122.80
29	B1	3212	C	C5-C4-N4	8.87	126.41	120.20
29	D1	2278	C	C5-C6-N1	8.86	125.43	121.00
29	B1	669	U	C2-N1-C1'	8.86	128.33	117.70
29	D1	969	C	C6-N1-C2	8.85	123.84	120.30
29	B1	3303	G	N9-C4-C5	8.85	108.94	105.40
30	B2	13	A	N3-C4-N9	-8.85	120.32	127.40
1	C1	45	U	N3-C4-O4	8.85	125.59	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	92	G	C8-N9-C1'	-8.85	115.50	127.00
29	B1	26	A	C8-N9-C4	-8.84	102.26	105.80
29	B1	2889	C	C6-N1-C2	8.84	123.84	120.30
29	D1	1147	G	N3-C4-C5	8.84	133.02	128.60
29	D1	1362	G	C8-N9-C4	8.84	109.94	106.40
29	D1	927	C	N1-C2-O2	-8.84	113.60	118.90
29	B1	2247	G	C5-C6-O6	-8.83	123.30	128.60
29	D1	1589	A	C8-N9-C4	-8.82	102.27	105.80
29	D1	3291	G	N3-C4-N9	8.82	131.29	126.00
29	B1	94	G	N3-C4-C5	8.82	133.01	128.60
29	D1	1897	G	C5-C6-O6	-8.82	123.31	128.60
29	B1	102	C	C6-N1-C2	-8.81	116.77	120.30
29	D1	3219	G	C6-C5-N7	-8.81	125.11	130.40
29	B1	1196	C	N3-C2-O2	-8.81	115.73	121.90
29	B1	1589	A	N7-C8-N9	8.81	118.20	113.80
1	C1	1028	C	C6-N1-C1'	-8.81	110.23	120.80
29	D1	513	G	C4-N9-C1'	-8.81	115.05	126.50
29	D1	92	G	C4-C5-N7	8.81	114.32	110.80
29	B1	588	G	N3-C4-C5	-8.80	124.20	128.60
29	D1	3244	A	N7-C8-N9	-8.80	109.40	113.80
29	B1	2890	A	C8-N9-C4	-8.80	102.28	105.80
29	B1	1097	G	N1-C6-O6	-8.79	114.62	119.90
29	D1	1902	G	C8-N9-C1'	-8.79	115.57	127.00
29	D1	1420	C	C6-N1-C2	8.79	123.82	120.30
1	A1	572	C	N3-C2-O2	-8.79	115.75	121.90
29	B1	67	A	N1-C6-N6	-8.78	113.33	118.60
29	D1	92	G	C5-C6-O6	-8.78	123.33	128.60
29	D1	513	G	C6-C5-N7	8.78	135.67	130.40
29	B1	2331	C	N3-C2-O2	8.77	128.04	121.90
29	D1	2378	C	N1-C2-O2	-8.77	113.64	118.90
29	B1	978	G	C4-N9-C1'	8.77	137.90	126.50
30	B2	111	U	C2-N1-C1'	8.77	128.22	117.70
1	A1	391	A	C8-N9-C4	8.76	109.31	105.80
29	B1	655	C	C5-C6-N1	-8.76	116.62	121.00
29	B1	3170	A	C6-N1-C2	8.76	123.85	118.60
29	D1	73	C	C6-N1-C2	-8.76	116.80	120.30
29	B1	853	G	C5-C6-N1	8.75	115.87	111.50
29	B1	1434	G	N3-C4-C5	8.75	132.97	128.60
29	B1	1951	C	C5-C4-N4	8.74	126.32	120.20
29	D1	3243	A	N1-C6-N6	8.74	123.84	118.60
1	C1	1046	G	N3-C4-N9	8.74	131.24	126.00
29	B1	1380	G	C2-N3-C4	-8.73	107.53	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2701	U	C5-C4-O4	-8.73	120.66	125.90
29	B1	2302	G	N1-C6-O6	-8.73	114.66	119.90
29	D1	640	U	N1-C2-O2	-8.73	116.69	122.80
29	B1	1387	G	C4-C5-N7	8.73	114.29	110.80
29	D1	505	G	C8-N9-C1'	8.73	138.34	127.00
1	C1	650	U	N3-C4-O4	8.72	125.51	119.40
29	D1	1124	U	N1-C2-O2	8.72	128.91	122.80
29	D1	390	G	N3-C4-C5	8.72	132.96	128.60
29	D1	3179	U	N3-C4-C5	-8.72	109.37	114.60
29	B1	1402	C	N3-C4-C5	8.71	125.39	121.90
1	A1	337	G	C6-C5-N7	-8.71	125.17	130.40
29	B1	2961	G	N3-C4-N9	8.71	131.23	126.00
29	D1	3211	C	N1-C2-O2	-8.70	113.68	118.90
29	B1	125	C	C2-N1-C1'	8.70	128.37	118.80
29	B1	1439	U	C2-N3-C4	-8.70	121.78	127.00
29	B1	630	A	C5-C6-N6	-8.70	116.74	123.70
29	B1	422	A	N1-C2-N3	-8.69	124.95	129.30
29	D1	434	U	N1-C2-O2	-8.69	116.71	122.80
29	D1	2527	G	N3-C4-N9	-8.69	120.79	126.00
29	B1	2331	C	C2-N1-C1'	-8.68	109.25	118.80
29	D1	1047	A	N9-C4-C5	8.68	109.27	105.80
29	D1	2331	C	N1-C2-O2	-8.68	113.69	118.90
1	A1	1198	G	C8-N9-C4	-8.67	102.93	106.40
29	D1	3176	G	C6-N1-C2	8.67	130.30	125.10
31	D3	92	A	C5-C6-N1	-8.67	113.37	117.70
29	B1	3391	A	C6-N1-C2	-8.66	113.40	118.60
29	D1	557	A	C5-C6-N1	-8.66	113.37	117.70
1	A1	1135	U	N1-C2-O2	-8.66	116.74	122.80
29	B1	718	G	N3-C4-N9	8.65	131.19	126.00
29	B1	514	G	C4-N9-C1'	-8.65	115.25	126.50
29	B1	514	G	N3-C4-C5	8.65	132.93	128.60
29	D1	3219	G	C5-N7-C8	-8.65	99.97	104.30
1	C1	1437	U	C6-N1-C1'	8.65	133.31	121.20
29	B1	505	G	C4-N9-C1'	-8.65	115.26	126.50
29	D1	1330	A	C2-N3-C4	-8.64	106.28	110.60
29	D1	3272	C	N3-C4-C5	-8.64	118.44	121.90
1	C1	409	C	C6-N1-C2	-8.64	116.84	120.30
29	D1	583	G	C5-C6-O6	8.64	133.78	128.60
29	D1	1850	A	C2-N3-C4	-8.64	106.28	110.60
30	D2	47	C	C5-C6-N1	8.64	125.32	121.00
29	B1	556	U	N1-C2-O2	8.64	128.85	122.80
29	D1	2835	U	C2-N1-C1'	8.64	128.06	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	337	G	C5-C6-O6	-8.63	123.42	128.60
29	B1	514	G	C8-N9-C1'	8.63	138.22	127.00
29	B1	557	A	C6-N1-C2	8.63	123.78	118.60
29	D1	517	G	N3-C2-N2	-8.63	113.86	119.90
29	D1	1951	C	C5-C4-N4	8.63	126.24	120.20
31	B3	34	U	C6-N1-C2	-8.63	115.82	121.00
30	D2	29	C	C6-N1-C2	8.63	123.75	120.30
29	D1	3220	G	C4-N9-C1'	8.62	137.71	126.50
29	B1	3099	C	C5-C6-N1	8.62	125.31	121.00
29	B1	1387	G	N1-C6-O6	8.62	125.07	119.90
29	B1	3243	A	N1-C6-N6	8.62	123.77	118.60
29	B1	3392	U	C5-C4-O4	-8.62	120.73	125.90
29	B1	284	A	N1-C6-N6	-8.61	113.43	118.60
1	C1	1377	U	C5-C4-O4	-8.61	120.73	125.90
1	A1	1651	A	N1-C6-N6	8.61	123.77	118.60
1	C1	517	U	N1-C2-O2	-8.61	116.78	122.80
29	B1	150	A	C5-C6-N1	8.60	122.00	117.70
30	B2	112	G	C4-C5-N7	-8.60	107.36	110.80
1	C1	427	C	C6-N1-C2	8.60	123.74	120.30
30	D2	66	A	C2-N3-C4	-8.60	106.30	110.60
29	B1	3220	G	C8-N9-C4	-8.60	102.96	106.40
29	B1	1330	A	C2-N3-C4	-8.59	106.31	110.60
29	B1	32	U	C6-N1-C2	8.59	126.15	121.00
29	B1	2913	C	C2-N1-C1'	-8.59	109.35	118.80
29	D1	517	G	N3-C4-N9	-8.59	120.85	126.00
29	D1	586	C	N1-C2-O2	-8.59	113.75	118.90
29	D1	1300	G	C8-N9-C4	-8.59	102.97	106.40
29	B1	576	C	N1-C2-O2	-8.58	113.75	118.90
29	D1	963	G	N9-C4-C5	-8.58	101.97	105.40
1	C1	1560	U	N3-C4-O4	-8.58	113.39	119.40
29	B1	518	G	C2-N3-C4	-8.58	107.61	111.90
29	B1	1100	U	C5-C6-N1	-8.58	118.41	122.70
1	C1	1303	U	N1-C2-O2	-8.58	116.80	122.80
29	D1	2929	C	N3-C4-N4	8.58	124.00	118.00
45	DP	131	PRO	N-CA-CB	8.57	113.59	103.30
30	B2	66	A	C5-C6-N1	-8.57	113.42	117.70
29	D1	3176	G	C6-C5-N7	8.57	135.54	130.40
1	A1	825	U	C6-N1-C2	-8.57	115.86	121.00
29	B1	3035	A	C6-N1-C2	-8.57	113.46	118.60
29	D1	1175	C	C2-N3-C4	-8.57	115.62	119.90
29	B1	2605	G	N1-C6-O6	8.56	125.04	119.90
29	D1	2882	U	C5-C4-O4	-8.56	120.76	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2899	C	C6-N1-C2	-8.55	116.88	120.30
29	B1	1054	A	C8-N9-C4	8.55	109.22	105.80
31	B3	34	U	C3'-C2'-C1'	-8.55	94.66	101.50
29	D1	94	G	C5-C6-O6	8.54	133.73	128.60
29	B1	2377	G	N9-C4-C5	8.54	108.82	105.40
29	B1	3266	G	N1-C6-O6	-8.54	114.77	119.90
29	D1	244	G	C6-N1-C2	8.54	130.22	125.10
29	D1	1175	C	C6-N1-C2	8.54	123.72	120.30
29	B1	2683	U	C5-C4-O4	-8.54	120.78	125.90
29	B1	3143	C	N3-C2-O2	8.54	127.88	121.90
1	C1	1541	G	C4-C5-C6	8.54	123.92	118.80
29	B1	655	C	C2-N3-C4	-8.54	115.63	119.90
29	D1	2398	A	N1-C6-N6	8.54	123.72	118.60
29	B1	2391	G	C5-C6-O6	-8.54	123.48	128.60
29	B1	1792	C	N1-C2-O2	-8.53	113.78	118.90
29	D1	1887	A	C8-N9-C4	8.53	109.21	105.80
1	A1	1033	C	C6-N1-C2	8.53	123.71	120.30
29	D1	1292	C	C6-N1-C2	8.53	123.71	120.30
29	B1	2391	G	C2-N3-C4	-8.53	107.64	111.90
29	B1	3211	C	N1-C2-O2	-8.52	113.79	118.90
29	D1	590	G	C8-N9-C4	8.52	109.81	106.40
29	D1	3303	G	N9-C4-C5	8.52	108.81	105.40
29	B1	517	G	C8-N9-C4	-8.52	102.99	106.40
30	B2	13	A	C4-N9-C1'	-8.52	110.97	126.30
29	B1	1111	U	C2-N1-C1'	-8.51	107.49	117.70
29	D1	1370	G	C5-C6-O6	-8.51	123.50	128.60
29	B1	39	A	C5-N7-C8	-8.50	99.65	103.90
29	B1	1887	A	C5-C6-N1	-8.50	113.45	117.70
29	B1	402	A	N1-C6-N6	8.50	123.70	118.60
1	C1	517	U	C5-C4-O4	8.50	131.00	125.90
29	B1	3176	G	C6-C5-N7	8.50	135.50	130.40
29	D1	1450	G	C5-N7-C8	-8.50	100.05	104.30
29	B1	358	G	N1-C6-O6	8.49	125.00	119.90
29	D1	965	A	C8-N9-C4	8.48	109.19	105.80
29	D1	2990	G	N1-C6-O6	8.48	124.99	119.90
29	B1	52	A	C4-C5-C6	8.48	121.24	117.00
29	D1	1525	G	C8-N9-C1'	-8.48	115.98	127.00
29	D1	729	C	C6-N1-C1'	-8.48	110.63	120.80
29	B1	1317	A	C4-C5-N7	8.47	114.94	110.70
29	B1	612	U	N3-C4-O4	8.47	125.33	119.40
29	B1	2362	C	C2-N1-C1'	-8.47	109.48	118.80
29	B1	640	U	C6-N1-C2	-8.47	115.92	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2835	U	N3-C4-O4	8.47	125.33	119.40
29	B1	505	G	C5-C6-O6	-8.46	123.52	128.60
29	B1	630	A	C4-C5-N7	8.47	114.93	110.70
29	D1	630	A	N1-C6-N6	8.47	123.68	118.60
29	D1	729	C	N1-C2-O2	8.46	123.98	118.90
29	D1	1902	G	C8-N9-C4	8.46	109.79	106.40
1	A1	1244	A	N1-C6-N6	-8.46	113.53	118.60
29	B1	504	A	C6-C5-N7	-8.46	126.38	132.30
29	B1	3108	G	N3-C4-C5	8.46	132.83	128.60
29	B1	677	A	N1-C6-N6	8.45	123.67	118.60
29	D1	2665	U	C2-N3-C4	-8.45	121.93	127.00
29	B1	1175	C	N3-C4-C5	8.45	125.28	121.90
29	B1	2828	G	N1-C6-O6	8.45	124.97	119.90
31	B3	104	A	C8-N9-C4	8.45	109.18	105.80
29	D1	606	C	C5-C4-N4	-8.45	114.29	120.20
29	B1	3396	U	N3-C2-O2	-8.44	116.29	122.20
29	B1	2867	C	N1-C2-O2	-8.44	113.84	118.90
29	B1	364	G	N3-C4-N9	8.44	131.06	126.00
30	D2	13	A	C8-N9-C1'	8.44	142.89	127.70
29	B1	2183	A	C8-N9-C4	-8.44	102.42	105.80
29	D1	118	U	N1-C2-O2	8.44	128.71	122.80
29	B1	2602	G	C8-N9-C4	8.44	109.77	106.40
29	D1	729	C	C2-N1-C1'	8.44	128.08	118.80
29	D1	3392	U	C2-N1-C1'	8.44	127.82	117.70
29	B1	864	G	C8-N9-C4	8.43	109.77	106.40
29	D1	102	C	C5-C6-N1	8.43	125.21	121.00
29	D1	518	G	N3-C2-N2	-8.43	114.00	119.90
30	D2	13	A	C5-C6-N6	8.43	130.44	123.70
29	B1	2879	C	N3-C2-O2	8.43	127.80	121.90
29	B1	380	U	C2-N1-C1'	-8.42	107.59	117.70
29	B1	588	G	C6-N1-C2	-8.42	120.05	125.10
29	B1	2906	C	C2-N1-C1'	-8.42	109.54	118.80
30	D2	9	C	C6-N1-C2	-8.42	116.93	120.30
29	D1	2147	A	N1-C6-N6	8.42	123.65	118.60
29	B1	421	G	N7-C8-N9	8.41	117.31	113.10
29	B1	609	G	C5-C6-O6	8.41	133.65	128.60
29	B1	3173	G	N3-C4-C5	8.41	132.81	128.60
29	B1	2247	G	C4-C5-N7	8.41	114.17	110.80
1	A1	1421	A	C8-N9-C4	-8.41	102.44	105.80
29	D1	1434	G	N3-C4-C5	8.41	132.81	128.60
29	D1	2290	C	N1-C2-O2	-8.41	113.86	118.90
1	A1	1109	G	C5-C6-O6	-8.40	123.56	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	645	A	C8-N9-C4	-8.40	102.44	105.80
29	B1	2828	G	C5-C6-O6	-8.40	123.56	128.60
29	D1	931	C	C6-N1-C2	-8.40	116.94	120.30
29	B1	102	C	C5-C6-N1	8.40	125.20	121.00
29	B1	965	A	C8-N9-C4	8.40	109.16	105.80
29	B1	3386	G	C6-C5-N7	-8.40	125.36	130.40
29	D1	1324	U	C2-N1-C1'	8.40	127.78	117.70
29	B1	3220	G	C4-N9-C1'	8.39	137.41	126.50
29	B1	2337	C	N1-C2-O2	-8.39	113.86	118.90
29	B1	2988	C	C6-N1-C1'	-8.39	110.73	120.80
30	D2	13	A	N3-C4-C5	8.39	132.68	126.80
29	B1	421	G	C5-C6-N1	-8.39	107.31	111.50
29	D1	500	C	C6-N1-C1'	-8.39	110.73	120.80
29	B1	2147	A	N9-C4-C5	-8.38	102.45	105.80
29	D1	2906	C	C2-N1-C1'	-8.38	109.58	118.80
29	B1	421	G	C4-C5-C6	8.38	123.83	118.80
29	D1	1058	U	C5-C6-N1	-8.38	118.51	122.70
29	D1	1320	C	C6-N1-C1'	-8.38	110.75	120.80
29	B1	379	C	C5-C4-N4	-8.37	114.34	120.20
29	B1	716	A	C8-N9-C4	-8.37	102.45	105.80
1	C1	847	A	C6-N1-C2	-8.37	113.58	118.60
1	C1	337	G	C4-C5-N7	8.36	114.14	110.80
29	D1	3266	G	N1-C6-O6	-8.36	114.89	119.90
29	D1	3392	U	C6-N1-C1'	-8.36	109.50	121.20
29	B1	1362	G	N7-C8-N9	-8.36	108.92	113.10
29	B1	3132	C	N1-C2-O2	-8.36	113.89	118.90
30	B2	13	A	N3-C4-C5	8.35	132.65	126.80
29	D1	92	G	N3-C4-N9	8.35	131.01	126.00
1	A1	1109	G	N1-C6-O6	8.35	124.91	119.90
1	C1	1135	U	N1-C2-O2	-8.34	116.96	122.80
29	B1	2283	G	N3-C2-N2	-8.34	114.06	119.90
29	B1	2369	G	N1-C6-O6	8.34	124.90	119.90
29	D1	2889	C	C6-N1-C2	8.34	123.64	120.30
29	B1	513	G	N9-C4-C5	8.34	108.73	105.40
29	B1	1146	C	C6-N1-C2	8.33	123.63	120.30
29	B1	1387	G	N7-C8-N9	8.33	117.26	113.10
29	D1	557	A	C6-N1-C2	8.33	123.60	118.60
29	D1	747	A	N1-C6-N6	8.33	123.60	118.60
29	B1	517	G	N3-C4-N9	-8.32	121.00	126.00
29	D1	1928	G	C8-N9-C4	8.32	109.73	106.40
1	A1	517	U	N1-C2-O2	-8.32	116.98	122.80
1	C1	364	G	C5-C6-O6	8.32	133.59	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3143	C	C5-C6-N1	8.32	125.16	121.00
29	B1	1550	C	C6-N1-C2	8.31	123.62	120.30
1	C1	426	G	N9-C4-C5	-8.31	102.08	105.40
29	D1	2664	C	C6-N1-C2	8.31	123.62	120.30
29	D1	2278	C	C4-C5-C6	-8.31	113.25	117.40
29	B1	2663	G	C5-C6-N1	8.30	115.65	111.50
1	C1	647	G	C5-C6-O6	-8.30	123.62	128.60
29	D1	746	A	C5-C6-N1	8.30	121.85	117.70
29	B1	1292	C	C6-N1-C2	8.30	123.62	120.30
1	C1	610	G	C6-C5-N7	-8.30	125.42	130.40
1	A1	1377	U	C5-C4-O4	-8.30	120.92	125.90
29	B1	3181	C	C6-N1-C1'	-8.30	110.84	120.80
29	B1	1450	G	C6-C5-N7	-8.30	125.42	130.40
29	D1	963	G	C4-N9-C1'	8.30	137.29	126.50
29	D1	2669	G	C4-C5-N7	8.30	114.12	110.80
29	B1	3244	A	N7-C8-N9	-8.30	109.65	113.80
29	B1	92	G	C5-C6-O6	-8.29	123.63	128.60
29	B1	777	U	C5-C4-O4	-8.29	120.93	125.90
29	D1	1525	G	C4-N9-C1'	8.29	137.28	126.50
29	B1	978	G	C8-N9-C1'	-8.29	116.23	127.00
29	B1	3223	A	C6-N1-C2	8.29	123.57	118.60
29	B1	2689	A	N9-C4-C5	8.28	109.11	105.80
1	C1	958	U	C2-N3-C4	-8.28	122.03	127.00
29	B1	2643	A	C2-N3-C4	-8.27	106.46	110.60
29	B1	2958	A	N7-C8-N9	-8.27	109.66	113.80
29	B1	814	U	N3-C2-O2	8.27	127.99	122.20
29	D1	2377	G	N3-C4-C5	8.27	132.74	128.60
29	D1	2707	C	C6-N1-C2	8.27	123.61	120.30
29	B1	3181	C	C5-C6-N1	8.27	125.14	121.00
29	D1	125	C	C2-N1-C1'	8.27	127.89	118.80
29	B1	2611	U	C6-N1-C2	-8.27	116.04	121.00
29	D1	1111	U	C5-C6-N1	-8.27	118.57	122.70
29	B1	335	G	C6-C5-N7	-8.26	125.44	130.40
29	D1	2687	G	N3-C4-C5	-8.26	124.47	128.60
29	D1	695	C	C6-N1-C2	8.26	123.60	120.30
29	B1	1115	G	C6-C5-N7	-8.26	125.44	130.40
29	D1	3124	G	C8-N9-C4	-8.26	103.10	106.40
29	D1	2362	C	N3-C4-N4	8.26	123.78	118.00
29	D1	2846	U	N1-C2-N3	8.25	119.85	114.90
29	B1	685	G	C8-N9-C1'	-8.25	116.28	127.00
29	B1	3019	U	C2-N3-C4	-8.25	122.05	127.00
1	A1	337	G	C5-N7-C8	-8.24	100.18	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	978	G	N3-C4-C5	-8.24	124.48	128.60
29	D1	92	G	C6-C5-N7	-8.24	125.45	130.40
29	D1	685	G	C8-N9-C1'	-8.24	116.29	127.00
29	D1	1097	G	N9-C4-C5	8.24	108.70	105.40
29	D1	576	C	N1-C2-O2	-8.24	113.96	118.90
29	B1	1501	U	N3-C4-C5	8.24	119.54	114.60
30	D2	93	C	C5-C4-N4	-8.24	114.44	120.20
29	D1	3303	G	C5-N7-C8	8.23	108.42	104.30
29	B1	1661	G	N3-C4-N9	8.23	130.94	126.00
29	D1	1661	G	C8-N9-C1'	-8.23	116.30	127.00
29	D1	2337	C	N1-C2-O2	-8.23	113.96	118.90
30	D2	46	A	N3-C4-C5	-8.23	121.04	126.80
29	B1	1506	A	C4-C5-N7	8.22	114.81	110.70
29	B1	2667	A	C5-C6-N1	8.22	121.81	117.70
1	C1	1647	U	N1-C2-O2	-8.22	117.04	122.80
1	A1	650	U	N3-C4-O4	8.22	125.16	119.40
29	B1	866	A	C8-N9-C4	-8.22	102.51	105.80
29	D1	994	G	N3-C4-N9	8.22	130.93	126.00
29	D1	1146	C	C5-C6-N1	-8.22	116.89	121.00
29	B1	1424	C	C6-N1-C2	8.22	123.59	120.30
29	D1	1097	G	C4-C5-N7	-8.22	107.51	110.80
29	D1	3391	A	C6-N1-C2	-8.22	113.67	118.60
29	B1	513	G	C6-C5-N7	8.22	135.33	130.40
29	B1	1187	C	C6-N1-C2	8.22	123.59	120.30
1	C1	1177	C	C6-N1-C2	8.21	123.58	120.30
1	A1	847	A	C6-N1-C2	-8.21	113.67	118.60
29	B1	505	G	C5-C6-N1	-8.21	107.39	111.50
29	D1	648	C	C4-C5-C6	8.21	121.51	117.40
29	D1	3205	G	C5-C6-N1	8.21	115.61	111.50
29	B1	726	G	C4-N9-C1'	8.21	137.17	126.50
1	C1	1455	G	N9-C4-C5	8.21	108.68	105.40
29	D1	1111	U	C6-N1-C2	8.20	125.92	121.00
29	B1	32	U	C6-N1-C1'	8.20	132.69	121.20
29	D1	1320	C	C5-C4-N4	-8.20	114.46	120.20
29	B1	2303	A	C8-N9-C4	8.20	109.08	105.80
29	D1	1147	G	N9-C4-C5	-8.20	102.12	105.40
29	B1	661	G	N3-C4-C5	8.20	132.70	128.60
29	B1	3215	A	C8-N9-C4	-8.20	102.52	105.80
29	B1	3390	G	C4-N9-C1'	8.20	137.15	126.50
29	D1	3170	A	C6-N1-C2	8.20	123.52	118.60
29	B1	343	U	N3-C2-O2	-8.19	116.47	122.20
29	D1	1191	U	N1-C2-N3	-8.19	109.98	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1609	C	C6-N1-C2	8.19	123.58	120.30
29	B1	2988	C	C2-N1-C1'	8.19	127.81	118.80
29	B1	1196	C	N1-C2-O2	8.19	123.81	118.90
1	A1	1481	C	C6-N1-C2	-8.18	117.03	120.30
1	A1	1187	U	C5-C4-O4	-8.18	120.99	125.90
1	A1	1421	A	C2-N3-C4	8.18	114.69	110.60
29	D1	370	U	N1-C2-O2	-8.18	117.07	122.80
29	B1	38	U	C6-N1-C2	8.18	125.91	121.00
29	B1	421	G	N1-C2-N3	8.18	128.81	123.90
29	B1	2391	G	N1-C6-O6	8.18	124.81	119.90
29	D1	89	A	N9-C4-C5	-8.18	102.53	105.80
29	D1	1288	U	N3-C4-O4	8.17	125.12	119.40
29	B1	2990	G	C4-C5-N7	8.17	114.07	110.80
29	B1	3303	G	N1-C6-O6	-8.17	115.00	119.90
29	D1	726	G	C4-N9-C1'	8.17	137.12	126.50
29	B1	1148	G	C5-N7-C8	-8.16	100.22	104.30
29	B1	2807	U	N3-C2-O2	8.16	127.92	122.20
1	C1	54	C	C5-C4-N4	-8.16	114.49	120.20
29	D1	505	G	C6-C5-N7	8.16	135.30	130.40
29	B1	1320	C	C5-C4-N4	-8.16	114.49	120.20
1	C1	1564	U	N3-C2-O2	8.16	127.91	122.20
29	D1	3376	A	C5-N7-C8	8.16	107.98	103.90
29	B1	3099	C	C4-C5-C6	-8.15	113.32	117.40
29	D1	52	A	C4-C5-C6	8.15	121.08	117.00
29	D1	327	A	C5-C6-N1	-8.14	113.63	117.70
29	D1	1315	U	N1-C2-N3	-8.14	110.02	114.90
29	B1	1003	A	C8-N9-C4	-8.14	102.54	105.80
29	B1	1207	G	C5-C6-O6	-8.14	123.72	128.60
29	B1	1111	U	C6-N1-C2	8.14	125.88	121.00
30	B2	113	C	C2-N3-C4	-8.14	115.83	119.90
29	B1	590	G	N3-C4-C5	8.13	132.67	128.60
29	B1	718	G	C2-N3-C4	8.13	115.97	111.90
29	D1	504	A	N9-C4-C5	-8.13	102.55	105.80
29	D1	654	C	C5-C6-N1	-8.13	116.93	121.00
1	A1	1174	C	C6-N1-C2	8.13	123.55	120.30
29	B1	387	A	C6-N1-C2	8.13	123.48	118.60
29	B1	410	U	C6-N1-C2	-8.13	116.12	121.00
29	B1	676	G	C4-N9-C1'	8.13	137.07	126.50
29	B1	729	C	C2-N1-C1'	8.13	127.74	118.80
29	B1	963	G	N3-C4-C5	-8.13	124.54	128.60
29	D1	435	C	C5-C6-N1	-8.13	116.94	121.00
29	D1	2957	G	N3-C4-N9	-8.13	121.12	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1063	G	N3-C4-C5	8.13	132.66	128.60
29	B1	3268	A	N7-C8-N9	-8.12	109.74	113.80
1	A1	1046	G	N3-C4-N9	8.12	130.87	126.00
1	C1	846	G	N1-C6-O6	-8.12	115.03	119.90
1	C1	1345	A	C5-C6-N1	-8.11	113.64	117.70
29	D1	606	C	N3-C4-N4	8.11	123.68	118.00
30	D2	14	U	C2-N3-C4	8.11	131.87	127.00
29	D1	1313	G	N1-C6-O6	-8.11	115.03	119.90
29	D1	2882	U	C2-N1-C1'	8.11	127.43	117.70
29	B1	1148	G	C2-N3-C4	-8.10	107.85	111.90
1	C1	1134	C	C6-N1-C2	8.10	123.54	120.30
29	D1	2671	A	C5-C6-N1	8.10	121.75	117.70
29	D1	2933	A	N1-C6-N6	-8.10	113.74	118.60
29	B1	3297	U	C6-N1-C2	-8.10	116.14	121.00
29	D1	92	G	N9-C4-C5	-8.10	102.16	105.40
44	DO	84	PRO	N-CA-CB	8.10	113.02	103.30
29	D1	102	C	N1-C2-O2	8.09	123.76	118.90
1	C1	1028	C	C2-N1-C1'	8.09	127.70	118.80
29	D1	1420	C	N3-C4-C5	8.09	125.14	121.90
29	B1	2390	A	N1-C6-N6	-8.09	113.75	118.60
29	B1	2837	A	N1-C6-N6	-8.09	113.75	118.60
29	D1	2913	C	C6-N1-C1'	8.09	130.50	120.80
1	C1	590	C	C6-N1-C2	-8.08	117.07	120.30
29	D1	3226	A	C2-N3-C4	-8.08	106.56	110.60
43	DN	49	PRO	N-CA-CB	8.08	113.00	103.30
29	B1	747	A	N1-C6-N6	8.08	123.45	118.60
29	D1	3215	A	C8-N9-C4	-8.08	102.57	105.80
29	B1	1458	U	C5-C6-N1	-8.08	118.66	122.70
29	B1	1887	A	N3-C4-C5	8.08	132.46	126.80
29	B1	257	U	C5-C4-O4	-8.08	121.05	125.90
29	B1	1296	C	C6-N1-C2	-8.07	117.07	120.30
29	B1	2982	A	N1-C6-N6	-8.07	113.75	118.60
30	B2	14	U	C2-N3-C4	8.07	131.84	127.00
29	D1	654	C	C6-N1-C2	8.07	123.53	120.30
29	B1	1431	G	C4-C5-N7	-8.07	107.57	110.80
29	D1	3324	C	N1-C2-O2	8.07	123.74	118.90
29	B1	1192	C	N1-C2-O2	8.07	123.74	118.90
29	D1	2879	C	C2-N1-C1'	-8.06	109.93	118.80
1	C1	426	G	C4-C5-N7	8.06	114.03	110.80
29	B1	607	A	N3-C4-C5	-8.06	121.16	126.80
38	DG	97	PRO	N-CA-CB	8.06	112.97	103.30
29	B1	1490	A	C8-N9-C4	8.06	109.02	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3376	A	N1-C6-N6	-8.06	113.77	118.60
29	D1	2391	G	C5-C6-O6	-8.05	123.77	128.60
29	D1	1899	G	C8-N9-C4	8.05	109.62	106.40
29	B1	963	G	C8-N9-C1'	-8.05	116.54	127.00
29	D1	597	G	C5-C6-O6	-8.05	123.77	128.60
29	D1	726	G	N3-C4-N9	8.04	130.83	126.00
29	B1	2906	C	C6-N1-C2	8.04	123.52	120.30
29	B1	752	C	C2-N1-C1'	8.04	127.64	118.80
1	A1	1498	G	N3-C4-N9	8.03	130.82	126.00
1	A1	423	G	C8-N9-C4	-8.03	103.19	106.40
29	B1	744	A	C5-N7-C8	8.03	107.92	103.90
30	B2	96	U	N1-C2-N3	8.03	119.72	114.90
29	D1	2377	G	N3-C2-N2	-8.03	114.28	119.90
29	B1	518	G	N3-C2-N2	-8.03	114.28	119.90
29	B1	3108	G	N3-C4-N9	-8.02	121.19	126.00
1	C1	374	U	C5-C4-O4	-8.02	121.09	125.90
29	B1	840	C	C6-N1-C2	8.02	123.51	120.30
29	B1	3242	G	C2-N3-C4	8.02	115.91	111.90
1	C1	310	C	C5-C4-N4	-8.02	114.59	120.20
29	D1	723	U	C2-N1-C1'	8.02	127.32	117.70
29	D1	1297	C	C5-C4-N4	-8.02	114.59	120.20
29	D1	1141	C	C6-N1-C2	8.02	123.51	120.30
29	D1	1151	U	N3-C4-C5	-8.02	109.79	114.60
29	D1	514	G	N3-C4-C5	8.01	132.61	128.60
29	D1	575	G	N9-C4-C5	8.01	108.60	105.40
1	C1	1745	G	N1-C6-O6	-8.01	115.10	119.90
29	D1	2913	C	N1-C2-O2	-8.01	114.10	118.90
29	B1	2708	C	C5-C4-N4	-8.00	114.60	120.20
29	D1	1312	C	C2-N3-C4	-8.00	115.90	119.90
1	A1	1234	A	C5-C6-N1	-8.00	113.70	117.70
30	D2	96	U	C5-C6-N1	-8.00	118.70	122.70
1	A1	869	A	C5-C6-N1	7.99	121.69	117.70
29	D1	1294	A	C2-N3-C4	7.99	114.59	110.60
29	B1	244	G	C6-N1-C2	7.99	129.89	125.10
1	C1	62	A	N9-C4-C5	7.99	109.00	105.80
29	D1	1166	G	N9-C4-C5	-7.99	102.20	105.40
29	B1	2912	G	C8-N9-C4	-7.99	103.21	106.40
29	B1	1377	G	N1-C6-O6	-7.98	115.11	119.90
29	D1	987	U	C5-C6-N1	-7.98	118.71	122.70
29	B1	92	G	C8-N9-C1'	-7.98	116.63	127.00
29	B1	3025	C	C5-C6-N1	-7.98	117.01	121.00
29	D1	2705	A	C4-C5-C6	-7.98	113.01	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	341	G	N1-C6-O6	7.98	124.69	119.90
29	B1	1419	A	C8-N9-C4	-7.98	102.61	105.80
1	C1	1220	C	C2-N1-C1'	7.98	127.58	118.80
29	B1	1168	U	C5-C6-N1	-7.97	118.71	122.70
43	DN	73	PRO	N-CA-CB	7.97	112.87	103.30
29	B1	2989	U	C5-C6-N1	-7.97	118.72	122.70
1	A1	1173	C	C6-N1-C2	7.97	123.49	120.30
29	B1	2362	C	C5-C6-N1	-7.97	117.02	121.00
29	B1	3323	A	C6-N1-C2	7.97	123.38	118.60
29	B1	608	A	N1-C6-N6	7.97	123.38	118.60
29	D1	2289	U	C5-C6-N1	-7.96	118.72	122.70
29	D1	3390	G	C4-N9-C1'	7.96	136.85	126.50
29	D1	3300	U	C5-C4-O4	7.96	130.68	125.90
29	D1	3314	A	C6-N1-C2	-7.96	113.83	118.60
1	A1	1486	G	N1-C6-O6	7.96	124.67	119.90
1	C1	1024	U	C5-C6-N1	-7.96	118.72	122.70
29	B1	882	A	N1-C6-N6	-7.95	113.83	118.60
29	B1	1387	G	C6-C5-N7	-7.95	125.63	130.40
29	B1	395	A	N1-C6-N6	-7.95	113.83	118.60
1	A1	1453	G	C8-N9-C4	7.95	109.58	106.40
29	B1	503	C	C6-N1-C1'	7.95	130.34	120.80
29	B1	3143	C	C2-N3-C4	7.95	123.87	119.90
29	B1	2913	C	N1-C2-O2	-7.95	114.13	118.90
16	CO	95	PRO	N-CA-CB	7.95	112.83	103.30
29	D1	3328	G	C8-N9-C4	7.95	109.58	106.40
45	BP	121	PRO	N-CA-CB	7.94	112.83	103.30
29	B1	518	G	N3-C4-N9	-7.94	121.24	126.00
29	D1	729	C	C5-C4-N4	-7.94	114.64	120.20
29	D1	1312	C	N1-C2-N3	7.94	124.76	119.20
29	B1	2882	U	C2-N1-C1'	7.94	127.23	117.70
29	D1	32	U	C2-N3-C4	-7.94	122.24	127.00
29	B1	402	A	C6-C5-N7	-7.93	126.75	132.30
29	D1	634	C	C6-N1-C2	7.93	123.47	120.30
29	D1	3266	G	N3-C4-N9	7.93	130.76	126.00
1	C1	1408	G	N3-C4-C5	-7.93	124.64	128.60
29	B1	89	A	C2-N3-C4	-7.92	106.64	110.60
29	D1	2889	C	N1-C2-O2	-7.92	114.15	118.90
29	B1	575	G	N3-C2-N2	-7.92	114.36	119.90
29	B1	1661	G	C6-C5-N7	-7.92	125.65	130.40
29	D1	3242	G	C8-N9-C4	-7.92	103.23	106.40
29	D1	380	U	C2-N1-C1'	-7.92	108.20	117.70
29	D1	2122	G	N1-C6-O6	7.91	124.65	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2811	A	N1-C6-N6	-7.91	113.85	118.60
29	B1	992	A	C8-N9-C4	-7.91	102.64	105.80
29	D1	941	G	C4-C5-N7	-7.91	107.64	110.80
29	B1	1884	A	C2-N3-C4	-7.91	106.65	110.60
29	B1	886	C	C5-C6-N1	-7.90	117.05	121.00
1	C1	1725	U	C2-N1-C1'	7.90	127.18	117.70
29	D1	1897	G	C4-C5-N7	7.90	113.96	110.80
29	B1	52	A	C6-C5-N7	-7.90	126.77	132.30
29	B1	723	U	N3-C4-O4	7.90	124.93	119.40
29	B1	1065	A	C2-N3-C4	7.90	114.55	110.60
29	B1	3314	A	C8-N9-C4	-7.90	102.64	105.80
29	D1	3132	C	N1-C2-O2	-7.90	114.16	118.90
29	D1	3291	G	N1-C2-N2	-7.90	109.09	116.20
1	A1	569	C	C6-N1-C2	7.89	123.46	120.30
1	A1	1141	G	C8-N9-C1'	-7.89	116.74	127.00
45	DP	121	PRO	N-CA-CB	7.89	112.76	103.30
29	D1	370	U	C2-N1-C1'	-7.88	108.24	117.70
29	D1	777	U	C5-C4-O4	-7.88	121.17	125.90
29	B1	3090	U	C5-C4-O4	-7.88	121.17	125.90
29	B1	513	G	C5-C6-N1	-7.88	107.56	111.50
29	D1	1193	A	N1-C6-N6	7.88	123.33	118.60
29	B1	537	A	N1-C6-N6	-7.87	113.88	118.60
1	A1	374	U	C5-C4-O4	-7.87	121.18	125.90
29	B1	654	C	C5-C6-N1	-7.87	117.06	121.00
29	D1	676	G	C4-N9-C1'	7.87	136.73	126.50
29	D1	3342	A	C5-C6-N1	7.87	121.64	117.70
29	B1	308	A	C5-C6-N6	-7.87	117.40	123.70
29	B1	424	G	C6-C5-N7	-7.87	125.68	130.40
29	D1	1661	G	C4-N9-C1'	7.87	136.72	126.50
29	B1	1500	G	N1-C6-O6	-7.86	115.18	119.90
29	D1	3143	C	C5-C4-N4	-7.86	114.70	120.20
29	B1	3390	G	N3-C4-C5	-7.86	124.67	128.60
29	B1	1897	G	C5-C6-O6	-7.86	123.89	128.60
31	D3	34	U	C3'-C2'-C1'	-7.86	95.21	101.50
29	B1	2391	G	C4-C5-N7	7.86	113.94	110.80
29	D1	390	G	C4-N9-C1'	-7.85	116.29	126.50
29	B1	877	C	C6-N1-C2	-7.85	117.16	120.30
29	D1	923	C	C6-N1-C2	7.85	123.44	120.30
29	B1	341	G	C6-C5-N7	-7.85	125.69	130.40
29	B1	2290	C	N1-C2-O2	-7.85	114.19	118.90
29	B1	1178	G	C2-N3-C4	7.85	115.82	111.90
29	D1	1124	U	C2-N1-C1'	7.85	127.12	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	1579	U	C5-C4-O4	-7.85	121.19	125.90
29	B1	422	A	C4-N9-C1'	-7.84	112.18	126.30
29	D1	577	C	C5-C4-N4	-7.84	114.71	120.20
29	B1	340	C	C6-N1-C2	-7.84	117.16	120.30
29	B1	625	G	C8-N9-C4	7.84	109.54	106.40
29	B1	782	U	C5-C4-O4	-7.84	121.19	125.90
1	C1	1073	G	C5-C6-N1	7.84	115.42	111.50
29	D1	2811	A	C5-C6-N6	7.84	129.97	123.70
1	A1	358	U	N1-C2-O2	7.84	128.29	122.80
29	B1	2611	U	C5-C4-O4	7.84	130.60	125.90
30	B2	47	C	C6-N1-C1'	-7.84	111.40	120.80
1	C1	1788	G	N3-C2-N2	-7.84	114.42	119.90
29	D1	389	A	C6-N1-C2	7.84	123.30	118.60
29	D1	3376	A	N7-C8-N9	-7.83	109.88	113.80
29	B1	2184	U	C5-C4-O4	-7.83	121.20	125.90
29	D1	2331	C	C6-N1-C2	7.83	123.43	120.30
29	D1	2845	A	C2-N3-C4	-7.83	106.68	110.60
29	D1	2889	C	N3-C2-O2	7.83	127.38	121.90
29	D1	2380	U	N1-C2-N3	7.83	119.60	114.90
29	B1	1917	C	N3-C2-O2	7.83	127.38	121.90
29	D1	429	U	N1-C2-O2	-7.82	117.32	122.80
29	B1	1928	G	C8-N9-C4	7.82	109.53	106.40
29	B1	42	C	C6-N1-C2	7.82	123.43	120.30
29	B1	299	G	N1-C6-O6	7.82	124.59	119.90
29	B1	685	G	C4-N9-C1'	7.82	136.66	126.50
1	C1	1541	G	C6-C5-N7	-7.82	125.71	130.40
29	D1	2867	C	N1-C2-O2	-7.82	114.21	118.90
29	D1	3213	A	N9-C4-C5	-7.82	102.67	105.80
29	B1	504	A	N9-C4-C5	-7.81	102.67	105.80
29	B1	3181	C	C2-N1-C1'	7.81	127.39	118.80
29	D1	1212	A	N7-C8-N9	7.81	117.70	113.80
29	B1	1661	G	C4-N9-C1'	7.81	136.65	126.50
29	B1	424	G	C5-C6-O6	-7.81	123.92	128.60
1	C1	869	A	C5-C6-N1	7.80	121.60	117.70
1	C1	1159	C	C2-N1-C1'	7.80	127.38	118.80
29	D1	2689	A	N9-C4-C5	7.80	108.92	105.80
29	B1	3054	U	N1-C2-O2	7.79	128.25	122.80
29	B1	2671	A	N1-C6-N6	7.79	123.27	118.60
29	B1	640	U	N3-C4-C5	-7.79	109.93	114.60
29	B1	561	C	N1-C2-O2	-7.79	114.23	118.90
29	B1	3179	U	C2-N3-C4	7.79	131.67	127.00
1	C1	1244	A	N1-C6-N6	-7.79	113.93	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	1331	A	N1-C6-N6	-7.79	113.93	118.60
29	B1	390	G	N3-C4-C5	7.78	132.49	128.60
29	D1	3108	G	N9-C4-C5	7.78	108.51	105.40
29	B1	50	U	N3-C2-O2	-7.78	116.75	122.20
29	B1	1432	C	C2-N1-C1'	7.78	127.36	118.80
29	B1	3297	U	C2-N3-C4	-7.78	122.33	127.00
29	D1	3138	U	C5-C4-O4	-7.78	121.23	125.90
29	B1	2353	G	C4-C5-N7	7.78	113.91	110.80
29	B1	3272	C	N3-C4-C5	-7.77	118.79	121.90
29	B1	1327	C	N3-C4-C5	7.77	125.01	121.90
29	D1	2262	A	N7-C8-N9	7.77	117.69	113.80
29	D1	2667	A	N1-C2-N3	-7.77	125.42	129.30
29	D1	2897	A	C5-C6-N1	7.76	121.58	117.70
29	B1	3392	U	C6-N1-C1'	-7.76	110.33	121.20
1	C1	1541	G	C8-N9-C1'	-7.76	116.91	127.00
29	D1	816	A	C2-N3-C4	7.76	114.48	110.60
29	D1	1160	C	C2-N3-C4	7.76	123.78	119.90
29	D1	1710	C	C2-N1-C1'	7.76	127.34	118.80
29	D1	2964	G	N1-C6-O6	-7.76	115.25	119.90
29	D1	3242	G	C2-N3-C4	7.76	115.78	111.90
29	D1	3243	A	C5-C6-N1	7.76	121.58	117.70
57	Db	68	PRO	N-CA-CB	7.76	112.61	103.30
29	D1	3391	A	C5-C6-N6	-7.75	117.50	123.70
30	D2	47	C	C4-C5-C6	-7.75	113.52	117.40
29	D1	2919	A	N7-C8-N9	7.75	117.68	113.80
29	B1	3000	A	C6-N1-C2	7.75	123.25	118.60
29	D1	2283	G	C2-N3-C4	-7.75	108.03	111.90
29	D1	3324	C	C2-N1-C1'	7.75	127.32	118.80
29	B1	404	G	C4-N9-C1'	7.75	136.57	126.50
29	D1	2358	A	N7-C8-N9	-7.74	109.93	113.80
29	B1	744	A	C4-C5-N7	-7.74	106.83	110.70
29	D1	1208	U	N1-C2-O2	7.74	128.22	122.80
1	A1	45	U	N3-C4-O4	7.74	124.82	119.40
29	D1	978	G	C8-N9-C1'	-7.73	116.95	127.00
29	B1	88	A	C8-N9-C4	7.73	108.89	105.80
29	D1	3322	A	C5-C6-N1	-7.73	113.83	117.70
29	D1	505	G	C4-N9-C1'	-7.73	116.45	126.50
29	D1	1171	G	C8-N9-C4	-7.73	103.31	106.40
29	D1	589	A	C2-N3-C4	7.72	114.46	110.60
29	D1	3173	G	N3-C4-C5	7.72	132.46	128.60
29	B1	2283	G	N1-C6-O6	7.72	124.53	119.90
1	C1	1459	C	C5-C6-N1	-7.72	117.14	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	125	C	C6-N1-C1'	-7.71	111.55	120.80
29	D1	1192	C	C6-N1-C1'	-7.71	111.55	120.80
29	D1	2883	U	C5-C6-N1	-7.71	118.84	122.70
29	D1	1123	U	N1-C2-O2	-7.71	117.40	122.80
29	D1	1207	G	C4-C5-N7	7.71	113.88	110.80
29	B1	92	G	N3-C4-N9	7.71	130.62	126.00
29	D1	1178	G	C8-N9-C4	-7.71	103.32	106.40
29	D1	3390	G	N3-C4-C5	-7.70	124.75	128.60
29	B1	3300	U	N3-C2-O2	-7.70	116.81	122.20
29	B1	2391	G	N3-C4-C5	7.70	132.45	128.60
29	B1	3176	G	C5-C6-N1	-7.69	107.65	111.50
1	A1	1085	G	C8-N9-C4	7.69	109.48	106.40
29	B1	2851	A	N1-C6-N6	-7.69	113.98	118.60
29	B1	1610	G	C5-N7-C8	-7.69	100.45	104.30
29	D1	2906	C	C5-C6-N1	-7.69	117.16	121.00
29	D1	2289	U	C2-N3-C4	-7.69	122.39	127.00
29	B1	729	C	C6-N1-C1'	-7.68	111.58	120.80
1	C1	825	U	N1-C2-O2	-7.68	117.42	122.80
29	D1	2355	G	N3-C4-N9	7.68	130.61	126.00
29	D1	3226	A	C5-C6-N1	-7.68	113.86	117.70
29	B1	1409	G	C5-C6-N1	7.68	115.34	111.50
1	C1	846	G	C5-C6-O6	7.68	133.21	128.60
29	B1	661	G	C2-N3-C4	-7.68	108.06	111.90
1	A1	1620	C	N3-C2-O2	-7.68	116.53	121.90
29	B1	1648	A	C2-N3-C4	7.68	114.44	110.60
29	B1	597	G	C4-C5-N7	7.67	113.87	110.80
29	B1	2354	C	N1-C2-O2	7.67	123.50	118.90
29	D1	390	G	C8-N9-C1'	7.67	136.98	127.00
29	B1	215	G	C8-N9-C4	-7.67	103.33	106.40
29	D1	2669	G	C6-C5-N7	-7.67	125.80	130.40
29	D1	3103	A	C6-N1-C2	-7.67	114.00	118.60
29	B1	574	U	N3-C2-O2	7.67	127.57	122.20
29	B1	1432	C	C5-C6-N1	7.67	124.83	121.00
29	B1	3103	A	N3-C4-C5	-7.66	121.44	126.80
29	D1	1208	U	N3-C4-O4	-7.66	114.03	119.40
29	D1	963	G	C8-N9-C1'	-7.66	117.04	127.00
29	D1	1192	C	C5-C6-N1	7.66	124.83	121.00
31	B3	87	G	N3-C4-N9	7.66	130.59	126.00
29	B1	1323	G	C8-N9-C4	-7.65	103.34	106.40
29	B1	3314	A	C6-N1-C2	-7.65	114.01	118.60
29	B1	1123	U	N1-C2-O2	-7.65	117.44	122.80
1	A1	358	U	C2-N1-C1'	7.65	126.88	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	1725	U	C2-N1-C1'	7.65	126.88	117.70
29	B1	1434	G	C8-N9-C4	7.65	109.46	106.40
29	B1	2835	U	C5-C4-O4	-7.65	121.31	125.90
29	D1	583	G	N1-C6-O6	-7.64	115.31	119.90
29	D1	1928	G	N3-C4-C5	7.64	132.42	128.60
1	A1	1591	C	C2-N1-C1'	-7.64	110.40	118.80
29	D1	1120	A	C6-N1-C2	-7.64	114.02	118.60
29	D1	2390	A	N9-C4-C5	7.64	108.86	105.80
29	B1	1151	U	N3-C4-O4	7.64	124.75	119.40
29	B1	390	G	C8-N9-C1'	7.64	136.93	127.00
29	B1	1322	U	N3-C4-C5	-7.63	110.02	114.60
29	D1	513	G	C8-N9-C1'	7.63	136.93	127.00
29	D1	752	C	C2-N1-C1'	7.63	127.20	118.80
29	B1	3143	C	C6-N1-C2	-7.63	117.25	120.30
31	B3	92	A	C5-C6-N1	-7.63	113.88	117.70
29	D1	2706	G	N1-C6-O6	-7.63	115.32	119.90
29	B1	421	G	C4-N9-C1'	7.63	136.41	126.50
31	D3	68	G	N3-C4-N9	-7.63	121.42	126.00
29	D1	1175	C	C5-C6-N1	-7.62	117.19	121.00
29	B1	244	G	C4-C5-C6	7.62	123.37	118.80
29	B1	556	U	N3-C2-O2	-7.62	116.86	122.20
29	B1	1439	U	C5-C4-O4	-7.62	121.33	125.90
29	D1	3108	G	C8-N9-C1'	7.62	136.91	127.00
29	B1	574	U	C5-C4-O4	-7.62	121.33	125.90
29	B1	2115	G	C5-N7-C8	-7.62	100.49	104.30
29	D1	1097	G	C5-C6-O6	7.62	133.17	128.60
29	D1	1331	U	C5-C6-N1	-7.62	118.89	122.70
29	B1	370	U	C2-N1-C1'	-7.61	108.56	117.70
29	B1	3054	U	N3-C2-O2	-7.61	116.87	122.20
29	D1	2391	G	C4-C5-N7	7.61	113.84	110.80
29	B1	751	A	C5-C6-N1	7.61	121.50	117.70
29	B1	3390	G	C8-N9-C1'	-7.61	117.11	127.00
44	BO	84	PRO	N-CA-CB	7.61	112.43	103.30
29	D1	341	G	N1-C6-O6	7.61	124.46	119.90
30	D2	10	C	C2-N1-C1'	7.61	127.17	118.80
29	D1	718	G	N3-C4-C5	-7.60	124.80	128.60
29	B1	3342	A	C5-C6-N1	7.60	121.50	117.70
1	C1	1595	U	N3-C4-O4	7.60	124.72	119.40
29	B1	390	G	C4-N9-C1'	-7.60	116.62	126.50
29	B1	726	G	N3-C4-C5	-7.60	124.80	128.60
29	B1	3303	G	C2-N3-C4	7.60	115.70	111.90
29	B1	584	G	C8-N9-C4	7.59	109.44	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	505	G	C6-C5-N7	7.59	134.96	130.40
29	B1	1420	C	N3-C4-C5	7.59	124.94	121.90
1	C1	647	G	C5-C6-N1	7.59	115.30	111.50
1	A1	1418	G	C5-C6-O6	-7.59	124.05	128.60
29	D1	3099	C	N1-C2-N3	-7.59	113.89	119.20
29	D1	3291	G	C8-N9-C1'	-7.59	117.14	127.00
29	B1	1060	U	C2-N1-C1'	7.59	126.81	117.70
29	B1	3263	G	N1-C6-O6	-7.59	115.35	119.90
29	D1	3235	C	C2-N3-C4	-7.58	116.11	119.90
1	A1	1606	C	C6-N1-C2	7.58	123.33	120.30
31	B3	93	U	C6-N1-C2	7.58	125.55	121.00
29	B1	978	G	N3-C4-N9	7.58	130.55	126.00
29	B1	2335	G	N1-C6-O6	-7.58	115.35	119.90
29	D1	1388	U	N1-C2-O2	-7.58	117.49	122.80
29	D1	2331	C	C2-N1-C1'	-7.58	110.46	118.80
29	D1	3059	G	C4-C5-N7	7.58	113.83	110.80
29	B1	2380	U	C2-N3-C4	-7.58	122.45	127.00
29	B1	2990	G	C2-N3-C4	-7.58	108.11	111.90
29	B1	3391	A	N1-C6-N6	7.58	123.15	118.60
29	B1	1292	C	N1-C2-O2	-7.58	114.36	118.90
29	B1	2277	C	C2-N3-C4	-7.57	116.11	119.90
29	B1	2341	A	C8-N9-C4	7.57	108.83	105.80
29	D1	1314	C	N1-C2-O2	7.57	123.44	118.90
29	D1	1480	G	C4-C5-N7	7.57	113.83	110.80
29	D1	2331	C	C5-C6-N1	-7.57	117.22	121.00
30	D2	49	G	C2-N3-C4	7.57	115.68	111.90
29	B1	2636	A	N1-C2-N3	7.57	133.08	129.30
29	B1	3103	A	C6-N1-C2	-7.57	114.06	118.60
29	D1	978	G	C4-N9-C1'	7.57	136.34	126.50
29	B1	1318	A	C5-C6-N1	7.56	121.48	117.70
29	B1	2993	G	C6-C5-N7	7.56	134.94	130.40
1	A1	54	C	C6-N1-C2	7.56	123.33	120.30
29	B1	3207	U	N3-C4-O4	-7.56	114.11	119.40
29	D1	1327	C	C5-C6-N1	-7.56	117.22	121.00
29	D1	3265	C	N1-C2-O2	7.56	123.44	118.90
29	B1	2993	G	C8-N9-C4	-7.56	103.38	106.40
29	B1	787	G	C6-C5-N7	-7.55	125.87	130.40
29	B1	3392	U	N1-C2-N3	7.55	119.43	114.90
29	D1	625	G	C5-C6-N1	-7.55	107.72	111.50
29	D1	366	A	C8-N9-C4	7.55	108.82	105.80
29	D1	3000	A	C6-N1-C2	7.55	123.13	118.60
29	B1	2247	G	C6-C5-N7	-7.55	125.87	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1323	G	N7-C8-N9	7.55	116.88	113.10
29	D1	125	C	C6-N1-C1'	-7.55	111.74	120.80
29	B1	659	G	N3-C4-N9	7.55	130.53	126.00
29	B1	1085	A	C8-N9-C4	-7.55	102.78	105.80
30	B2	13	A	C8-N9-C1'	7.55	141.28	127.70
29	D1	1450	G	N9-C4-C5	-7.55	102.38	105.40
29	D1	2752	U	N3-C2-O2	-7.55	116.92	122.20
29	D1	3314	A	N1-C2-N3	7.55	133.07	129.30
29	D1	95	A	C8-N9-C4	7.54	108.82	105.80
29	D1	647	A	C2-N3-C4	-7.54	106.83	110.60
29	D1	2957	G	N3-C4-C5	7.54	132.37	128.60
1	A1	1220	C	C2-N1-C1'	7.54	127.09	118.80
29	B1	3266	G	C4-C5-N7	-7.54	107.78	110.80
1	A1	1073	G	N3-C4-C5	-7.54	124.83	128.60
29	B1	1751	G	N3-C4-C5	-7.53	124.83	128.60
29	B1	2358	A	N7-C8-N9	-7.53	110.03	113.80
29	D1	2392	C	N3-C4-C5	7.53	124.91	121.90
29	D1	2646	C	C6-N1-C2	7.53	123.31	120.30
29	D1	3342	A	C6-N1-C2	-7.53	114.08	118.60
29	D1	2302	G	N3-C4-C5	7.53	132.36	128.60
1	A1	1541	G	C4-N9-C1'	7.53	136.28	126.50
1	A1	63	G	C4-C5-N7	-7.52	107.79	110.80
29	B1	2201	G	N1-C6-O6	7.52	124.42	119.90
29	D1	3213	A	C4-C5-N7	7.52	114.46	110.70
29	B1	3220	G	N7-C8-N9	7.52	116.86	113.10
29	B1	434	U	N1-C2-O2	-7.52	117.54	122.80
29	B1	3273	A	C8-N9-C4	-7.52	102.79	105.80
29	D1	2398	A	C5-C6-N6	-7.52	117.69	123.70
29	B1	790	U	C5-C6-N1	-7.52	118.94	122.70
29	B1	638	C	C6-N1-C2	7.51	123.31	120.30
29	B1	428	A	C6-C5-N7	-7.51	127.04	132.30
30	D2	66	A	N3-C4-C5	7.51	132.06	126.80
1	C1	1045	C	N3-C2-O2	-7.51	116.64	121.90
29	B1	1710	C	C2-N1-C1'	7.51	127.06	118.80
29	D1	1547	G	N3-C4-N9	7.51	130.50	126.00
29	D1	1899	G	N7-C8-N9	-7.51	109.35	113.10
29	D1	3035	A	N3-C4-N9	7.50	133.40	127.40
29	B1	1892	G	C4-C5-N7	-7.50	107.80	110.80
29	B1	2683	U	C2-N1-C1'	7.50	126.70	117.70
29	B1	2835	U	N3-C4-O4	7.50	124.65	119.40
29	D1	29	C	N3-C2-O2	7.50	127.15	121.90
29	B1	1152	G	C5-C6-N1	-7.50	107.75	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1363	A	C4-C5-C6	-7.50	113.25	117.00
29	B1	3188	G	N9-C4-C5	-7.50	102.40	105.40
29	D1	1432	C	C2-N1-C1'	7.50	127.05	118.80
29	D1	1547	G	N9-C4-C5	-7.50	102.40	105.40
1	A1	517	U	C5-C6-N1	-7.49	118.95	122.70
29	B1	573	C	N1-C2-O2	-7.49	114.40	118.90
29	D1	3307	A	C2-N3-C4	-7.49	106.85	110.60
29	B1	1661	G	C8-N9-C1'	-7.49	117.26	127.00
29	D1	2876	C	C2-N3-C4	-7.49	116.15	119.90
29	D1	3181	C	C2-N1-C1'	7.49	127.04	118.80
29	B1	750	G	C6-C5-N7	7.49	134.90	130.40
29	B1	3120	C	C6-N1-C2	7.49	123.30	120.30
29	B1	3250	U	C5-C6-N1	-7.49	118.95	122.70
58	Bc	39	PRO	N-CA-CB	7.49	112.29	103.30
29	D1	509	U	C5-C4-O4	7.48	130.39	125.90
29	D1	625	G	C2-N3-C4	-7.48	108.16	111.90
29	B1	1152	G	C2-N3-C4	-7.48	108.16	111.90
29	B1	2618	G	C5-C6-O6	7.48	133.09	128.60
29	B1	299	G	C6-C5-N7	-7.48	125.91	130.40
29	B1	424	G	C4-C5-N7	7.48	113.79	110.80
29	B1	432	G	N1-C6-O6	7.48	124.39	119.90
29	B1	2957	G	N3-C4-N9	-7.48	121.51	126.00
29	B1	654	C	C2-N3-C4	-7.47	116.16	119.90
29	B1	1459	C	C2-N3-C4	-7.47	116.16	119.90
30	D2	66	A	N3-C4-N9	-7.47	121.42	127.40
30	D2	111	U	C5-C6-N1	7.47	126.44	122.70
1	A1	1620	C	N1-C2-O2	7.47	123.38	118.90
29	B1	2241	U	C5-C4-O4	7.47	130.38	125.90
29	D1	517	G	N9-C4-C5	7.47	108.39	105.40
29	D1	744	A	N1-C6-N6	-7.47	114.12	118.60
1	A1	517	U	C5-C4-O4	7.47	130.38	125.90
29	B1	2823	G	C6-C5-N7	7.46	134.88	130.40
29	D1	895	A	C8-N9-C4	-7.46	102.81	105.80
42	DK	8	PRO	N-CA-CB	7.46	112.26	103.30
47	BR	143	PRO	N-CA-CB	7.46	112.25	103.30
29	B1	3188	G	C8-N9-C4	7.46	109.38	106.40
29	D1	875	G	C8-N9-C1'	-7.46	117.31	127.00
29	B1	3176	G	C6-N1-C2	7.46	129.57	125.10
29	B1	3376	A	N1-C6-N6	-7.46	114.13	118.60
1	C1	1535	U	C5-C6-N1	7.46	126.43	122.70
29	D1	52	A	N3-C4-N9	7.46	133.36	127.40
29	D1	608	A	N1-C6-N6	7.45	123.07	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	107	A	C8-N9-C4	-7.45	102.82	105.80
29	B1	364	G	N9-C4-C5	-7.45	102.42	105.40
29	B1	1907	C	C5-C6-N1	-7.45	117.27	121.00
29	D1	102	C	C6-N1-C2	-7.45	117.32	120.30
29	D1	3212	C	C5-C4-N4	7.45	125.41	120.20
29	B1	946	U	C2-N1-C1'	7.45	126.64	117.70
57	Bb	123	LYS	N-CA-C	-7.45	90.89	111.00
29	B1	2929	C	C5-C4-N4	-7.45	114.99	120.20
29	D1	1296	C	C6-N1-C2	-7.45	117.32	120.30
1	A1	13	C	C2-N1-C1'	7.44	126.98	118.80
29	B1	1124	U	N1-C2-O2	7.44	128.01	122.80
29	D1	1054	A	C8-N9-C4	7.44	108.78	105.80
29	D1	1434	G	N9-C4-C5	-7.44	102.42	105.40
44	DO	137	PRO	N-CA-CB	7.44	112.23	103.30
29	B1	2147	A	N1-C6-N6	7.44	123.06	118.60
29	B1	531	G	N3-C2-N2	-7.44	114.69	119.90
29	D1	1111	U	C2-N1-C1'	-7.44	108.78	117.70
29	D1	1192	C	N1-C2-O2	7.44	123.36	118.90
29	D1	1342	C	C5-C6-N1	-7.44	117.28	121.00
29	B1	1432	C	C6-N1-C2	-7.43	117.33	120.30
29	D1	3376	A	C2-N3-C4	7.43	114.32	110.60
1	A1	1159	C	C2-N1-C1'	7.43	126.97	118.80
29	D1	404	G	C4-N9-C1'	7.43	136.16	126.50
29	D1	1065	A	C2-N3-C4	7.43	114.31	110.60
29	B1	89	A	C4-C5-N7	7.43	114.41	110.70
1	C1	338	C	C2-N1-C1'	7.43	126.97	118.80
29	D1	2662	G	C4-C5-N7	7.43	113.77	110.80
29	D1	3059	G	C5-C6-O6	-7.43	124.14	128.60
1	C1	1455	G	C8-N9-C4	-7.42	103.43	106.40
29	D1	2701	U	C5-C4-O4	-7.42	121.44	125.90
29	D1	2757	U	N1-C2-O2	-7.42	117.60	122.80
29	B1	3132	C	N3-C2-O2	7.42	127.10	121.90
29	B1	345	G	C5-C6-N1	-7.42	107.79	111.50
29	B1	1855	U	N1-C2-O2	7.42	128.00	122.80
29	B1	885	U	C5-C6-N1	-7.42	118.99	122.70
29	B1	2283	G	N3-C4-N9	-7.42	121.55	126.00
1	C1	16	G	N3-C4-N9	7.42	130.45	126.00
29	D1	3291	G	C4-N9-C1'	7.42	136.14	126.50
30	D2	113	C	C4-C5-C6	7.42	121.11	117.40
1	A1	1073	G	C4-N9-C1'	7.42	136.14	126.50
42	BK	8	PRO	N-CA-CB	7.41	112.20	103.30
29	D1	2892	A	N1-C6-N6	7.41	123.05	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	1234	A	C5-C6-N1	-7.41	114.00	117.70
29	B1	645	A	N9-C4-C5	7.41	108.76	105.80
29	B1	1677	G	C5-C6-O6	7.41	133.04	128.60
29	D1	1187	C	N1-C2-O2	-7.41	114.45	118.90
29	D1	3108	G	N3-C4-N9	-7.41	121.56	126.00
29	D1	287	G	N1-C6-O6	7.41	124.34	119.90
29	D1	3390	G	C8-N9-C1'	-7.41	117.37	127.00
1	A1	1028	C	C6-N1-C1'	-7.40	111.92	120.80
29	D1	3314	A	C4-C5-C6	7.40	120.70	117.00
29	D1	669	U	C2-N1-C1'	7.40	126.58	117.70
1	A1	610	G	N7-C8-N9	7.40	116.80	113.10
1	A1	1421	A	N1-C6-N6	-7.40	114.16	118.60
29	B1	581	U	N3-C2-O2	-7.40	117.02	122.20
31	D3	87	G	N3-C4-C5	-7.40	124.90	128.60
29	B1	867	G	C5-C6-N1	-7.40	107.80	111.50
47	DR	143	PRO	N-CA-CB	7.40	112.18	103.30
30	B2	15	C	C5-C4-N4	-7.40	115.02	120.20
29	D1	577	C	N3-C4-C5	-7.40	118.94	121.90
1	A1	1772	C	C6-N1-C2	7.39	123.26	120.30
29	B1	503	C	C6-N1-C2	-7.39	117.34	120.30
56	Da	53	PRO	N-CA-CB	7.39	112.17	103.30
29	B1	3226	A	N1-C6-N6	-7.39	114.16	118.60
29	D1	614	C	N3-C4-C5	7.39	124.86	121.90
29	D1	2892	A	C2-N3-C4	-7.39	106.90	110.60
29	D1	3386	G	C5-C6-N1	-7.39	107.80	111.50
1	A1	1141	G	C4-N9-C1'	7.39	136.11	126.50
29	B1	1335	C	N1-C2-O2	-7.39	114.47	118.90
29	D1	503	C	C6-N1-C1'	7.39	129.67	120.80
29	D1	1367	G	C2-N3-C4	-7.39	108.21	111.90
1	A1	1121	C	N1-C2-O2	-7.39	114.47	118.90
29	B1	3035	A	C5-C6-N1	7.39	121.39	117.70
1	C1	427	C	N3-C2-O2	7.39	127.07	121.90
29	D1	588	G	N3-C2-N2	-7.39	114.73	119.90
29	B1	873	C	N3-C2-O2	7.38	127.07	121.90
29	B1	2115	G	C5-C6-O6	-7.38	124.17	128.60
1	C1	55	A	N1-C6-N6	-7.38	114.17	118.60
29	D1	3137	C	N3-C4-C5	7.38	124.85	121.90
29	D1	723	U	N3-C4-O4	7.38	124.57	119.40
29	B1	2667	A	N1-C6-N6	-7.38	114.17	118.60
29	D1	3300	U	N3-C2-O2	-7.38	117.03	122.20
29	D1	2851	A	N1-C6-N6	-7.38	114.17	118.60
29	D1	963	G	C5-C6-O6	-7.38	124.17	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3386	G	C4-N9-C1'	7.38	136.09	126.50
29	B1	3212	C	C2-N3-C4	-7.38	116.21	119.90
29	D1	1855	U	N1-C2-O2	7.38	127.96	122.80
29	D1	3207	U	N1-C2-N3	7.38	119.33	114.90
29	B1	3211	C	N3-C2-O2	7.38	127.06	121.90
1	C1	79	C	C2-N1-C1'	7.37	126.91	118.80
29	D1	94	G	N9-C4-C5	7.37	108.35	105.40
29	D1	3138	U	N3-C4-O4	7.37	124.56	119.40
29	D1	3093	C	C6-N1-C2	7.37	123.25	120.30
1	C1	1579	U	C5-C4-O4	-7.37	121.48	125.90
31	B3	68	G	N3-C4-N9	-7.36	121.58	126.00
1	C1	54	C	N3-C4-C5	7.36	124.84	121.90
29	D1	2339	C	C2-N1-C1'	7.36	126.90	118.80
29	D1	3192	U	N3-C2-O2	7.36	127.35	122.20
1	A1	1547	A	C8-N9-C4	7.36	108.75	105.80
29	B1	1610	G	C5-C6-O6	-7.36	124.18	128.60
29	D1	1193	A	C5-C6-N6	-7.36	117.81	123.70
29	D1	2992	U	C5-C4-O4	-7.36	121.48	125.90
29	B1	29	C	N3-C2-O2	7.36	127.05	121.90
29	B1	2683	U	C6-N1-C1'	-7.36	110.90	121.20
38	BG	97	PRO	N-CA-CB	7.36	112.13	103.30
1	A1	1421	A	N3-C4-C5	-7.36	121.65	126.80
29	B1	2960	C	C6-N1-C2	7.36	123.24	120.30
29	D1	2665	U	N3-C4-C5	7.36	119.01	114.60
29	D1	3035	A	C6-C5-N7	-7.36	127.15	132.30
29	D1	3096	C	N1-C2-O2	-7.36	114.49	118.90
29	B1	917	A	N1-C6-N6	-7.35	114.19	118.60
29	B1	52	A	C6-N1-C2	-7.35	114.19	118.60
29	B1	537	A	C5-C6-N6	7.35	129.58	123.70
29	B1	687	U	C6-N1-C1'	7.35	131.49	121.20
29	B1	2395	G	N7-C8-N9	7.35	116.78	113.10
29	D1	1426	C	C6-N1-C2	7.35	123.24	120.30
29	D1	2419	A	N1-C6-N6	7.35	123.01	118.60
29	D1	2882	U	C5-C6-N1	7.35	126.37	122.70
29	B1	1902	G	C8-N9-C1'	-7.35	117.45	127.00
29	D1	435	C	C6-N1-C2	7.35	123.24	120.30
29	D1	2876	C	C6-N1-C2	7.35	123.24	120.30
29	D1	2993	G	C8-N9-C4	-7.34	103.46	106.40
29	D1	2946	A	C8-N9-C4	-7.34	102.86	105.80
29	B1	1320	C	N3-C4-N4	7.34	123.14	118.00
1	C1	979	A	N1-C6-N6	-7.34	114.19	118.60
29	D1	2906	C	C6-N1-C2	7.34	123.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2681	U	N1-C2-N3	-7.34	110.50	114.90
43	BN	49	PRO	N-CA-CB	7.34	112.10	103.30
29	D1	422	A	N7-C8-N9	-7.34	110.13	113.80
29	B1	3257	C	C5-C6-N1	-7.33	117.33	121.00
29	B1	193	C	C6-N1-C2	-7.33	117.37	120.30
29	B1	511	G	N3-C4-N9	-7.33	121.60	126.00
30	D2	92	A	C8-N9-C4	7.33	108.73	105.80
29	D1	189	G	N1-C6-O6	-7.33	115.50	119.90
56	Ba	53	PRO	N-CA-CB	7.33	112.09	103.30
29	B1	500	C	C6-N1-C1'	-7.32	112.01	120.80
29	D1	1501	U	C2-N1-C1'	-7.32	108.91	117.70
29	D1	2420	C	C6-N1-C2	-7.32	117.37	120.30
29	B1	422	A	C8-N9-C4	7.32	108.73	105.80
29	B1	3320	A	C6-N1-C2	7.32	122.99	118.60
1	C1	1733	C	C6-N1-C2	7.32	123.23	120.30
29	D1	3132	C	C5-C6-N1	-7.32	117.34	121.00
29	D1	504	A	C6-C5-N7	-7.32	127.18	132.30
29	D1	2823	G	N3-C4-N9	-7.32	121.61	126.00
29	D1	3244	A	C4-C5-C6	-7.32	113.34	117.00
29	D1	2827	U	N3-C2-O2	-7.31	117.08	122.20
29	B1	651	G	C8-N9-C4	7.31	109.32	106.40
29	B1	3297	U	N1-C2-N3	7.31	119.29	114.90
29	D1	2693	C	N3-C4-C5	7.31	124.82	121.90
1	A1	1377	U	N3-C4-O4	7.31	124.51	119.40
29	B1	1803	C	N3-C4-C5	7.30	124.82	121.90
16	AO	95	PRO	N-CA-CB	7.30	112.06	103.30
29	B1	517	G	N3-C2-N2	-7.30	114.79	119.90
29	B1	1917	C	N1-C2-O2	-7.30	114.52	118.90
29	D1	1501	U	C5-C6-N1	-7.30	119.05	122.70
29	D1	2881	C	C6-N1-C2	7.30	123.22	120.30
29	B1	1076	C	C2-N1-C1'	7.30	126.83	118.80
29	D1	636	C	C6-N1-C2	7.30	123.22	120.30
1	A1	631	G	C8-N9-C4	-7.30	103.48	106.40
29	B1	89	A	N1-C6-N6	7.30	122.98	118.60
29	D1	2668	U	N3-C2-O2	-7.30	117.09	122.20
1	A1	337	G	N1-C6-O6	7.29	124.28	119.90
29	B1	2679	A	N1-C6-N6	7.29	122.97	118.60
45	BP	76	PRO	N-CA-CB	7.29	112.05	103.30
29	D1	1861	G	C2-N3-C4	-7.29	108.25	111.90
29	B1	3243	A	N3-C4-C5	-7.29	121.70	126.80
29	D1	2939	G	N1-C6-O6	-7.29	115.53	119.90
29	D1	257	U	C5-C4-O4	-7.29	121.53	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2297	U	N3-C2-O2	7.29	127.30	122.20
29	D1	3220	G	C8-N9-C4	-7.28	103.49	106.40
29	B1	638	C	N3-C4-C5	7.28	124.81	121.90
29	B1	278	U	N1-C2-O2	-7.28	117.70	122.80
29	B1	1436	U	C5-C4-O4	7.28	130.27	125.90
31	B3	47	C	C6-N1-C2	7.28	123.21	120.30
29	B1	589	A	C4-N9-C1'	7.28	139.40	126.30
1	A1	610	G	C4-C5-C6	7.27	123.16	118.80
29	B1	677	A	N7-C8-N9	7.27	117.44	113.80
29	B1	3300	U	C5-C4-O4	7.27	130.26	125.90
1	C1	91	G	N3-C4-C5	7.27	132.24	128.60
29	D1	586	C	N3-C2-O2	7.27	126.99	121.90
1	C1	610	G	N3-C4-N9	7.27	130.36	126.00
29	B1	3001	C	C2-N3-C4	-7.27	116.27	119.90
29	B1	963	G	C4-C5-N7	7.27	113.71	110.80
29	B1	3175	U	N3-C2-O2	-7.26	117.11	122.20
29	B1	3396	U	C2-N1-C1'	7.26	126.42	117.70
29	D1	192	C	N1-C2-O2	-7.26	114.54	118.90
29	D1	2838	A	C8-N9-C4	7.26	108.70	105.80
29	B1	1677	G	N1-C6-O6	-7.26	115.55	119.90
1	C1	45	U	N3-C2-O2	-7.26	117.12	122.20
1	C1	1335	U	N1-C2-O2	7.26	127.88	122.80
29	B1	171	G	N3-C4-N9	7.25	130.35	126.00
29	B1	674	G	N1-C6-O6	7.25	124.25	119.90
29	D1	847	A	C2-N3-C4	-7.25	106.97	110.60
29	D1	1661	G	N9-C4-C5	-7.25	102.50	105.40
29	B1	421	G	C5-N7-C8	-7.25	100.67	104.30
29	D1	3101	G	C5-C6-O6	-7.25	124.25	128.60
31	B3	42	G	N3-C4-C5	7.25	132.22	128.60
1	C1	1203	A	C8-N9-C4	-7.25	102.90	105.80
29	B1	387	A	C5-C6-N1	-7.25	114.08	117.70
29	B1	3265	C	N1-C2-O2	7.25	123.25	118.90
29	D1	875	G	C4-N9-C1'	7.25	135.92	126.50
29	D1	1085	A	N1-C6-N6	7.25	122.95	118.60
29	D1	1609	C	N3-C2-O2	7.25	126.97	121.90
29	B1	927	C	C6-N1-C2	7.24	123.20	120.30
11	CJ	41	PRO	N-CA-CB	7.24	111.99	103.30
29	D1	2296	A	C8-N9-C4	-7.24	102.90	105.80
29	D1	244	G	C4-C5-C6	7.24	123.14	118.80
29	B1	1450	G	N7-C8-N9	7.24	116.72	113.10
29	B1	1506	A	C5-C6-N6	-7.24	117.91	123.70
29	D1	685	G	C4-N9-C1'	7.24	135.91	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3304	U	N1-C2-N3	-7.24	110.56	114.90
29	B1	39	A	C4-C5-N7	7.23	114.32	110.70
29	D1	859	G	C5-C6-O6	-7.23	124.26	128.60
29	D1	1381	A	N1-C6-N6	-7.23	114.26	118.60
29	D1	593	C	N3-C2-O2	-7.23	116.84	121.90
29	D1	2362	C	C2-N1-C1'	-7.23	110.85	118.80
29	B1	719	U	C5-C4-O4	-7.23	121.56	125.90
29	D1	612	U	C5-C4-O4	-7.22	121.57	125.90
1	C1	1788	G	C4-C5-N7	-7.22	107.91	110.80
29	D1	2123	G	N1-C6-O6	-7.22	115.57	119.90
29	B1	2302	G	C6-C5-N7	7.22	134.73	130.40
29	D1	677	A	C8-N9-C4	-7.22	102.91	105.80
29	D1	2673	A	C5-C6-N6	-7.22	117.92	123.70
29	B1	3036	G	C8-N9-C4	7.22	109.29	106.40
1	C1	686	C	N3-C4-C5	7.22	124.79	121.90
29	D1	589	A	N3-C4-C5	-7.22	121.75	126.80
1	A1	427	C	N3-C2-O2	7.22	126.95	121.90
29	D1	556	U	N1-C2-O2	7.22	127.85	122.80
29	B1	1501	U	C5-C6-N1	-7.21	119.09	122.70
29	D1	1060	U	C6-N1-C1'	-7.21	111.10	121.20
29	D1	2195	C	C6-N1-C2	7.21	123.19	120.30
29	D1	2988	C	C2-N1-C1'	7.21	126.73	118.80
29	B1	2689	A	N1-C2-N3	7.21	132.91	129.30
29	D1	851	C	C6-N1-C2	7.21	123.18	120.30
29	D1	1379	G	N1-C6-O6	7.21	124.23	119.90
29	B1	422	A	C4-C5-C6	-7.21	113.39	117.00
29	B1	1187	C	N3-C2-O2	7.21	126.95	121.90
54	BY	2	PRO	N-CA-CB	7.21	111.95	103.30
29	D1	2139	A	N1-C6-N6	-7.21	114.28	118.60
29	D1	3099	C	C6-N1-C1'	-7.21	112.15	120.80
29	D1	953	G	C4-C5-N7	7.20	113.68	110.80
29	D1	2248	C	C6-N1-C2	7.20	123.18	120.30
29	D1	1434	G	C6-C5-N7	-7.20	126.08	130.40
1	A1	1301	U	C6-N1-C2	7.20	125.32	121.00
1	A1	1789	G	C8-N9-C4	7.20	109.28	106.40
29	B1	577	C	N3-C4-C5	-7.20	119.02	121.90
29	B1	1928	G	N3-C4-C5	7.20	132.20	128.60
29	D1	963	G	N1-C6-O6	7.20	124.22	119.90
1	A1	1498	G	N3-C4-C5	-7.19	125.00	128.60
29	B1	3095	U	N1-C2-O2	-7.19	117.77	122.80
29	B1	1434	G	C5-C6-O6	-7.19	124.29	128.60
29	D1	949	C	C2-N3-C4	-7.19	116.31	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	877	C	C2-N1-C1'	7.19	126.71	118.80
29	B1	1184	A	C5-C6-N6	7.19	129.45	123.70
30	D2	30	G	N3-C4-C5	7.19	132.19	128.60
29	B1	3213	A	N1-C6-N6	7.19	122.91	118.60
1	A1	373	G	N3-C4-C5	7.18	132.19	128.60
34	BC	9	PRO	N-CA-CB	7.18	111.92	103.30
29	D1	3193	C	N1-C2-O2	-7.18	114.59	118.90
29	B1	3322	A	C5-C6-N6	7.18	129.44	123.70
44	DO	76	PRO	N-CA-CB	7.18	111.91	103.30
29	D1	3177	G	N3-C2-N2	-7.17	114.88	119.90
29	D1	3250	U	C5-C6-N1	-7.17	119.11	122.70
29	B1	21	G	C4-C5-N7	7.17	113.67	110.80
29	B1	429	U	N1-C2-N3	7.17	119.20	114.90
29	B1	1154	A	C2-N3-C4	7.17	114.19	110.60
37	BF	11	PRO	N-CA-CB	7.17	111.91	103.30
29	D1	1002	A	C5-C6-N1	7.17	121.29	117.70
29	D1	1165	A	N1-C6-N6	7.17	122.90	118.60
29	B1	1194	G	C8-N9-C4	-7.17	103.53	106.40
1	A1	310	C	C5-C4-N4	-7.17	115.18	120.20
29	D1	3202	G	C8-N9-C4	7.17	109.27	106.40
1	A1	62	A	N9-C4-C5	7.17	108.67	105.80
29	B1	634	C	C2-N3-C4	-7.17	116.32	119.90
29	B1	881	C	C6-N1-C2	7.17	123.17	120.30
29	D1	1322	U	N3-C4-O4	7.17	124.42	119.40
29	B1	866	A	N7-C8-N9	7.17	117.38	113.80
29	B1	3297	U	C5-C4-O4	-7.16	121.60	125.90
29	D1	590	G	N3-C4-C5	7.16	132.18	128.60
45	DP	107	GLY	N-CA-C	-7.16	95.19	113.10
29	B1	712	G	C8-N9-C1'	-7.16	117.69	127.00
1	C1	1541	G	N3-C4-C5	-7.16	125.02	128.60
29	D1	2988	C	C6-N1-C1'	-7.16	112.21	120.80
1	A1	1567	U	C2-N1-C1'	7.16	126.29	117.70
29	B1	2325	G	C5-N7-C8	-7.16	100.72	104.30
29	B1	3114	A	C8-N9-C4	7.16	108.66	105.80
29	B1	3193	C	N3-C2-O2	7.16	126.91	121.90
29	D1	1589	A	C5-N7-C8	-7.16	100.32	103.90
29	D1	3181	C	C6-N1-C2	7.16	123.16	120.30
29	B1	1367	G	C4-C5-C6	7.16	123.09	118.80
1	C1	1073	G	C4-N9-C1'	7.16	135.80	126.50
29	D1	1047	A	C8-N9-C4	-7.16	102.94	105.80
29	D1	3198	U	C6-N1-C1'	-7.16	111.18	121.20
29	D1	3025	C	C2-N1-C1'	-7.15	110.93	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	513	G	C4-N9-C1'	-7.15	117.20	126.50
1	A1	1220	C	C6-N1-C1'	-7.15	112.22	120.80
29	B1	2939	G	C4-C5-N7	-7.15	107.94	110.80
29	B1	3074	G	C8-N9-C4	7.15	109.26	106.40
29	B1	1648	A	C5-C6-N1	7.15	121.27	117.70
29	D1	1303	A	C2-N3-C4	-7.15	107.03	110.60
29	D1	1859	A	N1-C6-N6	7.15	122.89	118.60
29	B1	286	U	N1-C2-O2	7.14	127.80	122.80
29	D1	88	A	C2-N3-C4	-7.14	107.03	110.60
29	D1	999	G	C5-C6-N1	7.14	115.07	111.50
1	A1	825	U	N1-C2-O2	-7.14	117.80	122.80
1	C1	1644	C	C2-N3-C4	-7.14	116.33	119.90
47	DR	61	PRO	N-CA-CB	7.14	111.87	103.30
29	B1	1426	C	N1-C2-O2	-7.14	114.62	118.90
29	B1	1333	C	C5-C6-N1	-7.13	117.43	121.00
1	C1	1602	C	C2-N1-C1'	7.13	126.65	118.80
29	D1	568	G	C4-C5-N7	7.13	113.65	110.80
29	B1	300	G	N1-C6-O6	7.13	124.18	119.90
29	D1	3184	A	C6-C5-N7	-7.13	127.31	132.30
29	B1	2917	G	C8-N9-C4	7.13	109.25	106.40
29	B1	2939	G	N1-C6-O6	-7.13	115.62	119.90
29	B1	497	C	N3-C4-C5	7.13	124.75	121.90
47	BR	61	PRO	N-CA-CB	7.13	111.85	103.30
29	D1	1045	C	N1-C2-O2	-7.13	114.62	118.90
29	B1	1898	G	N9-C4-C5	7.13	108.25	105.40
30	D2	113	C	N1-C2-N3	7.12	124.19	119.20
29	B1	1060	U	C5-C4-O4	-7.12	121.62	125.90
29	B1	2700	G	C5-C6-O6	-7.12	124.33	128.60
1	C1	1408	G	C4-N9-C1'	7.12	135.76	126.50
29	D1	3089	C	C5-C6-N1	7.12	124.56	121.00
29	D1	3376	A	C6-C5-N7	7.12	137.28	132.30
29	D1	726	G	C8-N9-C1'	-7.12	117.75	127.00
29	D1	2823	G	C8-N9-C1'	7.11	136.25	127.00
31	D3	87	G	N3-C4-N9	7.11	130.27	126.00
1	A1	332	U	N3-C2-O2	-7.11	117.22	122.20
29	B1	634	C	C5-C6-N1	-7.11	117.44	121.00
29	D1	3252	G	C5-C6-N1	7.11	115.06	111.50
29	B1	2673	A	C5-C6-N6	-7.11	118.01	123.70
29	B1	3177	G	N3-C2-N2	-7.11	114.92	119.90
29	B1	3176	G	N9-C4-C5	7.11	108.24	105.40
29	B1	3257	C	C6-N1-C2	7.11	123.14	120.30
29	D1	117	U	C5-C4-O4	-7.11	121.64	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	358	U	C2-N1-C1'	7.10	126.22	117.70
1	C1	1109	G	N1-C6-O6	7.10	124.16	119.90
1	C1	1331	A	N9-C4-C5	7.10	108.64	105.80
29	B1	853	G	C2-N3-C4	7.10	115.45	111.90
29	B1	3263	G	N9-C4-C5	7.10	108.24	105.40
29	B1	341	G	C5-C6-O6	-7.10	124.34	128.60
29	D1	2277	C	C6-N1-C2	7.10	123.14	120.30
1	A1	55	A	N1-C6-N6	-7.09	114.34	118.60
1	A1	306	U	C5-C6-N1	-7.09	119.15	122.70
29	B1	923	C	C6-N1-C2	7.09	123.14	120.30
29	B1	3090	U	C4-C5-C6	-7.09	115.44	119.70
29	D1	890	C	C6-N1-C2	7.09	123.14	120.30
29	B1	1379	G	N1-C6-O6	7.09	124.16	119.90
29	B1	1429	G	N3-C4-C5	-7.09	125.05	128.60
29	B1	2361	A	C5-C6-N1	7.09	121.25	117.70
29	D1	515	C	N3-C2-O2	7.09	126.86	121.90
1	A1	596	C	C6-N1-C2	7.09	123.14	120.30
29	B1	32	U	N3-C4-O4	-7.09	114.44	119.40
29	B1	1111	U	N3-C2-O2	7.09	127.16	122.20
29	B1	1751	G	C5-C6-O6	7.09	132.85	128.60
29	D1	257	U	C2-N1-C1'	7.09	126.20	117.70
29	D1	52	A	C6-C5-N7	-7.08	127.34	132.30
29	D1	656	A	C5-C6-N1	7.08	121.24	117.70
29	D1	1445	U	C5-C6-N1	-7.08	119.16	122.70
29	D1	52	A	C6-N1-C2	-7.08	114.35	118.60
29	D1	2964	G	C5-C6-O6	7.08	132.85	128.60
29	D1	3108	G	C8-N9-C4	-7.08	103.57	106.40
29	D1	2669	G	N3-C4-N9	7.08	130.25	126.00
29	B1	497	C	N3-C2-O2	-7.08	116.94	121.90
30	B2	112	G	C8-N9-C4	-7.08	103.57	106.40
29	D1	3386	G	N7-C8-N9	7.08	116.64	113.10
29	B1	644	G	C4-C5-C6	7.08	123.05	118.80
1	A1	1591	C	C6-N1-C1'	7.08	129.29	120.80
29	B1	890	C	N3-C4-C5	7.08	124.73	121.90
29	D1	941	G	N9-C4-C5	7.08	108.23	105.40
29	D1	978	G	N3-C4-N9	7.08	130.25	126.00
29	D1	402	A	C6-C5-N7	-7.07	127.35	132.30
29	D1	1499	C	N1-C2-O2	-7.07	114.66	118.90
29	D1	341	G	C4-C5-N7	7.07	113.63	110.80
29	D1	2925	C	C6-N1-C2	-7.07	117.47	120.30
29	D1	2681	U	N3-C4-O4	7.07	124.35	119.40
36	DE	174	PRO	N-CA-CB	7.07	111.78	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	750	G	C4-C5-N7	-7.07	107.97	110.80
29	D1	2845	A	C4-C5-C6	7.07	120.53	117.00
29	B1	3192	U	C6-N1-C1'	7.07	131.09	121.20
1	C1	981	U	C2-N1-C1'	7.07	126.18	117.70
29	D1	624	G	N9-C4-C5	-7.07	102.57	105.40
29	B1	659	G	C4-N9-C1'	7.06	135.68	126.50
29	B1	2267	C	N1-C2-O2	-7.06	114.66	118.90
29	B1	597	G	C5-C6-O6	-7.06	124.36	128.60
29	D1	3220	G	N3-C4-C5	-7.06	125.07	128.60
29	B1	3043	C	C6-N1-C2	7.06	123.12	120.30
29	D1	2892	A	C5-C6-N1	-7.06	114.17	117.70
29	B1	2881	C	N1-C2-O2	-7.06	114.67	118.90
1	C1	1462	G	C8-N9-C4	7.06	109.22	106.40
29	D1	352	A	N1-C6-N6	-7.06	114.37	118.60
29	B1	190	U	C2-N1-C1'	-7.05	109.24	117.70
29	B1	1168	U	C2-N1-C1'	-7.05	109.24	117.70
29	D1	3227	A	N3-C4-N9	-7.05	121.76	127.40
29	B1	994	G	N3-C4-N9	7.05	130.23	126.00
29	D1	1592	G	C5-C6-N1	-7.05	107.97	111.50
29	B1	2247	G	N1-C6-O6	7.05	124.13	119.90
29	D1	1187	C	N3-C2-O2	7.05	126.83	121.90
30	D2	111	U	C6-N1-C1'	-7.05	111.33	121.20
29	D1	1042	U	N3-C2-O2	7.04	127.13	122.20
29	D1	2342	U	C5-C6-N1	-7.04	119.18	122.70
29	B1	3273	A	C2-N3-C4	7.04	114.12	110.60
29	B1	3386	G	C5-C6-N1	-7.04	107.98	111.50
1	C1	374	U	C6-N1-C1'	-7.04	111.34	121.20
1	A1	1335	U	N1-C2-O2	7.04	127.73	122.80
29	B1	1894	U	C5-C6-N1	-7.04	119.18	122.70
29	D1	2370	G	N1-C6-O6	-7.04	115.68	119.90
29	D1	3266	G	C5-N7-C8	7.04	107.82	104.30
29	B1	1097	G	C8-N9-C4	-7.03	103.59	106.40
29	D1	507	U	C6-N1-C2	-7.03	116.78	121.00
29	D1	562	C	N1-C2-O2	-7.03	114.68	118.90
29	D1	886	C	C2-N3-C4	-7.03	116.38	119.90
29	D1	999	G	N3-C4-C5	-7.03	125.08	128.60
45	DP	58	LEU	N-CA-C	-7.03	92.01	111.00
29	B1	1753	G	C8-N9-C4	7.03	109.21	106.40
29	B1	2342	U	C5-C6-N1	-7.03	119.18	122.70
29	D1	2391	G	N9-C4-C5	-7.03	102.59	105.40
29	B1	103	G	C5-C6-O6	-7.03	124.38	128.60
29	B1	335	G	C5-C6-O6	-7.03	124.38	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1052	U	N1-C2-O2	-7.03	117.88	122.80
29	D1	1298	C	N1-C2-O2	-7.03	114.68	118.90
29	D1	1364	C	N3-C2-O2	7.03	126.82	121.90
29	D1	1368	U	C2-N1-C1'	7.03	126.14	117.70
29	B1	750	G	C5-C6-O6	7.03	132.82	128.60
29	B1	1321	G	C8-N9-C4	7.03	109.21	106.40
29	B1	89	A	C6-C5-N7	-7.02	127.39	132.30
29	B1	2669	G	C6-C5-N7	-7.02	126.19	130.40
29	B1	1052	U	N3-C2-O2	7.02	127.11	122.20
29	B1	1115	G	C4-C5-N7	7.02	113.61	110.80
29	B1	1184	A	N1-C6-N6	-7.02	114.39	118.60
29	D1	1371	G	C4-C5-N7	7.02	113.61	110.80
29	B1	3322	A	C5-C6-N1	-7.02	114.19	117.70
1	C1	248	U	C5-C4-O4	-7.01	121.69	125.90
29	D1	3297	U	C6-N1-C1'	-7.01	111.38	121.20
29	B1	3184	A	C6-C5-N7	-7.01	127.39	132.30
29	B1	729	C	C5-C4-N4	-7.01	115.29	120.20
29	D1	422	A	C4-N9-C1'	-7.01	113.68	126.30
29	D1	3143	C	N3-C4-N4	7.01	122.91	118.00
1	A1	338	C	C2-N1-C1'	7.01	126.51	118.80
29	B1	3143	C	N1-C2-O2	-7.01	114.69	118.90
1	C1	1149	G	N3-C4-C5	-7.01	125.09	128.60
29	B1	723	U	C6-N1-C1'	-7.01	111.39	121.20
29	B1	2924	U	N3-C2-O2	7.01	127.11	122.20
29	B1	3004	C	C6-N1-C2	-7.01	117.50	120.30
29	D1	594	U	C2-N1-C1'	7.01	126.11	117.70
29	D1	1861	G	N3-C4-C5	7.01	132.10	128.60
29	D1	655	C	C6-N1-C2	7.00	123.10	120.30
29	B1	3063	C	N3-C4-C5	7.00	124.70	121.90
29	D1	1329	U	N3-C2-O2	7.00	127.10	122.20
29	D1	2248	C	N3-C2-O2	7.00	126.80	121.90
29	B1	1501	U	C2-N1-C1'	-7.00	109.30	117.70
1	C1	597	G	C5-C6-O6	-7.00	124.40	128.60
29	D1	656	A	C6-N1-C2	-7.00	114.40	118.60
29	B1	668	G	N7-C8-N9	-7.00	109.60	113.10
29	D1	875	G	C6-C5-N7	-7.00	126.20	130.40
29	B1	1060	U	C6-N1-C1'	-7.00	111.41	121.20
29	B1	328	U	N1-C2-N3	7.00	119.10	114.90
30	B2	13	A	C5-C6-N6	7.00	129.30	123.70
29	D1	503	C	C6-N1-C2	-7.00	117.50	120.30
29	D1	2394	G	C5-C6-O6	6.99	132.80	128.60
29	B1	1097	G	C6-C5-N7	6.99	134.59	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2355	G	C8-N9-C1'	-6.99	117.91	127.00
29	D1	2362	C	C4-C5-C6	6.99	120.90	117.40
29	B1	1120	A	C6-N1-C2	-6.99	114.41	118.60
30	B2	10	C	C2-N1-C1'	6.99	126.49	118.80
37	BF	171	PRO	N-CA-CB	6.99	111.69	103.30
1	C1	1567	U	C5-C6-N1	6.99	126.19	122.70
29	B1	215	G	C4-C5-N7	6.98	113.59	110.80
29	B1	2385	G	C4-C5-N7	6.98	113.59	110.80
29	B1	2611	U	N1-C2-N3	6.98	119.09	114.90
29	D1	2127	U	N1-C2-O2	-6.98	117.91	122.80
29	B1	513	G	C8-N9-C1'	6.98	136.08	127.00
29	B1	514	G	C6-C5-N7	6.98	134.59	130.40
29	B1	2147	A	C8-N9-C4	6.98	108.59	105.80
29	B1	3307	A	C2-N3-C4	-6.98	107.11	110.60
29	B1	1292	C	N3-C2-O2	6.98	126.79	121.90
29	B1	793	C	N1-C2-O2	6.98	123.09	118.90
29	D1	1172	G	C8-N9-C4	6.98	109.19	106.40
29	D1	1592	G	N1-C6-O6	6.98	124.09	119.90
29	B1	45	A	N3-C4-C5	6.98	131.68	126.80
29	B1	2916	U	N3-C4-O4	6.98	124.28	119.40
29	B1	3001	C	N3-C4-C5	6.98	124.69	121.90
29	B1	1547	G	N3-C4-N9	6.97	130.19	126.00
29	D1	3322	A	C5-C6-N6	6.97	129.28	123.70
29	D1	3380	U	C2-N1-C1'	-6.97	109.33	117.70
29	B1	1341	U	C6-N1-C2	6.97	125.18	121.00
29	D1	1165	A	C6-N1-C2	6.97	122.78	118.60
61	Df	5	PRO	N-CA-CB	6.97	111.67	103.30
29	B1	3035	A	N3-C4-N9	6.97	132.97	127.40
29	D1	3201	C	C5-C6-N1	6.97	124.48	121.00
29	D1	2957	G	C2-N3-C4	-6.97	108.42	111.90
1	A1	610	G	C5-N7-C8	-6.97	100.82	104.30
29	B1	222	A	N1-C6-N6	6.97	122.78	118.60
1	A1	1567	U	C5-C6-N1	6.96	126.18	122.70
1	C1	517	U	N3-C4-O4	-6.96	114.53	119.40
1	C1	1331	A	C8-N9-C4	-6.96	103.01	105.80
29	D1	3322	A	N3-C4-N9	-6.96	121.83	127.40
29	B1	281	G	N1-C6-O6	6.96	124.08	119.90
5	CD	129	PRO	N-CA-CB	6.96	111.65	103.30
29	D1	1004	U	C5-C6-N1	6.96	126.18	122.70
29	D1	1706	C	C6-N1-C2	-6.96	117.52	120.30
29	D1	2705	A	N1-C2-N3	-6.96	125.82	129.30
29	D1	3392	U	N3-C2-O2	-6.96	117.33	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	1141	G	C8-N9-C1'	-6.96	117.95	127.00
1	A1	939	A	C8-N9-C4	-6.96	103.02	105.80
29	D1	507	U	C2-N1-C1'	6.96	126.05	117.70
29	D1	3291	G	N3-C2-N2	6.96	124.77	119.90
1	A1	1141	G	C6-C5-N7	-6.96	126.23	130.40
29	B1	1827	C	N1-C2-O2	-6.96	114.73	118.90
29	D1	1285	G	N3-C4-N9	6.96	130.17	126.00
29	D1	3386	G	C4-C5-C6	6.96	122.97	118.80
29	B1	1431	G	C5-N7-C8	6.96	107.78	104.30
29	D1	2297	U	C6-N1-C2	6.95	125.17	121.00
29	D1	2681	U	N1-C2-N3	-6.95	110.73	114.90
1	C1	478	A	C8-N9-C4	6.95	108.58	105.80
29	B1	1061	A	C8-N9-C4	6.95	108.58	105.80
29	B1	3272	C	C2-N1-C1'	6.95	126.45	118.80
1	C1	517	U	C5-C6-N1	-6.95	119.22	122.70
29	D1	2187	G	C5-C6-O6	6.95	132.77	128.60
30	D2	46	A	C2-N3-C4	6.95	114.08	110.60
1	A1	95	G	C8-N9-C4	6.95	109.18	106.40
29	B1	2353	G	C5-C6-O6	-6.95	124.43	128.60
29	B1	2969	A	C2-N3-C4	-6.95	107.13	110.60
29	B1	2990	G	N3-C2-N2	-6.95	115.04	119.90
29	B1	1166	G	N9-C4-C5	-6.95	102.62	105.40
29	B1	2913	C	C6-N1-C1'	6.95	129.14	120.80
1	C1	1028	C	N1-C2-O2	6.95	123.07	118.90
29	B1	2248	C	N1-C2-O2	-6.95	114.73	118.90
29	D1	648	C	N3-C2-O2	-6.95	117.04	121.90
29	B1	1178	G	N1-C2-N3	-6.94	119.73	123.90
29	B1	3099	C	N1-C2-N3	-6.94	114.34	119.20
29	D1	575	G	N1-C2-N2	6.94	122.45	116.20
1	C1	584	C	C6-N1-C2	6.94	123.08	120.30
29	D1	387	A	C6-N1-C2	6.94	122.77	118.60
29	D1	613	G	C5-C6-O6	-6.94	124.44	128.60
29	B1	1547	G	N3-C2-N2	6.94	124.76	119.90
1	C1	565	C	C2-N1-C1'	-6.94	111.17	118.80
29	B1	2990	G	C5-N7-C8	-6.94	100.83	104.30
29	D1	1431	G	N1-C6-O6	-6.94	115.74	119.90
29	D1	3392	U	N3-C4-C5	6.94	118.76	114.60
29	D1	827	A	C2-N3-C4	6.94	114.07	110.60
34	DC	267	ALA	N-CA-C	-6.94	92.27	111.00
29	B1	661	G	C6-N1-C2	6.93	129.26	125.10
29	D1	615	U	C5-C4-O4	-6.93	121.74	125.90
1	A1	577	G	C4-N9-C1'	6.93	135.51	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2355	G	C6-C5-N7	-6.93	126.24	130.40
29	D1	2297	U	N1-C2-O2	-6.93	117.95	122.80
29	D1	2990	G	C4-C5-N7	6.93	113.57	110.80
29	D1	3297	U	C5-C4-O4	-6.93	121.74	125.90
29	B1	2957	G	N3-C4-C5	6.93	132.06	128.60
31	B3	52	A	N1-C6-N6	-6.93	114.44	118.60
29	D1	504	A	C4-C5-N7	6.93	114.16	110.70
29	D1	639	G	C2-N3-C4	-6.93	108.44	111.90
2	CA	70	PRO	N-CA-CB	6.92	111.61	103.30
29	D1	2247	G	N9-C4-C5	-6.92	102.63	105.40
29	D1	2607	G	C6-C5-N7	-6.92	126.25	130.40
29	B1	1751	G	C8-N9-C4	-6.92	103.63	106.40
29	D1	3297	U	C2-N3-C4	-6.92	122.85	127.00
37	DF	75	PRO	N-CA-CB	6.92	111.61	103.30
29	B1	1123	U	N3-C2-O2	6.92	127.04	122.20
29	B1	2147	A	C2-N3-C4	-6.92	107.14	110.60
1	C1	1459	C	C4-C5-C6	6.92	120.86	117.40
29	B1	873	C	N1-C2-O2	-6.92	114.75	118.90
29	B1	1405	U	C2-N1-C1'	-6.92	109.40	117.70
29	D1	651	G	N1-C6-O6	6.92	124.05	119.90
29	B1	512	U	N3-C4-O4	6.92	124.24	119.40
29	B1	589	A	N9-C4-C5	6.91	108.56	105.80
61	Bf	5	PRO	N-CA-CB	6.91	111.60	103.30
1	C1	1773	C	N3-C2-O2	6.91	126.74	121.90
29	D1	1710	C	C6-N1-C1'	-6.91	112.50	120.80
29	D1	3307	A	N1-C2-N3	6.91	132.76	129.30
29	B1	2602	G	N1-C6-O6	6.91	124.05	119.90
29	B1	3095	U	C5-C4-O4	-6.91	121.75	125.90
29	D1	788	C	N3-C4-C5	-6.91	119.14	121.90
29	D1	1010	G	C4-C5-N7	6.91	113.56	110.80
29	D1	1172	G	C4-C5-N7	-6.91	108.04	110.80
1	A1	1792	G	C5-C6-O6	-6.91	124.46	128.60
29	B1	1307	G	C8-N9-C1'	-6.91	118.02	127.00
18	CQ	91	PRO	N-CA-CB	6.91	111.59	103.30
45	DP	76	PRO	N-CA-CB	6.91	111.59	103.30
72	DL	75	PRO	N-CA-CB	6.90	111.58	103.30
29	D1	1340	G	C8-N9-C4	6.90	109.16	106.40
29	D1	3392	U	C5-C4-O4	-6.90	121.76	125.90
29	B1	1187	C	N1-C2-O2	-6.90	114.76	118.90
29	D1	1317	A	C2-N3-C4	-6.90	107.15	110.60
29	B1	1190	A	C5-C6-N1	6.90	121.15	117.70
29	D1	509	U	N1-C2-O2	6.90	127.63	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1198	C	N1-C2-O2	6.90	123.04	118.90
29	B1	1499	C	N1-C2-O2	-6.90	114.76	118.90
30	D2	47	C	C6-N1-C1'	-6.90	112.52	120.80
1	A1	1773	C	N3-C2-O2	6.89	126.73	121.90
29	B1	1860	G	C8-N9-C4	6.89	109.16	106.40
1	C1	1792	G	C5-C6-O6	-6.89	124.46	128.60
29	D1	675	C	C4-C5-C6	-6.89	113.95	117.40
29	B1	52	A	N1-C2-N3	6.89	132.75	129.30
29	D1	417	A	C2-N3-C4	-6.89	107.15	110.60
29	B1	2527	G	N3-C4-N9	-6.89	121.87	126.00
50	BU	50	PRO	N-CA-CB	6.89	111.57	103.30
1	C1	79	C	C6-N1-C2	-6.89	117.54	120.30
29	D1	509	U	C6-N1-C2	-6.89	116.87	121.00
29	D1	2607	G	N1-C6-O6	6.89	124.03	119.90
29	B1	780	A	C5-C6-N1	-6.89	114.26	117.70
45	BP	5	PRO	N-CA-CB	6.89	111.56	103.30
29	D1	597	G	C4-C5-N7	6.89	113.56	110.80
12	AK	65	PRO	N-CA-CB	6.89	111.56	103.30
29	B1	150	A	C6-N1-C2	-6.89	114.47	118.60
29	B1	1434	G	C4-C5-N7	6.89	113.55	110.80
29	D1	588	G	N1-C2-N3	6.89	128.03	123.90
29	B1	511	G	N3-C4-C5	6.88	132.04	128.60
29	B1	3019	U	N1-C2-O2	-6.88	117.98	122.80
29	B1	3065	G	N1-C6-O6	-6.88	115.77	119.90
29	B1	3201	C	C5-C6-N1	6.88	124.44	121.00
29	D1	1501	U	C2-N3-C4	-6.88	122.87	127.00
29	B1	120	G	C4-N9-C1'	-6.88	117.56	126.50
29	B1	1858	A	C8-N9-C4	-6.88	103.05	105.80
29	B1	360	G	C5-C6-O6	6.88	132.73	128.60
29	B1	1457	U	C5-C6-N1	-6.88	119.26	122.70
31	B3	53	A	C5-C6-N1	6.88	121.14	117.70
43	BN	73	PRO	N-CA-CB	6.88	111.55	103.30
29	D1	587	U	C6-N1-C2	6.88	125.12	121.00
1	A1	1486	G	C5-C6-O6	-6.87	124.48	128.60
29	B1	630	A	C6-C5-N7	-6.87	127.49	132.30
29	B1	1151	U	C6-N1-C2	-6.87	116.88	121.00
29	B1	3296	A	C2-N3-C4	6.87	114.04	110.60
1	C1	1121	C	C2-N1-C1'	-6.87	111.24	118.80
29	B1	1612	A	N1-C6-N6	-6.87	114.48	118.60
37	BF	49	GLY	N-CA-C	-6.87	95.92	113.10
12	CK	65	PRO	N-CA-CB	6.87	111.55	103.30
29	D1	1050	U	C5-C6-N1	-6.87	119.26	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3170	A	C5-C6-N1	-6.87	114.27	117.70
30	D2	112	G	C6-C5-N7	6.87	134.52	130.40
29	B1	1363	A	N7-C8-N9	-6.87	110.37	113.80
29	B1	2354	C	N3-C2-O2	-6.87	117.09	121.90
34	BC	307	PRO	N-CA-CB	6.87	111.54	103.30
1	C1	1547	A	C4-C5-C6	-6.87	113.57	117.00
31	D3	92	A	C5-C6-N6	6.87	129.19	123.70
29	B1	918	C	N1-C2-O2	-6.87	114.78	118.90
29	D1	2664	C	C6-N1-C1'	-6.87	112.56	120.80
30	D2	119	U	C2-N1-C1'	6.87	125.94	117.70
1	A1	1331	A	N9-C4-C5	6.86	108.55	105.80
29	B1	338	A	N1-C6-N6	-6.86	114.48	118.60
1	C1	1567	U	C2-N1-C1'	6.86	125.94	117.70
29	D1	164	A	C5-C6-N6	-6.86	118.21	123.70
29	D1	1060	U	C2-N1-C1'	6.86	125.94	117.70
29	D1	429	U	N3-C4-O4	6.86	124.20	119.40
29	D1	3132	C	N3-C2-O2	6.86	126.70	121.90
1	A1	343	C	C2-N3-C4	-6.86	116.47	119.90
29	B1	867	G	N1-C6-O6	6.86	124.02	119.90
29	B1	1056	U	C6-N1-C1'	-6.86	111.59	121.20
29	B1	1880	U	C5-C6-N1	-6.86	119.27	122.70
1	C1	318	U	C6-N1-C2	6.86	125.12	121.00
29	D1	1902	G	N9-C4-C5	-6.86	102.66	105.40
1	A1	1606	C	N1-C2-O2	-6.86	114.78	118.90
29	B1	1897	G	N1-C6-O6	6.86	124.02	119.90
29	B1	272	G	C2-N3-C4	-6.86	108.47	111.90
30	D2	112	G	C2-N3-C4	6.86	115.33	111.90
29	D1	904	A	C2-N3-C4	-6.85	107.17	110.60
29	D1	2834	G	C5-C6-N1	6.85	114.93	111.50
1	A1	1560	U	N3-C4-O4	-6.85	114.60	119.40
29	B1	86	G	C4-N9-C1'	-6.85	117.59	126.50
29	B1	1427	U	C5-C4-O4	6.85	130.01	125.90
34	DC	9	PRO	N-CA-CB	6.85	111.52	103.30
1	A1	1028	C	C2-N1-C1'	6.85	126.33	118.80
29	B1	185	C	N3-C4-C5	6.85	124.64	121.90
29	B1	1318	A	C2-N3-C4	6.85	114.03	110.60
31	B3	34	U	N1-C2-O2	6.85	127.59	122.80
1	C1	1520	U	N1-C2-O2	-6.85	118.01	122.80
29	D1	1186	G	N1-C2-N2	-6.85	110.04	116.20
29	B1	1525	G	N3-C4-N9	6.85	130.11	126.00
29	D1	999	G	C2-N3-C4	6.85	115.32	111.90
31	B3	117	C	N1-C2-O2	-6.84	114.79	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	16	G	N9-C4-C5	-6.84	102.66	105.40
29	D1	667	C	C6-N1-C2	6.84	123.04	120.30
29	D1	994	G	N3-C4-C5	-6.84	125.18	128.60
29	B1	3192	U	C2-N1-C1'	-6.84	109.49	117.70
31	B3	87	G	N3-C4-C5	-6.84	125.18	128.60
29	D1	3363	U	N3-C2-O2	-6.84	117.41	122.20
29	B1	335	G	C2-N3-C4	-6.84	108.48	111.90
29	D1	2689	A	N3-C4-C5	-6.84	122.01	126.80
29	B1	612	U	N1-C2-O2	-6.84	118.02	122.80
29	D1	1585	C	C6-N1-C2	6.84	123.03	120.30
29	B1	2681	U	N3-C4-O4	6.83	124.19	119.40
1	A1	1773	C	N1-C2-O2	-6.83	114.80	118.90
29	B1	1076	C	C6-N1-C1'	-6.83	112.61	120.80
29	D1	1126	G	N1-C2-N3	6.83	128.00	123.90
30	D2	112	G	C5-C6-O6	6.83	132.70	128.60
17	AP	64	PRO	N-CA-CB	6.83	111.49	103.30
1	C1	1141	G	C4-C5-N7	6.83	113.53	110.80
29	B1	2601	A	C6-N1-C2	6.83	122.69	118.60
1	C1	1140	G	N1-C6-O6	-6.83	115.81	119.90
29	D1	946	U	C5-C4-O4	-6.83	121.81	125.90
29	B1	410	U	N3-C4-O4	6.82	124.18	119.40
1	C1	3	U	C6-N1-C2	6.82	125.09	121.00
44	BO	76	PRO	N-CA-CB	6.82	111.48	103.30
29	D1	787	G	C6-C5-N7	-6.82	126.31	130.40
29	D1	1861	G	N3-C2-N2	-6.82	115.12	119.90
29	D1	3271	G	C2-N3-C4	6.82	115.31	111.90
29	B1	435	C	C5-C6-N1	-6.82	117.59	121.00
29	B1	498	A	C6-N1-C2	6.82	122.69	118.60
29	B1	1327	C	C2-N3-C4	-6.82	116.49	119.90
30	B2	58	C	C2-N1-C1'	6.82	126.30	118.80
15	CN	59	PRO	N-CA-CB	6.82	111.48	103.30
29	D1	352	A	C4-C5-N7	-6.82	107.29	110.70
29	D1	2712	U	C2-N1-C1'	6.82	125.88	117.70
31	B3	36	G	N3-C4-N9	6.82	130.09	126.00
29	B1	421	G	C8-N9-C4	-6.81	103.67	106.40
29	B1	511	G	C5-C6-N1	-6.81	108.09	111.50
29	D1	868	C	C5-C6-N1	-6.81	117.59	121.00
29	D1	1908	A	C2-N3-C4	6.81	114.01	110.60
29	D1	3035	A	C6-N1-C2	-6.81	114.51	118.60
29	B1	2277	C	N1-C2-O2	-6.81	114.81	118.90
29	B1	2283	G	N7-C8-N9	6.81	116.50	113.10
29	B1	1387	G	C8-N9-C4	-6.81	103.68	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2414	G	C5-C6-O6	6.81	132.68	128.60
29	D1	3138	U	C5-C6-N1	6.81	126.10	122.70
29	D1	3266	G	C4-C5-N7	-6.81	108.08	110.80
31	D3	68	G	C4-N9-C1'	-6.81	117.65	126.50
31	B3	47	C	C5-C6-N1	-6.81	117.60	121.00
29	B1	3059	G	C6-C5-N7	-6.80	126.32	130.40
29	D1	137	G	C6-C5-N7	-6.80	126.32	130.40
29	D1	505	G	C6-N1-C2	6.80	129.18	125.10
10	AI	68	PRO	N-CA-CB	6.80	111.46	103.30
29	B1	949	C	C2-N3-C4	-6.80	116.50	119.90
29	D1	605	U	C5-C4-O4	-6.80	121.82	125.90
17	AP	42	PRO	N-CA-CB	6.80	111.46	103.30
29	D1	1186	G	C5-N7-C8	-6.80	100.90	104.30
29	D1	3089	C	C6-N1-C2	-6.80	117.58	120.30
36	DE	139	PRO	N-CA-CB	6.80	111.46	103.30
29	D1	514	G	C4-C5-N7	-6.80	108.08	110.80
29	B1	1056	U	C5-C6-N1	6.80	126.10	122.70
36	BE	174	PRO	N-CA-CB	6.80	111.46	103.30
29	B1	589	A	C4-C5-C6	6.80	120.40	117.00
1	C1	1792	G	N9-C4-C5	-6.80	102.68	105.40
29	D1	1188	U	N3-C2-O2	-6.80	117.44	122.20
1	A1	1541	G	C8-N9-C1'	-6.79	118.17	127.00
29	B1	2187	G	C4-C5-N7	-6.79	108.08	110.80
29	B1	2312	A	C5-C6-N1	6.79	121.10	117.70
29	B1	793	C	C2-N1-C1'	6.79	126.27	118.80
29	B1	1661	G	C4-C5-N7	6.79	113.52	110.80
29	B1	3097	C	N1-C2-O2	-6.79	114.83	118.90
29	D1	500	C	C5-C4-N4	-6.79	115.45	120.20
29	D1	750	G	N9-C4-C5	6.79	108.12	105.40
29	D1	2832	C	C6-N1-C2	6.79	123.01	120.30
1	A1	4	C	N3-C4-C5	6.78	124.61	121.90
30	D2	85	G	N1-C6-O6	6.78	123.97	119.90
29	D1	2895	G	N9-C4-C5	6.78	108.11	105.40
1	A1	373	G	C5-C6-N1	-6.78	108.11	111.50
37	DF	171	PRO	N-CA-CB	6.78	111.44	103.30
29	D1	1255	C	C6-N1-C2	6.78	123.01	120.30
29	D1	3297	U	C6-N1-C2	-6.78	116.93	121.00
29	B1	877	C	N1-C2-O2	6.78	122.97	118.90
29	B1	2756	C	C2-N3-C4	-6.78	116.51	119.90
29	B1	3018	C	C2-N1-C1'	-6.78	111.34	118.80
29	D1	222	A	N9-C4-C5	-6.78	103.09	105.80
29	B1	42	C	N3-C4-C5	6.78	124.61	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3291	G	N3-C4-C5	-6.78	125.21	128.60
29	D1	3323	A	C6-N1-C2	6.78	122.67	118.60
1	A1	343	C	C5-C6-N1	-6.77	117.61	121.00
47	BR	157	PRO	N-CA-CB	6.77	111.43	103.30
29	D1	832	G	C5-C6-O6	-6.77	124.54	128.60
29	D1	1483	G	C5-C6-O6	6.77	132.66	128.60
1	A1	1463	C	C6-N1-C2	6.77	123.01	120.30
1	C1	1788	G	N3-C4-N9	-6.77	121.94	126.00
29	D1	637	C	C6-N1-C2	6.77	123.01	120.30
29	D1	3223	A	N1-C2-N3	-6.77	125.92	129.30
29	B1	1891	A	C6-C5-N7	-6.77	127.56	132.30
29	B1	2380	U	N1-C2-N3	6.77	118.96	114.90
1	A1	958	U	C2-N3-C4	-6.77	122.94	127.00
29	B1	557	A	C2-N3-C4	-6.76	107.22	110.60
29	B1	676	G	N3-C4-N9	6.76	130.06	126.00
29	D1	859	G	C8-N9-C1'	-6.76	118.21	127.00
29	B1	2811	A	N1-C6-N6	-6.76	114.54	118.60
1	C1	1595	U	N3-C4-C5	-6.76	110.54	114.60
1	A1	686	C	N3-C4-C5	6.76	124.60	121.90
1	A1	1198	G	N9-C4-C5	6.76	108.10	105.40
29	B1	3025	C	C2-N1-C1'	-6.76	111.36	118.80
30	B2	77	G	N3-C4-N9	6.76	130.06	126.00
29	B1	875	G	C8-N9-C1'	-6.76	118.21	127.00
29	D1	3328	G	C2-N3-C4	-6.76	108.52	111.90
29	D1	3323	A	C5-C6-N1	-6.76	114.32	117.70
1	A1	1159	C	C6-N1-C1'	-6.75	112.69	120.80
29	B1	220	G	C8-N9-C1'	-6.75	118.22	127.00
29	D1	810	A	C8-N9-C4	-6.75	103.10	105.80
29	D1	1147	G	C5-C6-N1	-6.75	108.12	111.50
1	A1	346	G	N9-C4-C5	-6.75	102.70	105.40
1	A1	993	A	N9-C4-C5	6.75	108.50	105.80
29	D1	3177	G	C8-N9-C1'	6.75	135.78	127.00
29	B1	606	C	C6-N1-C2	-6.75	117.60	120.30
29	B1	932	U	N3-C2-O2	6.75	126.92	122.20
1	C1	423	G	N1-C6-O6	-6.75	115.85	119.90
1	C1	1323	C	C6-N1-C2	6.75	123.00	120.30
29	D1	2278	C	C2-N1-C1'	6.75	126.22	118.80
1	A1	95	G	N3-C4-C5	6.75	131.97	128.60
29	B1	564	G	C5-C6-O6	-6.75	124.55	128.60
30	D2	49	G	N3-C4-C5	-6.75	125.23	128.60
29	B1	726	G	C8-N9-C1'	-6.74	118.23	127.00
29	D1	341	G	C5-C6-O6	-6.74	124.55	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1185	C	C6-N1-C2	6.74	123.00	120.30
29	D1	2135	U	C5-C6-N1	-6.74	119.33	122.70
29	D1	1382	G	C8-N9-C4	6.74	109.10	106.40
29	B1	726	G	N3-C4-N9	6.74	130.04	126.00
29	B1	1003	A	N7-C8-N9	6.74	117.17	113.80
29	B1	3291	G	N3-C4-N9	6.74	130.04	126.00
29	D1	1165	A	C2-N3-C4	-6.74	107.23	110.60
29	D1	3259	U	N3-C2-O2	6.74	126.92	122.20
29	B1	751	A	C6-N1-C2	-6.74	114.56	118.60
29	B1	896	A	C8-N9-C4	-6.74	103.11	105.80
29	B1	2339	C	N3-C2-O2	-6.74	117.18	121.90
29	B1	2824	G	C6-N1-C2	6.74	129.14	125.10
29	D1	1487	G	C5-C6-N1	6.74	114.87	111.50
29	B1	2906	C	C5-C6-N1	-6.74	117.63	121.00
31	B3	68	G	C4-N9-C1'	-6.74	117.74	126.50
29	B1	1175	C	N3-C4-N4	-6.73	113.29	118.00
29	D1	2863	G	N1-C6-O6	-6.73	115.86	119.90
29	B1	364	G	C5-C6-O6	-6.73	124.56	128.60
30	B2	15	C	N1-C2-O2	6.73	122.94	118.90
29	D1	151	A	C6-N1-C2	-6.73	114.56	118.60
29	D1	3375	A	C8-N9-C4	6.73	108.49	105.80
8	AG	137	PRO	N-CA-CB	6.73	111.38	103.30
29	D1	1431	G	C4-C5-N7	-6.73	108.11	110.80
30	D2	47	C	C5-C4-N4	-6.73	115.49	120.20
29	D1	746	A	N3-C4-C5	-6.73	122.09	126.80
29	B1	1297	C	C5-C4-N4	-6.73	115.49	120.20
29	D1	659	G	N3-C4-N9	6.73	130.04	126.00
15	AN	59	PRO	N-CA-CB	6.73	111.37	103.30
29	B1	890	C	C2-N3-C4	-6.72	116.54	119.90
29	B1	3181	C	N1-C2-N3	-6.72	114.49	119.20
29	D1	278	U	N1-C2-O2	-6.72	118.09	122.80
29	B1	832	G	C4-C5-N7	6.72	113.49	110.80
29	B1	2636	A	C6-N1-C2	-6.72	114.57	118.60
29	D1	573	C	N1-C2-O2	-6.72	114.87	118.90
29	D1	1188	U	C5-C4-O4	6.72	129.93	125.90
29	B1	1158	A	C8-N9-C4	6.72	108.49	105.80
30	B2	46	A	N3-C4-C5	-6.72	122.10	126.80
36	BE	19	PRO	N-CA-CB	6.72	111.36	103.30
1	C1	647	G	N3-C4-N9	6.72	130.03	126.00
1	C1	1421	A	C8-N9-C4	-6.72	103.11	105.80
29	D1	1067	U	N3-C4-O4	6.72	124.10	119.40
1	C1	1606	C	C6-N1-C2	6.72	122.99	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	387	A	C5-C6-N1	-6.72	114.34	117.70
29	D1	1048	A	C5-C6-N1	6.72	121.06	117.70
29	B1	2583	C	N1-C2-O2	-6.72	114.87	118.90
29	B1	2601	A	C8-N9-C4	6.72	108.49	105.80
29	D1	2333	C	C5-C6-N1	-6.72	117.64	121.00
29	B1	679	U	C5-C6-N1	-6.71	119.34	122.70
29	B1	1341	U	C5-C6-N1	-6.71	119.34	122.70
29	B1	504	A	C5-C6-N1	-6.71	114.34	117.70
29	D1	1207	G	C5-C6-O6	-6.71	124.57	128.60
1	C1	577	G	C4-N9-C1'	6.71	135.22	126.50
29	D1	370	U	N3-C2-O2	6.71	126.90	122.20
29	D1	630	A	C6-C5-N7	-6.71	127.60	132.30
29	B1	2380	U	C5-C6-N1	-6.71	119.34	122.70
1	A1	305	C	N1-C2-O2	-6.71	114.88	118.90
29	D1	1004	U	N3-C4-O4	6.71	124.10	119.40
29	B1	1431	G	N1-C6-O6	-6.71	115.88	119.90
51	BV	46	PRO	N-CA-CB	6.71	111.35	103.30
29	D1	505	G	C2-N3-C4	-6.71	108.55	111.90
29	D1	1661	G	C6-C5-N7	-6.71	126.38	130.40
29	B1	2180	G	C5-C6-N1	6.71	114.85	111.50
29	B1	137	G	C6-C5-N7	-6.70	126.38	130.40
29	B1	435	C	C6-N1-C2	6.70	122.98	120.30
29	B1	1424	C	C5-C6-N1	-6.70	117.65	121.00
1	C1	1591	C	C2-N1-C1'	-6.70	111.43	118.80
29	D1	1450	G	C2-N3-C4	-6.70	108.55	111.90
29	D1	1367	G	N1-C6-O6	6.70	123.92	119.90
1	A1	301	A	C8-N9-C4	6.70	108.48	105.80
1	C1	1331	A	C6-N1-C2	-6.70	114.58	118.60
29	B1	288	C	C5-C6-N1	-6.70	117.65	121.00
29	D1	3045	G	C6-C5-N7	-6.70	126.38	130.40
29	D1	1056	U	C5-C6-N1	6.70	126.05	122.70
1	A1	1335	U	N3-C2-O2	-6.70	117.51	122.20
29	B1	2312	A	C2-N3-C4	6.70	113.95	110.60
45	DP	5	PRO	N-CA-CB	6.70	111.33	103.30
29	B1	1769	G	N1-C6-O6	6.69	123.92	119.90
29	B1	1151	U	C4-C5-C6	6.69	123.72	119.70
1	C1	1792	G	C4-C5-N7	6.69	113.48	110.80
29	D1	712	G	C6-C5-N7	-6.69	126.38	130.40
29	D1	3368	U	N3-C2-O2	6.69	126.89	122.20
35	DD	240	PRO	N-CA-CB	6.69	111.33	103.30
1	A1	364	G	N1-C6-O6	-6.69	115.89	119.90
1	C1	306	U	C5-C6-N1	-6.69	119.36	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	816	A	C5-C6-N1	6.69	121.05	117.70
29	B1	1320	C	C6-N1-C1'	-6.69	112.78	120.80
31	B3	50	C	N1-C2-O2	-6.69	114.89	118.90
29	D1	1403	C	C6-N1-C2	6.69	122.97	120.30
29	D1	2916	U	N1-C2-N3	-6.68	110.89	114.90
29	D1	706	A	C5-C6-N1	-6.68	114.36	117.70
29	D1	1100	U	C5-C6-N1	-6.68	119.36	122.70
51	DV	46	PRO	N-CA-CB	6.68	111.32	103.30
29	B1	3044	G	C8-N9-C4	6.68	109.07	106.40
1	A1	628	G	C8-N9-C4	6.68	109.07	106.40
29	B1	92	G	C6-C5-N7	-6.68	126.39	130.40
29	B1	390	G	N9-C4-C5	6.68	108.07	105.40
29	B1	1427	U	N3-C4-O4	-6.68	114.72	119.40
29	B1	1368	U	C6-N1-C1'	-6.68	111.85	121.20
29	B1	3386	G	C4-N9-C1'	6.68	135.18	126.50
29	D1	1123	U	N3-C2-O2	6.68	126.87	122.20
29	B1	3139	A	N3-C4-N9	-6.67	122.06	127.40
29	B1	3265	C	C2-N1-C1'	6.67	126.14	118.80
1	C1	1139	A	N1-C6-N6	6.67	122.61	118.60
1	C1	1484	G	C8-N9-C4	-6.67	103.73	106.40
29	D1	190	U	C2-N1-C1'	-6.67	109.69	117.70
31	D3	68	G	C8-N9-C1'	6.67	135.68	127.00
29	B1	978	G	C4-C5-C6	6.67	122.80	118.80
29	B1	3272	C	C2-N3-C4	6.67	123.24	119.90
29	B1	3108	G	C4-N9-C1'	-6.67	117.83	126.50
29	B1	3192	U	N1-C2-N3	6.67	118.90	114.90
30	D2	15	C	C5-C4-N4	-6.67	115.53	120.20
1	A1	1073	G	C6-C5-N7	-6.67	126.40	130.40
1	C1	1374	C	N1-C2-O2	-6.67	114.90	118.90
38	DG	162	PRO	N-CA-CB	6.67	111.30	103.30
29	B1	284	A	C5-C6-N1	6.67	121.03	117.70
29	B1	2339	C	N1-C2-O2	6.67	122.90	118.90
29	D1	1151	U	N1-C2-N3	6.67	118.90	114.90
30	D2	9	C	N1-C2-N3	6.67	123.87	119.20
29	B1	52	A	C4-N9-C1'	6.67	138.30	126.30
29	D1	52	A	N3-C4-C5	-6.67	122.13	126.80
29	D1	1846	C	N3-C2-O2	-6.67	117.23	121.90
29	D1	2682	C	C5-C6-N1	-6.67	117.67	121.00
29	B1	3000	A	N3-C4-C5	6.67	131.47	126.80
1	A1	79	C	C2-N1-C1'	6.66	126.13	118.80
36	BE	139	PRO	N-CA-CB	6.66	111.30	103.30
1	C1	337	G	C5-N7-C8	-6.66	100.97	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	531	G	N3-C2-N2	-6.66	115.24	119.90
29	D1	2365	C	N3-C4-C5	6.66	124.56	121.90
29	D1	2421	U	C2-N1-C1'	-6.66	109.70	117.70
30	D2	29	C	C2-N1-C1'	-6.66	111.47	118.80
1	A1	1331	A	C8-N9-C4	-6.66	103.14	105.80
29	B1	424	G	N3-C4-N9	6.66	130.00	126.00
29	B1	853	G	C6-C5-N7	6.66	134.40	130.40
29	B1	1609	C	N3-C2-O2	6.66	126.56	121.90
31	D3	34	U	N1-C2-O2	6.66	127.46	122.80
29	B1	659	G	C8-N9-C1'	-6.66	118.34	127.00
29	D1	613	G	N1-C6-O6	6.66	123.89	119.90
29	B1	2669	G	C4-C5-N7	6.66	113.46	110.80
1	C1	332	U	N3-C2-O2	-6.66	117.54	122.20
1	A1	45	U	N3-C2-O2	-6.66	117.54	122.20
29	B1	742	G	C8-N9-C4	6.66	109.06	106.40
29	B1	3223	A	C4-C5-C6	-6.66	113.67	117.00
36	DE	47	PRO	N-CA-CB	6.66	111.29	103.30
29	B1	380	U	C6-N1-C1'	6.65	130.52	121.20
29	D1	586	C	N3-C4-C5	-6.65	119.24	121.90
29	B1	1331	U	C5-C6-N1	-6.65	119.38	122.70
29	D1	2368	A	C2-N3-C4	-6.65	107.27	110.60
1	A1	825	U	N3-C2-O2	-6.65	117.55	122.20
29	D1	3298	C	N1-C2-O2	6.65	122.89	118.90
29	B1	2830	G	C5-C6-N1	-6.65	108.18	111.50
1	A1	1645	G	N1-C6-O6	6.65	123.89	119.90
29	B1	2609	A	N1-C6-N6	-6.64	114.61	118.60
44	BO	154	PRO	N-CA-CB	6.64	111.27	103.30
29	D1	352	A	C5-N7-C8	6.64	107.22	103.90
29	D1	1063	G	N3-C4-N9	-6.64	122.01	126.00
29	D1	3297	U	N1-C2-O2	6.64	127.45	122.80
29	B1	716	A	N7-C8-N9	6.64	117.12	113.80
29	B1	1381	A	C8-N9-C4	6.64	108.46	105.80
29	B1	2304	C	C6-N1-C2	-6.64	117.64	120.30
29	B1	2355	G	N3-C4-N9	6.64	129.99	126.00
29	B1	3303	G	C8-N9-C4	-6.64	103.74	106.40
30	B2	113	C	C5-C6-N1	-6.64	117.68	121.00
31	B3	68	G	C8-N9-C1'	6.64	135.63	127.00
29	B1	3269	U	C2-N1-C1'	6.64	125.67	117.70
33	BB	103	PRO	N-CA-CB	6.64	111.27	103.30
29	D1	32	U	N3-C4-O4	-6.64	114.75	119.40
29	D1	2643	A	C5-C6-N1	-6.64	114.38	117.70
29	D1	3143	C	C4-C5-C6	-6.64	114.08	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3205	G	C2-N3-C4	6.64	115.22	111.90
29	D1	3261	C	C2-N3-C4	-6.64	116.58	119.90
29	D1	421	G	C5-C6-N1	-6.64	108.18	111.50
29	D1	963	G	N7-C8-N9	6.64	116.42	113.10
29	D1	2939	G	C5-C6-O6	6.64	132.58	128.60
1	A1	1437	U	N1-C2-O2	-6.64	118.15	122.80
29	B1	220	G	C2-N3-C4	-6.64	108.58	111.90
29	B1	2320	A	C8-N9-C4	6.64	108.45	105.80
29	D1	2377	G	C4-N9-C1'	-6.64	117.87	126.50
11	AJ	51	PRO	N-CA-CB	6.63	111.26	103.30
29	B1	814	U	N1-C2-O2	-6.63	118.16	122.80
1	C1	939	A	N7-C8-N9	6.63	117.12	113.80
29	D1	2661	G	N3-C4-C5	-6.63	125.28	128.60
29	D1	2913	C	C5-C6-N1	-6.63	117.68	121.00
1	A1	577	G	C6-C5-N7	-6.63	126.42	130.40
29	D1	2982	A	N1-C6-N6	-6.63	114.62	118.60
1	A1	565	C	C2-N1-C1'	-6.63	111.51	118.80
1	C1	79	C	N1-C2-O2	6.63	122.88	118.90
1	A1	45	U	C2-N3-C4	-6.63	123.02	127.00
29	B1	1339	C	N1-C2-N3	6.63	123.84	119.20
29	B1	1342	C	C6-N1-C2	6.63	122.95	120.30
29	B1	2435	G	C5-C6-O6	-6.63	124.62	128.60
29	B1	3205	G	C4-N9-C1'	6.63	135.12	126.50
29	D1	422	A	C8-N9-C4	6.63	108.45	105.80
29	D1	1888	U	C5-C6-N1	-6.63	119.39	122.70
29	D1	3244	A	C4-N9-C1'	-6.63	114.37	126.30
29	D1	3268	A	N7-C8-N9	-6.63	110.49	113.80
29	B1	9	U	N3-C2-O2	-6.63	117.56	122.20
33	BB	66	PRO	N-CA-CB	6.63	111.25	103.30
29	D1	1089	G	C6-N1-C2	-6.63	121.12	125.10
41	DJ	18	PRO	N-CA-CB	6.63	111.25	103.30
29	B1	727	G	N9-C4-C5	-6.62	102.75	105.40
29	B1	1307	G	N9-C4-C5	-6.62	102.75	105.40
29	D1	435	C	C2-N3-C4	-6.62	116.59	119.90
29	D1	793	C	C2-N1-C1'	6.62	126.09	118.80
29	D1	2669	G	N9-C4-C5	-6.62	102.75	105.40
29	D1	1885	U	C2-N3-C4	-6.62	123.03	127.00
29	D1	2881	C	N1-C2-O2	-6.62	114.93	118.90
1	A1	517	U	N3-C4-O4	-6.62	114.77	119.40
29	D1	1480	G	C5-C6-N1	6.62	114.81	111.50
1	C1	16	G	C8-N9-C1'	-6.62	118.40	127.00
1	C1	1046	G	N3-C4-C5	-6.62	125.29	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	94	G	C2-N3-C4	-6.61	108.59	111.90
29	B1	613	G	N1-C2-N2	-6.61	110.25	116.20
29	B1	2992	U	C5-C4-O4	-6.61	121.93	125.90
30	B2	46	A	C2-N3-C4	6.61	113.91	110.60
1	A1	647	G	N3-C4-C5	-6.61	125.30	128.60
29	B1	859	G	C8-N9-C1'	-6.61	118.41	127.00
29	D1	2706	G	C5-C6-N1	6.61	114.81	111.50
29	D1	89	A	C2-N3-C4	-6.61	107.30	110.60
1	A1	1418	G	C8-N9-C4	-6.61	103.76	106.40
29	B1	2990	G	C6-C5-N7	-6.61	126.44	130.40
29	B1	3226	A	C5-C6-N1	-6.61	114.40	117.70
1	C1	1418	G	N1-C6-O6	6.61	123.86	119.90
29	D1	1315	U	C4-C5-C6	-6.61	115.74	119.70
29	B1	2379	U	N1-C2-O2	-6.61	118.18	122.80
29	D1	1300	G	N9-C4-C5	6.61	108.04	105.40
29	B1	92	G	C4-C5-N7	6.60	113.44	110.80
29	B1	150	A	N1-C6-N6	-6.60	114.64	118.60
29	D1	963	G	C5-N7-C8	-6.60	101.00	104.30
29	B1	549	U	N1-C2-O2	6.60	127.42	122.80
29	D1	1861	G	N3-C4-N9	-6.60	122.04	126.00
30	D2	29	C	N3-C4-C5	6.60	124.54	121.90
30	D2	103	A	C5-N7-C8	-6.60	100.60	103.90
29	B1	54	C	C6-N1-C2	6.60	122.94	120.30
1	C1	1149	G	N3-C4-N9	6.60	129.96	126.00
29	D1	341	G	C6-C5-N7	-6.60	126.44	130.40
29	B1	21	G	C5-N7-C8	-6.60	101.00	104.30
29	B1	52	A	N3-C4-N9	6.60	132.68	127.40
29	D1	634	C	C5-C6-N1	-6.60	117.70	121.00
29	D1	1056	U	C6-N1-C1'	-6.60	111.96	121.20
29	D1	3242	G	N1-C2-N3	-6.60	119.94	123.90
30	D2	96	U	C2-N3-C4	-6.60	123.04	127.00
1	A1	1073	G	C8-N9-C1'	-6.60	118.42	127.00
29	B1	789	A	N1-C6-N6	-6.60	114.64	118.60
29	B1	2330	C	C2-N3-C4	-6.60	116.60	119.90
1	A1	1149	G	N3-C4-N9	6.60	129.96	126.00
31	B3	92	A	N1-C2-N3	-6.60	126.00	129.30
29	D1	1528	G	C8-N9-C4	6.60	109.04	106.40
29	B1	1418	A	C2-N3-C4	6.59	113.90	110.60
29	B1	3324	C	N3-C2-O2	-6.59	117.28	121.90
29	B1	1305	U	C5-C6-N1	-6.59	119.40	122.70
29	B1	3291	G	C4-N9-C1'	6.59	135.07	126.50
1	C1	1220	C	C6-N1-C1'	-6.59	112.89	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	1121	C	C2-N1-C1'	-6.59	111.55	118.80
29	B1	103	G	N3-C4-C5	6.59	131.89	128.60
29	B1	2601	A	C4-C5-C6	-6.59	113.71	117.00
1	C1	305	C	C6-N1-C2	6.59	122.94	120.30
29	D1	513	G	C4-C5-C6	-6.59	114.85	118.80
29	D1	1892	G	C2-N3-C4	-6.59	108.61	111.90
29	B1	584	G	C5-C6-O6	-6.58	124.65	128.60
29	B1	2378	C	N3-C4-C5	6.58	124.53	121.90
29	D1	676	G	N1-C2-N2	-6.58	110.27	116.20
29	B1	1166	G	C8-N9-C4	6.58	109.03	106.40
29	B1	120	G	N3-C4-N9	-6.58	122.05	126.00
29	B1	703	G	C4-N9-C1'	-6.58	117.94	126.50
29	D1	1183	C	C6-N1-C2	6.58	122.93	120.30
10	AI	73	PRO	N-CA-CB	6.58	111.20	103.30
29	B1	655	C	C6-N1-C2	6.58	122.93	120.30
29	D1	3184	A	C4-C5-C6	6.58	120.29	117.00
29	B1	779	G	C6-C5-N7	-6.58	126.45	130.40
29	B1	2746	A	N1-C6-N6	-6.58	114.65	118.60
29	B1	227	G	N9-C4-C5	-6.58	102.77	105.40
29	B1	1168	U	C6-N1-C2	6.58	124.94	121.00
30	D2	58	C	C6-N1-C1'	-6.58	112.91	120.80
29	B1	1147	G	C4-C5-N7	6.57	113.43	110.80
29	D1	1367	G	C6-N1-C2	6.57	129.04	125.10
29	B1	622	A	C8-N9-C4	-6.57	103.17	105.80
29	B1	3138	U	C5-C4-O4	-6.57	121.96	125.90
29	D1	1169	A	C5-C6-N1	6.57	120.99	117.70
29	B1	1450	G	C4-C5-N7	6.57	113.43	110.80
29	B1	1608	C	C2-N1-C1'	6.57	126.03	118.80
29	B1	2689	A	C4-N9-C1'	6.57	138.13	126.30
29	B1	335	G	C5-C6-N1	-6.57	108.22	111.50
29	B1	1342	C	N3-C4-C5	6.57	124.53	121.90
29	B1	1870	C	C6-N1-C2	6.57	122.93	120.30
1	C1	552	G	C6-N1-C2	-6.57	121.16	125.10
30	D2	35	C	C6-N1-C1'	-6.57	112.92	120.80
29	B1	625	G	C2-N3-C4	-6.57	108.62	111.90
29	B1	3266	G	C5-N7-C8	6.57	107.58	104.30
29	B1	3322	A	N3-C4-N9	-6.57	122.15	127.40
1	C1	1149	G	C2-N3-C4	6.57	115.18	111.90
29	B1	1160	C	C6-N1-C2	6.56	122.93	120.30
1	A1	1778	G	N1-C6-O6	6.56	123.84	119.90
29	D1	2302	G	C8-N9-C4	6.56	109.03	106.40
29	D1	2919	A	C4-C5-C6	6.56	120.28	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	410	U	N1-C2-O2	-6.56	118.21	122.80
31	B3	50	C	C2-N1-C1'	-6.56	111.58	118.80
1	C1	1028	C	N3-C2-O2	-6.56	117.31	121.90
29	D1	150	A	C5-C6-N1	6.56	120.98	117.70
29	B1	3233	C	C5-C4-N4	-6.56	115.61	120.20
29	B1	2667	A	N1-C2-N3	-6.56	126.02	129.30
29	B1	2278	C	N1-C2-N3	-6.55	114.61	119.20
29	B1	2329	C	N1-C2-O2	-6.55	114.97	118.90
29	D1	1085	A	C5-C6-N1	-6.55	114.42	117.70
29	B1	3130	A	N9-C4-C5	-6.55	103.18	105.80
47	DR	157	PRO	N-CA-CB	6.55	111.16	103.30
11	AJ	41	PRO	N-CA-CB	6.55	111.16	103.30
29	B1	752	C	C6-N1-C1'	-6.55	112.94	120.80
29	B1	984	G	N3-C4-N9	-6.55	122.07	126.00
30	B2	111	U	C6-N1-C1'	-6.55	112.03	121.20
54	BY	29	PRO	N-CA-CB	6.55	111.16	103.30
29	D1	1331	U	C2-N1-C1'	-6.55	109.84	117.70
1	A1	684	A	C5-C6-N1	6.55	120.97	117.70
57	Bb	68	PRO	N-CA-CB	6.55	111.16	103.30
29	D1	92	G	N1-C6-O6	6.55	123.83	119.90
29	D1	3035	A	C4-C5-C6	6.55	120.28	117.00
29	D1	3261	C	N3-C4-N4	-6.55	113.42	118.00
29	B1	529	A	C6-N1-C2	6.55	122.53	118.60
29	B1	29	C	N1-C2-O2	-6.55	114.97	118.90
29	B1	3152	U	C5-C4-O4	-6.55	121.97	125.90
11	CJ	51	PRO	N-CA-CB	6.55	111.16	103.30
29	D1	3002	C	C6-N1-C2	6.55	122.92	120.30
29	D1	3137	C	N3-C4-N4	-6.55	113.42	118.00
4	AC	163	PRO	N-CA-CB	6.54	111.15	103.30
29	B1	402	A	C4-C5-C6	6.54	120.27	117.00
29	B1	933	A	C5-C6-N6	-6.54	118.47	123.70
29	B1	1055	A	N1-C6-N6	6.54	122.53	118.60
1	C1	1561	U	C5-C6-N1	-6.54	119.43	122.70
29	D1	2618	G	N9-C4-C5	6.54	108.02	105.40
29	B1	3266	G	N3-C4-N9	6.54	129.93	126.00
29	D1	1364	C	N1-C2-O2	-6.54	114.97	118.90
29	B1	2946	A	C8-N9-C4	-6.54	103.18	105.80
1	C1	1134	C	C5-C6-N1	-6.54	117.73	121.00
1	A1	647	G	C5-C6-N1	6.54	114.77	111.50
1	A1	1453	G	C4-N9-C1'	-6.54	118.00	126.50
29	B1	1500	G	C5-C6-N1	6.54	114.77	111.50
18	AQ	91	PRO	N-CA-CB	6.53	111.14	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1457	U	C4-C5-C6	6.53	123.62	119.70
29	B1	1905	G	C8-N9-C4	-6.53	103.79	106.40
29	D1	2743	A	C8-N9-C4	6.53	108.41	105.80
29	D1	3097	C	N1-C2-O2	-6.53	114.98	118.90
29	B1	76	G	N9-C4-C5	6.53	108.01	105.40
29	B1	370	U	C6-N1-C1'	6.53	130.34	121.20
29	B1	2919	A	C4-C5-C6	6.53	120.27	117.00
1	A1	1206	U	C5-C6-N1	6.53	125.97	122.70
29	B1	1342	C	N3-C2-O2	6.53	126.47	121.90
29	B1	1472	U	C5-C6-N1	-6.53	119.44	122.70
29	D1	1192	C	N3-C2-O2	-6.53	117.33	121.90
29	D1	1292	C	N3-C4-C5	6.53	124.51	121.90
29	D1	3012	A	C5-C6-N1	6.53	120.97	117.70
29	B1	2892	A	C4-C5-N7	6.53	113.97	110.70
29	D1	1507	G	N1-C2-N2	6.53	122.08	116.20
29	B1	515	C	N3-C4-C5	-6.53	119.29	121.90
1	C1	12	U	C5-C6-N1	-6.53	119.44	122.70
29	D1	214	G	C8-N9-C4	6.53	109.01	106.40
29	D1	3192	U	C2-N1-C1'	-6.53	109.87	117.70
30	D2	47	C	C6-N1-C2	-6.53	117.69	120.30
29	B1	969	C	C5-C6-N1	-6.53	117.74	121.00
29	B1	1877	U	C6-N1-C1'	-6.53	112.06	121.20
29	B1	3012	A	C8-N9-C4	-6.53	103.19	105.80
47	BR	97	PRO	N-CA-CB	6.53	111.13	103.30
1	C1	406	U	C6-N1-C2	6.53	124.92	121.00
2	AA	70	PRO	N-CA-CB	6.52	111.13	103.30
29	B1	2325	G	N7-C8-N9	6.52	116.36	113.10
29	D1	1751	G	C8-N9-C4	-6.52	103.79	106.40
29	D1	1915	A	C8-N9-C4	6.52	108.41	105.80
29	B1	3126	C	N3-C4-C5	6.52	124.51	121.90
29	D1	1156	C	N3-C4-N4	6.52	122.57	118.00
1	A1	353	A	N1-C6-N6	-6.52	114.69	118.60
29	D1	1010	G	N1-C6-O6	6.52	123.81	119.90
29	B1	588	G	C5-N7-C8	6.52	107.56	104.30
38	BG	99	PRO	N-CA-CB	6.52	111.12	103.30
4	CC	81	PRO	N-CA-CB	6.52	111.12	103.30
29	B1	1921	A	N1-C6-N6	6.51	122.51	118.60
1	A1	1294	G	C8-N9-C4	-6.51	103.80	106.40
1	C1	890	C	C2-N1-C1'	-6.51	111.64	118.80
1	C1	1437	U	C5-C6-N1	-6.51	119.44	122.70
29	B1	790	U	C2-N3-C4	-6.51	123.09	127.00
29	B1	2605	G	N3-C4-C5	6.51	131.85	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3307	A	N1-C2-N3	6.51	132.56	129.30
29	B1	3314	A	N3-C4-C5	-6.51	122.24	126.80
29	D1	868	C	C2-N3-C4	-6.51	116.64	119.90
29	D1	2752	U	N1-C2-O2	6.51	127.36	122.80
29	D1	3126	C	N1-C2-O2	-6.51	114.99	118.90
29	D1	3391	A	N1-C6-N6	6.51	122.51	118.60
29	B1	3184	A	C2-N3-C4	-6.51	107.34	110.60
29	D1	2355	G	C8-N9-C1'	-6.51	118.54	127.00
29	D1	3129	A	N1-C6-N6	-6.51	114.69	118.60
3	AB	37	PRO	N-CA-CB	6.51	111.11	103.30
29	B1	2513	U	N3-C4-O4	6.51	123.95	119.40
29	B1	3227	A	N3-C4-N9	-6.51	122.19	127.40
29	D1	380	U	C5-C4-O4	6.51	129.80	125.90
29	B1	1710	C	C6-N1-C1'	-6.50	112.99	120.80
29	D1	3139	A	N3-C4-N9	-6.50	122.20	127.40
29	B1	755	A	C5-C6-N1	6.50	120.95	117.70
29	D1	859	G	N3-C4-N9	6.50	129.90	126.00
29	D1	3386	G	N1-C6-O6	6.50	123.80	119.90
29	B1	1115	G	N1-C6-O6	6.50	123.80	119.90
38	BG	217	PRO	N-CA-CB	6.50	111.10	103.30
29	D1	2756	C	C2-N3-C4	-6.50	116.65	119.90
29	D1	2886	U	C2-N3-C4	-6.50	123.10	127.00
29	D1	3129	A	C8-N9-C4	-6.50	103.20	105.80
1	A1	62	A	C6-C5-N7	6.50	136.85	132.30
29	D1	89	A	C4-C5-N7	6.50	113.95	110.70
29	D1	2369	G	N3-C2-N2	-6.50	115.35	119.90
29	D1	2828	G	N1-C6-O6	6.50	123.80	119.90
31	D3	51	G	C4-N9-C1'	6.50	134.95	126.50
29	D1	1190	A	C5-C6-N6	-6.50	118.50	123.70
56	Da	30	PRO	N-CA-CB	6.50	111.09	103.30
29	B1	338	A	N3-C4-C5	-6.49	122.25	126.80
29	B1	257	U	C2-N1-C1'	6.49	125.49	117.70
29	B1	3393	U	C6-N1-C2	6.49	124.89	121.00
29	D1	2668	U	C2-N1-C1'	6.49	125.49	117.70
1	A1	1141	G	N3-C4-N9	6.49	129.90	126.00
29	B1	96	G	C2-N3-C4	-6.49	108.65	111.90
29	D1	594	U	C5-C4-O4	-6.49	122.00	125.90
29	D1	2330	C	N3-C2-O2	6.49	126.44	121.90
1	A1	373	G	N1-C6-O6	6.49	123.79	119.90
1	A1	1046	G	C6-C5-N7	-6.49	126.51	130.40
29	B1	2708	C	C6-N1-C2	6.49	122.89	120.30
29	D1	1363	A	C8-N9-C4	6.49	108.40	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	222	A	C5-C6-N6	-6.49	118.51	123.70
29	B1	1507	G	N1-C2-N2	6.49	122.04	116.20
29	D1	1307	G	C8-N9-C1'	-6.49	118.57	127.00
29	D1	1781	C	C2-N1-C1'	6.49	125.93	118.80
29	D1	2922	G	C6-C5-N7	-6.49	126.51	130.40
1	A1	1453	G	N3-C4-C5	6.48	131.84	128.60
29	D1	378	A	C2-N3-C4	6.48	113.84	110.60
31	B3	93	U	C5-C6-N1	-6.48	119.46	122.70
29	D1	2248	C	N1-C2-O2	-6.48	115.01	118.90
1	A1	1541	G	N3-C4-N9	6.48	129.89	126.00
29	B1	117	U	C5-C4-O4	-6.48	122.01	125.90
29	B1	592	A	C8-N9-C4	-6.48	103.21	105.80
29	B1	2289	U	N3-C4-C5	6.48	118.49	114.60
31	B3	100	U	C5-C4-O4	-6.48	122.01	125.90
3	CB	239	PRO	N-CA-CB	6.48	111.08	103.30
29	B1	3168	A	C5-C6-N6	-6.48	118.52	123.70
1	C1	621	A	N1-C6-N6	-6.48	114.71	118.60
29	D1	2283	G	N3-C4-N9	-6.48	122.11	126.00
1	A1	647	G	N3-C4-N9	6.48	129.89	126.00
1	A1	1591	C	C2-N3-C4	-6.48	116.66	119.90
29	D1	509	U	N3-C4-O4	-6.47	114.87	119.40
29	D1	2643	A	C2-N3-C4	-6.47	107.36	110.60
1	A1	1109	G	C6-C5-N7	-6.47	126.52	130.40
29	B1	1113	G	C8-N9-C1'	-6.47	118.59	127.00
29	D1	272	G	C2-N3-C4	-6.47	108.66	111.90
29	D1	1050	U	C2-N3-C4	-6.47	123.12	127.00
29	B1	2277	C	C6-N1-C2	6.47	122.89	120.30
1	A1	1651	A	C5-C6-N6	-6.47	118.53	123.70
29	B1	1506	A	N1-C6-N6	6.47	122.48	118.60
29	D1	1297	C	N3-C4-N4	6.47	122.53	118.00
29	D1	2838	A	N7-C8-N9	-6.47	110.56	113.80
29	D1	2935	U	N1-C2-N3	6.47	118.78	114.90
1	A1	346	G	C4-C5-N7	6.47	113.39	110.80
29	B1	404	G	C8-N9-C1'	-6.47	118.59	127.00
29	D1	2283	G	N3-C2-N2	-6.47	115.37	119.90
29	B1	2644	C	N3-C2-O2	-6.47	117.37	121.90
29	B1	3065	G	C5-C6-N1	6.47	114.73	111.50
29	D1	137	G	C4-C5-N7	6.47	113.39	110.80
31	B3	87	G	C4-N9-C1'	6.46	134.90	126.50
29	D1	1296	C	N3-C4-C5	6.46	124.49	121.90
29	D1	2909	U	N1-C2-O2	-6.46	118.28	122.80
29	B1	2700	G	C8-N9-C1'	-6.46	118.60	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	497	C	N3-C2-O2	-6.46	117.38	121.90
29	D1	670	C	N1-C2-O2	-6.46	115.02	118.90
29	D1	948	C	C6-N1-C2	6.46	122.89	120.30
29	D1	1190	A	C8-N9-C4	-6.46	103.22	105.80
29	D1	3137	C	N3-C2-O2	-6.46	117.38	121.90
29	B1	3328	G	C2-N3-C4	-6.46	108.67	111.90
29	B1	3396	U	N1-C2-O2	6.46	127.32	122.80
29	D1	676	G	C6-C5-N7	-6.46	126.53	130.40
29	D1	1171	G	N9-C4-C5	6.46	107.98	105.40
30	D2	109	G	C8-N9-C4	6.46	108.98	106.40
1	A1	1348	A	N1-C6-N6	6.46	122.47	118.60
29	B1	374	A	C8-N9-C4	6.46	108.38	105.80
33	BB	178	PRO	N-CA-CB	6.46	111.05	103.30
29	D1	3390	G	C6-C5-N7	-6.46	126.53	130.40
36	BE	47	PRO	N-CA-CB	6.45	111.04	103.30
29	D1	2262	A	C4-C5-C6	6.45	120.23	117.00
1	A1	625	C	N1-C2-O2	6.45	122.77	118.90
29	B1	2347	U	C5-C6-N1	-6.45	119.47	122.70
29	B1	3205	G	C8-N9-C1'	-6.45	118.61	127.00
1	C1	337	G	C6-C5-N7	-6.45	126.53	130.40
29	D1	1388	U	C5-C6-N1	-6.45	119.47	122.70
29	D1	1469	C	C6-N1-C2	-6.45	117.72	120.30
29	D1	2244	A	N1-C6-N6	-6.45	114.73	118.60
29	B1	1825	G	N3-C4-N9	-6.45	122.13	126.00
29	D1	593	C	C6-N1-C1'	-6.45	113.06	120.80
29	D1	1422	G	N1-C6-O6	6.45	123.77	119.90
29	B1	3244	A	C4-N9-C1'	-6.45	114.70	126.30
30	B2	85	G	N1-C6-O6	6.45	123.77	119.90
29	D1	2377	G	N9-C4-C5	6.45	107.98	105.40
29	D1	2683	U	C2-N1-C1'	6.45	125.44	117.70
29	B1	927	C	C2-N1-C1'	-6.44	111.71	118.80
29	D1	2700	G	N9-C4-C5	-6.44	102.82	105.40
51	DV	15	PRO	N-CA-CB	6.44	111.03	103.30
29	B1	304	G	C8-N9-C1'	-6.44	118.62	127.00
29	B1	607	A	C4-C5-C6	6.44	120.22	117.00
1	C1	1789	G	C8-N9-C4	6.44	108.98	106.40
29	B1	3228	C	N3-C4-N4	6.44	122.51	118.00
29	B1	3242	G	N1-C2-N3	-6.44	120.04	123.90
10	CI	68	PRO	N-CA-CB	6.44	111.03	103.30
29	D1	1298	C	N3-C2-O2	6.44	126.41	121.90
29	D1	2630	C	N3-C4-C5	6.44	124.48	121.90
29	D1	2683	U	C6-N1-C1'	-6.44	112.19	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2867	C	N3-C2-O2	6.44	126.41	121.90
29	B1	2187	G	C5-C6-O6	6.44	132.46	128.60
1	C1	1143	A	C5-C6-N1	6.44	120.92	117.70
4	AC	81	PRO	N-CA-CB	6.44	111.03	103.30
29	B1	2907	G	N3-C4-N9	-6.44	122.14	126.00
4	CC	43	PRO	N-CA-CB	6.44	111.03	103.30
29	D1	2683	U	C2-N3-C4	-6.44	123.14	127.00
30	D2	19	C	C2-N1-C1'	6.44	125.88	118.80
29	B1	2845	A	C2-N3-C4	-6.43	107.38	110.60
1	C1	572	C	N3-C2-O2	-6.43	117.40	121.90
1	C1	1620	C	C2-N1-C1'	6.43	125.88	118.80
29	D1	729	C	N3-C4-C5	6.43	124.47	121.90
29	D1	1374	G	C8-N9-C4	-6.43	103.83	106.40
29	D1	2290	C	N3-C2-O2	6.43	126.40	121.90
29	B1	364	G	C4-C5-N7	6.43	113.37	110.80
29	B1	3048	A	C5-N7-C8	-6.43	100.69	103.90
1	C1	62	A	C6-C5-N7	6.43	136.80	132.30
29	D1	1140	G	C2-N3-C4	-6.43	108.69	111.90
29	D1	3211	C	N3-C2-O2	6.43	126.40	121.90
29	B1	92	G	N3-C4-C5	-6.43	125.39	128.60
29	D1	2827	U	N1-C2-O2	6.43	127.30	122.80
29	D1	612	U	N3-C4-O4	6.43	123.90	119.40
29	D1	2347	U	C2-N1-C1'	-6.43	109.99	117.70
29	D1	2377	G	C8-N9-C1'	6.43	135.36	127.00
29	B1	157	A	C2-N3-C4	6.42	113.81	110.60
29	B1	1154	A	C5-C6-N1	6.42	120.91	117.70
29	D1	3200	G	C6-N1-C2	6.42	128.96	125.10
29	D1	2809	C	C5-C6-N1	-6.42	117.79	121.00
29	B1	927	C	N3-C2-O2	6.42	126.39	121.90
29	D1	837	A	C5-N7-C8	-6.42	100.69	103.90
29	D1	2683	U	N3-C4-C5	6.42	118.45	114.60
29	B1	2419	A	N1-C6-N6	-6.42	114.75	118.60
29	D1	518	G	C6-N1-C2	6.42	128.95	125.10
1	A1	1778	G	C5-C6-O6	-6.42	124.75	128.60
1	C1	1421	A	N3-C4-C5	-6.42	122.31	126.80
29	D1	2929	C	C6-N1-C2	-6.42	117.73	120.30
29	B1	1661	G	N9-C4-C5	-6.42	102.83	105.40
1	C1	577	G	C8-N9-C1'	-6.42	118.66	127.00
29	D1	380	U	C6-N1-C1'	6.42	130.18	121.20
29	D1	572	A	C5-C6-N6	-6.42	118.57	123.70
29	D1	779	G	C6-C5-N7	-6.42	126.55	130.40
29	D1	1389	G	C8-N9-C4	6.42	108.97	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2928	C	N3-C4-N4	6.42	122.49	118.00
29	D1	2933	A	N9-C4-C5	6.42	108.37	105.80
29	D1	3272	C	C2-N1-C1'	6.42	125.86	118.80
29	B1	3069	G	N1-C6-O6	6.42	123.75	119.90
29	B1	2689	A	N1-C6-N6	-6.41	114.75	118.60
31	B3	115	C	C6-N1-C2	6.41	122.87	120.30
1	C1	552	G	C5-C6-N1	6.41	114.71	111.50
1	C1	1408	G	C8-N9-C4	-6.41	103.83	106.40
10	CI	73	PRO	N-CA-CB	6.41	111.00	103.30
17	CP	42	PRO	N-CA-CB	6.41	111.00	103.30
29	D1	724	U	C5-C6-N1	-6.41	119.49	122.70
29	D1	2708	C	C5-C4-N4	-6.41	115.71	120.20
29	D1	3087	A	C8-N9-C4	6.41	108.37	105.80
37	DF	68	PRO	N-CA-CB	6.41	111.00	103.30
29	D1	1227	C	C2-N1-C1'	6.41	125.85	118.80
29	B1	3198	U	C5-C6-N1	6.41	125.91	122.70
1	C1	869	A	N3-C4-C5	-6.41	122.31	126.80
1	C1	1549	C	C4-C5-C6	6.41	120.61	117.40
29	D1	2830	G	C2-N3-C4	-6.41	108.70	111.90
29	B1	669	U	C6-N1-C1'	-6.41	112.23	121.20
1	C1	1564	U	N1-C2-O2	-6.41	118.31	122.80
29	D1	2391	G	C8-N9-C4	6.41	108.96	106.40
29	D1	2662	G	C5-C6-O6	-6.41	124.76	128.60
1	A1	16	G	N3-C4-N9	6.41	129.84	126.00
29	B1	2325	G	C8-N9-C4	-6.41	103.84	106.40
10	AI	38	PRO	N-CA-CB	6.40	110.98	103.30
37	BF	68	PRO	N-CA-CB	6.40	110.98	103.30
29	D1	2435	G	C5-C6-O6	-6.40	124.76	128.60
29	B1	343	U	N1-C2-O2	6.40	127.28	122.80
29	B1	880	G	C4-N9-C1'	-6.40	118.18	126.50
29	B1	3077	A	N9-C4-C5	6.40	108.36	105.80
29	B1	3210	A	C8-N9-C4	6.40	108.36	105.80
3	CB	74	PRO	N-CA-CB	6.40	110.98	103.30
29	D1	2396	G	C4-N9-C1'	6.40	134.82	126.50
29	D1	2912	G	C4-C5-N7	6.40	113.36	110.80
38	BG	162	PRO	N-CA-CB	6.40	110.98	103.30
4	CC	163	PRO	N-CA-CB	6.40	110.98	103.30
29	D1	2587	U	N3-C4-O4	6.40	123.88	119.40
29	D1	409	A	N7-C8-N9	-6.40	110.60	113.80
29	D1	3124	G	N9-C4-C5	6.40	107.96	105.40
29	B1	575	G	C8-N9-C4	-6.40	103.84	106.40
29	B1	997	A	N1-C2-N3	6.40	132.50	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3390	G	C6-C5-N7	-6.40	126.56	130.40
13	CL	76	PRO	N-CA-CB	6.40	110.98	103.30
29	D1	52	A	C4-N9-C1'	6.40	137.82	126.30
29	D1	1188	U	N1-C2-N3	6.40	118.74	114.90
29	D1	3093	C	N3-C2-O2	6.40	126.38	121.90
42	BK	45	PRO	N-CA-CB	6.40	110.97	103.30
29	B1	1589	A	C5-N7-C8	-6.39	100.70	103.90
29	B1	3132	C	C6-N1-C2	6.39	122.86	120.30
29	B1	3314	A	N1-C2-N3	6.39	132.50	129.30
32	BA	56	PRO	N-CA-CB	6.39	110.97	103.30
29	D1	2136	C	N3-C2-O2	-6.39	117.42	121.90
29	D1	2895	G	N3-C4-N9	-6.39	122.16	126.00
30	D2	9	C	C4-C5-C6	6.39	120.60	117.40
1	C1	1141	G	N9-C4-C5	-6.39	102.84	105.40
14	CM	118	PRO	N-CA-CB	6.39	110.97	103.30
29	B1	822	G	C8-N9-C4	6.39	108.96	106.40
29	D1	3034	C	N3-C4-C5	6.39	124.46	121.90
31	D3	68	G	N3-C4-C5	6.39	131.79	128.60
29	B1	2901	G	N3-C4-C5	-6.39	125.41	128.60
29	D1	190	U	C6-N1-C1'	6.39	130.14	121.20
29	D1	1877	U	C6-N1-C1'	-6.39	112.26	121.20
29	B1	1802	C	N3-C4-C5	6.38	124.45	121.90
29	D1	2294	U	N3-C2-O2	-6.38	117.73	122.20
13	AL	76	PRO	N-CA-CB	6.38	110.96	103.30
29	B1	1434	G	C8-N9-C1'	-6.38	118.70	127.00
29	D1	289	A	C8-N9-C4	6.38	108.35	105.80
29	D1	2918	G	C2-N3-C4	6.38	115.09	111.90
29	D1	3261	C	N3-C2-O2	-6.38	117.43	121.90
29	B1	1048	A	C4-C5-N7	6.38	113.89	110.70
29	B1	1056	U	N3-C4-C5	6.38	118.43	114.60
29	D1	2283	G	N1-C6-O6	6.38	123.73	119.90
29	D1	2776	C	C2-N1-C1'	6.38	125.82	118.80
29	B1	3198	U	C6-N1-C1'	-6.38	112.27	121.20
29	B1	3200	G	C5-C6-N1	-6.38	108.31	111.50
29	B1	343	U	C2-N1-C1'	6.38	125.36	117.70
29	B1	3130	A	C6-C5-N7	-6.38	127.83	132.30
1	C1	427	C	N1-C2-O2	-6.38	115.07	118.90
29	D1	89	A	N1-C6-N6	6.38	122.43	118.60
29	D1	2358	A	C4-C5-C6	-6.38	113.81	117.00
29	B1	118	U	N3-C2-O2	-6.38	117.74	122.20
29	B1	146	U	C2-N1-C1'	6.38	125.35	117.70
29	B1	229	G	C8-N9-C4	-6.38	103.85	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2681	U	N1-C2-O2	6.38	127.26	122.80
29	D1	189	G	C6-N1-C2	-6.38	121.28	125.10
29	D1	593	C	C2-N1-C1'	6.38	125.81	118.80
29	D1	994	G	C8-N9-C1'	-6.38	118.71	127.00
29	D1	1115	G	C6-C5-N7	-6.38	126.57	130.40
29	D1	3025	C	N3-C2-O2	6.38	126.36	121.90
29	B1	1319	G	N3-C4-C5	6.38	131.79	128.60
29	B1	3246	G	N9-C4-C5	6.38	107.95	105.40
33	DB	103	PRO	N-CA-CB	6.38	110.95	103.30
29	B1	1113	G	C6-C5-N7	-6.37	126.58	130.40
29	B1	3219	G	C2-N3-C4	-6.37	108.71	111.90
29	D1	3180	A	C2-N3-C4	6.37	113.79	110.60
47	DR	97	PRO	N-CA-CB	6.37	110.95	103.30
29	B1	865	U	C2-N1-C1'	-6.37	110.06	117.70
29	B1	1525	G	C6-C5-N7	-6.37	126.58	130.40
29	D1	827	A	N1-C6-N6	-6.37	114.78	118.60
29	B1	2700	G	N3-C4-N9	6.37	129.82	126.00
29	B1	3246	G	C8-N9-C4	-6.37	103.85	106.40
37	BF	75	PRO	N-CA-CB	6.37	110.94	103.30
29	D1	2415	C	C2-N3-C4	-6.37	116.72	119.90
1	A1	1046	G	N3-C4-C5	-6.37	125.42	128.60
29	D1	687	U	C6-N1-C1'	6.37	130.11	121.20
1	A1	1606	C	N3-C2-O2	6.37	126.36	121.90
29	B1	1387	G	C5-C6-O6	-6.37	124.78	128.60
29	B1	1330	A	N1-C2-N3	6.36	132.48	129.30
29	B1	1422	G	N3-C2-N2	-6.36	115.45	119.90
29	B1	875	G	C4-N9-C1'	6.36	134.77	126.50
29	B1	3261	C	C6-N1-C2	-6.36	117.76	120.30
29	B1	2353	G	N1-C6-O6	6.36	123.72	119.90
1	A1	439	U	C2-N1-C1'	6.36	125.33	117.70
6	CE	67	PRO	N-CA-CB	6.36	110.93	103.30
29	D1	1677	G	C5-C6-O6	6.36	132.41	128.60
29	D1	2278	C	N1-C2-N3	-6.36	114.75	119.20
31	D3	87	G	C4-N9-C1'	6.36	134.76	126.50
29	D1	599	C	C6-N1-C2	6.36	122.84	120.30
1	C1	54	C	C6-N1-C2	6.35	122.84	120.30
1	C1	610	G	C4-C5-N7	6.35	113.34	110.80
1	C1	1234	A	N1-C2-N3	-6.35	126.12	129.30
29	D1	3261	C	N1-C2-N3	6.35	123.65	119.20
33	DB	66	PRO	N-CA-CB	6.35	110.92	103.30
1	C1	4	C	N3-C4-C5	6.35	124.44	121.90
1	C1	336	G	N1-C2-N3	6.35	127.71	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	358	U	N3-C2-O2	-6.35	117.75	122.20
17	CP	64	PRO	N-CA-CB	6.35	110.92	103.30
29	D1	404	G	C8-N9-C1'	-6.35	118.74	127.00
29	D1	1327	C	N1-C2-N3	6.35	123.65	119.20
29	D1	3376	A	C5-C6-N1	6.35	120.88	117.70
29	B1	659	G	N3-C4-C5	-6.35	125.42	128.60
29	B1	3069	G	C5-C6-O6	-6.35	124.79	128.60
29	D1	434	U	C2-N1-C1'	-6.35	110.08	117.70
29	D1	1190	A	N3-C4-C5	-6.35	122.36	126.80
29	D1	2920	U	N1-C2-N3	6.35	118.71	114.90
1	A1	329	G	N3-C4-C5	6.35	131.77	128.60
29	B1	3192	U	N3-C2-O2	6.35	126.64	122.20
29	B1	644	G	N1-C2-N3	6.35	127.71	123.90
38	BG	204	PRO	N-CA-CB	6.35	110.92	103.30
29	B1	703	G	C8-N9-C1'	6.34	135.25	127.00
29	B1	951	A	C5-C6-N1	6.34	120.87	117.70
29	B1	1190	A	N3-C4-C5	-6.34	122.36	126.80
29	B1	2687	G	C2-N3-C4	6.34	115.07	111.90
1	C1	440	U	N1-C2-O2	-6.34	118.36	122.80
33	DB	108	PRO	N-CA-CB	6.34	110.91	103.30
3	AB	239	PRO	N-CA-CB	6.34	110.91	103.30
72	DL	88	PRO	N-CA-CB	6.34	110.91	103.30
29	B1	1160	C	C6-N1-C1'	-6.34	113.19	120.80
35	BD	223	PRO	N-CA-CB	6.34	110.91	103.30
1	A1	1322	A	C8-N9-C4	6.34	108.34	105.80
29	B1	515	C	N3-C2-O2	6.34	126.34	121.90
29	B1	1371	G	C4-C5-N7	6.34	113.34	110.80
29	D1	2863	G	C5-C6-O6	6.34	132.40	128.60
29	B1	1050	U	C5-C6-N1	-6.34	119.53	122.70
29	B1	1556	C	N1-C2-O2	6.34	122.70	118.90
29	D1	1005	G	N3-C4-N9	-6.34	122.20	126.00
29	B1	518	G	N1-C6-O6	6.34	123.70	119.90
29	B1	2889	C	C5-C6-N1	-6.34	117.83	121.00
29	D1	685	G	C6-C5-N7	-6.34	126.60	130.40
29	D1	782	U	C5-C4-O4	-6.34	122.10	125.90
29	B1	951	A	C5-C6-N6	-6.33	118.63	123.70
29	B1	3323	A	N1-C2-N3	-6.33	126.13	129.30
29	B1	1368	U	C2-N1-C1'	6.33	125.30	117.70
29	B1	2400	G	C6-C5-N7	-6.33	126.60	130.40
30	D2	87	G	N1-C6-O6	6.33	123.70	119.90
58	Dc	42	PRO	N-CA-CB	6.33	110.90	103.30
29	B1	514	G	N9-C4-C5	6.33	107.93	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1367	G	C6-N1-C2	6.33	128.90	125.10
29	B1	3297	U	N1-C2-O2	6.33	127.23	122.80
29	D1	1212	A	C5-N7-C8	-6.33	100.73	103.90
29	D1	2887	A	N1-C6-N6	-6.33	114.80	118.60
29	D1	3220	G	N7-C8-N9	6.33	116.27	113.10
29	B1	1450	G	C4-N9-C1'	6.33	134.73	126.50
15	AN	96	PRO	N-CA-CB	6.33	110.89	103.30
29	B1	900	G	C8-N9-C4	6.33	108.93	106.40
1	C1	1653	C	C2-N1-C1'	-6.33	111.84	118.80
15	CN	71	PRO	N-CA-CB	6.33	110.89	103.30
29	D1	951	A	C8-N9-C4	6.33	108.33	105.80
29	B1	2865	U	N1-C2-O2	-6.33	118.37	122.80
1	C1	437	A	N1-C2-N3	6.33	132.46	129.30
29	D1	3220	G	C8-N9-C1'	-6.33	118.78	127.00
29	B1	2218	G	C5-C6-N1	6.33	114.66	111.50
29	B1	3177	G	N3-C4-C5	6.33	131.76	128.60
29	B1	3314	A	C4-C5-C6	6.33	120.16	117.00
29	B1	3322	A	N1-C2-N3	-6.33	126.14	129.30
1	C1	597	G	C5-C6-N1	6.33	114.66	111.50
29	D1	343	U	C2-N1-C1'	6.33	125.29	117.70
29	D1	2950	G	C4-C5-N7	6.33	113.33	110.80
1	C1	1141	G	C4-N9-C1'	6.32	134.72	126.50
1	C1	1335	U	N3-C2-O2	-6.32	117.77	122.20
29	D1	639	G	N1-C6-O6	6.32	123.69	119.90
2	AA	68	PRO	N-CA-CB	6.32	110.89	103.30
29	B1	3143	C	N3-C4-N4	6.32	122.42	118.00
29	B1	3215	A	C2-N3-C4	6.32	113.76	110.60
29	B1	3250	U	C2-N1-C1'	-6.32	110.11	117.70
29	D1	2707	C	C5-C6-N1	-6.32	117.84	121.00
30	D2	35	C	C2-N1-C1'	6.32	125.75	118.80
1	C1	1604	U	C2-N1-C1'	6.32	125.28	117.70
29	D1	3219	G	N3-C4-C5	6.32	131.76	128.60
29	B1	2149	A	C6-N1-C2	-6.32	114.81	118.60
1	C1	1789	G	N9-C4-C5	-6.32	102.87	105.40
29	D1	347	G	C6-C5-N7	-6.32	126.61	130.40
9	AH	94	PRO	N-CA-CB	6.32	110.88	103.30
29	B1	335	G	C4-C5-N7	6.32	113.33	110.80
29	B1	1410	U	C5-C4-O4	-6.32	122.11	125.90
29	B1	2601	A	N1-C2-N3	-6.32	126.14	129.30
29	B1	3019	U	C5-C4-O4	-6.32	122.11	125.90
29	D1	3185	U	C5-C4-O4	6.32	129.69	125.90
29	D1	3377	G	C4-N9-C1'	6.32	134.71	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	479	C	N1-C2-O2	-6.32	115.11	118.90
38	BG	210	PRO	N-CA-CB	6.32	110.88	103.30
29	D1	792	G	C8-N9-C4	6.32	108.93	106.40
54	BY	83	PRO	N-CA-CB	6.31	110.88	103.30
1	C1	684	A	C5-C6-N1	6.31	120.86	117.70
29	D1	1907	C	N1-C2-O2	-6.31	115.11	118.90
29	D1	3133	C	C5-C4-N4	-6.31	115.78	120.20
30	D2	10	C	C6-N1-C2	-6.31	117.78	120.30
1	A1	1632	C	C6-N1-C2	-6.31	117.78	120.30
29	B1	1388	U	C6-N1-C2	6.31	124.78	121.00
29	B1	2857	C	N3-C4-C5	6.31	124.42	121.90
1	C1	757	A	C2-N3-C4	-6.31	107.44	110.60
29	D1	1888	U	C2-N1-C1'	-6.31	110.13	117.70
38	DG	99	PRO	N-CA-CB	6.31	110.87	103.30
29	B1	1321	G	N7-C8-N9	-6.31	109.95	113.10
29	B1	1429	G	N1-C2-N2	-6.31	110.52	116.20
29	B1	2847	A	C8-N9-C4	-6.31	103.28	105.80
1	C1	825	U	N3-C2-O2	-6.31	117.78	122.20
1	C1	1203	A	N1-C2-N3	6.31	132.45	129.30
17	CP	88	PRO	N-CA-CB	6.31	110.87	103.30
29	D1	2912	G	N1-C6-O6	6.31	123.68	119.90
29	B1	70	A	C2-N3-C4	6.31	113.75	110.60
29	B1	284	A	C6-N1-C2	-6.31	114.82	118.60
1	C1	1173	C	N3-C4-C5	6.31	124.42	121.90
38	BG	193	PRO	N-CA-CB	6.30	110.87	103.30
29	D1	3380	U	C5-C4-O4	6.30	129.68	125.90
2	CA	118	PRO	N-CA-CB	6.30	110.86	103.30
15	CN	96	PRO	N-CA-CB	6.30	110.86	103.30
1	C1	1421	A	N1-C6-N6	-6.30	114.82	118.60
29	D1	2247	G	C8-N9-C4	6.30	108.92	106.40
29	B1	2419	A	C5-C6-N6	6.30	128.74	123.70
29	D1	1897	G	N1-C6-O6	6.30	123.68	119.90
1	A1	437	A	N1-C2-N3	6.30	132.45	129.30
29	B1	1124	U	C6-N1-C1'	-6.30	112.38	121.20
1	C1	1418	G	C5-C6-O6	-6.30	124.82	128.60
1	C1	1455	G	N3-C4-N9	-6.30	122.22	126.00
29	D1	2162	U	C5-C6-N1	-6.30	119.55	122.70
29	D1	3198	U	C5-C6-N1	6.30	125.85	122.70
29	B1	1193	A	N1-C6-N6	6.29	122.38	118.60
29	B1	1439	U	N1-C2-O2	-6.29	118.39	122.80
29	D1	171	G	N3-C4-N9	6.29	129.78	126.00
29	D1	1076	C	C2-N1-C1'	6.29	125.72	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1048	A	C5-N7-C8	-6.29	100.75	103.90
1	C1	825	U	N3-C4-C5	-6.29	110.82	114.60
73	DM	78	PRO	N-CA-CB	6.29	110.85	103.30
31	B3	58	G	C5-C6-O6	-6.29	124.83	128.60
29	D1	315	C	C2-N1-C1'	6.29	125.72	118.80
29	B1	1450	G	C5-N7-C8	-6.29	101.16	104.30
29	B1	517	G	C8-N9-C1'	6.29	135.18	127.00
29	B1	804	C	C2-N1-C1'	-6.29	111.88	118.80
29	B1	1048	A	C4-C5-C6	-6.29	113.86	117.00
1	C1	1773	C	N1-C2-O2	-6.29	115.13	118.90
29	D1	150	A	C6-N1-C2	-6.29	114.83	118.60
29	D1	352	A	C5-C6-N6	6.29	128.73	123.70
1	C1	1453	G	C8-N9-C4	6.29	108.92	106.40
29	D1	41	G	N3-C4-N9	-6.29	122.23	126.00
29	D1	1126	G	C8-N9-C4	-6.29	103.89	106.40
1	A1	986	G	C8-N9-C4	-6.29	103.89	106.40
29	B1	171	G	C8-N9-C1'	-6.29	118.83	127.00
29	B1	584	G	N7-C8-N9	-6.29	109.96	113.10
29	B1	645	A	N3-C4-C5	-6.29	122.40	126.80
58	Bc	42	PRO	N-CA-CB	6.29	110.84	103.30
29	B1	513	G	C4-C5-N7	-6.28	108.29	110.80
29	D1	1123	U	C5-C6-N1	-6.28	119.56	122.70
29	D1	3179	U	C2-N3-C4	6.28	130.77	127.00
29	D1	3291	G	C6-C5-N7	-6.28	126.63	130.40
1	A1	45	U	N1-C2-O2	6.28	127.20	122.80
29	B1	378	A	C2-N3-C4	6.28	113.74	110.60
31	D3	50	C	C2-N1-C1'	-6.28	111.89	118.80
30	B2	112	G	C5-C6-O6	6.28	132.37	128.60
29	D1	1450	G	N7-C8-N9	6.28	116.24	113.10
54	BY	50	PRO	N-CA-CB	6.28	110.83	103.30
29	D1	723	U	C5-C6-N1	6.28	125.84	122.70
29	B1	815	G	C5-C6-O6	-6.28	124.83	128.60
29	B1	3291	G	C8-N9-C1'	-6.28	118.84	127.00
3	CB	37	PRO	N-CA-CB	6.27	110.83	103.30
29	D1	1337	A	C8-N9-C4	6.27	108.31	105.80
29	B1	2935	U	N1-C2-N3	6.27	118.66	114.90
29	D1	1302	A	N3-C4-C5	-6.27	122.41	126.80
29	D1	1857	C	N3-C4-C5	6.27	124.41	121.90
29	D1	1905	G	N3-C4-N9	-6.27	122.24	126.00
3	AB	173	PRO	N-CA-CB	6.27	110.83	103.30
29	B1	26	A	N3-C4-C5	-6.27	122.41	126.80
1	C1	1348	A	N1-C6-N6	6.27	122.36	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	CR	47	PRO	N-CA-CB	6.27	110.82	103.30
29	D1	3113	A	C8-N9-C4	6.27	108.31	105.80
29	D1	666	A	C2-N3-C4	-6.27	107.47	110.60
29	D1	2845	A	C6-C5-N7	-6.27	127.91	132.30
29	D1	3185	U	N3-C2-O2	-6.27	117.81	122.20
29	D1	3199	G	N3-C2-N2	-6.27	115.51	119.90
29	B1	1547	G	N9-C4-C5	-6.27	102.89	105.40
29	D1	1160	C	N1-C2-N3	-6.27	114.81	119.20
29	D1	3307	A	N1-C6-N6	6.27	122.36	118.60
29	B1	698	U	C2-N1-C1'	6.26	125.22	117.70
29	B1	927	C	C5-C6-N1	-6.26	117.87	121.00
29	D1	575	G	C8-N9-C4	-6.26	103.89	106.40
29	D1	2714	G	C2-N3-C4	-6.26	108.77	111.90
29	B1	2331	C	C5-C6-N1	-6.26	117.87	121.00
29	B1	3178	A	C2-N3-C4	-6.26	107.47	110.60
30	B2	9	C	C4-C5-C6	6.26	120.53	117.40
30	B2	58	C	C6-N1-C1'	-6.26	113.29	120.80
37	BF	123	PRO	N-CA-CB	6.26	110.81	103.30
29	D1	676	G	C8-N9-C1'	-6.26	118.86	127.00
29	D1	3103	A	C5-C6-N1	6.26	120.83	117.70
29	B1	1171	G	C8-N9-C4	-6.26	103.90	106.40
5	CD	88	PRO	N-CA-CB	6.26	110.81	103.30
29	D1	1439	U	N3-C2-O2	6.26	126.58	122.20
29	D1	1547	G	C5-C6-O6	-6.26	124.84	128.60
30	D2	101	G	C8-N9-C1'	6.25	135.13	127.00
1	A1	577	G	C8-N9-C1'	-6.25	118.87	127.00
4	AC	43	PRO	N-CA-CB	6.25	110.80	103.30
29	B1	836	A	C5-C6-N1	6.25	120.83	117.70
29	B1	853	G	N7-C8-N9	-6.25	109.97	113.10
29	D1	752	C	C6-N1-C1'	-6.25	113.30	120.80
29	D1	1186	G	C6-C5-N7	-6.25	126.65	130.40
57	Db	123	LYS	N-CA-C	-6.25	94.11	111.00
1	A1	1431	C	C6-N1-C2	6.25	122.80	120.30
29	B1	1522	U	C2-N1-C1'	6.25	125.20	117.70
29	B1	2248	C	C6-N1-C2	6.25	122.80	120.30
29	B1	3257	C	C2-N3-C4	-6.25	116.77	119.90
1	C1	1564	U	C6-N1-C2	6.25	124.75	121.00
29	D1	1403	C	N3-C4-C5	6.25	124.40	121.90
29	D1	2700	G	C5-C6-O6	-6.25	124.85	128.60
29	D1	3328	G	N9-C4-C5	-6.25	102.90	105.40
29	B1	3386	G	C2-N3-C4	-6.25	108.78	111.90
29	B1	3322	A	N3-C4-C5	6.25	131.17	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	514	G	N3-C2-N2	-6.25	115.53	119.90
29	D1	2355	G	C4-N9-C1'	6.25	134.62	126.50
1	A1	1450	U	N3-C4-C5	6.25	118.35	114.60
29	B1	94	G	C5-C6-O6	6.25	132.35	128.60
29	B1	1298	C	C6-N1-C2	6.25	122.80	120.30
29	B1	2919	A	C6-C5-N7	-6.25	127.93	132.30
35	BD	240	PRO	N-CA-CB	6.25	110.80	103.30
1	C1	400	A	N1-C6-N6	-6.25	114.85	118.60
29	D1	94	G	C8-N9-C1'	6.25	135.12	127.00
29	D1	949	C	N1-C2-N3	6.25	123.57	119.20
1	A1	614	C	C6-N1-C2	6.25	122.80	120.30
29	B1	3044	G	N7-C8-N9	-6.25	109.98	113.10
29	D1	677	A	N7-C8-N9	6.25	116.92	113.80
58	Dc	39	PRO	N-CA-CB	6.25	110.79	103.30
1	A1	1450	U	N1-C2-O2	6.24	127.17	122.80
29	B1	2881	C	C5-C6-N1	-6.24	117.88	121.00
36	BE	84	PRO	N-CA-CB	6.24	110.79	103.30
29	D1	674	G	N1-C6-O6	6.24	123.65	119.90
29	D1	2365	C	C5-C6-N1	-6.24	117.88	121.00
29	D1	720	A	N7-C8-N9	6.24	116.92	113.80
53	DX	101	PRO	N-CA-CB	6.24	110.79	103.30
29	B1	164	A	C5-C6-N6	-6.24	118.71	123.70
29	B1	3069	G	C6-C5-N7	-6.24	126.66	130.40
41	BJ	179	PRO	N-CA-CB	6.24	110.79	103.30
45	BP	110	PRO	N-CA-CB	6.24	110.79	103.30
1	C1	402	C	C3'-C2'-C1'	-6.24	96.51	101.50
29	D1	1123	U	C2-N1-C1'	-6.24	110.21	117.70
40	DI	98	PRO	N-CA-CB	6.24	110.79	103.30
29	B1	738	A	N1-C2-N3	-6.24	126.18	129.30
29	B1	826	G	N7-C8-N9	-6.24	109.98	113.10
30	B2	9	C	C6-N1-C2	-6.24	117.80	120.30
30	B2	65	G	N3-C4-N9	6.24	129.74	126.00
30	B2	105	C	N3-C4-C5	6.24	124.39	121.90
29	D1	651	G	C2-N3-C4	-6.24	108.78	111.90
29	D1	1099	A	C2-N3-C4	-6.24	107.48	110.60
29	B1	746	A	C5-C6-N1	6.24	120.82	117.70
29	B1	3188	G	N3-C4-N9	6.24	129.74	126.00
1	C1	313	U	C5-C6-N1	-6.24	119.58	122.70
29	D1	2282	U	N3-C2-O2	6.24	126.56	122.20
29	D1	3099	C	C2-N3-C4	6.24	123.02	119.90
29	D1	1331	U	N1-C2-O2	-6.23	118.44	122.80
54	BY	45	MET	N-CA-C	6.23	127.83	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	1141	G	C6-C5-N7	-6.23	126.66	130.40
29	D1	2895	G	N3-C2-N2	-6.23	115.54	119.90
29	D1	3143	C	N3-C2-O2	6.23	126.26	121.90
29	B1	779	G	N9-C4-C5	-6.23	102.91	105.40
29	B1	1091	A	C5-C6-N6	-6.23	118.72	123.70
29	B1	3084	C	C2-N1-C1'	6.23	125.65	118.80
29	B1	3227	A	N1-C2-N3	-6.23	126.19	129.30
29	D1	1111	U	C2-N3-C4	-6.23	123.26	127.00
29	B1	584	G	C4-N9-C1'	-6.23	118.40	126.50
29	B1	3379	C	N3-C4-C5	-6.23	119.41	121.90
29	D1	1152	G	N3-C4-C5	6.23	131.72	128.60
29	B1	380	U	N3-C2-O2	6.23	126.56	122.20
1	C1	403	G	N3-C4-C5	6.23	131.71	128.60
1	C1	1131	A	C5-C6-N1	6.23	120.81	117.70
29	D1	284	A	N1-C6-N6	-6.23	114.86	118.60
29	D1	2262	A	C5-C6-N1	-6.23	114.59	117.70
29	B1	3177	G	C8-N9-C1'	6.23	135.09	127.00
8	CG	82	PRO	N-CA-CB	6.23	110.77	103.30
29	D1	137	G	N9-C4-C5	-6.23	102.91	105.40
1	A1	1599	C	N1-C2-O2	6.22	122.64	118.90
29	B1	718	G	C5-C6-N1	6.22	114.61	111.50
29	B1	1312	C	C6-N1-C2	-6.22	117.81	120.30
29	B1	1650	G	C5-C6-N1	6.22	114.61	111.50
29	B1	3269	U	C5-C4-O4	-6.22	122.17	125.90
29	B1	3062	G	C5-C6-O6	-6.22	124.87	128.60
29	B1	3109	G	N3-C4-C5	-6.22	125.49	128.60
29	B1	2983	C	N3-C2-O2	-6.22	117.55	121.90
29	D1	2287	C	C5-C4-N4	6.22	124.56	120.20
1	A1	1431	C	N3-C4-C5	6.22	124.39	121.90
29	D1	3209	A	C8-N9-C4	-6.22	103.31	105.80
59	Dd	6	PRO	N-CA-CB	6.22	110.76	103.30
29	D1	1902	G	C4-N9-C1'	6.22	134.58	126.50
29	D1	1941	C	C6-N1-C2	6.22	122.79	120.30
1	A1	869	A	N3-C4-C5	-6.22	122.45	126.80
1	A1	1408	G	C4-N9-C1'	6.22	134.58	126.50
29	D1	1313	G	C5-C6-O6	6.22	132.33	128.60
29	D1	3314	A	N3-C4-C5	-6.22	122.45	126.80
31	D3	16	G	N1-C6-O6	6.22	123.63	119.90
29	B1	966	U	N3-C4-O4	6.21	123.75	119.40
1	C1	647	G	N3-C4-C5	-6.21	125.49	128.60
29	B1	963	G	C4-C5-C6	6.21	122.53	118.80
29	D1	3088	G	N1-C6-O6	6.21	123.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2881	C	C6-N1-C2	6.21	122.78	120.30
29	B1	2924	U	C6-N1-C2	6.21	124.73	121.00
30	B2	113	C	N3-C4-C5	6.21	124.39	121.90
29	D1	94	G	C4-N9-C1'	-6.21	118.43	126.50
29	D1	2690	G	C5-C6-O6	-6.21	124.87	128.60
29	D1	3019	U	C2-N3-C4	-6.21	123.27	127.00
29	D1	2527	G	N3-C4-C5	6.21	131.71	128.60
29	B1	3096	C	C6-N1-C2	6.21	122.78	120.30
29	D1	1010	G	C5-C6-O6	-6.21	124.88	128.60
29	D1	1333	C	C6-N1-C2	6.21	122.78	120.30
29	B1	712	G	N9-C4-C5	-6.21	102.92	105.40
29	B1	931	C	C6-N1-C2	-6.21	117.82	120.30
29	B1	2353	G	N9-C4-C5	-6.21	102.92	105.40
1	C1	789	A	C8-N9-C4	-6.21	103.32	105.80
15	CN	55	PRO	N-CA-CB	6.21	110.75	103.30
29	D1	576	C	N3-C2-O2	6.21	126.24	121.90
35	DD	205	PRO	N-CA-CB	6.21	110.75	103.30
1	C1	479	C	C2-N1-C1'	-6.21	111.97	118.80
29	B1	589	A	N7-C8-N9	6.20	116.90	113.80
29	B1	2280	A	C8-N9-C4	-6.20	103.32	105.80
1	C1	1438	G	N3-C4-N9	6.20	129.72	126.00
12	CK	22	PRO	N-CA-CB	6.20	110.75	103.30
29	D1	589	A	C4-N9-C1'	6.20	137.47	126.30
29	D1	716	A	C8-N9-C4	-6.20	103.32	105.80
29	D1	2974	U	C5-C6-N1	-6.20	119.60	122.70
29	D1	1152	G	C6-C5-N7	-6.20	126.68	130.40
29	D1	1367	G	N3-C4-C5	6.20	131.70	128.60
29	D1	3201	C	C6-N1-C2	-6.20	117.82	120.30
29	B1	676	G	C8-N9-C1'	-6.20	118.94	127.00
29	B1	744	A	N7-C8-N9	-6.20	110.70	113.80
29	B1	1480	G	C4-C5-N7	6.20	113.28	110.80
1	C1	1725	U	C6-N1-C1'	-6.20	112.52	121.20
1	A1	1045	C	N3-C4-N4	-6.20	113.66	118.00
1	A1	1591	C	N1-C2-O2	-6.20	115.18	118.90
29	B1	1085	A	N7-C8-N9	6.20	116.90	113.80
29	B1	1320	C	C6-N1-C2	-6.20	117.82	120.30
29	D1	706	A	C2-N3-C4	-6.20	107.50	110.60
29	D1	890	C	C2-N3-C4	-6.20	116.80	119.90
29	D1	2618	G	C8-N9-C4	-6.20	103.92	106.40
29	B1	656	A	N3-C4-C5	-6.20	122.46	126.80
29	B1	1457	U	N1-C2-O2	-6.20	118.46	122.80
1	C1	314	C	C6-N1-C2	6.20	122.78	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2267	C	N1-C2-O2	-6.20	115.18	118.90
29	B1	1918	C	C6-N1-C2	-6.19	117.82	120.30
29	B1	2601	A	N3-C4-C5	6.19	131.14	126.80
1	C1	1642	G	N3-C4-C5	6.19	131.70	128.60
1	A1	1173	C	N3-C4-C5	6.19	124.38	121.90
6	AE	67	PRO	N-CA-CB	6.19	110.73	103.30
29	B1	2990	G	N3-C4-C5	6.19	131.70	128.60
29	D1	497	C	N3-C4-C5	6.19	124.38	121.90
29	D1	1330	A	C5-C6-N1	-6.19	114.60	117.70
29	D1	2287	C	N1-C2-N3	6.19	123.53	119.20
29	D1	2329	C	N1-C2-O2	-6.19	115.19	118.90
1	A1	869	A	N3-C4-N9	6.19	132.35	127.40
29	B1	2689	A	C4-C5-C6	6.19	120.09	117.00
29	D1	1318	A	C5-C6-N1	6.19	120.80	117.70
29	D1	1670	C	N1-C2-O2	6.19	122.61	118.90
29	D1	2941	A	N1-C6-N6	-6.19	114.89	118.60
54	DY	50	PRO	N-CA-CB	6.19	110.73	103.30
29	B1	2330	C	C5-C6-N1	-6.19	117.91	121.00
29	D1	1048	A	C4-C5-C6	-6.19	113.91	117.00
29	D1	2349	U	N1-C2-N3	6.19	118.61	114.90
29	B1	756	U	C5-C4-O4	-6.19	122.19	125.90
2	CA	11	PRO	N-CA-CB	6.19	110.72	103.30
29	D1	190	U	C5-C4-O4	6.19	129.61	125.90
29	D1	434	U	N3-C2-O2	6.19	126.53	122.20
29	D1	517	G	C8-N9-C1'	6.19	135.04	127.00
29	D1	646	A	C2-N3-C4	-6.19	107.51	110.60
54	DY	119	PRO	N-CA-CB	6.19	110.73	103.30
29	B1	924	G	C4-C5-N7	6.18	113.27	110.80
29	B1	2807	U	C5-C4-O4	-6.18	122.19	125.90
1	C1	684	A	C6-N1-C2	-6.18	114.89	118.60
1	C1	1303	U	C2-N1-C1'	-6.18	110.28	117.70
1	C1	1378	U	C5-C6-N1	6.18	125.79	122.70
1	C1	1644	C	C5-C6-N1	-6.18	117.91	121.00
29	B1	422	A	C8-N9-C1'	6.18	138.83	127.70
29	B1	2901	G	N3-C4-N9	6.18	129.71	126.00
30	B2	77	G	N9-C4-C5	-6.18	102.93	105.40
1	C1	1145	U	N3-C2-O2	6.18	126.53	122.20
7	CF	95	PRO	N-CA-CB	6.18	110.72	103.30
29	D1	45	A	N3-C4-C5	6.18	131.13	126.80
29	D1	86	G	C4-N9-C1'	-6.18	118.46	126.50
29	B1	1490	A	N7-C8-N9	-6.18	110.71	113.80
1	A1	1788	G	N3-C4-N9	-6.18	122.29	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	CB	182	PRO	N-CA-CB	6.18	110.72	103.30
29	B1	1059	G	N3-C4-C5	6.18	131.69	128.60
1	C1	1073	G	C8-N9-C1'	-6.18	118.97	127.00
29	D1	2725	U	C5-C6-N1	6.18	125.79	122.70
29	D1	3002	C	C5-C6-N1	-6.18	117.91	121.00
3	AB	85	PRO	N-CA-CB	6.17	110.71	103.30
33	BB	206	PRO	N-CA-CB	6.17	110.71	103.30
29	D1	837	A	C8-N9-C4	-6.17	103.33	105.80
29	D1	1899	G	C5-C6-O6	6.17	132.31	128.60
29	D1	2689	A	C4-N9-C1'	6.17	137.42	126.30
29	D1	2823	G	C4-N9-C1'	-6.17	118.47	126.50
1	A1	1498	G	C8-N9-C1'	-6.17	118.97	127.00
29	D1	536	U	N3-C2-O2	6.17	126.52	122.20
29	D1	651	G	C4-C5-N7	6.17	113.27	110.80
29	B1	352	A	N1-C6-N6	-6.17	114.90	118.60
29	B1	703	G	N3-C4-C5	6.17	131.69	128.60
29	D1	1296	C	C2-N3-C4	-6.17	116.81	119.90
29	D1	3205	G	N3-C4-N9	6.17	129.70	126.00
29	B1	91	G	N3-C4-C5	-6.17	125.52	128.60
37	DF	49	GLY	N-CA-C	-6.17	97.67	113.10
1	A1	1303	U	N1-C2-O2	-6.17	118.48	122.80
19	AR	47	PRO	N-CA-CB	6.17	110.70	103.30
29	B1	909	G	N1-C2-N3	6.17	127.60	123.90
29	B1	2278	C	C2-N1-C1'	6.17	125.59	118.80
18	CQ	55	PRO	N-CA-CB	6.17	110.70	103.30
12	AK	22	PRO	N-CA-CB	6.17	110.70	103.30
29	B1	985	U	C2-N1-C1'	-6.17	110.30	117.70
29	B1	3392	U	N3-C4-C5	6.17	118.30	114.60
31	B3	41	A	N7-C8-N9	6.17	116.88	113.80
29	D1	94	G	C6-C5-N7	6.17	134.10	130.40
1	A1	13	C	C6-N1-C1'	-6.17	113.40	120.80
29	B1	513	G	C6-N1-C2	6.17	128.80	125.10
1	A1	752	A	N1-C6-N6	6.16	122.30	118.60
36	BE	181	PRO	N-CA-CB	6.16	110.70	103.30
1	A1	1455	G	C8-N9-C4	-6.16	103.94	106.40
29	B1	504	A	C4-C5-N7	6.16	113.78	110.70
1	A1	1611	A	N7-C8-N9	6.16	116.88	113.80
29	B1	192	C	N3-C2-O2	6.16	126.21	121.90
29	B1	1458	U	C2-N3-C4	-6.16	123.31	127.00
35	BD	205	PRO	N-CA-CB	6.16	110.69	103.30
29	D1	335	G	N1-C6-O6	6.16	123.59	119.90
29	D1	1099	A	C8-N9-C4	6.16	108.26	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3059	G	N9-C4-C5	-6.16	102.94	105.40
29	B1	3323	A	N3-C4-C5	6.16	131.11	126.80
29	D1	88	A	C8-N9-C4	6.16	108.26	105.80
29	D1	3018	C	N1-C2-O2	-6.16	115.21	118.90
29	B1	3219	G	N7-C8-N9	6.16	116.18	113.10
29	B1	3257	C	N3-C4-N4	-6.16	113.69	118.00
29	D1	2901	G	C4-C5-N7	6.16	113.26	110.80
29	D1	1324	U	C5-C4-O4	-6.15	122.21	125.90
29	D1	3332	U	N3-C4-C5	-6.15	110.91	114.60
29	B1	3059	G	N1-C6-O6	6.15	123.59	119.90
1	C1	981	U	C6-N1-C1'	-6.15	112.59	121.20
29	D1	222	A	C5-C6-N6	-6.15	118.78	123.70
29	D1	424	G	C4-C5-C6	6.15	122.49	118.80
29	D1	2120	A	C2-N3-C4	-6.15	107.52	110.60
29	B1	883	A	N1-C6-N6	-6.15	114.91	118.60
29	B1	2602	G	N3-C4-C5	6.15	131.68	128.60
29	D1	537	A	C5-C6-N6	6.15	128.62	123.70
29	B1	327	A	C5-C6-N1	-6.15	114.63	117.70
29	B1	1165	A	C2-N3-C4	-6.15	107.53	110.60
29	B1	1495	U	C5-C6-N1	-6.15	119.63	122.70
29	B1	1781	C	C2-N1-C1'	6.15	125.56	118.80
29	D1	1324	U	N3-C4-O4	6.15	123.70	119.40
29	D1	3227	A	C5-C6-N6	6.15	128.62	123.70
30	D2	103	A	N1-C6-N6	6.15	122.29	118.60
3	AB	74	PRO	N-CA-CB	6.15	110.67	103.30
29	B1	1047	A	N9-C4-C5	6.15	108.26	105.80
29	B1	2142	A	C8-N9-C4	6.15	108.26	105.80
29	B1	622	A	N1-C6-N6	6.14	122.29	118.60
29	B1	3201	C	C6-N1-C2	-6.14	117.84	120.30
1	C1	1636	C	N3-C4-C5	6.14	124.36	121.90
29	D1	744	A	C4-C5-N7	-6.14	107.63	110.70
29	D1	2642	A	C8-N9-C4	6.14	108.26	105.80
29	D1	3025	C	N1-C2-O2	-6.14	115.21	118.90
15	AN	55	PRO	N-CA-CB	6.14	110.67	103.30
29	B1	1397	C	N1-C2-O2	-6.14	115.22	118.90
29	D1	338	A	C8-N9-C4	-6.14	103.34	105.80
29	D1	857	G	C5-C6-O6	6.14	132.28	128.60
29	D1	1525	G	C6-C5-N7	-6.14	126.71	130.40
29	D1	2392	C	N1-C2-O2	6.14	122.59	118.90
29	D1	2916	U	N3-C2-O2	6.14	126.50	122.20
1	A1	1498	G	C4-N9-C1'	6.14	134.48	126.50
29	D1	1324	U	C5-C6-N1	6.14	125.77	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	281	G	C5-C6-O6	-6.14	124.92	128.60
29	B1	2968	G	N1-C6-O6	-6.14	116.22	119.90
29	B1	3219	G	N3-C4-C5	6.14	131.67	128.60
46	BQ	11	PRO	N-CA-CB	6.14	110.67	103.30
1	C1	16	G	N3-C2-N2	6.14	124.20	119.90
44	DO	154	PRO	N-CA-CB	6.14	110.67	103.30
21	AT	247	PRO	N-CA-CB	6.14	110.67	103.30
56	Ba	30	PRO	N-CA-CB	6.14	110.67	103.30
29	D1	2716	U	C2-N1-C1'	6.14	125.07	117.70
30	D2	46	A	N9-C4-C5	6.14	108.25	105.80
1	A1	406	U	N3-C2-O2	6.14	126.50	122.20
4	AC	192	PRO	N-CA-CB	6.14	110.66	103.30
29	B1	676	G	C8-N9-C4	-6.14	103.94	106.40
29	B1	2278	C	C6-N1-C1'	-6.14	113.44	120.80
29	B1	3377	G	C4-N9-C1'	6.14	134.48	126.50
1	C1	24	U	C5-C4-O4	-6.14	122.22	125.90
1	A1	825	U	C5-C6-N1	-6.13	119.63	122.70
29	B1	370	U	N3-C2-O2	6.13	126.49	122.20
29	B1	963	G	C5-C6-O6	-6.13	124.92	128.60
29	B1	1868	G	N1-C6-O6	6.13	123.58	119.90
1	C1	1745	G	C5-C6-N1	6.13	114.57	111.50
29	D1	607	A	N3-C4-C5	-6.13	122.51	126.80
1	A1	1541	G	C6-C5-N7	-6.13	126.72	130.40
29	B1	3393	U	C5-C6-N1	-6.13	119.63	122.70
29	B1	857	G	C5-C6-O6	6.13	132.28	128.60
1	C1	825	U	C5-C6-N1	-6.13	119.64	122.70
29	D1	2396	G	C8-N9-C1'	-6.13	119.03	127.00
14	AM	118	PRO	N-CA-CB	6.13	110.66	103.30
29	B1	148	G	C5-C6-N1	-6.13	108.44	111.50
29	B1	899	U	C5-C6-N1	-6.13	119.64	122.70
29	B1	2669	G	N9-C4-C5	-6.13	102.95	105.40
29	B1	3367	C	C6-N1-C2	6.13	122.75	120.30
29	D1	566	G	N9-C4-C5	6.13	107.85	105.40
29	D1	1143	A	C8-N9-C4	6.13	108.25	105.80
29	B1	2429	G	C8-N9-C4	-6.13	103.95	106.40
30	B2	105	C	C6-N1-C2	6.13	122.75	120.30
29	D1	537	A	N1-C6-N6	-6.13	114.92	118.60
29	D1	2700	G	C4-C5-N7	6.13	113.25	110.80
1	A1	1476	C	C6-N1-C2	6.12	122.75	120.30
8	AG	85	PRO	N-CA-CB	6.12	110.65	103.30
29	D1	968	G	N1-C2-N3	6.12	127.58	123.90
29	D1	1388	U	C2-N1-C1'	-6.12	110.35	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	481	A	C6-N1-C2	6.12	122.27	118.60
1	A1	1438	G	C6-C5-N7	-6.12	126.72	130.40
29	D1	2664	C	N1-C2-O2	6.12	122.57	118.90
1	A1	1792	G	N1-C6-O6	6.12	123.57	119.90
29	B1	151	A	C5-C6-N6	-6.12	118.80	123.70
29	B1	364	G	C8-N9-C1'	-6.12	119.04	127.00
29	B1	2700	G	C4-N9-C1'	6.12	134.46	126.50
29	B1	3268	A	C4-N9-C1'	-6.12	115.28	126.30
1	C1	1373	C	N1-C2-O2	-6.12	115.23	118.90
29	D1	2186	U	C5-C4-O4	6.12	129.57	125.90
29	B1	2639	G	N1-C6-O6	6.12	123.57	119.90
1	C1	358	U	N1-C2-O2	6.12	127.08	122.80
1	C1	1784	C	C6-N1-C2	6.12	122.75	120.30
29	B1	308	A	C4-C5-C6	6.12	120.06	117.00
29	B1	3173	G	C2-N3-C4	-6.12	108.84	111.90
29	D1	606	C	C5-C6-N1	6.12	124.06	121.00
29	D1	1371	G	C8-N9-C1'	-6.12	119.05	127.00
1	C1	1733	C	N1-C2-O2	-6.12	115.23	118.90
29	D1	1322	U	C5-C6-N1	6.12	125.76	122.70
6	AE	169	PRO	N-CA-CB	6.12	110.64	103.30
29	B1	52	A	N3-C4-C5	-6.12	122.52	126.80
1	C1	1141	G	N3-C4-N9	6.12	129.67	126.00
29	B1	345	G	C4-C5-C6	6.11	122.47	118.80
29	D1	1148	G	C4-C5-N7	6.11	113.25	110.80
29	D1	1371	G	C4-N9-C1'	6.11	134.45	126.50
29	D1	3209	A	N9-C4-C5	6.11	108.25	105.80
1	A1	437	A	C6-C5-N7	-6.11	128.02	132.30
29	B1	1609	C	N1-C2-O2	-6.11	115.23	118.90
29	B1	2892	A	C5-N7-C8	-6.11	100.84	103.90
1	C1	330	G	C5-C6-O6	-6.11	124.93	128.60
3	AB	171	PRO	N-CA-CB	6.11	110.63	103.30
29	B1	3228	C	N3-C4-C5	-6.11	119.45	121.90
45	BP	58	LEU	N-CA-C	-6.11	94.50	111.00
57	Bb	7	PRO	N-CA-CB	6.11	110.63	103.30
29	D1	2199	G	C8-N9-C4	-6.11	103.96	106.40
30	D2	113	C	N3-C2-O2	-6.11	117.62	121.90
29	D1	1517	G	N3-C4-C5	6.11	131.65	128.60
29	D1	3108	G	N1-C6-O6	-6.11	116.23	119.90
29	B1	625	G	C5-C6-O6	6.11	132.26	128.60
31	B3	92	A	C5-C6-N6	6.11	128.59	123.70
29	D1	606	C	N1-C2-O2	6.11	122.56	118.90
29	D1	3387	U	N1-C2-O2	-6.11	118.52	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1324	U	N3-C4-O4	6.11	123.67	119.40
29	B1	2362	C	C5-C4-N4	-6.11	115.93	120.20
29	B1	2935	U	C5-C4-O4	6.11	129.56	125.90
35	BD	102	PRO	N-CA-CB	6.11	110.63	103.30
1	C1	462	G	C4-N9-C1'	-6.11	118.56	126.50
29	D1	729	C	N3-C2-O2	-6.11	117.63	121.90
29	D1	2339	C	C6-N1-C2	-6.11	117.86	120.30
29	D1	3314	A	C8-N9-C4	-6.11	103.36	105.80
30	D2	112	G	C6-N1-C2	-6.11	121.44	125.10
29	B1	500	C	C5-C6-N1	6.10	124.05	121.00
29	B1	859	G	N3-C4-N9	6.10	129.66	126.00
1	C1	1279	C	N1-C2-O2	-6.10	115.24	118.90
37	DF	123	PRO	N-CA-CB	6.10	110.62	103.30
29	B1	853	G	C5-N7-C8	6.10	107.35	104.30
29	D1	1148	G	C6-C5-N7	-6.10	126.74	130.40
29	D1	2881	C	N3-C4-C5	6.10	124.34	121.90
29	D1	718	G	N3-C4-N9	6.10	129.66	126.00
29	D1	2970	C	C2-N1-C1'	6.10	125.51	118.80
29	B1	1861	G	N3-C4-C5	6.10	131.65	128.60
30	B2	112	G	N3-C4-C5	-6.10	125.55	128.60
45	BP	70	PRO	N-CA-CB	6.10	110.62	103.30
1	C1	1149	G	C5-C6-N1	6.10	114.55	111.50
29	D1	1140	G	C8-N9-C4	6.10	108.84	106.40
29	D1	1661	G	C4-C5-N7	6.10	113.24	110.80
29	B1	293	C	N1-C2-O2	-6.10	115.24	118.90
29	B1	3220	G	C6-C5-N7	-6.09	126.74	130.40
1	C1	1177	C	N3-C4-C5	6.09	124.34	121.90
29	D1	364	G	C8-N9-C1'	-6.09	119.08	127.00
29	D1	1126	G	C2-N3-C4	-6.09	108.85	111.90
29	D1	3227	A	C5-C6-N1	-6.09	114.65	117.70
29	B1	2289	U	C5-C6-N1	-6.09	119.65	122.70
29	D1	1134	G	C5-C6-O6	6.09	132.25	128.60
29	D1	3213	A	C5-N7-C8	-6.09	100.85	103.90
45	DP	76	PRO	N-CA-C	-6.09	96.26	112.10
1	A1	437	A	C5-C6-N1	6.09	120.74	117.70
1	A1	825	U	C2-N3-C4	-6.09	123.35	127.00
29	B1	583	G	C5-C6-O6	6.09	132.25	128.60
29	B1	608	A	C6-C5-N7	-6.09	128.04	132.30
29	B1	669	U	N3-C2-O2	-6.09	117.94	122.20
29	B1	1422	G	C2-N3-C4	-6.09	108.86	111.90
29	B1	1431	G	N3-C4-C5	-6.09	125.56	128.60
29	B1	2353	G	C6-C5-N7	-6.09	126.75	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3280	U	N3-C2-O2	6.09	126.46	122.20
29	D1	3045	G	C8-N9-C4	-6.09	103.96	106.40
73	DM	71	PRO	N-CA-CB	6.09	110.61	103.30
29	B1	3271	G	C2-N3-C4	6.09	114.94	111.90
33	BB	197	PRO	N-CA-CB	6.09	110.61	103.30
29	D1	2140	U	C5-C6-N1	-6.09	119.66	122.70
1	A1	1141	G	N9-C4-C5	-6.09	102.97	105.40
29	B1	576	C	N3-C4-N4	6.09	122.26	118.00
29	B1	3231	U	N3-C2-O2	-6.09	117.94	122.20
1	C1	1198	G	N9-C4-C5	6.09	107.83	105.40
31	D3	34	U	C6-N1-C2	-6.09	117.35	121.00
46	DQ	84	PRO	N-CA-CB	6.09	110.60	103.30
36	DE	255	PRO	N-CA-CB	6.08	110.60	103.30
1	A1	427	C	C6-N1-C2	6.08	122.73	120.30
29	D1	1885	U	C5-C6-N1	-6.08	119.66	122.70
29	D1	2361	A	N1-C6-N6	-6.08	114.95	118.60
50	DU	50	PRO	N-CA-CB	6.08	110.60	103.30
29	B1	26	A	C4-C5-C6	6.08	120.04	117.00
29	B1	902	G	C8-N9-C4	-6.08	103.97	106.40
29	B1	2369	G	C6-C5-N7	-6.08	126.75	130.40
29	B1	3047	U	N1-C2-O2	-6.08	118.54	122.80
29	B1	3131	U	C5-C4-O4	-6.08	122.25	125.90
32	BA	61	PRO	N-CA-CB	6.08	110.60	103.30
1	C1	1634	C	N1-C2-N3	-6.08	114.94	119.20
29	B1	712	G	C6-C5-N7	-6.08	126.75	130.40
29	B1	1324	U	C2-N1-C1'	6.08	125.00	117.70
29	B1	1851	G	C5-C6-O6	-6.08	124.95	128.60
36	DE	19	PRO	N-CA-CB	6.08	110.60	103.30
41	BJ	47	PRO	N-CA-CB	6.08	110.59	103.30
1	C1	1462	G	N9-C4-C5	-6.08	102.97	105.40
29	D1	3108	G	C6-C5-N7	6.08	134.05	130.40
29	B1	1439	U	N3-C4-C5	6.08	118.25	114.60
29	D1	954	U	C5-C4-O4	-6.08	122.25	125.90
29	B1	585	A	N9-C4-C5	6.08	108.23	105.80
54	BY	119	PRO	N-CA-CB	6.08	110.59	103.30
29	D1	2964	G	C4-C5-N7	-6.08	108.37	110.80
29	B1	38	U	C5-C6-N1	-6.07	119.66	122.70
29	B1	422	A	C2-N3-C4	6.07	113.64	110.60
29	B1	1551	C	C2-N3-C4	-6.07	116.86	119.90
29	B1	1868	G	C2-N3-C4	-6.07	108.86	111.90
29	B1	2892	A	N1-C2-N3	-6.07	126.26	129.30
29	D1	1365	G	C8-N9-C4	-6.07	103.97	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2892	A	C6-N1-C2	6.07	122.24	118.60
29	D1	2693	C	N3-C2-O2	-6.07	117.65	121.90
29	B1	2869	U	N3-C2-O2	-6.07	117.95	122.20
29	D1	2669	G	C4-N9-C1'	6.07	134.39	126.50
29	D1	3271	G	C3'-C2'-C1'	-6.07	96.64	101.50
33	DB	206	PRO	N-CA-CB	6.07	110.58	103.30
1	A1	459	G	C5-C6-N1	-6.07	108.47	111.50
29	B1	1005	G	C4-C5-N7	-6.07	108.37	110.80
34	DC	307	PRO	N-CA-CB	6.07	110.58	103.30
29	B1	1365	G	N3-C4-C5	-6.07	125.57	128.60
30	B2	30	G	N3-C4-C5	6.07	131.63	128.60
60	Be	22	PRO	N-CA-CB	6.07	110.58	103.30
29	D1	404	G	C4-C5-C6	6.07	122.44	118.80
29	D1	1111	U	N1-C2-O2	-6.07	118.55	122.80
29	B1	1331	U	C2-N1-C1'	-6.07	110.42	117.70
29	D1	2780	A	C6-N1-C2	-6.07	114.96	118.60
29	D1	2931	C	N1-C2-O2	-6.07	115.26	118.90
9	AH	120	PRO	N-CA-CB	6.06	110.58	103.30
29	B1	1044	U	C5-C6-N1	-6.06	119.67	122.70
1	C1	1024	U	C6-N1-C2	6.06	124.64	121.00
1	C1	1453	G	N3-C4-C5	6.06	131.63	128.60
36	DE	192	PRO	N-CA-CB	6.06	110.58	103.30
29	B1	790	U	N1-C2-O2	-6.06	118.56	122.80
29	B1	1317	A	C5-N7-C8	-6.06	100.87	103.90
29	B1	1476	G	C8-N9-C4	-6.06	103.97	106.40
29	D1	304	G	C8-N9-C1'	-6.06	119.12	127.00
46	DQ	11	PRO	N-CA-CB	6.06	110.58	103.30
47	DR	43	PRO	N-CA-CB	6.06	110.57	103.30
54	DY	83	PRO	N-CA-CB	6.06	110.58	103.30
29	B1	1865	A	C2-N3-C4	-6.06	107.57	110.60
29	B1	1902	G	C4-N9-C1'	6.06	134.38	126.50
29	B1	575	G	N9-C4-C5	6.06	107.82	105.40
9	CH	94	PRO	N-CA-CB	6.06	110.57	103.30
29	D1	32	U	C6-N1-C2	6.06	124.64	121.00
29	D1	1317	A	N3-C4-C5	6.06	131.04	126.80
29	D1	3095	U	C5-C4-O4	-6.06	122.26	125.90
29	B1	3170	A	C5-C6-N1	-6.06	114.67	117.70
38	DG	210	PRO	N-CA-CB	6.06	110.57	103.30
29	D1	387	A	C2-N3-C4	-6.06	107.57	110.60
29	B1	685	G	N1-C2-N3	6.05	127.53	123.90
29	B1	930	U	N3-C2-O2	6.05	126.44	122.20
29	B1	2559	U	N3-C2-O2	-6.05	117.96	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3227	A	C5-C6-N6	6.05	128.54	123.70
29	B1	3291	G	C6-C5-N7	-6.05	126.77	130.40
29	B1	3388	C	C2-N1-C1'	6.05	125.46	118.80
1	C1	160	C	C6-N1-C2	6.05	122.72	120.30
1	C1	869	A	N3-C4-N9	6.05	132.24	127.40
29	D1	996	A	C8-N9-C4	6.05	108.22	105.80
29	D1	1292	C	N3-C2-O2	6.05	126.14	121.90
29	D1	3088	G	C5-C6-O6	-6.05	124.97	128.60
29	D1	3192	U	C6-N1-C1'	6.05	129.68	121.20
29	B1	876	A	C8-N9-C4	6.05	108.22	105.80
29	B1	2882	U	C6-N1-C2	-6.05	117.37	121.00
29	D1	390	G	C6-C5-N7	6.05	134.03	130.40
1	A1	1497	U	C5-C4-O4	6.05	129.53	125.90
29	B1	3265	C	N3-C2-O2	-6.05	117.66	121.90
29	D1	94	G	N1-C6-O6	-6.05	116.27	119.90
29	D1	409	A	N1-C6-N6	-6.05	114.97	118.60
29	D1	529	A	C4-C5-C6	-6.05	113.97	117.00
29	D1	2914	G	C4-C5-N7	6.05	113.22	110.80
29	D1	3103	A	C5-C6-N6	-6.05	118.86	123.70
33	DB	178	PRO	N-CA-CB	6.05	110.56	103.30
1	A1	610	G	N3-C4-N9	6.05	129.63	126.00
7	AF	113	PRO	N-CA-CB	6.05	110.56	103.30
29	B1	622	A	C6-C5-N7	-6.05	128.06	132.30
29	B1	648	C	C4-C5-C6	6.05	120.42	117.40
29	B1	2992	U	N3-C2-O2	6.05	126.44	122.20
30	B2	66	A	N3-C4-C5	6.05	131.03	126.80
29	D1	751	A	C6-N1-C2	-6.05	114.97	118.60
29	D1	3224	G	N3-C2-N2	-6.05	115.67	119.90
29	D1	3324	C	C6-N1-C1'	-6.05	113.54	120.80
29	B1	677	A	C5-N7-C8	-6.05	100.88	103.90
29	B1	1457	U	N1-C2-N3	6.05	118.53	114.90
29	B1	2643	A	C5-C6-N1	-6.05	114.68	117.70
29	B1	2835	U	C6-N1-C1'	-6.05	112.73	121.20
29	B1	2585	G	N3-C4-N9	6.05	129.63	126.00
7	CF	113	PRO	N-CA-CB	6.05	110.56	103.30
29	D1	1915	A	C2-N3-C4	-6.05	107.58	110.60
29	B1	2882	U	C5-C6-N1	6.04	125.72	122.70
29	D1	1517	G	N3-C4-N9	-6.04	122.37	126.00
29	D1	1596	C	N3-C2-O2	-6.04	117.67	121.90
30	D2	8	G	C4-N9-C1'	-6.04	118.64	126.50
29	B1	3181	C	C5-C4-N4	-6.04	115.97	120.20
59	Bd	6	PRO	N-CA-CB	6.04	110.55	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	1107	G	N3-C4-C5	-6.04	125.58	128.60
29	D1	137	G	N3-C4-N9	6.04	129.63	126.00
29	D1	2780	A	C5-C6-N6	-6.04	118.86	123.70
29	D1	2904	U	N1-C2-O2	6.04	127.03	122.80
29	B1	2837	A	C8-N9-C4	6.04	108.22	105.80
29	B1	3366	G	N3-C4-N9	-6.04	122.38	126.00
33	BB	210	PRO	N-CA-CB	6.04	110.55	103.30
1	C1	1453	G	C4-N9-C1'	-6.04	118.64	126.50
29	D1	1695	U	N3-C2-O2	-6.04	117.97	122.20
1	A1	338	C	N1-C2-O2	6.04	122.52	118.90
1	C1	1073	G	C6-N1-C2	-6.04	121.48	125.10
29	D1	2315	G	N3-C2-N2	-6.04	115.67	119.90
29	D1	2435	G	N1-C6-O6	6.04	123.52	119.90
29	B1	237	G	N9-C4-C5	-6.04	102.98	105.40
29	B1	3271	G	C3'-C2'-C1'	-6.04	96.67	101.50
33	BB	108	PRO	N-CA-CB	6.04	110.55	103.30
29	B1	2278	C	C2-N3-C4	6.04	122.92	119.90
29	B1	2972	G	C8-N9-C1'	-6.04	119.15	127.00
29	B1	337	G	C5-C6-N1	-6.04	108.48	111.50
29	B1	1444	G	C6-C5-N7	-6.04	126.78	130.40
29	B1	304	G	C4-N9-C1'	6.03	134.34	126.50
29	B1	345	G	C4-C5-N7	-6.03	108.39	110.80
29	D1	2714	G	N3-C4-C5	6.03	131.62	128.60
31	B3	76	C	C6-N1-C2	-6.03	117.89	120.30
29	D1	2583	C	N1-C2-O2	-6.03	115.28	118.90
32	BA	121	PRO	N-CA-CB	6.03	110.54	103.30
29	D1	48	A	C8-N9-C4	6.03	108.21	105.80
72	DL	7	PRO	N-CA-CB	6.03	110.54	103.30
1	A1	890	C	C2-N1-C1'	-6.03	112.17	118.80
29	B1	214	G	N3-C4-C5	6.03	131.62	128.60
29	B1	299	G	C4-N9-C1'	6.03	134.34	126.50
29	B1	640	U	C2-N3-C4	6.03	130.62	127.00
29	D1	164	A	N1-C6-N6	6.03	122.22	118.60
29	D1	1850	A	C8-N9-C4	6.03	108.21	105.80
29	B1	409	A	C8-N9-C4	6.03	108.21	105.80
32	BA	135	PRO	N-CA-CB	6.03	110.53	103.30
29	D1	1186	G	C4-C5-N7	6.03	113.21	110.80
29	B1	1209	G	N3-C2-N2	-6.03	115.68	119.90
29	B1	2914	G	C8-N9-C4	-6.03	103.99	106.40
29	D1	2834	G	C4-C5-C6	-6.03	115.18	118.80
29	B1	89	A	N9-C4-C5	-6.02	103.39	105.80
29	B1	2943	G	N1-C6-O6	6.02	123.52	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BD	146	PRO	N-CA-CB	6.02	110.53	103.30
3	CB	85	PRO	N-CA-CB	6.02	110.53	103.30
29	B1	2607	G	C6-C5-N7	-6.02	126.79	130.40
1	C1	1323	C	C5-C6-N1	-6.02	117.99	121.00
29	D1	2117	A	N1-C6-N6	-6.02	114.99	118.60
29	D1	3130	A	N1-C6-N6	6.02	122.21	118.60
32	DA	43	PRO	N-CA-CB	6.02	110.53	103.30
1	C1	1291	G	N1-C6-O6	6.02	123.51	119.90
29	B1	389	A	C5-C6-N1	-6.02	114.69	117.70
29	B1	899	U	N3-C4-O4	-6.02	115.19	119.40
29	B1	930	U	N1-C2-O2	-6.02	118.59	122.80
29	D1	1941	C	N3-C4-C5	6.02	124.31	121.90
30	D2	117	A	C6-N1-C2	6.02	122.21	118.60
41	DJ	16	PRO	N-CA-CB	6.02	110.52	103.30
1	A1	684	A	C6-N1-C2	-6.02	114.99	118.60
29	B1	581	U	N1-C2-O2	6.02	127.01	122.80
34	BC	63	PRO	N-CA-CB	6.02	110.52	103.30
8	AG	82	PRO	N-CA-CB	6.01	110.52	103.30
10	AI	75	PRO	N-CA-CB	6.01	110.52	103.30
29	B1	2362	C	C6-N1-C1'	6.01	128.02	120.80
1	C1	627	C	C6-N1-C2	6.01	122.71	120.30
29	D1	2919	A	C4-N9-C1'	6.01	137.12	126.30
29	D1	3141	A	N3-C4-C5	-6.01	122.59	126.80
32	DA	61	PRO	N-CA-CB	6.01	110.52	103.30
6	CE	169	PRO	N-CA-CB	6.01	110.52	103.30
29	D1	2638	C	N1-C2-O2	-6.01	115.29	118.90
29	D1	3388	C	C2-N1-C1'	6.01	125.41	118.80
1	A1	1792	G	C6-C5-N7	-6.01	126.79	130.40
29	B1	137	G	C4-C5-N7	6.01	113.20	110.80
29	B1	334	A	C2-N3-C4	6.01	113.61	110.60
29	B1	1209	G	C2-N3-C4	-6.01	108.89	111.90
29	B1	3084	C	C5-C4-N4	-6.01	115.99	120.20
1	C1	1633	A	N7-C8-N9	6.01	116.81	113.80
37	DF	153	PRO	N-CA-CB	6.01	110.51	103.30
1	C1	552	G	C5-C6-O6	-6.01	125.00	128.60
1	C1	1159	C	C6-N1-C1'	-6.01	113.59	120.80
29	D1	97	U	N3-C2-O2	6.01	126.41	122.20
30	D2	96	U	C6-N1-C2	6.01	124.61	121.00
29	B1	505	G	C4-C5-N7	-6.01	108.40	110.80
29	D1	639	G	C6-C5-N7	-6.01	126.80	130.40
29	D1	703	G	C4-N9-C1'	-6.01	118.69	126.50
29	B1	419	G	N1-C6-O6	-6.01	116.30	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	622	A	N7-C8-N9	6.01	116.80	113.80
29	B1	2693	C	C6-N1-C1'	-6.01	113.59	120.80
29	D1	2639	G	C6-C5-N7	-6.01	126.80	130.40
29	B1	151	A	C6-N1-C2	-6.00	115.00	118.60
29	B1	2134	G	C5-C6-O6	-6.00	125.00	128.60
2	CA	194	PRO	N-CA-CB	6.00	110.51	103.30
29	D1	3326	G	C8-N9-C4	-6.00	104.00	106.40
60	De	24	PRO	N-CA-CB	6.00	110.51	103.30
29	B1	590	G	C8-N9-C4	6.00	108.80	106.40
29	B1	677	A	C8-N9-C4	-6.00	103.40	105.80
37	BF	7	PRO	N-CA-CB	6.00	110.50	103.30
37	DF	7	PRO	N-CA-CB	6.00	110.50	103.30
41	DJ	27	PRO	N-CA-CB	6.00	110.50	103.30
29	B1	333	G	C8-N9-C4	-6.00	104.00	106.40
1	C1	1792	G	N3-C4-N9	6.00	129.60	126.00
29	D1	287	G	C5-C6-N1	-6.00	108.50	111.50
1	A1	1579	U	C2-N1-C1'	6.00	124.90	117.70
29	B1	2382	G	C5-C6-N1	6.00	114.50	111.50
29	D1	1191	U	C6-N1-C2	6.00	124.60	121.00
1	A1	1787	C	N3-C4-C5	6.00	124.30	121.90
29	B1	21	G	C6-C5-N7	-6.00	126.80	130.40
1	C1	1132	A	N1-C6-N6	6.00	122.20	118.60
3	CB	171	PRO	N-CA-CB	6.00	110.50	103.30
29	D1	3103	A	C8-N9-C4	-6.00	103.40	105.80
29	B1	3208	G	C2-N3-C4	6.00	114.90	111.90
29	D1	2122	G	C2-N3-C4	-6.00	108.90	111.90
52	DW	66	PRO	N-CA-CB	6.00	110.50	103.30
29	B1	1506	A	C6-C5-N7	-6.00	128.10	132.30
21	CT	267	PRO	N-CA-CB	6.00	110.49	103.30
29	D1	1209	G	N3-C2-N2	-6.00	115.70	119.90
54	DY	122	PRO	N-CA-CB	6.00	110.49	103.30
1	A1	1104	U	N3-C2-O2	5.99	126.40	122.20
29	B1	651	G	N9-C4-C5	-5.99	103.00	105.40
29	B1	2283	G	C5-N7-C8	-5.99	101.30	104.30
29	B1	2669	G	C4-N9-C1'	5.99	134.29	126.50
30	B2	8	G	C4-N9-C1'	-5.99	118.71	126.50
35	DD	146	PRO	N-CA-CB	5.99	110.49	103.30
29	B1	956	U	C6-N1-C2	5.99	124.59	121.00
39	BH	129	PRO	N-CA-CB	5.99	110.49	103.30
29	B1	746	A	C2-N3-C4	5.99	113.59	110.60
29	B1	1547	G	C6-C5-N7	-5.99	126.81	130.40
29	B1	1556	C	N3-C2-O2	-5.99	117.71	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2990	G	C5-N7-C8	-5.99	101.31	104.30
29	B1	2551	U	C5-C6-N1	5.99	125.69	122.70
29	D1	1147	G	C5-N7-C8	-5.99	101.31	104.30
29	D1	3045	G	C4-C5-N7	5.99	113.19	110.80
29	B1	757	C	N3-C4-C5	5.99	124.30	121.90
1	C1	385	A	N1-C6-N6	-5.99	115.01	118.60
1	C1	423	G	C2-N3-C4	5.99	114.89	111.90
29	B1	337	G	N1-C6-O6	5.99	123.49	119.90
29	B1	659	G	N3-C2-N2	5.99	124.09	119.90
29	B1	2633	U	N3-C4-C5	-5.99	111.01	114.60
29	D1	3013	U	N3-C2-O2	-5.99	118.01	122.20
29	D1	3018	C	N3-C4-C5	5.99	124.29	121.90
29	B1	39	A	N1-C6-N6	5.98	122.19	118.60
29	B1	2607	G	C4-C5-C6	5.98	122.39	118.80
29	B1	2776	C	C6-N1-C1'	-5.98	113.62	120.80
4	CC	192	PRO	N-CA-CB	5.98	110.48	103.30
29	D1	1152	G	C5-C6-N1	-5.98	108.51	111.50
1	C1	1202	A	N1-C6-N6	-5.98	115.01	118.60
1	C1	1568	C	C4-C5-C6	5.98	120.39	117.40
1	C1	1591	C	C5-C6-N1	-5.98	118.01	121.00
29	D1	3245	A	C4-C5-N7	5.98	113.69	110.70
29	D1	3223	A	C5-C6-N1	-5.98	114.71	117.70
29	B1	86	G	C8-N9-C1'	5.98	134.77	127.00
29	D1	424	G	N7-C8-N9	5.98	116.09	113.10
29	D1	2292	U	C5-C4-O4	-5.98	122.31	125.90
29	D1	2707	C	N1-C2-O2	-5.98	115.31	118.90
1	A1	63	G	C5-N7-C8	5.98	107.29	104.30
29	B1	2183	A	N9-C4-C5	5.98	108.19	105.80
1	C1	1725	U	C5-C4-O4	-5.98	122.31	125.90
29	D1	2324	A	C2-N3-C4	5.98	113.59	110.60
37	DF	11	PRO	N-CA-CB	5.98	110.47	103.30
29	B1	32	U	N3-C4-C5	5.97	118.18	114.60
29	B1	685	G	C6-C5-N7	-5.97	126.82	130.40
8	CG	85	PRO	N-CA-CB	5.97	110.47	103.30
29	D1	2187	G	N1-C6-O6	-5.97	116.31	119.90
29	D1	2671	A	N1-C6-N6	5.97	122.19	118.60
29	D1	2851	A	N9-C4-C5	5.97	108.19	105.80
29	B1	2651	G	C8-N9-C4	5.97	108.79	106.40
29	D1	549	U	N1-C2-O2	5.97	126.98	122.80
29	D1	1097	G	N1-C6-O6	-5.97	116.32	119.90
29	D1	1368	U	C6-N1-C1'	-5.97	112.84	121.20
45	DP	111	PRO	N-CA-CB	5.97	110.47	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	390	G	C6-C5-N7	5.97	133.98	130.40
29	B1	946	U	C6-N1-C1'	-5.97	112.84	121.20
1	C1	565	C	C5-C6-N1	-5.97	118.01	121.00
1	C1	1291	G	C4-C5-N7	5.97	113.19	110.80
29	D1	2700	G	N3-C4-N9	5.97	129.58	126.00
29	D1	2993	G	C6-C5-N7	5.97	133.98	130.40
29	B1	2823	G	N3-C4-N9	-5.97	122.42	126.00
29	D1	2981	U	C5-C4-O4	-5.97	122.32	125.90
29	B1	789	A	N9-C4-C5	5.97	108.19	105.80
29	D1	1174	G	C6-N1-C2	-5.97	121.52	125.10
1	A1	590	C	C6-N1-C2	-5.97	117.91	120.30
3	AB	182	PRO	N-CA-CB	5.97	110.46	103.30
29	B1	3059	G	C5-C6-O6	-5.97	125.02	128.60
1	C1	1408	G	N3-C4-N9	5.97	129.58	126.00
15	AN	71	PRO	N-CA-CB	5.96	110.46	103.30
29	B1	2951	G	N3-C4-C5	5.96	131.58	128.60
34	BC	40	PRO	N-CA-CB	5.96	110.46	103.30
34	DC	40	PRO	N-CA-CB	5.96	110.46	103.30
39	DH	129	PRO	N-CA-CB	5.96	110.46	103.30
29	B1	3377	G	N7-C8-N9	5.96	116.08	113.10
1	C1	59	C	C6-N1-C2	-5.96	117.92	120.30
1	C1	479	C	C5-C6-N1	-5.96	118.02	121.00
29	B1	1113	G	C4-N9-C1'	5.96	134.25	126.50
29	D1	2895	G	C4-C5-N7	-5.96	108.42	110.80
29	B1	669	U	C5-C4-O4	-5.96	122.33	125.90
29	B1	1294	A	C8-N9-C4	-5.96	103.42	105.80
1	C1	621	A	C5-C6-N1	5.96	120.68	117.70
45	DP	110	PRO	N-CA-CB	5.96	110.45	103.30
17	AP	118	PRO	N-CA-CB	5.96	110.45	103.30
29	B1	500	C	N3-C2-O2	-5.96	117.73	121.90
29	B1	1428	A	C8-N9-C4	5.96	108.18	105.80
29	B1	1716	U	N3-C2-O2	-5.96	118.03	122.20
30	B2	47	C	C5-C6-N1	5.96	123.98	121.00
36	BE	255	PRO	N-CA-CB	5.96	110.45	103.30
29	D1	3139	A	N1-C6-N6	-5.96	115.03	118.60
54	DY	45	MET	N-CA-C	5.96	127.08	111.00
29	D1	794	U	N3-C2-O2	5.96	126.37	122.20
34	DC	63	PRO	N-CA-CB	5.96	110.45	103.30
1	A1	1149	G	C5-C6-N1	5.95	114.48	111.50
29	B1	22	G	N1-C6-O6	-5.95	116.33	119.90
29	B1	2527	G	C4-N9-C1'	-5.95	118.76	126.50
29	B1	2935	U	C5-C6-N1	-5.95	119.72	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	222	A	N1-C6-N6	5.95	122.17	118.60
29	D1	517	G	C8-N9-C4	-5.95	104.02	106.40
29	D1	2881	C	N3-C2-O2	5.95	126.07	121.90
29	D1	3272	C	C2-N3-C4	5.95	122.88	119.90
30	D2	19	C	C6-N1-C1'	-5.95	113.66	120.80
29	B1	956	U	C5-C6-N1	-5.95	119.72	122.70
1	A1	1073	G	C5-C6-O6	-5.95	125.03	128.60
3	AB	138	PRO	N-CA-CB	5.95	110.44	103.30
29	B1	3243	A	N9-C4-C5	-5.95	103.42	105.80
29	D1	617	G	C6-N1-C2	-5.95	121.53	125.10
29	D1	2669	G	C5-C6-O6	-5.95	125.03	128.60
29	B1	1324	U	C5-C4-O4	-5.95	122.33	125.90
29	B1	3108	G	C8-N9-C1'	5.95	134.73	127.00
30	B2	112	G	C6-C5-N7	5.95	133.97	130.40
29	D1	633	C	N1-C2-O2	-5.95	115.33	118.90
29	D1	1004	U	C6-N1-C2	-5.95	117.43	121.00
29	D1	3245	A	C6-C5-N7	-5.95	128.14	132.30
32	DA	126	PRO	N-CA-CB	5.95	110.44	103.30
29	B1	2700	G	C6-C5-N7	-5.95	126.83	130.40
29	D1	1434	G	C4-C5-N7	5.95	113.18	110.80
29	B1	1207	G	C4-C5-N7	5.95	113.18	110.80
29	B1	2327	U	C2-N3-C4	-5.95	123.43	127.00
16	CO	77	PRO	N-CA-CB	5.95	110.43	103.30
10	AI	53	PRO	N-CA-CB	5.94	110.43	103.30
29	D1	1487	G	N3-C4-N9	5.94	129.57	126.00
29	D1	3369	G	C5-C6-O6	5.94	132.17	128.60
18	AQ	55	PRO	N-CA-CB	5.94	110.43	103.30
1	C1	16	G	C8-N9-C4	5.94	108.78	106.40
1	C1	86	A	C6-N1-C2	5.94	122.17	118.60
3	CB	173	PRO	N-CA-CB	5.94	110.43	103.30
29	D1	3211	C	N3-C4-C5	5.94	124.28	121.90
29	D1	3322	A	N3-C4-C5	5.94	130.96	126.80
30	D2	65	G	C8-N9-C4	-5.94	104.02	106.40
16	AO	77	PRO	N-CA-CB	5.94	110.43	103.30
29	B1	2837	A	N7-C8-N9	-5.94	110.83	113.80
1	C1	1658	G	C8-N9-C4	5.94	108.78	106.40
29	D1	624	G	C4-C5-N7	5.94	113.18	110.80
29	D1	2278	C	C2-N3-C4	5.94	122.87	119.90
29	D1	3314	A	C4-N9-C1'	5.94	136.99	126.30
2	AA	118	PRO	N-CA-CB	5.94	110.43	103.30
29	B1	286	U	N3-C2-O2	-5.94	118.04	122.20
29	B1	1124	U	C2-N1-C1'	5.94	124.83	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1618	G	N1-C6-O6	-5.94	116.34	119.90
29	B1	1133	A	N9-C4-C5	5.94	108.17	105.80
29	B1	1342	C	C5-C4-N4	-5.94	116.04	120.20
29	B1	2738	A	C8-N9-C4	5.94	108.17	105.80
29	B1	3273	A	N1-C2-N3	-5.94	126.33	129.30
8	CG	47	PRO	N-CA-CB	5.94	110.42	103.30
29	D1	429	U	N1-C2-N3	5.94	118.46	114.90
29	D1	1362	G	N7-C8-N9	-5.94	110.13	113.10
29	D1	96	G	C2-N3-C4	-5.94	108.93	111.90
29	D1	1589	A	C6-C5-N7	-5.94	128.14	132.30
29	B1	424	G	N1-C6-O6	5.93	123.46	119.90
29	B1	1138	U	C5-C4-O4	-5.93	122.34	125.90
29	B1	2421	U	C2-N1-C1'	-5.93	110.58	117.70
10	CI	75	PRO	N-CA-CB	5.93	110.42	103.30
61	Df	56	PRO	N-CA-CB	5.93	110.42	103.30
29	B1	587	U	C6-N1-C2	5.93	124.56	121.00
29	B1	3130	A	C4-C5-N7	5.93	113.67	110.70
29	D1	1720	U	C5-C6-N1	5.93	125.67	122.70
30	D2	65	G	C5-C6-O6	-5.93	125.04	128.60
29	B1	304	G	C4-C5-N7	5.93	113.17	110.80
29	B1	3303	G	C5-N7-C8	5.93	107.27	104.30
16	CO	29	PRO	N-CA-CB	5.93	110.42	103.30
29	D1	364	G	C4-N9-C1'	5.93	134.21	126.50
29	D1	1919	G	C6-C5-N7	-5.93	126.84	130.40
29	D1	2639	G	C4-C5-N7	5.93	113.17	110.80
37	DF	36	PRO	N-CA-CB	5.93	110.42	103.30
1	A1	429	G	C8-N9-C4	-5.93	104.03	106.40
29	B1	812	G	N1-C6-O6	5.93	123.46	119.90
29	B1	3297	U	C6-N1-C1'	-5.93	112.90	121.20
30	D2	101	G	C4-N9-C1'	-5.93	118.79	126.50
35	DD	21	PRO	N-CA-CB	5.93	110.42	103.30
35	DD	23	PRO	N-CA-CB	5.93	110.42	103.30
29	B1	70	A	N3-C4-C5	-5.93	122.65	126.80
29	B1	2868	U	N3-C2-O2	5.93	126.35	122.20
29	B1	3280	U	C2-N3-C4	5.93	130.56	127.00
33	BB	57	PRO	N-CA-CB	5.93	110.41	103.30
1	C1	24	U	C2-N1-C1'	5.93	124.81	117.70
29	D1	3185	U	N3-C4-O4	-5.93	115.25	119.40
2	AA	194	PRO	N-CA-CB	5.93	110.41	103.30
8	AG	136	PRO	N-CA-CB	5.93	110.41	103.30
21	AT	206	PRO	N-CA-CB	5.93	110.41	103.30
29	B1	354	U	C5-C4-O4	-5.93	122.34	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	432	G	C5-C6-N1	-5.93	108.54	111.50
29	B1	1050	U	N1-C2-O2	-5.93	118.65	122.80
29	D1	3374	U	C6-N1-C2	5.93	124.56	121.00
30	D2	119	U	N3-C2-O2	-5.93	118.05	122.20
32	DA	137	PRO	N-CA-CB	5.93	110.41	103.30
1	A1	1028	C	N3-C4-C5	5.92	124.27	121.90
29	B1	302	U	C5-C6-N1	-5.92	119.74	122.70
29	B1	970	A	N9-C4-C5	-5.92	103.43	105.80
32	BA	126	PRO	N-CA-CB	5.92	110.41	103.30
2	CA	68	PRO	N-CA-CB	5.92	110.41	103.30
30	D2	51	A	C8-N9-C4	-5.92	103.43	105.80
33	DB	57	PRO	N-CA-CB	5.92	110.41	103.30
29	B1	419	G	C8-N9-C4	5.92	108.77	106.40
29	D1	659	G	C4-N9-C1'	5.92	134.20	126.50
29	D1	3181	C	C5-C4-N4	-5.92	116.05	120.20
29	B1	511	G	N1-C6-O6	5.92	123.45	119.90
29	B1	3386	G	C8-N9-C1'	-5.92	119.30	127.00
29	D1	2390	A	C8-N9-C4	-5.92	103.43	105.80
29	D1	3078	U	C6-N1-C1'	-5.92	112.91	121.20
29	B1	1720	U	C5-C6-N1	5.92	125.66	122.70
29	B1	2194	G	C8-N9-C4	5.92	108.77	106.40
32	BA	43	PRO	N-CA-CB	5.92	110.40	103.30
29	D1	1287	A	C8-N9-C4	5.92	108.17	105.80
1	A1	1378	U	C5-C6-N1	5.92	125.66	122.70
1	A1	1637	C	N1-C2-O2	5.92	122.45	118.90
29	D1	41	G	N3-C4-C5	5.92	131.56	128.60
29	D1	2681	U	N1-C2-O2	5.92	126.94	122.80
29	D1	3207	U	N3-C2-O2	-5.92	118.06	122.20
29	D1	3227	A	N1-C2-N3	-5.92	126.34	129.30
41	DJ	214	PRO	N-CA-CB	5.92	110.40	103.30
1	A1	874	C	N1-C2-O2	5.92	122.45	118.90
1	A1	1137	A	C8-N9-C4	5.92	108.17	105.80
5	AD	67	PRO	N-CA-CB	5.92	110.40	103.30
29	B1	137	G	N9-C4-C5	-5.92	103.03	105.40
29	D1	3303	G	N1-C6-O6	-5.92	116.35	119.90
29	B1	677	A	C6-C5-N7	-5.92	128.16	132.30
29	B1	3144	G	C8-N9-C4	-5.92	104.03	106.40
56	Ba	88	PRO	N-CA-CB	5.92	110.40	103.30
29	D1	3123	A	C8-N9-C4	-5.92	103.43	105.80
1	A1	1353	U	N3-C2-O2	-5.91	118.06	122.20
1	A1	1520	U	N1-C2-O2	-5.91	118.66	122.80
29	B1	1951	C	N1-C2-O2	5.91	122.45	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3273	A	C5-C6-N6	-5.91	118.97	123.70
9	CH	57	PRO	N-CA-CB	5.91	110.40	103.30
29	D1	1363	A	N7-C8-N9	-5.91	110.84	113.80
29	D1	3078	U	N1-C2-O2	5.91	126.94	122.80
29	B1	1403	C	C6-N1-C2	5.91	122.67	120.30
29	D1	1902	G	N3-C4-N9	5.91	129.55	126.00
29	B1	187	A	C8-N9-C4	-5.91	103.44	105.80
29	B1	659	G	C6-C5-N7	-5.91	126.85	130.40
29	B1	1434	G	C6-N1-C2	5.91	128.65	125.10
29	B1	2196	C	C6-N1-C2	-5.91	117.94	120.30
29	B1	2671	A	C6-N1-C2	-5.91	115.05	118.60
1	A1	1135	U	N3-C2-O2	5.91	126.33	122.20
29	B1	94	G	C4-N9-C1'	-5.91	118.82	126.50
29	B1	2663	G	C8-N9-C4	5.91	108.76	106.40
30	B2	93	C	C5-C4-N4	-5.91	116.06	120.20
1	C1	1291	G	C5-C6-O6	-5.91	125.06	128.60
29	D1	511	G	N3-C4-N9	-5.91	122.45	126.00
29	D1	1292	C	N1-C2-O2	-5.91	115.36	118.90
29	B1	2527	G	N3-C4-C5	5.91	131.55	128.60
29	D1	2355	G	N3-C4-C5	-5.91	125.65	128.60
1	C1	902	G	C5-C6-N1	-5.91	108.55	111.50
1	C1	1121	C	N1-C2-O2	-5.91	115.36	118.90
2	CA	97	PRO	N-CA-CB	5.91	110.39	103.30
29	D1	52	A	C8-N9-C1'	-5.91	117.07	127.70
29	D1	424	G	C5-N7-C8	-5.91	101.35	104.30
29	D1	946	U	C2-N1-C1'	5.91	124.79	117.70
30	D2	65	G	N3-C4-C5	-5.91	125.65	128.60
57	Db	7	PRO	N-CA-CB	5.91	110.39	103.30
1	A1	572	C	C2-N3-C4	5.90	122.85	119.90
29	B1	932	U	N1-C2-O2	-5.90	118.67	122.80
44	BO	42	PRO	N-CA-CB	5.90	110.38	103.30
61	Bf	56	PRO	N-CA-CB	5.90	110.38	103.30
1	C1	1198	G	N1-C6-O6	-5.90	116.36	119.90
29	D1	1062	A	C8-N9-C4	5.90	108.16	105.80
29	D1	1892	G	N1-C2-N3	5.90	127.44	123.90
29	D1	3099	C	C6-N1-C2	5.90	122.66	120.30
1	A1	100	A	N1-C6-N6	-5.90	115.06	118.60
29	B1	1547	G	N1-C2-N2	-5.90	110.89	116.20
50	BU	105	PRO	N-CA-CB	5.90	110.38	103.30
29	D1	434	U	C5-C6-N1	-5.90	119.75	122.70
29	D1	2669	G	C8-N9-C1'	-5.90	119.33	127.00
29	D1	2756	C	N3-C4-C5	5.90	124.26	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2989	U	N1-C2-O2	-5.90	118.67	122.80
29	B1	743	C	N3-C4-C5	5.90	124.26	121.90
29	B1	1452	A	N1-C6-N6	5.90	122.14	118.60
1	C1	1520	U	N3-C2-O2	5.90	126.33	122.20
1	C1	1549	C	N1-C2-O2	-5.90	115.36	118.90
1	A1	1615	C	C6-N1-C2	-5.90	117.94	120.30
29	B1	984	G	C8-N9-C1'	5.90	134.67	127.00
29	B1	2302	G	C5-C6-N1	5.90	114.45	111.50
29	B1	2669	G	N3-C4-N9	5.90	129.54	126.00
31	B3	53	A	N1-C2-N3	-5.90	126.35	129.30
60	Be	24	PRO	N-CA-CB	5.90	110.38	103.30
1	C1	1421	A	C2-N3-C4	5.90	113.55	110.60
29	D1	1172	G	N7-C8-N9	-5.90	110.15	113.10
29	D1	2700	G	C8-N9-C1'	-5.90	119.33	127.00
29	B1	3054	U	C5-C4-O4	5.90	129.44	125.90
29	B1	3224	G	N3-C2-N2	-5.90	115.77	119.90
29	D1	409	A	C8-N9-C4	5.90	108.16	105.80
29	D1	575	G	C6-C5-N7	5.90	133.94	130.40
35	DD	29	PRO	N-CA-CB	5.90	110.38	103.30
29	B1	503	C	C2-N1-C1'	-5.89	112.32	118.80
29	B1	810	A	C4-C5-N7	5.89	113.65	110.70
29	B1	954	U	C5-C4-O4	-5.89	122.36	125.90
29	B1	1076	C	N3-C2-O2	-5.89	117.77	121.90
29	B1	1377	G	C5-C6-O6	5.89	132.14	128.60
29	B1	2605	G	C5-C6-O6	-5.89	125.06	128.60
29	B1	3035	A	N1-C2-N3	5.89	132.25	129.30
1	C1	1470	C	C2-N1-C1'	5.89	125.28	118.80
10	CI	53	PRO	N-CA-CB	5.89	110.37	103.30
29	D1	978	G	N3-C4-C5	-5.89	125.65	128.60
29	D1	3170	A	C5-C6-N6	5.89	128.42	123.70
1	A1	1759	C	C6-N1-C2	5.89	122.66	120.30
9	AH	57	PRO	N-CA-CB	5.89	110.37	103.30
29	B1	164	A	N1-C6-N6	5.89	122.14	118.60
29	D1	2415	C	N3-C4-C5	5.89	124.26	121.90
29	D1	2886	U	C5-C6-N1	-5.89	119.75	122.70
72	DL	89	PRO	N-CA-CB	5.89	110.37	103.30
50	DU	117	PRO	N-CA-CB	5.89	110.37	103.30
29	B1	834	U	N1-C2-O2	5.89	126.92	122.80
1	C1	16	G	N1-C2-N2	-5.89	110.90	116.20
29	D1	625	G	N3-C4-C5	5.89	131.55	128.60
29	D1	1469	C	N3-C2-O2	-5.89	117.78	121.90
29	B1	2377	G	N3-C4-C5	5.89	131.54	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3099	C	C2-N3-C4	5.89	122.84	119.90
29	B1	3198	U	N1-C2-O2	5.89	126.92	122.80
29	D1	1120	A	N1-C2-N3	5.89	132.25	129.30
29	D1	2556	C	C6-N1-C2	-5.89	117.94	120.30
29	D1	3139	A	C6-C5-N7	5.89	136.42	132.30
29	B1	203	G	N1-C6-O6	-5.89	116.37	119.90
29	B1	1005	G	N3-C4-N9	-5.89	122.47	126.00
29	B1	1123	U	C2-N1-C1'	-5.89	110.63	117.70
13	CL	82	PRO	N-CA-CB	5.89	110.36	103.30
29	D1	1227	C	C5-C6-N1	5.89	123.94	121.00
29	D1	1781	C	C5-C4-N4	-5.89	116.08	120.20
1	A1	614	C	C6-N1-C1'	-5.89	113.74	120.80
29	B1	510	G	C5-C6-O6	-5.89	125.07	128.60
29	B1	1197	A	N9-C4-C5	-5.89	103.44	105.80
29	B1	1888	U	C5-C6-N1	-5.89	119.76	122.70
29	B1	2701	U	N3-C4-O4	5.89	123.52	119.40
29	B1	2943	G	C4-C5-N7	5.89	113.16	110.80
32	BA	137	PRO	N-CA-CB	5.89	110.36	103.30
29	D1	2552	C	N3-C2-O2	-5.89	117.78	121.90
1	A1	1498	G	C5-C6-N1	5.88	114.44	111.50
29	B1	120	G	C8-N9-C1'	5.88	134.65	127.00
29	B1	271	C	C6-N1-C2	-5.88	117.95	120.30
29	B1	868	C	N1-C2-O2	-5.88	115.37	118.90
29	B1	2867	C	N3-C2-O2	5.88	126.02	121.90
1	C1	1647	U	N1-C2-N3	-5.88	111.37	114.90
29	D1	1191	U	C4-C5-C6	-5.88	116.17	119.70
29	D1	2527	G	C8-N9-C1'	5.88	134.65	127.00
29	D1	3268	A	C4-N9-C1'	-5.88	115.71	126.30
1	A1	950	C	C6-N1-C2	5.88	122.65	120.30
29	B1	92	G	N7-C8-N9	5.88	116.04	113.10
29	B1	301	G	C5-C6-O6	5.88	132.13	128.60
1	C1	49	C	C6-N1-C2	5.88	122.65	120.30
1	A1	329	G	C2-N3-C4	-5.88	108.96	111.90
2	AA	42	PRO	N-CA-CB	5.88	110.36	103.30
29	B1	726	G	C6-C5-N7	-5.88	126.87	130.40
40	BI	13	PRO	N-CA-CB	5.88	110.36	103.30
29	D1	2353	G	C6-C5-N7	-5.88	126.87	130.40
1	A1	161	U	C5-C6-N1	-5.88	119.76	122.70
1	A1	1033	C	C2-N1-C1'	-5.88	112.33	118.80
1	A1	1529	C	C6-N1-C2	5.88	122.65	120.30
29	B1	1792	C	N3-C2-O2	5.88	126.02	121.90
29	B1	2355	G	C4-N9-C1'	5.88	134.14	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2358	A	N3-C4-C5	5.88	130.91	126.80
29	B1	2415	C	N3-C4-C5	5.88	124.25	121.90
1	A1	958	U	C5-C4-O4	-5.88	122.37	125.90
2	AA	11	PRO	N-CA-CB	5.88	110.35	103.30
29	B1	220	G	C8-N9-C4	5.88	108.75	106.40
29	B1	3199	G	N3-C4-N9	-5.88	122.47	126.00
29	B1	3314	A	C4-N9-C1'	5.88	136.88	126.30
29	D1	55	G	N1-C6-O6	5.88	123.43	119.90
29	D1	2911	A	C2-N3-C4	-5.88	107.66	110.60
29	D1	3265	C	C2-N1-C1'	5.88	125.26	118.80
45	DP	70	PRO	N-CA-CB	5.88	110.35	103.30
29	B1	2982	A	C4-C5-C6	-5.88	114.06	117.00
1	C1	867	G	N1-C6-O6	-5.88	116.38	119.90
29	D1	2341	A	C8-N9-C4	5.88	108.15	105.80
1	A1	388	G	C8-N9-C4	-5.87	104.05	106.40
29	B1	1751	G	C2-N3-C4	5.87	114.84	111.90
51	BV	15	PRO	N-CA-CB	5.87	110.35	103.30
29	D1	501	A	N1-C2-N3	-5.87	126.36	129.30
29	D1	651	G	C5-C6-O6	-5.87	125.08	128.60
29	D1	746	A	N3-C4-N9	5.87	132.10	127.40
29	D1	1855	U	C2-N1-C1'	5.87	124.75	117.70
29	B1	1367	G	C2-N3-C4	-5.87	108.96	111.90
29	B1	2315	G	N3-C2-N2	-5.87	115.79	119.90
29	D1	94	G	C2-N3-C4	-5.87	108.97	111.90
29	D1	2283	G	C8-N9-C4	-5.87	104.05	106.40
21	AT	287	PRO	N-CA-CB	5.87	110.34	103.30
29	D1	1330	A	N1-C2-N3	5.87	132.24	129.30
2	AA	97	PRO	N-CA-CB	5.87	110.34	103.30
29	B1	958	C	C2-N1-C1'	5.87	125.26	118.80
29	B1	1377	G	N3-C4-C5	-5.87	125.67	128.60
29	B1	2752	U	N3-C2-O2	-5.87	118.09	122.20
29	B1	586	C	N3-C4-N4	5.87	122.11	118.00
29	B1	1405	U	N1-C2-O2	-5.87	118.69	122.80
29	B1	1938	U	C5-C4-O4	5.87	129.42	125.90
1	C1	481	A	C5-C6-N6	5.87	128.39	123.70
1	C1	686	C	N1-C2-O2	-5.87	115.38	118.90
29	D1	594	U	C6-N1-C1'	-5.87	112.99	121.20
29	D1	3235	C	N3-C4-C5	5.87	124.25	121.90
21	CT	287	PRO	N-CA-CB	5.86	110.34	103.30
29	D1	1194	G	N3-C4-C5	-5.86	125.67	128.60
29	D1	3139	A	C5-C6-N6	5.86	128.39	123.70
1	A1	1188	G	C5-C6-O6	-5.86	125.08	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1479	U	C2-N3-C4	-5.86	123.48	127.00
29	D1	3252	G	N1-C6-O6	-5.86	116.38	119.90
29	B1	29	C	C6-N1-C2	5.86	122.64	120.30
29	B1	2390	A	N9-C4-C5	5.86	108.14	105.80
29	B1	2436	U	C5-C4-O4	-5.86	122.38	125.90
29	D1	1303	A	N3-C4-N9	-5.86	122.71	127.40
1	A1	1138	A	N1-C6-N6	-5.86	115.08	118.60
29	B1	1501	U	C6-N1-C2	5.86	124.52	121.00
42	BK	74	PRO	N-CA-CB	5.86	110.33	103.30
29	D1	424	G	C8-N9-C4	-5.86	104.06	106.40
29	B1	742	G	N3-C4-C5	5.86	131.53	128.60
29	B1	1507	G	C5-N7-C8	-5.86	101.37	104.30
29	B1	2131	A	C8-N9-C4	-5.86	103.46	105.80
29	B1	2725	U	C5-C6-N1	5.86	125.63	122.70
29	B1	2811	A	C5-C6-N6	5.86	128.39	123.70
29	D1	969	C	C5-C6-N1	-5.86	118.07	121.00
29	D1	1487	G	N3-C4-C5	-5.86	125.67	128.60
29	D1	2935	U	C4-C5-C6	5.86	123.21	119.70
29	B1	1322	U	N1-C2-O2	-5.86	118.70	122.80
29	B1	2356	A	C8-N9-C4	-5.86	103.46	105.80
29	B1	2707	C	N3-C2-O2	5.86	126.00	121.90
29	B1	3077	A	N7-C8-N9	5.86	116.73	113.80
21	CT	276	PRO	N-CA-CB	5.86	110.33	103.30
29	D1	367	A	C8-N9-C4	5.86	108.14	105.80
29	B1	1931	U	C2-N1-C1'	5.85	124.72	117.70
29	D1	1903	U	N3-C4-O4	5.85	123.50	119.40
1	A1	337	G	N9-C4-C5	-5.85	103.06	105.40
29	B1	512	U	C2-N1-C1'	5.85	124.72	117.70
29	B1	609	G	C5-C6-N1	-5.85	108.57	111.50
29	B1	934	G	N3-C4-C5	-5.85	125.67	128.60
32	BA	59	PRO	N-CA-CB	5.85	110.32	103.30
29	D1	556	U	N3-C2-O2	-5.85	118.10	122.20
54	DY	29	PRO	N-CA-CB	5.85	110.32	103.30
1	A1	402	C	C3'-C2'-C1'	-5.85	96.82	101.50
29	B1	3129	A	N1-C2-N3	-5.85	126.37	129.30
30	B2	85	G	N3-C4-C5	5.85	131.53	128.60
1	C1	1595	U	C5-C6-N1	5.85	125.62	122.70
29	D1	497	C	C2-N3-C4	-5.85	116.97	119.90
29	D1	3089	C	N3-C4-N4	5.85	122.09	118.00
29	D1	3297	U	N1-C2-N3	5.85	118.41	114.90
1	A1	625	C	C2-N1-C1'	5.85	125.23	118.80
29	B1	2780	A	N1-C6-N6	5.85	122.11	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	BI	98	PRO	N-CA-CB	5.85	110.32	103.30
40	BI	175	PHE	N-CA-C	-5.85	95.21	111.00
55	BZ	49	PRO	N-CA-CB	5.85	110.32	103.30
29	B1	752	C	C5-C4-N4	-5.85	116.11	120.20
29	B1	3227	A	N3-C4-C5	5.85	130.89	126.80
21	AT	267	PRO	N-CA-CB	5.84	110.31	103.30
10	CI	87	PRO	N-CA-CB	5.84	110.31	103.30
29	D1	421	G	C6-C5-N7	-5.84	126.89	130.40
29	D1	655	C	C5-C6-N1	-5.84	118.08	121.00
29	B1	1134	G	C4-C5-N7	-5.84	108.46	110.80
29	B1	1551	C	C5-C6-N1	-5.84	118.08	121.00
1	C1	1636	C	C2-N3-C4	-5.84	116.98	119.90
1	A1	1547	A	C4-C5-C6	-5.84	114.08	117.00
29	B1	1233	G	C4-N9-C1'	-5.84	118.91	126.50
29	B1	1898	G	N1-C2-N3	5.84	127.41	123.90
29	B1	1100	U	C6-N1-C2	5.84	124.50	121.00
29	B1	1788	C	C6-N1-C1'	-5.84	113.79	120.80
29	B1	2123	G	N1-C6-O6	-5.84	116.40	119.90
29	B1	3037	U	C5-C6-N1	-5.84	119.78	122.70
29	B1	3099	C	C6-N1-C1'	-5.84	113.79	120.80
29	B1	3215	A	N7-C8-N9	5.84	116.72	113.80
29	B1	3323	A	C5-C6-N1	-5.84	114.78	117.70
29	D1	2289	U	C6-N1-C2	5.84	124.50	121.00
29	D1	2865	U	N1-C2-O2	-5.84	118.71	122.80
29	B1	577	C	C2-N3-C4	5.84	122.82	119.90
29	B1	1134	G	N9-C4-C5	5.84	107.73	105.40
29	B1	2362	C	N3-C4-C5	-5.84	119.57	121.90
29	B1	2930	A	C5-C6-N6	-5.84	119.03	123.70
29	D1	149	U	C2-N1-C1'	5.84	124.70	117.70
29	D1	352	A	N7-C8-N9	-5.84	110.88	113.80
29	D1	2355	G	C6-C5-N7	-5.84	126.90	130.40
41	DJ	179	PRO	N-CA-CB	5.84	110.30	103.30
37	BF	36	PRO	N-CA-CB	5.83	110.30	103.30
29	D1	120	G	C4-N9-C1'	-5.83	118.92	126.50
29	B1	26	A	N9-C4-C5	5.83	108.13	105.80
29	B1	222	A	N9-C4-C5	-5.83	103.47	105.80
29	B1	608	A	C4-C5-N7	5.83	113.62	110.70
31	B3	34	U	N1-C2-N3	5.83	118.40	114.90
32	DA	212	PRO	N-CA-CB	5.83	110.30	103.30
29	B1	787	G	C8-N9-C4	-5.83	104.07	106.40
29	B1	3170	A	C5-C6-N6	5.83	128.37	123.70
39	DH	127	PRO	N-CA-CB	5.83	110.30	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	714	G	C4-C5-N7	5.83	113.13	110.80
1	C1	332	U	N1-C2-N3	5.83	118.40	114.90
29	D1	640	U	N3-C2-O2	5.83	126.28	122.20
29	B1	1177	G	C5-C6-O6	-5.83	125.10	128.60
29	B1	1314	C	N1-C2-O2	5.83	122.40	118.90
29	B1	1772	U	C2-N1-C1'	-5.83	110.71	117.70
32	BA	212	PRO	N-CA-CB	5.83	110.30	103.30
29	D1	2693	C	C2-N1-C1'	5.83	125.21	118.80
29	D1	2918	G	N3-C4-C5	-5.83	125.69	128.60
29	D1	3197	G	C8-N9-C4	5.83	108.73	106.40
29	B1	3307	A	N1-C6-N6	5.83	122.10	118.60
2	AA	4	PRO	N-CA-CB	5.83	110.29	103.30
5	AD	142	PRO	N-CA-CB	5.83	110.29	103.30
29	B1	354	U	C2-N1-C1'	5.83	124.69	117.70
29	B1	860	G	C6-C5-N7	-5.83	126.91	130.40
29	B1	1868	G	C5-C6-N1	-5.83	108.59	111.50
29	B1	2355	G	C4-C5-C6	5.83	122.30	118.80
29	D1	70	A	C8-N9-C4	-5.83	103.47	105.80
29	D1	584	G	C8-N9-C4	5.83	108.73	106.40
29	D1	2935	U	C2-N1-C1'	-5.83	110.71	117.70
29	B1	800	G	C8-N9-C4	5.82	108.73	106.40
29	B1	1296	C	N1-C2-O2	-5.82	115.41	118.90
31	B3	108	C	C6-N1-C2	5.82	122.63	120.30
35	BD	29	PRO	N-CA-CB	5.82	110.29	103.30
29	D1	146	U	C2-N1-C1'	5.82	124.69	117.70
29	D1	3052	G	N3-C2-N2	5.82	123.98	119.90
5	CD	142	PRO	N-CA-CB	5.82	110.29	103.30
29	D1	1064	A	C2-N3-C4	5.82	113.51	110.60
29	B1	299	G	C5-C6-N1	-5.82	108.59	111.50
29	B1	676	G	C4-C5-C6	5.82	122.29	118.80
29	B1	2935	U	C4-C5-C6	5.82	123.19	119.70
29	B1	3078	U	N1-C2-N3	-5.82	111.41	114.90
54	BY	71	PRO	N-CA-CB	5.82	110.28	103.30
1	C1	58	U	C5-C6-N1	5.82	125.61	122.70
3	CB	236	PRO	N-CA-CB	5.82	110.29	103.30
29	D1	594	U	N3-C4-C5	5.82	118.09	114.60
29	D1	3220	G	N3-C4-N9	5.82	129.49	126.00
29	B1	1196	C	C4-C5-C6	5.82	120.31	117.40
29	B1	3224	G	C4-C5-N7	-5.82	108.47	110.80
29	B1	3380	U	C2-N1-C1'	-5.82	110.72	117.70
29	B1	137	G	N3-C4-N9	5.82	129.49	126.00
29	B1	2669	G	C8-N9-C1'	-5.82	119.44	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	B2	66	A	N3-C4-N9	-5.82	122.75	127.40
29	D1	3194	C	N1-C2-O2	-5.82	115.41	118.90
40	DI	175	PHE	N-CA-C	-5.82	95.29	111.00
1	A1	1639	C	N1-C2-N3	-5.82	115.13	119.20
31	B3	14	C	N1-C2-O2	-5.82	115.41	118.90
29	D1	2854	U	N3-C2-O2	-5.82	118.13	122.20
29	B1	1111	U	C5-C6-N1	-5.81	119.79	122.70
29	D1	1091	A	C6-N1-C2	-5.81	115.11	118.60
29	D1	3272	C	C5-C4-N4	-5.81	116.13	120.20
29	B1	804	C	N1-C2-O2	-5.81	115.41	118.90
29	B1	2693	C	C2-N1-C1'	5.81	125.19	118.80
29	B1	2750	U	C5-C6-N1	-5.81	119.79	122.70
29	D1	2827	U	C2-N1-C1'	5.81	124.67	117.70
29	B1	1855	U	N3-C2-O2	-5.81	118.13	122.20
29	B1	2585	G	C5-C6-O6	-5.81	125.11	128.60
29	D1	592	A	C8-N9-C4	-5.81	103.48	105.80
29	D1	1547	G	C4-C5-N7	5.81	113.12	110.80
29	D1	2950	G	C6-C5-N7	-5.81	126.92	130.40
32	DA	56	PRO	N-CA-CB	5.81	110.27	103.30
32	DA	59	PRO	N-CA-CB	5.81	110.27	103.30
32	DA	135	PRO	N-CA-CB	5.81	110.27	103.30
46	BQ	59	PRO	N-CA-CB	5.81	110.27	103.30
1	C1	1498	G	N3-C4-N9	5.81	129.48	126.00
29	D1	420	G	C8-N9-C4	5.81	108.72	106.40
29	D1	1186	G	N7-C8-N9	5.81	116.00	113.10
29	B1	1855	U	C2-N1-C1'	5.80	124.67	117.70
29	D1	926	A	N1-C6-N6	-5.80	115.12	118.60
29	D1	2127	U	N3-C2-O2	5.80	126.26	122.20
29	D1	2895	G	C5-C6-O6	5.80	132.08	128.60
29	D1	3059	G	C6-C5-N7	-5.80	126.92	130.40
46	DQ	59	PRO	N-CA-CB	5.80	110.27	103.30
29	B1	719	U	N1-C2-N3	-5.80	111.42	114.90
44	BO	137	PRO	N-CA-CB	5.80	110.26	103.30
29	D1	884	A	C8-N9-C4	5.80	108.12	105.80
29	B1	1288	U	C5-C4-O4	-5.80	122.42	125.90
29	B1	1891	A	N1-C6-N6	5.80	122.08	118.60
29	D1	2369	G	C4-C5-N7	-5.80	108.48	110.80
29	D1	2599	U	N1-C2-O2	-5.80	118.74	122.80
29	D1	3342	A	N1-C6-N6	-5.80	115.12	118.60
29	D1	754	G	N3-C4-C5	5.80	131.50	128.60
29	D1	1140	G	N1-C2-N3	5.80	127.38	123.90
29	D1	2380	U	C2-N3-C4	-5.80	123.52	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	Db	5	PRO	N-CA-CB	5.80	110.26	103.30
29	D1	2354	C	N3-C4-C5	-5.80	119.58	121.90
29	D1	3244	A	C6-C5-N7	5.80	136.36	132.30
1	A1	63	G	N3-C2-N2	-5.80	115.84	119.90
8	AG	47	PRO	N-CA-CB	5.80	110.25	103.30
1	C1	305	C	N1-C2-O2	-5.80	115.42	118.90
1	C1	378	A	C2-N3-C4	5.80	113.50	110.60
29	D1	3026	G	N3-C4-C5	5.80	131.50	128.60
1	A1	1373	C	N1-C2-O2	-5.79	115.42	118.90
29	B1	1405	U	N3-C2-O2	5.79	126.25	122.20
29	B1	3002	C	C6-N1-C2	5.79	122.62	120.30
29	B1	3002	C	N3-C4-C5	5.79	124.22	121.90
29	B1	3277	U	C5-C6-N1	5.79	125.60	122.70
30	B2	112	G	C2-N3-C4	5.79	114.80	111.90
29	D1	2416	U	N1-C2-O2	-5.79	118.74	122.80
29	B1	1751	G	N9-C4-C5	5.79	107.72	105.40
29	B1	2187	G	N9-C4-C5	5.79	107.72	105.40
29	B1	971	G	N1-C6-O6	-5.79	116.43	119.90
29	B1	1380	G	N1-C6-O6	5.79	123.37	119.90
29	B1	2392	C	C6-N1-C2	5.79	122.62	120.30
29	B1	3018	C	N1-C2-O2	-5.79	115.43	118.90
8	CG	136	PRO	N-CA-CB	5.79	110.25	103.30
10	CI	38	PRO	N-CA-CB	5.79	110.25	103.30
29	D1	994	G	N3-C2-N2	5.79	123.95	119.90
29	D1	2667	A	C4-C5-C6	-5.79	114.11	117.00
39	DH	159	PRO	N-CA-CB	5.79	110.25	103.30
1	A1	847	A	C5-C6-N6	-5.79	119.07	123.70
29	B1	435	C	C2-N3-C4	-5.79	117.01	119.90
29	B1	624	G	C8-N9-C1'	-5.79	119.48	127.00
29	B1	992	A	N9-C4-C5	5.79	108.12	105.80
29	B1	1207	G	N1-C6-O6	5.79	123.37	119.90
29	B1	1477	A	C6-N1-C2	5.79	122.07	118.60
43	BN	48	GLY	N-CA-C	-5.79	98.63	113.10
29	D1	284	A	C5-C6-N1	5.79	120.59	117.70
29	D1	703	G	C8-N9-C1'	5.79	134.53	127.00
29	D1	837	A	C4-C5-N7	5.79	113.59	110.70
29	D1	1220	U	N1-C1'-C2'	-5.79	105.63	112.00
31	D3	50	C	N1-C2-O2	-5.79	115.43	118.90
1	A1	888	U	C2-N1-C1'	5.79	124.64	117.70
1	A1	1418	G	N1-C6-O6	5.79	123.37	119.90
29	B1	1335	C	C2-N3-C4	-5.79	117.01	119.90
29	B1	2303	A	N9-C4-C5	-5.79	103.48	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2385	G	C6-C5-N7	-5.79	126.93	130.40
41	BJ	18	PRO	N-CA-CB	5.79	110.25	103.30
1	A1	993	A	C4-C5-N7	-5.79	107.81	110.70
1	A1	1274	C	C6-N1-C2	-5.79	117.99	120.30
29	B1	1331	U	N1-C2-N3	5.79	118.37	114.90
29	B1	1444	G	C8-N9-C4	-5.79	104.09	106.40
29	B1	2325	G	C4-C5-N7	5.79	113.11	110.80
59	Bd	40	PRO	N-CA-CB	5.79	110.24	103.30
1	C1	1276	U	N1-C2-O2	-5.79	118.75	122.80
29	D1	76	G	C4-C5-N7	-5.79	108.49	110.80
29	D1	644	G	C5-C6-N1	-5.79	108.61	111.50
29	D1	2138	A	N1-C2-N3	5.79	132.19	129.30
36	DE	251	PRO	N-CA-CB	5.79	110.24	103.30
39	DH	176	PRO	N-CA-CB	5.79	110.24	103.30
1	A1	1438	G	C8-N9-C1'	-5.78	119.48	127.00
1	A1	1638	G	C2-N3-C4	-5.78	109.01	111.90
3	AB	236	PRO	N-CA-CB	5.78	110.24	103.30
29	B1	334	A	N7-C8-N9	-5.78	110.91	113.80
29	B1	1204	A	N1-C6-N6	5.78	122.07	118.60
1	C1	1602	C	C6-N1-C1'	-5.78	113.86	120.80
33	DB	197	PRO	N-CA-CB	5.78	110.24	103.30
40	DI	13	PRO	N-CA-CB	5.78	110.24	103.30
29	B1	389	A	N1-C2-N3	-5.78	126.41	129.30
29	B1	510	G	N1-C6-O6	5.78	123.37	119.90
1	C1	1033	C	N1-C2-O2	-5.78	115.43	118.90
29	B1	1175	C	C2-N1-C1'	-5.78	112.44	118.80
29	B1	2201	G	C5-C6-O6	-5.78	125.13	128.60
31	B3	53	A	C4-C5-C6	-5.78	114.11	117.00
1	C1	1198	G	C8-N9-C4	-5.78	104.09	106.40
29	D1	2810	C	N3-C4-N4	5.78	122.05	118.00
14	AM	2	PRO	N-CA-CB	5.78	110.23	103.30
29	B1	1373	A	C5-C6-N6	-5.78	119.08	123.70
62	Bg	12	GLY	N-CA-C	-5.78	98.65	113.10
1	C1	437	A	C6-C5-N7	-5.78	128.25	132.30
1	C1	629	U	N1-C2-O2	5.78	126.84	122.80
1	C1	1179	G	N9-C4-C5	-5.78	103.09	105.40
29	D1	2668	U	C6-N1-C2	-5.78	117.53	121.00
1	A1	437	A	N3-C4-N9	5.78	132.02	127.40
29	B1	75	G	C5-C6-N1	-5.78	108.61	111.50
29	B1	2970	C	C2-N1-C1'	5.78	125.16	118.80
29	B1	3244	A	N1-C2-N3	-5.78	126.41	129.30
29	D1	1453	A	C8-N9-C4	-5.78	103.49	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3084	C	C2-N1-C1'	5.78	125.15	118.80
29	B1	2609	A	C8-N9-C4	-5.78	103.49	105.80
29	B1	2883	U	C2-N3-C4	-5.78	123.53	127.00
1	C1	86	A	C5-C6-N1	-5.78	114.81	117.70
1	C1	348	U	N3-C2-O2	5.78	126.24	122.20
29	D1	528	U	N1-C2-O2	5.78	126.84	122.80
29	D1	1420	C	C5-C6-N1	-5.78	118.11	121.00
29	D1	3050	U	N3-C2-O2	-5.78	118.16	122.20
31	D3	42	G	N3-C4-C5	5.78	131.49	128.60
57	Bb	5	PRO	N-CA-CB	5.77	110.23	103.30
1	A1	597	G	C4-C5-N7	5.77	113.11	110.80
1	C1	400	A	N7-C8-N9	-5.77	110.91	113.80
29	D1	1002	A	N1-C6-N6	-5.77	115.14	118.60
29	D1	2343	C	N1-C2-O2	-5.77	115.44	118.90
29	B1	327	A	C2-N3-C4	-5.77	107.72	110.60
29	D1	529	A	C8-N9-C4	5.77	108.11	105.80
29	D1	1203	A	C8-N9-C4	-5.77	103.49	105.80
1	C1	1416	G	N1-C6-O6	5.77	123.36	119.90
1	C1	1540	G	C8-N9-C4	-5.77	104.09	106.40
8	CG	137	PRO	N-CA-CB	5.77	110.22	103.30
29	D1	595	G	C4-C5-N7	5.77	113.11	110.80
1	A1	792	U	C2-N1-C1'	5.77	124.62	117.70
2	AA	207	PRO	N-CA-CB	5.77	110.22	103.30
29	B1	1788	C	C2-N1-C1'	5.77	125.14	118.80
30	D2	92	A	N7-C8-N9	-5.77	110.92	113.80
29	B1	2988	C	N1-C2-O2	5.77	122.36	118.90
29	B1	3342	A	C6-N1-C2	-5.77	115.14	118.60
1	A1	1788	G	N3-C2-N2	-5.76	115.86	119.90
29	D1	2662	G	C6-C5-N7	-5.76	126.94	130.40
29	B1	3047	U	C5-C6-N1	-5.76	119.82	122.70
1	C1	8	U	N3-C4-O4	5.76	123.43	119.40
29	D1	1147	G	C5-C6-O6	-5.76	125.14	128.60
29	D1	3012	A	N1-C6-N6	-5.76	115.14	118.60
1	A1	1437	U	C5-C6-N1	-5.76	119.82	122.70
10	AI	109	PRO	N-CA-CB	5.76	110.21	103.30
29	B1	2134	G	C4-C5-N7	5.76	113.11	110.80
29	B1	2151	C	C5-C4-N4	-5.76	116.17	120.20
29	B1	2664	C	N1-C2-O2	5.76	122.36	118.90
29	D1	1063	G	C4-N9-C1'	-5.76	119.01	126.50
72	DL	34	PRO	N-CA-CB	5.76	110.22	103.30
29	B1	729	C	N1-C2-O2	5.76	122.36	118.90
29	B1	2330	C	N1-C2-O2	-5.76	115.44	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2702	A	C8-N9-C4	-5.76	103.50	105.80
31	B3	42	G	N3-C4-N9	-5.76	122.54	126.00
29	D1	1294	A	C5-C6-N1	5.76	120.58	117.70
29	D1	3060	C	N1-C2-O2	-5.76	115.44	118.90
29	B1	402	A	C5-C6-N1	-5.76	114.82	117.70
29	B1	431	U	N3-C4-C5	5.76	118.05	114.60
29	B1	963	G	N7-C8-N9	5.76	115.98	113.10
29	D1	1126	G	N9-C4-C5	5.76	107.70	105.40
29	D1	2414	G	C6-N1-C2	5.76	128.55	125.10
29	D1	2636	A	C6-N1-C2	-5.76	115.15	118.60
31	D3	117	C	N1-C2-O2	-5.76	115.45	118.90
29	B1	2892	A	C5-C6-N6	-5.75	119.10	123.70
17	AP	88	PRO	N-CA-CB	5.75	110.20	103.30
29	B1	3242	G	N1-C6-O6	-5.75	116.45	119.90
1	C1	62	A	N3-C4-N9	-5.75	122.80	127.40
5	CD	164	PRO	N-CA-CB	5.75	110.20	103.30
29	D1	832	G	N1-C6-O6	5.75	123.35	119.90
29	D1	837	A	N7-C8-N9	5.75	116.68	113.80
29	D1	1753	G	C8-N9-C4	5.75	108.70	106.40
1	A1	1303	U	C2-N1-C1'	-5.75	110.80	117.70
29	B1	950	G	N1-C6-O6	-5.75	116.45	119.90
1	C1	88	U	C5-C4-O4	5.75	129.35	125.90
29	D1	648	C	C5-C6-N1	-5.75	118.12	121.00
29	D1	956	U	C5-C6-N1	-5.75	119.82	122.70
29	D1	3035	A	C5-C6-N6	-5.75	119.10	123.70
29	D1	3096	C	N3-C2-O2	5.75	125.93	121.90
29	B1	2776	C	C2-N1-C1'	5.75	125.12	118.80
2	CA	207	PRO	N-CA-CB	5.75	110.20	103.30
29	B1	1005	G	N9-C4-C5	5.75	107.70	105.40
29	B1	2662	G	C8-N9-C4	5.75	108.70	106.40
39	BH	127	PRO	N-CA-CB	5.75	110.20	103.30
29	D1	3178	A	C2-N3-C4	-5.75	107.73	110.60
57	Db	122	PRO	N-CA-CB	5.75	110.20	103.30
1	A1	373	G	C2-N3-C4	-5.75	109.03	111.90
1	A1	610	G	C5-C6-N1	-5.75	108.63	111.50
21	AT	57	PRO	N-CA-CB	5.75	110.20	103.30
29	B1	934	G	C8-N9-C4	-5.75	104.10	106.40
29	B1	2981	U	C5-C4-O4	-5.75	122.45	125.90
1	C1	1459	C	C6-N1-C2	5.75	122.60	120.30
29	D1	371	G	N9-C4-C5	-5.75	103.10	105.40
29	D1	914	A	C2-N3-C4	5.75	113.47	110.60
29	D1	1113	G	N1-C6-O6	5.75	123.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1931	U	C2-N1-C1'	5.75	124.60	117.70
29	D1	3212	C	C4-C5-C6	5.75	120.27	117.40
29	B1	2395	G	N9-C4-C5	5.75	107.70	105.40
29	D1	675	C	C5-C6-N1	5.75	123.87	121.00
30	D2	112	G	C5-C6-N1	5.75	114.37	111.50
1	A1	24	U	C5-C4-O4	-5.74	122.45	125.90
1	A1	1421	A	N9-C4-C5	5.74	108.10	105.80
29	B1	1476	G	N1-C2-N3	5.74	127.35	123.90
29	B1	2689	A	N3-C4-C5	-5.74	122.78	126.80
29	D1	2283	G	C5-C6-N1	-5.74	108.63	111.50
29	B1	335	G	N3-C2-N2	-5.74	115.88	119.90
29	B1	2283	G	N1-C2-N2	5.74	121.37	116.20
31	B3	113	U	O4'-C1'-N1	5.74	112.79	108.20
1	C1	1541	G	N1-C2-N3	5.74	127.34	123.90
29	B1	2185	G	C8-N9-C4	5.74	108.70	106.40
37	BF	153	PRO	N-CA-CB	5.74	110.19	103.30
72	DL	39	PRO	N-CA-CB	5.74	110.19	103.30
29	B1	1891	A	C4-C5-N7	5.74	113.57	110.70
29	B1	2600	C	N1-C2-O2	-5.74	115.46	118.90
1	C1	1535	U	C2-N1-C1'	5.74	124.58	117.70
14	CM	31	PRO	N-CA-CB	5.74	110.19	103.30
29	D1	617	G	C5-C6-N1	5.74	114.37	111.50
29	D1	2338	C	C2-N3-C4	-5.74	117.03	119.90
52	DW	118	GLY	N-CA-C	-5.74	98.75	113.10
1	A1	647	G	C4-N9-C1'	5.74	133.96	126.50
1	C1	1645	G	C8-N9-C4	-5.74	104.11	106.40
29	D1	1005	G	N9-C4-C5	5.74	107.69	105.40
29	D1	1139	G	N3-C4-N9	-5.74	122.56	126.00
29	D1	2940	A	C5-C6-N1	5.74	120.57	117.70
42	DK	74	PRO	N-CA-CB	5.74	110.18	103.30
29	B1	2241	U	C6-N1-C1'	5.74	129.23	121.20
1	C1	968	U	N3-C2-O2	-5.74	118.19	122.20
29	D1	1380	G	C2-N3-C4	-5.74	109.03	111.90
29	B1	3213	A	C5-N7-C8	-5.73	101.03	103.90
29	D1	1001	G	N7-C8-N9	5.73	115.97	113.10
42	DK	45	PRO	N-CA-CB	5.73	110.18	103.30
29	B1	1585	C	N3-C2-O2	5.73	125.91	121.90
29	B1	2369	G	C2-N3-C4	-5.73	109.03	111.90
30	B2	65	G	N3-C4-C5	-5.73	125.73	128.60
29	D1	1307	G	C4-N9-C1'	5.73	133.95	126.50
29	D1	1402	C	C5-C6-N1	-5.73	118.13	121.00
29	D1	2632	G	N1-C6-O6	5.73	123.34	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2701	U	N3-C4-O4	5.73	123.41	119.40
29	B1	1188	U	C6-N1-C1'	5.73	129.22	121.20
29	B1	1371	G	C6-C5-N7	-5.73	126.96	130.40
29	B1	2696	A	C8-N9-C4	-5.73	103.51	105.80
29	B1	2774	C	C6-N1-C2	-5.73	118.01	120.30
29	B1	2810	C	C6-N1-C2	5.73	122.59	120.30
5	CD	67	PRO	N-CA-CB	5.73	110.18	103.30
1	A1	1109	G	N9-C4-C5	-5.73	103.11	105.40
29	B1	1439	U	C5-C6-N1	-5.73	119.83	122.70
29	B1	2896	A	N1-C2-N3	5.73	132.16	129.30
29	D1	1185	C	C5-C6-N1	-5.73	118.14	121.00
29	B1	2756	C	N1-C2-N3	5.73	123.21	119.20
41	BJ	122	PRO	N-CA-CB	5.73	110.17	103.30
1	C1	114	C	C6-N1-C1'	-5.73	113.93	120.80
1	C1	1634	C	C2-N3-C4	5.73	122.76	119.90
29	D1	1305	U	C5-C6-N1	-5.73	119.84	122.70
30	D2	4	U	N1-C2-O2	5.73	126.81	122.80
29	B1	725	G	C4-C5-N7	-5.73	108.51	110.80
29	B1	1489	A	N1-C6-N6	-5.73	115.16	118.60
29	B1	2700	G	C4-C5-N7	5.73	113.09	110.80
29	D1	1703	U	C6-N1-C2	-5.73	117.56	121.00
1	A1	1602	C	C2-N1-C1'	5.72	125.10	118.80
15	AN	110	PRO	N-CA-CB	5.72	110.17	103.30
29	B1	886	C	C2-N3-C4	-5.72	117.04	119.90
29	B1	1825	G	N9-C4-C5	5.72	107.69	105.40
29	B1	2290	C	N3-C4-C5	5.72	124.19	121.90
29	B1	2883	U	C5-C6-N1	-5.72	119.84	122.70
29	B1	3257	C	N3-C2-O2	5.72	125.91	121.90
1	C1	1110	G	C5-C6-O6	5.72	132.03	128.60
29	D1	299	G	N1-C6-O6	5.72	123.33	119.90
29	D1	880	G	C8-N9-C1'	5.72	134.44	127.00
31	D3	16	G	C6-C5-N7	-5.72	126.97	130.40
35	DD	102	PRO	N-CA-CB	5.72	110.17	103.30
29	B1	668	G	N9-C4-C5	-5.72	103.11	105.40
29	B1	1425	U	C6-N1-C2	5.72	124.43	121.00
29	B1	1429	G	C8-N9-C1'	-5.72	119.56	127.00
29	D1	720	A	C8-N9-C4	-5.72	103.51	105.80
29	D1	2928	C	C5-C4-N4	-5.72	116.19	120.20
29	B1	1376	C	C2-N3-C4	-5.72	117.04	119.90
29	B1	1888	U	N1-C2-N3	5.72	118.33	114.90
29	B1	2302	G	N3-C4-N9	-5.72	122.57	126.00
29	B1	3046	A	C8-N9-C4	-5.72	103.51	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2913	C	N3-C4-N4	-5.72	114.00	118.00
32	DA	121	PRO	N-CA-CB	5.72	110.16	103.30
29	B1	2639	G	C6-C5-N7	-5.72	126.97	130.40
29	D1	995	U	N3-C2-O2	5.72	126.20	122.20
29	D1	1476	G	C6-N1-C2	-5.72	121.67	125.10
29	B1	7	C	N3-C2-O2	-5.72	117.90	121.90
29	B1	793	C	C6-N1-C1'	-5.72	113.94	120.80
29	B1	1840	U	C5-C4-O4	5.72	129.33	125.90
1	C1	1631	A	C4-C5-C6	-5.72	114.14	117.00
29	D1	953	G	C5-N7-C8	-5.72	101.44	104.30
29	D1	1422	G	C5-C6-N1	-5.72	108.64	111.50
29	D1	2560	C	C5-C6-N1	5.72	123.86	121.00
29	D1	3205	G	C5-C6-O6	5.72	132.03	128.60
38	DG	217	PRO	N-CA-CB	5.72	110.16	103.30
29	B1	524	U	N3-C4-O4	-5.71	115.40	119.40
29	D1	70	A	N3-C4-C5	-5.71	122.80	126.80
29	D1	1184	A	C5-C6-N6	5.71	128.27	123.70
29	D1	3173	G	N3-C4-N9	-5.71	122.57	126.00
1	C1	1637	C	C6-N1-C2	-5.71	118.02	120.30
29	D1	429	U	C4-C5-C6	5.71	123.13	119.70
29	B1	171	G	C4-N9-C1'	5.71	133.93	126.50
29	B1	747	A	C5-C6-N6	-5.71	119.13	123.70
1	C1	481	A	C6-N1-C2	5.71	122.03	118.60
1	C1	1028	C	C2-N3-C4	-5.71	117.05	119.90
29	D1	985	U	N1-C2-O2	-5.71	118.80	122.80
29	D1	3244	A	C5-C6-N1	5.71	120.56	117.70
5	AD	129	PRO	N-CA-CB	5.71	110.15	103.30
29	B1	826	G	C8-N9-C4	5.71	108.68	106.40
29	D1	3225	C	C6-N1-C2	-5.71	118.02	120.30
29	B1	48	A	C8-N9-C4	5.71	108.08	105.80
29	B1	434	U	N3-C2-O2	5.71	126.20	122.20
29	B1	557	A	N1-C6-N6	5.71	122.03	118.60
29	B1	1171	G	N9-C4-C5	5.71	107.68	105.40
29	B1	2639	G	C5-C6-O6	-5.71	125.17	128.60
1	C1	337	G	N1-C6-O6	5.71	123.33	119.90
34	BC	5	LYS	N-CA-C	-5.71	95.59	111.00
1	C1	374	U	C2-N1-C1'	5.71	124.55	117.70
1	C1	1745	G	N3-C4-N9	5.71	129.42	126.00
29	D1	750	G	C4-C5-N7	-5.71	108.52	110.80
29	D1	1432	C	C6-N1-C1'	-5.71	113.95	120.80
29	D1	2607	G	C8-N9-C1'	-5.71	119.58	127.00
29	D1	2702	A	N1-C2-N3	5.71	132.15	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	304	G	N3-C4-N9	5.71	129.42	126.00
29	B1	832	G	C6-C5-N7	-5.71	126.98	130.40
29	B1	2977	G	C6-C5-N7	-5.71	126.98	130.40
29	B1	3233	C	C2-N1-C1'	5.71	125.08	118.80
29	D1	2687	G	N3-C4-N9	5.71	129.42	126.00
1	A1	1138	A	N9-C4-C5	5.70	108.08	105.80
29	B1	693	A	C8-N9-C1'	-5.70	117.43	127.70
29	B1	3274	A	N9-C4-C5	-5.70	103.52	105.80
1	C1	45	U	C2-N3-C4	-5.70	123.58	127.00
1	C1	1513	G	N9-C4-C5	5.70	107.68	105.40
29	D1	257	U	C6-N1-C1'	-5.70	113.21	121.20
29	B1	779	G	C8-N9-C1'	-5.70	119.59	127.00
29	B1	1307	G	C4-N9-C1'	5.70	133.91	126.50
1	A1	880	C	C6-N1-C2	5.70	122.58	120.30
29	B1	1002	A	C5-C6-N1	5.70	120.55	117.70
29	B1	1333	C	C2-N3-C4	-5.70	117.05	119.90
30	B2	66	A	N1-C6-N6	-5.70	115.18	118.60
48	BS	26	PRO	N-CA-CB	5.70	110.14	103.30
29	D1	299	G	C4-N9-C1'	5.70	133.91	126.50
29	D1	687	U	C5-C6-N1	-5.70	119.85	122.70
29	D1	1207	G	C5-N7-C8	-5.70	101.45	104.30
29	D1	2150	G	C4-C5-N7	-5.70	108.52	110.80
29	D1	3386	G	C8-N9-C4	-5.70	104.12	106.40
1	A1	374	U	C6-N1-C1'	-5.70	113.22	121.20
1	A1	1673	G	C6-N1-C2	-5.70	121.68	125.10
29	B1	421	G	C8-N9-C1'	-5.70	119.59	127.00
29	B1	2355	G	N1-C6-O6	5.70	123.32	119.90
29	B1	2396	G	C4-N9-C1'	5.70	133.91	126.50
29	B1	2939	G	C4-N9-C1'	5.70	133.91	126.50
29	B1	3220	G	C8-N9-C1'	-5.70	119.59	127.00
1	C1	968	U	N1-C2-O2	5.70	126.79	122.80
29	D1	571	U	C5-C6-N1	-5.70	119.85	122.70
29	D1	1058	U	C6-N1-C2	5.70	124.42	121.00
29	D1	1608	C	C2-N1-C1'	5.70	125.07	118.80
29	D1	2901	G	C5-C6-O6	-5.70	125.18	128.60
29	D1	3371	G	C4-C5-N7	5.70	113.08	110.80
29	B1	1586	G	N1-C6-O6	-5.70	116.48	119.90
29	B1	2134	G	N1-C6-O6	5.70	123.32	119.90
29	D1	3205	G	C6-N1-C2	-5.70	121.68	125.10
29	B1	2605	G	C4-C5-N7	5.69	113.08	110.80
29	D1	1483	G	N1-C6-O6	-5.69	116.48	119.90
29	B1	220	G	C6-C5-N7	-5.69	126.98	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	366	A	C2-N3-C4	-5.69	107.75	110.60
29	B1	3377	G	C8-N9-C4	-5.69	104.12	106.40
1	C1	1348	A	C3'-C2'-C1'	-5.69	96.95	101.50
29	D1	432	G	N1-C6-O6	5.69	123.32	119.90
29	D1	2302	G	N3-C4-N9	-5.69	122.58	126.00
29	D1	3190	C	N3-C2-O2	-5.69	117.92	121.90
29	B1	3329	U	N3-C2-O2	-5.69	118.22	122.20
31	B3	68	G	N3-C4-C5	5.69	131.45	128.60
29	D1	2679	A	N9-C4-C5	-5.69	103.52	105.80
29	D1	3048	A	C8-N9-C4	-5.69	103.52	105.80
29	D1	580	C	C2-N1-C1'	5.69	125.06	118.80
1	A1	1638	G	N1-C2-N3	5.69	127.31	123.90
2	AA	199	PRO	N-CA-CB	5.69	110.12	103.30
29	B1	1499	C	N3-C2-O2	5.69	125.88	121.90
29	B1	2339	C	C2-N1-C1'	5.69	125.06	118.80
21	CT	158	PRO	N-CA-CB	5.69	110.12	103.30
29	D1	1152	G	C2-N3-C4	-5.69	109.06	111.90
56	Da	88	PRO	N-CA-CB	5.69	110.12	103.30
29	D1	992	A	C8-N9-C4	-5.69	103.53	105.80
29	D1	1470	U	C5-C4-O4	-5.69	122.49	125.90
29	D1	2296	A	N1-C2-N3	5.69	132.14	129.30
29	D1	2899	C	C5-C6-N1	5.69	123.84	121.00
29	B1	529	A	N3-C4-C5	5.68	130.78	126.80
29	B1	687	U	N3-C4-O4	-5.68	115.42	119.40
29	B1	1111	U	N1-C2-O2	-5.68	118.82	122.80
48	BS	90	PRO	N-CA-CB	5.68	110.12	103.30
1	C1	1072	C	C2-N1-C1'	5.68	125.05	118.80
3	CB	234	PRO	N-CA-CB	5.68	110.12	103.30
29	D1	626	U	C2-N1-C1'	5.68	124.52	117.70
29	D1	2907	G	C8-N9-C1'	5.68	134.39	127.00
1	A1	1520	U	N3-C2-O2	5.68	126.18	122.20
29	B1	389	A	C6-C5-N7	5.68	136.28	132.30
29	B1	2248	C	N3-C2-O2	5.68	125.88	121.90
30	B2	35	C	C2-N1-C1'	5.68	125.05	118.80
1	C1	300	A	N1-C6-N6	-5.68	115.19	118.60
29	D1	1152	G	C5-N7-C8	-5.68	101.46	104.30
29	D1	2353	G	N1-C6-O6	5.68	123.31	119.90
29	D1	2885	C	N3-C4-C5	5.68	124.17	121.90
29	B1	52	A	N7-C8-N9	5.68	116.64	113.80
1	C1	1745	G	N3-C2-N2	5.68	123.88	119.90
29	D1	1585	C	N3-C2-O2	5.68	125.88	121.90
29	B1	1216	C	N1-C2-O2	-5.68	115.49	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3300	U	C6-N1-C1'	5.68	129.15	121.20
29	B1	3314	A	N7-C8-N9	5.68	116.64	113.80
29	D1	676	G	C4-C5-C6	5.68	122.21	118.80
29	D1	1377	G	N3-C4-C5	-5.68	125.76	128.60
1	A1	358	U	C6-N1-C1'	-5.68	113.25	121.20
29	B1	311	C	N3-C4-C5	5.68	124.17	121.90
29	B1	439	C	C2-N1-C1'	5.68	125.05	118.80
29	B1	504	A	C4-C5-C6	5.68	119.84	117.00
29	B1	577	C	C5-C6-N1	5.68	123.84	121.00
1	A1	592	A	C6-N1-C2	5.68	122.01	118.60
3	AB	227	PRO	N-CA-CB	5.68	110.11	103.30
14	AM	31	PRO	N-CA-CB	5.68	110.11	103.30
29	B1	2602	G	N7-C8-N9	-5.68	110.26	113.10
53	BX	101	PRO	N-CA-CB	5.68	110.11	103.30
21	CT	30	PRO	N-CA-CB	5.68	110.11	103.30
29	D1	389	A	C5-C6-N1	-5.68	114.86	117.70
29	D1	411	U	N3-C2-O2	5.68	126.17	122.20
33	DB	151	PRO	N-CA-CB	5.68	110.11	103.30
1	A1	1549	C	N1-C2-O2	-5.67	115.50	118.90
29	B1	283	G	C4-C5-N7	5.67	113.07	110.80
29	B1	531	G	N3-C4-C5	5.67	131.44	128.60
29	B1	1945	A	C5-C6-N1	5.67	120.54	117.70
29	B1	2529	A	C6-N1-C2	5.67	122.00	118.60
29	D1	827	A	C5-C6-N1	5.67	120.54	117.70
29	D1	1380	G	C5-C6-N1	-5.67	108.66	111.50
29	D1	3009	G	N3-C4-N9	-5.67	122.59	126.00
30	D2	111	U	C6-N1-C2	-5.67	117.60	121.00
1	A1	1602	C	C6-N1-C1'	-5.67	113.99	120.80
29	D1	2199	G	N7-C8-N9	5.67	115.94	113.10
29	D1	3396	U	C2-N1-C1'	5.67	124.51	117.70
29	B1	507	U	N3-C4-C5	5.67	118.00	114.60
29	B1	717	C	C6-N1-C2	-5.67	118.03	120.30
29	B1	883	A	C5-C6-N6	5.67	128.24	123.70
29	B1	933	A	N1-C6-N6	5.67	122.00	118.60
29	B1	952	A	C2-N3-C4	-5.67	107.76	110.60
29	B1	3017	A	C6-N1-C2	5.67	122.00	118.60
29	D1	390	G	N9-C4-C5	5.67	107.67	105.40
29	D1	987	U	C4-C5-C6	5.67	123.10	119.70
29	D1	2287	C	C6-N1-C2	-5.67	118.03	120.30
30	D2	58	C	C2-N1-C1'	5.67	125.04	118.80
21	AT	30	PRO	N-CA-CB	5.67	110.10	103.30
29	B1	364	G	C5-C6-N1	5.67	114.33	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1147	G	N9-C4-C5	-5.67	103.13	105.40
1	C1	1547	A	C8-N9-C4	5.67	108.07	105.80
29	D1	2278	C	C6-N1-C1'	-5.67	114.00	120.80
1	A1	1085	G	N7-C8-N9	-5.67	110.27	113.10
2	AA	35	PRO	N-CA-CB	5.67	110.10	103.30
10	AI	125	PRO	N-CA-CB	5.67	110.10	103.30
29	B1	89	A	C5-N7-C8	-5.67	101.07	103.90
29	B1	1048	A	C5-C6-N1	5.67	120.53	117.70
29	B1	1424	C	C2-N3-C4	-5.67	117.07	119.90
29	B1	2129	U	N3-C4-O4	-5.67	115.43	119.40
29	B1	2930	A	N1-C6-N6	5.67	122.00	118.60
15	CN	110	PRO	N-CA-CB	5.67	110.10	103.30
29	D1	1371	G	C6-C5-N7	-5.67	127.00	130.40
29	D1	3143	C	C3'-C2'-C1'	5.67	106.03	101.50
40	DI	30	PRO	N-CA-CB	5.67	110.10	103.30
55	DZ	49	PRO	N-CA-CB	5.67	110.10	103.30
10	AI	87	PRO	N-CA-CB	5.67	110.10	103.30
29	B1	2290	C	C2-N3-C4	-5.67	117.07	119.90
39	BH	99	PRO	N-CA-CB	5.67	110.10	103.30
29	B1	148	G	C5-C6-O6	5.67	132.00	128.60
29	B1	429	U	C2-N3-C4	-5.67	123.60	127.00
1	C1	1353	U	N1-C2-O2	5.67	126.77	122.80
29	D1	1113	G	C8-N9-C1'	-5.67	119.64	127.00
30	D2	16	U	C6-N1-C2	5.67	124.40	121.00
29	B1	271	C	N1-C2-O2	5.66	122.30	118.90
1	C1	91	G	C4-N9-C1'	-5.66	119.14	126.50
29	D1	775	A	C5-C6-N6	-5.66	119.17	123.70
29	D1	1123	U	C6-N1-C2	5.66	124.40	121.00
29	D1	1475	A	C8-N9-C4	5.66	108.06	105.80
29	D1	2116	G	N1-C6-O6	5.66	123.30	119.90
29	B1	2283	G	C2-N3-C4	-5.66	109.07	111.90
29	B1	3103	A	C4-C5-C6	5.66	119.83	117.00
29	D1	118	U	N3-C2-O2	-5.66	118.24	122.20
36	DE	181	PRO	N-CA-CB	5.66	110.09	103.30
29	B1	1303	A	C2-N3-C4	-5.66	107.77	110.60
29	B1	3211	C	C2-N1-C1'	-5.66	112.57	118.80
29	D1	3199	G	N3-C4-N9	-5.66	122.60	126.00
29	B1	2618	G	C5-C6-N1	-5.66	108.67	111.50
29	B1	2895	G	N3-C2-N2	-5.66	115.94	119.90
31	B3	36	G	N3-C4-C5	-5.66	125.77	128.60
45	BP	122	GLN	N-CA-C	-5.66	95.72	111.00
1	C1	364	G	C8-N9-C4	-5.66	104.14	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	309	U	N3-C4-O4	-5.66	115.44	119.40
29	D1	2740	A	C5-C6-N1	5.66	120.53	117.70
1	A1	869	A	C2-N3-C4	5.66	113.43	110.60
29	B1	281	G	C4-C5-N7	5.66	113.06	110.80
29	B1	1120	A	N1-C2-N3	5.66	132.13	129.30
29	B1	1841	A	C8-N9-C4	-5.66	103.54	105.80
29	B1	2814	G	C5-C6-O6	-5.66	125.21	128.60
29	B1	3000	A	C5-C6-N1	-5.66	114.87	117.70
30	B2	19	C	C6-N1-C1'	-5.66	114.01	120.80
36	BE	192	PRO	N-CA-CB	5.66	110.09	103.30
29	D1	2918	G	C8-N9-C4	-5.66	104.14	106.40
29	B1	1113	G	N1-C6-O6	5.65	123.29	119.90
29	D1	1172	G	C5-N7-C8	5.65	107.13	104.30
57	Db	53	PRO	N-CA-CB	5.65	110.08	103.30
29	B1	918	C	N3-C2-O2	5.65	125.86	121.90
29	B1	1434	G	N3-C2-N2	-5.65	115.94	119.90
29	B1	3176	G	C4-C5-C6	-5.65	115.41	118.80
1	C1	1377	U	N3-C4-O4	5.65	123.36	119.40
17	CP	118	PRO	N-CA-CB	5.65	110.08	103.30
1	A1	1725	U	C6-N1-C1'	-5.65	113.29	121.20
29	B1	877	C	N3-C4-N4	5.65	121.96	118.00
29	B1	2385	G	C2-N3-C4	-5.65	109.08	111.90
29	B1	2919	A	N7-C8-N9	5.65	116.62	113.80
29	B1	3210	A	C2-N3-C4	-5.65	107.78	110.60
29	D1	389	A	N3-C4-N9	-5.65	122.88	127.40
29	D1	3245	A	C5-C6-N6	-5.65	119.18	123.70
29	D1	584	G	C4-N9-C1'	-5.65	119.16	126.50
29	B1	360	G	C4-C5-N7	-5.65	108.54	110.80
29	B1	657	A	C4-C5-C6	-5.65	114.18	117.00
29	B1	1196	C	C5-C6-N1	-5.65	118.18	121.00
29	B1	1501	U	N3-C4-O4	-5.65	115.45	119.40
29	D1	569	A	C2-N3-C4	-5.65	107.78	110.60
29	D1	968	G	C5-C6-O6	5.65	131.99	128.60
29	D1	3303	G	C2-N3-C4	5.65	114.72	111.90
29	D1	52	A	N1-C2-N3	5.65	132.12	129.30
29	D1	422	A	C8-N9-C1'	5.65	137.86	127.70
29	B1	289	A	C5-C6-N1	-5.64	114.88	117.70
1	C1	1121	C	C6-N1-C1'	5.64	127.57	120.80
9	CH	120	PRO	N-CA-CB	5.64	110.07	103.30
29	D1	2665	U	C5-C6-N1	-5.64	119.88	122.70
33	DB	210	PRO	N-CA-CB	5.64	110.07	103.30
29	B1	52	A	C8-N9-C1'	-5.64	117.54	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	111	C	C6-N1-C2	5.64	122.56	120.30
29	B1	380	U	C2-N3-C4	5.64	130.38	127.00
29	B1	2823	G	C4-N9-C1'	-5.64	119.17	126.50
1	C1	597	G	C4-C5-N7	5.64	113.06	110.80
29	D1	86	G	C8-N9-C1'	5.64	134.34	127.00
29	D1	2135	U	C2-N3-C4	-5.64	123.61	127.00
29	B1	3139	A	N9-C4-C5	5.64	108.06	105.80
1	C1	418	G	C6-C5-N7	-5.64	127.02	130.40
1	A1	1437	U	N3-C2-O2	5.64	126.15	122.20
29	B1	1424	C	N3-C4-C5	5.64	124.16	121.90
54	BY	114	GLY	N-CA-C	5.64	127.20	113.10
1	C1	426	G	N3-C4-N9	5.64	129.38	126.00
1	C1	687	G	N3-C4-N9	-5.64	122.62	126.00
29	D1	379	C	N3-C2-O2	5.64	125.85	121.90
29	D1	501	A	C6-N1-C2	5.64	121.98	118.60
29	D1	1854	C	N3-C4-N4	5.64	121.95	118.00
29	B1	224	C	C6-N1-C2	-5.64	118.05	120.30
1	C1	1021	C	C6-N1-C2	5.64	122.56	120.30
1	A1	354	C	C6-N1-C2	5.64	122.56	120.30
29	B1	3217	C	C2-N1-C1'	5.64	125.00	118.80
30	B2	77	G	C5-C6-N1	5.64	114.32	111.50
1	A1	870	C	C6-N1-C2	5.63	122.55	120.30
1	A1	1786	G	C5-C6-O6	5.63	131.98	128.60
29	B1	881	C	C5-C6-N1	-5.63	118.18	121.00
29	B1	1388	U	C2-N1-C1'	-5.63	110.94	117.70
29	B1	1394	A	N1-C6-N6	5.63	121.98	118.60
29	D1	3010	U	C6-N1-C2	5.63	124.38	121.00
29	D1	3105	U	N3-C2-O2	-5.63	118.25	122.20
41	BJ	214	PRO	N-CA-CB	5.63	110.06	103.30
1	C1	786	C	C6-N1-C2	-5.63	118.05	120.30
1	A1	615	A	C6-N1-C2	-5.63	115.22	118.60
1	A1	1095	U	C2-N1-C1'	5.63	124.46	117.70
1	A1	1455	G	C5-N7-C8	5.63	107.12	104.30
29	B1	860	G	N9-C4-C5	-5.63	103.15	105.40
29	D1	2349	U	C6-N1-C2	-5.63	117.62	121.00
1	A1	1453	G	C5-C6-O6	-5.63	125.22	128.60
1	C1	336	G	N1-C6-O6	-5.63	116.52	119.90
1	C1	403	G	C4-C5-N7	5.63	113.05	110.80
1	C1	1159	C	N1-C2-O2	5.63	122.28	118.90
1	A1	1789	G	C8-N9-C1'	-5.63	119.68	127.00
29	B1	103	G	N1-C2-N3	-5.63	120.52	123.90
43	BN	67	PRO	N-CA-CB	5.63	110.05	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	563	U	N3-C4-O4	5.63	123.34	119.40
29	D1	3215	A	N7-C8-N9	5.63	116.61	113.80
29	D1	3388	C	C6-N1-C1'	-5.63	114.05	120.80
29	B1	3089	C	C6-N1-C2	-5.63	118.05	120.30
31	B3	87	G	C8-N9-C1'	-5.63	119.69	127.00
29	D1	608	A	C4-C5-C6	5.63	119.81	117.00
29	D1	987	U	C2-N3-C4	-5.63	123.62	127.00
29	D1	1322	U	N3-C4-C5	-5.63	111.22	114.60
29	D1	2961	G	N3-C4-N9	5.63	129.38	126.00
1	A1	91	G	N3-C4-C5	5.62	131.41	128.60
29	B1	935	U	C2-N1-C1'	5.62	124.45	117.70
29	B1	1618	G	C5-C6-N1	5.62	114.31	111.50
29	D1	2909	U	N1-C2-N3	5.62	118.28	114.90
29	D1	3187	A	N1-C6-N6	5.62	121.97	118.60
29	B1	563	U	C5-C6-N1	5.62	125.51	122.70
29	B1	1887	A	N1-C6-N6	5.62	121.97	118.60
29	B1	2330	C	N3-C4-C5	5.62	124.15	121.90
29	D1	596	C	N3-C2-O2	-5.62	117.96	121.90
29	D1	3266	G	N3-C2-N2	5.62	123.84	119.90
41	DJ	5	PRO	N-CA-CB	5.62	110.05	103.30
1	A1	1234	A	N1-C2-N3	-5.62	126.49	129.30
29	B1	810	A	C5-N7-C8	-5.62	101.09	103.90
29	B1	3146	G	C8-N9-C4	-5.62	104.15	106.40
29	B1	3181	C	N3-C4-C5	5.62	124.15	121.90
30	B2	33	U	N3-C2-O2	-5.62	118.26	122.20
41	BJ	16	PRO	N-CA-CB	5.62	110.05	103.30
29	D1	1525	G	N3-C4-N9	5.62	129.37	126.00
1	A1	565	C	C5-C6-N1	-5.62	118.19	121.00
29	B1	625	G	C5-C6-N1	-5.62	108.69	111.50
29	B1	2599	U	N1-C2-N3	5.62	118.27	114.90
46	BQ	143	PRO	N-CA-CB	5.62	110.04	103.30
54	BY	122	PRO	N-CA-CB	5.62	110.04	103.30
1	C1	1303	U	C6-N1-C1'	5.62	129.06	121.20
29	D1	1653	G	N3-C4-N9	5.62	129.37	126.00
29	B1	3207	U	C2-N1-C1'	-5.62	110.96	117.70
30	B2	8	G	C6-C5-N7	5.62	133.77	130.40
30	B2	101	G	C4-N9-C1'	-5.62	119.20	126.50
29	D1	171	G	C8-N9-C1'	-5.62	119.70	127.00
29	D1	3245	A	C5-N7-C8	-5.62	101.09	103.90
29	B1	659	G	C5-C6-N1	5.62	114.31	111.50
29	B1	1371	G	C4-N9-C1'	5.62	133.80	126.50
29	B1	2332	A	C2-N3-C4	-5.62	107.79	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2707	C	N3-C2-O2	5.62	125.83	121.90
29	D1	3035	A	N3-C4-C5	-5.62	122.87	126.80
1	A1	13	C	C5-C4-N4	-5.61	116.27	120.20
1	A1	1495	C	C6-N1-C2	5.61	122.55	120.30
29	B1	299	G	C4-C5-C6	5.61	122.17	118.80
29	B1	644	G	N3-C4-N9	-5.61	122.63	126.00
29	B1	958	C	C5-C4-N4	-5.61	116.27	120.20
29	B1	2895	G	C4-C5-N7	-5.61	108.56	110.80
1	C1	1641	C	C6-N1-C2	5.61	122.55	120.30
29	D1	589	A	N3-C4-N9	5.61	131.89	127.40
29	D1	655	C	N3-C4-C5	5.61	124.15	121.90
29	D1	880	G	C4-N9-C1'	-5.61	119.20	126.50
29	D1	1296	C	N1-C2-N3	5.61	123.13	119.20
30	D2	45	A	C8-N9-C4	5.61	108.05	105.80
29	B1	639	G	C5-C6-O6	-5.61	125.23	128.60
1	C1	1559	A	C8-N9-C4	5.61	108.05	105.80
29	D1	2919	A	N1-C2-N3	5.61	132.11	129.30
29	B1	999	G	N1-C6-O6	-5.61	116.53	119.90
29	B1	1610	G	N1-C6-O6	5.61	123.27	119.90
31	B3	100	U	N3-C2-O2	5.61	126.13	122.20
1	C1	1498	G	C4-N9-C1'	5.61	133.79	126.50
29	B1	237	G	N3-C4-N9	5.61	129.37	126.00
29	B1	1465	A	N1-C6-N6	5.61	121.96	118.60
29	B1	1608	C	C6-N1-C1'	-5.61	114.07	120.80
30	B2	6	C	N3-C2-O2	-5.61	117.97	121.90
53	BX	23	PRO	N-CA-CB	5.61	110.03	103.30
29	D1	3166	C	C6-N1-C1'	5.61	127.53	120.80
29	D1	3327	G	C5-C6-N1	5.61	114.30	111.50
1	A1	1331	A	C6-N1-C2	-5.61	115.24	118.60
1	A1	1645	G	C5-C6-O6	-5.61	125.24	128.60
29	B1	880	G	C8-N9-C1'	5.61	134.29	127.00
29	B1	880	G	N3-C4-C5	5.61	131.40	128.60
29	B1	2837	A	C4-C5-N7	-5.61	107.90	110.70
1	C1	1466	G	C4-C5-N7	5.61	113.04	110.80
21	CT	247	PRO	N-CA-CB	5.61	110.03	103.30
29	D1	189	G	C5-C6-N1	5.61	114.30	111.50
29	B1	1317	A	C6-C5-N7	-5.60	128.38	132.30
29	B1	1884	A	N3-C4-C5	5.60	130.72	126.80
30	B2	19	C	C2-N1-C1'	5.60	124.97	118.80
1	C1	1600	A	C8-N9-C4	-5.60	103.56	105.80
48	DS	90	PRO	N-CA-CB	5.60	110.03	103.30
5	AD	88	PRO	N-CA-CB	5.60	110.02	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	790	U	C6-N1-C2	5.60	124.36	121.00
29	B1	2919	A	C8-N9-C4	-5.60	103.56	105.80
29	D1	3227	A	N9-C4-C5	5.60	108.04	105.80
29	B1	393	U	N3-C2-O2	-5.60	118.28	122.20
29	D1	3136	G	N3-C4-C5	-5.60	125.80	128.60
60	De	22	PRO	N-CA-CB	5.60	110.02	103.30
29	B1	2370	G	N1-C6-O6	-5.60	116.54	119.90
29	B1	2755	C	N3-C4-C5	5.60	124.14	121.90
29	B1	2780	A	C5-C6-N6	-5.60	119.22	123.70
29	B1	3037	U	C6-N1-C2	5.60	124.36	121.00
29	B1	3103	A	C8-N9-C4	-5.60	103.56	105.80
1	C1	629	U	N3-C2-O2	-5.60	118.28	122.20
29	D1	3028	G	C5-C6-N1	-5.60	108.70	111.50
9	AH	122	PRO	N-CA-CB	5.60	110.02	103.30
29	B1	712	G	C4-N9-C1'	5.60	133.78	126.50
29	B1	1380	G	N1-C2-N3	5.60	127.26	123.90
29	B1	2780	A	C6-N1-C2	-5.60	115.24	118.60
1	C1	619	A	C8-N9-C4	5.60	108.04	105.80
14	CM	2	PRO	N-CA-CB	5.60	110.02	103.30
29	D1	3059	G	N3-C4-N9	5.60	129.36	126.00
29	B1	588	G	C4-N9-C1'	5.60	133.77	126.50
29	B1	1903	U	N3-C4-C5	-5.60	111.24	114.60
29	D1	3026	G	C5-C6-N1	-5.60	108.70	111.50
29	B1	257	U	C6-N1-C1'	-5.59	113.37	121.20
29	B1	909	G	N3-C2-N2	-5.59	115.98	119.90
29	B1	1192	C	N3-C2-O2	-5.59	117.98	121.90
29	B1	1380	G	N3-C4-C5	5.59	131.40	128.60
29	B1	1452	A	C4-C5-N7	5.59	113.50	110.70
31	D3	42	G	N3-C4-N9	-5.59	122.64	126.00
1	A1	1541	G	N3-C4-C5	-5.59	125.80	128.60
29	B1	1115	G	C5-N7-C8	-5.59	101.50	104.30
29	D1	1335	C	N1-C2-O2	-5.59	115.54	118.90
29	D1	3257	C	N3-C2-O2	5.59	125.81	121.90
29	B1	857	G	C4-C5-N7	-5.59	108.56	110.80
29	B1	1323	G	N3-C4-C5	-5.59	125.80	128.60
29	B1	1888	U	C5-C4-O4	5.59	129.25	125.90
29	B1	3329	U	C5-C4-O4	5.59	129.25	125.90
1	C1	1792	G	C6-C5-N7	-5.59	127.05	130.40
29	D1	1467	A	C8-N9-C4	5.59	108.04	105.80
29	D1	1856	C	C2-N3-C4	-5.59	117.11	119.90
29	D1	3137	C	C6-N1-C2	5.59	122.54	120.30
41	DJ	47	PRO	N-CA-CB	5.59	110.01	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	53	G	N1-C6-O6	-5.59	116.55	119.90
29	B1	626	U	C2-N1-C1'	5.59	124.41	117.70
29	B1	965	A	N7-C8-N9	-5.59	111.01	113.80
29	B1	2531	C	C2-N1-C1'	5.59	124.95	118.80
29	B1	2951	G	N3-C4-N9	-5.59	122.65	126.00
29	B1	3259	U	N3-C2-O2	5.59	126.11	122.20
50	BU	127	PRO	N-CA-CB	5.59	110.01	103.30
29	D1	513	G	N1-C6-O6	-5.59	116.55	119.90
29	D1	695	C	C5-C6-N1	-5.59	118.20	121.00
29	D1	1171	G	N3-C2-N2	-5.59	115.99	119.90
29	D1	1686	U	N1-C2-O2	5.59	126.71	122.80
29	D1	2528	G	N3-C4-N9	-5.59	122.65	126.00
29	D1	2667	A	C6-C5-N7	5.59	136.21	132.30
1	C1	1591	C	C2-N3-C4	-5.59	117.11	119.90
1	A1	1141	G	C4-C5-N7	5.59	113.03	110.80
29	B1	1151	U	N1-C2-O2	-5.59	118.89	122.80
29	B1	2618	G	N9-C4-C5	5.59	107.63	105.40
29	B1	2907	G	C8-N9-C1'	5.59	134.26	127.00
1	C1	647	G	C8-N9-C1'	-5.59	119.74	127.00
29	D1	2416	U	N3-C2-O2	5.59	126.11	122.20
1	A1	1149	G	N3-C4-C5	-5.58	125.81	128.60
1	A1	1634	C	C2-N3-C4	5.58	122.69	119.90
29	B1	1878	G	N3-C4-N9	5.58	129.35	126.00
29	B1	2650	U	C6-N1-C1'	5.58	129.02	121.20
29	D1	3296	A	C2-N3-C4	5.58	113.39	110.60
1	A1	63	G	N3-C4-N9	-5.58	122.65	126.00
5	AD	164	PRO	N-CA-CB	5.58	110.00	103.30
29	B1	1180	A	N9-C4-C5	5.58	108.03	105.80
29	B1	3078	U	C6-N1-C1'	-5.58	113.38	121.20
1	C1	1137	A	C8-N9-C4	5.58	108.03	105.80
1	C1	1523	G	N1-C6-O6	5.58	123.25	119.90
29	D1	1188	U	C2-N3-C4	-5.58	123.65	127.00
29	D1	1434	G	C8-N9-C4	5.58	108.63	106.40
29	D1	2881	C	C2-N1-C1'	-5.58	112.66	118.80
29	D1	3271	G	N3-C4-C5	-5.58	125.81	128.60
1	A1	628	G	N1-C2-N2	-5.58	111.18	116.20
29	B1	2355	G	N9-C4-C5	-5.58	103.17	105.40
29	B1	2882	U	C5-C4-O4	-5.58	122.55	125.90
53	BX	96	PRO	N-CA-CB	5.58	110.00	103.30
29	D1	389	A	N9-C4-C5	5.58	108.03	105.80
29	B1	1177	G	C4-C5-N7	5.58	113.03	110.80
29	B1	2347	U	C2-N1-C1'	-5.58	111.00	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3200	G	C6-N1-C2	5.58	128.45	125.10
1	C1	825	U	C2-N3-C4	-5.58	123.65	127.00
29	D1	188	U	N3-C2-O2	-5.58	118.29	122.20
29	B1	2740	A	C6-N1-C2	-5.58	115.25	118.60
29	D1	567	G	C4-C5-N7	5.58	113.03	110.80
29	D1	1052	U	N1-C2-O2	-5.58	118.89	122.80
38	DG	204	PRO	N-CA-CB	5.58	110.00	103.30
29	B1	1140	G	C2-N3-C4	-5.58	109.11	111.90
29	B1	2892	A	C5-C6-N1	-5.58	114.91	117.70
29	D1	3386	G	C8-N9-C1'	-5.58	119.75	127.00
1	A1	427	C	N1-C2-O2	-5.58	115.56	118.90
1	A1	1166	A	C5-C6-N6	-5.58	119.24	123.70
1	C1	439	U	C2-N1-C1'	5.58	124.39	117.70
1	C1	1521	G	N3-C4-C5	5.58	131.39	128.60
29	D1	1323	G	N3-C4-C5	-5.58	125.81	128.60
29	D1	2283	G	N3-C4-C5	5.58	131.39	128.60
29	D1	2556	C	N3-C2-O2	-5.58	118.00	121.90
29	D1	2951	G	N3-C4-N9	-5.58	122.65	126.00
29	D1	3066	U	C5-C4-O4	5.58	129.25	125.90
31	D3	16	G	C5-C6-O6	-5.58	125.25	128.60
29	B1	332	C	C5-C6-N1	5.57	123.79	121.00
29	B1	428	A	C4-C5-C6	5.57	119.79	117.00
40	BI	30	PRO	N-CA-CB	5.57	109.99	103.30
1	C1	1786	G	N1-C6-O6	-5.57	116.56	119.90
29	D1	3199	G	N1-C6-O6	5.57	123.24	119.90
29	B1	387	A	C2-N3-C4	-5.57	107.81	110.60
29	B1	985	U	N3-C4-O4	-5.57	115.50	119.40
1	C1	1633	A	C4-N9-C1'	5.57	136.33	126.30
29	D1	1612	A	C6-N1-C2	5.57	121.94	118.60
29	D1	2830	G	C4-C5-C6	5.57	122.14	118.80
3	AB	234	PRO	N-CA-CB	5.57	109.98	103.30
29	B1	994	G	N3-C4-C5	-5.57	125.81	128.60
29	B1	2707	C	C6-N1-C2	5.57	122.53	120.30
29	B1	3139	A	C5-C6-N6	5.57	128.16	123.70
1	C1	575	C	C6-N1-C2	5.57	122.53	120.30
29	D1	1047	A	C5-C6-N6	5.57	128.16	123.70
29	D1	3173	G	C2-N3-C4	-5.57	109.11	111.90
29	D1	3232	G	N1-C6-O6	-5.57	116.56	119.90
39	DH	167	PRO	N-CA-CB	5.57	109.98	103.30
29	B1	1825	G	C8-N9-C1'	5.57	134.24	127.00
30	B2	35	C	C6-N1-C1'	-5.57	114.12	120.80
29	B1	2300	G	C8-N9-C1'	-5.57	119.76	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3108	G	N1-C2-N2	5.57	121.21	116.20
31	B3	53	A	C2-N3-C4	5.57	113.38	110.60
1	C1	1472	C	C2-N1-C1'	5.57	124.92	118.80
29	D1	2856	G	N1-C6-O6	5.57	123.24	119.90
73	DM	92	PRO	N-CA-CB	5.57	109.98	103.30
1	A1	541	A	C8-N9-C4	-5.57	103.57	105.80
29	B1	1403	C	C2-N3-C4	-5.57	117.12	119.90
29	B1	3030	G	N1-C6-O6	5.57	123.24	119.90
29	B1	3264	G	C8-N9-C4	-5.57	104.17	106.40
1	C1	647	G	C4-N9-C1'	5.57	133.74	126.50
29	D1	1440	G	C8-N9-C4	5.57	108.63	106.40
29	D1	1496	C	C2-N1-C1'	5.57	124.92	118.80
1	A1	86	A	C8-N9-C4	-5.56	103.58	105.80
29	B1	1333	C	C6-N1-C1'	-5.56	114.12	120.80
1	C1	406	U	N3-C2-O2	5.56	126.09	122.20
1	C1	1647	U	C2-N3-C4	5.56	130.34	127.00
29	D1	3030	G	C3'-C2'-C1'	5.56	105.95	101.50
29	B1	529	A	N1-C2-N3	-5.56	126.52	129.30
29	B1	605	U	C5-C4-O4	-5.56	122.56	125.90
29	B1	1450	G	C5-C6-O6	-5.56	125.26	128.60
29	B1	1481	A	N1-C6-N6	5.56	121.94	118.60
30	B2	9	C	N1-C2-N3	5.56	123.09	119.20
1	C1	115	G	N3-C2-N2	-5.56	116.01	119.90
1	C1	1141	G	C5-C6-O6	-5.56	125.26	128.60
29	D1	1113	G	C6-C5-N7	-5.56	127.06	130.40
29	D1	3211	C	C2-N1-C1'	-5.56	112.68	118.80
29	B1	341	G	C4-C5-N7	5.56	113.02	110.80
29	B1	655	C	N3-C4-C5	5.56	124.12	121.90
29	B1	693	A	C4-N9-C1'	5.56	136.31	126.30
29	B1	2556	C	C6-N1-C2	-5.56	118.08	120.30
29	B1	2668	U	C2-N1-C1'	5.56	124.37	117.70
30	B2	5	G	N3-C4-C5	5.56	131.38	128.60
29	D1	315	C	C6-N1-C1'	-5.56	114.13	120.80
29	D1	1323	G	C4-N9-C1'	5.56	133.73	126.50
29	D1	1439	U	N1-C2-O2	-5.56	118.91	122.80
29	B1	787	G	N1-C6-O6	5.56	123.23	119.90
29	B1	1147	G	C5-C6-O6	-5.56	125.27	128.60
29	B1	2129	U	N3-C2-O2	-5.56	118.31	122.20
1	C1	79	C	C5-C6-N1	5.56	123.78	121.00
29	D1	171	G	C4-N9-C1'	5.56	133.72	126.50
29	D1	516	A	N1-C2-N3	-5.56	126.52	129.30
29	D1	1148	G	C5-N7-C8	-5.56	101.52	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	1205	C	C6-N1-C1'	-5.56	114.13	120.80
29	D1	1522	U	C2-N1-C1'	5.56	124.37	117.70
29	B1	1357	G	C5-C6-O6	5.55	131.93	128.60
29	D1	2287	C	N3-C4-N4	-5.55	114.11	118.00
1	C1	584	C	C5-C6-N1	-5.55	118.22	121.00
1	C1	1561	U	C6-N1-C2	5.55	124.33	121.00
38	DG	96	PRO	N-CA-CB	5.55	109.96	103.30
29	B1	531	G	C2-N3-C4	-5.55	109.12	111.90
29	B1	3143	C	C3'-C2'-C1'	5.55	105.94	101.50
39	BH	159	PRO	N-CA-CB	5.55	109.96	103.30
39	BH	167	PRO	N-CA-CB	5.55	109.96	103.30
47	BR	43	PRO	N-CA-CB	5.55	109.96	103.30
29	D1	1133	A	C6-N1-C2	5.55	121.93	118.60
1	A1	827	C	N1-C2-O2	-5.55	115.57	118.90
29	B1	875	G	C6-C5-N7	-5.55	127.07	130.40
29	B1	1307	G	N3-C4-N9	5.55	129.33	126.00
29	B1	1653	G	N3-C4-N9	5.55	129.33	126.00
29	B1	3377	G	C6-C5-N7	-5.55	127.07	130.40
29	D1	45	A	N7-C8-N9	-5.55	111.03	113.80
29	D1	2805	G	C5-C6-N1	5.55	114.28	111.50
29	D1	2887	A	N9-C4-C5	5.55	108.02	105.80
31	D3	44	A	C6-N1-C2	-5.55	115.27	118.60
34	DC	5	LYS	N-CA-C	-5.55	96.02	111.00
29	B1	1907	C	C6-N1-C2	5.55	122.52	120.30
1	C1	1498	G	C8-N9-C1'	-5.55	119.79	127.00
29	D1	876	A	C8-N9-C4	5.55	108.02	105.80
29	D1	1751	G	N3-C4-C5	-5.55	125.83	128.60
29	D1	3215	A	N9-C4-C5	5.55	108.02	105.80
1	A1	95	G	C4-N9-C1'	-5.55	119.29	126.50
29	B1	219	A	C5-N7-C8	-5.55	101.13	103.90
29	B1	284	A	N1-C2-N3	5.55	132.07	129.30
29	B1	1042	U	C6-N1-C2	5.55	124.33	121.00
29	B1	1076	C	N1-C2-O2	5.55	122.23	118.90
30	B2	29	C	C6-N1-C2	5.55	122.52	120.30
29	D1	687	U	N3-C4-O4	-5.55	115.52	119.40
1	A1	1636	C	C6-N1-C2	5.54	122.52	120.30
29	D1	345	G	N1-C6-O6	5.54	123.23	119.90
1	A1	993	A	N1-C6-N6	-5.54	115.27	118.60
29	B1	244	G	C4-C5-N7	-5.54	108.58	110.80
29	B1	753	C	C2-N3-C4	-5.54	117.13	119.90
29	B1	1592	G	C8-N9-C4	-5.54	104.18	106.40
29	B1	2330	C	C6-N1-C2	5.54	122.52	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2917	G	N7-C8-N9	-5.54	110.33	113.10
29	B1	3388	C	C6-N1-C1'	-5.54	114.15	120.80
1	C1	1472	C	N1-C2-O2	5.54	122.23	118.90
29	D1	589	A	C8-N9-C4	-5.54	103.58	105.80
29	D1	655	C	C2-N3-C4	-5.54	117.13	119.90
29	D1	1152	G	C4-C5-N7	5.54	113.02	110.80
29	D1	1892	G	N3-C4-N9	-5.54	122.67	126.00
29	D1	2630	C	C2-N3-C4	-5.54	117.13	119.90
29	D1	2693	C	N1-C2-O2	5.54	122.23	118.90
29	D1	3265	C	N3-C2-O2	-5.54	118.02	121.90
54	DY	114	GLY	N-CA-C	5.54	126.96	113.10
1	A1	1174	C	C5-C6-N1	-5.54	118.23	121.00
1	A1	1791	A	C4-C5-N7	5.54	113.47	110.70
29	B1	156	G	N1-C6-O6	-5.54	116.58	119.90
29	B1	2197	C	N3-C2-O2	5.54	125.78	121.90
1	C1	423	G	N3-C4-C5	-5.54	125.83	128.60
29	D1	608	A	C6-C5-N7	-5.54	128.42	132.30
29	D1	744	A	C6-N1-C2	-5.54	115.28	118.60
29	D1	2122	G	N3-C2-N2	-5.54	116.02	119.90
29	D1	3115	C	C6-N1-C2	-5.54	118.08	120.30
1	A1	1244	A	C5-C6-N6	5.54	128.13	123.70
29	B1	944	C	C2-N1-C1'	-5.54	112.71	118.80
29	D1	873	C	N3-C4-N4	5.54	121.88	118.00
29	D1	2400	G	C6-C5-N7	-5.54	127.08	130.40
29	D1	2719	U	N1-C2-N3	5.54	118.22	114.90
1	A1	847	A	C5-C6-N1	5.54	120.47	117.70
1	A1	939	A	N7-C8-N9	5.54	116.57	113.80
29	B1	671	U	C5-C6-N1	-5.54	119.93	122.70
29	B1	2366	C	N3-C4-C5	5.54	124.11	121.90
29	B1	3363	U	N3-C2-O2	-5.54	118.32	122.20
2	CA	126	PRO	N-CA-CB	5.54	109.95	103.30
2	CA	199	PRO	N-CA-CB	5.54	109.95	103.30
29	D1	2362	C	N3-C4-C5	-5.54	119.69	121.90
29	D1	222	A	C4-C5-N7	5.54	113.47	110.70
29	B1	836	A	C2-N3-C4	5.54	113.37	110.60
29	B1	2707	C	N1-C2-O2	-5.54	115.58	118.90
29	B1	2853	A	N1-C6-N6	5.54	121.92	118.60
2	CA	42	PRO	N-CA-CB	5.54	109.94	103.30
29	D1	891	G	C8-N9-C4	5.54	108.61	106.40
29	D1	1001	G	C4-N9-C1'	5.54	133.70	126.50
29	D1	1507	G	N3-C2-N2	-5.54	116.02	119.90
29	D1	3316	A	C8-N9-C4	5.54	108.01	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	341	A	C5-C6-N1	5.53	120.47	117.70
29	B1	822	G	N3-C4-C5	5.53	131.37	128.60
29	B1	1331	U	C2-N3-C4	-5.53	123.68	127.00
29	B1	1357	G	N1-C6-O6	-5.53	116.58	119.90
29	B1	1678	G	C8-N9-C4	-5.53	104.19	106.40
29	B1	1900	A	C8-N9-C4	-5.53	103.59	105.80
29	B1	2138	A	C4-C5-C6	5.53	119.77	117.00
29	B1	2400	G	N1-C6-O6	5.53	123.22	119.90
29	B1	1294	A	N3-C4-C5	-5.53	122.93	126.80
29	B1	1367	G	C6-C5-N7	-5.53	127.08	130.40
29	B1	2301	U	N3-C2-O2	5.53	126.07	122.20
29	D1	1085	A	C2-N3-C4	-5.53	107.83	110.60
21	AT	276	PRO	N-CA-CB	5.53	109.94	103.30
29	B1	428	A	C2-N3-C4	-5.53	107.83	110.60
39	BH	176	PRO	N-CA-CB	5.53	109.94	103.30
1	C1	1097	U	C2-N1-C1'	-5.53	111.06	117.70
29	D1	609	G	C8-N9-C4	-5.53	104.19	106.40
29	D1	1066	G	C8-N9-C4	-5.53	104.19	106.40
29	D1	1327	C	N3-C2-O2	-5.53	118.03	121.90
29	D1	2262	A	C4-N9-C1'	5.53	136.25	126.30
29	D1	2527	G	N3-C2-N2	-5.53	116.03	119.90
29	D1	2702	A	C8-N9-C4	-5.53	103.59	105.80
29	D1	2740	A	C6-N1-C2	-5.53	115.28	118.60
29	D1	3001	C	N3-C4-C5	5.53	124.11	121.90
29	D1	3078	U	C2-N1-C1'	5.53	124.34	117.70
30	D2	35	C	N1-C2-O2	5.53	122.22	118.90
29	B1	2988	C	N3-C4-C5	5.53	124.11	121.90
29	D1	1429	G	N3-C4-N9	5.53	129.32	126.00
31	D3	131	A	C6-N1-C2	5.53	121.92	118.60
29	B1	207	U	C5-C4-O4	-5.53	122.58	125.90
29	B1	1891	A	C2-N3-C4	-5.53	107.84	110.60
1	C1	439	U	C5-C4-O4	-5.53	122.58	125.90
29	D1	1370	G	N1-C6-O6	5.53	123.22	119.90
29	D1	2853	A	N1-C2-N3	-5.53	126.54	129.30
29	D1	3233	C	C2-N1-C1'	5.53	124.88	118.80
29	B1	2246	G	C5-C6-N1	5.52	114.26	111.50
29	D1	3381	U	N1-C2-O2	5.52	126.67	122.80
29	B1	933	A	C2-N3-C4	5.52	113.36	110.60
29	B1	1850	A	C8-N9-C4	5.52	108.01	105.80
29	D1	3063	C	N3-C2-O2	5.52	125.77	121.90
29	B1	876	A	N7-C8-N9	-5.52	111.04	113.80
29	B1	2935	U	C2-N1-C1'	-5.52	111.08	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	922	U	C2-N1-C1'	-5.52	111.08	117.70
29	D1	2296	A	C2-N3-C4	-5.52	107.84	110.60
29	D1	2896	A	N9-C4-C5	5.52	108.01	105.80
29	B1	693	A	C6-C5-N7	-5.52	128.44	132.30
1	C1	447	U	C3'-C2'-C1'	5.52	105.92	101.50
21	CT	57	PRO	N-CA-CB	5.52	109.92	103.30
29	D1	1315	U	N1-C2-O2	5.52	126.66	122.80
29	D1	1450	G	C5-C6-N1	-5.52	108.74	111.50
29	D1	1641	U	N3-C2-O2	5.52	126.06	122.20
29	D1	2291	A	N1-C6-N6	5.52	121.91	118.60
29	D1	2693	C	C6-N1-C1'	-5.52	114.17	120.80
72	DL	30	PRO	N-CA-CB	5.52	109.92	103.30
2	AA	126	PRO	N-CA-CB	5.52	109.92	103.30
29	B1	264	G	N3-C4-N9	5.52	129.31	126.00
29	B1	1861	G	N3-C4-N9	-5.52	122.69	126.00
29	B1	1951	C	N1-C2-N3	-5.52	115.34	119.20
29	B1	2679	A	N9-C4-C5	-5.52	103.59	105.80
29	B1	3173	G	C5-C6-N1	-5.52	108.74	111.50
29	D1	1402	C	C2-N3-C4	-5.52	117.14	119.90
29	D1	3040	A	N9-C4-C5	5.52	108.01	105.80
29	D1	3129	A	C8-N9-C1'	5.52	137.63	127.70
47	DR	132	PRO	N-CA-CB	5.52	109.92	103.30
29	B1	2663	G	N7-C8-N9	-5.52	110.34	113.10
29	D1	651	G	C6-C5-N7	-5.52	127.09	130.40
29	B1	2274	U	N3-C2-O2	-5.51	118.34	122.20
29	B1	2301	U	C6-N1-C2	5.51	124.31	121.00
29	D1	299	G	C6-C5-N7	-5.51	127.09	130.40
29	D1	859	G	N1-C6-O6	5.51	123.21	119.90
29	D1	3380	U	C6-N1-C1'	5.51	128.92	121.20
29	B1	498	A	C4-C5-N7	5.51	113.46	110.70
29	B1	1906	G	N1-C6-O6	5.51	123.21	119.90
29	B1	2117	A	N1-C6-N6	-5.51	115.29	118.60
1	C1	95	G	N3-C4-C5	5.51	131.36	128.60
29	B1	1439	U	C6-N1-C2	5.51	124.31	121.00
29	B1	2398	A	N3-C4-N9	5.51	131.81	127.40
1	C1	400	A	C8-N9-C4	5.51	108.00	105.80
1	C1	981	U	C5-C4-O4	-5.51	122.59	125.90
1	C1	1198	G	C5-C6-O6	5.51	131.91	128.60
29	B1	703	G	N1-C2-N2	5.51	121.16	116.20
1	C1	45	U	N1-C2-O2	5.51	126.66	122.80
10	CI	109	PRO	N-CA-CB	5.51	109.91	103.30
1	A1	1467	C	N1-C2-O2	-5.51	115.59	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	1781	A	C8-N9-C4	-5.51	103.60	105.80
29	B1	2618	G	C4-C5-N7	-5.51	108.60	110.80
29	B1	3182	G	C8-N9-C4	5.51	108.60	106.40
1	A1	1118	G	C4-N9-C1'	-5.51	119.34	126.50
1	A1	1134	C	C6-N1-C2	5.51	122.50	120.30
29	B1	125	C	C5-C4-N4	-5.51	116.34	120.20
29	B1	1173	U	C2-N3-C4	-5.51	123.70	127.00
30	B2	114	U	N1-C2-O2	5.51	126.66	122.80
31	B3	11	C	N3-C2-O2	-5.51	118.05	121.90
44	BO	74	PRO	N-CA-CB	5.51	109.91	103.30
1	C1	1140	G	C5-C6-N1	5.51	114.25	111.50
1	C1	1465	C	C6-N1-C2	-5.51	118.10	120.30
1	C1	1541	G	N3-C4-N9	5.51	129.30	126.00
29	D1	562	C	C6-N1-C2	-5.51	118.10	120.30
29	D1	1324	U	C6-N1-C2	-5.51	117.70	121.00
29	D1	1489	A	N1-C6-N6	-5.51	115.30	118.60
29	B1	146	U	C5-C4-O4	-5.50	122.60	125.90
29	B1	2369	G	C5-C6-O6	-5.50	125.30	128.60
1	C1	1609	U	N3-C2-O2	5.50	126.05	122.20
29	B1	404	G	C5-C6-O6	5.50	131.90	128.60
1	C1	1562	G	N3-C4-N9	-5.50	122.70	126.00
29	D1	954	U	N3-C4-O4	5.50	123.25	119.40
29	D1	2882	U	C6-N1-C2	-5.50	117.70	121.00
37	DF	27	PRO	N-CA-CB	5.50	109.90	103.30
3	AB	151	PRO	N-CA-CB	5.50	109.90	103.30
29	B1	220	G	N9-C4-C5	-5.50	103.20	105.40
29	B1	576	C	N3-C2-O2	5.50	125.75	121.90
29	B1	2969	A	N3-C4-C5	5.50	130.65	126.80
1	C1	1066	C	C2-N1-C1'	5.50	124.85	118.80
29	D1	590	G	N7-C8-N9	-5.50	110.35	113.10
29	D1	1780	G	C3'-C2'-C1'	5.50	105.90	101.50
1	A1	610	G	N9-C4-C5	-5.50	103.20	105.40
29	D1	1134	G	C4-C5-N7	-5.50	108.60	110.80
29	D1	2633	U	N3-C4-C5	-5.50	111.30	114.60
29	B1	949	C	C5-C6-N1	-5.50	118.25	121.00
29	D1	54	C	C6-N1-C2	5.50	122.50	120.30
29	D1	1429	G	C8-N9-C1'	-5.50	119.85	127.00
29	D1	1936	A	N1-C6-N6	-5.50	115.30	118.60
21	AT	158	PRO	N-CA-CB	5.50	109.90	103.30
29	B1	613	G	C2-N3-C4	-5.50	109.15	111.90
29	B1	963	G	N9-C4-C5	-5.50	103.20	105.40
29	B1	2929	C	N3-C4-N4	5.50	121.85	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2993	G	O4'-C1'-N9	5.50	112.60	108.20
1	C1	466	U	C5-C6-N1	-5.50	119.95	122.70
1	C1	1144	U	N3-C2-O2	-5.50	118.35	122.20
29	D1	3090	U	C5-C6-N1	5.50	125.45	122.70
44	DO	45	PRO	N-CA-CB	5.50	109.90	103.30
29	B1	859	G	C4-N9-C1'	5.50	133.64	126.50
1	A1	1788	G	C4-N9-C1'	-5.49	119.36	126.50
29	B1	971	G	N3-C4-C5	-5.49	125.85	128.60
29	B1	2671	A	C5-C6-N1	5.49	120.45	117.70
1	C1	1542	G	N3-C4-C5	-5.49	125.85	128.60
29	D1	650	C	C2-N1-C1'	5.49	124.84	118.80
29	D1	1951	C	N1-C2-O2	5.49	122.20	118.90
29	D1	2639	G	C5-C6-O6	-5.49	125.30	128.60
1	A1	1677	C	C6-N1-C2	-5.49	118.10	120.30
29	D1	1160	C	C6-N1-C1'	-5.49	114.21	120.80
29	B1	98	G	C4-C5-N7	-5.49	108.60	110.80
29	B1	190	U	C5-C4-O4	5.49	129.19	125.90
29	B1	1516	C	N1-C2-O2	-5.49	115.61	118.90
29	D1	2330	C	C5-C6-N1	-5.49	118.25	121.00
29	D1	3131	U	C2-N1-C1'	5.49	124.29	117.70
31	D3	62	C	C6-N1-C2	5.49	122.50	120.30
1	A1	1198	G	C5-C6-O6	5.49	131.89	128.60
29	B1	645	A	C6-N1-C2	-5.49	115.31	118.60
29	B1	1481	A	N9-C4-C5	-5.49	103.61	105.80
29	B1	2421	U	N1-C2-O2	-5.49	118.96	122.80
29	B1	2959	C	N1-C2-O2	-5.49	115.61	118.90
29	B1	3233	C	C6-N1-C1'	-5.49	114.22	120.80
29	B1	3324	C	C2-N1-C1'	5.49	124.84	118.80
30	B2	66	A	C2-N3-C4	-5.49	107.86	110.60
1	C1	1486	G	C8-N9-C4	5.49	108.59	106.40
29	D1	965	A	N7-C8-N9	-5.49	111.06	113.80
29	D1	1552	G	N3-C4-C5	-5.49	125.86	128.60
29	D1	2833	A	C8-N9-C4	5.49	108.00	105.80
1	A1	374	U	N3-C4-C5	5.49	117.89	114.60
29	B1	941	G	C4-C5-N7	-5.49	108.61	110.80
29	B1	2880	U	N1-C2-N3	5.49	118.19	114.90
29	D1	1937	U	N3-C2-O2	5.49	126.04	122.20
29	D1	3225	C	N3-C2-O2	-5.49	118.06	121.90
1	A1	1072	C	C2-N1-C1'	5.49	124.83	118.80
29	B1	1146	C	C5-C6-N1	-5.49	118.26	121.00
29	B1	1751	G	C5-C6-N1	5.49	114.24	111.50
29	B1	3106	A	C5-C6-N6	-5.49	119.31	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	804	C	N3-C4-C5	5.49	124.09	121.90
29	D1	2869	U	N3-C2-O2	-5.49	118.36	122.20
33	DB	141	PRO	N-CA-CB	5.49	109.88	103.30
29	B1	428	A	C5-N7-C8	-5.48	101.16	103.90
29	B1	1547	G	C8-N9-C1'	-5.48	119.87	127.00
35	DD	223	PRO	N-CA-CB	5.48	109.88	103.30
29	B1	794	U	N3-C2-O2	5.48	126.04	122.20
29	B1	1342	C	N1-C2-O2	-5.48	115.61	118.90
29	B1	2156	C	C5-C6-N1	-5.48	118.26	121.00
1	C1	388	G	N9-C4-C5	5.48	107.59	105.40
9	CH	122	PRO	N-CA-CB	5.48	109.88	103.30
29	D1	875	G	N1-C6-O6	5.48	123.19	119.90
29	D1	1141	C	C5-C6-N1	-5.48	118.26	121.00
29	D1	1628	C	N1-C2-O2	-5.48	115.61	118.90
29	D1	2349	U	C2-N1-C1'	5.48	124.28	117.70
29	D1	2897	A	C5-C6-N6	-5.48	119.31	123.70
29	D1	3303	G	C6-N1-C2	-5.48	121.81	125.10
1	A1	322	G	C5-C6-O6	-5.48	125.31	128.60
29	B1	886	C	N3-C4-C5	5.48	124.09	121.90
29	B1	1476	G	C6-N1-C2	-5.48	121.81	125.10
29	D1	513	G	C6-N1-C2	5.48	128.39	125.10
29	D1	857	G	C4-C5-N7	-5.48	108.61	110.80
29	D1	2527	G	C4-N9-C1'	-5.48	119.38	126.50
43	DN	48	GLY	N-CA-C	-5.48	99.40	113.10
29	B1	190	U	C6-N1-C1'	5.48	128.87	121.20
29	D1	120	G	C8-N9-C1'	5.48	134.12	127.00
29	B1	120	G	N3-C4-C5	5.48	131.34	128.60
29	B1	588	G	N3-C2-N2	-5.48	116.06	119.90
29	B1	718	G	N1-C6-O6	-5.48	116.61	119.90
29	B1	2370	G	N3-C2-N2	5.48	123.73	119.90
29	B1	2398	A	C6-C5-N7	-5.48	128.47	132.30
29	B1	2889	C	N1-C2-O2	-5.48	115.61	118.90
29	B1	3036	G	N7-C8-N9	-5.48	110.36	113.10
29	B1	3100	U	C5-C4-O4	-5.48	122.61	125.90
1	C1	1352	G	N3-C2-N2	-5.48	116.07	119.90
1	A1	1202	A	N1-C6-N6	-5.48	115.31	118.60
13	AL	82	PRO	N-CA-CB	5.48	109.87	103.30
29	B1	1061	A	C2-N3-C4	-5.48	107.86	110.60
1	A1	149	C	C6-N1-C1'	-5.47	114.23	120.80
29	B1	805	G	C8-N9-C4	-5.47	104.21	106.40
29	B1	2156	C	C2-N3-C4	-5.47	117.16	119.90
29	B1	2943	G	C2-N3-C4	-5.47	109.16	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2919	A	C6-C5-N7	-5.47	128.47	132.30
31	D3	17	A	N1-C6-N6	5.47	121.89	118.60
1	A1	1647	U	N1-C2-N3	-5.47	111.62	114.90
29	B1	703	G	N3-C2-N2	-5.47	116.07	119.90
29	B1	819	U	C6-N1-C2	5.47	124.28	121.00
29	B1	2939	G	N3-C4-C5	-5.47	125.86	128.60
1	C1	1190	C	N1-C2-O2	-5.47	115.62	118.90
29	D1	1336	U	C5-C4-O4	-5.47	122.62	125.90
29	D1	2370	G	C5-C6-O6	5.47	131.88	128.60
30	D2	14	U	N3-C4-C5	-5.47	111.32	114.60
46	BQ	84	PRO	N-CA-CB	5.47	109.86	103.30
1	C1	686	C	C5-C4-N4	-5.47	116.37	120.20
29	D1	656	A	C5-C6-N6	-5.47	119.32	123.70
29	D1	1183	C	N3-C4-C5	5.47	124.09	121.90
29	D1	2378	C	N1-C2-N3	5.47	123.03	119.20
1	A1	338	C	C6-N1-C1'	-5.47	114.24	120.80
29	B1	73	C	N3-C2-O2	-5.47	118.07	121.90
29	B1	1887	A	N3-C4-N9	-5.47	123.02	127.40
29	B1	2919	A	C4-N9-C1'	5.47	136.15	126.30
35	BD	23	PRO	N-CA-CB	5.47	109.86	103.30
29	D1	101	G	N3-C4-C5	5.47	131.34	128.60
29	D1	1295	G	N9-C4-C5	-5.47	103.21	105.40
29	B1	877	C	C5-C6-N1	5.47	123.73	121.00
29	B1	1507	G	N3-C2-N2	-5.47	116.07	119.90
42	BK	134	PRO	N-CA-CB	5.47	109.86	103.30
1	C1	246	G	C4-N9-C1'	-5.47	119.39	126.50
1	C1	479	C	C2-N3-C4	-5.47	117.17	119.90
29	D1	503	C	C2-N1-C1'	-5.47	112.79	118.80
29	D1	640	U	N3-C4-C5	-5.47	111.32	114.60
29	D1	2637	A	C4-C5-C6	5.47	119.73	117.00
29	D1	3035	A	C4-N9-C1'	5.47	136.14	126.30
1	A1	981	U	C2-N1-C1'	5.46	124.26	117.70
1	A1	1109	G	C4-C5-N7	5.46	112.99	110.80
1	A1	1149	G	C2-N3-C4	5.46	114.63	111.90
29	B1	572	A	N9-C4-C5	-5.46	103.61	105.80
29	B1	607	A	C4-N9-C1'	5.46	136.13	126.30
29	B1	1418	A	C5-N7-C8	5.46	106.63	103.90
29	B1	1677	G	N3-C2-N2	5.46	123.72	119.90
1	C1	373	G	C2-N3-C4	-5.46	109.17	111.90
6	CE	144	PRO	N-CA-CB	5.46	109.86	103.30
29	D1	787	G	C2-N3-C4	-5.46	109.17	111.90
29	D1	907	G	C5-C6-O6	-5.46	125.32	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2951	G	N3-C4-C5	5.46	131.33	128.60
29	B1	873	C	C5-C4-N4	-5.46	116.38	120.20
31	D3	92	A	N1-C2-N3	-5.46	126.57	129.30
36	DE	84	PRO	N-CA-CB	5.46	109.86	103.30
29	B1	2893	C	C2-N3-C4	-5.46	117.17	119.90
29	B1	2982	A	C8-N9-C4	-5.46	103.61	105.80
29	B1	3108	G	C4-C5-C6	-5.46	115.52	118.80
2	CA	35	PRO	N-CA-CB	5.46	109.85	103.30
29	D1	859	G	C4-N9-C1'	5.46	133.60	126.50
29	D1	1146	C	C5-C4-N4	-5.46	116.38	120.20
30	D2	101	G	N3-C4-N9	-5.46	122.72	126.00
29	B1	97	U	N3-C2-O2	5.46	126.02	122.20
29	B1	1751	G	C4-C5-N7	-5.46	108.62	110.80
29	B1	2283	G	N3-C4-C5	5.46	131.33	128.60
29	B1	50	U	N1-C2-N3	5.46	118.17	114.90
29	B1	1357	G	C4-C5-N7	-5.46	108.62	110.80
30	B2	6	C	C2-N1-C1'	5.46	124.81	118.80
29	D1	1060	U	C5-C4-O4	-5.46	122.62	125.90
29	D1	2901	G	C6-C5-N7	-5.46	127.12	130.40
29	D1	3061	G	N3-C4-N9	-5.46	122.72	126.00
30	D2	34	C	N3-C2-O2	-5.46	118.08	121.90
29	B1	865	U	C6-N1-C2	5.46	124.27	121.00
29	B1	921	A	C8-N9-C4	-5.46	103.62	105.80
29	B1	2361	A	N1-C6-N6	-5.46	115.33	118.60
29	B1	3138	U	C5-C6-N1	5.46	125.43	122.70
1	C1	1420	C	C5-C6-N1	5.46	123.73	121.00
29	D1	1072	G	C2-N3-C4	5.46	114.63	111.90
29	D1	2394	G	C4-C5-N7	-5.46	108.62	110.80
29	D1	3069	G	C6-C5-N7	-5.46	127.13	130.40
29	B1	1657	C	N1-C2-O2	5.46	122.17	118.90
29	D1	685	G	N9-C4-C5	-5.46	103.22	105.40
29	D1	3131	U	C2-N3-C4	-5.46	123.73	127.00
29	B1	1452	A	C5-N7-C8	-5.45	101.17	103.90
29	B1	2830	G	C2-N3-C4	-5.45	109.17	111.90
29	B1	2894	C	C5-C6-N1	-5.45	118.27	121.00
2	CA	4	PRO	N-CA-CB	5.45	109.84	103.30
29	D1	1179	A	C6-C5-N7	-5.45	128.48	132.30
29	B1	584	G	N3-C2-N2	-5.45	116.08	119.90
29	B1	2823	G	C4-C5-N7	-5.45	108.62	110.80
29	D1	3325	G	C8-N9-C4	5.45	108.58	106.40
1	A1	373	G	N3-C4-N9	-5.45	122.73	126.00
29	B1	214	G	C4-N9-C1'	-5.45	119.42	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	B3	51	G	C4-N9-C1'	5.45	133.59	126.50
29	D1	389	A	C6-C5-N7	5.45	136.12	132.30
29	D1	851	C	N3-C4-C5	5.45	124.08	121.90
29	D1	920	A	C8-N9-C4	-5.45	103.62	105.80
29	D1	2278	C	N3-C4-C5	5.45	124.08	121.90
29	D1	3213	A	C5-C6-N6	-5.45	119.34	123.70
29	B1	380	U	C5-C4-O4	5.45	129.17	125.90
29	B1	877	C	N3-C2-O2	-5.45	118.09	121.90
29	B1	2131	A	C4-C5-C6	5.45	119.72	117.00
29	B1	2361	A	C6-N1-C2	-5.45	115.33	118.60
29	D1	561	C	C5-C6-N1	-5.45	118.28	121.00
29	D1	1516	C	N1-C2-O2	-5.45	115.63	118.90
29	D1	2686	A	N1-C6-N6	5.45	121.87	118.60
29	D1	2946	A	N7-C8-N9	5.45	116.52	113.80
29	D1	3232	G	C2-N3-C4	5.45	114.62	111.90
29	B1	2301	U	N1-C2-O2	-5.45	118.99	122.80
31	B3	51	G	N7-C8-N9	5.45	115.82	113.10
29	D1	382	U	N3-C2-O2	5.45	126.01	122.20
29	D1	676	G	N3-C2-N2	5.45	123.71	119.90
29	D1	2752	U	C2-N1-C1'	5.45	124.24	117.70
29	B1	335	G	C5-N7-C8	-5.45	101.58	104.30
29	B1	2134	G	C6-C5-N7	-5.45	127.13	130.40
29	B1	2241	U	N1-C2-N3	5.45	118.17	114.90
29	B1	2527	G	C8-N9-C1'	5.45	134.08	127.00
29	D1	1368	U	C5-C4-O4	-5.45	122.63	125.90
29	D1	2846	U	N1-C2-O2	-5.45	118.99	122.80
29	D1	2895	G	N1-C6-O6	-5.45	116.63	119.90
29	D1	2983	C	N3-C2-O2	-5.45	118.09	121.90
29	D1	3034	C	C6-N1-C2	5.45	122.48	120.30
44	DO	42	PRO	N-CA-CB	5.45	109.83	103.30
1	C1	1633	A	C8-N9-C4	-5.44	103.62	105.80
29	D1	1389	G	C3'-C2'-C1'	5.44	105.86	101.50
29	B1	1048	A	C5-C6-N6	-5.44	119.35	123.70
29	B1	1877	U	C5-C6-N1	5.44	125.42	122.70
1	C1	336	G	N1-C2-N2	-5.44	111.30	116.20
1	C1	1203	A	C4-C5-C6	5.44	119.72	117.00
29	D1	875	G	N3-C4-N9	5.44	129.27	126.00
29	D1	1788	C	C6-N1-C1'	-5.44	114.27	120.80
1	A1	479	C	C2-N1-C1'	-5.44	112.81	118.80
29	B1	340	C	C5-C6-N1	5.44	123.72	121.00
29	B1	832	G	N9-C4-C5	-5.44	103.22	105.40
29	B1	2289	U	C5-C4-O4	-5.44	122.64	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	831	G	C8-N9-C4	5.44	108.58	106.40
29	D1	886	C	N3-C4-C5	5.44	124.08	121.90
29	D1	2319	U	N3-C2-O2	-5.44	118.39	122.20
1	A1	1455	G	N3-C4-C5	-5.44	125.88	128.60
29	B1	762	U	N1-C2-O2	-5.44	118.99	122.80
1	C1	1421	A	C4-C5-N7	-5.44	107.98	110.70
29	D1	3035	A	N1-C6-N6	5.44	121.86	118.60
29	B1	589	A	C4-C5-N7	-5.44	107.98	110.70
29	B1	867	G	C2-N3-C4	-5.44	109.18	111.90
29	B1	1301	A	N1-C6-N6	5.44	121.86	118.60
29	B1	2372	A	C5-C6-N1	-5.44	114.98	117.70
1	C1	1127	G	C8-N9-C4	5.44	108.58	106.40
1	C1	1142	A	N1-C6-N6	-5.44	115.34	118.60
11	AJ	35	PRO	N-CA-CB	5.44	109.82	103.30
29	B1	86	G	N3-C4-N9	-5.44	122.74	126.00
35	BD	21	PRO	N-CA-CB	5.44	109.82	103.30
1	C1	1276	U	N3-C2-O2	5.44	126.00	122.20
73	DM	198	PRO	N-CA-CB	5.44	109.82	103.30
1	A1	1438	G	N1-C6-O6	5.43	123.16	119.90
2	AA	152	PRO	N-CA-CB	5.43	109.82	103.30
29	B1	2716	U	C2-N1-C1'	5.43	124.22	117.70
29	B1	3055	U	C5-C6-N1	-5.43	119.98	122.70
29	D1	88	A	N3-C4-C5	5.43	130.60	126.80
29	D1	1312	C	C6-N1-C2	-5.43	118.13	120.30
29	D1	1940	G	C5-C6-N1	5.43	114.22	111.50
30	D2	13	A	N7-C8-N9	-5.43	111.08	113.80
1	A1	1205	C	C2-N1-C1'	5.43	124.78	118.80
1	A1	1673	G	N3-C4-C5	-5.43	125.88	128.60
1	A1	1788	G	N3-C4-C5	5.43	131.32	128.60
29	B1	497	C	C2-N3-C4	-5.43	117.18	119.90
29	B1	1431	G	N9-C4-C5	5.43	107.57	105.40
29	B1	1459	C	N1-C2-O2	-5.43	115.64	118.90
29	B1	2350	C	N1-C2-O2	-5.43	115.64	118.90
29	B1	3101	G	C5-C6-O6	-5.43	125.34	128.60
29	B1	3176	G	C5-C6-O6	5.43	131.86	128.60
29	B1	3246	G	N3-C2-N2	-5.43	116.10	119.90
34	BC	83	PRO	N-CA-CB	5.43	109.82	103.30
1	C1	364	G	N9-C4-C5	5.43	107.57	105.40
1	C1	939	A	N3-C4-C5	-5.43	123.00	126.80
1	C1	1142	A	C5-C6-N1	5.43	120.42	117.70
1	C1	1463	C	N3-C4-C5	5.43	124.07	121.90
29	D1	498	A	C6-N1-C2	5.43	121.86	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1002	A	C2-N3-C4	5.43	113.32	110.60
29	D1	1420	C	C2-N3-C4	-5.43	117.18	119.90
29	D1	3000	A	N3-C4-N9	-5.43	123.05	127.40
29	D1	3005	A	N9-C4-C5	5.43	107.97	105.80
29	D1	3300	U	C6-N1-C1'	5.43	128.81	121.20
29	B1	866	A	C5-N7-C8	-5.43	101.18	103.90
29	B1	1365	G	C8-N9-C4	-5.43	104.23	106.40
29	D1	747	A	C5-C6-N6	-5.43	119.36	123.70
29	D1	1172	G	N1-C2-N3	5.43	127.16	123.90
1	A1	1203	A	N1-C2-N3	5.43	132.01	129.30
29	B1	1415	U	N3-C4-C5	-5.43	111.34	114.60
29	B1	2611	U	N3-C4-C5	-5.43	111.34	114.60
1	C1	943	C	C6-N1-C2	5.43	122.47	120.30
29	D1	873	C	N1-C2-O2	-5.43	115.64	118.90
29	D1	2320	A	C8-N9-C4	5.43	107.97	105.80
29	D1	3046	A	C5-C6-N1	5.43	120.42	117.70
53	DX	34	PRO	N-CA-CB	5.43	109.82	103.30
31	B3	41	A	C8-N9-C4	-5.43	103.63	105.80
1	C1	1512	G	C8-N9-C1'	-5.43	119.94	127.00
29	D1	3373	U	N3-C2-O2	-5.43	118.40	122.20
1	A1	967	A	C8-N9-C4	5.43	107.97	105.80
29	B1	1334	U	N1-C2-O2	-5.43	119.00	122.80
29	B1	1880	U	C6-N1-C2	5.43	124.26	121.00
29	B1	3089	C	C2-N1-C1'	5.43	124.77	118.80
29	B1	3184	A	C8-N9-C1'	-5.43	117.93	127.70
31	B3	113	U	N1-C2-N3	5.43	118.16	114.90
2	CA	104	PRO	N-CA-CB	5.43	109.81	103.30
29	D1	1499	C	C5-C6-N1	-5.43	118.29	121.00
29	B1	3099	C	C5-C4-N4	-5.42	116.40	120.20
1	C1	869	A	C2-N3-C4	5.42	113.31	110.60
1	C1	1541	G	C5-C6-N1	-5.42	108.79	111.50
29	D1	719	U	C6-N1-C2	5.42	124.25	121.00
29	D1	1318	A	C5-C6-N6	-5.42	119.36	123.70
29	D1	1678	G	N3-C4-N9	-5.42	122.75	126.00
29	D1	3140	G	C8-N9-C1'	-5.42	119.95	127.00
31	D3	68	G	N3-C2-N2	-5.42	116.10	119.90
29	B1	1508	C	N3-C2-O2	-5.42	118.10	121.90
29	D1	137	G	C8-N9-C1'	-5.42	119.95	127.00
29	D1	656	A	N3-C4-N9	5.42	131.74	127.40
29	D1	1139	G	N3-C4-C5	5.42	131.31	128.60
29	D1	2398	A	C6-C5-N7	-5.42	128.50	132.30
29	B1	300	G	C6-C5-N7	-5.42	127.15	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	419	G	N7-C8-N9	-5.42	110.39	113.10
29	B1	1780	G	C3'-C2'-C1'	5.42	105.84	101.50
50	BU	67	PRO	N-CA-CB	5.42	109.81	103.30
1	C1	1591	C	C6-N1-C1'	5.42	127.31	120.80
7	CF	130	PRO	N-CA-CB	5.42	109.81	103.30
29	D1	1467	A	N7-C8-N9	-5.42	111.09	113.80
29	D1	2897	A	C6-N1-C2	-5.42	115.35	118.60
2	AA	142	PRO	N-CA-CB	5.42	109.80	103.30
1	C1	869	A	C5-C6-N6	-5.42	119.36	123.70
29	D1	515	C	N3-C4-C5	-5.42	119.73	121.90
1	A1	63	G	N7-C8-N9	-5.42	110.39	113.10
1	A1	864	U	C5-C6-N1	5.42	125.41	122.70
29	B1	1628	C	N1-C2-O2	-5.42	115.65	118.90
29	B1	2947	G	C6-C5-N7	5.42	133.65	130.40
29	B1	3173	G	C4-C5-N7	5.42	112.97	110.80
29	B1	3199	G	N3-C2-N2	-5.42	116.11	119.90
29	D1	822	G	N3-C4-C5	5.42	131.31	128.60
29	D1	2607	G	C4-N9-C1'	5.42	133.54	126.50
29	D1	2857	C	C6-N1-C2	5.42	122.47	120.30
29	D1	3200	G	C5-C6-N1	-5.42	108.79	111.50
1	A1	867	G	C5-C6-O6	5.42	131.85	128.60
1	A1	1535	U	C2-N1-C1'	5.42	124.20	117.70
29	B1	2147	A	N3-C4-C5	5.42	130.59	126.80
29	B1	2737	C	C2-N3-C4	-5.42	117.19	119.90
29	D1	1217	A	C5-N7-C8	-5.42	101.19	103.90
29	D1	1403	C	C2-N3-C4	-5.42	117.19	119.90
29	D1	2961	G	C6-C5-N7	-5.42	127.15	130.40
29	B1	1067	U	N3-C4-C5	5.42	117.85	114.60
29	B1	2752	U	C6-N1-C2	-5.42	117.75	121.00
29	D1	744	A	N9-C4-C5	5.42	107.97	105.80
1	A1	1121	C	C6-N1-C1'	5.41	127.30	120.80
29	B1	1047	A	C5-C6-N6	5.41	128.03	123.70
29	B1	1403	C	N3-C4-C5	5.41	124.07	121.90
29	B1	2586	G	N1-C6-O6	-5.41	116.65	119.90
1	C1	114	C	C6-N1-C2	5.41	122.47	120.30
29	D1	509	U	N1-C2-N3	5.41	118.15	114.90
29	D1	1076	C	C6-N1-C1'	-5.41	114.30	120.80
29	D1	1515	A	C6-N1-C2	-5.41	115.35	118.60
30	D2	14	U	C5-C6-N1	5.41	125.41	122.70
29	B1	271	C	C5-C6-N1	5.41	123.71	121.00
29	B1	402	A	N7-C8-N9	5.41	116.51	113.80
29	B1	2149	A	C5-C6-N1	5.41	120.41	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	12	U	C5-C6-N1	-5.41	119.99	122.70
1	A1	565	C	N3-C4-N4	-5.41	114.21	118.00
1	A1	1775	U	N1-C2-O2	-5.41	119.01	122.80
29	B1	74	G	C5-C6-O6	-5.41	125.35	128.60
29	B1	657	A	N3-C4-C5	5.41	130.59	126.80
29	B1	779	G	N1-C6-O6	5.41	123.15	119.90
29	B1	940	G	C4-C5-N7	5.41	112.96	110.80
29	B1	1401	A	C6-N1-C2	5.41	121.85	118.60
1	C1	1205	C	C2-N1-C1'	5.41	124.75	118.80
29	D1	511	G	C5-C6-N1	-5.41	108.79	111.50
29	D1	2296	A	N7-C8-N9	5.41	116.50	113.80
31	D3	92	A	N3-C4-N9	-5.41	123.07	127.40
1	A1	391	A	N3-C4-C5	5.41	130.59	126.80
1	A1	1348	A	C5-C6-N1	-5.41	115.00	117.70
29	B1	2639	G	C4-C5-N7	5.41	112.96	110.80
1	C1	45	U	C3'-C2'-C1'	5.41	105.83	101.50
1	C1	1008	G	C4-N9-C1'	5.41	133.53	126.50
29	D1	2895	G	C6-C5-N7	5.41	133.65	130.40
29	B1	3106	A	C4-C5-N7	5.41	113.40	110.70
7	AF	95	PRO	N-CA-CB	5.41	109.79	103.30
29	B1	731	U	C5-C6-N1	-5.41	120.00	122.70
29	B1	1212	A	C8-N9-C4	-5.41	103.64	105.80
29	B1	1303	A	N1-C2-N3	5.41	132.00	129.30
29	B1	1404	G	C6-C5-N7	-5.41	127.16	130.40
1	C1	315	A	N1-C6-N6	-5.41	115.36	118.60
29	D1	918	C	N1-C2-O2	-5.41	115.66	118.90
29	D1	3045	G	N7-C8-N9	5.41	115.80	113.10
50	DU	67	PRO	N-CA-CB	5.41	109.79	103.30
1	C1	601	A	C5-C6-N6	-5.40	119.38	123.70
29	D1	3099	C	C2-N1-C1'	5.40	124.74	118.80
29	B1	1161	G	C8-N9-C4	-5.40	104.24	106.40
29	B1	2195	C	C5-C4-N4	-5.40	116.42	120.20
29	B1	2412	G	N3-C4-N9	5.40	129.24	126.00
1	C1	1606	C	N1-C2-O2	-5.40	115.66	118.90
29	D1	1156	C	N3-C4-C5	-5.40	119.74	121.90
1	A1	883	C	C2-N1-C1'	5.40	124.74	118.80
1	A1	1220	C	N1-C2-O2	5.40	122.14	118.90
1	A1	1792	G	N3-C4-N9	5.40	129.24	126.00
29	B1	727	G	N1-C6-O6	5.40	123.14	119.90
29	B1	860	G	C8-N9-C1'	-5.40	119.98	127.00
46	BQ	123	PRO	N-CA-CB	5.40	109.78	103.30
1	C1	208	U	C5-C6-N1	-5.40	120.00	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	390	G	C2-N3-C4	-5.40	109.20	111.90
29	D1	2943	G	C8-N9-C4	5.40	108.56	106.40
1	A1	1331	A	N1-C6-N6	-5.40	115.36	118.60
1	A1	1459	C	C4-C5-C6	5.40	120.10	117.40
29	B1	2972	G	C4-N9-C1'	5.40	133.52	126.50
1	A1	1553	G	C4-C5-N7	5.40	112.96	110.80
29	B1	67	A	N9-C4-C5	5.40	107.96	105.80
29	B1	288	C	C4-C5-C6	5.40	120.10	117.40
29	B1	905	U	C2-N3-C4	-5.40	123.76	127.00
1	C1	994	G	C8-N9-C4	5.40	108.56	106.40
29	B1	505	G	C2-N3-C4	-5.39	109.20	111.90
29	B1	1821	U	N3-C2-O2	-5.39	118.42	122.20
29	B1	2671	A	N9-C4-C5	-5.39	103.64	105.80
29	B1	3143	C	N3-C4-C5	-5.39	119.74	121.90
29	D1	45	A	C6-N1-C2	5.39	121.84	118.60
29	D1	55	G	N3-C4-C5	5.39	131.30	128.60
29	D1	883	A	N1-C6-N6	-5.39	115.36	118.60
29	D1	1052	U	N3-C2-O2	5.39	125.98	122.20
29	D1	2940	A	C2-N3-C4	5.39	113.30	110.60
30	D2	119	U	C6-N1-C2	-5.39	117.76	121.00
31	D3	113	U	N1-C2-N3	5.39	118.14	114.90
29	B1	1305	U	C6-N1-C2	5.39	124.23	121.00
1	C1	376	C	C2-N1-C1'	5.39	124.73	118.80
29	D1	1364	C	C5-C6-N1	-5.39	118.30	121.00
29	D1	2270	A	C8-N9-C4	-5.39	103.64	105.80
29	D1	2680	A	N1-C6-N6	5.39	121.84	118.60
29	D1	3220	G	C6-C5-N7	-5.39	127.17	130.40
29	D1	3232	G	C6-C5-N7	5.39	133.64	130.40
16	AO	29	PRO	N-CA-CB	5.39	109.77	103.30
1	C1	572	C	C5-C6-N1	5.39	123.70	121.00
29	D1	575	G	C4-C5-N7	-5.39	108.64	110.80
29	D1	1059	G	N3-C4-N9	-5.39	122.77	126.00
29	D1	2929	C	C2-N1-C1'	5.39	124.73	118.80
29	B1	1000	C	N3-C2-O2	5.39	125.67	121.90
29	D1	1613	A	N1-C6-N6	-5.39	115.37	118.60
29	D1	1318	A	C2-N3-C4	5.39	113.29	110.60
1	A1	341	A	C6-N1-C2	-5.39	115.37	118.60
33	BB	151	PRO	N-CA-CB	5.39	109.76	103.30
1	C1	338	C	C6-N1-C1'	-5.39	114.34	120.80
29	D1	3108	G	C4-C5-C6	-5.39	115.57	118.80
1	A1	1600	A	C8-N9-C4	-5.38	103.65	105.80
29	B1	3084	C	N3-C4-N4	5.38	121.77	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	1421	A	N9-C4-C5	5.38	107.95	105.80
29	D1	1208	U	C5-C4-O4	5.38	129.13	125.90
1	A1	869	A	C5-C6-N6	-5.38	119.39	123.70
29	B1	3179	U	C4-C5-C6	5.38	122.93	119.70
29	D1	2427	U	N1-C2-O2	-5.38	119.03	122.80
1	A1	406	U	C6-N1-C2	5.38	124.23	121.00
29	B1	404	G	C5-C6-N1	-5.38	108.81	111.50
29	B1	665	A	N1-C6-N6	-5.38	115.37	118.60
29	B1	2689	A	C5-C6-N6	5.38	128.00	123.70
29	B1	3380	U	C5-C4-O4	5.38	129.13	125.90
29	D1	2180	G	C5-C6-N1	5.38	114.19	111.50
30	D2	103	A	C4-C5-N7	5.38	113.39	110.70
29	B1	685	G	N3-C4-N9	5.38	129.23	126.00
1	C1	10	G	C5-C6-N1	-5.38	108.81	111.50
29	B1	504	A	C8-N9-C1'	-5.38	118.02	127.70
29	B1	1877	U	N1-C2-O2	5.38	126.56	122.80
29	B1	2196	C	N3-C4-C5	5.38	124.05	121.90
29	B1	3230	G	N1-C6-O6	-5.38	116.67	119.90
1	C1	1109	G	C6-N1-C2	-5.38	121.87	125.10
29	D1	779	G	C8-N9-C1'	-5.38	120.01	127.00
29	D1	2705	A	C5-C6-N1	5.38	120.39	117.70
29	B1	1473	G	N1-C2-N3	5.38	127.13	123.90
29	B1	3300	U	C6-N1-C2	-5.38	117.77	121.00
29	D1	70	A	C2-N3-C4	5.38	113.29	110.60
29	D1	1194	G	C4-N9-C1'	5.38	133.49	126.50
1	A1	509	G	N9-C4-C5	5.38	107.55	105.40
29	B1	637	C	N1-C2-O2	-5.38	115.67	118.90
29	B1	2807	U	N1-C2-O2	-5.38	119.04	122.80
29	B1	3193	C	C6-N1-C1'	5.38	127.25	120.80
29	B1	3222	U	C5-C6-N1	-5.38	120.01	122.70
29	B1	712	G	N3-C4-N9	5.37	129.22	126.00
29	B1	882	A	C5-C6-N6	5.37	128.00	123.70
29	B1	2559	U	N1-C2-O2	5.37	126.56	122.80
29	B1	2700	G	N1-C6-O6	5.37	123.12	119.90
29	B1	3131	U	C2-N1-C1'	5.37	124.15	117.70
52	BW	66	PRO	N-CA-CB	5.37	109.75	103.30
29	D1	1285	G	C8-N9-C1'	-5.37	120.02	127.00
29	D1	1883	A	C6-N1-C2	-5.37	115.38	118.60
29	D1	2102	U	C2-N1-C1'	-5.37	111.25	117.70
29	D1	2853	A	C5-C6-N6	-5.37	119.40	123.70
29	D1	3393	U	C5-C4-O4	-5.37	122.68	125.90
34	DC	170	PRO	N-CA-CB	5.37	109.75	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	865	U	C5-C6-N1	-5.37	120.01	122.70
29	B1	1480	G	N9-C4-C5	-5.37	103.25	105.40
30	B2	10	C	C6-N1-C2	-5.37	118.15	120.30
1	C1	479	C	N1-C2-O2	-5.37	115.68	118.90
29	D1	1481	A	N1-C6-N6	5.37	121.82	118.60
29	D1	3363	U	N1-C2-N3	-5.37	111.68	114.90
29	B1	1900	A	N1-C6-N6	5.37	121.82	118.60
29	B1	2940	A	C8-N9-C4	-5.37	103.65	105.80
29	D1	3307	A	C6-C5-N7	-5.37	128.54	132.30
29	B1	3103	A	C2-N3-C4	5.37	113.28	110.60
31	B3	44	A	C5-C6-N1	5.37	120.38	117.70
29	D1	1379	G	C2-N3-C4	-5.37	109.22	111.90
29	D1	3108	G	C4-N9-C1'	-5.37	119.52	126.50
29	B1	1891	A	C5-N7-C8	-5.37	101.22	103.90
1	A1	300	A	N1-C6-N6	-5.37	115.38	118.60
1	A1	577	G	N1-C6-O6	5.37	123.12	119.90
29	B1	137	G	C8-N9-C1'	-5.37	120.02	127.00
29	B1	1482	A	C8-N9-C4	-5.37	103.65	105.80
29	B1	1899	G	C8-N9-C4	5.37	108.55	106.40
1	C1	1331	A	N3-C4-C5	-5.37	123.04	126.80
29	D1	506	U	C2-N1-C1'	5.37	124.14	117.70
29	D1	1091	A	C5-C6-N6	-5.37	119.41	123.70
29	D1	1403	C	C5-C6-N1	-5.37	118.32	121.00
1	A1	1046	G	C4-N9-C1'	5.36	133.47	126.50
29	B1	3193	C	C6-N1-C2	-5.36	118.16	120.30
21	CT	206	PRO	N-CA-CB	5.36	109.73	103.30
29	D1	532	A	N1-C6-N6	5.36	121.82	118.60
29	D1	1552	G	N3-C4-N9	5.36	129.22	126.00
29	B1	2643	A	N3-C4-C5	5.36	130.55	126.80
29	B1	3386	G	C4-C5-C6	5.36	122.02	118.80
44	BO	45	PRO	N-CA-CB	5.36	109.73	103.30
1	C1	390	G	C8-N9-C1'	-5.36	120.03	127.00
29	D1	2395	G	C8-N9-C4	-5.36	104.25	106.40
31	D3	87	G	C8-N9-C1'	-5.36	120.03	127.00
29	B1	821	U	C5-C6-N1	-5.36	120.02	122.70
29	B1	3172	A	N1-C2-N3	5.36	131.98	129.30
33	BB	141	PRO	N-CA-CB	5.36	109.73	103.30
29	D1	1277	C	N3-C4-C5	5.36	124.04	121.90
29	D1	1856	C	C5-C6-N1	-5.36	118.32	121.00
29	D1	2680	A	C5-C6-N6	-5.36	119.41	123.70
29	D1	2810	C	C5-C4-N4	-5.36	116.45	120.20
52	DW	116	PRO	N-CA-CB	5.36	109.73	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	281	G	C6-C5-N7	-5.36	127.18	130.40
29	D1	2364	G	C8-N9-C4	5.36	108.54	106.40
29	B1	2372	A	C4-C5-C6	5.36	119.68	117.00
29	D1	527	A	C5-C6-N1	5.36	120.38	117.70
29	D1	1608	C	C6-N1-C1'	-5.36	114.37	120.80
29	D1	2707	C	C3'-C2'-C1'	5.36	105.79	101.50
29	D1	3205	G	C4-N9-C1'	5.36	133.46	126.50
1	A1	975	C	C6-N1-C2	5.36	122.44	120.30
29	B1	1107	C	C2-N3-C4	-5.36	117.22	119.90
29	B1	2982	A	N9-C4-C5	5.36	107.94	105.80
29	B1	3078	U	C2-N1-C1'	5.36	124.13	117.70
29	D1	2144	A	N1-C6-N6	-5.36	115.39	118.60
7	AF	130	PRO	N-CA-CB	5.35	109.72	103.30
31	B3	68	G	N3-C2-N2	-5.35	116.15	119.90
29	D1	402	A	C5-N7-C8	-5.35	101.22	103.90
2	AA	161	PRO	N-CA-CB	5.35	109.72	103.30
29	B1	2343	C	N1-C2-O2	-5.35	115.69	118.90
29	B1	2869	U	C2-N1-C1'	5.35	124.12	117.70
29	B1	3213	A	C5-C6-N6	-5.35	119.42	123.70
1	C1	590	C	N1-C2-O2	-5.35	115.69	118.90
29	D1	3078	U	N1-C2-N3	-5.35	111.69	114.90
31	D3	33	A	C8-N9-C4	5.35	107.94	105.80
39	DH	99	PRO	N-CA-CB	5.35	109.72	103.30
50	DU	127	PRO	N-CA-CB	5.35	109.72	103.30
29	B1	39	A	N3-C4-C5	5.35	130.55	126.80
30	B2	29	C	N3-C4-C5	5.35	124.04	121.90
1	C1	1145	U	N1-C2-O2	-5.35	119.05	122.80
29	D1	3252	G	C6-N1-C2	-5.35	121.89	125.10
29	B1	576	C	C5-C4-N4	-5.35	116.46	120.20
29	B1	853	G	C4-C5-N7	-5.35	108.66	110.80
29	B1	2247	G	C5-N7-C8	-5.35	101.62	104.30
29	B1	3188	G	C8-N9-C1'	-5.35	120.05	127.00
42	BK	118	PRO	N-CA-CB	5.35	109.72	103.30
29	D1	1401	A	N1-C6-N6	-5.35	115.39	118.60
29	B1	2130	G	C6-C5-N7	-5.35	127.19	130.40
29	B1	2275	A	C5-C6-N1	-5.35	115.03	117.70
29	D1	654	C	C2-N3-C4	-5.35	117.23	119.90
29	D1	1315	U	C5-C4-O4	-5.35	122.69	125.90
31	D3	113	U	O4'-C1'-N1	5.35	112.48	108.20
29	D1	2376	G	C8-N9-C4	-5.35	104.26	106.40
29	B1	1396	C	C5-C4-N4	-5.34	116.46	120.20
29	B1	3097	C	C2-N3-C4	-5.34	117.23	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	358	U	C6-N1-C1'	-5.34	113.72	121.20
29	D1	750	G	C8-N9-C4	-5.34	104.26	106.40
1	A1	54	C	N3-C4-C5	5.34	124.04	121.90
1	A1	423	G	N9-C4-C5	5.34	107.54	105.40
29	B1	662	U	N1-C2-O2	5.34	126.54	122.80
29	B1	2326	A	C8-N9-C4	-5.34	103.66	105.80
1	C1	1639	C	N3-C2-O2	5.34	125.64	121.90
29	D1	884	A	N9-C4-C5	-5.34	103.66	105.80
29	D1	890	C	C5-C6-N1	-5.34	118.33	121.00
29	D1	2184	U	C5-C4-O4	-5.34	122.70	125.90
42	DK	118	PRO	N-CA-CB	5.34	109.71	103.30
1	A1	1450	U	N3-C2-O2	-5.34	118.46	122.20
29	B1	338	A	C6-N1-C2	-5.34	115.40	118.60
29	B1	992	A	C5-C6-N6	5.34	127.97	123.70
1	C1	1653	C	C5-C6-N1	-5.34	118.33	121.00
29	B1	1414	G	N3-C4-N9	-5.34	122.80	126.00
29	D1	3108	G	C5-C6-N1	5.34	114.17	111.50
35	DD	75	PRO	N-CA-CB	5.34	109.70	103.30
1	A1	408	C	C5-C4-N4	-5.34	116.46	120.20
1	A1	517	U	N3-C2-O2	5.34	125.94	122.20
1	A1	1620	C	C6-N1-C1'	-5.34	114.40	120.80
29	B1	117	U	C2-N3-C4	-5.34	123.80	127.00
29	B1	812	G	N3-C4-C5	5.34	131.27	128.60
29	D1	3007	U	C2-N1-C1'	5.34	124.11	117.70
29	B1	2377	G	C4-C5-N7	-5.33	108.67	110.80
29	B1	2780	A	C4-C5-C6	5.33	119.67	117.00
29	B1	3303	G	C6-N1-C2	-5.33	121.90	125.10
29	D1	1258	U	C5-C4-O4	5.33	129.10	125.90
1	A1	602	U	C2-N1-C1'	5.33	124.10	117.70
29	B1	325	A	N7-C8-N9	5.33	116.47	113.80
29	B1	707	U	C6-N1-C2	5.33	124.20	121.00
29	B1	1217	A	C6-N1-C2	-5.33	115.40	118.60
29	B1	1552	G	N1-C6-O6	5.33	123.10	119.90
29	B1	3391	A	C5-C6-N1	5.33	120.37	117.70
1	C1	287	G	N3-C4-N9	5.33	129.20	126.00
1	C1	456	A	C5-C6-N1	5.33	120.37	117.70
29	D1	380	U	N3-C2-O2	5.33	125.93	122.20
29	D1	1089	G	N3-C2-N2	-5.33	116.17	119.90
29	D1	2718	U	C5-C6-N1	-5.33	120.03	122.70
29	B1	2153	U	C2-N3-C4	-5.33	123.80	127.00
31	B3	44	A	C6-N1-C2	-5.33	115.40	118.60
53	BX	34	PRO	N-CA-CB	5.33	109.70	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	659	G	C8-N9-C1'	-5.33	120.07	127.00
29	D1	2684	C	C5-C4-N4	-5.33	116.47	120.20
29	D1	2699	G	N1-C6-O6	5.33	123.10	119.90
29	B1	86	G	C4-C5-N7	-5.33	108.67	110.80
29	B1	616	G	N1-C6-O6	5.33	123.10	119.90
29	D1	3035	A	N1-C2-N3	5.33	131.97	129.30
29	B1	1001	G	N7-C8-N9	5.33	115.76	113.10
29	B1	2341	A	N7-C8-N9	-5.33	111.14	113.80
29	B1	2943	G	C5-N7-C8	-5.33	101.64	104.30
29	B1	3177	G	C2-N3-C4	-5.33	109.23	111.90
29	D1	377	A	N1-C6-N6	5.33	121.80	118.60
33	BB	188	LYS	N-CA-C	-5.33	96.62	111.00
45	BP	109	PRO	N-CA-CB	5.33	109.69	103.30
1	C1	1558	U	C6-N1-C2	-5.33	117.80	121.00
29	D1	387	A	N3-C4-N9	-5.33	123.14	127.40
29	D1	756	U	C5-C4-O4	-5.33	122.70	125.90
29	D1	775	A	N1-C6-N6	5.33	121.80	118.60
29	D1	1177	G	C6-C5-N7	-5.33	127.20	130.40
29	D1	1321	G	N1-C2-N3	5.33	127.10	123.90
29	B1	315	C	C2-N1-C1'	5.33	124.66	118.80
29	B1	432	G	C6-C5-N7	-5.33	127.20	130.40
1	C1	1073	G	C6-C5-N7	-5.33	127.20	130.40
29	D1	389	A	C4-C5-N7	-5.33	108.04	110.70
29	D1	615	U	N3-C4-O4	5.33	123.13	119.40
29	D1	788	C	C4-C5-C6	5.33	120.06	117.40
29	D1	904	A	N3-C4-C5	5.33	130.53	126.80
29	B1	662	U	N3-C2-O2	-5.32	118.47	122.20
29	B1	1431	G	C6-N1-C2	-5.32	121.91	125.10
29	B1	1452	A	C5-C6-N6	-5.32	119.44	123.70
29	B1	3218	A	O4'-C1'-N9	5.32	112.46	108.20
29	D1	944	C	N3-C4-C5	5.32	124.03	121.90
29	D1	1322	U	C2-N3-C4	5.32	130.19	127.00
29	D1	2912	G	C5-C6-O6	-5.32	125.41	128.60
29	D1	3059	G	N1-C6-O6	5.32	123.09	119.90
1	A1	625	C	C6-N1-C1'	-5.32	114.41	120.80
1	A1	1611	A	C5-N7-C8	-5.32	101.24	103.90
29	B1	597	G	N9-C4-C5	-5.32	103.27	105.40
29	B1	2342	U	C6-N1-C2	5.32	124.19	121.00
1	C1	169	A	N1-C6-N6	5.32	121.79	118.60
1	C1	1658	G	N3-C4-C5	5.32	131.26	128.60
29	D1	3180	A	C5-C6-N6	-5.32	119.44	123.70
1	A1	1139	A	C8-N9-C4	5.32	107.93	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1004	U	N3-C4-O4	5.32	123.12	119.40
29	B1	2700	G	N9-C4-C5	-5.32	103.27	105.40
1	C1	426	G	N3-C2-N2	5.32	123.62	119.90
1	C1	1110	G	N1-C6-O6	-5.32	116.71	119.90
1	C1	1640	C	N3-C4-C5	5.32	124.03	121.90
29	D1	982	C	C2-N1-C1'	5.32	124.65	118.80
29	D1	1734	G	C5-C6-O6	-5.32	125.41	128.60
29	D1	2882	U	N3-C4-O4	5.32	123.12	119.40
29	B1	417	A	C8-N9-C4	5.32	107.93	105.80
29	B1	524	U	C3'-C2'-C1'	5.32	105.75	101.50
29	B1	651	G	N1-C2-N2	-5.32	111.41	116.20
29	D1	1686	U	N1-C2-N3	-5.32	111.71	114.90
29	B1	70	A	N7-C8-N9	5.32	116.46	113.80
29	B1	409	A	N7-C8-N9	-5.32	111.14	113.80
29	D1	904	A	C5-C6-N1	-5.32	115.04	117.70
29	D1	2338	C	N3-C4-C5	5.32	124.03	121.90
29	D1	2353	G	C5-C6-O6	-5.32	125.41	128.60
30	D2	10	C	C5-C6-N1	5.32	123.66	121.00
1	A1	1385	G	C8-N9-C4	5.32	108.53	106.40
29	B1	624	G	N9-C4-C5	-5.32	103.27	105.40
29	B1	674	G	N3-C4-C5	5.32	131.26	128.60
29	B1	1133	A	C5-C6-N6	5.32	127.95	123.70
29	B1	1885	U	C6-N1-C2	5.32	124.19	121.00
29	B1	2246	G	N3-C4-N9	5.32	129.19	126.00
1	C1	1144	U	C5-C6-N1	-5.32	120.04	122.70
1	C1	1549	C	C5-C6-N1	-5.32	118.34	121.00
1	C1	1661	U	C2-N1-C1'	-5.32	111.32	117.70
29	D1	2650	U	C6-N1-C1'	5.32	128.64	121.20
29	D1	3321	C	C6-N1-C2	-5.32	118.17	120.30
29	D1	3332	U	C5-C4-O4	5.32	129.09	125.90
1	A1	1789	G	N9-C4-C5	-5.31	103.28	105.40
29	B1	1472	U	C2-N3-C4	-5.31	123.81	127.00
1	C1	391	A	C8-N9-C4	5.31	107.92	105.80
1	C1	1132	A	N9-C4-C5	-5.31	103.67	105.80
1	C1	1417	A	N1-C6-N6	5.31	121.79	118.60
29	D1	730	C	C6-N1-C2	-5.31	118.17	120.30
29	D1	1045	C	N3-C2-O2	5.31	125.62	121.90
29	D1	1188	U	N3-C4-C5	5.31	117.79	114.60
29	D1	2618	G	C4-C5-N7	-5.31	108.67	110.80
29	D1	2918	G	N9-C4-C5	5.31	107.53	105.40
29	D1	3199	G	C5-C6-N1	-5.31	108.84	111.50
44	DO	74	PRO	N-CA-CB	5.31	109.67	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1303	A	N3-C4-N9	-5.31	123.15	127.40
29	D1	112	U	N1-C2-O2	-5.31	119.08	122.80
29	B1	1363	A	N3-C4-C5	5.31	130.52	126.80
29	B1	1522	U	C6-N1-C1'	-5.31	113.77	121.20
29	B1	3221	C	N3-C4-N4	5.31	121.72	118.00
29	D1	125	C	C5-C4-N4	-5.31	116.48	120.20
29	D1	744	A	C5-N7-C8	5.31	106.55	103.90
29	D1	2113	A	C8-N9-C4	5.31	107.92	105.80
29	D1	3188	G	N3-C4-N9	5.31	129.19	126.00
29	B1	706	A	C5-C6-N1	-5.31	115.05	117.70
29	B1	726	G	C4-C5-C6	5.31	121.98	118.80
29	B1	1657	C	N3-C2-O2	-5.31	118.19	121.90
29	B1	2687	G	N3-C4-C5	-5.31	125.95	128.60
29	B1	3181	C	N3-C2-O2	5.31	125.62	121.90
29	D1	74	G	C4-C5-N7	5.31	112.92	110.80
29	D1	137	G	C4-N9-C1'	5.31	133.40	126.50
29	D1	1063	G	C8-N9-C1'	5.31	133.90	127.00
29	D1	1368	U	N3-C4-O4	5.31	123.11	119.40
29	D1	1382	G	N3-C4-C5	5.31	131.25	128.60
1	A1	1348	A	C3'-C2'-C1'	-5.31	97.25	101.50
1	C1	621	A	N7-C8-N9	-5.31	111.15	113.80
29	D1	364	G	N3-C4-N9	5.31	129.18	126.00
29	D1	687	U	C2-N3-C4	-5.31	123.82	127.00
29	D1	1065	A	C5-C6-N1	5.31	120.35	117.70
30	D2	93	C	N3-C4-N4	5.31	121.71	118.00
1	A1	1633	A	C8-N9-C4	-5.30	103.68	105.80
29	B1	120	G	C6-C5-N7	5.30	133.58	130.40
1	C1	1204	A	C8-N9-C4	5.30	107.92	105.80
29	D1	185	C	C6-N1-C2	5.30	122.42	120.30
29	D1	432	G	C5-C6-O6	-5.30	125.42	128.60
29	D1	1703	U	N3-C2-O2	-5.30	118.49	122.20
29	D1	2117	A	N7-C8-N9	-5.30	111.15	113.80
29	D1	2120	A	C5-C6-N1	-5.30	115.05	117.70
29	D1	1010	G	C5-N7-C8	-5.30	101.65	104.30
29	D1	1501	U	C6-N1-C2	5.30	124.18	121.00
1	A1	1645	G	C4-C5-N7	5.30	112.92	110.80
29	B1	712	G	C8-N9-C4	5.30	108.52	106.40
29	B1	2940	A	N9-C4-C5	5.30	107.92	105.80
29	B1	3213	A	C4-C5-N7	5.30	113.35	110.70
30	B2	77	G	N3-C2-N2	5.30	123.61	119.90
29	D1	914	A	C5-C6-N1	5.30	120.35	117.70
29	D1	1903	U	C5-C6-N1	5.30	125.35	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2663	G	C4-C5-N7	5.30	112.92	110.80
29	D1	2697	A	C5-C6-N6	5.30	127.94	123.70
29	D1	3177	G	C2-N3-C4	-5.30	109.25	111.90
31	D3	51	G	C8-N9-C1'	-5.30	120.11	127.00
1	A1	1431	C	N1-C2-O2	5.30	122.08	118.90
29	B1	703	G	N3-C4-N9	-5.30	122.82	126.00
47	BR	60	PRO	N-CA-CB	5.30	109.66	103.30
29	D1	304	G	C4-N9-C1'	5.30	133.39	126.50
29	D1	779	G	C4-N9-C1'	5.30	133.39	126.50
29	D1	1151	U	C4-C5-C6	5.30	122.88	119.70
29	D1	1374	G	N1-C2-N3	5.30	127.08	123.90
29	B1	873	C	N3-C4-N4	5.30	121.71	118.00
29	B1	1376	C	N1-C2-N3	5.30	122.91	119.20
29	D1	712	G	N1-C6-O6	5.30	123.08	119.90
30	D2	96	U	C2-N1-C1'	-5.30	111.34	117.70
29	B1	1178	G	C8-N9-C4	-5.30	104.28	106.40
29	B1	2890	A	N7-C8-N9	5.29	116.45	113.80
52	BW	52	PRO	N-CA-CB	5.29	109.66	103.30
1	C1	980	G	C8-N9-C4	-5.29	104.28	106.40
1	C1	1126	G	N3-C2-N2	-5.29	116.19	119.90
29	D1	857	G	C3'-C2'-C1'	5.29	105.74	101.50
29	D1	1410	U	C6-N1-C2	5.29	124.18	121.00
29	D1	2352	A	C5-N7-C8	-5.29	101.25	103.90
29	B1	437	G	C6-C5-N7	5.29	133.58	130.40
29	B1	2810	C	C5-C4-N4	-5.29	116.49	120.20
1	C1	17	C	C2-N1-C1'	5.29	124.62	118.80
1	C1	351	C	N1-C2-O2	-5.29	115.72	118.90
1	C1	1658	G	N9-C4-C5	-5.29	103.28	105.40
29	D1	529	A	C6-C5-N7	5.29	136.00	132.30
29	D1	1176	C	C6-N1-C2	-5.29	118.18	120.30
29	D1	2117	A	C8-N9-C4	5.29	107.92	105.80
29	D1	2633	U	N1-C2-O2	-5.29	119.09	122.80
29	D1	3012	A	N9-C4-C5	5.29	107.92	105.80
29	B1	1151	U	C2-N3-C4	5.29	130.18	127.00
29	D1	1232	C	C6-N1-C2	-5.29	118.18	120.30
1	C1	1291	G	N9-C4-C5	-5.29	103.28	105.40
29	D1	640	U	C6-N1-C1'	5.29	128.61	121.20
29	D1	3188	G	C8-N9-C1'	-5.29	120.12	127.00
29	B1	353	G	C8-N9-C4	5.29	108.52	106.40
29	B1	428	A	C5-C6-N1	-5.29	115.06	117.70
29	B1	500	C	N3-C4-N4	5.29	121.70	118.00
29	B1	1898	G	N3-C4-N9	-5.29	122.83	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	3109	G	C5-C6-N1	5.29	114.14	111.50
29	B1	3207	U	N3-C4-C5	5.29	117.77	114.60
29	D1	511	G	C4-C5-N7	-5.29	108.69	110.80
29	D1	1097	G	C6-C5-N7	5.29	133.57	130.40
29	D1	1124	U	C6-N1-C1'	-5.29	113.80	121.20
29	D1	2920	U	C2-N3-C4	-5.29	123.83	127.00
35	DD	126	ILE	N-CA-C	-5.29	96.72	111.00
29	B1	524	U	C5-C4-O4	5.29	129.07	125.90
29	D1	89	A	C8-N9-C4	5.29	107.92	105.80
29	B1	2702	A	N7-C8-N9	5.29	116.44	113.80
30	B2	97	A	N1-C6-N6	-5.29	115.43	118.60
36	BE	251	PRO	N-CA-CB	5.29	109.64	103.30
30	B2	65	G	N3-C2-N2	5.28	123.60	119.90
29	D1	1331	U	C2-N3-C4	-5.28	123.83	127.00
29	B1	3106	A	N9-C4-C5	-5.28	103.69	105.80
29	D1	370	U	C6-N1-C1'	5.28	128.59	121.20
29	D1	3200	G	C4-C5-N7	-5.28	108.69	110.80
1	A1	1761	U	C4-C5-C6	5.28	122.87	119.70
29	B1	2699	G	N3-C4-C5	5.28	131.24	128.60
29	B1	3184	A	C4-N9-C1'	5.28	135.80	126.30
1	C1	890	C	C6-N1-C1'	5.28	127.14	120.80
29	D1	987	U	N1-C2-N3	5.28	118.07	114.90
29	D1	2350	C	N1-C2-O2	-5.28	115.73	118.90
29	D1	3300	U	N1-C2-O2	5.28	126.50	122.80
1	A1	79	C	C6-N1-C2	-5.28	118.19	120.30
29	D1	1285	G	N9-C4-C5	-5.28	103.29	105.40
48	DS	26	PRO	N-CA-CB	5.28	109.64	103.30
29	B1	171	G	N9-C4-C5	-5.28	103.29	105.40
29	B1	3220	G	N3-C4-C5	-5.28	125.96	128.60
29	B1	3278	C	N3-C4-C5	-5.28	119.79	121.90
3	CB	227	PRO	N-CA-CB	5.28	109.63	103.30
29	D1	95	A	N7-C8-N9	-5.28	111.16	113.80
29	D1	744	A	C5-C6-N1	5.28	120.34	117.70
29	D1	2334	U	C2-N1-C1'	5.28	124.03	117.70
29	D1	2362	C	C5-C4-N4	-5.28	116.51	120.20
29	D1	3370	A	C8-N9-C4	5.28	107.91	105.80
1	A1	1135	U	C5-C6-N1	-5.28	120.06	122.70
1	A1	1220	C	C5-C4-N4	-5.28	116.51	120.20
29	B1	227	G	N1-C6-O6	5.28	123.06	119.90
29	B1	588	G	C4-C5-C6	5.28	121.97	118.80
29	B1	1585	C	N1-C2-O2	-5.28	115.73	118.90
29	D1	432	G	C4-C5-N7	5.28	112.91	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	1377	G	C4-C5-N7	-5.28	108.69	110.80
29	D1	3369	G	C4-C5-N7	-5.28	108.69	110.80
29	B1	2993	G	C2-N3-C4	5.27	114.54	111.90
29	D1	402	A	C4-C5-N7	5.27	113.34	110.70
29	D1	3001	C	C5-C6-N1	-5.27	118.36	121.00
29	B1	1458	U	N1-C2-N3	5.27	118.06	114.90
29	B1	1610	G	C8-N9-C4	-5.27	104.29	106.40
29	B1	2734	A	C6-N1-C2	5.27	121.76	118.60
29	B1	2899	C	C6-N1-C2	-5.27	118.19	120.30
29	D1	92	G	C5-N7-C8	-5.27	101.66	104.30
29	D1	918	C	C6-N1-C2	5.27	122.41	120.30
29	D1	2651	G	N3-C4-C5	5.27	131.24	128.60
29	D1	3374	U	N3-C4-C5	5.27	117.76	114.60
30	D2	82	G	C8-N9-C4	5.27	108.51	106.40
34	DC	82	PRO	N-CA-CB	5.27	109.63	103.30
29	D1	1175	C	C2-N1-C1'	-5.27	113.00	118.80
1	A1	575	C	C6-N1-C2	5.27	122.41	120.30
1	A1	1122	G	C8-N9-C4	5.27	108.51	106.40
29	B1	1803	C	C2-N3-C4	-5.27	117.27	119.90
29	B1	1848	G	N1-C6-O6	5.27	123.06	119.90
29	B1	2663	G	C5-C6-O6	5.27	131.76	128.60
30	B2	14	U	N3-C4-C5	-5.27	111.44	114.60
1	C1	1560	U	C5-C4-O4	5.27	129.06	125.90
1	C1	1613	U	N3-C2-O2	-5.27	118.51	122.20
29	D1	608	A	C3'-C2'-C1'	-5.27	97.28	101.50
29	D1	1462	A	N1-C6-N6	5.27	121.76	118.60
1	A1	1729	C	C2-N3-C4	-5.27	117.27	119.90
29	B1	345	G	C5-C6-O6	5.27	131.76	128.60
29	B1	1750	A	C8-N9-C4	-5.27	103.69	105.80
38	BG	96	PRO	N-CA-CB	5.27	109.62	103.30
2	CA	142	PRO	N-CA-CB	5.27	109.62	103.30
29	D1	498	A	N1-C2-N3	-5.27	126.67	129.30
29	D1	2738	A	C5-C6-N1	5.27	120.33	117.70
1	A1	1166	A	C5-C6-N1	5.26	120.33	117.70
29	B1	437	G	C4-C5-N7	-5.26	108.69	110.80
29	B1	625	G	N3-C4-C5	5.26	131.23	128.60
29	B1	712	G	N1-C6-O6	5.26	123.06	119.90
29	B1	2671	A	N3-C4-N9	5.26	131.61	127.40
29	B1	2891	U	C5-C4-O4	5.26	129.06	125.90
1	C1	1568	C	N3-C4-C5	-5.26	119.79	121.90
29	D1	712	G	C4-C5-N7	5.26	112.91	110.80
29	D1	1342	C	N3-C2-O2	5.26	125.58	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	DD	32	PRO	N-CA-CB	5.26	109.62	103.30
29	B1	885	U	C6-N1-C2	5.26	124.16	121.00
1	C1	1386	G	N1-C6-O6	5.26	123.06	119.90
29	B1	514	G	N3-C2-N2	-5.26	116.22	119.90
29	B1	671	U	C6-N1-C2	5.26	124.16	121.00
29	B1	2342	U	C2-N1-C1'	-5.26	111.39	117.70
29	D1	1288	U	N3-C2-O2	5.26	125.88	122.20
29	D1	1431	G	C5-N7-C8	5.26	106.93	104.30
29	D1	2527	G	N9-C4-C5	5.26	107.50	105.40
29	B1	711	A	C8-N9-C4	5.26	107.90	105.80
29	B1	753	C	N3-C4-C5	5.26	124.00	121.90
29	B1	900	G	N7-C8-N9	-5.26	110.47	113.10
29	B1	1851	G	N3-C4-N9	5.26	129.16	126.00
29	B1	2303	A	C5-C6-N1	5.26	120.33	117.70
29	B1	3030	G	C3'-C2'-C1'	5.26	105.71	101.50
1	C1	1456	C	C2-N1-C1'	-5.26	113.01	118.80
29	D1	1179	A	N1-C6-N6	5.26	121.76	118.60
29	D1	3097	C	C2-N1-C1'	-5.26	113.01	118.80
29	D1	3230	G	N3-C4-C5	-5.26	125.97	128.60
46	DQ	143	PRO	N-CA-CB	5.26	109.61	103.30
1	A1	601	A	C5-C6-N6	-5.26	119.49	123.70
29	B1	3332	U	C6-N1-C1'	5.26	128.56	121.20
29	D1	120	G	N3-C4-N9	-5.26	122.84	126.00
30	D2	65	G	N3-C4-N9	5.26	129.16	126.00
1	A1	825	U	N3-C4-C5	-5.26	111.45	114.60
29	B1	30	G	N1-C6-O6	5.26	123.05	119.90
29	B1	422	A	N7-C8-N9	-5.26	111.17	113.80
29	B1	529	A	C4-C5-C6	-5.26	114.37	117.00
29	B1	1357	G	N9-C4-C5	5.26	107.50	105.40
1	C1	565	C	N3-C4-N4	-5.26	114.32	118.00
29	D1	994	G	C5-C6-N1	5.26	114.13	111.50
29	D1	2687	G	N1-C6-O6	-5.26	116.75	119.90
29	D1	3055	U	C5-C6-N1	-5.26	120.07	122.70
1	A1	112	A	C3'-C2'-C1'	5.25	105.70	101.50
29	B1	137	G	C4-N9-C1'	5.25	133.33	126.50
29	B1	1339	C	N3-C2-O2	-5.25	118.22	121.90
31	B3	51	G	C8-N9-C4	-5.25	104.30	106.40
1	C1	1139	A	C5-C6-N6	-5.25	119.50	123.70
29	D1	2690	G	C4-N9-C1'	-5.25	119.67	126.50
29	B1	149	U	C2-N1-C1'	5.25	124.00	117.70
29	B1	308	A	C2-N3-C4	-5.25	107.97	110.60
29	B1	650	C	C2-N1-C1'	5.25	124.58	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1097	G	C5-N7-C8	5.25	106.93	104.30
29	D1	1317	A	C5-C6-N1	-5.25	115.07	117.70
29	D1	1951	C	C4-C5-C6	5.25	120.03	117.40
29	D1	3041	U	N3-C4-O4	-5.25	115.72	119.40
1	A1	481	A	C5-C6-N6	5.25	127.90	123.70
1	A1	802	G	N3-C4-N9	-5.25	122.85	126.00
29	B1	1361	U	N3-C4-O4	5.25	123.08	119.40
29	B1	2362	C	C6-N1-C2	5.25	122.40	120.30
29	D1	2354	C	C4-C5-C6	5.25	120.03	117.40
29	D1	2556	C	N1-C2-O2	5.25	122.05	118.90
29	D1	2823	G	N3-C4-C5	5.25	131.23	128.60
29	D1	3019	U	C5-C4-O4	-5.25	122.75	125.90
1	A1	1438	G	C5-C6-O6	-5.25	125.45	128.60
29	B1	431	U	C2-N3-C4	-5.25	123.85	127.00
29	D1	1402	C	C6-N1-C2	5.25	122.40	120.30
29	D1	1887	A	N3-C4-C5	5.25	130.47	126.80
29	D1	2551	U	C5-C6-N1	5.25	125.33	122.70
1	A1	1127	G	N1-C6-O6	5.25	123.05	119.90
1	A1	1620	C	C5-C6-N1	5.25	123.62	121.00
29	B1	54	C	C5-C6-N1	-5.25	118.38	121.00
29	B1	1063	G	N3-C4-N9	-5.25	122.85	126.00
29	B1	1307	G	C6-C5-N7	-5.25	127.25	130.40
1	C1	373	G	N3-C4-C5	5.25	131.22	128.60
29	D1	613	G	N1-C2-N2	-5.25	111.48	116.20
29	D1	1431	G	N3-C4-C5	-5.25	125.98	128.60
29	D1	1641	U	N1-C2-O2	-5.25	119.13	122.80
29	D1	2354	C	N3-C2-O2	-5.25	118.23	121.90
29	D1	2718	U	C2-N3-C4	-5.25	123.85	127.00
29	D1	2846	U	C2-N3-C4	-5.25	123.85	127.00
38	DG	139	PRO	N-CA-CB	5.25	109.60	103.30
40	DI	92	TYR	N-CA-C	5.25	125.17	111.00
1	A1	365	G	C5-C6-O6	-5.25	125.45	128.60
29	B1	424	G	C4-N9-C1'	5.25	133.32	126.50
29	B1	585	A	N1-C6-N6	-5.25	115.45	118.60
29	B1	891	G	C2-N3-C4	-5.25	109.28	111.90
29	B1	901	G	C4-C5-N7	-5.25	108.70	110.80
29	B1	1194	G	N7-C8-N9	5.25	115.72	113.10
29	B1	1422	G	N1-C6-O6	5.25	123.05	119.90
29	B1	1545	A	C8-N9-C4	5.25	107.90	105.80
29	B1	2859	U	N3-C2-O2	5.25	125.87	122.20
1	C1	1077	C	N3-C2-O2	-5.25	118.23	121.90
29	D1	1477	A	C6-N1-C2	5.25	121.75	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2369	G	C6-C5-N7	5.25	133.55	130.40
29	D1	3018	C	C2-N1-C1'	-5.25	113.03	118.80
29	D1	3304	U	N3-C2-O2	5.25	125.87	122.20
29	B1	2194	G	N7-C8-N9	-5.25	110.48	113.10
29	B1	2790	A	N1-C6-N6	-5.25	115.45	118.60
29	B1	3227	A	C4-C5-C6	-5.25	114.38	117.00
29	D1	1493	G	N1-C6-O6	-5.25	116.75	119.90
34	DC	33	PRO	N-CA-CB	5.25	109.59	103.30
1	A1	535	A	C5-C6-N1	-5.24	115.08	117.70
1	A1	1463	C	N3-C4-C5	5.24	124.00	121.90
29	B1	32	U	N1-C2-N3	5.24	118.05	114.90
29	B1	431	U	C5-C6-N1	-5.24	120.08	122.70
29	D1	45	A	C2-N3-C4	-5.24	107.98	110.60
29	D1	1507	G	N9-C4-C5	5.24	107.50	105.40
29	D1	1834	U	N3-C4-C5	-5.24	111.45	114.60
29	D1	2719	U	C5-C4-O4	5.24	129.05	125.90
29	D1	3047	U	C3'-C2'-C1'	5.24	105.69	101.50
29	B1	2307	G	C2-N3-C4	-5.24	109.28	111.90
29	B1	2875	U	C2-N1-C1'	5.24	123.99	117.70
1	C1	867	G	C5-C6-O6	5.24	131.75	128.60
1	C1	1791	A	N9-C4-C5	-5.24	103.70	105.80
29	D1	2835	U	C6-N1-C1'	-5.24	113.86	121.20
29	B1	502	U	C6-N1-C2	5.24	124.14	121.00
29	B1	633	C	N1-C2-O2	-5.24	115.76	118.90
29	B1	2335	G	C5-C6-N1	5.24	114.12	111.50
29	B1	3334	U	C5-C4-O4	-5.24	122.76	125.90
43	BN	54	PRO	N-CA-CB	5.24	109.59	103.30
1	C1	1030	A	C8-N9-C4	5.24	107.90	105.80
29	D1	45	A	C5-C6-N1	-5.24	115.08	117.70
29	D1	1050	U	C6-N1-C2	5.24	124.14	121.00
29	D1	1428	A	C8-N9-C4	5.24	107.90	105.80
29	B1	45	A	C2-N3-C4	-5.24	107.98	110.60
29	B1	612	U	N3-C2-O2	5.24	125.87	122.20
29	B1	949	C	N1-C2-N3	5.24	122.87	119.20
29	B1	2513	U	C5-C4-O4	-5.24	122.76	125.90
31	B3	68	G	N1-C2-N2	5.24	120.91	116.20
29	D1	9	U	N1-C2-O2	5.24	126.47	122.80
29	D1	826	G	C5-C6-O6	-5.24	125.46	128.60
29	D1	2637	A	C4-C5-N7	-5.24	108.08	110.70
29	D1	2650	U	C2-N1-C1'	-5.24	111.42	117.70
29	B1	3300	U	N1-C2-O2	5.24	126.47	122.80
29	D1	1226	G	C6-C5-N7	-5.24	127.26	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3130	A	C6-C5-N7	-5.24	128.63	132.30
1	A1	1126	G	N3-C2-N2	-5.24	116.23	119.90
29	B1	1173	U	C5-C6-N1	-5.24	120.08	122.70
29	B1	1583	A	N9-C4-C5	5.24	107.89	105.80
29	B1	1860	G	C5-C6-N1	5.24	114.12	111.50
29	B1	3263	G	C5-C6-O6	5.24	131.74	128.60
31	B3	11	C	N1-C2-O2	5.24	122.04	118.90
1	C1	59	C	N1-C2-O2	5.24	122.04	118.90
29	D1	244	G	C6-C5-N7	-5.24	127.26	130.40
29	D1	1168	U	C2-N1-C1'	-5.24	111.42	117.70
29	D1	1227	C	C6-N1-C2	-5.24	118.21	120.30
29	D1	1825	G	N3-C4-N9	-5.24	122.86	126.00
29	D1	2388	U	N1-C2-O2	-5.24	119.14	122.80
29	D1	3205	G	C4-C5-N7	-5.24	108.71	110.80
29	D1	1111	U	N3-C2-O2	5.23	125.86	122.20
29	D1	1661	G	N3-C4-C5	-5.23	125.98	128.60
29	D1	2411	U	C5-C4-O4	5.23	129.04	125.90
29	D1	2689	A	C4-C5-C6	5.23	119.62	117.00
29	B1	334	A	C8-N9-C4	5.23	107.89	105.80
29	B1	410	U	C4-C5-C6	5.23	122.84	119.70
29	B1	720	A	N7-C8-N9	5.23	116.42	113.80
29	B1	2135	U	C5-C6-N1	-5.23	120.08	122.70
29	B1	2748	A	C2-N3-C4	-5.23	107.98	110.60
1	C1	1745	G	C2-N3-C4	5.23	114.52	111.90
29	D1	42	C	C6-N1-C2	5.23	122.39	120.30
29	D1	3123	A	N7-C8-N9	5.23	116.42	113.80
29	D1	3242	G	N9-C4-C5	5.23	107.49	105.40
29	B1	1384	U	C4-C5-C6	-5.23	116.56	119.70
29	B1	2395	G	C5-N7-C8	-5.23	101.69	104.30
29	B1	2963	C	C2-N3-C4	-5.23	117.28	119.90
1	C1	152	U	C5-C6-N1	-5.23	120.08	122.70
1	C1	883	C	C2-N1-C1'	5.23	124.55	118.80
29	D1	345	G	C2-N3-C4	-5.23	109.28	111.90
29	D1	2700	G	C4-N9-C1'	5.23	133.30	126.50
29	D1	3099	C	C5-C6-N1	5.23	123.61	121.00
43	DN	14	LEU	N-CA-C	5.23	125.12	111.00
1	A1	1498	G	C6-N1-C2	-5.23	121.96	125.10
29	B1	1870	C	N3-C4-C5	5.23	123.99	121.90
1	C1	1132	A	N3-C4-C5	5.23	130.46	126.80
29	D1	196	G	N3-C4-C5	-5.23	125.99	128.60
29	D1	2121	G	C8-N9-C4	5.23	108.49	106.40
1	A1	1277	G	C8-N9-C4	-5.23	104.31	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	751	A	C2-N3-C4	5.23	113.21	110.60
29	B1	989	A	C5-C6-N1	5.23	120.31	117.70
29	B1	2607	G	C4-N9-C1'	5.23	133.30	126.50
30	B2	82	G	N1-C6-O6	-5.23	116.76	119.90
29	D1	137	G	C5-C6-O6	-5.23	125.46	128.60
29	D1	227	G	C8-N9-C4	5.23	108.49	106.40
29	D1	624	G	C8-N9-C1'	-5.23	120.20	127.00
29	D1	2297	U	C5-C6-N1	-5.23	120.09	122.70
29	D1	2646	C	C5-C6-N1	-5.23	118.39	121.00
29	D1	3214	U	N3-C4-O4	5.23	123.06	119.40
29	D1	3268	A	N3-C4-C5	5.23	130.46	126.80
29	B1	1107	C	C5-C6-N1	-5.22	118.39	121.00
29	B1	1840	U	N3-C4-O4	-5.22	115.74	119.40
29	B1	2752	U	C2-N1-C1'	5.22	123.97	117.70
29	B1	3000	A	C4-N9-C1'	-5.22	116.90	126.30
29	B1	3208	G	N3-C4-C5	-5.22	125.99	128.60
30	B2	45	A	C8-N9-C4	5.22	107.89	105.80
1	C1	54	C	C6-N1-C1'	-5.22	114.53	120.80
29	D1	3188	G	C8-N9-C4	5.22	108.49	106.40
29	D1	3192	U	N1-C2-N3	5.22	118.03	114.90
29	B1	358	G	C5-C6-O6	-5.22	125.47	128.60
29	B1	422	A	C3'-C2'-C1'	-5.22	97.32	101.50
29	B1	802	C	N3-C4-C5	-5.22	119.81	121.90
29	B1	1507	G	C4-C5-C6	-5.22	115.67	118.80
29	B1	3000	A	N3-C4-N9	-5.22	123.22	127.40
29	D1	402	A	N9-C4-C5	-5.22	103.71	105.80
29	D1	2652	U	N1-C2-O2	-5.22	119.14	122.80
29	D1	2993	G	O4'-C1'-N9	5.22	112.38	108.20
29	D1	3386	G	C5-N7-C8	-5.22	101.69	104.30
29	B1	3035	A	N9-C4-C5	-5.22	103.71	105.80
1	C1	1077	C	N1-C2-O2	5.22	122.03	118.90
1	C1	1529	C	N1-C2-O2	-5.22	115.77	118.90
1	C1	1596	C	N3-C2-O2	5.22	125.56	121.90
29	D1	1298	C	C6-N1-C2	5.22	122.39	120.30
1	A1	802	G	N3-C4-C5	5.22	131.21	128.60
29	B1	149	U	N1-C2-O2	5.22	126.45	122.80
29	B1	989	A	C8-N9-C4	5.22	107.89	105.80
1	C1	55	A	C6-C5-N7	5.22	135.95	132.30
29	D1	1661	G	C5-C6-O6	-5.22	125.47	128.60
29	D1	2904	U	N3-C2-O2	-5.22	118.55	122.20
34	DC	12	GLY	N-CA-C	5.22	126.15	113.10
29	B1	21	G	N7-C8-N9	5.22	115.71	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	812	G	N3-C4-N9	-5.22	122.87	126.00
29	B1	3386	G	N1-C6-O6	5.22	123.03	119.90
29	B1	3386	G	N7-C8-N9	5.22	115.71	113.10
1	C1	158	U	N3-C2-O2	-5.22	118.55	122.20
1	C1	310	C	N3-C4-N4	5.22	121.65	118.00
1	C1	1046	G	C6-C5-N7	-5.22	127.27	130.40
1	A1	1438	G	N9-C4-C5	-5.22	103.31	105.40
29	B1	501	A	N7-C8-N9	-5.22	111.19	113.80
29	B1	3128	G	N3-C2-N2	-5.22	116.25	119.90
1	C1	378	A	C5-C6-N1	5.22	120.31	117.70
1	C1	879	G	C6-C5-N7	5.22	133.53	130.40
1	C1	1791	A	C4-C5-N7	5.22	113.31	110.70
29	D1	1294	A	C5-C6-N6	-5.22	119.53	123.70
29	D1	3290	G	C3'-C2'-C1'	5.22	105.67	101.50
31	D3	15	G	N1-C6-O6	-5.22	116.77	119.90
1	A1	365	G	C8-N9-C4	-5.21	104.31	106.40
29	B1	1146	C	N1-C2-O2	-5.21	115.77	118.90
29	B1	1377	G	C8-N9-C4	-5.21	104.31	106.40
29	D1	407	A	C8-N9-C4	5.21	107.89	105.80
29	D1	1409	G	C5-C6-N1	5.21	114.11	111.50
29	D1	1877	U	C5-C6-N1	5.21	125.31	122.70
29	D1	3012	A	C6-N1-C2	-5.21	115.47	118.60
29	D1	3256	G	C5-C6-O6	-5.21	125.47	128.60
29	B1	51	A	C2-N3-C4	5.21	113.21	110.60
29	B1	848	A	N1-C6-N6	5.21	121.73	118.60
29	D1	196	G	C2-N3-C4	5.21	114.51	111.90
29	D1	1311	G	C6-C5-N7	-5.21	127.27	130.40
29	D1	3184	A	C4-N9-C1'	5.21	135.68	126.30
29	B1	31	C	C2-N3-C4	-5.21	117.29	119.90
29	B1	614	C	N3-C4-C5	5.21	123.98	121.90
29	B1	1408	G	C8-N9-C4	5.21	108.48	106.40
29	B1	2935	U	C6-N1-C1'	5.21	128.50	121.20
57	Bb	53	PRO	N-CA-CB	5.21	109.56	103.30
29	D1	1089	G	N1-C2-N3	5.21	127.03	123.90
29	D1	2632	G	N3-C4-C5	5.21	131.21	128.60
29	D1	2643	A	C8-N9-C4	5.21	107.89	105.80
29	B1	802	C	N3-C4-N4	5.21	121.65	118.00
1	C1	1095	U	C2-N1-C1'	5.21	123.95	117.70
29	D1	402	A	N7-C8-N9	5.21	116.41	113.80
29	D1	978	G	C4-C5-C6	5.21	121.93	118.80
29	D1	1368	U	C5-C6-N1	5.21	125.31	122.70
29	D1	2143	A	C8-N9-C4	-5.21	103.72	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3207	U	C2-N3-C4	-5.21	123.87	127.00
1	A1	1028	C	N1-C2-O2	5.21	122.03	118.90
1	A1	1378	U	C2-N1-C1'	5.21	123.95	117.70
29	B1	156	G	N3-C4-C5	-5.21	126.00	128.60
29	B1	2158	A	N1-C6-N6	-5.21	115.47	118.60
31	B3	47	C	C2-N3-C4	-5.21	117.30	119.90
29	D1	918	C	C5-C6-N1	-5.21	118.40	121.00
29	D1	1217	A	C4-C5-N7	5.21	113.30	110.70
29	D1	1315	U	C6-N1-C2	5.21	124.12	121.00
29	D1	3035	A	N9-C4-C5	-5.21	103.72	105.80
29	B1	155	G	C4-C5-N7	5.21	112.88	110.80
29	B1	626	U	C5-C6-N1	5.21	125.30	122.70
29	B1	963	G	N1-C6-O6	5.21	123.02	119.90
29	B1	1175	C	C6-N1-C2	5.21	122.38	120.30
29	B1	2811	A	C6-N1-C2	5.21	121.72	118.60
1	C1	1077	C	C2-N1-C1'	5.21	124.53	118.80
29	D1	504	A	C5-N7-C8	-5.21	101.30	103.90
29	D1	1319	G	N3-C2-N2	-5.21	116.25	119.90
29	D1	1335	C	C5-C6-N1	-5.21	118.40	121.00
29	D1	1861	G	N1-C6-O6	5.21	123.02	119.90
29	B1	574	U	N1-C2-O2	-5.21	119.16	122.80
29	D1	1070	U	N3-C2-O2	-5.21	118.56	122.20
29	B1	780	A	C2-N3-C4	-5.20	108.00	110.60
29	B1	1161	G	N7-C8-N9	5.20	115.70	113.10
29	B1	3106	A	C6-C5-N7	-5.20	128.66	132.30
1	C1	1793	G	N3-C4-C5	-5.20	126.00	128.60
29	D1	1313	G	N3-C2-N2	5.20	123.54	119.90
1	A1	1009	U	N1-C2-O2	-5.20	119.16	122.80
3	AB	225	LEU	N-CA-C	5.20	125.05	111.00
1	C1	342	C	C5-C6-N1	-5.20	118.40	121.00
29	D1	1184	A	N3-C4-N9	-5.20	123.24	127.40
29	B1	14	U	N3-C2-O2	5.20	125.84	122.20
29	B1	707	U	C2-N1-C1'	-5.20	111.46	117.70
29	B1	939	U	N1-C2-N3	5.20	118.02	114.90
29	B1	1322	U	N3-C2-O2	5.20	125.84	122.20
29	B1	2560	C	C5-C6-N1	5.20	123.60	121.00
29	B1	3000	A	C8-N9-C4	5.20	107.88	105.80
29	D1	308	A	C4-C5-C6	5.20	119.60	117.00
29	D1	640	U	C6-N1-C2	-5.20	117.88	121.00
29	B1	98	G	C5-C6-O6	5.20	131.72	128.60
29	B1	103	G	N1-C2-N2	5.20	120.88	116.20
29	B1	2123	G	C5-C6-N1	5.20	114.10	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	509	G	N9-C4-C5	5.20	107.48	105.40
29	D1	578	A	N1-C6-N6	-5.20	115.48	118.60
29	D1	1285	G	C4-N9-C1'	5.20	133.26	126.50
29	D1	3000	A	C5-C6-N1	-5.20	115.10	117.70
29	B1	424	G	N9-C4-C5	-5.20	103.32	105.40
29	B1	1336	U	C2-N3-C4	-5.20	123.88	127.00
29	D1	1362	G	C4-N9-C1'	-5.20	119.74	126.50
29	D1	3265	C	C6-N1-C1'	-5.20	114.56	120.80
59	Dd	40	PRO	N-CA-CB	5.20	109.54	103.30
29	B1	905	U	N1-C2-O2	-5.20	119.16	122.80
29	B1	1143	A	C5-N7-C8	-5.20	101.30	103.90
29	B1	1227	C	C2-N1-C1'	5.20	124.52	118.80
29	B1	1499	C	C2-N1-C1'	-5.20	113.09	118.80
29	B1	1851	G	N1-C6-O6	5.20	123.02	119.90
1	C1	125	U	C3'-C2'-C1'	5.20	105.66	101.50
1	C1	1097	U	C5-C6-N1	-5.20	120.10	122.70
29	D1	584	G	C5-C6-O6	-5.20	125.48	128.60
29	D1	3224	G	C4-C5-N7	-5.20	108.72	110.80
1	A1	647	G	C8-N9-C1'	-5.19	120.25	127.00
1	C1	462	G	C8-N9-C1'	5.19	133.75	127.00
29	D1	3232	G	N3-C2-N2	5.19	123.54	119.90
29	D1	3342	A	N3-C4-C5	-5.19	123.16	126.80
1	A1	1330	G	C8-N9-C4	-5.19	104.32	106.40
29	B1	715	A	C3'-C2'-C1'	5.19	105.66	101.50
29	B1	2750	U	C6-N1-C2	5.19	124.12	121.00
29	B1	2891	U	N3-C4-O4	-5.19	115.77	119.40
29	B1	3147	G	C8-N9-C4	5.19	108.48	106.40
1	C1	13	C	C6-N1-C1'	-5.19	114.57	120.80
1	C1	587	C	N3-C4-C5	5.19	123.98	121.90
1	C1	1416	G	C5-C6-O6	-5.19	125.48	128.60
2	CA	152	PRO	N-CA-CB	5.19	109.53	103.30
29	D1	55	G	C5-C6-O6	-5.19	125.48	128.60
29	D1	875	G	N9-C4-C5	-5.19	103.32	105.40
29	D1	999	G	N1-C6-O6	-5.19	116.78	119.90
29	D1	1903	U	C2-N3-C4	5.19	130.12	127.00
29	D1	2958	A	N7-C8-N9	-5.19	111.20	113.80
29	D1	3246	G	N9-C4-C5	5.19	107.48	105.40
29	B1	210	U	C6-N1-C2	-5.19	117.89	121.00
29	B1	1653	G	C8-N9-C1'	-5.19	120.25	127.00
37	BF	27	PRO	N-CA-CB	5.19	109.53	103.30
1	C1	1788	G	N9-C4-C5	5.19	107.48	105.40
29	D1	102	C	N3-C2-O2	-5.19	118.27	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	DP	122	GLN	N-CA-C	-5.19	96.99	111.00
29	B1	2416	U	N3-C2-O2	5.19	125.83	122.20
29	B1	2587	U	N3-C4-O4	5.19	123.03	119.40
29	B1	2644	C	C2-N1-C1'	5.19	124.51	118.80
29	D1	1364	C	C5-C4-N4	-5.19	116.57	120.20
1	A1	1408	G	C8-N9-C4	-5.19	104.33	106.40
1	A1	1529	C	C5-C6-N1	-5.19	118.41	121.00
29	B1	1886	A	N1-C6-N6	-5.19	115.49	118.60
29	D1	865	U	C2-N1-C1'	-5.19	111.47	117.70
1	A1	113	U	N1-C2-N3	5.19	118.01	114.90
29	B1	1609	C	C5-C4-N4	-5.19	116.57	120.20
29	B1	1883	A	C6-N1-C2	-5.19	115.49	118.60
1	C1	405	C	C6-N1-C1'	-5.19	114.58	120.80
29	D1	3202	G	N7-C8-N9	-5.19	110.51	113.10
1	A1	687	G	N3-C4-N9	-5.18	122.89	126.00
1	A1	1368	G	C6-C5-N7	-5.18	127.29	130.40
29	B1	225	C	N3-C4-N4	5.18	121.63	118.00
29	B1	498	A	N1-C6-N6	5.18	121.71	118.60
29	B1	2960	C	C5-C6-N1	-5.18	118.41	121.00
30	B2	26	C	N3-C2-O2	-5.18	118.27	121.90
34	BC	82	PRO	N-CA-CB	5.18	109.52	103.30
1	C1	344	A	N9-C4-C5	5.18	107.87	105.80
29	D1	189	G	N3-C4-C5	-5.18	126.01	128.60
29	D1	1160	C	C2-N1-C1'	5.18	124.50	118.80
29	D1	2394	G	N9-C4-C5	5.18	107.47	105.40
29	D1	2714	G	N3-C4-N9	-5.18	122.89	126.00
29	D1	3251	U	N3-C2-O2	-5.18	118.57	122.20
1	A1	1244	A	N9-C4-C5	5.18	107.87	105.80
29	B1	103	G	C5-N7-C8	-5.18	101.71	104.30
29	B1	316	U	C5-C6-N1	-5.18	120.11	122.70
29	B1	2386	A	C5-C6-N6	-5.18	119.55	123.70
29	B1	2972	G	N1-C2-N3	5.18	127.01	123.90
1	C1	1305	U	N3-C4-C5	-5.18	111.49	114.60
1	C1	1634	C	C6-N1-C1'	-5.18	114.58	120.80
29	D1	1388	U	N3-C2-O2	5.18	125.83	122.20
29	B1	1337	A	N3-C4-C5	5.18	130.43	126.80
29	B1	2186	U	C5-C6-N1	-5.18	120.11	122.70
29	B1	2728	G	C8-N9-C4	5.18	108.47	106.40
29	D1	1286	A	C8-N9-C4	5.18	107.87	105.80
1	C1	13	C	C2-N1-C1'	5.18	124.50	118.80
1	C1	565	C	C6-N1-C1'	5.18	127.02	120.80
1	C1	1756	A	C8-N9-C4	-5.18	103.73	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	960	U	N3-C2-O2	-5.18	118.58	122.20
1	A1	1765	A	C4-C5-C6	5.18	119.59	117.00
29	B1	2683	U	C2-N3-C4	-5.18	123.89	127.00
29	B1	2780	A	C4-N9-C1'	5.18	135.62	126.30
29	D1	999	G	C6-N1-C2	-5.18	121.99	125.10
29	D1	1485	G	N3-C4-N9	5.18	129.11	126.00
29	B1	753	C	N3-C2-O2	-5.18	118.28	121.90
29	B1	1198	C	N3-C2-O2	-5.18	118.28	121.90
29	B1	2142	A	N1-C6-N6	5.18	121.70	118.60
29	D1	719	U	N1-C2-N3	-5.18	111.79	114.90
29	D1	890	C	N3-C4-N4	-5.18	114.38	118.00
29	D1	2331	C	N3-C2-O2	5.18	125.52	121.90
29	D1	2641	U	C5-C6-N1	-5.18	120.11	122.70
29	D1	3322	A	N1-C2-N3	-5.18	126.71	129.30
41	DJ	122	PRO	N-CA-CB	5.18	109.51	103.30
29	B1	790	U	N3-C4-O4	-5.17	115.78	119.40
29	B1	1063	G	C8-N9-C1'	5.17	133.73	127.00
29	D1	379	C	C5-C6-N1	5.17	123.59	121.00
29	D1	3376	A	C4-C5-C6	-5.17	114.41	117.00
29	B1	2398	A	N9-C4-C5	-5.17	103.73	105.80
29	D1	2609	A	C8-N9-C4	-5.17	103.73	105.80
29	D1	2989	U	C5-C6-N1	-5.17	120.11	122.70
29	D1	2993	G	C2-N3-C4	5.17	114.49	111.90
1	A1	981	U	C6-N1-C1'	-5.17	113.96	121.20
29	B1	431	U	N3-C4-O4	-5.17	115.78	119.40
29	B1	727	G	C8-N9-C4	5.17	108.47	106.40
29	B1	2881	C	N3-C2-O2	5.17	125.52	121.90
29	B1	3290	G	C3'-C2'-C1'	5.17	105.64	101.50
1	C1	1788	G	C6-C5-N7	5.17	133.50	130.40
29	D1	793	C	C6-N1-C1'	-5.17	114.59	120.80
29	B1	2991	A	C4-C5-C6	-5.17	114.42	117.00
29	B1	3307	A	C6-C5-N7	-5.17	128.68	132.30
1	C1	1512	G	N9-C4-C5	-5.17	103.33	105.40
1	A1	437	A	C4-C5-C6	5.17	119.58	117.00
29	B1	1194	G	C4-N9-C1'	5.17	133.22	126.50
29	B1	2716	U	N3-C4-O4	5.17	123.02	119.40
29	D1	2362	C	C6-N1-C1'	5.17	127.00	120.80
29	D1	2531	C	C2-N1-C1'	5.17	124.48	118.80
29	D1	3140	G	C4-N9-C1'	5.17	133.22	126.50
29	B1	694	C	C6-N1-C2	-5.17	118.23	120.30
29	B1	916	G	C6-C5-N7	-5.17	127.30	130.40
29	B1	1482	A	C2-N3-C4	5.17	113.18	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2166	A	C8-N9-C4	5.17	107.87	105.80
1	C1	879	G	N7-C8-N9	-5.17	110.52	113.10
1	C1	975	C	C6-N1-C2	5.17	122.37	120.30
29	D1	63	A	N1-C6-N6	5.17	121.70	118.60
29	D1	3099	C	N1-C2-O2	5.17	122.00	118.90
29	B1	39	A	C2-N3-C4	-5.17	108.02	110.60
29	B1	3140	G	C4-N9-C1'	5.17	133.21	126.50
1	C1	1244	A	C5-C6-N6	5.17	127.83	123.70
30	D2	13	A	C8-N9-C4	5.17	107.87	105.80
1	A1	631	G	N3-C4-C5	-5.16	126.02	128.60
1	A1	1634	C	C5-C6-N1	5.16	123.58	121.00
29	B1	32	U	N1-C2-O2	-5.16	119.19	122.80
29	B1	1056	U	C4-C5-C6	-5.16	116.60	119.70
29	B1	1224	C	C2-N1-C1'	-5.16	113.12	118.80
29	B1	3045	G	C5-C6-O6	-5.16	125.50	128.60
30	B2	82	G	C5-C6-N1	5.16	114.08	111.50
29	D1	596	C	N3-C4-N4	-5.16	114.39	118.00
29	D1	1138	U	C2-N3-C4	-5.16	123.90	127.00
29	D1	1177	G	C2-N3-C4	-5.16	109.32	111.90
29	D1	1547	G	C6-C5-N7	-5.16	127.30	130.40
29	D1	1938	U	N3-C2-O2	-5.16	118.59	122.20
29	D1	2974	U	C2-N3-C4	-5.16	123.90	127.00
29	B1	94	G	C6-C5-N7	5.16	133.50	130.40
29	D1	26	A	C4-C5-C6	5.16	119.58	117.00
29	D1	2325	G	C8-N9-C4	-5.16	104.33	106.40
29	B1	363	G	C4-C5-N7	5.16	112.86	110.80
29	B1	752	C	C5-C6-N1	5.16	123.58	121.00
29	B1	3099	C	C2-N1-C1'	5.16	124.48	118.80
29	D1	89	A	C6-C5-N7	-5.16	128.69	132.30
29	D1	513	G	C5-C6-N1	-5.16	108.92	111.50
29	D1	1318	A	C6-N1-C2	-5.16	115.50	118.60
29	D1	2716	U	C5-C4-O4	-5.16	122.80	125.90
29	D1	2740	A	N7-C8-N9	5.16	116.38	113.80
29	D1	3168	A	C5-C6-N6	-5.16	119.57	123.70
29	B1	98	G	N9-C4-C5	5.16	107.46	105.40
29	B1	222	A	C4-C5-N7	5.16	113.28	110.70
29	B1	1551	C	C6-N1-C2	5.16	122.36	120.30
29	B1	1677	G	N1-C2-N2	-5.16	111.56	116.20
29	B1	1877	U	N3-C2-O2	-5.16	118.59	122.20
29	B1	1892	G	C5-N7-C8	5.16	106.88	104.30
29	B1	3272	C	C5-C4-N4	-5.16	116.59	120.20
41	BJ	27	PRO	N-CA-CB	5.16	109.49	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	3132	C	C2-N1-C1'	-5.16	113.12	118.80
29	D1	3189	G	N1-C6-O6	5.16	123.00	119.90
29	D1	2376	G	N3-C4-N9	-5.16	122.91	126.00
29	D1	2814	G	C5-C6-O6	-5.16	125.51	128.60
1	A1	1787	C	C6-N1-C2	5.16	122.36	120.30
29	B1	676	G	N1-C2-N2	-5.16	111.56	116.20
29	B1	2102	U	C2-N1-C1'	-5.16	111.51	117.70
29	B1	1180	A	N1-C6-N6	-5.15	115.51	118.60
29	B1	2190	U	C5-C6-N1	-5.15	120.12	122.70
31	B3	11	C	C6-N1-C2	-5.15	118.24	120.30
29	D1	3205	G	C8-N9-C1'	-5.15	120.30	127.00
41	DJ	178	ARG	N-CA-C	5.15	124.92	111.00
1	A1	1777	G	C6-C5-N7	-5.15	127.31	130.40
29	B1	43	A	N7-C8-N9	-5.15	111.22	113.80
29	B1	574	U	N3-C4-O4	5.15	123.01	119.40
29	B1	2130	G	N1-C6-O6	5.15	122.99	119.90
29	D1	32	U	N1-C2-O2	-5.15	119.19	122.80
29	D1	207	U	C5-C4-O4	-5.15	122.81	125.90
29	D1	214	G	C4-N9-C1'	-5.15	119.80	126.50
29	D1	790	U	C5-C6-N1	-5.15	120.12	122.70
29	D1	1204	A	N1-C6-N6	5.15	121.69	118.60
29	D1	1640	G	C5-C6-O6	-5.15	125.51	128.60
29	D1	2661	G	C5-C6-N1	5.15	114.08	111.50
29	D1	3041	U	N3-C4-C5	5.15	117.69	114.60
29	D1	3134	A	N1-C6-N6	5.15	121.69	118.60
1	A1	1791	A	N1-C6-N6	5.15	121.69	118.60
29	B1	137	G	C5-C6-O6	-5.15	125.51	128.60
29	B1	670	C	N1-C2-O2	-5.15	115.81	118.90
29	B1	3166	C	C2-N1-C1'	-5.15	113.14	118.80
29	D1	644	G	N1-C6-O6	5.15	122.99	119.90
29	D1	948	C	C5-C4-N4	-5.15	116.59	120.20
29	D1	1499	C	C6-N1-C2	5.15	122.36	120.30
29	D1	2740	A	C4-C5-N7	5.15	113.28	110.70
29	D1	3030	G	N3-C4-C5	5.15	131.18	128.60
29	D1	3366	G	N3-C4-N9	-5.15	122.91	126.00
29	D1	617	G	N1-C6-O6	-5.15	116.81	119.90
29	D1	1380	G	N1-C6-O6	5.15	122.99	119.90
29	D1	1678	G	N3-C2-N2	-5.15	116.30	119.90
29	D1	2950	G	N1-C6-O6	5.15	122.99	119.90
1	A1	577	G	C4-C5-N7	5.15	112.86	110.80
29	B1	561	C	N3-C2-O2	5.15	125.50	121.90
29	B1	640	U	C6-N1-C1'	5.15	128.41	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	1340	G	N1-C2-N3	5.15	126.99	123.90
29	B1	1547	G	C4-C5-N7	5.15	112.86	110.80
1	C1	1745	G	N3-C4-C5	-5.15	126.03	128.60
29	D1	754	G	N3-C4-N9	-5.15	122.91	126.00
1	C1	575	C	N3-C4-C5	5.15	123.96	121.90
29	D1	573	C	C4-C5-C6	5.15	119.97	117.40
29	D1	1781	C	N3-C4-N4	5.15	121.60	118.00
1	A1	1030	A	C8-N9-C4	5.14	107.86	105.80
29	B1	607	A	N1-C2-N3	5.14	131.87	129.30
29	B1	1900	A	C6-C5-N7	-5.14	128.70	132.30
29	B1	2396	G	C8-N9-C1'	-5.14	120.31	127.00
7	CF	108	PRO	N-CA-CB	5.14	109.47	103.30
29	D1	63	A	N9-C4-C5	-5.14	103.74	105.80
29	D1	1190	A	N7-C8-N9	5.14	116.37	113.80
29	D1	1477	A	C5-C6-N1	-5.14	115.13	117.70
29	D1	1951	C	N1-C2-N3	-5.14	115.60	119.20
29	D1	3091	A	C6-N1-C2	-5.14	115.51	118.60
29	D1	3184	A	N7-C8-N9	5.14	116.37	113.80
29	D1	3219	G	N7-C8-N9	5.14	115.67	113.10
30	D2	65	G	N7-C8-N9	5.14	115.67	113.10
1	A1	1453	G	N1-C6-O6	5.14	122.98	119.90
29	B1	439	C	N1-C2-O2	5.14	121.99	118.90
29	B1	675	C	C2-N1-C1'	5.14	124.46	118.80
29	B1	1194	G	N3-C4-C5	-5.14	126.03	128.60
29	B1	1476	G	N9-C4-C5	5.14	107.46	105.40
29	B1	2641	U	C5-C6-N1	-5.14	120.13	122.70
1	C1	757	A	N1-C2-N3	5.14	131.87	129.30
17	CP	29	TYR	N-CA-C	5.14	124.89	111.00
29	D1	1333	C	N3-C4-N4	5.14	121.60	118.00
29	B1	1673	G	N3-C4-C5	5.14	131.17	128.60
29	D1	1899	G	N3-C4-C5	5.14	131.17	128.60
30	D2	44	C	C6-N1-C2	5.14	122.36	120.30
1	A1	346	G	C5-C6-O6	-5.14	125.52	128.60
1	A1	784	C	C6-N1-C1'	-5.14	114.63	120.80
1	A1	1481	C	C5-C6-N1	5.14	123.57	121.00
29	B1	1907	C	C4-C5-C6	5.14	119.97	117.40
29	D1	2697	A	C2-N3-C4	-5.14	108.03	110.60
29	D1	2898	G	C3'-C2'-C1'	5.14	105.61	101.50
1	A1	1421	A	C4-C5-N7	-5.14	108.13	110.70
29	B1	67	A	C2-N3-C4	5.14	113.17	110.60
1	C1	374	U	C6-N1-C2	5.14	124.08	121.00
29	D1	244	G	C2-N3-C4	-5.14	109.33	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	AJ	124	PRO	N-CA-CB	5.14	109.47	103.30
29	B1	1427	U	C2-N1-C1'	-5.14	111.53	117.70
29	D1	1360	C	N1-C2-O2	-5.14	115.82	118.90
29	D1	2108	C	N3-C4-C5	5.14	123.95	121.90
29	D1	2913	C	C2-N3-C4	-5.14	117.33	119.90
1	A1	79	C	N1-C2-O2	5.13	121.98	118.90
1	A1	1097	U	C5-C6-N1	-5.13	120.13	122.70
29	B1	1691	U	C2-N3-C4	-5.13	123.92	127.00
29	D1	1710	C	N1-C2-O2	5.13	121.98	118.90
37	DF	4	GLN	N-CA-C	5.13	124.86	111.00
1	A1	610	G	C5-C6-O6	-5.13	125.52	128.60
29	B1	1673	G	C8-N9-C4	5.13	108.45	106.40
29	D1	985	U	C2-N1-C1'	-5.13	111.54	117.70
29	D1	3030	G	C4-C5-N7	5.13	112.85	110.80
1	A1	306	U	C6-N1-C2	5.13	124.08	121.00
11	AJ	126	PRO	N-CA-CB	5.13	109.46	103.30
29	B1	77	A	C5-C6-N6	-5.13	119.59	123.70
29	B1	1091	A	C6-N1-C2	-5.13	115.52	118.60
29	B1	2992	U	N3-C4-O4	5.13	122.99	119.40
29	D1	907	G	C4-C5-N7	5.13	112.85	110.80
1	A1	330	G	C5-C6-O6	-5.13	125.52	128.60
1	A1	1377	U	C2-N1-C1'	5.13	123.86	117.70
1	A1	1438	G	N3-C4-N9	5.13	129.08	126.00
29	B1	1751	G	C6-C5-N7	5.13	133.48	130.40
29	D1	953	G	C5-C6-O6	-5.13	125.52	128.60
2	AA	104	PRO	N-CA-CB	5.13	109.45	103.30
29	B1	1395	G	C8-N9-C4	-5.13	104.35	106.40
29	B1	1436	U	C4-C5-C6	5.13	122.78	119.70
29	B1	3097	C	C2-N1-C1'	-5.13	113.16	118.80
29	B1	3379	C	N1-C2-O2	-5.13	115.82	118.90
31	B3	58	G	N1-C6-O6	5.13	122.98	119.90
1	C1	481	A	N1-C6-N6	-5.13	115.52	118.60
29	D1	1151	U	N3-C4-O4	5.13	122.99	119.40
29	D1	2705	A	C2-N3-C4	5.13	113.16	110.60
29	D1	2834	G	C6-C5-N7	5.13	133.48	130.40
47	DR	60	PRO	N-CA-CB	5.13	109.45	103.30
29	B1	1331	U	N1-C2-O2	-5.13	119.21	122.80
29	D1	2421	U	N1-C2-O2	-5.13	119.21	122.80
30	D2	56	A	C4-C5-N7	5.13	113.26	110.70
29	B1	1510	G	N1-C6-O6	-5.12	116.83	119.90
29	B1	3278	C	C5-C6-N1	5.12	123.56	121.00
1	C1	627	C	C5-C6-N1	-5.12	118.44	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	423	G	N3-C4-C5	-5.12	126.04	128.60
29	B1	585	A	C8-N9-C4	-5.12	103.75	105.80
29	B1	1496	C	C6-N1-C1'	-5.12	114.65	120.80
29	B1	3048	A	N7-C8-N9	5.12	116.36	113.80
30	B2	13	A	N7-C8-N9	-5.12	111.24	113.80
1	C1	342	C	C6-N1-C2	5.12	122.35	120.30
1	C1	1039	A	C5-C6-N1	-5.12	115.14	117.70
29	D1	429	U	C6-N1-C2	-5.12	117.93	121.00
29	D1	1360	C	C5-C6-N1	-5.12	118.44	121.00
29	D1	1664	G	N3-C4-C5	5.12	131.16	128.60
1	A1	351	C	N1-C2-O2	-5.12	115.83	118.90
1	A1	462	G	C4-N9-C1'	-5.12	119.84	126.50
1	A1	1148	C	C6-N1-C2	-5.12	118.25	120.30
1	A1	1455	G	C2-N3-C4	5.12	114.46	111.90
29	B1	2707	C	C3'-C2'-C1'	5.12	105.60	101.50
29	B1	2782	U	C2-N3-C4	5.12	130.07	127.00
29	B1	2892	A	C6-C5-N7	-5.12	128.72	132.30
45	BP	76	PRO	N-CA-C	-5.12	98.78	112.10
50	BU	117	PRO	N-CA-CB	5.12	109.45	103.30
1	C1	58	U	C2-N1-C1'	5.12	123.85	117.70
1	C1	338	C	N3-C2-O2	-5.12	118.31	121.90
29	D1	55	G	C4-C5-N7	5.12	112.85	110.80
29	D1	1439	U	C5-C4-O4	-5.12	122.83	125.90
29	D1	2939	G	N3-C2-N2	5.12	123.48	119.90
29	D1	2969	A	N3-C4-C5	5.12	130.38	126.80
37	DF	74	VAL	N-CA-C	5.12	124.83	111.00
1	A1	1778	G	C4-C5-N7	5.12	112.85	110.80
29	B1	161	G	N3-C4-N9	5.12	129.07	126.00
1	C1	570	A	C8-N9-C4	5.12	107.85	105.80
29	D1	1226	G	C3'-C2'-C1'	5.12	105.60	101.50
29	D1	1908	A	C5-C6-N1	5.12	120.26	117.70
29	D1	2641	U	C2-N3-C4	-5.12	123.93	127.00
29	B1	220	G	N3-C4-C5	5.12	131.16	128.60
29	B1	1307	G	N1-C6-O6	5.12	122.97	119.90
29	B1	1322	U	N3-C4-O4	5.12	122.98	119.40
29	B1	2737	C	C5-C6-N1	-5.12	118.44	121.00
29	B1	2814	G	C4-C5-N7	5.12	112.85	110.80
29	B1	3000	A	C2-N3-C4	-5.12	108.04	110.60
29	D1	755	A	C5-C6-N1	5.12	120.26	117.70
29	D1	1148	G	N7-C8-N9	5.12	115.66	113.10
29	D1	2358	A	N3-C4-C5	5.12	130.38	126.80
29	D1	3257	C	N3-C4-N4	-5.12	114.42	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	1335	U	C2-N1-C1'	5.12	123.84	117.70
29	B1	2648	G	C4-C5-N7	5.12	112.85	110.80
1	C1	341	A	C6-N1-C2	-5.12	115.53	118.60
29	D1	895	A	N7-C8-N9	5.12	116.36	113.80
29	D1	1861	G	C5-C6-N1	-5.12	108.94	111.50
31	D3	101	U	C2-N1-C1'	-5.12	111.56	117.70
1	A1	1567	U	C3'-C2'-C1'	5.12	105.59	101.50
29	B1	2672	G	C4-C5-N7	5.12	112.85	110.80
29	B1	2991	A	N1-C2-N3	-5.12	126.74	129.30
29	B1	3009	G	N3-C4-N9	-5.12	122.93	126.00
29	B1	3363	U	N1-C2-N3	-5.12	111.83	114.90
34	BC	170	PRO	N-CA-CB	5.12	109.44	103.30
1	C1	615	A	C6-N1-C2	-5.12	115.53	118.60
29	D1	994	G	C8-N9-C4	5.12	108.45	106.40
29	D1	2922	G	C4-C5-N7	5.12	112.85	110.80
29	D1	3266	G	C5-C6-N1	5.12	114.06	111.50
29	B1	2396	G	C6-C5-N7	-5.11	127.33	130.40
29	B1	3090	U	N3-C4-O4	5.11	122.98	119.40
1	C1	1781	A	C8-N9-C4	-5.11	103.75	105.80
11	CJ	126	PRO	N-CA-CB	5.11	109.44	103.30
29	D1	573	C	C5-C6-N1	-5.11	118.44	121.00
29	D1	1485	G	C5-C6-N1	5.11	114.06	111.50
29	B1	50	U	C6-N1-C2	-5.11	117.93	121.00
1	C1	113	U	C2-N1-C1'	-5.11	111.56	117.70
1	C1	1642	G	C4-C5-N7	5.11	112.84	110.80
29	D1	434	U	C2-N3-C4	-5.11	123.93	127.00
29	D1	624	G	C6-C5-N7	-5.11	127.33	130.40
50	DU	105	PRO	N-CA-CB	5.11	109.44	103.30
29	B1	549	U	N3-C2-O2	-5.11	118.62	122.20
29	B1	1166	G	C4-C5-N7	5.11	112.84	110.80
29	B1	1380	G	C5-C6-N1	-5.11	108.94	111.50
29	B1	2962	U	C6-N1-C1'	5.11	128.35	121.20
1	C1	351	C	N3-C4-C5	-5.11	119.86	121.90
1	C1	1418	G	C6-C5-N7	-5.11	127.33	130.40
1	C1	1420	C	C6-N1-C2	-5.11	118.25	120.30
29	D1	947	G	C5-C6-N1	5.11	114.06	111.50
29	D1	3207	U	C5-C4-O4	5.11	128.97	125.90
1	A1	314	C	C6-N1-C2	5.11	122.34	120.30
1	A1	1613	U	N1-C2-O2	5.11	126.38	122.80
29	B1	402	A	C4-N9-C1'	5.11	135.50	126.30
29	B1	2968	G	C5-C6-N1	5.11	114.06	111.50
29	B1	3059	G	C4-C5-N7	5.11	112.84	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	1486	G	N1-C6-O6	5.11	122.97	119.90
29	D1	68	C	C6-N1-C2	-5.11	118.26	120.30
29	D1	431	U	C2-N1-C1'	-5.11	111.57	117.70
29	D1	1133	A	C5-C6-N1	-5.11	115.15	117.70
29	D1	2660	G	C4-C5-N7	5.11	112.84	110.80
29	B1	214	G	C8-N9-C4	5.11	108.44	106.40
29	B1	227	G	N7-C8-N9	-5.11	110.55	113.10
29	B1	614	C	C2-N3-C4	-5.11	117.35	119.90
29	B1	624	G	C4-N9-C1'	5.11	133.14	126.50
29	B1	857	G	N1-C2-N3	5.11	126.96	123.90
29	B1	2737	C	C6-N1-C2	5.11	122.34	120.30
29	B1	2973	G	N7-C8-N9	-5.11	110.55	113.10
29	B1	3133	C	C5-C4-N4	-5.11	116.62	120.20
1	C1	1455	G	C4-C5-N7	-5.11	108.76	110.80
1	A1	439	U	C6-N1-C1'	-5.11	114.05	121.20
1	A1	479	C	C6-N1-C1'	5.11	126.93	120.80
29	B1	111	C	C5-C6-N1	-5.11	118.45	121.00
29	B1	506	U	C5-C6-N1	5.11	125.25	122.70
29	B1	556	U	C2-N3-C4	5.11	130.06	127.00
29	B1	2646	C	N1-C2-O2	-5.11	115.84	118.90
29	D1	1294	A	N3-C4-C5	-5.11	123.23	126.80
29	D1	1786	G	N9-C4-C5	5.11	107.44	105.40
29	D1	3066	U	N3-C4-C5	-5.11	111.54	114.60
29	B1	2719	U	C5-C4-O4	5.10	128.96	125.90
29	B1	2804	A	C3'-C2'-C1'	5.10	105.58	101.50
31	B3	67	U	C5-C4-O4	5.10	128.96	125.90
29	D1	715	A	C3'-C2'-C1'	5.10	105.58	101.50
1	A1	447	U	C3'-C2'-C1'	5.10	105.58	101.50
29	B1	94	G	C8-N9-C1'	5.10	133.63	127.00
29	B1	1097	G	N3-C4-C5	-5.10	126.05	128.60
29	B1	1899	G	N7-C8-N9	-5.10	110.55	113.10
29	B1	2939	G	C5-N7-C8	5.10	106.85	104.30
29	B1	3199	G	C8-N9-C1'	5.10	133.63	127.00
1	C1	594	A	C2-N3-C4	-5.10	108.05	110.60
29	D1	406	G	N9-C4-C5	-5.10	103.36	105.40
29	D1	431	U	C5-C6-N1	-5.10	120.15	122.70
29	D1	1062	A	N1-C6-N6	5.10	121.66	118.60
29	D1	1849	C	C6-N1-C2	5.10	122.34	120.30
29	D1	2679	A	N1-C6-N6	5.10	121.66	118.60
29	D1	3101	G	N1-C6-O6	5.10	122.96	119.90
29	D1	3366	G	N3-C4-C5	5.10	131.15	128.60
34	DC	239	PRO	N-CA-CB	5.10	109.42	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	437	A	N3-C4-C5	-5.10	123.23	126.80
29	B1	125	C	N1-C2-O2	5.10	121.96	118.90
29	B1	1188	U	C2-N1-C1'	-5.10	111.58	117.70
29	B1	2893	C	C6-N1-C2	5.10	122.34	120.30
29	D1	3381	U	N3-C2-O2	-5.10	118.63	122.20
1	A1	54	C	C2-N3-C4	-5.10	117.35	119.90
1	A1	1786	G	N1-C6-O6	-5.10	116.84	119.90
29	B1	1133	A	N3-C4-N9	-5.10	123.32	127.40
29	B1	1450	G	C8-N9-C1'	-5.10	120.37	127.00
29	B1	3173	G	N1-C6-O6	5.10	122.96	119.90
1	C1	627	C	C2-N1-C1'	-5.10	113.19	118.80
1	C1	1067	C	N1-C2-O2	5.10	121.96	118.90
29	D1	358	G	C5-C6-O6	-5.10	125.54	128.60
29	D1	1432	C	C5-C6-N1	5.10	123.55	121.00
29	D1	1829	G	C4-N9-C1'	5.10	133.13	126.50
29	D1	2352	A	C4-C5-N7	5.10	113.25	110.70
1	A1	1636	C	C5-C6-N1	-5.10	118.45	121.00
6	AE	144	PRO	N-CA-CB	5.10	109.42	103.30
29	B1	143	G	C5-C6-O6	-5.10	125.54	128.60
29	B1	746	A	N3-C4-C5	-5.10	123.23	126.80
29	B1	1000	C	C6-N1-C2	5.10	122.34	120.30
1	C1	798	C	C2-N1-C1'	5.10	124.41	118.80
1	C1	1220	C	N1-C2-O2	5.10	121.96	118.90
1	C1	1408	G	C8-N9-C1'	-5.10	120.37	127.00
1	C1	1620	C	C6-N1-C1'	-5.10	114.68	120.80
1	C1	1789	G	C2-N3-C4	-5.10	109.35	111.90
29	D1	552	G	N9-C4-C5	5.10	107.44	105.40
29	D1	1793	C	C6-N1-C1'	-5.10	114.68	120.80
29	D1	1900	A	C8-N9-C4	-5.10	103.76	105.80
29	D1	1912	U	C5-C6-N1	5.10	125.25	122.70
29	B1	86	G	C6-C5-N7	5.10	133.46	130.40
29	B1	1371	G	N3-C4-N9	5.10	129.06	126.00
29	B1	1477	A	C5-C6-N1	-5.10	115.15	117.70
29	D1	524	U	C3'-C2'-C1'	5.10	105.58	101.50
29	D1	3198	U	C5-C4-O4	-5.10	122.84	125.90
1	A1	88	U	C5-C4-O4	5.09	128.96	125.90
29	B1	1209	G	N1-C2-N3	5.09	126.96	123.90
29	B1	1481	A	C8-N9-C4	5.09	107.84	105.80
29	B1	2215	A	C2-N3-C4	-5.09	108.05	110.60
31	B3	97	A	C8-N9-C4	5.09	107.84	105.80
1	C1	1579	U	C2-N1-C1'	5.09	123.81	117.70
29	D1	625	G	C6-N1-C2	5.09	128.16	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	DN	67	PRO	N-CA-CB	5.09	109.41	103.30
1	A1	1468	U	C5-C4-O4	-5.09	122.84	125.90
1	A1	1777	G	C4-N9-C1'	5.09	133.12	126.50
29	B1	2912	G	N7-C8-N9	5.09	115.65	113.10
1	A1	1591	C	N3-C4-N4	-5.09	114.44	118.00
29	B1	152	U	C3'-C2'-C1'	5.09	105.57	101.50
29	B1	394	G	N9-C4-C5	5.09	107.44	105.40
29	B1	531	G	N3-C4-N9	-5.09	122.94	126.00
29	B1	1508	C	N3-C4-C5	-5.09	119.86	121.90
29	B1	3220	G	C5-C6-O6	-5.09	125.55	128.60
1	C1	792	U	C2-N1-C1'	5.09	123.81	117.70
29	D1	698	U	C2-N1-C1'	5.09	123.81	117.70
35	DD	249	ILE	N-CA-C	-5.09	97.25	111.00
29	B1	754	G	C8-N9-C4	5.09	108.44	106.40
29	B1	999	G	C6-N1-C2	-5.09	122.05	125.10
29	B1	1178	G	C5-C6-N1	5.09	114.05	111.50
29	B1	1387	G	C2-N3-C4	-5.09	109.36	111.90
30	D2	65	G	C6-C5-N7	-5.09	127.35	130.40
30	B2	15	C	C6-N1-C2	5.09	122.33	120.30
1	C1	784	C	N1-C2-O2	5.09	121.95	118.90
29	D1	985	U	C5-C6-N1	-5.09	120.16	122.70
29	D1	1899	G	C5-C6-N1	-5.09	108.96	111.50
29	D1	2400	G	N1-C6-O6	5.09	122.95	119.90
1	A1	389	G	C5-C6-O6	-5.09	125.55	128.60
29	B1	2597	U	N1-C2-N3	5.09	117.95	114.90
29	B1	2780	A	N3-C4-N9	5.09	131.47	127.40
29	B1	2907	G	C8-N9-C4	-5.09	104.37	106.40
29	B1	3148	U	C5-C6-N1	-5.09	120.16	122.70
29	B1	3231	U	C2-N3-C4	-5.09	123.95	127.00
1	C1	426	G	C8-N9-C4	5.09	108.43	106.40
29	D1	278	U	N3-C2-O2	5.09	125.76	122.20
1	C1	1045	C	N3-C4-N4	-5.08	114.44	118.00
29	B1	1155	C	N1-C2-O2	-5.08	115.85	118.90
29	B1	2691	A	C2-N3-C4	5.08	113.14	110.60
29	B1	1054	A	N7-C8-N9	-5.08	111.26	113.80
29	B1	2147	A	C4-C5-N7	5.08	113.24	110.70
29	B1	3271	G	N1-C2-N3	-5.08	120.85	123.90
29	D1	834	U	N1-C2-O2	5.08	126.36	122.80
29	D1	1207	G	C6-C5-N7	-5.08	127.35	130.40
29	D1	1397	C	N1-C2-O2	-5.08	115.85	118.90
29	D1	2201	G	N1-C6-O6	5.08	122.95	119.90
29	D1	3296	A	C8-N9-C4	5.08	107.83	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	625	G	N7-C8-N9	-5.08	110.56	113.10
29	B1	651	G	C2-N3-C4	-5.08	109.36	111.90
1	C1	960	U	N3-C2-O2	-5.08	118.64	122.20
29	D1	362	U	N3-C4-O4	5.08	122.96	119.40
29	D1	1365	G	N1-C2-N3	5.08	126.95	123.90
29	D1	2364	G	N9-C4-C5	-5.08	103.37	105.40
29	D1	3134	A	C5-C6-N6	-5.08	119.64	123.70
1	A1	149	C	C2-N1-C1'	5.08	124.39	118.80
1	A1	420	A	C2-N3-C4	-5.08	108.06	110.60
1	A1	1604	U	C2-N1-C1'	5.08	123.79	117.70
29	B1	1095	U	C2-N1-C1'	5.08	123.80	117.70
29	B1	2525	G	C4-N9-C1'	-5.08	119.90	126.50
29	B1	2806	U	N1-C2-N3	5.08	117.95	114.90
29	D1	513	G	N1-C2-N3	5.08	126.95	123.90
29	D1	805	G	C8-N9-C4	-5.08	104.37	106.40
29	D1	2368	A	C6-C5-N7	-5.08	128.75	132.30
29	D1	2982	A	N9-C4-C5	5.08	107.83	105.80
31	D3	100	U	C5-C4-O4	-5.08	122.85	125.90
29	B1	2618	G	N3-C4-N9	-5.08	122.95	126.00
29	D1	574	U	C5-C4-O4	-5.08	122.85	125.90
29	D1	2395	G	N1-C2-N3	5.08	126.95	123.90
1	A1	986	G	C5-C6-N1	-5.08	108.96	111.50
29	B1	501	A	N9-C4-C5	-5.08	103.77	105.80
29	B1	1124	U	N3-C4-C5	5.08	117.65	114.60
29	B1	3329	U	N3-C4-O4	-5.08	115.85	119.40
29	D1	429	U	N3-C4-C5	-5.08	111.56	114.60
29	D1	1158	A	N1-C6-N6	-5.08	115.56	118.60
29	D1	1525	G	N9-C4-C5	-5.08	103.37	105.40
29	D1	2740	A	C5-N7-C8	-5.08	101.36	103.90
29	D1	2904	U	N3-C4-O4	-5.08	115.85	119.40
1	A1	1438	G	C4-N9-C1'	5.07	133.09	126.50
29	B1	45	A	C4-C5-C6	-5.07	114.46	117.00
29	B1	1898	G	C4-C5-N7	-5.07	108.77	110.80
29	B1	3320	A	C5-C6-N1	-5.07	115.16	117.70
1	C1	354	C	N1-C2-O2	-5.07	115.86	118.90
11	CJ	35	PRO	N-CA-CB	5.07	109.39	103.30
29	D1	726	G	C4-C5-C6	5.07	121.84	118.80
29	D1	1894	U	C5-C6-N1	-5.07	120.16	122.70
29	D1	3236	U	N3-C2-O2	-5.07	118.65	122.20
31	D3	136	G	N3-C4-N9	-5.07	122.95	126.00
29	B1	2372	A	C8-N9-C1'	-5.07	118.57	127.70
29	B1	2652	U	C3'-C2'-C1'	5.07	105.56	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	666	A	N3-C4-C5	5.07	130.35	126.80
29	D1	746	A	C6-N1-C2	-5.07	115.56	118.60
29	D1	2840	C	N3-C4-N4	5.07	121.55	118.00
29	D1	2948	C	C3'-C2'-C1'	5.07	105.56	101.50
1	A1	551	G	C4-C5-N7	5.07	112.83	110.80
29	B1	656	A	C8-N9-C4	-5.07	103.77	105.80
29	B1	857	G	N3-C2-N2	-5.07	116.35	119.90
29	B1	1880	U	C2-N3-C4	-5.07	123.96	127.00
29	B1	2719	U	N1-C2-N3	5.07	117.94	114.90
1	C1	1651	A	N9-C4-C5	-5.07	103.77	105.80
29	D1	659	G	N3-C4-C5	-5.07	126.06	128.60
29	D1	1307	G	C6-C5-N7	-5.07	127.36	130.40
30	D2	46	A	N1-C6-N6	-5.07	115.56	118.60
1	A1	45	U	C3'-C2'-C1'	5.07	105.56	101.50
29	B1	2174	G	C4-N9-C1'	-5.07	119.91	126.50
29	D1	2856	G	C4-C5-N7	5.07	112.83	110.80
29	D1	3200	G	C4-N9-C1'	-5.07	119.91	126.50
29	B1	1066	G	C8-N9-C4	-5.07	104.37	106.40
29	B1	1125	U	N1-C2-O2	-5.07	119.25	122.80
29	B1	2122	G	N3-C4-C5	5.07	131.13	128.60
1	C1	1634	C	O4'-C1'-N1	-5.07	104.15	108.20
29	D1	1098	A	C2-N3-C4	-5.07	108.07	110.60
29	D1	1899	G	C4-C5-N7	-5.07	108.77	110.80
29	D1	2639	G	N1-C6-O6	5.07	122.94	119.90
29	D1	2652	U	C3'-C2'-C1'	5.07	105.55	101.50
29	D1	2752	U	C6-N1-C2	-5.07	117.96	121.00
29	B1	575	G	N3-C4-N9	-5.07	122.96	126.00
29	B1	719	U	N3-C4-C5	5.07	117.64	114.60
29	B1	1850	A	C2-N3-C4	-5.07	108.07	110.60
29	B1	2889	C	C2-N3-C4	-5.07	117.37	119.90
29	D1	661	G	C6-C5-N7	-5.07	127.36	130.40
29	D1	3104	U	C5-C4-O4	-5.07	122.86	125.90
1	A1	1753	A	C8-N9-C4	5.06	107.83	105.80
1	C1	1512	G	C6-C5-N7	-5.06	127.36	130.40
29	D1	1147	G	C8-N9-C4	5.06	108.43	106.40
29	B1	196	G	C2-N3-C4	5.06	114.43	111.90
29	B1	1401	A	N1-C2-N3	-5.06	126.77	129.30
29	B1	2961	G	C4-N9-C1'	5.06	133.08	126.50
31	B3	129	C	C5-C4-N4	-5.06	116.66	120.20
1	C1	338	C	N1-C2-O2	5.06	121.94	118.90
1	C1	592	A	C6-N1-C2	5.06	121.64	118.60
1	C1	1046	G	C4-N9-C1'	5.06	133.08	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	674	G	N3-C4-C5	5.06	131.13	128.60
29	D1	2699	G	C5-C6-O6	-5.06	125.56	128.60
29	D1	2853	A	C4-C5-C6	-5.06	114.47	117.00
29	D1	2999	U	C6-N1-C2	-5.06	117.96	121.00
1	A1	1025	A	N9-C4-C5	5.06	107.83	105.80
29	B1	713	U	C5-C6-N1	-5.06	120.17	122.70
29	D1	676	G	C8-N9-C4	-5.06	104.38	106.40
29	D1	1440	G	C6-C5-N7	5.06	133.44	130.40
29	D1	1589	A	C4-C5-N7	5.06	113.23	110.70
1	A1	686	C	C5-C4-N4	-5.06	116.66	120.20
29	B1	407	A	N1-C6-N6	-5.06	115.56	118.60
29	B1	958	C	C6-N1-C1'	-5.06	114.73	120.80
29	B1	1398	U	C3'-C2'-C1'	5.06	105.55	101.50
29	B1	2362	C	C2-N3-C4	5.06	122.43	119.90
29	B1	3367	C	N3-C4-C5	5.06	123.92	121.90
35	BD	75	PRO	N-CA-CB	5.06	109.37	103.30
1	C1	865	A	N7-C8-N9	-5.06	111.27	113.80
1	C1	1567	U	C5-C4-O4	-5.06	122.86	125.90
29	D1	1301	A	C2-N3-C4	-5.06	108.07	110.60
29	D1	2863	G	C4-C5-N7	-5.06	108.78	110.80
29	D1	2896	A	C4-C5-N7	-5.06	108.17	110.70
1	A1	62	A	C4-C5-N7	-5.06	108.17	110.70
1	A1	389	G	C5-C6-N1	5.06	114.03	111.50
1	A1	1033	C	C5-C6-N1	-5.06	118.47	121.00
1	A1	1647	U	C2-N3-C4	5.06	130.03	127.00
29	B1	814	U	C6-N1-C2	5.06	124.03	121.00
29	B1	918	C	C6-N1-C2	5.06	122.32	120.30
29	B1	1056	U	N3-C2-O2	-5.06	118.66	122.20
31	B3	131	A	C6-N1-C2	5.06	121.63	118.60
29	D1	220	G	N9-C4-C5	-5.06	103.38	105.40
29	D1	2641	U	N3-C2-O2	-5.06	118.66	122.20
29	D1	2957	G	C5-C6-N1	-5.06	108.97	111.50
29	B1	3177	G	C4-C5-N7	-5.06	108.78	110.80
29	B1	406	G	N9-C4-C5	-5.05	103.38	105.40
29	B1	953	G	C4-C5-N7	5.05	112.82	110.80
29	B1	1833	G	C8-N9-C4	5.05	108.42	106.40
29	B1	3111	U	N3-C2-O2	-5.05	118.66	122.20
1	C1	650	U	C2-N1-C1'	5.05	123.76	117.70
1	C1	1159	C	C5-C6-N1	5.05	123.53	121.00
1	C1	1595	U	C2-N3-C4	5.05	130.03	127.00
29	D1	2291	A	C4-C5-N7	5.05	113.23	110.70
29	D1	2667	A	N3-C4-C5	-5.05	123.26	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	DY	71	PRO	N-CA-CB	5.05	109.36	103.30
1	A1	1757	G	C4-C5-N7	5.05	112.82	110.80
29	B1	1381	A	N3-C4-C5	5.05	130.34	126.80
29	D1	2353	G	C8-N9-C1'	-5.05	120.43	127.00
1	A1	1139	A	N9-C4-C5	-5.05	103.78	105.80
1	A1	1428	G	C4-C5-N7	5.05	112.82	110.80
29	B1	504	A	C4-N9-C1'	5.05	135.39	126.30
29	B1	2281	A	C4-C5-C6	5.05	119.53	117.00
29	B1	2989	U	N1-C2-O2	-5.05	119.26	122.80
29	D1	968	G	C2-N3-C4	-5.05	109.37	111.90
29	D1	1710	C	C5-C4-N4	-5.05	116.66	120.20
29	D1	2875	U	C2-N1-C1'	5.05	123.76	117.70
53	DX	23	PRO	N-CA-CB	5.05	109.36	103.30
29	B1	429	U	N1-C2-O2	-5.05	119.27	122.80
29	B1	3230	G	C5-C6-O6	5.05	131.63	128.60
1	C1	374	U	N3-C4-C5	5.05	117.63	114.60
29	D1	233	C	C6-N1-C2	5.05	122.32	120.30
29	D1	1507	G	C5-N7-C8	-5.05	101.78	104.30
29	B1	7	C	N1-C2-O2	5.05	121.93	118.90
29	B1	1658	G	C2-N3-C4	-5.05	109.38	111.90
29	D1	2719	U	C5-C6-N1	-5.05	120.18	122.70
1	A1	1006	C	N1-C2-O2	-5.05	115.87	118.90
1	A1	1136	U	N1-C2-O2	5.05	126.33	122.80
29	B1	677	A	C4-C5-N7	5.05	113.22	110.70
29	B1	1002	A	N1-C6-N6	-5.05	115.57	118.60
29	B1	1618	G	C2-N3-C4	5.05	114.42	111.90
29	B1	1902	G	C6-C5-N7	-5.05	127.37	130.40
1	C1	1028	C	N3-C4-C5	5.05	123.92	121.90
29	D1	675	C	N3-C4-C5	5.05	123.92	121.90
29	D1	790	U	N1-C2-O2	-5.05	119.27	122.80
29	D1	1303	A	N3-C4-C5	5.05	130.33	126.80
29	B1	1550	C	N3-C2-O2	5.04	125.43	121.90
29	B1	2275	A	C2-N3-C4	-5.04	108.08	110.60
29	D1	2681	U	C5-C6-N1	5.04	125.22	122.70
29	D1	3244	A	N1-C2-N3	-5.04	126.78	129.30
38	DG	193	PRO	N-CA-CB	5.04	109.35	103.30
29	B1	644	G	N1-C6-O6	5.04	122.93	119.90
29	B1	729	C	N3-C2-O2	-5.04	118.37	121.90
29	B1	831	G	C8-N9-C4	5.04	108.42	106.40
29	B1	984	G	C4-N9-C1'	-5.04	119.94	126.50
29	B1	1152	G	N3-C4-N9	-5.04	122.97	126.00
29	B1	2525	G	N3-C4-C5	5.04	131.12	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B1	2685	C	C2-N1-C1'	5.04	124.35	118.80
29	B1	2917	G	C4-N9-C1'	-5.04	119.94	126.50
29	B1	2973	G	C8-N9-C4	5.04	108.42	106.40
29	B1	3312	U	N1-C2-O2	5.04	126.33	122.80
30	B2	10	C	C5-C6-N1	5.04	123.52	121.00
30	B2	96	U	N1-C2-O2	-5.04	119.27	122.80
31	B3	10	A	C8-N9-C4	-5.04	103.78	105.80
1	C1	318	U	C5-C6-N1	-5.04	120.18	122.70
1	C1	1754	A	C6-N1-C2	-5.04	115.57	118.60
11	CJ	124	PRO	N-CA-CB	5.04	109.35	103.30
29	D1	566	G	N1-C6-O6	-5.04	116.87	119.90
29	D1	944	C	C2-N1-C1'	-5.04	113.25	118.80
29	D1	1063	G	C2-N3-C4	-5.04	109.38	111.90
1	A1	1669	U	N1-C2-O2	-5.04	119.27	122.80
29	B1	790	U	N3-C4-C5	5.04	117.62	114.60
29	B1	2755	C	C6-N1-C2	5.04	122.32	120.30
1	C1	59	C	N3-C2-O2	-5.04	118.37	121.90
1	C1	425	A	C5-C6-N1	5.04	120.22	117.70
29	D1	910	G	C4-C5-N7	5.04	112.82	110.80
29	D1	1786	G	C4-C5-N7	-5.04	108.78	110.80
29	B1	822	G	C4-N9-C1'	-5.04	119.95	126.50
29	B1	1868	G	N3-C4-C5	5.04	131.12	128.60
29	B1	3200	G	N3-C4-N9	-5.04	122.98	126.00
1	C1	384	G	C8-N9-C4	5.04	108.42	106.40
29	D1	744	A	N3-C4-C5	-5.04	123.27	126.80
29	D1	1899	G	C5-N7-C8	5.04	106.82	104.30
29	D1	2607	G	C4-C5-C6	5.04	121.82	118.80
29	D1	2909	U	C5-C6-N1	-5.04	120.18	122.70
1	A1	1124	A	C8-N9-C4	5.04	107.81	105.80
29	B1	630	A	C5-N7-C8	-5.04	101.38	103.90
29	B1	3114	A	N7-C8-N9	-5.04	111.28	113.80
30	B2	47	C	C4-C5-C6	-5.04	114.88	117.40
41	BJ	178	ARG	N-CA-C	5.04	124.61	111.00
1	C1	1377	U	C6-N1-C1'	-5.04	114.15	121.20
29	D1	343	U	N1-C2-O2	5.04	126.33	122.80
29	D1	563	U	C5-C6-N1	5.04	125.22	122.70
29	D1	2149	A	C8-N9-C4	5.04	107.81	105.80
29	D1	2982	A	C4-C5-C6	-5.04	114.48	117.00
29	D1	3332	U	C2-N1-C1'	-5.04	111.66	117.70
1	C1	1634	C	N1-C2-O2	5.04	121.92	118.90
29	D1	281	G	C5-C6-O6	-5.04	125.58	128.60
29	D1	3038	U	C3'-C2'-C1'	5.04	105.53	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A1	1365	C	N1-C2-O2	-5.04	115.88	118.90
1	A1	1418	G	N7-C8-N9	5.04	115.62	113.10
1	A1	1428	G	C6-C5-N7	-5.04	127.38	130.40
1	A1	1547	A	N3-C4-C5	5.04	130.32	126.80
29	B1	304	G	N9-C4-C5	-5.04	103.39	105.40
29	B1	882	A	C5-N7-C8	5.04	106.42	103.90
29	B1	909	G	C2-N3-C4	-5.04	109.38	111.90
29	B1	2610	G	C5-C6-N1	5.04	114.02	111.50
29	B1	2653	C	C5-C4-N4	-5.04	116.67	120.20
29	B1	3130	A	C5-C6-N6	-5.04	119.67	123.70
29	B1	3328	G	C8-N9-C4	5.04	108.42	106.40
1	C1	364	G	C4-C5-N7	-5.04	108.79	110.80
29	D1	724	U	C2-N3-C4	-5.04	123.98	127.00
29	D1	2883	U	C4-C5-C6	5.04	122.72	119.70
29	D1	3200	G	N1-C6-O6	-5.04	116.88	119.90
30	D2	49	G	N3-C4-N9	5.04	129.02	126.00
45	DP	109	PRO	N-CA-CB	5.04	109.34	103.30
29	B1	669	U	N3-C4-O4	5.03	122.92	119.40
29	B1	719	U	C4-C5-C6	-5.03	116.68	119.70
29	B1	1404	G	C2-N3-C4	-5.03	109.38	111.90
29	B1	2668	U	N3-C2-O2	-5.03	118.68	122.20
29	B1	2828	G	C8-N9-C1'	-5.03	120.46	127.00
29	B1	3069	G	C4-C5-N7	5.03	112.81	110.80
1	C1	797	G	C8-N9-C4	5.03	108.41	106.40
29	D1	327	A	C4-C5-C6	5.03	119.52	117.00
29	D1	529	A	N3-C4-C5	5.03	130.32	126.80
29	D1	1170	A	N1-C6-N6	5.03	121.62	118.60
29	D1	1877	U	N3-C2-O2	-5.03	118.68	122.20
29	B1	362	U	C5-C4-O4	-5.03	122.88	125.90
29	B1	857	G	C5-C6-N1	-5.03	108.98	111.50
29	D1	352	A	C6-C5-N7	5.03	135.82	132.30
1	A1	306	U	C2-N3-C4	-5.03	123.98	127.00
1	A1	1008	G	C8-N9-C1'	-5.03	120.46	127.00
29	B1	98	G	C5-C6-N1	-5.03	108.98	111.50
29	B1	834	U	C2-N3-C4	5.03	130.02	127.00
29	B1	1190	A	C8-N9-C4	-5.03	103.79	105.80
29	B1	2935	U	N1-C2-O2	-5.03	119.28	122.80
29	B1	3210	A	N3-C4-C5	5.03	130.32	126.80
1	C1	563	U	N1-C2-O2	5.03	126.32	122.80
1	C1	1144	U	N3-C4-O4	-5.03	115.88	119.40
1	C1	1417	A	N9-C4-C5	-5.03	103.79	105.80
29	B1	215	G	N7-C8-N9	5.03	115.61	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	556	U	C2-N3-C4	5.03	130.02	127.00
29	B1	103	G	C4-C5-N7	5.03	112.81	110.80
29	B1	364	G	C4-N9-C1'	5.03	133.04	126.50
29	B1	536	U	N3-C4-O4	5.03	122.92	119.40
1	C1	246	G	C8-N9-C1'	5.03	133.54	127.00
1	C1	784	C	N3-C4-C5	5.03	123.91	121.90
1	C1	1756	A	N7-C8-N9	5.03	116.31	113.80
29	D1	2144	A	C8-N9-C4	5.03	107.81	105.80
29	B1	916	G	C4-N9-C1'	5.03	133.03	126.50
29	B1	1305	U	C2-N1-C1'	-5.03	111.67	117.70
29	B1	3269	U	C6-N1-C1'	-5.03	114.17	121.20
31	B3	129	C	C6-N1-C2	5.03	122.31	120.30
29	D1	1097	G	N3-C4-N9	-5.03	122.98	126.00
29	D1	1314	C	N3-C2-O2	-5.03	118.38	121.90
29	D1	3024	A	C2-N3-C4	-5.03	108.09	110.60
1	A1	1429	G	N9-C4-C5	5.02	107.41	105.40
29	B1	693	A	C4-C5-C6	5.02	119.51	117.00
29	B1	1405	U	C5-C6-N1	-5.02	120.19	122.70
29	B1	3096	C	N1-C2-O2	-5.02	115.89	118.90
1	C1	1004	U	N3-C2-O2	-5.02	118.68	122.20
29	D1	304	G	N3-C4-N9	5.02	129.01	126.00
29	D1	1703	U	C5-C4-O4	5.02	128.91	125.90
29	D1	3100	U	N3-C2-O2	-5.02	118.68	122.20
29	B1	727	G	C6-C5-N7	-5.02	127.39	130.40
29	B1	815	G	N1-C6-O6	5.02	122.91	119.90
29	B1	1586	G	C5-C6-O6	5.02	131.61	128.60
29	B1	1793	C	C6-N1-C1'	-5.02	114.77	120.80
29	B1	2183	A	N7-C8-N9	5.02	116.31	113.80
29	B1	2315	G	C5-C6-O6	-5.02	125.59	128.60
29	D1	3038	U	C5-C4-O4	-5.02	122.89	125.90
30	D2	120	C	N1-C2-N3	5.02	122.72	119.20
29	B1	674	G	C4-C5-N7	5.02	112.81	110.80
1	C1	757	A	C4-C5-C6	5.02	119.51	117.00
1	C1	1073	G	C2-N3-C4	5.02	114.41	111.90
29	B1	518	G	N1-C2-N2	5.02	120.72	116.20
29	B1	651	G	N1-C2-N3	5.02	126.91	123.90
29	B1	859	G	C6-N1-C2	-5.02	122.09	125.10
29	B1	1494	U	C5-C6-N1	-5.02	120.19	122.70
29	B1	3208	G	C5-C6-N1	5.02	114.01	111.50
1	C1	1486	G	C6-N1-C2	5.02	128.11	125.10
29	D1	380	U	C2-N3-C4	5.02	130.01	127.00
29	D1	1518	U	C2-N3-C4	-5.02	123.99	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	D1	2768	U	C6-N1-C2	5.02	124.01	121.00
29	D1	3130	A	C4-N9-C1'	5.02	135.34	126.30
1	A1	1579	U	C6-N1-C1'	-5.02	114.18	121.20
29	B1	529	A	N3-C4-N9	-5.02	123.39	127.40
29	B1	744	A	C6-C5-N7	5.02	135.81	132.30
29	B1	2146	C	N3-C2-O2	-5.02	118.39	121.90
29	B1	2267	C	N3-C2-O2	5.02	125.41	121.90
29	B1	3243	A	C5-C6-N1	5.02	120.21	117.70
30	B2	26	C	N3-C4-C5	5.02	123.91	121.90
1	C1	1472	C	N3-C2-O2	-5.02	118.39	121.90
29	D1	1120	A	N3-C4-C5	-5.02	123.29	126.80
29	D1	2935	U	C2-N3-C4	-5.02	123.99	127.00
29	D1	3258	U	N3-C4-C5	-5.02	111.59	114.60
33	DB	188	LYS	N-CA-C	-5.02	97.45	111.00
29	B1	1840	U	C2-N1-C1'	-5.02	111.68	117.70
29	B1	2436	U	N3-C2-O2	5.02	125.71	122.20
29	B1	3124	G	N3-C2-N2	-5.02	116.39	119.90
30	B2	8	G	C5-C6-N1	5.02	114.01	111.50
29	D1	288	C	C4-C5-C6	5.02	119.91	117.40
29	D1	1134	G	N3-C4-N9	-5.02	122.99	126.00
29	D1	2366	C	N3-C4-C5	5.02	123.91	121.90
29	D1	2906	C	C2-N3-C4	-5.02	117.39	119.90
29	D1	3279	A	C5-C6-N1	-5.02	115.19	117.70
1	A1	1097	U	C2-N1-C1'	-5.01	111.68	117.70
1	A1	1422	A	C5-C6-N1	5.01	120.21	117.70
29	B1	790	U	C2-N1-C1'	-5.01	111.68	117.70
29	B1	934	G	C4-N9-C1'	5.01	133.02	126.50
29	B1	1874	A	N1-C2-N3	5.01	131.81	129.30
29	B1	2385	G	C8-N9-C1'	-5.01	120.48	127.00
43	BN	14	LEU	N-CA-C	5.01	124.54	111.00
1	C1	1541	G	N1-C2-N2	-5.01	111.69	116.20
29	D1	3030	G	N1-C6-O6	5.01	122.91	119.90
29	B1	2869	U	C6-N1-C2	-5.01	117.99	121.00
31	B3	92	A	N3-C4-N9	-5.01	123.39	127.40
29	D1	834	U	C5-C4-O4	5.01	128.91	125.90
29	D1	1169	A	C6-C5-N7	5.01	135.81	132.30
29	D1	2722	U	N3-C4-O4	5.01	122.91	119.40
43	DN	54	PRO	N-CA-CB	5.01	109.31	103.30
29	B1	608	A	C5-N7-C8	-5.01	101.39	103.90
29	B1	1389	G	C3'-C2'-C1'	5.01	105.51	101.50
29	B1	3060	C	N1-C2-O2	-5.01	115.89	118.90
57	Bb	31	ASN	N-CA-C	5.01	124.53	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C1	569	C	C5-C4-N4	-5.01	116.69	120.20
1	C1	587	C	N1-C2-O2	5.01	121.91	118.90
1	C1	1760	G	C2-N3-C4	5.01	114.41	111.90
29	D1	2342	U	C2-N3-C4	-5.01	123.99	127.00
29	D1	2896	A	N1-C2-N3	5.01	131.81	129.30
31	D3	102	U	N1-C2-O2	-5.01	119.29	122.80
29	B1	68	C	C6-N1-C2	-5.01	118.30	120.30
29	B1	2889	C	N3-C4-C5	5.01	123.90	121.90
29	D1	288	C	N1-C2-N3	5.01	122.71	119.20
29	D1	1141	C	N3-C4-C5	5.01	123.90	121.90
29	D1	3089	C	C2-N1-C1'	5.01	124.31	118.80
29	B1	2551	U	N3-C4-O4	5.01	122.91	119.40
1	C1	444	C	N1-C2-N3	-5.01	115.69	119.20
1	C1	1595	U	C6-N1-C2	-5.01	118.00	121.00
29	D1	597	G	C6-C5-N7	-5.01	127.39	130.40
29	D1	1420	C	C2-N1-C1'	-5.01	113.29	118.80
1	A1	125	U	C3'-C2'-C1'	5.01	105.50	101.50
1	A1	1653	C	N1-C2-O2	-5.01	115.90	118.90
30	B2	98	C	N3-C4-C5	5.01	123.90	121.90
29	D1	573	C	N1-C2-N3	5.01	122.70	119.20
29	D1	1928	G	N7-C8-N9	-5.01	110.60	113.10
29	D1	2988	C	N3-C4-C5	5.01	123.90	121.90
29	D1	3136	G	C8-N9-C4	-5.01	104.40	106.40
29	D1	3352	U	N1-C2-O2	5.01	126.30	122.80
29	B1	2201	G	C4-C5-N7	5.00	112.80	110.80
29	D1	614	C	C4-C5-C6	-5.00	114.90	117.40
1	A1	1458	G	C8-N9-C4	-5.00	104.40	106.40
29	B1	15	C	C6-N1-C2	-5.00	118.30	120.30
29	B1	1804	A	C5-N7-C8	-5.00	101.40	103.90
29	D1	1621	A	N1-C6-N6	-5.00	115.60	118.60
29	D1	2368	A	C4-C5-C6	5.00	119.50	117.00
29	B1	2193	U	C3'-C2'-C1'	5.00	105.50	101.50
29	B1	3095	U	N3-C4-O4	5.00	122.90	119.40
1	C1	63	G	C4-C5-N7	-5.00	108.80	110.80
29	D1	2176	U	N3-C2-O2	-5.00	118.70	122.20
29	D1	2329	C	N3-C2-O2	5.00	125.40	121.90
29	D1	2661	G	N1-C6-O6	-5.00	116.90	119.90
29	D1	3207	U	C5-C6-N1	-5.00	120.20	122.70
29	D1	3332	U	C2-N3-C4	5.00	130.00	127.00
30	D2	117	A	C5-C6-N1	-5.00	115.20	117.70

There are no chirality outliers.

All (68) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	AB	224	PHE	Peptide
3	AB	225	LEU	Peptide
17	AP	28	ASN	Peptide
18	AQ	41	ILE	Peptide
23	Ab	14	UNK	Peptide
24	Ac	63	UNK	Peptide
29	B1	1884	A	Sidechain
29	B1	308	A	Sidechain
29	B1	3184	A	Sidechain
34	BC	239	PRO	Peptide
34	BC	313	HIS	Peptide
34	BC	4	ARG	Peptide
34	BC	95	THR	Peptide
34	BC	98	GLY	Peptide
35	BD	143	GLU	Peptide
36	BE	23	ARG	Peptide
37	BF	38	THR	Peptide
37	BF	60	ASP	Peptide
37	BF	69	PHE	Peptide
37	BF	91	VAL	Peptide
38	BG	165	ASP	Peptide
42	BK	51	ARG	Peptide
45	BP	121	PRO	Peptide
45	BP	130	LYS	Peptide
45	BP	56	ASP	Peptide
45	BP	58	LEU	Peptide
49	BT	49	GLN	Peptide
51	BV	54	LEU	Peptide
54	BY	1	MET	Peptide
54	BY	61	PHE	Peptide
56	Ba	24	SER	Peptide
57	Bb	122	PRO	Peptide
22	Bo	20	UNK	Peptide
3	CB	224	PHE	Peptide
3	CB	225	LEU	Peptide
17	CP	28	ASN	Peptide
18	CQ	41	ILE	Peptide
23	Cb	83	UNK	Peptide
29	D1	1884	A	Sidechain
29	D1	308	A	Sidechain
29	D1	3184	A	Sidechain
34	DC	239	PRO	Peptide

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Mol	Chain	Res	Type	Group
34	DC	281	LYS	Peptide
34	DC	313	HIS	Peptide
34	DC	4	ARG	Peptide
34	DC	95	THR	Peptide
34	DC	98	GLY	Peptide
35	DD	125	ALA	Peptide
35	DD	143	GLU	Peptide
36	DE	23	ARG	Peptide
37	DF	38	THR	Peptide
37	DF	60	ASP	Peptide
37	DF	69	PHE	Peptide
37	DF	91	VAL	Peptide
38	DG	165	ASP	Peptide
42	DK	51	ARG	Peptide
44	DO	187	ARG	Peptide
45	DP	121	PRO	Peptide
45	DP	130	LYS	Peptide
45	DP	57	PHE	Peptide
45	DP	58	LEU	Peptide
45	DP	75	ALA	Peptide
49	DT	49	GLN	Peptide
51	DV	54	LEU	Peptide
54	DY	1	MET	Peptide
54	DY	61	PHE	Peptide
56	Da	24	SER	Peptide
57	Db	122	PRO	Peptide

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

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	
2	AA	218/252 (86%)	75 (34%)	68 (31%)	75 (34%)	0	0
2	CA	218/252 (86%)	78 (36%)	63 (29%)	77 (35%)	0	0
3	AB	217/254 (85%)	85 (39%)	54 (25%)	78 (36%)	0	0
3	CB	217/254 (85%)	81 (37%)	62 (29%)	74 (34%)	0	0
4	AC	187/240 (78%)	72 (38%)	56 (30%)	59 (32%)	0	0
4	CC	187/240 (78%)	69 (37%)	55 (29%)	63 (34%)	0	0
5	AD	165/225 (73%)	55 (33%)	46 (28%)	64 (39%)	0	0
5	CD	165/225 (73%)	58 (35%)	44 (27%)	63 (38%)	0	0
6	AE	153/197 (78%)	48 (31%)	54 (35%)	51 (33%)	0	0
6	CE	153/197 (78%)	48 (31%)	49 (32%)	56 (37%)	0	0
7	AF	75/156 (48%)	32 (43%)	18 (24%)	25 (33%)	0	0
7	CF	75/156 (48%)	31 (41%)	20 (27%)	24 (32%)	0	0
8	AG	115/151 (76%)	46 (40%)	38 (33%)	31 (27%)	0	0
8	CG	115/151 (76%)	49 (43%)	33 (29%)	33 (29%)	0	0
9	AH	126/137 (92%)	52 (41%)	38 (30%)	36 (29%)	0	0
9	CH	126/137 (92%)	51 (40%)	39 (31%)	36 (29%)	0	0
10	AI	119/142 (84%)	38 (32%)	40 (34%)	41 (34%)	0	0
10	CI	119/142 (84%)	43 (36%)	35 (29%)	41 (34%)	0	0
11	AJ	132/143 (92%)	57 (43%)	33 (25%)	42 (32%)	0	0
11	CJ	132/143 (92%)	52 (39%)	37 (28%)	43 (33%)	0	0
12	AK	65/136 (48%)	27 (42%)	16 (25%)	22 (34%)	0	0
12	CK	65/136 (48%)	28 (43%)	16 (25%)	21 (32%)	0	0
13	AL	116/146 (80%)	48 (41%)	34 (29%)	34 (29%)	0	0
13	CL	116/146 (80%)	48 (41%)	33 (28%)	35 (30%)	0	0
14	AM	100/144 (69%)	38 (38%)	28 (28%)	34 (34%)	0	0
14	CM	100/144 (69%)	36 (36%)	27 (27%)	37 (37%)	0	0
15	AN	109/121 (90%)	49 (45%)	30 (28%)	30 (28%)	0	0
15	CN	109/121 (90%)	49 (45%)	29 (27%)	31 (28%)	0	0
16	AO	125/130 (96%)	48 (38%)	40 (32%)	37 (30%)	0	0
16	CO	125/130 (96%)	49 (39%)	36 (29%)	40 (32%)	0	0
17	AP	114/145 (79%)	48 (42%)	24 (21%)	42 (37%)	0	0
17	CP	114/145 (79%)	45 (40%)	28 (25%)	41 (36%)	0	0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	AQ	65/108 (60%)	28 (43%)	21 (32%)	16 (25%)	0	1
18	CQ	61/108 (56%)	28 (46%)	18 (30%)	15 (25%)	0	1
19	AR	45/67 (67%)	17 (38%)	12 (27%)	16 (36%)	0	0
19	CR	45/67 (67%)	17 (38%)	11 (24%)	17 (38%)	0	0
20	AS	37/56 (66%)	8 (22%)	14 (38%)	15 (40%)	0	0
20	CS	37/56 (66%)	8 (22%)	13 (35%)	16 (43%)	0	0
21	AT	309/319 (97%)	180 (58%)	71 (23%)	58 (19%)	0	2
21	CT	309/319 (97%)	184 (60%)	66 (21%)	59 (19%)	0	2
32	BA	211/217 (97%)	76 (36%)	67 (32%)	68 (32%)	0	0
32	DA	211/217 (97%)	76 (36%)	79 (37%)	56 (26%)	0	0
33	BB	228/254 (90%)	80 (35%)	55 (24%)	93 (41%)	0	0
33	DB	228/254 (90%)	83 (36%)	55 (24%)	90 (40%)	0	0
34	BC	362/387 (94%)	112 (31%)	100 (28%)	150 (41%)	0	0
34	DC	362/387 (94%)	109 (30%)	102 (28%)	151 (42%)	0	0
35	BD	266/362 (74%)	111 (42%)	79 (30%)	76 (29%)	0	0
35	DD	266/362 (74%)	109 (41%)	78 (29%)	79 (30%)	0	0
36	BE	285/297 (96%)	108 (38%)	82 (29%)	95 (33%)	0	0
36	DE	285/297 (96%)	105 (37%)	79 (28%)	101 (35%)	0	0
37	BF	174/176 (99%)	44 (25%)	62 (36%)	68 (39%)	0	0
37	DF	174/176 (99%)	43 (25%)	61 (35%)	70 (40%)	0	0
38	BG	211/244 (86%)	85 (40%)	62 (29%)	64 (30%)	0	0
38	DG	211/244 (86%)	89 (42%)	60 (28%)	62 (29%)	0	0
39	BH	171/256 (67%)	59 (34%)	58 (34%)	54 (32%)	0	0
39	DH	171/256 (67%)	60 (35%)	62 (36%)	49 (29%)	0	0
40	BI	189/191 (99%)	76 (40%)	60 (32%)	53 (28%)	0	0
40	DI	189/191 (99%)	79 (42%)	57 (30%)	53 (28%)	0	0
41	BJ	204/221 (92%)	80 (39%)	52 (26%)	72 (35%)	0	0
41	DJ	204/221 (92%)	75 (37%)	55 (27%)	74 (36%)	0	0
42	BK	163/174 (94%)	57 (35%)	42 (26%)	64 (39%)	0	0
42	DK	163/174 (94%)	56 (34%)	46 (28%)	61 (37%)	0	0
43	BN	118/138 (86%)	27 (23%)	44 (37%)	47 (40%)	0	0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
43	DN	118/138 (86%)	28 (24%)	39 (33%)	51 (43%)	0	0
44	BO	185/204 (91%)	77 (42%)	49 (26%)	59 (32%)	0	0
44	DO	185/204 (91%)	76 (41%)	53 (29%)	56 (30%)	0	0
45	BP	194/199 (98%)	81 (42%)	56 (29%)	57 (29%)	0	0
45	DP	194/199 (98%)	77 (40%)	62 (32%)	55 (28%)	0	0
46	BQ	152/184 (83%)	62 (41%)	44 (29%)	46 (30%)	0	0
46	DQ	152/184 (83%)	62 (41%)	45 (30%)	45 (30%)	0	0
47	BR	141/186 (76%)	63 (45%)	28 (20%)	50 (36%)	0	0
47	DR	141/186 (76%)	59 (42%)	32 (23%)	50 (36%)	0	0
48	BS	186/189 (98%)	104 (56%)	57 (31%)	25 (13%)	0	4
48	DS	186/189 (98%)	101 (54%)	60 (32%)	25 (13%)	0	4
49	BT	117/160 (73%)	53 (45%)	18 (15%)	46 (39%)	0	0
49	DT	117/160 (73%)	50 (43%)	23 (20%)	44 (38%)	0	0
50	BU	127/137 (93%)	64 (50%)	28 (22%)	35 (28%)	0	0
50	DU	127/137 (93%)	70 (55%)	21 (16%)	36 (28%)	0	0
51	BV	57/155 (37%)	14 (25%)	19 (33%)	24 (42%)	0	0
51	DV	57/155 (37%)	15 (26%)	16 (28%)	26 (46%)	0	0
52	BW	92/142 (65%)	30 (33%)	30 (33%)	32 (35%)	0	0
52	DW	92/142 (65%)	32 (35%)	28 (30%)	32 (35%)	0	0
53	BX	105/127 (83%)	53 (50%)	28 (27%)	24 (23%)	0	1
53	DX	105/127 (83%)	55 (52%)	30 (29%)	20 (19%)	0	2
54	BY	147/149 (99%)	37 (25%)	47 (32%)	63 (43%)	0	0
54	DY	147/149 (99%)	36 (24%)	51 (35%)	60 (41%)	0	0
55	BZ	96/105 (91%)	48 (50%)	28 (29%)	20 (21%)	0	1
55	DZ	96/105 (91%)	51 (53%)	28 (29%)	17 (18%)	0	2
56	Ba	84/113 (74%)	27 (32%)	27 (32%)	30 (36%)	0	0
56	Da	84/113 (74%)	25 (30%)	28 (33%)	31 (37%)	0	0
57	Bb	123/130 (95%)	39 (32%)	28 (23%)	56 (46%)	0	0
57	Db	123/130 (95%)	41 (33%)	31 (25%)	51 (42%)	0	0
58	Bc	66/120 (55%)	28 (42%)	23 (35%)	15 (23%)	0	1
58	Dc	66/120 (55%)	28 (42%)	26 (39%)	12 (18%)	0	2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
59	Bd	70/88 (80%)	19 (27%)	20 (29%)	31 (44%)	0	0
59	Dd	70/88 (80%)	17 (24%)	24 (34%)	29 (41%)	0	0
60	Be	46/51 (90%)	25 (54%)	8 (17%)	13 (28%)	0	0
60	De	46/51 (90%)	22 (48%)	12 (26%)	12 (26%)	0	1
61	Bf	93/106 (88%)	37 (40%)	28 (30%)	28 (30%)	0	0
61	Df	93/106 (88%)	37 (40%)	28 (30%)	28 (30%)	0	0
62	Bg	81/92 (88%)	31 (38%)	27 (33%)	23 (28%)	0	0
62	Dg	81/92 (88%)	32 (40%)	24 (30%)	25 (31%)	0	0
72	DL	136/165 (82%)	42 (31%)	42 (31%)	52 (38%)	0	0
73	DM	126/312 (40%)	48 (38%)	31 (25%)	47 (37%)	0	0
All	All	14930/18123 (82%)	5798 (39%)	4273 (29%)	4859 (32%)	0	0

All (4859) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AA	11	PRO
2	AA	13	ASP
2	AA	14	ALA
2	AA	21	ASN
2	AA	24	LEU
2	AA	36	TYR
2	AA	40	ALA
2	AA	41	ARG
2	AA	42	PRO
2	AA	43	ASP
2	AA	45	VAL
2	AA	49	ASN
2	AA	65	ALA
2	AA	70	PRO
2	AA	71	GLU
2	AA	94	GLY
2	AA	97	PRO
2	AA	113	ARG
2	AA	117	GLU
2	AA	118	PRO
2	AA	121	VAL
2	AA	124	THR
2	AA	126	PRO

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Mol	Chain	Res	Type
2	AA	140	ASN
2	AA	143	VAL
2	AA	159	ALA
2	AA	160	ILE
2	AA	161	PRO
2	AA	163	ASN
2	AA	172	LEU
2	AA	187	ALA
2	AA	193	GLN
2	AA	194	PRO
2	AA	202	TYR
2	AA	204	TYR
2	AA	220	THR
3	AB	37	PRO
3	AB	38	VAL
3	AB	59	HIS
3	AB	62	PRO
3	AB	66	PHE
3	AB	68	ILE
3	AB	73	LEU
3	AB	74	PRO
3	AB	84	LYS
3	AB	85	PRO
3	AB	125	ILE
3	AB	126	ARG
3	AB	133	LYS
3	AB	134	LEU
3	AB	135	SER
3	AB	136	VAL
3	AB	139	ILE
3	AB	140	ARG
3	AB	143	TYR
3	AB	147	ASN
3	AB	151	PRO
3	AB	159	THR
3	AB	164	SER
3	AB	165	VAL
3	AB	166	THR
3	AB	189	GLN
3	AB	193	VAL
3	AB	196	VAL
3	AB	209	ASN

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Mol	Chain	Res	Type
3	AB	220	ASN
3	AB	225	LEU
3	AB	234	PRO
3	AB	235	LEU
3	AB	236	PRO
3	AB	237	VAL
3	AB	238	SER
3	AB	239	PRO
3	AB	240	LEU
3	AB	243	TYR
4	AC	8	LYS
4	AC	9	ARG
4	AC	16	VAL
4	AC	22	ASN
4	AC	28	GLU
4	AC	37	VAL
4	AC	43	PRO
4	AC	66	ILE
4	AC	69	LEU
4	AC	70	THR
4	AC	76	ARG
4	AC	79	TYR
4	AC	80	ALA
4	AC	81	PRO
4	AC	94	ARG
4	AC	96	LEU
4	AC	98	ALA
4	AC	100	ALA
4	AC	131	ALA
4	AC	136	VAL
4	AC	145	ALA
4	AC	152	PHE
4	AC	157	LEU
4	AC	162	GLN
4	AC	163	PRO
4	AC	167	PHE
4	AC	168	ILE
4	AC	174	HIS
4	AC	175	VAL
5	AD	40	ILE
5	AD	46	TRP
5	AD	53	VAL

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Mol	Chain	Res	Type
5	AD	57	SER
5	AD	61	TYR
5	AD	66	GLN
5	AD	87	CYS
5	AD	88	PRO
5	AD	90	ILE
5	AD	91	GLU
5	AD	92	ARG
5	AD	93	LEU
5	AD	94	THR
5	AD	128	ASN
5	AD	129	PRO
5	AD	160	VAL
5	AD	162	VAL
5	AD	163	SER
5	AD	164	PRO
5	AD	182	ALA
5	AD	184	PHE
5	AD	187	ILE
5	AD	195	ALA
5	AD	216	GLU
6	AE	39	LYS
6	AE	41	GLU
6	AE	55	ALA
6	AE	56	ALA
6	AE	64	GLU
6	AE	67	PRO
6	AE	81	VAL
6	AE	82	ARG
6	AE	83	VAL
6	AE	85	VAL
6	AE	99	LEU
6	AE	100	LYS
6	AE	106	GLU
6	AE	112	GLN
6	AE	121	SER
6	AE	122	VAL
6	AE	124	HIS
6	AE	130	THR
6	AE	131	GLN
6	AE	132	ARG
6	AE	140	ILE

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Mol	Chain	Res	Type
6	AE	141	VAL
6	AE	143	ILE
6	AE	146	PHE
6	AE	152	SER
6	AE	153	GLU
6	AE	169	PRO
6	AE	174	ARG
7	AF	70	ILE
7	AF	80	MET
7	AF	83	THR
7	AF	86	ILE
7	AF	90	TYR
7	AF	94	ILE
7	AF	95	PRO
7	AF	98	ASN
7	AF	111	VAL
7	AF	112	SER
7	AF	113	PRO
7	AF	125	VAL
7	AF	130	PRO
7	AF	133	LYS
8	AG	46	THR
8	AG	47	PRO
8	AG	50	ILE
8	AG	62	GLN
8	AG	65	VAL
8	AG	69	ASN
8	AG	71	ILE
8	AG	82	PRO
8	AG	84	ILE
8	AG	85	PRO
8	AG	86	GLU
8	AG	126	ALA
8	AG	132	VAL
8	AG	135	LEU
8	AG	136	PRO
8	AG	137	PRO
9	AH	4	VAL
9	AH	23	PHE
9	AH	26	THR
9	AH	40	ALA
9	AH	42	VAL

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Mol	Chain	Res	Type
9	AH	43	THR
9	AH	50	ALA
9	AH	64	ALA
9	AH	65	GLN
9	AH	67	VAL
9	AH	79	VAL
9	AH	94	PRO
9	AH	96	PRO
9	AH	101	ALA
9	AH	122	PRO
9	AH	128	LYS
10	AI	11	VAL
10	AI	13	LYS
10	AI	23	GLU
10	AI	38	PRO
10	AI	51	SER
10	AI	53	PRO
10	AI	61	ARG
10	AI	68	PRO
10	AI	73	PRO
10	AI	75	PRO
10	AI	80	MET
10	AI	85	ILE
10	AI	86	VAL
10	AI	121	ILE
10	AI	125	PRO
11	AJ	34	SER
11	AJ	35	PRO
11	AJ	36	ILE
11	AJ	38	LEU
11	AJ	42	GLU
11	AJ	57	LEU
11	AJ	61	SER
11	AJ	63	ILE
11	AJ	70	THR
11	AJ	74	HIS
11	AJ	85	ILE
11	AJ	97	VAL
11	AJ	105	LEU
11	AJ	118	ILE
11	AJ	126	PRO
11	AJ	136	SER

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Mol	Chain	Res	Type
12	AK	22	PRO
12	AK	26	LEU
12	AK	29	GLN
12	AK	38	ILE
12	AK	39	ALA
12	AK	44	LYS
12	AK	60	ARG
12	AK	65	PRO
12	AK	69	ILE
13	AL	18	LEU
13	AL	27	LYS
13	AL	65	GLU
13	AL	66	LEU
13	AL	71	GLN
13	AL	72	ILE
13	AL	74	GLN
13	AL	75	ASN
13	AL	79	TYR
13	AL	80	LYS
13	AL	81	ILE
13	AL	98	TYR
13	AL	99	HIS
13	AL	102	ALA
13	AL	117	LYS
13	AL	118	LYS
14	AM	2	PRO
14	AM	4	VAL
14	AM	8	ASP
14	AM	9	VAL
14	AM	25	GLN
14	AM	36	ILE
14	AM	68	ARG
14	AM	110	LYS
14	AM	111	ILE
14	AM	113	ILE
14	AM	117	SER
14	AM	119	LYS
14	AM	125	SER
14	AM	126	GLU
14	AM	127	ASN
14	AM	129	GLN
15	AN	13	GLU

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Mol	Chain	Res	Type
15	AN	14	GLN
15	AN	15	GLN
15	AN	24	ILE
15	AN	31	VAL
15	AN	45	ALA
15	AN	50	LEU
15	AN	55	PRO
15	AN	59	PRO
15	AN	72	ASN
15	AN	76	SER
15	AN	93	LEU
15	AN	96	PRO
15	AN	108	ILE
15	AN	113	ASP
15	AN	117	VAL
16	AO	5	SER
16	AO	24	GLN
16	AO	27	ILE
16	AO	28	ARG
16	AO	29	PRO
16	AO	30	SER
16	AO	31	SER
16	AO	38	LEU
16	AO	63	VAL
16	AO	76	SER
16	AO	77	PRO
16	AO	79	PHE
16	AO	85	ASP
16	AO	86	ILE
16	AO	95	PRO
16	AO	97	ARG
16	AO	99	PHE
16	AO	100	GLY
16	AO	103	ILE
16	AO	106	THR
16	AO	118	ARG
16	AO	120	HIS
16	AO	126	LEU
17	AP	37	ALA
17	AP	48	HIS
17	AP	49	ALA
17	AP	59	ILE

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Mol	Chain	Res	Type
17	AP	64	PRO
17	AP	70	LYS
17	AP	78	LYS
17	AP	87	VAL
17	AP	90	ASP
17	AP	104	LEU
17	AP	105	ALA
17	AP	108	GLY
17	AP	119	GLY
17	AP	124	VAL
17	AP	127	VAL
17	AP	130	VAL
17	AP	135	LEU
17	AP	138	GLU
18	AQ	42	LEU
18	AQ	57	TYR
18	AQ	71	ILE
18	AQ	85	LYS
18	AQ	88	ILE
18	AQ	90	LYS
18	AQ	91	PRO
18	AQ	97	LYS
19	AR	10	ALA
19	AR	14	LYS
19	AR	15	VAL
19	AR	34	GLU
19	AR	39	THR
19	AR	44	VAL
20	AS	20	GLN
20	AS	24	CYS
20	AS	26	SER
20	AS	27	HIS
20	AS	34	TYR
20	AS	43	PHE
20	AS	48	ASN
21	AT	2	ALA
21	AT	48	THR
21	AT	66	HIS
21	AT	100	TYR
21	AT	119	ALA
21	AT	189	GLU
21	AT	195	HIS

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Mol	Chain	Res	Type
21	AT	198	ASN
21	AT	241	PHE
21	AT	247	PRO
21	AT	269	TYR
21	AT	281	TYR
21	AT	295	SER
32	BA	24	LYS
32	BA	36	VAL
32	BA	39	LYS
32	BA	42	ASP
32	BA	43	PRO
32	BA	55	LEU
32	BA	56	PRO
32	BA	58	CYS
32	BA	59	PRO
32	BA	60	ARG
32	BA	61	PRO
32	BA	109	ALA
32	BA	115	VAL
32	BA	120	VAL
32	BA	122	ARG
32	BA	124	LEU
32	BA	126	PRO
32	BA	127	GLN
32	BA	128	LEU
32	BA	129	SER
32	BA	135	PRO
32	BA	143	ASP
32	BA	151	VAL
32	BA	174	MET
32	BA	201	VAL
32	BA	207	LYS
32	BA	208	SER
32	BA	209	SER
32	BA	210	MET
32	BA	212	PRO
33	BB	5	ILE
33	BB	13	GLY
33	BB	14	SER
33	BB	16	PHE
33	BB	24	GLN
33	BB	26	ALA

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Mol	Chain	Res	Type
33	BB	38	HIS
33	BB	50	HIS
33	BB	61	VAL
33	BB	65	ASP
33	BB	79	ASN
33	BB	83	HIS
33	BB	84	THR
33	BB	90	ALA
33	BB	98	VAL
33	BB	107	VAL
33	BB	108	PRO
33	BB	110	GLY
33	BB	111	THR
33	BB	120	PRO
33	BB	136	ILE
33	BB	137	ILE
33	BB	139	HIS
33	BB	141	PRO
33	BB	148	VAL
33	BB	149	ARG
33	BB	152	SER
33	BB	166	ILE
33	BB	176	ASP
33	BB	178	PRO
33	BB	182	ALA
33	BB	188	LYS
33	BB	197	PRO
33	BB	199	THR
33	BB	207	VAL
33	BB	208	ASP
33	BB	210	PRO
33	BB	211	HIS
33	BB	217	GLN
33	BB	219	ILE
33	BB	220	GLY
33	BB	222	ALA
33	BB	230	VAL
33	BB	233	GLN
33	BB	234	LYS
33	BB	235	ALA
33	BB	237	LEU
33	BB	241	ARG

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Mol	Chain	Res	Type
33	BB	242	ARG
33	BB	243	THR
34	BC	3	HIS
34	BC	12	GLY
34	BC	21	ARG
34	BC	23	ALA
34	BC	33	PRO
34	BC	40	PRO
34	BC	41	VAL
34	BC	42	ALA
34	BC	43	LEU
34	BC	44	THR
34	BC	47	LEU
34	BC	61	ASP
34	BC	63	PRO
34	BC	68	HIS
34	BC	71	GLU
34	BC	81	THR
34	BC	83	PRO
34	BC	86	VAL
34	BC	89	VAL
34	BC	93	VAL
34	BC	94	GLU
34	BC	97	ARG
34	BC	104	THR
34	BC	105	VAL
34	BC	106	TRP
34	BC	109	HIS
34	BC	113	GLU
34	BC	117	ARG
34	BC	122	TRP
34	BC	123	TYR
34	BC	131	THR
34	BC	132	LYS
34	BC	137	TYR
34	BC	139	GLN
34	BC	143	GLY
34	BC	153	LYS
34	BC	158	VAL
34	BC	160	VAL
34	BC	165	GLN
34	BC	166	ILE

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Mol	Chain	Res	Type
34	BC	167	ARG
34	BC	170	PRO
34	BC	173	GLN
34	BC	174	LYS
34	BC	175	LYS
34	BC	176	ALA
34	BC	187	SER
34	BC	188	ILE
34	BC	192	VAL
34	BC	197	GLU
34	BC	200	GLU
34	BC	209	PHE
34	BC	220	VAL
34	BC	221	THR
34	BC	238	LEU
34	BC	239	PRO
34	BC	244	ARG
34	BC	248	LYS
34	BC	257	PRO
34	BC	259	HIS
34	BC	264	VAL
34	BC	270	ARG
34	BC	272	TYR
34	BC	274	SER
34	BC	275	ARG
34	BC	279	ASN
34	BC	284	ARG
34	BC	296	THR
34	BC	301	THR
34	BC	306	THR
34	BC	307	PRO
34	BC	317	ILE
34	BC	318	LYS
34	BC	320	ASP
34	BC	324	VAL
34	BC	327	CYS
34	BC	331	ASN
34	BC	333	LYS
34	BC	335	ILE
34	BC	346	THR
34	BC	351	LEU
34	BC	359	ILE

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Mol	Chain	Res	Type
35	BD	8	VAL
35	BD	19	ALA
35	BD	21	PRO
35	BD	23	PRO
35	BD	24	ALA
35	BD	28	ALA
35	BD	54	GLU
35	BD	69	ARG
35	BD	77	VAL
35	BD	90	PHE
35	BD	98	ARG
35	BD	100	PHE
35	BD	102	PRO
35	BD	107	ARG
35	BD	116	ASN
35	BD	131	VAL
35	BD	140	HIS
35	BD	149	PRO
35	BD	150	LEU
35	BD	159	ILE
35	BD	160	GLN
35	BD	166	VAL
35	BD	182	LEU
35	BD	194	TYR
35	BD	212	ASP
35	BD	239	ALA
35	BD	252	GLU
35	BD	254	ALA
35	BD	257	LYS
35	BD	258	LEU
35	BD	261	VAL
35	BD	265	GLU
35	BD	266	THR
35	BD	267	VAL
35	BD	274	TYR
36	BE	12	TYR
36	BE	13	SER
36	BE	17	GLN
36	BE	18	THR
36	BE	19	PRO
36	BE	21	ARG
36	BE	32	GLN

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Mol	Chain	Res	Type
36	BE	46	THR
36	BE	47	PRO
36	BE	48	LYS
36	BE	49	TYR
36	BE	50	ARG
36	BE	68	THR
36	BE	69	ILE
36	BE	78	ALA
36	BE	83	LEU
36	BE	84	PRO
36	BE	88	ILE
36	BE	100	ALA
36	BE	101	THR
36	BE	139	PRO
36	BE	148	ILE
36	BE	151	GLN
36	BE	159	VAL
36	BE	160	PHE
36	BE	171	LEU
36	BE	174	PRO
36	BE	178	ASN
36	BE	185	PHE
36	BE	191	ASP
36	BE	200	PHE
36	BE	211	LEU
36	BE	214	ASP
36	BE	231	ILE
36	BE	234	ASP
36	BE	238	ASP
36	BE	239	ILE
36	BE	246	ALA
36	BE	256	THR
36	BE	271	LYS
36	BE	293	LEU
37	BF	4	GLN
37	BF	6	ALA
37	BF	7	PRO
37	BF	10	TYR
37	BF	11	PRO
37	BF	13	GLU
37	BF	16	ALA
37	BF	26	ARG

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Mol	Chain	Res	Type
37	BF	27	PRO
37	BF	28	GLN
37	BF	32	ALA
37	BF	33	SER
37	BF	34	LEU
37	BF	39	VAL
37	BF	44	ALA
37	BF	47	PHE
37	BF	52	VAL
37	BF	53	VAL
37	BF	68	PRO
37	BF	70	LYS
37	BF	71	VAL
37	BF	85	ILE
37	BF	86	ALA
37	BF	90	LYS
37	BF	92	SER
37	BF	93	VAL
37	BF	99	GLU
37	BF	106	PHE
37	BF	109	GLU
37	BF	110	LYS
37	BF	116	LYS
37	BF	118	GLU
37	BF	121	LEU
37	BF	122	PHE
37	BF	126	GLN
37	BF	137	ASP
37	BF	144	ALA
37	BF	146	ILE
37	BF	150	LYS
37	BF	151	LYS
37	BF	167	ASN
37	BF	172	HIS
37	BF	174	LEU
38	BG	32	ALA
38	BG	49	ALA
38	BG	50	ALA
38	BG	74	SER
38	BG	81	HIS
38	BG	82	LYS
38	BG	84	VAL

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Mol	Chain	Res	Type
38	BG	85	PHE
38	BG	86	VAL
38	BG	96	PRO
38	BG	97	PRO
38	BG	112	ASN
38	BG	136	TYR
38	BG	138	TYR
38	BG	148	VAL
38	BG	149	TYR
38	BG	156	ILE
38	BG	160	ARG
38	BG	162	PRO
38	BG	177	GLY
38	BG	180	SER
38	BG	188	ILE
38	BG	193	PRO
38	BG	195	PHE
38	BG	202	LEU
38	BG	204	PRO
38	BG	206	LYS
38	BG	210	PRO
38	BG	217	PRO
38	BG	223	PHE
38	BG	224	ILE
38	BG	228	SER
38	BG	229	PHE
38	BG	232	ARG
38	BG	233	GLU
38	BG	234	GLU
39	BH	96	LYS
39	BH	98	ARG
39	BH	99	PRO
39	BH	109	LEU
39	BH	110	THR
39	BH	128	LYS
39	BH	131	ALA
39	BH	132	VAL
39	BH	151	VAL
39	BH	181	LYS
39	BH	194	THR
39	BH	201	THR
39	BH	203	VAL

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Mol	Chain	Res	Type
39	BH	209	ALA
39	BH	210	ALA
39	BH	212	ALA
39	BH	214	LEU
39	BH	227	ASP
39	BH	233	TRP
39	BH	238	LEU
39	BH	245	LYS
39	BH	249	ARG
40	BI	2	LYS
40	BI	5	GLN
40	BI	22	SER
40	BI	30	PRO
40	BI	41	ILE
40	BI	43	VAL
40	BI	46	THR
40	BI	53	ILE
40	BI	86	TYR
40	BI	104	VAL
40	BI	110	LYS
40	BI	122	LYS
40	BI	127	PRO
40	BI	138	THR
40	BI	140	VAL
40	BI	141	LYS
40	BI	142	ASP
40	BI	167	VAL
40	BI	169	ASN
40	BI	170	LYS
40	BI	172	ILE
40	BI	186	PHE
40	BI	189	GLU
41	BJ	5	PRO
41	BJ	11	TYR
41	BJ	13	LYS
41	BJ	14	ASN
41	BJ	16	PRO
41	BJ	17	TYR
41	BJ	25	ALA
41	BJ	29	SER
41	BJ	34	TYR
41	BJ	39	LYS

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Mol	Chain	Res	Type
41	BJ	43	VAL
41	BJ	46	PHE
41	BJ	48	LEU
41	BJ	57	LEU
41	BJ	61	SER
41	BJ	70	ILE
41	BJ	92	HIS
41	BJ	115	MET
41	BJ	136	PHE
41	BJ	145	LYS
41	BJ	147	VAL
41	BJ	160	PRO
41	BJ	162	GLN
41	BJ	169	LYS
41	BJ	178	ARG
41	BJ	190	VAL
41	BJ	201	SER
41	BJ	208	ASN
42	BK	8	PRO
42	BK	15	GLU
42	BK	18	VAL
42	BK	23	VAL
42	BK	32	ARG
42	BK	34	SER
42	BK	45	PRO
42	BK	47	GLN
42	BK	49	LYS
42	BK	50	ALA
42	BK	52	TYR
42	BK	54	VAL
42	BK	55	ARG
42	BK	56	THR
42	BK	62	ASN
42	BK	65	ILE
42	BK	66	ALA
42	BK	69	VAL
42	BK	76	ALA
42	BK	85	LYS
42	BK	86	VAL
42	BK	88	GLU
42	BK	102	PHE
42	BK	108	GLU

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Mol	Chain	Res	Type
42	BK	110	ILE
42	BK	115	LYS
42	BK	118	PRO
42	BK	120	ILE
42	BK	122	ILE
42	BK	129	VAL
42	BK	132	ASN
42	BK	133	ARG
42	BK	134	PRO
42	BK	143	ARG
42	BK	148	VAL
42	BK	154	THR
43	BN	10	SER
43	BN	15	VAL
43	BN	19	ARG
43	BN	20	VAL
43	BN	23	ILE
43	BN	24	LYS
43	BN	25	LYS
43	BN	27	GLN
43	BN	29	ALA
43	BN	43	LYS
43	BN	54	PRO
43	BN	55	ARG
43	BN	59	ASN
43	BN	60	LEU
43	BN	62	GLN
43	BN	63	VAL
43	BN	64	VAL
43	BN	66	THR
43	BN	67	PRO
43	BN	70	PHE
43	BN	81	VAL
43	BN	82	SER
43	BN	90	VAL
43	BN	103	ILE
43	BN	111	ALA
43	BN	126	GLN
43	BN	127	LYS
44	BO	17	ASP
44	BO	30	TYR
44	BO	35	VAL

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Mol	Chain	Res	Type
44	BO	39	ALA
44	BO	42	PRO
44	BO	46	ASP
44	BO	53	TYR
44	BO	54	LYS
44	BO	55	ALA
44	BO	60	VAL
44	BO	75	VAL
44	BO	76	PRO
44	BO	79	ALA
44	BO	80	THR
44	BO	83	LYS
44	BO	84	PRO
44	BO	96	ARG
44	BO	97	SER
44	BO	98	LEU
44	BO	121	VAL
44	BO	127	TYR
44	BO	136	ASP
44	BO	156	HIS
44	BO	161	ALA
45	BP	5	PRO
45	BP	12	LYS
45	BP	16	VAL
45	BP	23	VAL
45	BP	37	ARG
45	BP	38	ALA
45	BP	61	ALA
45	BP	66	LYS
45	BP	70	PRO
45	BP	75	ALA
45	BP	76	PRO
45	BP	83	ALA
45	BP	100	GLU
45	BP	108	ILE
45	BP	109	PRO
45	BP	110	PRO
45	BP	112	TYR
45	BP	115	LYS
45	BP	120	VAL
45	BP	121	PRO
45	BP	125	ARG

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Mol	Chain	Res	Type
45	BP	126	VAL
45	BP	128	ARG
45	BP	131	PRO
45	BP	134	LYS
45	BP	147	TRP
45	BP	188	SER
46	BQ	9	THR
46	BQ	10	ASN
46	BQ	12	ALA
46	BQ	20	SER
46	BQ	30	ARG
46	BQ	33	ALA
46	BQ	52	LEU
46	BQ	56	ARG
46	BQ	69	ARG
46	BQ	71	ALA
46	BQ	75	GLU
46	BQ	83	TRP
46	BQ	84	PRO
46	BQ	106	GLY
46	BQ	110	THR
46	BQ	114	VAL
46	BQ	118	GLN
46	BQ	122	ALA
46	BQ	123	PRO
46	BQ	142	SER
47	BR	18	ALA
47	BR	19	PRO
47	BR	22	ASP
47	BR	39	ARG
47	BR	42	ALA
47	BR	43	PRO
47	BR	60	PRO
47	BR	61	PRO
47	BR	76	ALA
47	BR	93	ILE
47	BR	94	PHE
47	BR	97	PRO
47	BR	103	ALA
47	BR	104	LEU
47	BR	108	ALA
47	BR	110	ALA

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Mol	Chain	Res	Type
47	BR	111	ARG
47	BR	112	ALA
47	BR	117	ALA
47	BR	123	THR
47	BR	143	PRO
47	BR	145	ASN
47	BR	153	PHE
48	BS	19	LYS
48	BS	60	LYS
48	BS	104	ARG
48	BS	106	LEU
48	BS	130	ASN
48	BS	133	LYS
48	BS	134	HIS
48	BS	135	LYS
48	BS	143	ILE
49	BT	9	SER
49	BT	15	PHE
49	BT	16	GLN
49	BT	31	LEU
49	BT	32	LYS
49	BT	34	TYR
49	BT	35	LYS
49	BT	43	LYS
49	BT	46	GLY
49	BT	49	GLN
49	BT	54	HIS
49	BT	64	VAL
49	BT	66	ASN
49	BT	67	VAL
49	BT	69	LYS
49	BT	70	SER
49	BT	75	ILE
49	BT	76	ILE
49	BT	79	MET
49	BT	81	GLY
49	BT	85	LEU
49	BT	98	HIS
49	BT	110	LYS
50	BU	19	VAL
50	BU	31	ALA
50	BU	40	LYS

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Mol	Chain	Res	Type
50	BU	46	LEU
50	BU	47	ASN
50	BU	66	LYS
50	BU	81	GLN
50	BU	94	TYR
50	BU	95	PHE
50	BU	97	ASP
50	BU	105	PRO
50	BU	112	SER
50	BU	131	SER
50	BU	134	GLY
50	BU	135	VAL
51	BV	3	VAL
51	BV	4	GLU
51	BV	5	ILE
51	BV	6	ASP
51	BV	8	PHE
51	BV	22	VAL
51	BV	23	ARG
51	BV	25	ASP
51	BV	28	ILE
51	BV	29	PHE
51	BV	33	ASN
51	BV	34	SER
51	BV	52	THR
51	BV	57	LYS
52	BW	49	LYS
52	BW	51	VAL
52	BW	52	PRO
52	BW	53	HIS
52	BW	58	ASP
52	BW	61	LYS
52	BW	62	VAL
52	BW	64	GLU
52	BW	66	PRO
52	BW	67	ILE
52	BW	70	GLU
52	BW	84	PHE
52	BW	102	LEU
52	BW	106	ASP
52	BW	129	ASP
52	BW	130	TYR

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Mol	Chain	Res	Type
53	BX	19	TYR
53	BX	20	PHE
53	BX	58	VAL
53	BX	59	VAL
53	BX	79	ALA
53	BX	100	HIS
53	BX	101	PRO
54	BY	2	PRO
54	BY	3	SER
54	BY	9	ARG
54	BY	10	LYS
54	BY	12	ARG
54	BY	21	ARG
54	BY	22	ILE
54	BY	27	LYS
54	BY	30	GLY
54	BY	34	MET
54	BY	36	GLY
54	BY	40	HIS
54	BY	43	ILE
54	BY	44	ASN
54	BY	50	PRO
54	BY	56	VAL
54	BY	60	TYR
54	BY	61	PHE
54	BY	69	TRP
54	BY	74	ASN
54	BY	78	LEU
54	BY	79	TRP
54	BY	85	ASP
54	BY	88	ASP
54	BY	90	TYR
54	BY	91	LEU
54	BY	94	ALA
54	BY	98	THR
54	BY	102	ILE
54	BY	112	ILE
54	BY	114	GLY
54	BY	117	ARG
54	BY	118	ILE
54	BY	119	PRO
54	BY	130	VAL

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Mol	Chain	Res	Type
54	BY	132	LYS
54	BY	148	ILE
55	BZ	27	TYR
55	BZ	63	SER
55	BZ	83	LYS
55	BZ	86	ARG
55	BZ	89	VAL
56	Ba	6	ASP
56	Ba	7	VAL
56	Ba	14	ILE
56	Ba	15	ASN
56	Ba	16	LEU
56	Ba	25	PHE
56	Ba	29	ALA
56	Ba	44	MET
56	Ba	47	ASP
56	Ba	59	ILE
56	Ba	60	TRP
56	Ba	61	LYS
56	Ba	79	ARG
56	Ba	85	ALA
57	Bb	6	HIS
57	Bb	7	PRO
57	Bb	12	LYS
57	Bb	20	HIS
57	Bb	22	SER
57	Bb	30	GLU
57	Bb	33	ARG
57	Bb	50	ILE
57	Bb	52	GLN
57	Bb	53	PRO
57	Bb	55	ILE
57	Bb	56	GLY
57	Bb	61	LYS
57	Bb	64	LYS
57	Bb	68	PRO
57	Bb	69	SER
57	Bb	79	VAL
57	Bb	84	THR
57	Bb	96	ILE
57	Bb	101	SER
57	Bb	109	LEU

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Mol	Chain	Res	Type
57	Bb	110	ALA
57	Bb	121	ASN
58	Bc	18	ALA
58	Bc	38	ARG
58	Bc	40	SER
59	Bd	5	THR
59	Bd	8	PHE
59	Bd	28	HIS
59	Bd	29	VAL
59	Bd	35	SER
59	Bd	42	ALA
59	Bd	47	TYR
59	Bd	64	MET
59	Bd	65	ARG
59	Bd	67	LEU
59	Bd	68	LYS
59	Bd	71	SER
60	Be	27	ILE
60	Be	44	TRP
60	Be	45	ARG
61	Bf	5	PRO
61	Bf	13	LYS
61	Bf	34	SER
61	Bf	47	GLN
61	Bf	53	GLN
61	Bf	66	LYS
61	Bf	93	LEU
62	Bg	16	VAL
62	Bg	18	TYR
62	Bg	34	HIS
62	Bg	35	ALA
62	Bg	37	TYR
62	Bg	48	LYS
62	Bg	49	ARG
62	Bg	53	GLY
62	Bg	54	ILE
62	Bg	55	TRP
62	Bg	71	VAL
62	Bg	81	SER
62	Bg	83	ILE
2	CA	11	PRO
2	CA	13	ASP

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Mol	Chain	Res	Type
2	CA	14	ALA
2	CA	24	LEU
2	CA	36	TYR
2	CA	40	ALA
2	CA	41	ARG
2	CA	42	PRO
2	CA	43	ASP
2	CA	45	VAL
2	CA	49	ASN
2	CA	65	ALA
2	CA	70	PRO
2	CA	71	GLU
2	CA	89	PHE
2	CA	94	GLY
2	CA	97	PRO
2	CA	113	ARG
2	CA	117	GLU
2	CA	118	PRO
2	CA	126	PRO
2	CA	140	ASN
2	CA	143	VAL
2	CA	159	ALA
2	CA	161	PRO
2	CA	163	ASN
2	CA	172	LEU
2	CA	193	GLN
2	CA	194	PRO
2	CA	202	TYR
2	CA	204	TYR
2	CA	220	THR
3	CB	37	PRO
3	CB	59	HIS
3	CB	62	PRO
3	CB	63	VAL
3	CB	66	PHE
3	CB	68	ILE
3	CB	73	LEU
3	CB	74	PRO
3	CB	84	LYS
3	CB	85	PRO
3	CB	125	ILE
3	CB	126	ARG

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Mol	Chain	Res	Type
3	CB	133	LYS
3	CB	135	SER
3	CB	136	VAL
3	CB	139	ILE
3	CB	140	ARG
3	CB	143	TYR
3	CB	147	ASN
3	CB	151	PRO
3	CB	159	THR
3	CB	161	LYS
3	CB	164	SER
3	CB	165	VAL
3	CB	166	THR
3	CB	186	LYS
3	CB	189	GLN
3	CB	193	VAL
3	CB	196	VAL
3	CB	204	THR
3	CB	209	ASN
3	CB	220	ASN
3	CB	225	LEU
3	CB	234	PRO
3	CB	235	LEU
3	CB	236	PRO
3	CB	237	VAL
3	CB	238	SER
3	CB	239	PRO
3	CB	243	TYR
4	CC	8	LYS
4	CC	9	ARG
4	CC	16	VAL
4	CC	17	PHE
4	CC	22	ASN
4	CC	28	GLU
4	CC	37	VAL
4	CC	43	PRO
4	CC	66	ILE
4	CC	69	LEU
4	CC	70	THR
4	CC	74	GLN
4	CC	76	ARG
4	CC	79	TYR

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Mol	Chain	Res	Type
4	CC	80	ALA
4	CC	81	PRO
4	CC	94	ARG
4	CC	96	LEU
4	CC	100	ALA
4	CC	131	ALA
4	CC	136	VAL
4	CC	145	ALA
4	CC	152	PHE
4	CC	157	LEU
4	CC	162	GLN
4	CC	163	PRO
4	CC	167	PHE
4	CC	168	ILE
4	CC	174	HIS
4	CC	175	VAL
4	CC	193	ALA
5	CD	40	ILE
5	CD	42	LEU
5	CD	47	SER
5	CD	56	ALA
5	CD	57	SER
5	CD	64	VAL
5	CD	65	ARG
5	CD	66	GLN
5	CD	88	PRO
5	CD	89	ILE
5	CD	92	ARG
5	CD	108	LEU
5	CD	129	PRO
5	CD	140	THR
5	CD	160	VAL
5	CD	162	VAL
5	CD	163	SER
5	CD	164	PRO
5	CD	166	ARG
5	CD	167	ARG
5	CD	182	ALA
5	CD	184	PHE
5	CD	187	ILE
5	CD	216	GLU
6	CE	39	LYS

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Mol	Chain	Res	Type
6	CE	41	GLU
6	CE	55	ALA
6	CE	56	ALA
6	CE	64	GLU
6	CE	66	ASP
6	CE	67	PRO
6	CE	81	VAL
6	CE	82	ARG
6	CE	83	VAL
6	CE	99	LEU
6	CE	100	LYS
6	CE	106	GLU
6	CE	112	GLN
6	CE	121	SER
6	CE	122	VAL
6	CE	124	HIS
6	CE	130	THR
6	CE	131	GLN
6	CE	132	ARG
6	CE	140	ILE
6	CE	141	VAL
6	CE	143	ILE
6	CE	152	SER
6	CE	153	GLU
6	CE	169	PRO
6	CE	174	ARG
7	CF	70	ILE
7	CF	80	MET
7	CF	83	THR
7	CF	86	ILE
7	CF	90	TYR
7	CF	94	ILE
7	CF	95	PRO
7	CF	98	ASN
7	CF	111	VAL
7	CF	112	SER
7	CF	113	PRO
7	CF	125	VAL
7	CF	130	PRO
7	CF	133	LYS
8	CG	46	THR
8	CG	47	PRO

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Mol	Chain	Res	Type
8	CG	50	ILE
8	CG	58	HIS
8	CG	62	GLN
8	CG	65	VAL
8	CG	69	ASN
8	CG	71	ILE
8	CG	82	PRO
8	CG	84	ILE
8	CG	85	PRO
8	CG	86	GLU
8	CG	126	ALA
8	CG	132	VAL
8	CG	135	LEU
8	CG	136	PRO
8	CG	137	PRO
9	CH	4	VAL
9	CH	23	PHE
9	CH	26	THR
9	CH	40	ALA
9	CH	42	VAL
9	CH	43	THR
9	CH	50	ALA
9	CH	65	GLN
9	CH	67	VAL
9	CH	79	VAL
9	CH	94	PRO
9	CH	96	PRO
9	CH	101	ALA
9	CH	122	PRO
10	CI	11	VAL
10	CI	13	LYS
10	CI	23	GLU
10	CI	34	VAL
10	CI	38	PRO
10	CI	45	PHE
10	CI	51	SER
10	CI	53	PRO
10	CI	61	ARG
10	CI	68	PRO
10	CI	73	PRO
10	CI	75	PRO
10	CI	80	MET

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Mol	Chain	Res	Type
10	CI	85	ILE
10	CI	86	VAL
10	CI	121	ILE
10	CI	125	PRO
11	CJ	34	SER
11	CJ	35	PRO
11	CJ	36	ILE
11	CJ	38	LEU
11	CJ	42	GLU
11	CJ	57	LEU
11	CJ	61	SER
11	CJ	63	ILE
11	CJ	70	THR
11	CJ	85	ILE
11	CJ	90	VAL
11	CJ	97	VAL
11	CJ	105	LEU
11	CJ	118	ILE
11	CJ	126	PRO
12	CK	22	PRO
12	CK	26	LEU
12	CK	29	GLN
12	CK	38	ILE
12	CK	39	ALA
12	CK	44	LYS
12	CK	60	ARG
12	CK	65	PRO
12	CK	69	ILE
13	CL	18	LEU
13	CL	27	LYS
13	CL	47	CYS
13	CL	65	GLU
13	CL	66	LEU
13	CL	71	GLN
13	CL	72	ILE
13	CL	74	GLN
13	CL	75	ASN
13	CL	79	TYR
13	CL	80	LYS
13	CL	81	ILE
13	CL	98	TYR
13	CL	99	HIS

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Mol	Chain	Res	Type
13	CL	102	ALA
13	CL	117	LYS
13	CL	118	LYS
14	CM	2	PRO
14	CM	8	ASP
14	CM	9	VAL
14	CM	25	GLN
14	CM	28	LEU
14	CM	29	GLU
14	CM	36	ILE
14	CM	68	ARG
14	CM	103	LYS
14	CM	110	LYS
14	CM	111	ILE
14	CM	113	ILE
14	CM	119	LYS
14	CM	125	SER
14	CM	126	GLU
14	CM	127	ASN
14	CM	129	GLN
15	CN	14	GLN
15	CN	15	GLN
15	CN	24	ILE
15	CN	31	VAL
15	CN	45	ALA
15	CN	50	LEU
15	CN	55	PRO
15	CN	59	PRO
15	CN	72	ASN
15	CN	76	SER
15	CN	84	MET
15	CN	93	LEU
15	CN	96	PRO
15	CN	108	ILE
15	CN	117	VAL
16	CO	5	SER
16	CO	24	GLN
16	CO	27	ILE
16	CO	28	ARG
16	CO	29	PRO
16	CO	30	SER
16	CO	31	SER

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Mol	Chain	Res	Type
16	CO	38	LEU
16	CO	63	VAL
16	CO	76	SER
16	CO	77	PRO
16	CO	79	PHE
16	CO	85	ASP
16	CO	86	ILE
16	CO	95	PRO
16	CO	97	ARG
16	CO	99	PHE
16	CO	103	ILE
16	CO	106	THR
16	CO	118	ARG
16	CO	120	HIS
16	CO	126	LEU
17	CP	32	ARG
17	CP	33	LEU
17	CP	48	HIS
17	CP	49	ALA
17	CP	59	ILE
17	CP	64	PRO
17	CP	78	LYS
17	CP	87	VAL
17	CP	90	ASP
17	CP	104	LEU
17	CP	105	ALA
17	CP	108	GLY
17	CP	119	GLY
17	CP	124	VAL
17	CP	127	VAL
17	CP	130	VAL
17	CP	135	LEU
17	CP	138	GLU
18	CQ	57	TYR
18	CQ	71	ILE
18	CQ	85	LYS
18	CQ	88	ILE
18	CQ	90	LYS
18	CQ	91	PRO
18	CQ	97	LYS
19	CR	10	ALA
19	CR	14	LYS

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Mol	Chain	Res	Type
19	CR	15	VAL
19	CR	34	GLU
19	CR	39	THR
19	CR	44	VAL
20	CS	20	GLN
20	CS	24	CYS
20	CS	26	SER
20	CS	34	TYR
20	CS	40	ARG
20	CS	43	PHE
20	CS	48	ASN
20	CS	52	PHE
21	CT	2	ALA
21	CT	48	THR
21	CT	66	HIS
21	CT	100	TYR
21	CT	119	ALA
21	CT	189	GLU
21	CT	195	HIS
21	CT	198	ASN
21	CT	231	MET
21	CT	237	GLN
21	CT	241	PHE
21	CT	269	TYR
21	CT	270	LEU
21	CT	281	TYR
21	CT	295	SER
32	DA	28	PHE
32	DA	31	THR
32	DA	36	VAL
32	DA	41	TYR
32	DA	43	PRO
32	DA	56	PRO
32	DA	57	ASN
32	DA	60	ARG
32	DA	111	ILE
32	DA	120	VAL
32	DA	121	PRO
32	DA	131	ALA
32	DA	134	PHE
32	DA	138	VAL
32	DA	142	ASP

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Mol	Chain	Res	Type
32	DA	153	SER
32	DA	167	VAL
32	DA	169	VAL
32	DA	171	ASN
32	DA	173	GLU
32	DA	201	VAL
32	DA	205	VAL
32	DA	212	PRO
33	DB	5	ILE
33	DB	9	ARG
33	DB	13	GLY
33	DB	14	SER
33	DB	16	PHE
33	DB	24	GLN
33	DB	26	ALA
33	DB	38	HIS
33	DB	50	HIS
33	DB	61	VAL
33	DB	65	ASP
33	DB	79	ASN
33	DB	83	HIS
33	DB	84	THR
33	DB	90	ALA
33	DB	92	LYS
33	DB	98	VAL
33	DB	107	VAL
33	DB	108	PRO
33	DB	110	GLY
33	DB	111	THR
33	DB	120	PRO
33	DB	137	ILE
33	DB	139	HIS
33	DB	141	PRO
33	DB	149	ARG
33	DB	152	SER
33	DB	157	VAL
33	DB	163	ARG
33	DB	166	ILE
33	DB	176	ASP
33	DB	178	PRO
33	DB	182	ALA
33	DB	188	LYS

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Mol	Chain	Res	Type
33	DB	197	PRO
33	DB	199	THR
33	DB	208	ASP
33	DB	210	PRO
33	DB	211	HIS
33	DB	216	HIS
33	DB	217	GLN
33	DB	219	ILE
33	DB	222	ALA
33	DB	230	VAL
33	DB	233	GLN
33	DB	234	LYS
33	DB	235	ALA
33	DB	237	LEU
33	DB	241	ARG
33	DB	242	ARG
33	DB	243	THR
34	DC	21	ARG
34	DC	23	ALA
34	DC	40	PRO
34	DC	41	VAL
34	DC	42	ALA
34	DC	43	LEU
34	DC	44	THR
34	DC	47	LEU
34	DC	51	ALA
34	DC	61	ASP
34	DC	63	PRO
34	DC	71	GLU
34	DC	81	THR
34	DC	82	PRO
34	DC	83	PRO
34	DC	86	VAL
34	DC	89	VAL
34	DC	93	VAL
34	DC	94	GLU
34	DC	97	ARG
34	DC	105	VAL
34	DC	106	TRP
34	DC	109	HIS
34	DC	110	LEU
34	DC	113	GLU

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Mol	Chain	Res	Type
34	DC	117	ARG
34	DC	122	TRP
34	DC	123	TYR
34	DC	131	THR
34	DC	132	LYS
34	DC	137	TYR
34	DC	139	GLN
34	DC	143	GLY
34	DC	153	LYS
34	DC	157	VAL
34	DC	158	VAL
34	DC	160	VAL
34	DC	165	GLN
34	DC	166	ILE
34	DC	167	ARG
34	DC	170	PRO
34	DC	173	GLN
34	DC	174	LYS
34	DC	175	LYS
34	DC	176	ALA
34	DC	179	ALA
34	DC	181	ILE
34	DC	187	SER
34	DC	188	ILE
34	DC	197	GLU
34	DC	199	PHE
34	DC	200	GLU
34	DC	209	PHE
34	DC	220	VAL
34	DC	221	THR
34	DC	238	LEU
34	DC	239	PRO
34	DC	244	ARG
34	DC	248	LYS
34	DC	251	CYS
34	DC	259	HIS
34	DC	261	MET
34	DC	264	VAL
34	DC	270	ARG
34	DC	272	TYR
34	DC	274	SER
34	DC	279	ASN

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Mol	Chain	Res	Type
34	DC	284	ARG
34	DC	286	GLY
34	DC	296	THR
34	DC	301	THR
34	DC	303	LYS
34	DC	306	THR
34	DC	307	PRO
34	DC	317	ILE
34	DC	318	LYS
34	DC	320	ASP
34	DC	324	VAL
34	DC	327	CYS
34	DC	331	ASN
34	DC	333	LYS
34	DC	335	ILE
34	DC	340	LYS
34	DC	346	THR
34	DC	351	LEU
34	DC	359	ILE
35	DD	19	ALA
35	DD	21	PRO
35	DD	23	PRO
35	DD	28	ALA
35	DD	54	GLU
35	DD	69	ARG
35	DD	77	VAL
35	DD	90	PHE
35	DD	100	PHE
35	DD	102	PRO
35	DD	107	ARG
35	DD	116	ASN
35	DD	131	VAL
35	DD	140	HIS
35	DD	149	PRO
35	DD	150	LEU
35	DD	154	THR
35	DD	159	ILE
35	DD	166	VAL
35	DD	182	LEU
35	DD	194	TYR
35	DD	239	ALA
35	DD	252	GLU

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Mol	Chain	Res	Type
35	DD	254	ALA
35	DD	257	LYS
35	DD	258	LEU
35	DD	261	VAL
35	DD	266	THR
35	DD	267	VAL
36	DE	12	TYR
36	DE	13	SER
36	DE	17	GLN
36	DE	18	THR
36	DE	19	PRO
36	DE	21	ARG
36	DE	32	GLN
36	DE	42	ALA
36	DE	43	LYS
36	DE	46	THR
36	DE	47	PRO
36	DE	48	LYS
36	DE	49	TYR
36	DE	50	ARG
36	DE	68	THR
36	DE	69	ILE
36	DE	78	ALA
36	DE	83	LEU
36	DE	84	PRO
36	DE	88	ILE
36	DE	101	THR
36	DE	122	VAL
36	DE	139	PRO
36	DE	148	ILE
36	DE	151	GLN
36	DE	159	VAL
36	DE	160	PHE
36	DE	171	LEU
36	DE	174	PRO
36	DE	178	ASN
36	DE	185	PHE
36	DE	191	ASP
36	DE	200	PHE
36	DE	211	LEU
36	DE	214	ASP
36	DE	231	ILE

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Mol	Chain	Res	Type
36	DE	234	ASP
36	DE	235	SER
36	DE	238	ASP
36	DE	239	ILE
36	DE	242	SER
36	DE	246	ALA
36	DE	256	THR
36	DE	271	LYS
36	DE	293	LEU
37	DF	4	GLN
37	DF	6	ALA
37	DF	7	PRO
37	DF	10	TYR
37	DF	11	PRO
37	DF	13	GLU
37	DF	21	THR
37	DF	27	PRO
37	DF	28	GLN
37	DF	32	ALA
37	DF	33	SER
37	DF	34	LEU
37	DF	39	VAL
37	DF	44	ALA
37	DF	47	PHE
37	DF	52	VAL
37	DF	53	VAL
37	DF	58	LEU
37	DF	68	PRO
37	DF	70	LYS
37	DF	71	VAL
37	DF	85	ILE
37	DF	90	LYS
37	DF	92	SER
37	DF	93	VAL
37	DF	99	GLU
37	DF	106	PHE
37	DF	109	GLU
37	DF	110	LYS
37	DF	116	LYS
37	DF	118	GLU
37	DF	122	PHE
37	DF	126	GLN

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Mol	Chain	Res	Type
37	DF	137	ASP
37	DF	144	ALA
37	DF	146	ILE
37	DF	150	LYS
37	DF	151	LYS
37	DF	167	ASN
37	DF	172	HIS
37	DF	174	LEU
38	DG	32	ALA
38	DG	49	ALA
38	DG	50	ALA
38	DG	70	LYS
38	DG	81	HIS
38	DG	82	LYS
38	DG	84	VAL
38	DG	85	PHE
38	DG	86	VAL
38	DG	96	PRO
38	DG	97	PRO
38	DG	112	ASN
38	DG	136	TYR
38	DG	138	TYR
38	DG	148	VAL
38	DG	149	TYR
38	DG	156	ILE
38	DG	160	ARG
38	DG	162	PRO
38	DG	177	GLY
38	DG	180	SER
38	DG	188	ILE
38	DG	193	PRO
38	DG	195	PHE
38	DG	202	LEU
38	DG	204	PRO
38	DG	206	LYS
38	DG	210	PRO
38	DG	217	PRO
38	DG	220	PHE
38	DG	223	PHE
38	DG	224	ILE
38	DG	228	SER
38	DG	229	PHE

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Mol	Chain	Res	Type
38	DG	232	ARG
39	DH	96	LYS
39	DH	99	PRO
39	DH	109	LEU
39	DH	110	THR
39	DH	128	LYS
39	DH	131	ALA
39	DH	132	VAL
39	DH	151	VAL
39	DH	179	ILE
39	DH	181	LYS
39	DH	194	THR
39	DH	201	THR
39	DH	203	VAL
39	DH	210	ALA
39	DH	212	ALA
39	DH	214	LEU
39	DH	227	ASP
39	DH	233	TRP
39	DH	245	LYS
39	DH	249	ARG
40	DI	2	LYS
40	DI	5	GLN
40	DI	22	SER
40	DI	30	PRO
40	DI	41	ILE
40	DI	43	VAL
40	DI	46	THR
40	DI	53	ILE
40	DI	86	TYR
40	DI	104	VAL
40	DI	110	LYS
40	DI	122	LYS
40	DI	127	PRO
40	DI	138	THR
40	DI	140	VAL
40	DI	141	LYS
40	DI	142	ASP
40	DI	167	VAL
40	DI	169	ASN
40	DI	170	LYS
40	DI	171	ASP

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Mol	Chain	Res	Type
40	DI	172	ILE
40	DI	186	PHE
40	DI	189	GLU
41	DJ	5	PRO
41	DJ	11	TYR
41	DJ	13	LYS
41	DJ	14	ASN
41	DJ	16	PRO
41	DJ	17	TYR
41	DJ	25	ALA
41	DJ	29	SER
41	DJ	34	TYR
41	DJ	39	LYS
41	DJ	43	VAL
41	DJ	46	PHE
41	DJ	48	LEU
41	DJ	56	GLU
41	DJ	57	LEU
41	DJ	70	ILE
41	DJ	92	HIS
41	DJ	115	MET
41	DJ	136	PHE
41	DJ	145	LYS
41	DJ	160	PRO
41	DJ	162	GLN
41	DJ	169	LYS
41	DJ	175	ASN
41	DJ	178	ARG
41	DJ	190	VAL
41	DJ	201	SER
41	DJ	208	ASN
42	DK	8	PRO
42	DK	18	VAL
42	DK	23	VAL
42	DK	32	ARG
42	DK	34	SER
42	DK	45	PRO
42	DK	49	LYS
42	DK	50	ALA
42	DK	54	VAL
42	DK	55	ARG
42	DK	56	THR

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Mol	Chain	Res	Type
42	DK	62	ASN
42	DK	65	ILE
42	DK	66	ALA
42	DK	69	VAL
42	DK	76	ALA
42	DK	77	GLU
42	DK	82	ARG
42	DK	85	LYS
42	DK	86	VAL
42	DK	88	GLU
42	DK	102	PHE
42	DK	108	GLU
42	DK	110	ILE
42	DK	115	LYS
42	DK	118	PRO
42	DK	120	ILE
42	DK	122	ILE
42	DK	129	VAL
42	DK	132	ASN
42	DK	133	ARG
42	DK	134	PRO
42	DK	143	ARG
42	DK	148	VAL
42	DK	154	THR
72	DL	10	VAL
72	DL	17	ALA
72	DL	18	VAL
72	DL	25	SER
72	DL	31	LYS
72	DL	35	LEU
72	DL	38	SER
72	DL	39	PRO
72	DL	49	ALA
72	DL	56	ILE
72	DL	58	VAL
72	DL	75	PRO
72	DL	77	ALA
72	DL	78	SER
72	DL	88	PRO
72	DL	90	ARG
72	DL	104	ILE
72	DL	106	LEU

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Mol	Chain	Res	Type
72	DL	112	ILE
72	DL	113	ALA
72	DL	124	THR
72	DL	141	CYS
73	DM	28	VAL
73	DM	30	VAL
73	DM	32	ASN
73	DM	33	VAL
73	DM	34	SER
73	DM	46	ARG
73	DM	60	ARG
73	DM	62	ALA
73	DM	70	LEU
73	DM	76	LEU
73	DM	77	LEU
73	DM	86	PHE
73	DM	91	GLU
73	DM	92	PRO
73	DM	100	ILE
73	DM	102	SER
73	DM	187	VAL
73	DM	188	VAL
73	DM	189	GLN
73	DM	191	TYR
73	DM	192	ASP
73	DM	198	PRO
43	DN	10	SER
43	DN	15	VAL
43	DN	19	ARG
43	DN	20	VAL
43	DN	23	ILE
43	DN	24	LYS
43	DN	25	LYS
43	DN	27	GLN
43	DN	29	ALA
43	DN	32	LEU
43	DN	43	LYS
43	DN	44	VAL
43	DN	54	PRO
43	DN	55	ARG
43	DN	60	LEU
43	DN	62	GLN

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Mol	Chain	Res	Type
43	DN	63	VAL
43	DN	64	VAL
43	DN	66	THR
43	DN	67	PRO
43	DN	70	PHE
43	DN	74	ARG
43	DN	81	VAL
43	DN	82	SER
43	DN	90	VAL
43	DN	103	ILE
43	DN	111	ALA
43	DN	126	GLN
43	DN	127	LYS
44	DO	17	ASP
44	DO	30	TYR
44	DO	35	VAL
44	DO	39	ALA
44	DO	42	PRO
44	DO	46	ASP
44	DO	53	TYR
44	DO	54	LYS
44	DO	55	ALA
44	DO	60	VAL
44	DO	75	VAL
44	DO	76	PRO
44	DO	79	ALA
44	DO	83	LYS
44	DO	84	PRO
44	DO	96	ARG
44	DO	97	SER
44	DO	98	LEU
44	DO	121	VAL
44	DO	127	TYR
44	DO	136	ASP
44	DO	156	HIS
44	DO	160	GLU
44	DO	161	ALA
45	DP	5	PRO
45	DP	12	LYS
45	DP	19	LEU
45	DP	37	ARG
45	DP	61	ALA

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Mol	Chain	Res	Type
45	DP	66	LYS
45	DP	69	GLY
45	DP	70	PRO
45	DP	75	ALA
45	DP	76	PRO
45	DP	77	SER
45	DP	100	GLU
45	DP	108	ILE
45	DP	109	PRO
45	DP	110	PRO
45	DP	112	TYR
45	DP	115	LYS
45	DP	116	LYS
45	DP	120	VAL
45	DP	121	PRO
45	DP	125	ARG
45	DP	126	VAL
45	DP	128	ARG
45	DP	131	PRO
45	DP	134	LYS
45	DP	138	LEU
45	DP	147	TRP
45	DP	188	SER
46	DQ	9	THR
46	DQ	10	ASN
46	DQ	12	ALA
46	DQ	20	SER
46	DQ	30	ARG
46	DQ	31	GLU
46	DQ	33	ALA
46	DQ	48	LEU
46	DQ	52	LEU
46	DQ	56	ARG
46	DQ	69	ARG
46	DQ	71	ALA
46	DQ	75	GLU
46	DQ	83	TRP
46	DQ	84	PRO
46	DQ	106	GLY
46	DQ	110	THR
46	DQ	114	VAL
46	DQ	118	GLN

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Mol	Chain	Res	Type
46	DQ	122	ALA
46	DQ	123	PRO
46	DQ	142	SER
47	DR	18	ALA
47	DR	19	PRO
47	DR	22	ASP
47	DR	39	ARG
47	DR	42	ALA
47	DR	43	PRO
47	DR	60	PRO
47	DR	61	PRO
47	DR	76	ALA
47	DR	93	ILE
47	DR	97	PRO
47	DR	103	ALA
47	DR	104	LEU
47	DR	108	ALA
47	DR	110	ALA
47	DR	111	ARG
47	DR	112	ALA
47	DR	117	ALA
47	DR	123	THR
47	DR	143	PRO
47	DR	145	ASN
47	DR	146	SER
47	DR	153	PHE
48	DS	3	ASN
48	DS	12	ALA
48	DS	19	LYS
48	DS	130	ASN
48	DS	133	LYS
48	DS	134	HIS
48	DS	143	ILE
49	DT	16	GLN
49	DT	31	LEU
49	DT	32	LYS
49	DT	34	TYR
49	DT	35	LYS
49	DT	49	GLN
49	DT	54	HIS
49	DT	64	VAL
49	DT	66	ASN

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Mol	Chain	Res	Type
49	DT	67	VAL
49	DT	70	SER
49	DT	75	ILE
49	DT	76	ILE
49	DT	79	MET
49	DT	81	GLY
49	DT	85	LEU
49	DT	98	HIS
49	DT	99	SER
49	DT	110	LYS
50	DU	19	VAL
50	DU	40	LYS
50	DU	46	LEU
50	DU	47	ASN
50	DU	54	LEU
50	DU	66	LYS
50	DU	80	ARG
50	DU	81	GLN
50	DU	82	ALA
50	DU	94	TYR
50	DU	95	PHE
50	DU	97	ASP
50	DU	98	ASN
50	DU	112	SER
50	DU	131	SER
50	DU	134	GLY
50	DU	135	VAL
51	DV	4	GLU
51	DV	5	ILE
51	DV	6	ASP
51	DV	8	PHE
51	DV	22	VAL
51	DV	23	ARG
51	DV	25	ASP
51	DV	28	ILE
51	DV	29	PHE
51	DV	33	ASN
51	DV	34	SER
51	DV	35	LYS
51	DV	52	THR
51	DV	57	LYS
52	DW	51	VAL

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Mol	Chain	Res	Type
52	DW	52	PRO
52	DW	53	HIS
52	DW	58	ASP
52	DW	60	TYR
52	DW	61	LYS
52	DW	62	VAL
52	DW	64	GLU
52	DW	66	PRO
52	DW	67	ILE
52	DW	70	GLU
52	DW	84	PHE
52	DW	102	LEU
52	DW	104	GLU
52	DW	106	ASP
52	DW	129	ASP
53	DX	15	ALA
53	DX	19	TYR
53	DX	20	PHE
53	DX	58	VAL
53	DX	59	VAL
53	DX	101	PRO
54	DY	3	SER
54	DY	9	ARG
54	DY	10	LYS
54	DY	12	ARG
54	DY	21	ARG
54	DY	22	ILE
54	DY	27	LYS
54	DY	30	GLY
54	DY	36	GLY
54	DY	40	HIS
54	DY	43	ILE
54	DY	44	ASN
54	DY	50	PRO
54	DY	56	VAL
54	DY	60	TYR
54	DY	61	PHE
54	DY	62	HIS
54	DY	69	TRP
54	DY	74	ASN
54	DY	78	LEU
54	DY	79	TRP

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Mol	Chain	Res	Type
54	DY	85	ASP
54	DY	88	ASP
54	DY	90	TYR
54	DY	91	LEU
54	DY	94	ALA
54	DY	98	THR
54	DY	102	ILE
54	DY	112	ILE
54	DY	114	GLY
54	DY	117	ARG
54	DY	118	ILE
54	DY	119	PRO
54	DY	127	ALA
54	DY	130	VAL
54	DY	132	LYS
54	DY	148	ILE
55	DZ	25	LEU
55	DZ	27	TYR
55	DZ	50	VAL
55	DZ	63	SER
55	DZ	83	LYS
55	DZ	86	ARG
55	DZ	89	VAL
56	Da	6	ASP
56	Da	7	VAL
56	Da	14	ILE
56	Da	15	ASN
56	Da	16	LEU
56	Da	25	PHE
56	Da	29	ALA
56	Da	44	MET
56	Da	47	ASP
56	Da	59	ILE
56	Da	60	TRP
56	Da	79	ARG
56	Da	85	ALA
57	Db	6	HIS
57	Db	7	PRO
57	Db	20	HIS
57	Db	22	SER
57	Db	24	ARG
57	Db	30	GLU

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Mol	Chain	Res	Type
57	Db	33	ARG
57	Db	50	ILE
57	Db	52	GLN
57	Db	53	PRO
57	Db	56	GLY
57	Db	61	LYS
57	Db	64	LYS
57	Db	68	PRO
57	Db	69	SER
57	Db	79	VAL
57	Db	96	ILE
57	Db	101	SER
57	Db	109	LEU
57	Db	110	ALA
57	Db	121	ASN
58	Dc	11	THR
58	Dc	38	ARG
58	Dc	40	SER
59	Dd	5	THR
59	Dd	38	GLY
59	Dd	42	ALA
59	Dd	47	TYR
59	Dd	64	MET
59	Dd	65	ARG
59	Dd	67	LEU
59	Dd	68	LYS
59	Dd	71	SER
60	De	27	ILE
60	De	33	ASN
60	De	35	ILE
60	De	45	ARG
61	Df	5	PRO
61	Df	9	LYS
61	Df	13	LYS
61	Df	34	SER
61	Df	53	GLN
61	Df	66	LYS
61	Df	88	CYS
61	Df	93	LEU
62	Dg	16	VAL
62	Dg	18	TYR
62	Dg	34	HIS

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Mol	Chain	Res	Type
62	Dg	35	ALA
62	Dg	37	TYR
62	Dg	48	LYS
62	Dg	49	ARG
62	Dg	53	GLY
62	Dg	55	TRP
62	Dg	66	GLY
62	Dg	81	SER
62	Dg	82	THR
62	Dg	83	ILE
2	AA	26	ALA
2	AA	85	ALA
2	AA	89	PHE
2	AA	116	LYS
2	AA	128	SER
2	AA	131	GLN
2	AA	148	ASP
2	AA	164	ASN
2	AA	171	GLY
2	AA	177	LEU
2	AA	189	VAL
2	AA	192	THR
2	AA	198	MET
2	AA	207	PRO
2	AA	211	GLU
2	AA	212	GLN
3	AB	40	LYS
3	AB	63	VAL
3	AB	69	ILE
3	AB	75	GLY
3	AB	124	ALA
3	AB	127	ALA
3	AB	150	GLN
3	AB	154	LEU
3	AB	161	LYS
3	AB	167	VAL
3	AB	185	LYS
3	AB	186	LYS
3	AB	213	ALA
3	AB	214	ALA
3	AB	224	PHE
4	AC	17	PHE

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Mol	Chain	Res	Type
4	AC	18	TYR
4	AC	55	THR
4	AC	61	GLU
4	AC	65	ARG
4	AC	74	GLN
4	AC	77	PHE
4	AC	95	GLY
4	AC	99	VAL
4	AC	130	GLY
4	AC	142	LEU
4	AC	143	ARG
4	AC	153	ALA
4	AC	159	HIS
4	AC	193	ALA
5	AD	43	PHE
5	AD	56	ALA
5	AD	60	ASP
5	AD	64	VAL
5	AD	89	ILE
5	AD	108	LEU
5	AD	113	ILE
5	AD	122	ASN
5	AD	140	THR
5	AD	144	GLU
5	AD	153	GLY
5	AD	166	ARG
5	AD	167	ARG
5	AD	181	GLU
5	AD	183	ALA
5	AD	197	GLU
5	AD	211	ILE
5	AD	215	ASP
6	AE	38	ASN
6	AE	63	ASP
6	AE	66	ASP
6	AE	88	GLU
6	AE	113	VAL
6	AE	133	HIS
6	AE	137	GLY
6	AE	139	GLN
6	AE	170	GLY
7	AF	96	LYS

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Mol	Chain	Res	Type
7	AF	109	VAL
7	AF	121	ASP
7	AF	127	GLN
8	AG	52	VAL
8	AG	54	LEU
8	AG	58	HIS
8	AG	128	TYR
9	AH	6	GLN
9	AH	19	ILE
9	AH	25	ASP
9	AH	28	VAL
9	AH	45	GLY
9	AH	97	GLY
9	AH	124	ASP
10	AI	22	LEU
10	AI	28	MET
10	AI	32	ASP
10	AI	34	VAL
10	AI	35	LYS
10	AI	45	PHE
10	AI	65	LEU
10	AI	113	GLY
11	AJ	43	ILE
11	AJ	62	ASN
11	AJ	92	TYR
11	AJ	98	ASP
11	AJ	104	GLU
11	AJ	107	LYS
11	AJ	129	PHE
12	AK	33	ARG
12	AK	47	ARG
12	AK	56	HIS
12	AK	63	LYS
12	AK	68	GLY
13	AL	47	CYS
13	AL	84	TRP
13	AL	101	LEU
14	AM	28	LEU
14	AM	29	GLU
14	AM	51	GLU
14	AM	54	PHE
14	AM	58	ALA

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Mol	Chain	Res	Type
14	AM	102	ARG
14	AM	103	LYS
14	AM	121	GLY
14	AM	122	ARG
15	AN	33	GLN
15	AN	37	VAL
15	AN	84	MET
15	AN	116	VAL
16	AO	22	LYS
16	AO	56	HIS
16	AO	62	VAL
16	AO	68	ARG
16	AO	72	CYS
16	AO	113	HIS
17	AP	32	ARG
17	AP	33	LEU
17	AP	41	SER
17	AP	42	PRO
17	AP	100	ASP
17	AP	114	LYS
17	AP	122	PHE
17	AP	129	GLY
17	AP	139	LYS
18	AQ	41	ILE
18	AQ	66	VAL
18	AQ	86	GLU
19	AR	28	VAL
19	AR	29	ARG
19	AR	41	VAL
19	AR	45	LYS
20	AS	16	LYS
20	AS	39	CYS
20	AS	40	ARG
20	AS	44	ARG
20	AS	47	ALA
20	AS	49	ASP
20	AS	52	PHE
21	AT	21	THR
21	AT	28	GLY
21	AT	49	GLY
21	AT	59	ARG
21	AT	95	ALA

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Mol	Chain	Res	Type
21	AT	108	SER
21	AT	112	SER
21	AT	140	CYS
21	AT	149	ASP
21	AT	176	LYS
21	AT	186	PHE
21	AT	188	ILE
21	AT	196	ASN
21	AT	202	LEU
21	AT	203	THR
21	AT	231	MET
21	AT	237	GLN
21	AT	244	ALA
21	AT	270	LEU
21	AT	283	LYS
21	AT	298	GLY
32	BA	25	LYS
32	BA	26	ARG
32	BA	41	TYR
32	BA	44	GLN
32	BA	47	LYS
32	BA	67	ILE
32	BA	77	ALA
32	BA	96	ASN
32	BA	117	ILE
32	BA	123	LEU
32	BA	169	VAL
32	BA	193	LEU
32	BA	194	LEU
32	BA	196	LYS
32	BA	197	ASN
32	BA	204	LEU
32	BA	206	VAL
33	BB	9	ARG
33	BB	19	HIS
33	BB	54	ARG
33	BB	92	LYS
33	BB	103	PRO
33	BB	118	GLU
33	BB	121	GLY
33	BB	122	ASP
33	BB	134	VAL

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Mol	Chain	Res	Type
33	BB	151	PRO
33	BB	163	ARG
33	BB	165	VAL
33	BB	169	ILE
33	BB	171	GLY
33	BB	183	GLY
33	BB	212	GLY
33	BB	216	HIS
33	BB	227	ARG
33	BB	231	SER
34	BC	2	SER
34	BC	7	GLU
34	BC	30	LYS
34	BC	37	ARG
34	BC	45	SER
34	BC	51	ALA
34	BC	69	LYS
34	BC	82	PRO
34	BC	92	TYR
34	BC	101	SER
34	BC	107	ALA
34	BC	134	SER
34	BC	148	LEU
34	BC	157	VAL
34	BC	179	ALA
34	BC	181	ILE
34	BC	194	TRP
34	BC	198	HIS
34	BC	203	VAL
34	BC	208	VAL
34	BC	224	HIS
34	BC	241	LYS
34	BC	251	CYS
34	BC	260	VAL
34	BC	286	GLY
34	BC	294	GLY
34	BC	305	ILE
34	BC	340	LYS
34	BC	343	TYR
34	BC	348	ARG
34	BC	361	THR
35	BD	16	THR

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Mol	Chain	Res	Type
35	BD	33	ASP
35	BD	55	LYS
35	BD	66	GLY
35	BD	68	GLY
35	BD	83	GLY
35	BD	135	VAL
35	BD	154	THR
35	BD	181	VAL
35	BD	189	ALA
35	BD	190	GLY
35	BD	193	LYS
35	BD	204	GLY
35	BD	238	LEU
36	BE	10	SER
36	BE	20	PHE
36	BE	29	ASP
36	BE	40	HIS
36	BE	42	ALA
36	BE	43	LYS
36	BE	45	ASN
36	BE	95	TRP
36	BE	111	GLN
36	BE	120	LYS
36	BE	122	VAL
36	BE	131	LEU
36	BE	140	ARG
36	BE	158	ARG
36	BE	195	LEU
36	BE	209	GLU
36	BE	216	GLU
36	BE	223	PHE
36	BE	227	LEU
36	BE	235	SER
36	BE	240	TYR
36	BE	242	SER
36	BE	249	ALA
36	BE	268	GLU
36	BE	282	ARG
37	BF	18	LEU
37	BF	21	THR
37	BF	58	LEU
37	BF	147	ALA

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Mol	Chain	Res	Type
38	BG	34	LYS
38	BG	70	LYS
38	BG	154	GLY
38	BG	219	LYS
39	BH	86	THR
39	BH	94	PHE
39	BH	100	GLU
39	BH	129	PRO
39	BH	157	VAL
39	BH	179	ILE
39	BH	208	GLU
39	BH	228	GLU
39	BH	229	VAL
39	BH	247	ASP
39	BH	248	LYS
40	BI	48	VAL
40	BI	52	LEU
40	BI	62	ARG
40	BI	64	HIS
40	BI	98	PRO
40	BI	129	ARG
40	BI	162	GLN
40	BI	171	ASP
41	BJ	12	GLN
41	BJ	21	ARG
41	BJ	28	ASP
41	BJ	35	ASP
41	BJ	36	LEU
41	BJ	78	THR
41	BJ	84	ALA
41	BJ	86	HIS
41	BJ	93	PRO
41	BJ	95	HIS
41	BJ	143	SER
41	BJ	175	ASN
41	BJ	177	ASP
41	BJ	185	ARG
41	BJ	189	GLU
41	BJ	196	PHE
41	BJ	207	GLU
42	BK	11	ASP
42	BK	31	THR

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Mol	Chain	Res	Type
42	BK	77	GLU
42	BK	82	ARG
42	BK	83	GLY
42	BK	92	ARG
42	BK	94	ARG
42	BK	112	LEU
42	BK	121	GLY
42	BK	123	PHE
42	BK	127	PHE
42	BK	141	ARG
42	BK	170	ASP
43	BN	32	LEU
43	BN	44	VAL
43	BN	56	GLN
43	BN	65	LEU
43	BN	73	PRO
43	BN	74	ARG
43	BN	77	ARG
43	BN	96	ALA
43	BN	104	ALA
43	BN	107	GLU
43	BN	118	PHE
43	BN	125	LYS
44	BO	16	SER
44	BO	21	PHE
44	BO	33	LYS
44	BO	52	GLY
44	BO	56	LYS
44	BO	78	GLY
44	BO	81	TYR
44	BO	110	ALA
44	BO	120	TRP
44	BO	149	ASN
44	BO	160	GLU
44	BO	164	LEU
44	BO	166	ALA
44	BO	176	LYS
45	BP	6	VAL
45	BP	19	LEU
45	BP	32	LYS
45	BP	58	LEU
45	BP	62	THR

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Mol	Chain	Res	Type
45	BP	69	GLY
45	BP	93	ALA
45	BP	96	LYS
45	BP	116	LYS
45	BP	129	LEU
45	BP	138	LEU
45	BP	163	SER
46	BQ	4	TYR
46	BQ	7	THR
46	BQ	13	LYS
46	BQ	26	PHE
46	BQ	48	LEU
46	BQ	70	THR
46	BQ	78	VAL
46	BQ	105	LYS
46	BQ	109	ALA
46	BQ	111	LYS
46	BQ	112	LEU
46	BQ	126	ARG
46	BQ	133	HIS
46	BQ	154	GLU
47	BR	20	LYS
47	BR	23	ASN
47	BR	24	VAL
47	BR	44	PHE
47	BR	67	ILE
47	BR	87	VAL
47	BR	98	LYS
47	BR	124	LEU
47	BR	127	LEU
47	BR	131	ALA
47	BR	146	SER
47	BR	154	GLY
48	BS	3	ASN
48	BS	55	VAL
48	BS	67	ALA
48	BS	128	LYS
48	BS	140	GLU
49	BT	19	PHE
49	BT	36	VAL
49	BT	48	ILE
49	BT	55	LYS

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Mol	Chain	Res	Type
49	BT	59	GLY
49	BT	72	VAL
49	BT	77	ASN
49	BT	99	SER
50	BU	28	ASN
50	BU	44	SER
50	BU	54	LEU
50	BU	79	VAL
50	BU	80	ARG
50	BU	82	ALA
50	BU	88	ARG
50	BU	98	ASN
50	BU	109	MET
51	BV	2	LYS
51	BV	42	GLN
51	BV	44	LYS
51	BV	53	VAL
52	BW	55	ASN
52	BW	60	TYR
52	BW	86	VAL
52	BW	89	LYS
52	BW	92	LYS
52	BW	95	ILE
52	BW	104	GLU
52	BW	138	ARG
53	BX	15	ALA
53	BX	25	SER
53	BX	50	ILE
53	BX	71	SER
53	BX	83	ASP
53	BX	92	GLY
53	BX	113	LYS
53	BX	116	LYS
54	BY	14	HIS
54	BY	37	GLY
54	BY	53	PHE
54	BY	62	HIS
54	BY	81	LEU
54	BY	127	ALA
54	BY	131	SER
55	BZ	25	LEU
55	BZ	42	ILE

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Mol	Chain	Res	Type
55	BZ	50	VAL
55	BZ	53	LYS
56	Ba	17	HIS
56	Ba	50	ARG
57	Bb	15	LYS
57	Bb	24	ARG
57	Bb	41	VAL
57	Bb	43	ARG
57	Bb	45	ARG
57	Bb	58	GLY
57	Bb	62	LYS
57	Bb	63	THR
57	Bb	89	THR
57	Bb	107	VAL
57	Bb	123	LYS
58	Bc	11	THR
58	Bc	27	GLU
58	Bc	37	SER
59	Bd	7	SER
59	Bd	9	GLY
59	Bd	12	HIS
59	Bd	20	ASN
59	Bd	26	SER
59	Bd	38	GLY
59	Bd	50	GLY
59	Bd	66	TYR
60	Be	26	TRP
60	Be	31	THR
60	Be	33	ASN
60	Be	34	THR
60	Be	35	ILE
61	Bf	6	LYS
61	Bf	9	LYS
61	Bf	11	TYR
61	Bf	21	THR
61	Bf	41	ARG
61	Bf	46	LYS
61	Bf	57	VAL
61	Bf	58	PHE
61	Bf	81	ALA
61	Bf	88	CYS
62	Bg	15	GLY

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Mol	Chain	Res	Type
62	Bg	66	GLY
62	Bg	67	GLY
62	Bg	82	THR
2	CA	12	GLU
2	CA	26	ALA
2	CA	88	LYS
2	CA	116	LYS
2	CA	121	VAL
2	CA	124	THR
2	CA	128	SER
2	CA	131	GLN
2	CA	148	ASP
2	CA	164	ASN
2	CA	171	GLY
2	CA	177	LEU
2	CA	187	ALA
2	CA	189	VAL
2	CA	207	PRO
2	CA	211	GLU
2	CA	212	GLN
3	CB	38	VAL
3	CB	75	GLY
3	CB	98	PHE
3	CB	124	ALA
3	CB	127	ALA
3	CB	134	LEU
3	CB	146	THR
3	CB	154	LEU
3	CB	167	VAL
3	CB	169	LEU
3	CB	185	LYS
3	CB	202	GLY
3	CB	224	PHE
3	CB	228	ASN
3	CB	233	GLN
3	CB	240	LEU
4	CC	18	TYR
4	CC	42	THR
4	CC	55	THR
4	CC	65	ARG
4	CC	77	PHE
4	CC	95	GLY

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Mol	Chain	Res	Type
4	CC	97	SER
4	CC	98	ALA
4	CC	99	VAL
4	CC	115	ILE
4	CC	130	GLY
4	CC	132	LYS
4	CC	142	LEU
4	CC	153	ALA
5	CD	48	PHE
5	CD	58	LEU
5	CD	93	LEU
5	CD	94	THR
5	CD	113	ILE
5	CD	122	ASN
5	CD	135	ASP
5	CD	183	ALA
5	CD	195	ALA
5	CD	197	GLU
6	CE	63	ASP
6	CE	85	VAL
6	CE	88	GLU
6	CE	113	VAL
6	CE	133	HIS
6	CE	137	GLY
6	CE	139	GLN
6	CE	146	PHE
7	CF	96	LYS
7	CF	109	VAL
7	CF	119	VAL
7	CF	121	ASP
7	CF	127	GLN
7	CF	140	VAL
8	CG	54	LEU
8	CG	128	TYR
8	CG	138	ASN
9	CH	3	ASN
9	CH	6	GLN
9	CH	19	ILE
9	CH	25	ASP
9	CH	28	VAL
9	CH	45	GLY
9	CH	64	ALA

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Mol	Chain	Res	Type
9	CH	73	GLU
9	CH	97	GLY
9	CH	124	ASP
9	CH	128	LYS
10	CI	12	PHE
10	CI	18	ARG
10	CI	22	LEU
10	CI	28	MET
10	CI	35	LYS
10	CI	65	LEU
10	CI	70	ASN
10	CI	81	ARG
10	CI	113	GLY
10	CI	116	LEU
11	CJ	43	ILE
11	CJ	62	ASN
11	CJ	74	HIS
11	CJ	82	ARG
11	CJ	92	TYR
11	CJ	104	GLU
11	CJ	106	LYS
11	CJ	110	THR
11	CJ	125	GLU
11	CJ	129	PHE
11	CJ	136	SER
12	CK	56	HIS
12	CK	63	LYS
12	CK	68	GLY
13	CL	44	ASN
13	CL	46	VAL
13	CL	84	TRP
14	CM	4	VAL
14	CM	51	GLU
14	CM	54	PHE
14	CM	58	ALA
14	CM	102	ARG
14	CM	117	SER
15	CN	13	GLU
15	CN	33	GLN
15	CN	37	VAL
15	CN	97	VAL
15	CN	101	LYS

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Mol	Chain	Res	Type
15	CN	113	ASP
15	CN	116	VAL
16	CO	22	LYS
16	CO	56	HIS
16	CO	62	VAL
16	CO	68	ARG
16	CO	72	CYS
16	CO	81	VAL
16	CO	94	LEU
16	CO	100	GLY
16	CO	113	HIS
17	CP	37	ALA
17	CP	42	PRO
17	CP	70	LYS
17	CP	81	LYS
17	CP	100	ASP
17	CP	114	LYS
17	CP	128	SER
17	CP	129	GLY
17	CP	139	LYS
18	CQ	42	LEU
18	CQ	66	VAL
18	CQ	75	LEU
19	CR	28	VAL
19	CR	29	ARG
19	CR	41	VAL
19	CR	43	ASN
19	CR	45	LYS
20	CS	27	HIS
20	CS	39	CYS
20	CS	44	ARG
20	CS	47	ALA
20	CS	49	ASP
21	CT	21	THR
21	CT	28	GLY
21	CT	49	GLY
21	CT	59	ARG
21	CT	94	VAL
21	CT	95	ALA
21	CT	108	SER
21	CT	112	SER
21	CT	136	ILE

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Mol	Chain	Res	Type
21	CT	140	CYS
21	CT	149	ASP
21	CT	188	ILE
21	CT	196	ASN
21	CT	202	LEU
21	CT	203	THR
21	CT	244	ALA
21	CT	247	PRO
21	CT	268	GLN
21	CT	283	LYS
21	CT	298	GLY
21	CT	318	ALA
32	DA	15	GLU
32	DA	22	GLU
32	DA	73	ASP
32	DA	82	VAL
32	DA	93	LEU
32	DA	104	SER
32	DA	109	ALA
32	DA	130	LYS
32	DA	141	ASN
32	DA	160	LYS
32	DA	170	GLY
32	DA	172	VAL
32	DA	193	LEU
32	DA	200	ASN
33	DB	19	HIS
33	DB	118	GLU
33	DB	121	GLY
33	DB	122	ASP
33	DB	128	ARG
33	DB	136	ILE
33	DB	148	VAL
33	DB	165	VAL
33	DB	169	ILE
33	DB	171	GLY
33	DB	173	GLY
33	DB	183	GLY
33	DB	207	VAL
33	DB	212	GLY
33	DB	214	GLY
33	DB	220	GLY

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Mol	Chain	Res	Type
33	DB	224	THR
33	DB	231	SER
34	DC	3	HIS
34	DC	7	GLU
34	DC	12	GLY
34	DC	30	LYS
34	DC	45	SER
34	DC	49	TYR
34	DC	57	VAL
34	DC	101	SER
34	DC	104	THR
34	DC	107	ALA
34	DC	134	SER
34	DC	146	ARG
34	DC	148	LEU
34	DC	194	TRP
34	DC	198	HIS
34	DC	203	VAL
34	DC	208	VAL
34	DC	224	HIS
34	DC	257	PRO
34	DC	273	HIS
34	DC	275	ARG
34	DC	278	ILE
34	DC	290	ASP
34	DC	294	GLY
34	DC	305	ILE
34	DC	319	ASN
34	DC	336	VAL
34	DC	343	TYR
34	DC	361	THR
35	DD	8	VAL
35	DD	24	ALA
35	DD	33	ASP
35	DD	66	GLY
35	DD	68	GLY
35	DD	71	VAL
35	DD	83	GLY
35	DD	135	VAL
35	DD	160	GLN
35	DD	181	VAL
35	DD	189	ALA

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Mol	Chain	Res	Type
35	DD	190	GLY
35	DD	193	LYS
35	DD	204	GLY
35	DD	212	ASP
35	DD	232	SER
35	DD	265	GLU
35	DD	274	TYR
36	DE	10	SER
36	DE	20	PHE
36	DE	29	ASP
36	DE	45	ASN
36	DE	79	TYR
36	DE	95	TRP
36	DE	100	ALA
36	DE	111	GLN
36	DE	120	LYS
36	DE	131	LEU
36	DE	132	THR
36	DE	140	ARG
36	DE	177	GLU
36	DE	195	LEU
36	DE	209	GLU
36	DE	216	GLU
36	DE	227	LEU
36	DE	240	TYR
36	DE	249	ALA
36	DE	268	GLU
36	DE	282	ARG
37	DF	16	ALA
37	DF	18	LEU
37	DF	26	ARG
37	DF	86	ALA
37	DF	98	VAL
37	DF	121	LEU
37	DF	123	PRO
37	DF	127	ASN
37	DF	147	ALA
38	DG	30	ARG
38	DG	34	LYS
38	DG	69	ALA
38	DG	150	LYS
38	DG	154	GLY

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Mol	Chain	Res	Type
38	DG	222	HIS
38	DG	233	GLU
38	DG	234	GLU
39	DH	94	PHE
39	DH	98	ARG
39	DH	100	GLU
39	DH	129	PRO
39	DH	157	VAL
39	DH	196	ALA
39	DH	209	ALA
39	DH	228	GLU
39	DH	229	VAL
39	DH	238	LEU
39	DH	247	ASP
39	DH	248	LYS
40	DI	48	VAL
40	DI	52	LEU
40	DI	59	ASN
40	DI	98	PRO
40	DI	116	ASN
40	DI	129	ARG
40	DI	130	ASP
40	DI	162	GLN
41	DJ	12	GLN
41	DJ	21	ARG
41	DJ	28	ASP
41	DJ	35	ASP
41	DJ	36	LEU
41	DJ	41	ALA
41	DJ	61	SER
41	DJ	78	THR
41	DJ	84	ALA
41	DJ	85	PHE
41	DJ	86	HIS
41	DJ	93	PRO
41	DJ	94	PHE
41	DJ	95	HIS
41	DJ	143	SER
41	DJ	177	ASP
41	DJ	185	ARG
41	DJ	189	GLU
41	DJ	196	PHE

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Mol	Chain	Res	Type
41	DJ	212	GLU
42	DK	11	ASP
42	DK	15	GLU
42	DK	31	THR
42	DK	47	GLN
42	DK	52	TYR
42	DK	83	GLY
42	DK	92	ARG
42	DK	94	ARG
42	DK	98	ALA
42	DK	112	LEU
42	DK	121	GLY
42	DK	127	PHE
42	DK	141	ARG
42	DK	167	TYR
42	DK	170	ASP
72	DL	14	TYR
72	DL	21	GLU
72	DL	41	LYS
72	DL	55	GLY
72	DL	60	VAL
72	DL	66	ASN
72	DL	69	ALA
72	DL	71	ALA
72	DL	91	ASP
72	DL	117	ARG
72	DL	127	SER
72	DL	140	GLY
73	DM	4	ILE
73	DM	13	ALA
73	DM	35	SER
73	DM	37	GLN
73	DM	38	MET
73	DM	50	VAL
73	DM	53	MET
73	DM	66	PHE
73	DM	190	VAL
73	DM	201	ILE
43	DN	56	GLN
43	DN	59	ASN
43	DN	65	LEU
43	DN	71	ALA

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Mol	Chain	Res	Type
43	DN	73	PRO
43	DN	89	ALA
43	DN	100	ALA
43	DN	104	ALA
43	DN	118	PHE
43	DN	125	LYS
44	DO	16	SER
44	DO	21	PHE
44	DO	33	LYS
44	DO	52	GLY
44	DO	56	LYS
44	DO	80	THR
44	DO	110	ALA
44	DO	135	VAL
44	DO	142	ILE
44	DO	149	ASN
44	DO	166	ALA
44	DO	176	LYS
45	DP	6	VAL
45	DP	16	VAL
45	DP	32	LYS
45	DP	38	ALA
45	DP	58	LEU
45	DP	62	THR
45	DP	78	ARG
45	DP	83	ALA
45	DP	93	ALA
45	DP	129	LEU
45	DP	163	SER
45	DP	166	GLU
45	DP	167	TYR
46	DQ	26	PHE
46	DQ	34	GLN
46	DQ	70	THR
46	DQ	78	VAL
46	DQ	86	LYS
46	DQ	87	SER
46	DQ	111	LYS
46	DQ	112	LEU
46	DQ	126	ARG
47	DR	20	LYS
47	DR	23	ASN

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Mol	Chain	Res	Type
47	DR	24	VAL
47	DR	37	ALA
47	DR	44	PHE
47	DR	72	LYS
47	DR	87	VAL
47	DR	94	PHE
47	DR	98	LYS
47	DR	124	LEU
48	DS	55	VAL
48	DS	60	LYS
48	DS	72	GLU
48	DS	106	LEU
48	DS	128	LYS
48	DS	135	LYS
48	DS	140	GLU
49	DT	19	PHE
49	DT	43	LYS
49	DT	46	GLY
49	DT	48	ILE
49	DT	59	GLY
49	DT	69	LYS
49	DT	72	VAL
49	DT	73	GLY
50	DU	11	PHE
50	DU	28	ASN
50	DU	31	ALA
50	DU	56	ASP
50	DU	88	ARG
50	DU	105	PRO
51	DV	3	VAL
51	DV	36	SER
51	DV	42	GLN
51	DV	44	LYS
51	DV	46	PRO
52	DW	49	LYS
52	DW	55	ASN
52	DW	86	VAL
52	DW	88	MET
52	DW	92	LYS
52	DW	98	ALA
52	DW	130	TYR
52	DW	138	ARG

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Mol	Chain	Res	Type
53	DX	65	GLY
53	DX	71	SER
53	DX	79	ALA
53	DX	83	ASP
53	DX	92	GLY
53	DX	100	HIS
53	DX	116	LYS
54	DY	14	HIS
54	DY	34	MET
54	DY	37	GLY
54	DY	53	PHE
54	DY	65	GLN
55	DZ	42	ILE
55	DZ	53	LYS
56	Da	20	LEU
56	Da	26	LYS
56	Da	49	VAL
56	Da	61	LYS
56	Da	64	VAL
57	Db	12	LYS
57	Db	15	LYS
57	Db	43	ARG
57	Db	55	ILE
57	Db	58	GLY
57	Db	62	LYS
57	Db	63	THR
57	Db	75	LEU
57	Db	84	THR
57	Db	89	THR
57	Db	123	LYS
58	Dc	18	ALA
58	Dc	37	SER
59	Dd	7	SER
59	Dd	8	PHE
59	Dd	9	GLY
59	Dd	20	ASN
59	Dd	25	ARG
59	Dd	26	SER
59	Dd	28	HIS
59	Dd	29	VAL
59	Dd	35	SER
59	Dd	36	SER

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Mol	Chain	Res	Type
59	Dd	37	CYS
59	Dd	50	GLY
59	Dd	66	TYR
60	De	31	THR
60	De	34	THR
60	De	44	TRP
60	De	49	MET
61	Df	6	LYS
61	Df	11	TYR
61	Df	17	CYS
61	Df	21	THR
61	Df	41	ARG
61	Df	46	LYS
61	Df	47	GLN
61	Df	57	VAL
61	Df	58	PHE
61	Df	81	ALA
62	Dg	15	GLY
62	Dg	54	ILE
62	Dg	67	GLY
62	Dg	71	VAL
2	AA	12	GLU
2	AA	38	PHE
2	AA	88	LYS
2	AA	153	SER
2	AA	165	ARG
2	AA	168	HIS
2	AA	203	PHE
3	AB	97	ARG
3	AB	98	PHE
3	AB	158	THR
3	AB	182	PRO
3	AB	195	ASP
3	AB	202	GLY
3	AB	228	ASN
3	AB	244	SER
4	AC	42	THR
4	AC	60	GLY
4	AC	67	ASN
4	AC	82	GLY
4	AC	104	SER
4	AC	134	CYS

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Mol	Chain	Res	Type
5	AD	55	ASP
5	AD	125	THR
5	AD	165	LEU
5	AD	205	SER
5	AD	207	THR
6	AE	87	SER
6	AE	91	LYS
6	AE	107	ARG
6	AE	134	ILE
7	AF	81	HIS
8	AG	55	ARG
8	AG	63	ALA
8	AG	89	TYR
8	AG	108	ASP
8	AG	138	ASN
9	AH	3	ASN
9	AH	34	SER
9	AH	38	THR
9	AH	48	VAL
9	AH	73	GLU
10	AI	17	TYR
10	AI	18	ARG
10	AI	92	SER
10	AI	116	LEU
11	AJ	47	LYS
11	AJ	56	GLY
11	AJ	88	GLY
11	AJ	110	THR
11	AJ	114	ARG
11	AJ	125	GLU
11	AJ	138	PHE
12	AK	28	PHE
13	AL	36	LYS
13	AL	46	VAL
14	AM	120	GLY
15	AN	97	VAL
15	AN	101	LYS
16	AO	41	MET
16	AO	94	LEU
16	AO	107	SER
17	AP	28	ASN
17	AP	81	LYS

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Mol	Chain	Res	Type
17	AP	128	SER
18	AQ	59	TYR
18	AQ	75	LEU
18	AQ	80	LEU
19	AR	8	THR
19	AR	25	VAL
19	AR	43	ASN
20	AS	22	ARG
21	AT	10	ARG
21	AT	54	PHE
21	AT	90	ARG
21	AT	91	LEU
21	AT	117	LYS
21	AT	129	LYS
21	AT	139	GLN
21	AT	200	ASN
21	AT	217	ASP
21	AT	265	LEU
21	AT	268	GLN
21	AT	289	ALA
21	AT	318	ALA
32	BA	22	GLU
32	BA	49	PHE
32	BA	57	ASN
32	BA	101	LYS
32	BA	102	LYS
32	BA	152	ARG
32	BA	202	GLY
33	BB	20	THR
33	BB	96	LEU
33	BB	128	ARG
33	BB	157	VAL
33	BB	173	GLY
33	BB	187	HIS
33	BB	214	GLY
34	BC	13	HIS
34	BC	49	TYR
34	BC	65	SER
34	BC	72	VAL
34	BC	88	GLY
34	BC	110	LEU
34	BC	121	ASN

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Mol	Chain	Res	Type
34	BC	129	ALA
34	BC	146	ARG
34	BC	211	GLN
34	BC	261	MET
34	BC	290	ASP
34	BC	303	LYS
34	BC	308	MET
34	BC	319	ASN
34	BC	336	VAL
34	BC	354	VAL
35	BD	18	ASN
35	BD	29	PRO
35	BD	40	THR
35	BD	41	SER
35	BD	115	HIS
35	BD	127	ALA
35	BD	156	LEU
35	BD	232	SER
35	BD	233	LEU
35	BD	242	ALA
35	BD	251	THR
35	BD	262	TRP
36	BE	79	TYR
36	BE	124	GLU
36	BE	132	THR
36	BE	143	LYS
36	BE	163	LEU
36	BE	184	ASP
36	BE	187	THR
36	BE	188	GLU
36	BE	230	ASP
37	BF	8	LYS
37	BF	50	LYS
37	BF	55	LEU
37	BF	66	SER
37	BF	123	PRO
37	BF	127	ASN
37	BF	132	ALA
37	BF	155	LEU
37	BF	158	TYR
38	BG	69	ALA
38	BG	72	ALA

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Mol	Chain	Res	Type
38	BG	139	PRO
38	BG	150	LYS
38	BG	164	SER
38	BG	220	PHE
38	BG	222	HIS
39	BH	82	LEU
39	BH	95	ASN
39	BH	105	LYS
39	BH	123	GLN
39	BH	190	VAL
39	BH	196	ALA
39	BH	237	ILE
40	BI	42	ASP
40	BI	56	ALA
40	BI	59	ASN
40	BI	83	THR
40	BI	106	LYS
40	BI	116	ASN
40	BI	118	LEU
40	BI	137	SER
40	BI	155	SER
40	BI	179	ILE
41	BJ	15	LYS
41	BJ	47	PRO
41	BJ	56	GLU
41	BJ	85	PHE
41	BJ	94	PHE
41	BJ	181	TYR
41	BJ	205	SER
41	BJ	214	PRO
42	BK	35	LYS
42	BK	119	SER
42	BK	156	LYS
42	BK	167	TYR
43	BN	71	ALA
43	BN	85	TRP
43	BN	89	ALA
43	BN	94	TRP
44	BO	34	ASN
44	BO	41	ARG
44	BO	59	PHE
44	BO	122	ASN

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Mol	Chain	Res	Type
44	BO	135	VAL
44	BO	138	GLN
44	BO	154	PRO
44	BO	158	HIS
44	BO	159	ARG
44	BO	172	ARG
45	BP	39	GLU
45	BP	42	ASN
45	BP	46	GLU
45	BP	82	LYS
45	BP	149	TYR
45	BP	189	ASP
45	BP	193	GLN
46	BQ	29	THR
46	BQ	66	SER
46	BQ	85	ALA
46	BQ	86	LYS
46	BQ	121	GLN
47	BR	25	TYR
47	BR	54	LEU
47	BR	72	LYS
47	BR	83	VAL
47	BR	109	GLY
47	BR	121	CYS
48	BS	71	ARG
49	BT	10	ARG
49	BT	14	MET
49	BT	73	GLY
49	BT	74	VAL
49	BT	78	LYS
50	BU	16	GLY
51	BV	36	SER
51	BV	43	ARG
52	BW	88	MET
52	BW	98	ALA
52	BW	111	ASN
53	BX	65	GLY
53	BX	76	LEU
53	BX	102	SER
54	BY	29	PRO
54	BY	83	PRO
54	BY	95	SER

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Mol	Chain	Res	Type
54	BY	126	LYS
55	BZ	9	SER
55	BZ	38	LYS
56	Ba	5	LYS
56	Ba	20	LEU
56	Ba	26	LYS
56	Ba	31	ARG
56	Ba	63	GLY
56	Ba	64	VAL
56	Ba	68	GLU
57	Bb	23	ASP
57	Bb	34	LYS
57	Bb	70	GLY
57	Bb	78	ASN
58	Bc	5	LYS
58	Bc	65	ALA
59	Bd	19	CYS
59	Bd	25	ARG
59	Bd	36	SER
59	Bd	37	CYS
59	Bd	52	LYS
60	Be	49	MET
61	Bf	17	CYS
61	Bf	19	LYS
61	Bf	56	PRO
62	Bg	65	ALA
2	CA	21	ASN
2	CA	38	PHE
2	CA	83	GLN
2	CA	85	ALA
2	CA	87	LEU
2	CA	112	THR
2	CA	165	ARG
2	CA	176	LEU
2	CA	192	THR
2	CA	198	MET
2	CA	203	PHE
3	CB	40	LYS
3	CB	46	LYS
3	CB	97	ARG
3	CB	150	GLN
3	CB	195	ASP

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Mol	Chain	Res	Type
3	CB	213	ALA
3	CB	214	ALA
4	CC	23	GLU
4	CC	60	GLY
4	CC	61	GLU
4	CC	67	ASN
4	CC	82	GLY
4	CC	143	ARG
4	CC	158	ILE
5	CD	44	ASN
5	CD	45	LYS
5	CD	121	ILE
5	CD	128	ASN
5	CD	138	THR
5	CD	144	GLU
5	CD	153	GLY
5	CD	186	ASN
5	CD	207	THR
5	CD	213	LYS
5	CD	215	ASP
6	CE	38	ASN
6	CE	87	SER
6	CE	107	ARG
6	CE	108	ARG
6	CE	123	HIS
6	CE	134	ILE
7	CF	81	HIS
7	CF	137	PHE
8	CG	52	VAL
8	CG	63	ALA
8	CG	70	LYS
8	CG	89	TYR
8	CG	110	ASP
8	CG	139	TRP
9	CH	34	SER
9	CH	48	VAL
10	CI	20	VAL
10	CI	32	ASP
10	CI	74	ALA
10	CI	92	SER
11	CJ	15	SER
11	CJ	28	LEU

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Mol	Chain	Res	Type
11	CJ	47	LYS
11	CJ	98	ASP
11	CJ	107	LYS
12	CK	40	THR
13	CL	36	LYS
13	CL	101	LEU
13	CL	136	GLN
13	CL	139	LYS
14	CM	7	ARG
14	CM	18	TYR
14	CM	120	GLY
14	CM	122	ARG
15	CN	34	LEU
15	CN	103	ILE
16	CO	41	MET
16	CO	46	TYR
16	CO	104	LEU
17	CP	28	ASN
17	CP	41	SER
17	CP	95	PHE
18	CQ	59	TYR
18	CQ	86	GLU
19	CR	8	THR
19	CR	38	ARG
20	CS	16	LYS
20	CS	22	ARG
21	CT	10	ARG
21	CT	54	PHE
21	CT	90	ARG
21	CT	91	LEU
21	CT	129	LYS
21	CT	139	GLN
21	CT	176	LYS
21	CT	186	PHE
21	CT	200	ASN
21	CT	217	ASP
21	CT	265	LEU
21	CT	289	ALA
32	DA	24	LYS
32	DA	94	ASN
32	DA	96	ASN
32	DA	194	LEU

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Mol	Chain	Res	Type
32	DA	203	SER
33	DB	20	THR
33	DB	54	ARG
33	DB	103	PRO
33	DB	134	VAL
33	DB	151	PRO
33	DB	187	HIS
33	DB	215	ASN
33	DB	227	ARG
34	DC	2	SER
34	DC	13	HIS
34	DC	37	ARG
34	DC	68	HIS
34	DC	69	LYS
34	DC	92	TYR
34	DC	129	ALA
34	DC	130	PHE
34	DC	138	ALA
34	DC	216	ASP
34	DC	235	THR
34	DC	241	LYS
34	DC	255	TRP
34	DC	295	ALA
34	DC	354	VAL
34	DC	364	LYS
35	DD	16	THR
35	DD	26	PHE
35	DD	29	PRO
35	DD	32	PRO
35	DD	127	ALA
35	DD	233	LEU
35	DD	238	LEU
35	DD	242	ALA
35	DD	250	TRP
35	DD	251	THR
35	DD	269	SER
35	DD	272	VAL
36	DE	40	HIS
36	DE	41	LYS
36	DE	72	ASP
36	DE	143	LYS
36	DE	158	ARG

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Mol	Chain	Res	Type
36	DE	188	GLU
36	DE	213	ASP
36	DE	223	PHE
36	DE	230	ASP
36	DE	263	GLU
37	DF	8	LYS
37	DF	50	LYS
37	DF	107	ALA
37	DF	132	ALA
38	DG	74	SER
38	DG	139	PRO
38	DG	145	ARG
38	DG	190	THR
38	DG	194	HIS
38	DG	209	ASN
38	DG	219	LYS
38	DG	243	MET
39	DH	95	ASN
39	DH	105	LYS
39	DH	106	LYS
39	DH	208	GLU
39	DH	221	ASN
40	DI	42	ASP
40	DI	64	HIS
40	DI	83	THR
40	DI	106	LYS
40	DI	118	LEU
40	DI	155	SER
40	DI	179	ILE
41	DJ	15	LYS
41	DJ	20	SER
41	DJ	47	PRO
41	DJ	67	ALA
41	DJ	171	TRP
41	DJ	198	LYS
41	DJ	205	SER
42	DK	144	CYS
42	DK	152	HIS
42	DK	156	LYS
72	DL	15	LEU
72	DL	54	LYS
72	DL	70	ALA

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Mol	Chain	Res	Type
72	DL	86	LYS
72	DL	95	ASP
72	DL	131	GLU
73	DM	5	ARG
73	DM	6	GLU
73	DM	61	ARG
73	DM	68	SER
73	DM	103	ASN
43	DN	40	ASP
43	DN	77	ARG
43	DN	85	TRP
43	DN	88	ALA
43	DN	96	ALA
44	DO	34	ASN
44	DO	38	ARG
44	DO	59	PHE
44	DO	78	GLY
44	DO	81	TYR
44	DO	120	TRP
44	DO	144	ARG
44	DO	154	PRO
44	DO	158	HIS
44	DO	164	LEU
44	DO	172	ARG
44	DO	185	ALA
45	DP	14	HIS
45	DP	82	LYS
45	DP	94	ARG
45	DP	96	LYS
45	DP	98	ALA
45	DP	149	TYR
45	DP	195	ALA
46	DQ	8	SER
46	DQ	13	LYS
46	DQ	29	THR
46	DQ	66	SER
46	DQ	105	LYS
46	DQ	109	ALA
46	DQ	145	HIS
46	DQ	154	GLU
47	DR	77	ALA
47	DR	121	CYS

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Mol	Chain	Res	Type
47	DR	127	LEU
47	DR	154	GLY
48	DS	20	ARG
48	DS	71	ARG
48	DS	104	ARG
48	DS	121	HIS
49	DT	15	PHE
49	DT	29	THR
49	DT	55	LYS
49	DT	74	VAL
49	DT	77	ASN
49	DT	108	ARG
50	DU	16	GLY
50	DU	42	SER
50	DU	70	ARG
50	DU	86	ARG
50	DU	91	VAL
50	DU	103	ALA
51	DV	2	LYS
51	DV	7	SER
51	DV	53	VAL
52	DW	111	ASN
53	DX	25	SER
53	DX	50	ILE
53	DX	113	LYS
54	DY	63	LYS
54	DY	81	LEU
54	DY	83	PRO
54	DY	95	SER
55	DZ	9	SER
55	DZ	38	LYS
55	DZ	84	LEU
56	Da	9	THR
56	Da	17	HIS
56	Da	31	ARG
56	Da	50	ARG
56	Da	68	GLU
57	Db	45	ARG
57	Db	70	GLY
57	Db	78	ASN
57	Db	83	GLU
57	Db	103	LYS

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Mol	Chain	Res	Type
57	Db	104	ASN
57	Db	115	LEU
57	Db	122	PRO
58	Dc	5	LYS
59	Dd	12	HIS
59	Dd	19	CYS
59	Dd	52	LYS
60	De	32	ASN
61	Df	19	LYS
61	Df	56	PRO
61	Df	62	ALA
62	Dg	50	GLY
62	Dg	65	ALA
2	AA	53	THR
2	AA	68	PRO
2	AA	82	GLY
2	AA	83	GLN
2	AA	107	PHE
2	AA	145	ALA
2	AA	158	VAL
2	AA	199	PRO
3	AB	45	VAL
3	AB	46	LYS
3	AB	71	THR
3	AB	169	LEU
3	AB	206	THR
3	AB	233	GLN
4	AC	68	GLU
4	AC	97	SER
4	AC	115	ILE
4	AC	125	TYR
4	AC	158	ILE
5	AD	58	LEU
5	AD	138	THR
5	AD	148	ARG
5	AD	157	ARG
5	AD	186	ASN
5	AD	196	GLU
5	AD	212	LYS
5	AD	219	ARG
6	AE	52	ILE
6	AE	60	LEU

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Mol	Chain	Res	Type
6	AE	180	LYS
7	AF	119	VAL
7	AF	140	VAL
8	AG	70	LYS
8	AG	81	ALA
8	AG	110	ASP
9	AH	32	ASP
9	AH	80	HIS
9	AH	110	LEU
9	AH	117	ASP
10	AI	12	PHE
10	AI	36	LEU
10	AI	52	LYS
10	AI	55	GLY
10	AI	63	ALA
10	AI	67	ALA
10	AI	70	ASN
10	AI	90	ILE
11	AJ	28	LEU
11	AJ	46	PHE
11	AJ	51	PRO
11	AJ	90	VAL
11	AJ	99	GLU
11	AJ	106	LYS
11	AJ	134	ALA
12	AK	11	ARG
12	AK	40	THR
12	AK	67	ARG
13	AL	29	VAL
13	AL	44	ASN
13	AL	58	ALA
13	AL	76	PRO
13	AL	82	PRO
13	AL	83	ALA
13	AL	136	GLN
14	AM	5	SER
14	AM	52	GLY
14	AM	70	GLN
14	AM	134	ARG
15	AN	34	LEU
15	AN	41	ILE
15	AN	49	ASN

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Mol	Chain	Res	Type
15	AN	70	THR
15	AN	103	ILE
16	AO	46	TYR
16	AO	81	VAL
16	AO	83	ILE
17	AP	95	PHE
17	AP	137	LYS
17	AP	141	GLU
18	AQ	84	GLU
19	AR	32	PHE
19	AR	38	ARG
21	AT	57	PRO
21	AT	63	GLY
21	AT	94	VAL
21	AT	105	GLY
21	AT	243	LEU
21	AT	291	SER
32	BA	27	ASN
32	BA	107	TYR
32	BA	132	GLY
32	BA	155	ILE
32	BA	165	LEU
32	BA	189	PHE
32	BA	213	ALA
33	BB	29	LEU
33	BB	52	SER
33	BB	53	GLY
33	BB	131	GLY
33	BB	224	THR
34	BC	57	VAL
34	BC	90	VAL
34	BC	164	THR
34	BC	183	LEU
34	BC	193	ASP
34	BC	199	PHE
34	BC	216	ASP
34	BC	255	TRP
34	BC	256	HIS
34	BC	273	HIS
34	BC	295	ALA
34	BC	364	LYS
35	BD	39	PHE

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Mol	Chain	Res	Type
35	BD	45	ASN
35	BD	78	GLY
35	BD	272	VAL
36	BE	41	LYS
36	BE	72	ASP
36	BE	123	GLU
36	BE	136	GLU
36	BE	177	GLU
36	BE	257	GLU
36	BE	263	GLU
36	BE	294	ALA
37	BF	61	ASN
37	BF	73	GLY
37	BF	107	ALA
37	BF	128	LYS
38	BG	28	ALA
38	BG	33	ARG
38	BG	55	TYR
38	BG	135	ALA
38	BG	161	VAL
38	BG	216	VAL
39	BH	88	ALA
39	BH	106	LYS
39	BH	155	ASN
39	BH	169	LEU
39	BH	221	ASN
39	BH	235	GLY
40	BI	17	THR
40	BI	38	LEU
40	BI	105	GLU
40	BI	111	PHE
40	BI	185	GLY
41	BJ	20	SER
41	BJ	60	LEU
41	BJ	66	GLU
41	BJ	67	ALA
41	BJ	91	VAL
41	BJ	154	ARG
41	BJ	163	GLN
42	BK	98	ALA
42	BK	106	ILE
42	BK	144	CYS

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Mol	Chain	Res	Type
43	BN	40	ASP
44	BO	47	LYS
44	BO	74	PRO
44	BO	137	PRO
44	BO	142	ILE
44	BO	175	ASN
45	BP	14	HIS
45	BP	77	SER
46	BQ	8	SER
46	BQ	31	GLU
46	BQ	34	GLN
46	BQ	87	SER
46	BQ	132	ALA
47	BR	21	SER
47	BR	37	ALA
47	BR	41	ASP
47	BR	46	LYS
47	BR	86	THR
47	BR	96	PHE
48	BS	12	ALA
48	BS	20	ARG
48	BS	72	GLU
48	BS	97	ARG
48	BS	121	HIS
49	BT	29	THR
49	BT	42	ILE
49	BT	57	TYR
50	BU	42	SER
50	BU	70	ARG
50	BU	91	VAL
50	BU	103	ALA
51	BV	9	SER
51	BV	35	LYS
51	BV	46	PRO
53	BX	21	THR
53	BX	42	GLN
53	BX	96	PRO
53	BX	119	ILE
54	BY	46	ASP
54	BY	51	GLY
54	BY	63	LYS
54	BY	65	GLN

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Mol	Chain	Res	Type
54	BY	66	ALA
54	BY	129	PHE
54	BY	136	GLU
55	BZ	69	TYR
55	BZ	77	LEU
55	BZ	84	LEU
56	Ba	49	VAL
56	Ba	72	ARG
56	Ba	77	ARG
57	Bb	17	PHE
57	Bb	35	GLN
57	Bb	49	ASN
57	Bb	83	GLU
57	Bb	92	TYR
57	Bb	103	LYS
57	Bb	108	ILE
57	Bb	115	LEU
58	Bc	28	LEU
58	Bc	35	LYS
59	Bd	22	CYS
59	Bd	33	THR
60	Be	32	ASN
61	Bf	12	CYS
61	Bf	59	HIS
62	Bg	14	TYR
62	Bg	68	ALA
2	CA	18	LEU
2	CA	68	PRO
2	CA	82	GLY
2	CA	99	ALA
2	CA	153	SER
2	CA	158	VAL
2	CA	168	HIS
3	CB	69	ILE
3	CB	153	SER
3	CB	182	PRO
4	CC	93	ASP
4	CC	104	SER
4	CC	134	CYS
4	CC	146	ARG
4	CC	159	HIS
5	CD	125	THR

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Mol	Chain	Res	Type
5	CD	134	VAL
5	CD	148	ARG
5	CD	170	GLN
5	CD	181	GLU
5	CD	196	GLU
5	CD	205	SER
5	CD	211	ILE
5	CD	212	LYS
5	CD	219	ARG
6	CE	27	GLU
6	CE	46	SER
6	CE	91	LYS
6	CE	101	VAL
6	CE	180	LYS
7	CF	101	GLU
7	CF	135	VAL
8	CG	55	ARG
8	CG	75	LEU
8	CG	81	ALA
9	CH	32	ASP
9	CH	38	THR
9	CH	110	LEU
10	CI	36	LEU
10	CI	52	LYS
10	CI	55	GLY
10	CI	67	ALA
10	CI	90	ILE
10	CI	126	VAL
11	CJ	23	LYS
11	CJ	44	LEU
11	CJ	46	PHE
11	CJ	51	PRO
11	CJ	56	GLY
11	CJ	88	GLY
11	CJ	114	ARG
11	CJ	134	ALA
12	CK	11	ARG
12	CK	27	ASP
12	CK	28	PHE
12	CK	47	ARG
13	CL	56	LYS
13	CL	58	ALA

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Mol	Chain	Res	Type
13	CL	61	LEU
13	CL	73	MET
13	CL	83	ALA
13	CL	135	GLY
13	CL	140	THR
14	CM	5	SER
14	CM	64	HIS
14	CM	70	GLN
15	CN	70	THR
16	CO	50	PHE
16	CO	60	LYS
16	CO	83	ILE
16	CO	107	SER
17	CP	122	PHE
17	CP	137	LYS
17	CP	141	GLU
18	CQ	80	LEU
18	CQ	84	GLU
19	CR	25	VAL
19	CR	32	PHE
19	CR	33	LEU
19	CR	37	SER
21	CT	57	PRO
21	CT	63	GLY
21	CT	105	GLY
21	CT	117	LYS
21	CT	192	PHE
21	CT	243	LEU
32	DA	6	SER
32	DA	25	LYS
32	DA	44	GLN
32	DA	47	LYS
32	DA	58	CYS
32	DA	80	CYS
32	DA	86	SER
32	DA	154	THR
33	DB	46	LYS
33	DB	52	SER
33	DB	53	GLY
33	DB	130	SER
33	DB	131	GLY
34	DC	65	SER

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Mol	Chain	Res	Type
34	DC	72	VAL
34	DC	90	VAL
34	DC	96	PRO
34	DC	121	ASN
34	DC	142	ALA
34	DC	183	LEU
34	DC	192	VAL
34	DC	222	LYS
34	DC	260	VAL
34	DC	308	MET
34	DC	348	ARG
35	DD	18	ASN
35	DD	55	LYS
35	DD	87	GLN
35	DD	94	CYS
35	DD	98	ARG
35	DD	106	TRP
35	DD	115	HIS
35	DD	156	LEU
35	DD	178	LEU
35	DD	262	TRP
35	DD	268	ALA
36	DE	30	TYR
36	DE	44	TYR
36	DE	184	ASP
36	DE	187	THR
37	DF	55	LEU
37	DF	66	SER
37	DF	76	LEU
37	DF	140	VAL
37	DF	155	LEU
37	DF	158	TYR
37	DF	160	SER
38	DG	33	ARG
38	DG	135	ALA
38	DG	153	PHE
38	DG	164	SER
38	DG	216	VAL
39	DH	82	LEU
39	DH	84	ARG
39	DH	86	THR
39	DH	97	TYR

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Mol	Chain	Res	Type
39	DH	169	LEU
39	DH	186	LEU
39	DH	190	VAL
39	DH	235	GLY
39	DH	237	ILE
40	DI	17	THR
40	DI	56	ALA
40	DI	62	ARG
40	DI	73	SER
40	DI	105	GLU
40	DI	111	PHE
40	DI	137	SER
40	DI	175	PHE
41	DJ	18	PRO
41	DJ	19	LYS
41	DJ	163	GLN
41	DJ	181	TYR
41	DJ	207	GLU
42	DK	119	SER
42	DK	123	PHE
42	DK	157	GLU
72	DL	89	PRO
72	DL	92	ARG
72	DL	120	SER
72	DL	128	VAL
73	DM	64	ARG
73	DM	197	PHE
43	DN	112	LEU
44	DO	41	ARG
44	DO	43	THR
44	DO	122	ASN
44	DO	173	GLY
45	DP	39	GLU
46	DQ	63	PHE
46	DQ	132	ALA
47	DR	96	PHE
47	DR	128	ALA
47	DR	132	PRO
47	DR	157	PRO
48	DS	38	ARG
49	DT	9	SER
49	DT	36	VAL

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Mol	Chain	Res	Type
49	DT	71	SER
49	DT	78	LYS
50	DU	14	SER
50	DU	79	VAL
50	DU	85	TRP
51	DV	43	ARG
51	DV	50	ALA
52	DW	89	LYS
52	DW	128	ALA
53	DX	102	SER
54	DY	19	LYS
54	DY	29	PRO
54	DY	51	GLY
54	DY	66	ALA
54	DY	96	LYS
54	DY	126	LYS
54	DY	131	SER
55	DZ	52	ARG
55	DZ	69	TYR
56	Da	5	LYS
56	Da	43	HIS
56	Da	63	GLY
57	Db	17	PHE
57	Db	23	ASP
57	Db	34	LYS
57	Db	86	THR
58	Dc	27	GLU
58	Dc	65	ALA
59	Dd	22	CYS
59	Dd	33	THR
61	Df	3	ASN
61	Df	12	CYS
62	Dg	14	TYR
62	Dg	26	VAL
62	Dg	46	THR
2	AA	25	GLY
2	AA	81	PHE
2	AA	119	ARG
2	AA	195	TRP
3	AB	61	LEU
3	AB	95	ARG
3	AB	138	PRO

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Mol	Chain	Res	Type
3	AB	146	THR
3	AB	153	SER
4	AC	93	ASP
4	AC	164	VAL
5	AD	45	LYS
5	AD	65	ARG
5	AD	213	LYS
5	AD	214	LYS
5	AD	221	ALA
6	AE	34	PHE
6	AE	101	VAL
6	AE	123	HIS
7	AF	101	GLU
7	AF	115	PHE
7	AF	135	VAL
7	AF	137	PHE
8	AG	77	SER
8	AG	142	GLU
8	AG	150	VAL
10	AI	20	VAL
10	AI	74	ALA
11	AJ	15	SER
12	AK	21	TYR
12	AK	43	SER
12	AK	66	VAL
13	AL	16	ARG
13	AL	56	LYS
13	AL	61	LEU
13	AL	120	ARG
13	AL	135	GLY
16	AO	104	LEU
17	AP	91	GLY
21	AT	158	PRO
21	AT	286	GLU
32	BA	5	THR
32	BA	45	ARG
32	BA	92	LYS
32	BA	108	ASN
32	BA	154	THR
33	BB	17	THR
33	BB	27	ALA
33	BB	46	LYS

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Mol	Chain	Res	Type
33	BB	99	GLY
33	BB	177	LYS
34	BC	111	SER
34	BC	130	PHE
34	BC	218	ILE
34	BC	347	SER
35	BD	250	TRP
35	BD	269	SER
36	BE	64	ILE
36	BE	226	TYR
36	BE	286	VAL
37	BF	30	LEU
37	BF	36	PRO
37	BF	67	GLY
37	BF	98	VAL
37	BF	140	VAL
38	BG	30	ARG
38	BG	83	LEU
38	BG	123	THR
38	BG	134	VAL
38	BG	145	ARG
38	BG	153	PHE
38	BG	211	SER
39	BH	97	TYR
39	BH	134	TYR
39	BH	241	LYS
40	BI	130	ASP
40	BI	175	PHE
41	BJ	8	CYS
41	BJ	41	ALA
41	BJ	171	TRP
41	BJ	212	GLU
42	BK	12	LEU
42	BK	44	THR
42	BK	130	VAL
43	BN	36	VAL
44	BO	31	ARG
45	BP	24	ALA
45	BP	94	ARG
45	BP	98	ALA
45	BP	166	GLU
45	BP	177	LYS

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Mol	Chain	Res	Type
45	BP	195	ALA
47	BR	77	ALA
47	BR	101	VAL
48	BS	8	LYS
48	BS	25	ASP
49	BT	27	LEU
49	BT	108	ARG
50	BU	11	PHE
50	BU	13	ILE
50	BU	56	ASP
50	BU	86	ARG
52	BW	96	LYS
52	BW	115	ARG
52	BW	128	ALA
54	BY	15	VAL
54	BY	19	LYS
54	BY	25	HIS
54	BY	28	HIS
54	BY	49	HIS
54	BY	70	LYS
54	BY	128	ARG
55	BZ	52	ARG
56	Ba	23	VAL
56	Ba	57	GLN
56	Ba	82	GLU
57	Bb	16	LYS
57	Bb	32	TRP
57	Bb	75	LEU
57	Bb	86	THR
59	Bd	34	CYS
60	Be	37	TYR
60	Be	39	ALA
61	Bf	3	ASN
61	Bf	39	GLY
61	Bf	45	ARG
61	Bf	55	LYS
61	Bf	62	ALA
62	Bg	26	VAL
62	Bg	74	ALA
2	CA	93	THR
2	CA	145	ALA
2	CA	152	PRO

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Mol	Chain	Res	Type
2	CA	160	ILE
2	CA	195	TRP
2	CA	199	PRO
3	CB	45	VAL
3	CB	71	THR
3	CB	138	PRO
4	CC	164	VAL
5	CD	60	ASP
5	CD	157	ARG
5	CD	165	LEU
5	CD	221	ALA
6	CE	60	LEU
6	CE	74	ASN
6	CE	75	ALA
6	CE	125	ALA
6	CE	170	GLY
6	CE	183	ALA
8	CG	77	SER
8	CG	150	VAL
10	CI	16	SER
10	CI	63	ALA
10	CI	117	GLY
11	CJ	55	VAL
12	CK	21	TYR
12	CK	59	LYS
12	CK	66	VAL
13	CL	82	PRO
13	CL	120	ARG
14	CM	15	ILE
14	CM	114	VAL
14	CM	121	GLY
14	CM	124	ILE
15	CN	12	GLN
17	CP	102	VAL
17	CP	118	PRO
18	CQ	96	SER
21	CT	158	PRO
21	CT	286	GLU
32	DA	74	VAL
32	DA	88	ASP
33	DB	10	LYS
33	DB	177	LYS

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Mol	Chain	Res	Type
34	DC	88	GLY
34	DC	218	ILE
34	DC	256	HIS
35	DD	12	THR
35	DD	40	THR
35	DD	41	SER
36	DE	103	LEU
36	DE	142	PHE
36	DE	156	GLY
36	DE	192	PRO
36	DE	202	GLY
36	DE	226	TYR
36	DE	248	ARG
36	DE	294	ALA
37	DF	36	PRO
37	DF	73	GLY
37	DF	81	ALA
38	DG	72	ALA
38	DG	83	LEU
38	DG	111	ILE
38	DG	134	VAL
38	DG	161	VAL
39	DH	165	PHE
39	DH	176	PRO
39	DH	243	GLN
40	DI	38	LEU
40	DI	51	GLN
40	DI	185	GLY
41	DJ	66	GLU
41	DJ	147	VAL
41	DJ	194	GLY
41	DJ	214	PRO
42	DK	130	VAL
72	DL	121	PHE
72	DL	136	ALA
73	DM	69	ASP
73	DM	96	ILE
44	DO	74	PRO
45	DP	180	SER
45	DP	191	ALA
46	DQ	4	TYR
46	DQ	85	ALA

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Mol	Chain	Res	Type
47	DR	21	SER
47	DR	41	ASP
47	DR	46	LYS
48	DS	17	VAL
48	DS	27	ASN
49	DT	10	ARG
49	DT	24	ALA
49	DT	53	PRO
49	DT	57	TYR
49	DT	102	ARG
50	DU	13	ILE
52	DW	95	ILE
52	DW	110	VAL
53	DX	42	GLN
54	DY	25	HIS
54	DY	70	LYS
55	DZ	77	LEU
56	Da	42	LEU
56	Da	72	ARG
57	Db	9	ILE
57	Db	21	HIS
60	De	26	TRP
60	De	39	ALA
61	Df	45	ARG
61	Df	48	SER
61	Df	59	HIS
62	Dg	74	ALA
3	AB	123	GLY
4	AC	29	LEU
4	AC	146	ARG
5	AD	170	GLN
9	AH	87	GLY
10	AI	76	VAL
11	AJ	33	GLY
11	AJ	84	ALA
12	AK	20	TYR
14	AM	61	VAL
14	AM	114	VAL
15	AN	118	VAL
17	AP	69	ARG
17	AP	88	PRO
17	AP	118	PRO

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Mol	Chain	Res	Type
19	AR	37	SER
21	AT	136	ILE
21	AT	138	GLY
33	BB	10	LYS
33	BB	62	VAL
34	BC	268	GLY
35	BD	32	PRO
35	BD	87	GLN
35	BD	94	CYS
35	BD	101	ALA
36	BE	141	PRO
36	BE	156	GLY
36	BE	183	TRP
36	BE	269	SER
37	BF	65	ILE
37	BF	125	GLN
38	BG	38	LYS
38	BG	243	MET
39	BH	136	LEU
40	BI	51	GLN
40	BI	158	ALA
42	BK	36	VAL
42	BK	75	LYS
42	BK	157	GLU
44	BO	38	ARG
44	BO	144	ARG
44	BO	153	ASP
44	BO	173	GLY
45	BP	164	SER
46	BQ	54	HIS
48	BS	33	ALA
49	BT	12	ARG
49	BT	24	ALA
49	BT	51	GLY
49	BT	53	PRO
50	BU	55	GLY
51	BV	50	ALA
55	BZ	57	GLU
55	BZ	92	ILE
57	Bb	60	ASN
57	Bb	71	HIS
57	Bb	122	PRO

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Mol	Chain	Res	Type
58	Bc	4	VAL
58	Bc	16	GLN
58	Bc	34	GLN
59	Bd	58	THR
60	Be	10	LYS
61	Bf	48	SER
62	Bg	50	GLY
2	CA	104	PRO
3	CB	56	ILE
3	CB	65	GLU
4	CC	15	GLY
4	CC	91	VAL
5	CD	200	ASN
8	CG	108	ASP
8	CG	143	SER
9	CH	58	TYR
9	CH	87	GLY
9	CH	115	ILE
11	CJ	33	GLY
12	CK	67	ARG
13	CL	29	VAL
13	CL	76	PRO
15	CN	118	VAL
16	CO	7	LEU
17	CP	38	PHE
20	CS	25	SER
21	CT	138	GLY
21	CT	291	SER
32	DA	135	PRO
32	DA	137	PRO
32	DA	209	SER
33	DB	6	ARG
33	DB	62	VAL
33	DB	91	GLY
33	DB	113	VAL
34	DC	133	TYR
34	DC	161	LEU
34	DC	204	ALA
35	DD	169	LEU
36	DE	64	ILE
36	DE	123	GLU
36	DE	136	GLU

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Mol	Chain	Res	Type
36	DE	141	PRO
36	DE	257	GLU
36	DE	265	TYR
36	DE	269	SER
36	DE	286	VAL
36	DE	291	ALA
37	DF	65	ILE
37	DF	67	GLY
37	DF	128	LYS
38	DG	37	ASN
40	DI	55	VAL
41	DJ	197	VAL
41	DJ	216	TYR
42	DK	35	LYS
42	DK	64	LYS
72	DL	85	LEU
72	DL	98	VAL
73	DM	47	GLY
73	DM	97	LYS
43	DN	61	GLY
45	DP	23	VAL
45	DP	84	LEU
45	DP	95	GLY
45	DP	165	ALA
46	DQ	121	GLN
47	DR	40	THR
47	DR	131	ALA
48	DS	13	SER
48	DS	25	ASP
48	DS	147	ALA
50	DU	17	LEU
50	DU	44	SER
51	DV	9	SER
52	DW	115	ARG
53	DX	78	PHE
54	DY	15	VAL
54	DY	46	ASP
54	DY	49	HIS
54	DY	93	SER
55	DZ	92	ILE
56	Da	82	GLU
57	Db	107	VAL

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Mol	Chain	Res	Type
58	Dc	4	VAL
59	Dd	32	LYS
59	Dd	60	GLY
60	De	37	TYR
61	Df	39	GLY
62	Dg	13	LYS
62	Dg	68	ALA
3	AB	160	GLY
6	AE	35	GLY
6	AE	144	PRO
9	AH	115	ILE
10	AI	105	VAL
11	AJ	39	VAL
14	AM	124	ILE
15	AN	58	LEU
17	AP	44	GLY
33	BB	91	GLY
34	BC	8	ALA
34	BC	96	PRO
38	BG	203	TRP
40	BI	55	VAL
41	BJ	4	ARG
41	BJ	172	GLY
41	BJ	194	GLY
48	BS	77	GLY
52	BW	110	VAL
53	BX	106	ILE
57	Bb	9	ILE
3	CB	160	GLY
3	CB	216	VAL
10	CI	76	VAL
11	CJ	39	VAL
14	CM	52	GLY
14	CM	61	VAL
15	CN	41	ILE
15	CN	58	LEU
17	CP	96	VAL
34	DC	8	ALA
34	DC	33	PRO
35	DD	22	LEU
35	DD	52	VAL
35	DD	101	ALA

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Mol	Chain	Res	Type
37	DF	79	VAL
41	DJ	27	PRO
41	DJ	91	VAL
42	DK	106	ILE
72	DL	23	GLY
73	DM	82	GLY
73	DM	101	VAL
43	DN	36	VAL
43	DN	38	ILE
44	DO	137	PRO
44	DO	153	ASP
46	DQ	24	VAL
47	DR	67	ILE
55	DZ	81	VAL
56	Da	8	VAL
57	Db	67	SER
61	Df	55	LYS
2	AA	104	PRO
5	AD	114	ILE
9	AH	13	VAL
9	AH	74	VAL
10	AI	126	VAL
16	AO	25	VAL
17	AP	96	VAL
17	AP	102	VAL
18	AQ	40	VAL
32	BA	69	GLY
33	BB	113	VAL
33	BB	135	ILE
33	BB	196	TRP
35	BD	52	VAL
35	BD	71	VAL
36	BE	26	GLY
36	BE	254	LYS
39	BH	176	PRO
39	BH	182	GLY
44	BO	89	VAL
56	Ba	8	VAL
2	CA	25	GLY
5	CD	123	VAL
6	CE	52	ILE
6	CE	144	PRO

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Mol	Chain	Res	Type
9	CH	13	VAL
9	CH	74	VAL
15	CN	73	GLY
17	CP	88	PRO
17	CP	91	GLY
35	DD	216	VAL
36	DE	254	LYS
41	DJ	172	GLY
42	DK	44	THR
72	DL	64	ILE
72	DL	102	GLY
72	DL	132	ILE
73	DM	80	VAL
43	DN	120	VAL
44	DO	89	VAL
47	DR	83	VAL
47	DR	109	GLY
53	DX	119	ILE
56	Da	23	VAL
57	Db	108	ILE
2	AA	144	ILE
3	AB	56	ILE
3	AB	171	PRO
3	AB	216	VAL
5	AD	121	ILE
5	AD	152	GLY
21	AT	20	VAL
32	BA	65	ILE
33	BB	85	GLY
34	BC	278	ILE
36	BE	202	GLY
38	BG	102	VAL
39	BH	127	PRO
39	BH	135	GLY
41	BJ	18	PRO
49	BT	109	VAL
53	BX	105	VAL
54	BY	57	GLY
55	BZ	81	VAL
59	Bd	60	GLY
2	CA	37	VAL
4	CC	112	GLY

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Mol	Chain	Res	Type
4	CC	123	VAL
5	CD	120	ILE
5	CD	152	GLY
6	CE	42	ILE
15	CN	42	VAL
16	CO	25	VAL
36	DE	201	GLY
37	DF	152	THR
41	DJ	4	ARG
41	DJ	89	VAL
43	DN	46	ILE
47	DR	101	VAL
48	DS	96	ILE
51	DV	45	ASN
54	DY	28	HIS
57	Db	100	ILE
58	Dc	33	VAL
2	AA	37	VAL
6	AE	73	GLY
11	AJ	50	GLU
13	AL	105	VAL
17	AP	125	VAL
36	BE	192	PRO
36	BE	201	GLY
37	BF	84	VAL
41	BJ	117	GLY
41	BJ	131	ILE
42	BK	105	GLY
42	BK	117	ASP
43	BN	38	ILE
45	BP	95	GLY
45	BP	190	VAL
46	BQ	24	VAL
48	BS	17	VAL
50	BU	17	LEU
52	BW	83	VAL
55	BZ	18	ILE
2	CA	144	ILE
3	CB	123	GLY
4	CC	12	VAL
6	CE	73	GLY
9	CH	44	GLY

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Mol	Chain	Res	Type
14	CM	112	GLY
17	CP	125	VAL
21	CT	15	GLY
32	DA	55	LEU
33	DB	135	ILE
36	DE	26	GLY
37	DF	75	PRO
40	DI	28	VAL
41	DJ	122	PRO
43	DN	18	GLY
49	DT	51	GLY
50	DU	55	GLY
52	DW	81	ILE
52	DW	83	VAL
57	Db	41	VAL
2	AA	152	PRO
6	AE	42	ILE
10	AI	117	GLY
14	AM	26	GLY
15	AN	42	VAL
17	AP	77	ILE
35	BD	22	LEU
35	BD	86	GLY
35	BD	216	VAL
40	BI	28	VAL
40	BI	101	VAL
41	BJ	27	PRO
41	BJ	89	VAL
43	BN	72	LEU
47	BR	132	PRO
55	BZ	88	GLY
57	Bb	5	PRO
57	Bb	67	SER
58	Bc	42	PRO
11	CJ	50	GLU
17	CP	117	ILE
33	DB	99	GLY
35	DD	192	GLY
36	DE	138	GLY
40	DI	24	ILE
41	DJ	117	GLY
41	DJ	131	ILE

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Mol	Chain	Res	Type
73	DM	51	VAL
49	DT	80	VAL
58	Dc	42	PRO
58	Bc	39	PRO
59	Bd	40	PRO
58	Dc	39	PRO

5.3.2 Protein sidechains [i](#)

There are no protein residues with a non-rotameric sidechain to report in this entry.

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	A1	1787/1800 (99%)	1003 (56%)	148 (8%)
1	C1	1787/1800 (99%)	990 (55%)	150 (8%)
29	B1	3203/3396 (94%)	1725 (53%)	259 (8%)
29	D1	3203/3396 (94%)	1714 (53%)	257 (8%)
30	B2	120/121 (99%)	70 (58%)	12 (10%)
30	D2	120/121 (99%)	66 (55%)	12 (10%)
31	B3	157/158 (99%)	80 (50%)	9 (5%)
31	D3	157/158 (99%)	79 (50%)	9 (5%)
All	All	10534/10950 (96%)	5727 (54%)	856 (8%)

All (5727) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	A1	2	A
1	A1	3	U
1	A1	4	C
1	A1	7	G
1	A1	8	U
1	A1	13	C
1	A1	17	C
1	A1	20	G
1	A1	21	U
1	A1	22	A
1	A1	24	U
1	A1	25	C
1	A1	26	A
1	A1	27	U

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Mol	Chain	Res	Type
1	A1	31	C
1	A1	34	G
1	A1	35	U
1	A1	40	A
1	A1	41	A
1	A1	42	G
1	A1	45	U
1	A1	46	A
1	A1	47	A
1	A1	48	G
1	A1	50	C
1	A1	51	A
1	A1	54	C
1	A1	56	U
1	A1	57	G
1	A1	58	U
1	A1	59	C
1	A1	60	U
1	A1	61	A
1	A1	62	A
1	A1	63	G
1	A1	64	U
1	A1	65	A
1	A1	66	U
1	A1	67	A
1	A1	68	A
1	A1	69	G
1	A1	70	C
1	A1	71	A
1	A1	72	A
1	A1	75	U
1	A1	76	A
1	A1	77	U
1	A1	78	A
1	A1	79	C
1	A1	80	A
1	A1	81	G
1	A1	82	U
1	A1	83	G
1	A1	86	A
1	A1	88	U
1	A1	99	C

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Mol	Chain	Res	Type
1	A1	100	A
1	A1	102	U
1	A1	104	A
1	A1	105	A
1	A1	106	U
1	A1	111	U
1	A1	112	A
1	A1	113	U
1	A1	114	C
1	A1	115	G
1	A1	117	U
1	A1	119	A
1	A1	120	U
1	A1	121	U
1	A1	122	U
1	A1	123	G
1	A1	124	A
1	A1	125	U
1	A1	126	A
1	A1	128	U
1	A1	129	U
1	A1	130	C
1	A1	131	C
1	A1	132	U
1	A1	133	U
1	A1	134	U
1	A1	135	A
1	A1	136	C
1	A1	137	U
1	A1	138	A
1	A1	139	C
1	A1	140	A
1	A1	141	U
1	A1	143	G
1	A1	144	U
1	A1	145	A
1	A1	146	U
1	A1	147	A
1	A1	148	A
1	A1	149	C
1	A1	150	U
1	A1	151	G

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Mol	Chain	Res	Type
1	A1	156	A
1	A1	158	U
1	A1	159	U
1	A1	160	C
1	A1	161	U
1	A1	162	A
1	A1	166	C
1	A1	167	U
1	A1	168	A
1	A1	169	A
1	A1	170	U
1	A1	171	A
1	A1	172	C
1	A1	173	A
1	A1	174	U
1	A1	177	U
1	A1	178	U
1	A1	179	A
1	A1	180	A
1	A1	181	A
1	A1	184	C
1	A1	187	G
1	A1	191	C
1	A1	192	U
1	A1	193	U
1	A1	194	U
1	A1	195	G
1	A1	196	G
1	A1	197	A
1	A1	198	A
1	A1	199	G
1	A1	200	A
1	A1	201	G
1	A1	204	G
1	A1	208	U
1	A1	209	U
1	A1	211	U
1	A1	212	U
1	A1	213	A
1	A1	215	A
1	A1	218	A
1	A1	219	A

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Mol	Chain	Res	Type
1	A1	220	A
1	A1	224	C
1	A1	226	A
1	A1	227	U
1	A1	228	G
1	A1	229	U
1	A1	233	C
1	A1	234	G
1	A1	238	U
1	A1	241	U
1	A1	242	U
1	A1	243	G
1	A1	244	A
1	A1	245	U
1	A1	246	G
1	A1	249	U
1	A1	250	C
1	A1	252	U
1	A1	253	A
1	A1	254	A
1	A1	255	U
1	A1	256	A
1	A1	257	A
1	A1	259	U
1	A1	260	U
1	A1	261	U
1	A1	262	U
1	A1	263	C
1	A1	264	G
1	A1	265	A
1	A1	266	A
1	A1	267	U
1	A1	270	C
1	A1	271	A
1	A1	272	U
1	A1	273	G
1	A1	274	G
1	A1	276	C
1	A1	277	U
1	A1	278	U
1	A1	280	U
1	A1	282	C

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Mol	Chain	Res	Type
1	A1	283	U
1	A1	284	G
1	A1	285	G
1	A1	289	U
1	A1	295	A
1	A1	296	U
1	A1	297	U
1	A1	298	C
1	A1	299	A
1	A1	302	U
1	A1	308	C
1	A1	309	C
1	A1	310	C
1	A1	311	U
1	A1	312	A
1	A1	314	C
1	A1	316	A
1	A1	320	U
1	A1	321	C
1	A1	322	G
1	A1	323	A
1	A1	324	U
1	A1	327	U
1	A1	330	G
1	A1	331	A
1	A1	332	U
1	A1	333	A
1	A1	334	G
1	A1	335	U
1	A1	337	G
1	A1	338	C
1	A1	340	U
1	A1	341	A
1	A1	350	U
1	A1	351	C
1	A1	352	A
1	A1	354	C
1	A1	359	A
1	A1	360	A
1	A1	361	C
1	A1	365	G
1	A1	366	A

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Mol	Chain	Res	Type
1	A1	368	U
1	A1	369	A
1	A1	370	A
1	A1	373	G
1	A1	374	U
1	A1	375	U
1	A1	376	C
1	A1	378	A
1	A1	379	U
1	A1	381	C
1	A1	382	C
1	A1	383	G
1	A1	385	A
1	A1	387	A
1	A1	390	G
1	A1	393	C
1	A1	394	C
1	A1	395	U
1	A1	396	G
1	A1	399	A
1	A1	400	A
1	A1	401	A
1	A1	402	C
1	A1	403	G
1	A1	404	G
1	A1	406	U
1	A1	411	C
1	A1	415	C
1	A1	416	A
1	A1	417	A
1	A1	418	G
1	A1	419	G
1	A1	421	A
1	A1	424	C
1	A1	425	A
1	A1	426	G
1	A1	427	C
1	A1	428	A
1	A1	434	G
1	A1	437	A
1	A1	438	A
1	A1	439	U

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Mol	Chain	Res	Type
1	A1	440	U
1	A1	441	A
1	A1	444	C
1	A1	445	A
1	A1	446	A
1	A1	447	U
1	A1	448	C
1	A1	449	C
1	A1	451	A
1	A1	452	A
1	A1	453	U
1	A1	454	U
1	A1	455	C
1	A1	458	G
1	A1	459	G
1	A1	462	G
1	A1	464	A
1	A1	467	G
1	A1	468	A
1	A1	469	C
1	A1	470	A
1	A1	475	A
1	A1	477	A
1	A1	482	U
1	A1	485	A
1	A1	486	G
1	A1	487	G
1	A1	488	G
1	A1	489	C
1	A1	490	C
1	A1	493	U
1	A1	494	U
1	A1	495	C
1	A1	496	G
1	A1	498	G
1	A1	500	C
1	A1	504	U
1	A1	505	A
1	A1	506	A
1	A1	510	G
1	A1	511	A
1	A1	512	A

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Mol	Chain	Res	Type
1	A1	513	U
1	A1	514	G
1	A1	515	A
1	A1	516	G
1	A1	517	U
1	A1	519	C
1	A1	521	A
1	A1	522	U
1	A1	523	G
1	A1	524	U
1	A1	526	A
1	A1	527	A
1	A1	528	U
1	A1	529	A
1	A1	530	C
1	A1	531	C
1	A1	533	U
1	A1	535	A
1	A1	537	G
1	A1	538	A
1	A1	539	G
1	A1	540	G
1	A1	541	A
1	A1	542	A
1	A1	543	C
1	A1	544	A
1	A1	545	A
1	A1	546	U
1	A1	548	G
1	A1	550	A
1	A1	551	G
1	A1	554	C
1	A1	555	A
1	A1	556	A
1	A1	557	G
1	A1	558	U
1	A1	560	U
1	A1	561	G
1	A1	563	U
1	A1	564	G
1	A1	565	C
1	A1	568	G

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Mol	Chain	Res	Type
1	A1	570	A
1	A1	572	C
1	A1	574	G
1	A1	578	U
1	A1	579	A
1	A1	580	A
1	A1	585	A
1	A1	594	A
1	A1	595	G
1	A1	596	C
1	A1	599	A
1	A1	601	A
1	A1	602	U
1	A1	605	A
1	A1	607	G
1	A1	608	U
1	A1	609	U
1	A1	610	G
1	A1	611	U
1	A1	612	U
1	A1	614	C
1	A1	615	A
1	A1	616	G
1	A1	619	A
1	A1	620	A
1	A1	622	A
1	A1	623	A
1	A1	624	G
1	A1	626	U
1	A1	630	A
1	A1	633	U
1	A1	635	A
1	A1	638	U
1	A1	639	U
1	A1	640	U
1	A1	647	G
1	A1	649	U
1	A1	650	U
1	A1	653	C
1	A1	656	G
1	A1	659	C
1	A1	660	G

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Mol	Chain	Res	Type
1	A1	662	U
1	A1	663	U
1	A1	665	U
1	A1	666	U
1	A1	667	U
1	A1	681	U
1	A1	682	C
1	A1	683	C
1	A1	685	A
1	A1	686	C
1	A1	691	C
1	A1	692	C
1	A1	693	U
1	A1	694	U
1	A1	696	C
1	A1	697	C
1	A1	698	U
1	A1	700	C
1	A1	702	G
1	A1	703	G
1	A1	705	U
1	A1	708	C
1	A1	709	C
1	A1	710	U
1	A1	713	A
1	A1	714	G
1	A1	715	U
1	A1	718	U
1	A1	719	U
1	A1	720	G
1	A1	721	U
1	A1	722	G
1	A1	725	U
1	A1	726	C
1	A1	727	U
1	A1	728	U
1	A1	729	G
1	A1	731	C
1	A1	732	G
1	A1	733	A
1	A1	734	A
1	A1	735	C

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Mol	Chain	Res	Type
1	A1	736	C
1	A1	737	A
1	A1	738	G
1	A1	739	G
1	A1	742	U
1	A1	743	U
1	A1	744	U
1	A1	750	U
1	A1	751	G
1	A1	754	A
1	A1	756	A
1	A1	765	G
1	A1	766	U
1	A1	767	U
1	A1	774	A
1	A1	775	G
1	A1	778	G
1	A1	779	U
1	A1	780	A
1	A1	781	U
1	A1	782	U
1	A1	783	G
1	A1	787	G
1	A1	789	A
1	A1	790	U
1	A1	793	A
1	A1	794	U
1	A1	803	A
1	A1	808	U
1	A1	811	A
1	A1	812	A
1	A1	813	U
1	A1	814	A
1	A1	815	G
1	A1	816	G
1	A1	818	C
1	A1	819	G
1	A1	820	U
1	A1	821	U
1	A1	822	U
1	A1	823	G
1	A1	824	G

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Mol	Chain	Res	Type
1	A1	825	U
1	A1	826	U
1	A1	828	U
1	A1	829	A
1	A1	830	U
1	A1	831	U
1	A1	832	U
1	A1	834	G
1	A1	839	U
1	A1	840	U
1	A1	841	U
1	A1	842	C
1	A1	844	A
1	A1	847	A
1	A1	848	C
1	A1	850	A
1	A1	856	A
1	A1	857	U
1	A1	858	G
1	A1	860	U
1	A1	861	U
1	A1	862	A
1	A1	863	A
1	A1	864	U
1	A1	865	A
1	A1	872	G
1	A1	873	U
1	A1	876	G
1	A1	880	C
1	A1	881	A
1	A1	883	C
1	A1	886	U
1	A1	888	U
1	A1	891	A
1	A1	893	U
1	A1	894	U
1	A1	896	U
1	A1	897	C
1	A1	899	G
1	A1	901	G
1	A1	902	G
1	A1	903	U

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Mol	Chain	Res	Type
1	A1	904	G
1	A1	905	A
1	A1	906	A
1	A1	909	U
1	A1	910	C
1	A1	911	U
1	A1	912	U
1	A1	913	G
1	A1	914	G
1	A1	915	A
1	A1	916	U
1	A1	920	U
1	A1	922	G
1	A1	923	A
1	A1	927	C
1	A1	929	A
1	A1	932	U
1	A1	933	A
1	A1	934	C
1	A1	935	U
1	A1	938	G
1	A1	939	A
1	A1	942	G
1	A1	943	C
1	A1	944	A
1	A1	952	A
1	A1	959	U
1	A1	960	U
1	A1	961	U
1	A1	964	U
1	A1	965	U
1	A1	966	A
1	A1	967	A
1	A1	975	C
1	A1	976	G
1	A1	977	A
1	A1	978	A
1	A1	979	A
1	A1	981	U
1	A1	987	G
1	A1	988	A
1	A1	992	A

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Mol	Chain	Res	Type
1	A1	993	A
1	A1	995	A
1	A1	996	U
1	A1	998	A
1	A1	1000	C
1	A1	1003	A
1	A1	1004	U
1	A1	1005	A
1	A1	1007	C
1	A1	1008	G
1	A1	1010	C
1	A1	1019	A
1	A1	1027	A
1	A1	1028	C
1	A1	1029	U
1	A1	1030	A
1	A1	1032	G
1	A1	1033	C
1	A1	1036	A
1	A1	1039	A
1	A1	1040	G
1	A1	1044	U
1	A1	1045	C
1	A1	1046	G
1	A1	1048	G
1	A1	1049	U
1	A1	1057	U
1	A1	1058	U
1	A1	1059	U
1	A1	1060	U
1	A1	1066	C
1	A1	1071	U
1	A1	1072	C
1	A1	1073	G
1	A1	1074	G
1	A1	1075	C
1	A1	1077	C
1	A1	1079	U
1	A1	1080	U
1	A1	1082	C
1	A1	1087	A
1	A1	1089	U

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Mol	Chain	Res	Type
1	A1	1090	C
1	A1	1091	A
1	A1	1092	A
1	A1	1093	A
1	A1	1094	G
1	A1	1095	U
1	A1	1096	C
1	A1	1097	U
1	A1	1098	U
1	A1	1099	U
1	A1	1100	G
1	A1	1101	G
1	A1	1103	U
1	A1	1107	G
1	A1	1108	G
1	A1	1109	G
1	A1	1110	G
1	A1	1111	G
1	A1	1112	G
1	A1	1113	A
1	A1	1114	G
1	A1	1115	U
1	A1	1119	G
1	A1	1123	C
1	A1	1124	A
1	A1	1126	G
1	A1	1129	U
1	A1	1136	U
1	A1	1137	A
1	A1	1138	A
1	A1	1139	A
1	A1	1140	G
1	A1	1141	G
1	A1	1142	A
1	A1	1143	A
1	A1	1145	U
1	A1	1146	G
1	A1	1147	A
1	A1	1149	G
1	A1	1150	G
1	A1	1151	A
1	A1	1152	A

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Mol	Chain	Res	Type
1	A1	1153	G
1	A1	1154	G
1	A1	1158	C
1	A1	1160	A
1	A1	1161	C
1	A1	1162	C
1	A1	1166	A
1	A1	1167	G
1	A1	1168	U
1	A1	1178	G
1	A1	1179	G
1	A1	1181	U
1	A1	1185	U
1	A1	1186	U
1	A1	1189	A
1	A1	1190	C
1	A1	1191	U
1	A1	1193	A
1	A1	1194	A
1	A1	1196	A
1	A1	1197	C
1	A1	1198	G
1	A1	1199	G
1	A1	1200	G
1	A1	1201	G
1	A1	1202	A
1	A1	1203	A
1	A1	1204	A
1	A1	1205	C
1	A1	1206	U
1	A1	1207	C
1	A1	1208	A
1	A1	1211	A
1	A1	1217	A
1	A1	1218	G
1	A1	1219	A
1	A1	1220	C
1	A1	1222	C
1	A1	1225	U
1	A1	1228	G
1	A1	1229	G
1	A1	1230	A

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Mol	Chain	Res	Type
1	A1	1231	U
1	A1	1232	U
1	A1	1234	A
1	A1	1235	C
1	A1	1238	A
1	A1	1239	U
1	A1	1240	U
1	A1	1242	A
1	A1	1243	G
1	A1	1244	A
1	A1	1245	G
1	A1	1248	C
1	A1	1254	U
1	A1	1255	G
1	A1	1256	A
1	A1	1257	U
1	A1	1258	U
1	A1	1259	U
1	A1	1260	U
1	A1	1264	G
1	A1	1266	U
1	A1	1268	G
1	A1	1270	G
1	A1	1273	G
1	A1	1274	C
1	A1	1275	A
1	A1	1276	U
1	A1	1280	C
1	A1	1283	U
1	A1	1284	C
1	A1	1286	U
1	A1	1287	A
1	A1	1288	G
1	A1	1290	U
1	A1	1297	G
1	A1	1302	U
1	A1	1306	C
1	A1	1310	U
1	A1	1311	U
1	A1	1312	A
1	A1	1314	U
1	A1	1315	U

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Mol	Chain	Res	Type
1	A1	1316	G
1	A1	1321	A
1	A1	1324	G
1	A1	1325	A
1	A1	1326	A
1	A1	1331	A
1	A1	1332	C
1	A1	1333	C
1	A1	1335	U
1	A1	1336	A
1	A1	1337	A
1	A1	1340	U
1	A1	1341	A
1	A1	1342	C
1	A1	1345	A
1	A1	1346	A
1	A1	1347	U
1	A1	1349	G
1	A1	1350	U
1	A1	1351	G
1	A1	1352	G
1	A1	1353	U
1	A1	1354	G
1	A1	1355	C
1	A1	1358	G
1	A1	1359	C
1	A1	1360	A
1	A1	1361	U
1	A1	1362	U
1	A1	1363	U
1	A1	1364	G
1	A1	1365	C
1	A1	1366	U
1	A1	1367	G
1	A1	1368	G
1	A1	1369	U
1	A1	1371	A
1	A1	1373	C
1	A1	1374	C
1	A1	1378	U
1	A1	1379	C
1	A1	1380	U

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Mol	Chain	Res	Type
1	A1	1383	G
1	A1	1384	A
1	A1	1388	A
1	A1	1390	U
1	A1	1391	A
1	A1	1392	U
1	A1	1397	U
1	A1	1398	U
1	A1	1399	C
1	A1	1400	A
1	A1	1401	A
1	A1	1402	G
1	A1	1407	U
1	A1	1408	G
1	A1	1409	G
1	A1	1410	A
1	A1	1412	G
1	A1	1413	U
1	A1	1414	U
1	A1	1415	U
1	A1	1418	G
1	A1	1419	G
1	A1	1420	C
1	A1	1422	A
1	A1	1427	A
1	A1	1428	G
1	A1	1429	G
1	A1	1431	C
1	A1	1432	U
1	A1	1433	G
1	A1	1434	U
1	A1	1435	G
1	A1	1436	A
1	A1	1438	G
1	A1	1443	U
1	A1	1445	G
1	A1	1446	A
1	A1	1447	C
1	A1	1448	G
1	A1	1449	U
1	A1	1450	U
1	A1	1453	G

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Mol	Chain	Res	Type
1	A1	1454	G
1	A1	1455	G
1	A1	1456	C
1	A1	1458	G
1	A1	1459	C
1	A1	1460	A
1	A1	1461	C
1	A1	1466	G
1	A1	1467	C
1	A1	1468	U
1	A1	1469	A
1	A1	1471	A
1	A1	1472	C
1	A1	1473	U
1	A1	1474	G
1	A1	1477	G
1	A1	1478	G
1	A1	1479	A
1	A1	1481	C
1	A1	1482	C
1	A1	1483	A
1	A1	1484	G
1	A1	1485	C
1	A1	1486	G
1	A1	1490	C
1	A1	1491	U
1	A1	1492	A
1	A1	1493	A
1	A1	1494	C
1	A1	1503	A
1	A1	1505	A
1	A1	1506	G
1	A1	1509	C
1	A1	1510	U
1	A1	1514	U
1	A1	1515	A
1	A1	1516	A
1	A1	1517	U
1	A1	1518	C
1	A1	1519	U
1	A1	1521	G
1	A1	1522	U

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Mol	Chain	Res	Type
1	A1	1523	G
1	A1	1524	A
1	A1	1533	C
1	A1	1534	G
1	A1	1535	U
1	A1	1536	G
1	A1	1537	C
1	A1	1538	U
1	A1	1539	G
1	A1	1540	G
1	A1	1541	G
1	A1	1542	G
1	A1	1545	A
1	A1	1547	A
1	A1	1548	G
1	A1	1550	A
1	A1	1551	U
1	A1	1553	G
1	A1	1554	U
1	A1	1555	A
1	A1	1556	A
1	A1	1557	U
1	A1	1558	U
1	A1	1559	A
1	A1	1560	U
1	A1	1565	C
1	A1	1568	C
1	A1	1570	A
1	A1	1572	G
1	A1	1573	A
1	A1	1574	G
1	A1	1575	G
1	A1	1576	A
1	A1	1581	C
1	A1	1583	A
1	A1	1584	G
1	A1	1587	A
1	A1	1590	G
1	A1	1591	C
1	A1	1592	A
1	A1	1599	C
1	A1	1600	A

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Mol	Chain	Res	Type
1	A1	1601	G
1	A1	1602	C
1	A1	1605	G
1	A1	1607	G
1	A1	1609	U
1	A1	1610	G
1	A1	1611	A
1	A1	1613	U
1	A1	1614	A
1	A1	1615	C
1	A1	1616	G
1	A1	1618	C
1	A1	1623	C
1	A1	1624	C
1	A1	1625	C
1	A1	1627	U
1	A1	1628	U
1	A1	1630	U
1	A1	1631	A
1	A1	1632	C
1	A1	1633	A
1	A1	1634	C
1	A1	1635	A
1	A1	1636	C
1	A1	1637	C
1	A1	1638	G
1	A1	1639	C
1	A1	1642	G
1	A1	1644	C
1	A1	1645	G
1	A1	1646	C
1	A1	1650	U
1	A1	1654	G
1	A1	1656	U
1	A1	1657	U
1	A1	1658	G
1	A1	1659	A
1	A1	1664	C
1	A1	1665	U
1	A1	1667	A
1	A1	1668	G
1	A1	1673	G

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Mol	Chain	Res	Type
1	A1	1674	C
1	A1	1675	C
1	A1	1676	U
1	A1	1677	C
1	A1	1678	A
1	A1	1680	G
1	A1	1681	A
1	A1	1682	U
1	A1	1683	C
1	A1	1684	U
1	A1	1685	G
1	A1	1688	U
1	A1	1689	A
1	A1	1691	A
1	A1	1692	G
1	A1	1693	A
1	A1	1695	G
1	A1	1696	G
1	A1	1698	G
1	A1	1700	C
1	A1	1701	A
1	A1	1706	C
1	A1	1707	A
1	A1	1710	U
1	A1	1711	C
1	A1	1716	C
1	A1	1719	A
1	A1	1720	G
1	A1	1722	A
1	A1	1728	A
1	A1	1731	A
1	A1	1739	C
1	A1	1742	U
1	A1	1744	A
1	A1	1746	A
1	A1	1748	G
1	A1	1754	A
1	A1	1755	A
1	A1	1757	G
1	A1	1758	U
1	A1	1759	C
1	A1	1760	G

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Mol	Chain	Res	Type
1	A1	1762	A
1	A1	1763	A
1	A1	1764	C
1	A1	1766	A
1	A1	1767	G
1	A1	1768	G
1	A1	1769	U
1	A1	1770	U
1	A1	1772	C
1	A1	1773	C
1	A1	1774	G
1	A1	1777	G
1	A1	1779	U
1	A1	1780	G
1	A1	1782	A
1	A1	1783	C
1	A1	1788	G
1	A1	1792	G
1	A1	1793	G
1	A1	1794	A
1	A1	1795	U
1	A1	1797	A
1	A1	1798	U
29	B1	6	A
29	B1	9	U
29	B1	12	A
29	B1	14	U
29	B1	15	C
29	B1	16	A
29	B1	20	A
29	B1	21	G
29	B1	25	U
29	B1	29	C
29	B1	32	U
29	B1	35	A
29	B1	38	U
29	B1	40	A
29	B1	43	A
29	B1	44	U
29	B1	47	C
29	B1	50	U
29	B1	53	G

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Mol	Chain	Res	Type
29	B1	56	G
29	B1	58	G
29	B1	59	G
29	B1	60	A
29	B1	62	A
29	B1	65	A
29	B1	66	A
29	B1	68	C
29	B1	69	C
29	B1	70	A
29	B1	71	A
29	B1	72	C
29	B1	73	C
29	B1	74	G
29	B1	76	G
29	B1	77	A
29	B1	81	C
29	B1	83	U
29	B1	85	A
29	B1	87	U
29	B1	88	A
29	B1	89	A
29	B1	92	G
29	B1	93	C
29	B1	94	G
29	B1	96	G
29	B1	97	U
29	B1	98	G
29	B1	99	A
29	B1	100	A
29	B1	102	C
29	B1	103	G
29	B1	105	C
29	B1	106	A
29	B1	108	A
29	B1	109	A
29	B1	110	G
29	B1	113	C
29	B1	114	A
29	B1	117	U
29	B1	118	U
29	B1	119	U

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Mol	Chain	Res	Type
29	B1	120	G
29	B1	121	A
29	B1	125	C
29	B1	126	U
29	B1	127	G
29	B1	131	C
29	B1	133	U
29	B1	134	U
29	B1	136	G
29	B1	138	U
29	B1	140	C
29	B1	141	C
29	B1	144	A
29	B1	145	G
29	B1	146	U
29	B1	147	U
29	B1	148	G
29	B1	149	U
29	B1	150	A
29	B1	152	U
29	B1	154	U
29	B1	155	G
29	B1	156	G
29	B1	157	A
29	B1	158	G
29	B1	159	A
29	B1	160	G
29	B1	161	G
29	B1	164	A
29	B1	167	U
29	B1	169	U
29	B1	170	G
29	B1	171	G
29	B1	172	G
29	B1	173	G
29	B1	175	C
29	B1	176	G
29	B1	177	U
29	B1	178	U
29	B1	179	C
29	B1	182	U
29	B1	187	A

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Mol	Chain	Res	Type
29	B1	188	U
29	B1	190	U
29	B1	191	U
29	B1	196	G
29	B1	197	G
29	B1	199	A
29	B1	201	A
29	B1	204	A
29	B1	205	C
29	B1	209	A
29	B1	210	U
29	B1	211	A
29	B1	214	G
29	B1	215	G
29	B1	217	U
29	B1	218	G
29	B1	219	A
29	B1	220	G
29	B1	221	A
29	B1	223	U
29	B1	224	C
29	B1	225	C
29	B1	227	G
29	B1	230	U
29	B1	231	G
29	B1	237	G
29	B1	238	A
29	B1	239	G
29	B1	240	U
29	B1	241	G
29	B1	242	C
29	B1	244	G
29	B1	245	U
29	B1	246	U
29	B1	247	C
29	B1	248	U
29	B1	249	U
29	B1	250	U
29	B1	251	G
29	B1	252	U
29	B1	253	A
29	B1	255	A

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Mol	Chain	Res	Type
29	B1	256	G
29	B1	257	U
29	B1	258	G
29	B1	259	C
29	B1	260	C
29	B1	262	U
29	B1	263	C
29	B1	264	G
29	B1	265	A
29	B1	266	A
29	B1	267	G
29	B1	269	G
29	B1	282	G
29	B1	283	G
29	B1	284	A
29	B1	285	A
29	B1	289	A
29	B1	292	U
29	B1	293	C
29	B1	295	A
29	B1	297	G
29	B1	298	U
29	B1	301	G
29	B1	304	G
29	B1	305	U
29	B1	306	A
29	B1	307	A
29	B1	311	C
29	B1	315	C
29	B1	316	U
29	B1	317	A
29	B1	318	A
29	B1	319	A
29	B1	323	A
29	B1	324	A
29	B1	325	A
29	B1	326	U
29	B1	327	A
29	B1	328	U
29	B1	329	U
29	B1	330	G
29	B1	331	G

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Mol	Chain	Res	Type
29	B1	332	C
29	B1	333	G
29	B1	335	G
29	B1	338	A
29	B1	339	C
29	B1	340	C
29	B1	341	G
29	B1	342	A
29	B1	345	G
29	B1	346	C
29	B1	349	A
29	B1	350	C
29	B1	351	A
29	B1	352	A
29	B1	354	U
29	B1	362	U
29	B1	364	G
29	B1	368	G
29	B1	371	G
29	B1	374	A
29	B1	375	A
29	B1	376	G
29	B1	377	A
29	B1	378	A
29	B1	379	C
29	B1	380	U
29	B1	381	U
29	B1	382	U
29	B1	383	G
29	B1	384	A
29	B1	385	A
29	B1	386	A
29	B1	387	A
29	B1	390	G
29	B1	391	A
29	B1	392	G
29	B1	395	A
29	B1	396	A
29	B1	397	A
29	B1	398	A
29	B1	399	A
29	B1	400	G

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Mol	Chain	Res	Type
29	B1	401	U
29	B1	402	A
29	B1	403	C
29	B1	404	G
29	B1	419	G
29	B1	421	G
29	B1	422	A
29	B1	423	A
29	B1	424	G
29	B1	425	G
29	B1	428	A
29	B1	429	U
29	B1	431	U
29	B1	432	G
29	B1	439	C
29	B1	493	G
29	B1	495	G
29	B1	500	C
29	B1	504	A
29	B1	509	U
29	B1	510	G
29	B1	511	G
29	B1	514	G
29	B1	515	C
29	B1	516	A
29	B1	517	G
29	B1	518	G
29	B1	519	A
29	B1	520	U
29	B1	521	A
29	B1	523	A
29	B1	524	U
29	B1	525	C
29	B1	528	U
29	B1	529	A
29	B1	533	A
29	B1	536	U
29	B1	537	A
29	B1	538	G
29	B1	539	C
29	B1	540	U
29	B1	541	U

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Mol	Chain	Res	Type
29	B1	544	C
29	B1	546	C
29	B1	547	G
29	B1	548	G
29	B1	549	U
29	B1	550	A
29	B1	556	U
29	B1	559	A
29	B1	560	G
29	B1	561	C
29	B1	562	C
29	B1	563	U
29	B1	564	G
29	B1	565	U
29	B1	566	G
29	B1	571	U
29	B1	574	U
29	B1	575	G
29	B1	576	C
29	B1	577	C
29	B1	578	A
29	B1	579	G
29	B1	580	C
29	B1	584	G
29	B1	586	C
29	B1	588	G
29	B1	590	G
29	B1	591	G
29	B1	592	A
29	B1	593	C
29	B1	594	U
29	B1	595	G
29	B1	597	G
29	B1	603	A
29	B1	604	G
29	B1	605	U
29	B1	606	C
29	B1	607	A
29	B1	608	A
29	B1	609	G
29	B1	610	G
29	B1	611	A

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Mol	Chain	Res	Type
29	B1	612	U
29	B1	618	C
29	B1	619	A
29	B1	620	U
29	B1	621	A
29	B1	622	A
29	B1	624	G
29	B1	625	G
29	B1	626	U
29	B1	628	A
29	B1	630	A
29	B1	632	G
29	B1	636	C
29	B1	637	C
29	B1	642	U
29	B1	645	A
29	B1	646	A
29	B1	647	A
29	B1	648	C
29	B1	649	A
29	B1	650	C
29	B1	651	G
29	B1	656	A
29	B1	657	A
29	B1	661	G
29	B1	666	A
29	B1	667	C
29	B1	668	G
29	B1	669	U
29	B1	674	G
29	B1	675	C
29	B1	677	A
29	B1	679	U
29	B1	680	G
29	B1	681	U
29	B1	682	U
29	B1	683	U
29	B1	685	G
29	B1	691	A
29	B1	692	A
29	B1	694	C
29	B1	697	A

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Mol	Chain	Res	Type
29	B1	698	U
29	B1	699	A
29	B1	705	A
29	B1	706	A
29	B1	712	G
29	B1	714	G
29	B1	715	A
29	B1	716	A
29	B1	717	C
29	B1	718	G
29	B1	719	U
29	B1	720	A
29	B1	721	G
29	B1	722	G
29	B1	723	U
29	B1	724	U
29	B1	725	G
29	B1	726	G
29	B1	727	G
29	B1	728	G
29	B1	731	U
29	B1	732	C
29	B1	733	G
29	B1	734	C
29	B1	735	A
29	B1	736	A
29	B1	738	A
29	B1	741	U
29	B1	743	C
29	B1	744	A
29	B1	745	C
29	B1	746	A
29	B1	747	A
29	B1	748	U
29	B1	749	C
29	B1	751	A
29	B1	752	C
29	B1	753	C
29	B1	756	U
29	B1	757	C
29	B1	758	C
29	B1	759	U

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Mol	Chain	Res	Type
29	B1	761	A
29	B1	762	U
29	B1	764	U
29	B1	765	C
29	B1	766	U
29	B1	767	U
29	B1	768	C
29	B1	769	G
29	B1	770	G
29	B1	771	A
29	B1	772	U
29	B1	774	G
29	B1	776	U
29	B1	777	U
29	B1	778	U
29	B1	779	G
29	B1	781	G
29	B1	782	U
29	B1	784	A
29	B1	785	G
29	B1	786	A
29	B1	787	G
29	B1	788	C
29	B1	791	A
29	B1	794	U
29	B1	798	G
29	B1	802	C
29	B1	803	C
29	B1	805	G
29	B1	806	A
29	B1	807	A
29	B1	808	A
29	B1	809	G
29	B1	810	A
29	B1	815	G
29	B1	817	A
29	B1	822	G
29	B1	825	U
29	B1	826	G
29	B1	828	A
29	B1	830	A
29	B1	831	G

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Mol	Chain	Res	Type
29	B1	834	U
29	B1	835	G
29	B1	836	A
29	B1	837	A
29	B1	838	G
29	B1	841	A
29	B1	845	G
29	B1	846	A
29	B1	847	A
29	B1	857	G
29	B1	858	A
29	B1	859	G
29	B1	860	G
29	B1	861	C
29	B1	863	C
29	B1	870	G
29	B1	871	U
29	B1	874	U
29	B1	875	G
29	B1	879	U
29	B1	880	G
29	B1	882	A
29	B1	884	A
29	B1	886	C
29	B1	887	G
29	B1	888	A
29	B1	892	U
29	B1	894	G
29	B1	895	A
29	B1	896	A
29	B1	897	U
29	B1	901	G
29	B1	903	U
29	B1	907	G
29	B1	908	G
29	B1	909	G
29	B1	911	C
29	B1	913	A
29	B1	914	A
29	B1	915	A
29	B1	916	G
29	B1	917	A

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Mol	Chain	Res	Type
29	B1	920	A
29	B1	921	A
29	B1	922	U
29	B1	924	G
29	B1	933	A
29	B1	934	G
29	B1	937	G
29	B1	939	U
29	B1	941	G
29	B1	943	U
29	B1	944	C
29	B1	945	C
29	B1	947	G
29	B1	949	C
29	B1	952	A
29	B1	953	G
29	B1	954	U
29	B1	957	C
29	B1	958	C
29	B1	960	U
29	B1	961	C
29	B1	962	A
29	B1	963	G
29	B1	967	A
29	B1	970	A
29	B1	971	G
29	B1	974	G
29	B1	975	C
29	B1	978	G
29	B1	979	U
29	B1	980	A
29	B1	981	U
29	B1	984	G
29	B1	987	U
29	B1	994	G
29	B1	995	U
29	B1	996	A
29	B1	1000	C
29	B1	1002	A
29	B1	1006	A
29	B1	1007	U
29	B1	1010	G

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Mol	Chain	Res	Type
29	B1	1011	A
29	B1	1013	G
29	B1	1014	U
29	B1	1015	U
29	B1	1017	C
29	B1	1019	G
29	B1	1024	G
29	B1	1026	A
29	B1	1027	A
29	B1	1030	A
29	B1	1033	U
29	B1	1036	A
29	B1	1038	C
29	B1	1041	U
29	B1	1042	U
29	B1	1043	C
29	B1	1047	A
29	B1	1048	A
29	B1	1049	C
29	B1	1053	A
29	B1	1060	U
29	B1	1061	A
29	B1	1063	G
29	B1	1064	A
29	B1	1065	A
29	B1	1066	G
29	B1	1067	U
29	B1	1068	C
29	B1	1071	U
29	B1	1073	U
29	B1	1074	U
29	B1	1075	A
29	B1	1077	U
29	B1	1078	U
29	B1	1079	A
29	B1	1080	A
29	B1	1081	U
29	B1	1082	U
29	B1	1085	A
29	B1	1086	C
29	B1	1093	A
29	B1	1094	U

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Mol	Chain	Res	Type
29	B1	1095	U
29	B1	1096	U
29	B1	1097	G
29	B1	1098	A
29	B1	1100	U
29	B1	1101	G
29	B1	1102	A
29	B1	1103	A
29	B1	1104	G
29	B1	1105	A
29	B1	1109	U
29	B1	1110	U
29	B1	1113	G
29	B1	1115	G
29	B1	1116	G
29	B1	1117	G
29	B1	1119	C
29	B1	1120	A
29	B1	1123	U
29	B1	1124	U
29	B1	1128	U
29	B1	1129	A
29	B1	1130	A
29	B1	1131	G
29	B1	1132	C
29	B1	1133	A
29	B1	1136	A
29	B1	1139	G
29	B1	1140	G
29	B1	1142	G
29	B1	1143	A
29	B1	1144	U
29	B1	1145	G
29	B1	1149	G
29	B1	1151	U
29	B1	1152	G
29	B1	1153	A
29	B1	1154	A
29	B1	1155	C
29	B1	1157	G
29	B1	1158	A
29	B1	1159	A

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Mol	Chain	Res	Type
29	B1	1160	C
29	B1	1162	U
29	B1	1163	A
29	B1	1168	U
29	B1	1169	A
29	B1	1175	C
29	B1	1176	C
29	B1	1177	G
29	B1	1178	G
29	B1	1179	A
29	B1	1180	A
29	B1	1181	U
29	B1	1184	A
29	B1	1187	C
29	B1	1190	A
29	B1	1191	U
29	B1	1192	C
29	B1	1193	A
29	B1	1194	G
29	B1	1195	A
29	B1	1196	C
29	B1	1197	A
29	B1	1198	C
29	B1	1199	C
29	B1	1200	A
29	B1	1201	C
29	B1	1202	A
29	B1	1203	A
29	B1	1205	A
29	B1	1207	G
29	B1	1208	U
29	B1	1209	G
29	B1	1211	U
29	B1	1212	A
29	B1	1213	G
29	B1	1214	U
29	B1	1217	A
29	B1	1218	U
29	B1	1219	C
29	B1	1220	U
29	B1	1222	G
29	B1	1223	A

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Mol	Chain	Res	Type
29	B1	1224	C
29	B1	1225	A
29	B1	1226	G
29	B1	1231	A
29	B1	1232	C
29	B1	1233	G
29	B1	1234	G
29	B1	1235	U
29	B1	1236	G
29	B1	1237	G
29	B1	1238	C
29	B1	1242	G
29	B1	1243	G
29	B1	1244	A
29	B1	1245	A
29	B1	1246	G
29	B1	1247	U
29	B1	1248	C
29	B1	1250	G
29	B1	1252	A
29	B1	1253	U
29	B1	1254	C
29	B1	1256	G
29	B1	1257	C
29	B1	1258	U
29	B1	1259	A
29	B1	1260	A
29	B1	1261	G
29	B1	1262	G
29	B1	1263	A
29	B1	1264	G
29	B1	1265	U
29	B1	1267	U
29	B1	1269	U
29	B1	1270	A
29	B1	1272	C
29	B1	1273	A
29	B1	1277	C
29	B1	1278	A
29	B1	1279	C
29	B1	1281	G
29	B1	1285	G

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Mol	Chain	Res	Type
29	B1	1286	A
29	B1	1287	A
29	B1	1288	U
29	B1	1289	G
29	B1	1290	A
29	B1	1291	A
29	B1	1292	C
29	B1	1295	G
29	B1	1296	C
29	B1	1297	C
29	B1	1299	U
29	B1	1303	A
29	B1	1305	U
29	B1	1307	G
29	B1	1308	A
29	B1	1309	U
29	B1	1310	G
29	B1	1313	G
29	B1	1314	C
29	B1	1315	U
29	B1	1316	C
29	B1	1318	A
29	B1	1320	C
29	B1	1323	G
29	B1	1324	U
29	B1	1325	U
29	B1	1326	A
29	B1	1330	A
29	B1	1331	U
29	B1	1332	A
29	B1	1342	C
29	B1	1348	U
29	B1	1349	G
29	B1	1350	A
29	B1	1351	U
29	B1	1353	U
29	B1	1354	G
29	B1	1355	A
29	B1	1356	U
29	B1	1365	G
29	B1	1367	G
29	B1	1368	U

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Mol	Chain	Res	Type
29	B1	1370	G
29	B1	1371	G
29	B1	1378	U
29	B1	1379	G
29	B1	1380	G
29	B1	1384	U
29	B1	1385	C
29	B1	1386	A
29	B1	1389	G
29	B1	1390	A
29	B1	1392	G
29	B1	1394	A
29	B1	1395	G
29	B1	1398	U
29	B1	1399	A
29	B1	1400	G
29	B1	1404	G
29	B1	1405	U
29	B1	1406	A
29	B1	1407	A
29	B1	1408	G
29	B1	1410	U
29	B1	1411	C
29	B1	1412	G
29	B1	1416	C
29	B1	1418	A
29	B1	1419	A
29	B1	1429	G
29	B1	1430	U
29	B1	1431	G
29	B1	1434	G
29	B1	1435	A
29	B1	1437	C
29	B1	1440	G
29	B1	1441	G
29	B1	1442	U
29	B1	1445	U
29	B1	1446	A
29	B1	1450	G
29	B1	1453	A
29	B1	1455	U
29	B1	1456	A

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Mol	Chain	Res	Type
29	B1	1460	A
29	B1	1462	A
29	B1	1465	A
29	B1	1467	A
29	B1	1468	A
29	B1	1469	C
29	B1	1470	U
29	B1	1478	C
29	B1	1479	U
29	B1	1480	G
29	B1	1481	A
29	B1	1482	A
29	B1	1483	G
29	B1	1484	U
29	B1	1485	G
29	B1	1488	G
29	B1	1493	G
29	B1	1495	U
29	B1	1496	C
29	B1	1497	C
29	B1	1501	U
29	B1	1503	A
29	B1	1504	A
29	B1	1505	C
29	B1	1506	A
29	B1	1507	G
29	B1	1508	C
29	B1	1509	A
29	B1	1510	G
29	B1	1511	U
29	B1	1520	G
29	B1	1521	G
29	B1	1524	A
29	B1	1525	G
29	B1	1527	C
29	B1	1530	U
29	B1	1531	C
29	B1	1533	U
29	B1	1535	A
29	B1	1536	G
29	B1	1539	A
29	B1	1540	U

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Mol	Chain	Res	Type
29	B1	1542	G
29	B1	1548	C
29	B1	1549	U
29	B1	1551	C
29	B1	1552	G
29	B1	1553	U
29	B1	1554	U
29	B1	1556	C
29	B1	1557	A
29	B1	1558	A
29	B1	1559	A
29	B1	1560	G
29	B1	1567	U
29	B1	1568	U
29	B1	1572	U
29	B1	1575	A
29	B1	1579	C
29	B1	1580	A
29	B1	1581	C
29	B1	1582	C
29	B1	1583	A
29	B1	1584	U
29	B1	1587	A
29	B1	1589	A
29	B1	1593	A
29	B1	1595	U
29	B1	1596	C
29	B1	1601	U
29	B1	1602	A
29	B1	1605	A
29	B1	1606	U
29	B1	1607	U
29	B1	1608	C
29	B1	1609	C
29	B1	1610	G
29	B1	1620	U
29	B1	1622	U
29	B1	1626	U
29	B1	1627	U
29	B1	1628	C
29	B1	1629	U
29	B1	1630	U

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Mol	Chain	Res	Type
29	B1	1631	C
29	B1	1632	A
29	B1	1633	C
29	B1	1634	G
29	B1	1635	G
29	B1	1636	U
29	B1	1638	A
29	B1	1639	C
29	B1	1641	U
29	B1	1642	A
29	B1	1643	A
29	B1	1644	C
29	B1	1645	U
29	B1	1646	G
29	B1	1652	G
29	B1	1653	G
29	B1	1655	G
29	B1	1656	A
29	B1	1657	C
29	B1	1661	G
29	B1	1667	A
29	B1	1668	G
29	B1	1671	C
29	B1	1672	U
29	B1	1678	G
29	B1	1681	U
29	B1	1682	U
29	B1	1683	A
29	B1	1684	U
29	B1	1685	C
29	B1	1686	U
29	B1	1687	U
29	B1	1688	U
29	B1	1689	U
29	B1	1692	U
29	B1	1694	U
29	B1	1698	C
29	B1	1699	A
29	B1	1701	C
29	B1	1703	U
29	B1	1704	A
29	B1	1706	C

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Mol	Chain	Res	Type
29	B1	1708	C
29	B1	1710	C
29	B1	1713	G
29	B1	1714	A
29	B1	1716	U
29	B1	1717	U
29	B1	1724	U
29	B1	1725	C
29	B1	1726	C
29	B1	1727	G
29	B1	1728	G
29	B1	1729	A
29	B1	1730	G
29	B1	1734	G
29	B1	1735	G
29	B1	1736	G
29	B1	1739	U
29	B1	1740	U
29	B1	1744	G
29	B1	1750	A
29	B1	1754	G
29	B1	1756	C
29	B1	1760	A
29	B1	1762	C
29	B1	1766	G
29	B1	1769	G
29	B1	1773	C
29	B1	1774	C
29	B1	1775	G
29	B1	1779	C
29	B1	1780	G
29	B1	1781	C
29	B1	1782	U
29	B1	1783	U
29	B1	1786	G
29	B1	1787	A
29	B1	1788	C
29	B1	1792	C
29	B1	1793	C
29	B1	1794	G
29	B1	1795	U
29	B1	1796	G

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Mol	Chain	Res	Type
29	B1	1797	A
29	B1	1802	C
29	B1	1803	C
29	B1	1806	A
29	B1	1807	G
29	B1	1808	G
29	B1	1809	A
29	B1	1810	A
29	B1	1812	G
29	B1	1813	A
29	B1	1814	A
29	B1	1815	U
29	B1	1816	A
29	B1	1820	U
29	B1	1821	U
29	B1	1822	C
29	B1	1830	G
29	B1	1834	U
29	B1	1835	A
29	B1	1839	A
29	B1	1840	U
29	B1	1841	A
29	B1	1842	A
29	B1	1844	C
29	B1	1846	C
29	B1	1847	A
29	B1	1849	C
29	B1	1852	G
29	B1	1853	U
29	B1	1855	U
29	B1	1857	C
29	B1	1858	A
29	B1	1859	A
29	B1	1860	G
29	B1	1864	A
29	B1	1871	U
29	B1	1875	G
29	B1	1876	U
29	B1	1877	U
29	B1	1878	G
29	B1	1879	A
29	B1	1880	U

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Mol	Chain	Res	Type
29	B1	1881	A
29	B1	1885	U
29	B1	1886	A
29	B1	1889	G
29	B1	1891	A
29	B1	1895	A
29	B1	1901	A
29	B1	1905	G
29	B1	1906	G
29	B1	1907	C
29	B1	1913	A
29	B1	1914	G
29	B1	1920	U
29	B1	1921	A
29	B1	1925	U
29	B1	1926	C
29	B1	1927	G
29	B1	1928	G
29	B1	1930	A
29	B1	1931	U
29	B1	1932	A
29	B1	1933	A
29	B1	1935	G
29	B1	1941	C
29	B1	1946	A
29	B1	1947	G
29	B1	1948	G
29	B1	1950	U
29	B1	2093	A
29	B1	2095	G
29	B1	2096	A
29	B1	2102	U
29	B1	2105	G
29	B1	2106	A
29	B1	2111	G
29	B1	2112	U
29	B1	2113	A
29	B1	2114	C
29	B1	2115	G
29	B1	2117	A
29	B1	2121	G
29	B1	2122	G

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Mol	Chain	Res	Type
29	B1	2126	A
29	B1	2129	U
29	B1	2130	G
29	B1	2131	A
29	B1	2132	C
29	B1	2137	U
29	B1	2138	A
29	B1	2139	A
29	B1	2144	A
29	B1	2147	A
29	B1	2148	U
29	B1	2149	A
29	B1	2150	G
29	B1	2151	C
29	B1	2152	A
29	B1	2158	A
29	B1	2161	G
29	B1	2168	A
29	B1	2169	G
29	B1	2172	A
29	B1	2173	U
29	B1	2174	G
29	B1	2176	U
29	B1	2178	A
29	B1	2185	G
29	B1	2187	G
29	B1	2188	A
29	B1	2191	U
29	B1	2193	U
29	B1	2194	G
29	B1	2195	C
29	B1	2201	G
29	B1	2205	U
29	B1	2206	G
29	B1	2207	A
29	B1	2208	A
29	B1	2209	U
29	B1	2210	G
29	B1	2211	U
29	B1	2215	A
29	B1	2222	A
29	B1	2223	A

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Mol	Chain	Res	Type
29	B1	2224	A
29	B1	2227	C
29	B1	2237	C
29	B1	2244	A
29	B1	2247	G
29	B1	2248	C
29	B1	2249	G
29	B1	2250	G
29	B1	2252	A
29	B1	2254	U
29	B1	2255	A
29	B1	2256	A
29	B1	2257	C
29	B1	2259	A
29	B1	2260	U
29	B1	2261	G
29	B1	2262	A
29	B1	2263	C
29	B1	2264	U
29	B1	2266	U
29	B1	2270	A
29	B1	2272	G
29	B1	2273	G
29	B1	2275	A
29	B1	2276	G
29	B1	2277	C
29	B1	2280	A
29	B1	2281	A
29	B1	2282	U
29	B1	2283	G
29	B1	2286	U
29	B1	2288	G
29	B1	2290	C
29	B1	2291	A
29	B1	2292	U
29	B1	2295	A
29	B1	2296	A
29	B1	2297	U
29	B1	2298	U
29	B1	2299	A
29	B1	2300	G
29	B1	2303	A

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Mol	Chain	Res	Type
29	B1	2306	C
29	B1	2307	G
29	B1	2308	C
29	B1	2309	A
29	B1	2310	U
29	B1	2311	G
29	B1	2313	A
29	B1	2314	U
29	B1	2315	G
29	B1	2320	A
29	B1	2324	A
29	B1	2325	G
29	B1	2326	A
29	B1	2327	U
29	B1	2329	C
29	B1	2330	C
29	B1	2334	U
29	B1	2335	G
29	B1	2336	U
29	B1	2339	C
29	B1	2341	A
29	B1	2342	U
29	B1	2344	U
29	B1	2345	A
29	B1	2360	C
29	B1	2361	A
29	B1	2363	A
29	B1	2364	G
29	B1	2365	C
29	B1	2371	G
29	B1	2372	A
29	B1	2373	A
29	B1	2374	C
29	B1	2375	G
29	B1	2377	G
29	B1	2379	U
29	B1	2380	U
29	B1	2383	C
29	B1	2384	A
29	B1	2385	G
29	B1	2386	A
29	B1	2390	A

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Mol	Chain	Res	Type
29	B1	2393	G
29	B1	2397	A
29	B1	2401	A
29	B1	2402	A
29	B1	2403	G
29	B1	2404	A
29	B1	2405	C
29	B1	2410	U
29	B1	2411	U
29	B1	2412	G
29	B1	2414	G
29	B1	2415	C
29	B1	2417	U
29	B1	2421	U
29	B1	2422	C
29	B1	2423	U
29	B1	2424	A
29	B1	2432	A
29	B1	2433	U
29	B1	2434	U
29	B1	2436	U
29	B1	2437	G
29	B1	2439	A
29	B1	2443	A
29	B1	2445	A
29	B1	2446	U
29	B1	2449	A
29	B1	2450	G
29	B1	2451	G
29	B1	2452	G
29	B1	2453	U
29	B1	2454	G
29	B1	2458	A
29	B1	2459	A
29	B1	2461	A
29	B1	2462	A
29	B1	2463	G
29	B1	2468	A
29	B1	2472	U
29	B1	2473	C
29	B1	2474	G
29	B1	2479	C

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Mol	Chain	Res	Type
29	B1	2484	A
29	B1	2485	A
29	B1	2486	A
29	B1	2487	U
29	B1	2488	A
29	B1	2491	A
29	B1	2492	C
29	B1	2493	U
29	B1	2499	U
29	B1	2500	A
29	B1	2501	U
29	B1	2502	A
29	B1	2503	G
29	B1	2504	U
29	B1	2508	U
29	B1	2511	A
29	B1	2512	C
29	B1	2513	U
29	B1	2514	U
29	B1	2515	A
29	B1	2516	U
29	B1	2517	U
29	B1	2520	A
29	B1	2521	U
29	B1	2522	G
29	B1	2523	A
29	B1	2524	A
29	B1	2525	G
29	B1	2526	C
29	B1	2528	G
29	B1	2530	G
29	B1	2531	C
29	B1	2536	A
29	B1	2539	C
29	B1	2540	A
29	B1	2541	U
29	B1	2542	U
29	B1	2543	U
29	B1	2547	A
29	B1	2548	C
29	B1	2549	G
29	B1	2550	U

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Mol	Chain	Res	Type
29	B1	2552	C
29	B1	2553	U
29	B1	2554	A
29	B1	2555	G
29	B1	2556	C
29	B1	2557	A
29	B1	2558	U
29	B1	2559	U
29	B1	2560	C
29	B1	2561	A
29	B1	2569	A
29	B1	2572	C
29	B1	2574	G
29	B1	2580	A
29	B1	2581	U
29	B1	2582	C
29	B1	2583	C
29	B1	2584	G
29	B1	2585	G
29	B1	2586	G
29	B1	2587	U
29	B1	2589	G
29	B1	2593	A
29	B1	2594	C
29	B1	2598	G
29	B1	2600	C
29	B1	2603	G
29	B1	2605	G
29	B1	2606	G
29	B1	2607	G
29	B1	2612	U
29	B1	2613	U
29	B1	2614	G
29	B1	2618	G
29	B1	2619	G
29	B1	2624	G
29	B1	2626	A
29	B1	2627	C
29	B1	2628	A
29	B1	2629	U
29	B1	2631	U
29	B1	2636	A

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Mol	Chain	Res	Type
29	B1	2637	A
29	B1	2638	C
29	B1	2639	G
29	B1	2642	A
29	B1	2643	A
29	B1	2644	C
29	B1	2648	G
29	B1	2649	A
29	B1	2650	U
29	B1	2651	G
29	B1	2652	U
29	B1	2653	C
29	B1	2655	U
29	B1	2656	A
29	B1	2657	A
29	B1	2658	G
29	B1	2662	G
29	B1	2663	G
29	B1	2664	C
29	B1	2666	C
29	B1	2667	A
29	B1	2668	U
29	B1	2671	A
29	B1	2672	G
29	B1	2675	C
29	B1	2676	A
29	B1	2677	G
29	B1	2678	A
29	B1	2679	A
29	B1	2681	U
29	B1	2682	C
29	B1	2683	U
29	B1	2684	C
29	B1	2685	C
29	B1	2686	A
29	B1	2687	G
29	B1	2688	U
29	B1	2689	A
29	B1	2690	G
29	B1	2691	A
29	B1	2693	C
29	B1	2694	A

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Mol	Chain	Res	Type
29	B1	2695	A
29	B1	2696	A
29	B1	2697	A
29	B1	2699	G
29	B1	2700	G
29	B1	2702	A
29	B1	2703	A
29	B1	2704	A
29	B1	2707	C
29	B1	2708	C
29	B1	2709	C
29	B1	2710	C
29	B1	2712	U
29	B1	2713	U
29	B1	2714	G
29	B1	2715	A
29	B1	2716	U
29	B1	2717	U
29	B1	2718	U
29	B1	2719	U
29	B1	2725	U
29	B1	2726	C
29	B1	2727	A
29	B1	2728	G
29	B1	2729	U
29	B1	2730	G
29	B1	2731	U
29	B1	2733	A
29	B1	2735	U
29	B1	2740	A
29	B1	2742	C
29	B1	2743	A
29	B1	2746	A
29	B1	2751	G
29	B1	2752	U
29	B1	2753	G
29	B1	2755	C
29	B1	2756	C
29	B1	2760	C
29	B1	2762	A
29	B1	2764	C
29	B1	2766	U

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Mol	Chain	Res	Type
29	B1	2769	A
29	B1	2771	U
29	B1	2772	C
29	B1	2776	C
29	B1	2777	G
29	B1	2778	G
29	B1	2779	A
29	B1	2780	A
29	B1	2782	U
29	B1	2783	U
29	B1	2784	G
29	B1	2787	G
29	B1	2790	A
29	B1	2796	G
29	B1	2798	C
29	B1	2799	A
29	B1	2800	G
29	B1	2801	A
29	B1	2802	A
29	B1	2804	A
29	B1	2805	G
29	B1	2807	U
29	B1	2809	C
29	B1	2810	C
29	B1	2814	G
29	B1	2816	G
29	B1	2817	A
29	B1	2818	U
29	B1	2822	U
29	B1	2823	G
29	B1	2825	C
29	B1	2826	U
29	B1	2828	G
29	B1	2829	U
29	B1	2830	G
29	B1	2833	A
29	B1	2834	G
29	B1	2835	U
29	B1	2836	C
29	B1	2838	A
29	B1	2839	G
29	B1	2840	C

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Mol	Chain	Res	Type
29	B1	2842	U
29	B1	2843	U
29	B1	2844	C
29	B1	2845	A
29	B1	2846	U
29	B1	2847	A
29	B1	2849	C
29	B1	2850	G
29	B1	2851	A
29	B1	2852	C
29	B1	2859	U
29	B1	2860	U
29	B1	2867	C
29	B1	2870	C
29	B1	2871	G
29	B1	2872	A
29	B1	2873	U
29	B1	2874	G
29	B1	2875	U
29	B1	2878	G
29	B1	2881	C
29	B1	2882	U
29	B1	2883	U
29	B1	2884	C
29	B1	2886	U
29	B1	2887	A
29	B1	2888	U
29	B1	2894	C
29	B1	2896	A
29	B1	2897	A
29	B1	2898	G
29	B1	2899	C
29	B1	2900	A
29	B1	2901	G
29	B1	2905	U
29	B1	2911	A
29	B1	2912	G
29	B1	2914	G
29	B1	2915	U
29	B1	2916	U
29	B1	2918	G
29	B1	2919	A

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Mol	Chain	Res	Type
29	B1	2920	U
29	B1	2922	G
29	B1	2923	U
29	B1	2928	C
29	B1	2929	C
29	B1	2932	U
29	B1	2935	U
29	B1	2936	A
29	B1	2939	G
29	B1	2941	A
29	B1	2942	C
29	B1	2943	G
29	B1	2944	U
29	B1	2945	G
29	B1	2947	G
29	B1	2954	U
29	B1	2957	G
29	B1	2960	C
29	B1	2961	G
29	B1	2962	U
29	B1	2965	U
29	B1	2968	G
29	B1	2971	A
29	B1	2972	G
29	B1	2973	G
29	B1	2978	U
29	B1	2979	U
29	B1	2983	C
29	B1	2984	C
29	B1	2986	U
29	B1	2988	C
29	B1	2989	U
29	B1	2990	G
29	B1	2993	G
29	B1	2996	U
29	B1	2997	G
29	B1	2998	U
29	B1	2999	U
29	B1	3003	G
29	B1	3005	A
29	B1	3006	A
29	B1	3011	A

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Mol	Chain	Res	Type
29	B1	3012	A
29	B1	3013	U
29	B1	3014	U
29	B1	3019	U
29	B1	3020	U
29	B1	3023	U
29	B1	3024	A
29	B1	3025	C
29	B1	3028	G
29	B1	3030	G
29	B1	3031	G
29	B1	3033	A
29	B1	3039	C
29	B1	3040	A
29	B1	3041	U
29	B1	3045	G
29	B1	3046	A
29	B1	3048	A
29	B1	3049	A
29	B1	3052	G
29	B1	3054	U
29	B1	3056	U
29	B1	3057	U
29	B1	3058	U
29	B1	3059	G
29	B1	3060	C
29	B1	3061	G
29	B1	3064	U
29	B1	3066	U
29	B1	3071	U
29	B1	3072	C
29	B1	3074	G
29	B1	3075	G
29	B1	3077	A
29	B1	3078	U
29	B1	3079	U
29	B1	3080	G
29	B1	3090	U
29	B1	3091	A
29	B1	3092	C
29	B1	3093	C
29	B1	3094	A

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Mol	Chain	Res	Type
29	B1	3096	C
29	B1	3097	C
29	B1	3098	G
29	B1	3099	C
29	B1	3100	U
29	B1	3101	G
29	B1	3102	G
29	B1	3103	A
29	B1	3104	U
29	B1	3105	U
29	B1	3113	A
29	B1	3115	C
29	B1	3120	C
29	B1	3121	U
29	B1	3122	A
29	B1	3123	A
29	B1	3126	C
29	B1	3127	A
29	B1	3128	G
29	B1	3129	A
29	B1	3130	A
29	B1	3131	U
29	B1	3133	C
29	B1	3134	A
29	B1	3136	G
29	B1	3137	C
29	B1	3138	U
29	B1	3139	A
29	B1	3140	G
29	B1	3141	A
29	B1	3142	A
29	B1	3143	C
29	B1	3144	G
29	B1	3145	C
29	B1	3149	G
29	B1	3151	U
29	B1	3152	U
29	B1	3153	U
29	B1	3154	C
29	B1	3157	U
29	B1	3159	C
29	B1	3160	U

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Mol	Chain	Res	Type
29	B1	3161	C
29	B1	3162	C
29	B1	3163	A
29	B1	3164	C
29	B1	3166	C
29	B1	3169	U
29	B1	3170	A
29	B1	3171	U
29	B1	3172	A
29	B1	3173	G
29	B1	3174	A
29	B1	3175	U
29	B1	3176	G
29	B1	3177	G
29	B1	3178	A
29	B1	3179	U
29	B1	3180	A
29	B1	3181	C
29	B1	3184	A
29	B1	3185	U
29	B1	3187	A
29	B1	3191	G
29	B1	3195	U
29	B1	3196	U
29	B1	3198	U
29	B1	3199	G
29	B1	3200	G
29	B1	3201	C
29	B1	3202	G
29	B1	3203	U
29	B1	3204	C
29	B1	3205	G
29	B1	3206	C
29	B1	3207	U
29	B1	3208	G
29	B1	3209	A
29	B1	3210	A
29	B1	3211	C
29	B1	3212	C
29	B1	3214	U
29	B1	3215	A
29	B1	3216	G

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Mol	Chain	Res	Type
29	B1	3217	C
29	B1	3218	A
29	B1	3219	G
29	B1	3220	G
29	B1	3223	A
29	B1	3225	C
29	B1	3227	A
29	B1	3228	C
29	B1	3229	G
29	B1	3237	U
29	B1	3238	G
29	B1	3243	A
29	B1	3244	A
29	B1	3245	A
29	B1	3246	G
29	B1	3254	G
29	B1	3257	C
29	B1	3258	U
29	B1	3259	U
29	B1	3260	G
29	B1	3261	C
29	B1	3262	U
29	B1	3263	G
29	B1	3265	C
29	B1	3267	A
29	B1	3268	A
29	B1	3269	U
29	B1	3270	U
29	B1	3271	G
29	B1	3272	C
29	B1	3273	A
29	B1	3274	A
29	B1	3275	U
29	B1	3276	G
29	B1	3277	U
29	B1	3279	A
29	B1	3280	U
29	B1	3281	U
29	B1	3282	U
29	B1	3283	U
29	B1	3285	C
29	B1	3287	U

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Mol	Chain	Res	Type
29	B1	3288	G
29	B1	3290	G
29	B1	3291	G
29	B1	3292	A
29	B1	3293	U
29	B1	3294	A
29	B1	3300	U
29	B1	3301	U
29	B1	3302	U
29	B1	3303	G
29	B1	3304	U
29	B1	3305	A
29	B1	3306	U
29	B1	3312	U
29	B1	3313	U
29	B1	3314	A
29	B1	3315	G
29	B1	3316	A
29	B1	3317	U
29	B1	3318	G
29	B1	3319	U
29	B1	3320	A
29	B1	3321	C
29	B1	3322	A
29	B1	3324	C
29	B1	3329	U
29	B1	3331	U
29	B1	3332	U
29	B1	3333	G
29	B1	3334	U
29	B1	3339	A
29	B1	3341	U
29	B1	3342	A
29	B1	3343	G
29	B1	3344	A
29	B1	3350	C
29	B1	3351	U
29	B1	3352	U
29	B1	3353	G
29	B1	3354	U
29	B1	3355	U
29	B1	3356	G

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Mol	Chain	Res	Type
29	B1	3357	U
29	B1	3358	U
29	B1	3360	C
29	B1	3361	G
29	B1	3362	A
29	B1	3363	U
29	B1	3369	G
29	B1	3370	A
29	B1	3371	G
29	B1	3372	A
29	B1	3375	A
29	B1	3376	A
29	B1	3377	G
29	B1	3378	C
29	B1	3379	C
29	B1	3381	U
29	B1	3382	U
29	B1	3383	G
29	B1	3384	U
29	B1	3387	U
29	B1	3389	U
29	B1	3390	G
29	B1	3392	U
29	B1	3394	U
29	B1	3395	G
29	B1	3396	U
30	B2	2	G
30	B2	3	U
30	B2	5	G
30	B2	6	C
30	B2	9	C
30	B2	10	C
30	B2	11	A
30	B2	12	U
30	B2	13	A
30	B2	14	U
30	B2	15	C
30	B2	19	C
30	B2	22	A
30	B2	27	A
30	B2	29	C
30	B2	30	G

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Mol	Chain	Res	Type
30	B2	31	U
30	B2	33	U
30	B2	34	C
30	B2	35	C
30	B2	36	C
30	B2	38	U
30	B2	39	C
30	B2	40	C
30	B2	41	G
30	B2	42	A
30	B2	43	U
30	B2	44	C
30	B2	47	C
30	B2	48	U
30	B2	49	G
30	B2	50	U
30	B2	51	A
30	B2	54	U
30	B2	55	A
30	B2	56	A
30	B2	58	C
30	B2	61	G
30	B2	63	A
30	B2	64	A
30	B2	65	G
30	B2	66	A
30	B2	68	C
30	B2	70	U
30	B2	75	G
30	B2	76	A
30	B2	78	U
30	B2	79	A
30	B2	81	U
30	B2	83	U
30	B2	84	A
30	B2	87	G
30	B2	89	G
30	B2	92	A
30	B2	93	C
30	B2	96	U
30	B2	97	A
30	B2	98	C

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Mol	Chain	Res	Type
30	B2	99	G
30	B2	102	A
30	B2	103	A
30	B2	105	C
30	B2	107	C
30	B2	109	G
30	B2	110	G
30	B2	112	G
30	B2	115	G
30	B2	118	A
30	B2	120	C
30	B2	121	U
31	B3	2	A
31	B3	6	U
31	B3	10	A
31	B3	12	A
31	B3	14	C
31	B3	15	G
31	B3	23	U
31	B3	24	G
31	B3	25	G
31	B3	30	C
31	B3	34	U
31	B3	38	U
31	B3	40	A
31	B3	41	A
31	B3	45	C
31	B3	49	G
31	B3	50	C
31	B3	51	G
31	B3	55	U
31	B3	59	A
31	B3	60	U
31	B3	61	A
31	B3	62	C
31	B3	63	G
31	B3	65	A
31	B3	67	U
31	B3	68	G
31	B3	70	G
31	B3	71	A
31	B3	72	A

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Mol	Chain	Res	Type
31	B3	73	U
31	B3	75	G
31	B3	76	C
31	B3	77	A
31	B3	78	G
31	B3	80	A
31	B3	82	U
31	B3	83	C
31	B3	85	G
31	B3	86	U
31	B3	87	G
31	B3	88	A
31	B3	89	A
31	B3	90	U
31	B3	93	U
31	B3	94	C
31	B3	95	G
31	B3	96	A
31	B3	97	A
31	B3	99	C
31	B3	101	U
31	B3	104	A
31	B3	105	A
31	B3	106	C
31	B3	107	G
31	B3	108	C
31	B3	110	C
31	B3	111	A
31	B3	112	U
31	B3	113	U
31	B3	114	G
31	B3	117	C
31	B3	124	G
31	B3	125	U
31	B3	126	A
31	B3	127	U
31	B3	128	U
31	B3	129	C
31	B3	130	C
31	B3	132	G
31	B3	137	C
31	B3	138	A

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Mol	Chain	Res	Type
31	B3	141	C
31	B3	145	U
31	B3	147	U
31	B3	149	A
31	B3	151	C
31	B3	152	G
31	B3	157	U
31	B3	158	U
1	C1	2	A
1	C1	3	U
1	C1	4	C
1	C1	7	G
1	C1	8	U
1	C1	13	C
1	C1	17	C
1	C1	20	G
1	C1	21	U
1	C1	22	A
1	C1	24	U
1	C1	25	C
1	C1	26	A
1	C1	27	U
1	C1	31	C
1	C1	34	G
1	C1	35	U
1	C1	40	A
1	C1	41	A
1	C1	42	G
1	C1	45	U
1	C1	46	A
1	C1	47	A
1	C1	48	G
1	C1	50	C
1	C1	51	A
1	C1	54	C
1	C1	56	U
1	C1	57	G
1	C1	58	U
1	C1	59	C
1	C1	60	U
1	C1	61	A
1	C1	62	A

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Mol	Chain	Res	Type
1	C1	63	G
1	C1	64	U
1	C1	65	A
1	C1	66	U
1	C1	67	A
1	C1	68	A
1	C1	69	G
1	C1	70	C
1	C1	71	A
1	C1	72	A
1	C1	75	U
1	C1	76	A
1	C1	77	U
1	C1	78	A
1	C1	79	C
1	C1	80	A
1	C1	81	G
1	C1	82	U
1	C1	83	G
1	C1	86	A
1	C1	88	U
1	C1	95	G
1	C1	99	C
1	C1	102	U
1	C1	104	A
1	C1	105	A
1	C1	106	U
1	C1	111	U
1	C1	112	A
1	C1	113	U
1	C1	114	C
1	C1	115	G
1	C1	117	U
1	C1	119	A
1	C1	120	U
1	C1	121	U
1	C1	122	U
1	C1	123	G
1	C1	124	A
1	C1	125	U
1	C1	126	A
1	C1	128	U

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Mol	Chain	Res	Type
1	C1	129	U
1	C1	130	C
1	C1	131	C
1	C1	132	U
1	C1	133	U
1	C1	134	U
1	C1	135	A
1	C1	136	C
1	C1	137	U
1	C1	138	A
1	C1	139	C
1	C1	140	A
1	C1	141	U
1	C1	144	U
1	C1	145	A
1	C1	146	U
1	C1	147	A
1	C1	148	A
1	C1	149	C
1	C1	150	U
1	C1	151	G
1	C1	154	G
1	C1	156	A
1	C1	158	U
1	C1	159	U
1	C1	160	C
1	C1	161	U
1	C1	162	A
1	C1	166	C
1	C1	167	U
1	C1	168	A
1	C1	169	A
1	C1	170	U
1	C1	171	A
1	C1	172	C
1	C1	174	U
1	C1	176	C
1	C1	177	U
1	C1	178	U
1	C1	179	A
1	C1	180	A
1	C1	181	A

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Mol	Chain	Res	Type
1	C1	184	C
1	C1	187	G
1	C1	190	C
1	C1	191	C
1	C1	192	U
1	C1	193	U
1	C1	194	U
1	C1	195	G
1	C1	196	G
1	C1	197	A
1	C1	198	A
1	C1	199	G
1	C1	200	A
1	C1	201	G
1	C1	204	G
1	C1	208	U
1	C1	209	U
1	C1	211	U
1	C1	212	U
1	C1	213	A
1	C1	215	A
1	C1	218	A
1	C1	219	A
1	C1	220	A
1	C1	224	C
1	C1	226	A
1	C1	227	U
1	C1	228	G
1	C1	229	U
1	C1	233	C
1	C1	234	G
1	C1	238	U
1	C1	241	U
1	C1	242	U
1	C1	243	G
1	C1	244	A
1	C1	245	U
1	C1	246	G
1	C1	249	U
1	C1	250	C
1	C1	251	A
1	C1	252	U

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Mol	Chain	Res	Type
1	C1	253	A
1	C1	254	A
1	C1	255	U
1	C1	256	A
1	C1	257	A
1	C1	259	U
1	C1	260	U
1	C1	261	U
1	C1	262	U
1	C1	263	C
1	C1	264	G
1	C1	265	A
1	C1	267	U
1	C1	270	C
1	C1	271	A
1	C1	272	U
1	C1	273	G
1	C1	274	G
1	C1	276	C
1	C1	277	U
1	C1	278	U
1	C1	280	U
1	C1	282	C
1	C1	283	U
1	C1	284	G
1	C1	285	G
1	C1	289	U
1	C1	295	A
1	C1	296	U
1	C1	297	U
1	C1	298	C
1	C1	299	A
1	C1	302	U
1	C1	309	C
1	C1	310	C
1	C1	311	U
1	C1	312	A
1	C1	314	C
1	C1	316	A
1	C1	320	U
1	C1	321	C
1	C1	322	G

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Mol	Chain	Res	Type
1	C1	323	A
1	C1	324	U
1	C1	327	U
1	C1	330	G
1	C1	331	A
1	C1	332	U
1	C1	333	A
1	C1	334	G
1	C1	335	U
1	C1	337	G
1	C1	338	C
1	C1	340	U
1	C1	341	A
1	C1	350	U
1	C1	351	C
1	C1	352	A
1	C1	354	C
1	C1	357	G
1	C1	359	A
1	C1	360	A
1	C1	361	C
1	C1	365	G
1	C1	366	A
1	C1	368	U
1	C1	369	A
1	C1	370	A
1	C1	373	G
1	C1	374	U
1	C1	375	U
1	C1	376	C
1	C1	378	A
1	C1	379	U
1	C1	381	C
1	C1	382	C
1	C1	383	G
1	C1	385	A
1	C1	387	A
1	C1	390	G
1	C1	393	C
1	C1	394	C
1	C1	395	U
1	C1	396	G

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Mol	Chain	Res	Type
1	C1	397	A
1	C1	399	A
1	C1	400	A
1	C1	401	A
1	C1	402	C
1	C1	403	G
1	C1	404	G
1	C1	406	U
1	C1	411	C
1	C1	415	C
1	C1	416	A
1	C1	417	A
1	C1	418	G
1	C1	419	G
1	C1	421	A
1	C1	424	C
1	C1	425	A
1	C1	426	G
1	C1	427	C
1	C1	428	A
1	C1	434	G
1	C1	436	A
1	C1	437	A
1	C1	438	A
1	C1	439	U
1	C1	440	U
1	C1	441	A
1	C1	444	C
1	C1	445	A
1	C1	446	A
1	C1	447	U
1	C1	448	C
1	C1	449	C
1	C1	451	A
1	C1	452	A
1	C1	453	U
1	C1	454	U
1	C1	455	C
1	C1	458	G
1	C1	459	G
1	C1	462	G
1	C1	464	A

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Mol	Chain	Res	Type
1	C1	467	G
1	C1	468	A
1	C1	469	C
1	C1	470	A
1	C1	475	A
1	C1	477	A
1	C1	480	G
1	C1	482	U
1	C1	485	A
1	C1	486	G
1	C1	487	G
1	C1	488	G
1	C1	489	C
1	C1	490	C
1	C1	493	U
1	C1	494	U
1	C1	495	C
1	C1	496	G
1	C1	498	G
1	C1	500	C
1	C1	504	U
1	C1	505	A
1	C1	506	A
1	C1	510	G
1	C1	511	A
1	C1	512	A
1	C1	513	U
1	C1	514	G
1	C1	515	A
1	C1	516	G
1	C1	517	U
1	C1	519	C
1	C1	522	U
1	C1	523	G
1	C1	524	U
1	C1	526	A
1	C1	527	A
1	C1	528	U
1	C1	529	A
1	C1	530	C
1	C1	531	C
1	C1	535	A

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Mol	Chain	Res	Type
1	C1	537	G
1	C1	538	A
1	C1	539	G
1	C1	540	G
1	C1	541	A
1	C1	542	A
1	C1	543	C
1	C1	544	A
1	C1	545	A
1	C1	546	U
1	C1	548	G
1	C1	550	A
1	C1	551	G
1	C1	554	C
1	C1	555	A
1	C1	556	A
1	C1	557	G
1	C1	558	U
1	C1	560	U
1	C1	561	G
1	C1	563	U
1	C1	564	G
1	C1	565	C
1	C1	568	G
1	C1	570	A
1	C1	572	C
1	C1	574	G
1	C1	578	U
1	C1	579	A
1	C1	580	A
1	C1	585	A
1	C1	594	A
1	C1	595	G
1	C1	596	C
1	C1	599	A
1	C1	601	A
1	C1	602	U
1	C1	605	A
1	C1	607	G
1	C1	608	U
1	C1	609	U
1	C1	610	G

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Mol	Chain	Res	Type
1	C1	611	U
1	C1	612	U
1	C1	614	C
1	C1	615	A
1	C1	616	G
1	C1	619	A
1	C1	620	A
1	C1	622	A
1	C1	623	A
1	C1	624	G
1	C1	626	U
1	C1	630	A
1	C1	633	U
1	C1	638	U
1	C1	639	U
1	C1	640	U
1	C1	646	C
1	C1	647	G
1	C1	649	U
1	C1	650	U
1	C1	653	C
1	C1	656	G
1	C1	659	C
1	C1	660	G
1	C1	662	U
1	C1	663	U
1	C1	665	U
1	C1	666	U
1	C1	667	U
1	C1	681	U
1	C1	682	C
1	C1	683	C
1	C1	685	A
1	C1	686	C
1	C1	691	C
1	C1	692	C
1	C1	693	U
1	C1	694	U
1	C1	695	U
1	C1	696	C
1	C1	697	C
1	C1	698	U

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Mol	Chain	Res	Type
1	C1	699	U
1	C1	702	G
1	C1	703	G
1	C1	706	A
1	C1	707	A
1	C1	708	C
1	C1	710	U
1	C1	714	G
1	C1	715	U
1	C1	718	U
1	C1	719	U
1	C1	720	G
1	C1	721	U
1	C1	722	G
1	C1	723	G
1	C1	729	G
1	C1	730	G
1	C1	731	C
1	C1	733	A
1	C1	736	C
1	C1	739	G
1	C1	741	C
1	C1	742	U
1	C1	743	U
1	C1	744	U
1	C1	750	U
1	C1	751	G
1	C1	754	A
1	C1	756	A
1	C1	765	G
1	C1	766	U
1	C1	767	U
1	C1	774	A
1	C1	775	G
1	C1	778	G
1	C1	779	U
1	C1	780	A
1	C1	781	U
1	C1	782	U
1	C1	783	G
1	C1	787	G
1	C1	789	A

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Mol	Chain	Res	Type
1	C1	790	U
1	C1	793	A
1	C1	794	U
1	C1	803	A
1	C1	808	U
1	C1	811	A
1	C1	812	A
1	C1	813	U
1	C1	814	A
1	C1	815	G
1	C1	816	G
1	C1	818	C
1	C1	819	G
1	C1	820	U
1	C1	821	U
1	C1	822	U
1	C1	823	G
1	C1	824	G
1	C1	825	U
1	C1	826	U
1	C1	828	U
1	C1	829	A
1	C1	830	U
1	C1	831	U
1	C1	832	U
1	C1	834	G
1	C1	839	U
1	C1	840	U
1	C1	841	U
1	C1	842	C
1	C1	844	A
1	C1	847	A
1	C1	848	C
1	C1	850	A
1	C1	856	A
1	C1	857	U
1	C1	858	G
1	C1	860	U
1	C1	861	U
1	C1	862	A
1	C1	863	A
1	C1	864	U

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Mol	Chain	Res	Type
1	C1	865	A
1	C1	872	G
1	C1	873	U
1	C1	876	G
1	C1	880	C
1	C1	881	A
1	C1	883	C
1	C1	886	U
1	C1	888	U
1	C1	891	A
1	C1	893	U
1	C1	894	U
1	C1	896	U
1	C1	897	C
1	C1	899	G
1	C1	901	G
1	C1	902	G
1	C1	903	U
1	C1	904	G
1	C1	905	A
1	C1	906	A
1	C1	909	U
1	C1	910	C
1	C1	911	U
1	C1	912	U
1	C1	913	G
1	C1	914	G
1	C1	915	A
1	C1	916	U
1	C1	920	U
1	C1	922	G
1	C1	923	A
1	C1	927	C
1	C1	929	A
1	C1	932	U
1	C1	933	A
1	C1	934	C
1	C1	938	G
1	C1	939	A
1	C1	942	G
1	C1	943	C
1	C1	944	A

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Mol	Chain	Res	Type
1	C1	952	A
1	C1	959	U
1	C1	960	U
1	C1	961	U
1	C1	964	U
1	C1	965	U
1	C1	966	A
1	C1	967	A
1	C1	973	A
1	C1	975	C
1	C1	976	G
1	C1	977	A
1	C1	978	A
1	C1	981	U
1	C1	987	G
1	C1	988	A
1	C1	992	A
1	C1	993	A
1	C1	995	A
1	C1	996	U
1	C1	998	A
1	C1	1000	C
1	C1	1003	A
1	C1	1004	U
1	C1	1005	A
1	C1	1007	C
1	C1	1008	G
1	C1	1010	C
1	C1	1019	A
1	C1	1027	A
1	C1	1028	C
1	C1	1029	U
1	C1	1030	A
1	C1	1032	G
1	C1	1036	A
1	C1	1039	A
1	C1	1040	G
1	C1	1044	U
1	C1	1045	C
1	C1	1046	G
1	C1	1048	G
1	C1	1049	U

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Mol	Chain	Res	Type
1	C1	1057	U
1	C1	1058	U
1	C1	1059	U
1	C1	1060	U
1	C1	1066	C
1	C1	1071	U
1	C1	1072	C
1	C1	1073	G
1	C1	1074	G
1	C1	1075	C
1	C1	1077	C
1	C1	1079	U
1	C1	1080	U
1	C1	1082	C
1	C1	1087	A
1	C1	1090	C
1	C1	1091	A
1	C1	1092	A
1	C1	1093	A
1	C1	1094	G
1	C1	1095	U
1	C1	1096	C
1	C1	1097	U
1	C1	1098	U
1	C1	1099	U
1	C1	1100	G
1	C1	1101	G
1	C1	1103	U
1	C1	1107	G
1	C1	1108	G
1	C1	1109	G
1	C1	1110	G
1	C1	1111	G
1	C1	1112	G
1	C1	1113	A
1	C1	1114	G
1	C1	1115	U
1	C1	1119	G
1	C1	1124	A
1	C1	1126	G
1	C1	1129	U
1	C1	1136	U

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Mol	Chain	Res	Type
1	C1	1137	A
1	C1	1138	A
1	C1	1139	A
1	C1	1140	G
1	C1	1141	G
1	C1	1142	A
1	C1	1143	A
1	C1	1145	U
1	C1	1146	G
1	C1	1147	A
1	C1	1149	G
1	C1	1150	G
1	C1	1151	A
1	C1	1152	A
1	C1	1153	G
1	C1	1154	G
1	C1	1158	C
1	C1	1160	A
1	C1	1161	C
1	C1	1162	C
1	C1	1166	A
1	C1	1167	G
1	C1	1168	U
1	C1	1178	G
1	C1	1179	G
1	C1	1185	U
1	C1	1186	U
1	C1	1189	A
1	C1	1190	C
1	C1	1191	U
1	C1	1193	A
1	C1	1194	A
1	C1	1196	A
1	C1	1197	C
1	C1	1198	G
1	C1	1199	G
1	C1	1200	G
1	C1	1201	G
1	C1	1202	A
1	C1	1203	A
1	C1	1204	A
1	C1	1205	C

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Mol	Chain	Res	Type
1	C1	1206	U
1	C1	1207	C
1	C1	1208	A
1	C1	1209	C
1	C1	1211	A
1	C1	1217	A
1	C1	1218	G
1	C1	1219	A
1	C1	1220	C
1	C1	1222	C
1	C1	1225	U
1	C1	1228	G
1	C1	1229	G
1	C1	1230	A
1	C1	1231	U
1	C1	1232	U
1	C1	1234	A
1	C1	1235	C
1	C1	1238	A
1	C1	1239	U
1	C1	1240	U
1	C1	1242	A
1	C1	1243	G
1	C1	1244	A
1	C1	1245	G
1	C1	1246	C
1	C1	1248	C
1	C1	1254	U
1	C1	1255	G
1	C1	1256	A
1	C1	1257	U
1	C1	1258	U
1	C1	1259	U
1	C1	1260	U
1	C1	1264	G
1	C1	1266	U
1	C1	1268	G
1	C1	1270	G
1	C1	1273	G
1	C1	1274	C
1	C1	1275	A
1	C1	1276	U

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Mol	Chain	Res	Type
1	C1	1280	C
1	C1	1283	U
1	C1	1284	C
1	C1	1286	U
1	C1	1287	A
1	C1	1288	G
1	C1	1290	U
1	C1	1297	G
1	C1	1299	G
1	C1	1302	U
1	C1	1303	U
1	C1	1306	C
1	C1	1310	U
1	C1	1311	U
1	C1	1312	A
1	C1	1314	U
1	C1	1315	U
1	C1	1316	G
1	C1	1321	A
1	C1	1324	G
1	C1	1325	A
1	C1	1326	A
1	C1	1331	A
1	C1	1332	C
1	C1	1333	C
1	C1	1335	U
1	C1	1336	A
1	C1	1337	A
1	C1	1340	U
1	C1	1341	A
1	C1	1342	C
1	C1	1345	A
1	C1	1346	A
1	C1	1347	U
1	C1	1348	A
1	C1	1349	G
1	C1	1350	U
1	C1	1351	G
1	C1	1353	U
1	C1	1354	G
1	C1	1355	C
1	C1	1358	G

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Mol	Chain	Res	Type
1	C1	1359	C
1	C1	1360	A
1	C1	1361	U
1	C1	1362	U
1	C1	1363	U
1	C1	1364	G
1	C1	1365	C
1	C1	1366	U
1	C1	1367	G
1	C1	1368	G
1	C1	1369	U
1	C1	1371	A
1	C1	1373	C
1	C1	1374	C
1	C1	1378	U
1	C1	1379	C
1	C1	1380	U
1	C1	1383	G
1	C1	1384	A
1	C1	1388	A
1	C1	1390	U
1	C1	1391	A
1	C1	1392	U
1	C1	1397	U
1	C1	1398	U
1	C1	1399	C
1	C1	1400	A
1	C1	1401	A
1	C1	1402	G
1	C1	1407	U
1	C1	1408	G
1	C1	1409	G
1	C1	1410	A
1	C1	1412	G
1	C1	1413	U
1	C1	1414	U
1	C1	1415	U
1	C1	1418	G
1	C1	1419	G
1	C1	1420	C
1	C1	1422	A
1	C1	1427	A

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Mol	Chain	Res	Type
1	C1	1428	G
1	C1	1429	G
1	C1	1431	C
1	C1	1432	U
1	C1	1433	G
1	C1	1434	U
1	C1	1435	G
1	C1	1436	A
1	C1	1438	G
1	C1	1443	U
1	C1	1445	G
1	C1	1446	A
1	C1	1447	C
1	C1	1448	G
1	C1	1449	U
1	C1	1450	U
1	C1	1454	G
1	C1	1455	G
1	C1	1456	C
1	C1	1458	G
1	C1	1459	C
1	C1	1460	A
1	C1	1466	G
1	C1	1467	C
1	C1	1468	U
1	C1	1469	A
1	C1	1471	A
1	C1	1472	C
1	C1	1473	U
1	C1	1474	G
1	C1	1477	G
1	C1	1478	G
1	C1	1479	A
1	C1	1481	C
1	C1	1482	C
1	C1	1483	A
1	C1	1484	G
1	C1	1485	C
1	C1	1486	G
1	C1	1490	C
1	C1	1491	U
1	C1	1492	A

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Mol	Chain	Res	Type
1	C1	1493	A
1	C1	1494	C
1	C1	1499	G
1	C1	1503	A
1	C1	1505	A
1	C1	1506	G
1	C1	1509	C
1	C1	1510	U
1	C1	1514	U
1	C1	1515	A
1	C1	1516	A
1	C1	1517	U
1	C1	1519	U
1	C1	1521	G
1	C1	1522	U
1	C1	1523	G
1	C1	1524	A
1	C1	1533	C
1	C1	1534	G
1	C1	1535	U
1	C1	1536	G
1	C1	1538	U
1	C1	1539	G
1	C1	1540	G
1	C1	1541	G
1	C1	1542	G
1	C1	1545	A
1	C1	1547	A
1	C1	1548	G
1	C1	1550	A
1	C1	1551	U
1	C1	1553	G
1	C1	1554	U
1	C1	1555	A
1	C1	1556	A
1	C1	1557	U
1	C1	1558	U
1	C1	1559	A
1	C1	1560	U
1	C1	1568	C
1	C1	1570	A
1	C1	1572	G

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Mol	Chain	Res	Type
1	C1	1573	A
1	C1	1574	G
1	C1	1575	G
1	C1	1576	A
1	C1	1581	C
1	C1	1583	A
1	C1	1584	G
1	C1	1587	A
1	C1	1590	G
1	C1	1591	C
1	C1	1592	A
1	C1	1598	U
1	C1	1599	C
1	C1	1600	A
1	C1	1601	G
1	C1	1602	C
1	C1	1605	G
1	C1	1607	G
1	C1	1609	U
1	C1	1611	A
1	C1	1613	U
1	C1	1614	A
1	C1	1615	C
1	C1	1616	G
1	C1	1618	C
1	C1	1623	C
1	C1	1624	C
1	C1	1625	C
1	C1	1627	U
1	C1	1628	U
1	C1	1630	U
1	C1	1631	A
1	C1	1632	C
1	C1	1633	A
1	C1	1634	C
1	C1	1635	A
1	C1	1636	C
1	C1	1637	C
1	C1	1638	G
1	C1	1639	C
1	C1	1644	C
1	C1	1645	G

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Mol	Chain	Res	Type
1	C1	1646	C
1	C1	1650	U
1	C1	1656	U
1	C1	1657	U
1	C1	1658	G
1	C1	1659	A
1	C1	1664	C
1	C1	1665	U
1	C1	1667	A
1	C1	1668	G
1	C1	1673	G
1	C1	1674	C
1	C1	1675	C
1	C1	1676	U
1	C1	1677	C
1	C1	1678	A
1	C1	1680	G
1	C1	1681	A
1	C1	1682	U
1	C1	1683	C
1	C1	1684	U
1	C1	1685	G
1	C1	1688	U
1	C1	1689	A
1	C1	1691	A
1	C1	1692	G
1	C1	1693	A
1	C1	1695	G
1	C1	1696	G
1	C1	1698	G
1	C1	1700	C
1	C1	1701	A
1	C1	1706	C
1	C1	1707	A
1	C1	1710	U
1	C1	1711	C
1	C1	1716	C
1	C1	1719	A
1	C1	1720	G
1	C1	1722	A
1	C1	1728	A
1	C1	1731	A

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Mol	Chain	Res	Type
1	C1	1739	C
1	C1	1740	A
1	C1	1744	A
1	C1	1746	A
1	C1	1748	G
1	C1	1754	A
1	C1	1755	A
1	C1	1756	A
1	C1	1757	G
1	C1	1760	G
1	C1	1762	A
1	C1	1764	C
1	C1	1766	A
1	C1	1767	G
1	C1	1768	G
1	C1	1769	U
1	C1	1770	U
1	C1	1772	C
1	C1	1773	C
1	C1	1774	G
1	C1	1777	G
1	C1	1779	U
1	C1	1780	G
1	C1	1782	A
1	C1	1783	C
1	C1	1788	G
1	C1	1792	G
1	C1	1793	G
1	C1	1794	A
1	C1	1795	U
1	C1	1797	A
1	C1	1798	U
29	D1	6	A
29	D1	9	U
29	D1	10	C
29	D1	12	A
29	D1	14	U
29	D1	15	C
29	D1	16	A
29	D1	20	A
29	D1	21	G
29	D1	22	G

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Mol	Chain	Res	Type
29	D1	25	U
29	D1	32	U
29	D1	35	A
29	D1	38	U
29	D1	40	A
29	D1	43	A
29	D1	44	U
29	D1	47	C
29	D1	50	U
29	D1	53	G
29	D1	56	G
29	D1	58	G
29	D1	59	G
29	D1	60	A
29	D1	62	A
29	D1	65	A
29	D1	66	A
29	D1	68	C
29	D1	70	A
29	D1	71	A
29	D1	72	C
29	D1	73	C
29	D1	74	G
29	D1	76	G
29	D1	77	A
29	D1	81	C
29	D1	83	U
29	D1	85	A
29	D1	87	U
29	D1	88	A
29	D1	89	A
29	D1	92	G
29	D1	93	C
29	D1	94	G
29	D1	96	G
29	D1	97	U
29	D1	98	G
29	D1	99	A
29	D1	102	C
29	D1	103	G
29	D1	105	C
29	D1	106	A

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Mol	Chain	Res	Type
29	D1	108	A
29	D1	109	A
29	D1	110	G
29	D1	113	C
29	D1	114	A
29	D1	117	U
29	D1	118	U
29	D1	119	U
29	D1	120	G
29	D1	121	A
29	D1	122	A
29	D1	125	C
29	D1	126	U
29	D1	127	G
29	D1	131	C
29	D1	133	U
29	D1	134	U
29	D1	136	G
29	D1	138	U
29	D1	141	C
29	D1	144	A
29	D1	145	G
29	D1	146	U
29	D1	147	U
29	D1	148	G
29	D1	149	U
29	D1	150	A
29	D1	152	U
29	D1	155	G
29	D1	156	G
29	D1	157	A
29	D1	158	G
29	D1	159	A
29	D1	160	G
29	D1	161	G
29	D1	164	A
29	D1	167	U
29	D1	169	U
29	D1	170	G
29	D1	171	G
29	D1	172	G
29	D1	173	G

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Mol	Chain	Res	Type
29	D1	175	C
29	D1	176	G
29	D1	177	U
29	D1	178	U
29	D1	179	C
29	D1	182	U
29	D1	187	A
29	D1	188	U
29	D1	190	U
29	D1	191	U
29	D1	196	G
29	D1	197	G
29	D1	199	A
29	D1	200	C
29	D1	201	A
29	D1	204	A
29	D1	205	C
29	D1	209	A
29	D1	210	U
29	D1	211	A
29	D1	214	G
29	D1	215	G
29	D1	218	G
29	D1	219	A
29	D1	220	G
29	D1	221	A
29	D1	223	U
29	D1	224	C
29	D1	225	C
29	D1	227	G
29	D1	230	U
29	D1	231	G
29	D1	237	G
29	D1	238	A
29	D1	239	G
29	D1	240	U
29	D1	241	G
29	D1	242	C
29	D1	244	G
29	D1	245	U
29	D1	246	U
29	D1	247	C

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Mol	Chain	Res	Type
29	D1	248	U
29	D1	249	U
29	D1	250	U
29	D1	251	G
29	D1	252	U
29	D1	253	A
29	D1	255	A
29	D1	256	G
29	D1	257	U
29	D1	258	G
29	D1	259	C
29	D1	260	C
29	D1	261	U
29	D1	262	U
29	D1	263	C
29	D1	264	G
29	D1	265	A
29	D1	266	A
29	D1	267	G
29	D1	269	G
29	D1	277	G
29	D1	282	G
29	D1	283	G
29	D1	284	A
29	D1	285	A
29	D1	288	C
29	D1	289	A
29	D1	290	G
29	D1	292	U
29	D1	293	C
29	D1	295	A
29	D1	297	G
29	D1	298	U
29	D1	301	G
29	D1	304	G
29	D1	305	U
29	D1	306	A
29	D1	307	A
29	D1	311	C
29	D1	315	C
29	D1	316	U
29	D1	317	A

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Mol	Chain	Res	Type
29	D1	318	A
29	D1	319	A
29	D1	323	A
29	D1	324	A
29	D1	325	A
29	D1	326	U
29	D1	327	A
29	D1	328	U
29	D1	329	U
29	D1	330	G
29	D1	331	G
29	D1	332	C
29	D1	333	G
29	D1	335	G
29	D1	338	A
29	D1	339	C
29	D1	340	C
29	D1	341	G
29	D1	342	A
29	D1	345	G
29	D1	346	C
29	D1	349	A
29	D1	350	C
29	D1	351	A
29	D1	352	A
29	D1	354	U
29	D1	362	U
29	D1	364	G
29	D1	368	G
29	D1	370	U
29	D1	371	G
29	D1	374	A
29	D1	375	A
29	D1	376	G
29	D1	377	A
29	D1	378	A
29	D1	379	C
29	D1	380	U
29	D1	381	U
29	D1	382	U
29	D1	383	G
29	D1	384	A

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Mol	Chain	Res	Type
29	D1	385	A
29	D1	386	A
29	D1	387	A
29	D1	390	G
29	D1	391	A
29	D1	392	G
29	D1	395	A
29	D1	396	A
29	D1	397	A
29	D1	398	A
29	D1	399	A
29	D1	400	G
29	D1	401	U
29	D1	402	A
29	D1	403	C
29	D1	404	G
29	D1	419	G
29	D1	421	G
29	D1	422	A
29	D1	423	A
29	D1	424	G
29	D1	425	G
29	D1	428	A
29	D1	429	U
29	D1	431	U
29	D1	432	G
29	D1	439	C
29	D1	493	G
29	D1	495	G
29	D1	499	G
29	D1	500	C
29	D1	502	U
29	D1	504	A
29	D1	509	U
29	D1	511	G
29	D1	514	G
29	D1	515	C
29	D1	516	A
29	D1	517	G
29	D1	518	G
29	D1	519	A
29	D1	520	U

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Mol	Chain	Res	Type
29	D1	521	A
29	D1	523	A
29	D1	524	U
29	D1	525	C
29	D1	528	U
29	D1	529	A
29	D1	533	A
29	D1	536	U
29	D1	537	A
29	D1	538	G
29	D1	539	C
29	D1	540	U
29	D1	541	U
29	D1	544	C
29	D1	546	C
29	D1	547	G
29	D1	548	G
29	D1	549	U
29	D1	550	A
29	D1	556	U
29	D1	559	A
29	D1	560	G
29	D1	561	C
29	D1	562	C
29	D1	563	U
29	D1	564	G
29	D1	565	U
29	D1	566	G
29	D1	571	U
29	D1	574	U
29	D1	575	G
29	D1	576	C
29	D1	577	C
29	D1	578	A
29	D1	579	G
29	D1	580	C
29	D1	586	C
29	D1	588	G
29	D1	590	G
29	D1	591	G
29	D1	592	A
29	D1	593	C

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Mol	Chain	Res	Type
29	D1	594	U
29	D1	595	G
29	D1	597	G
29	D1	602	A
29	D1	603	A
29	D1	604	G
29	D1	605	U
29	D1	606	C
29	D1	607	A
29	D1	608	A
29	D1	609	G
29	D1	610	G
29	D1	611	A
29	D1	612	U
29	D1	619	A
29	D1	620	U
29	D1	621	A
29	D1	622	A
29	D1	624	G
29	D1	625	G
29	D1	626	U
29	D1	628	A
29	D1	630	A
29	D1	632	G
29	D1	636	C
29	D1	637	C
29	D1	641	C
29	D1	642	U
29	D1	645	A
29	D1	647	A
29	D1	648	C
29	D1	649	A
29	D1	650	C
29	D1	651	G
29	D1	656	A
29	D1	657	A
29	D1	661	G
29	D1	666	A
29	D1	667	C
29	D1	669	U
29	D1	674	G
29	D1	675	C

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Mol	Chain	Res	Type
29	D1	677	A
29	D1	679	U
29	D1	680	G
29	D1	681	U
29	D1	682	U
29	D1	683	U
29	D1	691	A
29	D1	692	A
29	D1	694	C
29	D1	697	A
29	D1	699	A
29	D1	705	A
29	D1	706	A
29	D1	712	G
29	D1	714	G
29	D1	715	A
29	D1	716	A
29	D1	717	C
29	D1	718	G
29	D1	719	U
29	D1	720	A
29	D1	721	G
29	D1	722	G
29	D1	723	U
29	D1	724	U
29	D1	725	G
29	D1	726	G
29	D1	727	G
29	D1	728	G
29	D1	731	U
29	D1	732	C
29	D1	733	G
29	D1	734	C
29	D1	735	A
29	D1	736	A
29	D1	738	A
29	D1	741	U
29	D1	743	C
29	D1	744	A
29	D1	745	C
29	D1	746	A
29	D1	747	A

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Mol	Chain	Res	Type
29	D1	748	U
29	D1	749	C
29	D1	751	A
29	D1	752	C
29	D1	753	C
29	D1	756	U
29	D1	757	C
29	D1	758	C
29	D1	759	U
29	D1	761	A
29	D1	762	U
29	D1	764	U
29	D1	765	C
29	D1	766	U
29	D1	767	U
29	D1	768	C
29	D1	769	G
29	D1	770	G
29	D1	771	A
29	D1	772	U
29	D1	776	U
29	D1	777	U
29	D1	778	U
29	D1	779	G
29	D1	781	G
29	D1	782	U
29	D1	784	A
29	D1	785	G
29	D1	786	A
29	D1	787	G
29	D1	788	C
29	D1	791	A
29	D1	794	U
29	D1	799	G
29	D1	802	C
29	D1	803	C
29	D1	805	G
29	D1	806	A
29	D1	807	A
29	D1	808	A
29	D1	809	G
29	D1	815	G

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Mol	Chain	Res	Type
29	D1	817	A
29	D1	822	G
29	D1	825	U
29	D1	826	G
29	D1	828	A
29	D1	830	A
29	D1	831	G
29	D1	834	U
29	D1	835	G
29	D1	836	A
29	D1	837	A
29	D1	838	G
29	D1	841	A
29	D1	845	G
29	D1	846	A
29	D1	847	A
29	D1	857	G
29	D1	858	A
29	D1	859	G
29	D1	860	G
29	D1	861	C
29	D1	870	G
29	D1	871	U
29	D1	874	U
29	D1	875	G
29	D1	879	U
29	D1	880	G
29	D1	882	A
29	D1	884	A
29	D1	886	C
29	D1	887	G
29	D1	888	A
29	D1	894	G
29	D1	895	A
29	D1	896	A
29	D1	897	U
29	D1	901	G
29	D1	903	U
29	D1	904	A
29	D1	907	G
29	D1	908	G
29	D1	909	G

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Mol	Chain	Res	Type
29	D1	911	C
29	D1	913	A
29	D1	914	A
29	D1	915	A
29	D1	916	G
29	D1	917	A
29	D1	920	A
29	D1	921	A
29	D1	922	U
29	D1	923	C
29	D1	924	G
29	D1	933	A
29	D1	934	G
29	D1	935	U
29	D1	937	G
29	D1	939	U
29	D1	943	U
29	D1	944	C
29	D1	945	C
29	D1	949	C
29	D1	952	A
29	D1	953	G
29	D1	954	U
29	D1	957	C
29	D1	958	C
29	D1	960	U
29	D1	961	C
29	D1	962	A
29	D1	963	G
29	D1	967	A
29	D1	970	A
29	D1	971	G
29	D1	973	A
29	D1	974	G
29	D1	975	C
29	D1	978	G
29	D1	979	U
29	D1	980	A
29	D1	981	U
29	D1	984	G
29	D1	987	U
29	D1	994	G

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Mol	Chain	Res	Type
29	D1	995	U
29	D1	996	A
29	D1	1000	C
29	D1	1002	A
29	D1	1006	A
29	D1	1007	U
29	D1	1010	G
29	D1	1011	A
29	D1	1013	G
29	D1	1014	U
29	D1	1015	U
29	D1	1017	C
29	D1	1019	G
29	D1	1024	G
29	D1	1026	A
29	D1	1027	A
29	D1	1030	A
29	D1	1033	U
29	D1	1036	A
29	D1	1038	C
29	D1	1041	U
29	D1	1042	U
29	D1	1047	A
29	D1	1048	A
29	D1	1049	C
29	D1	1051	U
29	D1	1053	A
29	D1	1060	U
29	D1	1061	A
29	D1	1063	G
29	D1	1064	A
29	D1	1065	A
29	D1	1066	G
29	D1	1067	U
29	D1	1068	C
29	D1	1071	U
29	D1	1074	U
29	D1	1075	A
29	D1	1077	U
29	D1	1078	U
29	D1	1079	A
29	D1	1080	A

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Mol	Chain	Res	Type
29	D1	1081	U
29	D1	1082	U
29	D1	1085	A
29	D1	1093	A
29	D1	1094	U
29	D1	1095	U
29	D1	1096	U
29	D1	1097	G
29	D1	1098	A
29	D1	1100	U
29	D1	1101	G
29	D1	1102	A
29	D1	1103	A
29	D1	1104	G
29	D1	1109	U
29	D1	1113	G
29	D1	1115	G
29	D1	1116	G
29	D1	1117	G
29	D1	1119	C
29	D1	1120	A
29	D1	1123	U
29	D1	1124	U
29	D1	1128	U
29	D1	1129	A
29	D1	1130	A
29	D1	1131	G
29	D1	1132	C
29	D1	1133	A
29	D1	1136	A
29	D1	1139	G
29	D1	1140	G
29	D1	1143	A
29	D1	1144	U
29	D1	1145	G
29	D1	1149	G
29	D1	1151	U
29	D1	1152	G
29	D1	1153	A
29	D1	1154	A
29	D1	1155	C
29	D1	1157	G

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Mol	Chain	Res	Type
29	D1	1158	A
29	D1	1159	A
29	D1	1160	C
29	D1	1162	U
29	D1	1163	A
29	D1	1168	U
29	D1	1169	A
29	D1	1174	G
29	D1	1175	C
29	D1	1176	C
29	D1	1177	G
29	D1	1178	G
29	D1	1179	A
29	D1	1180	A
29	D1	1181	U
29	D1	1184	A
29	D1	1187	C
29	D1	1189	C
29	D1	1190	A
29	D1	1191	U
29	D1	1192	C
29	D1	1193	A
29	D1	1194	G
29	D1	1195	A
29	D1	1196	C
29	D1	1197	A
29	D1	1198	C
29	D1	1199	C
29	D1	1200	A
29	D1	1201	C
29	D1	1202	A
29	D1	1205	A
29	D1	1206	G
29	D1	1207	G
29	D1	1208	U
29	D1	1209	G
29	D1	1211	U
29	D1	1212	A
29	D1	1213	G
29	D1	1214	U
29	D1	1217	A
29	D1	1218	U

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Mol	Chain	Res	Type
29	D1	1219	C
29	D1	1220	U
29	D1	1221	A
29	D1	1222	G
29	D1	1223	A
29	D1	1224	C
29	D1	1225	A
29	D1	1226	G
29	D1	1227	C
29	D1	1228	C
29	D1	1229	G
29	D1	1235	U
29	D1	1236	G
29	D1	1237	G
29	D1	1239	C
29	D1	1240	A
29	D1	1241	U
29	D1	1242	G
29	D1	1244	A
29	D1	1245	A
29	D1	1246	G
29	D1	1248	C
29	D1	1249	G
29	D1	1251	A
29	D1	1253	U
29	D1	1254	C
29	D1	1256	G
29	D1	1257	C
29	D1	1258	U
29	D1	1259	A
29	D1	1261	G
29	D1	1262	G
29	D1	1263	A
29	D1	1264	G
29	D1	1265	U
29	D1	1268	G
29	D1	1269	U
29	D1	1270	A
29	D1	1272	C
29	D1	1273	A
29	D1	1274	A
29	D1	1275	C

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Mol	Chain	Res	Type
29	D1	1277	C
29	D1	1278	A
29	D1	1279	C
29	D1	1280	C
29	D1	1284	C
29	D1	1286	A
29	D1	1287	A
29	D1	1288	U
29	D1	1289	G
29	D1	1290	A
29	D1	1291	A
29	D1	1292	C
29	D1	1295	G
29	D1	1296	C
29	D1	1297	C
29	D1	1298	C
29	D1	1299	U
29	D1	1303	A
29	D1	1305	U
29	D1	1307	G
29	D1	1308	A
29	D1	1309	U
29	D1	1310	G
29	D1	1313	G
29	D1	1314	C
29	D1	1315	U
29	D1	1316	C
29	D1	1318	A
29	D1	1320	C
29	D1	1324	U
29	D1	1325	U
29	D1	1326	A
29	D1	1330	A
29	D1	1331	U
29	D1	1332	A
29	D1	1338	C
29	D1	1341	U
29	D1	1342	C
29	D1	1348	U
29	D1	1349	G
29	D1	1350	A
29	D1	1351	U

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Mol	Chain	Res	Type
29	D1	1352	A
29	D1	1353	U
29	D1	1354	G
29	D1	1355	A
29	D1	1356	U
29	D1	1365	G
29	D1	1368	U
29	D1	1370	G
29	D1	1371	G
29	D1	1373	A
29	D1	1378	U
29	D1	1379	G
29	D1	1380	G
29	D1	1384	U
29	D1	1385	C
29	D1	1386	A
29	D1	1389	G
29	D1	1390	A
29	D1	1392	G
29	D1	1394	A
29	D1	1395	G
29	D1	1398	U
29	D1	1399	A
29	D1	1400	G
29	D1	1404	G
29	D1	1405	U
29	D1	1406	A
29	D1	1407	A
29	D1	1408	G
29	D1	1410	U
29	D1	1412	G
29	D1	1416	C
29	D1	1418	A
29	D1	1419	A
29	D1	1429	G
29	D1	1430	U
29	D1	1431	G
29	D1	1434	G
29	D1	1435	A
29	D1	1437	C
29	D1	1440	G
29	D1	1441	G

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Mol	Chain	Res	Type
29	D1	1442	U
29	D1	1443	G
29	D1	1445	U
29	D1	1446	A
29	D1	1450	G
29	D1	1453	A
29	D1	1455	U
29	D1	1456	A
29	D1	1460	A
29	D1	1462	A
29	D1	1465	A
29	D1	1467	A
29	D1	1468	A
29	D1	1469	C
29	D1	1470	U
29	D1	1478	C
29	D1	1479	U
29	D1	1480	G
29	D1	1481	A
29	D1	1482	A
29	D1	1483	G
29	D1	1484	U
29	D1	1485	G
29	D1	1488	G
29	D1	1493	G
29	D1	1495	U
29	D1	1496	C
29	D1	1497	C
29	D1	1501	U
29	D1	1503	A
29	D1	1504	A
29	D1	1505	C
29	D1	1506	A
29	D1	1507	G
29	D1	1508	C
29	D1	1510	G
29	D1	1511	U
29	D1	1512	U
29	D1	1520	G
29	D1	1521	G
29	D1	1524	A
29	D1	1525	G

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Mol	Chain	Res	Type
29	D1	1527	C
29	D1	1530	U
29	D1	1531	C
29	D1	1533	U
29	D1	1536	G
29	D1	1539	A
29	D1	1540	U
29	D1	1542	G
29	D1	1548	C
29	D1	1549	U
29	D1	1551	C
29	D1	1552	G
29	D1	1553	U
29	D1	1554	U
29	D1	1556	C
29	D1	1557	A
29	D1	1558	A
29	D1	1559	A
29	D1	1560	G
29	D1	1567	U
29	D1	1568	U
29	D1	1572	U
29	D1	1575	A
29	D1	1579	C
29	D1	1580	A
29	D1	1581	C
29	D1	1582	C
29	D1	1583	A
29	D1	1584	U
29	D1	1587	A
29	D1	1589	A
29	D1	1593	A
29	D1	1595	U
29	D1	1596	C
29	D1	1601	U
29	D1	1602	A
29	D1	1605	A
29	D1	1606	U
29	D1	1607	U
29	D1	1608	C
29	D1	1609	C
29	D1	1610	G

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Mol	Chain	Res	Type
29	D1	1620	U
29	D1	1622	U
29	D1	1626	U
29	D1	1627	U
29	D1	1628	C
29	D1	1629	U
29	D1	1630	U
29	D1	1631	C
29	D1	1632	A
29	D1	1633	C
29	D1	1634	G
29	D1	1635	G
29	D1	1636	U
29	D1	1638	A
29	D1	1639	C
29	D1	1641	U
29	D1	1643	A
29	D1	1644	C
29	D1	1645	U
29	D1	1646	G
29	D1	1647	A
29	D1	1652	G
29	D1	1653	G
29	D1	1655	G
29	D1	1656	A
29	D1	1661	G
29	D1	1667	A
29	D1	1668	G
29	D1	1671	C
29	D1	1672	U
29	D1	1678	G
29	D1	1681	U
29	D1	1682	U
29	D1	1683	A
29	D1	1684	U
29	D1	1685	C
29	D1	1686	U
29	D1	1687	U
29	D1	1688	U
29	D1	1689	U
29	D1	1692	U
29	D1	1694	U

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Mol	Chain	Res	Type
29	D1	1698	C
29	D1	1699	A
29	D1	1701	C
29	D1	1703	U
29	D1	1704	A
29	D1	1706	C
29	D1	1708	C
29	D1	1710	C
29	D1	1713	G
29	D1	1714	A
29	D1	1716	U
29	D1	1717	U
29	D1	1724	U
29	D1	1725	C
29	D1	1726	C
29	D1	1727	G
29	D1	1728	G
29	D1	1729	A
29	D1	1730	G
29	D1	1734	G
29	D1	1735	G
29	D1	1736	G
29	D1	1739	U
29	D1	1740	U
29	D1	1744	G
29	D1	1750	A
29	D1	1754	G
29	D1	1756	C
29	D1	1760	A
29	D1	1762	C
29	D1	1766	G
29	D1	1769	G
29	D1	1773	C
29	D1	1774	C
29	D1	1775	G
29	D1	1779	C
29	D1	1780	G
29	D1	1781	C
29	D1	1782	U
29	D1	1783	U
29	D1	1786	G
29	D1	1787	A

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Mol	Chain	Res	Type
29	D1	1788	C
29	D1	1792	C
29	D1	1793	C
29	D1	1794	G
29	D1	1795	U
29	D1	1796	G
29	D1	1797	A
29	D1	1802	C
29	D1	1803	C
29	D1	1806	A
29	D1	1807	G
29	D1	1808	G
29	D1	1809	A
29	D1	1810	A
29	D1	1812	G
29	D1	1813	A
29	D1	1814	A
29	D1	1815	U
29	D1	1816	A
29	D1	1820	U
29	D1	1821	U
29	D1	1822	C
29	D1	1830	G
29	D1	1834	U
29	D1	1839	A
29	D1	1840	U
29	D1	1841	A
29	D1	1842	A
29	D1	1844	C
29	D1	1845	G
29	D1	1846	C
29	D1	1847	A
29	D1	1849	C
29	D1	1852	G
29	D1	1853	U
29	D1	1855	U
29	D1	1857	C
29	D1	1858	A
29	D1	1859	A
29	D1	1864	A
29	D1	1871	U
29	D1	1875	G

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Mol	Chain	Res	Type
29	D1	1876	U
29	D1	1877	U
29	D1	1878	G
29	D1	1879	A
29	D1	1880	U
29	D1	1882	G
29	D1	1885	U
29	D1	1886	A
29	D1	1888	U
29	D1	1889	G
29	D1	1891	A
29	D1	1901	A
29	D1	1905	G
29	D1	1906	G
29	D1	1907	C
29	D1	1913	A
29	D1	1914	G
29	D1	1920	U
29	D1	1921	A
29	D1	1925	U
29	D1	1926	C
29	D1	1927	G
29	D1	1928	G
29	D1	1931	U
29	D1	1932	A
29	D1	1933	A
29	D1	1935	G
29	D1	1941	C
29	D1	1946	A
29	D1	1947	G
29	D1	1948	G
29	D1	1950	U
29	D1	2093	A
29	D1	2095	G
29	D1	2096	A
29	D1	2102	U
29	D1	2105	G
29	D1	2106	A
29	D1	2111	G
29	D1	2112	U
29	D1	2113	A
29	D1	2114	C

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Mol	Chain	Res	Type
29	D1	2115	G
29	D1	2117	A
29	D1	2121	G
29	D1	2122	G
29	D1	2126	A
29	D1	2129	U
29	D1	2131	A
29	D1	2132	C
29	D1	2133	U
29	D1	2137	U
29	D1	2138	A
29	D1	2139	A
29	D1	2141	U
29	D1	2144	A
29	D1	2147	A
29	D1	2148	U
29	D1	2149	A
29	D1	2150	G
29	D1	2151	C
29	D1	2152	A
29	D1	2158	A
29	D1	2161	G
29	D1	2168	A
29	D1	2169	G
29	D1	2172	A
29	D1	2173	U
29	D1	2174	G
29	D1	2176	U
29	D1	2178	A
29	D1	2185	G
29	D1	2187	G
29	D1	2191	U
29	D1	2193	U
29	D1	2194	G
29	D1	2195	C
29	D1	2201	G
29	D1	2205	U
29	D1	2206	G
29	D1	2207	A
29	D1	2208	A
29	D1	2209	U
29	D1	2210	G

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Mol	Chain	Res	Type
29	D1	2211	U
29	D1	2215	A
29	D1	2222	A
29	D1	2223	A
29	D1	2224	A
29	D1	2227	C
29	D1	2244	A
29	D1	2247	G
29	D1	2248	C
29	D1	2249	G
29	D1	2250	G
29	D1	2252	A
29	D1	2254	U
29	D1	2255	A
29	D1	2256	A
29	D1	2257	C
29	D1	2259	A
29	D1	2260	U
29	D1	2261	G
29	D1	2262	A
29	D1	2263	C
29	D1	2266	U
29	D1	2270	A
29	D1	2272	G
29	D1	2273	G
29	D1	2275	A
29	D1	2276	G
29	D1	2277	C
29	D1	2280	A
29	D1	2281	A
29	D1	2282	U
29	D1	2283	G
29	D1	2286	U
29	D1	2288	G
29	D1	2290	C
29	D1	2291	A
29	D1	2292	U
29	D1	2295	A
29	D1	2296	A
29	D1	2297	U
29	D1	2298	U
29	D1	2299	A

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Mol	Chain	Res	Type
29	D1	2303	A
29	D1	2306	C
29	D1	2307	G
29	D1	2308	C
29	D1	2309	A
29	D1	2310	U
29	D1	2311	G
29	D1	2313	A
29	D1	2314	U
29	D1	2315	G
29	D1	2320	A
29	D1	2324	A
29	D1	2326	A
29	D1	2327	U
29	D1	2329	C
29	D1	2330	C
29	D1	2334	U
29	D1	2335	G
29	D1	2336	U
29	D1	2339	C
29	D1	2341	A
29	D1	2342	U
29	D1	2344	U
29	D1	2345	A
29	D1	2360	C
29	D1	2361	A
29	D1	2362	C
29	D1	2363	A
29	D1	2364	G
29	D1	2365	C
29	D1	2371	G
29	D1	2372	A
29	D1	2373	A
29	D1	2374	C
29	D1	2375	G
29	D1	2377	G
29	D1	2379	U
29	D1	2383	C
29	D1	2384	A
29	D1	2385	G
29	D1	2386	A
29	D1	2393	G

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Mol	Chain	Res	Type
29	D1	2397	A
29	D1	2401	A
29	D1	2402	A
29	D1	2403	G
29	D1	2404	A
29	D1	2405	C
29	D1	2411	U
29	D1	2412	G
29	D1	2414	G
29	D1	2415	C
29	D1	2417	U
29	D1	2421	U
29	D1	2422	C
29	D1	2423	U
29	D1	2424	A
29	D1	2432	A
29	D1	2434	U
29	D1	2436	U
29	D1	2437	G
29	D1	2439	A
29	D1	2443	A
29	D1	2445	A
29	D1	2446	U
29	D1	2449	A
29	D1	2450	G
29	D1	2451	G
29	D1	2452	G
29	D1	2453	U
29	D1	2454	G
29	D1	2458	A
29	D1	2459	A
29	D1	2461	A
29	D1	2462	A
29	D1	2463	G
29	D1	2468	A
29	D1	2472	U
29	D1	2473	C
29	D1	2474	G
29	D1	2479	C
29	D1	2484	A
29	D1	2485	A
29	D1	2486	A

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Mol	Chain	Res	Type
29	D1	2487	U
29	D1	2488	A
29	D1	2491	A
29	D1	2492	C
29	D1	2493	U
29	D1	2499	U
29	D1	2500	A
29	D1	2501	U
29	D1	2502	A
29	D1	2503	G
29	D1	2504	U
29	D1	2508	U
29	D1	2511	A
29	D1	2512	C
29	D1	2513	U
29	D1	2514	U
29	D1	2515	A
29	D1	2516	U
29	D1	2517	U
29	D1	2520	A
29	D1	2521	U
29	D1	2522	G
29	D1	2523	A
29	D1	2524	A
29	D1	2525	G
29	D1	2526	C
29	D1	2528	G
29	D1	2530	G
29	D1	2531	C
29	D1	2536	A
29	D1	2539	C
29	D1	2540	A
29	D1	2541	U
29	D1	2542	U
29	D1	2543	U
29	D1	2547	A
29	D1	2548	C
29	D1	2549	G
29	D1	2550	U
29	D1	2552	C
29	D1	2553	U
29	D1	2554	A

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Mol	Chain	Res	Type
29	D1	2555	G
29	D1	2556	C
29	D1	2557	A
29	D1	2558	U
29	D1	2559	U
29	D1	2560	C
29	D1	2561	A
29	D1	2569	A
29	D1	2572	C
29	D1	2574	G
29	D1	2580	A
29	D1	2581	U
29	D1	2582	C
29	D1	2583	C
29	D1	2584	G
29	D1	2585	G
29	D1	2586	G
29	D1	2587	U
29	D1	2589	G
29	D1	2593	A
29	D1	2594	C
29	D1	2598	G
29	D1	2600	C
29	D1	2603	G
29	D1	2605	G
29	D1	2606	G
29	D1	2607	G
29	D1	2612	U
29	D1	2613	U
29	D1	2614	G
29	D1	2618	G
29	D1	2619	G
29	D1	2624	G
29	D1	2626	A
29	D1	2627	C
29	D1	2628	A
29	D1	2629	U
29	D1	2631	U
29	D1	2636	A
29	D1	2637	A
29	D1	2638	C
29	D1	2639	G

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Mol	Chain	Res	Type
29	D1	2642	A
29	D1	2643	A
29	D1	2644	C
29	D1	2648	G
29	D1	2649	A
29	D1	2650	U
29	D1	2651	G
29	D1	2652	U
29	D1	2653	C
29	D1	2655	U
29	D1	2656	A
29	D1	2657	A
29	D1	2658	G
29	D1	2662	G
29	D1	2663	G
29	D1	2664	C
29	D1	2666	C
29	D1	2667	A
29	D1	2668	U
29	D1	2671	A
29	D1	2672	G
29	D1	2675	C
29	D1	2676	A
29	D1	2677	G
29	D1	2678	A
29	D1	2679	A
29	D1	2681	U
29	D1	2682	C
29	D1	2683	U
29	D1	2684	C
29	D1	2685	C
29	D1	2686	A
29	D1	2687	G
29	D1	2688	U
29	D1	2689	A
29	D1	2690	G
29	D1	2691	A
29	D1	2693	C
29	D1	2694	A
29	D1	2695	A
29	D1	2696	A
29	D1	2697	A

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Mol	Chain	Res	Type
29	D1	2699	G
29	D1	2700	G
29	D1	2702	A
29	D1	2703	A
29	D1	2704	A
29	D1	2708	C
29	D1	2709	C
29	D1	2710	C
29	D1	2712	U
29	D1	2713	U
29	D1	2714	G
29	D1	2715	A
29	D1	2716	U
29	D1	2717	U
29	D1	2718	U
29	D1	2719	U
29	D1	2725	U
29	D1	2726	C
29	D1	2727	A
29	D1	2728	G
29	D1	2729	U
29	D1	2730	G
29	D1	2731	U
29	D1	2733	A
29	D1	2735	U
29	D1	2738	A
29	D1	2740	A
29	D1	2742	C
29	D1	2743	A
29	D1	2746	A
29	D1	2751	G
29	D1	2752	U
29	D1	2753	G
29	D1	2755	C
29	D1	2760	C
29	D1	2762	A
29	D1	2764	C
29	D1	2766	U
29	D1	2769	A
29	D1	2771	U
29	D1	2772	C
29	D1	2776	C

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Mol	Chain	Res	Type
29	D1	2777	G
29	D1	2778	G
29	D1	2779	A
29	D1	2780	A
29	D1	2782	U
29	D1	2784	G
29	D1	2786	G
29	D1	2787	G
29	D1	2790	A
29	D1	2796	G
29	D1	2798	C
29	D1	2799	A
29	D1	2801	A
29	D1	2802	A
29	D1	2804	A
29	D1	2805	G
29	D1	2807	U
29	D1	2809	C
29	D1	2810	C
29	D1	2814	G
29	D1	2816	G
29	D1	2817	A
29	D1	2818	U
29	D1	2822	U
29	D1	2825	C
29	D1	2826	U
29	D1	2828	G
29	D1	2829	U
29	D1	2830	G
29	D1	2833	A
29	D1	2834	G
29	D1	2835	U
29	D1	2836	C
29	D1	2838	A
29	D1	2839	G
29	D1	2840	C
29	D1	2842	U
29	D1	2843	U
29	D1	2844	C
29	D1	2845	A
29	D1	2846	U
29	D1	2847	A

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Mol	Chain	Res	Type
29	D1	2850	G
29	D1	2851	A
29	D1	2852	C
29	D1	2859	U
29	D1	2860	U
29	D1	2867	C
29	D1	2870	C
29	D1	2871	G
29	D1	2872	A
29	D1	2873	U
29	D1	2874	G
29	D1	2875	U
29	D1	2881	C
29	D1	2883	U
29	D1	2884	C
29	D1	2886	U
29	D1	2887	A
29	D1	2888	U
29	D1	2894	C
29	D1	2896	A
29	D1	2897	A
29	D1	2898	G
29	D1	2899	C
29	D1	2900	A
29	D1	2901	G
29	D1	2905	U
29	D1	2911	A
29	D1	2912	G
29	D1	2914	G
29	D1	2915	U
29	D1	2916	U
29	D1	2918	G
29	D1	2919	A
29	D1	2920	U
29	D1	2922	G
29	D1	2923	U
29	D1	2928	C
29	D1	2929	C
29	D1	2930	A
29	D1	2932	U
29	D1	2935	U
29	D1	2936	A

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Mol	Chain	Res	Type
29	D1	2939	G
29	D1	2941	A
29	D1	2942	C
29	D1	2943	G
29	D1	2944	U
29	D1	2945	G
29	D1	2947	G
29	D1	2954	U
29	D1	2956	A
29	D1	2957	G
29	D1	2960	C
29	D1	2961	G
29	D1	2962	U
29	D1	2965	U
29	D1	2968	G
29	D1	2971	A
29	D1	2972	G
29	D1	2973	G
29	D1	2978	U
29	D1	2979	U
29	D1	2983	C
29	D1	2984	C
29	D1	2986	U
29	D1	2987	A
29	D1	2988	C
29	D1	2989	U
29	D1	2990	G
29	D1	2993	G
29	D1	2996	U
29	D1	2997	G
29	D1	2998	U
29	D1	2999	U
29	D1	3003	G
29	D1	3004	C
29	D1	3005	A
29	D1	3006	A
29	D1	3007	U
29	D1	3010	U
29	D1	3011	A
29	D1	3012	A
29	D1	3013	U
29	D1	3014	U

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Mol	Chain	Res	Type
29	D1	3019	U
29	D1	3020	U
29	D1	3023	U
29	D1	3024	A
29	D1	3030	G
29	D1	3031	G
29	D1	3033	A
29	D1	3038	U
29	D1	3039	C
29	D1	3040	A
29	D1	3041	U
29	D1	3045	G
29	D1	3046	A
29	D1	3048	A
29	D1	3049	A
29	D1	3052	G
29	D1	3054	U
29	D1	3056	U
29	D1	3057	U
29	D1	3058	U
29	D1	3059	G
29	D1	3060	C
29	D1	3061	G
29	D1	3064	U
29	D1	3066	U
29	D1	3071	U
29	D1	3072	C
29	D1	3074	G
29	D1	3075	G
29	D1	3077	A
29	D1	3078	U
29	D1	3079	U
29	D1	3080	G
29	D1	3090	U
29	D1	3091	A
29	D1	3092	C
29	D1	3093	C
29	D1	3094	A
29	D1	3096	C
29	D1	3097	C
29	D1	3098	G
29	D1	3099	C

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Mol	Chain	Res	Type
29	D1	3100	U
29	D1	3101	G
29	D1	3102	G
29	D1	3103	A
29	D1	3104	U
29	D1	3105	U
29	D1	3107	U
29	D1	3115	C
29	D1	3116	G
29	D1	3120	C
29	D1	3121	U
29	D1	3122	A
29	D1	3123	A
29	D1	3126	C
29	D1	3127	A
29	D1	3128	G
29	D1	3129	A
29	D1	3130	A
29	D1	3131	U
29	D1	3133	C
29	D1	3134	A
29	D1	3136	G
29	D1	3137	C
29	D1	3138	U
29	D1	3139	A
29	D1	3140	G
29	D1	3141	A
29	D1	3142	A
29	D1	3143	C
29	D1	3144	G
29	D1	3145	C
29	D1	3149	G
29	D1	3151	U
29	D1	3152	U
29	D1	3153	U
29	D1	3154	C
29	D1	3157	U
29	D1	3159	C
29	D1	3160	U
29	D1	3161	C
29	D1	3162	C
29	D1	3163	A

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Mol	Chain	Res	Type
29	D1	3164	C
29	D1	3166	C
29	D1	3169	U
29	D1	3170	A
29	D1	3171	U
29	D1	3172	A
29	D1	3173	G
29	D1	3174	A
29	D1	3175	U
29	D1	3176	G
29	D1	3177	G
29	D1	3178	A
29	D1	3179	U
29	D1	3180	A
29	D1	3181	C
29	D1	3184	A
29	D1	3185	U
29	D1	3187	A
29	D1	3191	G
29	D1	3195	U
29	D1	3196	U
29	D1	3198	U
29	D1	3200	G
29	D1	3201	C
29	D1	3202	G
29	D1	3203	U
29	D1	3204	C
29	D1	3205	G
29	D1	3206	C
29	D1	3207	U
29	D1	3208	G
29	D1	3209	A
29	D1	3210	A
29	D1	3211	C
29	D1	3212	C
29	D1	3213	A
29	D1	3214	U
29	D1	3215	A
29	D1	3216	G
29	D1	3217	C
29	D1	3218	A
29	D1	3219	G

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Mol	Chain	Res	Type
29	D1	3220	G
29	D1	3223	A
29	D1	3225	C
29	D1	3227	A
29	D1	3228	C
29	D1	3229	G
29	D1	3237	U
29	D1	3238	G
29	D1	3242	G
29	D1	3243	A
29	D1	3244	A
29	D1	3245	A
29	D1	3246	G
29	D1	3254	G
29	D1	3257	C
29	D1	3258	U
29	D1	3259	U
29	D1	3260	G
29	D1	3261	C
29	D1	3262	U
29	D1	3263	G
29	D1	3265	C
29	D1	3267	A
29	D1	3268	A
29	D1	3269	U
29	D1	3270	U
29	D1	3271	G
29	D1	3272	C
29	D1	3273	A
29	D1	3274	A
29	D1	3275	U
29	D1	3276	G
29	D1	3277	U
29	D1	3279	A
29	D1	3280	U
29	D1	3281	U
29	D1	3282	U
29	D1	3283	U
29	D1	3285	C
29	D1	3287	U
29	D1	3288	G
29	D1	3290	G

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Mol	Chain	Res	Type
29	D1	3291	G
29	D1	3292	A
29	D1	3293	U
29	D1	3294	A
29	D1	3300	U
29	D1	3301	U
29	D1	3302	U
29	D1	3303	G
29	D1	3304	U
29	D1	3305	A
29	D1	3306	U
29	D1	3312	U
29	D1	3313	U
29	D1	3314	A
29	D1	3315	G
29	D1	3316	A
29	D1	3317	U
29	D1	3318	G
29	D1	3319	U
29	D1	3320	A
29	D1	3321	C
29	D1	3322	A
29	D1	3324	C
29	D1	3329	U
29	D1	3331	U
29	D1	3332	U
29	D1	3333	G
29	D1	3334	U
29	D1	3339	A
29	D1	3341	U
29	D1	3342	A
29	D1	3343	G
29	D1	3344	A
29	D1	3350	C
29	D1	3351	U
29	D1	3352	U
29	D1	3353	G
29	D1	3354	U
29	D1	3355	U
29	D1	3356	G
29	D1	3357	U
29	D1	3358	U

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Mol	Chain	Res	Type
29	D1	3359	A
29	D1	3360	C
29	D1	3361	G
29	D1	3362	A
29	D1	3363	U
29	D1	3369	G
29	D1	3370	A
29	D1	3371	G
29	D1	3375	A
29	D1	3376	A
29	D1	3377	G
29	D1	3378	C
29	D1	3379	C
29	D1	3381	U
29	D1	3382	U
29	D1	3383	G
29	D1	3384	U
29	D1	3387	U
29	D1	3389	U
29	D1	3390	G
29	D1	3392	U
29	D1	3394	U
29	D1	3395	G
29	D1	3396	U
30	D2	2	G
30	D2	5	G
30	D2	6	C
30	D2	9	C
30	D2	10	C
30	D2	11	A
30	D2	12	U
30	D2	13	A
30	D2	14	U
30	D2	15	C
30	D2	19	C
30	D2	22	A
30	D2	27	A
30	D2	29	C
30	D2	30	G
30	D2	31	U
30	D2	33	U
30	D2	34	C

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Mol	Chain	Res	Type
30	D2	35	C
30	D2	36	C
30	D2	38	U
30	D2	39	C
30	D2	40	C
30	D2	41	G
30	D2	42	A
30	D2	43	U
30	D2	44	C
30	D2	47	C
30	D2	48	U
30	D2	49	G
30	D2	50	U
30	D2	51	A
30	D2	54	U
30	D2	55	A
30	D2	56	A
30	D2	58	C
30	D2	63	A
30	D2	64	A
30	D2	65	G
30	D2	66	A
30	D2	68	C
30	D2	70	U
30	D2	75	G
30	D2	76	A
30	D2	78	U
30	D2	79	A
30	D2	81	U
30	D2	83	U
30	D2	87	G
30	D2	89	G
30	D2	92	A
30	D2	93	C
30	D2	96	U
30	D2	97	A
30	D2	98	C
30	D2	99	G
30	D2	103	A
30	D2	105	C
30	D2	107	C
30	D2	109	G

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Mol	Chain	Res	Type
30	D2	110	G
30	D2	112	G
30	D2	115	G
30	D2	118	A
30	D2	120	C
30	D2	121	U
31	D3	2	A
31	D3	6	U
31	D3	10	A
31	D3	12	A
31	D3	14	C
31	D3	23	U
31	D3	24	G
31	D3	25	G
31	D3	30	C
31	D3	33	A
31	D3	34	U
31	D3	38	U
31	D3	40	A
31	D3	41	A
31	D3	45	C
31	D3	49	G
31	D3	50	C
31	D3	51	G
31	D3	55	U
31	D3	59	A
31	D3	60	U
31	D3	61	A
31	D3	62	C
31	D3	63	G
31	D3	65	A
31	D3	67	U
31	D3	68	G
31	D3	70	G
31	D3	71	A
31	D3	72	A
31	D3	73	U
31	D3	75	G
31	D3	76	C
31	D3	77	A
31	D3	78	G
31	D3	80	A

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Mol	Chain	Res	Type
31	D3	82	U
31	D3	83	C
31	D3	85	G
31	D3	86	U
31	D3	87	G
31	D3	88	A
31	D3	89	A
31	D3	90	U
31	D3	93	U
31	D3	94	C
31	D3	95	G
31	D3	96	A
31	D3	97	A
31	D3	99	C
31	D3	101	U
31	D3	104	A
31	D3	105	A
31	D3	106	C
31	D3	107	G
31	D3	108	C
31	D3	110	C
31	D3	111	A
31	D3	112	U
31	D3	113	U
31	D3	114	G
31	D3	117	C
31	D3	124	G
31	D3	125	U
31	D3	126	A
31	D3	127	U
31	D3	128	U
31	D3	129	C
31	D3	130	C
31	D3	132	G
31	D3	138	A
31	D3	141	C
31	D3	145	U
31	D3	147	U
31	D3	149	A
31	D3	151	C
31	D3	152	G
31	D3	157	U

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Mol	Chain	Res	Type
31	D3	158	U

All (856) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	A1	24	U
1	A1	40	A
1	A1	45	U
1	A1	61	A
1	A1	62	A
1	A1	65	A
1	A1	67	A
1	A1	68	A
1	A1	71	A
1	A1	78	A
1	A1	80	A
1	A1	103	A
1	A1	112	A
1	A1	114	C
1	A1	121	U
1	A1	125	U
1	A1	133	U
1	A1	135	A
1	A1	137	U
1	A1	139	C
1	A1	150	U
1	A1	160	C
1	A1	167	U
1	A1	183	U
1	A1	191	C
1	A1	195	G
1	A1	198	A
1	A1	203	U
1	A1	211	U
1	A1	217	A
1	A1	241	U
1	A1	243	G
1	A1	248	U
1	A1	254	A
1	A1	262	U
1	A1	263	C
1	A1	270	C

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Mol	Chain	Res	Type
1	A1	272	U
1	A1	284	G
1	A1	290	G
1	A1	295	A
1	A1	310	C
1	A1	320	U
1	A1	322	G
1	A1	351	C
1	A1	358	U
1	A1	380	U
1	A1	386	G
1	A1	399	A
1	A1	400	A
1	A1	416	A
1	A1	417	A
1	A1	427	C
1	A1	438	A
1	A1	439	U
1	A1	447	U
1	A1	511	A
1	A1	515	A
1	A1	521	A
1	A1	525	A
1	A1	528	U
1	A1	540	G
1	A1	541	A
1	A1	555	A
1	A1	577	G
1	A1	594	A
1	A1	607	G
1	A1	622	A
1	A1	659	C
1	A1	699	U
1	A1	704	C
1	A1	720	G
1	A1	721	U
1	A1	750	U
1	A1	755	A
1	A1	765	G
1	A1	782	U
1	A1	807	A
1	A1	820	U

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Mol	Chain	Res	Type
1	A1	827	C
1	A1	829	A
1	A1	842	C
1	A1	846	G
1	A1	859	A
1	A1	913	G
1	A1	914	G
1	A1	932	U
1	A1	959	U
1	A1	963	A
1	A1	964	U
1	A1	986	G
1	A1	1003	A
1	A1	1045	C
1	A1	1091	A
1	A1	1094	G
1	A1	1097	U
1	A1	1100	G
1	A1	1107	G
1	A1	1110	G
1	A1	1139	A
1	A1	1142	A
1	A1	1149	G
1	A1	1150	G
1	A1	1185	U
1	A1	1190	C
1	A1	1196	A
1	A1	1200	G
1	A1	1202	A
1	A1	1203	A
1	A1	1204	A
1	A1	1207	C
1	A1	1255	G
1	A1	1269	U
1	A1	1274	C
1	A1	1285	U
1	A1	1305	U
1	A1	1344	A
1	A1	1349	G
1	A1	1392	U
1	A1	1435	G
1	A1	1458	G

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Mol	Chain	Res	Type
1	A1	1472	C
1	A1	1478	G
1	A1	1480	G
1	A1	1481	C
1	A1	1492	A
1	A1	1513	G
1	A1	1522	U
1	A1	1539	G
1	A1	1560	U
1	A1	1567	U
1	A1	1573	A
1	A1	1574	G
1	A1	1580	C
1	A1	1591	C
1	A1	1609	U
1	A1	1633	A
1	A1	1634	C
1	A1	1636	C
1	A1	1645	G
1	A1	1657	U
1	A1	1694	A
1	A1	1754	A
1	A1	1761	U
1	A1	1764	C
1	A1	1779	U
1	A1	1791	A
1	A1	1793	G
29	B1	14	U
29	B1	15	C
29	B1	20	A
29	B1	42	C
29	B1	48	A
29	B1	65	A
29	B1	88	A
29	B1	92	G
29	B1	97	U
29	B1	102	C
29	B1	120	G
29	B1	152	U
29	B1	154	U
29	B1	155	G
29	B1	156	G

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Mol	Chain	Res	Type
29	B1	157	A
29	B1	191	U
29	B1	200	C
29	B1	209	A
29	B1	210	U
29	B1	249	U
29	B1	251	G
29	B1	265	A
29	B1	282	G
29	B1	304	G
29	B1	326	U
29	B1	327	A
29	B1	329	U
29	B1	330	G
29	B1	332	C
29	B1	340	C
29	B1	344	A
29	B1	369	A
29	B1	379	C
29	B1	396	A
29	B1	400	G
29	B1	422	A
29	B1	423	A
29	B1	424	G
29	B1	425	G
29	B1	431	U
29	B1	516	A
29	B1	520	U
29	B1	524	U
29	B1	536	U
29	B1	560	G
29	B1	561	C
29	B1	574	U
29	B1	575	G
29	B1	576	C
29	B1	577	C
29	B1	590	G
29	B1	603	A
29	B1	604	G
29	B1	605	U
29	B1	609	G
29	B1	620	U

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Mol	Chain	Res	Type
29	B1	625	G
29	B1	641	C
29	B1	647	A
29	B1	666	A
29	B1	674	G
29	B1	698	U
29	B1	705	A
29	B1	715	A
29	B1	718	G
29	B1	720	A
29	B1	746	A
29	B1	747	A
29	B1	758	C
29	B1	769	G
29	B1	806	A
29	B1	834	U
29	B1	845	G
29	B1	857	G
29	B1	858	A
29	B1	908	G
29	B1	914	A
29	B1	943	U
29	B1	953	G
29	B1	975	C
29	B1	979	U
29	B1	1005	G
29	B1	1026	A
29	B1	1038	C
29	B1	1062	A
29	B1	1063	G
29	B1	1076	C
29	B1	1102	A
29	B1	1103	A
29	B1	1130	A
29	B1	1139	G
29	B1	1143	A
29	B1	1144	U
29	B1	1152	G
29	B1	1154	A
29	B1	1157	G
29	B1	1159	A
29	B1	1167	U

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Mol	Chain	Res	Type
29	B1	1177	G
29	B1	1197	A
29	B1	1202	A
29	B1	1207	G
29	B1	1211	U
29	B1	1260	A
29	B1	1286	A
29	B1	1289	G
29	B1	1291	A
29	B1	1294	A
29	B1	1296	C
29	B1	1306	G
29	B1	1307	G
29	B1	1317	A
29	B1	1329	U
29	B1	1331	U
29	B1	1367	G
29	B1	1389	G
29	B1	1398	U
29	B1	1428	A
29	B1	1454	A
29	B1	1468	A
29	B1	1469	C
29	B1	1478	C
29	B1	1482	A
29	B1	1483	G
29	B1	1484	U
29	B1	1503	A
29	B1	1504	A
29	B1	1505	C
29	B1	1520	G
29	B1	1524	A
29	B1	1588	A
29	B1	1607	U
29	B1	1627	U
29	B1	1640	G
29	B1	1641	U
29	B1	1654	A
29	B1	1685	C
29	B1	1686	U
29	B1	1716	U
29	B1	1728	G

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Mol	Chain	Res	Type
29	B1	1779	C
29	B1	1780	G
29	B1	1792	C
29	B1	1793	C
29	B1	1795	U
29	B1	1808	G
29	B1	1841	A
29	B1	1876	U
29	B1	1877	U
29	B1	1912	U
29	B1	2105	G
29	B1	2112	U
29	B1	2147	A
29	B1	2148	U
29	B1	2151	C
29	B1	2193	U
29	B1	2211	U
29	B1	2251	G
29	B1	2254	U
29	B1	2255	A
29	B1	2270	A
29	B1	2280	A
29	B1	2281	A
29	B1	2290	C
29	B1	2297	U
29	B1	2372	A
29	B1	2385	G
29	B1	2400	G
29	B1	2403	G
29	B1	2414	G
29	B1	2423	U
29	B1	2487	U
29	B1	2501	U
29	B1	2513	U
29	B1	2516	U
29	B1	2522	G
29	B1	2523	A
29	B1	2549	G
29	B1	2555	G
29	B1	2580	A
29	B1	2593	A
29	B1	2618	G

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Mol	Chain	Res	Type
29	B1	2652	U
29	B1	2656	A
29	B1	2684	C
29	B1	2688	U
29	B1	2699	G
29	B1	2707	C
29	B1	2717	U
29	B1	2727	A
29	B1	2728	G
29	B1	2775	U
29	B1	2779	A
29	B1	2799	A
29	B1	2804	A
29	B1	2805	G
29	B1	2808	A
29	B1	2817	A
29	B1	2834	G
29	B1	2850	G
29	B1	2851	A
29	B1	2859	U
29	B1	2872	A
29	B1	2896	A
29	B1	2898	G
29	B1	2900	A
29	B1	2948	C
29	B1	2996	U
29	B1	2997	G
29	B1	2998	U
29	B1	2999	U
29	B1	3002	C
29	B1	3013	U
29	B1	3023	U
29	B1	3024	A
29	B1	3030	G
29	B1	3045	G
29	B1	3047	U
29	B1	3058	U
29	B1	3059	G
29	B1	3071	U
29	B1	3078	U
29	B1	3090	U
29	B1	3093	C

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Mol	Chain	Res	Type
29	B1	3097	C
29	B1	3098	G
29	B1	3099	C
29	B1	3102	G
29	B1	3121	U
29	B1	3137	C
29	B1	3139	A
29	B1	3143	C
29	B1	3144	G
29	B1	3151	U
29	B1	3152	U
29	B1	3168	A
29	B1	3171	U
29	B1	3173	G
29	B1	3179	U
29	B1	3180	A
29	B1	3204	C
29	B1	3205	G
29	B1	3211	C
29	B1	3257	C
29	B1	3268	A
29	B1	3274	A
29	B1	3290	G
29	B1	3291	G
29	B1	3299	A
29	B1	3303	G
29	B1	3313	U
29	B1	3316	A
29	B1	3328	G
29	B1	3331	U
29	B1	3351	U
29	B1	3356	G
29	B1	3377	G
29	B1	3386	G
30	B2	12	U
30	B2	13	A
30	B2	14	U
30	B2	26	C
30	B2	35	C
30	B2	38	U
30	B2	55	A
30	B2	62	U

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Mol	Chain	Res	Type
30	B2	64	A
30	B2	77	G
30	B2	92	A
30	B2	109	G
31	B3	22	U
31	B3	40	A
31	B3	70	G
31	B3	71	A
31	B3	76	C
31	B3	94	C
31	B3	106	C
31	B3	111	A
31	B3	113	U
1	C1	24	U
1	C1	40	A
1	C1	44	U
1	C1	45	U
1	C1	61	A
1	C1	62	A
1	C1	65	A
1	C1	67	A
1	C1	68	A
1	C1	71	A
1	C1	78	A
1	C1	80	A
1	C1	103	A
1	C1	112	A
1	C1	114	C
1	C1	125	U
1	C1	133	U
1	C1	135	A
1	C1	137	U
1	C1	139	C
1	C1	150	U
1	C1	160	C
1	C1	167	U
1	C1	175	G
1	C1	183	U
1	C1	191	C
1	C1	195	G
1	C1	198	A
1	C1	203	U

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Mol	Chain	Res	Type
1	C1	211	U
1	C1	217	A
1	C1	241	U
1	C1	243	G
1	C1	248	U
1	C1	254	A
1	C1	262	U
1	C1	263	C
1	C1	270	C
1	C1	272	U
1	C1	284	G
1	C1	290	G
1	C1	295	A
1	C1	310	C
1	C1	320	U
1	C1	322	G
1	C1	351	C
1	C1	358	U
1	C1	373	G
1	C1	380	U
1	C1	386	G
1	C1	399	A
1	C1	400	A
1	C1	416	A
1	C1	417	A
1	C1	427	C
1	C1	438	A
1	C1	439	U
1	C1	447	U
1	C1	453	U
1	C1	511	A
1	C1	515	A
1	C1	521	A
1	C1	525	A
1	C1	528	U
1	C1	540	G
1	C1	541	A
1	C1	555	A
1	C1	577	G
1	C1	594	A
1	C1	607	G
1	C1	622	A

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Mol	Chain	Res	Type
1	C1	659	C
1	C1	717	C
1	C1	718	U
1	C1	719	U
1	C1	721	U
1	C1	722	G
1	C1	750	U
1	C1	755	A
1	C1	765	G
1	C1	782	U
1	C1	807	A
1	C1	820	U
1	C1	827	C
1	C1	829	A
1	C1	842	C
1	C1	846	G
1	C1	859	A
1	C1	913	G
1	C1	914	G
1	C1	932	U
1	C1	959	U
1	C1	963	A
1	C1	964	U
1	C1	986	G
1	C1	1003	A
1	C1	1045	C
1	C1	1091	A
1	C1	1094	G
1	C1	1097	U
1	C1	1100	G
1	C1	1107	G
1	C1	1110	G
1	C1	1139	A
1	C1	1142	A
1	C1	1149	G
1	C1	1150	G
1	C1	1185	U
1	C1	1190	C
1	C1	1196	A
1	C1	1200	G
1	C1	1202	A
1	C1	1203	A

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Mol	Chain	Res	Type
1	C1	1204	A
1	C1	1207	C
1	C1	1255	G
1	C1	1269	U
1	C1	1285	U
1	C1	1305	U
1	C1	1344	A
1	C1	1349	G
1	C1	1392	U
1	C1	1435	G
1	C1	1458	G
1	C1	1472	C
1	C1	1478	G
1	C1	1480	G
1	C1	1481	C
1	C1	1492	A
1	C1	1513	G
1	C1	1522	U
1	C1	1539	G
1	C1	1560	U
1	C1	1567	U
1	C1	1573	A
1	C1	1574	G
1	C1	1580	C
1	C1	1591	C
1	C1	1609	U
1	C1	1633	A
1	C1	1634	C
1	C1	1636	C
1	C1	1657	U
1	C1	1694	A
1	C1	1754	A
1	C1	1761	U
1	C1	1764	C
1	C1	1779	U
1	C1	1791	A
1	C1	1793	G
29	D1	14	U
29	D1	15	C
29	D1	20	A
29	D1	42	C
29	D1	48	A

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Mol	Chain	Res	Type
29	D1	65	A
29	D1	88	A
29	D1	92	G
29	D1	102	C
29	D1	120	G
29	D1	152	U
29	D1	154	U
29	D1	155	G
29	D1	156	G
29	D1	157	A
29	D1	191	U
29	D1	200	C
29	D1	210	U
29	D1	249	U
29	D1	251	G
29	D1	265	A
29	D1	282	G
29	D1	304	G
29	D1	326	U
29	D1	327	A
29	D1	332	C
29	D1	340	C
29	D1	369	A
29	D1	379	C
29	D1	396	A
29	D1	400	G
29	D1	422	A
29	D1	423	A
29	D1	424	G
29	D1	425	G
29	D1	431	U
29	D1	516	A
29	D1	520	U
29	D1	524	U
29	D1	536	U
29	D1	560	G
29	D1	561	C
29	D1	574	U
29	D1	575	G
29	D1	576	C
29	D1	577	C
29	D1	590	G

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Mol	Chain	Res	Type
29	D1	603	A
29	D1	604	G
29	D1	605	U
29	D1	609	G
29	D1	620	U
29	D1	625	G
29	D1	641	C
29	D1	647	A
29	D1	666	A
29	D1	674	G
29	D1	698	U
29	D1	705	A
29	D1	715	A
29	D1	718	G
29	D1	720	A
29	D1	746	A
29	D1	747	A
29	D1	758	C
29	D1	769	G
29	D1	806	A
29	D1	834	U
29	D1	845	G
29	D1	857	G
29	D1	858	A
29	D1	896	A
29	D1	943	U
29	D1	953	G
29	D1	975	C
29	D1	979	U
29	D1	1005	G
29	D1	1026	A
29	D1	1038	C
29	D1	1062	A
29	D1	1063	G
29	D1	1076	C
29	D1	1102	A
29	D1	1103	A
29	D1	1130	A
29	D1	1139	G
29	D1	1143	A
29	D1	1144	U
29	D1	1152	G

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Mol	Chain	Res	Type
29	D1	1154	A
29	D1	1157	G
29	D1	1159	A
29	D1	1167	U
29	D1	1197	A
29	D1	1207	G
29	D1	1213	G
29	D1	1221	A
29	D1	1225	A
29	D1	1226	G
29	D1	1235	U
29	D1	1264	G
29	D1	1272	C
29	D1	1286	A
29	D1	1288	U
29	D1	1289	G
29	D1	1291	A
29	D1	1294	A
29	D1	1296	C
29	D1	1306	G
29	D1	1307	G
29	D1	1317	A
29	D1	1329	U
29	D1	1331	U
29	D1	1367	G
29	D1	1389	G
29	D1	1398	U
29	D1	1428	A
29	D1	1442	U
29	D1	1454	A
29	D1	1468	A
29	D1	1469	C
29	D1	1478	C
29	D1	1482	A
29	D1	1483	G
29	D1	1484	U
29	D1	1503	A
29	D1	1504	A
29	D1	1505	C
29	D1	1520	G
29	D1	1524	A
29	D1	1588	A

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Mol	Chain	Res	Type
29	D1	1607	U
29	D1	1627	U
29	D1	1640	G
29	D1	1646	G
29	D1	1654	A
29	D1	1685	C
29	D1	1686	U
29	D1	1716	U
29	D1	1728	G
29	D1	1779	C
29	D1	1780	G
29	D1	1793	C
29	D1	1795	U
29	D1	1808	G
29	D1	1876	U
29	D1	1877	U
29	D1	1912	U
29	D1	2105	G
29	D1	2112	U
29	D1	2147	A
29	D1	2148	U
29	D1	2151	C
29	D1	2193	U
29	D1	2211	U
29	D1	2251	G
29	D1	2254	U
29	D1	2255	A
29	D1	2270	A
29	D1	2280	A
29	D1	2281	A
29	D1	2290	C
29	D1	2297	U
29	D1	2372	A
29	D1	2385	G
29	D1	2400	G
29	D1	2403	G
29	D1	2404	A
29	D1	2414	G
29	D1	2423	U
29	D1	2487	U
29	D1	2501	U
29	D1	2513	U

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Mol	Chain	Res	Type
29	D1	2516	U
29	D1	2522	G
29	D1	2523	A
29	D1	2549	G
29	D1	2555	G
29	D1	2580	A
29	D1	2593	A
29	D1	2618	G
29	D1	2652	U
29	D1	2684	C
29	D1	2699	G
29	D1	2707	C
29	D1	2717	U
29	D1	2727	A
29	D1	2728	G
29	D1	2779	A
29	D1	2799	A
29	D1	2804	A
29	D1	2805	G
29	D1	2817	A
29	D1	2834	G
29	D1	2850	G
29	D1	2851	A
29	D1	2859	U
29	D1	2872	A
29	D1	2896	A
29	D1	2898	G
29	D1	2900	A
29	D1	2917	G
29	D1	2948	C
29	D1	2987	A
29	D1	2996	U
29	D1	2997	G
29	D1	2998	U
29	D1	2999	U
29	D1	3002	C
29	D1	3013	U
29	D1	3023	U
29	D1	3024	A
29	D1	3030	G
29	D1	3038	U
29	D1	3045	G

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Mol	Chain	Res	Type
29	D1	3047	U
29	D1	3058	U
29	D1	3059	G
29	D1	3071	U
29	D1	3078	U
29	D1	3090	U
29	D1	3093	C
29	D1	3097	C
29	D1	3098	G
29	D1	3099	C
29	D1	3102	G
29	D1	3108	G
29	D1	3121	U
29	D1	3137	C
29	D1	3139	A
29	D1	3143	C
29	D1	3144	G
29	D1	3151	U
29	D1	3152	U
29	D1	3168	A
29	D1	3171	U
29	D1	3173	G
29	D1	3179	U
29	D1	3180	A
29	D1	3204	C
29	D1	3205	G
29	D1	3211	C
29	D1	3257	C
29	D1	3268	A
29	D1	3274	A
29	D1	3290	G
29	D1	3291	G
29	D1	3299	A
29	D1	3303	G
29	D1	3313	U
29	D1	3316	A
29	D1	3328	G
29	D1	3331	U
29	D1	3332	U
29	D1	3351	U
29	D1	3356	G
29	D1	3377	G

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Mol	Chain	Res	Type
30	D2	12	U
30	D2	13	A
30	D2	14	U
30	D2	26	C
30	D2	35	C
30	D2	38	U
30	D2	55	A
30	D2	62	U
30	D2	64	A
30	D2	77	G
30	D2	92	A
30	D2	109	G
31	D3	22	U
31	D3	40	A
31	D3	70	G
31	D3	71	A
31	D3	76	C
31	D3	94	C
31	D3	106	C
31	D3	111	A
31	D3	113	U

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

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

715 ligands 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
74	OHX	D1	3475	-	0,6,6	-	-	-	-	-
74	OHX	A1	1938	-	0,6,6	-	-	-	-	-
74	OHX	A1	1907	-	0,6,6	-	-	-	-	-
74	OHX	B1	3448	-	0,6,6	-	-	-	-	-
74	OHX	C1	1970	-	0,6,6	-	-	-	-	-
74	OHX	D1	3432	-	0,6,6	-	-	-	-	-
74	OHX	D1	3579	-	0,6,6	-	-	-	-	-
74	OHX	D1	3424	-	0,6,6	-	-	-	-	-
74	OHX	D2	207	-	0,6,6	-	-	-	-	-
74	OHX	B1	3523	-	0,6,6	-	-	-	-	-
74	OHX	D1	3408	-	0,6,6	-	-	-	-	-
74	OHX	B1	3616	-	0,6,6	-	-	-	-	-
74	OHX	B1	3420	-	0,6,6	-	-	-	-	-
74	OHX	D1	3421	-	0,6,6	-	-	-	-	-
74	OHX	B1	3557	-	0,6,6	-	-	-	-	-
74	OHX	D1	3517	-	0,6,6	-	-	-	-	-
74	OHX	D1	3510	-	0,6,6	-	-	-	-	-
74	OHX	Dg	101	-	0,6,6	-	-	-	-	-
74	OHX	A1	1910	-	0,6,6	-	-	-	-	-
74	OHX	A1	1944	-	0,6,6	-	-	-	-	-
74	OHX	D1	3574	-	0,6,6	-	-	-	-	-
74	OHX	B1	3521	-	0,6,6	-	-	-	-	-
74	OHX	B3	206	-	0,6,6	-	-	-	-	-
74	OHX	A1	1926	-	0,6,6	-	-	-	-	-
74	OHX	B3	201	-	0,6,6	-	-	-	-	-
74	OHX	A1	1999	-	0,6,6	-	-	-	-	-
74	OHX	B1	3609	-	0,6,6	-	-	-	-	-
74	OHX	D1	3591	-	0,6,6	-	-	-	-	-
74	OHX	B1	3493	-	0,6,6	-	-	-	-	-
74	OHX	Ac	100	-	0,6,6	-	-	-	-	-
74	OHX	C1	1909	-	0,6,6	-	-	-	-	-
74	OHX	C1	1971	-	0,6,6	-	-	-	-	-
74	OHX	A1	1931	1	0,6,6	-	-	-	-	-
74	OHX	C1	1981	-	0,6,6	-	-	-	-	-
74	OHX	B1	3491	-	0,6,6	-	-	-	-	-
74	OHX	A1	1967	-	0,6,6	-	-	-	-	-
74	OHX	C1	1963	-	0,6,6	-	-	-	-	-
74	OHX	D1	3406	-	0,6,6	-	-	-	-	-
74	OHX	D1	3422	-	0,6,6	-	-	-	-	-
74	OHX	D1	3429	-	0,6,6	-	-	-	-	-
74	OHX	B1	3403	-	0,6,6	-	-	-	-	-
74	OHX	C1	1949	-	0,6,6	-	-	-	-	-
74	OHX	A1	1957	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	C1	1926	-	0,6,6	-	-	-	-	-
74	OHX	C1	1920	-	0,6,6	-	-	-	-	-
74	OHX	D1	3573	-	0,6,6	-	-	-	-	-
74	OHX	A1	1968	-	0,6,6	-	-	-	-	-
74	OHX	B3	211	-	0,6,6	-	-	-	-	-
74	OHX	B1	3614	-	0,6,6	-	-	-	-	-
74	OHX	D3	208	-	0,6,6	-	-	-	-	-
74	OHX	D1	3419	-	0,6,6	-	-	-	-	-
74	OHX	A1	1922	-	0,6,6	-	-	-	-	-
74	OHX	B1	3428	-	0,6,6	-	-	-	-	-
74	OHX	C1	1998	-	0,6,6	-	-	-	-	-
74	OHX	B1	3483	-	0,6,6	-	-	-	-	-
74	OHX	D3	205	-	0,6,6	-	-	-	-	-
74	OHX	A1	1962	-	0,6,6	-	-	-	-	-
74	OHX	D1	3590	-	0,6,6	-	-	-	-	-
74	OHX	C1	1910	-	0,6,6	-	-	-	-	-
74	OHX	D1	3472	-	0,6,6	-	-	-	-	-
74	OHX	D1	3580	-	0,6,6	-	-	-	-	-
74	OHX	C1	1912	-	0,6,6	-	-	-	-	-
74	OHX	D2	206	-	0,6,6	-	-	-	-	-
74	OHX	B1	3464	-	0,6,6	-	-	-	-	-
74	OHX	B1	3458	-	0,6,6	-	-	-	-	-
74	OHX	D1	3512	-	0,6,6	-	-	-	-	-
74	OHX	B1	3567	-	0,6,6	-	-	-	-	-
74	OHX	A1	1936	-	0,6,6	-	-	-	-	-
74	OHX	B1	3526	-	0,6,6	-	-	-	-	-
74	OHX	D2	201	-	0,6,6	-	-	-	-	-
74	OHX	B1	3544	-	0,6,6	-	-	-	-	-
74	OHX	A1	1921	-	0,6,6	-	-	-	-	-
74	OHX	C1	1972	-	0,6,6	-	-	-	-	-
74	OHX	B1	3434	-	0,6,6	-	-	-	-	-
74	OHX	A1	1961	-	0,6,6	-	-	-	-	-
74	OHX	B1	3409	-	0,6,6	-	-	-	-	-
74	OHX	B1	3572	-	0,6,6	-	-	-	-	-
74	OHX	C1	1958	-	0,6,6	-	-	-	-	-
74	OHX	D1	3528	-	0,6,6	-	-	-	-	-
74	OHX	D1	3586	-	0,6,6	-	-	-	-	-
74	OHX	B1	3549	-	0,6,6	-	-	-	-	-
74	OHX	A1	1977	-	0,6,6	-	-	-	-	-
74	OHX	A1	1997	-	0,6,6	-	-	-	-	-
74	OHX	B1	3556	-	0,6,6	-	-	-	-	-
74	OHX	D1	3523	-	0,6,6	-	-	-	-	-
74	OHX	B1	3518	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	D1	3583	-	0,6,6	-	-	-	-	-
74	OHX	A1	1973	-	0,6,6	-	-	-	-	-
74	OHX	D1	3572	-	0,6,6	-	-	-	-	-
74	OHX	C1	1945	-	0,6,6	-	-	-	-	-
74	OHX	D1	3588	-	0,6,6	-	-	-	-	-
74	OHX	D1	3433	-	0,6,6	-	-	-	-	-
74	OHX	D1	3606	-	0,6,6	-	-	-	-	-
74	OHX	C1	2001	-	0,6,6	-	-	-	-	-
74	OHX	B1	3580	-	0,6,6	-	-	-	-	-
74	OHX	B1	3401	-	0,6,6	-	-	-	-	-
74	OHX	A1	1917	-	0,6,6	-	-	-	-	-
74	OHX	D1	3560	-	0,6,6	-	-	-	-	-
74	OHX	C1	1925	-	0,6,6	-	-	-	-	-
74	OHX	D1	3504	-	0,6,6	-	-	-	-	-
74	OHX	D1	3463	-	0,6,6	-	-	-	-	-
74	OHX	B1	3418	-	0,6,6	-	-	-	-	-
74	OHX	B1	3430	-	0,6,6	-	-	-	-	-
74	OHX	DE	301	-	0,6,6	-	-	-	-	-
74	OHX	C1	1984	-	0,6,6	-	-	-	-	-
74	OHX	A1	1914	-	0,6,6	-	-	-	-	-
74	OHX	B1	3565	-	0,6,6	-	-	-	-	-
74	OHX	C1	1953	-	0,6,6	-	-	-	-	-
74	OHX	C1	1915	-	0,6,6	-	-	-	-	-
74	OHX	B1	3422	-	0,6,6	-	-	-	-	-
74	OHX	B1	3606	-	0,6,6	-	-	-	-	-
74	OHX	B1	3426	-	0,6,6	-	-	-	-	-
74	OHX	B1	3473	-	0,6,6	-	-	-	-	-
74	OHX	D1	3439	-	0,6,6	-	-	-	-	-
74	OHX	B1	3449	-	0,6,6	-	-	-	-	-
74	OHX	C1	1968	-	0,6,6	-	-	-	-	-
74	OHX	A1	1986	-	0,6,6	-	-	-	-	-
74	OHX	B1	3506	-	0,6,6	-	-	-	-	-
74	OHX	D1	3413	-	0,6,6	-	-	-	-	-
74	OHX	C1	1922	-	0,6,6	-	-	-	-	-
74	OHX	B1	3476	-	0,6,6	-	-	-	-	-
74	OHX	C1	1967	-	0,6,6	-	-	-	-	-
74	OHX	D1	3506	-	0,6,6	-	-	-	-	-
74	OHX	A1	1974	-	0,6,6	-	-	-	-	-
74	OHX	D2	203	-	0,6,6	-	-	-	-	-
74	OHX	C1	1962	-	0,6,6	-	-	-	-	-
74	OHX	D1	3533	-	0,6,6	-	-	-	-	-
74	OHX	A1	1942	-	0,6,6	-	-	-	-	-
74	OHX	D1	3487	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	B1	3504	-	0,6,6	-	-	-	-	-
74	OHX	B1	3463	-	0,6,6	-	-	-	-	-
74	OHX	B1	3615	-	0,6,6	-	-	-	-	-
74	OHX	D1	3401	-	0,6,6	-	-	-	-	-
74	OHX	D1	3470	-	0,6,6	-	-	-	-	-
74	OHX	C1	1936	-	0,6,6	-	-	-	-	-
74	OHX	D1	3494	-	0,6,6	-	-	-	-	-
74	OHX	D1	3496	-	0,6,6	-	-	-	-	-
74	OHX	D1	3534	-	0,6,6	-	-	-	-	-
74	OHX	B1	3550	-	0,6,6	-	-	-	-	-
74	OHX	A1	1941	-	0,6,6	-	-	-	-	-
74	OHX	B1	3545	-	0,6,6	-	-	-	-	-
74	OHX	C1	1961	-	0,6,6	-	-	-	-	-
74	OHX	D1	3411	-	0,6,6	-	-	-	-	-
74	OHX	B1	3584	-	0,6,6	-	-	-	-	-
74	OHX	D3	201	-	0,6,6	-	-	-	-	-
74	OHX	D1	3535	-	0,6,6	-	-	-	-	-
74	OHX	A1	1935	-	0,6,6	-	-	-	-	-
74	OHX	A1	1954	-	0,6,6	-	-	-	-	-
74	OHX	A1	1960	-	0,6,6	-	-	-	-	-
74	OHX	B1	3570	-	0,6,6	-	-	-	-	-
74	OHX	B2	210	-	0,6,6	-	-	-	-	-
74	OHX	C1	1982	-	0,6,6	-	-	-	-	-
74	OHX	D2	205	-	0,6,6	-	-	-	-	-
74	OHX	C1	1940	-	0,6,6	-	-	-	-	-
74	OHX	AT	401	-	0,6,6	-	-	-	-	-
74	OHX	D1	3436	-	0,6,6	-	-	-	-	-
74	OHX	B1	3537	-	0,6,6	-	-	-	-	-
74	OHX	A1	1951	-	0,6,6	-	-	-	-	-
74	OHX	C1	1956	-	0,6,6	-	-	-	-	-
74	OHX	D1	3415	-	0,6,6	-	-	-	-	-
74	OHX	B1	3407	-	0,6,6	-	-	-	-	-
74	OHX	D1	3508	-	0,6,6	-	-	-	-	-
74	OHX	A1	1965	-	0,6,6	-	-	-	-	-
74	OHX	D1	3538	-	0,6,6	-	-	-	-	-
74	OHX	C1	2000	-	0,6,6	-	-	-	-	-
74	OHX	Bd	101	-	0,6,6	-	-	-	-	-
74	OHX	D1	3445	-	0,6,6	-	-	-	-	-
74	OHX	B1	3425	-	0,6,6	-	-	-	-	-
74	OHX	B1	3507	-	0,6,6	-	-	-	-	-
74	OHX	A1	1927	-	0,6,6	-	-	-	-	-
74	OHX	C1	1996	-	0,6,6	-	-	-	-	-
74	OHX	A1	1918	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	B1	3501	-	0,6,6	-	-	-	-	-
74	OHX	B1	3543	-	0,6,6	-	-	-	-	-
74	OHX	D1	3427	-	0,6,6	-	-	-	-	-
74	OHX	D1	3479	-	0,6,6	-	-	-	-	-
74	OHX	A1	1948	-	0,6,6	-	-	-	-	-
74	OHX	D2	204	-	0,6,6	-	-	-	-	-
74	OHX	D1	3581	-	0,6,6	-	-	-	-	-
74	OHX	B1	3522	-	0,6,6	-	-	-	-	-
74	OHX	D1	3426	-	0,6,6	-	-	-	-	-
74	OHX	C1	1954	-	0,6,6	-	-	-	-	-
74	OHX	D1	3549	-	0,6,6	-	-	-	-	-
74	OHX	A1	1915	-	0,6,6	-	-	-	-	-
74	OHX	B1	3602	-	0,6,6	-	-	-	-	-
74	OHX	B1	3411	-	0,6,6	-	-	-	-	-
74	OHX	D3	211	-	0,6,6	-	-	-	-	-
74	OHX	C1	1983	1	0,6,6	-	-	-	-	-
74	OHX	D1	3536	-	0,6,6	-	-	-	-	-
74	OHX	C1	1942	-	0,6,6	-	-	-	-	-
74	OHX	A1	1987	-	0,6,6	-	-	-	-	-
74	OHX	D1	3452	-	0,6,6	-	-	-	-	-
74	OHX	D1	3562	-	0,6,6	-	-	-	-	-
74	OHX	B1	3404	-	0,6,6	-	-	-	-	-
74	OHX	D1	3611	-	0,6,6	-	-	-	-	-
74	OHX	A1	1929	-	0,6,6	-	-	-	-	-
74	OHX	C1	1927	-	0,6,6	-	-	-	-	-
74	OHX	B1	3462	-	0,6,6	-	-	-	-	-
74	OHX	D1	3428	-	0,6,6	-	-	-	-	-
74	OHX	D1	3582	-	0,6,6	-	-	-	-	-
74	OHX	D1	3483	-	0,6,6	-	-	-	-	-
74	OHX	C1	1941	-	0,6,6	-	-	-	-	-
74	OHX	A1	1933	-	0,6,6	-	-	-	-	-
74	OHX	D1	3531	-	0,6,6	-	-	-	-	-
74	OHX	D1	3585	-	0,6,6	-	-	-	-	-
74	OHX	A1	1946	-	0,6,6	-	-	-	-	-
74	OHX	C1	1950	-	0,6,6	-	-	-	-	-
74	OHX	D1	3525	-	0,6,6	-	-	-	-	-
74	OHX	B1	3447	-	0,6,6	-	-	-	-	-
74	OHX	C1	1964	-	0,6,6	-	-	-	-	-
74	OHX	B1	3435	-	0,6,6	-	-	-	-	-
74	OHX	B1	3485	-	0,6,6	-	-	-	-	-
74	OHX	B1	3499	-	0,6,6	-	-	-	-	-
74	OHX	A1	1932	-	0,6,6	-	-	-	-	-
74	OHX	D1	3464	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	D1	3503	-	0,6,6	-	-	-	-	-
74	OHX	C1	1960	-	0,6,6	-	-	-	-	-
74	OHX	D1	3620	-	0,6,6	-	-	-	-	-
74	OHX	A1	1949	-	0,6,6	-	-	-	-	-
74	OHX	C1	1933	-	0,6,6	-	-	-	-	-
74	OHX	B2	209	-	0,6,6	-	-	-	-	-
74	OHX	B1	3477	-	0,6,6	-	-	-	-	-
74	OHX	C1	1930	1	0,6,6	-	-	-	-	-
74	OHX	D1	3500	-	0,6,6	-	-	-	-	-
74	OHX	D1	3537	-	0,6,6	-	-	-	-	-
74	OHX	B1	3486	-	0,6,6	-	-	-	-	-
74	OHX	D3	206	-	0,6,6	-	-	-	-	-
74	OHX	C1	1995	-	0,6,6	-	-	-	-	-
74	OHX	Dd	101	-	0,6,6	-	-	-	-	-
74	OHX	D1	3481	-	0,6,6	-	-	-	-	-
74	OHX	B1	3469	-	0,6,6	-	-	-	-	-
74	OHX	D1	3453	-	0,6,6	-	-	-	-	-
74	OHX	D1	3604	-	0,6,6	-	-	-	-	-
74	OHX	D1	3556	-	0,6,6	-	-	-	-	-
74	OHX	B1	3558	-	0,6,6	-	-	-	-	-
74	OHX	A1	1904	-	0,6,6	-	-	-	-	-
74	OHX	CT	401	-	0,6,6	-	-	-	-	-
74	OHX	D1	3559	-	0,6,6	-	-	-	-	-
74	OHX	D1	3550	-	0,6,6	-	-	-	-	-
74	OHX	B3	204	-	0,6,6	-	-	-	-	-
74	OHX	C1	1948	-	0,6,6	-	-	-	-	-
74	OHX	D1	3468	-	0,6,6	-	-	-	-	-
74	OHX	A1	1952	-	0,6,6	-	-	-	-	-
74	OHX	C1	1937	-	0,6,6	-	-	-	-	-
74	OHX	D1	3599	-	0,6,6	-	-	-	-	-
74	OHX	DT	201	-	0,6,6	-	-	-	-	-
74	OHX	B1	3586	-	0,6,6	-	-	-	-	-
74	OHX	C1	1932	-	0,6,6	-	-	-	-	-
74	OHX	A1	1990	-	0,6,6	-	-	-	-	-
74	OHX	D1	3501	-	0,6,6	-	-	-	-	-
74	OHX	D1	3462	-	0,6,6	-	-	-	-	-
74	OHX	C1	1911	-	0,6,6	-	-	-	-	-
74	OHX	D1	3612	-	0,6,6	-	-	-	-	-
74	OHX	D1	3451	-	0,6,6	-	-	-	-	-
74	OHX	A1	1909	-	0,6,6	-	-	-	-	-
74	OHX	D1	3489	-	0,6,6	-	-	-	-	-
74	OHX	D1	3605	-	0,6,6	-	-	-	-	-
74	OHX	D1	3566	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	A1	1994	-	0,6,6	-	-	-	-	-
74	OHX	Dd	102	-	0,6,6	-	-	-	-	-
74	OHX	A1	1920	-	0,6,6	-	-	-	-	-
74	OHX	A1	1991	-	0,6,6	-	-	-	-	-
74	OHX	B1	3525	-	0,6,6	-	-	-	-	-
74	OHX	B1	3509	-	0,6,6	-	-	-	-	-
74	OHX	D1	3473	-	0,6,6	-	-	-	-	-
74	OHX	D1	3540	-	0,6,6	-	-	-	-	-
74	OHX	B1	3551	-	0,6,6	-	-	-	-	-
74	OHX	A1	2001	-	0,6,6	-	-	-	-	-
74	OHX	B1	3601	-	0,6,6	-	-	-	-	-
74	OHX	B2	208	-	0,6,6	-	-	-	-	-
74	OHX	D1	3480	-	0,6,6	-	-	-	-	-
74	OHX	D1	3418	-	0,6,6	-	-	-	-	-
74	OHX	B1	3414	-	0,6,6	-	-	-	-	-
74	OHX	B1	3577	-	0,6,6	-	-	-	-	-
74	OHX	C1	1952	-	0,6,6	-	-	-	-	-
74	OHX	A1	1912	-	0,6,6	-	-	-	-	-
74	OHX	B1	3466	-	0,6,6	-	-	-	-	-
74	OHX	C1	1959	-	0,6,6	-	-	-	-	-
74	OHX	A1	1924	-	0,6,6	-	-	-	-	-
74	OHX	D1	3519	-	0,6,6	-	-	-	-	-
74	OHX	B1	3528	-	0,6,6	-	-	-	-	-
74	OHX	C1	1993	-	0,6,6	-	-	-	-	-
74	OHX	D1	3522	-	0,6,6	-	-	-	-	-
74	OHX	A1	1972	-	0,6,6	-	-	-	-	-
74	OHX	D1	3589	-	0,6,6	-	-	-	-	-
74	OHX	B1	3541	-	0,6,6	-	-	-	-	-
74	OHX	D1	3513	-	0,6,6	-	-	-	-	-
74	OHX	A1	1903	-	0,6,6	-	-	-	-	-
74	OHX	B3	210	-	0,6,6	-	-	-	-	-
74	OHX	DO	302	-	0,6,6	-	-	-	-	-
74	OHX	B1	3619	-	0,6,6	-	-	-	-	-
74	OHX	B1	3461	-	0,6,6	-	-	-	-	-
74	OHX	D1	3498	-	0,6,6	-	-	-	-	-
74	OHX	CI	201	-	0,6,6	-	-	-	-	-
74	OHX	A1	1978	-	0,6,6	-	-	-	-	-
74	OHX	B1	3505	-	0,6,6	-	-	-	-	-
74	OHX	B1	3600	-	0,6,6	-	-	-	-	-
74	OHX	B1	3502	-	0,6,6	-	-	-	-	-
74	OHX	B1	3532	-	0,6,6	-	-	-	-	-
74	OHX	B1	3423	-	0,6,6	-	-	-	-	-
74	OHX	B1	3576	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	D1	3603	-	0,6,6	-	-	-	-	-
74	OHX	C1	1924	-	0,6,6	-	-	-	-	-
74	OHX	B1	3481	-	0,6,6	-	-	-	-	-
74	OHX	B1	3440	-	0,6,6	-	-	-	-	-
74	OHX	B1	3408	-	0,6,6	-	-	-	-	-
74	OHX	A1	1925	-	0,6,6	-	-	-	-	-
74	OHX	A1	1911	-	0,6,6	-	-	-	-	-
74	OHX	D1	3564	-	0,6,6	-	-	-	-	-
74	OHX	D2	202	-	0,6,6	-	-	-	-	-
74	OHX	C1	1987	-	0,6,6	-	-	-	-	-
74	OHX	B1	3546	-	0,6,6	-	-	-	-	-
74	OHX	C1	1990	-	0,6,6	-	-	-	-	-
74	OHX	D1	3610	-	0,6,6	-	-	-	-	-
74	OHX	D1	3423	-	0,6,6	-	-	-	-	-
74	OHX	C1	1938	-	0,6,6	-	-	-	-	-
74	OHX	B1	3419	-	0,6,6	-	-	-	-	-
74	OHX	D1	3416	-	0,6,6	-	-	-	-	-
74	OHX	A1	1947	-	0,6,6	-	-	-	-	-
74	OHX	AL	201	-	0,6,6	-	-	-	-	-
74	OHX	D1	3596	-	0,6,6	-	-	-	-	-
74	OHX	B1	3605	-	0,6,6	-	-	-	-	-
74	OHX	D1	3568	-	0,6,6	-	-	-	-	-
74	OHX	C1	1946	-	0,6,6	-	-	-	-	-
74	OHX	B1	3607	-	0,6,6	-	-	-	-	-
74	OHX	B1	3470	-	0,6,6	-	-	-	-	-
74	OHX	B1	3595	-	0,6,6	-	-	-	-	-
74	OHX	B1	3489	-	0,6,6	-	-	-	-	-
74	OHX	D1	3595	-	0,6,6	-	-	-	-	-
74	OHX	C1	1992	-	0,6,6	-	-	-	-	-
74	OHX	B1	3540	-	0,6,6	-	-	-	-	-
74	OHX	B1	3421	-	0,6,6	-	-	-	-	-
74	OHX	CS	102	-	0,6,6	-	-	-	-	-
74	OHX	B1	3417	-	0,6,6	-	-	-	-	-
74	OHX	D1	3403	-	0,6,6	-	-	-	-	-
74	OHX	D1	3484	-	0,6,6	-	-	-	-	-
74	OHX	B1	3548	-	0,6,6	-	-	-	-	-
74	OHX	B1	3514	-	0,6,6	-	-	-	-	-
74	OHX	D1	3444	-	0,6,6	-	-	-	-	-
74	OHX	A1	1976	-	0,6,6	-	-	-	-	-
74	OHX	A1	1963	-	0,6,6	-	-	-	-	-
74	OHX	A1	1966	-	0,6,6	-	-	-	-	-
74	OHX	D1	3555	-	0,6,6	-	-	-	-	-
74	OHX	C1	1974	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	B1	3529	-	0,6,6	-	-	-	-	-
74	OHX	B1	3534	-	0,6,6	-	-	-	-	-
74	OHX	D1	3624	-	0,6,6	-	-	-	-	-
74	OHX	D1	3530	-	0,6,6	-	-	-	-	-
74	OHX	B1	3578	-	0,6,6	-	-	-	-	-
74	OHX	A1	1913	-	0,6,6	-	-	-	-	-
74	OHX	B1	3416	-	0,6,6	-	-	-	-	-
74	OHX	B1	3542	-	0,6,6	-	-	-	-	-
74	OHX	D1	3471	-	0,6,6	-	-	-	-	-
74	OHX	B1	3510	-	0,6,6	-	-	-	-	-
74	OHX	C1	1947	-	0,6,6	-	-	-	-	-
74	OHX	A1	1989	-	0,6,6	-	-	-	-	-
74	OHX	A1	1916	-	0,6,6	-	-	-	-	-
74	OHX	B1	3441	-	0,6,6	-	-	-	-	-
74	OHX	B1	3513	-	0,6,6	-	-	-	-	-
74	OHX	B1	3589	-	0,6,6	-	-	-	-	-
74	OHX	D1	3495	-	0,6,6	-	-	-	-	-
74	OHX	C1	1975	-	0,6,6	-	-	-	-	-
74	OHX	D1	3497	-	0,6,6	-	-	-	-	-
74	OHX	C1	1957	-	0,6,6	-	-	-	-	-
74	OHX	B1	3520	-	0,6,6	-	-	-	-	-
74	OHX	A1	1982	-	0,6,6	-	-	-	-	-
74	OHX	C1	1989	-	0,6,6	-	-	-	-	-
74	OHX	D1	3505	-	0,6,6	-	-	-	-	-
74	OHX	D1	3526	-	0,6,6	-	-	-	-	-
74	OHX	C1	1978	-	0,6,6	-	-	-	-	-
74	OHX	A1	1940	-	0,6,6	-	-	-	-	-
74	OHX	D1	3455	-	0,6,6	-	-	-	-	-
74	OHX	B1	3406	-	0,6,6	-	-	-	-	-
74	OHX	B1	3590	-	0,6,6	-	-	-	-	-
74	OHX	B1	3566	-	0,6,6	-	-	-	-	-
74	OHX	B1	3497	-	0,6,6	-	-	-	-	-
74	OHX	D1	3608	-	0,6,6	-	-	-	-	-
74	OHX	C1	1919	-	0,6,6	-	-	-	-	-
74	OHX	D1	3622	-	0,6,6	-	-	-	-	-
74	OHX	A1	2000	-	0,6,6	-	-	-	-	-
74	OHX	D1	3474	-	0,6,6	-	-	-	-	-
74	OHX	D1	3569	-	0,6,6	-	-	-	-	-
74	OHX	C1	1997	-	0,6,6	-	-	-	-	-
74	OHX	C1	1903	-	0,6,6	-	-	-	-	-
74	OHX	A1	1996	-	0,6,6	-	-	-	-	-
74	OHX	D2	208	-	0,6,6	-	-	-	-	-
74	OHX	B2	203	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	B1	3582	-	0,6,6	-	-	-	-	-
74	OHX	C1	1994	-	0,6,6	-	-	-	-	-
74	OHX	A1	1964	-	0,6,6	-	-	-	-	-
74	OHX	C1	1973	-	0,6,6	-	-	-	-	-
74	OHX	B1	3585	-	0,6,6	-	-	-	-	-
74	OHX	B1	3552	-	0,6,6	-	-	-	-	-
74	OHX	C1	1918	-	0,6,6	-	-	-	-	-
74	OHX	A1	1992	-	0,6,6	-	-	-	-	-
74	OHX	D3	209	-	0,6,6	-	-	-	-	-
74	OHX	C1	1969	-	0,6,6	-	-	-	-	-
74	OHX	CS	101	-	0,6,6	-	-	-	-	-
74	OHX	B1	3487	-	0,6,6	-	-	-	-	-
74	OHX	D1	3467	-	0,6,6	-	-	-	-	-
74	OHX	B1	3459	-	0,6,6	-	-	-	-	-
74	OHX	B1	3620	-	0,6,6	-	-	-	-	-
74	OHX	D1	3557	-	0,6,6	-	-	-	-	-
74	OHX	B1	3517	-	0,6,6	-	-	-	-	-
74	OHX	D1	3509	-	0,6,6	-	-	-	-	-
74	OHX	D1	3532	-	0,6,6	-	-	-	-	-
74	OHX	A1	1983	-	0,6,6	-	-	-	-	-
74	OHX	D1	3548	-	0,6,6	-	-	-	-	-
74	OHX	B1	3547	-	0,6,6	-	-	-	-	-
74	OHX	D1	3435	-	0,6,6	-	-	-	-	-
74	OHX	D1	3551	-	0,6,6	-	-	-	-	-
74	OHX	C1	1904	-	0,6,6	-	-	-	-	-
74	OHX	D1	3592	-	0,6,6	-	-	-	-	-
74	OHX	C1	1966	-	0,6,6	-	-	-	-	-
74	OHX	D1	3520	-	0,6,6	-	-	-	-	-
74	OHX	B1	3431	-	0,6,6	-	-	-	-	-
74	OHX	C1	1928	-	0,6,6	-	-	-	-	-
74	OHX	D1	3420	-	0,6,6	-	-	-	-	-
74	OHX	D1	3477	-	0,6,6	-	-	-	-	-
74	OHX	B1	3474	-	0,6,6	-	-	-	-	-
74	OHX	A1	2002	-	0,6,6	-	-	-	-	-
74	OHX	A1	1995	-	0,6,6	-	-	-	-	-
74	OHX	C1	1913	-	0,6,6	-	-	-	-	-
74	OHX	C1	1914	-	0,6,6	-	-	-	-	-
74	OHX	B1	3456	-	0,6,6	-	-	-	-	-
74	OHX	B1	3405	-	0,6,6	-	-	-	-	-
74	OHX	A1	1939	-	0,6,6	-	-	-	-	-
74	OHX	C1	1916	-	0,6,6	-	-	-	-	-
74	OHX	D1	3600	-	0,6,6	-	-	-	-	-
74	OHX	B1	3516	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	B1	3442	-	0,6,6	-	-	-	-	-
74	OHX	B1	3415	-	0,6,6	-	-	-	-	-
74	OHX	B2	205	-	0,6,6	-	-	-	-	-
74	OHX	B1	3575	-	0,6,6	-	-	-	-	-
74	OHX	DO	301	-	0,6,6	-	-	-	-	-
74	OHX	B1	3451	-	0,6,6	-	-	-	-	-
74	OHX	Bg	101	-	0,6,6	-	-	-	-	-
74	OHX	DC	401	-	0,6,6	-	-	-	-	-
74	OHX	D1	3561	-	0,6,6	-	-	-	-	-
74	OHX	B2	204	-	0,6,6	-	-	-	-	-
74	OHX	C1	1980	-	0,6,6	-	-	-	-	-
74	OHX	D1	3593	-	0,6,6	-	-	-	-	-
74	OHX	D1	3545	-	0,6,6	-	-	-	-	-
74	OHX	B1	3553	-	0,6,6	-	-	-	-	-
74	OHX	D1	3448	-	0,6,6	-	-	-	-	-
74	OHX	D1	3502	-	0,6,6	-	-	-	-	-
74	OHX	D1	3516	-	0,6,6	-	-	-	-	-
74	OHX	B1	3482	-	0,6,6	-	-	-	-	-
74	OHX	B1	3592	-	0,6,6	-	-	-	-	-
74	OHX	B1	3433	-	0,6,6	-	-	-	-	-
74	OHX	D1	3544	-	0,6,6	-	-	-	-	-
74	OHX	C1	1939	-	0,6,6	-	-	-	-	-
74	OHX	B3	208	-	0,6,6	-	-	-	-	-
74	OHX	D1	3465	-	0,6,6	-	-	-	-	-
74	OHX	A1	1937	-	0,6,6	-	-	-	-	-
74	OHX	D1	3570	-	0,6,6	-	-	-	-	-
74	OHX	B1	3490	-	0,6,6	-	-	-	-	-
74	OHX	B2	202	-	0,6,6	-	-	-	-	-
74	OHX	D1	3594	-	0,6,6	-	-	-	-	-
74	OHX	B1	3561	-	0,6,6	-	-	-	-	-
74	OHX	A1	1923	-	0,6,6	-	-	-	-	-
74	OHX	D1	3607	-	0,6,6	-	-	-	-	-
74	OHX	C1	1955	-	0,6,6	-	-	-	-	-
74	OHX	A1	1905	-	0,6,6	-	-	-	-	-
74	OHX	B3	209	-	0,6,6	-	-	-	-	-
74	OHX	D1	3431	-	0,6,6	-	-	-	-	-
74	OHX	D3	210	-	0,6,6	-	-	-	-	-
74	OHX	B1	3508	-	0,6,6	-	-	-	-	-
74	OHX	B1	3457	-	0,6,6	-	-	-	-	-
74	OHX	B1	3471	-	0,6,6	-	-	-	-	-
74	OHX	B1	3617	-	0,6,6	-	-	-	-	-
74	OHX	D1	3417	-	0,6,6	-	-	-	-	-
74	OHX	AS	101	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	B1	3591	-	0,6,6	-	-	-	-	-
74	OHX	D1	3486	-	0,6,6	-	-	-	-	-
74	OHX	D1	3546	-	0,6,6	-	-	-	-	-
74	OHX	C1	1901	-	0,6,6	-	-	-	-	-
74	OHX	D1	3553	-	0,6,6	-	-	-	-	-
74	OHX	A1	1959	-	0,6,6	-	-	-	-	-
74	OHX	A1	1971	-	0,6,6	-	-	-	-	-
74	OHX	B1	3439	-	0,6,6	-	-	-	-	-
74	OHX	A1	1993	-	0,6,6	-	-	-	-	-
74	OHX	D1	3602	-	0,6,6	-	-	-	-	-
74	OHX	D1	3615	-	0,6,6	-	-	-	-	-
74	OHX	D1	3410	-	0,6,6	-	-	-	-	-
74	OHX	D1	3529	-	0,6,6	-	-	-	-	-
74	OHX	B1	3598	-	0,6,6	-	-	-	-	-
74	OHX	C1	1923	-	0,6,6	-	-	-	-	-
74	OHX	DJ	301	-	0,6,6	-	-	-	-	-
74	OHX	BC	401	-	0,6,6	-	-	-	-	-
74	OHX	BT	201	-	0,6,6	-	-	-	-	-
74	OHX	C1	1905	-	0,6,6	-	-	-	-	-
74	OHX	B1	3594	-	0,6,6	-	-	-	-	-
74	OHX	A1	1984	-	0,6,6	-	-	-	-	-
74	OHX	D1	3616	-	0,6,6	-	-	-	-	-
74	OHX	C1	1907	-	0,6,6	-	-	-	-	-
74	OHX	A1	1988	-	0,6,6	-	-	-	-	-
74	OHX	B1	3581	-	0,6,6	-	-	-	-	-
74	OHX	B1	3621	-	0,6,6	-	-	-	-	-
74	OHX	A1	1906	-	0,6,6	-	-	-	-	-
74	OHX	B1	3500	-	0,6,6	-	-	-	-	-
74	OHX	B1	3535	-	0,6,6	-	-	-	-	-
74	OHX	B1	3452	-	0,6,6	-	-	-	-	-
74	OHX	C1	1908	-	0,6,6	-	-	-	-	-
74	OHX	B1	3562	-	0,6,6	-	-	-	-	-
74	OHX	B2	207	-	0,6,6	-	-	-	-	-
74	OHX	D1	3450	-	0,6,6	-	-	-	-	-
74	OHX	C1	1906	-	0,6,6	-	-	-	-	-
74	OHX	D1	3437	-	0,6,6	-	-	-	-	-
74	OHX	D1	3402	-	0,6,6	-	-	-	-	-
74	OHX	B1	3453	-	0,6,6	-	-	-	-	-
74	OHX	B1	3531	-	0,6,6	-	-	-	-	-
74	OHX	C1	1991	-	0,6,6	-	-	-	-	-
74	OHX	C1	1999	-	0,6,6	-	-	-	-	-
74	OHX	D1	3430	-	0,6,6	-	-	-	-	-
74	OHX	B1	3443	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	D1	3614	-	0,6,6	-	-	-	-	-
74	OHX	B1	3579	-	0,6,6	-	-	-	-	-
74	OHX	D3	203	-	0,6,6	-	-	-	-	-
74	OHX	B1	3587	-	0,6,6	-	-	-	-	-
74	OHX	B1	3564	-	0,6,6	-	-	-	-	-
74	OHX	C1	1931	-	0,6,6	-	-	-	-	-
74	OHX	D1	3514	-	0,6,6	-	-	-	-	-
74	OHX	B1	3496	-	0,6,6	-	-	-	-	-
74	OHX	D1	3521	-	0,6,6	-	-	-	-	-
74	OHX	D1	3476	-	0,6,6	-	-	-	-	-
74	OHX	D1	3613	-	0,6,6	-	-	-	-	-
74	OHX	B1	3488	-	0,6,6	-	-	-	-	-
74	OHX	D1	3565	-	0,6,6	-	-	-	-	-
74	OHX	C1	1979	-	0,6,6	-	-	-	-	-
74	OHX	D3	204	-	0,6,6	-	-	-	-	-
74	OHX	B1	3533	-	0,6,6	-	-	-	-	-
74	OHX	B1	3484	-	0,6,6	-	-	-	-	-
74	OHX	B1	3460	-	0,6,6	-	-	-	-	-
74	OHX	B1	3503	-	0,6,6	-	-	-	-	-
74	OHX	B1	3538	-	0,6,6	-	-	-	-	-
74	OHX	B1	3568	-	0,6,6	-	-	-	-	-
74	OHX	B1	3468	-	0,6,6	-	-	-	-	-
74	OHX	D1	3412	-	0,6,6	-	-	-	-	-
74	OHX	D1	3625	-	0,6,6	-	-	-	-	-
74	OHX	B1	3479	-	0,6,6	-	-	-	-	-
74	OHX	B3	207	-	0,6,6	-	-	-	-	-
74	OHX	A1	1902	-	0,6,6	-	-	-	-	-
74	OHX	B1	3511	-	0,6,6	-	-	-	-	-
74	OHX	C1	1944	-	0,6,6	-	-	-	-	-
74	OHX	A1	1919	-	0,6,6	-	-	-	-	-
74	OHX	D1	3409	-	0,6,6	-	-	-	-	-
74	OHX	D1	3438	-	0,6,6	-	-	-	-	-
74	OHX	D1	3488	-	0,6,6	-	-	-	-	-
74	OHX	B1	3539	-	0,6,6	-	-	-	-	-
74	OHX	D1	3571	-	0,6,6	-	-	-	-	-
74	OHX	B3	203	-	0,6,6	-	-	-	-	-
74	OHX	C1	1921	-	0,6,6	-	-	-	-	-
74	OHX	B1	3455	-	0,6,6	-	-	-	-	-
74	OHX	D1	3405	-	0,6,6	-	-	-	-	-
74	OHX	D1	3491	-	0,6,6	-	-	-	-	-
74	OHX	D3	212	-	0,6,6	-	-	-	-	-
74	OHX	B1	3613	-	0,6,6	-	-	-	-	-
74	OHX	B3	205	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	D1	3601	-	0,6,6	-	-	-	-	-
74	OHX	D1	3527	-	0,6,6	-	-	-	-	-
74	OHX	B1	3530	-	0,6,6	-	-	-	-	-
74	OHX	B1	3480	-	0,6,6	-	-	-	-	-
74	OHX	C1	1977	-	0,6,6	-	-	-	-	-
74	OHX	B1	3498	-	0,6,6	-	-	-	-	-
74	OHX	A1	1975	-	0,6,6	-	-	-	-	-
74	OHX	B1	3410	-	0,6,6	-	-	-	-	-
74	OHX	B1	3555	-	0,6,6	-	-	-	-	-
74	OHX	B1	3604	-	0,6,6	-	-	-	-	-
74	OHX	BO	301	-	0,6,6	-	-	-	-	-
74	OHX	D1	3407	-	0,6,6	-	-	-	-	-
74	OHX	D1	3456	-	0,6,6	-	-	-	-	-
74	OHX	B1	3512	-	0,6,6	-	-	-	-	-
74	OHX	D1	3554	-	0,6,6	-	-	-	-	-
74	OHX	B1	3424	-	0,6,6	-	-	-	-	-
74	OHX	D1	3524	-	0,6,6	-	-	-	-	-
74	OHX	A1	1979	-	0,6,6	-	-	-	-	-
74	OHX	A1	1955	-	0,6,6	-	-	-	-	-
74	OHX	D1	3575	-	0,6,6	-	-	-	-	-
74	OHX	B1	3427	-	0,6,6	-	-	-	-	-
74	OHX	D1	3482	-	0,6,6	-	-	-	-	-
74	OHX	C1	1917	-	0,6,6	-	-	-	-	-
74	OHX	D1	3404	-	0,6,6	-	-	-	-	-
74	OHX	B1	3450	-	0,6,6	-	-	-	-	-
74	OHX	D1	3499	-	0,6,6	-	-	-	-	-
74	OHX	B1	3519	-	0,6,6	-	-	-	-	-
74	OHX	B1	3559	-	0,6,6	-	-	-	-	-
74	OHX	B1	3573	-	0,6,6	-	-	-	-	-
74	OHX	B1	3402	-	0,6,6	-	-	-	-	-
74	OHX	B1	3515	-	0,6,6	-	-	-	-	-
74	OHX	B3	212	-	0,6,6	-	-	-	-	-
74	OHX	D2	209	-	0,6,6	-	-	-	-	-
74	OHX	D1	3441	-	0,6,6	-	-	-	-	-
74	OHX	B1	3437	-	0,6,6	-	-	-	-	-
74	OHX	B1	3583	-	0,6,6	-	-	-	-	-
74	OHX	A1	1970	-	0,6,6	-	-	-	-	-
74	OHX	D1	3466	-	0,6,6	-	-	-	-	-
74	OHX	B2	206	-	0,6,6	-	-	-	-	-
74	OHX	B1	3618	-	0,6,6	-	-	-	-	-
74	OHX	D1	3440	-	0,6,6	-	-	-	-	-
74	OHX	B1	3454	-	0,6,6	-	-	-	-	-
74	OHX	B1	3438	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	D1	3447	-	0,6,6	-	-	-	-	-
74	OHX	D1	3425	-	0,6,6	-	-	-	-	-
74	OHX	B1	3593	-	0,6,6	-	-	-	-	-
74	OHX	A1	1934	-	0,6,6	-	-	-	-	-
74	OHX	D1	3543	-	0,6,6	-	-	-	-	-
74	OHX	C1	1986	-	0,6,6	-	-	-	-	-
74	OHX	D1	3578	-	0,6,6	-	-	-	-	-
74	OHX	A1	1956	-	0,6,6	-	-	-	-	-
74	OHX	A1	1969	-	0,6,6	-	-	-	-	-
74	OHX	D3	202	-	0,6,6	-	-	-	-	-
74	OHX	B1	3554	-	0,6,6	-	-	-	-	-
74	OHX	D1	3515	-	0,6,6	-	-	-	-	-
74	OHX	B1	3524	-	0,6,6	-	-	-	-	-
74	OHX	B1	3432	-	0,6,6	-	-	-	-	-
74	OHX	B1	3596	-	0,6,6	-	-	-	-	-
74	OHX	D1	3597	-	0,6,6	-	-	-	-	-
74	OHX	D1	3518	-	0,6,6	-	-	-	-	-
74	OHX	D1	3442	-	0,6,6	-	-	-	-	-
74	OHX	D1	3492	-	0,6,6	-	-	-	-	-
74	OHX	D1	3623	-	0,6,6	-	-	-	-	-
74	OHX	D1	3454	-	0,6,6	-	-	-	-	-
74	OHX	B1	3603	-	0,6,6	-	-	-	-	-
74	OHX	C1	1902	-	0,6,6	-	-	-	-	-
74	OHX	B1	3472	-	0,6,6	-	-	-	-	-
74	OHX	B1	3412	-	0,6,6	-	-	-	-	-
74	OHX	A1	1985	-	0,6,6	-	-	-	-	-
74	OHX	Bd	102	-	0,6,6	-	-	-	-	-
74	OHX	D1	3469	-	0,6,6	-	-	-	-	-
74	OHX	D3	207	-	0,6,6	-	-	-	-	-
74	OHX	A1	1928	-	0,6,6	-	-	-	-	-
74	OHX	A1	1953	-	0,6,6	-	-	-	-	-
74	OHX	A1	1981	-	0,6,6	-	-	-	-	-
74	OHX	A1	1943	-	0,6,6	-	-	-	-	-
74	OHX	B1	3612	-	0,6,6	-	-	-	-	-
74	OHX	B1	3413	-	0,6,6	-	-	-	-	-
74	OHX	D1	3563	-	0,6,6	-	-	-	-	-
74	OHX	D1	3617	-	0,6,6	-	-	-	-	-
74	OHX	D1	3587	-	0,6,6	-	-	-	-	-
74	OHX	C1	1934	-	0,6,6	-	-	-	-	-
74	OHX	C1	1943	-	0,6,6	-	-	-	-	-
74	OHX	B1	3465	-	0,6,6	-	-	-	-	-
74	OHX	C1	1935	-	0,6,6	-	-	-	-	-
74	OHX	D1	3449	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	B3	202	-	0,6,6	-	-	-	-	-
74	OHX	B1	3588	-	0,6,6	-	-	-	-	-
74	OHX	B1	3611	-	0,6,6	-	-	-	-	-
74	OHX	B1	3446	-	0,6,6	-	-	-	-	-
74	OHX	D1	3460	-	0,6,6	-	-	-	-	-
74	OHX	C1	1951	-	0,6,6	-	-	-	-	-
74	OHX	D1	3621	-	0,6,6	-	-	-	-	-
74	OHX	D1	3609	-	0,6,6	-	-	-	-	-
74	OHX	A1	1950	-	0,6,6	-	-	-	-	-
74	OHX	D1	3598	-	0,6,6	-	-	-	-	-
74	OHX	A1	1980	-	0,6,6	-	-	-	-	-
74	OHX	B1	3599	-	0,6,6	-	-	-	-	-
74	OHX	B1	3444	-	0,6,6	-	-	-	-	-
74	OHX	D1	3490	-	0,6,6	-	-	-	-	-
74	OHX	A1	1958	-	0,6,6	-	-	-	-	-
74	OHX	D1	3434	-	0,6,6	-	-	-	-	-
74	OHX	D1	3618	-	0,6,6	-	-	-	-	-
74	OHX	A1	1901	-	0,6,6	-	-	-	-	-
74	OHX	D1	3478	-	0,6,6	-	-	-	-	-
74	OHX	D1	3542	-	0,6,6	-	-	-	-	-
74	OHX	D1	3558	-	0,6,6	-	-	-	-	-
74	OHX	B1	3527	-	0,6,6	-	-	-	-	-
74	OHX	D1	3493	-	0,6,6	-	-	-	-	-
74	OHX	B1	3436	-	0,6,6	-	-	-	-	-
74	OHX	D1	3507	-	0,6,6	-	-	-	-	-
74	OHX	D1	3443	-	0,6,6	-	-	-	-	-
74	OHX	B1	3429	-	0,6,6	-	-	-	-	-
74	OHX	D1	3457	-	0,6,6	-	-	-	-	-
74	OHX	A1	1930	-	0,6,6	-	-	-	-	-
74	OHX	B1	3495	-	0,6,6	-	-	-	-	-
74	OHX	A1	1945	-	0,6,6	-	-	-	-	-
74	OHX	C1	1965	-	0,6,6	-	-	-	-	-
74	OHX	C1	1988	-	0,6,6	-	-	-	-	-
74	OHX	B1	3571	-	0,6,6	-	-	-	-	-
74	OHX	D1	3576	-	0,6,6	-	-	-	-	-
74	OHX	B1	3574	-	0,6,6	-	-	-	-	-
74	OHX	B1	3445	-	0,6,6	-	-	-	-	-
74	OHX	D1	3584	-	0,6,6	-	-	-	-	-
74	OHX	D1	3446	-	0,6,6	-	-	-	-	-
74	OHX	D1	3619	-	0,6,6	-	-	-	-	-
74	OHX	C1	1976	-	0,6,6	-	-	-	-	-
74	OHX	B1	3478	-	0,6,6	-	-	-	-	-
74	OHX	D1	3414	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
74	OHX	D1	3539	-	0,6,6	-	-	-		
74	OHX	B1	3597	-	0,6,6	-	-	-		
74	OHX	D1	3577	-	0,6,6	-	-	-		
74	OHX	B1	3467	-	0,6,6	-	-	-		
74	OHX	A1	1998	-	0,6,6	-	-	-		
74	OHX	B1	3608	-	0,6,6	-	-	-		
74	OHX	A1	1908	-	0,6,6	-	-	-		
74	OHX	C1	1929	-	0,6,6	-	-	-		
74	OHX	C1	1985	-	0,6,6	-	-	-		
74	OHX	D1	3459	-	0,6,6	-	-	-		
74	OHX	D1	3552	-	0,6,6	-	-	-		
74	OHX	D1	3511	-	0,6,6	-	-	-		
74	OHX	B1	3610	-	0,6,6	-	-	-		
74	OHX	B1	3560	-	0,6,6	-	-	-		
74	OHX	B1	3536	-	0,6,6	-	-	-		
74	OHX	B1	3492	-	0,6,6	-	-	-		
74	OHX	D1	3458	-	0,6,6	-	-	-		
74	OHX	B1	3475	-	0,6,6	-	-	-		
74	OHX	D1	3541	-	0,6,6	-	-	-		
74	OHX	B1	3494	-	0,6,6	-	-	-		
74	OHX	D1	3567	-	0,6,6	-	-	-		
74	OHX	B1	3563	-	0,6,6	-	-	-		
74	OHX	D1	3547	-	0,6,6	-	-	-		
74	OHX	B2	201	-	0,6,6	-	-	-		
74	OHX	D1	3461	-	0,6,6	-	-	-		
74	OHX	B1	3569	-	0,6,6	-	-	-		
74	OHX	D1	3485	-	0,6,6	-	-	-		

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

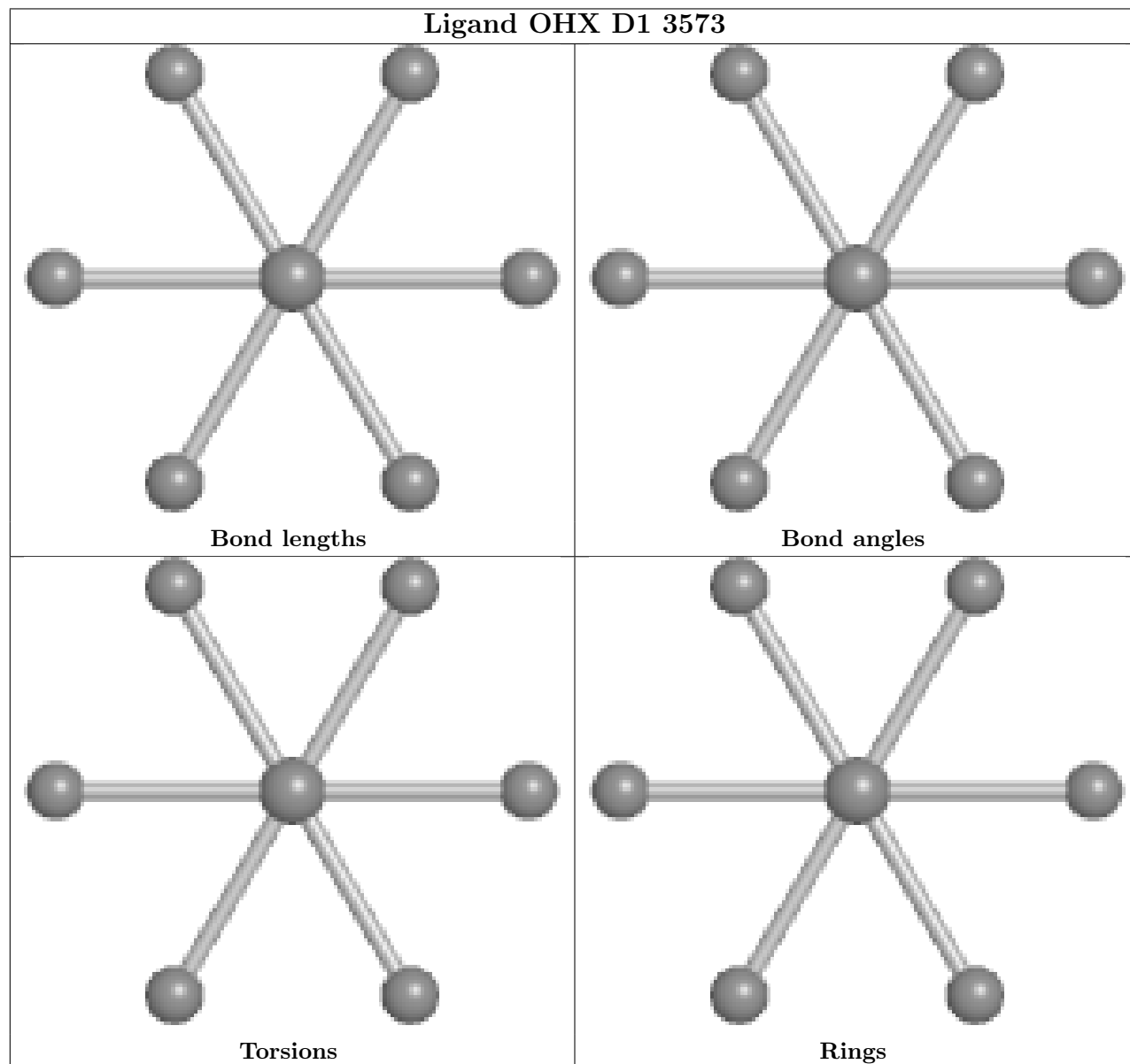
There are no torsion outliers.

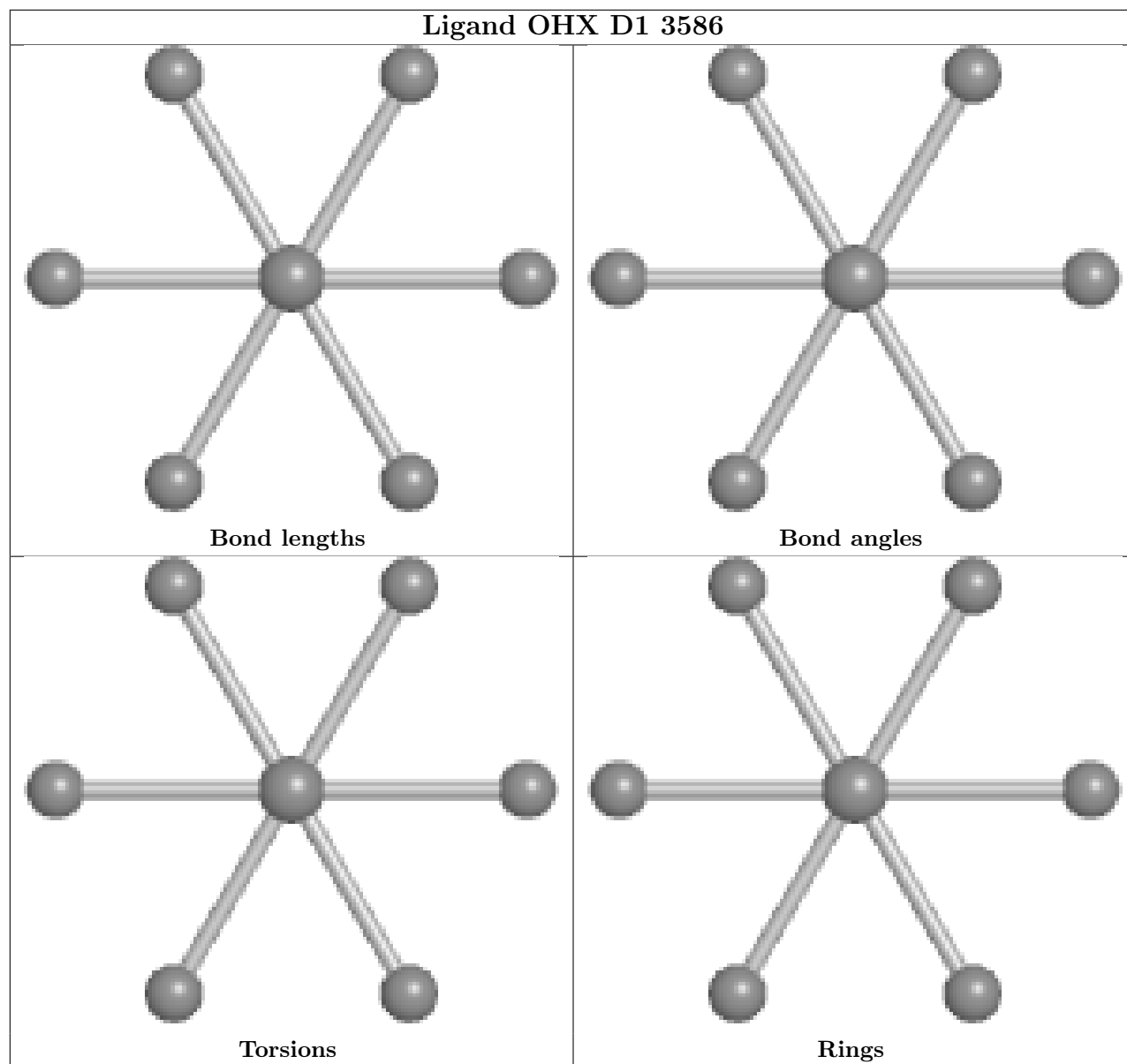
There are no ring outliers.

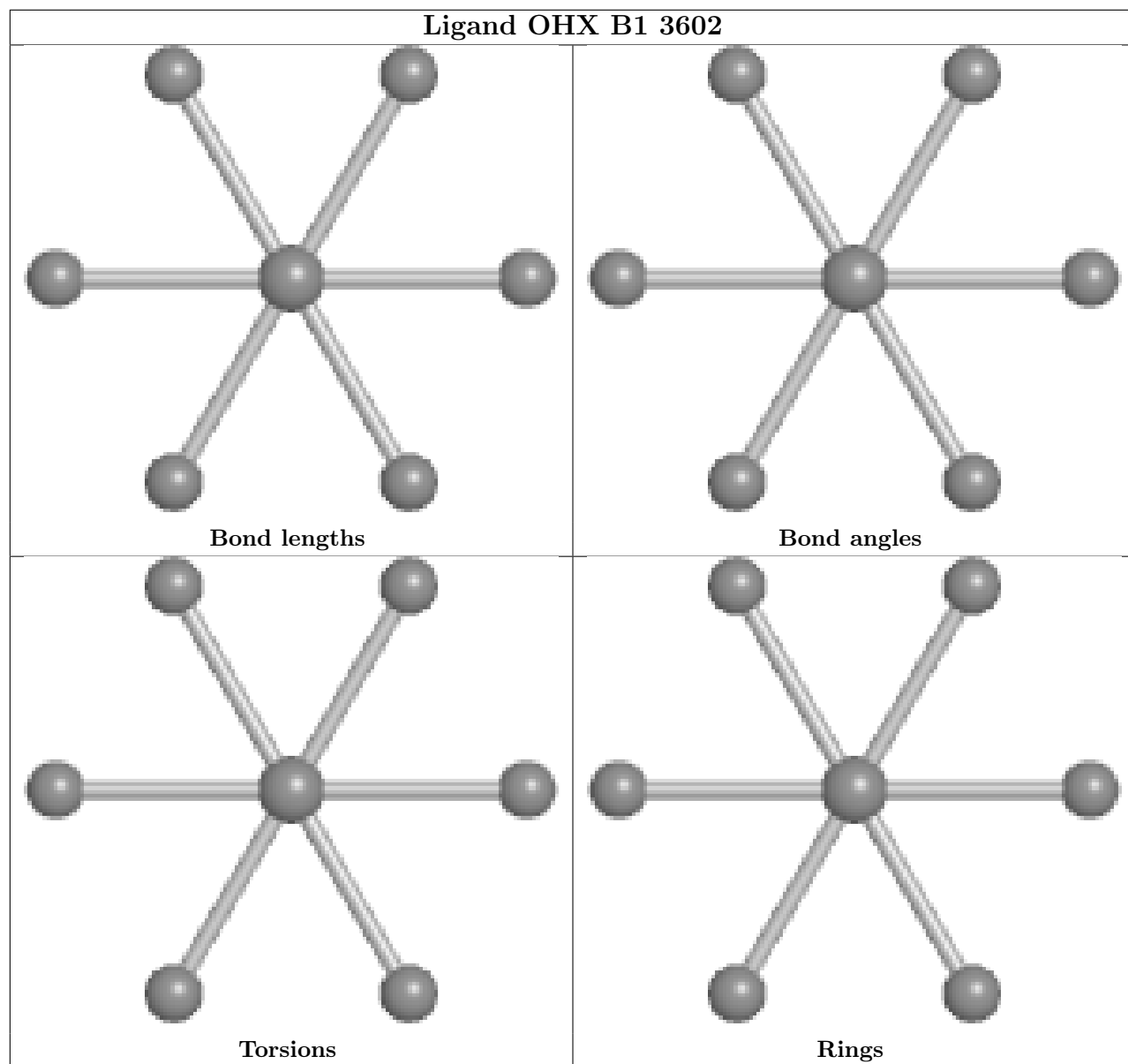
No monomer is involved in short contacts.

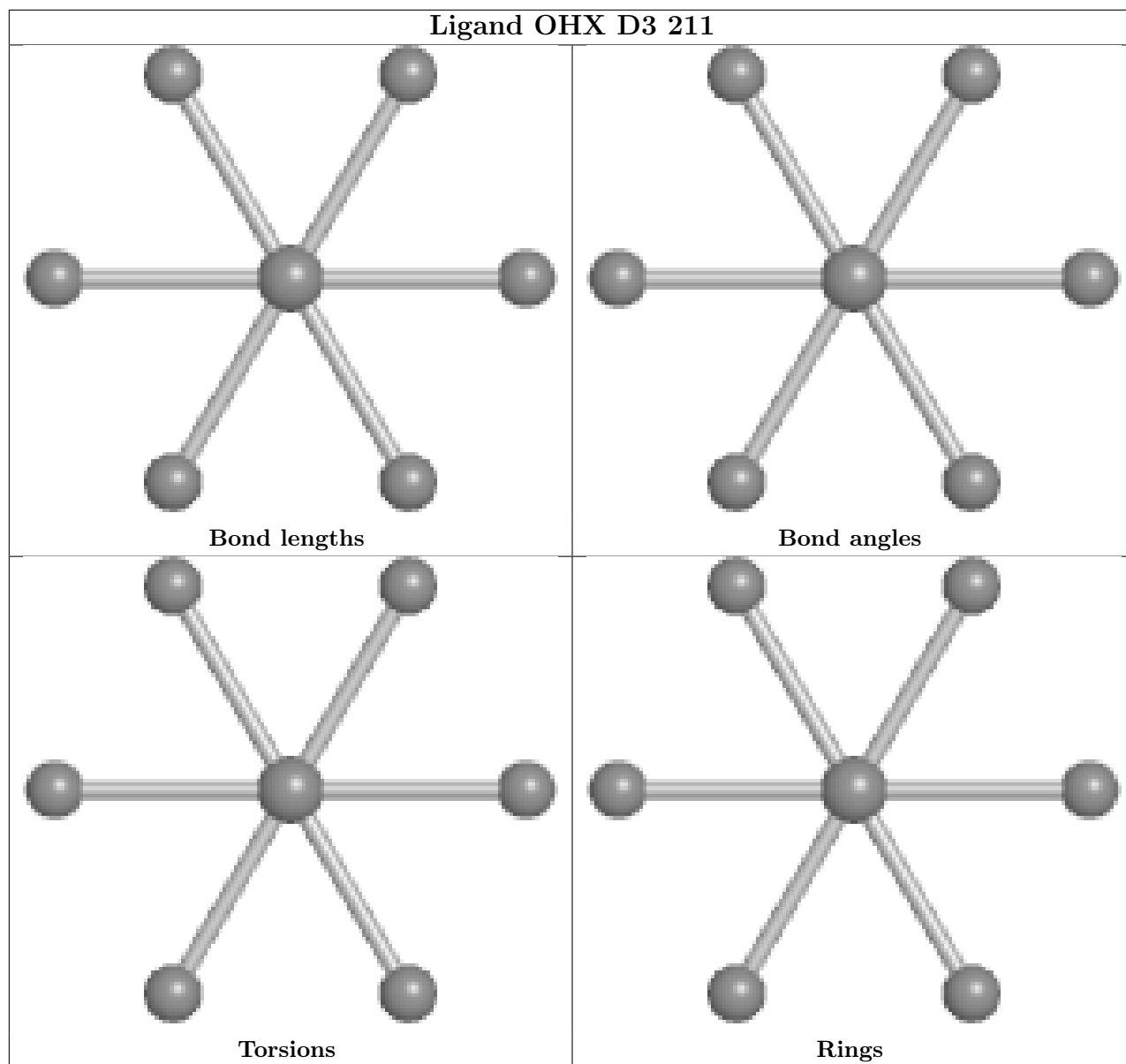
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be

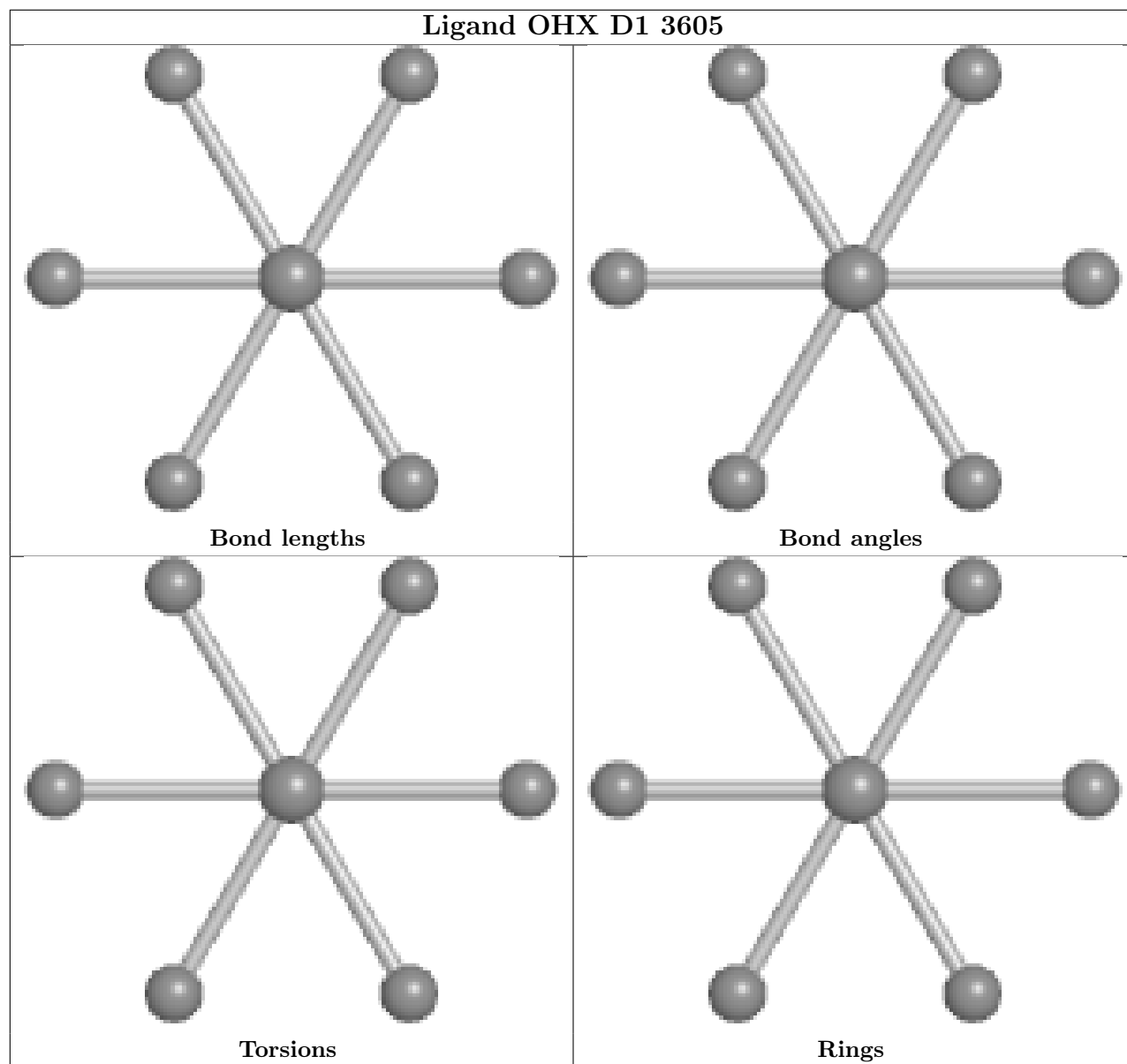
highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified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

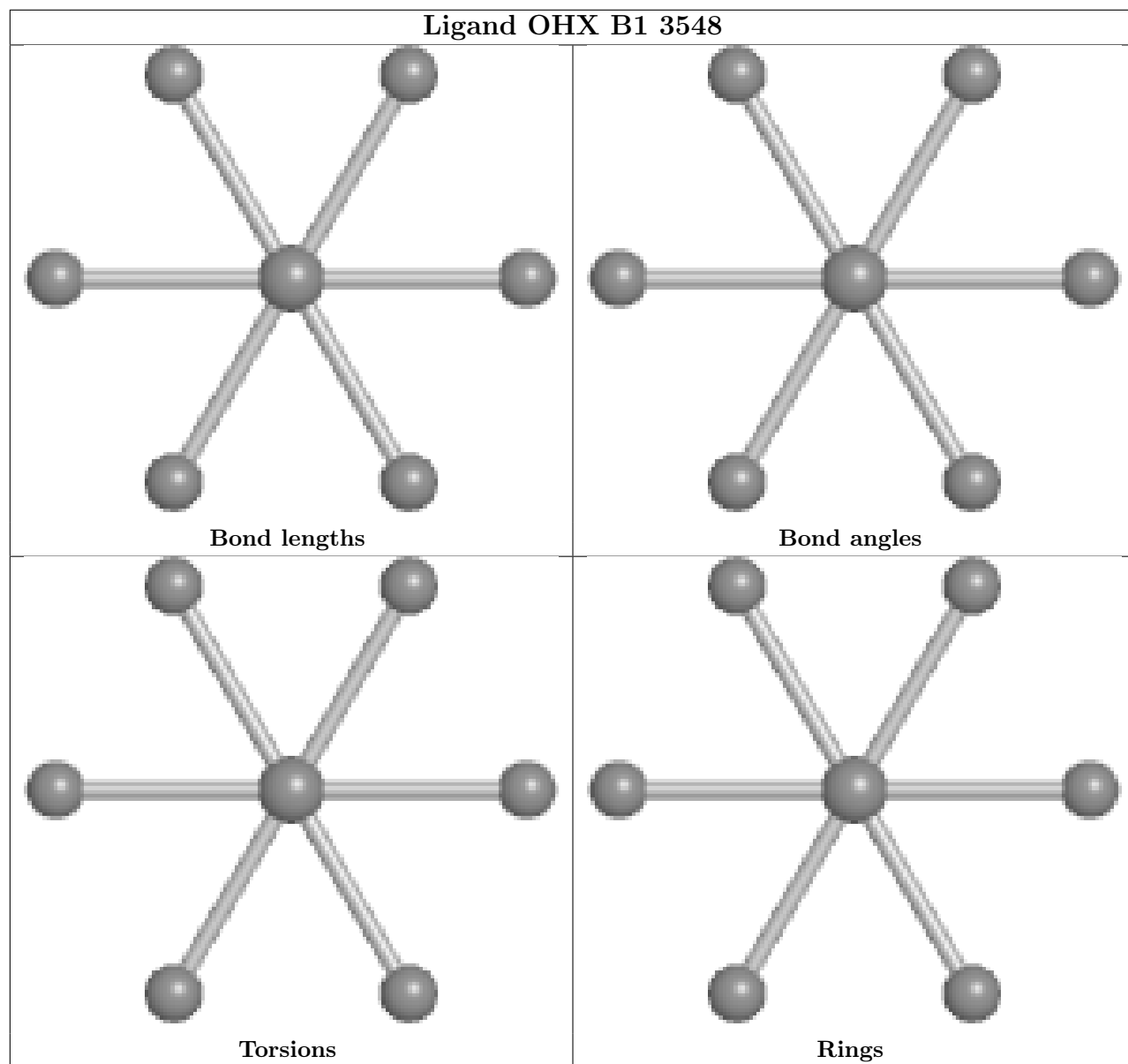


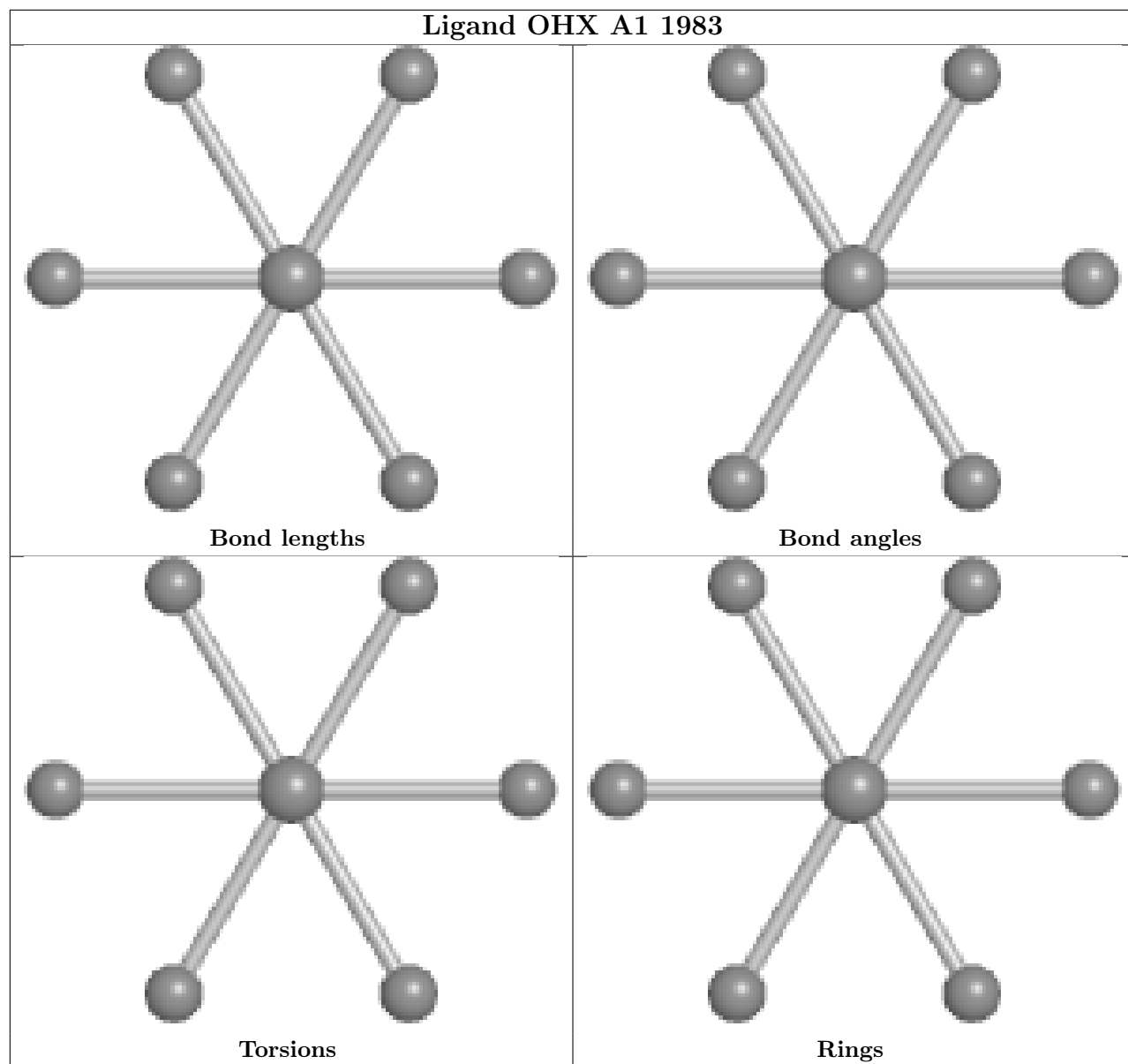


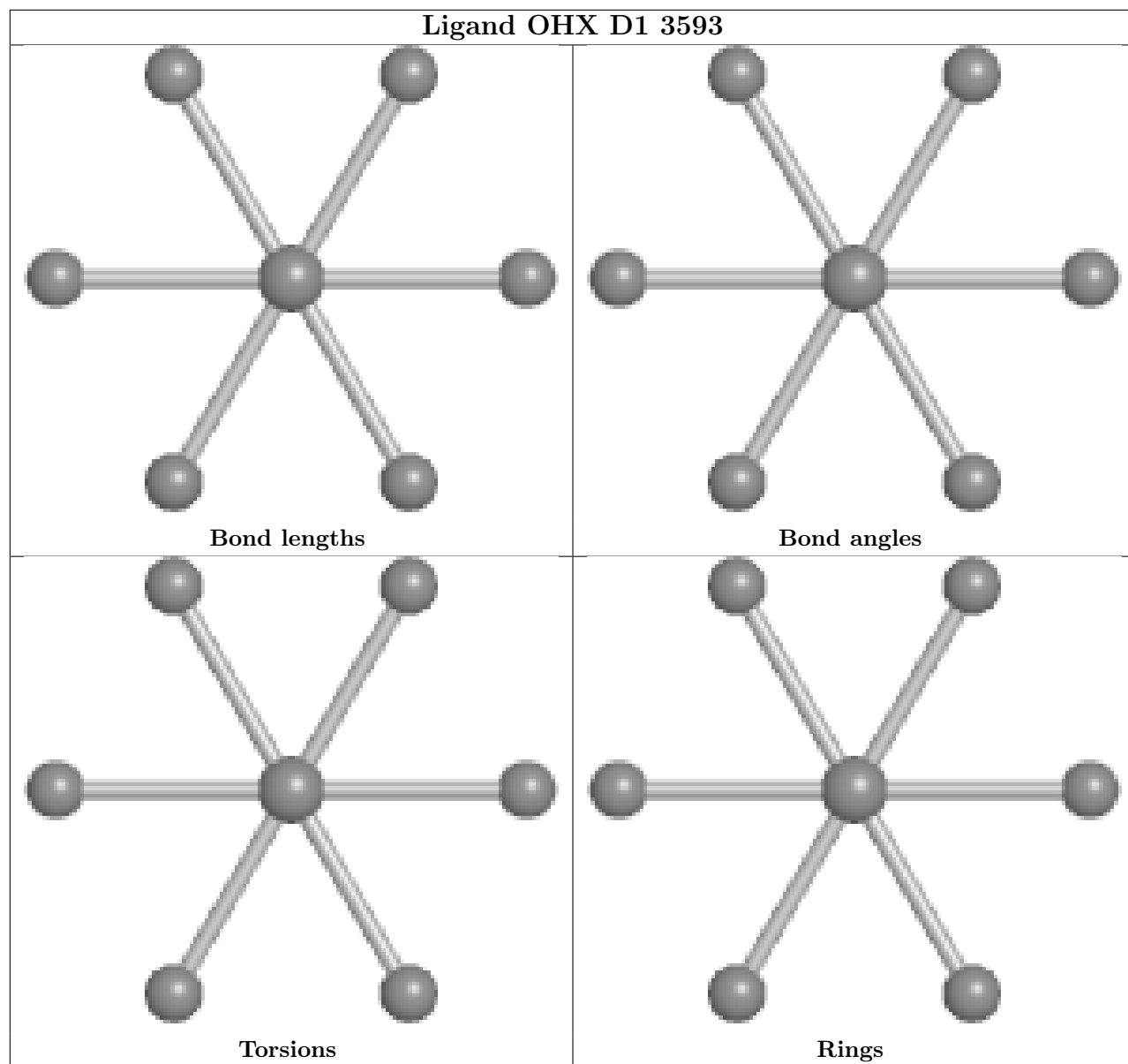


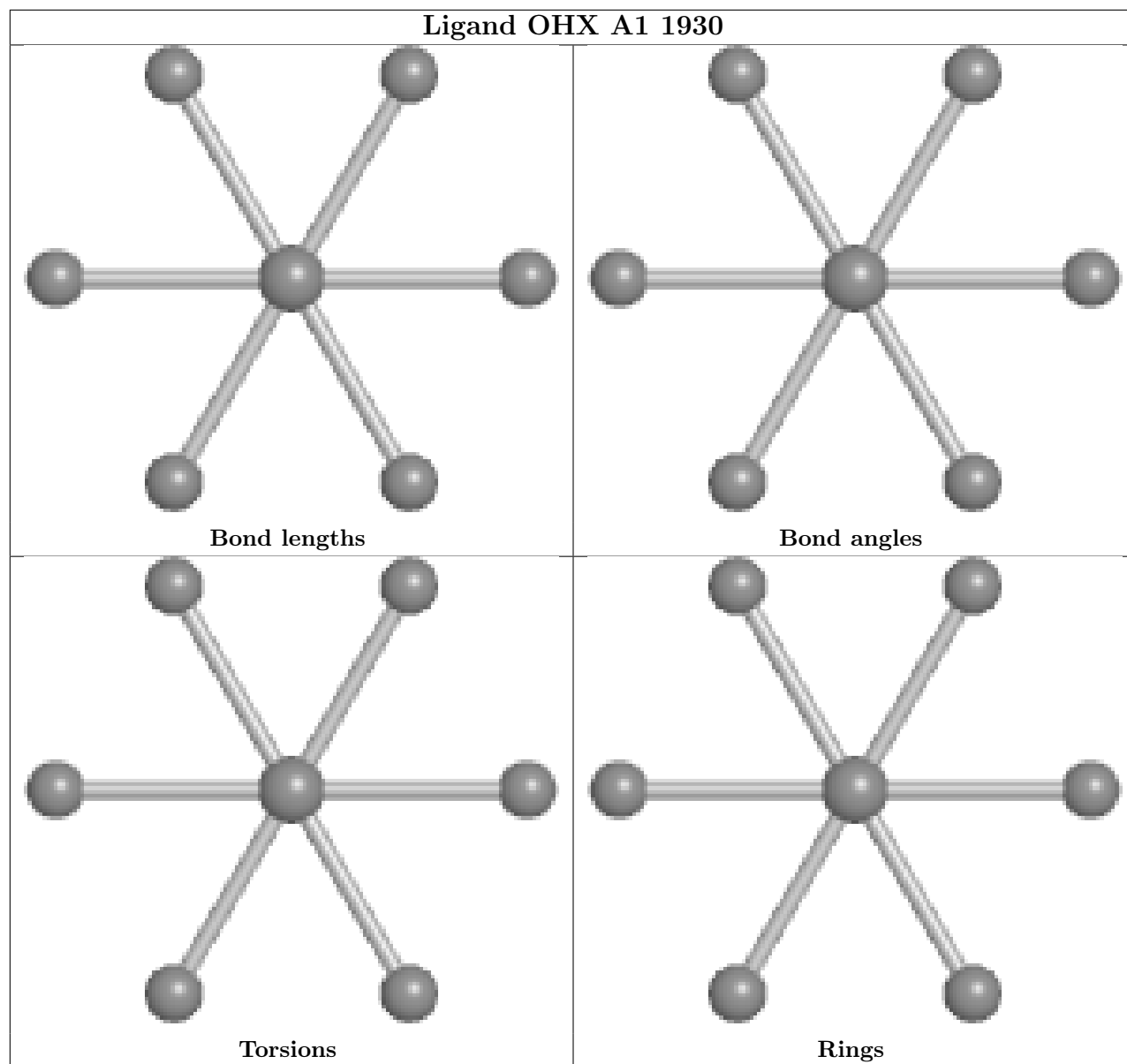


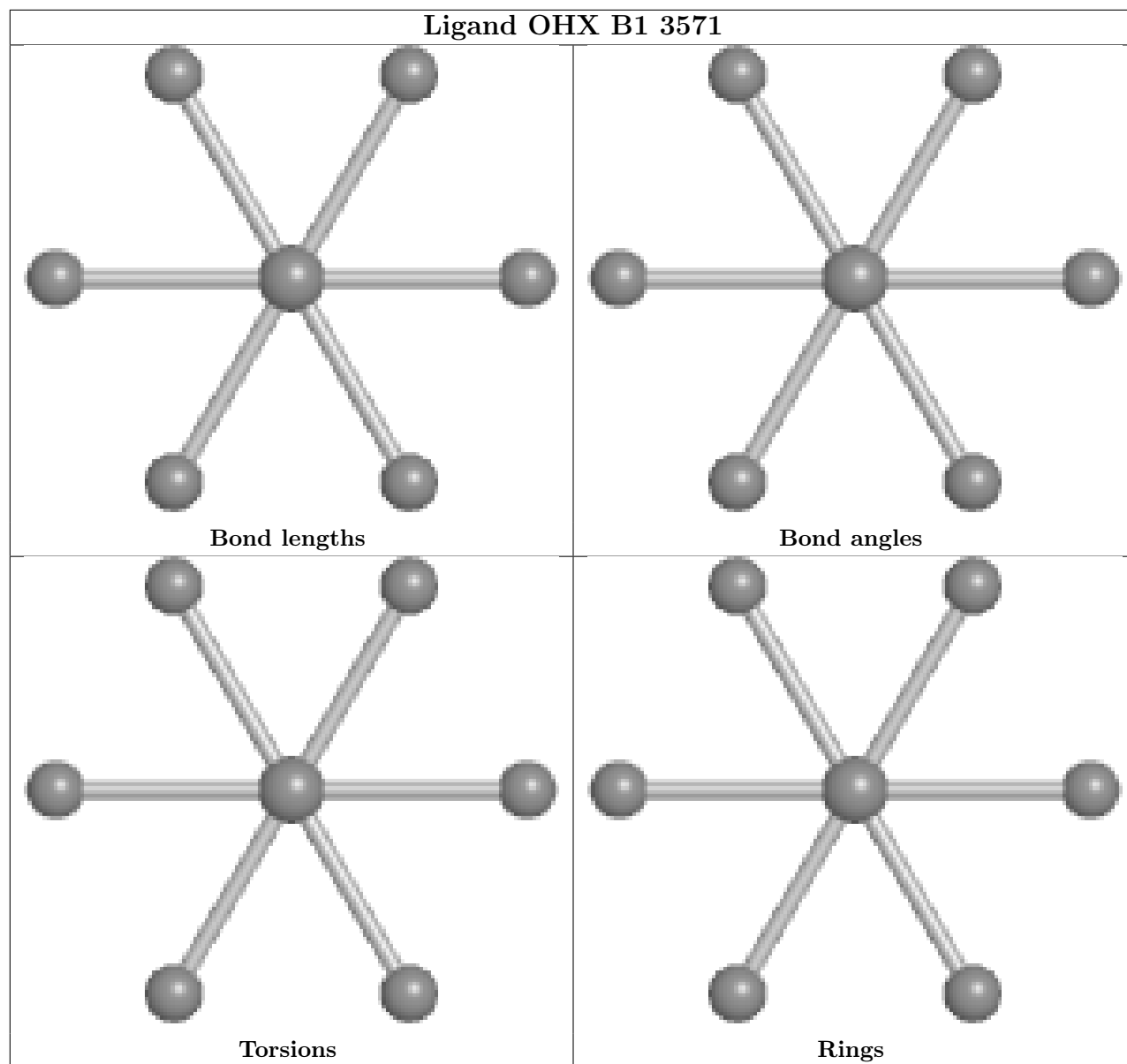












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
23	Ab	4
23	Cb	4
63	Bh	1

Continued on next page...

Continued from previous page...

Mol	Chain	Number of breaks
63	Dh	1
28	Ch	1
68	Bn	1
28	Ah	1
24	Cc	1
24	Ac	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	Bh	23:UNK	C	34:UNK	N	29.25
1	Dh	23:UNK	C	34:UNK	N	28.80
1	Ch	25:UNK	C	50:UNK	N	22.77
1	Ab	19:UNK	C	21:UNK	N	20.41
1	Bn	19:UNK	C	27:UNK	N	20.28
1	Cb	19:UNK	C	21:UNK	N	19.97
1	Cb	30:UNK	C	45:UNK	N	19.12
1	Ah	25:UNK	C	50:UNK	N	19.01
1	Cb	86:UNK	C	101:UNK	N	15.94
1	Ab	68:UNK	C	71:UNK	N	15.61
1	Ab	86:UNK	C	101:UNK	N	13.12
1	Cb	68:UNK	C	71:UNK	N	10.71
1	Ab	30:UNK	C	45:UNK	N	9.43
1	Cc	54:UNK	C	61:UNK	N	5.78
1	Ac	54:UNK	C	61:UNK	N	4.90

6 Fit of model and data i

6.1 Protein, DNA and RNA chains i

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A1	1789/1800 (99%)	0.04	50 (2%) 53 42	45, 138, 429, 753	0
1	C1	1789/1800 (99%)	0.14	61 (3%) 45 36	42, 120, 419, 674	0
2	AA	220/252 (87%)	-0.53	5 (2%) 60 51	64, 150, 323, 474	0
2	CA	220/252 (87%)	-0.54	2 (0%) 84 77	66, 119, 336, 538	0
3	AB	219/254 (86%)	-0.38	3 (1%) 75 65	42, 117, 298, 500	0
3	CB	219/254 (86%)	-0.55	2 (0%) 84 77	50, 108, 288, 386	0
4	AC	189/240 (78%)	-0.35	2 (1%) 80 72	52, 120, 278, 403	0
4	CC	189/240 (78%)	-0.54	0 100 100	41, 120, 262, 460	0
5	AD	169/225 (75%)	-0.58	3 (1%) 68 59	58, 150, 355, 516	0
5	CD	169/225 (75%)	-0.63	3 (1%) 68 59	33, 108, 269, 383	0
6	AE	157/197 (79%)	-0.47	6 (3%) 40 32	44, 140, 362, 438	0
6	CE	157/197 (79%)	-0.46	1 (0%) 89 84	31, 99, 330, 482	0
7	AF	77/156 (49%)	-0.56	1 (1%) 77 68	45, 95, 205, 412	0
7	CF	77/156 (49%)	0.09	7 (9%) 9 8	56, 91, 267, 342	0
8	AG	117/151 (77%)	-0.78	0 100 100	35, 108, 284, 362	0
8	CG	117/151 (77%)	-0.76	0 100 100	46, 97, 263, 458	0
9	AH	128/137 (93%)	-0.21	6 (4%) 31 26	53, 186, 349, 436	0
9	CH	128/137 (93%)	-0.21	5 (3%) 39 31	39, 132, 354, 482	0
10	AI	121/142 (85%)	-0.51	2 (1%) 70 60	55, 140, 329, 419	0
10	CI	121/142 (85%)	-0.44	1 (0%) 86 79	46, 116, 273, 447	0
11	AJ	134/143 (93%)	-0.56	2 (1%) 73 64	74, 144, 302, 340	0
11	CJ	134/143 (93%)	-0.46	3 (2%) 62 52	44, 99, 288, 381	0
12	AK	67/136 (49%)	-0.43	2 (2%) 50 39	52, 142, 319, 407	0
12	CK	67/136 (49%)	0.19	5 (7%) 14 12	64, 199, 350, 401	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AL	120/146 (82%)	-0.46	2 (1%) 70 60	55, 146, 298, 514	0
13	CL	120/146 (82%)	-0.41	5 (4%) 36 29	52, 96, 293, 519	0
14	AM	106/144 (73%)	-0.53	2 (1%) 66 58	71, 138, 348, 425	0
14	CM	106/144 (73%)	-0.57	2 (1%) 66 58	42, 81, 260, 338	0
15	AN	111/121 (91%)	-0.34	3 (2%) 54 44	68, 129, 336, 412	0
15	CN	111/121 (91%)	-0.34	1 (0%) 84 77	32, 111, 286, 424	0
16	AO	127/130 (97%)	-0.39	0 100 100	53, 95, 256, 411	0
16	CO	127/130 (97%)	-0.75	0 100 100	54, 91, 229, 441	0
17	AP	116/145 (80%)	-0.63	0 100 100	29, 95, 247, 384	0
17	CP	116/145 (80%)	-0.63	0 100 100	29, 71, 190, 418	0
18	AQ	67/108 (62%)	-0.42	1 (1%) 73 64	94, 210, 332, 355	0
18	CQ	63/108 (58%)	-0.33	2 (3%) 47 37	68, 150, 282, 307	0
19	AR	47/67 (70%)	0.11	4 (8%) 10 9	107, 245, 393, 457	0
19	CR	47/67 (70%)	0.37	5 (10%) 6 6	51, 221, 381, 425	0
20	AS	39/56 (69%)	-0.48	0 100 100	58, 108, 181, 260	0
20	CS	39/56 (69%)	-0.49	0 100 100	37, 95, 140, 292	0
21	AT	313/319 (98%)	-0.23	12 (3%) 40 32	106, 195, 286, 348	0
21	CT	313/319 (98%)	-0.20	13 (4%) 36 29	67, 158, 257, 328	0
22	Aa	0/20	-	-	-	-
22	Bo	0/20	-	-	-	-
22	Ca	0/20	-	-	-	-
23	Ab	0/105	-	-	-	-
23	Cb	0/105	-	-	-	-
24	Ac	0/93	-	-	-	-
24	Cc	0/93	-	-	-	-
25	Ad	0/35	-	-	-	-
25	Cd	0/35	-	-	-	-
26	Ae	0/21	-	-	-	-
26	Bj	0/21	-	-	-	-
26	Dj	0/21	-	-	-	-
27	Af	0/11	-	-	-	-
28	Ah	0/41	-	-	-	-
28	Ch	0/41	-	-	-	-
29	B1	3206/3396 (94%)	0.04	83 (2%) 56 46	33, 86, 395, 634	0
29	D1	3206/3396 (94%)	0.09	88 (2%) 54 44	30, 94, 427, 674	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
30	B2	121/121 (100%)	-0.09	0 100 100	46, 118, 189, 323	0
30	D2	121/121 (100%)	-0.06	1 (0%) 86 79	36, 95, 180, 349	0
31	B3	158/158 (100%)	0.00	6 (3%) 40 32	46, 108, 258, 619	0
31	D3	158/158 (100%)	-0.02	2 (1%) 77 68	59, 136, 358, 586	0
32	BA	213/217 (98%)	0.51	33 (15%) 2 2	137, 327, 441, 483	0
32	DA	213/217 (98%)	0.73	42 (19%) 1 1	159, 354, 442, 484	0
33	BB	234/254 (92%)	-0.46	3 (1%) 77 68	25, 83, 246, 419	0
33	DB	234/254 (92%)	-0.24	5 (2%) 63 54	54, 108, 254, 417	0
34	BC	364/387 (94%)	-0.61	1 (0%) 94 90	20, 66, 216, 560	0
34	DC	364/387 (94%)	-0.69	0 100 100	29, 58, 208, 543	0
35	BD	268/362 (74%)	-0.71	0 100 100	34, 70, 207, 500	0
35	DD	268/362 (74%)	-0.52	2 (0%) 87 82	50, 102, 274, 463	0
36	BE	287/297 (96%)	-0.46	2 (0%) 87 82	58, 119, 355, 497	0
36	DE	287/297 (96%)	-0.60	6 (2%) 63 54	38, 91, 302, 478	0
37	BF	176/176 (100%)	-0.61	2 (1%) 80 72	25, 81, 305, 519	0
37	DF	176/176 (100%)	-0.50	1 (0%) 89 84	31, 69, 342, 518	0
38	BG	215/244 (88%)	-0.85	0 100 100	21, 59, 226, 486	0
38	DG	215/244 (88%)	-0.89	0 100 100	25, 49, 167, 330	0
39	BH	173/256 (67%)	-0.45	4 (2%) 60 51	45, 110, 297, 429	0
39	DH	173/256 (67%)	-0.38	4 (2%) 60 51	70, 146, 316, 422	0
40	BI	191/191 (100%)	-0.51	2 (1%) 82 74	27, 83, 237, 347	0
40	DI	191/191 (100%)	-0.89	0 100 100	22, 49, 164, 286	0
41	BJ	208/221 (94%)	-0.64	1 (0%) 91 85	39, 93, 251, 452	0
41	DJ	208/221 (94%)	-0.73	1 (0%) 91 85	25, 64, 257, 456	0
42	BK	165/174 (94%)	-0.48	4 (2%) 59 49	56, 125, 348, 497	0
42	DK	165/174 (94%)	-0.60	1 (0%) 89 84	45, 97, 330, 532	0
43	BN	120/138 (86%)	-0.58	0 100 100	34, 77, 260, 387	0
43	DN	120/138 (86%)	-0.69	1 (0%) 86 79	33, 60, 262, 325	0
44	BO	187/204 (91%)	-0.55	1 (0%) 91 85	38, 86, 178, 383	0
44	DO	187/204 (91%)	-0.36	4 (2%) 63 54	57, 119, 255, 327	0
45	BP	196/199 (98%)	-0.84	0 100 100	23, 48, 152, 409	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
45	DP	196/199 (98%)	-0.74	1 (0%) 91 85	23, 45, 111, 424	0
46	BQ	154/184 (83%)	-0.73	0 100 100	30, 55, 144, 337	0
46	DQ	154/184 (83%)	-0.78	0 100 100	37, 77, 243, 373	0
47	BR	143/186 (76%)	-0.71	1 (0%) 87 82	38, 70, 200, 421	0
47	DR	143/186 (76%)	-0.30	4 (2%) 53 42	60, 87, 244, 378	0
48	BS	188/189 (99%)	-0.49	3 (1%) 72 62	52, 101, 419, 569	0
48	DS	188/189 (99%)	0.17	25 (13%) 3 4	59, 109, 589, 657	0
49	BT	119/160 (74%)	-0.57	1 (0%) 86 79	42, 73, 221, 310	0
49	DT	119/160 (74%)	-0.62	0 100 100	36, 72, 184, 282	0
50	BU	129/137 (94%)	-0.55	0 100 100	27, 70, 208, 391	0
50	DU	129/137 (94%)	-0.62	0 100 100	20, 48, 151, 235	0
51	BV	59/155 (38%)	-0.68	0 100 100	29, 84, 259, 363	0
51	DV	59/155 (38%)	-0.48	1 (1%) 70 60	53, 73, 197, 320	0
52	BW	94/142 (66%)	-0.44	0 100 100	53, 91, 211, 312	0
52	DW	94/142 (66%)	-0.45	1 (1%) 80 72	64, 124, 247, 337	0
53	BX	107/127 (84%)	-0.70	0 100 100	58, 91, 182, 233	0
53	DX	107/127 (84%)	-0.48	2 (1%) 66 58	56, 106, 248, 361	0
54	BY	149/149 (100%)	-0.46	3 (2%) 65 56	30, 76, 331, 456	0
54	DY	149/149 (100%)	-0.52	1 (0%) 87 82	49, 95, 277, 409	0
55	BZ	98/105 (93%)	-0.33	2 (2%) 65 56	52, 128, 269, 360	0
55	DZ	98/105 (93%)	-0.30	3 (3%) 49 38	56, 134, 272, 365	0
56	Ba	86/113 (76%)	-0.67	0 100 100	38, 83, 232, 396	0
56	Da	86/113 (76%)	-0.64	0 100 100	51, 82, 274, 430	0
57	Bb	125/130 (96%)	-0.78	0 100 100	26, 54, 138, 435	0
57	Db	125/130 (96%)	-0.48	1 (0%) 86 79	39, 77, 168, 380	0
58	Bc	68/120 (56%)	-0.66	0 100 100	46, 89, 202, 381	0
58	Dc	68/120 (56%)	-0.74	1 (1%) 73 64	50, 123, 270, 348	0
59	Bd	72/88 (81%)	-0.53	0 100 100	36, 79, 322, 434	0
59	Dd	72/88 (81%)	-0.62	0 100 100	30, 103, 268, 336	0
60	Be	48/51 (94%)	-0.65	0 100 100	30, 72, 159, 290	0
60	De	48/51 (94%)	-0.58	0 100 100	40, 118, 222, 333	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
61	Bf	95/106 (89%)	-0.19	3 (3%) 47 37	57, 145, 363, 475	0
61	Df	95/106 (89%)	0.22	10 (10%) 6 6	62, 195, 389, 486	0
62	Bg	83/92 (90%)	-0.68	1 (1%) 79 70	35, 98, 311, 431	0
62	Dg	83/92 (90%)	-0.63	0 100 100	42, 103, 241, 369	0
63	Bh	0/44	-	-	-	-
63	Dh	0/44	-	-	-	-
64	Bi	0/12	-	-	-	-
64	Di	0/12	-	-	-	-
65	Bk	0/16	-	-	-	-
65	Dk	0/16	-	-	-	-
66	Bl	0/19	-	-	-	-
67	Bm	0/9	-	-	-	-
68	Bn	0/27	-	-	-	-
69	Bp	0/8	-	-	-	-
70	Bq	0/17	-	-	-	-
71	Br	0/23	-	-	-	-
72	DL	138/165 (83%)	-0.58	2 (1%) 75 65	84, 172, 387, 465	0
73	DM	130/312 (41%)	-0.53	2 (1%) 73 64	47, 121, 305, 409	0
All	All	25728/30002 (85%)	-0.26	592 (2%) 60 51	20, 105, 353, 753	0

All (592) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
29	B1	136	G	14.9
1	C1	681	U	14.6
29	D1	2495	C	14.4
1	A1	1701	A	13.6
29	D1	2494	A	13.5
29	D1	2473	C	13.2
29	D1	2453	U	12.5
32	DA	168	ALA	11.9
1	C1	662	U	11.6
32	BA	197	ASN	10.8
29	B1	2494	A	10.8
29	B1	133	U	10.6
48	DS	175	GLN	10.6
1	C1	664	U	10.4
1	C1	680	U	10.1
32	DA	192	SER	10.1
48	DS	176	ARG	10.0

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Mol	Chain	Res	Type	RSRZ
29	D1	766	U	10.0
1	A1	1709	C	9.7
29	B1	2493	U	9.6
29	B1	2448	G	9.5
29	D1	2472	U	9.4
48	DS	174	ALA	9.2
1	A1	1795	U	9.1
29	B1	2472	U	9.0
1	C1	1700	C	8.8
29	D1	2449	A	8.6
29	B1	765	C	8.6
48	DS	173	ARG	8.3
1	C1	679	U	8.1
29	B1	2402	A	8.0
1	C1	1699	G	7.9
29	B1	1027	A	7.8
1	C1	666	U	7.8
29	B1	766	U	7.8
21	CT	51	ASP	7.4
1	C1	665	U	7.3
29	D1	2451	G	7.3
19	AR	19	THR	7.3
48	BS	182	ASP	7.1
5	AD	185	ARG	7.1
29	D1	2450	G	7.0
13	CL	94	ASP	6.9
29	D1	765	C	6.8
29	D1	2726	C	6.8
1	C1	69	G	6.8
19	CR	29	ARG	6.8
48	DS	160	GLU	6.6
21	AT	25	THR	6.6
29	B1	2495	C	6.6
1	C1	667	U	6.5
1	C1	1677	C	6.5
29	D1	2402	A	6.5
32	DA	33	GLU	6.5
12	AK	36	ASP	6.5
12	CK	36	ASP	6.5
29	D1	2481	G	6.5
29	D1	2474	G	6.4
1	C1	661	A	6.4

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Mol	Chain	Res	Type	RSRZ
48	DS	159	ALA	6.4
29	D1	2452	G	6.1
9	AH	11	SER	6.1
48	DS	171	ASP	6.1
39	BH	129	PRO	6.0
29	B1	2445	A	6.0
32	BA	198	TRP	6.0
9	CH	11	SER	6.0
1	A1	1705	C	5.9
32	BA	36	VAL	5.9
29	D1	2448	G	5.9
32	DA	194	LEU	5.9
1	A1	1699	G	5.9
32	BA	37	GLY	5.9
2	CA	213	GLN	5.8
10	AI	53	PRO	5.8
32	BA	199	GLN	5.8
29	D1	3353	G	5.7
48	DS	167	ARG	5.7
32	DA	156	LYS	5.7
19	CR	50	GLU	5.7
29	D1	1573	G	5.7
1	C1	682	C	5.7
29	B1	1241	U	5.6
48	DS	170	ARG	5.6
13	CL	95	GLY	5.6
32	BA	188	ASN	5.6
29	B1	1762	C	5.5
29	D1	2418	G	5.5
1	A1	1698	G	5.3
29	B1	1764	U	5.3
1	A1	664	U	5.3
29	B1	1644	C	5.3
1	A1	1697	G	5.3
29	D1	437	G	5.3
39	BH	235	GLY	5.2
29	B1	1763	U	5.2
12	CK	22	PRO	5.2
21	AT	44	SER	5.2
32	DA	158	GLN	5.1
29	D1	767	U	5.1
48	DS	186	LYS	5.1

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Mol	Chain	Res	Type	RSRZ
48	DS	187	GLU	5.1
1	A1	1255	G	5.1
36	DE	231	ILE	5.1
29	D1	2455	U	5.0
29	D1	2483	G	5.0
29	B1	2726	C	5.0
32	DA	197	ASN	5.0
29	B1	1199	C	4.9
35	DD	67	THR	4.9
55	DZ	105	ALA	4.8
12	CK	37	GLU	4.8
1	C1	1795	U	4.8
1	C1	1800	A	4.8
29	B1	2464	U	4.8
12	CK	35	CYS	4.8
32	DA	193	LEU	4.8
29	D1	133	U	4.8
32	DA	143	ASP	4.7
36	DE	232	ASP	4.7
13	CL	85	PHE	4.6
10	CI	53	PRO	4.6
29	B1	2499	U	4.5
31	B3	86	U	4.5
29	D1	2470	C	4.5
3	AB	93	GLY	4.5
29	D1	2465	G	4.5
7	CF	116	ARG	4.5
48	DS	166	ASN	4.5
30	D2	39	C	4.5
6	AE	21	SER	4.5
29	B1	2458	A	4.5
1	A1	1710	U	4.5
57	Db	116	GLY	4.5
36	DE	270	LYS	4.4
29	B1	2492	C	4.4
29	D1	2480	A	4.4
14	AM	3	GLY	4.4
48	DS	163	ARG	4.4
21	CT	212	ALA	4.3
21	AT	212	ALA	4.3
12	CK	31	ASN	4.3
21	CT	52	GLN	4.3

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Mol	Chain	Res	Type	RSRZ
1	A1	679	U	4.3
32	DA	86	SER	4.3
48	DS	177	VAL	4.2
32	BA	190	PHE	4.2
1	C1	652	G	4.2
32	BA	116	LEU	4.2
32	DA	160	LYS	4.2
29	B1	2466	G	4.2
1	C1	1676	U	4.2
29	D1	2460	U	4.2
1	C1	1697	G	4.2
61	Bf	10	THR	4.2
61	Df	56	PRO	4.2
32	DA	41	TYR	4.2
1	C1	137	U	4.2
1	C1	660	G	4.2
32	BA	166	ALA	4.2
32	DA	163	LEU	4.2
15	AN	85	ARG	4.1
48	DS	172	ARG	4.1
21	CT	113	VAL	4.1
29	D1	2454	G	4.1
19	CR	34	GLU	4.1
32	DA	162	VAL	4.1
29	B1	132	C	4.1
29	B1	2446	U	4.0
1	A1	69	G	4.0
29	D1	2475	G	4.0
32	BA	175	GLU	4.0
29	D1	2456	A	4.0
31	B3	126	A	4.0
29	D1	2675	C	4.0
1	A1	505	A	4.0
29	D1	2489	C	4.0
29	B1	1270	A	4.0
29	D1	2466	G	3.9
19	CR	30	VAL	3.9
2	CA	26	ALA	3.9
36	BE	268	GLU	3.9
53	DX	45	ILE	3.9
29	B1	2489	C	3.9
29	D1	2688	U	3.9

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Mol	Chain	Res	Type	RSRZ
14	AM	26	GLY	3.9
32	DA	144	LEU	3.9
29	D1	2496	C	3.8
13	CL	86	LEU	3.8
29	D1	2257	C	3.8
41	DJ	113	GLN	3.8
47	DR	120	GLU	3.8
1	A1	134	U	3.8
1	A1	1059	U	3.8
73	DM	72	ASP	3.8
1	C1	823	G	3.8
29	B1	119	U	3.8
1	A1	490	C	3.7
42	BK	136	ALA	3.7
32	DA	6	SER	3.7
1	A1	653	C	3.7
1	C1	656	G	3.7
29	B1	2447	A	3.7
29	D1	3273	A	3.7
32	DA	137	PRO	3.7
29	B1	2465	G	3.7
15	CN	95	ALA	3.7
13	AL	84	TRP	3.7
29	D1	2482	U	3.7
41	BJ	116	ARG	3.6
29	B1	2475	G	3.6
32	DA	164	CYS	3.6
7	CF	141	LYS	3.6
21	CT	172	ALA	3.6
32	BA	115	VAL	3.6
61	Df	21	THR	3.6
11	CJ	143	ARG	3.6
32	DA	139	SER	3.6
1	C1	1798	U	3.6
32	BA	9	VAL	3.6
6	AE	86	LEU	3.5
47	DR	152	HIS	3.5
61	Bf	12	CYS	3.5
39	DH	199	ALA	3.5
7	CF	117	VAL	3.5
1	A1	682	C	3.5
72	DL	102	GLY	3.5

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Mol	Chain	Res	Type	RSRZ
31	B3	158	U	3.5
45	DP	199	TYR	3.5
32	BA	66	CYS	3.5
62	Bg	92	ALA	3.5
32	BA	200	ASN	3.5
29	B1	2473	C	3.4
61	Df	82	GLN	3.4
7	CF	145	ALA	3.4
1	C1	1350	U	3.4
29	D1	2476	C	3.4
29	B1	2456	A	3.4
29	D1	2095	G	3.4
32	DA	111	ILE	3.4
1	C1	1201	G	3.4
1	A1	1794	A	3.4
7	CF	140	VAL	3.4
29	D1	245	U	3.4
29	B1	2688	U	3.4
29	B1	2675	C	3.4
11	AJ	58	ASP	3.3
73	DM	71	PRO	3.3
48	BS	183	ALA	3.3
19	AR	18	ARG	3.3
29	B1	2500	A	3.3
35	DD	66	GLY	3.3
33	DB	97	ASN	3.3
61	Df	54	THR	3.3
32	DA	169	VAL	3.3
21	AT	80	ALA	3.3
48	DS	157	GLU	3.3
29	D1	3271	G	3.2
29	D1	1568	U	3.2
43	DN	28	SER	3.2
32	DA	196	LYS	3.2
4	AC	187	LYS	3.2
29	B1	3260	G	3.2
21	CT	213	SER	3.2
42	BK	150	ASN	3.2
29	D1	2501	U	3.2
29	D1	1644	C	3.2
11	CJ	20	ALA	3.2
29	D1	3260	G	3.2

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Mol	Chain	Res	Type	RSRZ
48	DS	158	GLU	3.2
29	B1	1026	A	3.2
48	DS	156	ASN	3.1
58	Dc	1	MET	3.1
6	AE	87	SER	3.1
1	A1	1800	A	3.1
29	D1	2259	A	3.1
36	BE	39	GLN	3.1
1	C1	1698	G	3.1
29	B1	2462	A	3.1
1	A1	137	U	3.1
32	DA	50	SER	3.1
1	C1	1192	C	3.1
29	D1	2484	A	3.1
9	AH	80	HIS	3.1
1	A1	710	U	3.0
29	D1	136	G	3.0
1	A1	1240	U	3.0
32	BA	157	PHE	3.0
32	DA	37	GLY	3.0
32	DA	42	ASP	3.0
5	CD	184	PHE	3.0
32	DA	43	PRO	3.0
29	D1	2403	G	3.0
44	BO	57	GLN	3.0
1	A1	1703	C	3.0
29	B1	326	U	3.0
1	A1	1241	G	2.9
1	A1	1631	A	2.9
29	B1	1016	C	2.9
19	AR	50	GLU	2.9
32	BA	192	SER	2.9
29	B1	1221	A	2.9
44	DO	40	ALA	2.9
1	A1	1	U	2.9
1	A1	503	G	2.9
32	BA	145	TYR	2.9
32	DA	49	PHE	2.9
29	B1	2449	A	2.9
53	DX	44	GLY	2.9
32	DA	138	VAL	2.9
29	B1	2452	G	2.9

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Mol	Chain	Res	Type	RSRZ
48	DS	185	LEU	2.9
36	DE	230	ASP	2.9
29	B1	2486	A	2.9
44	DO	3	ALA	2.9
6	AE	175	ARG	2.9
5	AD	184	PHE	2.9
29	B1	3352	U	2.9
1	C1	1130	G	2.9
40	BI	190	ASP	2.9
21	AT	59	ARG	2.8
29	B1	135	C	2.8
31	D3	126	A	2.8
32	DA	141	ASN	2.8
61	Df	55	LYS	2.8
21	AT	130	THR	2.8
1	C1	1695	G	2.8
1	C1	782	U	2.8
1	A1	279	G	2.8
29	D1	2493	U	2.8
6	CE	174	ARG	2.8
47	DR	153	PHE	2.8
9	AH	12	GLN	2.8
32	BA	176	GLU	2.8
1	C1	653	C	2.8
9	AH	15	GLY	2.8
1	C1	695	U	2.8
29	B1	137	G	2.8
4	AC	153	ALA	2.8
32	DA	155	ILE	2.8
29	D1	252	U	2.8
6	AE	176	ASN	2.8
32	BA	62	ASN	2.8
32	BA	88	ASP	2.8
51	DV	1	MET	2.8
1	A1	135	A	2.8
29	B1	2418	G	2.7
61	Df	22	GLN	2.7
29	B1	1273	A	2.7
48	BS	53	LYS	2.7
1	C1	284	G	2.7
29	B1	1242	G	2.7
29	B1	1349	G	2.7

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Mol	Chain	Res	Type	RSRZ
32	BA	8	GLN	2.7
39	DH	213	LYS	2.7
11	AJ	57	LEU	2.7
5	CD	185	ARG	2.7
42	BK	135	GLY	2.7
29	D1	1574	C	2.7
1	C1	651	G	2.7
29	B1	2485	A	2.7
32	BA	27	ASN	2.7
1	C1	659	C	2.7
32	BA	26	ARG	2.7
48	DS	168	ALA	2.7
1	C1	493	U	2.7
32	DA	199	GLN	2.7
19	CR	28	VAL	2.7
29	B1	2467	G	2.7
61	Df	7	THR	2.7
47	DR	149	ALA	2.6
1	C1	1797	A	2.6
29	B1	2488	A	2.6
29	D1	2570	U	2.6
32	BA	189	PHE	2.6
29	B1	2871	G	2.6
49	BT	121	ALA	2.6
55	DZ	89	VAL	2.6
29	D1	2554	A	2.6
48	DS	182	ASP	2.6
1	A1	1706	C	2.6
29	B1	2471	U	2.6
29	D1	2491	A	2.6
7	AF	116	ARG	2.6
42	BK	152	HIS	2.6
29	B1	3353	G	2.6
7	CF	144	ALA	2.6
47	BR	152	HIS	2.6
72	DL	103	ASN	2.6
9	CH	109	GLY	2.6
29	B1	2463	G	2.6
36	DE	39	GLN	2.6
32	BA	168	ALA	2.6
32	DA	140	HIS	2.6
61	Df	81	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
3	AB	112	GLY	2.6
1	C1	239	C	2.6
1	C1	655	G	2.6
1	C1	1796	C	2.6
29	D1	1354	G	2.5
29	D1	2457	G	2.5
29	B1	1014	U	2.5
29	D1	246	U	2.5
29	D1	2256	A	2.5
1	A1	1796	C	2.5
1	C1	718	U	2.5
29	D1	2502	A	2.5
32	DA	63	MET	2.5
39	DH	198	ALA	2.5
31	B3	51	G	2.5
1	C1	1378	U	2.5
29	B1	3314	A	2.5
37	BF	140	VAL	2.5
1	A1	719	U	2.5
32	DA	48	ARG	2.5
1	C1	105	A	2.5
29	B1	1029	G	2.5
1	A1	1256	A	2.5
21	CT	125	GLY	2.5
29	B1	2474	G	2.5
21	AT	211	ILE	2.5
1	C1	712	G	2.5
31	B3	75	G	2.5
40	BI	143	GLU	2.5
1	A1	491	C	2.5
29	D1	2490	C	2.5
32	BA	110	PHE	2.5
29	D1	764	U	2.5
5	AD	161	ASP	2.5
3	AB	92	ALA	2.5
29	B1	1951	C	2.5
29	D1	72	C	2.5
21	CT	203	THR	2.5
1	C1	486	G	2.5
29	D1	2478	C	2.4
61	Df	25	VAL	2.4
1	A1	191	C	2.4

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Mol	Chain	Res	Type	RSRZ
14	CM	3	GLY	2.4
2	AA	28	ASN	2.4
54	BY	108	GLY	2.4
61	Df	53	GLN	2.4
29	D1	2498	U	2.4
29	B1	538	G	2.4
34	BC	125	SER	2.4
1	A1	665	U	2.4
29	D1	2553	U	2.4
29	B1	1195	A	2.4
37	BF	68	PRO	2.4
1	A1	369	A	2.4
29	D1	1565	G	2.4
15	AN	119	ALA	2.4
54	BY	24	LYS	2.4
1	C1	393	C	2.4
32	DA	64	SER	2.4
10	AI	9	LYS	2.4
21	CT	112	SER	2.4
42	DK	136	ALA	2.4
29	D1	847	A	2.3
29	D1	2265	C	2.3
32	DA	78	LYS	2.3
32	DA	157	PHE	2.3
29	B1	1243	G	2.3
29	B1	633	C	2.3
29	B1	1238	C	2.3
33	BB	74	GLU	2.3
29	D1	1560	G	2.3
1	A1	1707	A	2.3
13	CL	96	LYS	2.3
1	A1	1060	U	2.3
29	B1	1198	C	2.3
31	B3	77	A	2.3
1	A1	681	U	2.3
1	A1	1700	C	2.3
1	A1	1676	U	2.3
29	D1	492	U	2.3
2	AA	201	LEU	2.3
32	BA	146	GLY	2.3
19	AR	20	GLY	2.3
29	B1	718	G	2.3

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Mol	Chain	Res	Type	RSRZ
36	DE	40	HIS	2.3
29	B1	981	U	2.3
9	AH	17	ALA	2.3
14	CM	69	LYS	2.3
1	C1	1710	U	2.3
1	C1	1200	G	2.3
29	D1	2569	A	2.3
32	BA	52	SER	2.3
1	A1	1677	C	2.3
32	BA	83	ASP	2.3
1	C1	272	U	2.3
2	AA	48	ILE	2.3
29	B1	2470	C	2.3
21	CT	50	ASP	2.2
29	B1	682	U	2.2
33	BB	25	GLY	2.2
29	D1	2469	G	2.2
1	A1	1702	A	2.2
48	DS	169	ALA	2.2
32	BA	113	SER	2.2
1	C1	135	A	2.2
1	C1	1694	A	2.2
29	D1	1643	A	2.2
21	CT	311	ARG	2.2
29	D1	718	G	2.2
3	CB	50	ILE	2.2
13	AL	73	MET	2.2
18	AQ	87	GLY	2.2
32	DA	51	GLY	2.2
29	B1	2397	A	2.2
29	D1	1027	A	2.2
1	C1	275	C	2.2
2	AA	27	ARG	2.2
12	AK	35	CYS	2.2
1	A1	1704	U	2.2
32	BA	10	ARG	2.2
32	BA	22	GLU	2.2
37	DF	86	ALA	2.2
55	BZ	105	ALA	2.2
3	CB	248	SER	2.2
21	AT	24	ALA	2.2
33	DB	153	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
29	D1	2258	U	2.2
44	DO	64	VAL	2.2
52	DW	120	LYS	2.2
5	CD	152	GLY	2.2
29	D1	830	A	2.2
33	DB	43	GLY	2.2
1	C1	1114	G	2.2
29	B1	1579	C	2.1
18	CQ	99	ALA	2.1
1	C1	523	G	2.1
29	D1	2503	G	2.1
21	CT	214	ALA	2.1
31	D3	146	U	2.1
32	DA	5	THR	2.1
29	D1	135	C	2.1
21	AT	79	TYR	2.1
29	B1	2461	A	2.1
1	A1	667	U	2.1
6	AE	100	LYS	2.1
33	DB	60	LYS	2.1
44	DO	115	VAL	2.1
11	CJ	142	TYR	2.1
32	DA	159	LEU	2.1
2	AA	49	ASN	2.1
9	CH	15	GLY	2.1
1	A1	1364	G	2.1
1	C1	1150	G	2.1
9	CH	12	GLN	2.1
29	D1	2479	C	2.1
33	DB	140	ASN	2.1
32	DA	191	VAL	2.1
29	B1	2497	U	2.1
1	C1	1703	C	2.1
32	DA	74	VAL	2.1
18	CQ	58	ARG	2.1
48	DS	165	LYS	2.1
48	DS	179	GLU	2.1
54	BY	23	GLY	2.1
55	BZ	95	ALA	2.1
29	B1	1580	A	2.1
21	AT	55	GLY	2.1
21	AT	158	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
1	C1	277	U	2.1
33	BB	234	LYS	2.1
1	C1	1702	A	2.1
39	BH	205	ALA	2.1
1	C1	779	U	2.1
29	D1	1558	A	2.0
39	BH	198	ALA	2.0
29	D1	3270	U	2.0
15	AN	33	GLN	2.0
29	D1	610	G	2.0
29	D1	2267	C	2.0
32	BA	11	GLU	2.0
29	B1	262	U	2.0
29	D1	2266	U	2.0
55	DZ	21	GLY	2.0
1	A1	1692	G	2.0
21	CT	129	LYS	2.0
39	DH	182	GLY	2.0
1	A1	718	U	2.0
1	C1	663	U	2.0
9	CH	105	LEU	2.0
21	AT	45	TRP	2.0
48	DS	181	ARG	2.0
7	CF	113	PRO	2.0
29	B1	2496	C	2.0
54	DY	52	TYR	2.0
9	AH	10	ASN	2.0
29	B1	2208	A	2.0
61	Bf	11	TYR	2.0

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

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands i

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	B2	209	7/7	0.66	0.34	148,148,148,148	7
74	OHX	C1	1972	7/7	0.66	0.30	216,216,216,216	7
74	OHX	D1	3593	7/7	0.69	0.53	99,99,99,99	7
74	OHX	D1	3542	7/7	0.70	0.38	198,198,198,198	7
74	OHX	D3	211	7/7	0.70	0.41	137,137,137,137	7
74	OHX	D1	3525	7/7	0.72	0.27	106,106,106,106	7
74	OHX	C1	1950	7/7	0.72	0.28	215,215,215,215	7
74	OHX	C1	1970	7/7	0.73	0.30	176,176,176,176	7
74	OHX	A1	1930	7/7	0.73	0.43	228,228,228,228	7
74	OHX	D3	206	7/7	0.73	0.36	77,77,77,77	7
74	OHX	B1	3602	7/7	0.73	0.44	75,75,75,75	7
74	OHX	D3	205	7/7	0.74	0.25	199,199,199,199	7
74	OHX	A1	1983	7/7	0.74	0.59	122,122,122,122	7
74	OHX	B1	3571	7/7	0.74	0.48	176,176,176,176	7
74	OHX	C1	1978	7/7	0.75	0.29	145,145,145,145	7
74	OHX	D1	3551	7/7	0.76	0.30	120,120,120,120	7
74	OHX	D1	3573	7/7	0.76	0.43	135,135,135,135	7
74	OHX	C1	1957	7/7	0.76	0.38	226,226,226,226	7
74	OHX	C1	1979	7/7	0.77	0.33	190,190,190,190	7
74	OHX	B1	3552	7/7	0.77	0.32	138,138,138,138	7
74	OHX	D1	3605	7/7	0.77	0.47	93,93,93,93	7
74	OHX	D1	3522	7/7	0.78	0.27	133,133,133,133	7
74	OHX	A1	1999	7/7	0.78	0.38	99,99,99,99	7
74	OHX	D3	208	7/7	0.78	0.28	135,135,135,135	7
74	OHX	D1	3566	7/7	0.78	0.36	88,88,88,88	7
74	OHX	D1	3618	7/7	0.79	0.34	62,62,62,62	7
74	OHX	D1	3556	7/7	0.79	0.24	146,146,146,146	7
74	OHX	D1	3586	7/7	0.79	0.62	115,115,115,115	7
74	OHX	D1	3564	7/7	0.79	0.38	85,85,85,85	7
74	OHX	B1	3548	7/7	0.79	0.60	153,153,153,153	7
74	OHX	DE	301	7/7	0.79	0.24	302,302,302,302	7
74	OHX	C1	1988	7/7	0.80	0.27	146,146,146,146	7
74	OHX	C1	1998	7/7	0.80	0.62	129,129,129,129	7
74	OHX	B3	206	7/7	0.80	0.37	201,201,201,201	7
74	OHX	C1	1976	7/7	0.80	0.37	118,118,118,118	7
74	OHX	D1	3535	7/7	0.80	0.32	142,142,142,142	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	B1	3535	7/7	0.81	0.28	170,170,170,170	7
74	OHX	D1	3578	7/7	0.81	0.70	222,222,222,222	7
74	OHX	C1	1958	7/7	0.81	0.23	153,153,153,153	7
74	OHX	D1	3589	7/7	0.81	0.32	56,56,56,56	7
74	OHX	A1	1974	7/7	0.81	0.40	136,136,136,136	7
74	OHX	CS	102	7/7	0.81	0.35	184,184,184,184	7
74	OHX	B1	3577	7/7	0.82	0.47	148,148,148,148	7
74	OHX	C1	1962	7/7	0.82	0.30	180,180,180,180	7
74	OHX	B2	208	7/7	0.82	0.48	152,152,152,152	7
74	OHX	C1	1974	7/7	0.83	0.34	118,118,118,118	7
74	OHX	A1	1953	7/7	0.83	0.39	122,122,122,122	7
74	OHX	D1	3609	7/7	0.83	0.45	73,73,73,73	7
74	OHX	B1	3554	7/7	0.83	0.69	156,156,156,156	7
74	OHX	A1	1962	7/7	0.83	0.49	193,193,193,193	7
74	OHX	D1	3541	7/7	0.83	0.31	141,141,141,141	7
74	OHX	A1	1998	7/7	0.83	0.32	125,125,125,125	7
74	OHX	D1	3587	7/7	0.83	0.58	111,111,111,111	7
74	OHX	B1	3599	7/7	0.83	0.28	87,87,87,87	7
74	OHX	D1	3590	7/7	0.84	0.40	55,55,55,55	7
74	OHX	B1	3601	7/7	0.84	0.36	158,158,158,158	7
74	OHX	D1	3599	7/7	0.84	0.36	93,93,93,93	7
74	OHX	C1	1952	7/7	0.84	0.21	239,239,239,239	7
74	OHX	B1	3568	7/7	0.84	0.22	94,94,94,94	7
74	OHX	A1	2000	7/7	0.84	0.45	75,75,75,75	7
74	OHX	D1	3580	7/7	0.84	0.29	114,114,114,114	7
74	OHX	D1	3583	7/7	0.84	0.28	88,88,88,88	7
74	OHX	B1	3514	7/7	0.84	0.30	123,123,123,123	7
74	OHX	B2	210	7/7	0.84	0.43	131,131,131,131	7
74	OHX	B1	3555	7/7	0.84	0.30	103,103,103,103	7
74	OHX	B1	3580	7/7	0.85	0.38	84,84,84,84	7
74	OHX	A1	1993	7/7	0.85	0.33	108,108,108,108	7
74	OHX	B1	3600	7/7	0.85	0.34	135,135,135,135	7
74	OHX	C1	1990	7/7	0.85	0.27	105,105,105,105	7
74	OHX	C1	1993	7/7	0.85	0.28	93,93,93,93	7
74	OHX	C1	1968	7/7	0.85	0.30	103,103,103,103	7
74	OHX	B1	3560	7/7	0.85	0.33	105,105,105,105	7
74	OHX	D1	3488	7/7	0.85	0.20	141,141,141,141	7
74	OHX	D1	3509	7/7	0.85	0.33	120,120,120,120	7
74	OHX	C1	1938	7/7	0.85	0.30	191,191,191,191	7
74	OHX	B1	3562	7/7	0.85	0.59	130,130,130,130	7
74	OHX	B1	3621	7/7	0.85	0.36	83,83,83,83	7
74	OHX	D1	3553	7/7	0.86	0.25	145,145,145,145	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	B1	3511	7/7	0.86	0.39	160,160,160,160	7
74	OHX	D1	3596	7/7	0.86	0.21	114,114,114,114	7
74	OHX	D1	3490	7/7	0.86	0.36	167,167,167,167	7
74	OHX	D1	3600	7/7	0.86	0.30	96,96,96,96	7
74	OHX	D1	3507	7/7	0.86	0.28	133,133,133,133	7
74	OHX	A1	1958	7/7	0.86	0.19	116,116,116,116	7
74	OHX	A1	1990	7/7	0.86	0.28	117,117,117,117	7
74	OHX	C1	1966	7/7	0.86	0.42	127,127,127,127	7
74	OHX	A1	2002	7/7	0.86	0.43	185,185,185,185	7
74	OHX	B1	3614	7/7	0.86	0.34	163,163,163,163	7
74	OHX	B1	3561	7/7	0.86	0.50	280,280,280,280	7
74	OHX	B2	206	7/7	0.86	0.21	128,128,128,128	7
74	OHX	DO	301	7/7	0.86	0.23	285,285,285,285	7
74	OHX	A1	1978	7/7	0.87	0.36	139,139,139,139	7
74	OHX	C1	1954	7/7	0.87	0.25	116,116,116,116	7
74	OHX	D1	3529	7/7	0.87	0.28	130,130,130,130	7
74	OHX	B1	3581	7/7	0.87	0.34	106,106,106,106	7
74	OHX	B1	3583	7/7	0.87	0.28	126,126,126,126	7
74	OHX	C1	1959	7/7	0.87	0.29	166,166,166,166	7
74	OHX	B1	3539	7/7	0.87	0.33	137,137,137,137	7
74	OHX	B1	3493	7/7	0.87	0.21	135,135,135,135	7
74	OHX	B1	3526	7/7	0.87	0.25	174,174,174,174	7
74	OHX	D1	3563	7/7	0.87	0.35	99,99,99,99	7
74	OHX	D1	3616	7/7	0.87	0.46	150,150,150,150	7
74	OHX	C1	1969	7/7	0.87	0.30	133,133,133,133	7
74	OHX	D2	208	7/7	0.87	0.39	105,105,105,105	7
74	OHX	D2	209	7/7	0.87	0.32	74,74,74,74	7
74	OHX	BO	301	7/7	0.87	0.38	110,110,110,110	7
74	OHX	B1	3529	7/7	0.87	0.14	171,171,171,171	7
74	OHX	B1	3533	7/7	0.87	0.34	149,149,149,149	7
74	OHX	D1	3515	7/7	0.87	0.25	173,173,173,173	7
74	OHX	D1	3521	7/7	0.87	0.24	163,163,163,163	7
74	OHX	D1	3585	7/7	0.87	0.24	102,102,102,102	7
74	OHX	C1	1945	7/7	0.88	0.24	122,122,122,122	7
74	OHX	A1	1985	7/7	0.88	0.33	86,86,86,86	7
74	OHX	D1	3550	7/7	0.88	0.45	100,100,100,100	7
74	OHX	D1	3481	7/7	0.88	0.29	137,137,137,137	7
74	OHX	D1	3485	7/7	0.88	0.29	90,90,90,90	7
74	OHX	D1	3555	7/7	0.88	0.31	150,150,150,150	7
74	OHX	B2	204	7/7	0.88	0.23	132,132,132,132	7
74	OHX	D1	3558	7/7	0.88	0.30	127,127,127,127	7
74	OHX	A1	1951	7/7	0.88	0.29	259,259,259,259	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	D1	3611	7/7	0.88	0.36	82,82,82,82	7
74	OHX	B1	3544	7/7	0.88	0.30	130,130,130,130	7
74	OHX	A1	1925	7/7	0.88	0.37	165,165,165,165	7
74	OHX	D1	3624	7/7	0.88	0.42	95,95,95,95	7
74	OHX	D1	3569	7/7	0.88	0.29	88,88,88,88	7
74	OHX	D1	3572	7/7	0.88	0.34	91,91,91,91	7
74	OHX	B1	3474	7/7	0.88	0.26	179,179,179,179	7
74	OHX	C1	1985	7/7	0.88	0.30	153,153,153,153	7
74	OHX	C1	1987	7/7	0.88	0.36	108,108,108,108	7
74	OHX	A1	1964	7/7	0.88	0.74	85,85,85,85	7
74	OHX	B1	3603	7/7	0.88	0.29	63,63,63,63	7
74	OHX	DJ	301	7/7	0.88	0.29	138,138,138,138	7
74	OHX	B1	3534	7/7	0.88	0.27	128,128,128,128	7
74	OHX	A1	1970	7/7	0.89	0.23	66,66,66,66	7
74	OHX	A1	1955	7/7	0.89	0.34	110,110,110,110	7
74	OHX	D1	3524	7/7	0.89	0.28	162,162,162,162	7
74	OHX	B1	3595	7/7	0.89	0.32	73,73,73,73	7
74	OHX	D1	3527	7/7	0.89	0.19	146,146,146,146	7
74	OHX	B1	3597	7/7	0.89	0.35	137,137,137,137	7
74	OHX	C1	1991	7/7	0.89	0.28	77,77,77,77	7
74	OHX	C1	1967	7/7	0.89	0.25	100,100,100,100	7
74	OHX	B1	3538	7/7	0.89	0.28	93,93,93,93	7
74	OHX	D1	3597	7/7	0.89	0.65	222,222,222,222	7
74	OHX	D1	3546	7/7	0.89	0.32	105,105,105,105	7
74	OHX	D1	3548	7/7	0.89	0.25	77,77,77,77	7
74	OHX	B1	3523	7/7	0.89	0.30	150,150,150,150	7
74	OHX	D1	3606	7/7	0.89	0.24	63,63,63,63	7
74	OHX	D1	3460	7/7	0.89	0.22	138,138,138,138	7
74	OHX	B1	3541	7/7	0.89	0.28	117,117,117,117	7
74	OHX	D1	3484	7/7	0.89	0.22	116,116,116,116	7
74	OHX	A1	1946	7/7	0.89	0.19	153,153,153,153	7
74	OHX	D1	3622	7/7	0.89	0.30	142,142,142,142	7
74	OHX	D1	3557	7/7	0.89	0.25	148,148,148,148	7
74	OHX	D1	3625	7/7	0.89	0.24	100,100,100,100	7
74	OHX	B1	3545	7/7	0.89	0.34	82,82,82,82	7
74	OHX	A1	1997	7/7	0.89	0.39	100,100,100,100	7
74	OHX	D1	3495	7/7	0.89	0.17	160,160,160,160	7
74	OHX	D1	3503	7/7	0.89	0.25	120,120,120,120	7
74	OHX	D1	3506	7/7	0.89	0.32	131,131,131,131	7
74	OHX	D3	210	7/7	0.89	0.22	74,74,74,74	7
74	OHX	B1	3579	7/7	0.89	0.30	47,47,47,47	7
74	OHX	A1	1966	7/7	0.89	0.42	120,120,120,120	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
74	OHX	D1	3577	7/7	0.89	0.25	198,198,198,198	7
74	OHX	C1	1980	7/7	0.89	0.34	162,162,162,162	7
74	OHX	D1	3499	7/7	0.90	0.24	114,114,114,114	7
74	OHX	A1	1989	7/7	0.90	0.26	70,70,70,70	7
74	OHX	B1	3610	7/7	0.90	0.28	68,68,68,68	7
74	OHX	B1	3565	7/7	0.90	0.26	120,120,120,120	7
74	OHX	D1	3508	7/7	0.90	0.22	88,88,88,88	7
74	OHX	B1	3487	7/7	0.90	0.23	116,116,116,116	7
74	OHX	B1	3490	7/7	0.90	0.24	109,109,109,109	7
74	OHX	C1	1973	7/7	0.90	0.21	95,95,95,95	7
74	OHX	B2	205	7/7	0.90	0.18	159,159,159,159	7
74	OHX	B1	3572	7/7	0.90	0.36	56,56,56,56	7
74	OHX	B2	207	7/7	0.90	0.49	104,104,104,104	7
74	OHX	D1	3595	7/7	0.90	0.35	90,90,90,90	7
74	OHX	B1	3575	7/7	0.90	0.35	123,123,123,123	7
74	OHX	A1	1947	7/7	0.90	0.30	143,143,143,143	7
74	OHX	D1	3531	7/7	0.90	0.32	136,136,136,136	7
74	OHX	A1	1968	7/7	0.90	0.29	180,180,180,180	7
74	OHX	D1	3536	7/7	0.90	0.25	140,140,140,140	7
74	OHX	A1	1943	7/7	0.90	0.19	176,176,176,176	7
74	OHX	B1	3515	7/7	0.90	0.39	119,119,119,119	7
74	OHX	B1	3518	7/7	0.90	0.22	105,105,105,105	7
74	OHX	C1	1939	7/7	0.90	0.28	103,103,103,103	7
74	OHX	D1	3617	7/7	0.90	0.26	50,50,50,50	7
74	OHX	B1	3584	7/7	0.90	0.48	99,99,99,99	7
74	OHX	D1	3620	7/7	0.90	0.27	78,78,78,78	7
74	OHX	B1	3591	7/7	0.90	0.30	55,55,55,55	7
74	OHX	D1	3552	7/7	0.90	0.39	115,115,115,115	7
74	OHX	B1	3592	7/7	0.90	0.40	106,106,106,106	7
74	OHX	D2	204	7/7	0.90	0.20	116,116,116,116	7
74	OHX	A1	1939	7/7	0.90	0.19	100,100,100,100	7
74	OHX	D1	3466	7/7	0.90	0.22	103,103,103,103	7
74	OHX	D1	3475	7/7	0.90	0.34	142,142,142,142	7
74	OHX	A1	1963	7/7	0.90	0.34	137,137,137,137	7
74	OHX	D1	3559	7/7	0.90	0.21	116,116,116,116	7
74	OHX	A1	1954	7/7	0.90	0.20	153,153,153,153	7
74	OHX	B1	3557	7/7	0.90	0.49	46,46,46,46	7
74	OHX	B1	3530	7/7	0.90	0.31	138,138,138,138	7
74	OHX	C1	1965	7/7	0.90	0.42	101,101,101,101	7
74	OHX	A1	1965	7/7	0.90	0.25	114,114,114,114	7
74	OHX	B1	3546	7/7	0.91	0.41	148,148,148,148	7
74	OHX	D1	3539	7/7	0.91	0.24	69,69,69,69	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	D1	3594	7/7	0.91	0.30	30,30,30,30	7
74	OHX	D1	3473	7/7	0.91	0.16	123,123,123,123	7
74	OHX	B1	3593	7/7	0.91	0.24	46,46,46,46	7
74	OHX	D1	3476	7/7	0.91	0.28	100,100,100,100	7
74	OHX	D1	3477	7/7	0.91	0.15	142,142,142,142	7
74	OHX	B1	3594	7/7	0.91	0.33	100,100,100,100	7
74	OHX	D1	3601	7/7	0.91	0.57	99,99,99,99	7
74	OHX	D1	3602	7/7	0.91	0.31	109,109,109,109	7
74	OHX	B1	3502	7/7	0.91	0.28	166,166,166,166	7
74	OHX	B1	3510	7/7	0.91	0.33	153,153,153,153	7
74	OHX	A1	1935	7/7	0.91	0.23	156,156,156,156	7
74	OHX	A1	1933	7/7	0.91	0.20	152,152,152,152	7
74	OHX	B1	3556	7/7	0.91	0.25	104,104,104,104	7
74	OHX	A1	1969	7/7	0.91	0.26	87,87,87,87	7
74	OHX	A1	1994	7/7	0.91	0.25	123,123,123,123	7
74	OHX	B1	3607	7/7	0.91	0.32	44,44,44,44	7
74	OHX	A1	1996	7/7	0.91	0.24	100,100,100,100	7
74	OHX	B1	3613	7/7	0.91	0.46	93,93,93,93	7
74	OHX	C1	1956	7/7	0.91	0.31	170,170,170,170	7
74	OHX	D1	3513	7/7	0.91	0.27	160,160,160,160	7
74	OHX	A1	1984	7/7	0.91	0.21	65,65,65,65	7
74	OHX	B1	3615	7/7	0.91	0.34	49,49,49,49	7
74	OHX	B1	3620	7/7	0.91	0.31	58,58,58,58	7
74	OHX	B1	3586	7/7	0.91	0.35	116,116,116,116	7
74	OHX	C1	1999	7/7	0.91	0.26	41,41,41,41	7
74	OHX	C1	2000	7/7	0.91	0.38	82,82,82,82	7
74	OHX	B1	3589	7/7	0.91	0.50	85,85,85,85	7
74	OHX	D1	3457	7/7	0.91	0.32	130,130,130,130	7
74	OHX	D1	3532	7/7	0.91	0.26	102,102,102,102	7
74	OHX	A1	1942	7/7	0.91	0.30	97,97,97,97	7
74	OHX	Dd	102	7/7	0.91	0.23	118,118,118,118	7
74	OHX	C1	1977	7/7	0.92	0.26	102,102,102,102	7
74	OHX	A1	1938	7/7	0.92	0.19	155,155,155,155	7
74	OHX	B1	3504	7/7	0.92	0.35	140,140,140,140	7
74	OHX	D1	3575	7/7	0.92	0.29	84,84,84,84	7
74	OHX	B1	3604	7/7	0.92	0.30	53,53,53,53	7
74	OHX	D1	3505	7/7	0.92	0.36	160,160,160,160	7
74	OHX	C1	1981	7/7	0.92	0.38	87,87,87,87	7
74	OHX	C1	1982	7/7	0.92	0.27	106,106,106,106	7
74	OHX	B1	3506	7/7	0.92	0.29	53,53,53,53	7
74	OHX	C1	1947	7/7	0.92	0.28	70,70,70,70	7
74	OHX	B1	3507	7/7	0.92	0.26	104,104,104,104	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	D1	3588	7/7	0.92	0.24	336,336,336,336	7
74	OHX	C1	1989	7/7	0.92	0.53	114,114,114,114	7
74	OHX	D1	3516	7/7	0.92	0.33	138,138,138,138	7
74	OHX	D1	3519	7/7	0.92	0.37	111,111,111,111	7
74	OHX	B1	3611	7/7	0.92	0.33	68,68,68,68	7
74	OHX	B1	3612	7/7	0.92	0.28	45,45,45,45	7
74	OHX	C1	1992	7/7	0.92	0.41	76,76,76,76	7
74	OHX	B1	3559	7/7	0.92	0.23	68,68,68,68	7
74	OHX	D1	3598	7/7	0.92	0.28	65,65,65,65	7
74	OHX	D1	3526	7/7	0.92	0.18	158,158,158,158	7
74	OHX	C1	1994	7/7	0.92	0.29	47,47,47,47	7
74	OHX	C1	1995	7/7	0.92	0.32	51,51,51,51	7
74	OHX	C1	1996	7/7	0.92	0.43	86,86,86,86	7
74	OHX	C1	1997	7/7	0.92	0.24	36,36,36,36	7
74	OHX	A1	1981	7/7	0.92	0.26	128,128,128,128	7
74	OHX	B1	3588	7/7	0.92	0.32	78,78,78,78	7
74	OHX	D1	3610	7/7	0.92	0.47	94,94,94,94	7
74	OHX	B1	3617	7/7	0.92	0.38	90,90,90,90	7
74	OHX	A1	1952	7/7	0.92	0.32	110,110,110,110	7
74	OHX	CT	401	7/7	0.92	0.23	117,117,117,117	7
74	OHX	A1	1995	7/7	0.92	0.35	80,80,80,80	7
74	OHX	B1	3563	7/7	0.92	0.19	152,152,152,152	7
74	OHX	D1	3621	7/7	0.92	0.25	67,67,67,67	7
74	OHX	A1	1971	7/7	0.92	0.21	94,94,94,94	7
74	OHX	D1	3469	7/7	0.92	0.23	152,152,152,152	7
74	OHX	D1	3471	7/7	0.92	0.28	260,260,260,260	7
74	OHX	B1	3566	7/7	0.92	0.26	107,107,107,107	7
74	OHX	D1	3554	7/7	0.92	0.26	122,122,122,122	7
74	OHX	A1	1932	7/7	0.92	0.20	142,142,142,142	7
74	OHX	B1	3520	7/7	0.92	0.34	109,109,109,109	7
74	OHX	C1	1971	7/7	0.92	0.29	131,131,131,131	7
74	OHX	A1	1977	7/7	0.92	0.30	119,119,119,119	7
74	OHX	D3	209	7/7	0.92	0.20	127,127,127,127	7
74	OHX	D1	3482	7/7	0.92	0.21	107,107,107,107	7
74	OHX	D1	3562	7/7	0.92	0.18	121,121,121,121	7
74	OHX	B1	3525	7/7	0.92	0.25	54,54,54,54	7
74	OHX	B1	3498	7/7	0.92	0.32	83,83,83,83	7
74	OHX	B3	209	7/7	0.92	0.30	99,99,99,99	7
74	OHX	D1	3568	7/7	0.92	0.35	92,92,92,92	7
74	OHX	D1	3498	7/7	0.93	0.28	103,103,103,103	7
74	OHX	B1	3608	7/7	0.93	0.58	75,75,75,75	7
74	OHX	D1	3500	7/7	0.93	0.30	139,139,139,139	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	B1	3609	7/7	0.93	0.35	80,80,80,80	7
74	OHX	B3	210	7/7	0.93	0.40	64,64,64,64	7
74	OHX	B3	212	7/7	0.93	0.21	98,98,98,98	7
74	OHX	B1	3469	7/7	0.93	0.33	169,169,169,169	7
74	OHX	C1	1934	7/7	0.93	0.20	141,141,141,141	7
74	OHX	A1	1940	7/7	0.93	0.34	166,166,166,166	7
74	OHX	D1	3433	7/7	0.93	0.23	128,128,128,128	7
74	OHX	B1	3550	7/7	0.93	0.19	137,137,137,137	7
74	OHX	C1	1942	7/7	0.93	0.20	112,112,112,112	7
74	OHX	D1	3613	7/7	0.93	0.33	57,57,57,57	7
74	OHX	B1	3476	7/7	0.93	0.20	102,102,102,102	7
74	OHX	D1	3467	7/7	0.93	0.28	129,129,129,129	7
74	OHX	B1	3532	7/7	0.93	0.43	172,172,172,172	7
74	OHX	B1	3573	7/7	0.93	0.23	111,111,111,111	7
74	OHX	A1	1988	7/7	0.93	0.36	25,25,25,25	7
74	OHX	B1	3576	7/7	0.93	0.21	86,86,86,86	7
74	OHX	A1	1924	7/7	0.93	0.21	150,150,150,150	7
74	OHX	B2	203	7/7	0.93	0.36	174,174,174,174	7
74	OHX	D2	202	7/7	0.93	0.25	106,106,106,106	7
74	OHX	D1	3480	7/7	0.93	0.19	127,127,127,127	7
74	OHX	D2	207	7/7	0.93	0.22	111,111,111,111	7
74	OHX	D1	3579	7/7	0.93	0.30	44,44,44,44	7
74	OHX	A1	1982	7/7	0.93	0.19	148,148,148,148	7
74	OHX	D1	3534	7/7	0.93	0.41	142,142,142,142	7
74	OHX	B1	3517	7/7	0.93	0.30	111,111,111,111	7
74	OHX	D1	3483	7/7	0.93	0.23	98,98,98,98	7
74	OHX	A1	1991	7/7	0.93	0.31	98,98,98,98	7
74	OHX	A1	1950	7/7	0.93	0.17	127,127,127,127	7
74	OHX	A1	1921	7/7	0.93	0.27	148,148,148,148	7
74	OHX	D1	3545	7/7	0.93	0.42	77,77,77,77	7
74	OHX	B1	3606	7/7	0.93	0.38	74,74,74,74	7
74	OHX	D1	3547	7/7	0.93	0.19	64,64,64,64	7
74	OHX	B1	3505	7/7	0.93	0.17	134,134,134,134	7
74	OHX	B1	3549	7/7	0.94	0.30	86,86,86,86	7
74	OHX	D1	3493	7/7	0.94	0.17	126,126,126,126	7
74	OHX	C1	1975	7/7	0.94	0.24	119,119,119,119	7
74	OHX	B1	3585	7/7	0.94	0.29	197,197,197,197	7
74	OHX	A1	1959	7/7	0.94	0.26	110,110,110,110	7
74	OHX	A1	1944	7/7	0.94	0.21	108,108,108,108	7
74	OHX	D1	3501	7/7	0.94	0.17	102,102,102,102	7
74	OHX	B1	3488	7/7	0.94	0.18	104,104,104,104	7
74	OHX	B1	3521	7/7	0.94	0.25	107,107,107,107	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	D1	3581	7/7	0.94	0.26	60,60,60,60	7
74	OHX	A1	1941	7/7	0.94	0.19	124,124,124,124	7
74	OHX	B3	208	7/7	0.94	0.19	79,79,79,79	7
74	OHX	C1	1984	7/7	0.94	0.27	78,78,78,78	7
74	OHX	B1	3524	7/7	0.94	0.24	97,97,97,97	7
74	OHX	D1	3510	7/7	0.94	0.23	108,108,108,108	7
74	OHX	C1	1986	7/7	0.94	0.20	169,169,169,169	7
74	OHX	D1	3514	7/7	0.94	0.30	173,173,173,173	7
74	OHX	D1	3591	7/7	0.94	0.22	43,43,43,43	7
74	OHX	B1	3558	7/7	0.94	0.21	130,130,130,130	7
74	OHX	B1	3491	7/7	0.94	0.31	99,99,99,99	7
74	OHX	BC	401	7/7	0.94	0.21	66,66,66,66	7
74	OHX	A1	1973	7/7	0.94	0.28	101,101,101,101	7
74	OHX	Bd	102	7/7	0.94	0.19	73,73,73,73	7
74	OHX	C1	1919	7/7	0.94	0.26	159,159,159,159	7
74	OHX	C1	1933	7/7	0.94	0.21	111,111,111,111	7
74	OHX	B1	3598	7/7	0.94	0.22	100,100,100,100	7
74	OHX	C1	1935	7/7	0.94	0.17	93,93,93,93	7
74	OHX	D1	3528	7/7	0.94	0.35	96,96,96,96	7
74	OHX	D1	3604	7/7	0.94	0.14	44,44,44,44	7
74	OHX	B1	3527	7/7	0.94	0.21	84,84,84,84	7
74	OHX	B1	3497	7/7	0.94	0.24	103,103,103,103	7
74	OHX	A1	1987	7/7	0.94	0.23	72,72,72,72	7
74	OHX	A1	1927	7/7	0.94	0.22	139,139,139,139	7
74	OHX	B1	3503	7/7	0.94	0.18	86,86,86,86	7
74	OHX	C1	1948	7/7	0.94	0.20	117,117,117,117	7
74	OHX	D1	3614	7/7	0.94	0.49	83,83,83,83	7
74	OHX	D1	3538	7/7	0.94	0.25	87,87,87,87	7
74	OHX	C1	1949	7/7	0.94	0.19	97,97,97,97	7
74	OHX	B1	3567	7/7	0.94	0.10	126,126,126,126	7
74	OHX	D1	3454	7/7	0.94	0.19	117,117,117,117	7
74	OHX	A1	1948	7/7	0.94	0.27	106,106,106,106	7
74	OHX	B1	3569	7/7	0.94	0.18	95,95,95,95	7
74	OHX	A1	1949	7/7	0.94	0.20	101,101,101,101	7
74	OHX	AT	401	7/7	0.94	0.36	207,207,207,207	7
74	OHX	B1	3437	7/7	0.94	0.24	156,156,156,156	7
74	OHX	D2	203	7/7	0.94	0.25	94,94,94,94	7
74	OHX	B1	3574	7/7	0.94	0.44	136,136,136,136	7
74	OHX	D2	205	7/7	0.94	0.22	84,84,84,84	7
74	OHX	B1	3509	7/7	0.94	0.23	124,124,124,124	7
74	OHX	C1	1963	7/7	0.94	0.27	94,94,94,94	7
74	OHX	B1	3543	7/7	0.94	0.15	102,102,102,102	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
74	OHX	B1	3438	7/7	0.94	0.17	168,168,168,168	7
74	OHX	B1	3578	7/7	0.94	0.24	112,112,112,112	7
74	OHX	D3	207	7/7	0.94	0.23	123,123,123,123	7
74	OHX	A1	1980	7/7	0.94	0.19	136,136,136,136	7
74	OHX	B1	3619	7/7	0.94	0.22	85,85,85,85	7
74	OHX	B1	3470	7/7	0.94	0.19	122,122,122,122	7
74	OHX	B1	3547	7/7	0.94	0.28	117,117,117,117	7
74	OHX	B1	3582	7/7	0.94	0.27	83,83,83,83	7
74	OHX	A1	1922	7/7	0.94	0.24	133,133,133,133	7
74	OHX	D1	3489	7/7	0.94	0.32	75,75,75,75	7
74	OHX	DO	302	7/7	0.94	0.24	77,77,77,77	7
74	OHX	D1	3567	7/7	0.94	0.14	106,106,106,106	7
74	OHX	D1	3512	7/7	0.95	0.20	108,108,108,108	7
74	OHX	A1	1926	7/7	0.95	0.24	87,87,87,87	7
74	OHX	A1	1960	7/7	0.95	0.38	70,70,70,70	7
74	OHX	A1	1915	7/7	0.95	0.18	129,129,129,129	7
74	OHX	CI	201	7/7	0.95	0.31	143,143,143,143	7
74	OHX	D1	3517	7/7	0.95	0.29	126,126,126,126	7
74	OHX	B1	3522	7/7	0.95	0.16	129,129,129,129	7
74	OHX	B1	3494	7/7	0.95	0.18	118,118,118,118	7
74	OHX	B3	203	7/7	0.95	0.21	140,140,140,140	7
74	OHX	D1	3523	7/7	0.95	0.19	106,106,106,106	7
74	OHX	B1	3446	7/7	0.95	0.23	113,113,113,113	7
74	OHX	B3	207	7/7	0.95	0.18	68,68,68,68	7
74	OHX	D1	3459	7/7	0.95	0.21	96,96,96,96	7
74	OHX	B1	3448	7/7	0.95	0.19	124,124,124,124	7
74	OHX	B1	3553	7/7	0.95	0.19	66,66,66,66	7
74	OHX	B1	3457	7/7	0.95	0.23	147,147,147,147	7
74	OHX	D1	3530	7/7	0.95	0.19	51,51,51,51	7
74	OHX	D1	3468	7/7	0.95	0.26	130,130,130,130	7
74	OHX	B1	3459	7/7	0.95	0.16	160,160,160,160	7
74	OHX	D1	3533	7/7	0.95	0.27	92,92,92,92	7
74	OHX	B1	3528	7/7	0.95	0.37	158,158,158,158	7
74	OHX	D1	3472	7/7	0.95	0.21	185,185,185,185	7
74	OHX	D1	3603	7/7	0.95	0.43	114,114,114,114	7
74	OHX	B1	3465	7/7	0.95	0.17	142,142,142,142	7
74	OHX	D1	3537	7/7	0.95	0.23	74,74,74,74	7
74	OHX	A1	1934	7/7	0.95	0.25	122,122,122,122	7
74	OHX	D1	3607	7/7	0.95	0.29	78,78,78,78	7
74	OHX	C1	1910	7/7	0.95	0.20	138,138,138,138	7
74	OHX	B1	3531	7/7	0.95	0.30	65,65,65,65	7
74	OHX	C1	1926	7/7	0.95	0.21	96,96,96,96	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	D1	3544	7/7	0.95	0.43	127,127,127,127	7
74	OHX	C1	1930	7/7	0.95	0.17	112,112,112,112	7
74	OHX	D1	3615	7/7	0.95	0.27	73,73,73,73	7
74	OHX	C1	1931	7/7	0.95	0.19	130,130,130,130	7
74	OHX	C1	1932	7/7	0.95	0.18	115,115,115,115	7
74	OHX	A1	1919	7/7	0.95	0.25	141,141,141,141	7
74	OHX	D1	3619	7/7	0.95	0.21	86,86,86,86	7
74	OHX	D1	3549	7/7	0.95	0.27	127,127,127,127	7
74	OHX	B1	3473	7/7	0.95	0.17	91,91,91,91	7
74	OHX	B1	3587	7/7	0.95	0.15	154,154,154,154	7
74	OHX	C1	1983	7/7	0.95	0.19	59,59,59,59	7
74	OHX	A1	1936	7/7	0.95	0.20	129,129,129,129	7
74	OHX	B1	3616	7/7	0.95	0.28	103,103,103,103	7
74	OHX	D1	3494	7/7	0.95	0.25	105,105,105,105	7
74	OHX	A1	2001	7/7	0.95	0.24	26,26,26,26	7
74	OHX	D1	3496	7/7	0.95	0.27	155,155,155,155	7
74	OHX	C1	1944	7/7	0.95	0.12	134,134,134,134	7
74	OHX	B1	3481	7/7	0.95	0.23	133,133,133,133	7
74	OHX	D1	3561	7/7	0.95	0.21	65,65,65,65	7
74	OHX	C1	1946	7/7	0.95	0.22	63,63,63,63	7
74	OHX	B1	3513	7/7	0.95	0.23	171,171,171,171	7
74	OHX	B1	3484	7/7	0.95	0.25	143,143,143,143	7
74	OHX	D1	3504	7/7	0.95	0.16	101,101,101,101	7
74	OHX	B2	202	7/7	0.95	0.19	106,106,106,106	7
74	OHX	A1	1937	7/7	0.95	0.15	158,158,158,158	7
74	OHX	C1	1951	7/7	0.95	0.15	152,152,152,152	7
74	OHX	AL	201	7/7	0.95	0.20	122,122,122,122	7
74	OHX	B1	3596	7/7	0.95	0.33	56,56,56,56	7
74	OHX	C1	1955	7/7	0.95	0.20	106,106,106,106	7
74	OHX	D1	3576	7/7	0.95	0.21	76,76,76,76	7
74	OHX	D1	3511	7/7	0.95	0.28	85,85,85,85	7
74	OHX	B1	3501	7/7	0.96	0.31	99,99,99,99	7
74	OHX	B1	3570	7/7	0.96	0.28	91,91,91,91	7
74	OHX	D1	3574	7/7	0.96	0.19	114,114,114,114	7
74	OHX	B1	3456	7/7	0.96	0.25	106,106,106,106	7
74	OHX	A1	1945	7/7	0.96	0.18	108,108,108,108	7
74	OHX	C1	1936	7/7	0.96	0.34	126,126,126,126	7
74	OHX	C1	1937	7/7	0.96	0.17	124,124,124,124	7
74	OHX	B1	3536	7/7	0.96	0.28	324,324,324,324	7
74	OHX	B1	3537	7/7	0.96	0.21	56,56,56,56	7
74	OHX	C1	1940	7/7	0.96	0.25	139,139,139,139	7
74	OHX	C1	1941	7/7	0.96	0.18	109,109,109,109	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
74	OHX	D1	3584	7/7	0.96	0.27	47,47,47,47	7
74	OHX	A1	1928	7/7	0.96	0.15	99,99,99,99	7
74	OHX	C1	1943	7/7	0.96	0.15	141,141,141,141	7
74	OHX	B1	3461	7/7	0.96	0.19	101,101,101,101	7
74	OHX	B1	3462	7/7	0.96	0.21	90,90,90,90	7
74	OHX	B1	3542	7/7	0.96	0.38	64,64,64,64	7
74	OHX	D1	3518	7/7	0.96	0.21	108,108,108,108	7
74	OHX	B1	3463	7/7	0.96	0.16	137,137,137,137	7
74	OHX	D1	3592	7/7	0.96	0.23	118,118,118,118	7
74	OHX	D1	3520	7/7	0.96	0.18	109,109,109,109	7
74	OHX	C1	2001	7/7	0.96	0.25	130,130,130,130	7
74	OHX	B1	3618	7/7	0.96	0.24	109,109,109,109	7
74	OHX	A1	1957	7/7	0.96	0.18	129,129,129,129	7
74	OHX	A1	1929	7/7	0.96	0.14	114,114,114,114	7
74	OHX	A1	1908	7/7	0.96	0.24	96,96,96,96	7
74	OHX	B1	3512	7/7	0.96	0.22	113,113,113,113	7
74	OHX	B1	3472	7/7	0.96	0.25	132,132,132,132	7
74	OHX	D1	3458	7/7	0.96	0.17	103,103,103,103	7
74	OHX	A1	1986	7/7	0.96	0.18	98,98,98,98	7
74	OHX	A1	1972	7/7	0.96	0.17	87,87,87,87	7
74	OHX	D1	3461	7/7	0.96	0.18	128,128,128,128	7
74	OHX	D1	3462	7/7	0.96	0.16	114,114,114,114	7
74	OHX	D1	3463	7/7	0.96	0.18	140,140,140,140	7
74	OHX	D1	3464	7/7	0.96	0.18	92,92,92,92	7
74	OHX	B1	3551	7/7	0.96	0.43	84,84,84,84	7
74	OHX	B1	3516	7/7	0.96	0.21	136,136,136,136	7
74	OHX	A1	1923	7/7	0.96	0.17	98,98,98,98	7
74	OHX	D1	3612	7/7	0.96	0.23	36,36,36,36	7
74	OHX	C1	1960	7/7	0.96	0.13	111,111,111,111	7
74	OHX	C1	1961	7/7	0.96	0.18	101,101,101,101	7
74	OHX	D1	3540	7/7	0.96	0.20	85,85,85,85	7
74	OHX	B1	3590	7/7	0.96	0.21	69,69,69,69	7
74	OHX	B1	3479	7/7	0.96	0.35	145,145,145,145	7
74	OHX	A1	1917	7/7	0.96	0.14	130,130,130,130	7
74	OHX	B3	205	7/7	0.96	0.14	123,123,123,123	7
74	OHX	A1	1910	7/7	0.96	0.15	146,146,146,146	7
74	OHX	D1	3478	7/7	0.96	0.17	117,117,117,117	7
74	OHX	B1	3486	7/7	0.96	0.22	104,104,104,104	7
74	OHX	D1	3623	7/7	0.96	0.33	23,23,23,23	7
74	OHX	B1	3425	7/7	0.96	0.18	108,108,108,108	7
74	OHX	B1	3431	7/7	0.96	0.19	125,125,125,125	7
74	OHX	A1	1920	7/7	0.96	0.15	126,126,126,126	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	A1	1992	7/7	0.96	0.43	45,45,45,45	7
74	OHX	B1	3439	7/7	0.96	0.24	90,90,90,90	7
74	OHX	D1	3486	7/7	0.96	0.24	143,143,143,143	7
74	OHX	A1	1979	7/7	0.96	0.19	81,81,81,81	7
74	OHX	B1	3564	7/7	0.96	0.25	126,126,126,126	7
74	OHX	B1	3495	7/7	0.96	0.31	108,108,108,108	7
74	OHX	D1	3491	7/7	0.96	0.25	37,37,37,37	7
74	OHX	C1	1913	7/7	0.96	0.22	149,149,149,149	7
74	OHX	D1	3560	7/7	0.96	0.23	82,82,82,82	7
74	OHX	C1	1916	7/7	0.96	0.23	169,169,169,169	7
74	OHX	A1	1914	7/7	0.96	0.21	145,145,145,145	7
74	OHX	C1	1923	7/7	0.96	0.23	123,123,123,123	7
74	OHX	D1	3497	7/7	0.96	0.37	99,99,99,99	7
74	OHX	DC	401	7/7	0.96	0.23	93,93,93,93	7
74	OHX	B1	3455	7/7	0.96	0.20	134,134,134,134	7
74	OHX	C1	1927	7/7	0.96	0.14	149,149,149,149	7
74	OHX	B1	3605	7/7	0.96	0.26	52,52,52,52	7
74	OHX	B1	3500	7/7	0.96	0.15	116,116,116,116	7
74	OHX	D1	3570	7/7	0.96	0.30	49,49,49,49	7
74	OHX	Dg	101	7/7	0.96	0.16	69,69,69,69	7
74	OHX	B1	3483	7/7	0.97	0.28	71,71,71,71	7
74	OHX	D1	3406	7/7	0.97	0.13	107,107,107,107	0
74	OHX	D1	3413	7/7	0.97	0.23	114,114,114,114	7
74	OHX	D1	3416	7/7	0.97	0.16	108,108,108,108	7
74	OHX	D1	3425	7/7	0.97	0.16	126,126,126,126	7
74	OHX	B1	3443	7/7	0.97	0.21	134,134,134,134	7
74	OHX	D1	3435	7/7	0.97	0.18	92,92,92,92	7
74	OHX	D1	3439	7/7	0.97	0.23	107,107,107,107	7
74	OHX	D1	3443	7/7	0.97	0.16	96,96,96,96	7
74	OHX	D1	3447	7/7	0.97	0.20	142,142,142,142	7
74	OHX	D1	3448	7/7	0.97	0.21	107,107,107,107	7
74	OHX	D1	3451	7/7	0.97	0.22	112,112,112,112	7
74	OHX	D1	3453	7/7	0.97	0.24	124,124,124,124	7
74	OHX	B1	3485	7/7	0.97	0.23	110,110,110,110	7
74	OHX	B1	3444	7/7	0.97	0.15	111,111,111,111	7
74	OHX	A1	1911	7/7	0.97	0.20	112,112,112,112	7
74	OHX	A1	1975	7/7	0.97	0.17	67,67,67,67	7
74	OHX	C1	1905	7/7	0.97	0.13	114,114,114,114	7
74	OHX	C1	1908	7/7	0.97	0.15	104,104,104,104	7
74	OHX	C1	1909	7/7	0.97	0.14	130,130,130,130	7
74	OHX	B1	3489	7/7	0.97	0.11	129,129,129,129	7
74	OHX	C1	1912	7/7	0.97	0.15	117,117,117,117	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	D1	3465	7/7	0.97	0.16	101,101,101,101	7
74	OHX	B1	3449	7/7	0.97	0.18	105,105,105,105	7
74	OHX	C1	1915	7/7	0.97	0.21	120,120,120,120	7
74	OHX	B1	3451	7/7	0.97	0.17	86,86,86,86	7
74	OHX	B1	3492	7/7	0.97	0.14	70,70,70,70	7
74	OHX	D1	3470	7/7	0.97	0.15	84,84,84,84	7
74	OHX	C1	1921	7/7	0.97	0.09	145,145,145,145	7
74	OHX	C1	1922	7/7	0.97	0.18	142,142,142,142	7
74	OHX	D1	3608	7/7	0.97	0.23	14,14,14,14	7
74	OHX	B1	3453	7/7	0.97	0.24	127,127,127,127	7
74	OHX	D1	3474	7/7	0.97	0.30	118,118,118,118	7
74	OHX	C1	1924	7/7	0.97	0.14	82,82,82,82	7
74	OHX	B1	3454	7/7	0.97	0.33	123,123,123,123	7
74	OHX	D1	3543	7/7	0.97	0.19	45,45,45,45	7
74	OHX	A1	1976	7/7	0.97	0.19	51,51,51,51	7
74	OHX	C1	1928	7/7	0.97	0.17	165,165,165,165	7
74	OHX	D1	3479	7/7	0.97	0.24	99,99,99,99	7
74	OHX	B1	3496	7/7	0.97	0.15	122,122,122,122	7
74	OHX	A1	1956	7/7	0.97	0.12	159,159,159,159	7
74	OHX	A1	1912	7/7	0.97	0.16	125,125,125,125	7
74	OHX	B1	3499	7/7	0.97	0.16	123,123,123,123	7
74	OHX	A1	1967	7/7	0.97	0.30	96,96,96,96	7
74	OHX	A1	1905	7/7	0.97	0.17	118,118,118,118	0
74	OHX	B1	3410	7/7	0.97	0.19	111,111,111,111	0
74	OHX	D1	3487	7/7	0.97	0.24	103,103,103,103	7
74	OHX	A1	1909	7/7	0.97	0.16	115,115,115,115	7
74	OHX	B1	3426	7/7	0.97	0.17	111,111,111,111	7
74	OHX	B1	3467	7/7	0.97	0.15	119,119,119,119	7
74	OHX	B1	3468	7/7	0.97	0.28	89,89,89,89	7
74	OHX	B1	3429	7/7	0.97	0.17	93,93,93,93	7
74	OHX	D2	206	7/7	0.97	0.16	85,85,85,85	7
74	OHX	B1	3508	7/7	0.97	0.25	113,113,113,113	7
74	OHX	B1	3430	7/7	0.97	0.14	99,99,99,99	7
74	OHX	A1	1916	7/7	0.97	0.14	91,91,91,91	7
74	OHX	D3	203	7/7	0.97	0.17	86,86,86,86	7
74	OHX	D3	204	7/7	0.97	0.19	120,120,120,120	7
74	OHX	B1	3433	7/7	0.97	0.19	98,98,98,98	7
74	OHX	B1	3436	7/7	0.97	0.17	104,104,104,104	7
74	OHX	D1	3565	7/7	0.97	0.23	60,60,60,60	7
74	OHX	B1	3475	7/7	0.97	0.20	84,84,84,84	7
74	OHX	A1	1961	7/7	0.97	0.10	105,105,105,105	7
74	OHX	B1	3478	7/7	0.97	0.14	110,110,110,110	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
74	OHX	D1	3502	7/7	0.97	0.14	79,79,79,79	7
74	OHX	D3	212	7/7	0.97	0.27	71,71,71,71	7
74	OHX	A1	1906	7/7	0.97	0.15	97,97,97,97	7
74	OHX	D1	3571	7/7	0.97	0.17	77,77,77,77	7
74	OHX	B1	3480	7/7	0.97	0.18	85,85,85,85	7
74	OHX	A1	1918	7/7	0.97	0.18	94,94,94,94	7
74	OHX	B1	3519	7/7	0.97	0.28	115,115,115,115	7
74	OHX	CS	101	7/7	0.97	0.18	46,46,46,46	7
74	OHX	B1	3482	7/7	0.97	0.19	111,111,111,111	7
74	OHX	B1	3404	7/7	0.98	0.15	114,114,114,114	0
74	OHX	B1	3406	7/7	0.98	0.22	106,106,106,106	0
74	OHX	D1	3456	7/7	0.98	0.20	131,131,131,131	7
74	OHX	B3	211	7/7	0.98	0.16	67,67,67,67	7
74	OHX	B1	3407	7/7	0.98	0.14	105,105,105,105	0
74	OHX	B1	3409	7/7	0.98	0.18	122,122,122,122	0
74	OHX	B1	3471	7/7	0.98	0.11	130,130,130,130	7
74	OHX	B1	3440	7/7	0.98	0.19	105,105,105,105	7
74	OHX	Bg	101	7/7	0.98	0.17	79,79,79,79	7
74	OHX	C1	1903	7/7	0.98	0.17	115,115,115,115	0
74	OHX	C1	1904	7/7	0.98	0.16	113,113,113,113	0
74	OHX	B1	3441	7/7	0.98	0.20	129,129,129,129	7
74	OHX	A1	1907	7/7	0.98	0.22	111,111,111,111	7
74	OHX	B1	3411	7/7	0.98	0.15	105,105,105,105	0
74	OHX	B1	3414	7/7	0.98	0.14	106,106,106,106	0
74	OHX	B1	3477	7/7	0.98	0.19	101,101,101,101	7
74	OHX	C1	1953	7/7	0.98	0.13	56,56,56,56	7
74	OHX	B1	3417	7/7	0.98	0.12	102,102,102,102	0
74	OHX	C1	1914	7/7	0.98	0.12	128,128,128,128	7
74	OHX	B1	3418	7/7	0.98	0.16	106,106,106,106	0
74	OHX	B1	3419	7/7	0.98	0.17	109,109,109,109	7
74	OHX	B2	201	7/7	0.98	0.10	141,141,141,141	7
74	OHX	C1	1920	7/7	0.98	0.19	103,103,103,103	7
74	OHX	B1	3452	7/7	0.98	0.19	134,134,134,134	7
74	OHX	A1	1904	7/7	0.98	0.17	137,137,137,137	7
74	OHX	A1	1931	7/7	0.98	0.14	96,96,96,96	7
74	OHX	B1	3427	7/7	0.98	0.21	95,95,95,95	7
74	OHX	C1	1925	7/7	0.98	0.12	116,116,116,116	7
74	OHX	B1	3428	7/7	0.98	0.15	109,109,109,109	7
74	OHX	D1	3401	7/7	0.98	0.24	96,96,96,96	0
74	OHX	D1	3402	7/7	0.98	0.24	100,100,100,100	0
74	OHX	D1	3405	7/7	0.98	0.20	110,110,110,110	0
74	OHX	A1	1913	7/7	0.98	0.11	135,135,135,135	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	D1	3408	7/7	0.98	0.12	143,143,143,143	0
74	OHX	D1	3409	7/7	0.98	0.17	114,114,114,114	0
74	OHX	D1	3411	7/7	0.98	0.16	117,117,117,117	0
74	OHX	B1	3458	7/7	0.98	0.29	114,114,114,114	7
74	OHX	C1	1929	7/7	0.98	0.19	90,90,90,90	7
74	OHX	D1	3492	7/7	0.98	0.16	112,112,112,112	7
74	OHX	D1	3417	7/7	0.98	0.23	91,91,91,91	7
74	OHX	D1	3418	7/7	0.98	0.22	103,103,103,103	0
74	OHX	D1	3419	7/7	0.98	0.17	92,92,92,92	0
74	OHX	D1	3421	7/7	0.98	0.15	98,98,98,98	7
74	OHX	D1	3422	7/7	0.98	0.18	114,114,114,114	7
74	OHX	D1	3424	7/7	0.98	0.13	125,125,125,125	7
74	OHX	Ac	100	7/7	0.98	0.29	131,131,131,131	7
74	OHX	D1	3427	7/7	0.98	0.16	90,90,90,90	7
74	OHX	D1	3429	7/7	0.98	0.21	82,82,82,82	7
74	OHX	D1	3430	7/7	0.98	0.15	101,101,101,101	7
74	OHX	D1	3431	7/7	0.98	0.13	109,109,109,109	7
74	OHX	D1	3432	7/7	0.98	0.18	100,100,100,100	7
74	OHX	B1	3460	7/7	0.98	0.16	137,137,137,137	7
74	OHX	B3	202	7/7	0.98	0.15	116,116,116,116	0
74	OHX	B1	3402	7/7	0.98	0.18	99,99,99,99	0
74	OHX	D1	3440	7/7	0.98	0.18	137,137,137,137	7
74	OHX	D1	3441	7/7	0.98	0.20	124,124,124,124	7
74	OHX	D1	3442	7/7	0.98	0.16	126,126,126,126	7
74	OHX	B1	3432	7/7	0.98	0.19	79,79,79,79	7
74	OHX	D1	3445	7/7	0.98	0.20	101,101,101,101	7
74	OHX	D1	3446	7/7	0.98	0.15	83,83,83,83	7
74	OHX	B1	3403	7/7	0.98	0.25	126,126,126,126	0
74	OHX	B1	3435	7/7	0.98	0.28	130,130,130,130	7
74	OHX	D1	3450	7/7	0.98	0.21	112,112,112,112	7
74	OHX	D1	3582	7/7	0.98	0.13	71,71,71,71	7
74	OHX	B1	3466	7/7	0.98	0.17	120,120,120,120	7
74	OHX	D1	3452	7/7	0.98	0.09	94,94,94,94	7
74	OHX	B1	3408	7/7	0.99	0.20	98,98,98,98	0
74	OHX	B1	3420	7/7	0.99	0.19	93,93,93,93	7
74	OHX	B1	3421	7/7	0.99	0.18	141,141,141,141	0
74	OHX	B1	3422	7/7	0.99	0.12	93,93,93,93	7
74	OHX	B1	3423	7/7	0.99	0.21	91,91,91,91	7
74	OHX	D1	3444	7/7	0.99	0.18	72,72,72,72	7
74	OHX	C1	1964	7/7	0.99	0.15	88,88,88,88	7
74	OHX	B1	3424	7/7	0.99	0.14	105,105,105,105	7
74	OHX	BT	201	7/7	0.99	0.15	91,91,91,91	7

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
74	OHX	Bd	101	7/7	0.99	0.19	32,32,32,32	7
74	OHX	D1	3449	7/7	0.99	0.27	124,124,124,124	7
74	OHX	B1	3442	7/7	0.99	0.17	89,89,89,89	7
74	OHX	B1	3464	7/7	0.99	0.17	89,89,89,89	7
74	OHX	C1	1901	7/7	0.99	0.16	100,100,100,100	0
74	OHX	C1	1902	7/7	0.99	0.22	108,108,108,108	0
74	OHX	A1	1901	7/7	0.99	0.15	100,100,100,100	0
74	OHX	D1	3455	7/7	0.99	0.13	110,110,110,110	7
74	OHX	D1	3403	7/7	0.99	0.21	96,96,96,96	0
74	OHX	D1	3404	7/7	0.99	0.21	99,99,99,99	0
74	OHX	AS	101	7/7	0.99	0.14	29,29,29,29	7
74	OHX	B1	3445	7/7	0.99	0.12	113,113,113,113	7
74	OHX	D1	3407	7/7	0.99	0.13	113,113,113,113	0
74	OHX	C1	1906	7/7	0.99	0.17	101,101,101,101	7
74	OHX	C1	1907	7/7	0.99	0.14	123,123,123,123	7
74	OHX	D1	3410	7/7	0.99	0.21	96,96,96,96	0
74	OHX	A1	1902	7/7	0.99	0.14	112,112,112,112	0
74	OHX	D1	3412	7/7	0.99	0.18	126,126,126,126	0
74	OHX	B1	3447	7/7	0.99	0.16	126,126,126,126	7
74	OHX	D2	201	7/7	0.99	0.13	94,94,94,94	7
74	OHX	D1	3414	7/7	0.99	0.11	114,114,114,114	0
74	OHX	D1	3415	7/7	0.99	0.11	139,139,139,139	0
74	OHX	B1	3412	7/7	0.99	0.14	121,121,121,121	0
74	OHX	C1	1911	7/7	0.99	0.13	96,96,96,96	7
74	OHX	B1	3413	7/7	0.99	0.12	106,106,106,106	7
74	OHX	B1	3450	7/7	0.99	0.12	91,91,91,91	7
74	OHX	D1	3420	7/7	0.99	0.11	112,112,112,112	0
74	OHX	B1	3405	7/7	0.99	0.18	101,101,101,101	0
74	OHX	D3	201	7/7	0.99	0.14	93,93,93,93	0
74	OHX	D3	202	7/7	0.99	0.13	116,116,116,116	0
74	OHX	B3	201	7/7	0.99	0.19	117,117,117,117	0
74	OHX	D1	3423	7/7	0.99	0.12	88,88,88,88	7
74	OHX	B1	3540	7/7	0.99	0.18	58,58,58,58	7
74	OHX	C1	1917	7/7	0.99	0.15	130,130,130,130	7
74	OHX	D1	3426	7/7	0.99	0.17	112,112,112,112	7
74	OHX	C1	1918	7/7	0.99	0.14	123,123,123,123	7
74	OHX	D1	3428	7/7	0.99	0.15	80,80,80,80	7
74	OHX	B1	3415	7/7	0.99	0.14	93,93,93,93	7
74	OHX	B3	204	7/7	0.99	0.15	84,84,84,84	7
74	OHX	B1	3416	7/7	0.99	0.18	113,113,113,113	0
74	OHX	A1	1903	7/7	0.99	0.12	122,122,122,122	7
74	OHX	B1	3434	7/7	0.99	0.17	102,102,102,102	7

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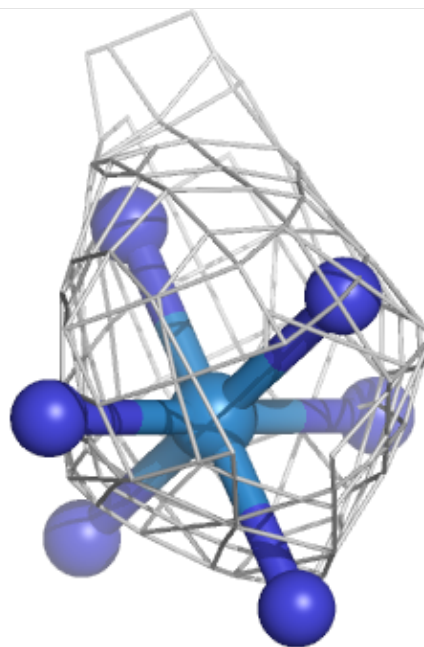
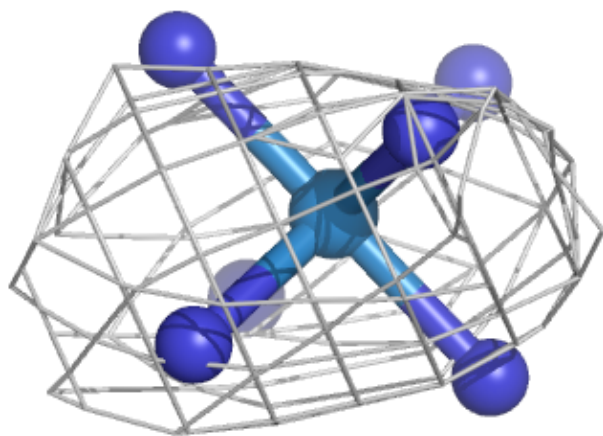
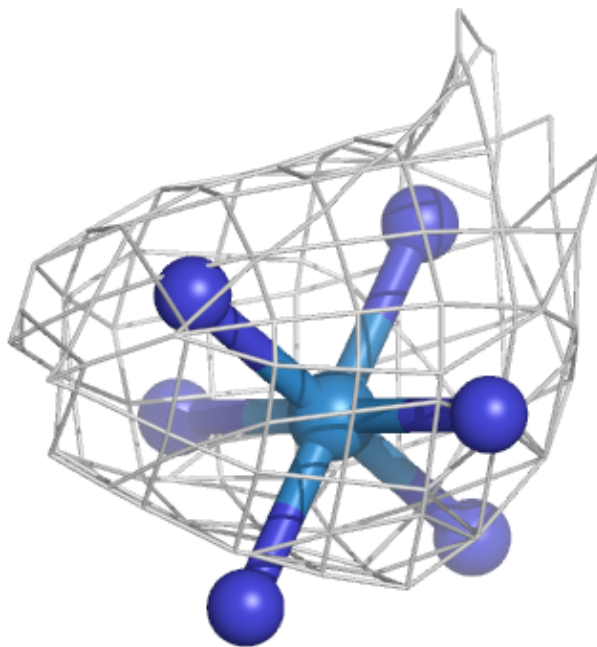
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
74	OHX	D1	3434	7/7	0.99	0.13	77,77,77,77	7
74	OHX	B1	3401	7/7	0.99	0.22	90,90,90,90	0
74	OHX	D1	3436	7/7	0.99	0.19	125,125,125,125	7
74	OHX	DT	201	7/7	0.99	0.18	100,100,100,100	0
74	OHX	Dd	101	7/7	0.99	0.15	32,32,32,32	7
74	OHX	D1	3437	7/7	0.99	0.24	103,103,103,103	7
74	OHX	D1	3438	7/7	0.99	0.12	98,98,98,98	7

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

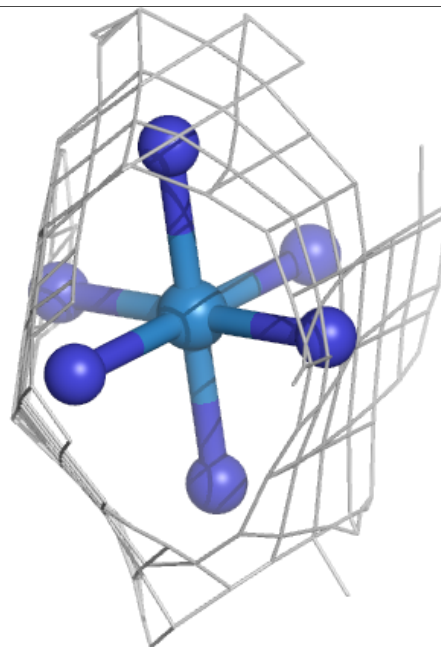
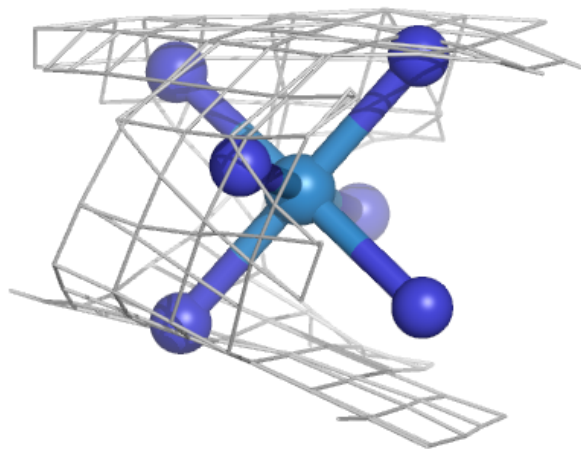
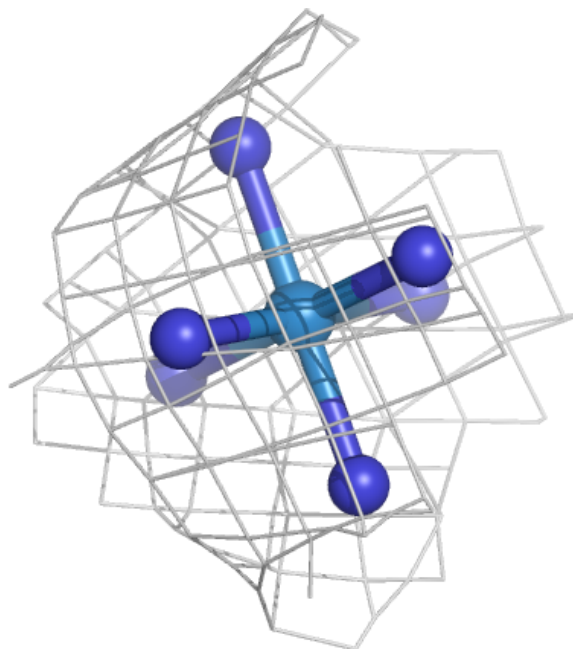
Electron density around OHX D1 3593:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



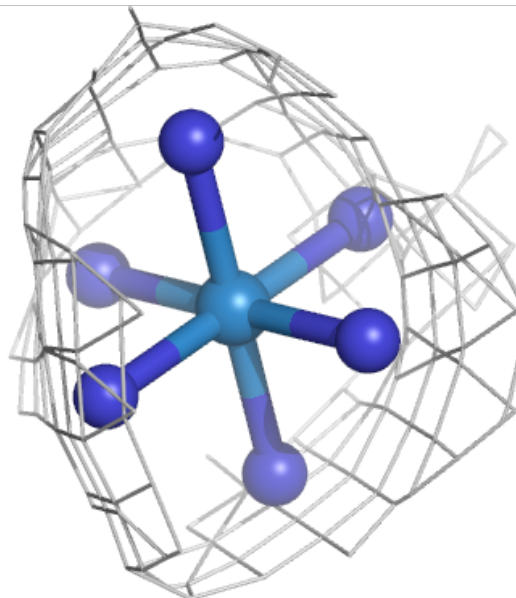
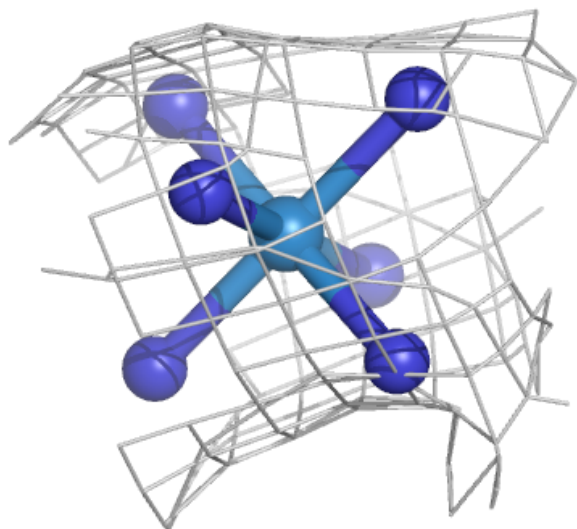
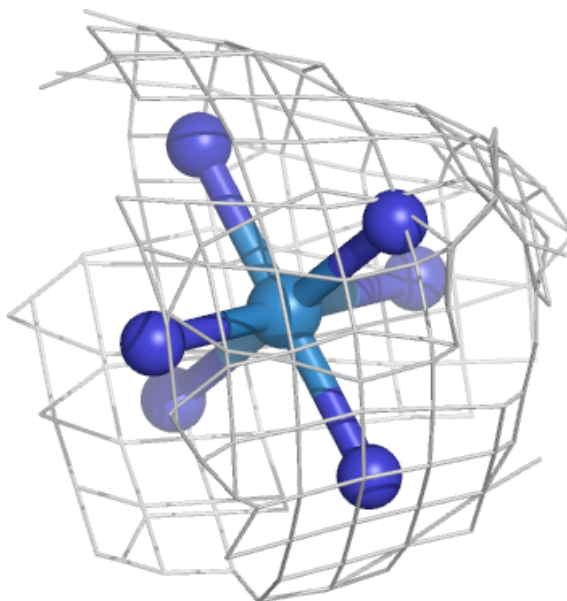
Electron density around OHX D3 211:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



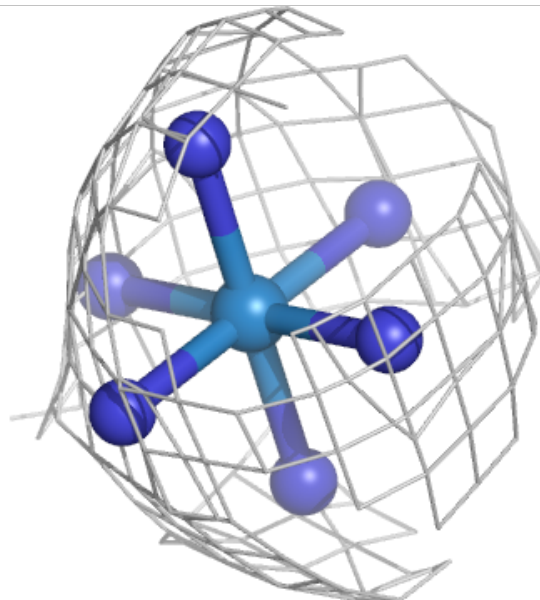
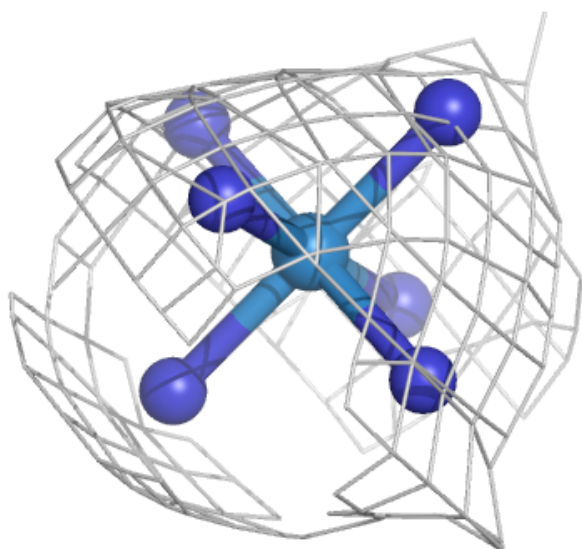
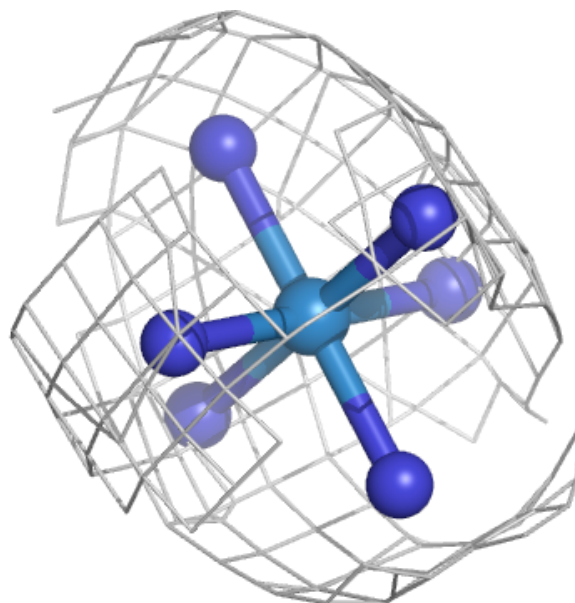
Electron density around OHX A1 1930:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



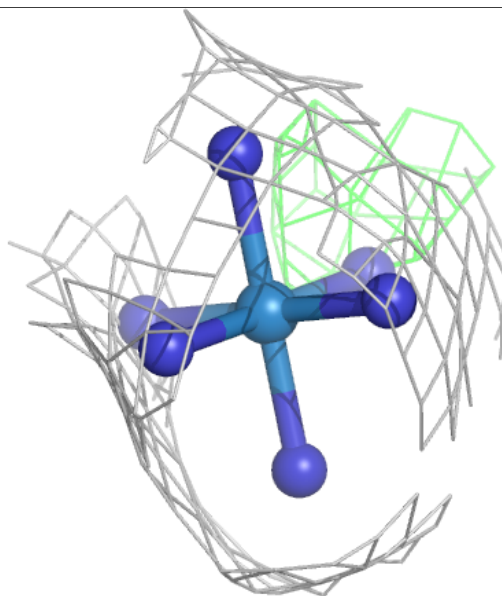
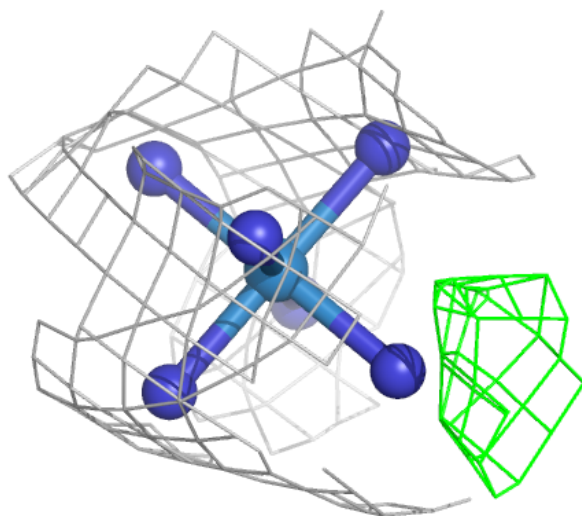
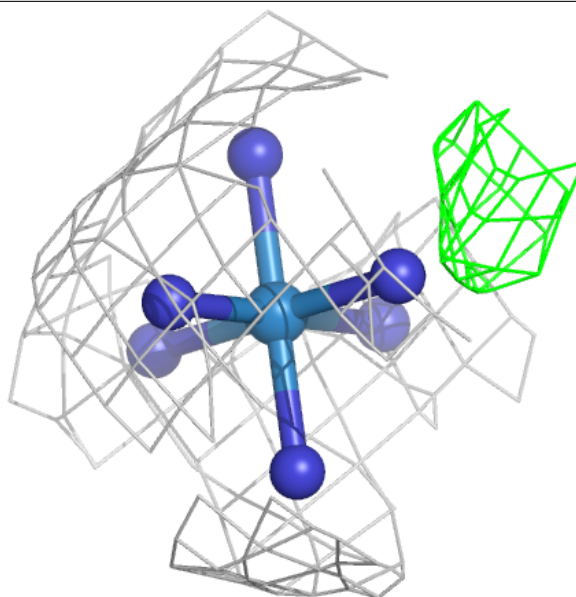
Electron density around OHX B1 3602:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



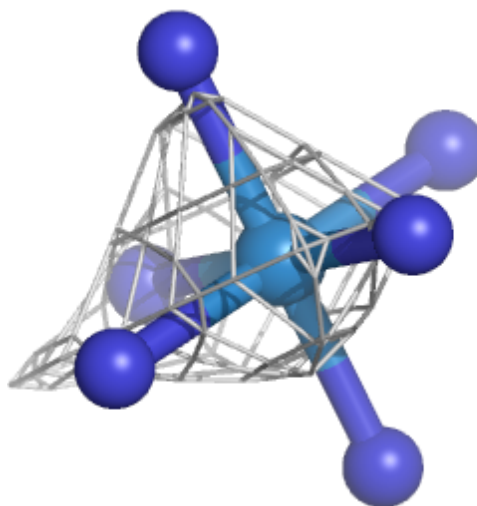
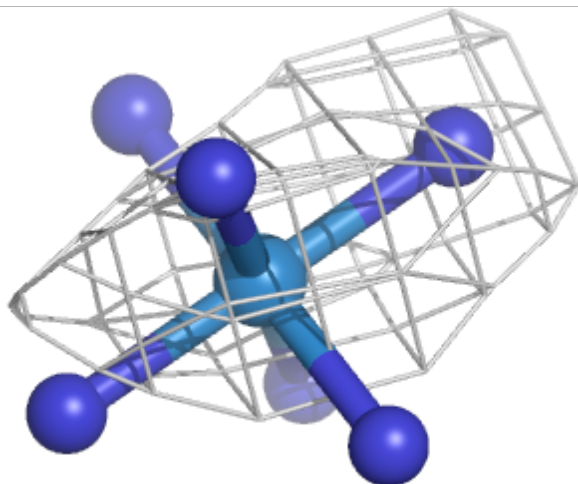
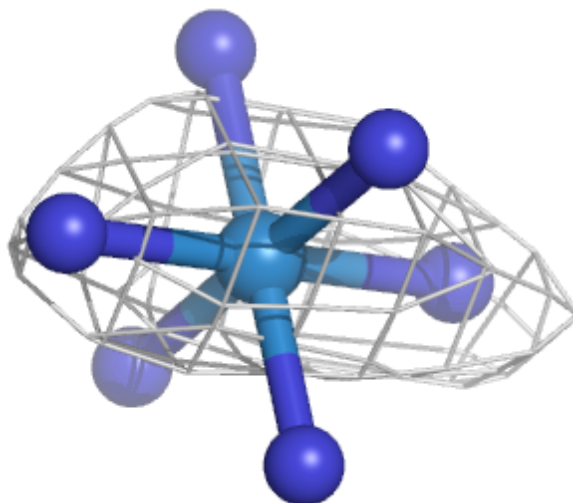
Electron density around OHX A1 1983:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



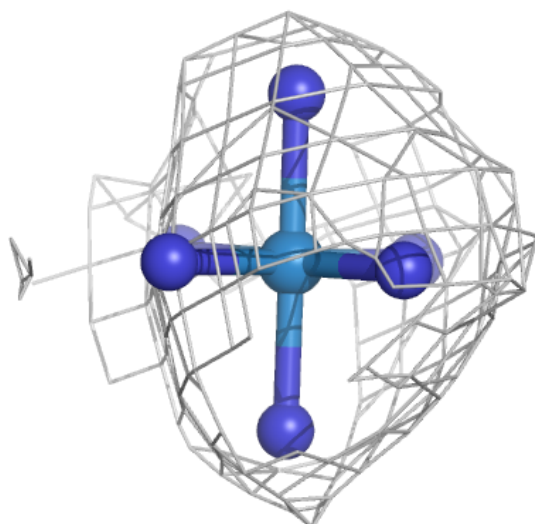
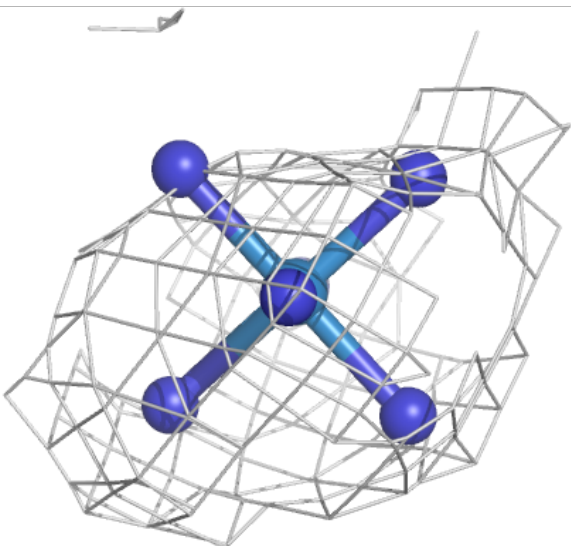
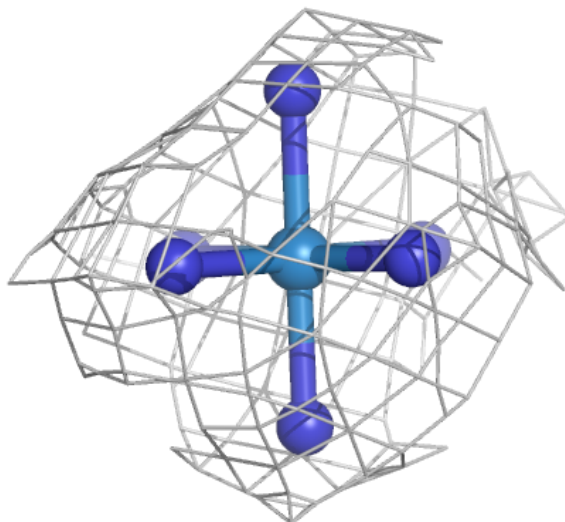
Electron density around OHX B1 3571:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



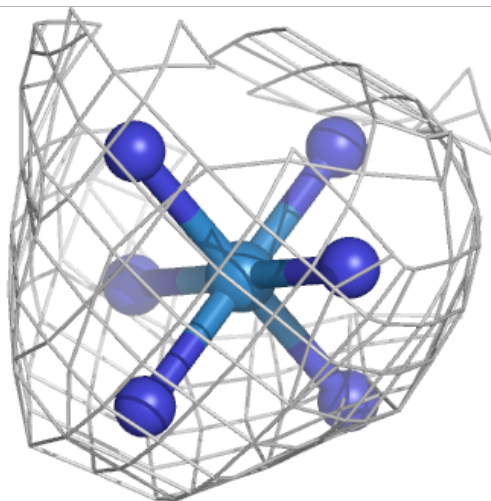
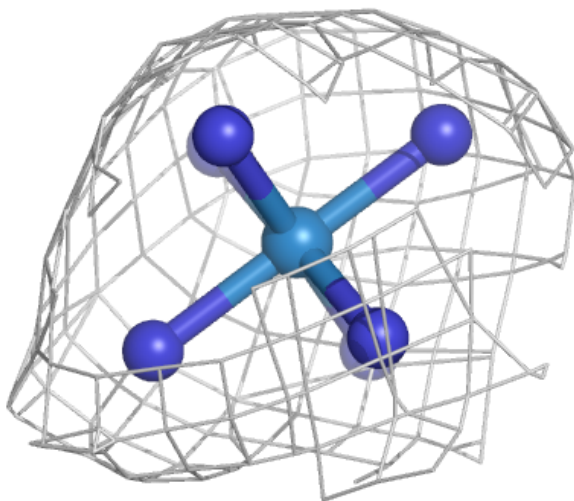
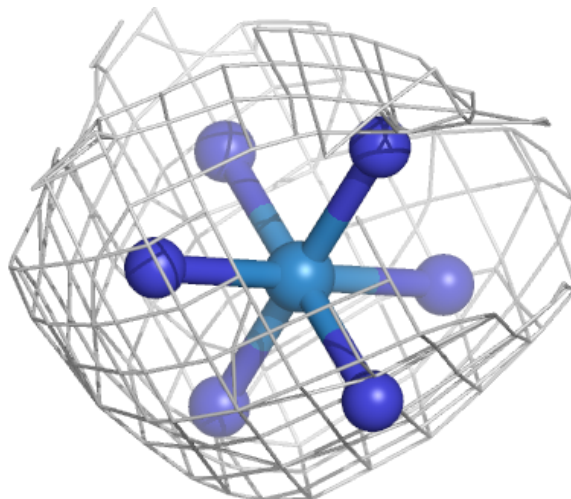
Electron density around OHX D1 3573:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



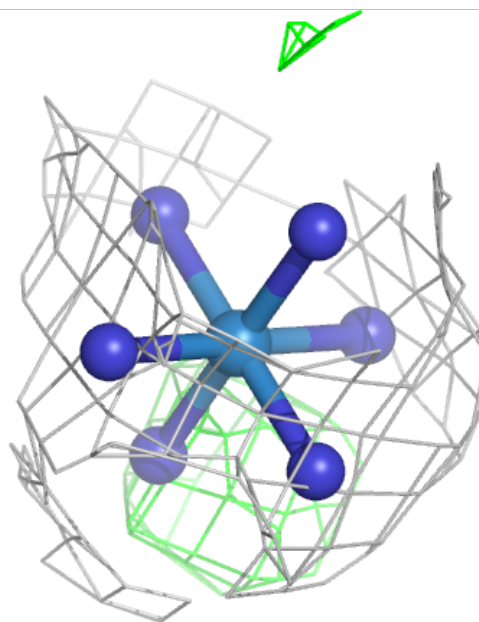
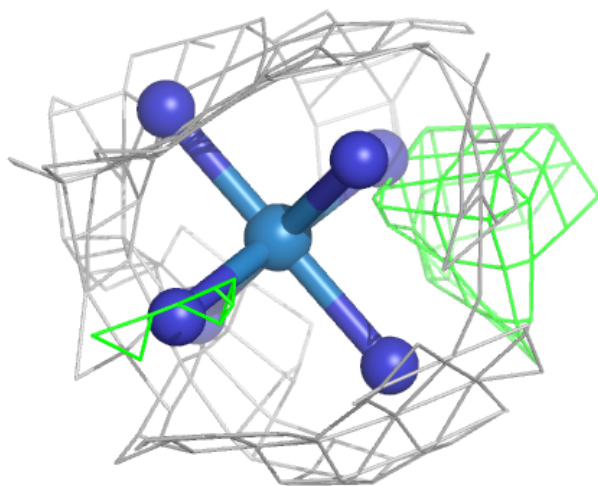
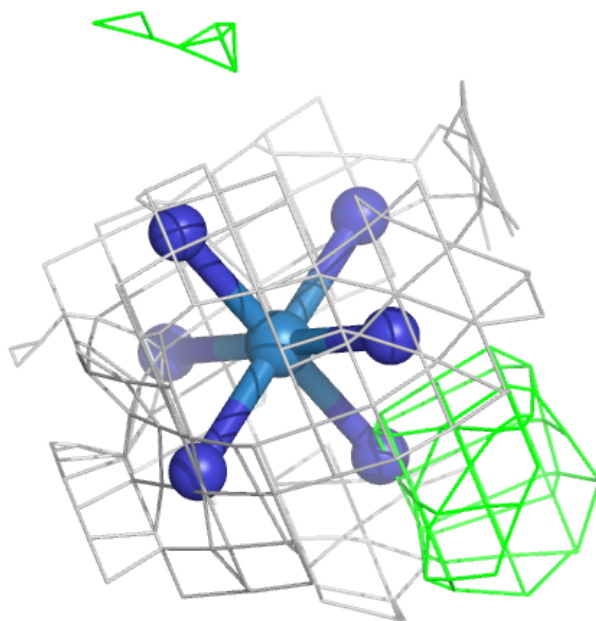
Electron density around OHX D1 3605:

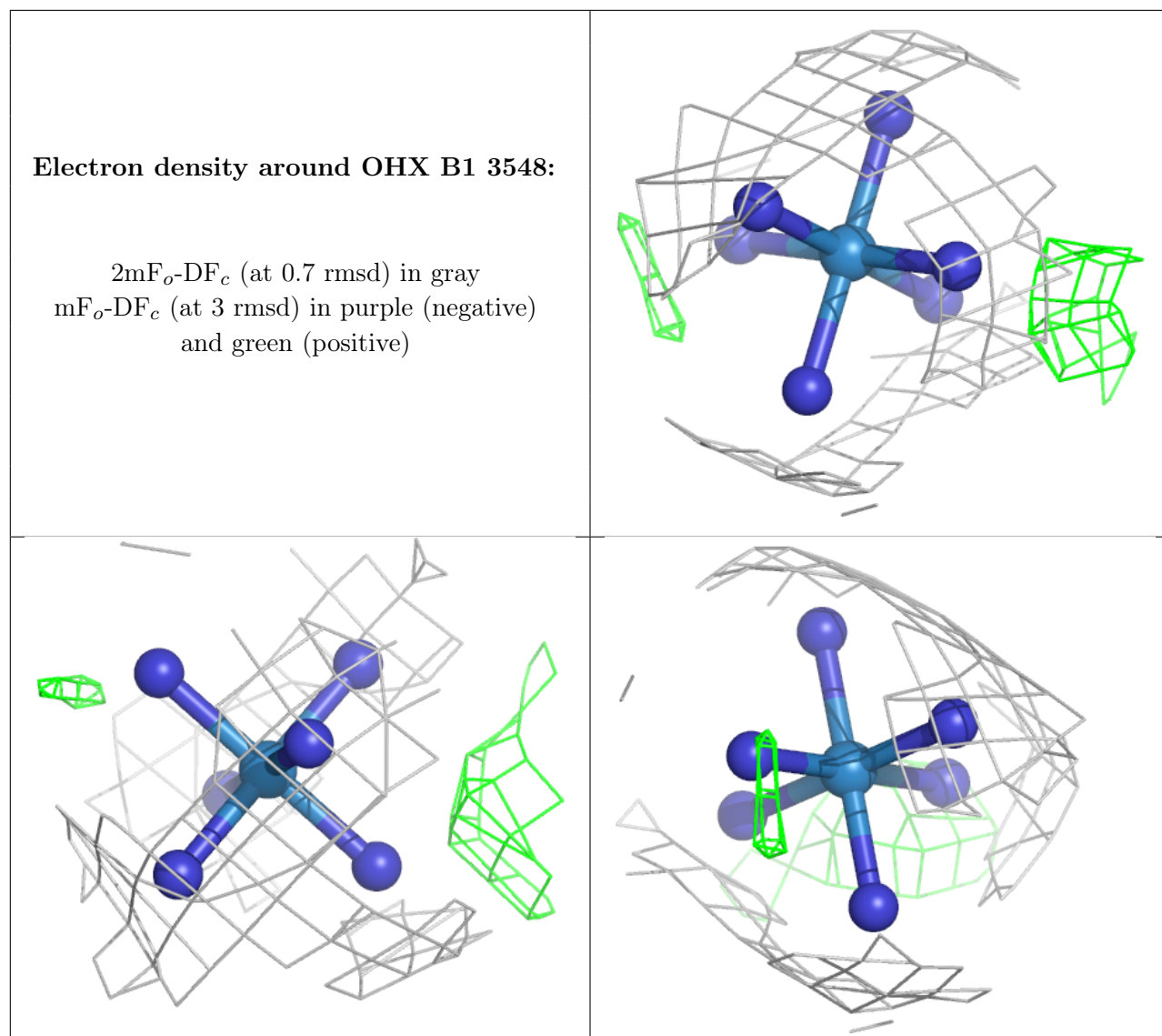
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around OHX D1 3586:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





6.5 Other polymers [\(i\)](#)

There are no such residues in this entry.