Full wwPDB X-ray Structure Validation Report ⓘ

Oct 9, 2023 – 12:38 AM EDT

PDB ID	:	6HHQ
Title	:	Crystal structure of compound C45 bound to the yeast 80S ribosome
Authors	:	Pellegrino, S.; Vanderwal, C.D.; Yusupov, M.
Deposited on	:	2018-08-28
Resolution	:	3.10 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:

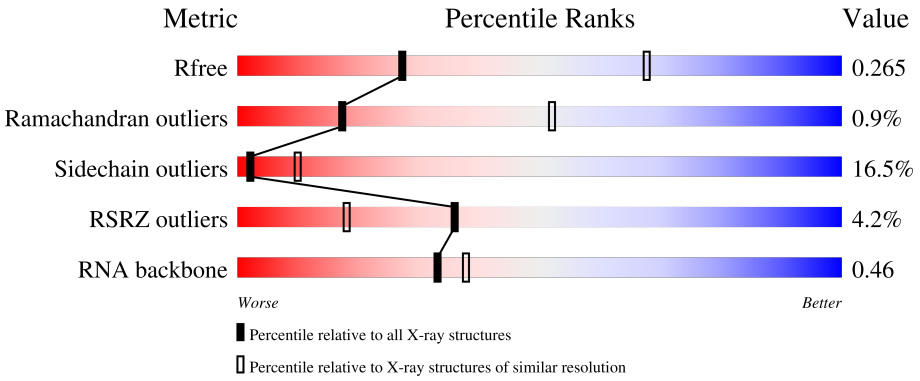
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35.1
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35.1

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 3.10 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	1094 (3.10-3.10)
Ramachandran outliers	138981	1141 (3.10-3.10)
Sidechain outliers	138945	1141 (3.10-3.10)
RSRZ outliers	127900	1067 (3.10-3.10)
RNA backbone	3102	1116 (3.40-2.80)

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

Mol	Chain	Length	Quality of chain
1	1	3396	3% 61% 27% 5% 7%
1	AR	3396	3% 60% 28% · 7%
2	3	121	83% 16% ·
2	AS	121	79% 18% ·
3	4	158	% 66% 31% ·

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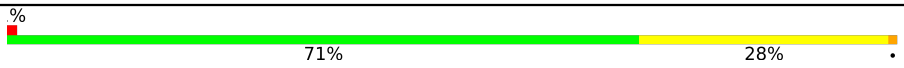
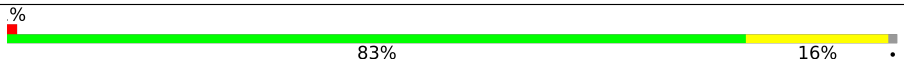
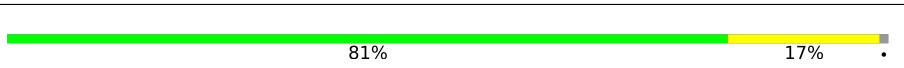
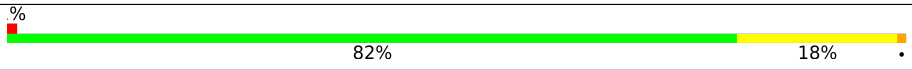
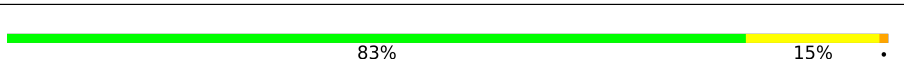
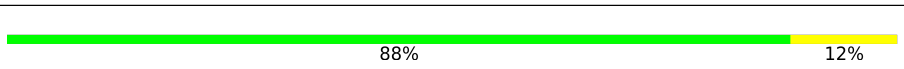
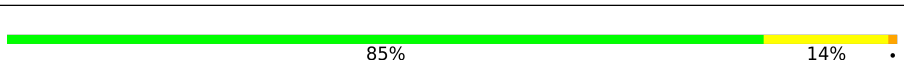
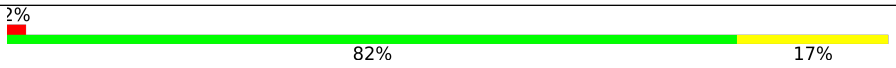
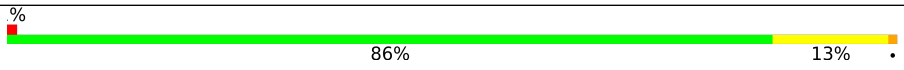
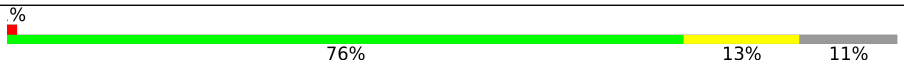
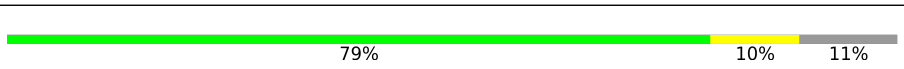
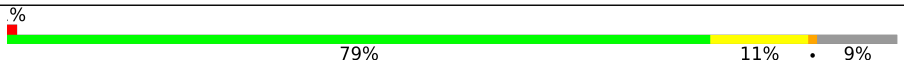
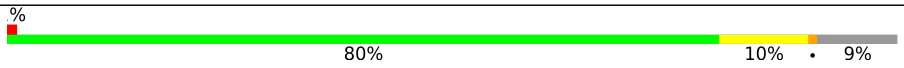
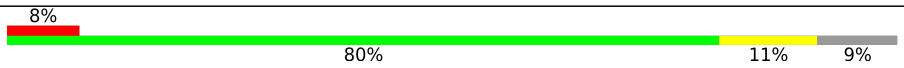
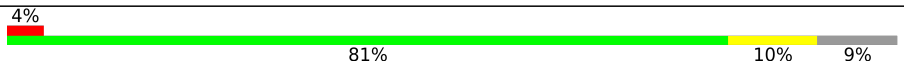
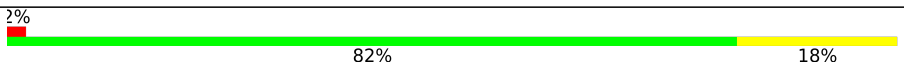
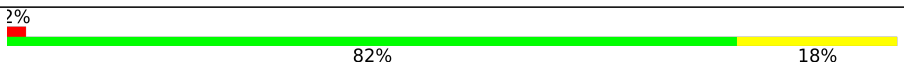
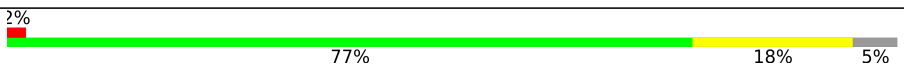
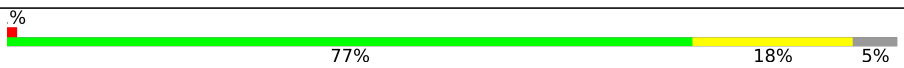
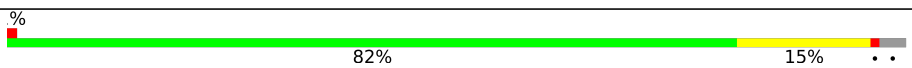
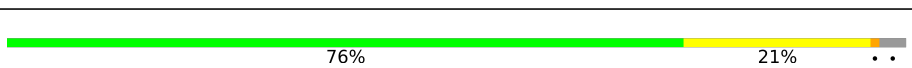
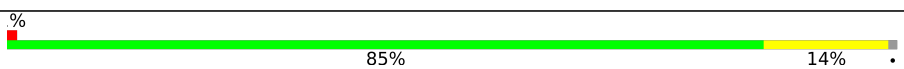
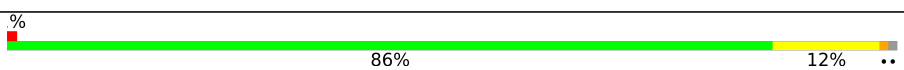
Mol	Chain	Length	Quality of chain
3	AT	158	
4	CD	254	
4	j	254	
5	CE	387	
5	k	387	
6	CF	362	
6	l	362	
7	CG	297	
7	m	297	
8	CH	176	
8	n	176	
9	CI	244	
9	o	244	
10	CJ	256	
10	p	256	
11	CK	191	
11	q	191	
12	CL	221	
12	r	221	
13	CM	174	
13	s	174	
14	CN	199	
14	t	199	
15	CO	138	
15	u	138	

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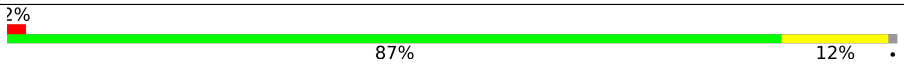
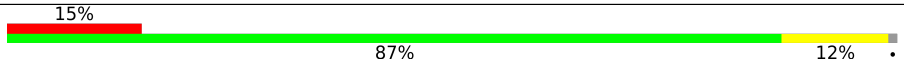
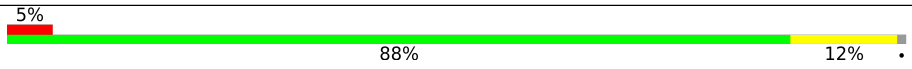
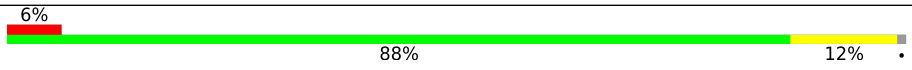
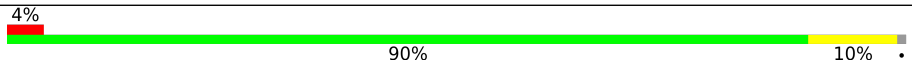
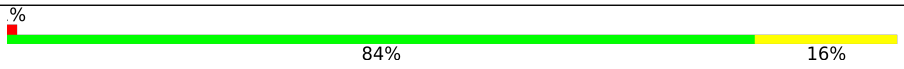
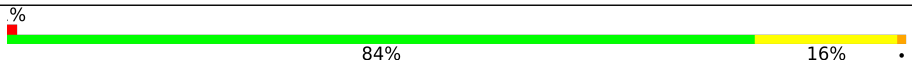
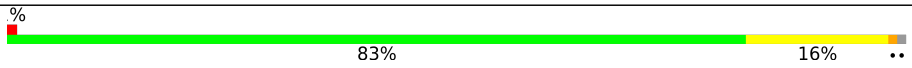
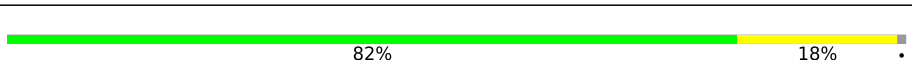
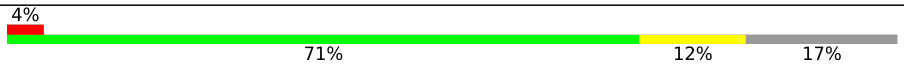
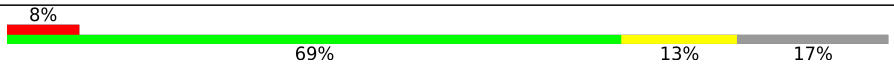
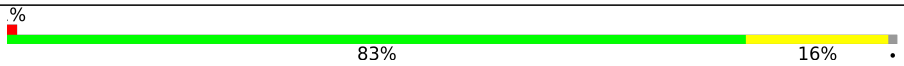
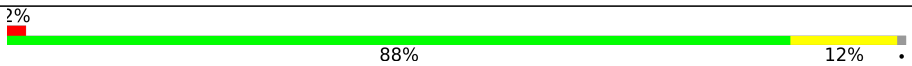
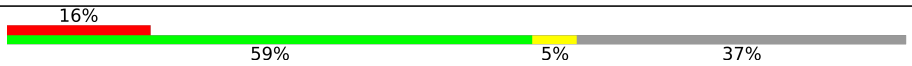
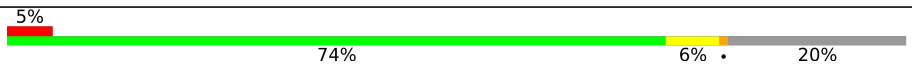
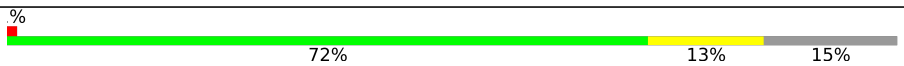
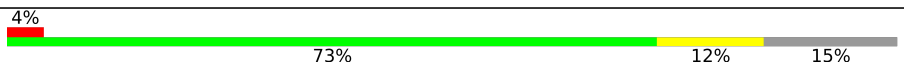
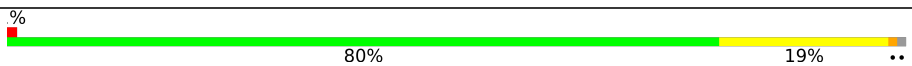
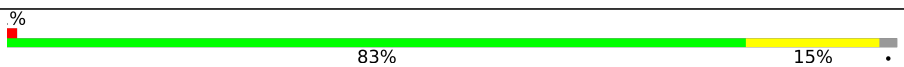
Mol	Chain	Length	Quality of chain
16	CP	204	
16	v	204	
17	CQ	199	
17	w	199	
18	CR	184	
18	x	184	
19	CS	186	
19	y	186	
20	CT	189	
20	z	189	
21	0	172	
21	CU	172	
22	2	160	
22	CV	160	
23	5	121	
23	CW	121	
24	6	137	
24	CX	137	
25	7	155	
25	CY	155	
26	8	142	
26	CZ	142	
27	9	127	
27	DA	127	
28	AA	136	

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Mol	Chain	Length	Quality of chain
28	DB	136	85% 13%
29	AB	149	85% 13%
29	DC	149	85% 13%
30	AC	59	7% 76% 22%
30	DD	59	3% 83% 15%
31	AD	105	5% 83% 10% 8%
31	DE	105	5% 82% 10% 8%
32	AE	113	4% 80% 15%
32	DF	113	2% 83% 13%
33	AF	130	2% 88% 10%
33	DG	130	2% 82% 15%
34	AG	107	88% 11%
34	DH	107	89% 10%
35	AH	121	2% 83% 10% 7%
35	DI	121	77% 16% 7%
36	AI	120	78% 20%
36	DJ	120	2% 78% 22%
37	AJ	100	4% 81% 18%
37	DK	100	4% 86% 12%
38	AK	88	84% 15%
38	DL	88	2% 82% 17%
39	AL	78	3% 83% 15%
39	DM	78	21% 83% 15%
40	AM	51	2% 82% 16%
40	DN	51	82% 16%

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Mol	Chain	Length	Quality of chain
41	AN	128	2% 35% 5% 59%
41	DO	128	% 35% 5% 59%
42	AO	25	80% 20%
42	DP	25	76% 24%
43	AP	106	2% 83% 16%
43	DQ	106	84% 15%
44	AQ	92	82% 17%
44	DR	92	90% 9%
45	i	273	7% 49% 9% 42%
45	sM	273	3% 19% 77%
46	p0	312	5% 38% 7% 54%
47	A	1797	6% 70% 27%
48	B	252	5% 69% 12% 18%
48	s0	252	70% 12% 18%
49	C	255	14% 71% 12% 16%
49	s1	255	3% 70% 15% 15%
50	D	254	72% 13% 15%
50	s2	254	2% 70% 15% 15%
51	E	240	5% 79% 14% 7%
51	s3	240	4% 81% 11% 7%
52	F	261	2% 84% 15%
52	s4	261	2% 89% 11%
53	G	225	7% 79% 11% 8%
53	s5	225	3% 76% 16% 8%
54	H	236	6% 80% 15%

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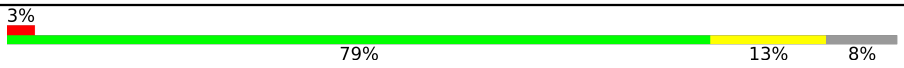
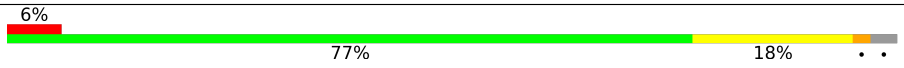
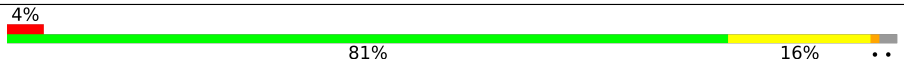
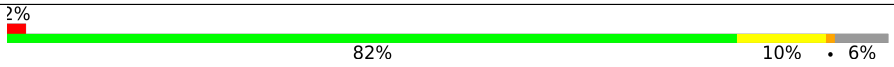
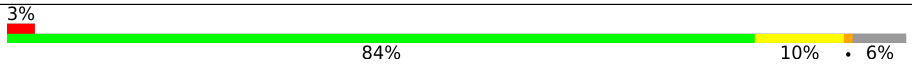
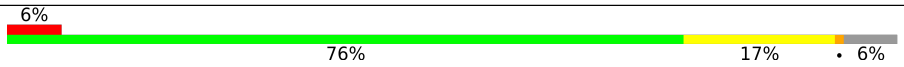
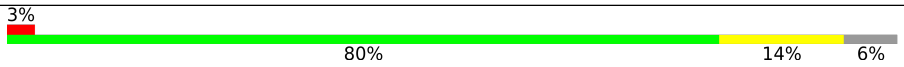
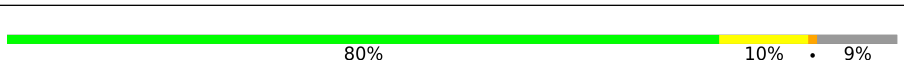
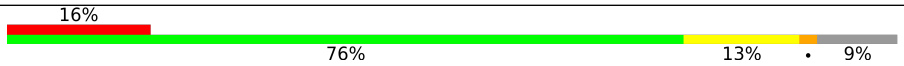
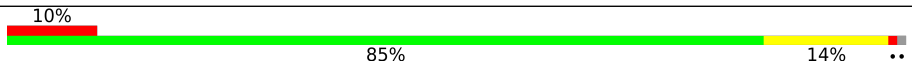
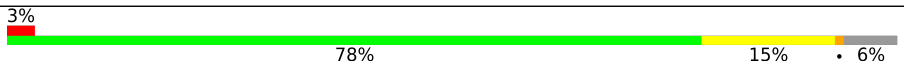
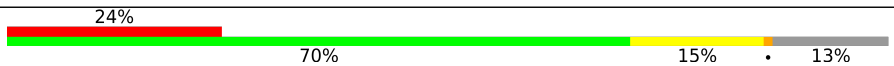
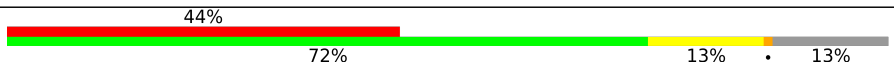
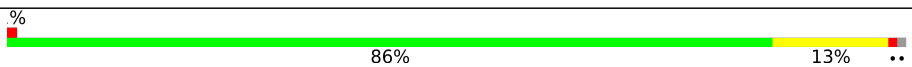
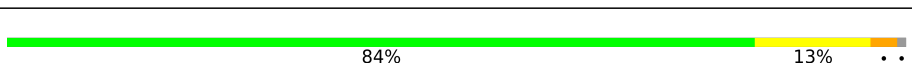
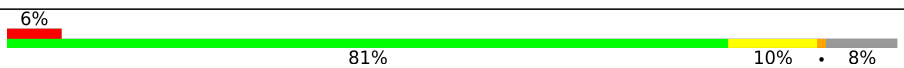
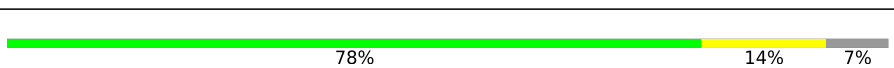
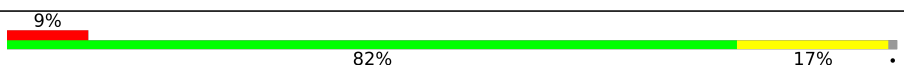
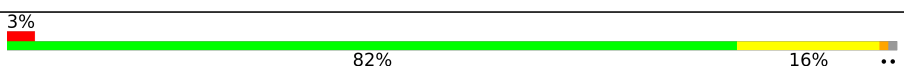
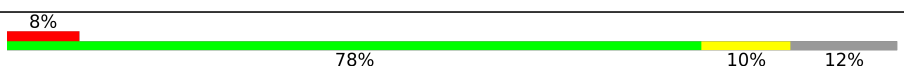
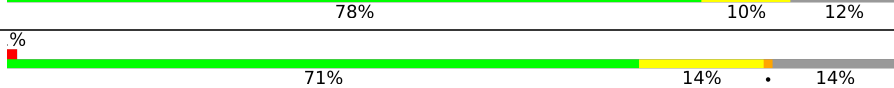
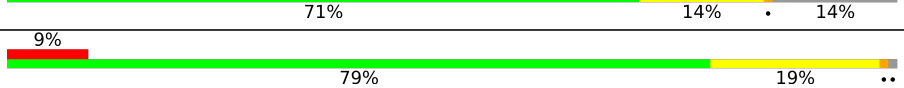
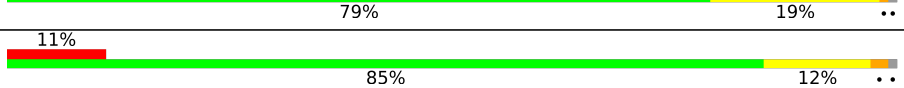
Mol	Chain	Length	Quality of chain
54	s6	236	
55	I	190	
55	s7	190	
56	J	200	
56	s8	200	
57	K	197	
57	s9	197	
58	L	105	
58	c0	105	
59	M	156	
59	c1	156	
60	N	143	
60	c2	143	
61	O	151	
61	c3	151	
62	P	138	
62	c4	138	
63	Q	142	
63	c5	142	
64	R	143	
64	c6	143	
65	S	136	
65	c7	136	
66	T	146	
66	c8	146	

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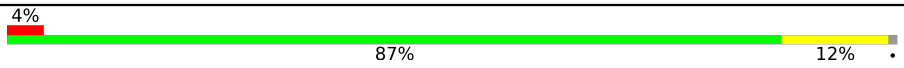
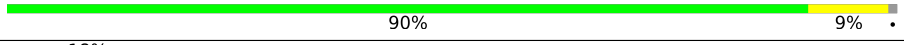
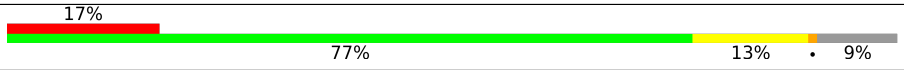
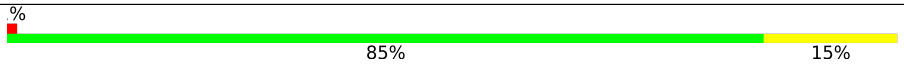
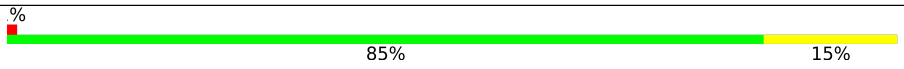
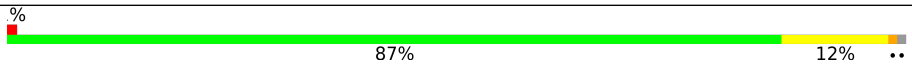
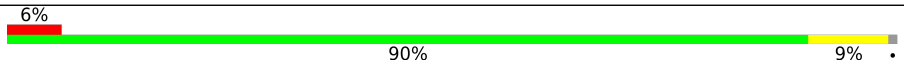
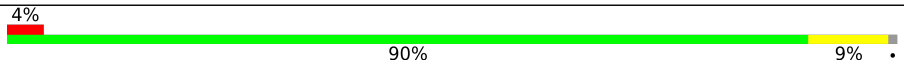
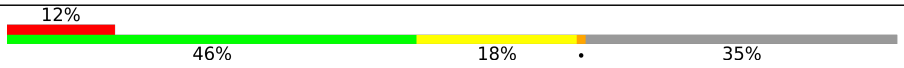
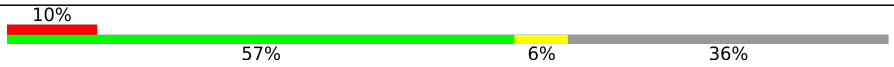
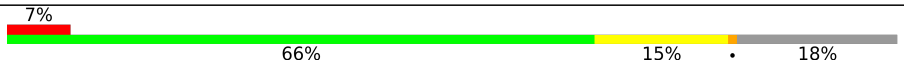
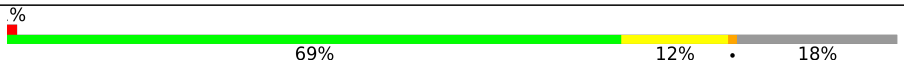
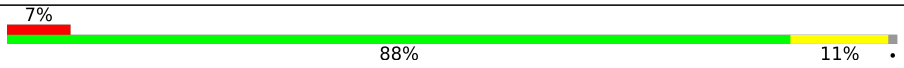
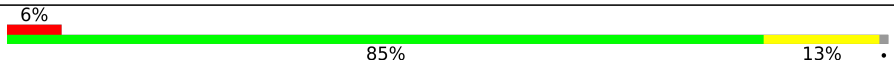
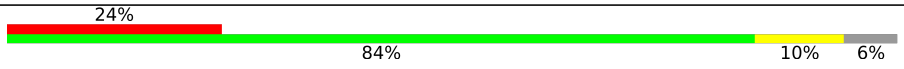
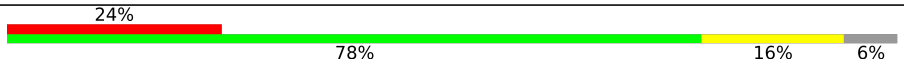
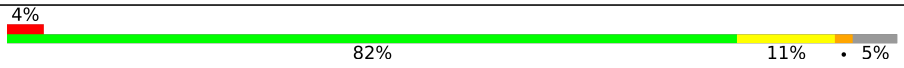
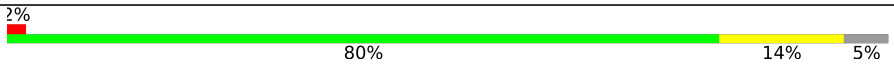
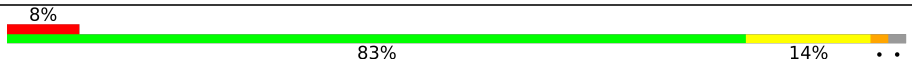
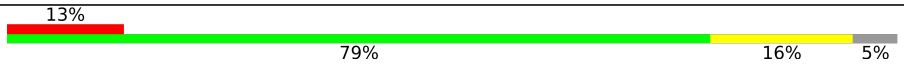
Mol	Chain	Length	Quality of chain
67	U	144	
67	c9	144	
68	V	121	
68	d0	121	
69	W	87	
69	d1	87	
70	X	130	
70	d2	130	
71	Y	145	
71	d3	145	
72	Z	135	
72	d4	135	
73	a	108	
73	d5	108	
74	b	119	
74	d6	119	
75	c	82	
75	d7	82	
76	d	67	
76	d8	67	
77	d9	56	
77	e	56	
78	e0	63	
78	f	63	
79	e1	152	

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Mol	Chain	Length	Quality of chain
79	g	152	9% 38% 7% 53%
80	Rb	319	8% 92% 7%
80	h	319	7% 91% 8%
81	sR	1800	5% 70% 27%

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
83	MG	1	3728	-	-	-	X
83	MG	1	3731	-	-	-	X
83	MG	1	3780	-	-	-	X
83	MG	1	3803	-	-	-	X
83	MG	1	3828	-	-	-	X
83	MG	1	3931	-	-	-	X
83	MG	1	3958	-	-	-	X
83	MG	1	3962	-	-	-	X
83	MG	1	3992	-	-	-	X
83	MG	1	4008	-	-	-	X
83	MG	1	4029	-	-	-	X
83	MG	1	4136	-	-	-	X
83	MG	1	4143	-	-	-	X
83	MG	1	4158	-	-	-	X
83	MG	1	4205	-	-	-	X
83	MG	1	4210	-	-	-	X
83	MG	3	211	-	-	-	X
83	MG	3	217	-	-	-	X
83	MG	A	1946	-	-	-	X
83	MG	A	1954	-	-	-	X
83	MG	A	1961	-	-	-	X
83	MG	A	1962	-	-	-	X
83	MG	A	1969	-	-	-	X
83	MG	A	1988	-	-	-	X
83	MG	A	2001	-	-	-	X
83	MG	A	2005	-	-	-	X
83	MG	A	2010	-	-	-	X
83	MG	A	2012	-	-	-	X
83	MG	A	2018	-	-	-	X
83	MG	A	2021	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
83	MG	A	2025	-	-	-	X
83	MG	A	2058	-	-	-	X
83	MG	A	2061	-	-	-	X
83	MG	A	2062	-	-	-	X
83	MG	A	2068	-	-	-	X
83	MG	AR	3752	-	-	-	X
83	MG	AR	3794	-	-	-	X
83	MG	AR	3830	-	-	-	X
83	MG	AR	3895	-	-	-	X
83	MG	AR	3934	-	-	-	X
83	MG	AR	3953	-	-	-	X
83	MG	AR	3961	-	-	-	X
83	MG	AR	3969	-	-	-	X
83	MG	AR	3982	-	-	-	X
83	MG	AR	3994	-	-	-	X
83	MG	AR	4016	-	-	-	X
83	MG	AR	4062	-	-	-	X
83	MG	AR	4084	-	-	-	X
83	MG	AR	4089	-	-	-	X
83	MG	AR	4091	-	-	-	X
83	MG	AR	4105	-	-	-	X
83	MG	AR	4112	-	-	-	X
83	MG	AR	4113	-	-	-	X
83	MG	AR	4199	-	-	-	X
83	MG	AR	4222	-	-	-	X
83	MG	AR	4223	-	-	-	X
83	MG	AR	4235	-	-	-	X
83	MG	AR	4246	-	-	-	X
83	MG	AR	4260	-	-	-	X
83	MG	AT	225	-	-	-	X
83	MG	AT	228	-	-	-	X
83	MG	AT	230	-	-	-	X
83	MG	CD	301	-	-	-	X
83	MG	DA	201	-	-	-	X
83	MG	c6	201	-	-	-	X
83	MG	sR	2073	-	-	-	X
83	MG	sR	2079	-	-	-	X
83	MG	sR	2088	-	-	-	X
83	MG	sR	2107	-	-	-	X
83	MG	sR	2113	-	-	-	X
83	MG	sR	2128	-	-	-	X
83	MG	sR	2137	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
83	MG	sR	2154	-	-	-	X
83	MG	sR	2157	-	-	-	X
83	MG	sR	2159	-	-	-	X
83	MG	sR	2164	-	-	-	X
83	MG	sR	2180	-	-	-	X
83	MG	sR	2188	-	-	-	X
83	MG	sR	2189	-	-	-	X

2 Entry composition (i)

There are 86 unique types of molecules in this entry. The entry contains 409486 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 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1	3149	Total	C	N	O	P	0	0	0
			67355	30086	12142	21978	3149			
1	AR	3147	Total	C	N	O	P	0	0	0
			67313	30067	12134	21965	3147			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	3	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			
2	AS	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			

- Molecule 3 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	4	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			
3	AT	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			

- Molecule 4 is a protein called 60S ribosomal protein L2-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	j	252	Total	C	N	O	S	0	0	0
			1914	1191	388	334	1			
4	CD	252	Total	C	N	O	S	0	0	0
			1914	1191	388	334	1			

- Molecule 5 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	k	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			
5	CE	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			

- Molecule 6 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	l	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			
6	CF	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			

- Molecule 7 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	m	296	Total	C	N	O	S	0	0	0
			2375	1501	414	458	2			
7	CG	296	Total	C	N	O	S	0	0	0
			2375	1501	414	458	2			

- Molecule 8 is a protein called 60S ribosomal protein L6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	n	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			
8	CH	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			

- Molecule 9 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	o	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			
9	CI	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			

- Molecule 10 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	p	233	Total	C	N	O	S	0	0	0
			1804	1151	323	327	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	CJ	233	Total	C	N	O	S	0	0	0
			1804	1151	323	327	3			

- Molecule 11 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	q	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			
11	CK	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			

- Molecule 12 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	r	211	Total	C	N	O	S	0	0	0
			1705	1083	322	294	6			
12	CL	211	Total	C	N	O	S	0	0	0
			1705	1083	322	294	6			

- Molecule 13 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	s	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			
13	CM	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			

- Molecule 14 is a protein called 60S ribosomal protein L13-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	t	193	Total	C	N	O	0	0	0
			1543	962	315	266			
14	CN	193	Total	C	N	O	0	0	0
			1543	962	315	266			

- Molecule 15 is a protein called 60S ribosomal protein L14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	u	136	Total	C	N	O	S	0	0	0
			1053	675	199	177	2			
15	CO	136	Total	C	N	O	S	0	0	0
			1053	675	199	177	2			

- Molecule 16 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	v	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			
16	CP	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			

- Molecule 17 is a protein called 60S ribosomal protein L16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	w	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			
17	CQ	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			

- Molecule 18 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	x	183	Total	C	N	O	0	0	0
			1420	882	281	257			
18	CR	183	Total	C	N	O	0	0	0
			1420	882	281	257			

- Molecule 19 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	y	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			
19	CS	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			

- Molecule 20 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	z	188	Total	C	N	O	0	0	0
			1521	935	326	260			
20	CT	188	Total	C	N	O	0	0	0
			1521	935	326	260			

- Molecule 21 is a protein called 60S ribosomal protein L20-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			
21	CU	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

- Molecule 22 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	2	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			
22	CV	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			

- Molecule 23 is a protein called 60S ribosomal protein L22-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
23	5	100	Total	C	N	O	0	0	0
			796	516	131	149			
23	CW	100	Total	C	N	O	0	0	0
			796	516	131	149			

- Molecule 24 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	6	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			
24	CX	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			

- Molecule 25 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	7	98	Total	C	N	O	S	0	0	0
			699	443	137	118	1			
25	CY	124	Total	C	N	O	S	0	0	0
			836	525	166	144	1			

- Molecule 26 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	8	121	Total	C	N	O	S	0	0	0
			964	620	169	173	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	CZ	121	Total	C	N	O	S	0	0	0
			964	620	169	173	2			

- Molecule 27 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	9	126	Total	C	N	O	0	0	0
			993	625	192	176			
27	DA	124	Total	C	N	O	0	0	0
			976	614	190	172			

- Molecule 28 is a protein called 60S ribosomal protein L27-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
28	AA	135	Total	C	N	O	0	0	0
			1092	710	202	180			
28	DB	135	Total	C	N	O	0	0	0
			1092	710	202	180			

- Molecule 29 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	AB	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			
29	DC	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			

- Molecule 30 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
30	AC	58	Total	C	N	O	0	0	0
			462	289	100	73			
30	DD	58	Total	C	N	O	0	0	0
			462	289	100	73			

- Molecule 31 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	AD	97	Total	C	N	O	S	0	0	0
			743	479	124	139	1			
31	DE	97	Total	C	N	O	S	0	0	0
			743	479	124	139	1			

- Molecule 32 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	AE	109	Total	C	N	O	S	0	0	0
			876	556	167	152	1			
32	DF	109	Total	C	N	O	S	0	0	0
			876	556	167	152	1			

- Molecule 33 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	AF	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			
33	DG	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

- Molecule 34 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	AG	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			
34	DH	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			

- Molecule 35 is a protein called 60S ribosomal protein L34-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	AH	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			
35	DI	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			

- Molecule 36 is a protein called 60S ribosomal protein L35-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	AI	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			
36	DJ	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			

- Molecule 37 is a protein called 60S ribosomal protein L36-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	AJ	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			
37	DK	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			

- Molecule 38 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	AK	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			
38	DL	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			

- Molecule 39 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	AL	77	Total	C	N	O	0	0	0
			612	391	115	106			
39	DM	77	Total	C	N	O	0	0	0
			612	391	115	106			

- Molecule 40 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	AM	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			
40	DN	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			

- Molecule 41 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	AN	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			
41	DO	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			

- Molecule 42 is a protein called 60S ribosomal protein L41-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	AO	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	DP	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			

- Molecule 43 is a protein called 60S ribosomal protein L42-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	AP	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			
43	DQ	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			

- Molecule 44 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	AQ	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			
44	DR	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			

- Molecule 45 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	i	159	Total	C	N	O	0	0	0
			1104	652	221	231			
45	sM	63	Total	C	N	O	0	0	0
			475	280	99	96			

- Molecule 46 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	p0	143	Total	C	N	O	S	0	0	0
			1076	686	192	195	3			

- Molecule 47 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	A	1781	Total	C	N	O	P	0	0	0
			37948	16965	6715	12487	1781			

- Molecule 48 is a protein called 40S ribosomal protein S0-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B	206	Total	C	N	O	S	0	0	0
			1577	1014	278	283	2			
48	s0	206	Total	C	N	O	S	0	0	0
			1583	1017	281	283	2			

- Molecule 49 is a protein called 40S ribosomal protein S1-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	C	214	Total	C	N	O	S	0	0	0
			1709	1084	310	311	4			
49	s1	216	Total	C	N	O	S	0	0	0
			1722	1091	312	315	4			

- Molecule 50 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	D	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			
50	s2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			

- Molecule 51 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	E	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			
51	s3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			

- Molecule 52 is a protein called 40S ribosomal protein S4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	F	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			
52	s4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			

- Molecule 53 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	G	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	s5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			

- Molecule 54 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	H	226	Total	C	N	O	S	0	0	0
			1799	1129	346	321	3			
54	s6	218	Total	C	N	O	S	0	0	0
			1755	1102	337	313	3			

- Molecule 55 is a protein called 40S ribosomal protein S7-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
55	I	184	Total	C	N	O	0	0	0
			1481	951	265	265			
55	s7	186	Total	C	N	O	0	0	0
			1491	957	267	267			

- Molecule 56 is a protein called 40S ribosomal protein S8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	J	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			
56	s8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

- Molecule 57 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	K	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			
57	s9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			

- Molecule 58 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	L	96	Total	C	N	O	S	0	0	0
			772	499	126	145	2			
58	c0	96	Total	C	N	O	S	0	0	0
			761	490	125	144	2			

- Molecule 59 is a protein called 40S ribosomal protein S11-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	M	155	Total	C	N	O	S	0	0	0
			1213	774	230	206	3			
59	c1	146	Total	C	N	O	S	0	0	0
			1168	747	221	197	3			

- Molecule 60 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	N	124	Total	C	N	O	S	0	0	0
			890	560	156	172	2			
60	c2	124	Total	C	N	O	S	0	0	0
			890	560	156	172	2			

- Molecule 61 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	O	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			
61	c3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			

- Molecule 62 is a protein called 40S ribosomal protein S14-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	P	127	Total	C	N	O	S	0	0	0
			891	545	182	163	1			
62	c4	128	Total	C	N	O	S	0	0	0
			949	582	188	176	3			

- Molecule 63 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	Q	124	Total	C	N	O	S	0	0	0
			977	622	182	166	7			
63	c5	135	Total	C	N	O	S	0	0	0
			1039	658	196	178	7			

- Molecule 64 is a protein called 40S ribosomal protein S16-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
64	R	141	Total	C	N	O	0	0	0
			1105	708	203	194			
64	c6	142	Total	C	N	O	0	0	0
			1111	711	204	196			

- Molecule 65 is a protein called 40S ribosomal protein S17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	S	120	Total	C	N	O	S	0	0	0
			926	577	177	170	2			
65	c7	117	Total	C	N	O	S	0	0	0
			906	563	174	167	2			

- Molecule 66 is a protein called 40S ribosomal protein S18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	T	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			
66	c8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			

- Molecule 67 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	U	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			
67	c9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			

- Molecule 68 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	V	107	Total	C	N	O	S	0	0	0
			855	539	156	159	1			
68	d0	110	Total	C	N	O	S	0	0	0
			882	554	161	166	1			

- Molecule 69 is a protein called 40S ribosomal protein S21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	W	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	d1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			

- Molecule 70 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	X	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			
70	d2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			

- Molecule 71 is a protein called 40S ribosomal protein S23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	Y	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			
71	d3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			

- Molecule 72 is a protein called 40S ribosomal protein S24-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
72	Z	134	Total	C	N	O	0	0	0
			1073	676	208	189			
72	d4	134	Total	C	N	O	0	0	0
			1073	676	208	189			

- Molecule 73 is a protein called 40S ribosomal protein S25-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
73	a	70	Total	C	N	O	0	0	0
			563	360	104	99			
73	d5	69	Total	C	N	O	0	0	0
			558	357	103	98			

- Molecule 74 is a protein called 40S ribosomal protein S26-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	b	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			
74	d6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

- Molecule 75 is a protein called 40S ribosomal protein S27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	c	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			
75	d7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			

- Molecule 76 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	d	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			
76	d8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			

- Molecule 77 is a protein called 40S ribosomal protein S29-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	e	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			
77	d9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			

- Molecule 78 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	f	60	Total	C	N	O	S	0	0	0
			475	299	98	77	1			
78	e0	62	Total	C	N	O	S	0	0	0
			491	309	101	80	1			

- Molecule 79 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	g	71	Total	C	N	O	S	0	0	0
			566	362	106	94	4			
79	e1	51	Total	C	N	O	S	0	0	0
			397	249	73	71	4			

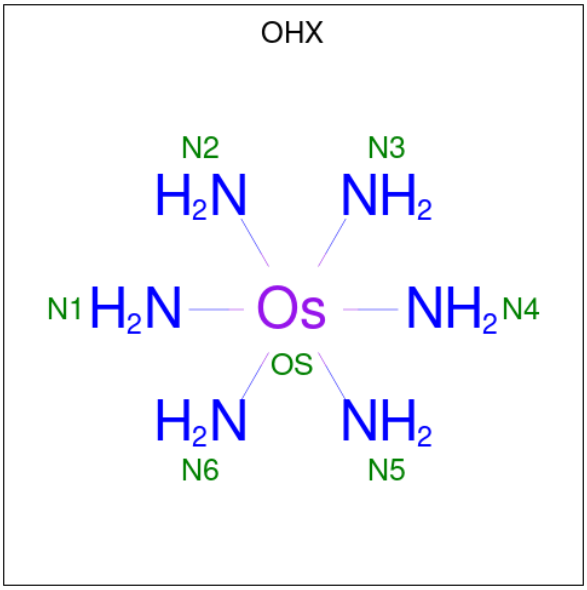
- Molecule 80 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
80	h	318	Total	C	N	O	S	0	0	0
			2437	1541	418	470	8			
80	Rb	318	Total	C	N	O	S	0	0	0
			2442	1544	418	472	8			

- Molecule 81 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
81	sR	1783	Total	C	N	O	P	0	0	0
			37990	16984	6723	12500	1783			

- Molecule 82 is osmium (III) hexammine (three-letter code: OHX) (formula: $H_{12}N_6Os$).



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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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			7	6	1		
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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82	1	1	Total Os 1 1	0	0
82	3	1	Total N Os 7 6 1	0	0
82	3	1	Total N Os 7 6 1	0	0
82	3	1	Total N Os 7 6 1	0	0
82	3	1	Total N Os 7 6 1	0	0
82	3	1	Total N Os 7 6 1	0	0
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82	4	1	Total N Os 7 6 1	0	0
82	4	1	Total N Os 7 6 1	0	0
82	4	1	Total N Os 7 6 1	0	0
82	4	1	Total N Os 7 6 1	0	0
82	4	1	Total N Os 7 6 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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82	4	1	Total N Os 7 6 1	0	0
82	4	1	Total N Os 7 6 1	0	0
82	4	1	Total N Os 7 6 1	0	0
82	k	1	Total N Os 7 6 1	0	0
82	l	1	Total N Os 7 6 1	0	0
82	n	1	Total N Os 7 6 1	0	0
82	r	1	Total N Os 7 6 1	0	0
82	v	1	Total N Os 7 6 1	0	0
82	v	1	Total N Os 7 6 1	0	0
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82	x	1	Total N Os 7 6 1	0	0
82	y	1	Total N Os 7 6 1	0	0
82	z	1	Total N Os 7 6 1	0	0
82	2	1	Total N Os 7 6 1	0	0
82	AC	1	Total N Os 7 6 1	0	0
82	AE	1	Total N Os 7 6 1	0	0
82	AG	1	Total N Os 7 6 1	0	0
82	AK	1	Total N Os 7 6 1	0	0
82	AK	1	Total N Os 7 6 1	0	0
82	AP	1	Total N Os 7 6 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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82	AR	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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82	AR	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	AR	1	Total	N	Os	0	0
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82	AR	1	Total	N	Os	0	0
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82	AR	1	Total	N	Os	0	0
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82	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
82	AR	1	Total	N	Os	0	0
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82	AR	1	Total	N	Os	0	0
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82	AR	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	AR	1	Total	N	Os	0	0
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			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		
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82	AR	1	Total	N	Os	0	0
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			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	AR	1	Total	N	Os	0	0
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82	AR	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
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			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	AR	1	Total	N	Os	0	0
			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
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			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	AR	1	Total	N	Os	0	0
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82	AR	1	Total	N	Os	0	0
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			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		
82	AR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	AR	1	Total N Os 7 6 1	0	0
82	AR	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AS	1	Total N Os 7 6 1	0	0
82	AT	1	Total N Os 7 6 1	0	0
82	AT	1	Total N Os 7 6 1	0	0
82	AT	1	Total N Os 7 6 1	0	0
82	AT	1	Total N Os 7 6 1	0	0
82	AT	1	Total N Os 7 6 1	0	0
82	AT	1	Total N Os 7 6 1	0	0
82	AT	1	Total N Os 7 6 1	0	0
82	AT	1	Total N Os 7 6 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	AT	1	Total 7	N 6	Os 1	0	0
82	AT	1	Total 7	N 6	Os 1	0	0
82	AT	1	Total 7	N 6	Os 1	0	0
82	AT	1	Total 7	N 6	Os 1	0	0
82	AT	1	Total 7	N 6	Os 1	0	0
82	AT	1	Total 7	N 6	Os 1	0	0
82	AT	1	Total 7	N 6	Os 1	0	0
82	CE	1	Total 7	N 6	Os 1	0	0
82	CE	1	Total 7	N 6	Os 1	0	0
82	CF	1	Total 7	N 6	Os 1	0	0
82	CG	1	Total 7	N 6	Os 1	0	0
82	CG	1	Total 7	N 6	Os 1	0	0
82	CG	1	Total 7	N 6	Os 1	0	0
82	CH	1	Total 7	N 6	Os 1	0	0
82	CK	1	Total 7	N 6	Os 1	0	0
82	CL	1	Total 7	N 6	Os 1	0	0
82	CL	1	Total 7	N 6	Os 1	0	0
82	CM	1	Total 7	N 6	Os 1	0	0
82	CO	1	Total 7	N 6	Os 1	0	0
82	CP	1	Total 7	N 6	Os 1	0	0
82	CQ	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	CS	1	Total Os 1 1	0	0
82	CX	1	Total N Os 7 6 1	0	0
82	CX	1	Total N Os 7 6 1	0	0
82	DD	1	Total N Os 7 6 1	0	0
82	DG	1	Total N Os 7 6 1	0	0
82	DH	1	Total N Os 7 6 1	0	0
82	DQ	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
			7	6	1		
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82	A	1	Total	N	Os	0	0
			7	6	1		
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
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			7	6	1		
82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
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82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
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82	A	1	Total N Os 7 6 1	0	0
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82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
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82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
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82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0
82	A	1	Total N Os 7 6 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	A	1	Total	N	Os	0	0
			7	6	1		
82	A	1	Total	N	Os	0	0
			7	6	1		
82	J	1	Total	N	Os	0	0
			7	6	1		
82	J	1	Total	N	Os	0	0
			7	6	1		
82	O	1	Total	N	Os	0	0
			7	6	1		
82	Q	1	Total	N	Os	0	0
			7	6	1		
82	T	1	Total	N	Os	0	0
			7	6	1		
82	e	1	Total	N	Os	0	0
			7	6	1		
82	h	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	sR	1	Total	N	Os	0	0
			7	6	1		
82	Rb	1	Total	N	Os	0	0
			7	6	1		
82	s1	1	Total	N	Os	0	0
			7	6	1		
82	s4	1	Total	N	Os	0	0
			7	6	1		
82	s8	1	Total	N	Os	0	0
			7	6	1		
82	c1	1	Total	N	Os	0	0
			7	6	1		
82	c3	1	Total	N	Os	0	0
			7	6	1		
82	c5	1	Total	N	Os	0	0
			7	6	1		
82	c8	1	Total	N	Os	0	0
			7	6	1		
82	d4	1	Total	N	Os	0	0
			7	6	1		
82	d9	1	Total	N	Os	0	0
			7	6	1		

- Molecule 83 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	1	499	Total Mg 499 499	0	0
83	3	13	Total Mg 13 13	0	0
83	4	23	Total Mg 23 23	0	0
83	j	2	Total Mg 2 2	0	0
83	k	1	Total Mg 1 1	0	0
83	l	3	Total Mg 3 3	0	0
83	o	1	Total Mg 1 1	0	0
83	r	2	Total Mg 2 2	0	0
83	s	1	Total Mg 1 1	0	0
83	t	3	Total Mg 3 3	0	0
83	v	5	Total Mg 5 5	0	0
83	w	1	Total Mg 1 1	0	0
83	x	5	Total Mg 5 5	0	0
83	z	1	Total Mg 1 1	0	0
83	6	3	Total Mg 3 3	0	0
83	9	1	Total Mg 1 1	0	0
83	AB	8	Total Mg 8 8	0	0
83	AF	2	Total Mg 2 2	0	0
83	AG	1	Total Mg 1 1	0	0
83	AH	1	Total Mg 1 1	0	0
83	AK	2	Total Mg 2 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	AM	1	Total Mg 1 1	0	0
83	AP	1	Total Mg 1 1	0	0
83	AR	523	Total Mg 523 523	0	0
83	AS	19	Total Mg 19 19	0	0
83	AT	15	Total Mg 15 15	0	0
83	CD	3	Total Mg 3 3	0	0
83	CE	3	Total Mg 3 3	0	0
83	CF	2	Total Mg 2 2	0	0
83	CG	3	Total Mg 3 3	0	0
83	CI	2	Total Mg 2 2	0	0
83	CJ	1	Total Mg 1 1	0	0
83	CK	3	Total Mg 3 3	0	0
83	CL	1	Total Mg 1 1	0	0
83	CM	1	Total Mg 1 1	0	0
83	CO	1	Total Mg 1 1	0	0
83	CP	4	Total Mg 4 4	0	0
83	CQ	2	Total Mg 2 2	0	0
83	CR	8	Total Mg 8 8	0	0
83	CU	2	Total Mg 2 2	0	0
83	CX	3	Total Mg 3 3	0	0
83	CY	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	DA	2	Total Mg 2 2	0	0
83	DC	4	Total Mg 4 4	0	0
83	DD	1	Total Mg 1 1	0	0
83	DE	1	Total Mg 1 1	0	0
83	DH	1	Total Mg 1 1	0	0
83	DI	1	Total Mg 1 1	0	0
83	DL	1	Total Mg 1 1	0	0
83	DN	1	Total Mg 1 1	0	0
83	DO	1	Total Mg 1 1	0	0
83	DP	1	Total Mg 1 1	0	0
83	DQ	3	Total Mg 3 3	0	0
83	DR	2	Total Mg 2 2	0	0
83	sM	2	Total Mg 2 2	0	0
83	A	129	Total Mg 129 129	0	0
83	D	1	Total Mg 1 1	0	0
83	F	1	Total Mg 1 1	0	0
83	H	1	Total Mg 1 1	0	0
83	J	1	Total Mg 1 1	0	0
83	O	1	Total Mg 1 1	0	0
83	Y	1	Total Mg 1 1	0	0
83	b	1	Total Mg 1 1	0	0

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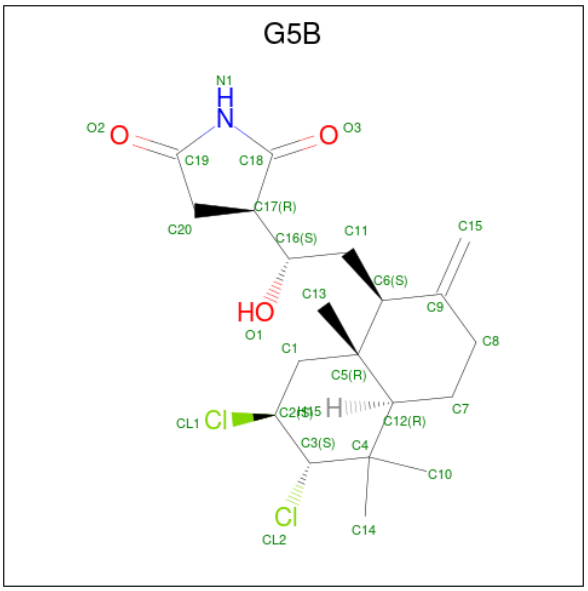
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	e	1	Total Mg 1 1	0	0
83	sR	154	Total Mg 154 154	0	0
83	s1	1	Total Mg 1 1	0	0
83	s2	1	Total Mg 1 1	0	0
83	s4	1	Total Mg 1 1	0	0
83	s8	2	Total Mg 2 2	0	0
83	c1	2	Total Mg 2 2	0	0
83	c4	1	Total Mg 1 1	0	0
83	c6	1	Total Mg 1 1	0	0
83	c8	1	Total Mg 1 1	0	0
83	c9	1	Total Mg 1 1	0	0
83	d3	3	Total Mg 3 3	0	0
83	d4	3	Total Mg 3 3	0	0
83	d5	1	Total Mg 1 1	0	0
83	d6	1	Total Mg 1 1	0	0
83	d9	1	Total Mg 1 1	0	0

- Molecule 84 is (3 {R})-3-[(1 {S})-2-[(1 {S},4 {a} {R},6 {S},7 {S},8 {a} {R})-6,7-bis(chloranyl)-5,5,8 {a}-trimethyl-2-methylidene-3,4,4 {a},6,7,8-hexahydro-1 {H}-naphthalen-1-yl]-1-oxidanyl-ethyl]pyrrolidine-2,5-dione (three-letter code: G5B) (formula: $C_{20}H_{29}Cl_2NO_3$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
84	1	1	Total	C	Cl	N	O	0	0
			26	20	2	1	3		
84	AR	1	Total	C	Cl	N	O	0	0
			26	20	2	1	3		

- Molecule 85 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	AK	1	Total	Zn	0	0
			1	1		
85	AN	1	Total	Zn	0	0
			1	1		
85	AP	1	Total	Zn	0	0
			1	1		
85	AQ	1	Total	Zn	0	0
			1	1		
85	DL	1	Total	Zn	0	0
			1	1		
85	DO	1	Total	Zn	0	0
			1	1		
85	DQ	1	Total	Zn	0	0
			1	1		
85	DR	1	Total	Zn	0	0
			1	1		
85	b	1	Total	Zn	0	0
			1	1		
85	c	1	Total	Zn	0	0
			1	1		

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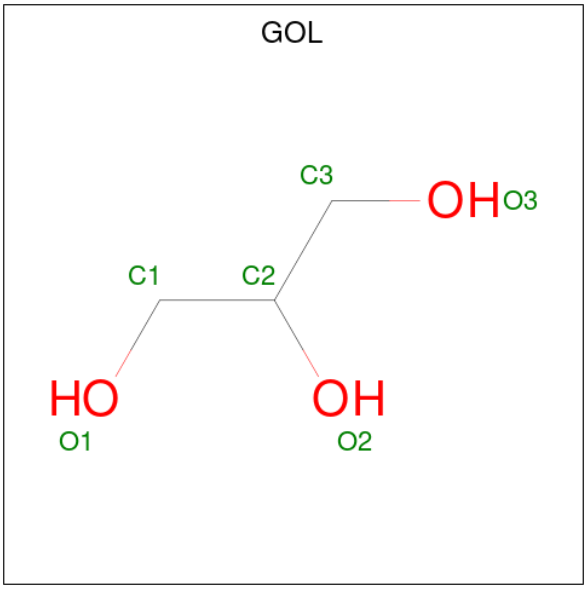
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
85	e	1	Total Zn 1 1	0	0
85	g	1	Total Zn 1 1	0	0
85	d6	1	Total Zn 1 1	0	0
85	d7	1	Total Zn 1 1	0	0
85	d9	1	Total Zn 1 1	0	0
85	e1	1	Total Zn 1 1	0	0

- Molecule 86 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).



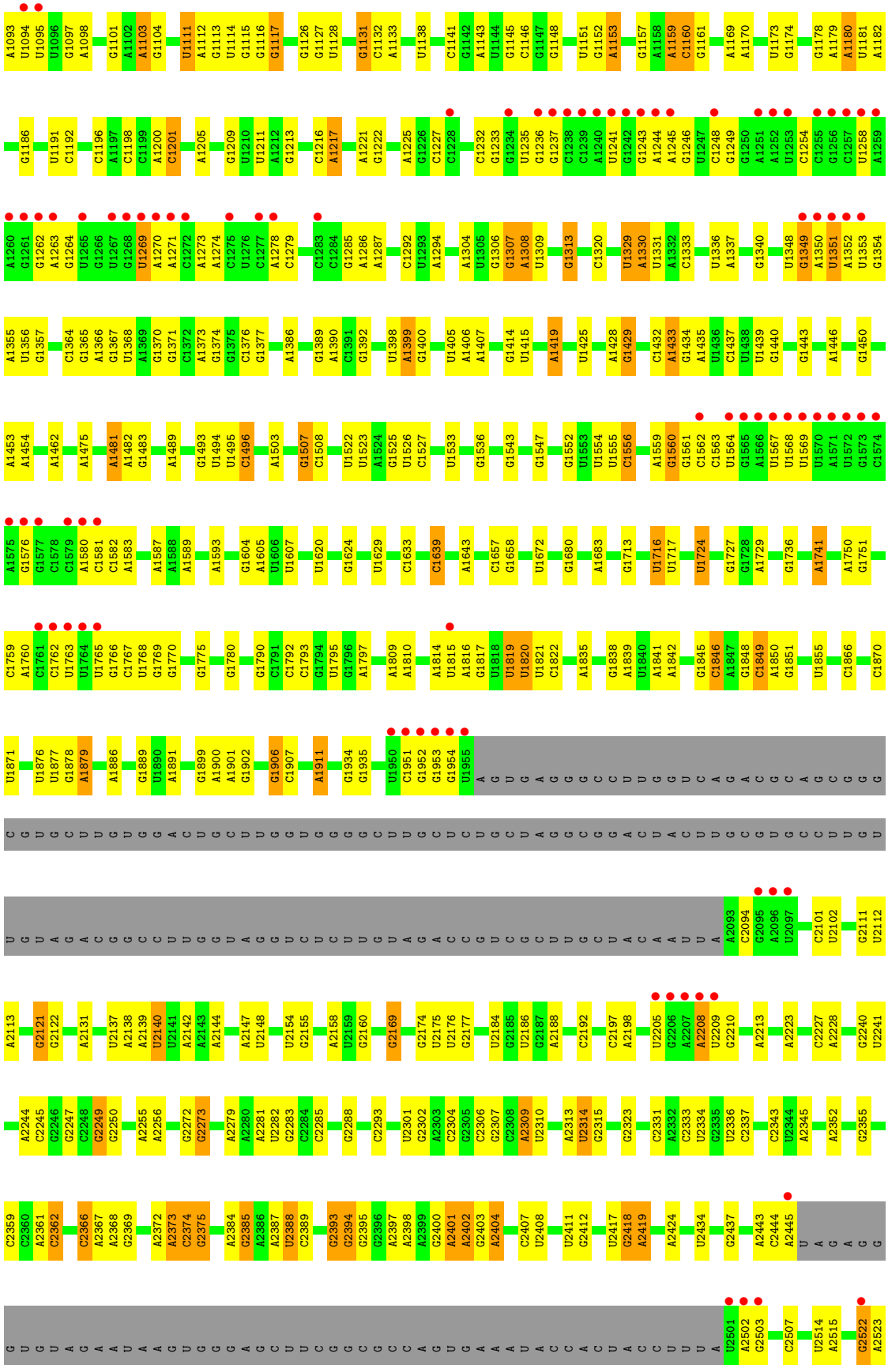
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
86	AR	1	Total C O 6 3 3	0	0
86	AR	1	Total C O 6 3 3	0	0

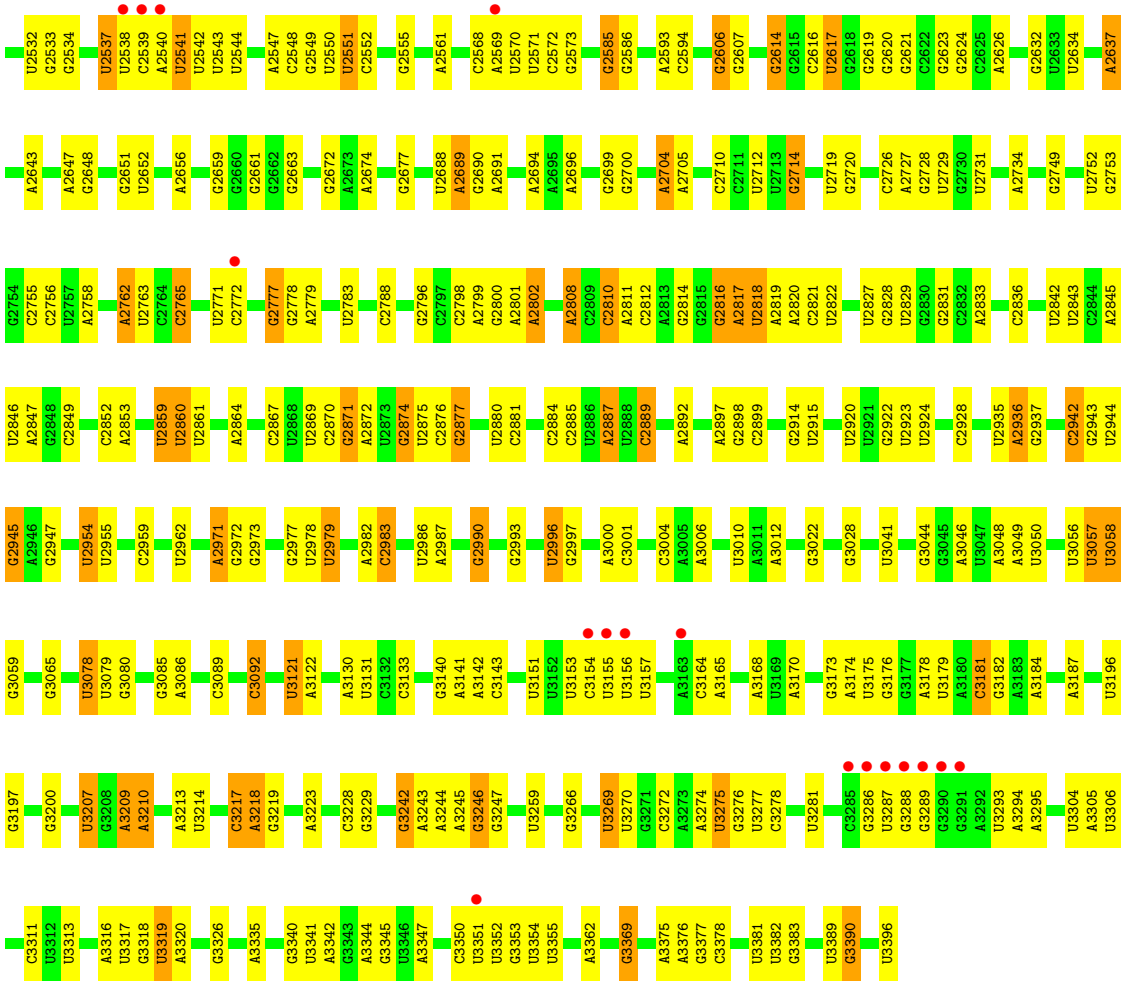
3 Residue-property plots (i)

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

• Molecule 1: 25S ribosomal RNA

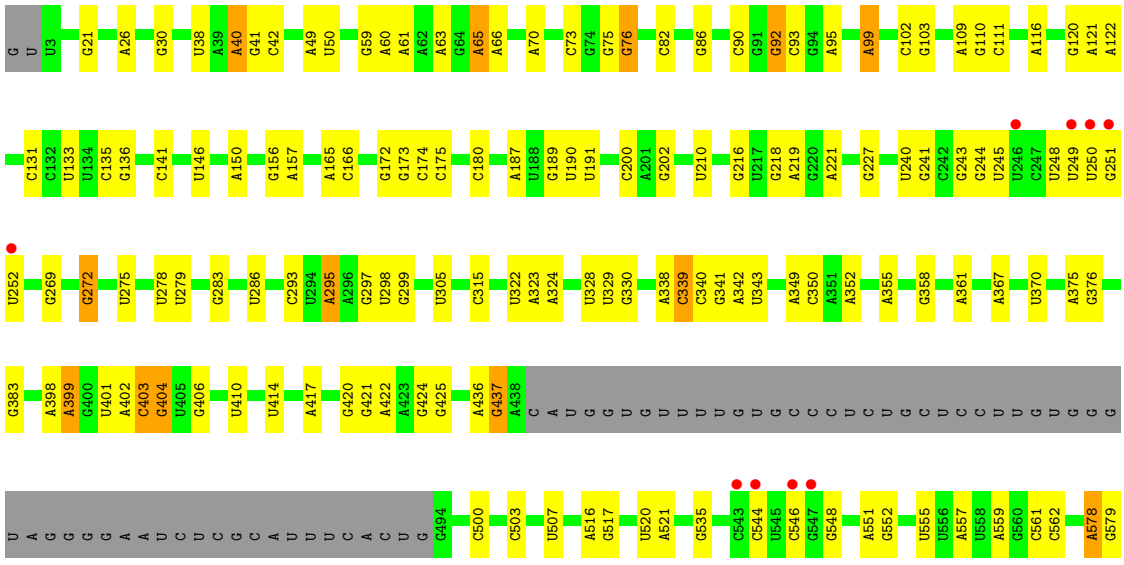
Chain 1:

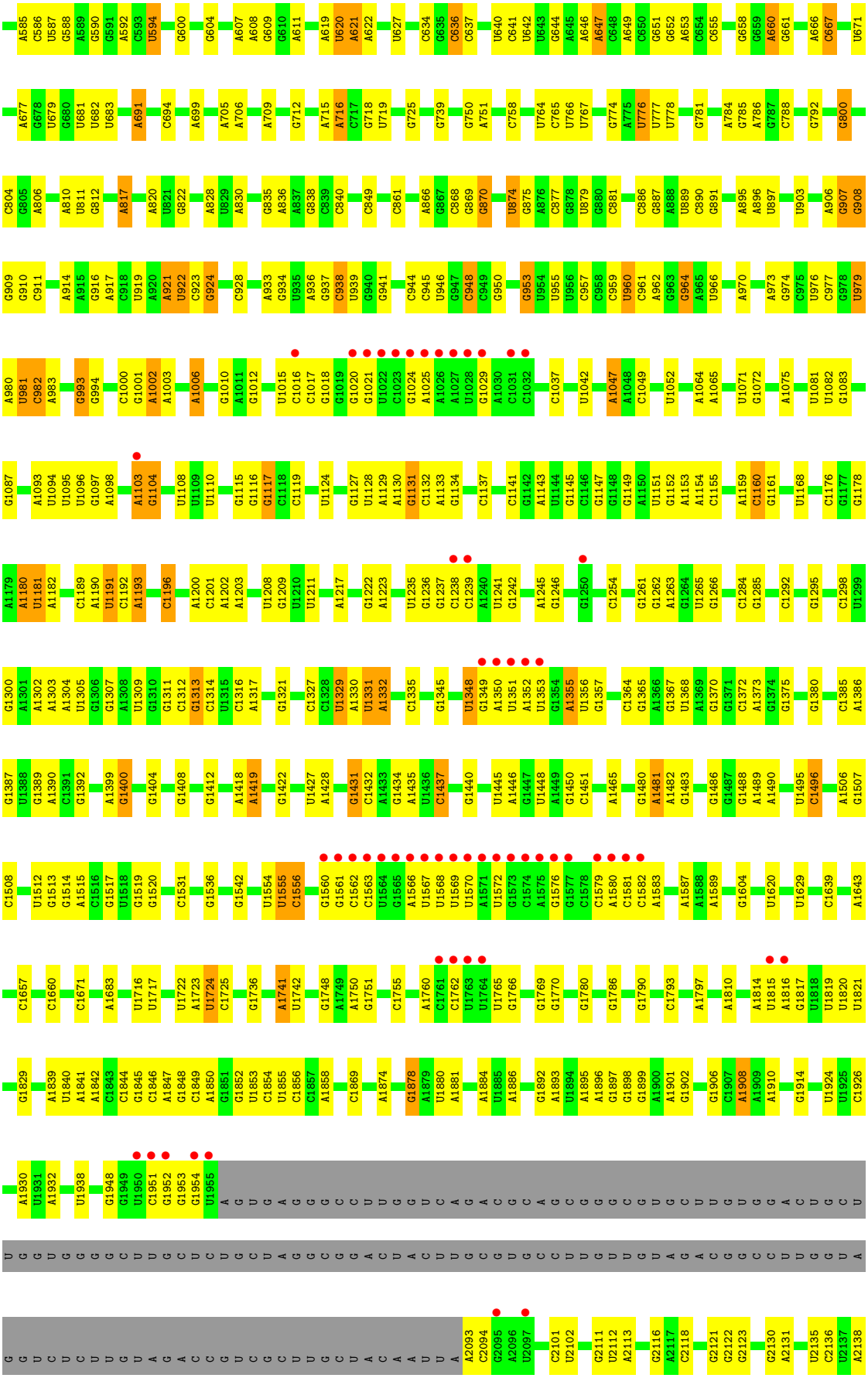


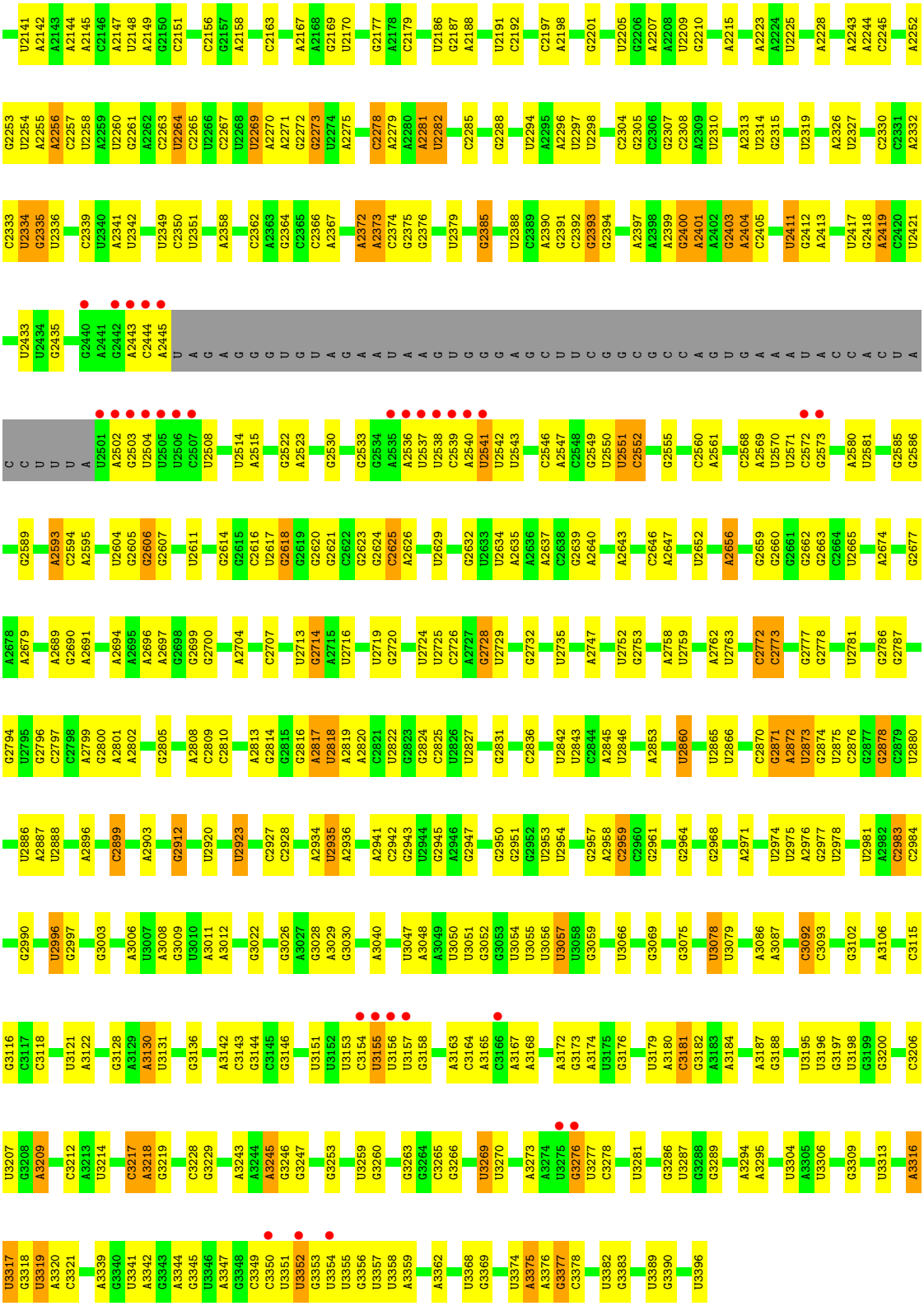


• Molecule 1: 25S ribosomal RNA

Chain AR:

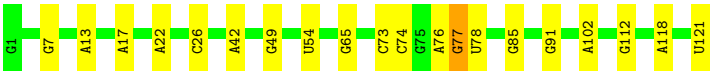






• Molecule 2: 5S ribosomal RNA

Chain 3:

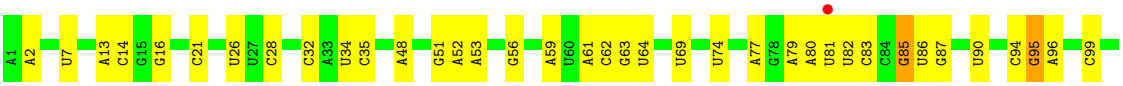


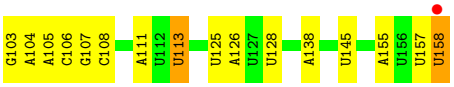
• Molecule 2: 5S ribosomal RNA

Chain AS:

• Molecule 3: 5.8S ribosomal RNA

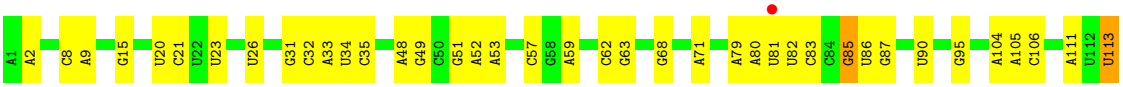
Chain 4:





• Molecule 3: 5.8S ribosomal RNA

Chain AT:

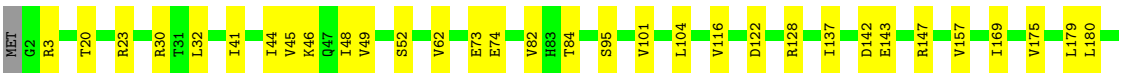


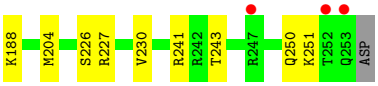
• Molecule 4: 60S ribosomal protein L2-A

Chain j:

• Molecule 4: 60S ribosomal protein L2-A

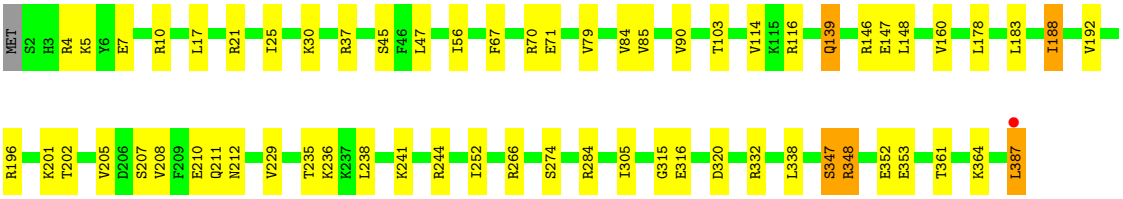
Chain CD:





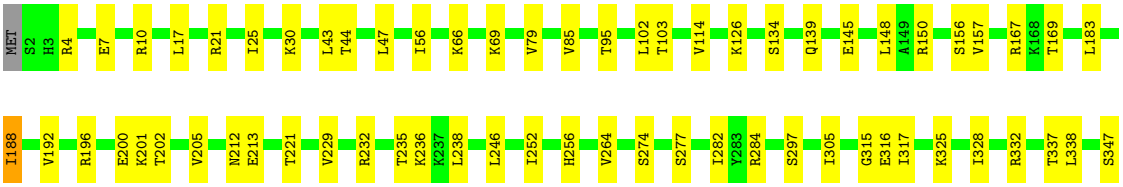
• Molecule 5: 60S ribosomal protein L3

Chain k:



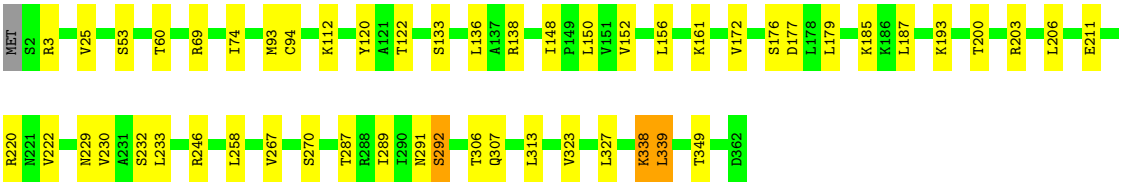
• Molecule 5: 60S ribosomal protein L3

Chain CE:



• Molecule 6: 60S ribosomal protein L4-A

Chain l:



• Molecule 6: 60S ribosomal protein L4-A

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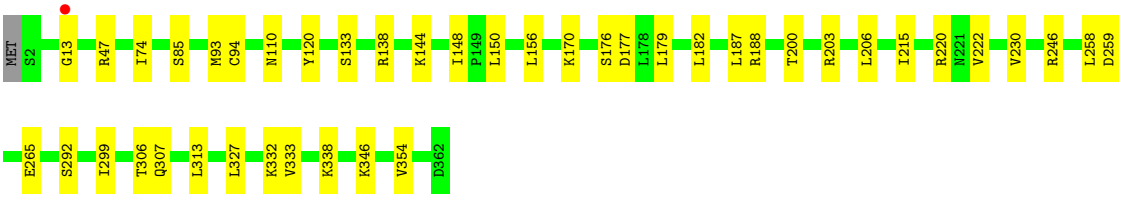
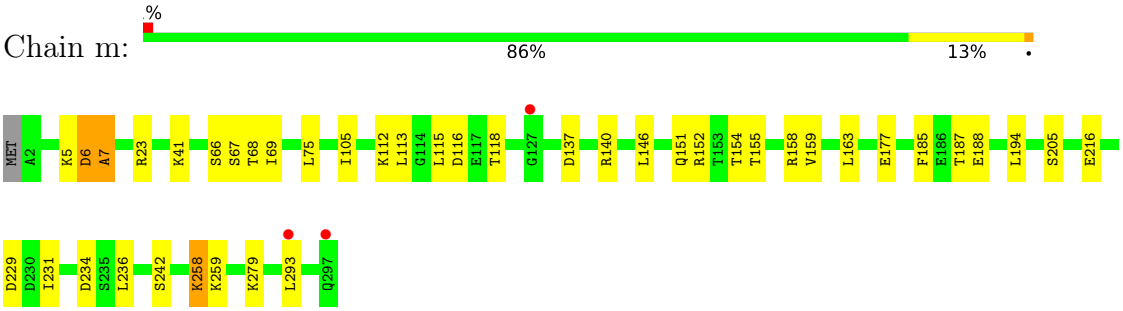


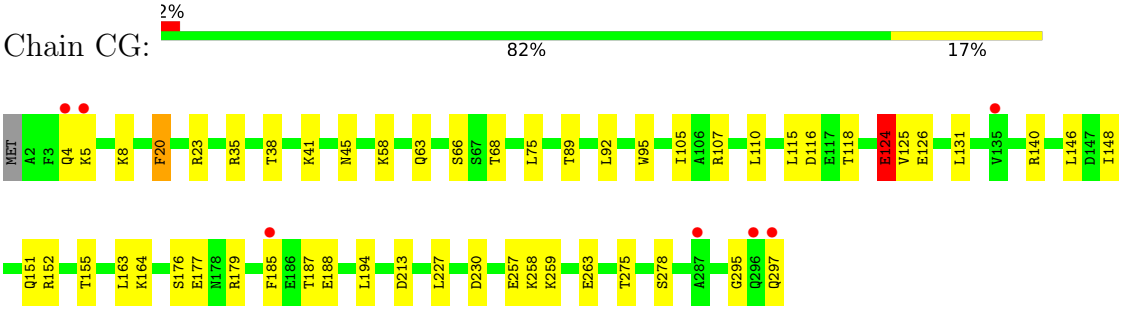
• Molecule 7: 60S ribosomal protein L5

Chain m:



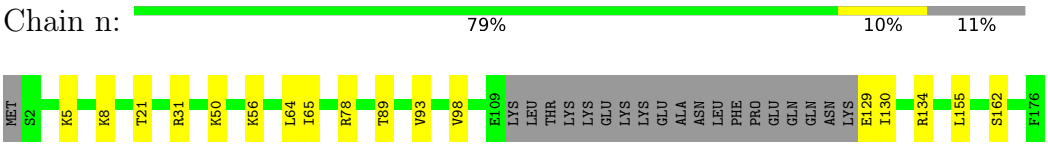
• Molecule 7: 60S ribosomal protein L5

Chain CG:



• Molecule 8: 60S ribosomal protein L6-A

Chain n:



• Molecule 8: 60S ribosomal protein L6-A

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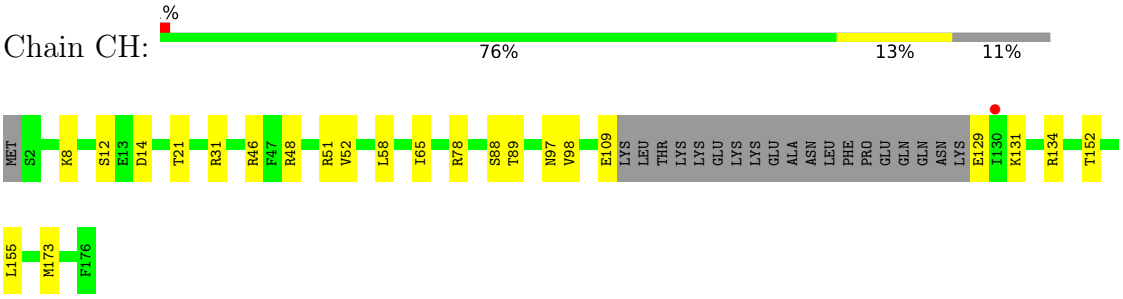
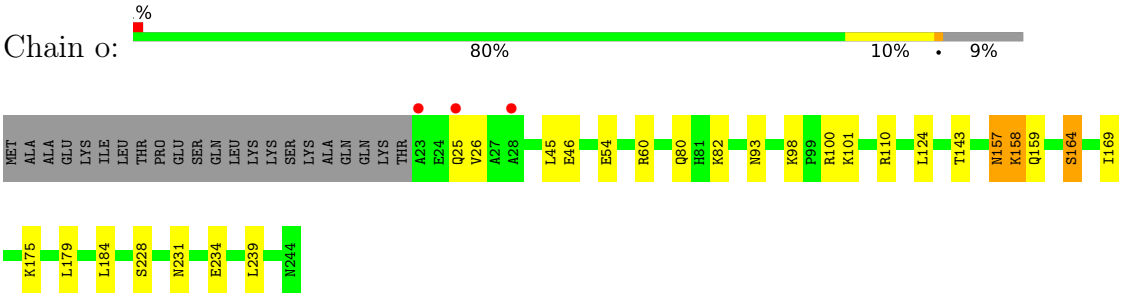


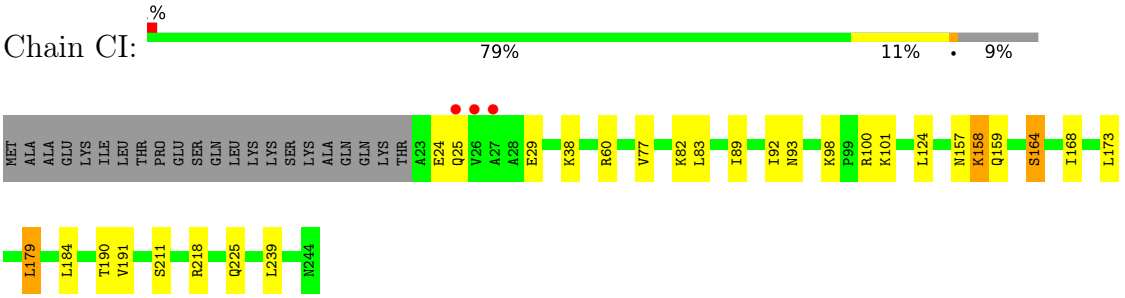
• Molecule 9: 60S ribosomal protein L7-A

Chain o:



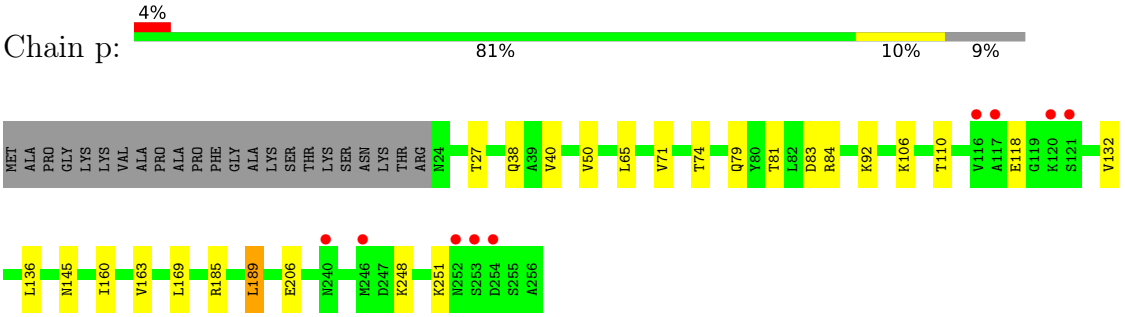
• Molecule 9: 60S ribosomal protein L7-A

Chain CI:



• Molecule 10: 60S ribosomal protein L8-A

Chain p:



• Molecule 10: 60S ribosomal protein L8-A

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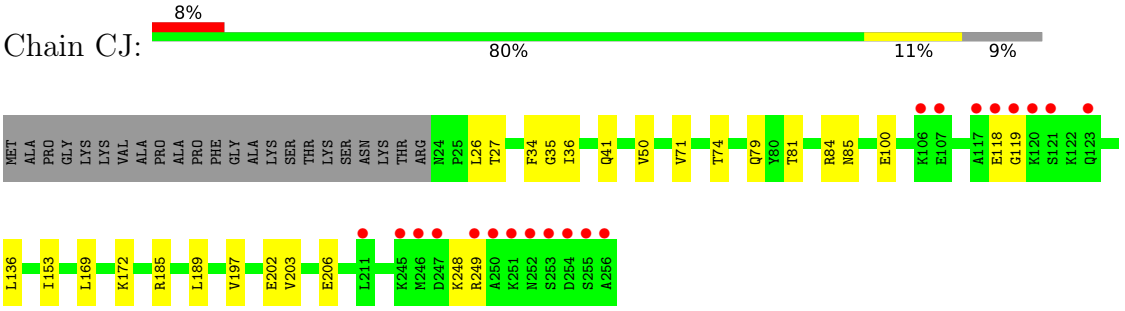
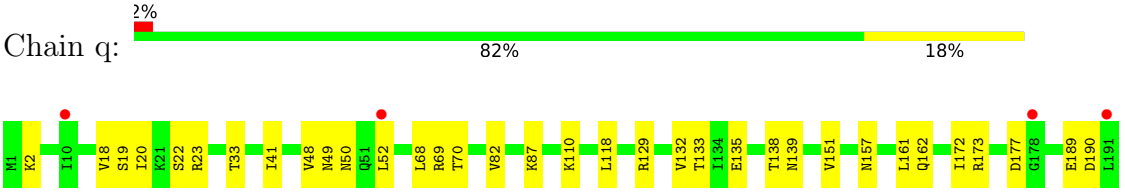


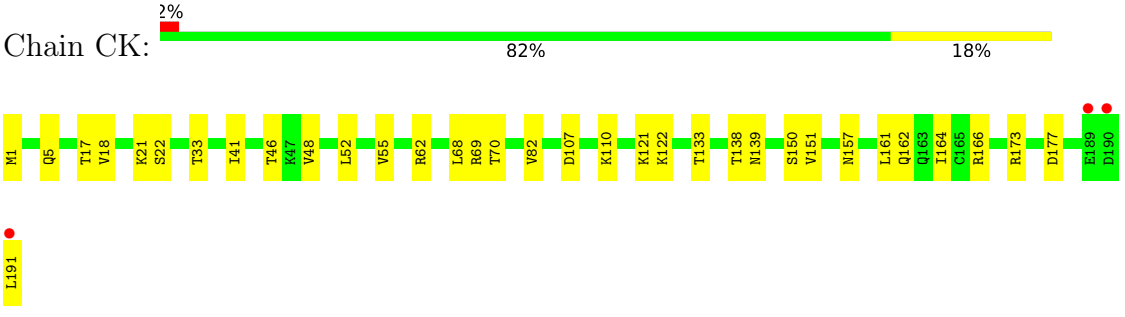
• Molecule 11: 60S ribosomal protein L9-A

Chain q:



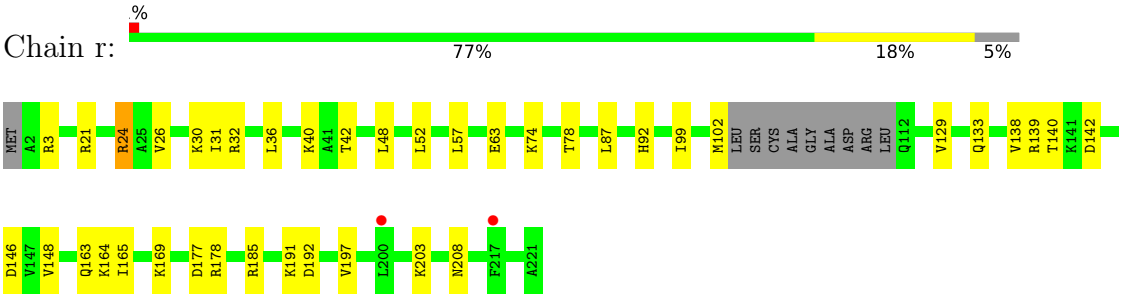
• Molecule 11: 60S ribosomal protein L9-A

Chain CK:



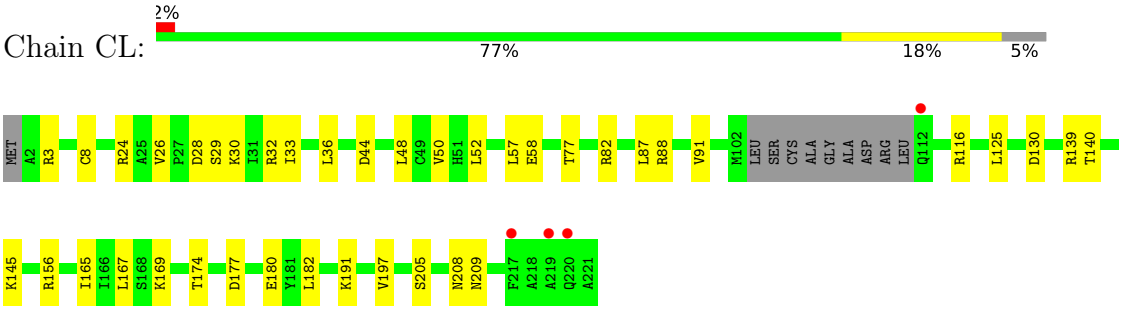
• Molecule 12: 60S ribosomal protein L10

Chain r:



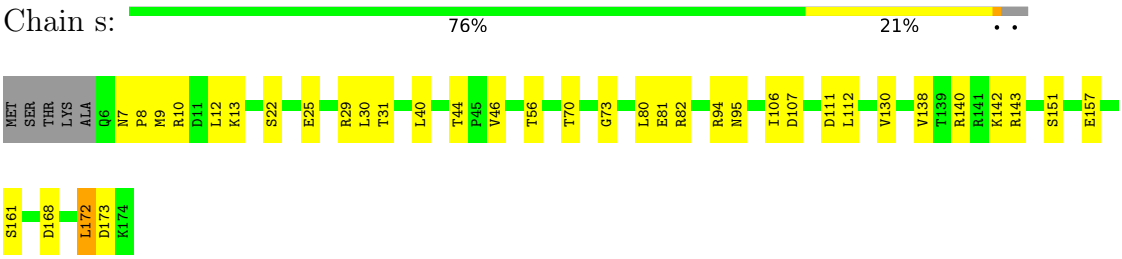
• Molecule 12: 60S ribosomal protein L10

Chain CL:



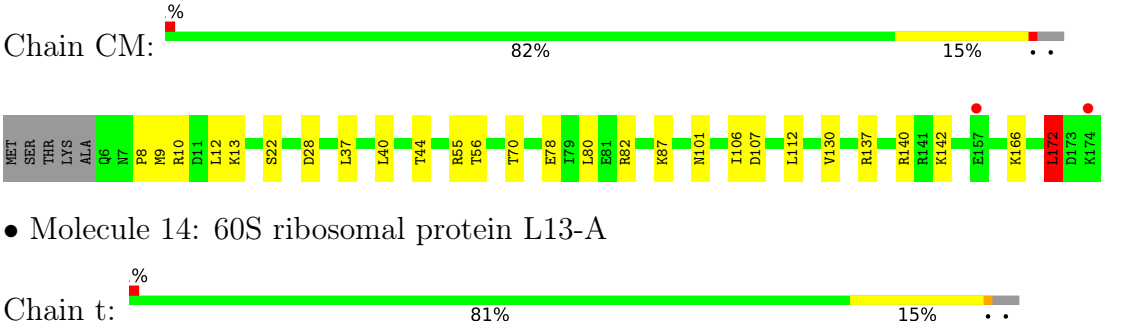
• Molecule 13: 60S ribosomal protein L11-B

Chain s:



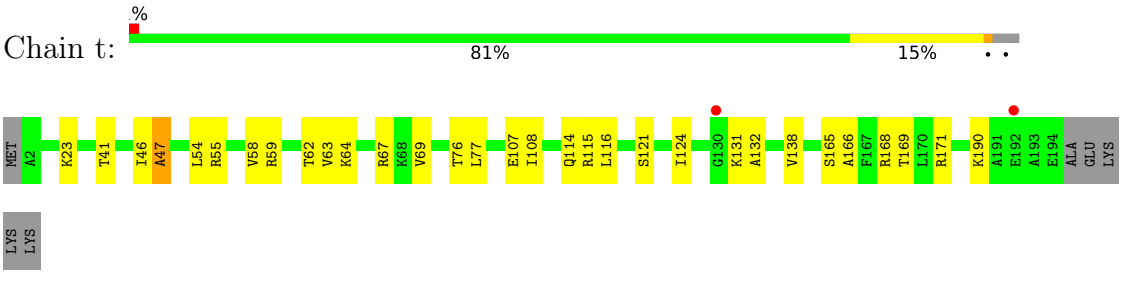
• Molecule 13: 60S ribosomal protein L11-B

Chain CM:



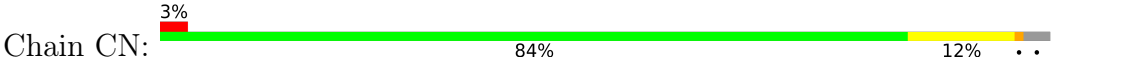
• Molecule 14: 60S ribosomal protein L13-A

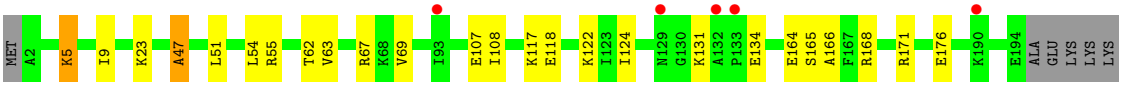
Chain t:



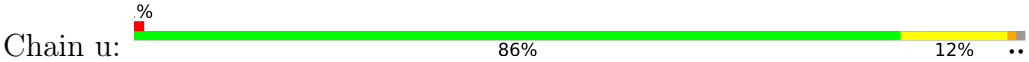
• Molecule 14: 60S ribosomal protein L13-A

Chain CN:

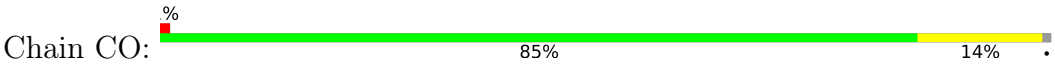


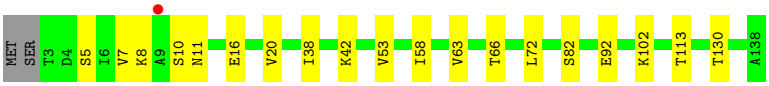


• Molecule 15: 60S ribosomal protein L14-A

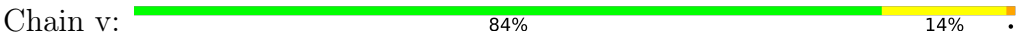


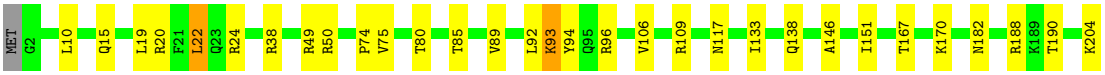
• Molecule 15: 60S ribosomal protein L14-A



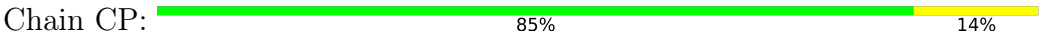


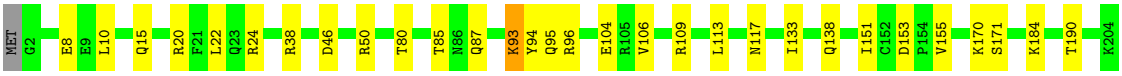
• Molecule 16: 60S ribosomal protein L15-A



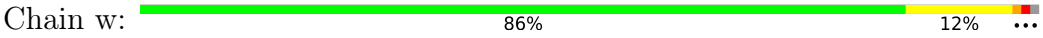


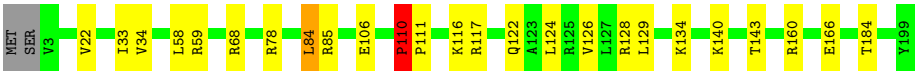
• Molecule 16: 60S ribosomal protein L15-A



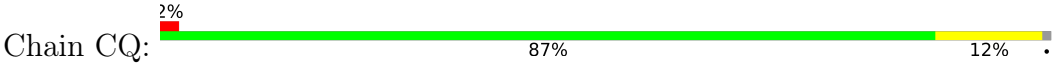


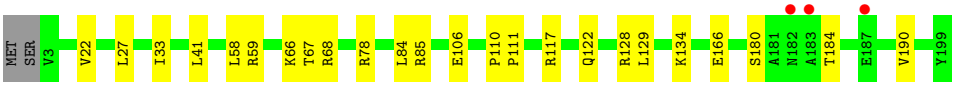
• Molecule 17: 60S ribosomal protein L16-A



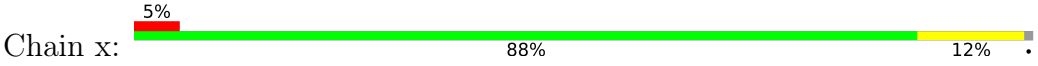


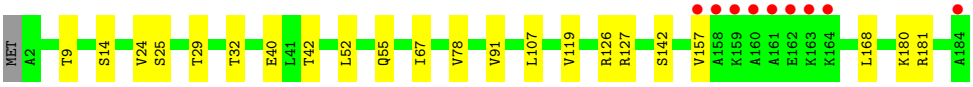
• Molecule 17: 60S ribosomal protein L16-A



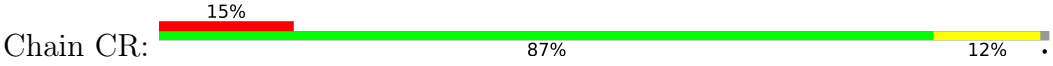


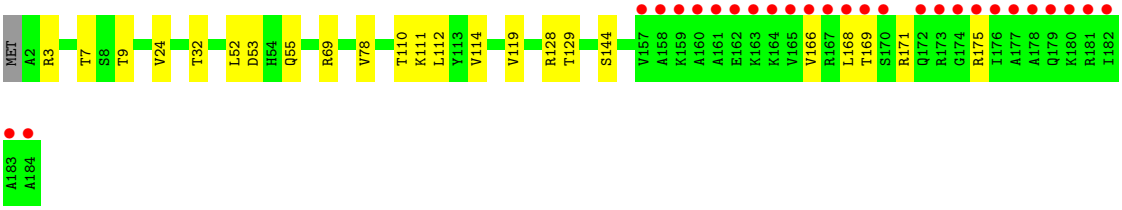
• Molecule 18: 60S ribosomal protein L17-A



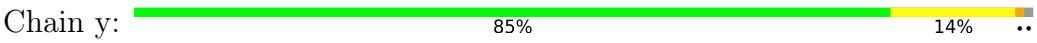


• Molecule 18: 60S ribosomal protein L17-A

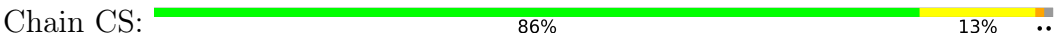




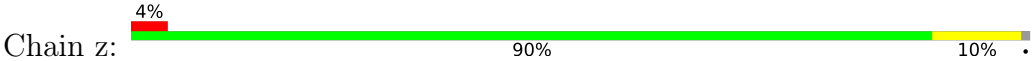
• Molecule 19: 60S ribosomal protein L18-A

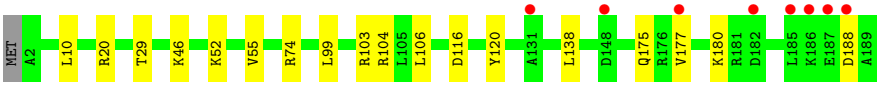


• Molecule 19: 60S ribosomal protein L18-A

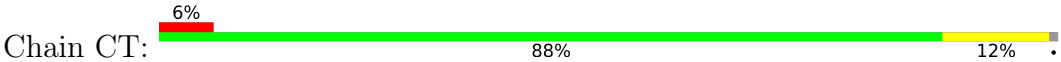


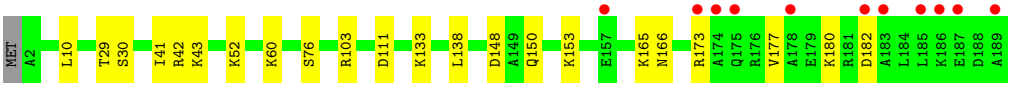
• Molecule 20: 60S ribosomal protein L19-A



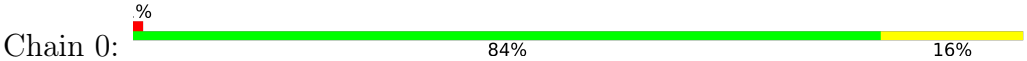


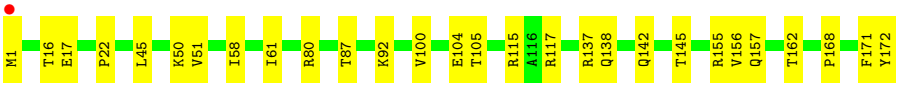
• Molecule 20: 60S ribosomal protein L19-A





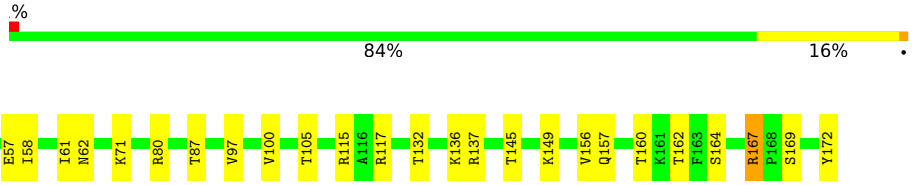
• Molecule 21: 60S ribosomal protein L20-A





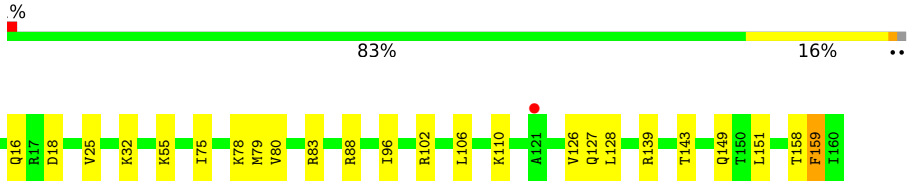
• Molecule 21: 60S ribosomal protein L20-A

Chain CU:



• Molecule 22: 60S ribosomal protein L21-A

Chain 2:



• Molecule 22: 60S ribosomal protein L21-A

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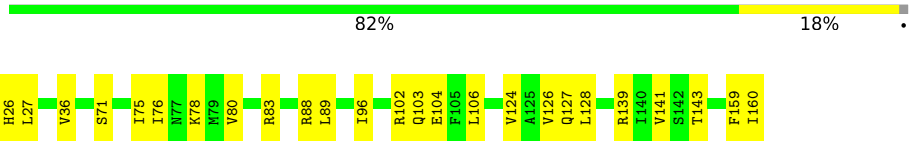
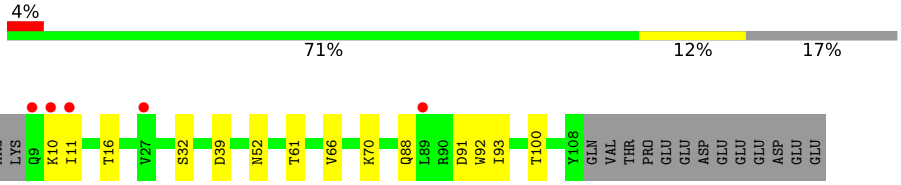


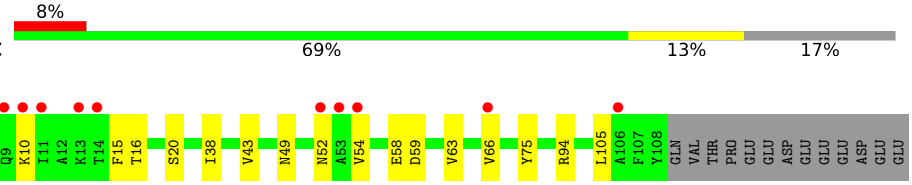
• Molecule 23: 60S ribosomal protein L22-A

Chain 5:



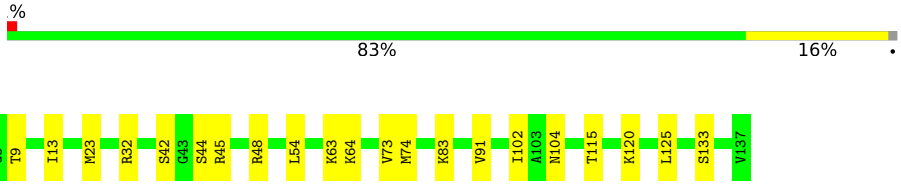
• Molecule 23: 60S ribosomal protein L22-A

Chain CW:



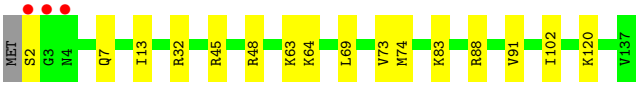
• Molecule 24: 60S ribosomal protein L23-A

Chain 6:



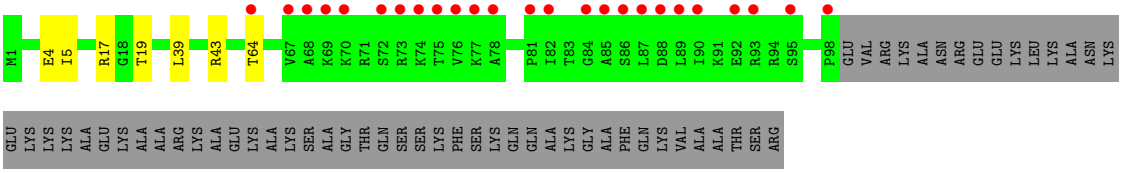
• Molecule 24: 60S ribosomal protein L23-A

Chain CX:



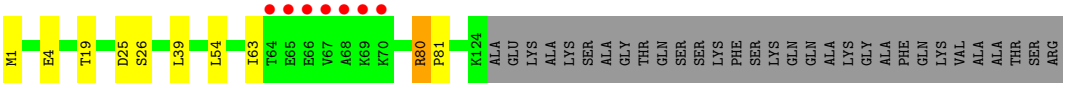
• Molecule 25: 60S ribosomal protein L24-A

Chain 7:



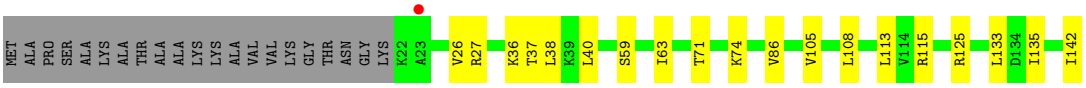
• Molecule 25: 60S ribosomal protein L24-A

Chain CY:



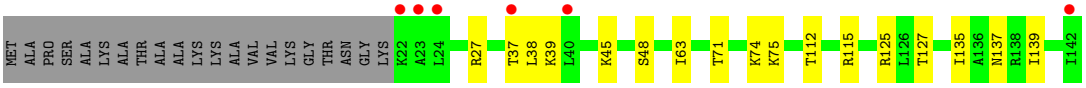
• Molecule 26: 60S ribosomal protein L25

Chain 8:



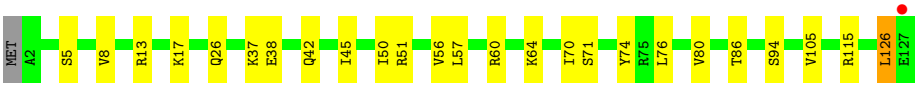
• Molecule 26: 60S ribosomal protein L25

Chain CZ:



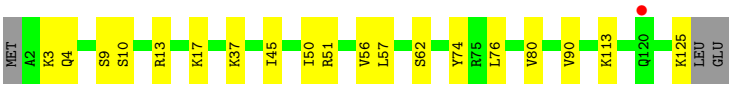
• Molecule 27: 60S ribosomal protein L26-A

Chain 9:



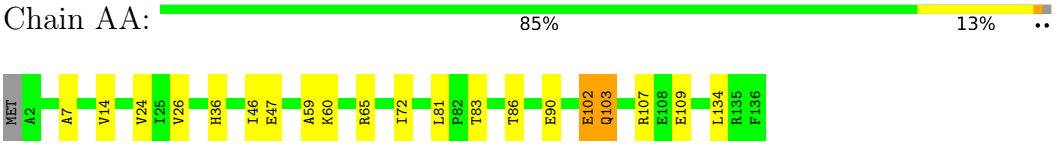
• Molecule 27: 60S ribosomal protein L26-A

Chain DA:



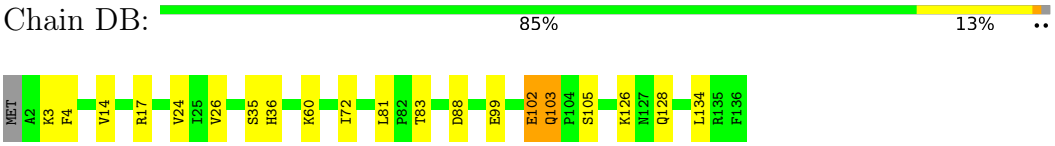
• Molecule 28: 60S ribosomal protein L27-A

Chain AA:



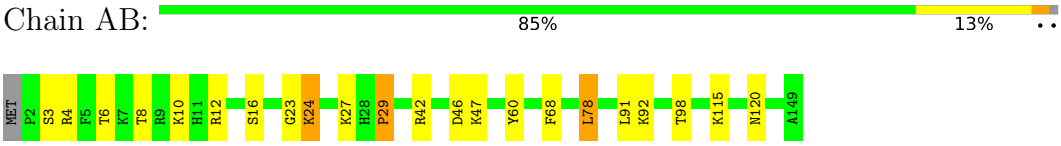
• Molecule 28: 60S ribosomal protein L27-A

Chain DB:



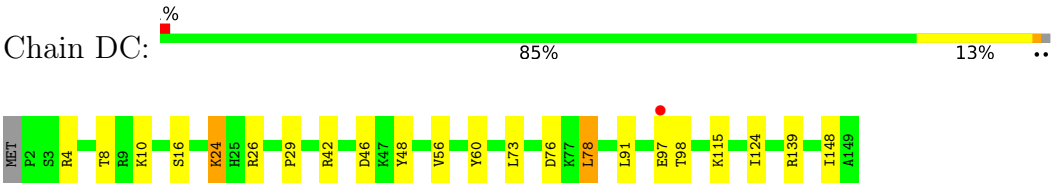
• Molecule 29: 60S ribosomal protein L28

Chain AB:



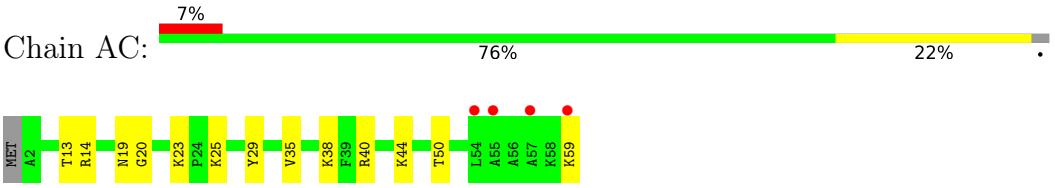
• Molecule 29: 60S ribosomal protein L28

Chain DC:



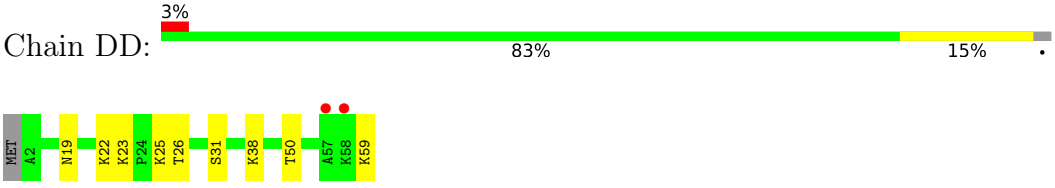
• Molecule 30: 60S ribosomal protein L29

Chain AC:



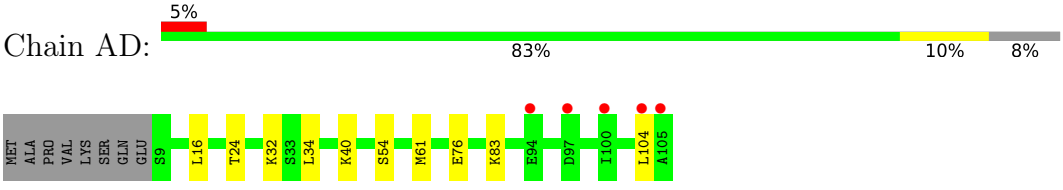
• Molecule 30: 60S ribosomal protein L29

Chain DD:



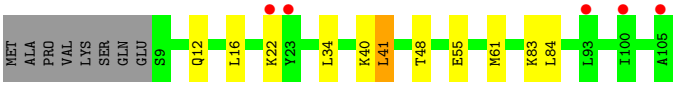
• Molecule 31: 60S ribosomal protein L30

Chain AD:



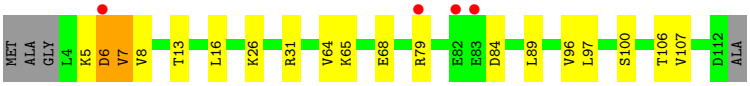
• Molecule 31: 60S ribosomal protein L30

Chain DE:



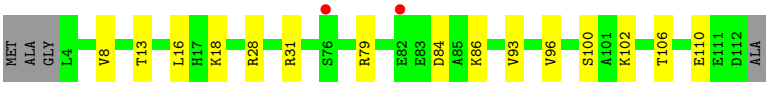
• Molecule 32: 60S ribosomal protein L31-A

Chain AE:



• Molecule 32: 60S ribosomal protein L31-A

Chain DF:

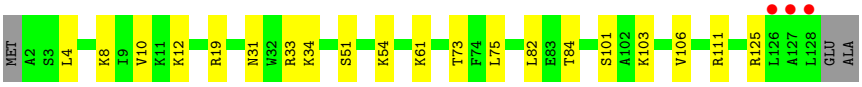


• Molecule 33: 60S ribosomal protein L32

Chain AF:

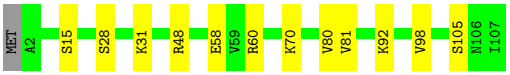
• Molecule 33: 60S ribosomal protein L32

Chain DG:



• Molecule 34: 60S ribosomal protein L33-A

Chain AG:

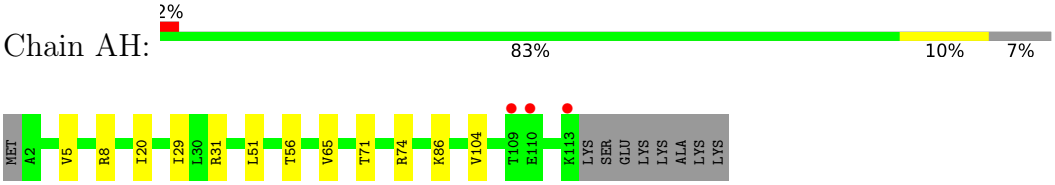


• Molecule 34: 60S ribosomal protein L33-A

Chain DH:

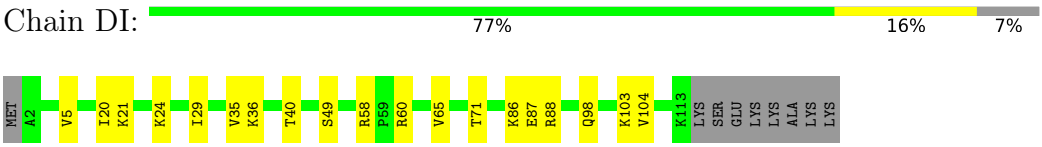
• Molecule 35: 60S ribosomal protein L34-A

Chain AH:



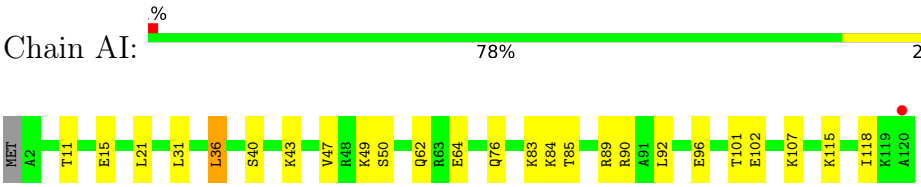
• Molecule 35: 60S ribosomal protein L34-A

Chain DI:



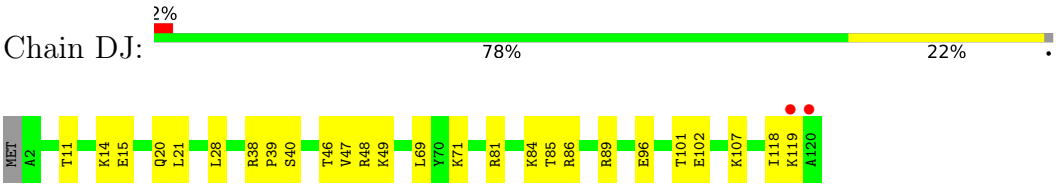
• Molecule 36: 60S ribosomal protein L35-A

Chain AI:



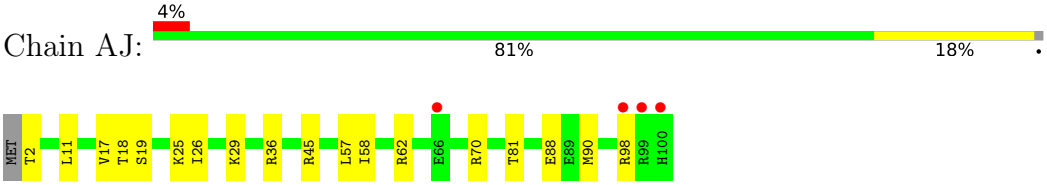
• Molecule 36: 60S ribosomal protein L35-A

Chain DJ:



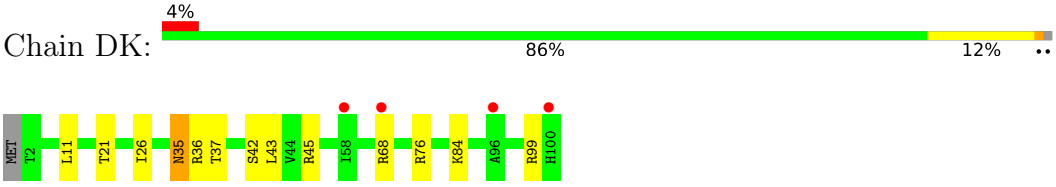
• Molecule 37: 60S ribosomal protein L36-A

Chain AJ:



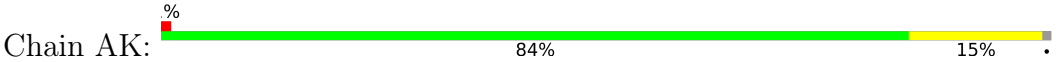
• Molecule 37: 60S ribosomal protein L36-A

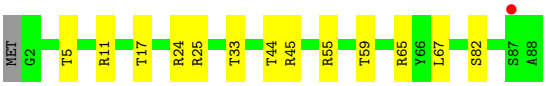
Chain DK:



• Molecule 38: 60S ribosomal protein L37-A

Chain AK:



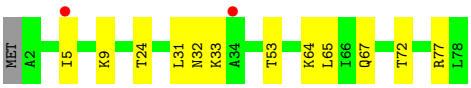


• Molecule 38: 60S ribosomal protein L37-A

Chain DL:

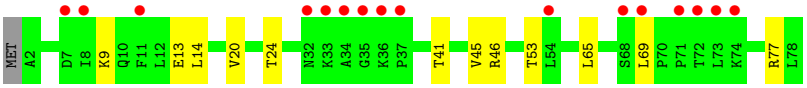
• Molecule 39: 60S ribosomal protein L38

Chain AL:



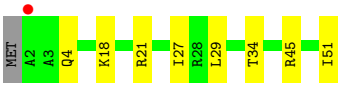
• Molecule 39: 60S ribosomal protein L38

Chain DM:



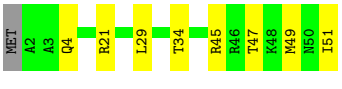
• Molecule 40: 60S ribosomal protein L39

Chain AM:



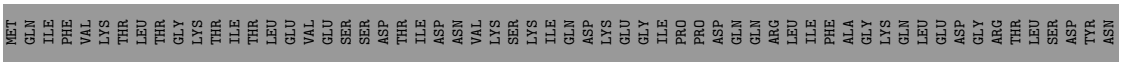
• Molecule 40: 60S ribosomal protein L39

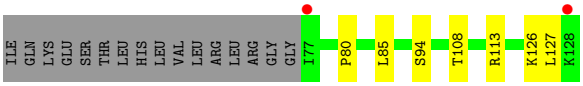
Chain DN:



• Molecule 41: Ubiquitin-60S ribosomal protein L40

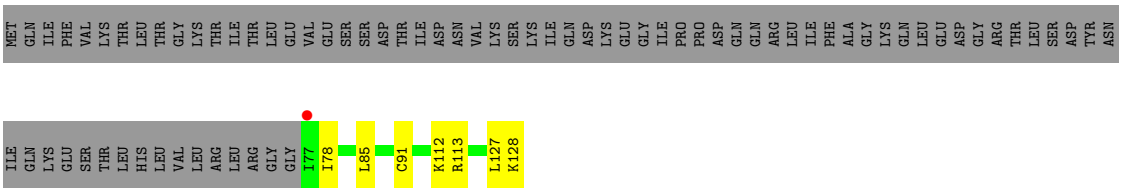
Chain AN:





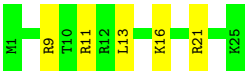
• Molecule 41: Ubiquitin-60S ribosomal protein L40

Chain DO:



• Molecule 42: 60S ribosomal protein L41-B

Chain AO:

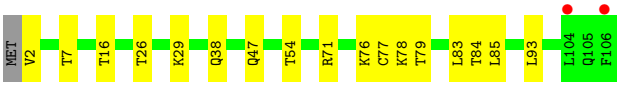


• Molecule 42: 60S ribosomal protein L41-B

Chain DP:

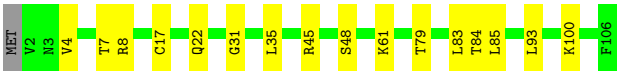
• Molecule 43: 60S ribosomal protein L42-A

Chain AP:



• Molecule 43: 60S ribosomal protein L42-A

Chain DQ:

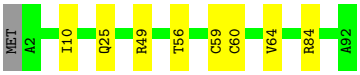


• Molecule 44: 60S ribosomal protein L43-A

Chain AQ:

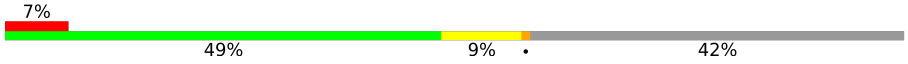
• Molecule 44: 60S ribosomal protein L43-A

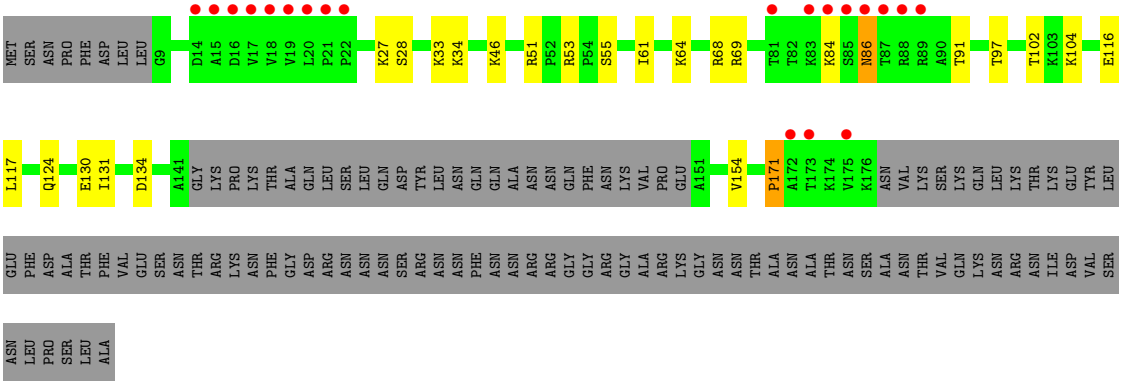
Chain DR:



• Molecule 45: Suppressor protein STM1

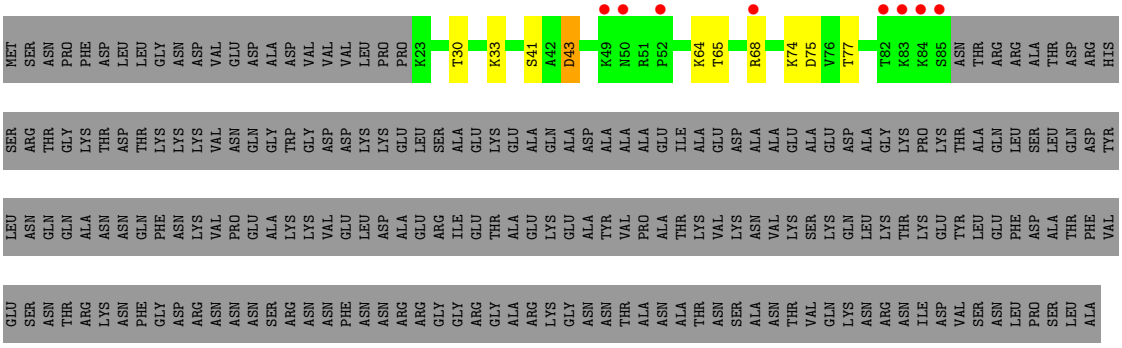
Chain i:





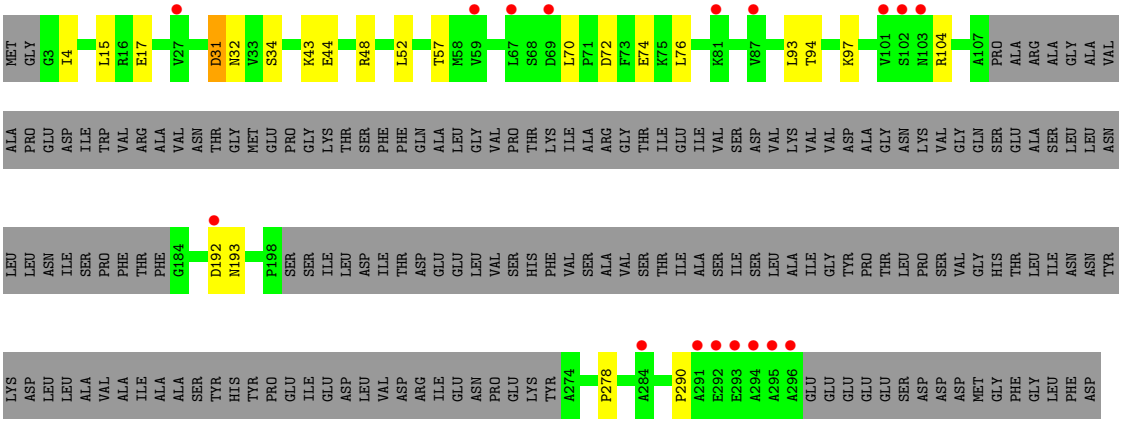
• Molecule 45: Suppressor protein STM1

Chain sM:



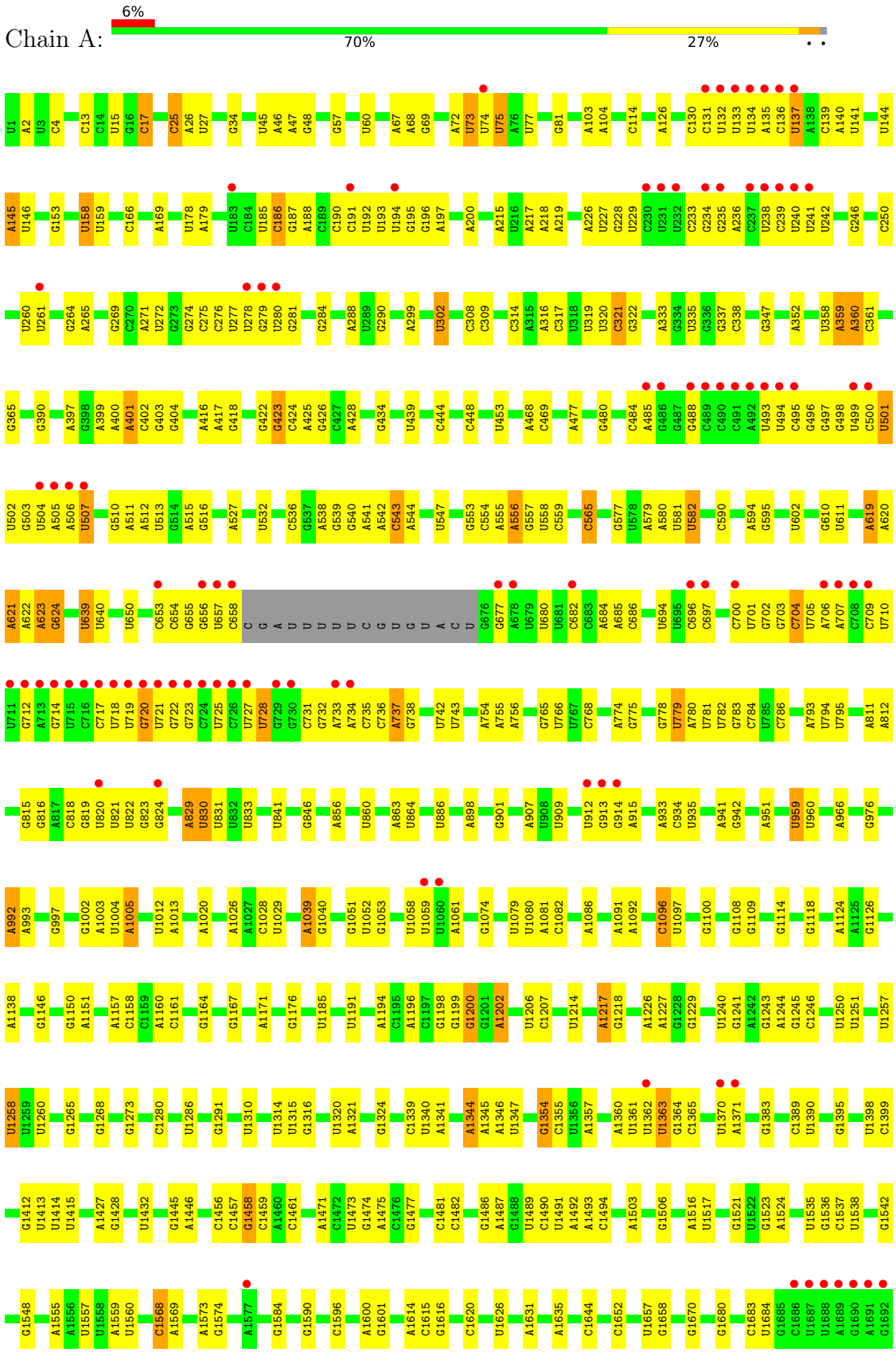
• Molecule 46: 60S acidic ribosomal protein P0

Chain p0:



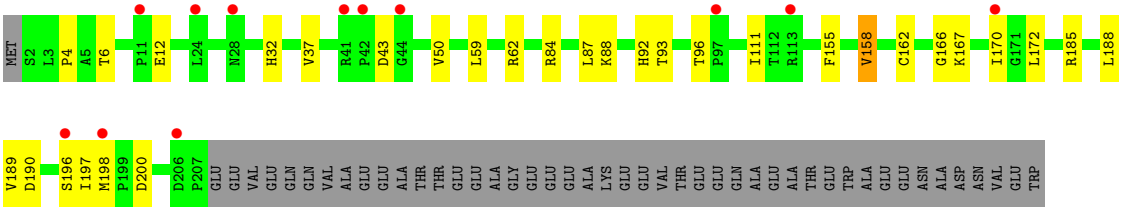
• Molecule 47: 18S ribosomal RNA

Chain A:



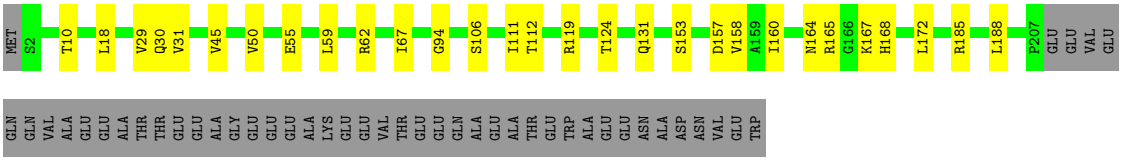
• Molecule 48: 40S ribosomal protein S0-A

Chain B:



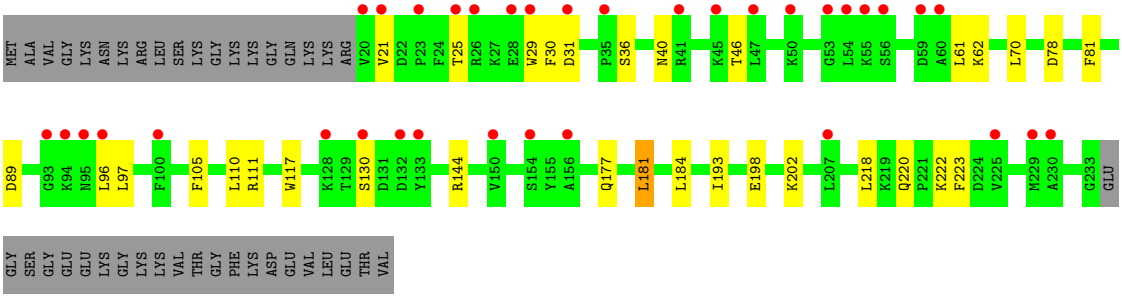
• Molecule 48: 40S ribosomal protein S0-A

Chain s0:



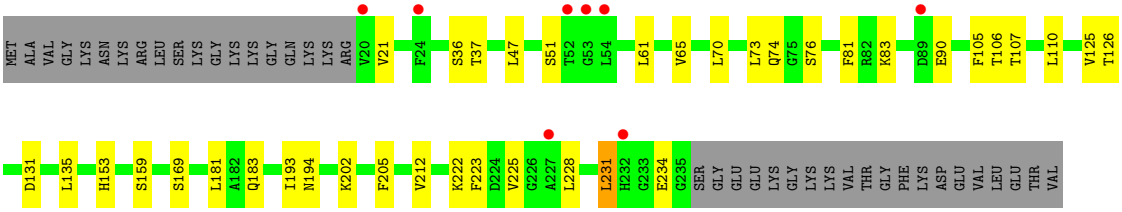
• Molecule 49: 40S ribosomal protein S1-A

Chain C:



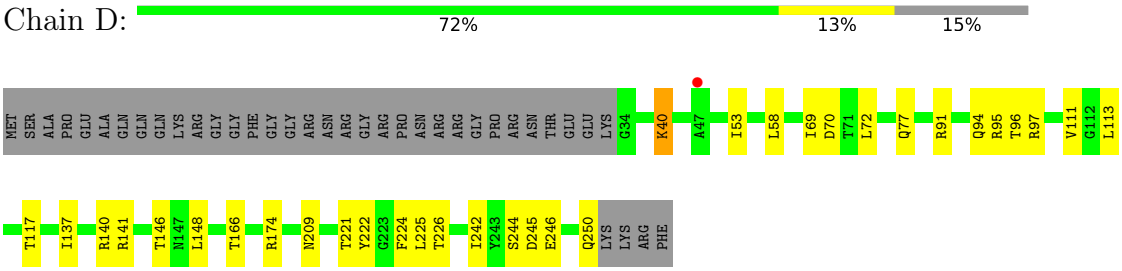
• Molecule 49: 40S ribosomal protein S1-A

Chain s1:



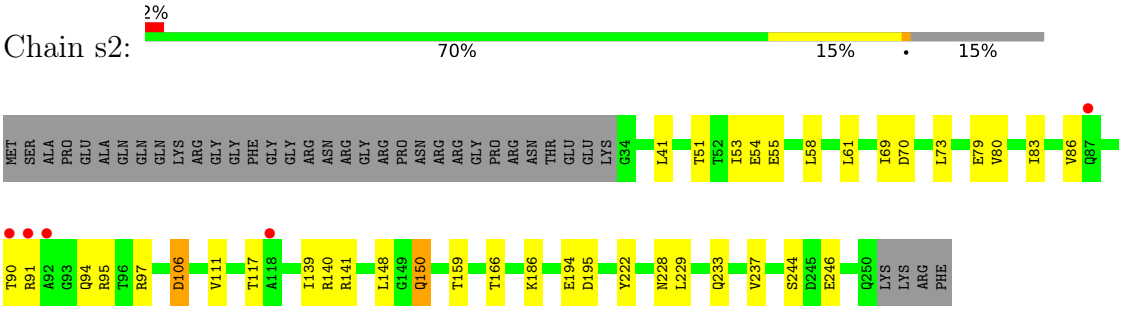
• Molecule 50: 40S ribosomal protein S2

Chain D:



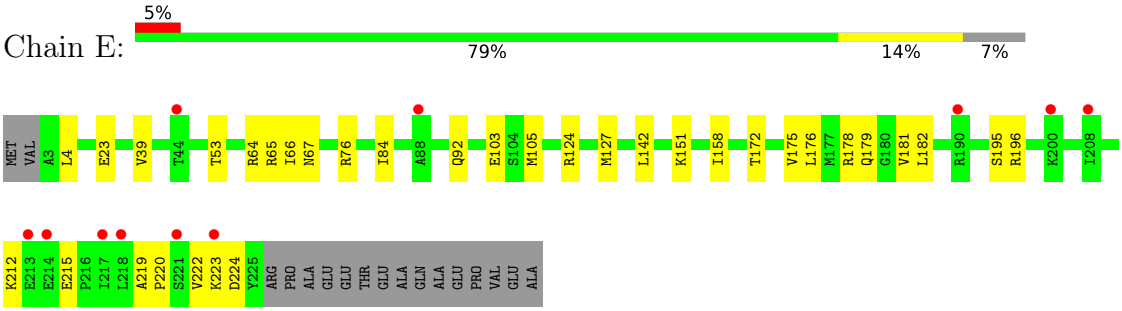
• Molecule 50: 40S ribosomal protein S2

Chain s2:



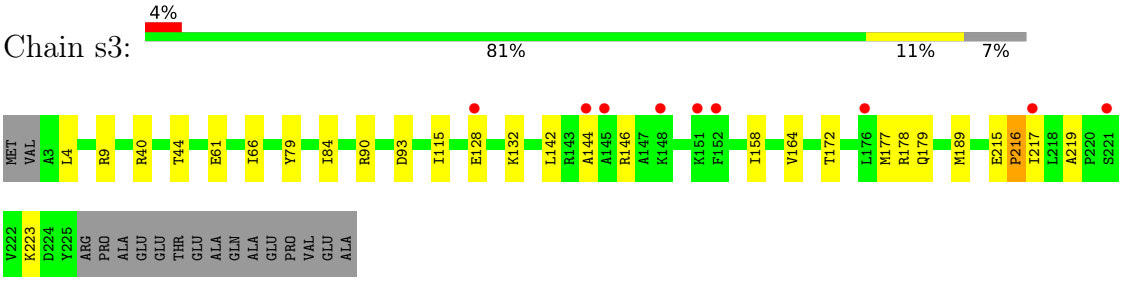
• Molecule 51: 40S ribosomal protein S3

Chain E:



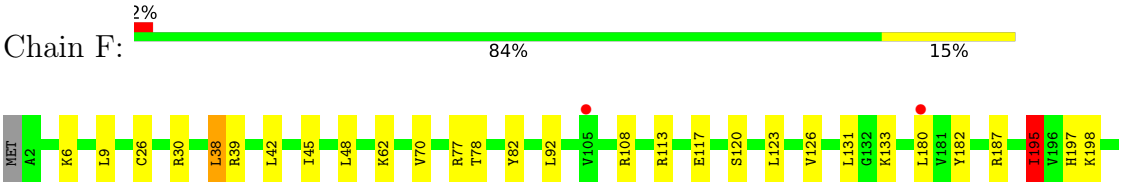
• Molecule 51: 40S ribosomal protein S3

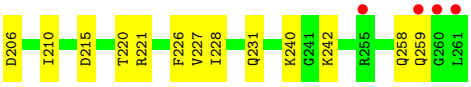
Chain s3:



• Molecule 52: 40S ribosomal protein S4-A

Chain F:



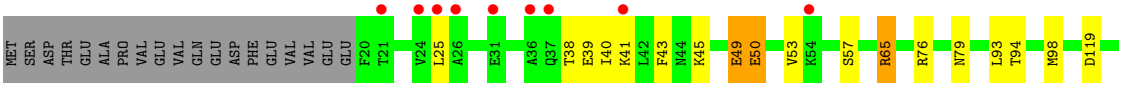


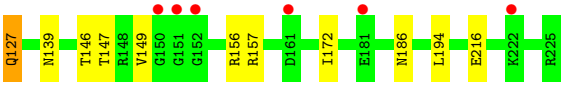
• Molecule 52: 40S ribosomal protein S4-A

Chain s4:

• Molecule 53: 40S ribosomal protein S5

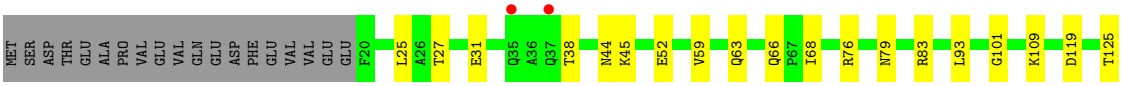
Chain G:

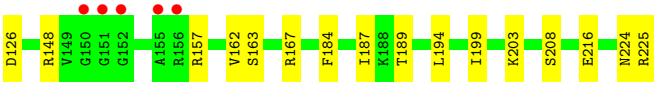




• Molecule 53: 40S ribosomal protein S5

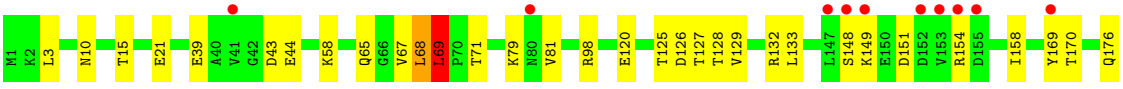
Chain s5:

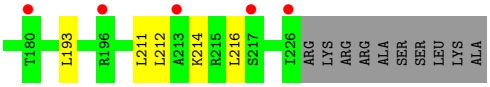




• Molecule 54: 40S ribosomal protein S6-A

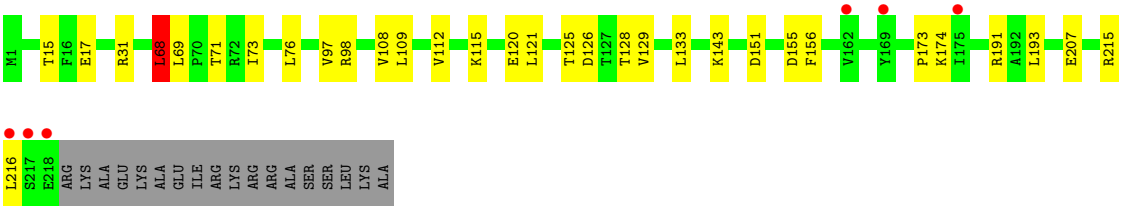
Chain H:



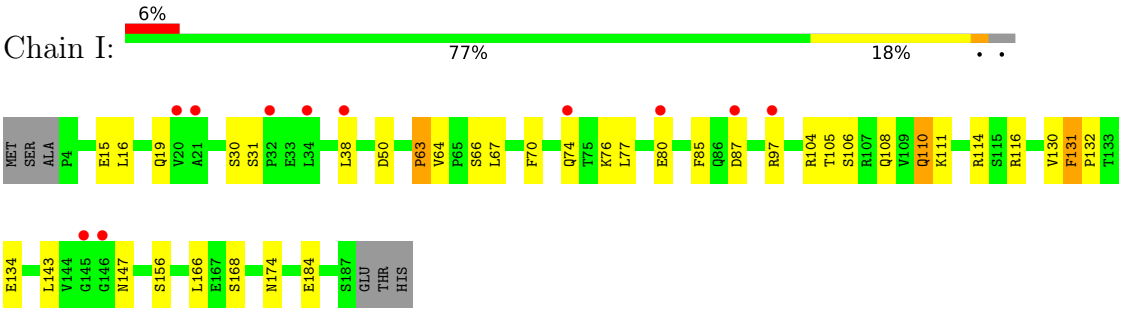


• Molecule 54: 40S ribosomal protein S6-A

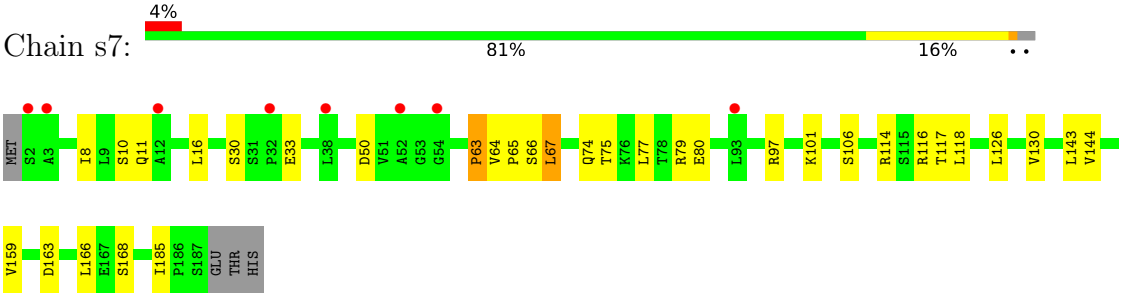
Chain s6:



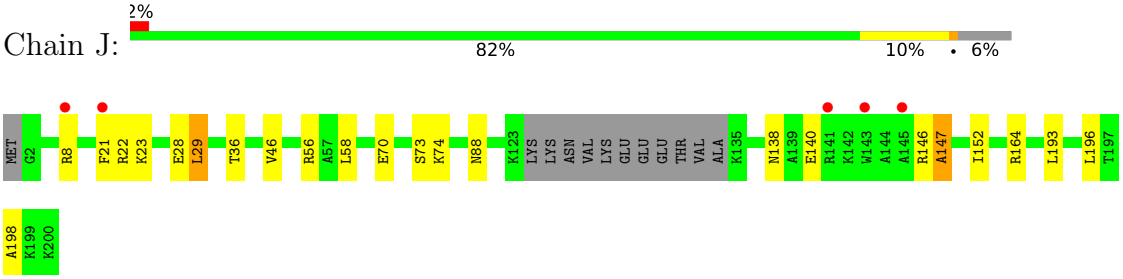
• Molecule 55: 40S ribosomal protein S7-A



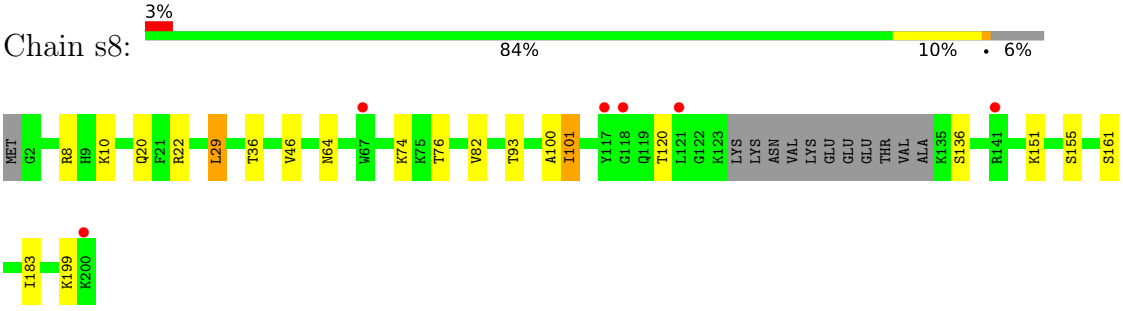
• Molecule 55: 40S ribosomal protein S7-A



• Molecule 56: 40S ribosomal protein S8-A

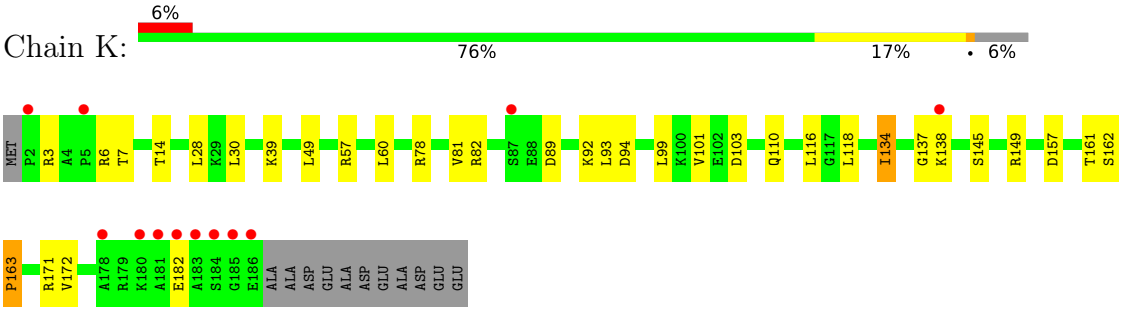


• Molecule 56: 40S ribosomal protein S8-A



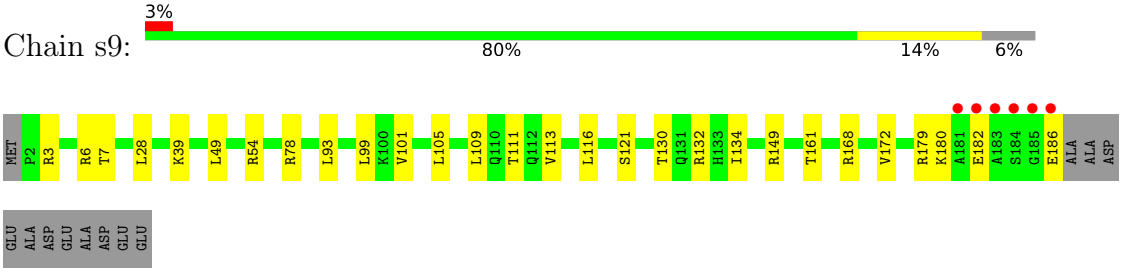
• Molecule 57: 40S ribosomal protein S9-A

Chain K:



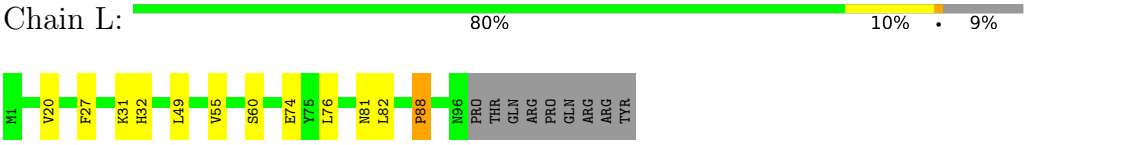
• Molecule 57: 40S ribosomal protein S9-A

Chain s9:



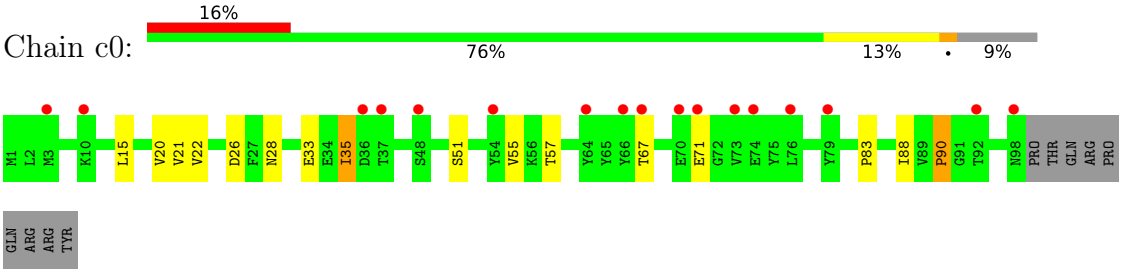
• Molecule 58: 40S ribosomal protein S10-A

Chain L:



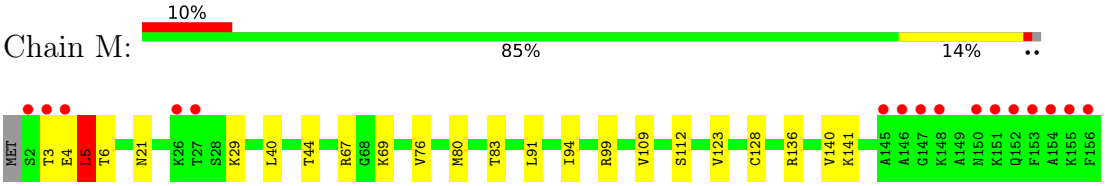
• Molecule 58: 40S ribosomal protein S10-A

Chain c0:



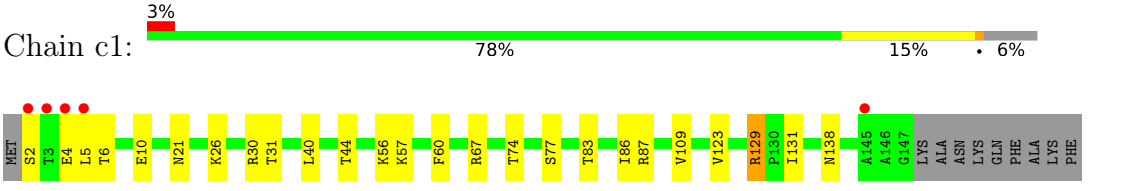
• Molecule 59: 40S ribosomal protein S11-A

Chain M:



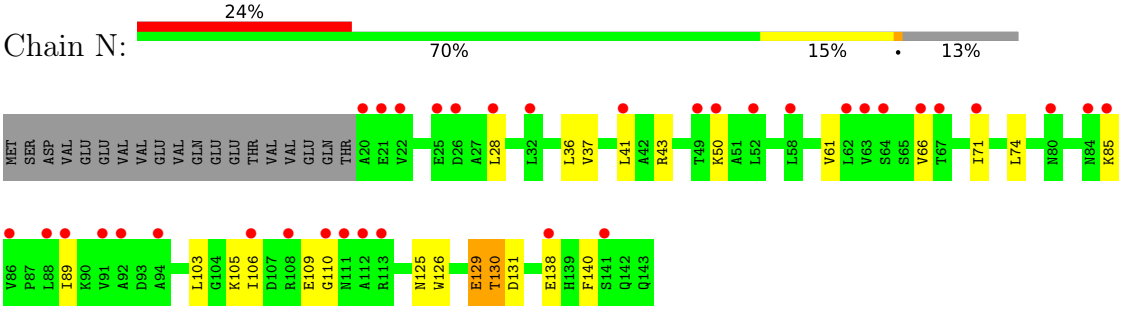
• Molecule 59: 40S ribosomal protein S11-A

Chain c1:



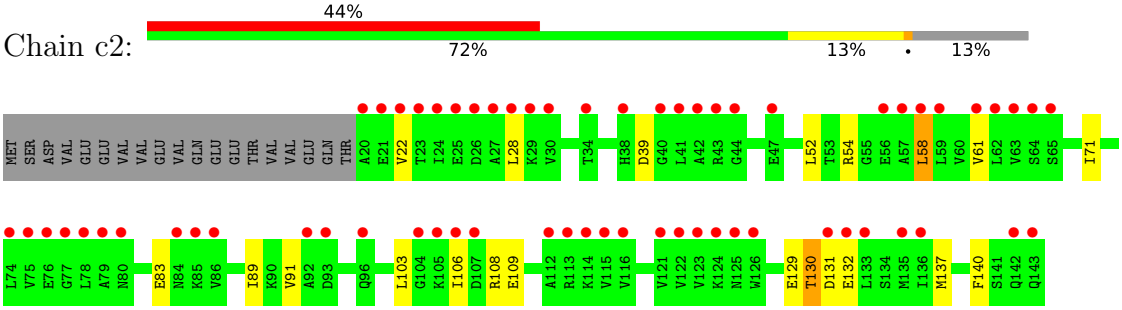
• Molecule 60: 40S ribosomal protein S12

Chain N:



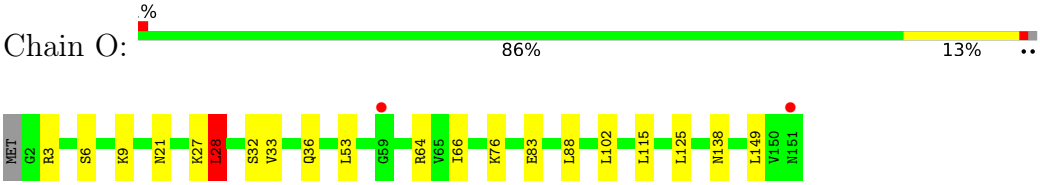
• Molecule 60: 40S ribosomal protein S12

Chain c2:



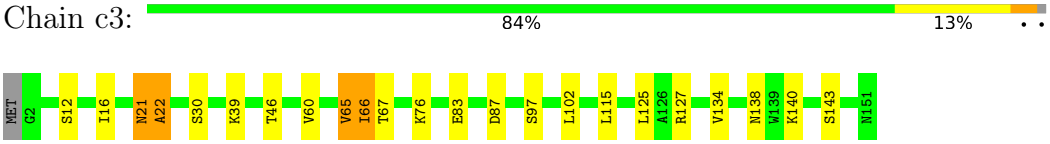
• Molecule 61: 40S ribosomal protein S13

Chain O:



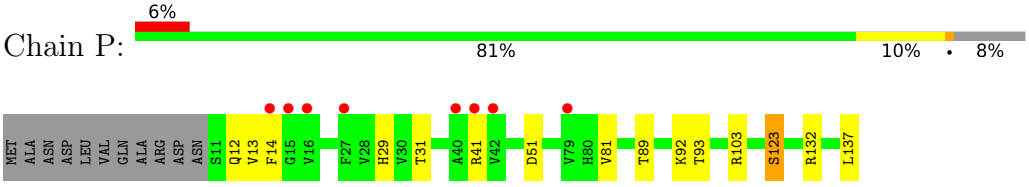
• Molecule 61: 40S ribosomal protein S13

Chain c3:



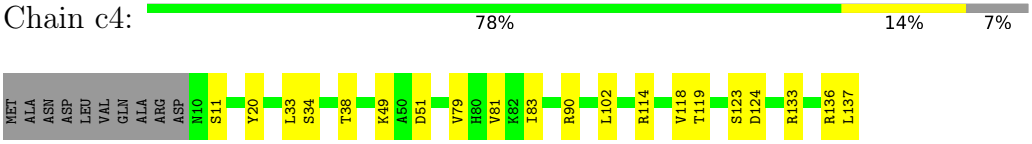
• Molecule 62: 40S ribosomal protein S14-B

Chain P:



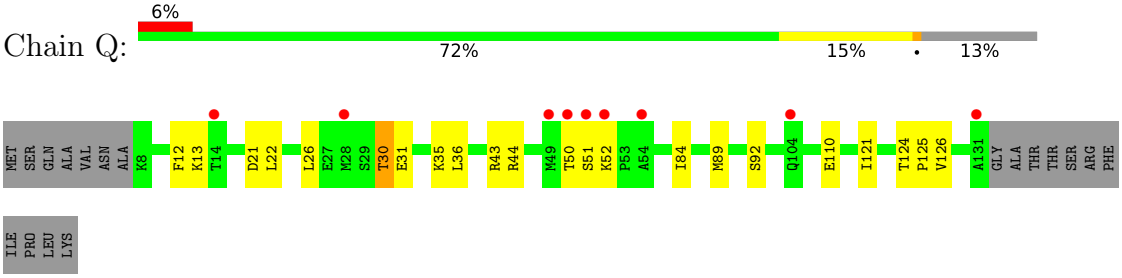
• Molecule 62: 40S ribosomal protein S14-B

Chain c4:



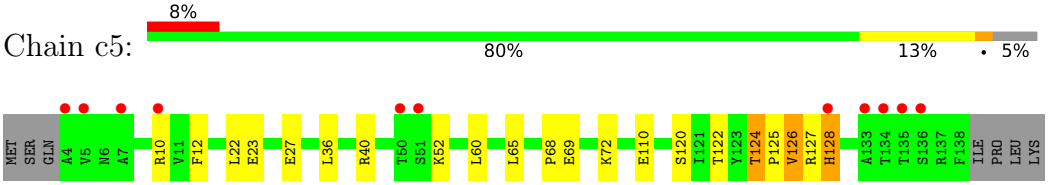
• Molecule 63: 40S ribosomal protein S15

Chain Q:



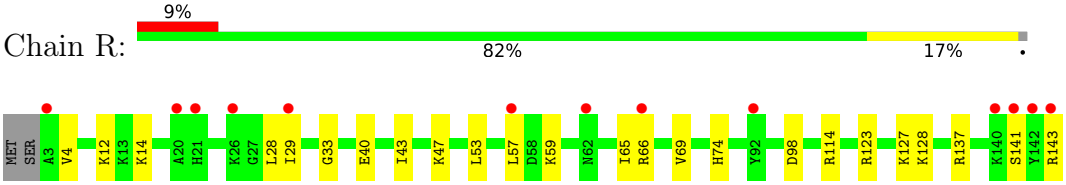
• Molecule 63: 40S ribosomal protein S15

Chain c5:



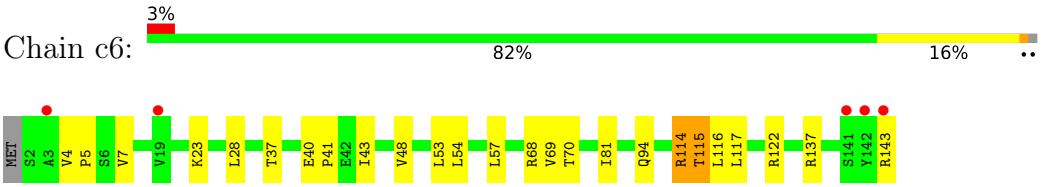
• Molecule 64: 40S ribosomal protein S16-A

Chain R:



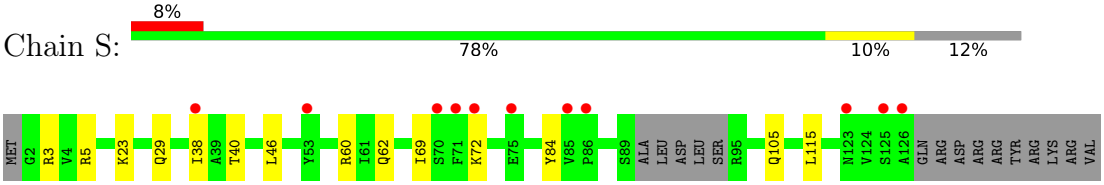
• Molecule 64: 40S ribosomal protein S16-A

Chain c6:



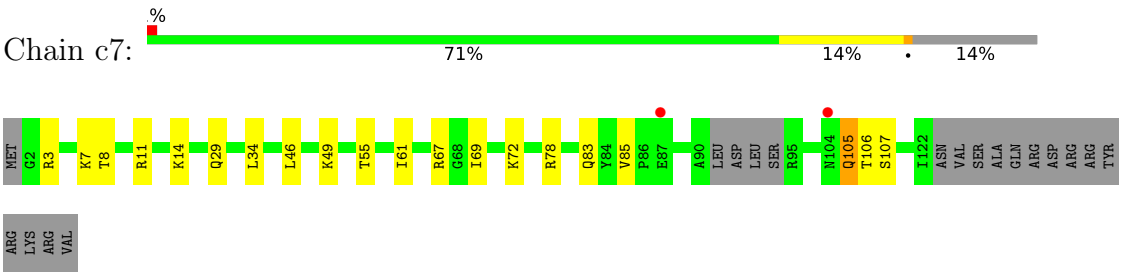
• Molecule 65: 40S ribosomal protein S17-A

Chain S:



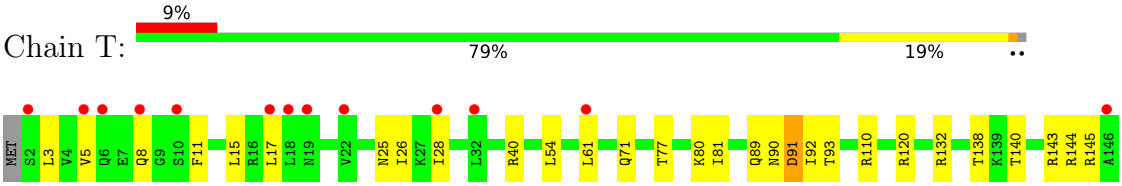
• Molecule 65: 40S ribosomal protein S17-A

Chain c7:



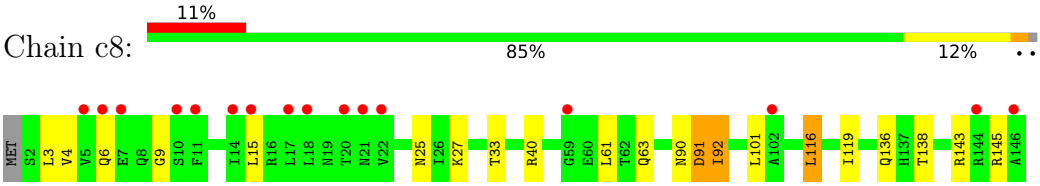
• Molecule 66: 40S ribosomal protein S18-A

Chain T:



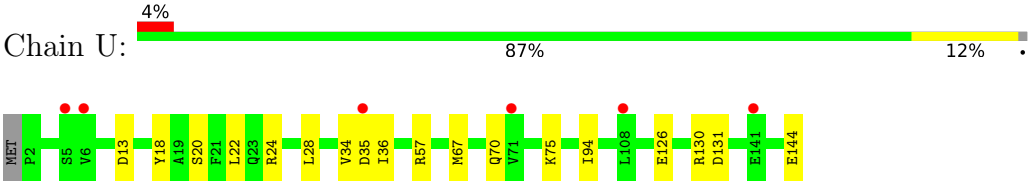
• Molecule 66: 40S ribosomal protein S18-A

Chain c8:



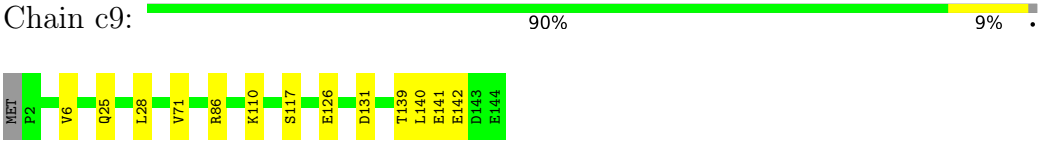
• Molecule 67: 40S ribosomal protein S19-A

Chain U:



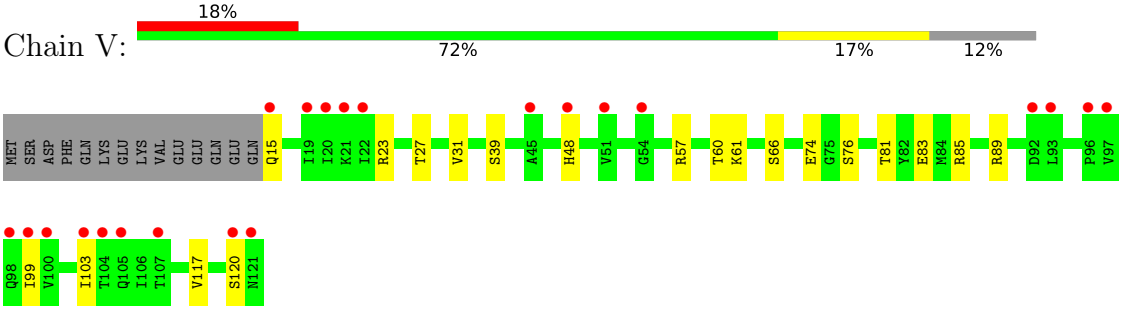
• Molecule 67: 40S ribosomal protein S19-A

Chain c9:



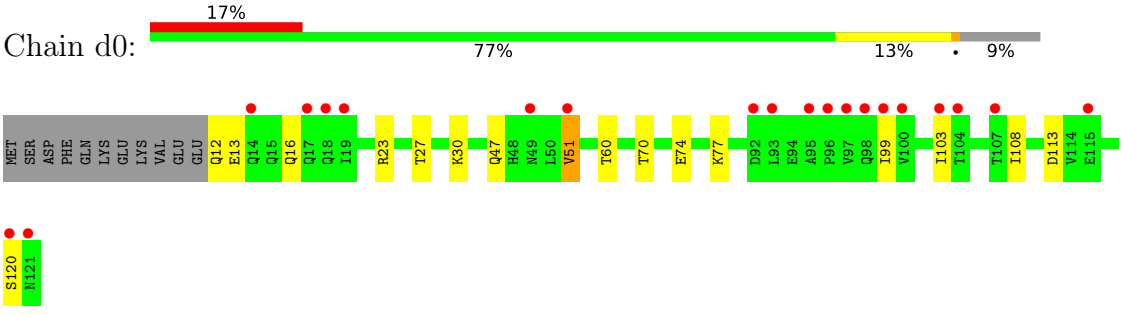
• Molecule 68: 40S ribosomal protein S20

Chain V:



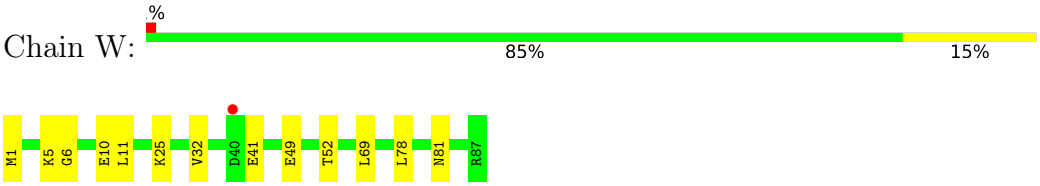
• Molecule 68: 40S ribosomal protein S20

Chain d0:



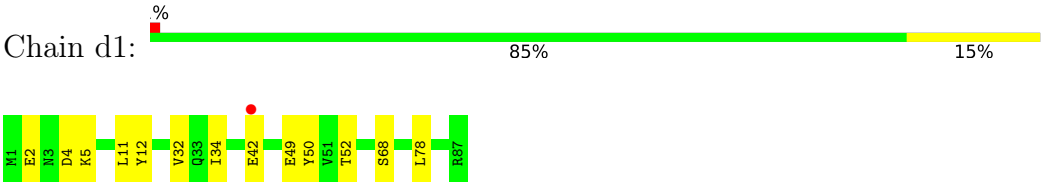
• Molecule 69: 40S ribosomal protein S21-A

Chain W:



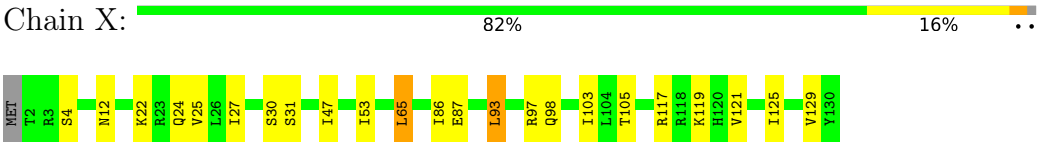
• Molecule 69: 40S ribosomal protein S21-A

Chain d1:



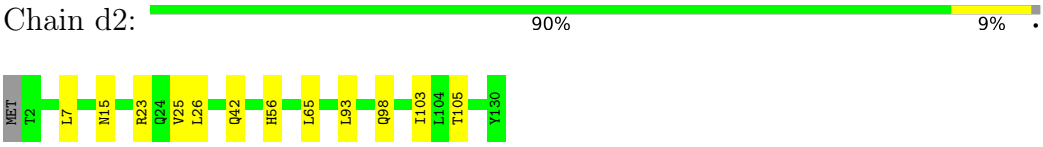
• Molecule 70: 40S ribosomal protein S22-A

Chain X:



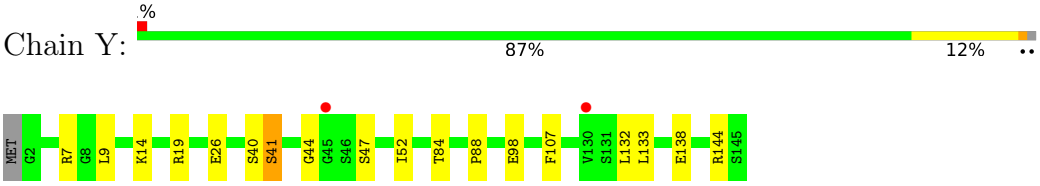
• Molecule 70: 40S ribosomal protein S22-A

Chain d2:



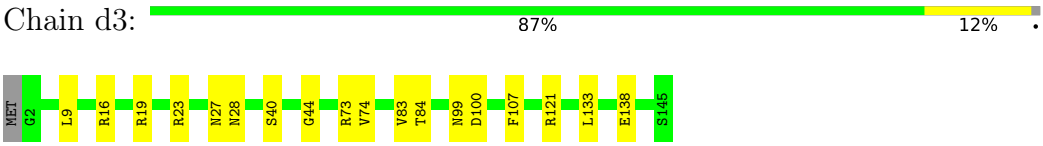
• Molecule 71: 40S ribosomal protein S23-A

Chain Y:



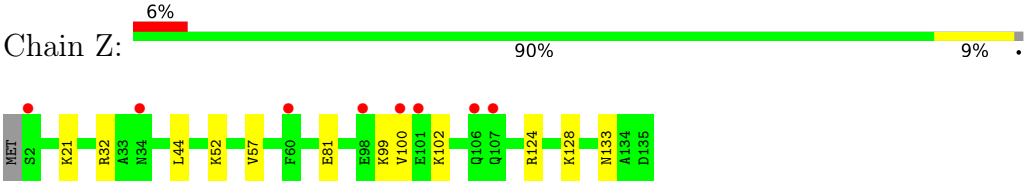
• Molecule 71: 40S ribosomal protein S23-A

Chain d3:



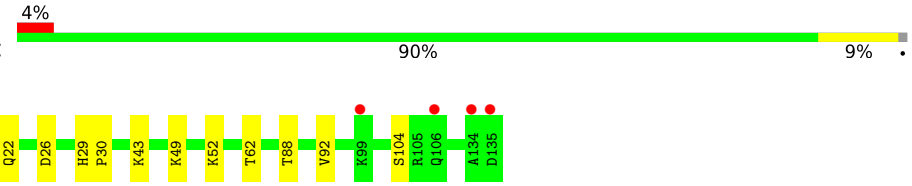
• Molecule 72: 40S ribosomal protein S24-A

Chain Z:



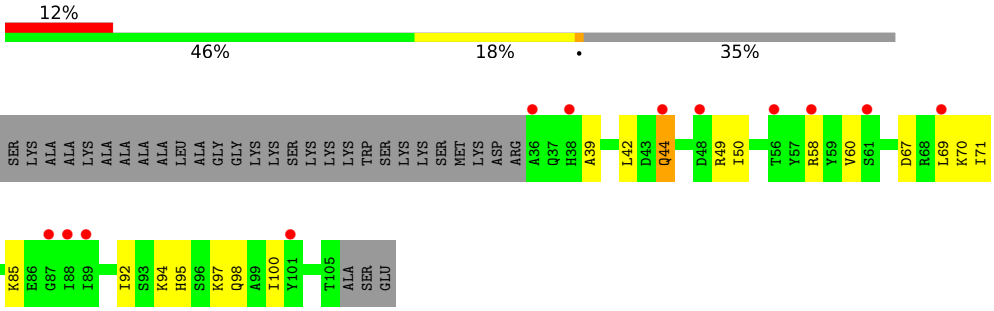
• Molecule 72: 40S ribosomal protein S24-A

Chain d4:



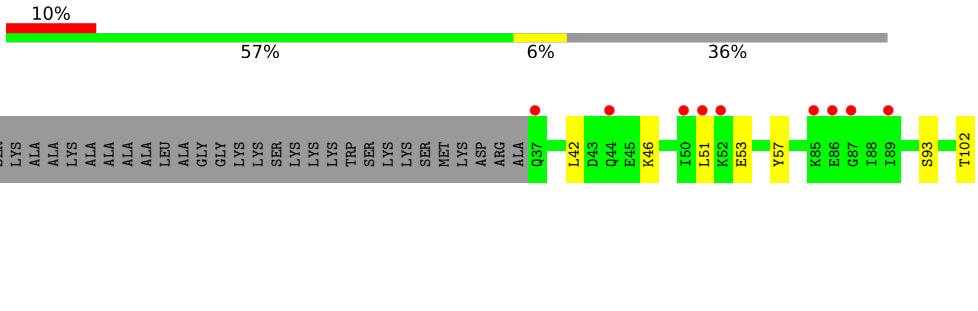
• Molecule 73: 40S ribosomal protein S25-A

Chain a:



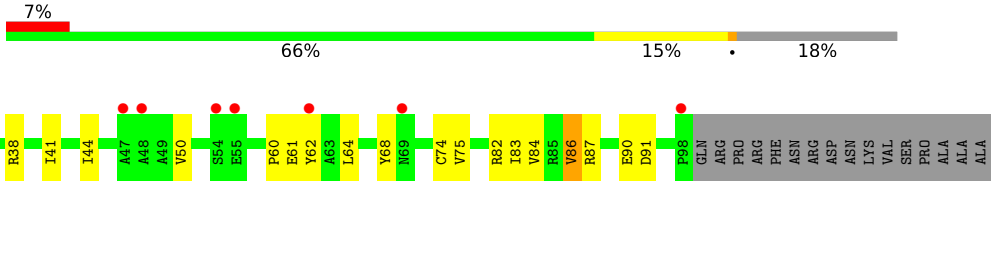
• Molecule 73: 40S ribosomal protein S25-A

Chain d5:



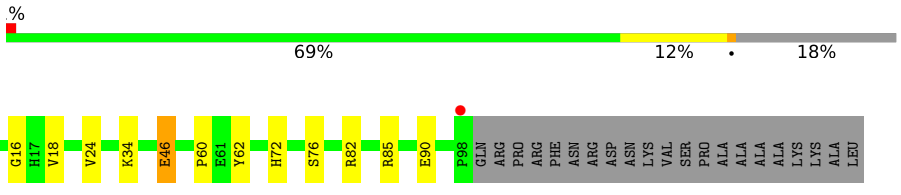
• Molecule 74: 40S ribosomal protein S26-B

Chain b:



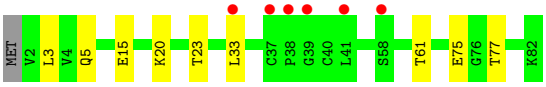
• Molecule 74: 40S ribosomal protein S26-B

Chain d6:



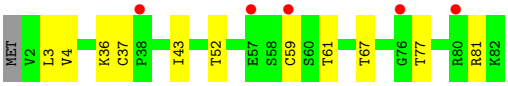
• Molecule 75: 40S ribosomal protein S27-A

Chain c:



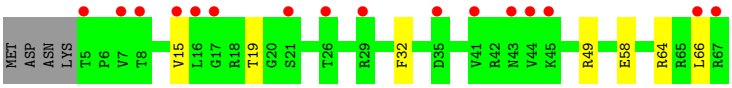
• Molecule 75: 40S ribosomal protein S27-A

Chain d7:



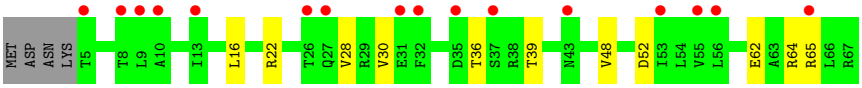
• Molecule 76: 40S ribosomal protein S28-A

Chain d:



• Molecule 76: 40S ribosomal protein S28-A

Chain d8:



• Molecule 77: 40S ribosomal protein S29-A

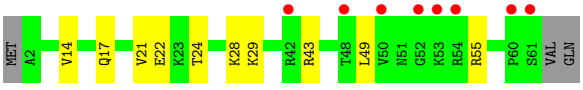
Chain e:

• Molecule 77: 40S ribosomal protein S29-A

Chain d9:

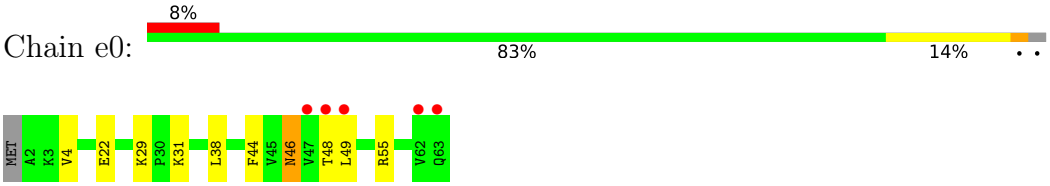
• Molecule 78: 40S ribosomal protein S30-A

Chain f:



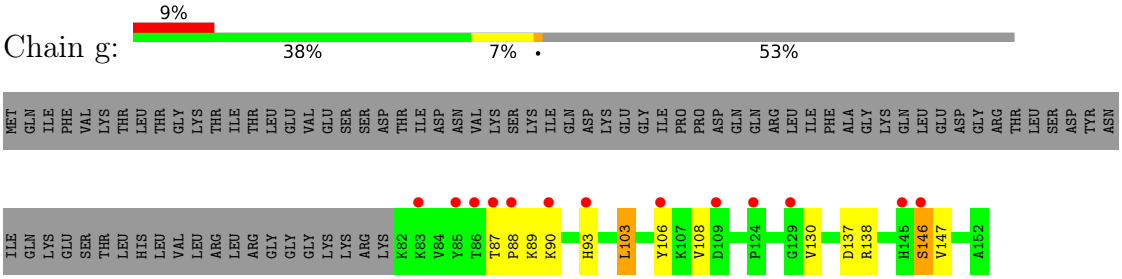
• Molecule 78: 40S ribosomal protein S30-A

Chain e0:



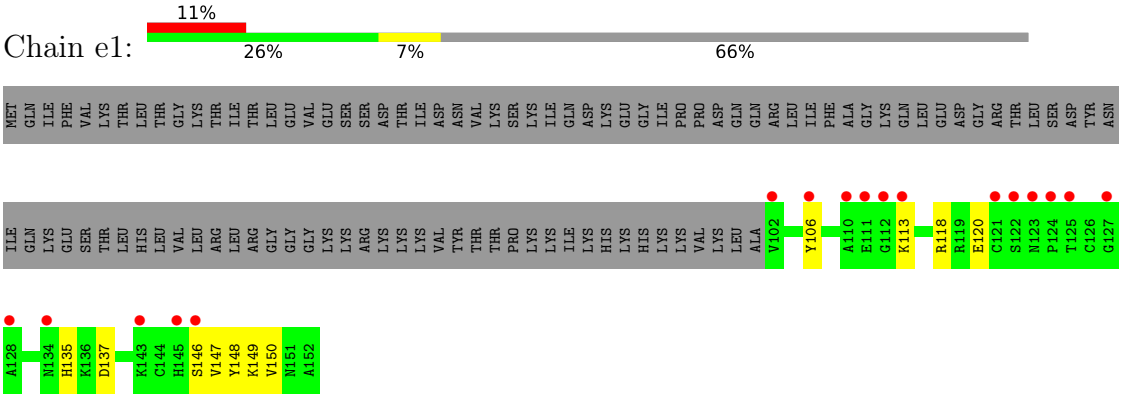
• Molecule 79: Ubiquitin-40S ribosomal protein S31

Chain g:



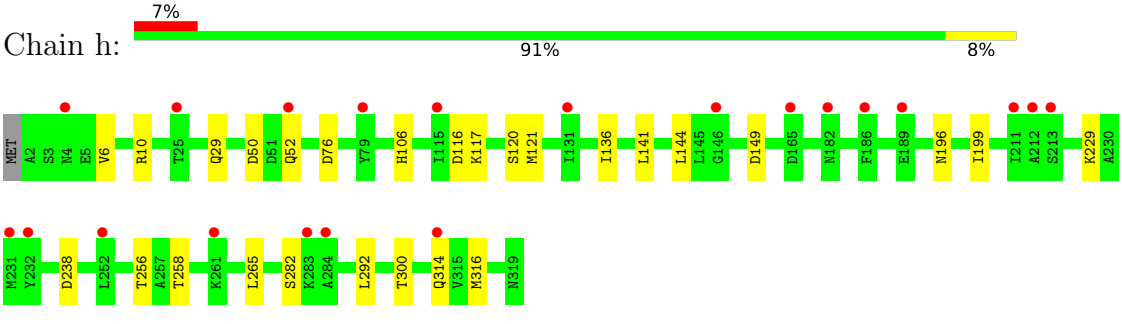
• Molecule 79: Ubiquitin-40S ribosomal protein S31

Chain e1:



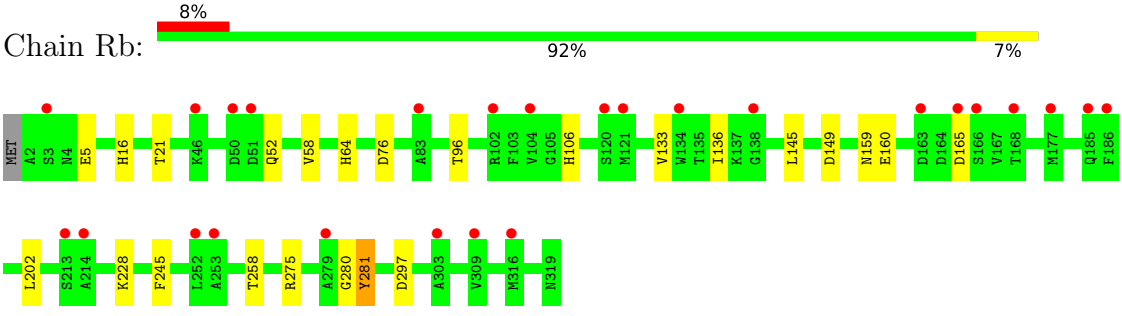
• Molecule 80: Guanine nucleotide-binding protein subunit beta-like protein

Chain h:



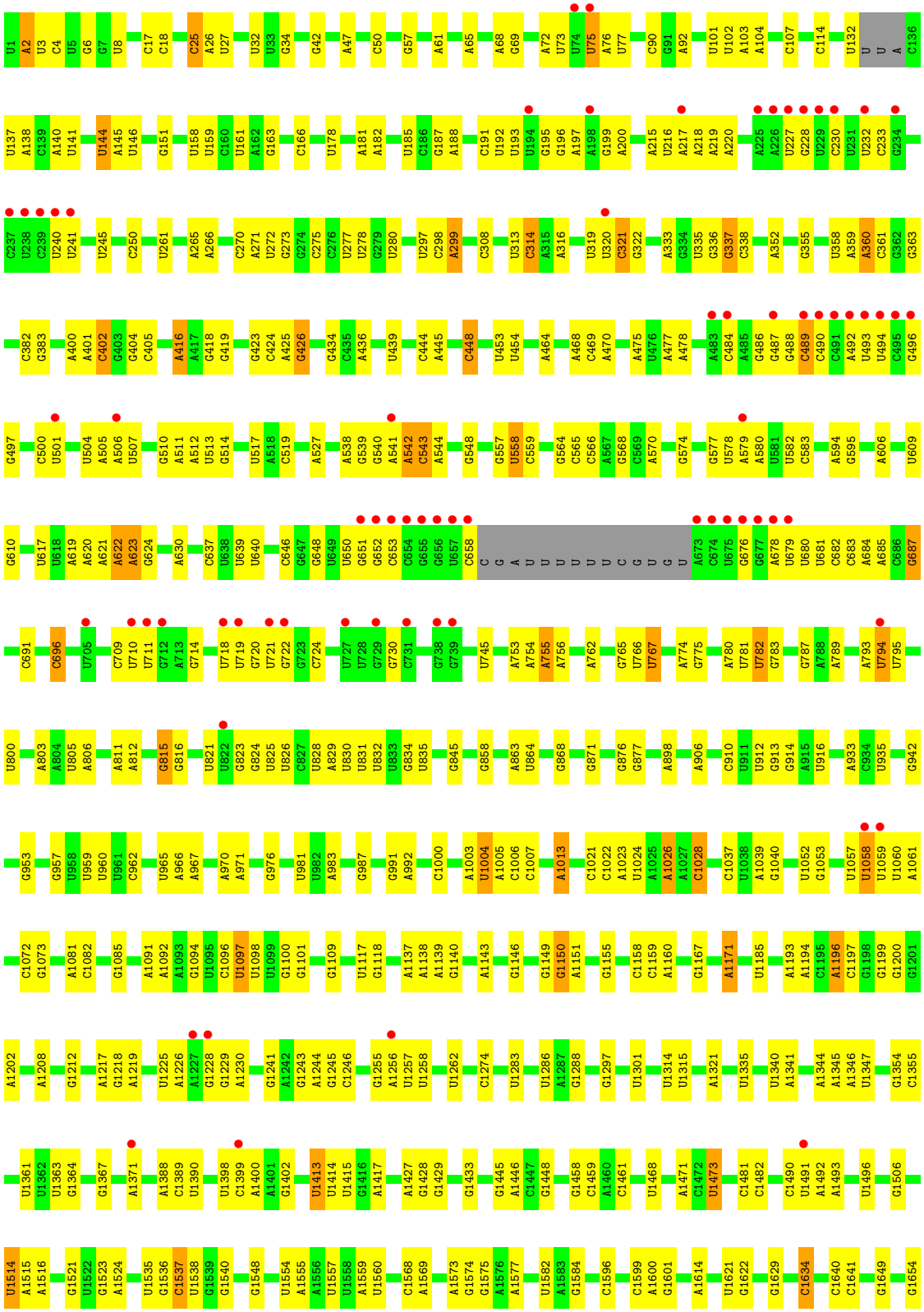
• Molecule 80: Guanine nucleotide-binding protein subunit beta-like protein

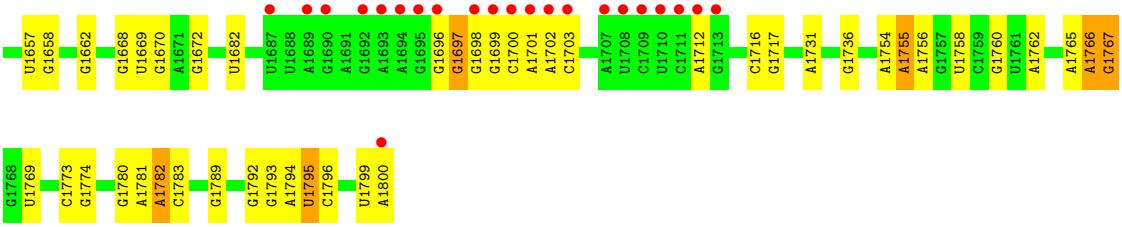
Chain Rb:



• Molecule 81: 18S ribosomal RNA

Chain sR:




U1657
G1658
G1662
G1668
U1669
G1670
A1671
G1672
U1682
U1687
U1688
A1689
G1690
A1691
G1692
A1693
A1694
G1695
G1696
G1697
G1698
G1699
C1700
A1701
A1702
C1703
A1707
U1708
C1709
U1710
C1711
A1712
G1713
C1716
G1717
A1731
G1736
A1754
A1755
A1756
G1757
U1758
C1759
G1760
U1761
A1762
A1765
A1766
G1767
G1768
U1769
C1773
G1774
G1780
A1781
A1782
C1783
G1789
G1792
G1793
A1794
U1795
C1796
U1799
A1800

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	303.77Å 287.95Å 435.45Å 90.00° 98.96° 90.00°	Depositor
Resolution (Å)	54.71 – 3.10 54.71 – 3.10	Depositor EDS
% Data completeness (in resolution range)	100.0 (54.71-3.10) 100.0 (54.71-3.10)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.45 (at 3.13Å)	Xtriage
Refinement program	PHENIX dev_2450, PHENIX dev_2450	Depositor
R, R_{free}	0.217 , 0.264 0.217 , 0.265	Depositor DCC
R_{free} test set	26494 reflections (1.99%)	wwPDB-VP
Wilson B-factor (Å^2)	67.0	Xtriage
Anisotropy	0.278	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 53.5	EDS
L-test for twinning[2]	$< \|L\| > = 0.49$, $< L^2 > = 0.32$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.91	EDS
Total number of atoms	409486	wwPDB-VP
Average B, all atoms (Å^2)	60.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.47% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, OHX, MG, G5B, GOL

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	1	1.00	49/75394 (0.1%)	1.43	925/117545 (0.8%)
1	AR	1.04	61/75347 (0.1%)	1.44	947/117472 (0.8%)
2	3	0.82	0/2883	1.25	7/4491 (0.2%)
2	AS	0.97	2/2883 (0.1%)	1.37	16/4491 (0.4%)
3	4	0.96	0/3746	1.35	28/5832 (0.5%)
3	AT	0.88	2/3746 (0.1%)	1.28	17/5832 (0.3%)
4	CD	0.54	0/1948	0.72	0/2617
4	j	0.54	0/1948	0.74	1/2617 (0.0%)
5	CE	0.63	0/3146	0.74	1/4228 (0.0%)
5	k	0.55	0/3146	0.70	1/4228 (0.0%)
6	CF	0.59	1/2800 (0.0%)	0.74	2/3790 (0.1%)
6	l	0.62	1/2800 (0.0%)	0.79	2/3790 (0.1%)
7	CG	0.61	1/2425 (0.0%)	0.69	0/3271
7	m	0.46	0/2425	0.64	0/3271
8	CH	0.60	0/1260	0.71	1/1694 (0.1%)
8	n	0.59	0/1260	0.69	1/1694 (0.1%)
9	CI	0.63	0/1821	0.73	2/2451 (0.1%)
9	o	0.59	0/1821	0.74	0/2451
10	CJ	0.44	0/1836	0.59	0/2481
10	p	0.47	0/1836	0.59	1/2481 (0.0%)
11	CK	0.56	0/1539	0.68	0/2073
11	q	0.53	0/1539	0.66	0/2073
12	CL	0.58	1/1741 (0.1%)	0.75	2/2335 (0.1%)
12	r	0.63	1/1741 (0.1%)	0.72	3/2335 (0.1%)
13	CM	0.53	1/1374 (0.1%)	0.72	2/1842 (0.1%)
13	s	0.43	0/1374	0.65	0/1842
14	CN	0.51	0/1568	0.63	0/2106
14	t	0.79	1/1568 (0.1%)	0.68	0/2106
15	CO	0.58	0/1068	0.68	0/1438
15	u	0.55	0/1068	0.65	0/1438
16	CP	0.52	0/1757	0.67	0/2354
16	v	0.59	0/1757	0.74	1/2354 (0.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	CQ	0.73	0/1585	0.80	3/2128 (0.1%)
17	w	0.64	0/1585	0.72	1/2128 (0.0%)
18	CR	0.62	0/1443	0.71	0/1944
18	x	0.58	0/1443	0.70	0/1944
19	CS	0.59	0/1465	0.80	2/1965 (0.1%)
19	y	0.60	0/1465	0.77	1/1965 (0.1%)
20	CT	0.49	0/1538	0.61	0/2050
20	z	0.44	0/1538	0.60	0/2050
21	0	0.59	0/1481	0.70	0/1990
21	CU	0.65	0/1481	0.69	0/1990
22	2	0.58	0/1300	0.69	0/1743
22	CV	0.62	0/1300	0.70	0/1743
23	5	0.37	0/812	0.55	0/1099
23	CW	0.44	0/812	0.59	0/1099
24	6	0.59	0/1018	0.73	0/1369
24	CX	0.62	0/1018	0.73	0/1369
25	7	0.42	0/712	0.55	0/958
25	CY	0.49	0/848	0.57	0/1146
26	8	0.50	0/979	0.65	0/1321
26	CZ	0.49	0/979	0.68	0/1321
27	9	0.56	0/1004	0.79	1/1341 (0.1%)
27	DA	0.52	0/987	0.70	0/1318
28	AA	0.51	1/1118 (0.1%)	0.62	1/1497 (0.1%)
28	DB	0.49	1/1118 (0.1%)	0.56	0/1497
29	AB	0.63	0/1204	0.81	1/1612 (0.1%)
29	DC	0.58	0/1204	0.74	1/1612 (0.1%)
30	AC	0.54	0/473	0.67	0/629
30	DD	0.53	0/473	0.69	0/629
31	AD	0.41	0/751	0.59	0/1008
31	DE	0.41	0/751	0.61	1/1008 (0.1%)
32	AE	0.50	0/890	0.60	0/1196
32	DF	0.57	0/890	0.65	0/1196
33	AF	0.62	0/1041	0.73	0/1394
33	DG	0.63	0/1041	0.75	0/1394
34	AG	0.70	0/868	0.73	0/1168
34	DH	0.68	0/868	0.71	0/1168
35	AH	0.48	0/890	0.70	0/1189
35	DI	0.52	0/890	0.64	0/1189
36	AI	0.57	1/978 (0.1%)	0.72	2/1301 (0.2%)
36	DJ	0.50	0/978	0.66	1/1301 (0.1%)
37	AJ	0.50	0/778	0.65	0/1034
37	DK	0.45	0/778	0.60	0/1034
38	AK	0.59	0/696	0.78	1/923 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	DL	0.58	0/696	0.71	0/923
39	AL	0.44	0/618	0.56	0/826
39	DM	0.40	0/618	0.60	0/826
40	AM	0.64	0/443	0.76	0/588
40	DN	0.58	0/443	0.75	0/588
41	AN	0.59	0/423	0.77	0/562
41	DO	0.71	0/423	0.79	0/562
42	AO	0.48	0/234	0.70	0/300
42	DP	0.68	0/234	0.81	0/300
43	AP	0.60	0/860	0.76	1/1136 (0.1%)
43	DQ	0.62	0/860	0.78	0/1136
44	AQ	0.58	0/701	0.70	0/934
44	DR	0.58	0/701	0.78	0/934
45	i	0.40	0/1113	0.64	1/1502 (0.1%)
45	sM	0.42	0/480	0.69	0/642
46	p0	0.41	0/1091	0.60	2/1472 (0.1%)
47	A	0.64	9/42443 (0.0%)	1.16	193/66134 (0.3%)
48	B	0.38	0/1617	0.59	0/2215
48	s0	0.47	1/1623 (0.1%)	0.60	0/2222
49	C	0.30	0/1735	0.58	1/2335 (0.0%)
49	s1	0.42	0/1748	0.61	1/2352 (0.0%)
50	D	0.39	0/1665	0.60	0/2263
50	s2	0.45	0/1665	0.67	0/2263
51	E	0.39	0/1759	0.55	0/2368
51	s3	0.38	0/1759	0.55	0/2368
52	F	0.44	1/2109 (0.0%)	0.63	1/2839 (0.0%)
52	s4	0.53	1/2109 (0.0%)	0.64	0/2839
53	G	0.32	0/1629	0.54	0/2202
53	s5	0.35	0/1629	0.53	0/2202
54	H	0.38	0/1823	0.60	1/2439 (0.0%)
54	s6	0.47	0/1779	0.63	0/2379
55	I	0.37	0/1506	0.58	0/2028
55	s7	0.40	0/1516	0.58	0/2043
56	J	0.42	0/1514	0.67	1/2021 (0.0%)
56	s8	0.47	0/1514	0.63	1/2021 (0.0%)
57	K	0.39	0/1519	0.60	1/2035 (0.0%)
57	s9	0.43	0/1519	0.60	0/2035
58	L	0.34	0/789	0.60	1/1067 (0.1%)
58	c0	0.33	0/776	0.58	2/1047 (0.2%)
59	M	0.46	0/1239	0.62	0/1673
59	c1	0.52	1/1194 (0.1%)	0.65	0/1610
60	N	0.34	0/898	0.62	0/1220
60	c2	0.27	0/898	0.61	1/1220 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
61	O	0.42	0/1215	0.56	0/1638
61	c3	0.45	0/1215	0.69	3/1638 (0.2%)
62	P	0.31	0/901	0.59	0/1217
62	c4	0.45	0/960	0.66	0/1290
63	Q	0.40	0/998	0.57	0/1341
63	c5	0.41	0/1060	0.62	0/1426
64	R	0.35	0/1125	0.59	0/1510
64	c6	0.37	0/1131	0.65	1/1518 (0.1%)
65	S	0.35	0/935	0.55	0/1254
65	c7	0.40	0/914	0.61	0/1224
66	T	0.36	0/1211	0.57	0/1628
66	c8	0.39	0/1211	0.60	2/1628 (0.1%)
67	U	0.36	0/1130	0.54	0/1517
67	c9	0.38	0/1130	0.54	0/1517
68	V	0.37	0/865	0.55	0/1169
68	d0	0.39	0/892	0.57	0/1205
69	W	0.36	0/693	0.58	0/935
69	d1	0.41	0/693	0.65	0/935
70	X	0.41	0/1038	0.64	2/1395 (0.1%)
70	d2	0.48	0/1038	0.66	0/1395
71	Y	0.47	0/1139	0.70	1/1518 (0.1%)
71	d3	0.54	0/1139	0.68	0/1518
72	Z	0.39	0/1087	0.54	0/1449
72	d4	0.43	0/1087	0.64	0/1449
73	a	0.32	0/571	0.55	0/768
73	d5	0.35	0/566	0.51	0/761
74	b	0.35	0/782	0.66	0/1047
74	d6	0.48	0/782	0.69	0/1047
75	c	0.36	0/620	0.62	0/838
75	d7	0.47	1/620 (0.2%)	0.63	0/838
76	d	0.32	0/499	0.55	0/670
76	d8	0.35	0/499	0.66	0/670
77	d9	0.42	0/452	0.62	1/600 (0.2%)
77	e	0.42	0/452	0.61	0/600
78	e0	0.44	0/499	0.61	0/665
78	f	0.38	0/483	0.52	0/643
79	e1	0.31	0/404	0.56	0/542
79	g	0.37	0/577	0.61	0/770
80	Rb	0.33	0/2495	0.55	0/3395
80	h	0.32	0/2490	0.54	0/3389
81	sR	0.78	17/42490 (0.0%)	1.24	270/66207 (0.4%)
All	All	0.77	155/430036 (0.0%)	1.14	2464/631418 (0.4%)

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
4	j	0	1
5	CE	0	2
5	k	0	2
6	CF	0	1
6	l	0	3
7	CG	0	4
7	m	0	3
8	CH	0	1
9	CI	0	2
9	o	0	2
10	CJ	0	3
11	CK	0	1
11	q	0	1
13	CM	0	1
13	s	0	1
14	CN	0	1
14	t	0	1
15	CO	0	1
15	u	0	2
16	CP	0	1
16	v	0	2
17	CQ	0	2
17	w	0	1
19	CS	0	1
21	0	0	1
22	2	0	1
28	AA	0	1
28	DB	0	1
29	AB	0	1
29	DC	0	1
30	AC	0	1
30	DD	0	1
32	AE	0	2
36	AI	0	1
36	DJ	0	1
43	DQ	0	1
46	p0	0	1
48	B	0	2
48	s0	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
50	s2	0	1
51	E	0	1
51	s3	0	3
52	F	0	1
53	G	0	2
53	s5	0	1
54	H	0	2
54	s6	0	1
55	I	0	4
55	s7	0	2
56	J	0	2
56	s8	0	1
57	K	0	2
59	M	0	2
60	N	0	4
60	c2	0	2
61	O	0	1
61	c3	0	2
62	P	0	1
62	c4	0	3
63	c5	0	2
64	R	0	1
64	c6	0	3
65	c7	0	1
66	T	0	3
66	c8	0	3
69	d1	0	1
71	Y	0	2
71	d3	0	1
72	d4	0	1
73	a	0	1
74	b	0	3
78	e0	0	1
79	e1	0	1
79	g	0	3
80	Rb	0	2
All	All	0	124

All (155) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	t	132	ALA	C-N	21.63	1.75	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AR	870	G	C8-N7	13.78	1.39	1.30
52	s4	82	TYR	C-N	-13.10	1.09	1.34
81	sR	1662	G	C8-N7	11.30	1.37	1.30
12	r	92	HIS	C-N	10.69	1.54	1.34
1	AR	275	U	C4-O4	9.57	1.31	1.23
48	s0	160	ILE	C-N	-9.56	1.16	1.34
81	sR	1007	C	P-OP2	9.53	1.65	1.49
1	1	1934	G	C8-N7	9.16	1.36	1.30
47	A	423	G	C8-N7	8.97	1.36	1.30
81	sR	1672	G	C8-N7	8.40	1.35	1.30
52	F	82	TYR	C-N	-8.39	1.18	1.34
1	AR	812	G	C8-N7	8.10	1.35	1.30
7	CG	179	ARG	C-N	-8.01	1.15	1.34
1	1	3181	C	N3-C4	-7.96	1.28	1.33
1	AR	3075	G	C6-O6	7.95	1.31	1.24
1	AR	2700	G	C8-N7	7.90	1.35	1.30
28	DB	36	HIS	C-N	7.77	1.49	1.34
6	CF	94	CYS	CB-SG	-7.69	1.69	1.82
1	AR	2401	A	N3-C4	7.64	1.39	1.34
81	sR	1756	A	P-OP2	7.63	1.61	1.49
1	1	275	U	C4-O4	7.56	1.29	1.23
1	AR	2401	A	N9-C4	7.48	1.42	1.37
1	AR	870	G	N9-C8	7.20	1.42	1.37
6	l	94	CYS	CB-SG	-7.10	1.70	1.82
1	AR	870	G	N7-C5	6.98	1.43	1.39
81	sR	1672	G	N7-C5	6.87	1.43	1.39
81	sR	1758	U	C4-O4	6.82	1.29	1.23
1	AR	2903	A	N9-C4	-6.79	1.33	1.37
1	1	2273	G	C6-O6	6.78	1.30	1.24
1	AR	3319	U	N1-C2	6.74	1.44	1.38
1	AR	2725	U	C4-O4	6.73	1.29	1.23
1	1	2395	G	C8-N7	-6.73	1.26	1.30
1	AR	3362	A	N9-C4	-6.69	1.33	1.37
1	AR	1115	G	N7-C5	-6.64	1.35	1.39
1	AR	2714	G	N9-C4	-6.43	1.32	1.38
1	1	2395	G	N7-C5	-6.42	1.35	1.39
3	AT	15	G	P-OP2	6.37	1.59	1.49
1	1	921	A	N7-C5	-6.37	1.35	1.39
1	1	1132	C	N3-C4	-6.35	1.29	1.33
1	AR	1047	A	C5-C6	-6.35	1.35	1.41
36	AI	64	GLU	CG-CD	6.34	1.61	1.51
1	AR	2983	C	N3-C4	-6.34	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	c1	57	LYS	C-N	6.24	1.48	1.34
1	AR	924	G	C5-C4	-6.23	1.33	1.38
12	CL	8	CYS	CB-SG	-6.23	1.71	1.82
1	AR	3006	A	N3-C4	-6.22	1.31	1.34
1	AR	2604	U	C4-O4	6.20	1.28	1.23
47	A	1214	U	C2-N3	6.20	1.42	1.37
1	1	804	C	N1-C6	-6.19	1.33	1.37
81	sR	1629	G	C2'-O2'	6.14	1.49	1.41
1	1	638	C	N1-C6	-6.14	1.33	1.37
1	AR	1103	A	N9-C4	6.13	1.41	1.37
47	A	423	G	N9-C8	6.10	1.42	1.37
47	A	577	G	C6-N1	6.09	1.43	1.39
1	AR	2147	A	C5-C6	-6.04	1.35	1.41
1	AR	2663	G	C6-O6	6.04	1.29	1.24
81	sR	163	G	N9-C4	-5.93	1.33	1.38
1	1	1143	A	N3-C4	-5.92	1.31	1.34
1	1	1429	G	N9-C8	-5.91	1.33	1.37
1	AR	2934	A	C6-N1	-5.90	1.31	1.35
1	1	1143	A	N9-C4	-5.88	1.34	1.37
1	1	2177	G	C6-O6	5.85	1.29	1.24
1	1	956	U	N1-C2	-5.85	1.33	1.38
1	1	1103	A	N9-C4	5.84	1.41	1.37
1	1	1103	A	N7-C5	5.81	1.42	1.39
1	AR	1132	C	N3-C4	-5.81	1.29	1.33
1	1	2333	C	N3-C4	-5.76	1.29	1.33
1	1	1133	A	N9-C4	-5.76	1.34	1.37
47	A	1265	G	N7-C5	5.75	1.42	1.39
75	d7	36	LYS	C-N	5.74	1.47	1.34
1	1	803	C	N1-C2	-5.74	1.34	1.40
47	A	976	G	C6-O6	5.71	1.29	1.24
1	1	1900	A	N9-C4	-5.71	1.34	1.37
1	AR	2846	U	N3-C4	-5.71	1.33	1.38
1	1	716	A	C5-C6	-5.64	1.35	1.41
1	1	1103	A	N3-C4	5.64	1.38	1.34
1	AR	1143	A	N9-C4	-5.62	1.34	1.37
1	1	1399	A	N9-C4	-5.61	1.34	1.37
1	1	98	G	N9-C4	-5.60	1.33	1.38
1	1	1116	G	N7-C5	-5.59	1.35	1.39
1	AR	3008	A	N9-C4	-5.57	1.34	1.37
1	1	1002	A	N9-C4	-5.56	1.34	1.37
81	sR	976	G	C6-O6	5.54	1.29	1.24
1	1	706	A	N9-C4	-5.54	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AR	964	G	N7-C5	-5.54	1.35	1.39
81	sR	337	G	C2-N3	5.53	1.37	1.32
81	sR	1765	A	N9-C4	-5.52	1.34	1.37
81	sR	577	G	C6-N1	5.51	1.43	1.39
1	AR	1874	A	N9-C4	-5.50	1.34	1.37
1	1	343	U	C2-N3	-5.47	1.33	1.37
1	1	2208	A	N9-C4	5.45	1.41	1.37
47	A	469	C	C2-O2	5.43	1.29	1.24
1	1	635	G	C5-C4	-5.40	1.34	1.38
1	AR	1332	A	N9-C4	-5.39	1.34	1.37
1	AR	3106	A	N7-C5	-5.39	1.36	1.39
47	A	1214	U	C4-O4	5.39	1.27	1.23
81	sR	163	G	N3-C4	-5.39	1.31	1.35
81	sR	1736	G	C6-O6	5.36	1.28	1.24
1	1	1370	G	C5-C6	-5.33	1.37	1.42
1	1	1891	A	N9-C4	-5.32	1.34	1.37
28	AA	36	HIS	C-N	5.29	1.44	1.34
1	1	1835	A	N9-C4	-5.29	1.34	1.37
1	1	658	G	N9-C8	-5.29	1.34	1.37
1	1	2762	A	N3-C4	-5.29	1.31	1.34
1	AR	367	A	N9-C4	-5.28	1.34	1.37
1	AR	1372	C	N1-C6	-5.27	1.33	1.37
1	1	1114	U	P-OP2	5.27	1.57	1.49
2	AS	49	G	N9-C8	-5.26	1.34	1.37
1	1	345	G	N9-C8	-5.26	1.34	1.37
47	A	423	G	N7-C5	5.26	1.42	1.39
1	1	1159	A	N3-C4	-5.26	1.31	1.34
1	1	656	A	N7-C5	-5.25	1.36	1.39
1	AR	2941	A	N9-C4	-5.25	1.34	1.37
3	AT	31	G	P-OP2	5.24	1.57	1.49
1	AR	3130	A	N3-C4	-5.21	1.31	1.34
2	AS	88	G	N9-C8	-5.20	1.34	1.37
1	AR	2726	C	N3-C4	-5.18	1.30	1.33
1	AR	1147	G	N9-C8	-5.16	1.34	1.37
1	AR	40	A	C8-N7	-5.15	1.27	1.31
1	1	970	A	N3-C4	-5.15	1.31	1.34
1	AR	2637	A	N9-C4	-5.15	1.34	1.37
81	sR	337	G	C2-N2	5.15	1.39	1.34
1	AR	953	G	C5-C4	-5.14	1.34	1.38
1	AR	804	C	N1-C6	-5.14	1.34	1.37
1	1	2617	U	N3-C4	-5.14	1.33	1.38
1	AR	973	A	N7-C5	-5.14	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AR	2404	A	C5-C4	5.14	1.42	1.38
1	AR	2617	U	N3-C4	-5.13	1.33	1.38
1	AR	3209	A	C6-N1	5.13	1.39	1.35
1	1	2983	C	N3-C4	-5.12	1.30	1.33
1	AR	3306	U	N1-C2	5.12	1.43	1.38
1	AR	2646	C	N1-C6	-5.09	1.34	1.37
1	AR	706	A	C5-C4	-5.08	1.35	1.38
81	sR	845	G	C8-N7	5.08	1.33	1.30
1	AR	1902	G	C5-C4	-5.07	1.34	1.38
13	CM	78	GLU	CG-CD	5.06	1.59	1.51
81	sR	1662	G	N7-C5	5.06	1.42	1.39
1	1	1390	A	N3-C4	-5.05	1.31	1.34
1	AR	934	G	C5-C4	-5.05	1.34	1.38
1	AR	1303	A	N9-C4	-5.05	1.34	1.37
1	AR	2903	A	N3-C4	-5.05	1.31	1.34
1	1	970	A	C6-N1	-5.05	1.32	1.35
1	AR	1103	A	N3-C4	5.05	1.37	1.34
1	AR	2413	A	C5-C6	-5.04	1.36	1.41
1	AR	647	A	C6-N1	-5.04	1.32	1.35
1	AR	970	A	N9-C4	-5.04	1.34	1.37
1	1	3010	U	C4-O4	5.03	1.27	1.23
1	AR	437	G	C5-C4	5.03	1.41	1.38
1	1	200	C	N1-C6	-5.02	1.34	1.37
1	AR	3040	A	N9-C4	-5.01	1.34	1.37
1	1	282	G	N1-C2	-5.01	1.33	1.37
1	1	317	A	N7-C5	-5.01	1.36	1.39
1	AR	420	G	N9-C8	-5.01	1.34	1.37
1	AR	2138	A	N7-C5	-5.00	1.36	1.39

All (2464) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	870	G	C5-N7-C8	-19.96	94.32	104.30
81	sR	1672	G	C5-N7-C8	-16.95	95.82	104.30
1	1	86	G	O5'-P-OP2	-16.12	91.19	105.70
1	AR	870	G	N7-C8-N9	15.53	120.86	113.10
1	AR	2700	G	C5-N7-C8	-14.21	97.19	104.30
1	AR	870	G	C8-N9-C4	-13.95	100.82	106.40
1	AR	3306	U	N3-C2-O2	-13.71	112.61	122.20
1	AR	1134	G	N1-C6-O6	13.53	128.02	119.90
1	1	1934	G	C5-N7-C8	-13.33	97.64	104.30
81	sR	1662	G	C5-N7-C8	-13.21	97.70	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	1897	G	N1-C6-O6	13.04	127.73	119.90
1	AR	1134	G	C5-C6-O6	-12.75	120.95	128.60
47	A	577	G	C5-C6-O6	-12.44	121.13	128.60
47	A	423	G	C5-N7-C8	-12.27	98.16	104.30
1	AR	1897	G	C5-N7-C8	-11.95	98.33	104.30
1	1	406	G	O4'-C1'-N9	11.88	117.70	108.20
1	AR	870	G	C4-C5-N7	11.65	115.46	110.80
1	AR	1902	G	C5-C6-O6	-11.57	121.66	128.60
81	sR	871	G	N1-C6-O6	11.56	126.84	119.90
1	1	2861	U	O5'-P-OP1	-11.56	95.30	105.70
81	sR	1672	G	N7-C8-N9	11.49	118.84	113.10
81	sR	1117	U	N3-C4-O4	11.24	127.27	119.40
1	AR	2373	A	O5'-P-OP1	-11.17	95.65	105.70
1	AR	275	U	N3-C4-C5	-11.11	107.93	114.60
47	A	1214	U	N3-C4-O4	11.09	127.16	119.40
81	sR	163	G	N3-C4-N9	-10.89	119.47	126.00
1	AR	1495	U	C5-C6-N1	-10.80	117.30	122.70
1	1	1934	G	C8-N9-C4	-10.76	102.10	106.40
1	AR	3075	G	C5-C6-N1	-10.73	106.14	111.50
47	A	423	G	C8-N9-C4	-10.73	102.11	106.40
1	AR	2846	U	C5-C4-O4	10.68	132.31	125.90
1	1	1934	G	N7-C8-N9	10.66	118.43	113.10
1	1	2617	U	C5-C4-O4	10.56	132.23	125.90
47	A	423	G	N7-C8-N9	10.49	118.34	113.10
81	sR	976	G	C5-C6-N1	-10.45	106.28	111.50
1	AR	3057	U	C5-C4-O4	10.43	132.16	125.90
1	1	2818	U	O5'-P-OP1	-10.38	96.36	105.70
47	A	577	G	C6-N1-C2	-10.36	118.88	125.10
1	AR	2860	U	O5'-P-OP2	-10.35	96.39	105.70
81	sR	1672	G	C4-C5-N7	10.35	114.94	110.80
1	AR	2700	G	C4-C5-N7	10.34	114.94	110.80
1	AR	3306	U	N1-C2-O2	10.31	130.02	122.80
1	AR	1495	U	C5-C4-O4	10.26	132.05	125.90
1	1	3278	C	N1-C2-O2	10.23	125.04	118.90
1	AR	877	C	N3-C4-C5	10.22	125.99	121.90
1	1	1495	U	C5-C6-N1	-10.17	117.62	122.70
1	1	716	A	N1-C6-N6	9.97	124.58	118.60
1	AR	2604	U	N3-C4-C5	-9.85	108.69	114.60
47	A	553	G	N1-C6-O6	9.83	125.80	119.90
1	AR	2846	U	N3-C2-O2	-9.80	115.34	122.20
47	A	639	U	N3-C2-O2	-9.66	115.44	122.20
1	AR	1897	G	C4-C5-N7	9.62	114.65	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	3217	C	N3-C2-O2	-9.60	115.18	121.90
1	1	3181	C	N3-C2-O2	-9.57	115.20	121.90
47	A	976	G	C5-C6-N1	-9.57	106.71	111.50
1	AR	2714	G	N3-C4-C5	9.56	133.38	128.60
1	AR	2726	C	N3-C2-O2	-9.55	115.22	121.90
1	1	2714	G	N3-C4-C5	9.50	133.35	128.60
1	AR	812	G	C5-N7-C8	-9.50	99.55	104.30
1	AR	2700	G	N7-C8-N9	9.49	117.85	113.10
1	AR	2111	G	O5'-P-OP1	9.48	122.08	110.70
1	AR	2846	U	N3-C4-O4	-9.46	112.78	119.40
1	1	2617	U	C5-C6-N1	-9.44	117.98	122.70
1	1	938	C	N3-C4-C5	9.44	125.68	121.90
1	AR	1115	G	C8-N9-C4	-9.42	102.63	106.40
1	1	3278	C	N3-C2-O2	-9.31	115.39	121.90
1	1	2395	G	N1-C6-O6	9.27	125.46	119.90
81	sR	1758	U	N3-C4-C5	-9.26	109.04	114.60
1	1	962	A	OP1-P-O3'	-9.22	84.92	105.20
1	1	2846	U	N3-C2-O2	-9.22	115.75	122.20
1	1	24	G	O5'-P-OP2	-9.21	97.41	105.70
1	1	1307	G	P-O3'-C3'	9.16	130.69	119.70
81	sR	1662	G	C8-N9-C1'	9.13	138.87	127.00
1	1	2831	G	N1-C6-O6	9.12	125.37	119.90
1	AR	2362	C	C6-N1-C2	-9.12	116.65	120.30
1	1	1556	C	C2-N1-C1'	9.11	128.82	118.80
1	AR	1047	A	N1-C6-N6	9.09	124.06	118.60
2	3	85	G	N1-C6-O6	9.05	125.33	119.90
1	1	2617	U	N1-C2-N3	9.04	120.32	114.90
1	1	637	C	C2-N1-C1'	-9.02	108.88	118.80
1	AR	1495	U	C4-C5-C6	9.01	125.11	119.70
1	1	1934	G	N3-C4-N9	-8.99	120.61	126.00
1	AR	1495	U	N1-C2-N3	8.98	120.29	114.90
81	sR	1000	C	C2-N1-C1'	8.96	128.65	118.80
1	1	439	C	N1-C2-O2	8.92	124.25	118.90
1	1	2663	G	N1-C6-O6	8.91	125.25	119.90
1	AR	2617	U	C5-C6-N1	-8.91	118.24	122.70
81	sR	448	C	C6-N1-C2	-8.91	116.74	120.30
1	AR	2385	G	O5'-P-OP1	-8.91	97.68	105.70
1	1	3217	C	C2-N1-C1'	8.88	128.56	118.80
1	AR	2726	C	C6-N1-C2	-8.87	116.75	120.30
1	AR	3057	U	N3-C2-O2	-8.87	115.99	122.20
1	AR	1134	G	C6-C5-N7	-8.86	125.08	130.40
1	1	1846	C	N1-C2-O2	-8.86	113.59	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2283	G	N1-C6-O6	8.84	125.20	119.90
1	1	2726	C	C6-N1-C2	-8.82	116.77	120.30
1	AR	1897	G	C5-C6-O6	-8.79	123.33	128.60
47	A	469	C	N1-C2-O2	8.79	124.17	118.90
1	AR	2623	G	C5-C6-O6	-8.79	123.33	128.60
47	A	565	C	C2-N3-C4	-8.78	115.51	119.90
1	1	962	A	OP2-P-O3'	8.76	124.48	105.20
81	sR	1662	G	N7-C8-N9	8.76	117.48	113.10
81	sR	1629	G	N3-C4-C5	-8.76	124.22	128.60
47	A	75	U	N1-C2-O2	8.73	128.91	122.80
1	1	1308	A	O5'-P-OP1	-8.72	97.85	105.70
81	sR	1473	U	N3-C2-O2	-8.72	116.09	122.20
1	AR	1881	A	O5'-P-OP2	-8.71	97.86	105.70
1	AR	2393	G	O5'-P-OP2	-8.71	97.86	105.70
1	AR	2794	G	C5-C6-O6	-8.71	123.38	128.60
1	AR	2964	G	N1-C6-O6	-8.69	114.68	119.90
1	AR	437	G	N7-C8-N9	8.69	117.44	113.10
1	AR	2367	A	O5'-P-OP2	8.66	121.09	110.70
81	sR	1629	G	C8-N9-C4	-8.65	102.94	106.40
1	AR	870	G	C8-N9-C1'	8.65	138.24	127.00
1	AR	1897	G	N7-C8-N9	8.65	117.42	113.10
1	AR	1902	G	N1-C6-O6	8.64	125.09	119.90
1	AR	437	G	C8-N9-C4	-8.61	102.96	106.40
1	AR	1897	G	C8-N9-C4	-8.60	102.96	106.40
1	AR	960	U	C5-C6-N1	8.54	126.97	122.70
1	AR	922	U	C5-C6-N1	8.53	126.96	122.70
1	AR	3344	A	N7-C8-N9	8.52	118.06	113.80
1	AR	2392	C	C6-N1-C2	8.52	123.71	120.30
1	1	97	U	C5-C6-N1	-8.52	118.44	122.70
1	AR	2679	A	N1-C6-N6	8.52	123.71	118.60
1	1	2831	G	C5-C6-O6	-8.50	123.50	128.60
47	A	1214	U	C2-N1-C1'	8.50	127.90	117.70
1	1	933	A	N1-C2-N3	8.48	133.54	129.30
1	1	1495	U	C4-C5-C6	8.47	124.78	119.70
81	sR	103	A	OP1-P-OP2	-8.47	106.89	119.60
1	1	1556	C	N1-C2-O2	8.47	123.98	118.90
1	1	2419	A	O5'-P-OP2	-8.46	98.09	105.70
1	1	645	A	C6-N1-C2	-8.45	113.53	118.60
1	1	2870	C	C2-N1-C1'	-8.45	109.51	118.80
47	A	554	C	N1-C2-O2	8.45	123.97	118.90
1	AR	3217	C	N1-C2-O2	8.43	123.96	118.90
1	1	1146	C	O5'-P-OP2	-8.42	98.12	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	2700	G	C5-C6-O6	-8.42	123.55	128.60
3	4	74	U	O5'-P-OP1	-8.41	98.13	105.70
47	A	577	G	C5-C6-N1	8.41	115.70	111.50
1	1	1934	G	N9-C4-C5	8.40	108.76	105.40
81	sR	453	U	C2-N1-C1'	8.38	127.76	117.70
1	AR	1134	G	C4-C5-N7	8.38	114.15	110.80
1	1	2138	A	C8-N9-C4	-8.37	102.45	105.80
1	AR	2604	U	C6-N1-C2	-8.37	115.98	121.00
81	sR	402	C	O5'-P-OP2	-8.36	98.18	105.70
47	A	453	U	C2-N1-C1'	8.33	127.70	117.70
1	AR	2927	C	C6-N1-C2	-8.33	116.97	120.30
1	1	1049	C	O5'-P-OP1	-8.33	98.21	105.70
1	AR	2825	C	C6-N1-C2	8.33	123.63	120.30
1	1	1672	U	OP2-P-O3'	8.30	123.47	105.20
1	1	1160	C	O5'-P-OP1	-8.27	98.26	105.70
1	AR	2341	A	C8-N9-C4	8.26	109.10	105.80
1	AR	1313	G	O5'-P-OP2	-8.24	98.28	105.70
1	AR	3344	A	C8-N9-C4	-8.24	102.50	105.80
1	1	1581	C	N1-C2-O2	8.23	123.84	118.90
1	1	3181	C	N3-C4-N4	-8.23	112.24	118.00
1	AR	835	G	O4'-C1'-N9	8.22	114.78	108.20
47	A	75	U	N3-C2-O2	-8.22	116.44	122.20
1	AR	2358	A	C8-N9-C4	8.22	109.09	105.80
1	AR	2243	A	O5'-P-OP1	-8.21	98.31	105.70
1	1	111	C	C5-C6-N1	-8.21	116.90	121.00
1	AR	283	G	C4-C5-N7	8.19	114.08	110.80
1	AR	2617	U	C5-C4-O4	8.19	130.81	125.90
1	1	275	U	N3-C4-C5	-8.19	109.69	114.60
1	AR	655	C	C6-N1-C2	-8.18	117.03	120.30
1	AR	1556	C	C6-N1-C2	-8.18	117.03	120.30
81	sR	1773	C	N3-C4-C5	-8.18	118.63	121.90
1	1	2389	C	O5'-P-OP1	-8.17	98.34	105.70
81	sR	1560	U	N3-C2-O2	-8.17	116.48	122.20
1	1	651	G	N3-C4-N9	8.17	130.90	126.00
1	1	2273	G	C5-C6-N1	-8.17	107.42	111.50
1	1	947	G	O5'-P-OP2	-8.16	98.36	105.70
1	AR	1373	A	O5'-P-OP2	-8.15	98.36	105.70
1	1	1127	G	N1-C6-O6	8.15	124.79	119.90
1	1	2700	G	N1-C6-O6	8.13	124.78	119.90
1	AR	812	G	C8-N9-C4	-8.13	103.15	106.40
47	A	25	C	N1-C2-O2	8.13	123.78	118.90
1	1	3181	C	C5-C4-N4	8.10	125.87	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	881	C	C5-C6-N1	8.10	125.05	121.00
1	AR	2726	C	N1-C2-N3	8.09	124.86	119.20
1	1	339	C	N3-C2-O2	-8.09	116.24	121.90
81	sR	163	G	N3-C4-C5	8.09	132.64	128.60
1	1	1414	G	C5-N7-C8	-8.08	100.26	104.30
1	1	2355	G	N1-C6-O6	8.07	124.74	119.90
1	1	637	C	O4'-C1'-N1	8.06	114.65	108.20
1	1	908	G	O4'-C1'-N9	-8.05	101.76	108.20
1	1	716	A	N9-C4-C5	-8.05	102.58	105.80
47	A	553	G	C5-C6-O6	-8.05	123.77	128.60
1	1	2412	G	C5-C6-O6	-8.03	123.78	128.60
1	1	421	G	N9-C4-C5	-8.03	102.19	105.40
1	AR	1897	G	C6-C5-N7	-8.03	125.58	130.40
54	H	69	LEU	CA-CB-CG	8.03	133.76	115.30
81	sR	1736	G	C5-C6-N1	-8.02	107.49	111.50
1	AR	1790	G	N1-C6-O6	8.02	124.71	119.90
47	A	1670	G	N1-C6-O6	8.02	124.71	119.90
1	1	421	G	C5-C6-O6	-8.01	123.79	128.60
1	1	1495	U	C2-N1-C1'	-8.01	108.08	117.70
1	1	1934	G	C8-N9-C1'	8.01	137.42	127.00
1	AR	2604	U	C5-C4-O4	8.01	130.71	125.90
3	AT	113	U	C5-C6-N1	-8.01	118.70	122.70
1	AR	812	G	N7-C8-N9	8.00	117.10	113.10
1	AR	3057	U	N3-C4-O4	-8.00	113.80	119.40
1	1	1790	G	N3-C2-N2	-7.99	114.31	119.90
1	1	2700	G	C5-C6-O6	-7.99	123.81	128.60
81	sR	868	G	N1-C6-O6	7.98	124.69	119.90
81	sR	1662	G	C8-N9-C4	-7.97	103.21	106.40
1	AR	3057	U	N1-C2-N3	7.97	119.68	114.90
1	1	1556	C	N3-C2-O2	-7.97	116.32	121.90
1	1	805	G	C8-N9-C4	7.96	109.58	106.40
1	1	1371	G	C8-N9-C4	7.96	109.58	106.40
1	AR	776	U	C5-C6-N1	-7.96	118.72	122.70
1	1	3306	U	C5-C4-O4	7.95	130.67	125.90
1	1	979	U	C6-N1-C2	-7.94	116.24	121.00
1	AR	3278	C	N1-C2-O2	7.92	123.65	118.90
1	AR	1115	G	C4-N9-C1'	7.92	136.79	126.50
81	sR	871	G	C6-C5-N7	-7.89	125.67	130.40
1	1	1581	C	N3-C2-O2	-7.88	116.38	121.90
1	AR	3344	A	C5-N7-C8	-7.87	99.96	103.90
47	A	365	G	C5-N7-C8	-7.87	100.36	104.30
81	sR	1000	C	N3-C2-O2	-7.87	116.39	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2621	G	O5'-P-OP2	-7.85	98.64	105.70
1	AR	2263	C	O5'-P-OP1	7.84	120.11	110.70
1	1	1889	G	N1-C6-O6	7.82	124.59	119.90
1	AR	1364	C	OP2-P-O3'	7.82	122.41	105.20
1	1	2942	C	C2-N1-C1'	-7.82	110.20	118.80
1	AR	1047	A	C5-C6-N6	-7.82	117.45	123.70
1	AR	2623	G	N1-C6-O6	7.81	124.59	119.90
1	1	2942	C	C6-N1-C2	7.80	123.42	120.30
1	AR	343	U	O5'-P-OP1	-7.80	98.68	105.70
1	1	695	C	C6-N1-C2	7.79	123.42	120.30
1	1	3340	G	C5-N7-C8	-7.78	100.41	104.30
1	1	67	A	O5'-P-OP1	-7.78	98.70	105.70
1	AR	1130	A	C2-N3-C4	7.77	114.49	110.60
1	AR	641	C	N1-C2-O2	-7.76	114.24	118.90
1	1	2395	G	C5-C6-O6	-7.76	123.94	128.60
1	1	427	C	C6-N1-C2	-7.76	117.20	120.30
1	AR	966	U	N3-C2-O2	-7.76	116.77	122.20
1	1	802	C	O5'-P-OP1	-7.75	98.72	105.70
81	sR	542	A	N7-C8-N9	7.75	117.67	113.80
1	1	2314	U	C5-C4-O4	-7.74	121.26	125.90
1	AR	2400	G	C4-C5-N7	7.73	113.89	110.80
1	AR	2400	G	C5-C6-O6	-7.73	123.96	128.60
81	sR	1006	C	OP2-P-O3'	7.73	122.20	105.20
3	4	51	G	C5-C6-O6	-7.72	123.97	128.60
1	AR	2714	G	C5-N7-C8	-7.72	100.44	104.30
1	AR	38	U	O5'-P-OP2	-7.72	98.75	105.70
47	A	1273	G	O5'-P-OP1	-7.72	98.75	105.70
1	AR	2263	C	C4-C5-C6	-7.72	113.54	117.40
1	1	3306	U	N3-C4-O4	-7.71	114.00	119.40
1	AR	2393	G	C5-C6-O6	-7.71	123.97	128.60
81	sR	426	G	C4-N9-C1'	7.70	136.51	126.50
1	1	2973	G	N1-C6-O6	7.70	124.52	119.90
1	AR	2620	G	N1-C6-O6	7.69	124.51	119.90
1	AR	2130	G	C8-N9-C4	7.68	109.47	106.40
1	1	1389	G	C4-C5-N7	7.68	113.87	110.80
1	1	2283	G	C5-C6-O6	-7.68	123.99	128.60
1	AR	2763	U	O5'-P-OP2	-7.67	98.80	105.70
1	AR	3155	U	C2-N1-C1'	7.67	126.91	117.70
81	sR	1662	G	C4-C5-N7	7.66	113.87	110.80
6	l	327	LEU	CA-CB-CG	7.65	132.91	115.30
1	AR	895	A	C5-N7-C8	-7.65	100.08	103.90
1	AR	2872	A	C8-N9-C4	7.65	108.86	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	3278	C	C2-N1-C1'	7.64	127.21	118.80
1	AR	881	C	N1-C2-O2	7.64	123.48	118.90
1	1	2373	A	O5'-P-OP1	-7.64	98.83	105.70
1	1	895	A	C5-N7-C8	-7.63	100.08	103.90
1	1	1002	A	C8-N9-C4	7.63	108.85	105.80
1	1	1838	G	C5-C6-O6	-7.63	124.02	128.60
1	1	435	C	C6-N1-C2	7.63	123.35	120.30
1	1	1406	A	O5'-P-OP2	-7.63	98.84	105.70
47	A	75	U	C2-N1-C1'	7.62	126.85	117.70
1	1	2836	C	C5-C4-N4	7.62	125.53	120.20
1	1	3214	U	N3-C2-O2	-7.61	116.88	122.20
47	A	469	C	N1-C2-N3	-7.61	113.88	119.20
1	AR	2831	G	C5-C6-O6	-7.60	124.04	128.60
1	AR	2726	C	C5-C4-N4	7.60	125.52	120.20
81	sR	1629	G	C4-N9-C1'	7.60	136.38	126.50
1	AR	870	G	N9-C4-C5	7.59	108.44	105.40
81	sR	1537	C	C6-N1-C2	-7.59	117.26	120.30
1	AR	2372	A	C8-N9-C4	-7.59	102.76	105.80
1	AR	1047	A	C4-C5-N7	7.58	114.49	110.70
81	sR	453	U	N3-C2-O2	-7.58	116.89	122.20
1	1	1495	U	N1-C2-O2	-7.58	117.50	122.80
1	AR	2618	G	C5-C6-O6	-7.58	124.06	128.60
1	1	895	A	C8-N9-C4	-7.56	102.78	105.80
1	AR	3306	U	C5-C6-N1	-7.55	118.92	122.70
1	AR	92	G	C5-C6-N1	7.55	115.28	111.50
1	1	1543	G	N1-C6-O6	7.55	124.43	119.90
1	1	651	G	N3-C4-C5	-7.54	124.83	128.60
47	A	728	U	C2-N1-C1'	7.54	126.75	117.70
1	AR	275	U	C6-N1-C2	-7.54	116.48	121.00
1	AR	870	G	N3-C4-N9	-7.54	121.48	126.00
1	AR	2899	C	C6-N1-C2	-7.54	117.29	120.30
47	A	1265	G	C5-N7-C8	-7.53	100.53	104.30
1	AR	2620	G	C5-C6-O6	-7.52	124.09	128.60
81	sR	1037	C	C6-N1-C2	7.52	123.31	120.30
1	1	2798	C	N1-C2-O2	-7.52	114.39	118.90
81	sR	298	C	N1-C2-O2	-7.52	114.39	118.90
1	1	3362	A	C2-N3-C4	-7.51	106.84	110.60
1	AR	3306	U	N3-C4-O4	-7.51	114.14	119.40
1	1	2395	G	C6-C5-N7	-7.50	125.90	130.40
1	1	2819	A	O5'-P-OP2	-7.50	98.95	105.70
1	AR	1131	G	O5'-P-OP2	-7.49	98.96	105.70
1	1	509	U	N3-C4-C5	-7.49	110.11	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	1443	G	N7-C8-N9	7.49	116.85	113.10
1	1	2337	C	C6-N1-C2	-7.49	117.30	120.30
1	1	2808	A	N1-C6-N6	7.49	123.09	118.60
1	AR	2714	G	C4-C5-N7	7.49	113.80	110.80
1	1	716	A	C4-C5-N7	7.47	114.44	110.70
1	1	716	A	C5-C6-N6	-7.47	117.72	123.70
1	AR	2621	G	N1-C6-O6	7.47	124.38	119.90
1	AR	1134	G	N9-C4-C5	-7.47	102.41	105.40
1	1	608	A	N1-C6-N6	7.47	123.08	118.60
1	AR	406	G	O4'-C1'-N9	7.47	114.17	108.20
1	AR	2617	U	C4-C5-C6	7.47	124.18	119.70
1	AR	2873	U	C5-C4-O4	7.46	130.38	125.90
1	1	1790	G	N1-C6-O6	7.45	124.37	119.90
1	AR	216	G	C6-C5-N7	-7.45	125.93	130.40
81	sR	871	G	C5-C6-O6	-7.45	124.13	128.60
1	1	2726	C	N3-C2-O2	-7.44	116.69	121.90
1	1	1419	A	O5'-P-OP1	7.44	119.63	110.70
1	AR	95	A	C8-N9-C4	7.44	108.78	105.80
1	1	2860	U	C5-C6-N1	7.44	126.42	122.70
1	AR	1790	G	N3-C2-N2	-7.42	114.71	119.90
1	AR	909	G	N1-C6-O6	-7.41	115.45	119.90
1	AR	1223	A	O5'-P-OP1	-7.41	99.03	105.70
1	1	1389	G	C5-C6-O6	-7.40	124.16	128.60
1	1	112	U	C2-N1-C1'	7.40	126.58	117.70
1	AR	2116	G	N1-C6-O6	7.39	124.34	119.90
1	AR	2342	U	O5'-P-OP2	-7.39	99.05	105.70
81	sR	1117	U	N3-C4-C5	-7.39	110.17	114.60
81	sR	1117	U	N1-C2-O2	-7.38	117.63	122.80
1	1	421	G	C4-C5-N7	7.38	113.75	110.80
1	1	3214	U	C5-C4-O4	7.38	130.33	125.90
81	sR	1599	C	N1-C2-O2	7.38	123.33	118.90
1	AR	216	G	C5-C6-O6	-7.38	124.17	128.60
81	sR	965	U	N1-C2-O2	7.38	127.96	122.80
1	AR	2816	G	C8-N9-C4	7.37	109.35	106.40
81	sR	1596	C	N3-C2-O2	-7.36	116.75	121.90
1	AR	2818	U	O5'-P-OP1	-7.36	99.08	105.70
1	1	2617	U	N3-C4-O4	-7.36	114.25	119.40
47	A	1039	A	O4'-C1'-N9	7.36	114.09	108.20
1	1	895	A	N7-C8-N9	7.36	117.48	113.80
1	AR	2728	G	O5'-P-OP2	-7.36	99.08	105.70
1	1	2816	G	O4'-C1'-N9	7.35	114.08	108.20
1	1	3022	G	O4'-C1'-N9	7.35	114.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2870	C	N3-C4-N4	-7.34	112.86	118.00
1	AR	966	U	N1-C2-O2	7.34	127.94	122.80
1	1	1127	G	C5-C6-O6	-7.34	124.20	128.60
1	1	1495	U	N1-C2-N3	7.33	119.30	114.90
1	AR	2699	G	C8-N9-C4	7.33	109.33	106.40
47	A	73	U	C6-N1-C2	-7.33	116.60	121.00
1	AR	1790	G	C5-C6-N1	-7.33	107.84	111.50
1	AR	2870	C	C2-N1-C1'	-7.32	110.75	118.80
1	AR	216	G	N1-C6-O6	7.32	124.29	119.90
1	AR	2978	U	O4'-C1'-N1	7.31	114.05	108.20
1	1	65	A	P-O3'-C3'	7.31	128.47	119.70
1	AR	2123	G	C5-C6-O6	-7.31	124.22	128.60
1	1	2617	U	C4-C5-C6	7.30	124.08	119.70
1	1	2870	C	N3-C4-C5	7.29	124.82	121.90
81	sR	868	G	C5-C6-O6	-7.29	124.23	128.60
1	1	963	G	O5'-P-OP1	-7.28	99.14	105.70
81	sR	1672	G	N3-C4-N9	-7.28	121.63	126.00
1	AR	63	A	N1-C6-N6	7.28	122.97	118.60
1	AR	3009	G	O5'-P-OP1	-7.27	99.15	105.70
1	1	2387	A	C8-N9-C4	7.27	108.71	105.80
1	1	2661	G	O5'-P-OP1	-7.27	99.16	105.70
27	9	126	LEU	CA-CB-CG	7.27	132.01	115.30
1	1	909	G	C8-N9-C4	7.26	109.30	106.40
1	1	2197	C	C6-N1-C2	7.25	123.20	120.30
1	1	2944	U	N1-C2-O2	7.25	127.88	122.80
47	A	1214	U	N3-C4-C5	-7.24	110.26	114.60
47	A	453	U	C6-N1-C2	-7.24	116.66	121.00
1	1	3140	G	C5-C6-O6	-7.24	124.26	128.60
1	AR	2827	U	C2-N3-C4	-7.23	122.66	127.00
81	sR	405	C	O5'-P-OP1	7.23	119.38	110.70
81	sR	1758	U	N3-C4-O4	7.23	124.46	119.40
47	A	358	U	N3-C4-O4	7.23	124.46	119.40
1	1	932	U	N1-C2-O2	-7.23	117.74	122.80
1	1	1489	A	N1-C6-N6	7.23	122.94	118.60
1	AR	2827	U	C5-C6-N1	-7.23	119.09	122.70
1	1	1365	G	N3-C4-C5	-7.22	124.99	128.60
1	AR	3026	G	C5-C6-O6	-7.22	124.27	128.60
1	1	3207	U	C5-C4-O4	7.22	130.23	125.90
1	1	2345	A	N1-C6-N6	7.21	122.92	118.60
47	A	1560	U	N3-C2-O2	-7.21	117.16	122.20
1	1	922	U	N1-C2-O2	7.20	127.84	122.80
1	AR	1435	A	N1-C6-N6	7.20	122.92	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	2872	A	O5'-P-OP1	-7.19	99.23	105.70
1	AR	1155	C	N3-C4-C5	7.19	124.78	121.90
47	A	639	U	N1-C2-O2	7.18	127.83	122.80
2	3	77	G	OP1-P-O3'	7.17	120.98	105.20
1	1	2700	G	C6-C5-N7	-7.17	126.10	130.40
1	1	3217	C	C6-N1-C1'	-7.16	112.21	120.80
3	4	32	C	N1-C2-O2	-7.15	114.61	118.90
1	AR	279	U	C5-C4-O4	-7.15	121.61	125.90
1	1	2870	C	C6-N1-C1'	7.15	129.38	120.80
6	CF	182	LEU	CA-CB-CG	7.14	131.73	115.30
1	1	2285	C	O5'-P-OP1	-7.14	99.28	105.70
81	sR	1537	C	C6-N1-C1'	7.13	129.36	120.80
1	1	2943	G	O5'-P-OP2	-7.13	99.28	105.70
1	1	1891	A	C8-N9-C4	7.13	108.65	105.80
1	AR	342	A	O5'-P-OP2	-7.13	99.28	105.70
1	1	776	U	C4-C5-C6	7.13	123.97	119.70
81	sR	426	G	N3-C4-C5	-7.12	125.04	128.60
1	AR	636	C	N3-C4-C5	7.12	124.75	121.90
1	AR	1495	U	C2-N1-C1'	-7.11	109.17	117.70
81	sR	1672	G	C8-N9-C4	-7.11	103.56	106.40
1	AR	874	U	O5'-P-OP1	-7.11	99.31	105.70
13	CM	112	LEU	CA-CB-CG	7.11	131.65	115.30
2	3	77	G	P-O3'-C3'	7.10	128.22	119.70
1	1	2859	U	O5'-P-OP1	-7.09	99.32	105.70
1	1	1556	C	C6-N1-C2	-7.09	117.46	120.30
1	AR	189	G	N1-C6-O6	-7.08	115.65	119.90
47	A	453	U	N3-C4-C5	-7.08	110.35	114.60
81	sR	1629	G	N7-C8-N9	7.08	116.64	113.10
81	sR	610	G	C4-N9-C1'	7.07	135.69	126.50
1	AR	718	G	C5-N7-C8	-7.07	100.76	104.30
1	1	3048	A	O5'-P-OP2	-7.07	99.34	105.70
1	AR	2272	G	O4'-C1'-N9	7.07	113.86	108.20
1	1	1111	U	C6-N1-C2	7.07	125.24	121.00
1	AR	2699	G	N9-C4-C5	-7.07	102.57	105.40
47	A	423	G	C8-N9-C1'	7.06	136.18	127.00
1	AR	2870	C	C6-N1-C1'	7.06	129.27	120.80
1	AR	3181	C	N3-C2-O2	-7.06	116.96	121.90
1	1	1838	G	N1-C6-O6	7.05	124.13	119.90
1	AR	65	A	P-O3'-C3'	7.05	128.16	119.70
1	AR	2298	U	C5-C6-N1	-7.04	119.18	122.70
1	AR	340	C	N3-C4-N4	-7.04	113.07	118.00
47	A	1773	C	C6-N1-C2	-7.04	117.48	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AS	38	U	C5-C4-O4	-7.04	121.68	125.90
1	1	426	G	C5-C6-O6	-7.04	124.38	128.60
1	1	111	C	C6-N1-C2	7.04	123.11	120.30
1	1	2719	U	N1-C2-N3	7.03	119.12	114.90
81	sR	1000	C	C6-N1-C1'	-7.03	112.36	120.80
1	1	943	U	N3-C2-O2	-7.03	117.28	122.20
47	A	422	G	C5-N7-C8	-7.03	100.79	104.30
1	1	3041	U	N1-C2-O2	-7.02	117.88	122.80
47	A	830	U	N3-C2-O2	-7.02	117.28	122.20
1	AR	1723	A	O5'-P-OP2	-7.02	99.38	105.70
1	AR	2827	U	N1-C2-N3	7.02	119.11	114.90
47	A	423	G	C4-C5-N7	7.02	113.61	110.80
1	AR	957	C	C6-N1-C2	-7.01	117.50	120.30
1	AR	838	G	C5-C6-O6	7.01	132.80	128.60
1	AR	2950	G	O4'-C1'-N9	7.01	113.81	108.20
1	1	2971	A	O4'-C1'-N9	7.00	113.80	108.20
47	A	992	A	C2-N3-C4	-7.00	107.10	110.60
1	1	635	G	C5-C6-O6	-7.00	124.40	128.60
1	1	639	G	N1-C6-O6	7.00	124.10	119.90
1	AR	2700	G	C8-N9-C4	-6.99	103.60	106.40
47	A	934	C	C2-N1-C1'	6.99	126.49	118.80
1	1	1454	A	O5'-P-OP1	-6.99	99.41	105.70
1	AR	960	U	N1-C2-O2	6.99	127.69	122.80
1	AR	640	U	N1-C2-O2	-6.99	117.91	122.80
81	sR	1755	A	OP2-P-O3'	6.98	120.56	105.20
1	AR	2714	G	C2-N3-C4	-6.98	108.41	111.90
1	1	98	G	N3-C4-C5	6.97	132.09	128.60
81	sR	558	U	C2-N1-C1'	6.97	126.07	117.70
1	AR	2700	G	N1-C6-O6	6.97	124.08	119.90
3	AT	9	A	O5'-P-OP2	-6.97	99.42	105.70
1	1	880	G	C8-N9-C4	6.97	109.19	106.40
1	AR	881	C	C2-N3-C4	6.97	123.38	119.90
1	AR	1448	U	C5-C6-N1	-6.97	119.22	122.70
1	AR	679	U	C5-C4-O4	6.97	130.08	125.90
1	1	1560	G	O5'-P-OP2	-6.96	99.43	105.70
1	AR	275	U	C5-C4-O4	6.96	130.08	125.90
47	A	623	A	O5'-P-OP1	-6.96	99.44	105.70
1	1	639	G	C5-C6-O6	-6.96	124.42	128.60
1	1	1308	A	O5'-P-OP2	6.96	119.05	110.70
1	AR	2186	U	O5'-P-OP2	-6.95	99.44	105.70
1	AR	924	G	C5-C6-O6	-6.95	124.43	128.60
1	1	81	C	N3-C4-C5	6.95	124.68	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	1907	C	N1-C2-O2	6.95	123.07	118.90
81	sR	1766	A	O5'-P-OP2	-6.94	99.45	105.70
1	AR	2147	A	C5-C6-N6	-6.94	118.15	123.70
1	AR	2617	U	O5'-P-OP2	-6.94	99.45	105.70
1	1	1377	G	C5-C6-O6	-6.94	124.44	128.60
81	sR	25	C	P-O3'-C3'	6.93	128.02	119.70
1	AR	1483	G	O5'-P-OP1	-6.93	99.46	105.70
1	1	1145	G	C5-C6-O6	-6.93	124.44	128.60
1	1	2395	G	N3-C4-N9	6.92	130.15	126.00
1	1	2368	A	O5'-P-OP1	-6.92	99.48	105.70
1	1	421	G	N3-C4-N9	6.91	130.15	126.00
1	1	2155	G	O5'-P-OP2	-6.91	99.48	105.70
1	1	2418	G	OP1-P-O3'	6.91	120.40	105.20
1	1	970	A	N1-C2-N3	6.90	132.75	129.30
1	1	2395	G	N9-C4-C5	-6.89	102.64	105.40
1	AR	1856	C	C6-N1-C2	-6.89	117.54	120.30
81	sR	337	G	N3-C4-N9	6.89	130.13	126.00
1	AR	1432	C	N1-C2-O2	6.89	123.03	118.90
1	1	1820	U	P-O3'-C3'	6.88	127.96	119.70
1	AR	1878	G	C4-N9-C1'	6.88	135.45	126.50
1	1	2385	G	O5'-P-OP2	6.88	118.95	110.70
1	1	2331	C	C6-N1-C2	6.87	123.05	120.30
1	AR	709	A	O5'-P-OP1	-6.87	99.52	105.70
1	1	111	C	C2-N3-C4	-6.86	116.47	119.90
1	AR	2617	U	N1-C2-N3	6.86	119.02	114.90
1	AR	2772	C	N1-C2-O2	6.86	123.01	118.90
1	AR	586	C	C6-N1-C2	6.85	123.04	120.30
1	AR	2831	G	C5-C6-N1	6.85	114.92	111.50
1	AR	961	C	OP1-P-OP2	-6.84	109.33	119.60
1	AR	1312	C	C6-N1-C2	-6.84	117.56	120.30
81	sR	577	G	C6-N1-C2	-6.84	121.00	125.10
56	J	29	LEU	CA-CB-CG	6.84	131.03	115.30
1	1	3319	U	P-O3'-C3'	6.83	127.89	119.70
1	1	509	U	C5-C4-O4	6.83	130.00	125.90
1	AR	1316	C	N1-C2-O2	-6.83	114.80	118.90
47	A	1363	U	C2-N1-C1'	6.83	125.89	117.70
1	AR	1191	U	N1-C2-O2	-6.82	118.02	122.80
1	AR	2996	U	N1-C2-O2	6.82	127.58	122.80
1	1	2846	U	C5-C4-O4	6.81	129.99	125.90
1	AR	41	G	C4-C5-N7	6.81	113.52	110.80
1	1	1414	G	N1-C6-O6	6.81	123.98	119.90
1	1	708	G	C8-N9-C4	6.80	109.12	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	A	1214	U	C6-N1-C2	-6.80	116.92	121.00
1	1	212	G	N3-C4-N9	6.80	130.08	126.00
1	AR	2376	G	OP1-P-OP2	6.80	129.80	119.60
1	1	755	A	N1-C6-N6	-6.79	114.52	118.60
1	1	3178	A	C8-N9-C4	6.79	108.52	105.80
1	AR	1145	G	N3-C2-N2	-6.79	115.15	119.90
1	1	69	C	N3-C4-C5	-6.79	119.19	121.90
1	1	835	G	O4'-C1'-N9	6.78	113.63	108.20
1	AR	2846	U	N1-C2-O2	6.78	127.55	122.80
1	1	3218	A	N1-C6-N6	6.78	122.67	118.60
1	1	1377	G	C4-C5-N7	6.77	113.51	110.80
81	sR	610	G	C8-N9-C1'	-6.77	118.20	127.00
1	AR	2167	A	C8-N9-C4	-6.77	103.09	105.80
1	AR	2364	G	N1-C6-O6	-6.77	115.84	119.90
1	AR	2392	C	N3-C4-C5	6.77	124.61	121.90
1	1	936	A	N1-C6-N6	6.77	122.66	118.60
19	CS	127	LEU	CA-CB-CG	6.76	130.86	115.30
1	1	421	G	O5'-P-OP1	-6.76	99.61	105.70
1	AR	924	G	N1-C6-O6	6.76	123.95	119.90
1	AR	111	C	C6-N1-C2	6.75	123.00	120.30
1	1	426	G	N3-C4-N9	6.75	130.05	126.00
1	1	2247	G	N1-C6-O6	6.75	123.95	119.90
1	1	1902	G	C4-C5-N7	6.74	113.50	110.80
81	sR	1117	U	C6-N1-C2	-6.74	116.96	121.00
1	1	2714	G	C2-N3-C4	-6.74	108.53	111.90
1	1	1160	C	N1-C2-O2	6.74	122.94	118.90
1	AR	636	C	C6-N1-C2	6.74	122.99	120.30
1	AR	1127	G	C5-C6-O6	-6.73	124.56	128.60
81	sR	158	U	P-O3'-C3'	6.73	127.78	119.70
1	1	2973	G	C5-C6-O6	-6.72	124.57	128.60
81	sR	542	A	O5'-P-OP1	-6.72	99.65	105.70
1	1	369	A	C8-N9-C4	-6.72	103.11	105.80
1	1	1443	G	C8-N9-C4	-6.72	103.71	106.40
1	AR	3116	G	C5-N7-C8	-6.72	100.94	104.30
1	1	66	A	O5'-P-OP1	-6.72	99.66	105.70
1	1	709	A	C8-N9-C4	6.72	108.49	105.80
1	AR	2419	A	C8-N9-C4	-6.72	103.11	105.80
1	1	1790	G	C5-C6-N1	-6.71	108.14	111.50
1	1	2144	A	O4'-C1'-N9	6.71	113.57	108.20
1	1	1211	U	N3-C4-O4	-6.71	114.70	119.40
1	1	3269	U	N3-C2-O2	-6.71	117.50	122.20
1	AR	343	U	C5-C4-O4	6.71	129.92	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	407	A	C8-N9-C4	-6.70	103.12	105.80
1	1	1200	A	C8-N9-C4	-6.70	103.12	105.80
1	1	339	C	C5-C4-N4	6.69	124.89	120.20
1	1	637	C	C6-N1-C1'	6.69	128.83	120.80
81	sR	542	A	C5-N7-C8	-6.69	100.55	103.90
1	1	1306	G	N3-C2-N2	-6.69	115.22	119.90
81	sR	1140	G	O5'-P-OP1	-6.69	99.68	105.70
81	sR	1629	G	N3-C4-N9	6.69	130.01	126.00
1	AR	2662	G	N1-C6-O6	-6.68	115.89	119.90
1	AR	2156	C	C6-N1-C2	6.68	122.97	120.30
1	1	965	A	O5'-P-OP2	-6.68	99.69	105.70
1	1	793	C	N1-C2-O2	-6.67	114.90	118.90
1	AR	2964	G	C5-C6-O6	6.67	132.60	128.60
81	sR	163	G	C2-N3-C4	-6.67	108.56	111.90
47	A	1280	C	N3-C4-C5	-6.67	119.23	121.90
47	A	401	A	O4'-C1'-N9	6.67	113.53	108.20
1	AR	1412	G	C8-N9-C4	-6.67	103.73	106.40
1	1	339	C	N3-C4-N4	-6.66	113.34	118.00
1	1	638	C	C5-C6-N1	6.66	124.33	121.00
1	AR	3339	A	N1-C6-N6	6.66	122.59	118.60
1	AR	3319	U	P-O3'-C3'	6.65	127.68	119.70
81	sR	1028	C	O5'-P-OP1	-6.65	99.72	105.70
1	1	1525	G	O5'-P-OP2	-6.64	99.72	105.70
81	sR	337	G	C4-N9-C1'	6.64	135.14	126.50
1	1	2827	U	C5-C4-O4	6.64	129.88	125.90
1	1	592	A	O5'-P-OP1	-6.64	99.72	105.70
1	1	956	U	N1-C2-O2	-6.64	118.15	122.80
1	1	1889	G	C5-C6-O6	-6.64	124.62	128.60
1	1	590	G	C5-C6-O6	-6.64	124.62	128.60
81	sR	426	G	C8-N9-C1'	-6.64	118.37	127.00
1	AR	948	C	C6-N1-C2	6.63	122.95	120.30
1	AR	2179	C	C6-N1-C2	6.63	122.95	120.30
81	sR	1649	G	N1-C6-O6	6.63	123.88	119.90
1	1	2314	U	C2-N1-C1'	6.63	125.66	117.70
81	sR	1662	G	C4-N9-C1'	-6.63	117.88	126.50
1	1	1820	U	N3-C2-O2	-6.63	117.56	122.20
1	AR	641	C	C2-N3-C4	-6.63	116.59	119.90
1	AR	644	G	C4-C5-N7	-6.63	108.15	110.80
1	AR	3316	A	OP2-P-O3'	6.62	119.77	105.20
1	1	722	G	N1-C6-O6	6.62	123.87	119.90
2	AS	112	G	C8-N9-C4	-6.62	103.75	106.40
1	1	2714	G	N3-C4-N9	-6.62	122.03	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	1844	C	C6-N1-C2	-6.62	117.65	120.30
1	1	2621	G	N3-C2-N2	-6.61	115.27	119.90
1	AR	810	A	O5'-P-OP1	-6.61	99.75	105.70
81	sR	358	U	O5'-P-OP1	-6.61	99.75	105.70
1	AR	2385	G	N3-C4-C5	6.61	131.90	128.60
1	AR	1103	A	P-O3'-C3'	6.60	127.62	119.70
81	sR	542	A	N1-C6-N6	6.60	122.56	118.60
1	1	2362	C	O5'-P-OP2	-6.60	99.76	105.70
29	DC	29	PRO	C-N-CA	-6.60	108.44	122.30
1	AR	1848	G	C5-C6-O6	-6.59	124.64	128.60
1	AR	2635	A	N1-C6-N6	-6.59	114.64	118.60
1	AR	2953	U	C6-N1-C2	-6.59	117.04	121.00
1	AR	1116	G	N3-C4-C5	-6.59	125.31	128.60
49	s1	231	LEU	CA-CB-CG	6.59	130.45	115.30
1	1	2550	U	N3-C2-O2	-6.59	117.59	122.20
1	1	2877	G	O5'-P-OP1	-6.59	99.77	105.70
1	1	2643	A	C8-N9-C4	6.58	108.43	105.80
1	1	2619	G	C8-N9-C4	6.58	109.03	106.40
2	3	85	G	C5-C6-O6	-6.58	124.65	128.60
1	1	933	A	C4-C5-C6	6.58	120.29	117.00
1	1	317	A	C8-N9-C4	-6.57	103.17	105.80
1	AR	895	A	C4-C5-N7	6.57	113.99	110.70
1	1	2395	G	C4-C5-C6	6.57	122.74	118.80
1	1	2138	A	N9-C4-C5	6.57	108.43	105.80
81	sR	337	G	N3-C2-N2	6.56	124.50	119.90
1	AR	2308	C	N1-C2-O2	-6.56	114.96	118.90
1	AR	2621	G	O5'-P-OP2	-6.56	99.79	105.70
1	AR	2878	G	N1-C6-O6	-6.56	115.96	119.90
1	1	3001	C	C6-N1-C2	6.56	122.92	120.30
1	AR	3155	U	N1-C2-O2	6.56	127.39	122.80
81	sR	151	G	N3-C4-N9	-6.56	122.07	126.00
1	1	1419	A	O5'-P-OP2	-6.55	99.80	105.70
3	4	7	U	O5'-P-OP1	-6.55	99.80	105.70
70	X	65	LEU	CA-CB-CG	6.55	130.37	115.30
1	1	3057	U	N3-C2-O2	-6.55	117.61	122.20
1	1	2871	G	O5'-P-OP2	-6.55	99.81	105.70
1	1	3278	C	C2-N1-C1'	6.55	126.00	118.80
1	AR	2400	G	N9-C4-C5	-6.55	102.78	105.40
81	sR	163	G	N3-C2-N2	-6.55	115.31	119.90
1	AR	1840	U	OP1-P-OP2	6.55	129.42	119.60
1	AR	1880	U	OP2-P-O3'	6.55	119.60	105.20
1	AR	1897	G	N3-C4-N9	-6.55	122.07	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	3116	G	N7-C8-N9	6.54	116.37	113.10
47	A	1096	C	C5-C6-N1	6.54	124.27	121.00
1	AR	2953	U	N3-C4-C5	-6.54	110.67	114.60
1	AR	3128	G	C5-C6-O6	-6.54	124.67	128.60
1	1	1838	G	N9-C4-C5	-6.54	102.78	105.40
1	AR	2351	U	C6-N1-C2	-6.54	117.08	121.00
1	1	1117	G	O5'-P-OP1	-6.53	99.82	105.70
81	sR	1634	C	N1-C2-O2	6.53	122.82	118.90
47	A	554	C	C2-N1-C1'	6.53	125.99	118.80
1	1	28	C	C6-N1-C2	6.53	122.91	120.30
1	AR	216	G	C4-C5-N7	6.53	113.41	110.80
1	1	719	U	O5'-P-OP1	-6.53	99.83	105.70
1	AR	642	U	O5'-P-OP2	-6.53	99.83	105.70
47	A	264	G	C5-N7-C8	-6.52	101.04	104.30
1	1	638	C	O5'-P-OP2	-6.52	99.83	105.70
1	1	2309	A	N1-C6-N6	6.52	122.51	118.60
1	AR	2943	G	O5'-P-OP2	-6.52	99.83	105.70
81	sR	453	U	C6-N1-C2	-6.52	117.09	121.00
1	1	1054	A	O5'-P-OP2	-6.52	99.84	105.70
1	1	1329	U	C2-N1-C1'	6.51	125.52	117.70
1	AR	811	U	C5-C6-N1	-6.51	119.44	122.70
1	AR	3214	U	N3-C2-O2	-6.51	117.64	122.20
1	AR	2758	A	C8-N9-C4	-6.51	103.20	105.80
1	1	2241	U	O5'-P-OP1	-6.51	99.84	105.70
1	1	2954	U	N3-C2-O2	6.51	126.75	122.20
1	AR	1419	A	O5'-P-OP2	-6.51	99.84	105.70
1	1	2978	U	O4'-C1'-N1	6.50	113.40	108.20
1	1	640	U	N1-C2-O2	-6.50	118.25	122.80
58	L	88	PRO	N-CA-CB	6.50	111.10	103.30
1	AR	2151	C	O5'-P-OP1	-6.49	99.86	105.70
1	1	3335	A	O5'-P-OP2	-6.49	99.86	105.70
1	1	410	U	N1-C2-O2	-6.49	118.26	122.80
1	AR	982	C	OP2-P-O3'	6.49	119.47	105.20
1	AR	1898	G	N1-C6-O6	6.49	123.79	119.90
2	AS	73	C	C6-N1-C2	-6.49	117.71	120.30
6	CF	313	LEU	CA-CB-CG	6.49	130.22	115.30
3	AT	8	C	C6-N1-C2	-6.48	117.71	120.30
47	A	1214	U	C5-C6-N1	6.48	125.94	122.70
81	sR	314	C	O5'-P-OP1	-6.48	99.87	105.70
1	1	3311	C	O5'-P-OP1	-6.48	99.87	105.70
47	A	347	G	C5-C6-N1	-6.48	108.26	111.50
8	n	64	LEU	CA-CB-CG	6.48	130.20	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	1389	G	N1-C6-O6	6.48	123.79	119.90
1	1	2885	C	C6-N1-C2	6.47	122.89	120.30
81	sR	558	U	N1-C2-O2	6.47	127.33	122.80
1	1	1132	C	N3-C4-N4	-6.47	113.47	118.00
1	AR	933	A	N1-C2-N3	6.47	132.53	129.30
47	A	1600	A	C2-N3-C4	-6.47	107.36	110.60
1	1	2623	G	C6-C5-N7	-6.47	126.52	130.40
1	AR	2714	G	N3-C4-N9	-6.47	122.12	126.00
1	AR	2625	C	C5-C4-N4	-6.46	115.67	120.20
47	A	1291	G	N3-C4-N9	-6.46	122.12	126.00
47	A	959	U	N3-C2-O2	-6.46	117.68	122.20
1	AR	1852	G	C8-N9-C4	-6.46	103.82	106.40
47	A	73	U	O4'-C1'-N1	6.46	113.37	108.20
1	AR	1437	C	C6-N1-C2	-6.46	117.72	120.30
1	1	375	A	O5'-P-OP2	-6.45	99.89	105.70
1	1	1433	A	C5-C6-N6	-6.45	118.54	123.70
1	1	2616	C	C6-N1-C2	-6.45	117.72	120.30
1	AR	2326	A	OP2-P-O3'	6.45	119.40	105.20
81	sR	1013	A	OP1-P-O3'	6.45	119.39	105.20
1	AR	1117	G	C5-C6-O6	-6.45	124.73	128.60
1	AR	1392	G	C5-C6-O6	-6.45	124.73	128.60
1	AR	2257	C	C2-N1-C1'	6.45	125.90	118.80
1	AR	3218	A	N1-C6-N6	6.45	122.47	118.60
81	sR	65	A	C2-N3-C4	-6.45	107.38	110.60
1	1	3010	U	N3-C4-C5	-6.45	110.73	114.60
1	AR	3184	A	O5'-P-OP2	-6.45	99.90	105.70
1	1	2400	G	N1-C6-O6	6.44	123.77	119.90
1	AR	406	G	N1-C6-O6	-6.44	116.04	119.90
1	AR	2256	A	N1-C6-N6	6.44	122.46	118.60
1	1	880	G	N7-C8-N9	-6.43	109.88	113.10
1	AR	2787	G	OP1-P-O3'	6.43	119.35	105.20
1	1	2144	A	C2-N3-C4	6.43	113.81	110.60
43	AP	93	LEU	CA-CB-CG	6.43	130.08	115.30
1	AR	1542	G	N1-C6-O6	6.43	123.76	119.90
47	A	1096	C	C2-N1-C1'	6.43	125.87	118.80
1	AR	877	C	C4-C5-C6	-6.42	114.19	117.40
1	1	859	G	C6-C5-N7	-6.42	126.55	130.40
1	1	1439	U	O5'-P-OP1	-6.42	99.92	105.70
1	AR	1160	C	C2-N1-C1'	-6.42	111.74	118.80
47	A	358	U	N3-C4-C5	-6.41	110.75	114.60
1	1	1331	U	O4'-C1'-N1	-6.41	103.07	108.20
1	1	2408	U	N3-C2-O2	-6.41	117.72	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	404	G	O5'-P-OP2	-6.41	99.94	105.70
1	1	1367	G	N1-C6-O6	6.40	123.74	119.90
1	1	685	G	C5-C6-O6	-6.40	124.76	128.60
47	A	565	C	N3-C2-O2	-6.40	117.42	121.90
1	AR	50	U	O5'-P-OP1	-6.39	99.95	105.70
3	4	56	G	O5'-P-OP2	-6.39	99.95	105.70
1	1	2306	C	C6-N1-C2	-6.39	117.75	120.30
1	AR	2403	G	C2-N3-C4	6.38	115.09	111.90
1	1	1495	U	C6-N1-C1'	6.38	130.13	121.20
1	1	2240	G	C8-N9-C4	6.38	108.95	106.40
81	sR	755	A	C8-N9-C4	-6.38	103.25	105.80
1	1	1307	G	N1-C6-O6	-6.37	116.08	119.90
1	1	1604	G	C4-N9-C1'	6.37	134.78	126.50
47	A	1652	C	C6-N1-C2	-6.37	117.75	120.30
1	AR	3075	G	C4-C5-C6	6.37	122.62	118.80
1	AR	973	A	N1-C6-N6	6.36	122.42	118.60
1	1	2314	U	N1-C2-N3	-6.36	111.08	114.90
1	AR	2725	U	N3-C4-C5	-6.36	110.78	114.60
1	AR	3375	A	C8-N9-C4	-6.36	103.26	105.80
47	A	1761	U	P-O3'-C3'	6.36	127.33	119.70
1	1	1138	U	N3-C2-O2	-6.36	117.75	122.20
1	AR	2130	G	N9-C4-C5	-6.36	102.86	105.40
1	AR	2621	G	C5-C6-O6	-6.36	124.79	128.60
1	1	907	G	O4'-C1'-N9	6.35	113.28	108.20
1	AR	3116	G	O4'-C1'-N9	6.35	113.28	108.20
81	sR	987	G	N1-C6-O6	6.35	123.71	119.90
1	1	2154	U	C5-C4-O4	-6.35	122.09	125.90
1	AR	3116	G	C4-C5-N7	6.34	113.34	110.80
3	AT	51	G	N1-C6-O6	6.33	123.70	119.90
81	sR	75	U	O4'-C1'-N1	6.33	113.27	108.20
1	AR	2726	C	C4-C5-C6	6.33	120.56	117.40
1	AR	1480	G	O4'-C1'-N9	6.33	113.26	108.20
1	AR	699	A	C2-N3-C4	-6.33	107.44	110.60
1	AR	812	G	N9-C4-C5	6.33	107.93	105.40
1	1	1153	A	O5'-P-OP1	-6.32	100.01	105.70
1	AR	2333	C	OP2-P-O3'	6.32	119.11	105.20
1	AR	2271	A	C8-N9-C4	6.32	108.33	105.80
1	AR	2620	G	N3-C2-N2	-6.32	115.47	119.90
1	AR	667	C	C6-N1-C2	6.32	122.83	120.30
1	AR	2390	A	C8-N9-C4	-6.32	103.27	105.80
1	AR	1432	C	N3-C2-O2	-6.32	117.48	121.90
47	A	610	G	C4-N9-C1'	6.32	134.71	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	2679	A	C2-N3-C4	-6.32	107.44	110.60
1	AR	2824	G	O5'-P-OP2	-6.32	100.02	105.70
47	A	158	U	P-O3'-C3'	6.32	127.28	119.70
81	sR	794	U	N3-C2-O2	-6.32	117.78	122.20
1	AR	653	A	N1-C6-N6	6.31	122.39	118.60
1	1	1269	U	C2-N1-C1'	6.31	125.27	117.70
1	AR	358	G	N1-C6-O6	6.31	123.69	119.90
1	AR	644	G	N9-C4-C5	6.31	107.92	105.40
1	AR	868	C	C6-N1-C2	6.31	122.82	120.30
1	AR	2145	A	C6-N1-C2	-6.31	114.82	118.60
1	AR	2400	G	N1-C6-O6	6.31	123.68	119.90
1	AR	2412	G	C8-N9-C4	-6.31	103.88	106.40
1	1	770	G	O4'-C1'-N9	6.30	113.24	108.20
3	4	108	C	N3-C4-C5	-6.30	119.38	121.90
1	1	267	G	C5-C6-O6	-6.30	124.82	128.60
47	A	728	U	N1-C2-O2	6.30	127.21	122.80
81	sR	542	A	C6-C5-N7	-6.30	127.89	132.30
81	sR	991	G	C5-C6-O6	-6.30	124.82	128.60
1	AR	627	U	C5-C4-O4	6.30	129.68	125.90
1	1	2302	G	C5-C6-O6	6.29	132.38	128.60
1	AR	2269	U	C4-C5-C6	6.29	123.47	119.70
1	1	1792	C	C4-C5-C6	6.29	120.55	117.40
1	AR	2725	U	N1-C2-O2	-6.29	118.40	122.80
81	sR	101	U	N3-C2-O2	-6.29	117.80	122.20
1	AR	2928	C	C4-C5-C6	6.29	120.54	117.40
47	A	73	U	C5-C4-O4	6.28	129.67	125.90
1	AR	2714	G	N1-C6-O6	6.28	123.67	119.90
1	AR	1853	U	N1-C2-O2	-6.28	118.40	122.80
47	A	365	G	N7-C8-N9	6.28	116.24	113.10
57	K	116	LEU	CA-CB-CG	6.28	129.73	115.30
1	1	817	A	C8-N9-C4	-6.27	103.29	105.80
1	AR	919	U	N3-C2-O2	-6.27	117.81	122.20
1	AR	1196	C	C6-N1-C2	6.27	122.81	120.30
2	AS	101	G	N1-C6-O6	6.27	123.66	119.90
1	1	1367	G	C5-C6-O6	-6.26	124.84	128.60
1	AR	2679	A	O4'-C1'-N9	6.26	113.21	108.20
1	1	1141	C	C4-C5-C6	6.26	120.53	117.40
2	AS	49	G	C5-N7-C8	6.26	107.43	104.30
1	1	2659	G	N1-C6-O6	6.26	123.65	119.90
1	AR	2271	A	N7-C8-N9	-6.25	110.67	113.80
1	AR	2123	G	N1-C6-O6	6.25	123.65	119.90
1	AR	869	G	N1-C6-O6	-6.25	116.15	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	3317	U	O5'-P-OP2	-6.25	100.07	105.70
1	1	1414	G	C4-C5-N7	6.25	113.30	110.80
1	AR	1392	G	N1-C6-O6	6.25	123.65	119.90
81	sR	957	G	N1-C6-O6	6.25	123.65	119.90
1	1	2827	U	C5-C6-N1	-6.25	119.58	122.70
1	1	3362	A	N1-C6-N6	6.25	122.35	118.60
3	4	51	G	N1-C6-O6	6.24	123.64	119.90
1	AR	561	C	C6-N1-C2	-6.24	117.81	120.30
1	1	2777	G	C5-C6-O6	6.24	132.34	128.60
47	A	17	C	C6-N1-C2	-6.24	117.81	120.30
1	AR	3278	C	C5-C6-N1	6.23	124.12	121.00
81	sR	32	U	N3-C4-O4	6.23	123.76	119.40
1	AR	2191	U	N1-C2-O2	6.23	127.16	122.80
81	sR	18	C	C6-N1-C2	-6.23	117.81	120.30
1	1	2944	U	N3-C2-O2	-6.22	117.84	122.20
19	y	41	ASP	CB-CG-OD1	6.22	123.90	118.30
81	sR	1640	C	C2-N1-C1'	6.22	125.65	118.80
1	1	817	A	O5'-P-OP1	-6.22	100.10	105.70
1	AR	2953	U	N3-C4-O4	6.21	123.75	119.40
47	A	610	G	C8-N9-C1'	-6.21	118.92	127.00
1	1	2928	C	C2-N1-C1'	6.21	125.63	118.80
1	1	3209	A	N1-C6-N6	6.21	122.33	118.60
47	A	186	C	C2-N1-C1'	6.21	125.63	118.80
1	1	2293	C	C5-C6-N1	6.21	124.10	121.00
1	AR	2735	U	C6-N1-C2	-6.21	117.27	121.00
81	sR	1340	U	N1-C2-O2	6.21	127.15	122.80
2	AS	104	A	N1-C6-N6	6.21	122.32	118.60
1	AR	2660	G	C8-N9-C4	6.20	108.88	106.40
1	AR	2263	C	C5-C6-N1	6.20	124.10	121.00
1	1	979	U	N1-C2-N3	6.20	118.62	114.90
1	1	1101	G	C6-C5-N7	6.20	134.12	130.40
81	sR	163	G	N9-C4-C5	6.20	107.88	105.40
1	1	895	A	C4-C5-N7	6.20	113.80	110.70
1	1	2355	G	C5-C6-O6	-6.20	124.88	128.60
1	1	2726	C	C5-C4-N4	6.20	124.54	120.20
1	AR	1741	A	N1-C2-N3	6.20	132.40	129.30
1	AR	92	G	C2-N3-C4	6.20	115.00	111.90
1	AR	1115	G	P-O3'-C3'	6.20	127.14	119.70
1	AR	1495	U	C6-N1-C1'	6.20	129.87	121.20
70	X	93	LEU	CA-CB-CG	6.20	129.55	115.30
1	1	2614	G	N3-C4-N9	6.19	129.71	126.00
1	1	329	U	N1-C2-O2	-6.19	118.47	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	372	A	O5'-P-OP2	-6.19	100.13	105.70
1	1	2827	U	C2-N1-C1'	-6.18	110.28	117.70
1	AR	2928	C	C6-N1-C2	-6.18	117.83	120.30
1	1	2384	A	N1-C6-N6	6.18	122.31	118.60
1	AR	295	A	O5'-P-OP1	-6.18	100.14	105.70
47	A	1600	A	N1-C6-N6	6.18	122.31	118.60
1	1	908	G	C8-N9-C1'	-6.18	118.97	127.00
1	AR	776	U	N1-C2-N3	6.18	118.61	114.90
1	AR	800	G	C8-N9-C4	6.18	108.87	106.40
1	AR	2334	U	N3-C2-O2	-6.18	117.87	122.20
47	A	976	G	C4-C5-N7	-6.18	108.33	110.80
3	4	14	C	N3-C4-C5	6.18	124.37	121.90
1	1	120	G	C8-N9-C4	6.18	108.87	106.40
47	A	1389	C	N1-C2-O2	6.18	122.61	118.90
1	1	2827	U	N3-C4-O4	-6.17	115.08	119.40
1	1	427	C	N3-C4-C5	-6.17	119.43	121.90
1	AR	1176	C	C5-C4-N4	-6.17	115.88	120.20
1	AR	2167	A	N9-C4-C5	6.17	108.27	105.80
1	AR	3277	U	N1-C2-O2	6.17	127.12	122.80
47	A	1005	A	OP1-P-O3'	6.17	118.77	105.20
1	AR	2604	U	N1-C2-N3	6.17	118.60	114.90
1	1	1169	A	OP2-P-O3'	6.17	118.77	105.20
1	AR	1143	A	C2-N3-C4	-6.16	107.52	110.60
2	3	85	G	C6-C5-N7	-6.16	126.70	130.40
1	AR	86	G	C5-C6-N1	6.16	114.58	111.50
81	sR	151	G	N3-C2-N2	-6.16	115.59	119.90
81	sR	1024	U	O5'-P-OP1	-6.16	100.16	105.70
1	AR	908	G	C4-N9-C1'	6.15	134.50	126.50
1	AR	92	G	N3-C4-C5	-6.15	125.52	128.60
1	1	608	A	C6-C5-N7	-6.15	128.00	132.30
1	1	1053	A	C8-N9-C4	6.15	108.26	105.80
1	AR	792	G	C8-N9-C4	6.15	108.86	106.40
1	AR	1519	G	N1-C6-O6	6.15	123.59	119.90
81	sR	102	U	O5'-P-OP1	-6.15	100.17	105.70
1	AR	2405	C	C5-C6-N1	-6.14	117.93	121.00
1	AR	934	G	C5-C6-O6	-6.14	124.91	128.60
3	AT	79	A	P-O3'-C3'	6.14	127.07	119.70
81	sR	337	G	C6-C5-N7	-6.14	126.71	130.40
81	sR	402	C	O4'-C1'-N1	6.14	113.11	108.20
1	AR	976	U	C5-C4-O4	6.14	129.58	125.90
2	AS	94	C	C5-C4-N4	-6.14	115.90	120.20
1	1	2924	U	C5-C6-N1	-6.13	119.63	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	1115	G	N7-C8-N9	6.13	116.17	113.10
5	CE	102	LEU	CA-CB-CG	6.13	129.40	115.30
1	AR	2978	U	C5-C6-N1	-6.13	119.64	122.70
1	AR	3118	C	C6-N1-C2	-6.13	117.85	120.30
47	A	1200	G	N1-C6-O6	6.13	123.58	119.90
1	AR	275	U	C2-N3-C4	6.12	130.67	127.00
1	AR	1047	A	C5-N7-C8	-6.12	100.84	103.90
1	AR	2263	C	OP1-P-OP2	-6.12	110.42	119.60
1	1	3046	A	O5'-P-OP1	-6.12	100.19	105.70
81	sR	1596	C	N1-C2-O2	6.12	122.57	118.90
1	AR	216	G	N9-C4-C5	-6.11	102.95	105.40
1	AR	2679	A	C4-C5-N7	6.11	113.75	110.70
81	sR	355	G	OP2-P-O3'	6.11	118.64	105.20
1	AR	2400	G	C6-C5-N7	-6.11	126.73	130.40
1	1	1157	G	OP2-P-O3'	6.11	118.64	105.20
1	1	3340	G	N7-C8-N9	6.11	116.15	113.10
81	sR	1473	U	C2-N1-C1'	6.11	125.03	117.70
1	1	143	G	N3-C4-C5	-6.10	125.55	128.60
1	AR	2399	A	N1-C6-N6	6.10	122.26	118.60
1	AR	2935	U	C5-C6-N1	6.10	125.75	122.70
1	1	2314	U	C6-N1-C1'	-6.10	112.66	121.20
1	1	416	A	C8-N9-C4	6.10	108.24	105.80
1	AR	21	G	N3-C4-C5	6.10	131.65	128.60
1	AR	3278	C	C6-N1-C2	-6.10	117.86	120.30
1	1	3181	C	N1-C2-O2	6.10	122.56	118.90
1	AR	2263	C	C6-N1-C1'	-6.09	113.49	120.80
1	1	984	G	C8-N9-C4	-6.09	103.96	106.40
1	AR	361	A	N1-C6-N6	-6.09	114.94	118.60
1	AR	2245	C	C6-N1-C2	-6.09	117.86	120.30
1	1	28	C	N3-C4-C5	6.09	124.33	121.90
3	AT	113	U	C2-N1-C1'	-6.08	110.40	117.70
31	DE	41	LEU	CA-CB-CG	6.08	129.30	115.30
1	1	192	C	O5'-P-OP1	-6.08	100.23	105.70
1	1	2869	U	O5'-P-OP2	6.08	118.00	110.70
1	1	1795	U	O5'-P-OP1	-6.08	100.23	105.70
1	1	2651	G	N3-C4-N9	-6.08	122.35	126.00
1	AR	587	U	C6-N1-C2	6.08	124.65	121.00
81	sR	1340	U	N3-C2-O2	-6.08	117.95	122.20
3	4	94	C	N3-C4-C5	6.07	124.33	121.90
1	AR	3276	G	C4-N9-C1'	-6.07	118.61	126.50
1	1	1349	G	N3-C4-N9	6.07	129.64	126.00
81	sR	1662	G	N3-C4-N9	-6.07	122.36	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2884	C	C6-N1-C2	6.07	122.73	120.30
1	AR	634	C	N3-C4-C5	6.07	124.33	121.90
1	1	3306	U	N3-C2-O2	-6.07	117.95	122.20
47	A	1560	U	C5-C4-O4	6.07	129.54	125.90
81	sR	805	U	C6-N1-C2	-6.07	117.36	121.00
47	A	959	U	N1-C2-O2	6.06	127.04	122.80
1	AR	92	G	N3-C4-N9	6.06	129.64	126.00
1	1	1113	G	N3-C2-N2	-6.06	115.66	119.90
1	1	2175	U	C5-C6-N1	-6.06	119.67	122.70
81	sR	577	G	C5-C6-O6	-6.06	124.97	128.60
1	1	802	C	N3-C2-O2	-6.06	117.66	121.90
81	sR	845	G	C8-N9-C1'	6.06	134.87	127.00
1	1	363	G	C5-C6-O6	-6.05	124.97	128.60
1	AR	2888	U	O5'-P-OP2	-6.05	100.25	105.70
1	AR	63	A	C5-C6-N6	-6.05	118.86	123.70
1	AR	691	A	N1-C6-N6	6.05	122.23	118.60
1	AR	2330	C	C2-N3-C4	-6.05	116.88	119.90
1	1	411	U	N3-C4-O4	6.05	123.63	119.40
1	1	2620	G	N1-C6-O6	6.05	123.53	119.90
1	1	295	A	N7-C8-N9	6.05	116.82	113.80
1	1	1507	G	N3-C4-N9	6.04	129.63	126.00
1	AR	776	U	C2-N3-C4	-6.04	123.37	127.00
1	AR	3344	A	O4'-C1'-N9	6.04	113.03	108.20
47	A	720	G	OP1-P-O3'	6.04	118.50	105.20
1	1	812	G	N1-C6-O6	6.04	123.53	119.90
1	AR	3319	U	N3-C2-O2	-6.04	117.97	122.20
1	AR	1372	C	C6-N1-C2	6.04	122.72	120.30
1	AR	1844	C	N1-C2-O2	-6.04	115.28	118.90
81	sR	858	G	N7-C8-N9	6.04	116.12	113.10
1	1	1390	A	N9-C4-C5	6.04	108.22	105.80
1	1	2169	G	C4-C5-N7	-6.04	108.38	110.80
1	AR	1117	G	O5'-P-OP1	-6.04	100.27	105.70
1	AR	1368	U	O5'-P-OP1	-6.04	100.27	105.70
81	sR	245	U	N3-C4-C5	-6.04	110.98	114.60
1	1	54	C	N3-C4-C5	6.03	124.31	121.90
1	AR	2298	U	C5-C4-O4	6.03	129.52	125.90
1	AR	2720	G	O5'-P-OP2	-6.03	100.27	105.70
2	AS	49	G	C8-N9-C4	6.03	108.81	106.40
81	sR	965	U	N3-C2-O2	-6.03	117.98	122.20
1	1	1365	G	C8-N9-C4	-6.03	103.99	106.40
1	AR	2872	A	N9-C4-C5	-6.03	103.39	105.80
1	1	2763	U	N3-C2-O2	6.03	126.42	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	4	13	A	N1-C6-N6	6.02	122.21	118.60
1	AR	2604	U	C4-C5-C6	6.02	123.31	119.70
1	AR	2954	U	C5-C4-O4	-6.02	122.29	125.90
1	AR	1181	U	C5-C6-N1	-6.02	119.69	122.70
1	AR	2873	U	O4'-C1'-N1	-6.02	103.38	108.20
81	sR	1085	G	N1-C6-O6	-6.02	116.29	119.90
1	AR	957	C	N3-C2-O2	-6.02	117.69	121.90
1	1	1543	G	C5-C6-N1	-6.02	108.49	111.50
1	AR	950	G	N3-C4-N9	6.02	129.61	126.00
81	sR	795	U	C2-N1-C1'	6.02	124.92	117.70
81	sR	609	U	N3-C4-O4	-6.02	115.19	119.40
1	1	1838	G	C6-C5-N7	-6.01	126.79	130.40
1	AR	1404	G	N3-C4-N9	-6.01	122.39	126.00
1	AR	2207	A	N1-C6-N6	6.01	122.20	118.60
1	AR	1556	C	C2-N1-C1'	6.01	125.41	118.80
1	1	2954	U	C6-N1-C2	6.00	124.60	121.00
1	AR	653	A	C6-C5-N7	-6.00	128.10	132.30
1	AR	1431	G	C8-N9-C4	-6.00	104.00	106.40
45	i	171	PRO	N-CA-CB	6.00	110.50	103.30
81	sR	795	U	N3-C2-O2	-6.00	118.00	122.20
81	sR	1758	U	C4-C5-C6	6.00	123.30	119.70
1	1	3133	C	OP1-P-O3'	6.00	118.39	105.20
1	1	957	C	N1-C2-O2	-6.00	115.30	118.90
81	sR	858	G	O4'-C1'-N9	6.00	113.00	108.20
1	AR	2281	A	C8-N9-C4	5.99	108.20	105.80
1	1	3175	U	N3-C2-O2	-5.99	118.00	122.20
81	sR	3	U	C5-C6-N1	-5.99	119.70	122.70
81	sR	542	A	O4'-C1'-N9	5.99	112.99	108.20
1	1	2177	G	C4-C5-C6	5.99	122.39	118.80
1	1	2407	C	N3-C4-N4	5.99	122.19	118.00
46	p0	290	PRO	N-CA-CB	5.99	110.48	103.30
47	A	1698	G	P-O3'-C3'	5.99	126.88	119.70
1	1	867	G	N3-C2-N2	-5.98	115.71	119.90
1	AR	3051	U	N3-C2-O2	-5.98	118.01	122.20
1	1	709	A	N7-C8-N9	-5.98	110.81	113.80
1	1	1101	G	C5-C6-O6	5.98	132.19	128.60
1	AR	3217	C	C2-N1-C1'	5.98	125.38	118.80
1	AR	1203	A	O5'-P-OP1	-5.98	100.32	105.70
1	AR	3260	G	C5-C6-O6	5.97	132.18	128.60
81	sR	1026	A	O5'-P-OP1	-5.97	100.32	105.70
1	AR	2123	G	N3-C2-N2	-5.97	115.72	119.90
1	1	1507	G	C5-C6-O6	-5.97	125.02	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	1522	U	C5-C4-O4	-5.97	122.32	125.90
1	1	2343	C	N3-C4-C5	5.97	124.29	121.90
47	A	621	A	OP2-P-O3'	5.96	118.31	105.20
81	sR	90	C	N3-C2-O2	-5.96	117.73	121.90
1	1	969	C	N1-C2-O2	-5.96	115.32	118.90
1	AR	1897	G	C8-N9-C1'	5.96	134.75	127.00
1	1	2811	A	C6-N1-C2	-5.96	115.03	118.60
1	1	2987	A	N1-C6-N6	5.96	122.17	118.60
1	1	295	A	C8-N9-C4	-5.96	103.42	105.80
1	1	867	G	C4-C5-N7	-5.96	108.42	110.80
1	1	2887	A	O5'-P-OP2	-5.95	100.34	105.70
1	AR	922	U	C2-N1-C1'	5.95	124.84	117.70
1	AR	2809	C	C6-N1-C2	5.95	122.68	120.30
81	sR	2	A	C8-N9-C4	5.95	108.18	105.80
1	AR	2207	A	C4-C5-N7	5.95	113.67	110.70
1	1	1151	U	N1-C2-O2	-5.95	118.64	122.80
1	AR	1006	A	O5'-P-OP2	-5.95	100.35	105.70
3	AT	85	G	N1-C6-O6	5.94	123.46	119.90
3	4	16	G	O5'-P-OP1	-5.94	100.36	105.70
81	sR	858	G	C4-C5-N7	5.94	113.18	110.80
1	1	363	G	C8-N9-C4	5.94	108.78	106.40
1	AR	283	G	C6-C5-N7	-5.94	126.84	130.40
1	AR	2399	A	C5-C6-N6	-5.94	118.95	123.70
12	r	24	ARG	NE-CZ-NH1	5.93	123.27	120.30
1	AR	2201	G	N3-C2-N2	5.93	124.06	119.90
1	AR	2871	G	OP2-P-O3'	5.93	118.26	105.20
1	1	2831	G	C6-C5-N7	-5.93	126.84	130.40
81	sR	489	C	C2-N1-C1'	5.93	125.32	118.80
1	1	1132	C	O5'-P-OP1	-5.93	100.36	105.70
1	1	2637	A	C5-C6-N6	-5.93	118.96	123.70
47	A	423	G	N9-C4-C5	5.93	107.77	105.40
81	sR	1672	G	N3-C4-C5	5.93	131.56	128.60
1	1	1556	C	C6-N1-C1'	-5.93	113.69	120.80
1	1	612	U	N3-C4-O4	-5.92	115.25	119.40
1	AR	102	C	N1-C2-O2	-5.92	115.34	118.90
1	AR	1141	C	O5'-P-OP1	-5.92	100.37	105.70
1	AR	2697	A	O5'-P-OP1	-5.92	100.37	105.70
46	p0	278	PRO	N-CA-CB	5.92	110.41	103.30
1	1	275	U	C6-N1-C2	-5.92	117.45	121.00
1	1	2726	C	N1-C2-N3	5.92	123.34	119.20
1	AR	2148	U	N3-C4-C5	5.92	118.15	114.60
1	1	835	G	C5-C6-N1	5.92	114.46	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	909	G	C5-C6-O6	5.92	132.15	128.60
1	AR	2899	C	N3-C2-O2	-5.92	117.76	121.90
1	1	939	U	N1-C2-O2	-5.92	118.66	122.80
81	sR	1139	A	N1-C6-N6	-5.92	115.05	118.60
1	AR	1208	U	O5'-P-OP1	-5.91	100.38	105.70
1	1	1727	G	N3-C4-C5	-5.91	125.64	128.60
1	1	2624	G	C8-N9-C4	-5.91	104.03	106.40
1	1	1101	G	N1-C6-O6	-5.91	116.35	119.90
1	1	2864	A	O5'-P-OP1	-5.91	100.38	105.70
1	1	2273	G	C4-C5-N7	-5.91	108.44	110.80
1	AR	1375	G	C8-N9-C4	-5.91	104.04	106.40
1	1	933	A	C2-N3-C4	-5.91	107.65	110.60
1	AR	2263	C	C5-C4-N4	-5.90	116.07	120.20
1	AR	1483	G	O4'-C1'-N9	5.90	112.92	108.20
81	sR	1781	A	O5'-P-OP1	5.90	117.78	110.70
81	sR	782	U	N3-C2-O2	-5.90	118.07	122.20
1	1	812	G	C5-C6-O6	-5.90	125.06	128.60
81	sR	436	A	O5'-P-OP1	-5.90	100.39	105.70
1	1	2418	G	C2-N3-C4	5.89	114.85	111.90
81	sR	864	U	N3-C2-O2	-5.89	118.07	122.20
81	sR	1672	G	C8-N9-C1'	5.89	134.66	127.00
1	1	2404	A	O4'-C1'-N9	-5.89	103.49	108.20
1	AR	2805	G	C8-N9-C4	5.89	108.76	106.40
1	1	2147	A	C8-N9-C4	5.89	108.16	105.80
1	AR	3050	U	N1-C2-O2	5.89	126.92	122.80
1	1	785	G	C2-N3-C4	5.89	114.84	111.90
1	AR	2786	G	OP2-P-O3'	5.89	118.15	105.20
1	AR	634	C	C6-N1-C2	5.88	122.65	120.30
1	1	2395	G	C8-N9-C4	5.88	108.75	106.40
1	1	2820	A	C2-N3-C4	5.88	113.54	110.60
1	1	1002	A	C4-C5-C6	-5.88	114.06	117.00
81	sR	609	U	C5-C4-O4	5.88	129.43	125.90
1	1	1329	U	N3-C2-O2	-5.87	118.09	122.20
1	AR	3362	A	O4'-C1'-N9	5.87	112.90	108.20
81	sR	981	U	OP1-P-O3'	5.87	118.12	105.20
1	1	979	U	P-O3'-C3'	5.87	126.75	119.70
19	CS	49	LEU	CA-CB-CG	5.87	128.80	115.30
1	AR	2366	C	C2-N1-C1'	5.87	125.25	118.80
1	AR	3317	U	C5-C4-O4	5.87	129.42	125.90
47	A	553	G	C6-C5-N7	-5.87	126.88	130.40
2	AS	49	G	N7-C8-N9	-5.86	110.17	113.10
3	4	145	U	N3-C2-O2	-5.86	118.10	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	494	G	N3-C4-N9	5.86	129.51	126.00
1	AR	2659	G	N1-C6-O6	5.85	123.41	119.90
2	AS	120	C	C6-N1-C2	5.85	122.64	120.30
1	1	227	G	N1-C6-O6	5.85	123.41	119.90
1	AR	279	U	N3-C2-O2	5.85	126.30	122.20
1	AR	960	U	C2-N1-C1'	5.85	124.72	117.70
47	A	1762	A	O5'-P-OP1	-5.85	100.43	105.70
1	AR	2805	G	N9-C4-C5	-5.85	103.06	105.40
1	1	2400	G	C6-C5-N7	-5.85	126.89	130.40
81	sR	782	U	N1-C2-O2	5.85	126.89	122.80
81	sR	991	G	N1-C6-O6	5.84	123.41	119.90
1	1	521	A	N1-C6-N6	5.84	122.11	118.60
1	AR	895	A	C6-C5-N7	-5.84	128.21	132.30
1	AR	3368	U	C2-N1-C1'	-5.84	110.69	117.70
81	sR	1662	G	N9-C4-C5	5.84	107.73	105.40
1	1	421	G	N1-C6-O6	5.83	123.40	119.90
1	AR	3075	G	N1-C6-O6	5.83	123.40	119.90
38	AK	11	ARG	NE-CZ-NH1	-5.83	117.38	120.30
1	AR	2541	U	P-O3'-C3'	5.83	126.70	119.70
1	1	1507	G	N1-C6-O6	5.83	123.40	119.90
1	AR	146	U	C5-C6-N1	-5.83	119.78	122.70
1	AR	1513	G	C8-N9-C4	-5.83	104.07	106.40
81	sR	313	U	C5-C6-N1	-5.83	119.79	122.70
1	AR	1154	A	C2-N3-C4	5.83	113.51	110.60
1	AR	2191	U	N3-C2-O2	-5.83	118.12	122.20
1	AR	2816	G	C4-N9-C1'	-5.83	118.93	126.50
1	AR	2643	A	C8-N9-C4	5.82	108.13	105.80
1	1	1103	A	P-O3'-C3'	5.82	126.69	119.70
1	1	200	C	C2-N1-C1'	5.82	125.20	118.80
1	1	2585	G	N3-C4-C5	-5.82	125.69	128.60
1	AR	2611	U	C4-C5-C6	5.82	123.19	119.70
47	A	1363	U	N1-C2-O2	5.82	126.87	122.80
1	1	2765	C	C6-N1-C2	-5.82	117.97	120.30
1	AR	21	G	C8-N9-C4	5.82	108.73	106.40
81	sR	25	C	OP2-P-O3'	5.82	118.00	105.20
1	1	887	G	O5'-P-OP2	-5.81	100.47	105.70
47	A	15	U	C6-N1-C2	-5.81	117.51	121.00
47	A	1596	C	N3-C2-O2	-5.81	117.83	121.90
1	1	2395	G	C8-N9-C1'	-5.81	119.45	127.00
1	1	2922	G	N1-C2-N2	-5.81	110.97	116.20
3	4	99	C	C6-N1-C2	5.81	122.62	120.30
2	AS	57	G	O5'-P-OP2	-5.81	100.47	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	CQ	84	LEU	CB-CG-CD1	-5.81	101.12	111.00
1	1	2869	U	O5'-P-OP1	-5.81	100.47	105.70
17	w	84	LEU	CB-CG-CD2	-5.81	101.13	111.00
1	AR	3078	U	N3-C2-O2	-5.81	118.14	122.20
1	AR	141	C	N1-C2-O2	-5.80	115.42	118.90
1	AR	3078	U	N1-C2-O2	5.80	126.86	122.80
1	AR	2593	A	P-O3'-C3'	5.80	126.66	119.70
1	AR	1389	G	C5-C6-O6	-5.80	125.12	128.60
1	1	212	G	C8-N9-C4	5.80	108.72	106.40
1	AR	646	A	C8-N9-C4	-5.79	103.48	105.80
1	AR	1189	C	N1-C2-O2	-5.79	115.42	118.90
1	AR	1302	A	N9-C4-C5	5.79	108.12	105.80
47	A	359	A	C8-N9-C4	5.79	108.12	105.80
81	sR	1654	G	N1-C6-O6	5.79	123.38	119.90
1	1	33	G	O5'-P-OP1	-5.79	100.49	105.70
1	1	3362	A	O4'-C1'-N9	5.79	112.83	108.20
47	A	1494	C	C6-N1-C2	-5.79	117.98	120.30
1	1	2945	G	O5'-P-OP1	-5.79	100.49	105.70
47	A	556	A	N1-C6-N6	-5.79	115.13	118.60
1	AR	2341	A	N7-C8-N9	-5.79	110.91	113.80
47	A	830	U	N1-C2-O2	5.79	126.85	122.80
1	1	1116	G	N1-C6-O6	5.78	123.37	119.90
1	AR	1840	U	O5'-P-OP2	-5.78	100.50	105.70
81	sR	1118	G	N1-C6-O6	5.78	123.37	119.90
1	1	406	G	O5'-P-OP2	-5.78	100.50	105.70
1	1	2827	U	N1-C2-N3	5.78	118.37	114.90
1	AR	1083	G	OP1-P-OP2	5.78	128.27	119.60
1	AR	2724	U	N1-C2-N3	5.78	118.37	114.90
81	sR	630	A	C2-N3-C4	-5.78	107.71	110.60
1	1	3092	C	C2-N3-C4	-5.78	117.01	119.90
81	sR	1773	C	N3-C4-N4	5.78	122.05	118.00
1	AR	718	G	C4-C5-N7	5.78	113.11	110.80
1	1	3078	U	C5-C6-N1	5.78	125.59	122.70
1	AR	3362	A	C5-N7-C8	-5.77	101.01	103.90
1	1	3340	G	C8-N9-C4	-5.77	104.09	106.40
47	A	73	U	N3-C2-O2	-5.77	118.16	122.20
47	A	934	C	C6-N1-C1'	-5.77	113.87	120.80
81	sR	1022	C	N3-C4-C5	5.77	124.21	121.90
1	1	645	A	C5-C6-N1	5.77	120.58	117.70
1	1	1170	A	N1-C6-N6	5.77	122.06	118.60
1	1	3210	A	N1-C6-N6	-5.77	115.14	118.60
29	AB	29	PRO	C-N-CA	-5.77	110.18	122.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	sR	1649	G	C6-C5-N7	-5.77	126.94	130.40
1	1	3121	U	OP1-P-O3'	5.76	117.88	105.20
1	1	334	A	C8-N9-C4	-5.76	103.50	105.80
1	1	895	A	O5'-P-OP1	-5.76	100.52	105.70
1	AR	2269	U	C5-C6-N1	-5.76	119.82	122.70
1	AR	3309	G	C4-N9-C1'	5.76	133.99	126.50
1	1	324	A	N1-C2-N3	5.76	132.18	129.30
1	1	1389	G	N1-C6-O6	5.75	123.35	119.90
1	AR	1329	U	N1-C1'-C2'	-5.75	105.67	112.00
1	AR	2759	U	N1-C2-N3	5.75	118.35	114.90
1	AR	340	C	N3-C4-C5	5.75	124.20	121.90
1	1	2996	U	N1-C2-O2	5.75	126.82	122.80
1	AR	1160	C	C6-N1-C2	5.75	122.60	120.30
1	1	3369	G	C5-C6-O6	-5.75	125.15	128.60
1	AR	706	A	C8-N9-C4	5.75	108.10	105.80
1	AR	2144	A	O4'-C1'-N9	5.75	112.80	108.20
47	A	621	A	P-O3'-C3'	5.75	126.59	119.70
1	AR	99	A	O5'-P-OP1	-5.74	100.53	105.70
1	AR	1604	G	C4-N9-C1'	5.74	133.97	126.50
1	1	645	A	N1-C2-N3	5.74	132.17	129.30
1	AR	2873	U	N3-C2-O2	-5.74	118.18	122.20
1	1	1370	G	C5-C6-O6	-5.74	125.16	128.60
12	r	48	LEU	CA-CB-CG	5.74	128.50	115.30
1	AR	41	G	N9-C4-C5	-5.74	103.11	105.40
1	1	1132	C	C5-C4-N4	5.74	124.22	120.20
81	sR	1473	U	C6-N1-C2	-5.74	117.56	121.00
1	AR	718	G	N3-C4-C5	5.73	131.47	128.60
1	1	43	A	C6-N1-C2	5.73	122.04	118.60
1	AR	922	U	C4-C5-C6	-5.73	116.26	119.70
1	AR	977	C	C6-N1-C2	-5.73	118.01	120.30
1	1	1432	C	N1-C2-O2	-5.73	115.46	118.90
1	AR	1435	A	C5-C6-N6	-5.73	119.12	123.70
81	sR	1140	G	C5-C6-O6	-5.73	125.16	128.60
1	1	2808	A	N9-C4-C5	-5.73	103.51	105.80
1	AR	2135	U	N3-C4-C5	5.73	118.03	114.60
81	sR	1094	G	N1-C6-O6	-5.73	116.46	119.90
1	1	903	U	N3-C2-O2	-5.72	118.19	122.20
1	AR	189	G	C5-C6-O6	5.72	132.03	128.60
1	AR	938	C	C5-C4-N4	-5.72	116.19	120.20
1	1	866	A	N1-C6-N6	5.72	122.03	118.60
1	AR	1852	G	N7-C8-N9	5.72	115.96	113.10
1	1	797	U	OP2-P-O3'	5.72	117.79	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	1198	C	C6-N1-C2	-5.72	118.01	120.30
1	1	1052	U	N3-C4-O4	-5.72	115.40	119.40
1	1	1115	G	C8-N9-C4	-5.72	104.11	106.40
1	AR	2827	U	N1-C2-O2	-5.72	118.80	122.80
1	AR	979	U	P-O3'-C3'	5.72	126.56	119.70
66	c8	116	LEU	CA-CB-CG	5.72	128.45	115.30
1	1	1581	C	C2-N1-C1'	5.72	125.09	118.80
1	1	3362	A	C5-N7-C8	-5.72	101.04	103.90
1	AR	2349	U	OP1-P-O3'	5.72	117.78	105.20
1	AR	2551	U	N3-C4-O4	-5.72	115.40	119.40
1	AR	3206	C	N3-C2-O2	-5.72	117.90	121.90
1	AR	42	C	N1-C2-O2	5.71	122.33	118.90
1	AR	341	G	OP1-P-O3'	5.71	117.77	105.20
1	1	3044	G	N1-C6-O6	-5.71	116.47	119.90
81	sR	416	A	N1-C6-N6	5.71	122.03	118.60
1	1	895	A	C6-C5-N7	-5.71	128.30	132.30
1	1	3246	G	C5-C6-N1	-5.71	108.65	111.50
1	AR	1520	G	C5-C6-O6	-5.71	125.17	128.60
81	sR	1629	G	O4'-C1'-N9	-5.71	103.63	108.20
1	1	2169	G	N1-C6-O6	-5.71	116.48	119.90
1	AR	3048	A	O5'-P-OP2	-5.71	100.56	105.70
1	1	1048	A	C8-N9-C4	5.71	108.08	105.80
1	1	914	A	N1-C6-N6	-5.70	115.18	118.60
1	1	2314	U	C5-C6-N1	5.70	125.55	122.70
36	AI	36	LEU	CA-CB-CG	5.70	128.42	115.30
1	AR	1924	U	N3-C4-C5	5.70	118.02	114.60
1	1	3344	A	N7-C8-N9	5.70	116.65	113.80
1	1	1112	A	N9-C4-C5	-5.70	103.52	105.80
1	AR	3344	A	C2-N3-C4	-5.70	107.75	110.60
47	A	1600	A	C5-C6-N1	-5.70	114.85	117.70
81	sR	1758	U	C6-N1-C2	-5.70	117.58	121.00
1	1	637	C	C5-C6-N1	-5.70	118.15	121.00
1	AR	939	U	O5'-P-OP2	-5.70	100.57	105.70
1	AR	3309	G	N3-C4-C5	-5.70	125.75	128.60
1	1	2847	A	N1-C6-N6	5.70	122.02	118.60
1	AR	1432	C	C2-N1-C1'	5.69	125.06	118.80
1	1	2861	U	O5'-P-OP2	5.69	117.53	110.70
1	AR	2141	U	OP2-P-O3'	5.69	117.72	105.20
1	1	922	U	C4-C5-C6	-5.69	116.29	119.70
1	AR	694	C	N3-C2-O2	-5.69	117.92	121.90
81	sR	542	A	P-O3'-C3'	5.69	126.53	119.70
81	sR	1774	G	C5-C6-O6	5.69	132.01	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	776	U	C4-C5-C6	5.69	123.11	119.70
1	1	2245	C	N3-C2-O2	-5.69	117.92	121.90
47	A	25	C	OP2-P-O3'	5.69	117.71	105.20
1	1	2177	G	C5-C6-N1	-5.68	108.66	111.50
1	1	1407	A	N7-C8-N9	-5.68	110.96	113.80
1	AR	2978	U	N3-C2-O2	-5.68	118.22	122.20
1	AR	3087	A	OP2-P-O3'	5.68	117.70	105.20
1	1	2283	G	C6-C5-N7	-5.68	126.99	130.40
1	AR	1133	A	C5-N7-C8	5.68	106.74	103.90
47	A	1745	G	C6-C5-N7	-5.68	126.99	130.40
81	sR	65	A	N1-C6-N6	5.68	122.01	118.60
81	sR	782	U	C2-N1-C1'	5.68	124.52	117.70
1	AR	1115	G	N3-C4-C5	-5.68	125.76	128.60
1	AR	3218	A	C4-C5-N7	5.68	113.54	110.70
47	A	577	G	N3-C4-N9	5.68	129.41	126.00
81	sR	858	G	C6-C5-N7	-5.68	126.99	130.40
1	AR	103	G	N1-C6-O6	-5.68	116.49	119.90
1	AR	410	U	N3-C4-C5	-5.67	111.19	114.60
1	AR	718	G	N7-C8-N9	5.67	115.94	113.10
1	AR	820	A	C8-N9-C4	-5.67	103.53	105.80
1	AR	1604	G	N3-C4-C5	-5.67	125.76	128.60
1	AR	2163	C	N3-C2-O2	-5.67	117.93	121.90
1	AR	2977	G	C8-N9-C4	5.67	108.67	106.40
81	sR	622	A	O5'-P-OP1	-5.67	100.59	105.70
1	1	2402	A	N1-C6-N6	5.67	122.00	118.60
47	A	501	U	OP1-P-O3'	5.67	117.67	105.20
81	sR	687	G	N3-C4-N9	-5.67	122.60	126.00
1	1	677	A	O5'-P-OP1	-5.67	100.60	105.70
1	1	2811	A	N1-C2-N3	5.67	132.13	129.30
1	AR	653	A	C5-C6-N6	-5.67	119.17	123.70
81	sR	1766	A	N1-C6-N6	5.67	122.00	118.60
1	1	326	U	C2-N1-C1'	5.67	124.50	117.70
1	1	1116	G	C8-N9-C4	-5.67	104.13	106.40
1	AR	2333	C	C5-C4-N4	-5.67	116.23	120.20
1	1	610	G	O5'-P-OP2	-5.66	100.60	105.70
1	1	3022	G	C8-N9-C4	-5.66	104.13	106.40
1	AR	928	C	O5'-P-OP2	-5.66	100.60	105.70
47	A	1773	C	N3-C4-C5	-5.66	119.64	121.90
58	c0	90	PRO	N-CA-CB	5.66	110.10	103.30
1	AR	2142	A	OP1-P-O3'	5.66	117.66	105.20
81	sR	815	G	C4-N9-C1'	-5.66	119.14	126.50
1	1	1048	A	N7-C8-N9	-5.66	110.97	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	30	G	O5'-P-OP2	5.66	117.49	110.70
1	AR	694	C	C6-N1-C2	-5.66	118.04	120.30
1	AR	1914	G	O5'-P-OP1	-5.66	100.61	105.70
1	AR	3306	U	C2-N1-C1'	5.66	124.49	117.70
1	1	678	G	N1-C6-O6	5.66	123.30	119.90
1	1	1713	G	N3-C4-C5	5.66	131.43	128.60
1	1	1793	C	C6-N1-C2	5.66	122.56	120.30
1	1	2897	A	C8-N9-C4	5.66	108.06	105.80
81	sR	858	G	C5-N7-C8	-5.66	101.47	104.30
1	AR	2632	G	C8-N9-C4	5.66	108.66	106.40
1	AR	328	U	N3-C4-C5	-5.66	111.21	114.60
1	AR	1348	U	C2-N1-C1'	-5.66	110.91	117.70
1	AR	2679	A	C6-C5-N7	-5.66	128.34	132.30
81	sR	337	G	C8-N9-C1'	-5.66	119.65	127.00
1	AR	562	C	C2-N1-C1'	5.65	125.02	118.80
1	1	2836	C	C4-C5-C6	5.65	120.23	117.40
81	sR	1150	G	N3-C4-C5	5.65	131.43	128.60
1	1	968	G	C5-C6-N1	5.65	114.33	111.50
1	AR	50	U	C5-C6-N1	5.65	125.53	122.70
1	AR	3054	U	N1-C2-O2	-5.65	118.84	122.80
81	sR	1171	A	C8-N9-C4	-5.65	103.54	105.80
47	A	1198	G	C8-N9-C4	-5.65	104.14	106.40
1	1	1320	C	O5'-P-OP2	-5.65	100.62	105.70
1	AR	2298	U	O4'-C1'-N1	5.65	112.72	108.20
81	sR	1117	U	C5-C6-N1	5.65	125.52	122.70
1	AR	1897	G	N3-C2-N2	-5.64	115.95	119.90
1	AR	2364	G	C5-C6-O6	5.64	131.99	128.60
1	AR	2819	A	O5'-P-OP2	-5.64	100.62	105.70
47	A	1363	U	N3-C2-O2	-5.64	118.25	122.20
1	1	1269	U	N1-C2-O2	5.64	126.75	122.80
1	1	2550	U	C5-C4-O4	5.64	129.29	125.90
47	A	728	U	N3-C2-O2	-5.64	118.25	122.20
1	1	305	U	N3-C2-O2	-5.64	118.25	122.20
1	AR	1408	G	OP1-P-O3'	5.64	117.60	105.20
1	AR	2332	A	C8-N9-C4	5.64	108.06	105.80
81	sR	1058	U	OP1-P-O3'	5.64	117.60	105.20
1	1	1727	G	C2-N3-C4	5.64	114.72	111.90
1	AR	216	G	N3-C4-N9	5.64	129.38	126.00
1	AR	966	U	C2-N1-C1'	5.64	124.46	117.70
1	AR	2968	G	N1-C6-O6	-5.64	116.52	119.90
81	sR	1117	U	C5-C4-O4	-5.64	122.52	125.90
1	1	922	U	C2-N1-C1'	5.63	124.46	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	1792	C	N3-C4-C5	-5.63	119.65	121.90
81	sR	1149	G	C5-C6-O6	5.63	131.98	128.60
1	1	776	U	N1-C2-N3	5.63	118.28	114.90
1	1	2304	C	C6-N1-C2	-5.63	118.05	120.30
1	AR	3321	C	N1-C2-O2	-5.63	115.52	118.90
1	1	158	G	N1-C6-O6	5.63	123.28	119.90
47	A	554	C	C2-N3-C4	5.63	122.72	119.90
1	1	2920	U	C2-N3-C4	-5.63	123.62	127.00
1	1	2962	U	O5'-P-OP1	-5.63	100.63	105.70
47	A	401	A	OP2-P-O3'	5.63	117.58	105.20
1	1	2522	G	C4-N9-C1'	5.62	133.81	126.50
1	AR	297	G	O4'-C1'-N9	5.62	112.70	108.20
1	AR	1445	U	N1-C2-O2	-5.62	118.86	122.80
1	1	809	G	C8-N9-C4	5.62	108.65	106.40
1	1	1330	A	O5'-P-OP1	-5.62	100.64	105.70
1	AR	886	C	N1-C2-O2	-5.62	115.53	118.90
1	1	1148	G	C8-N9-C4	5.62	108.65	106.40
1	1	1373	A	N1-C6-N6	-5.62	115.23	118.60
1	1	1407	A	C8-N9-C4	5.62	108.05	105.80
1	AR	2335	G	OP2-P-O3'	5.62	117.57	105.20
1	1	1934	G	C4-C5-N7	5.62	113.05	110.80
1	AR	655	C	N3-C4-C5	-5.62	119.65	121.90
1	1	1493	G	O4'-C1'-N9	5.62	112.69	108.20
1	AR	2207	A	C5-N7-C8	-5.62	101.09	103.90
1	1	866	A	C5-C6-N6	-5.62	119.21	123.70
81	sR	1670	G	C8-N9-C4	-5.62	104.15	106.40
1	1	2550	U	N1-C2-O2	5.62	126.73	122.80
3	4	95	G	C4-N9-C1'	-5.62	119.20	126.50
1	AR	1884	A	OP2-P-O3'	5.61	117.55	105.20
81	sR	962	C	C6-N1-C2	5.61	122.55	120.30
47	A	264	G	N3-C4-N9	-5.61	122.63	126.00
1	1	1876	U	C2-N1-C1'	5.61	124.43	117.70
1	1	945	C	O5'-P-OP2	-5.61	100.65	105.70
1	1	283	G	O4'-C1'-N9	-5.61	103.71	108.20
1	1	1443	G	C5-N7-C8	-5.61	101.50	104.30
1	1	3000	A	C8-N9-C4	5.61	108.04	105.80
3	4	79	A	C8-N9-C4	-5.61	103.56	105.80
1	AR	637	C	C2-N1-C1'	-5.61	112.63	118.80
1	AR	2552	C	N1-C2-O2	5.61	122.27	118.90
81	sR	1301	U	N1-C2-O2	5.61	126.73	122.80
81	sR	1614	A	N1-C6-N6	5.61	121.97	118.60
1	1	967	A	N1-C2-N3	5.61	132.10	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	196	G	O5'-P-OP2	-5.60	100.66	105.70
1	1	1307	G	C2'-C3'-O3'	5.60	122.66	113.70
1	1	1523	U	N1-C2-O2	-5.60	118.88	122.80
1	1	809	G	N9-C4-C5	-5.60	103.16	105.40
1	1	233	C	C6-N1-C2	5.60	122.54	120.30
1	1	942	U	OP1-P-OP2	-5.60	111.20	119.60
1	1	54	C	C6-N1-C2	5.60	122.54	120.30
1	1	2293	C	C5-C4-N4	-5.60	116.28	120.20
1	1	3275	U	OP1-P-O3'	5.59	117.51	105.20
1	1	3340	G	C8-N9-C1'	5.59	134.27	127.00
1	AR	1465	A	N1-C6-N6	-5.59	115.24	118.60
47	A	1217	A	O4'-C1'-N9	-5.59	103.72	108.20
1	1	2959	C	N1-C2-O2	-5.59	115.54	118.90
1	AR	836	A	O5'-P-OP2	-5.59	100.67	105.70
1	AR	1161	G	C5-C6-N1	5.59	114.30	111.50
1	AR	1448	U	C6-N1-C2	5.59	124.36	121.00
1	AR	2758	A	O5'-P-OP1	-5.59	100.67	105.70
1	AR	2934	A	N1-C6-N6	-5.59	115.24	118.60
1	AR	1300	G	C8-N9-C4	5.59	108.64	106.40
81	sR	845	G	C5-N7-C8	-5.59	101.50	104.30
1	1	2139	A	N1-C6-N6	-5.59	115.25	118.60
1	AR	644	G	C8-N9-C4	-5.59	104.16	106.40
1	AR	866	A	C8-N9-C4	5.59	108.03	105.80
1	AR	1854	C	C2-N3-C4	5.59	122.69	119.90
1	1	1365	G	N3-C2-N2	5.59	123.81	119.90
1	1	2417	U	C2-N3-C4	-5.59	123.65	127.00
3	4	28	C	N1-C2-O2	5.59	122.25	118.90
1	AR	2983	C	O4'-C1'-N1	5.59	112.67	108.20
1	1	1415	U	C5-C6-N1	-5.58	119.91	122.70
1	1	1793	C	C2-N3-C4	-5.58	117.11	119.90
1	1	2395	G	N7-C8-N9	-5.58	110.31	113.10
1	AR	339	C	OP1-P-OP2	-5.58	111.23	119.60
1	AR	2191	U	N3-C4-O4	-5.58	115.49	119.40
1	AR	2872	A	N1-C6-N6	5.58	121.95	118.60
1	AR	2945	G	C5-C6-O6	-5.58	125.25	128.60
1	1	1429	G	N3-C4-C5	-5.58	125.81	128.60
1	1	2361	A	OP2-P-O3'	5.58	117.48	105.20
1	AR	1127	G	C2-N3-C4	5.58	114.69	111.90
1	AR	2419	A	N7-C8-N9	5.58	116.59	113.80
1	1	2283	G	C4-C5-N7	5.58	113.03	110.80
81	sR	1389	C	C2-N1-C1'	5.58	124.94	118.80
1	1	945	C	N3-C4-C5	5.58	124.13	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	2551	U	N3-C2-O2	-5.58	118.30	122.20
1	AR	2912	G	O5'-P-OP1	-5.58	100.68	105.70
64	c6	114	ARG	C-N-CA	5.57	135.64	121.70
1	1	1405	U	C5-C4-O4	-5.57	122.56	125.90
1	1	2852	C	C6-N1-C2	5.57	122.53	120.30
1	AR	2364	G	N9-C4-C5	5.57	107.63	105.40
1	1	3001	C	C2-N1-C1'	-5.57	112.67	118.80
81	sR	144	U	C5-C4-O4	5.57	129.24	125.90
81	sR	1697	G	C4-N9-C1'	5.57	133.74	126.50
1	1	2647	A	C6-N1-C2	-5.57	115.26	118.60
1	1	2808	A	C4-C5-N7	5.57	113.48	110.70
1	1	3058	U	C2-N1-C1'	5.57	124.38	117.70
1	AR	1116	G	OP2-P-O3'	5.57	117.45	105.20
1	AR	1147	G	C4-C5-N7	-5.57	108.57	110.80
81	sR	1773	C	N1-C2-O2	-5.57	115.56	118.90
1	1	817	A	N9-C1'-C2'	5.57	121.24	114.00
1	AR	637	C	N1-C2-O2	-5.57	115.56	118.90
1	AR	2606	G	C5-C6-O6	5.57	131.94	128.60
1	AR	2888	U	C5-C4-O4	-5.57	122.56	125.90
1	1	1414	G	N7-C8-N9	5.56	115.88	113.10
1	1	112	U	C6-N1-C1'	-5.56	113.41	121.20
1	1	2836	C	N3-C4-N4	-5.56	114.11	118.00
1	1	866	A	C8-N9-C4	5.56	108.02	105.80
1	1	2293	C	C2-N1-C1'	5.56	124.92	118.80
1	1	2434	U	C5-C4-O4	5.56	129.24	125.90
1	AR	908	G	C8-N9-C1'	-5.56	119.77	127.00
81	sR	1097	U	P-O3'-C3'	5.56	126.37	119.70
1	AR	877	C	N3-C4-N4	-5.56	114.11	118.00
1	1	1306	G	N1-C6-O6	5.56	123.23	119.90
1	AR	2412	G	N3-C4-C5	-5.56	125.82	128.60
3	4	13	A	C5-C6-N6	-5.55	119.26	123.70
1	AR	621	A	N1-C6-N6	-5.55	115.27	118.60
47	A	737	A	O4'-C1'-N9	5.55	112.64	108.20
1	1	414	U	OP2-P-O3'	5.55	117.42	105.20
58	c0	83	PRO	N-CA-CB	5.55	109.96	103.30
1	1	1141	C	N3-C4-C5	-5.55	119.68	121.90
1	1	2362	C	N1-C2-O2	5.55	122.23	118.90
1	AR	1151	U	O5'-P-OP2	-5.55	100.70	105.70
1	AR	1513	G	N1-C6-O6	-5.55	116.57	119.90
1	AR	3309	G	N3-C4-N9	5.55	129.33	126.00
81	sR	337	G	N3-C4-C5	-5.55	125.82	128.60
1	1	1364	C	OP2-P-O3'	5.55	117.41	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	914	A	N9-C4-C5	5.55	108.02	105.80
1	AR	3181	C	C5-C4-N4	5.55	124.08	120.20
1	1	1101	G	C4-C5-N7	-5.54	108.58	110.80
1	AR	2726	C	N3-C4-C5	-5.54	119.68	121.90
1	AR	3052	G	C8-N9-C4	-5.54	104.18	106.40
1	1	672	A	N1-C6-N6	5.54	121.92	118.60
1	AR	828	A	O5'-P-OP2	-5.54	100.71	105.70
1	1	2986	U	N1-C2-N3	5.54	118.22	114.90
1	AR	941	G	OP1-P-O3'	5.54	117.39	105.20
8	CH	173	MET	CB-CG-SD	-5.54	95.78	112.40
1	1	954	U	O5'-P-OP2	-5.54	100.72	105.70
1	AR	3212	C	N1-C2-O2	-5.54	115.58	118.90
47	A	25	C	P-O3'-C3'	5.54	126.35	119.70
47	A	1214	U	C5-C4-O4	-5.54	122.58	125.90
1	1	1349	G	N9-C4-C5	-5.54	103.19	105.40
1	AR	3003	G	C8-N9-C4	-5.54	104.19	106.40
1	1	227	G	C5-C6-O6	-5.54	125.28	128.60
1	1	282	G	C2'-C3'-O3'	5.54	122.56	113.70
81	sR	3	U	C6-N1-C2	5.54	124.32	121.00
1	AR	682	U	C2-N1-C1'	-5.53	111.06	117.70
1	AR	1431	G	C2-N3-C4	5.53	114.67	111.90
47	A	507	U	N1-C2-O2	5.53	126.67	122.80
1	1	2710	C	N1-C2-O2	-5.53	115.58	118.90
1	AR	2923	U	O5'-P-OP1	-5.53	100.72	105.70
1	1	2249	G	P-O3'-C3'	5.53	126.34	119.70
1	AR	2808	A	N9-C4-C5	-5.53	103.59	105.80
1	AR	2983	C	C6-N1-C2	-5.53	118.09	120.30
47	A	565	C	N1-C2-N3	5.53	123.07	119.20
1	1	304	G	N3-C2-N2	-5.53	116.03	119.90
1	1	2632	G	N1-C6-O6	-5.53	116.58	119.90
1	1	976	U	O5'-P-OP2	-5.53	100.73	105.70
52	F	38	LEU	CA-CB-CG	5.53	128.01	115.30
81	sR	1118	G	C5-C6-N1	-5.53	108.74	111.50
1	1	1337	A	C2-N3-C4	5.53	113.36	110.60
1	AR	1390	A	N1-C6-N6	-5.53	115.28	118.60
1	1	743	C	C6-N1-C2	5.52	122.51	120.30
1	1	1838	G	C4-C5-N7	5.52	113.01	110.80
1	1	363	G	N9-C4-C5	-5.52	103.19	105.40
1	1	1374	G	N1-C2-N2	-5.52	111.23	116.20
1	1	3004	C	O5'-P-OP1	-5.52	100.73	105.70
3	4	99	C	C2-N3-C4	-5.52	117.14	119.90
6	l	313	LEU	CA-CB-CG	5.52	127.99	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	374	A	N1-C6-N6	-5.52	115.29	118.60
1	1	3050	U	N1-C2-O2	5.51	126.66	122.80
1	AR	936	A	P-O3'-C3'	5.51	126.32	119.70
1	AR	981	U	C5-C6-N1	5.51	125.46	122.70
1	AR	2758	A	C2-N3-C4	5.51	113.36	110.60
1	AR	2964	G	C4-C5-N7	-5.51	108.59	110.80
47	A	469	C	C6-N1-C1'	-5.51	114.18	120.80
1	1	3050	U	N3-C2-O2	-5.51	118.34	122.20
1	1	509	U	C4-C5-C6	5.51	123.01	119.70
1	1	922	U	C5-C6-N1	5.51	125.46	122.70
1	1	3010	U	C6-N1-C2	-5.51	117.69	121.00
1	1	284	A	O4'-C1'-N9	5.50	112.60	108.20
1	1	932	U	N1-C2-N3	5.50	118.20	114.90
1	AR	2865	U	C5-C6-N1	5.50	125.45	122.70
1	1	2928	C	C6-N1-C2	-5.50	118.10	120.30
1	AR	1926	C	N1-C2-O2	-5.50	115.60	118.90
2	AS	101	G	C6-C5-N7	-5.50	127.10	130.40
47	A	554	C	C6-N1-C1'	-5.50	114.20	120.80
1	1	3085	G	N1-C6-O6	5.50	123.20	119.90
1	1	3207	U	N3-C4-O4	-5.50	115.55	119.40
1	AR	869	G	N3-C2-N2	5.50	123.75	119.90
81	sR	623	A	O4'-C1'-N9	5.50	112.60	108.20
1	1	650	C	OP2-P-O3'	5.50	117.30	105.20
1	1	2756	C	C2-N1-C1'	5.50	124.85	118.80
1	AR	955	U	C5-C4-O4	-5.50	122.60	125.90
1	AR	2618	G	N1-C6-O6	5.50	123.20	119.90
1	AR	3306	U	C2-N3-C4	-5.50	123.70	127.00
1	1	2160	G	C5-C6-O6	5.50	131.90	128.60
81	sR	1297	G	O5'-P-OP2	-5.50	100.75	105.70
1	AR	1902	G	N3-C4-N9	5.50	129.30	126.00
1	AR	3144	G	N1-C6-O6	-5.50	116.60	119.90
47	A	335	U	OP2-P-O3'	5.50	117.29	105.20
1	AR	1440	G	C5-C6-O6	5.49	131.90	128.60
1	AR	2116	G	C6-C5-N7	-5.49	127.10	130.40
1	1	692	A	O5'-P-OP1	-5.49	100.76	105.70
1	AR	2392	C	C2-N3-C4	-5.49	117.15	119.90
47	A	469	C	C4-C5-C6	-5.49	114.65	117.40
1	1	804	C	O5'-P-OP1	-5.49	100.76	105.70
1	1	1374	G	N3-C2-N2	5.49	123.74	119.90
1	AR	1481	A	P-O3'-C3'	5.49	126.29	119.70
1	1	2367	A	N1-C6-N6	5.49	121.89	118.60
1	1	2833	A	O5'-P-OP2	-5.49	100.76	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	3	118	A	N1-C6-N6	-5.49	115.31	118.60
1	AR	2629	U	C5-C4-O4	-5.49	122.61	125.90
1	AR	3055	U	C2-N1-C1'	5.49	124.28	117.70
1	1	2643	A	N9-C4-C5	-5.48	103.61	105.80
1	AR	800	G	N9-C4-C5	-5.48	103.21	105.40
1	AR	1886	A	O5'-P-OP2	-5.48	100.77	105.70
1	AR	2813	A	C8-N9-C4	-5.48	103.61	105.80
47	A	1600	A	C6-C5-N7	-5.48	128.46	132.30
1	1	99	A	O4'-C1'-N9	5.48	112.58	108.20
81	sR	383	G	C8-N9-C4	-5.48	104.21	106.40
81	sR	864	U	O4'-C1'-N1	5.48	112.58	108.20
1	1	1547	G	N7-C8-N9	-5.48	110.36	113.10
1	1	794	U	N3-C4-C5	-5.48	111.31	114.60
1	1	1483	G	O4'-C1'-N9	5.48	112.58	108.20
1	AR	911	C	C5-C6-N1	-5.48	118.26	121.00
1	AR	1133	A	N7-C8-N9	-5.48	111.06	113.80
1	AR	3200	G	N1-C6-O6	5.48	123.19	119.90
81	sR	297	U	C6-N1-C2	-5.48	117.71	121.00
81	sR	1560	U	N1-C2-O2	5.48	126.63	122.80
1	1	635	G	C5-C6-N1	5.47	114.24	111.50
1	1	936	A	C5-C6-N6	-5.47	119.32	123.70
1	1	2779	A	O5'-P-OP2	-5.47	100.77	105.70
81	sR	976	G	C2-N3-C4	-5.47	109.16	111.90
3	4	99	C	C5-C6-N1	-5.47	118.26	121.00
1	AR	2403	G	O5'-P-OP1	5.47	117.26	110.70
1	AR	3136	G	N1-C2-N3	5.47	127.18	123.90
1	AR	960	U	N3-C2-O2	-5.47	118.37	122.20
1	1	1160	C	N1-C2-N3	-5.47	115.37	119.20
1	1	2651	G	C5-C6-O6	5.47	131.88	128.60
1	AR	887	G	C5-N7-C8	-5.47	101.57	104.30
47	A	1773	C	N3-C4-N4	5.47	121.83	118.00
1	1	1368	U	C2-N1-C1'	5.46	124.26	117.70
81	sR	1000	C	N1-C2-O2	5.46	122.18	118.90
1	1	686	G	OP2-P-O3'	5.46	117.22	105.20
1	1	1313	G	C5-C6-O6	-5.46	125.32	128.60
12	CL	88	ARG	NE-CZ-NH1	-5.46	117.57	120.30
1	1	645	A	N3-C4-C5	-5.46	122.98	126.80
1	1	3246	G	O4'-C1'-N9	5.46	112.57	108.20
1	AR	895	A	N1-C6-N6	5.46	121.88	118.60
47	A	453	U	C5-C6-N1	5.46	125.43	122.70
81	sR	1662	G	O4'-C1'-N9	5.46	112.57	108.20
1	1	678	G	C4-C5-C6	5.46	122.08	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	92	G	N3-C2-N2	5.46	123.72	119.90
1	1	970	A	C2-N3-C4	-5.46	107.87	110.60
1	1	1741	A	C2-N3-C4	-5.46	107.87	110.60
1	1	2186	U	N1-C2-O2	5.46	126.62	122.80
81	sR	583	C	C2-N1-C1'	5.46	124.81	118.80
81	sR	795	U	N1-C2-O2	5.46	126.62	122.80
1	1	2352	A	O5'-P-OP2	-5.46	100.79	105.70
1	AR	1910	A	OP2-P-O3'	5.46	117.20	105.20
1	AR	1897	G	N3-C4-C5	5.46	131.33	128.60
1	AR	2899	C	C2-N1-C1'	5.46	124.80	118.80
1	1	1440	G	C8-N9-C4	5.45	108.58	106.40
1	1	2331	C	N3-C4-C5	5.45	124.08	121.90
1	AR	2305	G	C6-C5-N7	-5.45	127.13	130.40
1	1	426	G	C5-C6-N1	5.45	114.23	111.50
1	AR	716	A	O4'-C1'-N9	-5.45	103.84	108.20
3	AT	71	A	C8-N9-C4	5.45	107.98	105.80
1	1	1160	C	C2-N3-C4	5.45	122.62	119.90
1	AR	399	A	O5'-P-OP1	-5.45	100.80	105.70
1	AR	1124	U	OP1-P-O3'	5.45	117.19	105.20
1	AR	1161	G	C4-C5-C6	-5.45	115.53	118.80
1	AR	1555	U	O4'-C1'-N1	5.45	112.56	108.20
1	1	1367	G	O5'-P-OP1	-5.45	100.80	105.70
1	1	2915	U	C5-C4-O4	-5.45	122.63	125.90
1	AR	1331	U	O4'-C1'-N1	-5.45	103.84	108.20
1	AR	2874	G	N3-C4-C5	-5.45	125.88	128.60
1	1	2983	C	C5-C6-N1	-5.45	118.28	121.00
1	AR	1002	A	N1-C6-N6	-5.45	115.33	118.60
1	AR	1200	A	N1-C6-N6	5.45	121.87	118.60
1	AR	2551	U	C5-C4-O4	5.45	129.17	125.90
47	A	1200	G	N3-C2-N2	-5.45	116.09	119.90
81	sR	426	G	N3-C4-N9	5.45	129.27	126.00
1	AR	1724	U	C6-N1-C2	-5.44	117.73	121.00
81	sR	512	A	P-O3'-C3'	5.44	126.23	119.70
1	1	3344	A	O4'-C1'-N9	5.44	112.55	108.20
1	AR	324	A	C8-N9-C4	-5.44	103.62	105.80
1	AR	889	U	N3-C4-C5	5.44	117.86	114.60
1	AR	1858	A	N7-C8-N9	5.44	116.52	113.80
1	AR	1878	G	C8-N9-C1'	-5.44	119.93	127.00
1	1	97	U	C2-N3-C4	-5.44	123.74	127.00
1	1	2142	A	OP1-P-O3'	5.44	117.16	105.20
1	1	2375	G	C5-C6-N1	5.44	114.22	111.50
1	1	2537	U	P-O3'-C3'	5.44	126.22	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2874	G	P-O3'-C3'	5.44	126.23	119.70
1	AR	2392	C	C2-N1-C1'	-5.44	112.82	118.80
1	AR	3218	A	C5-N7-C8	-5.44	101.18	103.90
2	AS	104	A	O5'-P-OP1	5.44	117.22	110.70
81	sR	858	G	C4-N9-C1'	5.44	133.57	126.50
1	1	28	C	C6-N1-C1'	-5.44	114.28	120.80
1	AR	1180	A	O4'-C1'-N9	-5.44	103.85	108.20
1	AR	2805	G	N3-C4-N9	5.44	129.26	126.00
1	1	2651	G	C4-C5-N7	-5.43	108.63	110.80
1	AR	666	A	C6-N1-C2	-5.43	115.34	118.60
47	A	1432	U	C5-C6-N1	-5.43	119.98	122.70
1	1	755	A	C5-C6-N6	5.43	128.04	123.70
1	1	2881	C	O5'-P-OP2	-5.43	100.81	105.70
1	AR	2773	C	N1-C2-O2	-5.43	115.64	118.90
1	1	811	U	C5-C6-N1	-5.43	119.98	122.70
3	4	61	A	C5-C6-N1	5.43	120.42	117.70
12	r	57	LEU	CA-CB-CG	5.43	127.79	115.30
1	1	909	G	N7-C8-N9	-5.43	110.39	113.10
1	AR	2866	U	OP1-P-O3'	5.43	117.14	105.20
1	1	2836	C	N3-C2-O2	-5.43	118.10	121.90
1	AR	2959	C	OP2-P-O3'	5.43	117.14	105.20
1	AR	1365	G	C8-N9-C4	-5.42	104.23	106.40
1	1	1370	G	N1-C6-O6	5.42	123.15	119.90
1	AR	725	G	N1-C6-O6	-5.42	116.65	119.90
47	A	1265	G	N7-C8-N9	5.42	115.81	113.10
1	1	609	G	C2-N3-C4	5.42	114.61	111.90
1	1	1901	A	N1-C6-N6	-5.42	115.35	118.60
3	4	94	C	C6-N1-C2	5.42	122.47	120.30
1	AR	644	G	C2-N3-C4	5.42	114.61	111.90
1	AR	2278	C	C4-C5-C6	-5.42	114.69	117.40
47	A	360	A	C8-N9-C4	5.42	107.97	105.80
47	A	577	G	N1-C6-O6	5.42	123.15	119.90
1	AR	2816	G	N7-C8-N9	-5.41	110.39	113.10
1	1	1365	G	N3-C4-N9	5.41	129.25	126.00
1	AR	1117	G	N1-C6-O6	5.41	123.15	119.90
1	1	283	G	C5-N7-C8	-5.41	101.60	104.30
1	1	648	C	O5'-P-OP1	-5.41	100.83	105.70
1	AR	2275	A	O5'-P-OP1	-5.41	100.83	105.70
47	A	137	U	N3-C2-O2	-5.41	118.41	122.20
1	1	1200	A	N9-C4-C5	5.41	107.96	105.80
1	1	2821	C	N3-C2-O2	5.41	125.69	121.90
3	AT	33	A	O5'-P-OP1	-5.41	100.83	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	97	U	O5'-P-OP2	-5.41	100.83	105.70
1	1	1494	U	N3-C4-O4	-5.41	115.62	119.40
47	A	1745	G	N3-C4-N9	5.41	129.24	126.00
61	c3	22	ALA	C-N-CD	5.41	139.75	128.40
3	4	61	A	C5-C6-N6	-5.40	119.38	123.70
1	AR	1512	U	N3-C2-O2	-5.40	118.42	122.20
1	1	1822	C	C6-N1-C2	-5.40	118.14	120.30
1	1	2983	C	C4-C5-C6	5.40	120.10	117.40
81	sR	1355	C	C6-N1-C2	-5.40	118.14	120.30
1	1	1604	G	C8-N9-C1'	-5.40	119.98	127.00
47	A	1202	A	C8-N9-C4	-5.40	103.64	105.80
1	1	2273	G	N9-C4-C5	5.40	107.56	105.40
1	1	2331	C	OP1-P-OP2	5.40	127.70	119.60
1	1	3305	A	N1-C6-N6	-5.40	115.36	118.60
1	AR	2880	U	N3-C2-O2	-5.40	118.42	122.20
17	CQ	68	ARG	NE-CZ-NH2	5.40	123.00	120.30
47	A	1012	U	C2-N3-C4	5.40	130.24	127.00
81	sR	1473	U	N1-C2-O2	5.40	126.58	122.80
81	sR	1514	U	N3-C4-O4	-5.40	115.62	119.40
77	d9	36	LEU	CA-CB-CG	5.39	127.71	115.30
1	1	2148	U	N1-C2-O2	-5.39	119.03	122.80
1	1	2802	A	OP2-P-O3'	5.39	117.06	105.20
1	AR	1496	C	C2-N1-C1'	5.39	124.73	118.80
1	AR	1517	G	O5'-P-OP2	-5.39	100.85	105.70
1	AR	2899	C	N1-C2-N3	5.39	122.97	119.20
1	AR	3188	G	N1-C6-O6	-5.39	116.66	119.90
1	AR	1314	C	N1-C2-O2	5.39	122.13	118.90
1	AR	2264	U	O5'-P-OP2	5.39	117.17	110.70
1	AR	2350	C	OP1-P-OP2	-5.39	111.52	119.60
1	AR	1431	G	N9-C4-C5	5.39	107.56	105.40
1	1	339	C	N1-C2-O2	5.38	122.13	118.90
1	1	716	A	C8-N9-C4	5.38	107.95	105.80
1	1	1336	U	N3-C2-O2	-5.38	118.43	122.20
3	4	95	G	N3-C4-C5	5.38	131.29	128.60
3	4	113	U	C5-C6-N1	-5.38	120.01	122.70
47	A	829	A	P-O3'-C3'	5.38	126.16	119.70
81	sR	299	A	O5'-P-OP2	-5.38	100.85	105.70
1	1	652	G	C5-C6-O6	5.38	131.83	128.60
1	1	2606	G	N3-C2-N2	5.38	123.67	119.90
47	A	507	U	C2-N1-C1'	5.38	124.16	117.70
1	1	678	G	C5-C6-N1	-5.38	108.81	111.50
47	A	1494	C	P-O3'-C3'	-5.38	113.24	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	sR	815	G	N3-C4-N9	-5.38	122.77	126.00
81	sR	1004	U	N1-C2-O2	-5.38	119.03	122.80
1	AR	2298	U	N3-C4-O4	-5.38	115.63	119.40
81	sR	800	U	C6-N1-C2	-5.38	117.77	121.00
1	1	2777	G	N1-C6-O6	-5.38	116.67	119.90
1	AR	2269	U	N1-C2-O2	-5.38	119.03	122.80
1	AR	2679	A	N9-C4-C5	-5.38	103.65	105.80
1	1	1340	G	O5'-P-OP2	-5.38	100.86	105.70
3	4	64	U	N3-C2-O2	-5.38	118.44	122.20
1	AR	671	U	C5-C4-O4	-5.38	122.67	125.90
1	AR	3277	U	N3-C2-O2	-5.38	118.44	122.20
1	1	935	U	OP2-P-O3'	5.37	117.02	105.20
1	1	1126	G	C4-C5-N7	5.37	112.95	110.80
1	AR	425	G	C5-C6-O6	-5.37	125.38	128.60
1	AR	425	G	N1-C6-O6	5.37	123.12	119.90
1	AR	1117	G	N1-C2-N2	5.37	121.03	116.20
1	AR	3277	U	C2-N1-C1'	5.37	124.15	117.70
3	AT	32	C	N1-C2-O2	-5.37	115.67	118.90
1	1	968	G	N3-C4-C5	-5.37	125.92	128.60
1	1	968	G	C5-C6-O6	-5.37	125.38	128.60
1	1	1294	A	O4'-C1'-N9	5.37	112.50	108.20
1	AR	644	G	N3-C4-C5	-5.37	125.92	128.60
1	AR	2245	C	N3-C4-C5	-5.37	119.75	121.90
1	AR	2294	U	N1-C2-N3	5.37	118.12	114.90
47	A	469	C	C2-N3-C4	5.37	122.58	119.90
81	sR	1767	G	C8-N9-C4	5.37	108.55	106.40
1	1	1376	C	N1-C2-O2	5.37	122.12	118.90
1	AR	945	C	C6-N1-C2	5.37	122.45	120.30
47	A	581	U	C2-N1-C1'	5.37	124.14	117.70
1	1	155	G	N3-C2-N2	5.36	123.65	119.90
1	1	421	G	C8-N9-C1'	-5.36	120.03	127.00
1	AR	716	A	O5'-P-OP1	-5.36	100.87	105.70
47	A	1246	C	N3-C2-O2	-5.36	118.15	121.90
71	Y	133	LEU	CA-CB-CG	5.36	127.64	115.30
61	c3	22	ALA	C-N-CA	-5.36	99.47	122.00
1	1	3140	G	N3-C4-N9	5.36	129.22	126.00
47	A	704	C	N1-C2-O2	5.36	122.12	118.90
1	1	1507	G	OP1-P-OP2	5.36	127.64	119.60
1	AR	2808	A	O4'-C1'-N9	-5.36	103.91	108.20
47	A	399	A	N1-C6-N6	-5.36	115.39	118.60
1	1	2385	G	O5'-P-OP1	-5.36	100.88	105.70
1	1	2889	C	N1-C2-O2	5.36	122.11	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	1304	A	C5-C6-N6	-5.36	119.42	123.70
1	AR	2550	U	N3-C2-O2	-5.36	118.45	122.20
1	1	1116	G	OP2-P-O3'	5.35	116.98	105.20
81	sR	321	C	N3-C2-O2	-5.35	118.15	121.90
1	1	342	A	O5'-P-OP2	-5.35	100.88	105.70
1	AR	1367	G	C5-C6-N1	-5.35	108.82	111.50
1	AR	2831	G	C2-N3-C4	5.35	114.58	111.90
47	A	453	U	N3-C4-O4	5.35	123.15	119.40
81	sR	360	A	N1-C6-N6	5.35	121.81	118.60
81	sR	965	U	C2-N1-C1'	5.35	124.12	117.70
1	1	2551	U	N3-C2-O2	-5.35	118.46	122.20
1	1	2663	G	C5-C6-O6	-5.35	125.39	128.60
47	A	1258	U	N3-C2-O2	-5.35	118.45	122.20
1	1	637	C	N3-C4-N4	-5.35	114.26	118.00
1	1	1906	G	C4-N9-C1'	5.35	133.45	126.50
1	1	2979	U	C2-N3-C4	-5.35	123.79	127.00
10	p	189	LEU	CA-CB-CG	5.35	127.60	115.30
1	AR	1047	A	C6-C5-N7	-5.35	128.56	132.30
1	1	439	C	C2-N1-C1'	5.34	124.68	118.80
1	1	1879	A	C8-N9-C4	5.34	107.94	105.80
1	1	2817	A	OP2-P-O3'	5.34	116.96	105.20
1	AR	578	A	N1-C6-N6	5.34	121.81	118.60
1	AR	2405	C	N3-C2-O2	-5.34	118.16	121.90
1	1	2314	U	N3-C4-O4	5.34	123.14	119.40
3	4	103	G	C8-N9-C4	-5.34	104.26	106.40
1	AR	414	U	C5-C6-N1	-5.34	120.03	122.70
1	AR	909	G	C4-C5-N7	-5.34	108.66	110.80
81	sR	1058	U	P-O3'-C3'	5.34	126.11	119.70
1	1	873	C	C2-N3-C4	-5.34	117.23	119.90
1	1	916	G	P-O3'-C3'	5.34	126.11	119.70
1	1	521	A	C5-C6-N6	-5.34	119.43	123.70
1	AR	906	A	C6-N1-C2	-5.34	115.40	118.60
81	sR	1672	G	C4-C5-C6	-5.34	115.60	118.80
1	AR	895	A	N7-C8-N9	5.33	116.47	113.80
1	AR	3092	C	N1-C2-O2	5.33	122.10	118.90
1	1	361	A	N1-C6-N6	-5.33	115.40	118.60
1	1	999	G	C5-C6-O6	-5.33	125.40	128.60
1	AR	275	U	C4-C5-C6	5.33	122.90	119.70
1	AR	1110	U	C5-C6-N1	5.33	125.37	122.70
61	c3	65	VAL	N-CA-C	-5.33	96.60	111.00
1	1	439	C	N3-C2-O2	-5.33	118.17	121.90
1	1	2990	G	N3-C4-N9	5.33	129.20	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	3140	G	N1-C6-O6	5.33	123.10	119.90
1	AR	718	G	N3-C4-N9	-5.33	122.80	126.00
1	1	509	U	C6-N1-C2	-5.33	117.80	121.00
1	1	640	U	N3-C4-O4	5.33	123.13	119.40
1	1	1475	A	N1-C6-N6	-5.33	115.40	118.60
1	1	2827	U	C6-N1-C1'	5.33	128.66	121.20
1	1	1114	U	C4-C5-C6	-5.33	116.50	119.70
1	1	2821	C	C6-N1-C2	5.33	122.43	120.30
1	AR	3266	G	C5-C6-O6	5.33	131.79	128.60
81	sR	363	G	C8-N9-C4	5.33	108.53	106.40
1	1	324	A	C6-N1-C2	-5.32	115.41	118.60
1	1	1306	G	N1-C2-N2	5.32	120.99	116.20
1	1	1366	A	C5-N7-C8	-5.32	101.24	103.90
1	1	1899	G	C5-N7-C8	-5.32	101.64	104.30
1	1	2121	G	N3-C4-C5	-5.32	125.94	128.60
1	1	3266	G	N9-C4-C5	5.32	107.53	105.40
1	AR	2822	U	N3-C4-O4	-5.32	115.67	119.40
47	A	1456	C	N3-C2-O2	-5.32	118.17	121.90
1	AR	3155	U	C5-C6-N1	5.32	125.36	122.70
47	A	901	G	C4-N9-C1'	5.32	133.42	126.50
1	1	2810	C	O5'-P-OP2	-5.32	100.91	105.70
1	AR	2334	U	N1-C2-N3	5.32	118.09	114.90
47	A	553	G	N3-C2-N2	-5.32	116.18	119.90
1	AR	1193	A	C4-C5-C6	5.32	119.66	117.00
1	1	2847	A	C5-C6-N6	-5.32	119.45	123.70
1	1	2359	C	O5'-P-OP2	-5.32	100.92	105.70
1	AR	1042	U	N3-C2-O2	-5.32	118.48	122.20
1	AR	3050	U	N3-C2-O2	-5.32	118.48	122.20
47	A	1324	G	N3-C4-N9	-5.32	122.81	126.00
1	1	2892	A	N1-C6-N6	-5.31	115.41	118.60
1	AR	2296	A	N1-C6-N6	5.31	121.79	118.60
1	AR	1404	G	N3-C4-C5	5.31	131.25	128.60
1	AR	1855	U	C5-C6-N1	-5.31	120.05	122.70
1	AR	2433	U	C6-N1-C2	5.31	124.19	121.00
1	AR	2797	C	N1-C2-O2	-5.31	115.72	118.90
81	sR	609	U	C5-C6-N1	-5.31	120.05	122.70
1	1	431	U	C5-C4-O4	-5.31	122.72	125.90
1	1	2184	U	C5-C4-O4	-5.31	122.72	125.90
1	AR	2130	G	N3-C4-C5	5.31	131.25	128.60
1	AR	2390	A	N9-C4-C5	5.31	107.92	105.80
1	AR	2611	U	C5-C6-N1	-5.31	120.05	122.70
1	AR	3047	U	O5'-P-OP1	-5.31	100.92	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	A	590	C	N1-C2-O2	5.31	122.08	118.90
1	AR	424	G	N3-C2-N2	5.30	123.61	119.90
1	AR	1075	A	C8-N9-C4	5.30	107.92	105.80
81	sR	1781	A	C5-C6-N1	-5.30	115.05	117.70
1	1	3326	G	C8-N9-C4	5.30	108.52	106.40
1	AR	1327	C	N3-C4-C5	5.30	124.02	121.90
1	AR	2257	C	N3-C2-O2	-5.30	118.19	121.90
1	1	3065	G	C8-N9-C4	5.30	108.52	106.40
1	AR	890	C	C6-N1-C2	5.30	122.42	120.30
1	1	202	G	O5'-P-OP2	-5.30	100.93	105.70
1	AR	2747	A	N1-C6-N6	-5.30	115.42	118.60
1	AR	993	G	O5'-P-OP2	-5.30	100.93	105.70
1	1	283	G	C4-C5-N7	5.30	112.92	110.80
1	1	2712	U	N3-C2-O2	-5.30	118.49	122.20
1	1	359	U	C4-C5-C6	5.29	122.88	119.70
1	1	2808	A	C5-N7-C8	-5.29	101.25	103.90
3	4	113	U	N1-C2-N3	5.29	118.08	114.90
1	1	304	G	N9-C4-C5	5.29	107.52	105.40
1	1	1329	U	N1-C1'-C2'	-5.29	106.18	112.00
1	AR	3278	C	N3-C2-O2	-5.29	118.20	121.90
47	A	779	U	O4'-C1'-N1	5.29	112.43	108.20
81	sR	308	C	N3-C2-O2	-5.29	118.20	121.90
81	sR	363	G	N9-C4-C5	-5.29	103.28	105.40
1	1	2398	A	C4-C5-C6	5.29	119.64	117.00
47	A	321	C	N3-C2-O2	-5.29	118.20	121.90
81	sR	542	A	C4-N9-C1'	5.29	135.82	126.30
81	sR	1614	A	C4-C5-N7	5.29	113.34	110.70
1	1	2384	A	C4-C5-N7	5.29	113.34	110.70
1	1	3218	A	C5-C6-N6	-5.29	119.47	123.70
1	AR	3306	U	C6-N1-C1'	-5.29	113.80	121.20
81	sR	687	G	N3-C2-N2	-5.29	116.20	119.90
1	1	2877	G	N3-C4-C5	-5.29	125.96	128.60
1	AR	2258	U	N3-C2-O2	-5.29	118.50	122.20
47	A	422	G	C4-C5-N7	5.29	112.91	110.80
1	1	3390	G	C5-C6-O6	-5.28	125.43	128.60
1	AR	417	A	N1-C6-N6	-5.28	115.43	118.60
1	AR	1938	U	C6-N1-C2	5.28	124.17	121.00
81	sR	337	G	C2-N3-C4	5.28	114.54	111.90
81	sR	1641	C	N1-C2-O2	-5.28	115.73	118.90
1	1	428	A	OP2-P-O3'	5.28	116.82	105.20
81	sR	92	A	C8-N9-C4	5.28	107.91	105.80
1	1	3344	A	C8-N9-C4	-5.28	103.69	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	2401	A	C5-C6-N1	5.28	120.34	117.70
47	A	145	A	C8-N9-C4	-5.28	103.69	105.80
81	sR	1274	C	N1-C2-O2	5.28	122.07	118.90
1	1	2651	G	C6-C5-N7	5.28	133.57	130.40
1	1	2689	A	N1-C6-N6	-5.28	115.43	118.60
1	AR	2617	U	N3-C4-O4	-5.28	115.70	119.40
1	1	961	C	OP1-P-OP2	-5.28	111.68	119.60
1	1	2140	U	N3-C4-O4	-5.28	115.70	119.40
1	1	2273	G	C5-C6-O6	5.28	131.77	128.60
1	AR	500	C	OP1-P-O3'	5.28	116.81	105.20
56	s8	29	LEU	CA-CB-CG	5.28	127.44	115.30
5	k	387	LEU	CA-CB-CG	5.28	127.43	115.30
1	AR	75	G	O5'-P-OP1	5.28	117.03	110.70
1	AR	981	U	C6-N1-C2	-5.28	117.83	121.00
1	AR	2258	U	N1-C2-O2	5.28	126.49	122.80
1	AR	2974	U	OP1-P-O3'	5.28	116.81	105.20
47	A	1126	G	OP2-P-O3'	5.28	116.81	105.20
1	AR	1355	A	OP2-P-O3'	5.27	116.80	105.20
1	AR	1119	C	N3-C4-N4	-5.27	114.31	118.00
1	AR	1556	C	N3-C2-O2	-5.27	118.21	121.90
1	AR	3055	U	C6-N1-C1'	-5.27	113.82	121.20
1	1	1390	A	N1-C6-N6	-5.27	115.44	118.60
1	1	2977	G	C8-N9-C4	5.27	108.51	106.40
1	1	3213	A	C4-C5-C6	5.27	119.63	117.00
1	1	3277	U	N3-C2-O2	-5.27	118.51	122.20
1	AR	1854	C	C5-C4-N4	5.27	123.89	120.20
47	A	1171	A	N1-C6-N6	-5.27	115.44	118.60
1	AR	2983	C	OP1-P-OP2	5.27	127.50	119.60
1	1	2374	C	C2-N1-C1'	5.26	124.59	118.80
47	A	621	A	O4'-C1'-N9	-5.26	103.99	108.20
81	sR	696	C	O4'-C1'-N1	5.26	112.41	108.20
1	1	926	A	O5'-P-OP2	-5.26	100.96	105.70
1	1	948	C	N1-C2-O2	-5.26	115.74	118.90
1	1	1495	U	C2-N3-C4	-5.26	123.84	127.00
1	1	1713	G	C8-N9-C4	5.26	108.50	106.40
1	AR	1178	G	N3-C4-C5	-5.26	125.97	128.60
1	AR	1314	C	C2-N1-C1'	5.26	124.59	118.80
1	AR	1445	U	C5-C4-O4	-5.26	122.74	125.90
1	AR	1660	C	N3-C2-O2	-5.26	118.22	121.90
1	AR	2713	U	N1-C2-O2	5.26	126.48	122.80
1	1	2648	G	C4-C5-N7	5.26	112.90	110.80
1	AR	90	C	C6-N1-C2	-5.26	118.20	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	1104	G	C4-N9-C1'	5.26	133.34	126.50
47	A	1596	C	N1-C2-O2	5.26	122.06	118.90
1	1	61	A	N1-C6-N6	5.26	121.75	118.60
60	c2	58	LEU	CA-CB-CG	5.26	127.39	115.30
1	1	2942	C	C5-C6-N1	-5.26	118.37	121.00
1	AR	1465	A	C5-C6-N6	5.26	127.91	123.70
1	AR	3352	U	C6-N1-C2	-5.26	117.85	121.00
47	A	619	A	OP2-P-O3'	5.26	116.76	105.20
1	1	1351	U	N1-C2-O2	5.25	126.48	122.80
1	1	2944	U	OP2-P-O3'	5.25	116.76	105.20
1	AR	620	U	N1-C2-N3	5.25	118.05	114.90
1	AR	2215	A	C8-N9-C4	5.25	107.90	105.80
1	AR	2719	U	C2-N1-C1'	-5.25	111.39	117.70
1	1	2945	G	C5-C6-O6	-5.25	125.45	128.60
1	AR	655	C	C5-C6-N1	5.25	123.63	121.00
1	AR	2659	G	C5-C6-O6	-5.25	125.45	128.60
1	1	1680	G	N3-C2-N2	-5.25	116.22	119.90
1	AR	2149	A	C4-C5-C6	5.25	119.62	117.00
1	1	857	G	N1-C6-O6	5.25	123.05	119.90
1	1	2369	G	C8-N9-C4	-5.25	104.30	106.40
1	1	3089	C	C6-N1-C2	-5.25	118.20	120.30
81	sR	678	A	P-O3'-C3'	5.25	126.00	119.70
1	1	2651	G	N9-C4-C5	5.25	107.50	105.40
1	AR	2411	U	C5-C6-N1	-5.25	120.08	122.70
1	AR	2719	U	C5-C6-N1	-5.25	120.08	122.70
1	1	2816	G	O5'-P-OP2	-5.25	100.98	105.70
1	1	3242	G	C8-N9-C4	5.25	108.50	106.40
1	AR	2421	U	C5-C6-N1	-5.25	120.08	122.70
1	AR	2794	G	C4-C5-N7	5.25	112.90	110.80
1	1	2818	U	OP2-P-O3'	5.24	116.73	105.20
1	AR	1365	G	N3-C4-C5	-5.24	125.98	128.60
47	A	264	G	C8-N9-C1'	5.24	133.82	127.00
47	A	501	U	P-O3'-C3'	5.24	125.99	119.70
1	AR	3011	A	C8-N9-C4	5.24	107.90	105.80
1	1	304	G	C4-C5-N7	-5.24	108.70	110.80
1	1	1414	G	C5-C6-O6	-5.24	125.46	128.60
1	AR	1115	G	C6-C5-N7	-5.24	127.26	130.40
1	AR	1355	A	O4'-C1'-N9	5.24	112.39	108.20
1	AR	1878	G	C8-N9-C4	-5.24	104.30	106.40
47	A	795	U	N3-C2-O2	-5.24	118.53	122.20
2	3	73	C	N1-C2-O2	5.24	122.04	118.90
1	1	1329	U	C6-N1-C1'	-5.24	113.87	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	637	C	C6-N1-C1'	5.24	127.08	120.80
1	AR	2728	G	N3-C2-N2	-5.24	116.23	119.90
47	A	786	C	C6-N1-C2	-5.24	118.21	120.30
81	sR	1596	C	N3-C4-N4	-5.24	114.34	118.00
1	1	908	G	C4-N9-C1'	5.23	133.31	126.50
1	1	1131	G	C8-N9-C4	5.23	108.49	106.40
17	CQ	27	LEU	CB-CG-CD1	-5.23	102.10	111.00
1	1	962	A	P-O3'-C3'	5.23	125.98	119.70
1	1	2174	G	C5-C6-O6	-5.23	125.46	128.60
1	1	2393	G	N3-C2-N2	-5.23	116.24	119.90
1	AR	2093	A	C2-N3-C4	5.23	113.22	110.60
1	AR	2391	G	N1-C6-O6	-5.23	116.76	119.90
1	1	99	A	C5'-C4'-O4'	5.23	115.38	109.10
1	1	1870	C	C2-N1-C1'	-5.23	113.05	118.80
1	1	2372	A	O4'-C1'-N9	-5.23	104.02	108.20
1	1	3362	A	N1-C2-N3	5.23	131.91	129.30
81	sR	542	A	C4-C5-N7	5.23	113.31	110.70
1	AR	2285	C	C6-N1-C2	-5.23	118.21	120.30
1	1	832	G	C8-N9-C4	5.23	108.49	106.40
1	1	3340	G	N3-C4-N9	-5.23	122.86	126.00
1	AR	3155	U	C6-N1-C1'	-5.23	113.88	121.20
1	1	25	U	N3-C4-C5	-5.22	111.47	114.60
1	1	2798	C	C6-N1-C1'	5.22	127.07	120.80
1	AR	1137	C	C6-N1-C2	5.22	122.39	120.30
1	AR	1506	A	N9-C4-C5	5.22	107.89	105.80
1	AR	2333	C	N3-C2-O2	5.22	125.56	121.90
47	A	720	G	P-O3'-C3'	5.22	125.97	119.70
1	1	920	A	N1-C2-N3	5.22	131.91	129.30
1	AR	1556	C	N1-C2-O2	5.22	122.03	118.90
9	CI	211	SER	C-N-CA	-5.22	111.33	122.30
1	1	2418	G	N3-C4-C5	-5.22	125.99	128.60
1	1	158	G	C6-C5-N7	-5.22	127.27	130.40
1	1	968	G	N3-C4-N9	5.22	129.13	126.00
1	1	1911	A	N1-C6-N6	5.22	121.73	118.60
1	1	2541	U	P-O3'-C3'	5.22	125.96	119.70
1	AR	1321	G	C6-C5-N7	-5.22	127.27	130.40
47	A	1568	C	P-O3'-C3'	5.22	125.96	119.70
81	sR	542	A	C8-N9-C4	-5.22	103.71	105.80
1	1	2121	G	N1-C6-O6	-5.22	116.77	119.90
1	AR	2928	C	N1-C2-N3	5.22	122.85	119.20
81	sR	1023	A	OP1-P-O3'	5.22	116.68	105.20
1	1	1370	G	C4-C5-N7	5.22	112.89	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	2395	G	C5-N7-C8	5.22	106.91	104.30
1	AR	907	G	O5'-P-OP1	-5.22	101.00	105.70
81	sR	610	G	N3-C4-N9	5.22	129.13	126.00
1	1	2192	C	C5-C6-N1	-5.21	118.39	121.00
28	AA	7	ALA	CA-C-N	5.21	126.63	116.20
1	1	1848	G	O5'-P-OP1	-5.21	101.01	105.70
1	AR	221	A	O4'-C1'-N9	5.21	112.37	108.20
1	1	1111	U	N3-C4-C5	5.21	117.73	114.60
1	AR	3375	A	OP2-P-O3'	5.21	116.66	105.20
81	sR	1795	U	O5'-P-OP1	5.21	116.95	110.70
1	1	427	C	C5-C6-N1	5.21	123.61	121.00
1	1	1304	A	N1-C6-N6	-5.21	115.47	118.60
1	1	1624	G	N3-C4-N9	5.21	129.12	126.00
1	AR	2339	C	C2-N1-C1'	5.21	124.53	118.80
47	A	1344	A	C3'-C2'-C1'	5.21	105.67	101.50
81	sR	1629	G	C8-N9-C1'	-5.21	120.23	127.00
1	1	2884	C	N3-C4-C5	5.21	123.98	121.90
1	1	3182	G	C8-N9-C4	5.21	108.48	106.40
1	AR	1858	A	C8-N9-C4	-5.21	103.72	105.80
1	AR	3092	C	O4'-C1'-N1	5.21	112.37	108.20
1	AR	3128	G	N9-C4-C5	-5.21	103.32	105.40
1	AR	3276	G	C8-N9-C1'	5.21	133.77	127.00
1	1	2366	C	C2-N1-C1'	5.21	124.53	118.80
12	CL	125	LEU	CA-CB-CG	-5.21	103.33	115.30
1	1	1201	C	N3-C4-N4	5.20	121.64	118.00
1	1	2617	U	N3-C2-O2	-5.20	118.56	122.20
1	AR	3075	G	C8-N9-C4	-5.20	104.32	106.40
47	A	48	G	O5'-P-OP2	-5.20	101.02	105.70
47	A	1114	G	O4'-C1'-N9	5.20	112.36	108.20
1	1	669	U	C6-N1-C2	5.20	124.12	121.00
1	AR	3048	A	N1-C6-N6	5.20	121.72	118.60
81	sR	360	A	C5-N7-C8	-5.20	101.30	103.90
1	AR	272	G	N1-C6-O6	5.20	123.02	119.90
1	AR	903	U	N3-C4-O4	-5.20	115.76	119.40
1	AR	1748	G	C5-C6-O6	5.20	131.72	128.60
47	A	302	U	C5-C6-N1	5.20	125.30	122.70
1	1	2302	G	N1-C6-O6	-5.20	116.78	119.90
1	AR	1435	A	C5-N7-C8	-5.20	101.30	103.90
47	A	624	G	N1-C6-O6	-5.20	116.78	119.90
1	AR	887	G	C4-C5-N7	5.19	112.88	110.80
1	AR	2656	A	C8-N9-C4	-5.19	103.72	105.80
1	AR	822	G	O5'-P-OP1	-5.19	101.03	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	A	347	G	N1-C6-O6	5.19	123.02	119.90
1	1	2401	A	C8-N9-C4	-5.19	103.72	105.80
1	AR	3026	G	N1-C6-O6	5.19	123.01	119.90
1	AR	1372	C	C5-C6-N1	-5.19	118.41	121.00
81	sR	1117	U	O5'-P-OP2	-5.19	101.03	105.70
1	AR	838	G	N1-C6-O6	-5.19	116.79	119.90
1	AR	1869	C	C6-N1-C2	5.19	122.38	120.30
1	AR	2147	A	N1-C6-N6	5.19	121.71	118.60
1	AR	3306	U	C5-C4-O4	5.19	129.01	125.90
1	1	91	G	N3-C4-N9	-5.18	122.89	126.00
1	1	2734	A	OP2-P-O3'	5.18	116.61	105.20
47	A	941	A	N9-C4-C5	5.18	107.87	105.80
47	A	1240	U	O5'-P-OP2	5.18	116.92	110.70
81	sR	1413	U	OP2-P-O3'	5.18	116.61	105.20
1	1	1160	C	C6-N1-C2	5.18	122.37	120.30
1	AR	414	U	C6-N1-C2	5.18	124.11	121.00
1	AR	1844	C	N1-C2-N3	5.18	122.83	119.20
1	AR	2808	A	C8-N9-C4	5.18	107.87	105.80
81	sR	767	U	C5-C4-O4	5.18	129.01	125.90
1	1	2936	A	O5'-P-OP2	5.18	116.92	110.70
1	AR	2366	C	C6-N1-C1'	-5.18	114.58	120.80
1	1	2846	U	N1-C2-O2	5.18	126.43	122.80
1	AR	517	G	C4-N9-C1'	5.18	133.23	126.50
81	sR	245	U	C6-N1-C2	-5.18	117.89	121.00
1	AR	283	G	C5-N7-C8	-5.18	101.71	104.30
81	sR	1758	U	N1-C2-O2	-5.18	119.18	122.80
1	AR	2403	G	O5'-P-OP2	-5.18	101.04	105.70
47	A	941	A	N1-C6-N6	-5.18	115.49	118.60
1	AR	974	G	N3-C4-C5	-5.17	126.01	128.60
1	AR	2663	G	N1-C6-O6	5.17	123.00	119.90
81	sR	107	C	OP2-P-O3'	5.17	116.58	105.20
1	1	1115	G	N9-C4-C5	5.17	107.47	105.40
1	AR	3276	G	C6-C5-N7	5.17	133.50	130.40
1	AR	3116	G	C8-N9-C4	-5.17	104.33	106.40
47	A	582	U	C5-C6-N1	5.17	125.29	122.70
81	sR	298	C	N3-C2-O2	5.17	125.52	121.90
1	1	3200	G	N3-C2-N2	-5.17	116.28	119.90
81	sR	1006	C	OP1-P-O3'	-5.17	93.83	105.20
1	1	1399	A	C2-N3-C4	-5.17	108.02	110.60
81	sR	163	G	C8-N9-C4	-5.17	104.33	106.40
1	AR	111	C	N3-C4-C5	5.17	123.97	121.90
47	A	602	U	O5'-P-OP1	-5.17	101.05	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	2983	C	N1-C2-N3	5.17	122.81	119.20
3	AT	23	U	N1-C2-N3	5.17	118.00	114.90
1	AR	2978	U	N1-C2-O2	5.16	126.42	122.80
47	A	302	U	C2-N1-C1'	5.16	123.90	117.70
1	AR	2257	C	O4'-C1'-N1	5.16	112.33	108.20
1	1	339	C	OP1-P-OP2	-5.16	111.86	119.60
1	1	3184	A	C8-N9-C4	5.16	107.86	105.80
1	AR	594	U	C5-C4-O4	-5.16	122.81	125.90
1	AR	2794	G	O4'-C1'-N9	5.16	112.33	108.20
1	AR	3245	A	C4-C5-N7	5.16	113.28	110.70
1	AR	3245	A	N1-C6-N6	5.16	121.69	118.60
1	AR	3269	U	N3-C2-O2	-5.16	118.59	122.20
2	AS	92	A	N1-C6-N6	5.16	121.69	118.60
1	1	1716	U	P-O3'-C3'	5.16	125.89	119.70
1	1	2889	C	N3-C2-O2	-5.16	118.29	121.90
1	1	3218	A	C4-C5-N7	5.16	113.28	110.70
1	AR	61	A	C4-C5-C6	5.16	119.58	117.00
1	AR	1149	G	N3-C2-N2	-5.16	116.29	119.90
1	AR	1427	U	N3-C2-O2	-5.16	118.59	122.20
1	AR	1902	G	C6-C5-N7	-5.16	127.31	130.40
81	sR	1389	C	N1-C2-O2	5.16	121.99	118.90
1	1	2273	G	N3-C4-N9	-5.15	122.91	126.00
1	AR	2304	C	O5'-P-OP1	-5.15	101.06	105.70
1	AR	2618	G	N9-C4-C5	-5.15	103.34	105.40
81	sR	1668	G	OP2-P-O3'	5.15	116.54	105.20
1	1	282	G	P-O3'-C3'	5.15	125.88	119.70
1	1	2626	A	O5'-P-OP1	-5.15	101.06	105.70
1	AR	1556	C	C5-C6-N1	5.15	123.58	121.00
1	AR	3218	A	P-O3'-C3'	5.15	125.88	119.70
36	DJ	28	LEU	CA-CB-CG	5.15	127.15	115.30
66	c8	15	LEU	CA-CB-CG	5.15	127.14	115.30
1	AR	840	C	N1-C2-N3	5.15	122.80	119.20
1	AR	2327	U	C5-C6-N1	-5.15	120.12	122.70
1	AR	2417	U	N1-C2-O2	-5.15	119.20	122.80
1	AR	278	U	N3-C2-O2	5.15	125.80	122.20
1	AR	921	A	C8-N9-C4	-5.15	103.74	105.80
1	AR	1786	G	N3-C4-C5	-5.15	126.03	128.60
1	AR	2400	G	OP1-P-O3'	5.15	116.53	105.20
1	1	984	G	N1-C6-O6	-5.14	116.81	119.90
1	AR	3374	U	C2-N1-C1'	-5.14	111.53	117.70
1	1	48	A	O4'-C1'-N9	5.14	112.31	108.20
1	1	505	G	C8-N9-C4	5.14	108.46	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	AT	20	U	C5-C6-N1	-5.14	120.13	122.70
47	A	1354	G	C8-N9-C4	-5.14	104.34	106.40
49	C	96	LEU	CA-CB-CG	5.14	127.13	115.30
81	sR	1670	G	C5-N7-C8	-5.14	101.73	104.30
1	AR	658	G	N1-C6-O6	5.14	122.98	119.90
1	AR	1419	A	O5'-P-OP1	5.14	116.87	110.70
1	AR	2665	U	O5'-P-OP2	-5.14	101.07	105.70
2	AS	12	U	C5-C4-O4	-5.14	122.81	125.90
1	1	1180	A	N1-C6-N6	-5.14	115.52	118.60
1	AR	1489	A	C5-C6-N6	-5.14	119.59	123.70
1	AR	1755	C	C6-N1-C2	5.14	122.36	120.30
1	AR	2820	A	N7-C8-N9	5.14	116.37	113.80
1	1	1639	C	O5'-P-OP2	-5.14	101.08	105.70
1	AR	2256	A	N9-C4-C5	-5.14	103.75	105.80
1	1	305	U	N1-C2-O2	5.14	126.40	122.80
1	1	2758	A	C5-C6-N1	5.14	120.27	117.70
1	1	2983	C	C5-C4-N4	5.14	123.80	120.20
1	1	3181	C	C6-N1-C2	-5.14	118.25	120.30
1	AR	358	G	N3-C4-C5	5.14	131.17	128.60
1	AR	590	G	C5-C6-O6	-5.14	125.52	128.60
1	AR	2144	A	N1-C6-N6	5.14	121.68	118.60
1	AR	2984	C	N3-C2-O2	-5.14	118.31	121.90
47	A	401	A	C8-N9-C4	-5.14	103.75	105.80
1	1	585	A	O5'-P-OP1	-5.13	101.08	105.70
1	1	2394	G	OP2-P-O3'	5.13	116.50	105.20
1	1	2704	A	C8-N9-C4	5.13	107.85	105.80
1	AR	993	G	O4'-C1'-N9	5.13	112.31	108.20
1	AR	1108	U	O5'-P-OP2	-5.13	101.08	105.70
1	1	1433	A	C5-C6-N1	5.13	120.27	117.70
1	1	2309	A	N9-C4-C5	-5.13	103.75	105.80
47	A	1118	G	N1-C6-O6	5.13	122.98	119.90
47	A	1555	A	O5'-P-OP2	-5.13	101.08	105.70
81	sR	845	G	C4-N9-C1'	-5.13	119.83	126.50
1	AR	2145	A	C4-N9-C1'	5.13	135.53	126.30
3	AT	26	U	N1-C2-O2	5.13	126.39	122.80
1	1	1117	G	C4-C5-N7	5.13	112.85	110.80
1	1	2617	U	C2-N3-C4	-5.13	123.92	127.00
1	AR	3048	A	C5-C6-N6	-5.13	119.60	123.70
3	AT	26	U	N3-C2-O2	-5.13	118.61	122.20
1	1	648	C	C6-N1-C2	-5.12	118.25	120.30
1	AR	960	U	N3-C4-O4	5.12	122.99	119.40
81	sR	1782	A	O5'-P-OP1	-5.12	101.09	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	281	G	C6-N1-C2	-5.12	122.03	125.10
1	1	793	C	C5-C4-N4	-5.12	116.61	120.20
1	AR	403	C	OP2-P-O3'	5.12	116.47	105.20
1	AR	1908	A	C8-N9-C4	-5.12	103.75	105.80
1	AR	2263	C	O4'-C1'-N1	5.12	112.30	108.20
1	1	66	A	O5'-P-OP2	5.12	116.84	110.70
1	1	2808	A	O4'-C1'-N9	-5.12	104.11	108.20
1	AR	2871	G	P-O3'-C3'	5.12	125.84	119.70
47	A	507	U	N3-C2-O2	-5.12	118.62	122.20
47	A	1620	C	C6-N1-C2	-5.12	118.25	120.30
81	sR	815	G	C6-C5-N7	5.12	133.47	130.40
81	sR	767	U	N3-C2-O2	-5.12	118.62	122.20
1	AR	2809	C	C5-C6-N1	-5.12	118.44	121.00
1	1	272	G	N1-C6-O6	-5.11	116.83	119.90
1	1	1899	G	C4-C5-N7	5.11	112.85	110.80
1	AR	955	U	C2-N3-C4	-5.11	123.93	127.00
1	1	803	C	C4-C5-C6	-5.11	114.84	117.40
1	AR	1506	A	C8-N9-C4	-5.11	103.75	105.80
1	1	350	C	N3-C2-O2	-5.11	118.32	121.90
1	1	1115	G	OP1-P-OP2	-5.11	111.93	119.60
1	1	2323	G	N1-C6-O6	-5.11	116.83	119.90
1	AR	585	A	O5'-P-OP2	-5.11	101.10	105.70
1	1	509	U	N1-C2-N3	5.11	117.97	114.90
1	1	944	C	OP2-P-O3'	5.11	116.44	105.20
2	AS	42	A	N1-C6-N6	5.11	121.67	118.60
47	A	728	U	C6-N1-C1'	-5.11	114.05	121.20
1	1	1819	U	C5-C6-N1	5.11	125.25	122.70
1	AR	2920	U	N1-C2-O2	-5.11	119.22	122.80
3	AT	68	G	C6-C5-N7	-5.11	127.34	130.40
1	1	494	G	C8-N9-C1'	-5.11	120.36	127.00
1	1	1911	A	C5-C6-N6	-5.11	119.61	123.70
1	1	2400	G	C2-N3-C4	-5.11	109.35	111.90
1	AR	620	U	O4'-C1'-N1	5.11	112.28	108.20
1	AR	1604	G	N3-C4-N9	5.11	129.06	126.00
1	1	3390	G	N1-C6-O6	5.10	122.96	119.90
1	AR	817	A	O5'-P-OP1	-5.10	101.11	105.70
1	1	642	U	N3-C2-O2	-5.10	118.63	122.20
1	1	658	G	C8-N9-C1'	-5.10	120.37	127.00
1	1	1045	C	O5'-P-OP2	-5.10	101.11	105.70
1	1	1145	G	N1-C6-O6	5.10	122.96	119.90
1	1	1389	G	C6-C5-N7	-5.10	127.34	130.40
16	v	22	LEU	CA-CB-CG	5.10	127.04	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	38	U	C6-N1-C2	5.10	124.06	121.00
81	sR	1568	C	P-O3'-C3'	5.10	125.82	119.70
1	AR	1897	G	C5-C6-N1	-5.10	108.95	111.50
1	1	432	G	C6-C5-N7	-5.10	127.34	130.40
1	AR	652	G	N3-C4-C5	-5.10	126.05	128.60
47	A	577	G	N3-C4-C5	-5.10	126.05	128.60
1	1	359	U	N1-C2-N3	5.10	117.96	114.90
1	1	937	G	O5'-P-OP2	-5.10	101.11	105.70
1	AR	2618	G	C8-N9-C4	5.10	108.44	106.40
47	A	976	G	N9-C4-C5	5.10	107.44	105.40
81	sR	1765	A	C8-N9-C4	5.10	107.84	105.80
1	1	282	G	C8-N9-C4	-5.10	104.36	106.40
1	1	1217	A	OP2-P-O3'	5.10	116.41	105.20
1	1	2983	C	N1-C2-N3	5.10	122.77	119.20
47	A	1458	G	C4-N9-C1'	5.10	133.12	126.50
81	sR	987	G	C5-C6-O6	-5.10	125.54	128.60
1	1	424	G	O5'-P-OP2	-5.09	101.11	105.70
1	1	659	G	OP2-P-O3'	5.09	116.41	105.20
1	1	1877	U	C5-C6-N1	-5.09	120.15	122.70
1	1	2688	U	C6-N1-C1'	-5.09	114.07	121.20
47	A	1644	C	N3-C2-O2	-5.09	118.33	121.90
81	sR	646	C	C6-N1-C2	-5.09	118.26	120.30
1	AR	660	A	OP1-P-O3'	5.09	116.41	105.20
1	AR	1335	C	OP2-P-O3'	5.09	116.41	105.20
47	A	1059	U	N1-C2-O2	5.09	126.36	122.80
1	1	199	A	N1-C6-N6	5.09	121.65	118.60
1	1	230	U	N1-C2-N3	5.09	117.95	114.90
1	1	1547	G	C8-N9-C4	5.09	108.44	106.40
36	AI	118	ILE	C-N-CA	-5.09	108.97	121.70
1	AR	343	U	O5'-P-OP2	5.09	116.81	110.70
1	AR	921	A	N9-C4-C5	5.09	107.84	105.80
1	AR	2816	G	N3-C4-C5	5.09	131.15	128.60
47	A	1503	A	N1-C6-N6	5.09	121.66	118.60
81	sR	800	U	N3-C2-O2	-5.09	118.64	122.20
1	1	91	G	N3-C4-C5	5.09	131.15	128.60
1	1	92	G	N3-C4-N9	5.09	129.05	126.00
1	AR	1496	C	N1-C2-O2	5.09	121.95	118.90
1	AR	1722	U	N3-C4-C5	5.09	117.65	114.60
1	AR	2836	C	C4-C5-C6	5.09	119.94	117.40
47	A	577	G	C2-N3-C4	5.09	114.44	111.90
1	1	3278	C	C6-N1-C2	-5.09	118.27	120.30
1	AR	2297	U	O5'-P-OP2	-5.09	101.12	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	2950	G	N1-C2-N3	-5.08	120.85	123.90
47	A	1796	C	C4-C5-C6	5.08	119.94	117.40
1	1	1453	A	OP2-P-O3'	5.08	116.38	105.20
1	AR	3377	G	O5'-P-OP2	5.08	116.80	110.70
1	1	903	U	N1-C2-O2	5.08	126.36	122.80
1	AR	150	A	N1-C6-N6	5.08	121.65	118.60
3	AT	51	G	C5-C6-O6	-5.08	125.55	128.60
1	1	43	A	C2-N3-C4	-5.08	108.06	110.60
1	AR	661	G	O5'-P-OP1	-5.08	101.13	105.70
1	AR	2634	U	C2-N3-C4	-5.08	123.95	127.00
1	1	199	A	O4'-C1'-N9	5.08	112.26	108.20
1	1	1481	A	N7-C8-N9	5.08	116.34	113.80
1	AR	383	G	N3-C4-C5	5.08	131.14	128.60
47	A	1773	C	C5-C6-N1	5.08	123.54	121.00
1	1	111	C	C4-C5-C6	5.08	119.94	117.40
1	AR	2616	C	OP2-P-O3'	5.08	116.37	105.20
1	AR	2763	U	C5-C4-O4	-5.08	122.86	125.90
1	AR	2772	C	C2-N1-C1'	5.08	124.38	118.80
81	sR	1094	G	C5-C6-O6	5.08	131.65	128.60
1	1	421	G	C6-C5-N7	-5.07	127.36	130.40
1	1	2954	U	C5-C4-O4	-5.07	122.86	125.90
3	4	85	G	C8-N9-C4	-5.07	104.37	106.40
1	AR	202	G	C4-C5-N7	5.07	112.83	110.80
3	AT	33	A	C8-N9-C4	5.07	107.83	105.80
81	sR	75	U	C2-N1-C1'	5.07	123.79	117.70
81	sR	1347	U	N1-C2-O2	-5.07	119.25	122.80
81	sR	1640	C	C6-N1-C1'	-5.07	114.71	120.80
1	1	615	U	C5-C4-O4	5.07	128.94	125.90
1	1	695	C	N3-C4-C5	5.07	123.93	121.90
1	1	2249	G	N1-C6-O6	-5.07	116.86	119.90
1	1	2993	G	C5-C6-O6	-5.07	125.56	128.60
1	AR	658	G	C6-C5-N7	-5.07	127.36	130.40
1	AR	1899	G	C8-N9-C4	-5.07	104.37	106.40
1	AR	2981	U	C2-N1-C1'	5.07	123.78	117.70
47	A	543	C	N1-C2-O2	5.07	121.94	118.90
47	A	1268	G	O5'-P-OP2	-5.07	101.14	105.70
81	sR	337	G	C4-C5-N7	5.07	112.83	110.80
1	1	1581	C	C6-N1-C2	-5.07	118.27	120.30
1	1	2812	C	N3-C2-O2	-5.07	118.35	121.90
1	AR	1489	A	N1-C6-N6	5.07	121.64	118.60
1	1	103	G	N3-C4-C5	-5.07	126.07	128.60
1	1	2714	G	C4-C5-N7	5.07	112.83	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	1116	G	N9-C4-C5	5.07	107.43	105.40
1	AR	1211	U	OP2-P-O3'	5.07	116.35	105.20
81	sR	1670	G	N7-C8-N9	5.07	115.63	113.10
1	1	1052	U	C5-C4-O4	5.07	128.94	125.90
1	1	2247	G	C6-C5-N7	-5.07	127.36	130.40
1	AR	666	A	N9-C4-C5	5.07	107.83	105.80
1	AR	2888	U	N3-C4-O4	5.07	122.94	119.40
1	AR	2976	A	N1-C6-N6	-5.07	115.56	118.60
1	1	2176	U	N3-C2-O2	-5.06	118.66	122.20
1	1	2345	A	C6-C5-N7	-5.06	128.75	132.30
1	AR	3022	G	C5-C6-O6	5.06	131.64	128.60
81	sR	1000	C	C4-C5-C6	5.06	119.93	117.40
1	1	200	C	N3-C4-N4	5.06	121.54	118.00
1	1	943	U	N1-C2-O2	5.06	126.34	122.80
1	1	3213	A	C6-C5-N7	-5.06	128.76	132.30
1	AR	293	C	O5'-P-OP1	-5.06	101.14	105.70
1	AR	1103	A	O4'-C1'-N9	5.06	112.25	108.20
1	AR	1829	G	OP2-P-O3'	5.06	116.34	105.20
1	AR	2393	G	N1-C6-O6	5.06	122.94	119.90
1	AR	2975	U	O5'-P-OP1	-5.06	101.14	105.70
1	1	3049	A	N1-C6-N6	5.06	121.64	118.60
1	AR	2393	G	C4-C5-N7	5.06	112.82	110.80
1	AR	2903	A	C2-N3-C4	-5.06	108.07	110.60
1	1	1366	A	N7-C8-N9	5.06	116.33	113.80
1	1	2996	U	N3-C2-O2	-5.06	118.66	122.20
1	AR	1103	A	OP1-P-O3'	5.06	116.33	105.20
1	AR	2623	G	C4-C5-N7	5.06	112.82	110.80
1	AR	2634	U	C5-C4-O4	-5.06	122.86	125.90
1	AR	3066	U	C5-C4-O4	5.06	128.94	125.90
1	AR	739	G	O5'-P-OP1	-5.06	101.15	105.70
1	AR	2285	C	C5-C6-N1	5.06	123.53	121.00
1	AR	950	G	C5-C6-O6	-5.06	125.57	128.60
1	1	2388	U	OP2-P-O3'	5.05	116.32	105.20
1	AR	810	A	C8-N9-C4	-5.05	103.78	105.80
81	sR	163	G	C8-N9-C1'	5.05	133.57	127.00
81	sR	871	G	C5-C6-N1	-5.05	108.97	111.50
47	A	1206	U	N3-C4-O4	5.05	122.94	119.40
1	AR	725	G	C5-C6-O6	5.05	131.63	128.60
1	AR	2136	C	OP2-P-O3'	5.05	116.31	105.20
1	AR	2330	C	O5'-P-OP2	-5.05	101.15	105.70
1	AR	2605	G	C5-C6-O6	-5.05	125.57	128.60
81	sR	543	C	C6-N1-C2	-5.05	118.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	790	U	C5-C4-O4	5.05	128.93	125.90
1	1	866	A	N9-C4-C5	-5.05	103.78	105.80
1	1	3085	G	C6-C5-N7	-5.05	127.37	130.40
1	AR	939	U	C2-N1-C1'	-5.05	111.64	117.70
1	AR	1370	G	N3-C4-C5	-5.05	126.08	128.60
1	AR	2197	C	C2-N1-C1'	-5.05	113.25	118.80
1	AR	2342	U	N3-C4-O4	-5.05	115.86	119.40
1	1	369	A	C2-N3-C4	5.05	113.12	110.60
1	1	715	A	P-O3'-C3'	5.05	125.76	119.70
1	1	1269	U	N3-C2-O2	-5.05	118.67	122.20
1	1	267	G	N1-C6-O6	5.05	122.93	119.90
1	1	812	G	N3-C2-N2	-5.05	116.37	119.90
1	AR	2817	A	C5-C6-N6	-5.05	119.66	123.70
1	AR	3146	G	N1-C2-N2	-5.05	111.66	116.20
81	sR	1196	A	P-O3'-C3'	5.05	125.76	119.70
1	AR	2273	G	C4-N9-C1'	-5.04	119.94	126.50
1	1	3244	A	C8-N9-C4	5.04	107.82	105.80
1	AR	2282	U	O5'-P-OP2	-5.04	101.16	105.70
1	1	494	G	C4-N9-C1'	5.04	133.06	126.50
1	1	644	G	C8-N9-C4	-5.04	104.38	106.40
4	j	55	GLY	C-N-CA	5.04	134.30	121.70
1	AR	2417	U	N3-C4-O4	5.04	122.93	119.40
1	AR	2871	G	N1-C6-O6	-5.04	116.88	119.90
1	1	212	G	N9-C4-C5	-5.04	103.38	105.40
1	1	1365	G	N1-C6-O6	-5.04	116.88	119.90
81	sR	1007	C	O5'-P-OP1	-5.04	101.17	105.70
81	sR	577	G	C5-C6-N1	5.04	114.02	111.50
81	sR	815	G	C8-N9-C1'	5.04	133.55	127.00
1	1	426	G	N3-C4-C5	-5.04	126.08	128.60
1	1	818	C	OP1-P-OP2	-5.04	112.05	119.60
1	1	1849	C	N3-C2-O2	5.04	125.42	121.90
1	1	2699	G	C6-C5-N7	-5.04	127.38	130.40
1	AR	586	C	N3-C4-C5	5.04	123.92	121.90
1	AR	2319	U	N3-C2-O2	-5.04	118.67	122.20
1	AR	2951	G	C5-C6-N1	5.04	114.02	111.50
47	A	1347	U	N1-C2-O2	-5.04	119.28	122.80
81	sR	1669	U	N3-C2-O2	-5.04	118.67	122.20
1	1	678	G	N3-C2-N2	-5.03	116.38	119.90
1	1	754	G	OP2-P-O3'	5.03	116.27	105.20
1	1	2314	U	P-O3'-C3'	-5.03	113.66	119.70
1	1	2727	A	O5'-P-OP1	-5.03	101.17	105.70
1	AR	2732	G	N1-C6-O6	5.03	122.92	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	A	976	G	C5-C6-O6	5.03	131.62	128.60
47	A	1124	A	C2-N3-C4	-5.03	108.08	110.60
47	A	1365	C	C6-N1-C2	-5.03	118.29	120.30
81	sR	953	G	C8-N9-C4	5.03	108.41	106.40
1	1	2731	U	N3-C4-O4	5.03	122.92	119.40
1	AR	2617	U	C2-N3-C4	-5.03	123.98	127.00
1	1	2634	U	C4-C5-C6	5.03	122.72	119.70
1	AR	1435	A	C4-C5-N7	5.03	113.21	110.70
1	AR	1604	G	C8-N9-C1'	-5.03	120.47	127.00
81	sR	217	A	P-O3'-C3'	5.03	125.73	119.70
1	1	802	C	O5'-P-OP2	5.03	116.73	110.70
1	1	1543	G	C6-C5-N7	-5.03	127.39	130.40
1	1	1496	C	C4-C5-C6	-5.02	114.89	117.40
1	AR	1671	C	C6-N1-C2	-5.02	118.29	120.30
1	AR	2606	G	N1-C6-O6	-5.02	116.89	119.90
1	1	501	A	C8-N9-C4	5.02	107.81	105.80
13	CM	172	LEU	CA-CB-CG	5.02	126.85	115.30
1	1	155	G	N3-C4-N9	5.02	129.01	126.00
1	1	2385	G	OP1-P-O3'	5.02	116.24	105.20
1	AR	355	A	C2-N3-C4	-5.02	108.09	110.60
1	AR	2860	U	OP1-P-OP2	5.02	127.13	119.60
1	1	408	A	OP2-P-O3'	5.02	116.24	105.20
1	1	691	A	OP1-P-O3'	5.02	116.24	105.20
1	1	1724	U	O4'-C1'-N1	5.02	112.21	108.20
1	AR	788	C	OP2-P-O3'	5.02	116.24	105.20
1	AR	2399	A	C8-N9-C4	5.02	107.81	105.80
1	1	793	C	N3-C4-N4	5.02	121.51	118.00
1	1	3218	A	C6-C5-N7	-5.02	128.79	132.30
47	A	365	G	C4-C5-N7	5.02	112.81	110.80
1	AR	634	C	C2-N3-C4	-5.01	117.39	119.90
1	AR	1298	C	N1-C2-O2	-5.01	115.89	118.90
1	AR	1495	U	N3-C4-O4	-5.01	115.89	119.40
81	sR	382	C	N3-C4-C5	5.01	123.91	121.90
1	1	864	G	O5'-P-OP1	-5.01	101.19	105.70
1	AR	70	A	C8-N9-C4	-5.01	103.80	105.80
1	AR	640	U	N3-C4-O4	5.01	122.91	119.40
1	AR	2405	C	C4-C5-C6	5.01	119.91	117.40
1	AR	1208	U	C5-C4-O4	-5.01	122.89	125.90
1	AR	2198	A	C2-N3-C4	-5.01	108.09	110.60
1	AR	2388	U	N3-C4-O4	5.01	122.91	119.40
81	sR	868	G	C4-C5-N7	5.01	112.80	110.80
1	AR	76	G	C2-N3-C4	-5.01	109.40	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AR	1400	G	N1-C6-O6	-5.01	116.89	119.90
47	A	317	C	C6-N1-C2	5.01	122.30	120.30
1	1	701	G	OP2-P-O3'	5.01	116.22	105.20
1	AR	2257	C	C6-N1-C2	-5.01	118.30	120.30
1	AR	2820	A	C8-N9-C4	-5.01	103.80	105.80
1	1	105	C	C5-C4-N4	-5.00	116.70	120.20
1	AR	3182	G	C5-C6-O6	5.00	131.60	128.60
1	1	1552	G	C5-C6-O6	-5.00	125.60	128.60
1	AR	1496	C	N3-C2-O2	-5.00	118.40	121.90
1	AR	2640	A	C8-N9-C4	5.00	107.80	105.80
9	CI	179	LEU	CA-CB-CG	5.00	126.81	115.30
81	sR	558	U	C5-C6-N1	5.00	125.20	122.70
1	1	688	G	N3-C4-C5	-5.00	126.10	128.60
1	1	765	C	C6-N1-C2	-5.00	118.30	120.30
1	1	2861	U	N3-C2-O2	-5.00	118.70	122.20
1	AR	2130	G	C2-N3-C4	-5.00	109.40	111.90
1	AR	2961	G	OP2-P-O3'	5.00	116.20	105.20
47	A	590	C	N3-C2-O2	-5.00	118.40	121.90

There are no chirality outliers.

All (124) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
21	0	22	PRO	Peptide
22	2	16	GLN	Peptide
28	AA	102	GLU	Peptide
29	AB	23	GLY	Peptide
30	AC	19	ASN	Peptide
32	AE	5	LYS	Peptide
32	AE	6	ASP	Peptide
36	AI	83	LYS	Peptide
48	B	166	GLY	Peptide
48	B	190	ASP	Peptide
5	CE	315	GLY	Peptide
5	CE	349	LYS	Peptide
6	CF	13	GLY	Peptide
7	CG	124	GLU	Peptide
7	CG	257	GLU	Peptide
7	CG	258	LYS	Peptide
7	CG	58	LYS	Peptide
8	CH	51	ARG	Peptide
9	CI	157	ASN	Peptide

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Mol	Chain	Res	Type	Group
9	CI	190	THR	Peptide
10	CJ	119	GLY	Peptide
10	CJ	34	PHE	Peptide
10	CJ	35	GLY	Peptide
11	CK	21	LYS	Peptide
13	CM	172	LEU	Peptide
14	CN	47	ALA	Peptide
15	CO	7	VAL	Peptide
16	CP	93	LYS	Peptide
17	CQ	110	PRO	Peptide,Mainchain
19	CS	161	LYS	Peptide
28	DB	3	LYS	Peptide
29	DC	97	GLU	Peptide
30	DD	19	ASN	Peptide
36	DJ	118	ILE	Peptide
43	DQ	31	GLY	Peptide
51	E	219	ALA	Peptide
52	F	195	ILE	Peptide
53	G	57	SER	Peptide
53	G	65	ARG	Peptide
54	H	148	SER	Peptide
54	H	67	VAL	Peptide
55	I	110	GLN	Peptide
55	I	131	PHE	Peptide
55	I	30	SER	Peptide
55	I	63	PRO	Peptide
56	J	147	ALA	Peptide
56	J	198	ALA	Peptide
57	K	137	GLY	Peptide
57	K	163	PRO	Peptide
59	M	3	THR	Peptide
59	M	5	LEU	Peptide
60	N	105	LYS	Peptide
60	N	110	GLY	Peptide
60	N	129	GLU	Peptide
60	N	130	THR	Peptide
61	O	28	LEU	Peptide
62	P	123	SER	Peptide
64	R	40	GLU	Peptide
80	Rb	160	GLU	Peptide
80	Rb	280	GLY	Peptide
66	T	144	ARG	Peptide

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Mol	Chain	Res	Type	Group
66	T	81	ILE	Peptide
66	T	90	ASN	Peptide
71	Y	44	GLY	Peptide
71	Y	88	PRO	Peptide
73	a	94	LYS	Peptide
74	b	10	ARG	Peptide
74	b	74	CYS	Peptide
74	b	83	ILE	Peptide
60	c2	108	ARG	Peptide
60	c2	130	THR	Peptide
61	c3	21	ASN	Peptide
61	c3	22	ALA	Peptide
62	c4	11	SER	Peptide
62	c4	34	SER	Peptide
62	c4	90	ARG	Peptide
63	c5	124	THR	Peptide
63	c5	52	LYS	Peptide
64	c6	115	THR	Peptide
64	c6	40	GLU	Peptide
64	c6	41	PRO	Peptide
65	c7	105	GLN	Peptide
66	c8	101	LEU	Peptide
66	c8	90	ASN	Peptide
66	c8	91	ASP	Peptide
69	d1	42	GLU	Peptide
71	d3	44	GLY	Peptide
72	d4	29	HIS	Peptide
78	e0	46	ASN	Peptide
79	e1	146	SER	Peptide
79	g	103	LEU	Peptide
79	g	146	SER	Peptide
79	g	88	PRO	Peptide
4	j	48	ILE	Peptide
5	k	139	GLN	Peptide
5	k	315	GLY	Peptide
6	l	291	ASN	Peptide
6	l	292	SER	Peptide
6	l	338	LYS	Peptide
7	m	258	LYS	Peptide
7	m	6	ASP	Peptide
7	m	7	ALA	Peptide
9	o	157	ASN	Peptide

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Mol	Chain	Res	Type	Group
9	o	231	ASN	Peptide
46	p0	31	ASP	Peptide
11	q	22	SER	Peptide
13	s	73	GLY	Peptide
48	s0	94	GLY	Peptide
50	s2	106	ASP	Peptide
51	s3	144	ALA	Peptide
51	s3	216	PRO	Peptide
51	s3	219	ALA	Peptide
53	s5	44	ASN	Peptide
54	s6	68	LEU	Peptide
55	s7	130	VAL	Peptide
55	s7	63	PRO	Peptide
56	s8	100	ALA	Peptide
14	t	47	ALA	Peptide
15	u	7	VAL	Peptide
15	u	8	LYS	Peptide
16	v	89	VAL	Peptide
16	v	93	LYS	Peptide
17	w	110	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	
4	CD	250/254 (98%)	225 (90%)	25 (10%)	0	100	100
4	j	250/254 (98%)	223 (89%)	26 (10%)	1 (0%)	34	69
5	CE	384/387 (99%)	347 (90%)	34 (9%)	3 (1%)	19	54

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
5	k	384/387 (99%)	343 (89%)	37 (10%)	4 (1%)	15 49
6	CF	359/362 (99%)	315 (88%)	44 (12%)	0	100 100
6	l	359/362 (99%)	322 (90%)	35 (10%)	2 (1%)	25 59
7	CG	294/297 (99%)	240 (82%)	49 (17%)	5 (2%)	9 36
7	m	294/297 (99%)	252 (86%)	39 (13%)	3 (1%)	15 49
8	CH	152/176 (86%)	135 (89%)	16 (10%)	1 (1%)	22 57
8	n	152/176 (86%)	143 (94%)	9 (6%)	0	100 100
9	CI	220/244 (90%)	201 (91%)	15 (7%)	4 (2%)	8 34
9	o	220/244 (90%)	198 (90%)	18 (8%)	4 (2%)	8 34
10	CJ	231/256 (90%)	204 (88%)	26 (11%)	1 (0%)	34 69
10	p	231/256 (90%)	205 (89%)	25 (11%)	1 (0%)	34 69
11	CK	189/191 (99%)	173 (92%)	16 (8%)	0	100 100
11	q	189/191 (99%)	164 (87%)	23 (12%)	2 (1%)	14 46
12	CL	207/221 (94%)	184 (89%)	23 (11%)	0	100 100
12	r	207/221 (94%)	185 (89%)	22 (11%)	0	100 100
13	CM	167/174 (96%)	136 (81%)	30 (18%)	1 (1%)	25 59
13	s	167/174 (96%)	133 (80%)	31 (19%)	3 (2%)	8 34
14	CN	191/199 (96%)	165 (86%)	20 (10%)	6 (3%)	4 23
14	t	191/199 (96%)	168 (88%)	17 (9%)	6 (3%)	4 23
15	CO	134/138 (97%)	120 (90%)	13 (10%)	1 (1%)	22 57
15	u	134/138 (97%)	117 (87%)	16 (12%)	1 (1%)	22 57
16	CP	201/204 (98%)	182 (90%)	18 (9%)	1 (0%)	29 64
16	v	201/204 (98%)	181 (90%)	16 (8%)	4 (2%)	7 31
17	CQ	195/199 (98%)	185 (95%)	9 (5%)	1 (0%)	29 64
17	w	195/199 (98%)	186 (95%)	7 (4%)	2 (1%)	15 49
18	CR	181/184 (98%)	154 (85%)	27 (15%)	0	100 100
18	x	181/184 (98%)	159 (88%)	22 (12%)	0	100 100
19	CS	183/186 (98%)	156 (85%)	26 (14%)	1 (0%)	29 64
19	y	183/186 (98%)	170 (93%)	13 (7%)	0	100 100
20	CT	186/189 (98%)	165 (89%)	21 (11%)	0	100 100
20	z	186/189 (98%)	174 (94%)	12 (6%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
21	0	170/172 (99%)	154 (91%)	16 (9%)	0	100	100
21	CU	170/172 (99%)	157 (92%)	12 (7%)	1 (1%)	25	59
22	2	157/160 (98%)	140 (89%)	16 (10%)	1 (1%)	25	59
22	CV	157/160 (98%)	143 (91%)	14 (9%)	0	100	100
23	5	98/121 (81%)	85 (87%)	13 (13%)	0	100	100
23	CW	98/121 (81%)	81 (83%)	17 (17%)	0	100	100
24	6	134/137 (98%)	127 (95%)	7 (5%)	0	100	100
24	CX	134/137 (98%)	124 (92%)	10 (8%)	0	100	100
25	7	96/155 (62%)	81 (84%)	15 (16%)	0	100	100
25	CY	122/155 (79%)	107 (88%)	12 (10%)	3 (2%)	5	27
26	8	119/142 (84%)	113 (95%)	6 (5%)	0	100	100
26	CZ	119/142 (84%)	108 (91%)	11 (9%)	0	100	100
27	9	124/127 (98%)	109 (88%)	15 (12%)	0	100	100
27	DA	122/127 (96%)	117 (96%)	5 (4%)	0	100	100
28	AA	133/136 (98%)	112 (84%)	17 (13%)	4 (3%)	4	23
28	DB	133/136 (98%)	114 (86%)	15 (11%)	4 (3%)	4	23
29	AB	146/149 (98%)	119 (82%)	25 (17%)	2 (1%)	11	40
29	DC	146/149 (98%)	120 (82%)	23 (16%)	3 (2%)	7	30
30	AC	56/59 (95%)	51 (91%)	4 (7%)	1 (2%)	8	34
30	DD	56/59 (95%)	47 (84%)	9 (16%)	0	100	100
31	AD	95/105 (90%)	89 (94%)	6 (6%)	0	100	100
31	DE	95/105 (90%)	88 (93%)	7 (7%)	0	100	100
32	AE	107/113 (95%)	98 (92%)	8 (8%)	1 (1%)	17	52
32	DF	107/113 (95%)	97 (91%)	10 (9%)	0	100	100
33	AF	125/130 (96%)	117 (94%)	8 (6%)	0	100	100
33	DG	125/130 (96%)	116 (93%)	9 (7%)	0	100	100
34	AG	104/107 (97%)	97 (93%)	7 (7%)	0	100	100
34	DH	104/107 (97%)	95 (91%)	9 (9%)	0	100	100
35	AH	110/121 (91%)	101 (92%)	9 (8%)	0	100	100
35	DI	110/121 (91%)	103 (94%)	7 (6%)	0	100	100
36	AI	117/120 (98%)	104 (89%)	12 (10%)	1 (1%)	17	52

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
36	DJ	117/120 (98%)	102 (87%)	13 (11%)	2 (2%)	9 36
37	AJ	97/100 (97%)	81 (84%)	16 (16%)	0	100 100
37	DK	97/100 (97%)	84 (87%)	12 (12%)	1 (1%)	15 49
38	AK	85/88 (97%)	74 (87%)	11 (13%)	0	100 100
38	DL	85/88 (97%)	79 (93%)	6 (7%)	0	100 100
39	AL	75/78 (96%)	64 (85%)	11 (15%)	0	100 100
39	DM	75/78 (96%)	61 (81%)	14 (19%)	0	100 100
40	AM	48/51 (94%)	42 (88%)	6 (12%)	0	100 100
40	DN	48/51 (94%)	45 (94%)	3 (6%)	0	100 100
41	AN	50/128 (39%)	47 (94%)	3 (6%)	0	100 100
41	DO	50/128 (39%)	47 (94%)	3 (6%)	0	100 100
42	AO	23/25 (92%)	22 (96%)	1 (4%)	0	100 100
42	DP	23/25 (92%)	19 (83%)	4 (17%)	0	100 100
43	AP	103/106 (97%)	87 (84%)	16 (16%)	0	100 100
43	DQ	103/106 (97%)	90 (87%)	13 (13%)	0	100 100
44	AQ	89/92 (97%)	79 (89%)	10 (11%)	0	100 100
44	DR	89/92 (97%)	81 (91%)	8 (9%)	0	100 100
45	i	155/273 (57%)	115 (74%)	37 (24%)	3 (2%)	8 33
45	sM	61/273 (22%)	44 (72%)	16 (26%)	1 (2%)	9 37
46	p0	139/312 (45%)	125 (90%)	12 (9%)	2 (1%)	11 40
48	B	204/252 (81%)	157 (77%)	44 (22%)	3 (2%)	10 39
48	s0	204/252 (81%)	162 (79%)	39 (19%)	3 (2%)	10 39
49	C	212/255 (83%)	161 (76%)	50 (24%)	1 (0%)	29 64
49	s1	214/255 (84%)	179 (84%)	33 (15%)	2 (1%)	17 52
50	D	215/254 (85%)	192 (89%)	22 (10%)	1 (0%)	29 64
50	s2	215/254 (85%)	193 (90%)	20 (9%)	2 (1%)	17 52
51	E	221/240 (92%)	198 (90%)	22 (10%)	1 (0%)	29 64
51	s3	221/240 (92%)	194 (88%)	26 (12%)	1 (0%)	29 64
52	F	258/261 (99%)	225 (87%)	32 (12%)	1 (0%)	34 69
52	s4	258/261 (99%)	230 (89%)	28 (11%)	0	100 100
53	G	204/225 (91%)	160 (78%)	40 (20%)	4 (2%)	7 31

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
53	s5	204/225 (91%)	169 (83%)	33 (16%)	2 (1%)	15 49
54	H	224/236 (95%)	199 (89%)	21 (9%)	4 (2%)	8 34
54	s6	216/236 (92%)	197 (91%)	16 (7%)	3 (1%)	11 40
55	I	182/190 (96%)	156 (86%)	20 (11%)	6 (3%)	4 21
55	s7	184/190 (97%)	152 (83%)	26 (14%)	6 (3%)	4 21
56	J	184/200 (92%)	157 (85%)	24 (13%)	3 (2%)	9 37
56	s8	184/200 (92%)	158 (86%)	25 (14%)	1 (0%)	29 64
57	K	183/197 (93%)	157 (86%)	24 (13%)	2 (1%)	14 46
57	s9	183/197 (93%)	162 (88%)	21 (12%)	0	100 100
58	L	94/105 (90%)	69 (73%)	23 (24%)	2 (2%)	7 30
58	c0	92/105 (88%)	63 (68%)	26 (28%)	3 (3%)	4 21
59	M	153/156 (98%)	130 (85%)	20 (13%)	3 (2%)	7 31
59	c1	144/156 (92%)	128 (89%)	15 (10%)	1 (1%)	22 57
60	N	122/143 (85%)	85 (70%)	32 (26%)	5 (4%)	3 16
60	c2	122/143 (85%)	86 (70%)	31 (25%)	5 (4%)	3 16
61	O	148/151 (98%)	132 (89%)	14 (10%)	2 (1%)	11 40
61	c3	148/151 (98%)	127 (86%)	18 (12%)	3 (2%)	7 31
62	P	125/138 (91%)	96 (77%)	29 (23%)	0	100 100
62	c4	126/138 (91%)	104 (82%)	22 (18%)	0	100 100
63	Q	122/142 (86%)	93 (76%)	25 (20%)	4 (3%)	4 21
63	c5	133/142 (94%)	99 (74%)	30 (23%)	4 (3%)	4 23
64	R	139/143 (97%)	120 (86%)	18 (13%)	1 (1%)	22 57
64	c6	140/143 (98%)	123 (88%)	14 (10%)	3 (2%)	7 30
65	S	116/136 (85%)	97 (84%)	19 (16%)	0	100 100
65	c7	113/136 (83%)	96 (85%)	17 (15%)	0	100 100
66	T	143/146 (98%)	120 (84%)	21 (15%)	2 (1%)	11 40
66	c8	143/146 (98%)	117 (82%)	23 (16%)	3 (2%)	7 30
67	U	141/144 (98%)	124 (88%)	17 (12%)	0	100 100
67	c9	141/144 (98%)	130 (92%)	11 (8%)	0	100 100
68	V	105/121 (87%)	92 (88%)	12 (11%)	1 (1%)	15 49
68	d0	108/121 (89%)	92 (85%)	15 (14%)	1 (1%)	17 52

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
69	W	85/87 (98%)	63 (74%)	19 (22%)	3 (4%)	3 20
69	d1	85/87 (98%)	72 (85%)	13 (15%)	0	100 100
70	X	127/130 (98%)	113 (89%)	14 (11%)	0	100 100
70	d2	127/130 (98%)	118 (93%)	9 (7%)	0	100 100
71	Y	142/145 (98%)	112 (79%)	28 (20%)	2 (1%)	11 40
71	d3	142/145 (98%)	122 (86%)	20 (14%)	0	100 100
72	Z	132/135 (98%)	113 (86%)	18 (14%)	1 (1%)	19 54
72	d4	132/135 (98%)	113 (86%)	17 (13%)	2 (2%)	10 39
73	a	68/108 (63%)	53 (78%)	13 (19%)	2 (3%)	4 24
73	d5	67/108 (62%)	58 (87%)	9 (13%)	0	100 100
74	b	95/119 (80%)	68 (72%)	23 (24%)	4 (4%)	3 16
74	d6	95/119 (80%)	69 (73%)	21 (22%)	5 (5%)	2 12
75	c	79/82 (96%)	63 (80%)	16 (20%)	0	100 100
75	d7	79/82 (96%)	64 (81%)	15 (19%)	0	100 100
76	d	61/67 (91%)	52 (85%)	9 (15%)	0	100 100
76	d8	61/67 (91%)	45 (74%)	16 (26%)	0	100 100
77	d9	51/56 (91%)	45 (88%)	6 (12%)	0	100 100
77	e	51/56 (91%)	47 (92%)	4 (8%)	0	100 100
78	e0	60/63 (95%)	52 (87%)	8 (13%)	0	100 100
78	f	58/63 (92%)	44 (76%)	14 (24%)	0	100 100
79	e1	49/152 (32%)	32 (65%)	17 (35%)	0	100 100
79	g	69/152 (45%)	37 (54%)	32 (46%)	0	100 100
80	Rb	316/319 (99%)	276 (87%)	39 (12%)	1 (0%)	41 73
80	h	316/319 (99%)	281 (89%)	35 (11%)	0	100 100
All	All	22284/24620 (90%)	19305 (87%)	2782 (12%)	197 (1%)	17 52

All (197) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
6	l	339	LEU
7	m	7	ALA
9	o	159	GLN
9	o	234	GLU
11	q	50	ASN

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Mol	Chain	Res	Type
13	s	173	ASP
14	t	63	VAL
15	u	8	LYS
29	AB	24	LYS
45	i	154	VAL
45	i	171	PRO
7	CG	125	VAL
10	CJ	36	ILE
14	CN	5	LYS
14	CN	63	VAL
17	CQ	111	PRO
25	CY	80	ARG
46	p0	32	ASN
49	C	181	LEU
52	F	195	ILE
53	G	50	GLU
54	H	68	LEU
54	H	149	LYS
55	I	63	PRO
55	I	74	GLN
56	J	147	ALA
58	L	88	PRO
59	M	5	LEU
60	N	130	THR
60	N	131	ASP
61	O	28	LEU
74	b	75	VAL
54	s6	68	LEU
54	s6	173	PRO
55	s7	64	VAL
55	s7	67	LEU
56	s8	101	ILE
58	c0	88	ILE
60	c2	106	ILE
60	c2	109	GLU
61	c3	66	ILE
63	c5	128	HIS
64	c6	116	LEU
66	c8	91	ASP
72	d4	52	LYS
6	l	292	SER
14	t	77	LEU

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Mol	Chain	Res	Type
29	AB	78	LEU
5	CE	188	ILE
7	CG	20	PHE
7	CG	124	GLU
8	CH	98	VAL
9	CI	158	LYS
15	CO	8	LYS
19	CS	99	THR
28	DB	4	PHE
28	DB	60	LYS
29	DC	24	LYS
29	DC	78	LEU
37	DK	35	ASN
55	I	111	LYS
60	N	85	LYS
63	Q	125	PRO
66	T	91	ASP
73	a	39	ALA
74	b	86	VAL
50	s2	106	ASP
53	s5	101	GLY
60	c2	130	THR
61	c3	140	LYS
5	k	4	ARG
5	k	347	SER
7	m	6	ASP
7	m	259	LYS
9	o	164	SER
13	s	8	PRO
14	t	166	ALA
16	v	94	TYR
17	w	110	PRO
17	w	111	PRO
22	2	159	PHE
28	AA	59	ALA
7	CG	259	LYS
7	CG	295	GLY
9	CI	164	SER
9	CI	191	VAL
14	CN	51	LEU
25	CY	81	PRO
48	B	4	PRO

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Mol	Chain	Res	Type
50	D	40	LYS
53	G	49	GLU
60	N	109	GLU
61	O	27	LYS
63	Q	30	THR
71	Y	98	GLU
72	Z	52	LYS
74	b	61	GLU
48	s0	167	LYS
48	s0	168	HIS
54	s6	174	LYS
55	s7	63	PRO
55	s7	74	GLN
58	c0	90	PRO
63	c5	68	PRO
63	c5	125	PRO
9	o	158	LYS
11	q	23	ARG
13	s	172	LEU
14	t	76	THR
28	AA	60	LYS
45	i	86	ASN
14	CN	166	ALA
16	CP	94	TYR
48	B	196	SER
53	G	127	GLN
54	H	21	GLU
55	I	64	VAL
55	I	132	PRO
56	J	146	ARG
58	L	60	SER
59	M	4	GLU
63	Q	12	PHE
68	V	120	SER
69	W	81	ASN
73	a	44	GLN
49	s1	107	THR
55	s7	66	SER
60	c2	131	ASP
68	d0	51	VAL
72	d4	30	PRO
74	d6	34	LYS

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Mol	Chain	Res	Type
74	d6	46	GLU
5	k	348	ARG
14	t	47	ALA
14	t	62	THR
16	v	146	ALA
30	AC	20	GLY
36	AI	92	LEU
5	CE	348	ARG
9	CI	159	GLN
13	CM	8	PRO
14	CN	62	THR
25	CY	25	ASP
28	DB	103	GLN
36	DJ	85	THR
46	p0	31	ASP
56	J	23	LYS
57	K	134	ILE
59	M	6	THR
63	Q	126	VAL
66	T	92	ILE
80	Rb	281	TYR
49	s1	106	THR
55	s7	65	PRO
61	c3	65	VAL
63	c5	126	VAL
66	c8	92	ILE
4	j	250	GLN
16	v	74	PRO
28	AA	102	GLU
28	AA	103	GLN
14	CN	47	ALA
28	DB	102	GLU
29	DC	48	TYR
45	sM	43	ASP
53	G	39	GLU
54	H	69	LEU
64	R	33	GLY
69	W	11	LEU
53	s5	184	PHE
58	c0	35	ILE
74	d6	62	TYR
10	p	40	VAL

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Mol	Chain	Res	Type
16	v	75	VAL
32	AE	7	VAL
5	CE	317	ILE
21	CU	167	ARG
48	s0	31	VAL
51	s3	216	PRO
59	c1	129	ARG
5	k	188	ILE
71	Y	41	SER
74	b	60	PRO
50	s2	150	GLN
60	c2	22	VAL
64	c6	4	VAL
74	d6	16	GLY
36	DJ	39	PRO
48	B	158	VAL
55	I	131	PHE
60	N	106	ILE
64	c6	5	PRO
66	c8	9	GLY
74	d6	60	PRO
51	E	220	PRO
57	K	163	PRO
69	W	6	GLY

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
4	CD	193/196 (98%)	152 (79%)	41 (21%)	1 5
4	j	193/196 (98%)	150 (78%)	43 (22%)	1 3
5	CE	320/323 (99%)	254 (79%)	66 (21%)	1 5
5	k	320/323 (99%)	259 (81%)	61 (19%)	1 6
6	CF	288/289 (100%)	249 (86%)	39 (14%)	4 16

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
6	l	288/289 (100%)	241 (84%)	47 (16%)	2 10
7	CG	244/245 (100%)	198 (81%)	46 (19%)	1 6
7	m	244/245 (100%)	205 (84%)	39 (16%)	2 11
8	CH	134/153 (88%)	114 (85%)	20 (15%)	3 13
8	n	134/153 (88%)	118 (88%)	16 (12%)	5 20
9	CI	186/205 (91%)	162 (87%)	24 (13%)	4 18
9	o	186/205 (91%)	162 (87%)	24 (13%)	4 18
10	CJ	187/208 (90%)	163 (87%)	24 (13%)	4 18
10	p	187/208 (90%)	162 (87%)	25 (13%)	4 16
11	CK	171/171 (100%)	138 (81%)	33 (19%)	1 6
11	q	171/171 (100%)	140 (82%)	31 (18%)	1 7
12	CL	177/187 (95%)	140 (79%)	37 (21%)	1 5
12	r	177/187 (95%)	140 (79%)	37 (21%)	1 5
13	CM	147/151 (97%)	123 (84%)	24 (16%)	2 10
13	s	147/151 (97%)	113 (77%)	34 (23%)	1 3
14	CN	154/159 (97%)	134 (87%)	20 (13%)	4 18
14	t	154/159 (97%)	130 (84%)	24 (16%)	2 11
15	CO	107/109 (98%)	90 (84%)	17 (16%)	2 11
15	u	107/109 (98%)	91 (85%)	16 (15%)	3 12
16	CP	175/176 (99%)	146 (83%)	29 (17%)	2 9
16	v	175/176 (99%)	149 (85%)	26 (15%)	3 13
17	CQ	160/162 (99%)	141 (88%)	19 (12%)	5 20
17	w	160/162 (99%)	136 (85%)	24 (15%)	3 12
18	CR	140/146 (96%)	117 (84%)	23 (16%)	2 10
18	x	140/146 (96%)	118 (84%)	22 (16%)	2 11
19	CS	150/151 (99%)	128 (85%)	22 (15%)	3 13
19	y	150/151 (99%)	123 (82%)	27 (18%)	1 7
20	CT	153/154 (99%)	131 (86%)	22 (14%)	3 14
20	z	153/154 (99%)	135 (88%)	18 (12%)	5 21
21	0	156/156 (100%)	129 (83%)	27 (17%)	2 9
21	CU	156/156 (100%)	128 (82%)	28 (18%)	2 8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
22	2	136/137 (99%)	111 (82%)	25 (18%)	1 7
22	CV	136/137 (99%)	108 (79%)	28 (21%)	1 5
23	5	87/107 (81%)	73 (84%)	14 (16%)	2 10
23	CW	87/107 (81%)	71 (82%)	16 (18%)	1 7
24	6	104/105 (99%)	82 (79%)	22 (21%)	1 5
24	CX	104/105 (99%)	88 (85%)	16 (15%)	2 11
25	7	57/129 (44%)	50 (88%)	7 (12%)	4 19
25	CY	58/129 (45%)	50 (86%)	8 (14%)	3 16
26	8	104/118 (88%)	85 (82%)	19 (18%)	1 7
26	CZ	104/118 (88%)	87 (84%)	17 (16%)	2 10
27	9	109/110 (99%)	84 (77%)	25 (23%)	1 3
27	DA	107/110 (97%)	88 (82%)	19 (18%)	2 8
28	AA	115/116 (99%)	100 (87%)	15 (13%)	4 18
28	DB	115/116 (99%)	99 (86%)	16 (14%)	3 15
29	AB	118/119 (99%)	97 (82%)	21 (18%)	2 8
29	DC	118/119 (99%)	99 (84%)	19 (16%)	2 10
30	AC	46/47 (98%)	35 (76%)	11 (24%)	0 2
30	DD	46/47 (98%)	38 (83%)	8 (17%)	2 9
31	AD	81/88 (92%)	71 (88%)	10 (12%)	4 19
31	DE	81/88 (92%)	70 (86%)	11 (14%)	3 16
32	AE	92/97 (95%)	74 (80%)	18 (20%)	1 6
32	DF	92/97 (95%)	77 (84%)	15 (16%)	2 10
33	AF	109/111 (98%)	96 (88%)	13 (12%)	5 20
33	DG	109/111 (98%)	89 (82%)	20 (18%)	1 7
34	AG	90/91 (99%)	78 (87%)	12 (13%)	4 16
34	DH	90/91 (99%)	79 (88%)	11 (12%)	5 19
35	AH	95/103 (92%)	83 (87%)	12 (13%)	4 18
35	DI	95/103 (92%)	76 (80%)	19 (20%)	1 5
36	AI	104/105 (99%)	83 (80%)	21 (20%)	1 5
36	DJ	104/105 (99%)	82 (79%)	22 (21%)	1 5
37	AJ	81/82 (99%)	63 (78%)	18 (22%)	1 4

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
37	DK	81/82 (99%)	68 (84%)	13 (16%)	2 11
38	AK	70/71 (99%)	58 (83%)	12 (17%)	2 9
38	DL	70/71 (99%)	55 (79%)	15 (21%)	1 4
39	AL	68/69 (99%)	56 (82%)	12 (18%)	2 8
39	DM	68/69 (99%)	56 (82%)	12 (18%)	2 8
40	AM	45/46 (98%)	37 (82%)	8 (18%)	2 8
40	DN	45/46 (98%)	37 (82%)	8 (18%)	2 8
41	AN	47/116 (40%)	40 (85%)	7 (15%)	3 13
41	DO	47/116 (40%)	40 (85%)	7 (15%)	3 13
42	AO	23/23 (100%)	18 (78%)	5 (22%)	1 4
42	DP	23/23 (100%)	17 (74%)	6 (26%)	0 1
43	AP	90/91 (99%)	74 (82%)	16 (18%)	2 8
43	DQ	90/91 (99%)	75 (83%)	15 (17%)	2 9
44	AQ	71/72 (99%)	55 (78%)	16 (22%)	1 3
44	DR	71/72 (99%)	63 (89%)	8 (11%)	6 23
45	i	97/228 (42%)	73 (75%)	24 (25%)	0 2
45	sM	54/228 (24%)	44 (82%)	10 (18%)	1 7
46	p0	105/254 (41%)	86 (82%)	19 (18%)	1 7
48	B	164/210 (78%)	137 (84%)	27 (16%)	2 10
48	s0	165/210 (79%)	141 (86%)	24 (14%)	3 13
49	C	191/224 (85%)	160 (84%)	31 (16%)	2 10
49	s1	192/224 (86%)	156 (81%)	36 (19%)	1 6
50	D	176/205 (86%)	143 (81%)	33 (19%)	1 6
50	s2	176/205 (86%)	138 (78%)	38 (22%)	1 4
51	E	182/195 (93%)	150 (82%)	32 (18%)	2 8
51	s3	182/195 (93%)	157 (86%)	25 (14%)	3 16
52	F	221/222 (100%)	180 (81%)	41 (19%)	1 7
52	s4	221/222 (100%)	193 (87%)	28 (13%)	4 18
53	G	173/191 (91%)	146 (84%)	27 (16%)	2 11
53	s5	173/191 (91%)	141 (82%)	32 (18%)	1 7
54	H	188/201 (94%)	155 (82%)	33 (18%)	2 8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
54	s6	187/201 (93%)	157 (84%)	30 (16%)	2 11
55	I	165/170 (97%)	134 (81%)	31 (19%)	1 6
55	s7	165/170 (97%)	138 (84%)	27 (16%)	2 10
56	J	150/161 (93%)	131 (87%)	19 (13%)	4 18
56	s8	150/161 (93%)	130 (87%)	20 (13%)	4 16
57	K	158/166 (95%)	126 (80%)	32 (20%)	1 5
57	s9	158/166 (95%)	130 (82%)	28 (18%)	2 8
58	L	77/98 (79%)	67 (87%)	10 (13%)	4 18
58	c0	73/98 (74%)	60 (82%)	13 (18%)	2 8
59	M	129/137 (94%)	109 (84%)	20 (16%)	2 11
59	c1	129/137 (94%)	105 (81%)	24 (19%)	1 7
60	N	88/119 (74%)	71 (81%)	17 (19%)	1 6
60	c2	88/119 (74%)	73 (83%)	15 (17%)	2 9
61	O	127/128 (99%)	108 (85%)	19 (15%)	3 12
61	c3	127/128 (99%)	107 (84%)	20 (16%)	2 11
62	P	81/105 (77%)	66 (82%)	15 (18%)	1 7
62	c4	97/105 (92%)	80 (82%)	17 (18%)	2 8
63	Q	101/118 (86%)	82 (81%)	19 (19%)	1 6
63	c5	103/118 (87%)	85 (82%)	18 (18%)	2 8
64	R	117/119 (98%)	95 (81%)	22 (19%)	1 6
64	c6	118/119 (99%)	98 (83%)	20 (17%)	2 9
65	S	94/124 (76%)	80 (85%)	14 (15%)	3 13
65	c7	92/124 (74%)	72 (78%)	20 (22%)	1 4
66	T	128/129 (99%)	103 (80%)	25 (20%)	1 6
66	c8	128/129 (99%)	112 (88%)	16 (12%)	4 18
67	U	115/116 (99%)	97 (84%)	18 (16%)	2 11
67	c9	115/116 (99%)	102 (89%)	13 (11%)	6 23
68	V	100/114 (88%)	81 (81%)	19 (19%)	1 6
68	d0	103/114 (90%)	86 (84%)	17 (16%)	2 10
69	W	74/74 (100%)	64 (86%)	10 (14%)	4 16
69	d1	74/74 (100%)	62 (84%)	12 (16%)	2 10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
70	X	110/111 (99%)	87 (79%)	23 (21%)	1 5
70	d2	110/111 (99%)	98 (89%)	12 (11%)	6 25
71	Y	119/120 (99%)	105 (88%)	14 (12%)	5 21
71	d3	119/120 (99%)	102 (86%)	17 (14%)	3 14
72	Z	112/113 (99%)	101 (90%)	11 (10%)	8 29
72	d4	112/113 (99%)	103 (92%)	9 (8%)	12 40
73	a	61/89 (68%)	43 (70%)	18 (30%)	0 1
73	d5	61/89 (68%)	54 (88%)	7 (12%)	5 22
74	b	83/100 (83%)	70 (84%)	13 (16%)	2 11
74	d6	83/100 (83%)	72 (87%)	11 (13%)	4 16
75	c	70/71 (99%)	61 (87%)	9 (13%)	4 18
75	d7	70/71 (99%)	60 (86%)	10 (14%)	3 14
76	d	56/60 (93%)	49 (88%)	7 (12%)	4 18
76	d8	56/60 (93%)	45 (80%)	11 (20%)	1 6
77	d9	47/49 (96%)	40 (85%)	7 (15%)	3 13
77	e	47/49 (96%)	39 (83%)	8 (17%)	2 9
78	e0	53/54 (98%)	43 (81%)	10 (19%)	1 6
78	f	51/54 (94%)	41 (80%)	10 (20%)	1 6
79	e1	43/135 (32%)	33 (77%)	10 (23%)	1 3
79	g	62/135 (46%)	50 (81%)	12 (19%)	1 6
80	Rb	260/262 (99%)	238 (92%)	22 (8%)	10 37
80	h	259/262 (99%)	232 (90%)	27 (10%)	7 27
All	All	18682/20678 (90%)	15601 (84%)	3081 (16%)	2 10

All (3081) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	j	14	SER
4	j	18	SER
4	j	20	THR
4	j	32	LEU
4	j	37	ARG
4	j	44	ILE
4	j	45	VAL

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Mol	Chain	Res	Type
4	j	48	ILE
4	j	49	VAL
4	j	52	SER
4	j	62	VAL
4	j	71	LEU
4	j	72	ARG
4	j	74	GLU
4	j	79	ASN
4	j	84	THR
4	j	95	SER
4	j	96	LEU
4	j	101	VAL
4	j	104	LEU
4	j	114	SER
4	j	116	VAL
4	j	128	ARG
4	j	130	SER
4	j	134	VAL
4	j	142	ASP
4	j	144	ASN
4	j	149	ARG
4	j	157	VAL
4	j	165	VAL
4	j	177	LYS
4	j	179	LEU
4	j	180	LEU
4	j	202	VAL
4	j	204	MET
4	j	207	VAL
4	j	226	SER
4	j	227	ARG
4	j	230	VAL
4	j	231	SER
4	j	241	ARG
4	j	242	ARG
4	j	243	THR
5	k	5	LYS
5	k	7	GLU
5	k	10	ARG
5	k	17	LEU
5	k	21	ARG
5	k	25	ILE

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Mol	Chain	Res	Type
5	k	30	LYS
5	k	37	ARG
5	k	45	SER
5	k	47	LEU
5	k	56	ILE
5	k	67	PHE
5	k	70	ARG
5	k	71	GLU
5	k	79	VAL
5	k	84	VAL
5	k	85	VAL
5	k	90	VAL
5	k	103	THR
5	k	114	VAL
5	k	116	ARG
5	k	139	GLN
5	k	146	ARG
5	k	147	GLU
5	k	148	LEU
5	k	160	VAL
5	k	178	LEU
5	k	183	LEU
5	k	188	ILE
5	k	192	VAL
5	k	196	ARG
5	k	201	LYS
5	k	202	THR
5	k	205	VAL
5	k	207	SER
5	k	208	VAL
5	k	210	GLU
5	k	211	GLN
5	k	212	ASN
5	k	229	VAL
5	k	235	THR
5	k	236	LYS
5	k	238	LEU
5	k	241	LYS
5	k	244	ARG
5	k	252	ILE
5	k	266	ARG
5	k	274	SER

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Mol	Chain	Res	Type
5	k	284	ARG
5	k	305	ILE
5	k	316	GLU
5	k	320	ASP
5	k	332	ARG
5	k	338	LEU
5	k	347	SER
5	k	348	ARG
5	k	352	GLU
5	k	353	GLU
5	k	361	THR
5	k	364	LYS
5	k	387	LEU
6	l	3	ARG
6	l	25	VAL
6	l	53	SER
6	l	60	THR
6	l	69	ARG
6	l	74	ILE
6	l	93	MET
6	l	112	LYS
6	l	120	TYR
6	l	122	THR
6	l	133	SER
6	l	136	LEU
6	l	138	ARG
6	l	148	ILE
6	l	150	LEU
6	l	152	VAL
6	l	156	LEU
6	l	161	LYS
6	l	172	VAL
6	l	176	SER
6	l	177	ASP
6	l	179	LEU
6	l	185	LYS
6	l	187	LEU
6	l	193	LYS
6	l	200	THR
6	l	203	ARG
6	l	206	LEU
6	l	211	GLU

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Mol	Chain	Res	Type
6	l	220	ARG
6	l	222	VAL
6	l	229	ASN
6	l	230	VAL
6	l	232	SER
6	l	233	LEU
6	l	246	ARG
6	l	258	LEU
6	l	267	VAL
6	l	270	SER
6	l	287	THR
6	l	289	ILE
6	l	306	THR
6	l	307	GLN
6	l	323	VAL
6	l	338	LYS
6	l	339	LEU
6	l	349	THR
7	m	5	LYS
7	m	23	ARG
7	m	41	LYS
7	m	66	SER
7	m	67	SER
7	m	68	THR
7	m	69	ILE
7	m	75	LEU
7	m	105	ILE
7	m	112	LYS
7	m	113	LEU
7	m	115	LEU
7	m	116	ASP
7	m	118	THR
7	m	137	ASP
7	m	140	ARG
7	m	146	LEU
7	m	151	GLN
7	m	152	ARG
7	m	154	THR
7	m	155	THR
7	m	158	ARG
7	m	159	VAL
7	m	163	LEU

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Mol	Chain	Res	Type
7	m	177	GLU
7	m	185	PHE
7	m	187	THR
7	m	188	GLU
7	m	194	LEU
7	m	205	SER
7	m	216	GLU
7	m	229	ASP
7	m	231	ILE
7	m	234	ASP
7	m	236	LEU
7	m	242	SER
7	m	258	LYS
7	m	279	LYS
7	m	293	LEU
8	n	5	LYS
8	n	8	LYS
8	n	21	THR
8	n	31	ARG
8	n	50	LYS
8	n	56	LYS
8	n	65	ILE
8	n	78	ARG
8	n	89	THR
8	n	93	VAL
8	n	98	VAL
8	n	129	GLU
8	n	130	ILE
8	n	134	ARG
8	n	155	LEU
8	n	162	SER
9	o	25	GLN
9	o	26	VAL
9	o	45	LEU
9	o	46	GLU
9	o	54	GLU
9	o	60	ARG
9	o	80	GLN
9	o	82	LYS
9	o	93	ASN
9	o	98	LYS
9	o	100	ARG

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Mol	Chain	Res	Type
9	o	101	LYS
9	o	110	ARG
9	o	124	LEU
9	o	143	THR
9	o	157	ASN
9	o	158	LYS
9	o	164	SER
9	o	169	ILE
9	o	175	LYS
9	o	179	LEU
9	o	184	LEU
9	o	228	SER
9	o	239	LEU
10	p	27	THR
10	p	38	GLN
10	p	50	VAL
10	p	65	LEU
10	p	71	VAL
10	p	74	THR
10	p	79	GLN
10	p	81	THR
10	p	83	ASP
10	p	84	ARG
10	p	92	LYS
10	p	106	LYS
10	p	110	THR
10	p	118	GLU
10	p	132	VAL
10	p	136	LEU
10	p	145	ASN
10	p	160	ILE
10	p	163	VAL
10	p	169	LEU
10	p	185	ARG
10	p	189	LEU
10	p	206	GLU
10	p	248	LYS
10	p	251	LYS
11	q	2	LYS
11	q	18	VAL
11	q	19	SER
11	q	20	ILE

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Mol	Chain	Res	Type
11	q	33	THR
11	q	41	ILE
11	q	48	VAL
11	q	49	ASN
11	q	52	LEU
11	q	68	LEU
11	q	69	ARG
11	q	70	THR
11	q	82	VAL
11	q	87	LYS
11	q	110	LYS
11	q	118	LEU
11	q	129	ARG
11	q	132	VAL
11	q	133	THR
11	q	135	GLU
11	q	138	THR
11	q	139	ASN
11	q	151	VAL
11	q	157	ASN
11	q	161	LEU
11	q	162	GLN
11	q	172	ILE
11	q	173	ARG
11	q	177	ASP
11	q	189	GLU
11	q	190	ASP
12	r	3	ARG
12	r	21	ARG
12	r	24	ARG
12	r	26	VAL
12	r	30	LYS
12	r	31	ILE
12	r	32	ARG
12	r	36	LEU
12	r	40	LYS
12	r	42	THR
12	r	52	LEU
12	r	63	GLU
12	r	74	LYS
12	r	78	THR
12	r	87	LEU

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Mol	Chain	Res	Type
12	r	99	ILE
12	r	102	MET
12	r	129	VAL
12	r	133	GLN
12	r	138	VAL
12	r	139	ARG
12	r	140	THR
12	r	142	ASP
12	r	146	ASP
12	r	148	VAL
12	r	163	GLN
12	r	164	LYS
12	r	165	ILE
12	r	169	LYS
12	r	177	ASP
12	r	178	ARG
12	r	185	ARG
12	r	191	LYS
12	r	192	ASP
12	r	197	VAL
12	r	203	LYS
12	r	208	ASN
13	s	7	ASN
13	s	9	MET
13	s	10	ARG
13	s	12	LEU
13	s	13	LYS
13	s	22	SER
13	s	25	GLU
13	s	29	ARG
13	s	30	LEU
13	s	31	THR
13	s	40	LEU
13	s	44	THR
13	s	46	VAL
13	s	56	THR
13	s	70	THR
13	s	80	LEU
13	s	81	GLU
13	s	82	ARG
13	s	94	ARG
13	s	95	ASN

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Mol	Chain	Res	Type
13	s	106	ILE
13	s	107	ASP
13	s	111	ASP
13	s	112	LEU
13	s	130	VAL
13	s	138	VAL
13	s	140	ARG
13	s	142	LYS
13	s	143	ARG
13	s	151	SER
13	s	157	GLU
13	s	161	SER
13	s	168	ASP
13	s	172	LEU
14	t	23	LYS
14	t	41	THR
14	t	46	ILE
14	t	54	LEU
14	t	55	ARG
14	t	58	VAL
14	t	59	ARG
14	t	64	LYS
14	t	67	ARG
14	t	69	VAL
14	t	107	GLU
14	t	108	ILE
14	t	114	GLN
14	t	115	ARG
14	t	116	LEU
14	t	121	SER
14	t	124	ILE
14	t	131	LYS
14	t	138	VAL
14	t	165	SER
14	t	168	ARG
14	t	169	THR
14	t	171	ARG
14	t	190	LYS
15	u	3	THR
15	u	4	ASP
15	u	6	ILE
15	u	27	GLN

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Mol	Chain	Res	Type
15	u	50	LYS
15	u	53	VAL
15	u	55	ARG
15	u	66	THR
15	u	90	VAL
15	u	92	GLU
15	u	93	LYS
15	u	102	LYS
15	u	105	GLN
15	u	122	VAL
15	u	130	THR
15	u	135	LEU
16	v	10	LEU
16	v	15	GLN
16	v	19	LEU
16	v	20	ARG
16	v	22	LEU
16	v	24	ARG
16	v	38	ARG
16	v	49	ARG
16	v	50	ARG
16	v	80	THR
16	v	85	THR
16	v	92	LEU
16	v	93	LYS
16	v	96	ARG
16	v	106	VAL
16	v	109	ARG
16	v	117	ASN
16	v	133	ILE
16	v	138	GLN
16	v	151	ILE
16	v	167	THR
16	v	170	LYS
16	v	182	ASN
16	v	188	ARG
16	v	190	THR
16	v	204	LYS
17	w	22	VAL
17	w	33	ILE
17	w	34	VAL
17	w	58	LEU

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Mol	Chain	Res	Type
17	w	59	ARG
17	w	68	ARG
17	w	78	ARG
17	w	84	LEU
17	w	85	ARG
17	w	106	GLU
17	w	110	PRO
17	w	116	LYS
17	w	117	ARG
17	w	122	GLN
17	w	124	LEU
17	w	126	VAL
17	w	128	ARG
17	w	129	LEU
17	w	134	LYS
17	w	140	LYS
17	w	143	THR
17	w	160	ARG
17	w	166	GLU
17	w	184	THR
18	x	9	THR
18	x	14	SER
18	x	24	VAL
18	x	25	SER
18	x	29	THR
18	x	32	THR
18	x	40	GLU
18	x	42	THR
18	x	52	LEU
18	x	55	GLN
18	x	67	ILE
18	x	78	VAL
18	x	91	VAL
18	x	107	LEU
18	x	119	VAL
18	x	126	ARG
18	x	127	ARG
18	x	142	SER
18	x	157	VAL
18	x	168	LEU
18	x	180	LYS
18	x	181	ARG

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Mol	Chain	Res	Type
19	y	3	ILE
19	y	17	THR
19	y	21	SER
19	y	24	VAL
19	y	26	LEU
19	y	32	LEU
19	y	34	THR
19	y	41	ASP
19	y	49	LEU
19	y	57	ILE
19	y	63	SER
19	y	69	ARG
19	y	80	THR
19	y	81	VAL
19	y	86	THR
19	y	98	LYS
19	y	99	THR
19	y	100	THR
19	y	122	ILE
19	y	127	LEU
19	y	135	GLN
19	y	138	LEU
19	y	147	ARG
19	y	159	LYS
19	y	179	ARG
19	y	180	ARG
19	y	182	LYS
20	z	10	LEU
20	z	20	ARG
20	z	29	THR
20	z	46	LYS
20	z	52	LYS
20	z	55	VAL
20	z	74	ARG
20	z	99	LEU
20	z	103	ARG
20	z	104	ARG
20	z	106	LEU
20	z	116	ASP
20	z	120	TYR
20	z	138	LEU
20	z	175	GLN

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Mol	Chain	Res	Type
20	z	177	VAL
20	z	180	LYS
20	z	188	ASP
21	0	1	MET
21	0	16	THR
21	0	17	GLU
21	0	45	LEU
21	0	50	LYS
21	0	51	VAL
21	0	58	ILE
21	0	61	ILE
21	0	80	ARG
21	0	87	THR
21	0	92	LYS
21	0	100	VAL
21	0	104	GLU
21	0	105	THR
21	0	115	ARG
21	0	117	ARG
21	0	137	ARG
21	0	138	GLN
21	0	142	GLN
21	0	145	THR
21	0	155	ARG
21	0	156	VAL
21	0	157	GLN
21	0	162	THR
21	0	168	PRO
21	0	171	PHE
21	0	172	TYR
22	2	4	SER
22	2	12	ARG
22	2	18	ASP
22	2	25	VAL
22	2	32	LYS
22	2	55	LYS
22	2	75	ILE
22	2	78	LYS
22	2	79	MET
22	2	80	VAL
22	2	83	ARG
22	2	88	ARG

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Mol	Chain	Res	Type
22	2	96	ILE
22	2	102	ARG
22	2	106	LEU
22	2	110	LYS
22	2	126	VAL
22	2	127	GLN
22	2	128	LEU
22	2	139	ARG
22	2	143	THR
22	2	149	GLN
22	2	151	LEU
22	2	158	THR
22	2	159	PHE
23	5	10	LYS
23	5	11	ILE
23	5	16	THR
23	5	32	SER
23	5	39	ASP
23	5	52	ASN
23	5	61	THR
23	5	66	VAL
23	5	70	LYS
23	5	88	GLN
23	5	91	ASP
23	5	92	TRP
23	5	93	ILE
23	5	100	THR
24	6	7	GLN
24	6	9	THR
24	6	13	ILE
24	6	23	MET
24	6	32	ARG
24	6	42	SER
24	6	44	SER
24	6	45	ARG
24	6	48	ARG
24	6	54	LEU
24	6	63	LYS
24	6	64	LYS
24	6	73	VAL
24	6	74	MET
24	6	83	LYS

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Mol	Chain	Res	Type
24	6	91	VAL
24	6	102	ILE
24	6	104	ASN
24	6	115	THR
24	6	120	LYS
24	6	125	LEU
24	6	133	SER
25	7	4	GLU
25	7	5	ILE
25	7	17	ARG
25	7	19	THR
25	7	39	LEU
25	7	43	ARG
25	7	64	THR
26	8	26	VAL
26	8	27	ARG
26	8	36	LYS
26	8	37	THR
26	8	38	LEU
26	8	40	LEU
26	8	59	SER
26	8	63	ILE
26	8	71	THR
26	8	74	LYS
26	8	86	VAL
26	8	105	VAL
26	8	108	LEU
26	8	113	LEU
26	8	115	ARG
26	8	125	ARG
26	8	133	LEU
26	8	135	ILE
26	8	142	ILE
27	9	5	SER
27	9	8	VAL
27	9	13	ARG
27	9	17	LYS
27	9	26	GLN
27	9	37	LYS
27	9	38	GLU
27	9	42	GLN
27	9	45	ILE

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Mol	Chain	Res	Type
27	9	50	ILE
27	9	51	ARG
27	9	56	VAL
27	9	57	LEU
27	9	60	ARG
27	9	64	LYS
27	9	70	ILE
27	9	71	SER
27	9	74	TYR
27	9	76	LEU
27	9	80	VAL
27	9	86	THR
27	9	94	SER
27	9	105	VAL
27	9	115	ARG
27	9	126	LEU
28	AA	14	VAL
28	AA	24	VAL
28	AA	26	VAL
28	AA	46	ILE
28	AA	47	GLU
28	AA	65	ARG
28	AA	72	ILE
28	AA	81	LEU
28	AA	83	THR
28	AA	86	THR
28	AA	90	GLU
28	AA	103	GLN
28	AA	107	ARG
28	AA	109	GLU
28	AA	134	LEU
29	AB	3	SER
29	AB	4	ARG
29	AB	6	THR
29	AB	8	THR
29	AB	10	LYS
29	AB	12	ARG
29	AB	16	SER
29	AB	24	LYS
29	AB	27	LYS
29	AB	29	PRO
29	AB	42	ARG

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Mol	Chain	Res	Type
29	AB	46	ASP
29	AB	47	LYS
29	AB	60	TYR
29	AB	68	PHE
29	AB	78	LEU
29	AB	91	LEU
29	AB	92	LYS
29	AB	98	THR
29	AB	115	LYS
29	AB	120	ASN
30	AC	13	THR
30	AC	14	ARG
30	AC	23	LYS
30	AC	25	LYS
30	AC	29	TYR
30	AC	35	VAL
30	AC	38	LYS
30	AC	40	ARG
30	AC	44	LYS
30	AC	50	THR
30	AC	59	LYS
31	AD	16	LEU
31	AD	24	THR
31	AD	32	LYS
31	AD	34	LEU
31	AD	40	LYS
31	AD	54	SER
31	AD	61	MET
31	AD	76	GLU
31	AD	83	LYS
31	AD	104	LEU
32	AE	6	ASP
32	AE	7	VAL
32	AE	8	VAL
32	AE	13	THR
32	AE	16	LEU
32	AE	26	LYS
32	AE	31	ARG
32	AE	64	VAL
32	AE	65	LYS
32	AE	68	GLU
32	AE	79	ARG

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Mol	Chain	Res	Type
32	AE	84	ASP
32	AE	89	LEU
32	AE	96	VAL
32	AE	97	LEU
32	AE	100	SER
32	AE	106	THR
32	AE	107	VAL
33	AF	12	LYS
33	AF	19	ARG
33	AF	27	ARG
33	AF	33	ARG
33	AF	51	SER
33	AF	54	LYS
33	AF	61	LYS
33	AF	62	LYS
33	AF	73	THR
33	AF	75	LEU
33	AF	84	THR
33	AF	125	ARG
33	AF	128	LEU
34	AG	15	SER
34	AG	28	SER
34	AG	31	LYS
34	AG	48	ARG
34	AG	58	GLU
34	AG	60	ARG
34	AG	70	LYS
34	AG	80	VAL
34	AG	81	VAL
34	AG	92	LYS
34	AG	98	VAL
34	AG	105	SER
35	AH	5	VAL
35	AH	8	ARG
35	AH	20	ILE
35	AH	29	ILE
35	AH	31	ARG
35	AH	51	LEU
35	AH	56	THR
35	AH	65	VAL
35	AH	71	THR
35	AH	74	ARG

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Mol	Chain	Res	Type
35	AH	86	LYS
35	AH	104	VAL
36	AI	11	THR
36	AI	15	GLU
36	AI	21	LEU
36	AI	31	LEU
36	AI	36	LEU
36	AI	40	SER
36	AI	43	LYS
36	AI	47	VAL
36	AI	49	LYS
36	AI	50	SER
36	AI	62	GLN
36	AI	76	GLN
36	AI	84	LYS
36	AI	85	THR
36	AI	89	ARG
36	AI	90	ARG
36	AI	96	GLU
36	AI	101	THR
36	AI	102	GLU
36	AI	107	LYS
36	AI	115	LYS
37	AJ	2	THR
37	AJ	11	LEU
37	AJ	17	VAL
37	AJ	18	THR
37	AJ	19	SER
37	AJ	25	LYS
37	AJ	26	ILE
37	AJ	29	LYS
37	AJ	36	ARG
37	AJ	45	ARG
37	AJ	57	LEU
37	AJ	58	ILE
37	AJ	62	ARG
37	AJ	70	ARG
37	AJ	81	THR
37	AJ	88	GLU
37	AJ	90	MET
37	AJ	98	ARG
38	AK	5	THR

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Mol	Chain	Res	Type
38	AK	17	THR
38	AK	24	ARG
38	AK	25	ARG
38	AK	33	THR
38	AK	44	THR
38	AK	45	ARG
38	AK	55	ARG
38	AK	59	THR
38	AK	65	ARG
38	AK	67	LEU
38	AK	82	SER
39	AL	5	ILE
39	AL	9	LYS
39	AL	24	THR
39	AL	31	LEU
39	AL	32	ASN
39	AL	33	LYS
39	AL	53	THR
39	AL	64	LYS
39	AL	65	LEU
39	AL	67	GLN
39	AL	72	THR
39	AL	77	ARG
40	AM	4	GLN
40	AM	18	LYS
40	AM	21	ARG
40	AM	27	ILE
40	AM	29	LEU
40	AM	34	THR
40	AM	45	ARG
40	AM	51	ILE
41	AN	80	PRO
41	AN	85	LEU
41	AN	94	SER
41	AN	108	THR
41	AN	113	ARG
41	AN	126	LYS
41	AN	127	LEU
42	AO	9	ARG
42	AO	11	ARG
42	AO	13	LEU
42	AO	16	LYS

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Mol	Chain	Res	Type
42	AO	21	ARG
43	AP	2	VAL
43	AP	7	THR
43	AP	16	THR
43	AP	26	THR
43	AP	29	LYS
43	AP	38	GLN
43	AP	47	GLN
43	AP	54	THR
43	AP	71	ARG
43	AP	76	LYS
43	AP	77	CYS
43	AP	78	LYS
43	AP	79	THR
43	AP	83	LEU
43	AP	84	THR
43	AP	85	LEU
44	AQ	11	THR
44	AQ	21	SER
44	AQ	25	GLN
44	AQ	40	SER
44	AQ	42	CYS
44	AQ	45	LYS
44	AQ	49	ARG
44	AQ	56	THR
44	AQ	60	CYS
44	AQ	62	LYS
44	AQ	70	THR
44	AQ	78	THR
44	AQ	80	ARG
44	AQ	84	ARG
44	AQ	90	VAL
44	AQ	91	GLU
45	i	27	LYS
45	i	28	SER
45	i	33	LYS
45	i	34	LYS
45	i	46	LYS
45	i	51	ARG
45	i	53	ARG
45	i	55	SER
45	i	61	ILE

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Mol	Chain	Res	Type
45	i	64	LYS
45	i	68	ARG
45	i	69	ARG
45	i	84	LYS
45	i	86	ASN
45	i	91	THR
45	i	97	THR
45	i	102	THR
45	i	104	LYS
45	i	116	GLU
45	i	117	LEU
45	i	124	GLN
45	i	130	GLU
45	i	131	ILE
45	i	134	ASP
4	CD	3	ARG
4	CD	20	THR
4	CD	23	ARG
4	CD	30	ARG
4	CD	32	LEU
4	CD	41	ILE
4	CD	44	ILE
4	CD	45	VAL
4	CD	46	LYS
4	CD	48	ILE
4	CD	49	VAL
4	CD	52	SER
4	CD	62	VAL
4	CD	73	GLU
4	CD	74	GLU
4	CD	82	VAL
4	CD	84	THR
4	CD	95	SER
4	CD	101	VAL
4	CD	104	LEU
4	CD	116	VAL
4	CD	122	ASP
4	CD	128	ARG
4	CD	137	ILE
4	CD	142	ASP
4	CD	143	GLU
4	CD	147	ARG

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Mol	Chain	Res	Type
4	CD	157	VAL
4	CD	169	ILE
4	CD	175	VAL
4	CD	179	LEU
4	CD	180	LEU
4	CD	188	LYS
4	CD	204	MET
4	CD	226	SER
4	CD	227	ARG
4	CD	230	VAL
4	CD	241	ARG
4	CD	243	THR
4	CD	250	GLN
4	CD	251	LYS
5	CE	4	ARG
5	CE	7	GLU
5	CE	10	ARG
5	CE	17	LEU
5	CE	21	ARG
5	CE	25	ILE
5	CE	30	LYS
5	CE	43	LEU
5	CE	44	THR
5	CE	47	LEU
5	CE	56	ILE
5	CE	66	LYS
5	CE	69	LYS
5	CE	79	VAL
5	CE	85	VAL
5	CE	95	THR
5	CE	103	THR
5	CE	114	VAL
5	CE	126	LYS
5	CE	134	SER
5	CE	139	GLN
5	CE	145	GLU
5	CE	148	LEU
5	CE	150	ARG
5	CE	156	SER
5	CE	157	VAL
5	CE	167	ARG
5	CE	169	THR

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Mol	Chain	Res	Type
5	CE	183	LEU
5	CE	188	ILE
5	CE	192	VAL
5	CE	196	ARG
5	CE	200	GLU
5	CE	201	LYS
5	CE	202	THR
5	CE	205	VAL
5	CE	212	ASN
5	CE	213	GLU
5	CE	221	THR
5	CE	229	VAL
5	CE	232	ARG
5	CE	235	THR
5	CE	236	LYS
5	CE	238	LEU
5	CE	246	LEU
5	CE	252	ILE
5	CE	256	HIS
5	CE	264	VAL
5	CE	274	SER
5	CE	277	SER
5	CE	282	ILE
5	CE	284	ARG
5	CE	297	SER
5	CE	305	ILE
5	CE	316	GLU
5	CE	325	LYS
5	CE	328	ILE
5	CE	332	ARG
5	CE	337	THR
5	CE	338	LEU
5	CE	347	SER
5	CE	348	ARG
5	CE	363	SER
5	CE	364	LYS
5	CE	382	THR
5	CE	386	ASP
6	CF	47	ARG
6	CF	74	ILE
6	CF	85	SER
6	CF	93	MET

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Mol	Chain	Res	Type
6	CF	110	ASN
6	CF	120	TYR
6	CF	133	SER
6	CF	138	ARG
6	CF	144	LYS
6	CF	148	ILE
6	CF	150	LEU
6	CF	156	LEU
6	CF	170	LYS
6	CF	176	SER
6	CF	177	ASP
6	CF	179	LEU
6	CF	187	LEU
6	CF	188	ARG
6	CF	200	THR
6	CF	203	ARG
6	CF	206	LEU
6	CF	215	ILE
6	CF	220	ARG
6	CF	222	VAL
6	CF	230	VAL
6	CF	246	ARG
6	CF	258	LEU
6	CF	259	ASP
6	CF	265	GLU
6	CF	292	SER
6	CF	299	ILE
6	CF	306	THR
6	CF	307	GLN
6	CF	327	LEU
6	CF	332	LYS
6	CF	333	VAL
6	CF	338	LYS
6	CF	346	LYS
6	CF	354	VAL
7	CG	4	GLN
7	CG	5	LYS
7	CG	8	LYS
7	CG	20	PHE
7	CG	23	ARG
7	CG	35	ARG
7	CG	38	THR

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Mol	Chain	Res	Type
7	CG	41	LYS
7	CG	45	ASN
7	CG	63	GLN
7	CG	66	SER
7	CG	68	THR
7	CG	75	LEU
7	CG	89	THR
7	CG	92	LEU
7	CG	95	TRP
7	CG	105	ILE
7	CG	107	ARG
7	CG	110	LEU
7	CG	115	LEU
7	CG	116	ASP
7	CG	118	THR
7	CG	124	GLU
7	CG	126	GLU
7	CG	131	LEU
7	CG	140	ARG
7	CG	146	LEU
7	CG	148	ILE
7	CG	151	GLN
7	CG	152	ARG
7	CG	155	THR
7	CG	163	LEU
7	CG	164	LYS
7	CG	176	SER
7	CG	177	GLU
7	CG	185	PHE
7	CG	187	THR
7	CG	188	GLU
7	CG	194	LEU
7	CG	213	ASP
7	CG	227	LEU
7	CG	230	ASP
7	CG	263	GLU
7	CG	275	THR
7	CG	278	SER
7	CG	297	GLN
8	CH	8	LYS
8	CH	12	SER
8	CH	14	ASP

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Mol	Chain	Res	Type
8	CH	21	THR
8	CH	31	ARG
8	CH	46	ARG
8	CH	48	ARG
8	CH	52	VAL
8	CH	58	LEU
8	CH	65	ILE
8	CH	78	ARG
8	CH	88	SER
8	CH	89	THR
8	CH	97	ASN
8	CH	109	GLU
8	CH	129	GLU
8	CH	131	LYS
8	CH	134	ARG
8	CH	152	THR
8	CH	155	LEU
9	CI	24	GLU
9	CI	25	GLN
9	CI	29	GLU
9	CI	38	LYS
9	CI	60	ARG
9	CI	77	VAL
9	CI	82	LYS
9	CI	83	LEU
9	CI	89	ILE
9	CI	92	ILE
9	CI	93	ASN
9	CI	98	LYS
9	CI	100	ARG
9	CI	101	LYS
9	CI	124	LEU
9	CI	158	LYS
9	CI	164	SER
9	CI	168	ILE
9	CI	173	LEU
9	CI	179	LEU
9	CI	184	LEU
9	CI	218	ARG
9	CI	225	GLN
9	CI	239	LEU
10	CJ	26	LEU

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Mol	Chain	Res	Type
10	CJ	27	THR
10	CJ	41	GLN
10	CJ	50	VAL
10	CJ	71	VAL
10	CJ	74	THR
10	CJ	79	GLN
10	CJ	81	THR
10	CJ	84	ARG
10	CJ	85	ASN
10	CJ	100	GLU
10	CJ	118	GLU
10	CJ	136	LEU
10	CJ	153	ILE
10	CJ	169	LEU
10	CJ	172	LYS
10	CJ	185	ARG
10	CJ	189	LEU
10	CJ	197	VAL
10	CJ	202	GLU
10	CJ	203	VAL
10	CJ	206	GLU
10	CJ	248	LYS
10	CJ	249	ARG
11	CK	1	MET
11	CK	5	GLN
11	CK	17	THR
11	CK	18	VAL
11	CK	22	SER
11	CK	33	THR
11	CK	41	ILE
11	CK	46	THR
11	CK	48	VAL
11	CK	52	LEU
11	CK	55	VAL
11	CK	62	ARG
11	CK	68	LEU
11	CK	69	ARG
11	CK	70	THR
11	CK	82	VAL
11	CK	107	ASP
11	CK	110	LYS
11	CK	121	LYS

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Mol	Chain	Res	Type
11	CK	122	LYS
11	CK	133	THR
11	CK	138	THR
11	CK	139	ASN
11	CK	150	SER
11	CK	151	VAL
11	CK	157	ASN
11	CK	161	LEU
11	CK	162	GLN
11	CK	164	ILE
11	CK	166	ARG
11	CK	173	ARG
11	CK	177	ASP
11	CK	191	LEU
12	CL	3	ARG
12	CL	24	ARG
12	CL	26	VAL
12	CL	28	ASP
12	CL	29	SER
12	CL	30	LYS
12	CL	32	ARG
12	CL	33	ILE
12	CL	36	LEU
12	CL	44	ASP
12	CL	48	LEU
12	CL	50	VAL
12	CL	52	LEU
12	CL	57	LEU
12	CL	58	GLU
12	CL	77	THR
12	CL	82	ARG
12	CL	87	LEU
12	CL	91	VAL
12	CL	116	ARG
12	CL	130	ASP
12	CL	139	ARG
12	CL	140	THR
12	CL	145	LYS
12	CL	156	ARG
12	CL	165	ILE
12	CL	167	LEU
12	CL	169	LYS

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Mol	Chain	Res	Type
12	CL	174	THR
12	CL	177	ASP
12	CL	180	GLU
12	CL	182	LEU
12	CL	191	LYS
12	CL	197	VAL
12	CL	205	SER
12	CL	208	ASN
12	CL	209	ASN
13	CM	9	MET
13	CM	10	ARG
13	CM	12	LEU
13	CM	13	LYS
13	CM	22	SER
13	CM	28	ASP
13	CM	37	LEU
13	CM	40	LEU
13	CM	44	THR
13	CM	55	ARG
13	CM	56	THR
13	CM	70	THR
13	CM	80	LEU
13	CM	82	ARG
13	CM	87	LYS
13	CM	101	ASN
13	CM	106	ILE
13	CM	107	ASP
13	CM	130	VAL
13	CM	137	ARG
13	CM	140	ARG
13	CM	142	LYS
13	CM	166	LYS
13	CM	172	LEU
14	CN	5	LYS
14	CN	9	ILE
14	CN	23	LYS
14	CN	54	LEU
14	CN	55	ARG
14	CN	67	ARG
14	CN	69	VAL
14	CN	107	GLU
14	CN	108	ILE

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Mol	Chain	Res	Type
14	CN	117	LYS
14	CN	118	GLU
14	CN	122	LYS
14	CN	124	ILE
14	CN	131	LYS
14	CN	134	GLU
14	CN	164	GLU
14	CN	165	SER
14	CN	168	ARG
14	CN	171	ARG
14	CN	176	GLU
15	CO	5	SER
15	CO	10	SER
15	CO	11	ASN
15	CO	16	GLU
15	CO	20	VAL
15	CO	38	ILE
15	CO	42	LYS
15	CO	53	VAL
15	CO	58	ILE
15	CO	63	VAL
15	CO	66	THR
15	CO	72	LEU
15	CO	82	SER
15	CO	92	GLU
15	CO	102	LYS
15	CO	113	THR
15	CO	130	THR
16	CP	8	GLU
16	CP	10	LEU
16	CP	15	GLN
16	CP	20	ARG
16	CP	22	LEU
16	CP	24	ARG
16	CP	38	ARG
16	CP	46	ASP
16	CP	50	ARG
16	CP	80	THR
16	CP	85	THR
16	CP	87	GLN
16	CP	93	LYS
16	CP	95	GLN

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Mol	Chain	Res	Type
16	CP	96	ARG
16	CP	104	GLU
16	CP	106	VAL
16	CP	109	ARG
16	CP	113	LEU
16	CP	117	ASN
16	CP	133	ILE
16	CP	138	GLN
16	CP	151	ILE
16	CP	153	ASP
16	CP	155	VAL
16	CP	170	LYS
16	CP	171	SER
16	CP	184	LYS
16	CP	190	THR
17	CQ	22	VAL
17	CQ	33	ILE
17	CQ	41	LEU
17	CQ	58	LEU
17	CQ	59	ARG
17	CQ	66	LYS
17	CQ	67	THR
17	CQ	78	ARG
17	CQ	85	ARG
17	CQ	106	GLU
17	CQ	117	ARG
17	CQ	122	GLN
17	CQ	128	ARG
17	CQ	129	LEU
17	CQ	134	LYS
17	CQ	166	GLU
17	CQ	180	SER
17	CQ	184	THR
17	CQ	190	VAL
18	CR	3	ARG
18	CR	7	THR
18	CR	9	THR
18	CR	24	VAL
18	CR	32	THR
18	CR	52	LEU
18	CR	53	ASP
18	CR	55	GLN

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Mol	Chain	Res	Type
18	CR	69	ARG
18	CR	78	VAL
18	CR	110	THR
18	CR	111	LYS
18	CR	112	LEU
18	CR	114	VAL
18	CR	119	VAL
18	CR	128	ARG
18	CR	129	THR
18	CR	144	SER
18	CR	166	VAL
18	CR	168	LEU
18	CR	169	THR
18	CR	171	ARG
18	CR	175	ARG
19	CS	3	ILE
19	CS	7	SER
19	CS	17	THR
19	CS	22	ASP
19	CS	32	LEU
19	CS	34	THR
19	CS	39	ARG
19	CS	41	ASP
19	CS	49	LEU
19	CS	63	SER
19	CS	64	VAL
19	CS	66	ARG
19	CS	80	THR
19	CS	81	VAL
19	CS	86	THR
19	CS	93	ILE
19	CS	100	THR
19	CS	113	LYS
19	CS	135	GLN
19	CS	168	THR
19	CS	180	ARG
19	CS	185	LYS
20	CT	10	LEU
20	CT	29	THR
20	CT	30	SER
20	CT	41	ILE
20	CT	42	ARG

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Mol	Chain	Res	Type
20	CT	43	LYS
20	CT	52	LYS
20	CT	60	LYS
20	CT	76	SER
20	CT	103	ARG
20	CT	111	ASP
20	CT	133	LYS
20	CT	138	LEU
20	CT	148	ASP
20	CT	150	GLN
20	CT	153	LYS
20	CT	165	LYS
20	CT	166	ASN
20	CT	173	ARG
20	CT	177	VAL
20	CT	180	LYS
20	CT	182	ASP
21	CU	16	THR
21	CU	45	LEU
21	CU	52	LYS
21	CU	57	GLU
21	CU	58	ILE
21	CU	61	ILE
21	CU	62	ASN
21	CU	71	LYS
21	CU	80	ARG
21	CU	87	THR
21	CU	97	VAL
21	CU	100	VAL
21	CU	105	THR
21	CU	115	ARG
21	CU	117	ARG
21	CU	132	THR
21	CU	136	LYS
21	CU	137	ARG
21	CU	145	THR
21	CU	149	LYS
21	CU	156	VAL
21	CU	157	GLN
21	CU	160	THR
21	CU	162	THR
21	CU	164	SER

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Mol	Chain	Res	Type
21	CU	167	ARG
21	CU	169	SER
21	CU	172	TYR
22	CV	12	ARG
22	CV	16	GLN
22	CV	25	VAL
22	CV	26	HIS
22	CV	27	LEU
22	CV	36	VAL
22	CV	71	SER
22	CV	75	ILE
22	CV	76	ILE
22	CV	78	LYS
22	CV	80	VAL
22	CV	83	ARG
22	CV	88	ARG
22	CV	89	LEU
22	CV	96	ILE
22	CV	102	ARG
22	CV	103	GLN
22	CV	104	GLU
22	CV	106	LEU
22	CV	124	VAL
22	CV	126	VAL
22	CV	127	GLN
22	CV	128	LEU
22	CV	139	ARG
22	CV	141	VAL
22	CV	143	THR
22	CV	159	PHE
22	CV	160	ILE
23	CW	10	LYS
23	CW	15	PHE
23	CW	16	THR
23	CW	20	SER
23	CW	38	ILE
23	CW	43	VAL
23	CW	49	ASN
23	CW	52	ASN
23	CW	54	VAL
23	CW	58	GLU
23	CW	59	ASP

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Mol	Chain	Res	Type
23	CW	63	VAL
23	CW	66	VAL
23	CW	75	TYR
23	CW	94	ARG
23	CW	105	LEU
24	CX	2	SER
24	CX	7	GLN
24	CX	13	ILE
24	CX	32	ARG
24	CX	45	ARG
24	CX	48	ARG
24	CX	63	LYS
24	CX	64	LYS
24	CX	69	LEU
24	CX	73	VAL
24	CX	74	MET
24	CX	83	LYS
24	CX	88	ARG
24	CX	91	VAL
24	CX	102	ILE
24	CX	120	LYS
25	CY	1	MET
25	CY	4	GLU
25	CY	19	THR
25	CY	26	SER
25	CY	39	LEU
25	CY	54	LEU
25	CY	63	ILE
25	CY	80	ARG
26	CZ	27	ARG
26	CZ	37	THR
26	CZ	38	LEU
26	CZ	39	LYS
26	CZ	45	LYS
26	CZ	48	SER
26	CZ	63	ILE
26	CZ	71	THR
26	CZ	74	LYS
26	CZ	75	LYS
26	CZ	112	THR
26	CZ	115	ARG
26	CZ	125	ARG

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Mol	Chain	Res	Type
26	CZ	127	THR
26	CZ	135	ILE
26	CZ	137	ASN
26	CZ	139	ILE
27	DA	3	LYS
27	DA	4	GLN
27	DA	9	SER
27	DA	10	SER
27	DA	13	ARG
27	DA	17	LYS
27	DA	37	LYS
27	DA	45	ILE
27	DA	50	ILE
27	DA	51	ARG
27	DA	56	VAL
27	DA	57	LEU
27	DA	62	SER
27	DA	74	TYR
27	DA	76	LEU
27	DA	80	VAL
27	DA	90	VAL
27	DA	113	LYS
27	DA	125	LYS
28	DB	14	VAL
28	DB	17	ARG
28	DB	24	VAL
28	DB	26	VAL
28	DB	35	SER
28	DB	72	ILE
28	DB	81	LEU
28	DB	83	THR
28	DB	88	ASP
28	DB	99	GLU
28	DB	102	GLU
28	DB	103	GLN
28	DB	105	SER
28	DB	126	LYS
28	DB	128	GLN
28	DB	134	LEU
29	DC	4	ARG
29	DC	8	THR
29	DC	10	LYS

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Mol	Chain	Res	Type
29	DC	16	SER
29	DC	24	LYS
29	DC	26	ARG
29	DC	42	ARG
29	DC	46	ASP
29	DC	56	VAL
29	DC	60	TYR
29	DC	73	LEU
29	DC	76	ASP
29	DC	78	LEU
29	DC	91	LEU
29	DC	98	THR
29	DC	115	LYS
29	DC	124	ILE
29	DC	139	ARG
29	DC	148	ILE
30	DD	22	LYS
30	DD	23	LYS
30	DD	25	LYS
30	DD	26	THR
30	DD	31	SER
30	DD	38	LYS
30	DD	50	THR
30	DD	59	LYS
31	DE	12	GLN
31	DE	16	LEU
31	DE	22	LYS
31	DE	34	LEU
31	DE	40	LYS
31	DE	41	LEU
31	DE	48	THR
31	DE	55	GLU
31	DE	61	MET
31	DE	83	LYS
31	DE	84	LEU
32	DF	8	VAL
32	DF	13	THR
32	DF	16	LEU
32	DF	18	LYS
32	DF	28	ARG
32	DF	31	ARG
32	DF	79	ARG

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Mol	Chain	Res	Type
32	DF	84	ASP
32	DF	86	LYS
32	DF	93	VAL
32	DF	96	VAL
32	DF	100	SER
32	DF	102	LYS
32	DF	106	THR
32	DF	110	GLU
33	DG	4	LEU
33	DG	8	LYS
33	DG	10	VAL
33	DG	12	LYS
33	DG	19	ARG
33	DG	31	ASN
33	DG	33	ARG
33	DG	34	LYS
33	DG	51	SER
33	DG	54	LYS
33	DG	61	LYS
33	DG	73	THR
33	DG	75	LEU
33	DG	82	LEU
33	DG	84	THR
33	DG	101	SER
33	DG	103	LYS
33	DG	106	VAL
33	DG	111	ARG
33	DG	125	ARG
34	DH	4	SER
34	DH	10	LYS
34	DH	15	SER
34	DH	31	LYS
34	DH	48	ARG
34	DH	49	ILE
34	DH	59	VAL
34	DH	74	THR
34	DH	92	LYS
34	DH	98	VAL
34	DH	105	SER
35	DI	5	VAL
35	DI	20	ILE
35	DI	21	LYS

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Mol	Chain	Res	Type
35	DI	24	LYS
35	DI	29	ILE
35	DI	35	VAL
35	DI	36	LYS
35	DI	40	THR
35	DI	49	SER
35	DI	58	ARG
35	DI	60	ARG
35	DI	65	VAL
35	DI	71	THR
35	DI	86	LYS
35	DI	87	GLU
35	DI	88	ARG
35	DI	98	GLN
35	DI	103	LYS
35	DI	104	VAL
36	DJ	11	THR
36	DJ	14	LYS
36	DJ	15	GLU
36	DJ	20	GLN
36	DJ	21	LEU
36	DJ	38	ARG
36	DJ	40	SER
36	DJ	46	THR
36	DJ	47	VAL
36	DJ	48	ARG
36	DJ	49	LYS
36	DJ	69	LEU
36	DJ	71	LYS
36	DJ	81	ARG
36	DJ	84	LYS
36	DJ	86	ARG
36	DJ	89	ARG
36	DJ	96	GLU
36	DJ	101	THR
36	DJ	102	GLU
36	DJ	107	LYS
36	DJ	119	LYS
37	DK	11	LEU
37	DK	21	THR
37	DK	26	ILE
37	DK	35	ASN

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Mol	Chain	Res	Type
37	DK	36	ARG
37	DK	37	THR
37	DK	42	SER
37	DK	43	LEU
37	DK	45	ARG
37	DK	68	ARG
37	DK	76	ARG
37	DK	84	LYS
37	DK	99	ARG
38	DL	3	LYS
38	DL	5	THR
38	DL	15	SER
38	DL	17	THR
38	DL	24	ARG
38	DL	25	ARG
38	DL	33	THR
38	DL	54	LYS
38	DL	55	ARG
38	DL	67	LEU
38	DL	68	LYS
38	DL	71	SER
38	DL	79	GLN
38	DL	80	THR
38	DL	82	SER
39	DM	9	LYS
39	DM	13	GLU
39	DM	14	LEU
39	DM	20	VAL
39	DM	24	THR
39	DM	41	THR
39	DM	45	VAL
39	DM	46	ARG
39	DM	53	THR
39	DM	65	LEU
39	DM	69	LEU
39	DM	77	ARG
40	DN	4	GLN
40	DN	21	ARG
40	DN	29	LEU
40	DN	34	THR
40	DN	45	ARG
40	DN	47	THR

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Mol	Chain	Res	Type
40	DN	49	MET
40	DN	51	ILE
41	DO	78	ILE
41	DO	85	LEU
41	DO	91	CYS
41	DO	112	LYS
41	DO	113	ARG
41	DO	127	LEU
41	DO	128	LYS
42	DP	6	ARG
42	DP	9	ARG
42	DP	11	ARG
42	DP	13	LEU
42	DP	16	LYS
42	DP	25	LYS
43	DQ	4	VAL
43	DQ	7	THR
43	DQ	8	ARG
43	DQ	17	CYS
43	DQ	22	GLN
43	DQ	35	LEU
43	DQ	45	ARG
43	DQ	48	SER
43	DQ	61	LYS
43	DQ	79	THR
43	DQ	83	LEU
43	DQ	84	THR
43	DQ	85	LEU
43	DQ	93	LEU
43	DQ	100	LYS
44	DR	10	ILE
44	DR	25	GLN
44	DR	49	ARG
44	DR	56	THR
44	DR	59	CYS
44	DR	60	CYS
44	DR	64	VAL
44	DR	84	ARG
46	p0	4	ILE
46	p0	15	LEU
46	p0	17	GLU
46	p0	34	SER

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Mol	Chain	Res	Type
46	p0	43	LYS
46	p0	44	GLU
46	p0	48	ARG
46	p0	52	LEU
46	p0	57	THR
46	p0	70	LEU
46	p0	72	ASP
46	p0	74	GLU
46	p0	76	LEU
46	p0	93	LEU
46	p0	94	THR
46	p0	97	LYS
46	p0	104	ARG
46	p0	192	ASP
46	p0	193	ASN
45	sM	30	THR
45	sM	33	LYS
45	sM	41	SER
45	sM	43	ASP
45	sM	64	LYS
45	sM	65	THR
45	sM	68	ARG
45	sM	74	LYS
45	sM	75	ASP
45	sM	77	THR
48	B	6	THR
48	B	12	GLU
48	B	32	HIS
48	B	37	VAL
48	B	43	ASP
48	B	50	VAL
48	B	59	LEU
48	B	62	ARG
48	B	84	ARG
48	B	87	LEU
48	B	88	LYS
48	B	92	HIS
48	B	93	THR
48	B	96	THR
48	B	111	ILE
48	B	155	PHE
48	B	158	VAL

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Mol	Chain	Res	Type
48	B	162	CYS
48	B	167	LYS
48	B	170	ILE
48	B	172	LEU
48	B	185	ARG
48	B	188	LEU
48	B	189	VAL
48	B	197	ILE
48	B	198	MET
48	B	200	ASP
49	C	21	VAL
49	C	25	THR
49	C	29	TRP
49	C	30	PHE
49	C	31	ASP
49	C	36	SER
49	C	40	ASN
49	C	46	THR
49	C	61	LEU
49	C	62	LYS
49	C	70	LEU
49	C	78	ASP
49	C	81	PHE
49	C	89	ASP
49	C	97	LEU
49	C	105	PHE
49	C	110	LEU
49	C	111	ARG
49	C	117	TRP
49	C	130	SER
49	C	144	ARG
49	C	177	GLN
49	C	181	LEU
49	C	184	LEU
49	C	193	ILE
49	C	198	GLU
49	C	202	LYS
49	C	218	LEU
49	C	220	GLN
49	C	222	LYS
49	C	223	PHE
50	D	40	LYS

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Mol	Chain	Res	Type
50	D	53	ILE
50	D	58	LEU
50	D	69	ILE
50	D	70	ASP
50	D	72	LEU
50	D	77	GLN
50	D	91	ARG
50	D	94	GLN
50	D	95	ARG
50	D	96	THR
50	D	97	ARG
50	D	111	VAL
50	D	113	LEU
50	D	117	THR
50	D	137	ILE
50	D	140	ARG
50	D	141	ARG
50	D	146	THR
50	D	148	LEU
50	D	166	THR
50	D	174	ARG
50	D	209	ASN
50	D	221	THR
50	D	222	TYR
50	D	224	PHE
50	D	225	LEU
50	D	226	THR
50	D	242	ILE
50	D	244	SER
50	D	245	ASP
50	D	246	GLU
50	D	250	GLN
51	E	4	LEU
51	E	23	GLU
51	E	39	VAL
51	E	53	THR
51	E	64	ARG
51	E	65	ARG
51	E	66	ILE
51	E	67	ASN
51	E	76	ARG
51	E	84	ILE

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Mol	Chain	Res	Type
51	E	92	GLN
51	E	103	GLU
51	E	105	MET
51	E	124	ARG
51	E	127	MET
51	E	142	LEU
51	E	151	LYS
51	E	158	ILE
51	E	172	THR
51	E	175	VAL
51	E	176	LEU
51	E	178	ARG
51	E	179	GLN
51	E	181	VAL
51	E	182	LEU
51	E	195	SER
51	E	196	ARG
51	E	212	LYS
51	E	215	GLU
51	E	222	VAL
51	E	223	LYS
51	E	224	ASP
52	F	6	LYS
52	F	9	LEU
52	F	26	CYS
52	F	30	ARG
52	F	38	LEU
52	F	39	ARG
52	F	42	LEU
52	F	45	ILE
52	F	48	LEU
52	F	62	LYS
52	F	70	VAL
52	F	77	ARG
52	F	78	THR
52	F	92	LEU
52	F	108	ARG
52	F	113	ARG
52	F	117	GLU
52	F	120	SER
52	F	123	LEU
52	F	126	VAL

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Mol	Chain	Res	Type
52	F	131	LEU
52	F	133	LYS
52	F	180	LEU
52	F	182	TYR
52	F	187	ARG
52	F	195	ILE
52	F	197	HIS
52	F	198	LYS
52	F	206	ASP
52	F	210	ILE
52	F	215	ASP
52	F	220	THR
52	F	221	ARG
52	F	226	PHE
52	F	227	VAL
52	F	228	ILE
52	F	231	GLN
52	F	240	LYS
52	F	242	LYS
52	F	258	GLN
52	F	259	GLN
53	G	25	LEU
53	G	38	THR
53	G	40	ILE
53	G	41	LYS
53	G	43	PHE
53	G	45	LYS
53	G	49	GLU
53	G	50	GLU
53	G	53	VAL
53	G	65	ARG
53	G	76	ARG
53	G	79	ASN
53	G	93	LEU
53	G	94	THR
53	G	98	MET
53	G	119	ASP
53	G	127	GLN
53	G	139	ASN
53	G	146	THR
53	G	147	THR
53	G	149	VAL

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Mol	Chain	Res	Type
53	G	156	ARG
53	G	157	ARG
53	G	172	ILE
53	G	186	ASN
53	G	194	LEU
53	G	216	GLU
54	H	3	LEU
54	H	10	ASN
54	H	15	THR
54	H	39	GLU
54	H	43	ASP
54	H	44	GLU
54	H	58	LYS
54	H	65	GLN
54	H	68	LEU
54	H	69	LEU
54	H	71	THR
54	H	79	LYS
54	H	81	VAL
54	H	98	ARG
54	H	120	GLU
54	H	125	THR
54	H	126	ASP
54	H	127	THR
54	H	128	THR
54	H	129	VAL
54	H	132	ARG
54	H	133	LEU
54	H	151	ASP
54	H	154	ARG
54	H	158	ILE
54	H	169	TYR
54	H	170	THR
54	H	176	GLN
54	H	193	LEU
54	H	211	LEU
54	H	212	LEU
54	H	214	LYS
54	H	216	LEU
55	I	15	GLU
55	I	16	LEU
55	I	19	GLN

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Mol	Chain	Res	Type
55	I	31	SER
55	I	38	LEU
55	I	50	ASP
55	I	66	SER
55	I	67	LEU
55	I	70	PHE
55	I	76	LYS
55	I	77	LEU
55	I	80	GLU
55	I	85	PHE
55	I	87	ASP
55	I	97	ARG
55	I	104	ARG
55	I	105	THR
55	I	106	SER
55	I	108	GLN
55	I	110	GLN
55	I	114	ARG
55	I	116	ARG
55	I	130	VAL
55	I	134	GLU
55	I	143	LEU
55	I	147	ASN
55	I	156	SER
55	I	166	LEU
55	I	168	SER
55	I	174	ASN
55	I	184	GLU
56	J	8	ARG
56	J	21	PHE
56	J	22	ARG
56	J	28	GLU
56	J	29	LEU
56	J	36	THR
56	J	46	VAL
56	J	56	ARG
56	J	58	LEU
56	J	70	GLU
56	J	73	SER
56	J	74	LYS
56	J	88	ASN
56	J	138	ASN

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Mol	Chain	Res	Type
56	J	140	GLU
56	J	152	ILE
56	J	164	ARG
56	J	193	LEU
56	J	196	LEU
57	K	3	ARG
57	K	6	ARG
57	K	7	THR
57	K	14	THR
57	K	28	LEU
57	K	30	LEU
57	K	39	LYS
57	K	49	LEU
57	K	57	ARG
57	K	60	LEU
57	K	78	ARG
57	K	81	VAL
57	K	82	ARG
57	K	89	ASP
57	K	92	LYS
57	K	93	LEU
57	K	94	ASP
57	K	99	LEU
57	K	101	VAL
57	K	103	ASP
57	K	110	GLN
57	K	118	LEU
57	K	134	ILE
57	K	138	LYS
57	K	145	SER
57	K	149	ARG
57	K	157	ASP
57	K	161	THR
57	K	162	SER
57	K	171	ARG
57	K	172	VAL
57	K	182	GLU
58	L	20	VAL
58	L	27	PHE
58	L	31	LYS
58	L	32	HIS
58	L	49	LEU

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Mol	Chain	Res	Type
58	L	55	VAL
58	L	74	GLU
58	L	76	LEU
58	L	81	ASN
58	L	82	LEU
59	M	5	LEU
59	M	21	ASN
59	M	29	LYS
59	M	40	LEU
59	M	44	THR
59	M	67	ARG
59	M	69	LYS
59	M	76	VAL
59	M	80	MET
59	M	83	THR
59	M	91	LEU
59	M	94	ILE
59	M	99	ARG
59	M	109	VAL
59	M	112	SER
59	M	123	VAL
59	M	128	CYS
59	M	136	ARG
59	M	140	VAL
59	M	141	LYS
60	N	28	LEU
60	N	36	LEU
60	N	37	VAL
60	N	41	LEU
60	N	43	ARG
60	N	50	LYS
60	N	61	VAL
60	N	66	VAL
60	N	71	ILE
60	N	74	LEU
60	N	89	ILE
60	N	103	LEU
60	N	125	ASN
60	N	126	TRP
60	N	129	GLU
60	N	138	GLU
60	N	140	PHE

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Mol	Chain	Res	Type
61	O	3	ARG
61	O	6	SER
61	O	9	LYS
61	O	21	ASN
61	O	28	LEU
61	O	32	SER
61	O	33	VAL
61	O	36	GLN
61	O	53	LEU
61	O	64	ARG
61	O	66	ILE
61	O	76	LYS
61	O	83	GLU
61	O	88	LEU
61	O	102	LEU
61	O	115	LEU
61	O	125	LEU
61	O	138	ASN
61	O	149	LEU
62	P	12	GLN
62	P	13	VAL
62	P	14	PHE
62	P	29	HIS
62	P	31	THR
62	P	41	ARG
62	P	51	ASP
62	P	81	VAL
62	P	89	THR
62	P	92	LYS
62	P	93	THR
62	P	103	ARG
62	P	123	SER
62	P	132	ARG
62	P	137	LEU
63	Q	13	LYS
63	Q	21	ASP
63	Q	22	LEU
63	Q	26	LEU
63	Q	30	THR
63	Q	31	GLU
63	Q	35	LYS
63	Q	36	LEU

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Mol	Chain	Res	Type
63	Q	43	ARG
63	Q	44	ARG
63	Q	50	THR
63	Q	51	SER
63	Q	52	LYS
63	Q	84	ILE
63	Q	89	MET
63	Q	92	SER
63	Q	110	GLU
63	Q	121	ILE
63	Q	124	THR
64	R	4	VAL
64	R	12	LYS
64	R	14	LYS
64	R	28	LEU
64	R	29	ILE
64	R	43	ILE
64	R	47	LYS
64	R	53	LEU
64	R	57	LEU
64	R	59	LYS
64	R	65	ILE
64	R	66	ARG
64	R	69	VAL
64	R	74	HIS
64	R	98	ASP
64	R	114	ARG
64	R	123	ARG
64	R	127	LYS
64	R	128	LYS
64	R	137	ARG
64	R	141	SER
64	R	143	ARG
65	S	3	ARG
65	S	5	ARG
65	S	23	LYS
65	S	29	GLN
65	S	38	ILE
65	S	40	THR
65	S	46	LEU
65	S	60	ARG
65	S	62	GLN

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Mol	Chain	Res	Type
65	S	69	ILE
65	S	72	LYS
65	S	84	TYR
65	S	105	GLN
65	S	115	LEU
66	T	3	LEU
66	T	5	VAL
66	T	8	GLN
66	T	11	PHE
66	T	15	LEU
66	T	17	LEU
66	T	25	ASN
66	T	26	ILE
66	T	28	ILE
66	T	40	ARG
66	T	54	LEU
66	T	61	LEU
66	T	71	GLN
66	T	77	THR
66	T	80	LYS
66	T	89	GLN
66	T	91	ASP
66	T	93	THR
66	T	110	ARG
66	T	120	ARG
66	T	132	ARG
66	T	138	THR
66	T	140	THR
66	T	143	ARG
66	T	145	ARG
67	U	13	ASP
67	U	18	TYR
67	U	20	SER
67	U	22	LEU
67	U	24	ARG
67	U	28	LEU
67	U	34	VAL
67	U	35	ASP
67	U	36	ILE
67	U	57	ARG
67	U	67	MET
67	U	70	GLN

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Mol	Chain	Res	Type
67	U	75	LYS
67	U	94	ILE
67	U	126	GLU
67	U	130	ARG
67	U	131	ASP
67	U	144	GLU
68	V	15	GLN
68	V	23	ARG
68	V	27	THR
68	V	31	VAL
68	V	39	SER
68	V	48	HIS
68	V	57	ARG
68	V	60	THR
68	V	61	LYS
68	V	66	SER
68	V	74	GLU
68	V	76	SER
68	V	81	THR
68	V	83	GLU
68	V	85	ARG
68	V	89	ARG
68	V	99	ILE
68	V	103	ILE
68	V	117	VAL
69	W	1	MET
69	W	5	LYS
69	W	10	GLU
69	W	25	LYS
69	W	32	VAL
69	W	41	GLU
69	W	49	GLU
69	W	52	THR
69	W	69	LEU
69	W	78	LEU
70	X	4	SER
70	X	12	ASN
70	X	22	LYS
70	X	24	GLN
70	X	25	VAL
70	X	27	ILE
70	X	30	SER

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Mol	Chain	Res	Type
70	X	31	SER
70	X	47	ILE
70	X	53	ILE
70	X	65	LEU
70	X	86	ILE
70	X	87	GLU
70	X	93	LEU
70	X	97	ARG
70	X	98	GLN
70	X	103	ILE
70	X	105	THR
70	X	117	ARG
70	X	119	LYS
70	X	121	VAL
70	X	125	ILE
70	X	129	VAL
71	Y	7	ARG
71	Y	9	LEU
71	Y	14	LYS
71	Y	19	ARG
71	Y	26	GLU
71	Y	40	SER
71	Y	41	SER
71	Y	47	SER
71	Y	52	ILE
71	Y	84	THR
71	Y	107	PHE
71	Y	132	LEU
71	Y	138	GLU
71	Y	144	ARG
72	Z	21	LYS
72	Z	32	ARG
72	Z	44	LEU
72	Z	57	VAL
72	Z	81	GLU
72	Z	99	LYS
72	Z	100	VAL
72	Z	102	LYS
72	Z	124	ARG
72	Z	128	LYS
72	Z	133	ASN
73	a	42	LEU

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Mol	Chain	Res	Type
73	a	44	GLN
73	a	49	ARG
73	a	50	ILE
73	a	58	ARG
73	a	60	VAL
73	a	67	ASP
73	a	69	LEU
73	a	70	LYS
73	a	71	ILE
73	a	75	LEU
73	a	78	ILE
73	a	85	LYS
73	a	92	ILE
73	a	95	HIS
73	a	97	LYS
73	a	98	GLN
73	a	100	ILE
74	b	38	ARG
74	b	41	ILE
74	b	44	ILE
74	b	50	VAL
74	b	62	TYR
74	b	64	LEU
74	b	68	TYR
74	b	82	ARG
74	b	84	VAL
74	b	86	VAL
74	b	87	ARG
74	b	90	GLU
74	b	91	ASP
75	c	3	LEU
75	c	5	GLN
75	c	15	GLU
75	c	20	LYS
75	c	23	THR
75	c	33	LEU
75	c	61	THR
75	c	75	GLU
75	c	77	THR
76	d	15	VAL
76	d	19	THR
76	d	32	PHE

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Mol	Chain	Res	Type
76	d	49	ARG
76	d	58	GLU
76	d	64	ARG
76	d	66	LEU
77	e	7	TRP
77	e	9	SER
77	e	12	ARG
77	e	19	ARG
77	e	26	SER
77	e	28	THR
77	e	30	LEU
77	e	32	ARG
78	f	14	VAL
78	f	17	GLN
78	f	21	VAL
78	f	22	GLU
78	f	24	THR
78	f	28	LYS
78	f	29	LYS
78	f	43	ARG
78	f	49	LEU
78	f	55	ARG
79	g	87	THR
79	g	89	LYS
79	g	90	LYS
79	g	93	HIS
79	g	103	LEU
79	g	106	TYR
79	g	108	VAL
79	g	130	VAL
79	g	137	ASP
79	g	138	ARG
79	g	146	SER
79	g	147	VAL
80	h	6	VAL
80	h	10	ARG
80	h	29	GLN
80	h	50	ASP
80	h	52	GLN
80	h	76	ASP
80	h	106	HIS
80	h	116	ASP

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Mol	Chain	Res	Type
80	h	117	LYS
80	h	120	SER
80	h	121	MET
80	h	136	ILE
80	h	141	LEU
80	h	144	LEU
80	h	149	ASP
80	h	196	ASN
80	h	199	ILE
80	h	229	LYS
80	h	238	ASP
80	h	256	THR
80	h	258	THR
80	h	265	LEU
80	h	282	SER
80	h	292	LEU
80	h	300	THR
80	h	314	GLN
80	h	316	MET
80	Rb	5	GLU
80	Rb	16	HIS
80	Rb	21	THR
80	Rb	52	GLN
80	Rb	58	VAL
80	Rb	64	HIS
80	Rb	76	ASP
80	Rb	96	THR
80	Rb	106	HIS
80	Rb	133	VAL
80	Rb	136	ILE
80	Rb	145	LEU
80	Rb	149	ASP
80	Rb	159	ASN
80	Rb	165	ASP
80	Rb	202	LEU
80	Rb	228	LYS
80	Rb	245	PHE
80	Rb	258	THR
80	Rb	275	ARG
80	Rb	281	TYR
80	Rb	297	ASP
48	s0	10	THR

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Mol	Chain	Res	Type
48	s0	18	LEU
48	s0	29	VAL
48	s0	30	GLN
48	s0	45	VAL
48	s0	50	VAL
48	s0	55	GLU
48	s0	59	LEU
48	s0	62	ARG
48	s0	67	ILE
48	s0	106	SER
48	s0	111	ILE
48	s0	112	THR
48	s0	119	ARG
48	s0	124	THR
48	s0	131	GLN
48	s0	153	SER
48	s0	157	ASP
48	s0	158	VAL
48	s0	164	ASN
48	s0	165	ARG
48	s0	172	LEU
48	s0	185	ARG
48	s0	188	LEU
49	s1	21	VAL
49	s1	36	SER
49	s1	37	THR
49	s1	47	LEU
49	s1	51	SER
49	s1	61	LEU
49	s1	65	VAL
49	s1	70	LEU
49	s1	73	LEU
49	s1	74	GLN
49	s1	76	SER
49	s1	81	PHE
49	s1	83	LYS
49	s1	90	GLU
49	s1	105	PHE
49	s1	110	LEU
49	s1	125	VAL
49	s1	126	THR
49	s1	131	ASP

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Mol	Chain	Res	Type
49	s1	135	LEU
49	s1	153	HIS
49	s1	159	SER
49	s1	169	SER
49	s1	181	LEU
49	s1	183	GLN
49	s1	193	ILE
49	s1	194	ASN
49	s1	202	LYS
49	s1	205	PHE
49	s1	212	VAL
49	s1	222	LYS
49	s1	223	PHE
49	s1	225	VAL
49	s1	228	LEU
49	s1	231	LEU
49	s1	234	GLU
50	s2	41	LEU
50	s2	51	THR
50	s2	53	ILE
50	s2	54	GLU
50	s2	55	GLU
50	s2	58	LEU
50	s2	61	LEU
50	s2	69	ILE
50	s2	70	ASP
50	s2	73	LEU
50	s2	79	GLU
50	s2	80	VAL
50	s2	83	ILE
50	s2	86	VAL
50	s2	90	THR
50	s2	91	ARG
50	s2	94	GLN
50	s2	95	ARG
50	s2	97	ARG
50	s2	111	VAL
50	s2	117	THR
50	s2	139	ILE
50	s2	140	ARG
50	s2	141	ARG
50	s2	148	LEU

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Mol	Chain	Res	Type
50	s2	150	GLN
50	s2	159	THR
50	s2	166	THR
50	s2	186	LYS
50	s2	194	GLU
50	s2	195	ASP
50	s2	222	TYR
50	s2	228	ASN
50	s2	229	LEU
50	s2	233	GLN
50	s2	237	VAL
50	s2	244	SER
50	s2	246	GLU
51	s3	4	LEU
51	s3	9	ARG
51	s3	40	ARG
51	s3	44	THR
51	s3	61	GLU
51	s3	66	ILE
51	s3	79	TYR
51	s3	84	ILE
51	s3	90	ARG
51	s3	93	ASP
51	s3	115	ILE
51	s3	128	GLU
51	s3	132	LYS
51	s3	142	LEU
51	s3	146	ARG
51	s3	158	ILE
51	s3	164	VAL
51	s3	172	THR
51	s3	177	MET
51	s3	178	ARG
51	s3	179	GLN
51	s3	189	MET
51	s3	215	GLU
51	s3	217	ILE
51	s3	223	LYS
52	s4	9	LEU
52	s4	23	LEU
52	s4	26	CYS
52	s4	30	ARG

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Mol	Chain	Res	Type
52	s4	37	LYS
52	s4	38	LEU
52	s4	39	ARG
52	s4	42	LEU
52	s4	49	ARG
52	s4	51	ARG
52	s4	67	GLN
52	s4	69	HIS
52	s4	70	VAL
52	s4	78	THR
52	s4	98	ASN
52	s4	105	VAL
52	s4	126	VAL
52	s4	128	LYS
52	s4	160	VAL
52	s4	180	LEU
52	s4	181	VAL
52	s4	182	TYR
52	s4	210	ILE
52	s4	221	ARG
52	s4	227	VAL
52	s4	237	SER
52	s4	242	LYS
52	s4	254	ARG
53	s5	25	LEU
53	s5	27	THR
53	s5	31	GLU
53	s5	38	THR
53	s5	45	LYS
53	s5	52	GLU
53	s5	59	VAL
53	s5	63	GLN
53	s5	66	GLN
53	s5	68	ILE
53	s5	76	ARG
53	s5	79	ASN
53	s5	83	ARG
53	s5	93	LEU
53	s5	109	LYS
53	s5	119	ASP
53	s5	125	THR
53	s5	126	ASP

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Mol	Chain	Res	Type
53	s5	148	ARG
53	s5	157	ARG
53	s5	162	VAL
53	s5	163	SER
53	s5	167	ARG
53	s5	187	ILE
53	s5	189	THR
53	s5	194	LEU
53	s5	199	ILE
53	s5	203	LYS
53	s5	208	SER
53	s5	216	GLU
53	s5	224	ASN
53	s5	225	ARG
54	s6	15	THR
54	s6	17	GLU
54	s6	31	ARG
54	s6	68	LEU
54	s6	69	LEU
54	s6	71	THR
54	s6	73	ILE
54	s6	76	LEU
54	s6	97	VAL
54	s6	98	ARG
54	s6	108	VAL
54	s6	109	LEU
54	s6	112	VAL
54	s6	115	LYS
54	s6	120	GLU
54	s6	121	LEU
54	s6	125	THR
54	s6	126	ASP
54	s6	128	THR
54	s6	129	VAL
54	s6	133	LEU
54	s6	143	LYS
54	s6	151	ASP
54	s6	155	ASP
54	s6	156	PHE
54	s6	191	ARG
54	s6	193	LEU
54	s6	207	GLU

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Mol	Chain	Res	Type
54	s6	215	ARG
54	s6	216	LEU
55	s7	8	ILE
55	s7	10	SER
55	s7	11	GLN
55	s7	16	LEU
55	s7	30	SER
55	s7	33	GLU
55	s7	50	ASP
55	s7	67	LEU
55	s7	75	THR
55	s7	77	LEU
55	s7	79	ARG
55	s7	80	GLU
55	s7	97	ARG
55	s7	101	LYS
55	s7	106	SER
55	s7	114	ARG
55	s7	116	ARG
55	s7	117	THR
55	s7	118	LEU
55	s7	126	LEU
55	s7	143	LEU
55	s7	144	VAL
55	s7	159	VAL
55	s7	163	ASP
55	s7	166	LEU
55	s7	168	SER
55	s7	185	ILE
56	s8	8	ARG
56	s8	10	LYS
56	s8	20	GLN
56	s8	22	ARG
56	s8	29	LEU
56	s8	36	THR
56	s8	46	VAL
56	s8	64	ASN
56	s8	74	LYS
56	s8	76	THR
56	s8	82	VAL
56	s8	93	THR
56	s8	101	ILE

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Mol	Chain	Res	Type
56	s8	120	THR
56	s8	136	SER
56	s8	151	LYS
56	s8	155	SER
56	s8	161	SER
56	s8	183	ILE
56	s8	199	LYS
57	s9	3	ARG
57	s9	6	ARG
57	s9	7	THR
57	s9	28	LEU
57	s9	39	LYS
57	s9	49	LEU
57	s9	54	ARG
57	s9	78	ARG
57	s9	93	LEU
57	s9	99	LEU
57	s9	101	VAL
57	s9	105	LEU
57	s9	109	LEU
57	s9	111	THR
57	s9	113	VAL
57	s9	116	LEU
57	s9	121	SER
57	s9	130	THR
57	s9	132	ARG
57	s9	134	ILE
57	s9	149	ARG
57	s9	161	THR
57	s9	168	ARG
57	s9	172	VAL
57	s9	179	ARG
57	s9	180	LYS
57	s9	182	GLU
57	s9	186	GLU
58	c0	15	LEU
58	c0	20	VAL
58	c0	21	VAL
58	c0	22	VAL
58	c0	26	ASP
58	c0	28	ASN
58	c0	33	GLU

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Mol	Chain	Res	Type
58	c0	35	ILE
58	c0	51	SER
58	c0	55	VAL
58	c0	57	THR
58	c0	67	THR
58	c0	71	GLU
59	c1	2	SER
59	c1	4	GLU
59	c1	5	LEU
59	c1	6	THR
59	c1	10	GLU
59	c1	21	ASN
59	c1	26	LYS
59	c1	30	ARG
59	c1	31	THR
59	c1	40	LEU
59	c1	44	THR
59	c1	56	LYS
59	c1	60	PHE
59	c1	67	ARG
59	c1	74	THR
59	c1	77	SER
59	c1	83	THR
59	c1	86	ILE
59	c1	87	ARG
59	c1	109	VAL
59	c1	123	VAL
59	c1	129	ARG
59	c1	131	ILE
59	c1	138	ASN
60	c2	28	LEU
60	c2	39	ASP
60	c2	52	LEU
60	c2	54	ARG
60	c2	58	LEU
60	c2	61	VAL
60	c2	71	ILE
60	c2	83	GLU
60	c2	89	ILE
60	c2	91	VAL
60	c2	103	LEU
60	c2	129	GLU

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Mol	Chain	Res	Type
60	c2	132	GLU
60	c2	137	MET
60	c2	140	PHE
61	c3	12	SER
61	c3	16	ILE
61	c3	21	ASN
61	c3	30	SER
61	c3	39	LYS
61	c3	46	THR
61	c3	60	VAL
61	c3	66	ILE
61	c3	67	THR
61	c3	76	LYS
61	c3	83	GLU
61	c3	87	ASP
61	c3	97	SER
61	c3	102	LEU
61	c3	115	LEU
61	c3	125	LEU
61	c3	127	ARG
61	c3	134	VAL
61	c3	138	ASN
61	c3	143	SER
62	c4	20	TYR
62	c4	33	LEU
62	c4	38	THR
62	c4	49	LYS
62	c4	51	ASP
62	c4	79	VAL
62	c4	81	VAL
62	c4	83	ILE
62	c4	102	LEU
62	c4	114	ARG
62	c4	118	VAL
62	c4	119	THR
62	c4	123	SER
62	c4	124	ASP
62	c4	133	ARG
62	c4	136	ARG
62	c4	137	LEU
63	c5	10	ARG
63	c5	12	PHE

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Mol	Chain	Res	Type
63	c5	22	LEU
63	c5	23	GLU
63	c5	27	GLU
63	c5	36	LEU
63	c5	40	ARG
63	c5	60	LEU
63	c5	65	LEU
63	c5	69	GLU
63	c5	72	LYS
63	c5	110	GLU
63	c5	120	SER
63	c5	122	THR
63	c5	124	THR
63	c5	126	VAL
63	c5	127	ARG
63	c5	128	HIS
64	c6	7	VAL
64	c6	23	LYS
64	c6	28	LEU
64	c6	37	THR
64	c6	43	ILE
64	c6	48	VAL
64	c6	53	LEU
64	c6	54	LEU
64	c6	57	LEU
64	c6	68	ARG
64	c6	69	VAL
64	c6	70	THR
64	c6	81	ILE
64	c6	94	GLN
64	c6	114	ARG
64	c6	115	THR
64	c6	117	LEU
64	c6	122	ARG
64	c6	137	ARG
64	c6	143	ARG
65	c7	3	ARG
65	c7	7	LYS
65	c7	8	THR
65	c7	11	ARG
65	c7	14	LYS
65	c7	29	GLN

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Mol	Chain	Res	Type
65	c7	34	LEU
65	c7	46	LEU
65	c7	49	LYS
65	c7	55	THR
65	c7	61	ILE
65	c7	67	ARG
65	c7	69	ILE
65	c7	72	LYS
65	c7	78	ARG
65	c7	83	GLN
65	c7	85	VAL
65	c7	105	GLN
65	c7	106	THR
65	c7	107	SER
66	c8	3	LEU
66	c8	4	VAL
66	c8	6	GLN
66	c8	25	ASN
66	c8	27	LYS
66	c8	33	THR
66	c8	40	ARG
66	c8	61	LEU
66	c8	63	GLN
66	c8	92	ILE
66	c8	116	LEU
66	c8	119	ILE
66	c8	136	GLN
66	c8	138	THR
66	c8	143	ARG
66	c8	145	ARG
67	c9	6	VAL
67	c9	25	GLN
67	c9	28	LEU
67	c9	71	VAL
67	c9	86	ARG
67	c9	110	LYS
67	c9	117	SER
67	c9	126	GLU
67	c9	131	ASP
67	c9	139	THR
67	c9	140	LEU
67	c9	141	GLU

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Mol	Chain	Res	Type
67	c9	142	GLU
68	d0	12	GLN
68	d0	13	GLU
68	d0	16	GLN
68	d0	23	ARG
68	d0	27	THR
68	d0	30	LYS
68	d0	47	GLN
68	d0	51	VAL
68	d0	60	THR
68	d0	70	THR
68	d0	74	GLU
68	d0	77	LYS
68	d0	99	ILE
68	d0	103	ILE
68	d0	108	ILE
68	d0	113	ASP
68	d0	120	SER
69	d1	2	GLU
69	d1	4	ASP
69	d1	5	LYS
69	d1	11	LEU
69	d1	12	TYR
69	d1	32	VAL
69	d1	34	ILE
69	d1	49	GLU
69	d1	50	TYR
69	d1	52	THR
69	d1	68	SER
69	d1	78	LEU
70	d2	7	LEU
70	d2	15	ASN
70	d2	23	ARG
70	d2	25	VAL
70	d2	26	LEU
70	d2	42	GLN
70	d2	56	HIS
70	d2	65	LEU
70	d2	93	LEU
70	d2	98	GLN
70	d2	103	ILE
70	d2	105	THR

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Mol	Chain	Res	Type
71	d3	9	LEU
71	d3	16	ARG
71	d3	19	ARG
71	d3	23	ARG
71	d3	27	ASN
71	d3	28	ASN
71	d3	40	SER
71	d3	73	ARG
71	d3	74	VAL
71	d3	83	VAL
71	d3	84	THR
71	d3	99	ASN
71	d3	100	ASP
71	d3	107	PHE
71	d3	121	ARG
71	d3	133	LEU
71	d3	138	GLU
72	d4	5	VAL
72	d4	22	GLN
72	d4	26	ASP
72	d4	43	LYS
72	d4	49	LYS
72	d4	62	THR
72	d4	88	THR
72	d4	92	VAL
72	d4	104	SER
73	d5	42	LEU
73	d5	46	LYS
73	d5	51	LEU
73	d5	53	GLU
73	d5	57	TYR
73	d5	93	SER
73	d5	102	THR
74	d6	8	ASN
74	d6	10	ARG
74	d6	11	ASN
74	d6	18	VAL
74	d6	24	VAL
74	d6	46	GLU
74	d6	72	HIS
74	d6	76	SER
74	d6	82	ARG

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Mol	Chain	Res	Type
74	d6	85	ARG
74	d6	90	GLU
75	d7	3	LEU
75	d7	4	VAL
75	d7	37	CYS
75	d7	43	ILE
75	d7	52	THR
75	d7	59	CYS
75	d7	61	THR
75	d7	67	THR
75	d7	77	THR
75	d7	81	ARG
76	d8	16	LEU
76	d8	22	ARG
76	d8	28	VAL
76	d8	30	VAL
76	d8	36	THR
76	d8	39	THR
76	d8	48	VAL
76	d8	52	ASP
76	d8	62	GLU
76	d8	64	ARG
76	d8	65	ARG
77	d9	19	ARG
77	d9	21	CYS
77	d9	26	SER
77	d9	32	ARG
77	d9	36	LEU
77	d9	39	CYS
77	d9	54	LYS
78	e0	4	VAL
78	e0	22	GLU
78	e0	29	LYS
78	e0	31	LYS
78	e0	38	LEU
78	e0	44	PHE
78	e0	46	ASN
78	e0	48	THR
78	e0	49	LEU
78	e0	55	ARG
79	e1	106	TYR
79	e1	113	LYS

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Mol	Chain	Res	Type
79	e1	118	ARG
79	e1	120	GLU
79	e1	135	HIS
79	e1	137	ASP
79	e1	147	VAL
79	e1	148	TYR
79	e1	149	LYS
79	e1	150	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (30) such sidechains are listed below:

Mol	Chain	Res	Type
4	j	132	ASN
7	m	264	GLN
11	q	49	ASN
13	s	7	ASN
18	x	55	GLN
26	8	80	ASN
28	AA	57	HIS
28	AA	127	ASN
45	i	71	ASN
11	CK	139	ASN
19	CS	145	ASN
28	DB	36	HIS
48	B	168	HIS
49	C	177	GLN
49	C	211	HIS
50	D	94	GLN
53	G	95	ASN
53	G	131	GLN
55	I	174	ASN
56	J	9	HIS
57	K	110	GLN
67	U	25	GLN
71	Y	48	HIS
73	a	95	HIS
80	h	187	GLN
48	s0	69	ASN
53	s5	104	ASN
55	s7	71	HIS
65	c7	31	ASN
70	d2	56	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1	3145/3396 (92%)	643 (20%)	74 (2%)
1	AR	3143/3396 (92%)	642 (20%)	75 (2%)
2	3	120/121 (99%)	15 (12%)	2 (1%)
2	AS	120/121 (99%)	16 (13%)	1 (0%)
3	4	157/158 (99%)	35 (22%)	2 (1%)
3	AT	157/158 (99%)	32 (20%)	3 (1%)
47	A	1778/1797 (98%)	453 (25%)	53 (2%)
81	sR	1780/1800 (98%)	433 (24%)	0
All	All	10400/10947 (95%)	2269 (21%)	210 (2%)

All (2269) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1	16	A
1	1	18	G
1	1	26	A
1	1	40	A
1	1	43	A
1	1	44	U
1	1	45	A
1	1	49	A
1	1	59	G
1	1	60	A
1	1	65	A
1	1	66	A
1	1	68	C
1	1	73	C
1	1	83	U
1	1	85	A
1	1	92	G
1	1	99	A
1	1	109	A
1	1	110	G
1	1	111	C
1	1	113	C
1	1	116	A
1	1	117	U
1	1	121	A
1	1	122	A
1	1	131	C
1	1	133	U

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Mol	Chain	Res	Type
1	1	135	C
1	1	136	G
1	1	156	G
1	1	157	A
1	1	166	C
1	1	173	G
1	1	187	A
1	1	190	U
1	1	191	U
1	1	192	C
1	1	210	U
1	1	218	G
1	1	219	A
1	1	240	U
1	1	241	G
1	1	243	G
1	1	246	U
1	1	247	C
1	1	250	U
1	1	251	G
1	1	252	U
1	1	269	G
1	1	282	G
1	1	283	G
1	1	286	U
1	1	295	A
1	1	298	U
1	1	305	U
1	1	323	A
1	1	329	U
1	1	339	C
1	1	343	U
1	1	344	A
1	1	349	A
1	1	350	C
1	1	351	A
1	1	370	U
1	1	376	G
1	1	377	A
1	1	395	A
1	1	398	A
1	1	399	A

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Mol	Chain	Res	Type
1	1	401	U
1	1	402	A
1	1	403	C
1	1	421	G
1	1	422	A
1	1	438	A
1	1	439	C
1	1	440	A
1	1	495	G
1	1	498	A
1	1	507	U
1	1	520	U
1	1	521	A
1	1	535	G
1	1	537	A
1	1	544	C
1	1	546	C
1	1	547	G
1	1	548	G
1	1	551	A
1	1	552	G
1	1	553	U
1	1	555	U
1	1	557	A
1	1	559	A
1	1	578	A
1	1	579	G
1	1	592	A
1	1	604	G
1	1	609	G
1	1	611	A
1	1	619	A
1	1	620	U
1	1	621	A
1	1	636	C
1	1	637	C
1	1	638	C
1	1	642	U
1	1	643	U
1	1	649	A
1	1	658	G
1	1	660	A

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Mol	Chain	Res	Type
1	1	661	G
1	1	667	C
1	1	677	A
1	1	681	U
1	1	682	U
1	1	691	A
1	1	705	A
1	1	712	G
1	1	715	A
1	1	716	A
1	1	725	G
1	1	764	U
1	1	765	C
1	1	766	U
1	1	767	U
1	1	776	U
1	1	777	U
1	1	780	A
1	1	781	G
1	1	785	G
1	1	806	A
1	1	816	A
1	1	817	A
1	1	829	U
1	1	830	A
1	1	849	C
1	1	861	C
1	1	874	U
1	1	878	G
1	1	879	U
1	1	887	G
1	1	890	C
1	1	896	A
1	1	907	G
1	1	908	G
1	1	914	A
1	1	916	G
1	1	917	A
1	1	921	A
1	1	924	G
1	1	937	G
1	1	938	C

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Mol	Chain	Res	Type
1	1	944	C
1	1	959	C
1	1	960	U
1	1	961	C
1	1	962	A
1	1	974	G
1	1	979	U
1	1	980	A
1	1	981	U
1	1	982	C
1	1	993	G
1	1	994	G
1	1	1000	C
1	1	1001	G
1	1	1002	A
1	1	1006	A
1	1	1010	G
1	1	1017	C
1	1	1018	G
1	1	1020	G
1	1	1021	G
1	1	1024	G
1	1	1025	A
1	1	1029	G
1	1	1034	U
1	1	1036	A
1	1	1041	U
1	1	1042	U
1	1	1047	A
1	1	1049	C
1	1	1052	U
1	1	1064	A
1	1	1065	A
1	1	1072	G
1	1	1081	U
1	1	1082	U
1	1	1083	G
1	1	1093	A
1	1	1094	U
1	1	1095	U
1	1	1097	G
1	1	1098	A

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Mol	Chain	Res	Type
1	1	1103	A
1	1	1104	G
1	1	1111	U
1	1	1117	G
1	1	1128	U
1	1	1131	G
1	1	1152	G
1	1	1153	A
1	1	1159	A
1	1	1160	C
1	1	1161	G
1	1	1173	U
1	1	1174	G
1	1	1178	G
1	1	1179	A
1	1	1180	A
1	1	1181	U
1	1	1182	A
1	1	1186	G
1	1	1191	U
1	1	1192	C
1	1	1201	C
1	1	1205	A
1	1	1209	G
1	1	1213	G
1	1	1216	C
1	1	1217	A
1	1	1221	A
1	1	1222	G
1	1	1225	A
1	1	1227	C
1	1	1232	C
1	1	1233	G
1	1	1235	U
1	1	1236	G
1	1	1237	G
1	1	1241	U
1	1	1243	G
1	1	1244	A
1	1	1245	A
1	1	1246	G
1	1	1248	C

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Mol	Chain	Res	Type
1	1	1249	G
1	1	1254	C
1	1	1258	U
1	1	1262	G
1	1	1263	A
1	1	1264	G
1	1	1269	U
1	1	1270	A
1	1	1271	A
1	1	1274	A
1	1	1278	A
1	1	1279	C
1	1	1285	G
1	1	1286	A
1	1	1287	A
1	1	1292	C
1	1	1307	G
1	1	1308	A
1	1	1309	U
1	1	1313	G
1	1	1329	U
1	1	1330	A
1	1	1333	C
1	1	1348	U
1	1	1349	G
1	1	1350	A
1	1	1351	U
1	1	1352	A
1	1	1353	U
1	1	1354	G
1	1	1355	A
1	1	1356	U
1	1	1357	G
1	1	1386	A
1	1	1392	G
1	1	1398	U
1	1	1399	A
1	1	1400	G
1	1	1419	A
1	1	1425	U
1	1	1428	A
1	1	1429	G

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Mol	Chain	Res	Type
1	1	1433	A
1	1	1434	G
1	1	1435	A
1	1	1437	C
1	1	1446	A
1	1	1450	G
1	1	1462	A
1	1	1481	A
1	1	1482	A
1	1	1496	C
1	1	1503	A
1	1	1508	C
1	1	1526	U
1	1	1527	C
1	1	1533	U
1	1	1536	G
1	1	1555	U
1	1	1556	C
1	1	1560	G
1	1	1561	G
1	1	1562	C
1	1	1563	C
1	1	1564	U
1	1	1567	U
1	1	1568	U
1	1	1569	U
1	1	1576	G
1	1	1580	A
1	1	1582	C
1	1	1583	A
1	1	1587	A
1	1	1589	A
1	1	1593	A
1	1	1605	A
1	1	1607	U
1	1	1620	U
1	1	1629	U
1	1	1633	C
1	1	1639	C
1	1	1643	A
1	1	1657	C
1	1	1658	G

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Mol	Chain	Res	Type
1	1	1683	A
1	1	1716	U
1	1	1717	U
1	1	1724	U
1	1	1729	A
1	1	1736	G
1	1	1741	A
1	1	1750	A
1	1	1751	G
1	1	1759	C
1	1	1760	A
1	1	1762	C
1	1	1763	U
1	1	1765	U
1	1	1766	G
1	1	1767	C
1	1	1768	U
1	1	1769	G
1	1	1770	G
1	1	1775	G
1	1	1780	G
1	1	1797	A
1	1	1809	A
1	1	1810	A
1	1	1814	A
1	1	1815	U
1	1	1816	A
1	1	1817	G
1	1	1819	U
1	1	1820	U
1	1	1821	U
1	1	1839	A
1	1	1841	A
1	1	1842	A
1	1	1845	G
1	1	1846	C
1	1	1849	C
1	1	1850	A
1	1	1851	G
1	1	1855	U
1	1	1866	C
1	1	1871	U

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Mol	Chain	Res	Type
1	1	1878	G
1	1	1879	A
1	1	1886	A
1	1	1906	G
1	1	1911	A
1	1	1935	G
1	1	1951	C
1	1	1952	G
1	1	1953	G
1	1	1954	G
1	1	2094	C
1	1	2101	C
1	1	2102	U
1	1	2111	G
1	1	2112	U
1	1	2113	A
1	1	2121	G
1	1	2122	G
1	1	2131	A
1	1	2137	U
1	1	2140	U
1	1	2158	A
1	1	2169	G
1	1	2188	A
1	1	2198	A
1	1	2205	U
1	1	2208	A
1	1	2210	G
1	1	2213	A
1	1	2223	A
1	1	2228	A
1	1	2244	A
1	1	2249	G
1	1	2250	G
1	1	2255	A
1	1	2256	A
1	1	2272	G
1	1	2273	G
1	1	2279	A
1	1	2281	A
1	1	2282	U
1	1	2288	G

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Mol	Chain	Res	Type
1	1	2301	U
1	1	2307	G
1	1	2309	A
1	1	2310	U
1	1	2313	A
1	1	2314	U
1	1	2315	G
1	1	2334	U
1	1	2336	U
1	1	2362	C
1	1	2366	C
1	1	2373	A
1	1	2374	C
1	1	2375	G
1	1	2385	G
1	1	2388	U
1	1	2393	G
1	1	2394	G
1	1	2397	A
1	1	2401	A
1	1	2402	A
1	1	2403	G
1	1	2404	A
1	1	2411	U
1	1	2418	G
1	1	2419	A
1	1	2424	A
1	1	2437	G
1	1	2443	A
1	1	2444	C
1	1	2445	A
1	1	2502	A
1	1	2503	G
1	1	2507	C
1	1	2514	U
1	1	2515	A
1	1	2522	G
1	1	2523	A
1	1	2532	U
1	1	2533	G
1	1	2534	G
1	1	2537	U

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Mol	Chain	Res	Type
1	1	2538	U
1	1	2539	C
1	1	2540	A
1	1	2541	U
1	1	2542	U
1	1	2543	U
1	1	2544	U
1	1	2547	A
1	1	2548	C
1	1	2549	G
1	1	2551	U
1	1	2552	C
1	1	2555	G
1	1	2561	A
1	1	2568	C
1	1	2569	A
1	1	2570	U
1	1	2571	U
1	1	2572	C
1	1	2573	G
1	1	2585	G
1	1	2586	G
1	1	2593	A
1	1	2594	C
1	1	2606	G
1	1	2607	G
1	1	2614	G
1	1	2617	U
1	1	2637	A
1	1	2652	U
1	1	2656	A
1	1	2672	G
1	1	2674	A
1	1	2677	G
1	1	2689	A
1	1	2690	G
1	1	2691	A
1	1	2694	A
1	1	2696	A
1	1	2705	A
1	1	2714	G
1	1	2720	G

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Mol	Chain	Res	Type
1	1	2728	G
1	1	2729	U
1	1	2749	G
1	1	2752	U
1	1	2753	G
1	1	2755	C
1	1	2762	A
1	1	2765	C
1	1	2771	U
1	1	2772	C
1	1	2777	G
1	1	2778	G
1	1	2783	U
1	1	2788	C
1	1	2796	G
1	1	2799	A
1	1	2800	G
1	1	2801	A
1	1	2802	A
1	1	2808	A
1	1	2810	C
1	1	2814	G
1	1	2816	G
1	1	2817	A
1	1	2818	U
1	1	2822	U
1	1	2828	G
1	1	2829	U
1	1	2842	U
1	1	2843	U
1	1	2845	A
1	1	2849	C
1	1	2853	A
1	1	2860	U
1	1	2867	C
1	1	2871	G
1	1	2872	A
1	1	2875	U
1	1	2876	C
1	1	2877	G
1	1	2880	U
1	1	2887	A

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Mol	Chain	Res	Type
1	1	2889	C
1	1	2898	G
1	1	2899	C
1	1	2914	G
1	1	2923	U
1	1	2935	U
1	1	2936	A
1	1	2937	G
1	1	2942	C
1	1	2945	G
1	1	2947	G
1	1	2954	U
1	1	2955	U
1	1	2971	A
1	1	2972	G
1	1	2979	U
1	1	2982	A
1	1	2983	C
1	1	2990	G
1	1	2996	U
1	1	2997	G
1	1	3006	A
1	1	3012	A
1	1	3028	G
1	1	3057	U
1	1	3058	U
1	1	3059	G
1	1	3078	U
1	1	3079	U
1	1	3080	G
1	1	3086	A
1	1	3092	C
1	1	3122	A
1	1	3130	A
1	1	3131	U
1	1	3141	A
1	1	3142	A
1	1	3143	C
1	1	3151	U
1	1	3153	U
1	1	3154	C
1	1	3155	U

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Mol	Chain	Res	Type
1	1	3156	U
1	1	3157	U
1	1	3164	C
1	1	3165	A
1	1	3168	A
1	1	3170	A
1	1	3173	G
1	1	3174	A
1	1	3176	G
1	1	3179	U
1	1	3181	C
1	1	3187	A
1	1	3196	U
1	1	3197	G
1	1	3207	U
1	1	3209	A
1	1	3210	A
1	1	3217	C
1	1	3218	A
1	1	3219	G
1	1	3223	A
1	1	3228	C
1	1	3229	G
1	1	3242	G
1	1	3243	A
1	1	3245	A
1	1	3246	G
1	1	3247	G
1	1	3259	U
1	1	3270	U
1	1	3272	C
1	1	3274	A
1	1	3275	U
1	1	3276	G
1	1	3281	U
1	1	3286	G
1	1	3287	U
1	1	3288	G
1	1	3289	G
1	1	3293	U
1	1	3294	A
1	1	3295	A

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Mol	Chain	Res	Type
1	1	3304	U
1	1	3313	U
1	1	3316	A
1	1	3317	U
1	1	3318	G
1	1	3319	U
1	1	3320	A
1	1	3341	U
1	1	3342	A
1	1	3345	G
1	1	3347	A
1	1	3351	U
1	1	3352	U
1	1	3353	G
1	1	3354	U
1	1	3355	U
1	1	3369	G
1	1	3375	A
1	1	3376	A
1	1	3377	G
1	1	3378	C
1	1	3381	U
1	1	3382	U
1	1	3383	G
1	1	3389	U
1	1	3390	G
1	1	3396	U
2	3	7	G
2	3	13	A
2	3	17	A
2	3	22	A
2	3	26	C
2	3	42	A
2	3	54	U
2	3	65	G
2	3	74	C
2	3	76	A
2	3	78	U
2	3	91	G
2	3	102	A
2	3	112	G
2	3	121	U

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Mol	Chain	Res	Type
3	4	2	A
3	4	21	C
3	4	26	U
3	4	34	U
3	4	35	C
3	4	48	A
3	4	52	A
3	4	53	A
3	4	59	A
3	4	62	C
3	4	63	G
3	4	69	U
3	4	77	A
3	4	80	A
3	4	81	U
3	4	82	U
3	4	83	C
3	4	86	U
3	4	87	G
3	4	90	U
3	4	95	G
3	4	96	A
3	4	104	A
3	4	105	A
3	4	106	C
3	4	107	G
3	4	111	A
3	4	113	U
3	4	125	U
3	4	126	A
3	4	128	U
3	4	138	A
3	4	155	A
3	4	157	U
3	4	158	U
1	AR	26	A
1	AR	40	A
1	AR	49	A
1	AR	59	G
1	AR	60	A
1	AR	65	A
1	AR	66	A

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Mol	Chain	Res	Type
1	AR	73	C
1	AR	76	G
1	AR	82	C
1	AR	92	G
1	AR	93	C
1	AR	99	A
1	AR	109	A
1	AR	110	G
1	AR	116	A
1	AR	120	G
1	AR	121	A
1	AR	122	A
1	AR	131	C
1	AR	133	U
1	AR	135	C
1	AR	136	G
1	AR	156	G
1	AR	157	A
1	AR	165	A
1	AR	166	C
1	AR	172	G
1	AR	173	G
1	AR	174	C
1	AR	175	C
1	AR	180	C
1	AR	187	A
1	AR	190	U
1	AR	191	U
1	AR	200	C
1	AR	210	U
1	AR	218	G
1	AR	219	A
1	AR	227	G
1	AR	240	U
1	AR	241	G
1	AR	243	G
1	AR	244	G
1	AR	245	U
1	AR	248	U
1	AR	249	U
1	AR	250	U
1	AR	251	G

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Mol	Chain	Res	Type
1	AR	252	U
1	AR	269	G
1	AR	272	G
1	AR	286	U
1	AR	295	A
1	AR	298	U
1	AR	299	G
1	AR	305	U
1	AR	315	C
1	AR	322	U
1	AR	323	A
1	AR	329	U
1	AR	330	G
1	AR	338	A
1	AR	339	C
1	AR	349	A
1	AR	350	C
1	AR	352	A
1	AR	370	U
1	AR	375	A
1	AR	376	G
1	AR	398	A
1	AR	399	A
1	AR	401	U
1	AR	402	A
1	AR	403	C
1	AR	404	G
1	AR	421	G
1	AR	422	A
1	AR	436	A
1	AR	437	G
1	AR	503	C
1	AR	507	U
1	AR	516	A
1	AR	520	U
1	AR	521	A
1	AR	535	G
1	AR	544	C
1	AR	546	C
1	AR	548	G
1	AR	551	A
1	AR	552	G

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Mol	Chain	Res	Type
1	AR	555	U
1	AR	557	A
1	AR	559	A
1	AR	578	A
1	AR	579	G
1	AR	592	A
1	AR	600	G
1	AR	604	G
1	AR	607	A
1	AR	608	A
1	AR	609	G
1	AR	611	A
1	AR	619	A
1	AR	620	U
1	AR	621	A
1	AR	622	A
1	AR	636	C
1	AR	649	A
1	AR	651	G
1	AR	660	A
1	AR	667	C
1	AR	677	A
1	AR	681	U
1	AR	683	U
1	AR	691	A
1	AR	705	A
1	AR	712	G
1	AR	715	A
1	AR	716	A
1	AR	750	G
1	AR	751	A
1	AR	758	C
1	AR	764	U
1	AR	765	C
1	AR	766	U
1	AR	767	U
1	AR	774	G
1	AR	776	U
1	AR	777	U
1	AR	778	U
1	AR	781	G
1	AR	784	A

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Mol	Chain	Res	Type
1	AR	785	G
1	AR	786	A
1	AR	800	G
1	AR	806	A
1	AR	817	A
1	AR	830	A
1	AR	849	C
1	AR	861	C
1	AR	870	G
1	AR	874	U
1	AR	875	G
1	AR	879	U
1	AR	891	G
1	AR	896	A
1	AR	897	U
1	AR	907	G
1	AR	908	G
1	AR	910	G
1	AR	914	A
1	AR	916	G
1	AR	917	A
1	AR	921	A
1	AR	922	U
1	AR	923	C
1	AR	924	G
1	AR	937	G
1	AR	938	C
1	AR	944	C
1	AR	946	U
1	AR	948	C
1	AR	953	G
1	AR	959	C
1	AR	960	U
1	AR	962	A
1	AR	964	G
1	AR	979	U
1	AR	980	A
1	AR	981	U
1	AR	982	C
1	AR	983	A
1	AR	993	G
1	AR	994	G

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Mol	Chain	Res	Type
1	AR	1000	C
1	AR	1001	G
1	AR	1002	A
1	AR	1003	A
1	AR	1006	A
1	AR	1010	G
1	AR	1012	G
1	AR	1015	U
1	AR	1016	C
1	AR	1017	C
1	AR	1018	G
1	AR	1020	G
1	AR	1021	G
1	AR	1024	G
1	AR	1025	A
1	AR	1029	G
1	AR	1037	C
1	AR	1047	A
1	AR	1049	C
1	AR	1052	U
1	AR	1064	A
1	AR	1065	A
1	AR	1071	U
1	AR	1072	G
1	AR	1081	U
1	AR	1082	U
1	AR	1087	G
1	AR	1093	A
1	AR	1094	U
1	AR	1095	U
1	AR	1096	U
1	AR	1097	G
1	AR	1098	A
1	AR	1103	A
1	AR	1104	G
1	AR	1117	G
1	AR	1128	U
1	AR	1129	A
1	AR	1131	G
1	AR	1153	A
1	AR	1159	A
1	AR	1160	C

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Mol	Chain	Res	Type
1	AR	1168	U
1	AR	1180	A
1	AR	1181	U
1	AR	1182	A
1	AR	1190	A
1	AR	1191	U
1	AR	1192	C
1	AR	1193	A
1	AR	1196	C
1	AR	1201	C
1	AR	1202	A
1	AR	1209	G
1	AR	1217	A
1	AR	1222	G
1	AR	1235	U
1	AR	1236	G
1	AR	1237	G
1	AR	1239	C
1	AR	1241	U
1	AR	1242	G
1	AR	1245	A
1	AR	1246	G
1	AR	1254	C
1	AR	1261	G
1	AR	1262	G
1	AR	1263	A
1	AR	1265	U
1	AR	1266	G
1	AR	1285	G
1	AR	1292	C
1	AR	1295	G
1	AR	1305	U
1	AR	1307	G
1	AR	1309	U
1	AR	1311	G
1	AR	1313	G
1	AR	1330	A
1	AR	1332	A
1	AR	1345	G
1	AR	1348	U
1	AR	1349	G
1	AR	1350	A

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Mol	Chain	Res	Type
1	AR	1351	U
1	AR	1352	A
1	AR	1353	U
1	AR	1355	A
1	AR	1356	U
1	AR	1357	G
1	AR	1380	G
1	AR	1385	C
1	AR	1386	A
1	AR	1387	G
1	AR	1399	A
1	AR	1400	G
1	AR	1418	A
1	AR	1419	A
1	AR	1422	G
1	AR	1428	A
1	AR	1431	G
1	AR	1434	G
1	AR	1437	C
1	AR	1446	A
1	AR	1450	G
1	AR	1451	C
1	AR	1481	A
1	AR	1482	A
1	AR	1486	G
1	AR	1488	G
1	AR	1490	A
1	AR	1496	C
1	AR	1508	C
1	AR	1514	G
1	AR	1515	A
1	AR	1531	C
1	AR	1536	G
1	AR	1555	U
1	AR	1556	C
1	AR	1560	G
1	AR	1561	G
1	AR	1562	C
1	AR	1563	C
1	AR	1566	A
1	AR	1567	U
1	AR	1568	U

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Mol	Chain	Res	Type
1	AR	1569	U
1	AR	1570	U
1	AR	1572	U
1	AR	1576	G
1	AR	1579	C
1	AR	1580	A
1	AR	1581	C
1	AR	1582	C
1	AR	1583	A
1	AR	1587	A
1	AR	1589	A
1	AR	1620	U
1	AR	1629	U
1	AR	1639	C
1	AR	1643	A
1	AR	1657	C
1	AR	1683	A
1	AR	1716	U
1	AR	1717	U
1	AR	1724	U
1	AR	1725	C
1	AR	1736	G
1	AR	1741	A
1	AR	1742	U
1	AR	1750	A
1	AR	1751	G
1	AR	1760	A
1	AR	1762	C
1	AR	1765	U
1	AR	1766	G
1	AR	1769	G
1	AR	1770	G
1	AR	1780	G
1	AR	1793	C
1	AR	1797	A
1	AR	1810	A
1	AR	1814	A
1	AR	1815	U
1	AR	1816	A
1	AR	1817	G
1	AR	1819	U
1	AR	1820	U

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Mol	Chain	Res	Type
1	AR	1821	U
1	AR	1839	A
1	AR	1841	A
1	AR	1842	A
1	AR	1845	G
1	AR	1846	C
1	AR	1847	A
1	AR	1849	C
1	AR	1850	A
1	AR	1878	G
1	AR	1892	G
1	AR	1893	A
1	AR	1895	A
1	AR	1896	A
1	AR	1901	A
1	AR	1906	G
1	AR	1908	A
1	AR	1930	A
1	AR	1932	A
1	AR	1948	G
1	AR	1951	C
1	AR	1952	G
1	AR	1953	G
1	AR	1954	G
1	AR	2094	C
1	AR	2101	C
1	AR	2102	U
1	AR	2112	U
1	AR	2113	A
1	AR	2118	C
1	AR	2121	G
1	AR	2122	G
1	AR	2131	A
1	AR	2158	A
1	AR	2169	G
1	AR	2170	U
1	AR	2177	G
1	AR	2187	G
1	AR	2188	A
1	AR	2192	C
1	AR	2205	U
1	AR	2209	U

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Mol	Chain	Res	Type
1	AR	2210	G
1	AR	2223	A
1	AR	2225	U
1	AR	2228	A
1	AR	2244	A
1	AR	2252	A
1	AR	2253	G
1	AR	2254	U
1	AR	2255	A
1	AR	2256	A
1	AR	2261	G
1	AR	2264	U
1	AR	2265	C
1	AR	2267	C
1	AR	2269	U
1	AR	2270	A
1	AR	2273	G
1	AR	2278	C
1	AR	2279	A
1	AR	2281	A
1	AR	2282	U
1	AR	2288	G
1	AR	2307	G
1	AR	2310	U
1	AR	2313	A
1	AR	2314	U
1	AR	2315	G
1	AR	2334	U
1	AR	2335	G
1	AR	2336	U
1	AR	2372	A
1	AR	2373	A
1	AR	2374	C
1	AR	2375	G
1	AR	2379	U
1	AR	2385	G
1	AR	2393	G
1	AR	2394	G
1	AR	2397	A
1	AR	2401	A
1	AR	2403	G
1	AR	2404	A

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Mol	Chain	Res	Type
1	AR	2411	U
1	AR	2418	G
1	AR	2419	A
1	AR	2435	G
1	AR	2443	A
1	AR	2444	C
1	AR	2445	A
1	AR	2502	A
1	AR	2503	G
1	AR	2504	U
1	AR	2508	U
1	AR	2514	U
1	AR	2515	A
1	AR	2522	G
1	AR	2523	A
1	AR	2530	G
1	AR	2533	G
1	AR	2536	A
1	AR	2538	U
1	AR	2539	C
1	AR	2540	A
1	AR	2541	U
1	AR	2542	U
1	AR	2543	U
1	AR	2546	C
1	AR	2547	A
1	AR	2549	G
1	AR	2551	U
1	AR	2552	C
1	AR	2555	G
1	AR	2560	C
1	AR	2561	A
1	AR	2568	C
1	AR	2569	A
1	AR	2570	U
1	AR	2571	U
1	AR	2572	C
1	AR	2573	G
1	AR	2580	A
1	AR	2581	U
1	AR	2585	G
1	AR	2586	G

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Mol	Chain	Res	Type
1	AR	2589	G
1	AR	2593	A
1	AR	2594	C
1	AR	2595	A
1	AR	2606	G
1	AR	2607	G
1	AR	2614	G
1	AR	2618	G
1	AR	2624	G
1	AR	2625	C
1	AR	2626	A
1	AR	2639	G
1	AR	2647	A
1	AR	2652	U
1	AR	2656	A
1	AR	2674	A
1	AR	2677	G
1	AR	2689	A
1	AR	2690	G
1	AR	2691	A
1	AR	2694	A
1	AR	2696	A
1	AR	2704	A
1	AR	2707	C
1	AR	2714	G
1	AR	2716	U
1	AR	2728	G
1	AR	2729	U
1	AR	2752	U
1	AR	2753	G
1	AR	2762	A
1	AR	2772	C
1	AR	2773	C
1	AR	2777	G
1	AR	2778	G
1	AR	2781	U
1	AR	2796	G
1	AR	2799	A
1	AR	2800	G
1	AR	2801	A
1	AR	2802	A
1	AR	2810	C

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Mol	Chain	Res	Type
1	AR	2814	G
1	AR	2817	A
1	AR	2818	U
1	AR	2842	U
1	AR	2843	U
1	AR	2845	A
1	AR	2853	A
1	AR	2860	U
1	AR	2871	G
1	AR	2872	A
1	AR	2873	U
1	AR	2875	U
1	AR	2876	C
1	AR	2878	G
1	AR	2886	U
1	AR	2887	A
1	AR	2896	A
1	AR	2899	C
1	AR	2912	G
1	AR	2923	U
1	AR	2935	U
1	AR	2936	A
1	AR	2942	C
1	AR	2947	G
1	AR	2957	G
1	AR	2958	A
1	AR	2959	C
1	AR	2971	A
1	AR	2983	C
1	AR	2990	G
1	AR	2996	U
1	AR	2997	G
1	AR	3012	A
1	AR	3028	G
1	AR	3029	A
1	AR	3030	G
1	AR	3056	U
1	AR	3057	U
1	AR	3059	G
1	AR	3069	G
1	AR	3078	U
1	AR	3079	U

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Mol	Chain	Res	Type
1	AR	3086	A
1	AR	3092	C
1	AR	3102	G
1	AR	3115	C
1	AR	3122	A
1	AR	3130	A
1	AR	3131	U
1	AR	3142	A
1	AR	3143	C
1	AR	3151	U
1	AR	3153	U
1	AR	3154	C
1	AR	3155	U
1	AR	3156	U
1	AR	3157	U
1	AR	3158	G
1	AR	3163	A
1	AR	3164	C
1	AR	3165	A
1	AR	3167	A
1	AR	3168	A
1	AR	3172	A
1	AR	3173	G
1	AR	3174	A
1	AR	3176	G
1	AR	3179	U
1	AR	3180	A
1	AR	3181	C
1	AR	3187	A
1	AR	3195	U
1	AR	3196	U
1	AR	3197	G
1	AR	3198	U
1	AR	3207	U
1	AR	3209	A
1	AR	3217	C
1	AR	3218	A
1	AR	3219	G
1	AR	3228	C
1	AR	3229	G
1	AR	3243	A
1	AR	3245	A

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Mol	Chain	Res	Type
1	AR	3246	G
1	AR	3247	G
1	AR	3253	G
1	AR	3259	U
1	AR	3263	G
1	AR	3265	C
1	AR	3270	U
1	AR	3273	A
1	AR	3276	G
1	AR	3281	U
1	AR	3286	G
1	AR	3287	U
1	AR	3289	G
1	AR	3294	A
1	AR	3295	A
1	AR	3304	U
1	AR	3313	U
1	AR	3316	A
1	AR	3317	U
1	AR	3318	G
1	AR	3319	U
1	AR	3320	A
1	AR	3341	U
1	AR	3342	A
1	AR	3345	G
1	AR	3347	A
1	AR	3349	C
1	AR	3350	C
1	AR	3351	U
1	AR	3352	U
1	AR	3353	G
1	AR	3354	U
1	AR	3355	U
1	AR	3356	G
1	AR	3357	U
1	AR	3358	U
1	AR	3359	A
1	AR	3369	G
1	AR	3375	A
1	AR	3376	A
1	AR	3377	G
1	AR	3378	C

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Mol	Chain	Res	Type
1	AR	3382	U
1	AR	3383	G
1	AR	3389	U
1	AR	3390	G
1	AR	3396	U
2	AS	22	A
2	AS	45	A
2	AS	51	A
2	AS	52	G
2	AS	53	U
2	AS	54	U
2	AS	55	A
2	AS	65	G
2	AS	73	C
2	AS	74	C
2	AS	91	G
2	AS	99	G
2	AS	101	G
2	AS	102	A
2	AS	112	G
2	AS	121	U
3	AT	2	A
3	AT	21	C
3	AT	34	U
3	AT	35	C
3	AT	48	A
3	AT	49	G
3	AT	52	A
3	AT	53	A
3	AT	57	C
3	AT	59	A
3	AT	62	C
3	AT	63	G
3	AT	80	A
3	AT	81	U
3	AT	82	U
3	AT	83	C
3	AT	86	U
3	AT	87	G
3	AT	90	U
3	AT	95	G
3	AT	104	A

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Mol	Chain	Res	Type
3	AT	105	A
3	AT	106	C
3	AT	111	A
3	AT	113	U
3	AT	114	G
3	AT	125	U
3	AT	126	A
3	AT	148	G
3	AT	155	A
3	AT	157	U
3	AT	158	U
47	A	2	A
47	A	4	C
47	A	13	C
47	A	17	C
47	A	25	C
47	A	26	A
47	A	27	U
47	A	34	G
47	A	45	U
47	A	46	A
47	A	47	A
47	A	57	G
47	A	60	U
47	A	67	A
47	A	68	A
47	A	69	G
47	A	72	A
47	A	73	U
47	A	74	U
47	A	75	U
47	A	77	U
47	A	81	G
47	A	104	A
47	A	114	C
47	A	130	C
47	A	131	C
47	A	132	U
47	A	133	U
47	A	134	U
47	A	135	A
47	A	136	C

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Mol	Chain	Res	Type
47	A	137	U
47	A	140	A
47	A	141	U
47	A	144	U
47	A	145	A
47	A	146	U
47	A	153	G
47	A	158	U
47	A	159	U
47	A	166	C
47	A	169	A
47	A	178	U
47	A	179	A
47	A	185	U
47	A	186	C
47	A	187	G
47	A	188	A
47	A	190	C
47	A	191	C
47	A	192	U
47	A	193	U
47	A	194	U
47	A	195	G
47	A	196	G
47	A	197	A
47	A	200	A
47	A	215	A
47	A	217	A
47	A	218	A
47	A	219	A
47	A	226	A
47	A	227	U
47	A	228	G
47	A	229	U
47	A	233	C
47	A	234	G
47	A	235	G
47	A	238	U
47	A	239	C
47	A	240	U
47	A	241	U
47	A	242	U

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Mol	Chain	Res	Type
47	A	246	G
47	A	250	C
47	A	260	U
47	A	261	U
47	A	265	A
47	A	269	G
47	A	271	A
47	A	272	U
47	A	274	G
47	A	275	C
47	A	276	C
47	A	277	U
47	A	278	U
47	A	279	G
47	A	280	U
47	A	281	G
47	A	284	G
47	A	288	A
47	A	290	G
47	A	299	A
47	A	302	U
47	A	308	C
47	A	309	C
47	A	314	C
47	A	316	A
47	A	319	U
47	A	320	U
47	A	321	C
47	A	322	G
47	A	333	A
47	A	337	G
47	A	338	C
47	A	352	A
47	A	359	A
47	A	360	A
47	A	361	C
47	A	390	G
47	A	397	A
47	A	400	A
47	A	401	A
47	A	402	C
47	A	403	G

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Mol	Chain	Res	Type
47	A	404	G
47	A	416	A
47	A	418	G
47	A	423	G
47	A	424	C
47	A	425	A
47	A	426	G
47	A	428	A
47	A	434	G
47	A	439	U
47	A	444	C
47	A	448	C
47	A	468	A
47	A	477	A
47	A	480	G
47	A	484	C
47	A	485	A
47	A	488	G
47	A	493	U
47	A	494	U
47	A	495	C
47	A	496	G
47	A	497	G
47	A	498	G
47	A	499	U
47	A	500	C
47	A	502	U
47	A	503	G
47	A	504	U
47	A	505	A
47	A	506	A
47	A	507	U
47	A	510	G
47	A	511	A
47	A	512	A
47	A	513	U
47	A	515	A
47	A	516	G
47	A	527	A
47	A	532	U
47	A	536	C
47	A	538	A

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Mol	Chain	Res	Type
47	A	539	G
47	A	540	G
47	A	541	A
47	A	542	A
47	A	543	C
47	A	544	A
47	A	547	U
47	A	555	A
47	A	556	A
47	A	557	G
47	A	558	U
47	A	559	C
47	A	565	C
47	A	579	A
47	A	580	A
47	A	582	U
47	A	594	A
47	A	595	G
47	A	611	U
47	A	619	A
47	A	620	A
47	A	621	A
47	A	622	A
47	A	623	A
47	A	624	G
47	A	639	U
47	A	640	U
47	A	650	U
47	A	653	C
47	A	654	C
47	A	655	G
47	A	656	G
47	A	657	U
47	A	658	C
47	A	677	G
47	A	680	U
47	A	682	C
47	A	684	A
47	A	685	A
47	A	686	C
47	A	694	U
47	A	696	C

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Mol	Chain	Res	Type
47	A	697	C
47	A	700	C
47	A	701	U
47	A	702	G
47	A	703	G
47	A	704	C
47	A	705	U
47	A	706	A
47	A	707	A
47	A	709	C
47	A	710	U
47	A	712	G
47	A	714	G
47	A	717	C
47	A	718	U
47	A	719	U
47	A	721	U
47	A	722	G
47	A	723	G
47	A	725	U
47	A	727	U
47	A	728	U
47	A	731	C
47	A	732	G
47	A	733	A
47	A	734	A
47	A	735	C
47	A	736	C
47	A	737	A
47	A	738	G
47	A	742	U
47	A	743	U
47	A	754	A
47	A	755	A
47	A	756	A
47	A	765	G
47	A	766	U
47	A	768	C
47	A	774	A
47	A	775	G
47	A	778	G
47	A	779	U

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Mol	Chain	Res	Type
47	A	780	A
47	A	781	U
47	A	782	U
47	A	783	G
47	A	784	C
47	A	793	A
47	A	794	U
47	A	812	A
47	A	815	G
47	A	816	G
47	A	818	C
47	A	819	G
47	A	820	U
47	A	821	U
47	A	822	U
47	A	823	G
47	A	824	G
47	A	829	A
47	A	830	U
47	A	831	U
47	A	833	U
47	A	841	U
47	A	846	G
47	A	856	A
47	A	860	U
47	A	863	A
47	A	864	U
47	A	886	U
47	A	898	A
47	A	907	A
47	A	909	U
47	A	912	U
47	A	914	G
47	A	915	A
47	A	933	A
47	A	935	U
47	A	942	G
47	A	951	A
47	A	959	U
47	A	960	U
47	A	966	A
47	A	992	A

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Mol	Chain	Res	Type
47	A	993	A
47	A	997	G
47	A	1002	G
47	A	1003	A
47	A	1004	U
47	A	1005	A
47	A	1013	A
47	A	1020	A
47	A	1026	A
47	A	1028	C
47	A	1029	U
47	A	1039	A
47	A	1040	G
47	A	1052	U
47	A	1053	G
47	A	1058	U
47	A	1061	A
47	A	1074	G
47	A	1079	U
47	A	1080	U
47	A	1082	C
47	A	1086	A
47	A	1091	A
47	A	1092	A
47	A	1096	C
47	A	1097	U
47	A	1100	G
47	A	1109	G
47	A	1138	A
47	A	1146	G
47	A	1150	G
47	A	1151	A
47	A	1157	A
47	A	1158	C
47	A	1160	A
47	A	1161	C
47	A	1164	G
47	A	1167	G
47	A	1176	G
47	A	1185	U
47	A	1191	U
47	A	1194	A

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Mol	Chain	Res	Type
47	A	1196	A
47	A	1199	G
47	A	1200	G
47	A	1202	A
47	A	1207	C
47	A	1217	A
47	A	1218	G
47	A	1227	A
47	A	1229	G
47	A	1241	G
47	A	1243	G
47	A	1244	A
47	A	1245	G
47	A	1250	U
47	A	1251	U
47	A	1257	U
47	A	1258	U
47	A	1260	U
47	A	1286	U
47	A	1310	U
47	A	1314	U
47	A	1315	U
47	A	1316	G
47	A	1320	U
47	A	1321	A
47	A	1339	C
47	A	1340	U
47	A	1341	A
47	A	1344	A
47	A	1345	A
47	A	1346	A
47	A	1354	G
47	A	1355	C
47	A	1357	A
47	A	1360	A
47	A	1361	U
47	A	1362	U
47	A	1363	U
47	A	1364	G
47	A	1370	U
47	A	1371	A
47	A	1383	G

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Mol	Chain	Res	Type
47	A	1390	U
47	A	1395	G
47	A	1398	U
47	A	1399	C
47	A	1412	G
47	A	1413	U
47	A	1414	U
47	A	1415	U
47	A	1427	A
47	A	1428	G
47	A	1445	G
47	A	1446	A
47	A	1457	C
47	A	1458	G
47	A	1459	C
47	A	1461	C
47	A	1471	A
47	A	1473	U
47	A	1474	G
47	A	1475	A
47	A	1477	G
47	A	1482	C
47	A	1486	G
47	A	1487	A
47	A	1489	U
47	A	1490	C
47	A	1491	U
47	A	1492	A
47	A	1493	A
47	A	1506	G
47	A	1516	A
47	A	1517	U
47	A	1521	G
47	A	1523	G
47	A	1524	A
47	A	1535	U
47	A	1536	G
47	A	1537	C
47	A	1538	U
47	A	1542	G
47	A	1548	G
47	A	1557	U

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Mol	Chain	Res	Type
47	A	1559	A
47	A	1569	A
47	A	1574	G
47	A	1584	G
47	A	1590	G
47	A	1601	G
47	A	1614	A
47	A	1616	G
47	A	1626	U
47	A	1631	A
47	A	1635	A
47	A	1657	U
47	A	1658	G
47	A	1680	G
47	A	1683	C
47	A	1684	U
47	A	1698	G
47	A	1699	G
47	A	1700	C
47	A	1701	A
47	A	1702	A
47	A	1703	C
47	A	1711	C
47	A	1712	A
47	A	1713	G
47	A	1715	G
47	A	1731	A
47	A	1754	A
47	A	1755	A
47	A	1756	A
47	A	1760	G
47	A	1761	U
47	A	1762	A
47	A	1766	A
47	A	1769	U
47	A	1770	U
47	A	1780	G
47	A	1781	A
47	A	1782	A
47	A	1783	C
47	A	1792	G
47	A	1793	G

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Mol	Chain	Res	Type
47	A	1794	A
47	A	1796	C
81	sR	2	A
81	sR	4	C
81	sR	6	G
81	sR	8	U
81	sR	17	C
81	sR	25	C
81	sR	26	A
81	sR	27	U
81	sR	34	G
81	sR	42	G
81	sR	47	A
81	sR	50	C
81	sR	57	G
81	sR	61	A
81	sR	68	A
81	sR	69	G
81	sR	72	A
81	sR	73	U
81	sR	75	U
81	sR	76	A
81	sR	77	U
81	sR	104	A
81	sR	114	C
81	sR	132	U
81	sR	137	U
81	sR	138	A
81	sR	140	A
81	sR	141	U
81	sR	144	U
81	sR	145	A
81	sR	146	U
81	sR	159	U
81	sR	161	U
81	sR	166	C
81	sR	178	U
81	sR	181	A
81	sR	182	A
81	sR	185	U
81	sR	187	G
81	sR	188	A

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Mol	Chain	Res	Type
81	sR	191	C
81	sR	192	U
81	sR	193	U
81	sR	195	G
81	sR	196	G
81	sR	197	A
81	sR	199	G
81	sR	200	A
81	sR	215	A
81	sR	216	U
81	sR	218	A
81	sR	219	A
81	sR	220	A
81	sR	227	U
81	sR	228	G
81	sR	230	C
81	sR	232	U
81	sR	233	C
81	sR	240	U
81	sR	241	U
81	sR	250	C
81	sR	261	U
81	sR	265	A
81	sR	266	A
81	sR	270	C
81	sR	271	A
81	sR	272	U
81	sR	273	G
81	sR	275	C
81	sR	277	U
81	sR	278	U
81	sR	280	U
81	sR	299	A
81	sR	314	C
81	sR	316	A
81	sR	319	U
81	sR	320	U
81	sR	321	C
81	sR	322	G
81	sR	333	A
81	sR	335	U
81	sR	336	G

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Mol	Chain	Res	Type
81	sR	337	G
81	sR	338	C
81	sR	352	A
81	sR	359	A
81	sR	360	A
81	sR	361	C
81	sR	400	A
81	sR	401	A
81	sR	402	C
81	sR	404	G
81	sR	416	A
81	sR	418	G
81	sR	419	G
81	sR	423	G
81	sR	424	C
81	sR	425	A
81	sR	426	G
81	sR	434	G
81	sR	439	U
81	sR	444	C
81	sR	445	A
81	sR	448	C
81	sR	454	U
81	sR	464	A
81	sR	468	A
81	sR	469	C
81	sR	470	A
81	sR	475	A
81	sR	477	A
81	sR	478	A
81	sR	484	C
81	sR	486	G
81	sR	487	G
81	sR	488	G
81	sR	489	C
81	sR	490	C
81	sR	492	A
81	sR	493	U
81	sR	494	U
81	sR	496	G
81	sR	497	G
81	sR	500	C

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Mol	Chain	Res	Type
81	sR	501	U
81	sR	504	U
81	sR	505	A
81	sR	506	A
81	sR	507	U
81	sR	510	G
81	sR	511	A
81	sR	513	U
81	sR	514	G
81	sR	517	U
81	sR	519	C
81	sR	527	A
81	sR	538	A
81	sR	539	G
81	sR	540	G
81	sR	541	A
81	sR	542	A
81	sR	543	C
81	sR	544	A
81	sR	548	G
81	sR	557	G
81	sR	558	U
81	sR	559	C
81	sR	564	G
81	sR	565	C
81	sR	566	C
81	sR	568	G
81	sR	570	A
81	sR	574	G
81	sR	578	U
81	sR	579	A
81	sR	580	A
81	sR	582	U
81	sR	594	A
81	sR	595	G
81	sR	606	A
81	sR	617	U
81	sR	619	A
81	sR	620	A
81	sR	621	A
81	sR	622	A
81	sR	623	A

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Mol	Chain	Res	Type
81	sR	624	G
81	sR	637	C
81	sR	639	U
81	sR	640	U
81	sR	648	G
81	sR	650	U
81	sR	651	G
81	sR	652	G
81	sR	653	C
81	sR	658	C
81	sR	676	G
81	sR	679	U
81	sR	680	U
81	sR	681	U
81	sR	682	C
81	sR	683	C
81	sR	684	A
81	sR	685	A
81	sR	687	G
81	sR	691	C
81	sR	696	C
81	sR	709	C
81	sR	710	U
81	sR	711	U
81	sR	714	G
81	sR	718	U
81	sR	719	U
81	sR	720	G
81	sR	721	U
81	sR	722	G
81	sR	724	C
81	sR	730	G
81	sR	745	U
81	sR	753	A
81	sR	754	A
81	sR	755	A
81	sR	756	A
81	sR	762	A
81	sR	765	G
81	sR	766	U
81	sR	767	U
81	sR	774	A

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Mol	Chain	Res	Type
81	sR	775	G
81	sR	780	A
81	sR	781	U
81	sR	782	U
81	sR	783	G
81	sR	787	G
81	sR	789	A
81	sR	793	A
81	sR	794	U
81	sR	803	A
81	sR	806	A
81	sR	811	A
81	sR	812	A
81	sR	815	G
81	sR	816	G
81	sR	821	U
81	sR	823	G
81	sR	824	G
81	sR	825	U
81	sR	826	U
81	sR	828	U
81	sR	829	A
81	sR	830	U
81	sR	831	U
81	sR	832	U
81	sR	834	G
81	sR	835	U
81	sR	863	A
81	sR	876	G
81	sR	877	G
81	sR	898	A
81	sR	906	A
81	sR	910	C
81	sR	912	U
81	sR	913	G
81	sR	914	G
81	sR	916	U
81	sR	933	A
81	sR	935	U
81	sR	942	G
81	sR	959	U
81	sR	960	U

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Mol	Chain	Res	Type
81	sR	966	A
81	sR	967	A
81	sR	970	A
81	sR	971	A
81	sR	983	A
81	sR	992	A
81	sR	1003	A
81	sR	1004	U
81	sR	1005	A
81	sR	1013	A
81	sR	1021	C
81	sR	1026	A
81	sR	1028	C
81	sR	1039	A
81	sR	1040	G
81	sR	1052	U
81	sR	1053	G
81	sR	1057	U
81	sR	1058	U
81	sR	1059	U
81	sR	1060	U
81	sR	1061	A
81	sR	1072	C
81	sR	1073	G
81	sR	1081	A
81	sR	1082	C
81	sR	1091	A
81	sR	1092	A
81	sR	1096	C
81	sR	1097	U
81	sR	1098	U
81	sR	1100	G
81	sR	1101	G
81	sR	1109	G
81	sR	1137	A
81	sR	1138	A
81	sR	1143	A
81	sR	1146	G
81	sR	1150	G
81	sR	1151	A
81	sR	1155	G
81	sR	1158	C

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Mol	Chain	Res	Type
81	sR	1159	C
81	sR	1160	A
81	sR	1167	G
81	sR	1171	A
81	sR	1185	U
81	sR	1193	A
81	sR	1194	A
81	sR	1196	A
81	sR	1197	C
81	sR	1199	G
81	sR	1200	G
81	sR	1202	A
81	sR	1208	A
81	sR	1212	G
81	sR	1217	A
81	sR	1218	G
81	sR	1219	A
81	sR	1225	U
81	sR	1226	A
81	sR	1228	G
81	sR	1229	G
81	sR	1230	A
81	sR	1241	G
81	sR	1243	G
81	sR	1244	A
81	sR	1245	G
81	sR	1246	C
81	sR	1255	G
81	sR	1256	A
81	sR	1257	U
81	sR	1258	U
81	sR	1262	U
81	sR	1283	U
81	sR	1286	U
81	sR	1288	G
81	sR	1314	U
81	sR	1315	U
81	sR	1321	A
81	sR	1335	U
81	sR	1341	A
81	sR	1344	A
81	sR	1345	A

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Mol	Chain	Res	Type
81	sR	1346	A
81	sR	1354	G
81	sR	1361	U
81	sR	1363	U
81	sR	1364	G
81	sR	1367	G
81	sR	1371	A
81	sR	1388	A
81	sR	1390	U
81	sR	1398	U
81	sR	1399	C
81	sR	1400	A
81	sR	1402	G
81	sR	1413	U
81	sR	1414	U
81	sR	1415	U
81	sR	1417	A
81	sR	1427	A
81	sR	1428	G
81	sR	1429	G
81	sR	1433	G
81	sR	1445	G
81	sR	1446	A
81	sR	1448	G
81	sR	1458	G
81	sR	1459	C
81	sR	1461	C
81	sR	1468	U
81	sR	1471	A
81	sR	1473	U
81	sR	1481	C
81	sR	1482	C
81	sR	1490	C
81	sR	1491	U
81	sR	1492	A
81	sR	1493	A
81	sR	1496	U
81	sR	1506	G
81	sR	1514	U
81	sR	1515	A
81	sR	1516	A
81	sR	1521	G

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Mol	Chain	Res	Type
81	sR	1523	G
81	sR	1524	A
81	sR	1535	U
81	sR	1536	G
81	sR	1537	C
81	sR	1538	U
81	sR	1540	G
81	sR	1548	G
81	sR	1554	U
81	sR	1555	A
81	sR	1557	U
81	sR	1559	A
81	sR	1569	A
81	sR	1573	A
81	sR	1574	G
81	sR	1575	G
81	sR	1577	A
81	sR	1582	U
81	sR	1584	G
81	sR	1600	A
81	sR	1601	G
81	sR	1621	U
81	sR	1622	G
81	sR	1634	C
81	sR	1657	U
81	sR	1658	G
81	sR	1682	U
81	sR	1696	G
81	sR	1697	G
81	sR	1698	G
81	sR	1699	G
81	sR	1700	C
81	sR	1701	A
81	sR	1702	A
81	sR	1703	C
81	sR	1712	A
81	sR	1716	C
81	sR	1717	G
81	sR	1731	A
81	sR	1754	A
81	sR	1755	A
81	sR	1760	G

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Mol	Chain	Res	Type
81	sR	1762	A
81	sR	1766	A
81	sR	1767	G
81	sR	1769	U
81	sR	1780	G
81	sR	1782	A
81	sR	1783	C
81	sR	1789	G
81	sR	1792	G
81	sR	1793	G
81	sR	1794	A
81	sR	1795	U
81	sR	1796	C
81	sR	1799	U
81	sR	1800	A

All (210) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1	43	A
1	1	65	A
1	1	210	U
1	1	239	G
1	1	282	G
1	1	545	U
1	1	547	G
1	1	588	G
1	1	594	U
1	1	637	C
1	1	715	A
1	1	763	G
1	1	816	A
1	1	873	C
1	1	896	A
1	1	916	G
1	1	979	U
1	1	981	U
1	1	993	G
1	1	1064	A
1	1	1094	U
1	1	1097	G
1	1	1103	A

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Mol	Chain	Res	Type
1	1	1181	U
1	1	1196	C
1	1	1273	A
1	1	1307	G
1	1	1329	U
1	1	1352	A
1	1	1355	A
1	1	1481	A
1	1	1507	G
1	1	1554	U
1	1	1559	A
1	1	1562	C
1	1	1716	U
1	1	1751	G
1	1	1815	U
1	1	1820	U
1	1	2101	C
1	1	2112	U
1	1	2209	U
1	1	2227	C
1	1	2249	G
1	1	2404	A
1	1	2418	G
1	1	2522	G
1	1	2537	U
1	1	2541	U
1	1	2585	G
1	1	2593	A
1	1	2689	A
1	1	2704	A
1	1	2728	G
1	1	2771	U
1	1	2801	A
1	1	2808	A
1	1	2818	U
1	1	2859	U
1	1	2874	G
1	1	2875	U
1	1	3056	U
1	1	3078	U
1	1	3121	U
1	1	3207	U

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Mol	Chain	Res	Type
1	1	3218	A
1	1	3228	C
1	1	3269	U
1	1	3275	U
1	1	3319	U
1	1	3350	C
1	1	3351	U
1	1	3353	G
1	1	3375	A
2	3	49	G
2	3	77	G
3	4	85	G
3	4	125	U
1	AR	65	A
1	AR	269	G
1	AR	588	G
1	AR	594	U
1	AR	620	U
1	AR	647	A
1	AR	715	A
1	AR	719	U
1	AR	896	A
1	AR	916	G
1	AR	979	U
1	AR	981	U
1	AR	993	G
1	AR	1064	A
1	AR	1094	U
1	AR	1097	G
1	AR	1103	A
1	AR	1152	G
1	AR	1181	U
1	AR	1238	C
1	AR	1241	U
1	AR	1284	C
1	AR	1317	A
1	AR	1329	U
1	AR	1331	U
1	AR	1352	A
1	AR	1355	A
1	AR	1481	A
1	AR	1507	G

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Mol	Chain	Res	Type
1	AR	1554	U
1	AR	1562	C
1	AR	1589	A
1	AR	1716	U
1	AR	1793	C
1	AR	1815	U
1	AR	1816	A
1	AR	1820	U
1	AR	1841	A
1	AR	1846	C
1	AR	2101	C
1	AR	2112	U
1	AR	2209	U
1	AR	2252	A
1	AR	2255	A
1	AR	2260	U
1	AR	2269	U
1	AR	2374	C
1	AR	2400	G
1	AR	2401	A
1	AR	2418	G
1	AR	2537	U
1	AR	2541	U
1	AR	2585	G
1	AR	2593	A
1	AR	2728	G
1	AR	2801	A
1	AR	2818	U
1	AR	2871	G
1	AR	2887	A
1	AR	2896	A
1	AR	3056	U
1	AR	3078	U
1	AR	3093	C
1	AR	3121	U
1	AR	3157	U
1	AR	3218	A
1	AR	3228	C
1	AR	3269	U
1	AR	3276	G
1	AR	3316	A
1	AR	3317	U

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Mol	Chain	Res	Type
1	AR	3319	U
1	AR	3350	C
1	AR	3352	U
1	AR	3375	A
2	AS	52	G
3	AT	85	G
3	AT	111	A
3	AT	125	U
47	A	2	A
47	A	25	C
47	A	45	U
47	A	68	A
47	A	73	U
47	A	103	A
47	A	126	A
47	A	130	C
47	A	131	C
47	A	139	C
47	A	158	U
47	A	187	G
47	A	218	A
47	A	240	U
47	A	278	U
47	A	280	U
47	A	400	A
47	A	417	A
47	A	499	U
47	A	501	U
47	A	503	G
47	A	510	G
47	A	512	A
47	A	555	A
47	A	582	U
47	A	685	A
47	A	704	C
47	A	720	G
47	A	721	U
47	A	755	A
47	A	781	U
47	A	811	A
47	A	829	A
47	A	913	G

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Mol	Chain	Res	Type
47	A	1051	G
47	A	1081	A
47	A	1108	G
47	A	1150	G
47	A	1157	A
47	A	1226	A
47	A	1244	A
47	A	1250	U
47	A	1344	A
47	A	1370	U
47	A	1481	C
47	A	1490	C
47	A	1568	C
47	A	1573	A
47	A	1615	C
47	A	1657	U
47	A	1698	G
47	A	1754	A
47	A	1761	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)

Of 2586 ligands modelled in this entry, 2 are modelled with single atom and 1525 are monoatomic - leaving 1059 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
82	OHX	sR	1920	-	0,6,6	-	-	-		
82	OHX	CE	402	-	0,6,6	-	-	-		
82	OHX	AR	3526	82	0,6,6	-	-	-		
82	OHX	AR	3563	-	0,6,6	-	-	-		
82	OHX	1	3605	-	0,6,6	-	-	-		
82	OHX	sR	2021	-	0,6,6	-	-	-		
82	OHX	A	1896	-	0,6,6	-	-	-		
82	OHX	A	1854	-	0,6,6	-	-	-		
82	OHX	sR	1966	-	0,6,6	-	-	-		
82	OHX	1	3402	-	0,6,6	-	-	-		
82	OHX	sR	1912	-	0,6,6	-	-	-		
82	OHX	AR	3446	-	0,6,6	-	-	-		
82	OHX	1	3445	-	0,6,6	-	-	-		
82	OHX	A	1857	-	0,6,6	-	-	-		
82	OHX	1	3698	-	0,6,6	-	-	-		
82	OHX	1	3563	-	0,6,6	-	-	-		
82	OHX	A	1889	-	0,6,6	-	-	-		
82	OHX	AR	3643	-	0,6,6	-	-	-		
82	OHX	AT	215	-	0,6,6	-	-	-		
82	OHX	1	3516	-	0,6,6	-	-	-		
82	OHX	1	3596	-	0,6,6	-	-	-		
82	OHX	AR	3481	-	0,6,6	-	-	-		
82	OHX	AR	3483	-	0,6,6	-	-	-		
82	OHX	1	3708	-	0,6,6	-	-	-		
82	OHX	AR	3455	-	0,6,6	-	-	-		
82	OHX	A	1930	-	0,6,6	-	-	-		
82	OHX	1	3603	-	0,6,6	-	-	-		
82	OHX	1	3619	-	0,6,6	-	-	-		
82	OHX	AR	3716	-	0,6,6	-	-	-		
82	OHX	AR	3416	-	0,6,6	-	-	-		
82	OHX	1	3688	-	0,6,6	-	-	-		
82	OHX	1	3547	-	0,6,6	-	-	-		
82	OHX	A	1937	-	0,6,6	-	-	-		
82	OHX	sR	1968	-	0,6,6	-	-	-		
82	OHX	c3	201	-	0,6,6	-	-	-		
82	OHX	AR	3722	-	0,6,6	-	-	-		
82	OHX	1	3650	-	0,6,6	-	-	-		
82	OHX	AR	3489	-	0,6,6	-	-	-		
82	OHX	1	3659	-	0,6,6	-	-	-		
82	OHX	sR	1961	-	0,6,6	-	-	-		
82	OHX	1	3416	-	0,6,6	-	-	-		
82	OHX	1	3623	-	0,6,6	-	-	-		
82	OHX	1	3686	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	AR	3631	-	0,6,6	-	-	-		
82	OHX	AR	3634	-	0,6,6	-	-	-		
82	OHX	AR	3524	-	0,6,6	-	-	-		
82	OHX	AR	3691	-	0,6,6	-	-	-		
82	OHX	A	1818	-	0,6,6	-	-	-		
82	OHX	sR	1987	-	0,6,6	-	-	-		
82	OHX	sR	1933	-	0,6,6	-	-	-		
82	OHX	AR	3583	-	0,6,6	-	-	-		
82	OHX	A	1867	-	0,6,6	-	-	-		
82	OHX	l	401	-	0,6,6	-	-	-		
82	OHX	sR	2038	-	0,6,6	-	-	-		
82	OHX	AR	3589	-	0,6,6	-	-	-		
82	OHX	AT	203	82	0,6,6	-	-	-		
82	OHX	1	3704	-	0,6,6	-	-	-		
82	OHX	1	3540	-	0,6,6	-	-	-		
82	OHX	1	3475	-	0,6,6	-	-	-		
82	OHX	1	3544	-	0,6,6	-	-	-		
82	OHX	AR	3420	-	0,6,6	-	-	-		
82	OHX	AR	3477	-	0,6,6	-	-	-		
82	OHX	AR	3632	-	0,6,6	-	-	-		
82	OHX	A	1908	-	0,6,6	-	-	-		
82	OHX	A	1902	-	0,6,6	-	-	-		
82	OHX	sR	1954	-	0,6,6	-	-	-		
82	OHX	AR	3531	-	0,6,6	-	-	-		
82	OHX	CH	201	-	0,6,6	-	-	-		
82	OHX	AR	3470	-	0,6,6	-	-	-		
82	OHX	1	3564	-	0,6,6	-	-	-		
82	OHX	A	1903	-	0,6,6	-	-	-		
82	OHX	AR	3630	-	0,6,6	-	-	-		
82	OHX	sR	1939	-	0,6,6	-	-	-		
82	OHX	1	3522	-	0,6,6	-	-	-		
82	OHX	4	201	-	0,6,6	-	-	-		
82	OHX	AR	3422	-	0,6,6	-	-	-		
82	OHX	sR	1958	-	0,6,6	-	-	-		
82	OHX	1	3594	-	0,6,6	-	-	-		
82	OHX	1	3582	-	0,6,6	-	-	-		
82	OHX	A	1909	-	0,6,6	-	-	-		
82	OHX	CF	401	-	0,6,6	-	-	-		
82	OHX	1	3670	-	0,6,6	-	-	-		
82	OHX	1	3513	-	0,6,6	-	-	-		
82	OHX	AR	3406	-	0,6,6	-	-	-		
82	OHX	AR	3557	-	0,6,6	-	-	-		
82	OHX	A	1846	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	sR	1972	-	0,6,6	-	-	-		
82	OHX	A	1822	82	0,6,6	-	-	-		
82	OHX	AR	3566	-	0,6,6	-	-	-		
82	OHX	sR	2027	-	0,6,6	-	-	-		
82	OHX	1	3476	-	0,6,6	-	-	-		
82	OHX	1	3663	-	0,6,6	-	-	-		
82	OHX	AR	3678	-	0,6,6	-	-	-		
82	OHX	1	3593	-	0,6,6	-	-	-		
82	OHX	sR	1927	-	0,6,6	-	-	-		
82	OHX	1	3462	-	0,6,6	-	-	-		
82	OHX	AR	3667	-	0,6,6	-	-	-		
82	OHX	AE	201	-	0,6,6	-	-	-		
82	OHX	AR	3676	-	0,6,6	-	-	-		
82	OHX	1	3543	-	0,6,6	-	-	-		
82	OHX	1	3655	-	0,6,6	-	-	-		
82	OHX	1	3484	-	0,6,6	-	-	-		
82	OHX	1	3611	-	0,6,6	-	-	-		
82	OHX	1	3654	-	0,6,6	-	-	-		
82	OHX	A	1911	-	0,6,6	-	-	-		
82	OHX	sR	1962	-	0,6,6	-	-	-		
82	OHX	A	1925	-	0,6,6	-	-	-		
82	OHX	1	3551	-	0,6,6	-	-	-		
82	OHX	3	203	-	0,6,6	-	-	-		
82	OHX	AR	3614	-	0,6,6	-	-	-		
82	OHX	AR	3555	-	0,6,6	-	-	-		
82	OHX	sR	1999	-	0,6,6	-	-	-		
82	OHX	1	3579	-	0,6,6	-	-	-		
82	OHX	AR	3540	-	0,6,6	-	-	-		
82	OHX	sR	1915	-	0,6,6	-	-	-		
82	OHX	AK	102	-	0,6,6	-	-	-		
82	OHX	AR	3549	-	0,6,6	-	-	-		
82	OHX	A	1898	-	0,6,6	-	-	-		
82	OHX	n	201	-	0,6,6	-	-	-		
82	OHX	AR	3445	-	0,6,6	-	-	-		
82	OHX	sR	1942	-	0,6,6	-	-	-		
82	OHX	AR	3411	-	0,6,6	-	-	-		
82	OHX	AR	3535	-	0,6,6	-	-	-		
82	OHX	A	1853	-	0,6,6	-	-	-		
82	OHX	sR	1906	-	0,6,6	-	-	-		
82	OHX	1	3572	-	0,6,6	-	-	-		
82	OHX	sR	1945	-	0,6,6	-	-	-		
82	OHX	1	3490	-	0,6,6	-	-	-		
82	OHX	AR	3711	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
82	OHX	A	1828	-	0,6,6	-	-	-		
82	OHX	AR	3701	-	0,6,6	-	-	-		
82	OHX	AR	3431	-	0,6,6	-	-	-		
82	OHX	AR	3613	-	0,6,6	-	-	-		
82	OHX	4	213	-	0,6,6	-	-	-		
82	OHX	1	3661	-	0,6,6	-	-	-		
82	OHX	AS	201	-	0,6,6	-	-	-		
82	OHX	1	3580	-	0,6,6	-	-	-		
82	OHX	AR	3592	-	0,6,6	-	-	-		
82	OHX	AR	3478	-	0,6,6	-	-	-		
82	OHX	A	1834	-	0,6,6	-	-	-		
82	OHX	1	3541	-	0,6,6	-	-	-		
82	OHX	AP	502	-	0,6,6	-	-	-		
82	OHX	AR	3668	-	0,6,6	-	-	-		
82	OHX	sR	1965	-	0,6,6	-	-	-		
82	OHX	sR	2020	-	0,6,6	-	-	-		
82	OHX	4	205	-	0,6,6	-	-	-		
82	OHX	AR	3686	-	0,6,6	-	-	-		
82	OHX	1	3649	-	0,6,6	-	-	-		
82	OHX	A	1837	-	0,6,6	-	-	-		
82	OHX	AR	3605	-	0,6,6	-	-	-		
82	OHX	1	3434	-	0,6,6	-	-	-		
82	OHX	1	3558	-	0,6,6	-	-	-		
82	OHX	4	202	-	0,6,6	-	-	-		
82	OHX	A	1923	-	0,6,6	-	-	-		
82	OHX	AR	3501	-	0,6,6	-	-	-		
82	OHX	O	201	-	0,6,6	-	-	-		
82	OHX	sR	1982	-	0,6,6	-	-	-		
82	OHX	AR	3588	-	0,6,6	-	-	-		
82	OHX	A	1927	-	0,6,6	-	-	-		
82	OHX	sR	1971	-	0,6,6	-	-	-		
82	OHX	sR	2029	-	0,6,6	-	-	-		
82	OHX	1	3652	-	0,6,6	-	-	-		
82	OHX	1	3595	-	0,6,6	-	-	-		
82	OHX	1	3615	-	0,6,6	-	-	-		
82	OHX	1	3656	-	0,6,6	-	-	-		
82	OHX	AR	3573	-	0,6,6	-	-	-		
82	OHX	sR	1959	-	0,6,6	-	-	-		
82	OHX	sR	1996	-	0,6,6	-	-	-		
82	OHX	AR	3620	-	0,6,6	-	-	-		
82	OHX	AR	3696	-	0,6,6	-	-	-		
82	OHX	1	3483	-	0,6,6	-	-	-		
82	OHX	AR	3453	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
82	OHX	A	1855	-	0,6,6	-	-	-		
82	OHX	A	1804	-	0,6,6	-	-	-		
82	OHX	AR	3685	-	0,6,6	-	-	-		
82	OHX	DD	101	-	0,6,6	-	-	-		
82	OHX	sR	2026	-	0,6,6	-	-	-		
82	OHX	AR	3452	-	0,6,6	-	-	-		
82	OHX	1	3550	-	0,6,6	-	-	-		
82	OHX	sR	2025	-	0,6,6	-	-	-		
82	OHX	1	3471	-	0,6,6	-	-	-		
82	OHX	sR	1944	-	0,6,6	-	-	-		
82	OHX	1	3456	-	0,6,6	-	-	-		
82	OHX	3	209	-	0,6,6	-	-	-		
82	OHX	AR	3499	-	0,6,6	-	-	-		
82	OHX	AR	3574	-	0,6,6	-	-	-		
82	OHX	1	3723	-	0,6,6	-	-	-		
82	OHX	AR	3683	-	0,6,6	-	-	-		
82	OHX	A	1820	-	0,6,6	-	-	-		
82	OHX	1	3477	-	0,6,6	-	-	-		
82	OHX	1	3506	-	0,6,6	-	-	-		
82	OHX	AR	3669	-	0,6,6	-	-	-		
82	OHX	AR	3645	-	0,6,6	-	-	-		
82	OHX	AR	3721	-	0,6,6	-	-	-		
82	OHX	A	1910	-	0,6,6	-	-	-		
82	OHX	sR	1984	-	0,6,6	-	-	-		
82	OHX	A	1883	-	0,6,6	-	-	-		
82	OHX	sR	1995	-	0,6,6	-	-	-		
82	OHX	AR	3698	-	0,6,6	-	-	-		
82	OHX	1	3568	-	0,6,6	-	-	-		
82	OHX	A	1871	-	0,6,6	-	-	-		
82	OHX	sR	1907	-	0,6,6	-	-	-		
82	OHX	sR	2034	-	0,6,6	-	-	-		
82	OHX	AT	212	82	0,6,6	-	-	-		
82	OHX	AR	3462	-	0,6,6	-	-	-		
82	OHX	AR	3414	-	0,6,6	-	-	-		
82	OHX	AR	3519	-	0,6,6	-	-	-		
82	OHX	AR	3523	-	0,6,6	-	-	-		
82	OHX	A	1920	82	0,6,6	-	-	-		
82	OHX	1	3421	-	0,6,6	-	-	-		
82	OHX	sR	1998	-	0,6,6	-	-	-		
82	OHX	AR	3436	-	0,6,6	-	-	-		
82	OHX	AR	3547	-	0,6,6	-	-	-		
82	OHX	AR	3627	-	0,6,6	-	-	-		
82	OHX	AR	3689	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	CM	201	-	0,6,6	-	-	-		
82	OHX	A	1934	-	0,6,6	-	-	-		
82	OHX	1	3410	-	0,6,6	-	-	-		
82	OHX	AS	202	-	0,6,6	-	-	-		
82	OHX	A	1919	-	0,6,6	-	-	-		
82	OHX	1	3644	-	0,6,6	-	-	-		
82	OHX	sR	1986	-	0,6,6	-	-	-		
82	OHX	sR	2024	-	0,6,6	-	-	-		
82	OHX	sR	1919	-	0,6,6	-	-	-		
82	OHX	AR	3729	-	0,6,6	-	-	-		
82	OHX	sR	1978	-	0,6,6	-	-	-		
82	OHX	AR	3433	-	0,6,6	-	-	-		
82	OHX	A	1894	-	0,6,6	-	-	-		
82	OHX	AR	3403	-	0,6,6	-	-	-		
82	OHX	AR	3610	-	0,6,6	-	-	-		
82	OHX	sR	2008	-	0,6,6	-	-	-		
82	OHX	1	3464	-	0,6,6	-	-	-		
84	G5B	1	4224	-	27,28,28	0.39	0	33,45,45	0.91	2 (6%)
82	OHX	AR	3730	-	0,6,6	-	-	-		
82	OHX	sR	1917	-	0,6,6	-	-	-		
82	OHX	1	3470	-	0,6,6	-	-	-		
82	OHX	sR	2001	-	0,6,6	-	-	-		
82	OHX	AT	216	-	0,6,6	-	-	-		
82	OHX	1	3560	-	0,6,6	-	-	-		
82	OHX	A	1879	-	0,6,6	-	-	-		
82	OHX	AR	3561	-	0,6,6	-	-	-		
82	OHX	1	3427	-	0,6,6	-	-	-		
82	OHX	sR	1988	-	0,6,6	-	-	-		
82	OHX	1	3672	-	0,6,6	-	-	-		
82	OHX	AR	3582	-	0,6,6	-	-	-		
82	OHX	A	1941	47	0,6,6	-	-	-		
82	OHX	1	3581	-	0,6,6	-	-	-		
82	OHX	AR	3504	-	0,6,6	-	-	-		
82	OHX	AR	3507	-	0,6,6	-	-	-		
82	OHX	AR	3513	-	0,6,6	-	-	-		
82	OHX	AR	3652	-	0,6,6	-	-	-		
82	OHX	AR	3584	-	0,6,6	-	-	-		
82	OHX	1	3640	-	0,6,6	-	-	-		
82	OHX	AR	3541	-	0,6,6	-	-	-		
82	OHX	sR	1956	-	0,6,6	-	-	-		
82	OHX	1	3492	-	0,6,6	-	-	-		
82	OHX	1	3678	-	0,6,6	-	-	-		
82	OHX	AR	3441	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
82	OHX	1	3607	-	0,6,6	-	-	-		
82	OHX	1	3517	-	0,6,6	-	-	-		
82	OHX	A	1868	-	0,6,6	-	-	-		
82	OHX	1	3617	-	0,6,6	-	-	-		
82	OHX	1	3405	-	0,6,6	-	-	-		
82	OHX	1	3570	-	0,6,6	-	-	-		
82	OHX	1	3498	-	0,6,6	-	-	-		
82	OHX	AR	3434	-	0,6,6	-	-	-		
82	OHX	1	3509	-	0,6,6	-	-	-		
82	OHX	AR	3516	-	0,6,6	-	-	-		
82	OHX	AR	3567	-	0,6,6	-	-	-		
82	OHX	1	3700	-	0,6,6	-	-	-		
82	OHX	A	1877	-	0,6,6	-	-	-		
82	OHX	1	3430	-	0,6,6	-	-	-		
82	OHX	1	3487	-	0,6,6	-	-	-		
82	OHX	1	3503	-	0,6,6	-	-	-		
82	OHX	AR	3732	-	0,6,6	-	-	-		
82	OHX	1	3512	-	0,6,6	-	-	-		
82	OHX	AR	3426	-	0,6,6	-	-	-		
82	OHX	AR	3728	-	0,6,6	-	-	-		
82	OHX	1	3447	-	0,6,6	-	-	-		
82	OHX	1	3600	-	0,6,6	-	-	-		
82	OHX	3	206	-	0,6,6	-	-	-		
82	OHX	AR	3569	-	0,6,6	-	-	-		
82	OHX	AS	205	-	0,6,6	-	-	-		
82	OHX	1	3559	-	0,6,6	-	-	-		
82	OHX	1	3567	-	0,6,6	-	-	-		
82	OHX	1	3705	-	0,6,6	-	-	-		
82	OHX	d4	201	-	0,6,6	-	-	-		
82	OHX	1	3553	-	0,6,6	-	-	-		
82	OHX	1	3613	-	0,6,6	-	-	-		
82	OHX	sR	2013	-	0,6,6	-	-	-		
82	OHX	A	1890	-	0,6,6	-	-	-		
82	OHX	AR	3495	-	0,6,6	-	-	-		
82	OHX	1	3425	-	0,6,6	-	-	-		
82	OHX	AR	3633	-	0,6,6	-	-	-		
82	OHX	sR	1940	-	0,6,6	-	-	-		
82	OHX	AR	3601	-	0,6,6	-	-	-		
82	OHX	AR	3733	-	0,6,6	-	-	-		
82	OHX	sR	1957	-	0,6,6	-	-	-		
82	OHX	AR	3456	-	0,6,6	-	-	-		
82	OHX	AR	3737	1	0,6,6	-	-	-		
82	OHX	A	1872	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	1	3626	-	0,6,6	-	-	-		
82	OHX	AR	3404	-	0,6,6	-	-	-		
82	OHX	AR	3625	-	0,6,6	-	-	-		
82	OHX	AR	3674	-	0,6,6	-	-	-		
82	OHX	AR	3443	82	0,6,6	-	-	-		
82	OHX	AR	3506	-	0,6,6	-	-	-		
82	OHX	AR	3661	-	0,6,6	-	-	-		
82	OHX	1	3552	-	0,6,6	-	-	-		
82	OHX	A	1882	-	0,6,6	-	-	-		
82	OHX	1	3510	-	0,6,6	-	-	-		
82	OHX	1	3480	-	0,6,6	-	-	-		
82	OHX	AR	3577	-	0,6,6	-	-	-		
82	OHX	AT	213	-	0,6,6	-	-	-		
82	OHX	1	3598	-	0,6,6	-	-	-		
82	OHX	A	1847	-	0,6,6	-	-	-		
82	OHX	A	1840	-	0,6,6	-	-	-		
82	OHX	AR	3490	-	0,6,6	-	-	-		
82	OHX	1	3499	-	0,6,6	-	-	-		
82	OHX	1	3433	-	0,6,6	-	-	-		
82	OHX	1	3573	-	0,6,6	-	-	-		
82	OHX	AG	201	-	0,6,6	-	-	-		
82	OHX	A	1880	-	0,6,6	-	-	-		
82	OHX	DH	201	-	0,6,6	-	-	-		
82	OHX	1	3457	-	0,6,6	-	-	-		
82	OHX	AR	3657	-	0,6,6	-	-	-		
82	OHX	A	1875	-	0,6,6	-	-	-		
82	OHX	sR	1970	-	0,6,6	-	-	-		
82	OHX	1	3653	-	0,6,6	-	-	-		
82	OHX	1	3588	82	0,6,6	-	-	-		
82	OHX	AR	3442	-	0,6,6	-	-	-		
82	OHX	1	3423	-	0,6,6	-	-	-		
82	OHX	3	204	-	0,6,6	-	-	-		
82	OHX	AR	3521	-	0,6,6	-	-	-		
82	OHX	sR	1952	-	0,6,6	-	-	-		
82	OHX	AR	3544	-	0,6,6	-	-	-		
82	OHX	1	3665	-	0,6,6	-	-	-		
82	OHX	1	3473	-	0,6,6	-	-	-		
82	OHX	1	3486	-	0,6,6	-	-	-		
82	OHX	1	3586	-	0,6,6	-	-	-		
82	OHX	sR	1901	-	0,6,6	-	-	-		
82	OHX	sR	2042	-	0,6,6	-	-	-		
82	OHX	1	3529	-	0,6,6	-	-	-		
82	OHX	sR	1989	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	1	3525	-	0,6,6	-	-	-		
82	OHX	1	3685	-	0,6,6	-	-	-		
82	OHX	CX	202	-	0,6,6	-	-	-		
82	OHX	A	1899	-	0,6,6	-	-	-		
82	OHX	sR	2010	-	0,6,6	-	-	-		
82	OHX	1	3536	-	0,6,6	-	-	-		
82	OHX	1	3629	-	0,6,6	-	-	-		
82	OHX	AR	3473	-	0,6,6	-	-	-		
82	OHX	1	3535	-	0,6,6	-	-	-		
82	OHX	1	3531	-	0,6,6	-	-	-		
82	OHX	AR	3651	-	0,6,6	-	-	-		
82	OHX	AR	3687	-	0,6,6	-	-	-		
82	OHX	AR	3679	-	0,6,6	-	-	-		
82	OHX	CO	201	-	0,6,6	-	-	-		
82	OHX	1	3519	-	0,6,6	-	-	-		
82	OHX	A	1832	-	0,6,6	-	-	-		
82	OHX	1	3717	-	0,6,6	-	-	-		
82	OHX	sR	2028	-	0,6,6	-	-	-		
82	OHX	1	3556	-	0,6,6	-	-	-		
82	OHX	1	3721	1	0,6,6	-	-	-		
82	OHX	AR	3493	-	0,6,6	-	-	-		
82	OHX	AR	3656	-	0,6,6	-	-	-		
82	OHX	1	3673	-	0,6,6	-	-	-		
82	OHX	A	1842	-	0,6,6	-	-	-		
82	OHX	A	1869	-	0,6,6	-	-	-		
82	OHX	sR	1928	-	0,6,6	-	-	-		
82	OHX	A	1918	-	0,6,6	-	-	-		
82	OHX	AR	3427	-	0,6,6	-	-	-		
82	OHX	AR	3708	-	0,6,6	-	-	-		
82	OHX	1	3680	-	0,6,6	-	-	-		
82	OHX	1	3681	-	0,6,6	-	-	-		
82	OHX	AR	3612	-	0,6,6	-	-	-		
82	OHX	A	1891	-	0,6,6	-	-	-		
82	OHX	1	3488	-	0,6,6	-	-	-		
82	OHX	A	1936	-	0,6,6	-	-	-		
82	OHX	1	3502	-	0,6,6	-	-	-		
82	OHX	sR	2044	-	0,6,6	-	-	-		
82	OHX	sR	1909	-	0,6,6	-	-	-		
82	OHX	AR	3623	-	0,6,6	-	-	-		
82	OHX	A	1931	-	0,6,6	-	-	-		
82	OHX	AR	3450	-	0,6,6	-	-	-		
82	OHX	AR	3635	-	0,6,6	-	-	-		
82	OHX	1	3466	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	AR	3599	-	0,6,6	-	-	-		
82	OHX	A	1851	-	0,6,6	-	-	-		
82	OHX	1	3453	-	0,6,6	-	-	-		
82	OHX	sR	2004	-	0,6,6	-	-	-		
82	OHX	AR	3417	-	0,6,6	-	-	-		
82	OHX	AR	3494	-	0,6,6	-	-	-		
82	OHX	1	3507	-	0,6,6	-	-	-		
82	OHX	1	3504	-	0,6,6	-	-	-		
82	OHX	1	3508	-	0,6,6	-	-	-		
82	OHX	1	3641	-	0,6,6	-	-	-		
82	OHX	A	1922	-	0,6,6	-	-	-		
82	OHX	sR	1924	-	0,6,6	-	-	-		
82	OHX	4	204	-	0,6,6	-	-	-		
82	OHX	1	3602	-	0,6,6	-	-	-		
82	OHX	AR	3545	-	0,6,6	-	-	-		
82	OHX	sR	2047	-	0,6,6	-	-	-		
82	OHX	AR	3562	-	0,6,6	-	-	-		
82	OHX	1	3614	-	0,6,6	-	-	-		
82	OHX	sR	1932	-	0,6,6	-	-	-		
82	OHX	sR	1922	-	0,6,6	-	-	-		
82	OHX	AR	3646	-	0,6,6	-	-	-		
82	OHX	A	1826	-	0,6,6	-	-	-		
82	OHX	A	1907	-	0,6,6	-	-	-		
82	OHX	CX	201	-	0,6,6	-	-	-		
82	OHX	AR	3718	-	0,6,6	-	-	-		
82	OHX	1	3645	-	0,6,6	-	-	-		
82	OHX	1	3715	-	0,6,6	-	-	-		
82	OHX	AR	3735	-	0,6,6	-	-	-		
82	OHX	A	1803	-	0,6,6	-	-	-		
82	OHX	A	1825	-	0,6,6	-	-	-		
82	OHX	1	3413	-	0,6,6	-	-	-		
82	OHX	1	3578	-	0,6,6	-	-	-		
82	OHX	AR	3471	-	0,6,6	-	-	-		
82	OHX	sR	1921	-	0,6,6	-	-	-		
82	OHX	r	301	-	0,6,6	-	-	-		
82	OHX	AT	214	-	0,6,6	-	-	-		
82	OHX	1	3414	-	0,6,6	-	-	-		
82	OHX	AR	3498	-	0,6,6	-	-	-		
82	OHX	AR	3702	-	0,6,6	-	-	-		
82	OHX	AR	3690	-	0,6,6	-	-	-		
82	OHX	A	1812	-	0,6,6	-	-	-		
82	OHX	1	3695	-	0,6,6	-	-	-		
82	OHX	A	1858	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	A	1862	-	0,6,6	-	-	-		
82	OHX	sR	2015	-	0,6,6	-	-	-		
82	OHX	A	1860	-	0,6,6	-	-	-		
82	OHX	1	3496	-	0,6,6	-	-	-		
82	OHX	AR	3593	-	0,6,6	-	-	-		
82	OHX	AT	211	-	0,6,6	-	-	-		
82	OHX	e	102	-	0,6,6	-	-	-		
82	OHX	1	3648	-	0,6,6	-	-	-		
82	OHX	1	3706	-	0,6,6	-	-	-		
82	OHX	AR	3647	-	0,6,6	-	-	-		
82	OHX	A	1940	-	0,6,6	-	-	-		
82	OHX	1	3458	-	0,6,6	-	-	-		
82	OHX	A	1892	-	0,6,6	-	-	-		
82	OHX	1	3707	-	0,6,6	-	-	-		
82	OHX	1	3403	-	0,6,6	-	-	-		
82	OHX	AR	3655	-	0,6,6	-	-	-		
82	OHX	1	3533	-	0,6,6	-	-	-		
82	OHX	1	3616	-	0,6,6	-	-	-		
82	OHX	AR	3430	-	0,6,6	-	-	-		
82	OHX	AR	3571	-	0,6,6	-	-	-		
82	OHX	AR	3640	-	0,6,6	-	-	-		
82	OHX	A	1816	-	0,6,6	-	-	-		
82	OHX	1	3465	-	0,6,6	-	-	-		
82	OHX	1	3548	-	0,6,6	-	-	-		
82	OHX	AR	3688	-	0,6,6	-	-	-		
82	OHX	AR	3719	-	0,6,6	-	-	-		
82	OHX	AR	3536	-	0,6,6	-	-	-		
82	OHX	A	1924	-	0,6,6	-	-	-		
82	OHX	A	1933	-	0,6,6	-	-	-		
82	OHX	1	3482	-	0,6,6	-	-	-		
82	OHX	1	3682	-	0,6,6	-	-	-		
82	OHX	AR	3538	-	0,6,6	-	-	-		
82	OHX	1	3642	-	0,6,6	-	-	-		
82	OHX	A	1827	-	0,6,6	-	-	-		
82	OHX	AR	3528	-	0,6,6	-	-	-		
82	OHX	1	3418	-	0,6,6	-	-	-		
82	OHX	AR	3693	-	0,6,6	-	-	-		
82	OHX	1	3439	-	0,6,6	-	-	-		
82	OHX	AR	3454	-	0,6,6	-	-	-		
82	OHX	v	301	-	0,6,6	-	-	-		
82	OHX	AR	3581	-	0,6,6	-	-	-		
82	OHX	h	401	-	0,6,6	-	-	-		
82	OHX	sR	2049	81	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	AR	3664	-	0,6,6	-	-	-		
82	OHX	1	3459	-	0,6,6	-	-	-		
82	OHX	AR	3484	-	0,6,6	-	-	-		
82	OHX	AR	3638	-	0,6,6	-	-	-		
82	OHX	AR	3624	-	0,6,6	-	-	-		
82	OHX	AR	3439	-	0,6,6	-	-	-		
82	OHX	AR	3736	-	0,6,6	-	-	-		
82	OHX	A	1817	-	0,6,6	-	-	-		
82	OHX	1	3505	-	0,6,6	-	-	-		
82	OHX	AR	3408	-	0,6,6	-	-	-		
82	OHX	A	1906	47	0,6,6	-	-	-		
82	OHX	J	301	-	0,6,6	-	-	-		
82	OHX	sR	1983	-	0,6,6	-	-	-		
82	OHX	1	3472	-	0,6,6	-	-	-		
82	OHX	A	1916	-	0,6,6	-	-	-		
82	OHX	1	3546	-	0,6,6	-	-	-		
82	OHX	1	3664	-	0,6,6	-	-	-		
82	OHX	AR	3658	-	0,6,6	-	-	-		
82	OHX	1	3554	-	0,6,6	-	-	-		
82	OHX	AR	3515	-	0,6,6	-	-	-		
82	OHX	AR	3457	-	0,6,6	-	-	-		
82	OHX	A	1806	-	0,6,6	-	-	-		
82	OHX	AT	206	-	0,6,6	-	-	-		
82	OHX	x	201	-	0,6,6	-	-	-		
82	OHX	AR	3666	-	0,6,6	-	-	-		
82	OHX	1	3412	-	0,6,6	-	-	-		
82	OHX	CE	401	-	0,6,6	-	-	-		
82	OHX	A	1861	-	0,6,6	-	-	-		
82	OHX	1	3562	-	0,6,6	-	-	-		
82	OHX	1	3622	-	0,6,6	-	-	-		
82	OHX	AR	3466	-	0,6,6	-	-	-		
82	OHX	1	3703	-	0,6,6	-	-	-		
82	OHX	AR	3534	-	0,6,6	-	-	-		
82	OHX	AR	3517	-	0,6,6	-	-	-		
82	OHX	1	3419	-	0,6,6	-	-	-		
82	OHX	A	1836	-	0,6,6	-	-	-		
82	OHX	1	3606	-	0,6,6	-	-	-		
82	OHX	AR	3401	-	0,6,6	-	-	-		
82	OHX	sR	2033	-	0,6,6	-	-	-		
82	OHX	1	3565	-	0,6,6	-	-	-		
82	OHX	sR	1947	-	0,6,6	-	-	-		
82	OHX	AR	3641	-	0,6,6	-	-	-		
82	OHX	sR	1931	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	1	3679	-	0,6,6	-	-	-		
82	OHX	CK	201	-	0,6,6	-	-	-		
82	OHX	A	1885	-	0,6,6	-	-	-		
82	OHX	A	1811	-	0,6,6	-	-	-		
82	OHX	1	3497	-	0,6,6	-	-	-		
82	OHX	AR	3451	-	0,6,6	-	-	-		
82	OHX	AR	3460	-	0,6,6	-	-	-		
82	OHX	1	3625	-	0,6,6	-	-	-		
82	OHX	1	3674	-	0,6,6	-	-	-		
82	OHX	1	3443	-	0,6,6	-	-	-		
82	OHX	1	3696	-	0,6,6	-	-	-		
82	OHX	AR	3587	-	0,6,6	-	-	-		
82	OHX	sR	1976	-	0,6,6	-	-	-		
82	OHX	1	3716	-	0,6,6	-	-	-		
82	OHX	sR	1941	-	0,6,6	-	-	-		
82	OHX	AR	3650	-	0,6,6	-	-	-		
82	OHX	1	3467	-	0,6,6	-	-	-		
82	OHX	AR	3580	-	0,6,6	-	-	-		
82	OHX	sR	2000	-	0,6,6	-	-	-		
82	OHX	1	3435	-	0,6,6	-	-	-		
82	OHX	AR	3461	-	0,6,6	-	-	-		
82	OHX	1	3631	-	0,6,6	-	-	-		
82	OHX	A	1901	-	0,6,6	-	-	-		
82	OHX	AR	3600	-	0,6,6	-	-	-		
82	OHX	sR	1902	-	0,6,6	-	-	-		
82	OHX	AR	3564	-	0,6,6	-	-	-		
82	OHX	1	3408	-	0,6,6	-	-	-		
82	OHX	AR	3559	-	0,6,6	-	-	-		
82	OHX	A	1887	-	0,6,6	-	-	-		
82	OHX	AR	3585	-	0,6,6	-	-	-		
82	OHX	AR	3694	-	0,6,6	-	-	-		
82	OHX	1	3521	-	0,6,6	-	-	-		
82	OHX	1	3583	-	0,6,6	-	-	-		
82	OHX	1	3627	-	0,6,6	-	-	-		
82	OHX	AR	3463	-	0,6,6	-	-	-		
82	OHX	AR	3662	-	0,6,6	-	-	-		
82	OHX	1	3537	82	0,6,6	-	-	-		
82	OHX	1	3609	-	0,6,6	-	-	-		
82	OHX	AR	3475	-	0,6,6	-	-	-		
82	OHX	AR	3485	-	0,6,6	-	-	-		
82	OHX	1	3592	-	0,6,6	-	-	-		
82	OHX	A	1801	-	0,6,6	-	-	-		
82	OHX	1	3420	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	AR	3502	-	0,6,6	-	-	-		
82	OHX	A	1917	-	0,6,6	-	-	-		
82	OHX	A	1873	-	0,6,6	-	-	-		
82	OHX	1	3415	-	0,6,6	-	-	-		
82	OHX	1	3518	-	0,6,6	-	-	-		
82	OHX	1	3632	-	0,6,6	-	-	-		
82	OHX	AR	3639	-	0,6,6	-	-	-		
82	OHX	AR	3725	-	0,6,6	-	-	-		
82	OHX	A	1859	-	0,6,6	-	-	-		
82	OHX	1	3714	-	0,6,6	-	-	-		
82	OHX	3	207	-	0,6,6	-	-	-		
82	OHX	sR	2036	-	0,6,6	-	-	-		
82	OHX	A	1870	-	0,6,6	-	-	-		
82	OHX	A	1845	-	0,6,6	-	-	-		
82	OHX	sR	1948	-	0,6,6	-	-	-		
82	OHX	A	1813	-	0,6,6	-	-	-		
82	OHX	AR	3418	-	0,6,6	-	-	-		
82	OHX	1	3539	-	0,6,6	-	-	-		
82	OHX	AR	3488	-	0,6,6	-	-	-		
82	OHX	1	3658	-	0,6,6	-	-	-		
82	OHX	sR	1905	-	0,6,6	-	-	-		
82	OHX	1	3621	-	0,6,6	-	-	-		
82	OHX	A	1928	-	0,6,6	-	-	-		
82	OHX	2	201	-	0,6,6	-	-	-		
82	OHX	3	202	-	0,6,6	-	-	-		
82	OHX	AS	207	-	0,6,6	-	-	-		
82	OHX	AR	3542	-	0,6,6	-	-	-		
82	OHX	sR	1923	-	0,6,6	-	-	-		
82	OHX	4	210	-	0,6,6	-	-	-		
82	OHX	AR	3603	-	0,6,6	-	-	-		
82	OHX	4	209	-	0,6,6	-	-	-		
82	OHX	sR	2017	-	0,6,6	-	-	-		
82	OHX	AT	207	-	0,6,6	-	-	-		
82	OHX	AR	3629	-	0,6,6	-	-	-		
82	OHX	1	3668	-	0,6,6	-	-	-		
82	OHX	1	3404	-	0,6,6	-	-	-		
82	OHX	1	3575	-	0,6,6	-	-	-		
82	OHX	AR	3595	-	0,6,6	-	-	-		
82	OHX	AR	3604	-	0,6,6	-	-	-		
82	OHX	A	1838	-	0,6,6	-	-	-		
82	OHX	A	1893	-	0,6,6	-	-	-		
82	OHX	1	3684	-	0,6,6	-	-	-		
82	OHX	AT	208	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	AR	3575	-	0,6,6	-	-	-		
82	OHX	1	3667	-	0,6,6	-	-	-		
82	OHX	sR	2037	-	0,6,6	-	-	-		
82	OHX	AR	3423	-	0,6,6	-	-	-		
82	OHX	sR	2009	-	0,6,6	-	-	-		
82	OHX	AR	3637	-	0,6,6	-	-	-		
82	OHX	sR	1949	-	0,6,6	-	-	-		
82	OHX	1	3549	-	0,6,6	-	-	-		
82	OHX	AR	3578	-	0,6,6	-	-	-		
82	OHX	AR	3551	-	0,6,6	-	-	-		
82	OHX	1	3647	-	0,6,6	-	-	-		
82	OHX	sR	2018	-	0,6,6	-	-	-		
82	OHX	sR	1990	-	0,6,6	-	-	-		
82	OHX	AR	3565	-	0,6,6	-	-	-		
82	OHX	A	1829	-	0,6,6	-	-	-		
82	OHX	1	3662	-	0,6,6	-	-	-		
82	OHX	AR	3553	-	0,6,6	-	-	-		
82	OHX	A	1881	-	0,6,6	-	-	-		
82	OHX	1	3438	-	0,6,6	-	-	-		
82	OHX	1	3441	-	0,6,6	-	-	-		
82	OHX	AR	3619	-	0,6,6	-	-	-		
82	OHX	1	3646	-	0,6,6	-	-	-		
82	OHX	AR	3707	-	0,6,6	-	-	-		
82	OHX	AR	3594	-	0,6,6	-	-	-		
82	OHX	1	3660	-	0,6,6	-	-	-		
82	OHX	AR	3465	-	0,6,6	-	-	-		
82	OHX	AR	3659	-	0,6,6	-	-	-		
82	OHX	4	207	-	0,6,6	-	-	-		
82	OHX	AR	3608	-	0,6,6	-	-	-		
82	OHX	AR	3467	-	0,6,6	-	-	-		
82	OHX	AS	208	-	0,6,6	-	-	-		
82	OHX	sR	1960	-	0,6,6	-	-	-		
82	OHX	AR	3642	-	0,6,6	-	-	-		
82	OHX	AR	3680	-	0,6,6	-	-	-		
82	OHX	sR	2003	-	0,6,6	-	-	-		
82	OHX	1	3440	-	0,6,6	-	-	-		
82	OHX	AR	3543	-	0,6,6	-	-	-		
82	OHX	1	3469	-	0,6,6	-	-	-		
82	OHX	1	3590	-	0,6,6	-	-	-		
82	OHX	1	3675	-	0,6,6	-	-	-		
82	OHX	AR	3727	-	0,6,6	-	-	-		
82	OHX	AR	3482	-	0,6,6	-	-	-		
82	OHX	s8	301	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	AR	3497	-	0,6,6	-	-	-		
82	OHX	A	1844	-	0,6,6	-	-	-		
82	OHX	1	3511	-	0,6,6	-	-	-		
82	OHX	AR	3500	-	0,6,6	-	-	-		
82	OHX	AR	3472	-	0,6,6	-	-	-		
82	OHX	sR	1916	-	0,6,6	-	-	-		
82	OHX	AR	3537	-	0,6,6	-	-	-		
82	OHX	1	3566	-	0,6,6	-	-	-		
82	OHX	1	3534	-	0,6,6	-	-	-		
82	OHX	AR	3579	-	0,6,6	-	-	-		
82	OHX	AR	3734	-	0,6,6	-	-	-		
82	OHX	AR	3606	-	0,6,6	-	-	-		
82	OHX	J	302	-	0,6,6	-	-	-		
82	OHX	AR	3554	-	0,6,6	-	-	-		
82	OHX	A	1878	-	0,6,6	-	-	-		
82	OHX	1	3635	-	0,6,6	-	-	-		
82	OHX	sR	2005	-	0,6,6	-	-	-		
82	OHX	AR	3653	-	0,6,6	-	-	-		
82	OHX	A	1819	-	0,6,6	-	-	-		
82	OHX	1	3500	-	0,6,6	-	-	-		
82	OHX	sR	1975	-	0,6,6	-	-	-		
82	OHX	AR	3598	-	0,6,6	-	-	-		
82	OHX	1	3411	-	0,6,6	-	-	-		
82	OHX	sR	1963	-	0,6,6	-	-	-		
82	OHX	AR	3522	-	0,6,6	-	-	-		
82	OHX	1	3538	-	0,6,6	-	-	-		
82	OHX	A	1866	-	0,6,6	-	-	-		
82	OHX	AS	210	-	0,6,6	-	-	-		
82	OHX	AT	210	-	0,6,6	-	-	-		
82	OHX	AR	3539	-	0,6,6	-	-	-		
82	OHX	AR	3621	-	0,6,6	-	-	-		
82	OHX	AR	3706	-	0,6,6	-	-	-		
82	OHX	AR	3670	-	0,6,6	-	-	-		
82	OHX	AS	209	-	0,6,6	-	-	-		
82	OHX	AT	209	-	0,6,6	-	-	-		
82	OHX	sR	2002	-	0,6,6	-	-	-		
82	OHX	sR	2012	-	0,6,6	-	-	-		
82	OHX	1	3485	-	0,6,6	-	-	-		
82	OHX	AR	3509	-	0,6,6	-	-	-		
82	OHX	sR	2023	-	0,6,6	-	-	-		
82	OHX	sR	1981	-	0,6,6	-	-	-		
82	OHX	1	3699	-	0,6,6	-	-	-		
82	OHX	1	3657	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	1	3710	-	0,6,6	-	-	-		
82	OHX	1	3618	-	0,6,6	-	-	-		
82	OHX	DQ	502	-	0,6,6	-	-	-		
82	OHX	sR	1953	-	0,6,6	-	-	-		
82	OHX	1	3669	-	0,6,6	-	-	-		
82	OHX	1	3417	-	0,6,6	-	-	-		
82	OHX	1	3452	-	0,6,6	-	-	-		
82	OHX	A	1912	-	0,6,6	-	-	-		
82	OHX	1	3474	-	0,6,6	-	-	-		
82	OHX	sR	2040	-	0,6,6	-	-	-		
82	OHX	A	1802	-	0,6,6	-	-	-		
82	OHX	AR	3611	-	0,6,6	-	-	-		
82	OHX	1	3431	-	0,6,6	-	-	-		
82	OHX	1	3515	-	0,6,6	-	-	-		
82	OHX	AR	3550	-	0,6,6	-	-	-		
82	OHX	AR	3576	-	0,6,6	-	-	-		
82	OHX	1	3612	-	0,6,6	-	-	-		
82	OHX	AR	3591	-	0,6,6	-	-	-		
82	OHX	1	3444	-	0,6,6	-	-	-		
82	OHX	1	3610	-	0,6,6	-	-	-		
82	OHX	AR	3616	-	0,6,6	-	-	-		
82	OHX	AR	3449	-	0,6,6	-	-	-		
82	OHX	4	208	-	0,6,6	-	-	-		
82	OHX	AR	3609	-	0,6,6	-	-	-		
82	OHX	AR	3712	-	0,6,6	-	-	-		
82	OHX	1	3630	-	0,6,6	-	-	-		
82	OHX	1	3523	-	0,6,6	-	-	-		
82	OHX	1	3639	-	0,6,6	-	-	-		
82	OHX	sR	1967	-	0,6,6	-	-	-		
82	OHX	sR	2014	-	0,6,6	-	-	-		
82	OHX	1	3501	-	0,6,6	-	-	-		
82	OHX	AR	3597	-	0,6,6	-	-	-		
82	OHX	A	1821	-	0,6,6	-	-	-		
82	OHX	AR	3713	-	0,6,6	-	-	-		
82	OHX	A	1895	-	0,6,6	-	-	-		
82	OHX	A	1905	-	0,6,6	-	-	-		
82	OHX	A	1815	-	0,6,6	-	-	-		
82	OHX	1	3561	-	0,6,6	-	-	-		
82	OHX	AR	3532	-	0,6,6	-	-	-		
82	OHX	AR	3703	-	0,6,6	-	-	-		
82	OHX	sR	1974	-	0,6,6	-	-	-		
82	OHX	1	3587	-	0,6,6	-	-	-		
82	OHX	T	201	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
86	GOL	AR	4262	-	5,5,5	0.28	0	5,5,5	0.37	0
82	OHX	1	3620	-	0,6,6	-	-	-		
82	OHX	CG	303	-	0,6,6	-	-	-		
82	OHX	AR	3705	-	0,6,6	-	-	-		
82	OHX	AR	3602	-	0,6,6	-	-	-		
82	OHX	1	3424	-	0,6,6	-	-	-		
82	OHX	sR	2046	-	0,6,6	-	-	-		
82	OHX	sR	1946	-	0,6,6	-	-	-		
82	OHX	AR	3440	-	0,6,6	-	-	-		
82	OHX	A	1833	-	0,6,6	-	-	-		
82	OHX	AR	3421	-	0,6,6	-	-	-		
82	OHX	1	3720	-	0,6,6	-	-	-		
82	OHX	1	3437	-	0,6,6	-	-	-		
82	OHX	AR	3407	-	0,6,6	-	-	-		
82	OHX	AR	3424	-	0,6,6	-	-	-		
82	OHX	1	3461	-	0,6,6	-	-	-		
82	OHX	AR	3590	-	0,6,6	-	-	-		
82	OHX	1	3689	-	0,6,6	-	-	-		
82	OHX	1	3426	-	0,6,6	-	-	-		
82	OHX	AR	3618	-	0,6,6	-	-	-		
82	OHX	1	3683	-	0,6,6	-	-	-		
82	OHX	Rb	401	-	0,6,6	-	-	-		
82	OHX	AR	3700	-	0,6,6	-	-	-		
82	OHX	1	3569	-	0,6,6	-	-	-		
82	OHX	CQ	201	-	0,6,6	-	-	-		
82	OHX	sR	1926	-	0,6,6	-	-	-		
82	OHX	A	1913	-	0,6,6	-	-	-		
82	OHX	1	3585	-	0,6,6	-	-	-		
82	OHX	1	3694	-	0,6,6	-	-	-		
82	OHX	AR	3447	-	0,6,6	-	-	-		
82	OHX	AR	3511	-	0,6,6	-	-	-		
82	OHX	A	1835	-	0,6,6	-	-	-		
82	OHX	y	201	-	0,6,6	-	-	-		
82	OHX	1	3463	-	0,6,6	-	-	-		
82	OHX	A	1808	-	0,6,6	-	-	-		
82	OHX	1	3676	-	0,6,6	-	-	-		
82	OHX	AR	3684	-	0,6,6	-	-	-		
82	OHX	AR	3518	-	0,6,6	-	-	-		
82	OHX	1	3636	-	0,6,6	-	-	-		
82	OHX	AR	3520	-	0,6,6	-	-	-		
82	OHX	1	3692	-	0,6,6	-	-	-		
82	OHX	AR	3672	-	0,6,6	-	-	-		
82	OHX	AT	202	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
82	OHX	A	1824	-	0,6,6	-	-	-		
82	OHX	A	1865	-	0,6,6	-	-	-		
82	OHX	s4	301	-	0,6,6	-	-	-		
82	OHX	A	1823	-	0,6,6	-	-	-		
82	OHX	sR	1980	-	0,6,6	-	-	-		
82	OHX	1	3436	-	0,6,6	-	-	-		
82	OHX	sR	2007	-	0,6,6	-	-	-		
82	OHX	c1	201	-	0,6,6	-	-	-		
82	OHX	A	1888	-	0,6,6	-	-	-		
82	OHX	AR	3464	-	0,6,6	-	-	-		
82	OHX	1	3514	-	0,6,6	-	-	-		
82	OHX	1	3628	-	0,6,6	-	-	-		
82	OHX	AR	3681	-	0,6,6	-	-	-		
82	OHX	1	3666	-	0,6,6	-	-	-		
82	OHX	1	3709	-	0,6,6	-	-	-		
82	OHX	AR	3738	-	0,6,6	-	-	-		
82	OHX	AS	203	-	0,6,6	-	-	-		
82	OHX	1	3455	-	0,6,6	-	-	-		
82	OHX	1	3468	-	0,6,6	-	-	-		
82	OHX	AR	3671	-	0,6,6	-	-	-		
82	OHX	1	3693	-	0,6,6	-	-	-		
82	OHX	A	1856	-	0,6,6	-	-	-		
82	OHX	A	1904	-	0,6,6	-	-	-		
82	OHX	sR	1943	-	0,6,6	-	-	-		
82	OHX	AR	3432	-	0,6,6	-	-	-		
82	OHX	AR	3415	-	0,6,6	-	-	-		
82	OHX	1	3495	-	0,6,6	-	-	-		
82	OHX	AR	3607	-	0,6,6	-	-	-		
82	OHX	AR	3710	-	0,6,6	-	-	-		
82	OHX	1	3608	-	0,6,6	-	-	-		
82	OHX	AR	3437	-	0,6,6	-	-	-		
82	OHX	A	1841	-	0,6,6	-	-	-		
82	OHX	A	1843	-	0,6,6	-	-	-		
82	OHX	sR	2030	-	0,6,6	-	-	-		
82	OHX	k	401	-	0,6,6	-	-	-		
82	OHX	1	3574	-	0,6,6	-	-	-		
82	OHX	A	1932	-	0,6,6	-	-	-		
82	OHX	v	302	-	0,6,6	-	-	-		
82	OHX	1	3526	-	0,6,6	-	-	-		
82	OHX	sR	1929	-	0,6,6	-	-	-		
82	OHX	A	1809	82	0,6,6	-	-	-		
82	OHX	A	1839	-	0,6,6	-	-	-		
82	OHX	A	1863	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
82	OHX	A	1884	-	0,6,6	-	-	-		
82	OHX	A	1805	-	0,6,6	-	-	-		
82	OHX	1	3446	-	0,6,6	-	-	-		
82	OHX	1	3637	-	0,6,6	-	-	-		
82	OHX	AR	3487	-	0,6,6	-	-	-		
82	OHX	AR	3503	-	0,6,6	-	-	-		
82	OHX	AR	3491	-	0,6,6	-	-	-		
82	OHX	AR	3546	-	0,6,6	-	-	-		
82	OHX	1	3530	-	0,6,6	-	-	-		
82	OHX	sR	1973	-	0,6,6	-	-	-		
82	OHX	sR	1950	-	0,6,6	-	-	-		
82	OHX	1	3711	-	0,6,6	-	-	-		
82	OHX	A	1850	-	0,6,6	-	-	-		
82	OHX	sR	1997	-	0,6,6	-	-	-		
82	OHX	AR	3586	-	0,6,6	-	-	-		
82	OHX	sR	2045	-	0,6,6	-	-	-		
82	OHX	A	1939	-	0,6,6	-	-	-		
82	OHX	Q	201	-	0,6,6	-	-	-		
82	OHX	1	3722	-	0,6,6	-	-	-		
82	OHX	AR	3459	-	0,6,6	-	-	-		
82	OHX	1	3524	-	0,6,6	-	-	-		
82	OHX	AR	3560	-	0,6,6	-	-	-		
82	OHX	1	3494	-	0,6,6	-	-	-		
82	OHX	sR	2039	-	0,6,6	-	-	-		
82	OHX	AR	3474	-	0,6,6	-	-	-		
82	OHX	1	3493	-	0,6,6	-	-	-		
82	OHX	AR	3644	-	0,6,6	-	-	-		
82	OHX	1	3638	-	0,6,6	-	-	-		
82	OHX	AR	3622	-	0,6,6	-	-	-		
82	OHX	1	3478	-	0,6,6	-	-	-		
82	OHX	1	3401	-	0,6,6	-	-	-		
82	OHX	A	1852	-	0,6,6	-	-	-		
82	OHX	sR	1930	-	0,6,6	-	-	-		
82	OHX	1	3442	-	0,6,6	-	-	-		
82	OHX	AR	3419	-	0,6,6	-	-	-		
82	OHX	1	3429	-	0,6,6	-	-	-		
82	OHX	AR	3552	-	0,6,6	-	-	-		
82	OHX	sR	1918	-	0,6,6	-	-	-		
82	OHX	AR	3480	-	0,6,6	-	-	-		
82	OHX	A	1830	-	0,6,6	-	-	-		
82	OHX	A	1810	-	0,6,6	-	-	-		
82	OHX	1	3687	-	0,6,6	-	-	-		
82	OHX	3	205	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
82	OHX	1	3577	-	0,6,6	-	-	-		
82	OHX	sR	2032	-	0,6,6	-	-	-		
82	OHX	AT	201	-	0,6,6	-	-	-		
82	OHX	1	3697	82	0,6,6	-	-	-		
82	OHX	sR	2043	-	0,6,6	-	-	-		
82	OHX	1	3406	-	0,6,6	-	-	-		
82	OHX	AR	3660	-	0,6,6	-	-	-		
82	OHX	1	3576	-	0,6,6	-	-	-		
82	OHX	sR	1955	-	0,6,6	-	-	-		
84	G5B	AR	4264	-	27,28,28	0.41	0	33,45,45	0.51	0
82	OHX	sR	1991	-	0,6,6	-	-	-		
82	OHX	AR	3654	-	0,6,6	-	-	-		
82	OHX	AR	3508	-	0,6,6	-	-	-		
82	OHX	AT	205	-	0,6,6	-	-	-		
82	OHX	CG	302	-	0,6,6	-	-	-		
82	OHX	sR	2048	-	0,6,6	-	-	-		
82	OHX	1	3481	-	0,6,6	-	-	-		
82	OHX	w	201	-	0,6,6	-	-	-		
82	OHX	AR	3568	-	0,6,6	-	-	-		
82	OHX	4	214	-	0,6,6	-	-	-		
82	OHX	sR	2031	-	0,6,6	-	-	-		
82	OHX	sR	2019	-	0,6,6	-	-	-		
82	OHX	1	3643	-	0,6,6	-	-	-		
82	OHX	A	1929	-	0,6,6	-	-	-		
82	OHX	AR	3529	-	0,6,6	-	-	-		
82	OHX	1	3449	-	0,6,6	-	-	-		
82	OHX	1	3450	-	0,6,6	-	-	-		
82	OHX	1	3479	-	0,6,6	-	-	-		
82	OHX	AR	3469	-	0,6,6	-	-	-		
82	OHX	AR	3530	-	0,6,6	-	-	-		
82	OHX	CL	301	-	0,6,6	-	-	-		
82	OHX	1	3671	-	0,6,6	-	-	-		
82	OHX	A	1938	-	0,6,6	-	-	-		
82	OHX	sR	1992	-	0,6,6	-	-	-		
82	OHX	sR	1951	-	0,6,6	-	-	-		
82	OHX	1	3677	-	0,6,6	-	-	-		
82	OHX	1	3691	-	0,6,6	-	-	-		
82	OHX	1	3489	-	0,6,6	-	-	-		
82	OHX	4	206	-	0,6,6	-	-	-		
82	OHX	AR	3438	-	0,6,6	-	-	-		
82	OHX	1	3713	-	0,6,6	-	-	-		
82	OHX	AR	3626	-	0,6,6	-	-	-		
82	OHX	sR	1993	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
82	OHX	AS	206	-	0,6,6	-	-	-		
82	OHX	sR	1908	-	0,6,6	-	-	-		
82	OHX	AR	3556	-	0,6,6	-	-	-		
82	OHX	AR	3714	-	0,6,6	-	-	-		
82	OHX	sR	2041	-	0,6,6	-	-	-		
82	OHX	1	3701	-	0,6,6	-	-	-		
82	OHX	AR	3525	-	0,6,6	-	-	-		
82	OHX	1	3702	-	0,6,6	-	-	-		
82	OHX	1	3690	82	0,6,6	-	-	-		
82	OHX	AR	3412	-	0,6,6	-	-	-		
82	OHX	4	203	-	0,6,6	-	-	-		
82	OHX	A	1914	-	0,6,6	-	-	-		
82	OHX	A	1926	-	0,6,6	-	-	-		
82	OHX	AR	3715	-	0,6,6	-	-	-		
82	OHX	sR	1994	-	0,6,6	-	-	-		
82	OHX	AR	3663	-	0,6,6	-	-	-		
82	OHX	1	3718	-	0,6,6	-	-	-		
82	OHX	sR	1936	-	0,6,6	-	-	-		
82	OHX	AT	204	-	0,6,6	-	-	-		
82	OHX	AR	3717	-	0,6,6	-	-	-		
82	OHX	1	3407	-	0,6,6	-	-	-		
82	OHX	A	1876	82	0,6,6	-	-	-		
82	OHX	A	1921	-	0,6,6	-	-	-		
82	OHX	sR	1937	-	0,6,6	-	-	-		
82	OHX	A	1886	-	0,6,6	-	-	-		
82	OHX	d9	102	-	0,6,6	-	-	-		
82	OHX	1	3527	-	0,6,6	-	-	-		
82	OHX	1	3448	-	0,6,6	-	-	-		
82	OHX	1	3432	-	0,6,6	-	-	-		
82	OHX	1	3591	-	0,6,6	-	-	-		
82	OHX	1	3601	-	0,6,6	-	-	-		
82	OHX	AR	3486	-	0,6,6	-	-	-		
82	OHX	AR	3570	-	0,6,6	-	-	-		
82	OHX	AR	3704	-	0,6,6	-	-	-		
82	OHX	1	3599	-	0,6,6	-	-	-		
82	OHX	AR	3596	-	0,6,6	-	-	-		
82	OHX	A	1864	-	0,6,6	-	-	-		
82	OHX	AK	103	-	0,6,6	-	-	-		
82	OHX	A	1900	-	0,6,6	-	-	-		
82	OHX	sR	1977	-	0,6,6	-	-	-		
82	OHX	1	3520	-	0,6,6	-	-	-		
82	OHX	sR	1914	-	0,6,6	-	-	-		
82	OHX	1	3712	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	sR	1985	-	0,6,6	-	-	-		
82	OHX	A	1874	-	0,6,6	-	-	-		
82	OHX	sR	1913	-	0,6,6	-	-	-		
82	OHX	AR	3479	-	0,6,6	-	-	-		
82	OHX	sR	1964	-	0,6,6	-	-	-		
82	OHX	CG	301	-	0,6,6	-	-	-		
82	OHX	s1	301	-	0,6,6	-	-	-		
82	OHX	1	3409	-	0,6,6	-	-	-		
82	OHX	1	3719	-	0,6,6	-	-	-		
82	OHX	AR	3572	-	0,6,6	-	-	-		
82	OHX	1	3597	-	0,6,6	-	-	-		
82	OHX	AR	3720	-	0,6,6	-	-	-		
82	OHX	sR	2016	-	0,6,6	-	-	-		
82	OHX	A	1849	-	0,6,6	-	-	-		
82	OHX	sR	1904	-	0,6,6	-	-	-		
82	OHX	AR	3405	-	0,6,6	-	-	-		
82	OHX	1	3589	-	0,6,6	-	-	-		
82	OHX	1	3604	-	0,6,6	-	-	-		
82	OHX	AR	3409	-	0,6,6	-	-	-		
82	OHX	A	1814	-	0,6,6	-	-	-		
82	OHX	AR	3628	-	0,6,6	-	-	-		
82	OHX	1	3557	-	0,6,6	-	-	-		
82	OHX	AR	3692	-	0,6,6	-	-	-		
82	OHX	1	3624	-	0,6,6	-	-	-		
82	OHX	1	3633	-	0,6,6	-	-	-		
82	OHX	AR	3697	-	0,6,6	-	-	-		
82	OHX	c5	201	-	0,6,6	-	-	-		
82	OHX	AR	3673	-	0,6,6	-	-	-		
82	OHX	4	211	-	0,6,6	-	-	-		
82	OHX	A	1897	47	0,6,6	-	-	-		
82	OHX	1	3571	-	0,6,6	-	-	-		
82	OHX	z	201	-	0,6,6	-	-	-		
82	OHX	1	3651	-	0,6,6	-	-	-		
82	OHX	4	212	-	0,6,6	-	-	-		
82	OHX	AR	3496	-	0,6,6	-	-	-		
82	OHX	AR	3505	-	0,6,6	-	-	-		
82	OHX	AR	3413	-	0,6,6	-	-	-		
82	OHX	AR	3649	-	0,6,6	-	-	-		
82	OHX	AR	3695	-	0,6,6	-	-	-		
82	OHX	AR	3636	-	0,6,6	-	-	-		
82	OHX	1	3545	-	0,6,6	-	-	-		
82	OHX	1	3555	-	0,6,6	-	-	-		
82	OHX	AR	3512	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	AR	3724	-	0,6,6	-	-	-		
82	OHX	1	3454	-	0,6,6	-	-	-		
82	OHX	1	3528	-	0,6,6	-	-	-		
82	OHX	AR	3510	-	0,6,6	-	-	-		
82	OHX	1	3634	-	0,6,6	-	-	-		
82	OHX	3	208	-	0,6,6	-	-	-		
82	OHX	AR	3402	-	0,6,6	-	-	-		
82	OHX	AR	3514	-	0,6,6	-	-	-		
82	OHX	AR	3548	-	0,6,6	-	-	-		
82	OHX	AR	3709	82	0,6,6	-	-	-		
82	OHX	AR	3468	-	0,6,6	-	-	-		
82	OHX	AR	3731	-	0,6,6	-	-	-		
82	OHX	AR	3425	-	0,6,6	-	-	-		
82	OHX	A	1807	-	0,6,6	-	-	-		
82	OHX	A	1935	-	0,6,6	-	-	-		
82	OHX	sR	2022	-	0,6,6	-	-	-		
82	OHX	AR	3476	-	0,6,6	-	-	-		
82	OHX	sR	1903	-	0,6,6	-	-	-		
82	OHX	AR	3648	-	0,6,6	-	-	-		
82	OHX	DG	201	-	0,6,6	-	-	-		
82	OHX	c8	201	-	0,6,6	-	-	-		
82	OHX	AR	3428	-	0,6,6	-	-	-		
82	OHX	AR	3444	-	0,6,6	-	-	-		
82	OHX	AR	3458	-	0,6,6	-	-	-		
82	OHX	AR	3615	-	0,6,6	-	-	-		
82	OHX	1	3428	-	0,6,6	-	-	-		
82	OHX	AR	3533	-	0,6,6	-	-	-		
82	OHX	sR	1979	-	0,6,6	-	-	-		
82	OHX	AR	3682	-	0,6,6	-	-	-		
82	OHX	AR	3677	-	0,6,6	-	-	-		
82	OHX	sR	1935	-	0,6,6	-	-	-		
82	OHX	CP	501	-	0,6,6	-	-	-		
82	OHX	sR	1925	-	0,6,6	-	-	-		
82	OHX	sR	2006	-	0,6,6	-	-	-		
82	OHX	sR	1934	-	0,6,6	-	-	-		
82	OHX	AR	3435	-	0,6,6	-	-	-		
82	OHX	1	3460	-	0,6,6	-	-	-		
82	OHX	A	1831	-	0,6,6	-	-	-		
82	OHX	3	201	-	0,6,6	-	-	-		
82	OHX	AR	3723	82	0,6,6	-	-	-		
82	OHX	sR	2035	-	0,6,6	-	-	-		
82	OHX	1	3422	-	0,6,6	-	-	-		
82	OHX	AR	3617	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
82	OHX	AR	3726	-	0,6,6	-	-	-		
82	OHX	AS	204	-	0,6,6	-	-	-		
82	OHX	A	1915	-	0,6,6	-	-	-		
82	OHX	sR	1938	-	0,6,6	-	-	-		
82	OHX	AR	3492	-	0,6,6	-	-	-		
82	OHX	1	3451	-	0,6,6	-	-	-		
82	OHX	sR	2011	-	0,6,6	-	-	-		
82	OHX	sR	1911	-	0,6,6	-	-	-		
82	OHX	1	3542	-	0,6,6	-	-	-		
82	OHX	1	3584	-	0,6,6	-	-	-		
82	OHX	CL	302	-	0,6,6	-	-	-		
82	OHX	A	1942	-	0,6,6	-	-	-		
82	OHX	AC	101	-	0,6,6	-	-	-		
82	OHX	AR	3665	-	0,6,6	-	-	-		
82	OHX	1	3532	-	0,6,6	-	-	-		
82	OHX	AR	3675	-	0,6,6	-	-	-		
82	OHX	A	1848	-	0,6,6	-	-	-		
82	OHX	AR	3558	-	0,6,6	-	-	-		
86	GOL	AR	4263	-	5,5,5	0.07	0	5,5,5	0.24	0
82	OHX	AR	3527	-	0,6,6	-	-	-		
82	OHX	AR	3699	-	0,6,6	-	-	-		
82	OHX	sR	1910	-	0,6,6	-	-	-		
82	OHX	AR	3448	-	0,6,6	-	-	-		
82	OHX	AR	3410	-	0,6,6	-	-	-		
82	OHX	AR	3429	-	0,6,6	-	-	-		
82	OHX	1	3491	-	0,6,6	-	-	-		
82	OHX	sR	1969	-	0,6,6	-	-	-		

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	GOL	AR	4263	-	-	0/4/4/4	-
84	G5B	1	4224	-	-	1/8/62/62	0/3/3/3
84	G5B	AR	4264	-	-	1/8/62/62	0/3/3/3
86	GOL	AR	4262	-	-	2/4/4/4	-

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
84	1	4224	G5B	C11-C6-C5	-3.63	109.39	114.43
84	1	4224	G5B	C11-C6-C9	2.28	117.03	113.71

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
86	AR	4262	GOL	C1-C2-C3-O3
86	AR	4262	GOL	O2-C2-C3-O3
84	1	4224	G5B	C6-C11-C16-O1
84	AR	4264	G5B	C6-C11-C16-O1

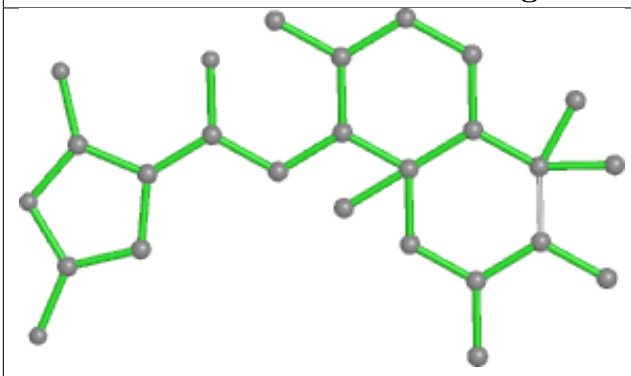
There are no ring outliers.

1 monomer is involved in 1 short contact:

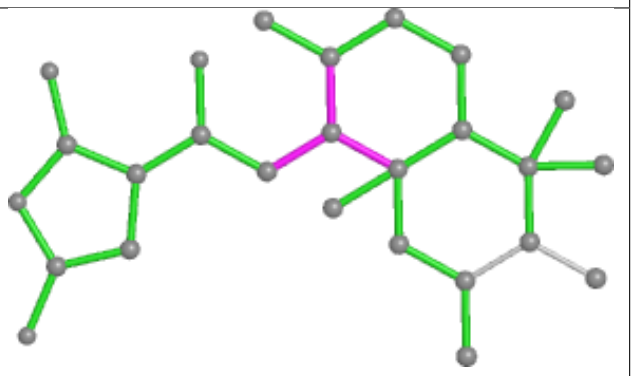
Mol	Chain	Res	Type	Clashes	Symm-Clashes
82	AR	3441	OHX	0	1

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

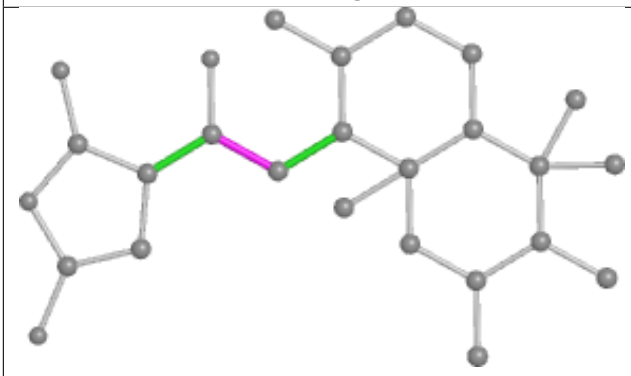
Ligand G5B 1 4224



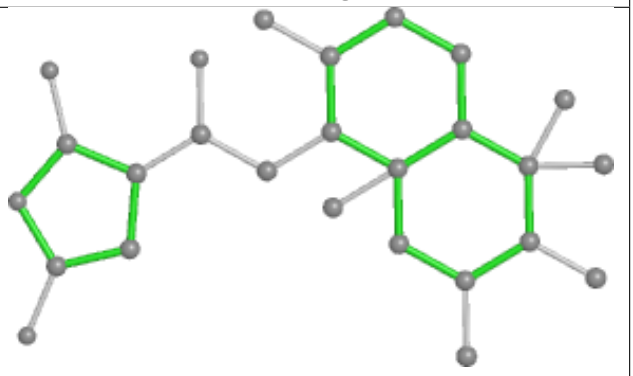
Bond lengths



Bond angles

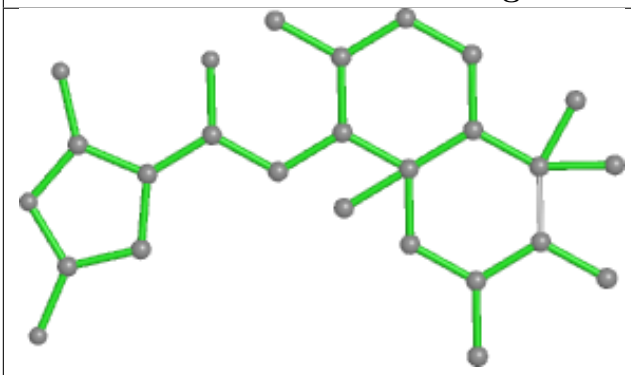


Torsions

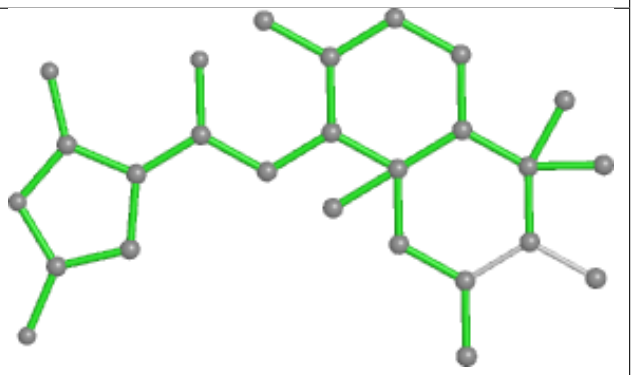


Rings

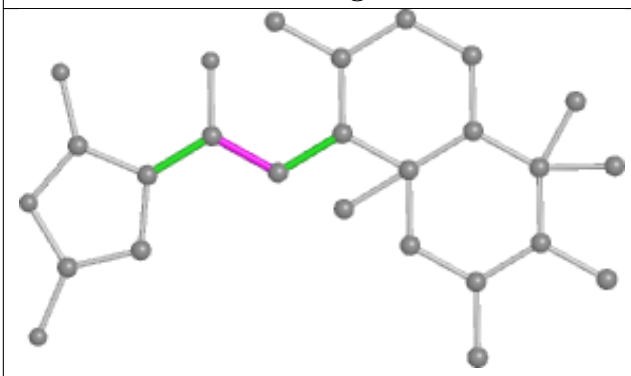
Ligand G5B AR 4264



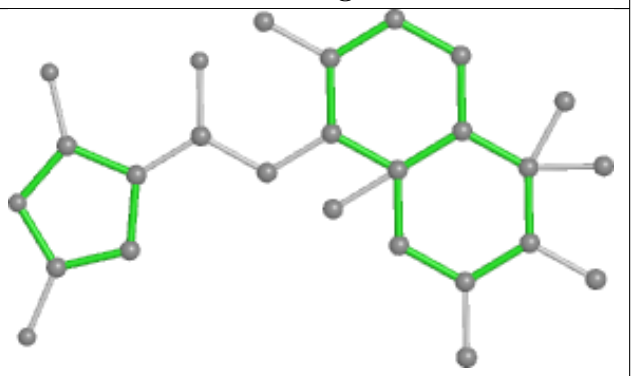
Bond lengths



Bond angles



Torsions



Rings

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
58	c0	1
47	A	1
14	t	1
52	F	1
48	s0	1
7	CG	1
52	s4	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	c0	84:GLU	C	87:HIS	N	9.26
1	A	1716:C	O3'	1717:G	P	4.20
1	t	132:ALA	C	133:PRO	N	1.75
1	F	82:TYR	C	83:PRO	N	1.18
1	s0	160:ILE	C	161:PRO	N	1.16
1	CG	179:ARG	C	180:PHE	N	1.15
1	s4	82:TYR	C	83:PRO	N	1.09

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1	3149/3396 (92%)	-0.03	116 (3%) 41 21	20, 42, 104, 200	0
1	AR	3147/3396 (92%)	-0.03	97 (3%) 49 26	21, 40, 100, 196	0
2	3	121/121 (100%)	-0.31	0 100 100	34, 58, 70, 71	0
2	AS	121/121 (100%)	-0.31	0 100 100	27, 43, 53, 56	0
3	4	158/158 (100%)	-0.23	2 (1%) 77 59	24, 40, 73, 107	0
3	AT	158/158 (100%)	-0.17	2 (1%) 77 59	29, 48, 78, 95	0
4	CD	252/254 (99%)	-0.28	3 (1%) 79 61	25, 40, 57, 64	0
4	j	252/254 (99%)	-0.28	0 100 100	25, 39, 53, 62	0
5	CE	386/387 (99%)	-0.31	2 (0%) 91 81	22, 33, 43, 76	0
5	k	386/387 (99%)	-0.28	1 (0%) 94 88	28, 44, 54, 64	0
6	CF	361/362 (99%)	-0.38	1 (0%) 94 88	25, 39, 53, 67	0
6	l	361/362 (99%)	-0.36	0 100 100	21, 34, 49, 56	0
7	CG	296/297 (99%)	-0.09	7 (2%) 59 37	34, 44, 64, 79	0
7	m	296/297 (99%)	-0.02	3 (1%) 82 67	41, 61, 74, 95	0
8	CH	156/176 (88%)	-0.28	1 (0%) 89 78	33, 41, 58, 70	0
8	n	156/176 (88%)	-0.35	0 100 100	33, 37, 49, 62	0
9	CI	222/244 (90%)	-0.37	3 (1%) 75 56	26, 31, 61, 93	0
9	o	222/244 (90%)	-0.37	3 (1%) 75 56	27, 33, 52, 79	0
10	CJ	233/256 (91%)	0.58	20 (8%) 10 4	54, 64, 94, 103	0
10	p	233/256 (91%)	-0.01	9 (3%) 39 20	45, 57, 85, 93	0
11	CK	191/191 (100%)	-0.27	3 (1%) 72 51	33, 39, 53, 62	0
11	q	191/191 (100%)	0.02	4 (2%) 63 43	42, 52, 62, 72	0
12	CL	211/221 (95%)	-0.21	4 (1%) 66 46	26, 39, 62, 90	0
12	r	211/221 (95%)	-0.10	2 (0%) 84 69	29, 42, 73, 81	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	CM	169/174 (97%)	-0.22	2 (1%) 79 61	36, 51, 65, 76	0
13	s	169/174 (97%)	-0.00	0 100 100	51, 67, 76, 82	0
14	CN	193/199 (96%)	0.06	5 (2%) 56 33	26, 49, 80, 95	0
14	t	193/199 (96%)	-0.15	2 (1%) 82 67	23, 41, 73, 94	0
15	CO	136/138 (98%)	-0.42	1 (0%) 87 75	31, 36, 53, 68	0
15	u	136/138 (98%)	-0.28	1 (0%) 87 75	34, 42, 53, 60	0
16	CP	203/204 (99%)	-0.25	0 100 100	28, 44, 53, 57	0
16	v	203/204 (99%)	-0.34	0 100 100	24, 37, 46, 51	0
17	CQ	197/199 (98%)	-0.37	3 (1%) 73 54	23, 26, 51, 56	0
17	w	197/199 (98%)	-0.40	0 100 100	27, 33, 48, 50	0
18	CR	183/184 (99%)	0.95	27 (14%) 2 1	25, 31, 109, 140	0
18	x	183/184 (99%)	0.06	9 (4%) 29 14	28, 35, 76, 106	0
19	CS	185/186 (99%)	-0.25	0 100 100	28, 39, 47, 53	0
19	y	185/186 (99%)	-0.35	0 100 100	27, 36, 48, 65	0
20	CT	188/189 (99%)	0.17	11 (5%) 22 10	38, 49, 119, 134	0
20	z	188/189 (99%)	0.25	8 (4%) 35 17	43, 55, 125, 139	0
21	0	172/172 (100%)	-0.37	1 (0%) 89 78	33, 40, 50, 54	0
21	CU	172/172 (100%)	-0.39	1 (0%) 89 78	28, 32, 40, 48	0
22	2	159/160 (99%)	-0.20	1 (0%) 89 78	27, 40, 73, 80	0
22	CV	159/160 (99%)	-0.23	0 100 100	24, 34, 67, 73	0
23	5	100/121 (82%)	0.47	5 (5%) 28 13	71, 82, 89, 95	0
23	CW	100/121 (82%)	0.76	10 (10%) 7 2	60, 70, 76, 90	0
24	6	136/137 (99%)	-0.24	1 (0%) 87 75	31, 40, 48, 52	0
24	CX	136/137 (99%)	-0.13	3 (2%) 62 41	24, 32, 42, 45	0
25	7	98/155 (63%)	1.03	25 (25%) 0 0	40, 52, 124, 127	0
25	CY	124/155 (80%)	0.03	7 (5%) 24 11	32, 64, 109, 125	0
26	8	121/142 (85%)	-0.17	1 (0%) 86 72	36, 46, 59, 90	0
26	CZ	121/142 (85%)	0.02	6 (4%) 28 13	38, 49, 68, 78	0
27	9	126/127 (99%)	-0.07	1 (0%) 86 72	27, 42, 51, 54	0
27	DA	124/127 (97%)	-0.08	1 (0%) 86 72	32, 49, 60, 64	0
28	AA	135/136 (99%)	0.04	0 100 100	55, 65, 79, 87	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	DB	135/136 (99%)	0.04	0 100 100	61, 72, 92, 99	0
29	AB	148/149 (99%)	-0.30	0 100 100	20, 36, 52, 60	0
29	DC	148/149 (99%)	-0.33	1 (0%) 87 75	22, 41, 54, 56	0
30	AC	58/59 (98%)	-0.01	4 (6%) 16 7	24, 43, 85, 97	0
30	DD	58/59 (98%)	-0.20	2 (3%) 45 24	23, 42, 64, 70	0
31	AD	97/105 (92%)	0.11	5 (5%) 27 12	53, 60, 77, 81	0
31	DE	97/105 (92%)	0.23	5 (5%) 27 12	53, 63, 79, 82	0
32	AE	109/113 (96%)	0.04	4 (3%) 41 21	40, 51, 74, 86	0
32	DF	109/113 (96%)	0.08	2 (1%) 68 47	33, 42, 69, 85	0
33	AF	127/130 (97%)	-0.16	3 (2%) 59 37	22, 34, 41, 51	0
33	DG	127/130 (97%)	-0.15	3 (2%) 59 37	22, 39, 47, 56	0
34	AG	106/107 (99%)	-0.41	0 100 100	28, 32, 49, 54	0
34	DH	106/107 (99%)	-0.34	0 100 100	26, 32, 57, 70	0
35	AH	112/121 (92%)	0.00	3 (2%) 54 31	38, 52, 86, 95	0
35	DI	112/121 (92%)	-0.13	0 100 100	39, 55, 86, 95	0
36	AI	119/120 (99%)	-0.18	1 (0%) 86 72	34, 48, 55, 59	0
36	DJ	119/120 (99%)	-0.04	2 (1%) 70 49	44, 54, 65, 72	0
37	AJ	99/100 (99%)	0.06	4 (4%) 38 19	39, 48, 71, 84	0
37	DK	99/100 (99%)	-0.10	4 (4%) 38 19	46, 56, 72, 85	0
38	AK	87/88 (98%)	-0.30	1 (1%) 80 64	25, 30, 47, 66	0
38	DL	87/88 (98%)	-0.08	2 (2%) 60 39	26, 33, 58, 86	0
39	AL	77/78 (98%)	0.29	2 (2%) 56 33	59, 70, 85, 88	0
39	DM	77/78 (98%)	1.09	16 (20%) 1 0	60, 70, 81, 86	0
40	AM	50/51 (98%)	-0.23	1 (2%) 65 44	33, 36, 43, 46	0
40	DN	50/51 (98%)	-0.30	0 100 100	35, 39, 48, 52	0
41	AN	52/128 (40%)	0.02	2 (3%) 40 20	39, 44, 53, 56	0
41	DO	52/128 (40%)	-0.22	1 (1%) 66 46	28, 30, 41, 48	0
42	AO	25/25 (100%)	0.03	0 100 100	48, 50, 54, 55	0
42	DP	25/25 (100%)	-0.41	0 100 100	34, 39, 46, 49	0
43	AP	105/106 (99%)	0.10	2 (1%) 66 46	26, 41, 62, 77	0
43	DQ	105/106 (99%)	0.06	0 100 100	27, 38, 52, 70	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	AQ	91/92 (98%)	-0.26	0 100 100	32, 40, 50, 55	0
44	DR	91/92 (98%)	-0.40	0 100 100	30, 40, 51, 60	0
45	i	159/273 (58%)	0.67	20 (12%) 3 1	47, 77, 123, 128	0
45	sM	63/273 (23%)	0.71	8 (12%) 3 1	48, 76, 88, 91	0
46	p0	143/312 (45%)	0.84	17 (11%) 4 2	73, 90, 152, 161	0
47	A	1781/1797 (99%)	0.29	115 (6%) 18 8	47, 77, 163, 229	0
48	B	206/252 (81%)	0.32	12 (5%) 23 10	82, 94, 103, 116	0
48	s0	206/252 (81%)	-0.17	0 100 100	60, 73, 85, 89	0
49	C	214/255 (83%)	0.91	35 (16%) 1 1	84, 110, 135, 144	0
49	s1	216/255 (84%)	0.12	8 (3%) 41 21	53, 65, 92, 107	0
50	D	217/254 (85%)	-0.15	1 (0%) 91 81	61, 74, 88, 95	0
50	s2	217/254 (85%)	-0.10	5 (2%) 60 39	46, 57, 68, 77	0
51	E	223/240 (92%)	0.25	11 (4%) 29 14	67, 79, 105, 113	0
51	s3	223/240 (92%)	0.30	9 (4%) 38 19	62, 85, 103, 108	0
52	F	260/261 (99%)	0.24	6 (2%) 60 39	58, 74, 83, 101	0
52	s4	260/261 (99%)	-0.06	4 (1%) 73 54	42, 60, 73, 100	0
53	G	206/225 (91%)	0.45	15 (7%) 15 6	85, 101, 112, 120	0
53	s5	206/225 (91%)	0.25	7 (3%) 45 24	64, 82, 97, 101	0
54	H	226/236 (95%)	0.39	15 (6%) 18 7	57, 86, 105, 114	0
54	s6	218/236 (92%)	0.16	6 (2%) 53 30	43, 68, 84, 99	0
55	I	184/190 (96%)	0.45	11 (5%) 21 10	73, 99, 127, 132	0
55	s7	186/190 (97%)	0.36	8 (4%) 35 17	54, 85, 117, 126	0
56	J	188/200 (94%)	0.13	5 (2%) 54 31	50, 61, 94, 105	0
56	s8	188/200 (94%)	0.08	6 (3%) 47 25	39, 57, 96, 108	0
57	K	185/197 (93%)	0.45	12 (6%) 18 8	68, 83, 118, 149	0
57	s9	185/197 (93%)	0.04	6 (3%) 47 25	54, 65, 89, 113	0
58	L	96/105 (91%)	0.10	0 100 100	72, 91, 115, 130	0
58	c0	96/105 (91%)	1.03	17 (17%) 1 0	82, 110, 128, 145	0
59	M	155/156 (99%)	0.32	16 (10%) 6 2	51, 59, 92, 101	0
59	c1	146/156 (93%)	-0.01	5 (3%) 45 24	39, 52, 76, 97	0
60	N	124/143 (86%)	1.52	35 (28%) 0 0	114, 126, 146, 155	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
60	c2	124/143 (86%)	2.50	63 (50%) 0 0	148, 162, 179, 183	0
61	O	150/151 (99%)	-0.04	2 (1%) 77 59	58, 73, 84, 88	0
61	c3	150/151 (99%)	-0.25	0 100 100	45, 57, 70, 83	0
62	P	127/138 (92%)	0.29	8 (6%) 20 8	59, 112, 126, 127	0
62	c4	128/138 (92%)	-0.11	0 100 100	38, 69, 76, 78	0
63	Q	124/142 (87%)	0.38	9 (7%) 15 6	67, 80, 105, 127	0
63	c5	135/142 (95%)	0.50	11 (8%) 12 5	68, 80, 99, 109	0
64	R	141/143 (98%)	0.57	13 (9%) 9 3	72, 94, 99, 101	0
64	c6	142/143 (99%)	0.33	5 (3%) 44 23	58, 76, 88, 102	0
65	S	120/136 (88%)	0.44	11 (9%) 9 3	81, 94, 112, 114	0
65	c7	117/136 (86%)	0.14	2 (1%) 70 49	66, 77, 95, 101	0
66	T	145/146 (99%)	0.58	13 (8%) 9 3	66, 89, 111, 118	0
66	c8	145/146 (99%)	0.37	16 (11%) 5 2	60, 74, 95, 104	0
67	U	143/144 (99%)	0.31	6 (4%) 36 18	76, 90, 103, 110	0
67	c9	143/144 (99%)	0.09	0 100 100	60, 70, 86, 94	0
68	V	107/121 (88%)	0.96	22 (20%) 1 0	64, 96, 118, 123	0
68	d0	110/121 (90%)	0.80	20 (18%) 1 0	61, 89, 122, 132	0
69	W	87/87 (100%)	-0.06	1 (1%) 80 64	77, 82, 95, 102	0
69	d1	87/87 (100%)	-0.20	1 (1%) 80 64	55, 62, 79, 85	0
70	X	129/130 (99%)	-0.12	0 100 100	59, 69, 76, 86	0
70	d2	129/130 (99%)	-0.28	0 100 100	43, 52, 58, 66	0
71	Y	144/145 (99%)	0.03	2 (1%) 75 56	50, 55, 63, 70	0
71	d3	144/145 (99%)	-0.09	0 100 100	38, 42, 53, 59	0
72	Z	134/135 (99%)	0.44	8 (5%) 21 10	64, 85, 97, 104	0
72	d4	134/135 (99%)	0.08	5 (3%) 41 21	49, 67, 78, 96	0
73	a	70/108 (64%)	1.05	13 (18%) 1 0	97, 109, 116, 118	0
73	d5	69/108 (63%)	0.66	11 (15%) 1 1	75, 92, 101, 103	0
74	b	97/119 (81%)	0.54	8 (8%) 11 4	61, 75, 126, 131	0
74	d6	97/119 (81%)	-0.16	1 (1%) 82 67	43, 52, 78, 85	0
75	c	81/82 (98%)	0.43	6 (7%) 14 5	72, 84, 112, 115	0
75	d7	81/82 (98%)	0.24	5 (6%) 20 9	53, 67, 97, 99	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
76	d	63/67 (94%)	1.36	16 (25%) 0 0	95, 110, 118, 122	0
76	d8	63/67 (94%)	1.46	16 (25%) 0 0	79, 91, 100, 107	0
77	d9	53/56 (94%)	0.26	2 (3%) 40 20	61, 69, 100, 105	0
77	e	53/56 (94%)	-0.04	1 (1%) 66 46	66, 70, 85, 89	0
78	e0	62/63 (98%)	0.53	5 (8%) 12 5	44, 66, 84, 91	0
78	f	60/63 (95%)	0.83	8 (13%) 3 1	53, 83, 111, 113	0
79	e1	51/152 (33%)	1.54	17 (33%) 0 0	128, 142, 157, 160	0
79	g	71/152 (46%)	0.99	13 (18%) 1 0	87, 107, 119, 121	0
80	Rb	318/319 (99%)	0.49	26 (8%) 11 4	83, 95, 103, 111	0
80	h	318/319 (99%)	0.42	21 (6%) 18 7	88, 100, 113, 125	0
81	sR	1783/1800 (99%)	0.21	94 (5%) 26 12	33, 64, 134, 203	0
All	All	33026/35567 (92%)	0.08	1381 (4%) 36 18	20, 55, 110, 229	0

All (1381) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
18	CR	179	GLN	16.5
18	CR	161	ALA	16.0
18	CR	162	GLU	15.0
18	CR	160	ALA	13.1
47	A	1694	A	12.4
18	CR	178	ALA	10.9
18	CR	176	ILE	10.8
60	c2	63	VAL	10.6
47	A	1702	A	10.6
18	CR	180	LYS	10.4
47	A	1699	G	9.5
18	CR	158	ALA	9.3
55	s7	2	SER	8.9
47	A	1700	C	8.9
25	7	76	VAL	8.8
45	i	85	SER	8.8
60	c2	105	LYS	8.5
47	A	658	C	8.4
47	A	1698	G	8.4
47	A	238	U	8.3
1	AR	1569	U	8.3
47	A	656	G	8.2

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Mol	Chain	Res	Type	RSRZ
81	sR	658	C	8.2
18	CR	159	LYS	8.2
57	K	181	ALA	7.9
47	A	1709	C	7.8
79	g	87	THR	7.8
81	sR	239	C	7.7
60	c2	20	ALA	7.6
47	A	1696	G	7.5
20	CT	182	ASP	7.4
18	CR	181	ARG	7.3
47	A	1692	G	7.1
38	DL	88	ALA	7.1
49	C	20	VAL	7.1
63	c5	135	THR	7.0
47	A	1693	A	7.0
60	N	62	LEU	7.0
59	M	146	ALA	7.0
45	i	87	THR	6.9
1	1	1569	U	6.9
60	c2	56	GLU	6.8
25	7	75	THR	6.8
18	CR	157	VAL	6.7
60	c2	113	ARG	6.7
18	CR	170	SER	6.7
81	sR	678	A	6.7
18	CR	184	ALA	6.7
47	A	1701	A	6.7
10	CJ	121	SER	6.6
81	sR	1710	U	6.6
45	i	84	LYS	6.6
1	1	1568	U	6.5
47	A	913	G	6.5
25	CY	69	LYS	6.5
47	A	1708	U	6.5
1	AR	2445	A	6.4
53	G	152	GLY	6.4
18	CR	165	VAL	6.4
18	CR	175	ARG	6.4
18	CR	163	LYS	6.3
1	AR	2539	C	6.3
25	7	78	ALA	6.3
68	V	120	SER	6.2

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Mol	Chain	Res	Type	RSRZ
25	7	69	LYS	6.2
18	x	161	ALA	6.2
81	sR	676	G	6.2
59	M	147	GLY	6.2
53	s5	151	GLY	6.2
7	CG	297	GLN	6.1
79	g	85	TYR	6.1
47	A	1703	C	6.0
49	C	55	LYS	6.0
59	M	152	GLN	6.0
60	c2	23	THR	5.9
18	CR	168	LEU	5.9
1	AR	1025	A	5.9
25	7	88	ASP	5.9
60	c2	64	SER	5.9
60	c2	28	LEU	5.9
45	i	16	ASP	5.9
18	CR	177	ALA	5.9
60	c2	112	ALA	5.9
81	sR	718	U	5.8
60	c2	30	VAL	5.8
60	c2	114	LYS	5.8
60	c2	123	VAL	5.8
47	A	1697	G	5.8
18	CR	167	ARG	5.7
64	c6	142	TYR	5.7
47	A	506	A	5.7
49	C	54	LEU	5.7
47	A	1704	U	5.7
81	sR	656	G	5.7
55	s7	3	ALA	5.6
81	sR	1707	A	5.6
47	A	657	U	5.6
1	1	1566	A	5.6
64	R	20	ALA	5.5
45	i	88	ARG	5.5
63	c5	134	THR	5.5
75	c	38	PRO	5.5
63	c5	50	THR	5.5
1	AR	1574	C	5.5
53	G	37	GLN	5.5
1	AR	1581	C	5.5

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Mol	Chain	Res	Type	RSRZ
18	CR	182	ILE	5.5
1	1	1567	U	5.4
77	d9	4	GLU	5.4
18	x	162	GLU	5.4
25	CY	66	GLU	5.4
18	CR	169	THR	5.4
1	1	1762	C	5.4
17	CQ	182	ASN	5.4
54	H	149	LYS	5.4
1	AR	1573	G	5.4
1	AR	1028	U	5.4
25	7	84	GLY	5.4
25	7	68	ALA	5.3
60	c2	92	ALA	5.3
1	1	1240	A	5.3
63	c5	4	ALA	5.3
1	1	2539	C	5.3
1	AR	1016	C	5.3
10	CJ	255	SER	5.3
47	A	135	A	5.3
18	CR	174	GLY	5.3
1	AR	2503	G	5.3
1	1	1269	U	5.3
10	CJ	254	ASP	5.3
1	AR	2535	A	5.3
1	AR	252	U	5.3
1	1	1952	G	5.3
47	A	1695	G	5.3
68	d0	121	ASN	5.2
1	1	1955	U	5.2
25	7	86	SER	5.2
63	Q	50	THR	5.2
81	sR	506	A	5.2
1	AR	1566	A	5.2
1	AR	1570	U	5.2
10	CJ	253	SER	5.2
1	1	1238	C	5.2
1	AR	2502	A	5.1
1	1	1570	U	5.1
47	A	718	U	5.1
49	C	25	THR	5.1
1	AR	1567	U	5.1

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Mol	Chain	Res	Type	RSRZ
1	AR	1579	C	5.0
47	A	1711	C	5.0
81	sR	1711	C	5.0
1	1	1237	G	5.0
1	1	1243	G	5.0
18	CR	164	LYS	5.0
47	A	239	C	4.9
25	7	85	ALA	4.9
80	h	283	LYS	4.9
1	AR	1351	U	4.9
48	B	28	ASN	4.8
51	E	44	THR	4.8
47	A	1705	C	4.8
57	K	180	LYS	4.8
60	c2	34	THR	4.8
25	7	81	PRO	4.8
59	M	2	SER	4.8
80	Rb	121	MET	4.8
60	N	112	ALA	4.8
1	AR	1562	C	4.8
23	CW	14	THR	4.7
1	1	1571	A	4.7
47	A	1690	G	4.7
23	5	27	VAL	4.7
60	c2	57	ALA	4.7
63	c5	133	ALA	4.7
59	c1	5	LEU	4.7
1	AR	1571	A	4.7
81	sR	1693	A	4.7
81	sR	1694	A	4.7
25	CY	67	VAL	4.7
57	K	184	SER	4.6
47	A	134	U	4.6
81	sR	194	U	4.6
1	1	1255	C	4.6
47	A	194	U	4.6
59	M	145	ALA	4.6
78	e0	62	VAL	4.6
81	sR	679	U	4.6
47	A	715	U	4.6
47	A	719	U	4.6
25	CY	68	ALA	4.6

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Mol	Chain	Res	Type	RSRZ
1	AR	1024	G	4.6
81	sR	1371	A	4.6
60	N	64	SER	4.5
67	U	5	SER	4.5
10	CJ	247	ASP	4.5
1	1	1763	U	4.5
57	s9	184	SER	4.5
76	d8	13	ILE	4.5
47	A	494	U	4.5
23	CW	52	ASN	4.5
1	1	2445	A	4.5
1	1	1239	C	4.5
38	DL	87	SER	4.5
47	A	714	G	4.5
45	i	19	VAL	4.4
60	c2	85	LYS	4.4
18	CR	172	GLN	4.4
76	d	26	THR	4.4
75	d7	38	PRO	4.4
47	A	1712	A	4.4
58	c0	74	GLU	4.4
47	A	912	U	4.4
1	AR	1563	C	4.4
18	CR	166	VAL	4.4
64	R	143	ARG	4.4
26	CZ	23	ALA	4.3
81	sR	493	U	4.3
39	DM	34	ALA	4.3
63	c5	5	VAL	4.3
68	V	93	LEU	4.3
81	sR	675	U	4.3
62	P	40	ALA	4.3
47	A	1707	A	4.3
53	G	161	ASP	4.3
18	x	184	ALA	4.3
47	A	729	G	4.3
76	d	44	VAL	4.3
1	1	1236	G	4.3
66	c8	14	ILE	4.3
57	K	138	LYS	4.2
64	R	92	TYR	4.2
20	CT	183	ALA	4.2

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Mol	Chain	Res	Type	RSRZ
33	DG	128	LEU	4.2
25	7	77	LYS	4.2
78	f	52	GLY	4.2
78	f	53	LYS	4.2
58	c0	79	TYR	4.2
76	d8	9	LEU	4.2
1	1	2205	U	4.2
51	s3	144	ALA	4.2
20	CT	189	ALA	4.2
1	1	1349	G	4.2
45	sM	84	LYS	4.2
65	S	126	ALA	4.2
54	s6	217	SER	4.2
47	A	723	G	4.2
81	sR	229	U	4.2
60	c2	21	GLU	4.2
1	1	1951	C	4.2
60	c2	93	ASP	4.2
59	M	155	LYS	4.2
78	e0	49	LEU	4.2
47	A	1687	U	4.1
49	C	95	ASN	4.1
20	z	187	GLU	4.1
60	c2	107	ASP	4.1
80	h	4	ASN	4.1
60	N	113	ARG	4.1
81	sR	677	G	4.1
12	CL	112	GLN	4.1
1	1	2207	A	4.1
81	sR	240	U	4.1
57	K	182	GLU	4.1
1	1	1263	A	4.1
49	C	26	ARG	4.1
1	AR	1572	U	4.1
64	R	141	SER	4.1
76	d	16	LEU	4.1
64	R	3	ALA	4.1
33	AF	128	LEU	4.1
78	f	61	SER	4.1
25	7	70	LYS	4.1
64	c6	143	ARG	4.1
53	G	25	LEU	4.1

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Mol	Chain	Res	Type	RSRZ
81	sR	494	U	4.1
1	1	1256	G	4.1
58	c0	98	ASN	4.1
49	C	94	LYS	4.0
45	i	89	ARG	4.0
1	AR	2538	U	4.0
11	CK	190	ASP	4.0
79	e1	146	SER	4.0
25	7	98	PRO	4.0
9	CI	26	VAL	4.0
81	sR	495	C	4.0
7	CG	296	GLN	4.0
66	T	22	VAL	4.0
39	DM	71	PRO	4.0
60	N	67	THR	4.0
46	p0	295	ALA	4.0
59	M	153	PHE	4.0
1	1	1764	U	3.9
60	N	111	ASN	3.9
81	sR	1228	G	3.9
47	A	734	A	3.9
68	d0	18	GLN	3.9
68	d0	100	VAL	3.9
20	z	185	LEU	3.9
60	N	106	ILE	3.9
1	1	547	G	3.9
47	A	730	G	3.9
47	A	706	A	3.9
79	e1	124	PRO	3.9
49	C	60	ALA	3.9
1	AR	1576	G	3.9
68	V	20	ILE	3.9
20	CT	174	ALA	3.9
68	V	96	PRO	3.9
49	s1	20	VAL	3.9
45	i	172	ALA	3.9
51	s3	145	ALA	3.9
60	c2	115	VAL	3.9
79	e1	113	LYS	3.9
25	7	95	SER	3.9
45	i	83	LYS	3.9
64	R	66	ARG	3.9

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Mol	Chain	Res	Type	RSRZ
54	H	217	SER	3.8
1	1	1815	U	3.8
58	c0	37	THR	3.8
37	DK	100	HIS	3.8
10	CJ	120	LYS	3.8
53	G	41	LYS	3.8
47	A	491	C	3.8
60	c2	47	GLU	3.8
25	7	87	LEU	3.8
60	c2	74	LEU	3.8
79	e1	102	VAL	3.8
80	Rb	120	SER	3.8
1	1	1581	C	3.8
47	A	1686	C	3.8
20	z	188	ASP	3.8
59	c1	3	THR	3.8
31	AD	105	ALA	3.8
47	A	725	U	3.8
73	a	87	GLY	3.8
1	1	1352	A	3.8
47	A	493	U	3.8
64	R	142	TYR	3.8
60	N	86	VAL	3.8
60	c2	143	GLN	3.8
27	9	127	GLU	3.8
63	c5	136	SER	3.8
46	p0	192	ASP	3.8
5	CE	387	LEU	3.8
60	N	52	LEU	3.8
68	V	19	ILE	3.7
79	g	88	PRO	3.7
10	CJ	249	ARG	3.7
47	A	707	A	3.7
80	h	52	GLN	3.7
68	V	121	ASN	3.7
77	d9	5	ASN	3.7
20	CT	186	LYS	3.7
81	sR	234	G	3.7
1	AR	2504	U	3.7
3	4	158	U	3.7
81	sR	484	C	3.7
81	sR	1491	U	3.7

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Mol	Chain	Res	Type	RSRZ
81	sR	738	G	3.7
56	J	145	ALA	3.7
74	b	47	ALA	3.7
37	AJ	99	ARG	3.7
45	sM	85	SER	3.7
63	Q	51	SER	3.7
32	DF	82	GLU	3.7
60	N	41	LEU	3.7
47	A	507	U	3.7
47	A	1710	U	3.7
76	d	17	GLY	3.7
25	7	73	ARG	3.7
18	CR	183	ALA	3.7
48	B	170	ILE	3.7
54	H	226	ILE	3.7
1	AR	1352	A	3.7
81	sR	1800	A	3.7
60	c2	59	LEU	3.7
68	d0	99	ILE	3.7
81	sR	487	G	3.7
60	c2	126	TRP	3.7
54	H	152	ASP	3.6
47	A	696	C	3.6
47	A	724	C	3.6
10	CJ	246	MET	3.6
20	CT	185	LEU	3.6
23	CW	9	GLN	3.6
47	A	697	C	3.6
65	S	85	VAL	3.6
81	sR	721	U	3.6
81	sR	655	G	3.6
60	N	88	LEU	3.6
67	U	35	ASP	3.6
78	e0	63	GLN	3.6
1	AR	1815	U	3.6
47	A	132	U	3.6
47	A	1691	A	3.6
60	c2	75	VAL	3.6
60	c2	125	ASN	3.6
81	sR	1702	A	3.6
37	DK	96	ALA	3.6
79	g	86	THR	3.6

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Mol	Chain	Res	Type	RSRZ
1	AR	1764	U	3.5
60	N	50	LYS	3.5
47	A	713	A	3.5
49	C	133	TYR	3.5
81	sR	1699	G	3.5
76	d8	32	PHE	3.5
81	sR	1712	A	3.5
60	c2	132	GLU	3.5
60	c2	96	GLN	3.5
25	7	89	LEU	3.5
1	AR	1031	C	3.5
59	c1	2	SER	3.5
1	1	1265	U	3.5
47	A	237	C	3.5
48	B	113	ARG	3.5
1	1	1095	U	3.5
47	A	1688	U	3.5
65	S	123	ASN	3.5
81	sR	653	C	3.5
55	s7	52	ALA	3.5
21	0	1	MET	3.5
1	1	3290	G	3.5
63	c5	7	ALA	3.5
80	h	261	LYS	3.5
10	CJ	252	ASN	3.5
1	1	1242	G	3.5
1	AR	1564	U	3.5
81	sR	1708	U	3.5
66	T	8	GLN	3.5
57	s9	186	GLU	3.5
73	d5	86	GLU	3.4
1	1	1576	G	3.4
1	AR	2505	U	3.4
10	p	121	SER	3.4
18	x	157	VAL	3.4
47	A	1059	U	3.4
47	A	1362	U	3.4
47	A	1370	U	3.4
60	c2	43	ARG	3.4
60	c2	44	GLY	3.4
49	s1	52	THR	3.4
1	AR	1350	A	3.4

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Mol	Chain	Res	Type	RSRZ
1	AR	1026	A	3.4
9	CI	27	ALA	3.4
60	N	91	VAL	3.4
68	d0	17	GLN	3.4
66	T	10	SER	3.4
80	h	146	GLY	3.4
1	1	1094	U	3.4
18	x	159	LYS	3.4
52	s4	261	LEU	3.4
1	1	1260	A	3.4
10	p	252	ASN	3.4
60	N	110	GLY	3.4
81	sR	654	C	3.4
60	c2	80	ASN	3.4
49	s1	227	ALA	3.4
25	7	82	ILE	3.4
81	sR	705	U	3.4
25	CY	65	GLU	3.4
58	c0	36	ASP	3.4
60	c2	131	ASP	3.4
73	a	88	ILE	3.4
79	g	83	LYS	3.4
68	d0	107	THR	3.4
55	I	74	GLN	3.4
10	CJ	251	LYS	3.4
62	P	41	ARG	3.4
76	d	7	VAL	3.3
12	CL	219	ALA	3.3
5	k	387	LEU	3.3
47	A	488	G	3.3
10	CJ	119	GLY	3.3
49	C	28	GLU	3.3
1	1	2095	G	3.3
59	M	4	GLU	3.3
47	A	1706	C	3.3
36	AI	120	ALA	3.3
58	c0	71	GLU	3.3
79	e1	145	HIS	3.3
81	sR	490	C	3.3
10	CJ	107	GLU	3.3
59	M	154	ALA	3.3
1	1	252	U	3.3

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Mol	Chain	Res	Type	RSRZ
25	CY	70	LYS	3.3
46	p0	87	VAL	3.3
23	CW	11	ILE	3.3
57	K	185	GLY	3.3
1	1	1241	U	3.3
81	sR	657	U	3.3
23	CW	13	LYS	3.3
5	CE	386	ASP	3.3
68	V	92	ASP	3.3
79	g	109	ASP	3.3
1	1	1950	U	3.3
1	AR	1349	G	3.3
47	A	280	U	3.3
60	N	85	LYS	3.3
76	d	21	SER	3.3
78	f	48	THR	3.3
60	N	20	ALA	3.3
7	m	127	GLY	3.2
53	G	36	ALA	3.2
60	N	63	VAL	3.2
79	e1	111	GLU	3.2
1	AR	1027	A	3.2
53	s5	155	ALA	3.2
60	N	28	LEU	3.2
60	c2	41	LEU	3.2
68	d0	93	LEU	3.2
81	sR	483	A	3.2
45	i	17	VAL	3.2
47	A	279	G	3.2
81	sR	729	G	3.2
36	DJ	120	ALA	3.2
1	1	1351	U	3.2
43	AP	106	PHE	3.2
1	AR	1021	G	3.2
55	s7	12	ALA	3.2
55	s7	93	LEU	3.2
25	7	67	VAL	3.2
65	S	125	SER	3.2
1	AR	1568	U	3.2
31	AD	97	ASP	3.2
51	E	213	GLU	3.2
81	sR	225	A	3.2

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Mol	Chain	Res	Type	RSRZ
1	AR	1762	C	3.2
80	h	165	ASP	3.2
80	Rb	213	SER	3.2
68	d0	103	ILE	3.2
47	A	505	A	3.2
72	Z	2	SER	3.2
73	d5	105	THR	3.2
80	Rb	51	ASP	3.2
33	AF	127	ALA	3.2
49	C	45	LYS	3.2
81	sR	232	U	3.2
1	AR	1029	G	3.2
60	c2	124	LYS	3.2
80	h	212	ALA	3.2
1	AR	3275	U	3.2
1	1	1234	G	3.2
1	1	2206	G	3.2
39	DM	32	ASN	3.2
55	I	34	LEU	3.2
73	d5	87	GLY	3.2
60	N	22	VAL	3.2
80	Rb	303	ALA	3.2
1	1	1761	C	3.2
47	A	495	C	3.2
14	t	130	GLY	3.2
45	sM	50	ASN	3.2
1	AR	1565	G	3.2
18	x	163	LYS	3.1
35	AH	110	GLU	3.1
45	i	86	ASN	3.1
68	d0	104	THR	3.1
1	AR	1954	G	3.1
18	CR	173	ARG	3.1
51	E	214	GLU	3.1
53	s5	152	GLY	3.1
60	c2	106	ILE	3.1
1	1	1259	A	3.1
1	AR	2540	A	3.1
68	V	97	VAL	3.1
81	sR	496	G	3.1
81	sR	719	U	3.1
60	c2	22	VAL	3.1

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Mol	Chain	Res	Type	RSRZ
20	z	182	ASP	3.1
79	e1	106	TYR	3.1
24	CX	3	GLY	3.1
46	p0	81	LYS	3.1
1	1	1350	A	3.1
81	sR	226	A	3.1
25	7	92	GLU	3.1
49	C	59	ASP	3.1
1	AR	1577	G	3.1
49	C	29	TRP	3.1
59	c1	145	ALA	3.1
13	CM	174	LYS	3.1
73	d5	37	GLN	3.1
1	AR	1023	C	3.1
47	A	678	A	3.1
55	s7	32	PRO	3.1
10	p	116	VAL	3.1
48	B	198	MET	3.1
79	e1	123	ASN	3.1
62	P	15	GLY	3.1
49	C	35	PRO	3.1
66	c8	17	LEU	3.1
9	CI	25	GLN	3.1
53	G	222	LYS	3.1
51	s3	152	PHE	3.1
62	P	14	PHE	3.1
10	CJ	118	GLU	3.1
23	CW	66	VAL	3.1
1	AR	1575	A	3.1
27	DA	120	GLN	3.0
68	V	99	ILE	3.0
45	sM	82	THR	3.0
1	AR	1952	G	3.0
22	2	121	ALA	3.0
1	AR	2572	C	3.0
23	CW	10	LYS	3.0
80	h	186	PHE	3.0
76	d	15	VAL	3.0
81	sR	1687	U	3.0
43	AP	104	LEU	3.0
30	AC	57	ALA	3.0
73	d5	85	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
1	AR	1561	G	3.0
68	V	22	ILE	3.0
1	AR	1239	C	3.0
60	c2	26	ASP	3.0
81	sR	1700	C	3.0
47	A	727	U	3.0
60	c2	104	GLY	3.0
79	e1	110	ALA	3.0
54	H	80	ASN	3.0
76	d	43	ASN	3.0
79	e1	134	ASN	3.0
47	A	492	A	3.0
1	AR	2506	U	3.0
10	CJ	250	ALA	3.0
47	A	232	U	3.0
52	F	259	GLN	3.0
59	M	150	ASN	3.0
68	d0	92	ASP	3.0
47	A	700	C	3.0
47	A	733	A	3.0
51	s3	128	GLU	3.0
80	h	314	GLN	3.0
65	S	71	PHE	3.0
80	Rb	214	ALA	3.0
1	AR	2097	U	3.0
60	c2	133	LEU	3.0
47	A	720	G	3.0
10	p	240	ASN	3.0
10	CJ	256	ALA	3.0
18	x	164	LYS	3.0
60	c2	40	GLY	3.0
47	A	709	C	3.0
81	sR	227	U	3.0
81	sR	238	U	3.0
60	c2	136	ILE	3.0
72	Z	98	GLU	3.0
73	a	36	ALA	3.0
58	c0	76	LEU	3.0
60	N	32	LEU	3.0
67	U	108	LEU	3.0
75	c	33	LEU	3.0
1	1	251	G	3.0

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Mol	Chain	Res	Type	RSRZ
1	1	1954	G	3.0
59	M	27	THR	3.0
57	s9	182	GLU	3.0
79	g	129	GLY	3.0
10	CJ	117	ALA	3.0
47	A	231	U	3.0
66	c8	18	LEU	3.0
1	1	2502	A	3.0
75	c	37	CYS	3.0
49	s1	53	GLY	2.9
60	c2	122	VAL	2.9
51	s3	151	LYS	2.9
1	1	1579	C	2.9
1	1	2096	A	2.9
60	N	108	ARG	2.9
45	i	18	VAL	2.9
47	A	234	G	2.9
72	d4	135	ASP	2.9
4	CD	252	THR	2.9
72	d4	134	ALA	2.9
54	H	196	ARG	2.9
15	u	9	ALA	2.9
1	AR	2536	A	2.9
60	c2	76	GLU	2.9
73	a	56	THR	2.9
20	CT	187	GLU	2.9
76	d8	31	GLU	2.9
1	1	3163	A	2.9
80	Rb	50	ASP	2.9
31	DE	93	LEU	2.9
47	A	721	U	2.9
49	C	130	SER	2.9
7	m	293	LEU	2.9
68	V	100	VAL	2.9
1	AR	1950	U	2.9
1	AR	2537	U	2.9
3	AT	158	U	2.9
7	CG	5	LYS	2.9
81	sR	75	U	2.9
47	A	726	C	2.9
75	c	41	LEU	2.9
54	H	155	ASP	2.9

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Mol	Chain	Res	Type	RSRZ
10	CJ	106	LYS	2.9
66	T	19	ASN	2.9
47	A	74	U	2.9
68	d0	19	ILE	2.9
32	AE	82	GLU	2.9
24	CX	2	SER	2.8
1	AR	1238	C	2.8
32	AE	79	ARG	2.8
45	i	22	PRO	2.8
47	A	486	G	2.8
76	d8	56	LEU	2.8
51	E	190	ARG	2.8
75	d7	59	CYS	2.8
46	p0	69	ASP	2.8
54	s6	162	VAL	2.8
64	R	26	LYS	2.8
81	sR	1696	G	2.8
45	i	173	THR	2.8
51	E	208	ILE	2.8
21	CU	1	MET	2.8
54	s6	169	TYR	2.8
60	N	94	ALA	2.8
77	e	4	GLU	2.8
1	1	1573	G	2.8
47	A	1713	G	2.8
55	I	87	ASP	2.8
1	AR	3154	C	2.8
47	A	490	C	2.8
66	c8	59	GLY	2.8
80	Rb	3	SER	2.8
31	DE	100	ILE	2.8
58	c0	73	VAL	2.8
60	N	49	THR	2.8
64	c6	19	VAL	2.8
1	1	3291	G	2.8
46	p0	284	ALA	2.8
63	Q	131	ALA	2.8
49	s1	54	LEU	2.8
41	DO	77	ILE	2.8
1	1	2208	A	2.8
1	AR	1022	U	2.8
32	AE	6	ASP	2.8

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Mol	Chain	Res	Type	RSRZ
9	o	25	GLN	2.8
12	r	200	LEU	2.8
81	sR	228	G	2.8
25	7	72	SER	2.8
75	c	58	SER	2.8
80	h	115	ILE	2.8
24	6	4	ASN	2.8
69	d1	42	GLU	2.8
45	sM	49	LYS	2.8
79	e1	143	LYS	2.8
48	B	24	LEU	2.8
73	a	69	LEU	2.8
81	sR	1059	U	2.8
66	c8	5	VAL	2.8
57	K	87	SER	2.8
66	T	2	SER	2.8
35	AH	109	THR	2.8
46	p0	296	ALA	2.8
74	b	62	TYR	2.8
1	1	2540	A	2.8
1	AR	249	U	2.8
47	A	261	U	2.8
80	Rb	186	PHE	2.8
74	b	8	ASN	2.8
11	q	178	GLY	2.8
53	G	151	GLY	2.8
65	S	53	TYR	2.8
80	h	284	ALA	2.8
79	g	93	HIS	2.8
60	c2	142	GLN	2.8
80	Rb	309	VAL	2.8
25	7	90	ILE	2.8
51	s3	221	SER	2.8
18	x	160	ALA	2.8
57	K	183	ALA	2.8
57	s9	183	ALA	2.8
58	c0	64	TYR	2.8
60	c2	61	VAL	2.8
66	c8	22	VAL	2.8
1	AR	1560	G	2.7
23	5	89	LEU	2.7
10	CJ	245	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
53	G	54	LYS	2.7
54	H	148	SER	2.7
81	sR	1701	A	2.7
79	g	124	PRO	2.7
46	p0	292	GLU	2.7
80	h	211	ILE	2.7
49	C	56	SER	2.7
81	sR	1698	G	2.7
10	CJ	123	GLN	2.7
54	s6	218	GLU	2.7
66	c8	6	GLN	2.7
75	c	39	GLY	2.7
62	P	16	VAL	2.7
67	U	71	VAL	2.7
39	AL	5	ILE	2.7
53	s5	37	GLN	2.7
81	sR	652	G	2.7
1	1	1252	A	2.7
39	DM	54	LEU	2.7
81	sR	1227	A	2.7
58	c0	70	GLU	2.7
81	sR	489	C	2.7
1	AR	1763	U	2.7
64	R	21	HIS	2.7
1	1	1565	G	2.7
59	M	151	LYS	2.7
1	AR	2541	U	2.7
76	d8	8	THR	2.7
20	CT	178	ALA	2.7
60	c2	42	ALA	2.7
1	1	1245	A	2.7
1	1	3286	G	2.7
11	CK	191	LEU	2.7
48	B	196	SER	2.7
59	M	26	LYS	2.7
56	s8	121	LEU	2.7
57	K	2	PRO	2.7
58	c0	10	LYS	2.7
1	1	1572	U	2.7
1	1	1577	G	2.7
1	1	3155	U	2.7
66	c8	21	ASN	2.7

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Mol	Chain	Res	Type	RSRZ
81	sR	1690	G	2.7
1	1	439	C	2.7
1	AR	2507	C	2.7
18	x	158	ALA	2.7
39	AL	34	ALA	2.7
25	7	74	LYS	2.7
62	P	27	PHE	2.7
23	CW	54	VAL	2.7
46	p0	101	VAL	2.7
47	A	1689	A	2.7
53	G	24	VAL	2.7
56	s8	117	TYR	2.7
11	q	191	LEU	2.7
54	H	154	ARG	2.7
52	s4	183	VAL	2.7
57	s9	185	GLY	2.7
63	Q	104	GLN	2.7
68	d0	98	GLN	2.7
80	Rb	177	MET	2.7
51	E	221	SER	2.7
53	G	181	GLU	2.7
66	T	5	VAL	2.7
68	V	48	HIS	2.7
75	d7	57	GLU	2.7
46	p0	291	ALA	2.7
55	I	21	ALA	2.7
39	DM	7	ASP	2.7
59	M	148	LYS	2.7
47	A	717	C	2.7
47	A	914	G	2.7
20	z	186	LYS	2.6
50	s2	118	ALA	2.7
80	h	252	LEU	2.6
66	c8	20	THR	2.6
68	V	51	VAL	2.6
1	1	1016	C	2.6
1	AR	1951	C	2.6
60	c2	27	ALA	2.6
79	g	145	HIS	2.6
62	P	79	VAL	2.6
68	V	54	GLY	2.6
39	DM	33	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
63	c5	10	ARG	2.6
30	DD	57	ALA	2.6
66	T	17	LEU	2.6
66	c8	15	LEU	2.6
1	AR	546	C	2.6
1	AR	2444	C	2.6
59	M	3	THR	2.6
65	c7	87	GLU	2.6
53	G	26	ALA	2.6
76	d8	53	ILE	2.6
80	Rb	252	LEU	2.6
1	1	440	A	2.6
63	c5	128	HIS	2.6
1	1	1574	C	2.6
60	N	21	GLU	2.6
60	N	84	ASN	2.6
76	d8	35	ASP	2.6
73	d5	104	ALA	2.6
64	c6	141	SER	2.6
54	H	180	THR	2.6
68	d0	95	ALA	2.6
76	d8	10	ALA	2.6
1	AR	246	U	2.6
47	A	240	U	2.6
47	A	235	G	2.6
58	c0	48	SER	2.6
68	d0	14	GLN	2.6
31	DE	22	LYS	2.6
73	d5	52	LYS	2.6
80	Rb	163	ASP	2.6
81	sR	491	C	2.6
60	c2	77	GLY	2.6
72	d4	18	LEU	2.6
1	AR	2095	G	2.6
45	sM	68	ARG	2.6
81	sR	1692	G	2.6
68	d0	49	ASN	2.6
74	b	69	ASN	2.6
63	Q	49	MET	2.6
45	i	175	VAL	2.6
65	S	72	LYS	2.6
74	d6	98	PRO	2.6

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Mol	Chain	Res	Type	RSRZ
1	AR	544	C	2.6
54	H	147	LEU	2.6
23	CW	53	ALA	2.6
23	CW	106	ALA	2.6
80	Rb	253	ALA	2.6
11	CK	189	GLU	2.6
1	1	2569	A	2.6
81	sR	651	G	2.6
1	1	2501	U	2.6
1	AR	3166	C	2.6
80	h	79	TYR	2.6
55	I	97	ARG	2.6
80	h	182	ASN	2.6
39	DM	72	THR	2.6
49	C	50	LYS	2.5
1	1	1251	A	2.5
1	AR	1580	A	2.5
1	1	1262	G	2.5
1	1	1268	G	2.5
47	A	183	U	2.5
30	DD	58	LYS	2.5
1	AR	3157	U	2.5
49	C	207	LEU	2.5
60	c2	29	LYS	2.5
81	sR	1709	C	2.5
1	1	1261	G	2.5
53	s5	150	GLY	2.5
65	S	70	SER	2.5
58	c0	67	THR	2.5
76	d8	26	THR	2.5
78	e0	48	THR	2.5
26	CZ	142	ILE	2.5
1	AR	3155	U	2.5
81	sR	74	U	2.5
26	8	23	ALA	2.5
62	P	42	VAL	2.5
73	a	82	HIS	2.5
1	1	1277	C	2.5
51	s3	176	LEU	2.5
73	d5	89	ILE	2.5
47	A	711	U	2.5
64	c6	3	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
39	DM	69	LEU	2.5
68	V	98	GLN	2.5
80	Rb	168	THR	2.5
1	AR	2440	G	2.5
31	DE	105	ALA	2.5
1	1	250	U	2.5
1	1	2538	U	2.5
1	AR	2501	U	2.5
1	AR	3156	U	2.5
65	c7	104	ASN	2.5
63	Q	28	MET	2.5
73	d5	50	ILE	2.5
23	5	10	LYS	2.5
60	c2	121	VAL	2.5
52	F	180	LEU	2.5
1	1	545	U	2.5
1	1	1353	U	2.5
10	p	117	ALA	2.5
53	G	150	GLY	2.5
68	d0	97	VAL	2.5
60	c2	38	HIS	2.5
76	d	5	THR	2.5
20	z	177	VAL	2.5
49	C	150	VAL	2.5
58	c0	66	TYR	2.5
66	T	32	LEU	2.5
39	DM	74	LYS	2.5
47	A	653	C	2.5
81	sR	731	C	2.5
60	c2	25	GLU	2.5
80	Rb	102	ARG	2.5
1	1	2522	G	2.5
47	A	722	G	2.5
50	s2	91	ARG	2.5
33	AF	2	ALA	2.4
45	i	81	THR	2.4
31	AD	100	ILE	2.4
66	c8	10	SER	2.4
1	AR	3276	G	2.4
47	A	136	C	2.4
47	A	716	C	2.4
66	c8	146	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
1	1	979	U	2.4
47	A	504	U	2.4
76	d	67	ARG	2.4
66	T	18	LEU	2.4
78	e0	47	VAL	2.4
45	i	15	ALA	2.4
1	1	3285	C	2.4
76	d8	43	ASN	2.4
1	AR	547	G	2.4
31	AD	94	GLU	2.4
81	sR	230	C	2.4
81	sR	674	C	2.4
48	B	42	PRO	2.4
11	q	52	LEU	2.4
52	F	260	GLY	2.4
12	CL	220	GLN	2.4
14	CN	93	ILE	2.4
68	V	21	LYS	2.4
66	T	6	GLN	2.4
1	AR	1032	C	2.4
54	H	153	VAL	2.4
9	o	28	ALA	2.4
10	p	253	SER	2.4
49	C	154	SER	2.4
58	c0	54	TYR	2.4
80	h	189	GLU	2.4
23	5	9	GLN	2.4
10	p	246	MET	2.4
45	sM	52	PRO	2.4
47	A	133	U	2.4
57	K	186	GLU	2.4
60	N	71	ILE	2.4
45	i	20	LEU	2.4
72	d4	106	GLN	2.4
72	Z	101	GLU	2.4
80	Rb	165	ASP	2.4
1	1	1275	C	2.4
1	1	1562	C	2.4
8	CH	130	ILE	2.4
60	c2	65	SER	2.4
80	h	213	SER	2.4
1	1	1270	A	2.4

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Mol	Chain	Res	Type	RSRZ
1	1	1271	A	2.4
30	AC	54	LEU	2.4
54	s6	216	LEU	2.4
55	s7	38	LEU	2.4
81	sR	673	A	2.4
65	S	75	GLU	2.4
39	DM	68	SER	2.4
60	N	141	SER	2.4
67	U	6	VAL	2.4
72	Z	100	VAL	2.4
4	CD	247	ARG	2.4
24	CX	4	ASN	2.4
47	A	485	A	2.4
81	sR	198	A	2.4
81	sR	1256	A	2.4
56	s8	67	TRP	2.4
81	sR	1695	G	2.4
1	AR	3354	U	2.4
26	CZ	24	LEU	2.4
20	CT	173	ARG	2.4
47	A	708	C	2.4
50	s2	90	THR	2.4
72	Z	34	ASN	2.4
1	1	249	U	2.4
1	1	1953	G	2.4
3	AT	81	U	2.4
37	AJ	98	ARG	2.4
46	p0	102	SER	2.4
81	sR	241	U	2.4
20	z	131	ALA	2.4
40	AM	2	ALA	2.4
51	E	223	LYS	2.4
73	a	89	ILE	2.4
33	DG	126	LEU	2.4
79	e1	125	THR	2.4
58	c0	3	MET	2.3
32	DF	76	SER	2.3
81	sR	320	U	2.3
55	I	32	PRO	2.3
46	p0	103	ASN	2.3
52	F	105	VAL	2.3
66	c8	144	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
73	d5	44	GLN	2.3
37	DK	58	ILE	2.3
30	AC	59	LYS	2.3
47	A	677	G	2.3
20	CT	175	GLN	2.3
68	d0	115	GLU	2.3
1	1	1244	A	2.3
23	5	11	ILE	2.3
80	h	131	ILE	2.3
1	1	1253	U	2.3
1	AR	3352	U	2.3
76	d	45	LYS	2.3
76	d8	55	VAL	2.3
81	sR	822	U	2.3
49	C	100	PHE	2.3
68	V	104	THR	2.3
80	h	25	THR	2.3
60	N	26	ASP	2.3
1	1	1228	C	2.3
47	A	131	C	2.3
47	A	230	C	2.3
49	C	47	LEU	2.3
51	E	218	LEU	2.3
54	H	213	ALA	2.3
80	Rb	83	ALA	2.3
76	d8	37	SER	2.3
79	g	146	SER	2.3
47	A	1060	U	2.3
81	sR	541	A	2.3
56	s8	200	LYS	2.3
60	c2	79	ALA	2.3
7	CG	135	VAL	2.3
81	sR	1703	C	2.3
1	1	3289	G	2.3
56	J	143	TRP	2.3
60	c2	84	ASN	2.3
41	AN	77	ILE	2.3
66	T	146	ALA	2.3
68	V	103	ILE	2.3
80	Rb	138	GLY	2.3
1	AR	1582	C	2.3
59	c1	4	GLU	2.3

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Mol	Chain	Res	Type	RSRZ
1	1	1267	U	2.3
1	1	3351	U	2.3
3	4	81	U	2.3
7	m	297	GLN	2.3
47	A	241	U	2.3
45	i	14	ASP	2.3
51	E	88	ALA	2.3
39	DM	73	LEU	2.3
73	a	38	HIS	2.3
64	R	62	ASN	2.3
76	d	41	VAL	2.3
1	1	1026	A	2.3
81	sR	712	G	2.3
63	c5	51	SER	2.3
51	s3	217	ILE	2.3
72	Z	60	PHE	2.3
1	1	546	C	2.3
1	1	1765	U	2.3
1	AR	1955	U	2.3
41	AN	128	LYS	2.3
47	A	682	C	2.3
61	O	151	ASN	2.3
31	AD	104	LEU	2.3
81	sR	217	A	2.3
48	B	41	ARG	2.3
49	C	21	VAL	2.3
57	s9	181	ALA	2.3
80	Rb	104	VAL	2.3
80	Rb	279	ALA	2.3
79	e1	112	GLY	2.3
73	a	48	ASP	2.3
46	p0	67	LEU	2.3
65	S	86	PRO	2.3
14	CN	190	LYS	2.3
51	E	217	ILE	2.3
37	AJ	100	HIS	2.3
50	s2	92	ALA	2.3
60	c2	86	VAL	2.3
79	e1	121	CYS	2.2
80	h	231	MET	2.2
1	1	1272	C	2.2
1	AR	543	C	2.2

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Mol	Chain	Res	Type	RSRZ
48	B	11	PRO	2.2
60	N	89	ILE	2.2
81	sR	237	C	2.2
49	s1	232	HIS	2.2
1	1	1278	A	2.2
81	sR	1689	A	2.2
1	1	3287	U	2.2
54	H	41	VAL	2.2
71	Y	130	VAL	2.2
53	s5	156	ARG	2.2
73	a	61	SER	2.2
80	Rb	134	TRP	2.2
1	AR	2443	A	2.2
74	b	98	PRO	2.2
30	AC	55	ALA	2.2
67	U	141	GLU	2.2
73	a	44	GLN	2.2
64	R	57	LEU	2.2
49	s1	24	PHE	2.2
37	DK	68	ARG	2.2
49	s1	89	ASP	2.2
47	A	1577	A	2.2
56	J	141	ARG	2.2
52	s4	258	GLN	2.2
79	g	106	TYR	2.2
47	A	820	U	2.2
47	A	489	C	2.2
78	f	54	ARG	2.2
45	sM	83	LYS	2.2
25	CY	64	THR	2.2
50	D	47	ALA	2.2
12	CL	217	PHE	2.2
60	c2	135	MET	2.2
1	AR	1761	C	2.2
55	I	146	GLY	2.2
20	z	148	ASP	2.2
73	a	101	TYR	2.2
76	d	8	THR	2.2
80	Rb	185	GLN	2.2
12	r	217	PHE	2.2
51	s3	148	LYS	2.2
49	C	23	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
35	AH	113	LYS	2.2
47	A	712	G	2.2
56	J	21	PHE	2.2
60	c2	116	VAL	2.2
15	CO	9	ALA	2.2
68	V	45	ALA	2.2
81	sR	492	A	2.2
55	I	38	LEU	2.2
60	c2	58	LEU	2.2
14	CN	133	PRO	2.2
78	f	60	PRO	2.2
54	H	169	TYR	2.2
4	CD	253	GLN	2.2
39	DM	37	PRO	2.2
53	s5	35	GLN	2.2
49	C	132	ASP	2.2
13	CM	157	GLU	2.2
79	g	90	LYS	2.2
1	1	2503	G	2.2
76	d8	27	GLN	2.2
81	sR	722	G	2.2
32	AE	83	GLU	2.2
60	N	58	LEU	2.1
1	AR	3350	C	2.1
81	sR	710	U	2.1
14	t	192	GLU	2.1
60	c2	24	ILE	2.1
76	d	35	ASP	2.1
78	f	50	VAL	2.1
80	Rb	316	MET	2.1
6	CF	13	GLY	2.1
55	I	145	GLY	2.1
1	1	1025	A	2.1
25	7	64	THR	2.1
68	V	107	THR	2.1
59	M	156	PHE	2.1
7	CG	4	GLN	2.1
20	CT	157	GLU	2.1
25	7	93	ARG	2.1
76	d8	65	ARG	2.1
79	e1	122	SER	2.1
1	1	1258	U	2.1

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Mol	Chain	Res	Type	RSRZ
48	B	97	PRO	2.1
57	K	5	PRO	2.1
71	Y	45	GLY	2.1
10	CJ	211	LEU	2.1
60	N	80	ASN	2.1
79	e1	128	ALA	2.1
80	h	232	TYR	2.1
1	AR	2442	G	2.1
29	DC	97	GLU	2.1
49	C	41	ARG	2.1
81	sR	1713	G	2.1
55	I	80	GLU	2.1
60	N	25	GLU	2.1
1	1	1248	C	2.1
1	1	1283	C	2.1
47	A	191	C	2.1
49	C	96	LEU	2.1
73	d5	51	LEU	2.1
49	C	230	ALA	2.1
1	1	1580	A	2.1
1	AR	251	G	2.1
55	s7	54	GLY	2.1
60	c2	62	LEU	2.1
68	d0	120	SER	2.1
17	CQ	183	ALA	2.1
47	A	278	U	2.1
56	s8	141	ARG	2.1
26	CZ	37	THR	2.1
60	N	66	VAL	2.1
1	AR	1103	A	2.1
31	DE	23	TYR	2.1
39	DM	11	PHE	2.1
1	AR	2573	G	2.1
81	sR	739	G	2.1
11	q	10	ILE	2.1
14	CN	129	ASN	2.1
47	A	500	C	2.1
49	C	229	MET	2.1
52	F	261	LEU	2.1
7	CG	185	PHE	2.1
45	i	21	PRO	2.1
68	d0	96	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
46	p0	294	ALA	2.1
1	AR	250	U	2.1
39	DM	8	ILE	2.1
47	A	1371	A	2.1
55	I	20	VAL	2.1
64	R	29	ILE	2.1
81	sR	501	U	2.1
81	sR	579	A	2.1
81	sR	711	U	2.1
81	sR	794	U	2.1
1	1	1257	C	2.1
81	sR	1399	C	2.1
9	o	23	ALA	2.1
38	AK	87	SER	2.1
57	K	178	ALA	2.1
64	R	140	LYS	2.1
49	C	93	GLY	2.1
1	1	1575	A	2.1
50	s2	87	GLN	2.1
26	CZ	22	LYS	2.1
51	E	200	LYS	2.1
49	C	31	ASP	2.1
76	d	29	ARG	2.1
61	O	59	GLY	2.1
1	1	1564	U	2.1
76	d8	5	THR	2.1
81	sR	1058	U	2.1
1	AR	1816	A	2.1
60	N	138	GLU	2.1
73	a	58	ARG	2.1
74	b	55	GLU	2.1
1	1	2772	C	2.1
65	S	38	ILE	2.1
1	AR	1250	G	2.1
10	p	254	ASP	2.1
69	W	40	ASP	2.1
75	d7	76	GLY	2.1
68	V	15	GLN	2.1
68	V	105	GLN	2.1
1	1	2097	U	2.1
1	1	2209	U	2.1
47	A	137	U	2.1

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Mol	Chain	Res	Type	RSRZ
53	G	31	GLU	2.1
49	C	225	VAL	2.1
72	Z	107	GLN	2.0
37	AJ	66	GLU	2.0
7	CG	287	ALA	2.0
46	p0	27	VAL	2.0
47	A	499	U	2.0
58	c0	92	THR	2.0
39	DM	35	GLY	2.0
39	DM	36	LYS	2.0
66	c8	7	GLU	2.0
46	p0	59	VAL	2.0
66	c8	102	ALA	2.0
74	b	48	ALA	2.0
54	s6	175	ILE	2.0
66	T	61	LEU	2.0
1	1	3156	U	2.0
1	AR	1353	U	2.0
63	Q	52	LYS	2.0
80	Rb	46	LYS	2.0
81	sR	727	U	2.0
52	F	255	ARG	2.0
48	B	206	ASP	2.0
14	CN	132	ALA	2.0
60	N	92	ALA	2.0
60	c2	78	LEU	2.0
52	s4	218	PHE	2.0
78	f	42	ARG	2.0
1	1	3288	G	2.0
1	AR	1020	G	2.0
17	CQ	187	GLU	2.0
74	b	54	SER	2.0
26	CZ	40	LEU	2.0
33	DG	127	ALA	2.0
36	DJ	119	LYS	2.0
49	C	156	ALA	2.0
63	Q	54	ALA	2.0
75	d7	80	ARG	2.0
53	G	21	THR	2.0
72	d4	99	LYS	2.0
56	J	8	ARG	2.0
80	Rb	166	SER	2.0

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Mol	Chain	Res	Type	RSRZ
47	A	824	G	2.0
48	B	44	GLY	2.0
49	C	53	GLY	2.0
56	s8	118	GLY	2.0
66	T	28	ILE	2.0
79	e1	127	GLY	2.0
66	c8	11	PHE	2.0
46	p0	293	GLU	2.0
1	1	3154	C	2.0
10	p	120	LYS	2.0
49	C	128	LYS	2.0
63	Q	14	THR	2.0
72	Z	106	GLN	2.0
68	d0	51	VAL	2.0
76	d	66	LEU	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, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	sR	2188	1/1	0.13	0.68	120,120,120,120	0
83	MG	AR	4112	1/1	0.26	0.46	73,73,73,73	0
83	MG	A	2012	1/1	0.35	0.99	83,83,83,83	0
83	MG	A	2001	1/1	0.45	0.71	71,71,71,71	0
83	MG	1	4111	1/1	0.46	0.32	58,58,58,58	0
83	MG	3	211	1/1	0.48	0.49	39,39,39,39	0
83	MG	AR	3953	1/1	0.51	0.65	38,38,38,38	0
83	MG	1	4146	1/1	0.54	0.39	174,174,174,174	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AM	101	1/1	0.55	0.29	49,49,49,49	0
83	MG	A	2018	1/1	0.56	1.03	80,80,80,80	0
83	MG	sR	2131	1/1	0.56	0.31	73,73,73,73	0
83	MG	AR	4046	1/1	0.56	0.30	43,43,43,43	0
83	MG	AR	4223	1/1	0.57	0.41	29,29,29,29	0
83	MG	1	4047	1/1	0.57	0.35	46,46,46,46	0
83	MG	t	202	1/1	0.59	0.30	76,76,76,76	0
83	MG	A	2062	1/1	0.59	1.26	82,82,82,82	0
83	MG	sR	2137	1/1	0.60	0.44	66,66,66,66	0
83	MG	1	4094	1/1	0.62	0.28	104,104,104,104	0
83	MG	A	2010	1/1	0.62	0.73	102,102,102,102	0
83	MG	1	4158	1/1	0.62	0.57	91,91,91,91	0
83	MG	1	3931	1/1	0.62	1.04	68,68,68,68	0
83	MG	1	3728	1/1	0.63	0.47	57,57,57,57	0
83	MG	c6	201	1/1	0.63	0.45	76,76,76,76	0
83	MG	DA	201	1/1	0.64	0.44	52,52,52,52	0
83	MG	1	4080	1/1	0.64	0.37	38,38,38,38	0
83	MG	6	202	1/1	0.65	0.29	58,58,58,58	0
83	MG	A	1962	1/1	0.65	0.44	58,58,58,58	0
83	MG	AT	230	1/1	0.65	0.72	61,61,61,61	0
83	MG	A	2005	1/1	0.65	0.45	65,65,65,65	0
83	MG	DN	101	1/1	0.66	0.29	49,49,49,49	0
83	MG	A	1946	1/1	0.66	0.61	70,70,70,70	0
83	MG	A	2021	1/1	0.66	0.62	86,86,86,86	0
83	MG	AR	3895	1/1	0.66	0.41	39,39,39,39	0
83	MG	AR	3830	1/1	0.67	0.42	48,48,48,48	0
83	MG	1	3992	1/1	0.67	0.53	41,41,41,41	0
83	MG	sR	2164	1/1	0.67	0.41	43,43,43,43	0
83	MG	A	2057	1/1	0.67	0.28	109,109,109,109	0
83	MG	w	202	1/1	0.67	0.25	40,40,40,40	0
83	MG	AR	3865	1/1	0.68	0.34	43,43,43,43	0
83	MG	A	2009	1/1	0.68	0.21	79,79,79,79	0
83	MG	AR	3823	1/1	0.68	0.32	38,38,38,38	0
83	MG	sR	2180	1/1	0.68	0.61	59,59,59,59	0
83	MG	A	2058	1/1	0.68	0.67	76,76,76,76	0
83	MG	1	4142	1/1	0.68	0.38	55,55,55,55	0
83	MG	AR	3934	1/1	0.69	0.44	33,33,33,33	0
83	MG	s8	302	1/1	0.69	0.34	45,45,45,45	0
83	MG	AR	4014	1/1	0.69	0.33	27,27,27,27	0
83	MG	1	4133	1/1	0.70	0.32	41,41,41,41	0
83	MG	AS	225	1/1	0.70	0.32	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	3804	1/1	0.70	0.38	88,88,88,88	0
83	MG	AR	4006	1/1	0.70	0.12	76,76,76,76	0
83	MG	A	1986	1/1	0.71	0.35	58,58,58,58	0
83	MG	AT	228	1/1	0.71	0.49	46,46,46,46	0
83	MG	1	4077	1/1	0.71	0.34	42,42,42,42	0
83	MG	CK	202	1/1	0.71	0.23	36,36,36,36	0
83	MG	sR	2138	1/1	0.71	0.33	45,45,45,45	0
83	MG	sR	2157	1/1	0.71	0.80	42,42,42,42	0
83	MG	AR	4142	1/1	0.71	0.37	36,36,36,36	0
83	MG	AR	4222	1/1	0.71	0.50	30,30,30,30	0
83	MG	AR	3752	1/1	0.71	0.55	50,50,50,50	0
83	MG	A	1954	1/1	0.71	0.50	62,62,62,62	0
83	MG	1	4029	1/1	0.71	0.92	59,59,59,59	0
83	MG	AR	4016	1/1	0.72	0.42	51,51,51,51	0
83	MG	3	217	1/1	0.72	0.56	53,53,53,53	0
83	MG	1	3960	1/1	0.72	0.31	38,38,38,38	0
83	MG	1	4161	1/1	0.72	0.29	45,45,45,45	0
83	MG	AR	4189	1/1	0.72	0.24	53,53,53,53	0
83	MG	AR	3988	1/1	0.72	0.36	37,37,37,37	0
83	MG	1	4204	1/1	0.72	0.38	54,54,54,54	0
83	MG	A	2025	1/1	0.72	0.93	75,75,75,75	0
83	MG	AR	4235	1/1	0.72	0.71	38,38,38,38	0
83	MG	1	4036	1/1	0.72	0.32	43,43,43,43	0
83	MG	DR	502	1/1	0.73	0.32	56,56,56,56	0
83	MG	AR	3994	1/1	0.73	0.40	48,48,48,48	0
83	MG	AR	4148	1/1	0.73	0.26	54,54,54,54	0
83	MG	1	3828	1/1	0.73	0.62	39,39,39,39	0
83	MG	AG	202	1/1	0.73	0.22	48,48,48,48	0
83	MG	1	4044	1/1	0.74	0.21	62,62,62,62	0
83	MG	AR	3961	1/1	0.74	0.48	51,51,51,51	0
83	MG	AR	4260	1/1	0.74	0.42	33,33,33,33	0
83	MG	A	1969	1/1	0.74	0.58	51,51,51,51	0
83	MG	AR	4062	1/1	0.74	0.42	55,55,55,55	0
83	MG	A	1988	1/1	0.74	0.69	77,77,77,77	0
83	MG	AR	3969	1/1	0.74	0.52	50,50,50,50	0
83	MG	1	3859	1/1	0.74	0.35	35,35,35,35	0
83	MG	AR	3742	1/1	0.74	0.20	34,34,34,34	0
83	MG	CU	201	1/1	0.74	0.38	31,31,31,31	0
83	MG	AR	4182	1/1	0.74	0.24	41,41,41,41	0
83	MG	1	4143	1/1	0.74	0.56	23,23,23,23	0
83	MG	1	3849	1/1	0.74	0.24	26,26,26,26	0
83	MG	AR	4088	1/1	0.75	0.20	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	4062	1/1	0.75	0.20	71,71,71,71	0
83	MG	AR	3807	1/1	0.75	0.14	95,95,95,95	0
83	MG	AR	3816	1/1	0.75	0.26	47,47,47,47	0
83	MG	1	4171	1/1	0.75	0.32	23,23,23,23	0
83	MG	1	4084	1/1	0.75	0.23	33,33,33,33	0
83	MG	1	3826	1/1	0.75	0.31	64,64,64,64	0
83	MG	A	2068	1/1	0.75	0.49	67,67,67,67	0
83	MG	sR	2073	1/1	0.75	1.05	96,96,96,96	0
83	MG	AR	4025	1/1	0.76	0.28	37,37,37,37	0
83	MG	AR	4227	1/1	0.76	0.33	36,36,36,36	0
83	MG	1	3803	1/1	0.76	0.49	35,35,35,35	0
83	MG	1	4164	1/1	0.76	0.23	47,47,47,47	0
83	MG	AR	4084	1/1	0.76	0.45	38,38,38,38	0
83	MG	1	4093	1/1	0.76	0.31	41,41,41,41	0
83	MG	sR	2135	1/1	0.76	0.26	70,70,70,70	0
83	MG	AR	4109	1/1	0.76	0.29	74,74,74,74	0
83	MG	AR	3987	1/1	0.76	0.13	35,35,35,35	0
83	MG	sR	2154	1/1	0.76	0.49	43,43,43,43	0
83	MG	AF	201	1/1	0.76	0.38	23,23,23,23	0
83	MG	1	3731	1/1	0.76	0.45	33,33,33,33	0
83	MG	1	4205	1/1	0.76	0.71	44,44,44,44	0
83	MG	1	4099	1/1	0.76	0.28	45,45,45,45	0
83	MG	1	3745	1/1	0.76	0.28	55,55,55,55	0
83	MG	A	2031	1/1	0.76	0.40	64,64,64,64	0
83	MG	sR	2079	1/1	0.77	0.63	63,63,63,63	0
83	MG	sR	2113	1/1	0.77	0.44	57,57,57,57	0
83	MG	sR	2118	1/1	0.77	0.17	52,52,52,52	0
83	MG	AR	3946	1/1	0.77	0.11	44,44,44,44	0
83	MG	AR	3834	1/1	0.77	0.25	21,21,21,21	0
83	MG	s	300	1/1	0.77	0.37	64,64,64,64	0
83	MG	CD	301	1/1	0.77	0.60	40,40,40,40	0
83	MG	CD	303	1/1	0.77	0.34	31,31,31,31	0
83	MG	AR	3829	1/1	0.77	0.39	44,44,44,44	0
83	MG	AR	4180	1/1	0.77	0.33	36,36,36,36	0
83	MG	A	2061	1/1	0.77	0.92	77,77,77,77	0
83	MG	AR	4246	1/1	0.77	0.85	49,49,49,49	0
83	MG	1	4160	1/1	0.77	0.34	54,54,54,54	0
83	MG	AS	219	1/1	0.77	0.20	48,48,48,48	0
83	MG	AR	4146	1/1	0.78	0.19	69,69,69,69	0
83	MG	1	4003	1/1	0.78	0.38	54,54,54,54	0
83	MG	sR	2088	1/1	0.78	0.54	82,82,82,82	0
83	MG	sR	2107	1/1	0.78	0.75	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	4136	1/1	0.78	0.46	41,41,41,41	0
83	MG	1	4051	1/1	0.78	0.21	44,44,44,44	0
83	MG	1	3958	1/1	0.78	0.52	51,51,51,51	0
83	MG	CM	202	1/1	0.78	0.23	52,52,52,52	0
83	MG	AR	3841	1/1	0.78	0.31	31,31,31,31	0
83	MG	1	3783	1/1	0.78	0.36	59,59,59,59	0
83	MG	AR	4090	1/1	0.78	0.39	46,46,46,46	0
83	MG	AR	4091	1/1	0.78	0.77	48,48,48,48	0
83	MG	AR	3893	1/1	0.78	0.39	30,30,30,30	0
83	MG	AR	4247	1/1	0.78	0.32	39,39,39,39	0
83	MG	1	3956	1/1	0.78	0.26	24,24,24,24	0
83	MG	1	4210	1/1	0.78	0.68	58,58,58,58	0
83	MG	AR	4145	1/1	0.78	0.33	34,34,34,34	0
83	MG	1	3959	1/1	0.79	0.32	61,61,61,61	0
83	MG	CR	207	1/1	0.79	0.25	37,37,37,37	0
83	MG	AR	3794	1/1	0.79	0.64	25,25,25,25	0
83	MG	AR	4199	1/1	0.79	0.45	41,41,41,41	0
83	MG	AR	4087	1/1	0.79	0.24	49,49,49,49	0
83	MG	z	202	1/1	0.79	0.18	50,50,50,50	0
83	MG	DR	503	1/1	0.79	0.29	54,54,54,54	0
83	MG	sM	301	1/1	0.79	0.17	37,37,37,37	0
83	MG	1	3940	1/1	0.79	0.14	52,52,52,52	0
83	MG	AR	3810	1/1	0.79	0.20	28,28,28,28	0
83	MG	AR	4009	1/1	0.79	0.21	29,29,29,29	0
83	MG	1	3962	1/1	0.79	0.42	49,49,49,49	0
83	MG	sR	2128	1/1	0.79	0.50	58,58,58,58	0
83	MG	AR	4113	1/1	0.79	0.54	61,61,61,61	0
83	MG	AR	4117	1/1	0.79	0.21	29,29,29,29	0
83	MG	AR	4137	1/1	0.79	0.39	51,51,51,51	0
83	MG	AT	225	1/1	0.79	0.48	50,50,50,50	0
83	MG	sR	2140	1/1	0.79	0.34	45,45,45,45	0
83	MG	sR	2148	1/1	0.79	0.30	62,62,62,62	0
83	MG	1	3818	1/1	0.79	0.35	54,54,54,54	0
83	MG	1	3801	1/1	0.79	0.36	31,31,31,31	0
83	MG	1	4008	1/1	0.79	0.62	72,72,72,72	0
83	MG	A	2016	1/1	0.79	0.36	61,61,61,61	0
83	MG	AR	4056	1/1	0.79	0.15	82,82,82,82	0
83	MG	CF	403	1/1	0.79	0.23	38,38,38,38	0
83	MG	AR	4060	1/1	0.79	0.40	66,66,66,66	0
83	MG	d5	201	1/1	0.79	0.18	74,74,74,74	0
85	ZN	c	101	1/1	0.79	0.28	119,119,119,119	0
83	MG	A	1961	1/1	0.80	0.53	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	4160	1/1	0.80	0.29	31,31,31,31	0
83	MG	AR	4167	1/1	0.80	0.26	49,49,49,49	0
83	MG	AR	4089	1/1	0.80	0.65	26,26,26,26	0
83	MG	1	4106	1/1	0.80	0.27	33,33,33,33	0
83	MG	AR	3982	1/1	0.80	0.44	61,61,61,61	0
83	MG	CE	403	1/1	0.80	0.52	21,21,21,21	0
83	MG	AR	4105	1/1	0.80	0.52	62,62,62,62	0
83	MG	CG	306	1/1	0.80	0.34	52,52,52,52	0
83	MG	AR	4206	1/1	0.80	0.37	33,33,33,33	0
83	MG	AR	4029	1/1	0.80	0.29	52,52,52,52	0
83	MG	1	3752	1/1	0.80	0.37	31,31,31,31	0
83	MG	sR	2141	1/1	0.80	0.23	37,37,37,37	0
83	MG	1	3970	1/1	0.80	0.43	41,41,41,41	0
83	MG	1	4059	1/1	0.80	0.34	42,42,42,42	0
83	MG	AR	4238	1/1	0.80	0.22	30,30,30,30	0
83	MG	sR	2159	1/1	0.80	0.56	95,95,95,95	0
83	MG	A	2032	1/1	0.80	0.20	81,81,81,81	0
83	MG	AR	4002	1/1	0.80	0.18	61,61,61,61	0
83	MG	AR	3802	1/1	0.80	0.38	31,31,31,31	0
83	MG	sR	2189	1/1	0.80	0.61	64,64,64,64	0
83	MG	AR	4085	1/1	0.80	0.34	40,40,40,40	0
83	MG	1	3780	1/1	0.80	0.69	50,50,50,50	0
83	MG	1	3864	1/1	0.80	0.53	50,50,50,50	0
83	MG	sR	2069	1/1	0.80	0.55	55,55,55,55	0
83	MG	AR	3769	1/1	0.81	0.32	33,33,33,33	0
83	MG	AS	218	1/1	0.81	0.31	50,50,50,50	0
83	MG	1	3991	1/1	0.81	0.15	65,65,65,65	0
83	MG	1	3837	1/1	0.81	0.47	24,24,24,24	0
83	MG	1	4048	1/1	0.81	0.51	43,43,43,43	0
83	MG	1	4002	1/1	0.81	0.36	48,48,48,48	0
83	MG	1	3939	1/1	0.81	0.30	30,30,30,30	0
83	MG	A	2004	1/1	0.81	0.43	51,51,51,51	0
83	MG	sR	2132	1/1	0.81	0.27	38,38,38,38	0
83	MG	AR	3976	1/1	0.81	0.72	49,49,49,49	0
83	MG	AR	3980	1/1	0.81	0.24	40,40,40,40	0
83	MG	1	3966	1/1	0.81	0.35	36,36,36,36	0
83	MG	1	4173	1/1	0.81	0.18	27,27,27,27	0
83	MG	AR	4191	1/1	0.81	0.57	44,44,44,44	0
83	MG	1	4175	1/1	0.81	0.28	22,22,22,22	0
83	MG	1	4199	1/1	0.81	0.39	37,37,37,37	0
83	MG	AR	4215	1/1	0.81	0.19	35,35,35,35	0
83	MG	A	2030	1/1	0.81	0.36	90,90,90,90	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	3831	1/1	0.81	0.37	38,38,38,38	0
83	MG	1	4027	1/1	0.81	0.47	39,39,39,39	0
83	MG	1	3878	1/1	0.81	0.45	27,27,27,27	0
83	MG	AR	4110	1/1	0.81	0.37	55,55,55,55	0
83	MG	AR	3743	1/1	0.81	0.36	29,29,29,29	0
83	MG	1	3974	1/1	0.81	0.47	62,62,62,62	0
83	MG	AR	4022	1/1	0.81	0.35	41,41,41,41	0
83	MG	A	1947	1/1	0.81	0.69	53,53,53,53	0
83	MG	AR	3955	1/1	0.82	0.27	53,53,53,53	0
83	MG	sR	2114	1/1	0.82	0.30	71,71,71,71	0
83	MG	1	4038	1/1	0.82	0.34	33,33,33,33	0
83	MG	AR	3753	1/1	0.82	0.22	26,26,26,26	0
83	MG	1	3763	1/1	0.82	0.56	26,26,26,26	0
83	MG	1	4018	1/1	0.82	0.45	36,36,36,36	0
83	MG	AR	4190	1/1	0.82	0.24	32,32,32,32	0
83	MG	1	3868	1/1	0.82	0.55	34,34,34,34	0
83	MG	1	3949	1/1	0.82	0.40	63,63,63,63	0
83	MG	1	4167	1/1	0.82	0.37	55,55,55,55	0
83	MG	A	1950	1/1	0.82	0.36	65,65,65,65	0
83	MG	AR	4131	1/1	0.82	0.26	54,54,54,54	0
83	MG	A	1960	1/1	0.82	0.93	53,53,53,53	0
83	MG	1	3954	1/1	0.82	0.31	34,34,34,34	0
83	MG	AR	3931	1/1	0.82	0.15	38,38,38,38	0
83	MG	A	1968	1/1	0.82	0.34	82,82,82,82	0
83	MG	r	303	1/1	0.82	0.32	37,37,37,37	0
83	MG	A	1985	1/1	0.82	0.33	63,63,63,63	0
83	MG	AR	4229	1/1	0.82	0.62	44,44,44,44	0
83	MG	1	4096	1/1	0.82	0.68	47,47,47,47	0
83	MG	CK	203	1/1	0.82	0.29	38,38,38,38	0
83	MG	sR	2095	1/1	0.82	0.57	48,48,48,48	0
83	MG	AR	3824	1/1	0.82	0.48	37,37,37,37	0
83	MG	AR	4015	1/1	0.83	0.37	42,42,42,42	0
83	MG	sR	2052	1/1	0.83	0.52	38,38,38,38	0
83	MG	sR	2053	1/1	0.83	0.54	66,66,66,66	0
83	MG	sR	2063	1/1	0.83	0.33	64,64,64,64	0
83	MG	AR	4237	1/1	0.83	0.30	34,34,34,34	0
83	MG	1	4089	1/1	0.83	0.53	38,38,38,38	0
83	MG	AR	4018	1/1	0.83	0.20	36,36,36,36	0
83	MG	AR	3936	1/1	0.83	0.21	23,23,23,23	0
83	MG	AR	4023	1/1	0.83	0.37	38,38,38,38	0
83	MG	AR	3937	1/1	0.83	0.34	33,33,33,33	0
83	MG	1	4049	1/1	0.83	0.48	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3934	1/1	0.83	0.30	32,32,32,32	0
83	MG	1	4052	1/1	0.83	0.36	38,38,38,38	0
83	MG	AR	4151	1/1	0.83	0.15	60,60,60,60	0
83	MG	1	4213	1/1	0.83	0.49	30,30,30,30	0
83	MG	1	4004	1/1	0.83	0.20	33,33,33,33	0
83	MG	AR	4168	1/1	0.83	0.13	56,56,56,56	0
83	MG	A	2007	1/1	0.83	0.46	87,87,87,87	0
83	MG	1	3792	1/1	0.83	0.54	35,35,35,35	0
83	MG	4	219	1/1	0.83	0.58	39,39,39,39	0
83	MG	AR	3840	1/1	0.83	0.56	33,33,33,33	0
83	MG	1	4108	1/1	0.83	0.25	60,60,60,60	0
83	MG	1	3809	1/1	0.83	0.26	31,31,31,31	0
83	MG	1	4021	1/1	0.83	0.58	62,62,62,62	0
83	MG	1	3846	1/1	0.83	0.34	61,61,61,61	0
83	MG	AR	4093	1/1	0.83	0.27	39,39,39,39	0
83	MG	AR	4216	1/1	0.83	0.24	38,38,38,38	0
83	MG	AR	3896	1/1	0.83	0.41	23,23,23,23	0
83	MG	A	2037	1/1	0.83	0.35	64,64,64,64	0
83	MG	sR	2196	1/1	0.83	0.44	62,62,62,62	0
83	MG	AR	4107	1/1	0.83	0.34	27,27,27,27	0
83	MG	AR	3903	1/1	0.83	0.36	25,25,25,25	0
83	MG	1	4141	1/1	0.83	0.35	36,36,36,36	0
83	MG	AR	4234	1/1	0.83	0.42	20,20,20,20	0
83	MG	1	4180	1/1	0.84	0.82	52,52,52,52	0
83	MG	AR	4155	1/1	0.84	0.19	27,27,27,27	0
83	MG	AR	4158	1/1	0.84	0.27	37,37,37,37	0
83	MG	AS	214	1/1	0.84	0.55	55,55,55,55	0
83	MG	AR	3932	1/1	0.84	0.16	37,37,37,37	0
83	MG	1	3881	1/1	0.84	0.09	41,41,41,41	0
83	MG	1	4022	1/1	0.84	0.33	37,37,37,37	0
83	MG	AT	217	1/1	0.84	0.32	29,29,29,29	0
83	MG	1	4145	1/1	0.84	0.26	32,32,32,32	0
83	MG	1	3808	1/1	0.84	0.27	42,42,42,42	0
83	MG	sR	2116	1/1	0.84	0.47	66,66,66,66	0
83	MG	1	4028	1/1	0.84	0.42	38,38,38,38	0
82	OHX	A	1938	7/7	0.84	0.52	106,106,106,106	0
83	MG	AR	3958	1/1	0.84	0.39	23,23,23,23	0
83	MG	AR	4193	1/1	0.84	0.50	65,65,65,65	0
83	MG	1	3877	1/1	0.84	0.38	45,45,45,45	0
83	MG	sR	2136	1/1	0.84	0.58	63,63,63,63	0
83	MG	1	4162	1/1	0.84	0.25	35,35,35,35	0
83	MG	AR	4214	1/1	0.84	0.36	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	4027	1/1	0.84	0.98	57,57,57,57	0
83	MG	1	4067	1/1	0.84	0.26	59,59,59,59	0
83	MG	CR	202	1/1	0.84	0.34	28,28,28,28	0
83	MG	CR	204	1/1	0.84	0.20	40,40,40,40	0
83	MG	AR	4030	1/1	0.84	0.32	36,36,36,36	0
83	MG	AR	4122	1/1	0.84	0.24	41,41,41,41	0
83	MG	CX	204	1/1	0.84	0.23	33,33,33,33	0
83	MG	1	3973	1/1	0.84	0.37	78,78,78,78	0
83	MG	sR	2183	1/1	0.84	0.51	34,34,34,34	0
83	MG	DC	203	1/1	0.84	0.32	28,28,28,28	0
83	MG	DD	102	1/1	0.84	0.33	29,29,29,29	0
83	MG	AR	4048	1/1	0.84	0.22	44,44,44,44	0
83	MG	1	4079	1/1	0.84	0.21	47,47,47,47	0
83	MG	AR	3985	1/1	0.84	0.26	61,61,61,61	0
83	MG	1	3744	1/1	0.84	0.34	70,70,70,70	0
83	MG	d9	103	1/1	0.84	0.69	94,94,94,94	0
83	MG	1	3986	1/1	0.84	0.33	42,42,42,42	0
83	MG	1	3791	1/1	0.85	0.20	43,43,43,43	0
83	MG	4	215	1/1	0.85	0.47	41,41,41,41	0
83	MG	AR	4143	1/1	0.85	0.42	33,33,33,33	0
83	MG	AR	4248	1/1	0.85	0.35	31,31,31,31	0
83	MG	sR	2070	1/1	0.85	0.65	38,38,38,38	0
83	MG	1	3952	1/1	0.85	0.22	65,65,65,65	0
83	MG	AR	3803	1/1	0.85	0.41	50,50,50,50	0
83	MG	AR	3945	1/1	0.85	0.31	27,27,27,27	0
83	MG	AR	4039	1/1	0.85	0.65	73,73,73,73	0
83	MG	4	220	1/1	0.85	0.45	29,29,29,29	0
83	MG	4	232	1/1	0.85	0.26	60,60,60,60	0
83	MG	1	3972	1/1	0.85	0.28	56,56,56,56	0
83	MG	AR	3814	1/1	0.85	0.48	30,30,30,30	0
83	MG	1	4013	1/1	0.85	0.22	31,31,31,31	0
83	MG	A	1990	1/1	0.85	0.75	56,56,56,56	0
83	MG	1	3810	1/1	0.85	0.45	41,41,41,41	0
83	MG	AR	3975	1/1	0.85	0.26	31,31,31,31	0
82	OHX	A	1937	7/7	0.85	0.41	130,130,130,130	0
83	MG	CF	402	1/1	0.85	0.28	27,27,27,27	0
83	MG	A	2008	1/1	0.85	0.64	54,54,54,54	0
83	MG	x	205	1/1	0.85	0.19	36,36,36,36	0
83	MG	1	3742	1/1	0.85	0.44	37,37,37,37	0
83	MG	1	3936	1/1	0.85	0.37	45,45,45,45	0
82	OHX	AR	3662	7/7	0.85	0.39	137,137,137,137	0
83	MG	AR	4203	1/1	0.85	0.33	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	AR	3732	7/7	0.85	0.38	181,181,181,181	0
83	MG	1	4159	1/1	0.85	0.24	33,33,33,33	0
83	MG	1	4211	1/1	0.85	0.32	29,29,29,29	0
83	MG	AR	3890	1/1	0.85	0.62	31,31,31,31	0
83	MG	sR	2182	1/1	0.85	0.53	37,37,37,37	0
83	MG	1	4065	1/1	0.85	0.46	53,53,53,53	0
83	MG	A	2033	1/1	0.85	0.85	53,53,53,53	0
83	MG	AR	3745	1/1	0.85	0.24	36,36,36,36	0
83	MG	A	2038	1/1	0.85	0.56	65,65,65,65	0
83	MG	sR	2201	1/1	0.85	0.15	62,62,62,62	0
83	MG	1	4223	1/1	0.85	0.33	34,34,34,34	0
83	MG	s8	303	1/1	0.85	0.27	42,42,42,42	0
83	MG	1	4107	1/1	0.85	0.43	47,47,47,47	0
83	MG	AR	3921	1/1	0.85	0.73	43,43,43,43	0
83	MG	AR	4128	1/1	0.85	0.30	36,36,36,36	0
83	MG	AR	3761	1/1	0.85	0.45	47,47,47,47	0
83	MG	AR	4028	1/1	0.86	0.14	29,29,29,29	0
83	MG	1	3989	1/1	0.86	0.35	41,41,41,41	0
83	MG	AR	3747	1/1	0.86	0.29	37,37,37,37	0
83	MG	AR	4034	1/1	0.86	0.17	55,55,55,55	0
83	MG	AR	4178	1/1	0.86	0.15	46,46,46,46	0
83	MG	1	3755	1/1	0.86	0.51	37,37,37,37	0
83	MG	A	2054	1/1	0.86	0.63	44,44,44,44	0
83	MG	AR	3933	1/1	0.86	0.24	57,57,57,57	0
83	MG	1	3906	1/1	0.86	0.39	33,33,33,33	0
83	MG	CR	205	1/1	0.86	0.28	28,28,28,28	0
83	MG	3	213	1/1	0.86	0.49	32,32,32,32	0
83	MG	AR	3768	1/1	0.86	0.49	76,76,76,76	0
83	MG	1	3821	1/1	0.86	0.38	39,39,39,39	0
83	MG	AR	4198	1/1	0.86	0.31	40,40,40,40	0
83	MG	sR	2059	1/1	0.86	0.34	46,46,46,46	0
83	MG	AR	4075	1/1	0.86	0.43	50,50,50,50	0
83	MG	sR	2064	1/1	0.86	0.56	47,47,47,47	0
83	MG	sR	2067	1/1	0.86	0.44	61,61,61,61	0
83	MG	DC	204	1/1	0.86	0.32	33,33,33,33	0
83	MG	AR	3779	1/1	0.86	0.37	21,21,21,21	0
83	MG	DE	201	1/1	0.86	0.17	55,55,55,55	0
83	MG	3	218	1/1	0.86	0.58	56,56,56,56	0
83	MG	1	3771	1/1	0.86	0.43	39,39,39,39	0
83	MG	1	4163	1/1	0.86	0.31	44,44,44,44	0
83	MG	1	3788	1/1	0.86	0.19	30,30,30,30	0
83	MG	4	227	1/1	0.86	0.32	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	3974	1/1	0.86	0.57	44,44,44,44	0
83	MG	A	1948	1/1	0.86	0.34	49,49,49,49	0
83	MG	4	230	1/1	0.86	0.22	37,37,37,37	0
83	MG	sR	2120	1/1	0.86	0.50	50,50,50,50	0
83	MG	sR	2123	1/1	0.86	0.61	55,55,55,55	0
83	MG	1	4068	1/1	0.86	0.46	43,43,43,43	0
83	MG	A	1956	1/1	0.86	0.64	59,59,59,59	0
83	MG	4	234	1/1	0.86	0.48	31,31,31,31	0
83	MG	o	301	1/1	0.86	0.40	34,34,34,34	0
83	MG	1	4169	1/1	0.86	0.17	34,34,34,34	0
83	MG	1	4116	1/1	0.86	0.42	40,40,40,40	0
83	MG	1	3802	1/1	0.86	0.34	39,39,39,39	0
83	MG	A	1970	1/1	0.86	0.94	77,77,77,77	0
83	MG	v	305	1/1	0.86	0.78	39,39,39,39	0
83	MG	AR	4118	1/1	0.86	0.77	70,70,70,70	0
83	MG	sR	2152	1/1	0.86	0.21	48,48,48,48	0
83	MG	AR	4253	1/1	0.86	0.51	38,38,38,38	0
83	MG	1	4134	1/1	0.86	0.43	24,24,24,24	0
83	MG	1	4010	1/1	0.86	0.52	31,31,31,31	0
83	MG	1	4192	1/1	0.86	0.30	29,29,29,29	0
83	MG	AR	4133	1/1	0.86	0.14	59,59,59,59	0
83	MG	1	4046	1/1	0.86	0.36	27,27,27,27	0
83	MG	AR	3889	1/1	0.86	0.39	38,38,38,38	0
83	MG	AT	221	1/1	0.86	0.37	32,32,32,32	0
83	MG	1	4083	1/1	0.86	0.28	32,32,32,32	0
83	MG	1	3975	1/1	0.86	0.24	38,38,38,38	0
83	MG	A	2013	1/1	0.86	0.57	68,68,68,68	0
83	MG	A	2014	1/1	0.86	0.42	67,67,67,67	0
83	MG	1	4207	1/1	0.86	0.59	38,38,38,38	0
83	MG	1	3814	1/1	0.86	0.27	42,42,42,42	0
83	MG	d4	203	1/1	0.86	0.32	66,66,66,66	0
83	MG	1	4019	1/1	0.86	0.31	40,40,40,40	0
83	MG	AR	3905	1/1	0.86	0.37	25,25,25,25	0
83	MG	A	2027	1/1	0.86	0.31	55,55,55,55	0
83	MG	A	1981	1/1	0.87	0.42	61,61,61,61	0
83	MG	AR	4202	1/1	0.87	1.05	72,72,72,72	0
83	MG	1	3916	1/1	0.87	0.66	59,59,59,59	0
83	MG	sR	2077	1/1	0.87	0.37	50,50,50,50	0
83	MG	1	4070	1/1	0.87	0.38	54,54,54,54	0
83	MG	A	1989	1/1	0.87	0.33	54,54,54,54	0
83	MG	AR	4208	1/1	0.87	0.59	52,52,52,52	0
83	MG	sR	2103	1/1	0.87	0.53	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3795	1/1	0.87	0.17	33,33,33,33	0
83	MG	A	2002	1/1	0.87	0.56	94,94,94,94	0
83	MG	l	404	1/1	0.87	0.23	83,83,83,83	0
83	MG	1	3827	1/1	0.87	0.46	21,21,21,21	0
82	OHX	A	1939	7/7	0.87	0.28	138,138,138,138	0
83	MG	AR	4138	1/1	0.87	0.21	40,40,40,40	0
83	MG	AR	4058	1/1	0.87	0.23	45,45,45,45	0
83	MG	AR	3990	1/1	0.87	0.34	26,26,26,26	0
83	MG	1	4055	1/1	0.87	0.56	31,31,31,31	0
83	MG	AR	4001	1/1	0.87	0.31	24,24,24,24	0
83	MG	1	4042	1/1	0.87	0.24	37,37,37,37	0
83	MG	DA	202	1/1	0.87	0.40	39,39,39,39	0
83	MG	1	3876	1/1	0.87	0.59	29,29,29,29	0
83	MG	AR	4245	1/1	0.87	0.58	43,43,43,43	0
83	MG	v	307	1/1	0.87	0.50	34,34,34,34	0
83	MG	AR	4011	1/1	0.87	0.25	27,27,27,27	0
83	MG	A	2028	1/1	0.87	0.56	60,60,60,60	0
83	MG	AR	3939	1/1	0.87	0.48	26,26,26,26	0
83	MG	AR	4250	1/1	0.87	0.24	49,49,49,49	0
83	MG	AR	4251	1/1	0.87	0.55	39,39,39,39	0
83	MG	1	4197	1/1	0.87	0.34	26,26,26,26	0
83	MG	AR	3773	1/1	0.87	0.43	30,30,30,30	0
83	MG	1	3981	1/1	0.87	0.53	35,35,35,35	0
83	MG	AR	4104	1/1	0.87	0.21	86,86,86,86	0
83	MG	AR	4020	1/1	0.87	0.53	40,40,40,40	0
83	MG	sR	2185	1/1	0.87	0.55	46,46,46,46	0
83	MG	A	1951	1/1	0.87	0.66	65,65,65,65	0
83	MG	AR	4184	1/1	0.87	0.25	44,44,44,44	0
83	MG	AR	4188	1/1	0.87	0.49	31,31,31,31	0
83	MG	AR	3789	1/1	0.87	0.33	29,29,29,29	0
83	MG	AR	3876	1/1	0.87	0.48	31,31,31,31	0
83	MG	AR	3792	1/1	0.87	0.37	29,29,29,29	0
83	MG	c4	201	1/1	0.87	0.46	46,46,46,46	0
83	MG	sR	2058	1/1	0.87	0.42	90,90,90,90	0
83	MG	1	4135	1/1	0.87	0.27	46,46,46,46	0
83	MG	1	3967	1/1	0.87	0.40	54,54,54,54	0
83	MG	d6	202	1/1	0.87	0.27	43,43,43,43	0
83	MG	1	4206	1/1	0.87	0.66	36,36,36,36	0
83	MG	A	1978	1/1	0.87	0.42	51,51,51,51	0
83	MG	1	4195	1/1	0.88	0.70	42,42,42,42	0
83	MG	1	3947	1/1	0.88	0.48	36,36,36,36	0
83	MG	AR	3806	1/1	0.88	0.33	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3729	1/1	0.88	0.76	59,59,59,59	0
83	MG	sR	2061	1/1	0.88	0.63	47,47,47,47	0
82	OHX	sR	2018	7/7	0.88	0.29	136,136,136,136	0
83	MG	AR	4031	1/1	0.88	0.27	26,26,26,26	0
83	MG	sR	2065	1/1	0.88	1.41	64,64,64,64	0
83	MG	AR	4147	1/1	0.88	0.21	46,46,46,46	0
83	MG	1	3769	1/1	0.88	0.50	37,37,37,37	0
83	MG	AR	4038	1/1	0.88	0.18	41,41,41,41	0
83	MG	1	4144	1/1	0.88	0.24	27,27,27,27	0
83	MG	AR	4045	1/1	0.88	0.29	38,38,38,38	0
83	MG	1	3816	1/1	0.88	0.61	53,53,53,53	0
83	MG	sR	2081	1/1	0.88	0.60	63,63,63,63	0
83	MG	1	3935	1/1	0.88	0.34	36,36,36,36	0
83	MG	AR	3964	1/1	0.88	0.65	79,79,79,79	0
83	MG	AR	4173	1/1	0.88	0.49	30,30,30,30	0
83	MG	AT	227	1/1	0.88	0.50	51,51,51,51	0
83	MG	sR	2111	1/1	0.88	0.52	78,78,78,78	0
83	MG	1	4151	1/1	0.88	0.41	28,28,28,28	0
83	MG	1	4157	1/1	0.88	0.20	41,41,41,41	0
83	MG	A	2000	1/1	0.88	1.10	69,69,69,69	0
83	MG	AR	4181	1/1	0.88	0.22	29,29,29,29	0
83	MG	1	4020	1/1	0.88	0.45	48,48,48,48	0
83	MG	AR	4066	1/1	0.88	0.34	58,58,58,58	0
82	OHX	1	3720	7/7	0.88	0.29	112,112,112,112	0
83	MG	1	4098	1/1	0.88	0.19	39,39,39,39	0
83	MG	AR	3744	1/1	0.88	0.41	32,32,32,32	0
83	MG	AR	3862	1/1	0.88	0.51	38,38,38,38	0
83	MG	1	3774	1/1	0.88	0.30	35,35,35,35	0
83	MG	1	4100	1/1	0.88	0.35	56,56,56,56	0
83	MG	CQ	203	1/1	0.88	0.39	27,27,27,27	0
83	MG	AR	3880	1/1	0.88	0.44	26,26,26,26	0
83	MG	CR	203	1/1	0.88	0.69	93,93,93,93	0
83	MG	AR	3991	1/1	0.88	0.61	35,35,35,35	0
83	MG	3	221	1/1	0.88	0.66	74,74,74,74	0
83	MG	1	4026	1/1	0.88	0.27	32,32,32,32	0
83	MG	1	3961	1/1	0.88	0.30	47,47,47,47	0
83	MG	AR	4212	1/1	0.88	0.53	30,30,30,30	0
83	MG	sR	2163	1/1	0.88	0.78	49,49,49,49	0
83	MG	A	2029	1/1	0.88	0.40	59,59,59,59	0
83	MG	sR	2174	1/1	0.88	0.61	81,81,81,81	0
83	MG	1	3854	1/1	0.88	0.69	54,54,54,54	0
83	MG	1	3999	1/1	0.88	0.48	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	3771	1/1	0.88	0.32	68,68,68,68	0
83	MG	AR	4221	1/1	0.88	0.66	44,44,44,44	0
83	MG	AR	4013	1/1	0.88	0.26	42,42,42,42	0
83	MG	1	3945	1/1	0.88	0.22	55,55,55,55	0
83	MG	sR	2191	1/1	0.88	0.34	75,75,75,75	0
83	MG	sR	2194	1/1	0.88	0.45	83,83,83,83	0
83	MG	A	2045	1/1	0.88	0.57	49,49,49,49	0
83	MG	A	2053	1/1	0.88	0.75	46,46,46,46	0
83	MG	sR	2202	1/1	0.88	1.02	49,49,49,49	0
83	MG	1	4129	1/1	0.88	0.19	46,46,46,46	0
83	MG	AR	3924	1/1	0.88	0.43	35,35,35,35	0
83	MG	c1	202	1/1	0.88	0.30	42,42,42,42	0
83	MG	1	3946	1/1	0.88	0.18	30,30,30,30	0
83	MG	A	2060	1/1	0.88	0.72	49,49,49,49	0
83	MG	c9	201	1/1	0.88	0.55	65,65,65,65	0
83	MG	1	4074	1/1	0.88	0.62	46,46,46,46	0
83	MG	d4	204	1/1	0.88	0.43	57,57,57,57	0
83	MG	1	4181	1/1	0.88	0.75	44,44,44,44	0
83	MG	A	2064	1/1	0.88	0.55	68,68,68,68	0
83	MG	1	4040	1/1	0.88	0.49	79,79,79,79	0
83	MG	e	103	1/1	0.88	0.54	81,81,81,81	0
82	OHX	sR	2045	7/7	0.89	0.36	139,139,139,139	0
83	MG	H	301	1/1	0.89	0.32	82,82,82,82	0
83	MG	J	303	1/1	0.89	0.36	51,51,51,51	0
83	MG	v	306	1/1	0.89	0.50	43,43,43,43	0
83	MG	AR	3963	1/1	0.89	0.16	37,37,37,37	0
83	MG	1	3834	1/1	0.89	0.48	18,18,18,18	0
83	MG	1	4092	1/1	0.89	0.30	30,30,30,30	0
83	MG	x	204	1/1	0.89	0.21	33,33,33,33	0
82	OHX	sR	2047	7/7	0.89	0.29	127,127,127,127	0
83	MG	1	3747	1/1	0.89	0.22	29,29,29,29	0
83	MG	1	3930	1/1	0.89	0.97	44,44,44,44	0
83	MG	1	3957	1/1	0.89	0.21	54,54,54,54	0
83	MG	AF	202	1/1	0.89	0.23	24,24,24,24	0
83	MG	AR	3836	1/1	0.89	0.31	38,38,38,38	0
82	OHX	AS	210	7/7	0.89	0.33	112,112,112,112	0
83	MG	3	210	1/1	0.89	0.31	60,60,60,60	0
83	MG	AR	3851	1/1	0.89	0.27	25,25,25,25	0
83	MG	A	1965	1/1	0.89	0.77	54,54,54,54	0
83	MG	AR	3854	1/1	0.89	0.47	30,30,30,30	0
83	MG	AR	4000	1/1	0.89	0.35	47,47,47,47	0
83	MG	AR	3858	1/1	0.89	0.41	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	A	1853	7/7	0.89	0.35	112,112,112,112	0
83	MG	sR	2106	1/1	0.89	0.67	44,44,44,44	0
83	MG	AR	4126	1/1	0.89	0.40	32,32,32,32	0
83	MG	1	4105	1/1	0.89	0.29	48,48,48,48	0
83	MG	1	4060	1/1	0.89	0.38	30,30,30,30	0
83	MG	1	3762	1/1	0.89	0.29	39,39,39,39	0
83	MG	3	220	1/1	0.89	0.23	42,42,42,42	0
83	MG	AR	3751	1/1	0.89	0.58	27,27,27,27	0
83	MG	A	1995	1/1	0.89	0.15	81,81,81,81	0
83	MG	A	1996	1/1	0.89	0.72	101,101,101,101	0
83	MG	1	4064	1/1	0.89	0.24	30,30,30,30	0
83	MG	1	3994	1/1	0.89	0.40	28,28,28,28	0
83	MG	AT	219	1/1	0.89	0.25	46,46,46,46	0
83	MG	AR	4017	1/1	0.89	0.22	61,61,61,61	0
82	OHX	A	1919	7/7	0.89	0.35	117,117,117,117	0
83	MG	A	2006	1/1	0.89	0.31	108,108,108,108	0
83	MG	1	4035	1/1	0.89	0.17	42,42,42,42	0
83	MG	1	4001	1/1	0.89	0.21	29,29,29,29	0
83	MG	AR	3906	1/1	0.89	0.40	31,31,31,31	0
83	MG	1	4176	1/1	0.89	0.63	43,43,43,43	0
83	MG	1	3767	1/1	0.89	0.24	62,62,62,62	0
83	MG	AR	3778	1/1	0.89	0.36	32,32,32,32	0
83	MG	CE	405	1/1	0.89	0.28	28,28,28,28	0
83	MG	AR	4162	1/1	0.89	0.23	23,23,23,23	0
83	MG	1	4039	1/1	0.89	0.33	33,33,33,33	0
83	MG	AR	3786	1/1	0.89	0.43	43,43,43,43	0
83	MG	A	2023	1/1	0.89	0.55	62,62,62,62	0
83	MG	sR	2177	1/1	0.89	0.74	50,50,50,50	0
83	MG	sR	2179	1/1	0.89	0.56	51,51,51,51	0
83	MG	4	237	1/1	0.89	0.57	39,39,39,39	0
83	MG	AR	4032	1/1	0.89	0.19	47,47,47,47	0
83	MG	j	302	1/1	0.89	0.31	28,28,28,28	0
83	MG	CP	502	1/1	0.89	0.51	40,40,40,40	0
83	MG	CP	505	1/1	0.89	0.52	40,40,40,40	0
83	MG	AR	4036	1/1	0.89	0.42	44,44,44,44	0
83	MG	1	4191	1/1	0.89	0.63	37,37,37,37	0
83	MG	AR	3938	1/1	0.89	0.33	39,39,39,39	0
83	MG	A	2036	1/1	0.89	0.23	48,48,48,48	0
83	MG	AR	3801	1/1	0.89	0.43	44,44,44,44	0
83	MG	AR	3944	1/1	0.89	0.18	26,26,26,26	0
83	MG	A	2039	1/1	0.89	0.68	59,59,59,59	0
83	MG	1	3875	1/1	0.89	0.56	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	A	2046	1/1	0.89	0.28	96,96,96,96	0
83	MG	AR	4049	1/1	0.89	0.27	45,45,45,45	0
83	MG	1	3768	1/1	0.89	0.26	55,55,55,55	0
83	MG	CX	205	1/1	0.89	0.22	31,31,31,31	0
83	MG	AR	4057	1/1	0.89	0.26	25,25,25,25	0
83	MG	AR	3949	1/1	0.89	0.15	40,40,40,40	0
83	MG	AR	3952	1/1	0.89	0.25	40,40,40,40	0
83	MG	1	4081	1/1	0.89	0.17	49,49,49,49	0
82	OHX	A	1930	7/7	0.89	0.24	193,193,193,193	0
83	MG	A	2065	1/1	0.89	0.46	51,51,51,51	0
83	MG	AR	4136	1/1	0.90	0.19	34,34,34,34	0
83	MG	1	3888	1/1	0.90	0.38	39,39,39,39	0
83	MG	AK	104	1/1	0.90	0.28	47,47,47,47	0
83	MG	AR	4139	1/1	0.90	0.14	127,127,127,127	0
83	MG	AK	105	1/1	0.90	0.61	33,33,33,33	0
83	MG	1	3900	1/1	0.90	0.42	21,21,21,21	0
83	MG	AR	3867	1/1	0.90	0.62	46,46,46,46	0
83	MG	AR	3740	1/1	0.90	0.32	24,24,24,24	0
83	MG	CP	504	1/1	0.90	0.80	48,48,48,48	0
83	MG	1	3905	1/1	0.90	0.40	39,39,39,39	0
83	MG	AR	3886	1/1	0.90	0.67	35,35,35,35	0
83	MG	1	4215	1/1	0.90	0.49	38,38,38,38	0
83	MG	AR	4154	1/1	0.90	0.42	34,34,34,34	0
83	MG	1	3825	1/1	0.90	0.89	59,59,59,59	0
83	MG	1	3911	1/1	0.90	0.44	29,29,29,29	0
83	MG	AR	3746	1/1	0.90	0.24	24,24,24,24	0
83	MG	1	4069	1/1	0.90	0.23	40,40,40,40	0
83	MG	AR	4026	1/1	0.90	0.28	34,34,34,34	0
83	MG	sR	2057	1/1	0.90	0.28	43,43,43,43	0
82	OHX	sR	2041	7/7	0.90	0.48	92,92,92,92	0
83	MG	1	3754	1/1	0.90	0.46	39,39,39,39	0
83	MG	1	3971	1/1	0.90	0.26	39,39,39,39	0
82	OHX	1	3709	7/7	0.90	0.43	127,127,127,127	0
83	MG	AR	3762	1/1	0.90	0.33	33,33,33,33	0
83	MG	AR	3767	1/1	0.90	0.17	22,22,22,22	0
83	MG	sR	2066	1/1	0.90	0.45	48,48,48,48	0
83	MG	1	3794	1/1	0.90	0.31	45,45,45,45	0
82	OHX	1	3710	7/7	0.90	0.40	106,106,106,106	0
83	MG	DQ	505	1/1	0.90	0.17	34,34,34,34	0
83	MG	4	216	1/1	0.90	0.80	48,48,48,48	0
83	MG	sR	2076	1/1	0.90	0.76	55,55,55,55	0
83	MG	1	4082	1/1	0.90	0.45	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	3774	1/1	0.90	0.46	32,32,32,32	0
83	MG	AR	3775	1/1	0.90	0.32	42,42,42,42	0
83	MG	sR	2083	1/1	0.90	0.93	56,56,56,56	0
83	MG	sR	2087	1/1	0.90	0.82	62,62,62,62	0
83	MG	AR	4197	1/1	0.90	0.09	48,48,48,48	0
83	MG	1	3796	1/1	0.90	0.43	28,28,28,28	0
83	MG	1	4034	1/1	0.90	0.12	46,46,46,46	0
83	MG	sR	2105	1/1	0.90	1.04	56,56,56,56	0
83	MG	AR	4050	1/1	0.90	0.23	38,38,38,38	0
83	MG	A	1952	1/1	0.90	0.54	53,53,53,53	0
83	MG	A	1953	1/1	0.90	0.62	53,53,53,53	0
83	MG	AR	4051	1/1	0.90	0.26	46,46,46,46	0
82	OHX	1	3687	7/7	0.90	0.33	116,116,116,116	0
83	MG	AR	4207	1/1	0.90	0.79	43,43,43,43	0
83	MG	sR	2117	1/1	0.90	0.20	49,49,49,49	0
83	MG	1	3982	1/1	0.90	0.25	26,26,26,26	0
83	MG	sR	2119	1/1	0.90	0.35	63,63,63,63	0
82	OHX	AR	3530	7/7	0.90	0.27	69,69,69,69	0
83	MG	4	236	1/1	0.90	0.49	42,42,42,42	0
83	MG	sR	2127	1/1	0.90	0.57	50,50,50,50	0
83	MG	1	4168	1/1	0.90	0.52	36,36,36,36	0
83	MG	sR	2129	1/1	0.90	0.31	39,39,39,39	0
83	MG	sR	2130	1/1	0.90	0.20	68,68,68,68	0
83	MG	AR	4063	1/1	0.90	0.24	29,29,29,29	0
83	MG	AR	4217	1/1	0.90	0.58	42,42,42,42	0
83	MG	sR	2133	1/1	0.90	0.35	65,65,65,65	0
83	MG	AR	4064	1/1	0.90	0.27	36,36,36,36	0
83	MG	AR	3954	1/1	0.90	0.51	28,28,28,28	0
83	MG	AR	4067	1/1	0.90	0.40	31,31,31,31	0
82	OHX	1	3701	7/7	0.90	0.38	103,103,103,103	0
83	MG	AR	3957	1/1	0.90	0.50	36,36,36,36	0
82	OHX	AR	3682	7/7	0.90	0.38	121,121,121,121	0
83	MG	sR	2146	1/1	0.90	0.23	71,71,71,71	0
82	OHX	AR	3712	7/7	0.90	0.46	104,104,104,104	0
83	MG	AR	4236	1/1	0.90	0.32	34,34,34,34	0
83	MG	sR	2153	1/1	0.90	0.26	39,39,39,39	0
83	MG	1	3772	1/1	0.90	0.35	23,23,23,23	0
83	MG	A	1997	1/1	0.90	0.43	88,88,88,88	0
83	MG	1	3995	1/1	0.90	0.38	40,40,40,40	0
83	MG	AR	4242	1/1	0.90	0.65	41,41,41,41	0
83	MG	1	3998	1/1	0.90	0.43	31,31,31,31	0
83	MG	sR	2170	1/1	0.90	0.74	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	3972	1/1	0.90	0.20	44,44,44,44	0
83	MG	1	3773	1/1	0.90	0.15	29,29,29,29	0
83	MG	sR	2178	1/1	0.90	0.24	45,45,45,45	0
83	MG	AR	4102	1/1	0.90	0.27	32,32,32,32	0
83	MG	1	4000	1/1	0.90	0.37	43,43,43,43	0
82	OHX	AR	3721	7/7	0.90	0.37	118,118,118,118	0
83	MG	AR	4252	1/1	0.90	0.53	26,26,26,26	0
83	MG	1	4109	1/1	0.90	0.30	45,45,45,45	0
83	MG	sR	2186	1/1	0.90	0.28	41,41,41,41	0
82	OHX	AR	3729	7/7	0.90	0.21	114,114,114,114	0
83	MG	AR	3983	1/1	0.90	0.26	25,25,25,25	0
83	MG	1	3750	1/1	0.90	0.33	23,23,23,23	0
83	MG	1	4058	1/1	0.90	0.34	28,28,28,28	0
83	MG	A	2017	1/1	0.90	0.22	60,60,60,60	0
83	MG	sR	2199	1/1	0.90	0.57	65,65,65,65	0
83	MG	AR	4115	1/1	0.90	0.15	47,47,47,47	0
83	MG	AS	227	1/1	0.90	0.43	38,38,38,38	0
83	MG	1	4131	1/1	0.90	0.30	22,22,22,22	0
83	MG	6	203	1/1	0.90	0.49	40,40,40,40	0
83	MG	AB	208	1/1	0.90	0.38	45,45,45,45	0
83	MG	AT	223	1/1	0.90	0.30	55,55,55,55	0
83	MG	AR	4124	1/1	0.90	0.45	70,70,70,70	0
83	MG	1	3886	1/1	0.90	0.52	22,22,22,22	0
83	MG	d3	201	1/1	0.90	0.37	48,48,48,48	0
83	MG	AR	3843	1/1	0.90	0.44	24,24,24,24	0
83	MG	1	4005	1/1	0.90	0.56	40,40,40,40	0
83	MG	AR	4132	1/1	0.90	0.26	29,29,29,29	0
83	MG	AR	3852	1/1	0.90	0.53	46,46,46,46	0
83	MG	AR	4135	1/1	0.90	0.23	25,25,25,25	0
83	MG	CE	404	1/1	0.90	0.31	22,22,22,22	0
83	MG	1	3979	1/1	0.91	0.65	31,31,31,31	0
82	OHX	sR	1960	7/7	0.91	0.24	92,92,92,92	0
83	MG	AR	3749	1/1	0.91	0.53	32,32,32,32	0
83	MG	DC	201	1/1	0.91	0.30	20,20,20,20	0
83	MG	1	4216	1/1	0.91	0.59	44,44,44,44	0
82	OHX	AR	3519	7/7	0.91	0.15	122,122,122,122	0
82	OHX	sR	2021	7/7	0.91	0.31	137,137,137,137	0
83	MG	AR	3756	1/1	0.91	0.33	27,27,27,27	0
83	MG	1	3987	1/1	0.91	0.32	30,30,30,30	0
83	MG	AR	4200	1/1	0.91	0.25	70,70,70,70	0
82	OHX	AS	208	7/7	0.91	0.28	115,115,115,115	0
83	MG	3	215	1/1	0.91	0.39	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	3	216	1/1	0.91	0.30	38,38,38,38	0
83	MG	1	3990	1/1	0.91	0.63	36,36,36,36	0
83	MG	1	3933	1/1	0.91	0.28	35,35,35,35	0
83	MG	AR	4210	1/1	0.91	0.30	33,33,33,33	0
83	MG	sR	2074	1/1	0.91	0.55	41,41,41,41	0
82	OHX	sR	2042	7/7	0.91	0.35	118,118,118,118	0
83	MG	1	3993	1/1	0.91	0.50	57,57,57,57	0
83	MG	3	222	1/1	0.91	0.52	27,27,27,27	0
83	MG	AR	4074	1/1	0.91	0.45	36,36,36,36	0
82	OHX	AR	3687	7/7	0.91	0.33	136,136,136,136	0
83	MG	AR	4076	1/1	0.91	0.21	51,51,51,51	0
83	MG	AR	4077	1/1	0.91	0.22	47,47,47,47	0
83	MG	sR	2090	1/1	0.91	0.44	30,30,30,30	0
82	OHX	CG	302	7/7	0.91	0.36	107,107,107,107	0
83	MG	AR	3780	1/1	0.91	0.42	27,27,27,27	0
83	MG	4	218	1/1	0.91	0.43	55,55,55,55	0
82	OHX	s1	301	7/7	0.91	0.45	126,126,126,126	0
83	MG	1	3727	1/1	0.91	0.24	31,31,31,31	0
83	MG	AR	3793	1/1	0.91	0.37	36,36,36,36	0
83	MG	1	4154	1/1	0.91	0.24	38,38,38,38	0
83	MG	1	3776	1/1	0.91	0.34	29,29,29,29	0
83	MG	A	1982	1/1	0.91	0.21	57,57,57,57	0
83	MG	A	1984	1/1	0.91	0.49	66,66,66,66	0
83	MG	AR	4239	1/1	0.91	0.41	30,30,30,30	0
83	MG	AR	4240	1/1	0.91	0.17	33,33,33,33	0
83	MG	4	231	1/1	0.91	0.32	35,35,35,35	0
83	MG	1	3778	1/1	0.91	0.40	31,31,31,31	0
82	OHX	A	1846	7/7	0.91	0.21	126,126,126,126	0
83	MG	4	235	1/1	0.91	0.16	30,30,30,30	0
83	MG	1	3851	1/1	0.91	0.37	24,24,24,24	0
82	OHX	AR	3711	7/7	0.91	0.40	133,133,133,133	0
83	MG	j	301	1/1	0.91	0.36	25,25,25,25	0
83	MG	1	3730	1/1	0.91	0.45	78,78,78,78	0
83	MG	1	4006	1/1	0.91	0.26	38,38,38,38	0
83	MG	A	2003	1/1	0.91	0.45	55,55,55,55	0
83	MG	AR	4258	1/1	0.91	0.60	26,26,26,26	0
82	OHX	A	1871	7/7	0.91	0.20	116,116,116,116	0
83	MG	AR	3828	1/1	0.91	0.48	25,25,25,25	0
83	MG	AR	3993	1/1	0.91	0.27	39,39,39,39	0
83	MG	r	302	1/1	0.91	0.33	35,35,35,35	0
83	MG	AR	3996	1/1	0.91	0.30	21,21,21,21	0
83	MG	AS	226	1/1	0.91	0.29	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	4127	1/1	0.91	0.25	37,37,37,37	0
83	MG	1	4165	1/1	0.91	0.22	33,33,33,33	0
83	MG	1	3867	1/1	0.91	0.55	31,31,31,31	0
82	OHX	A	1885	7/7	0.91	0.35	96,96,96,96	0
83	MG	1	3872	1/1	0.91	0.48	37,37,37,37	0
83	MG	1	3743	1/1	0.91	0.51	41,41,41,41	0
83	MG	AR	4010	1/1	0.91	0.59	66,66,66,66	0
82	OHX	1	3652	7/7	0.91	0.34	76,76,76,76	0
83	MG	1	4086	1/1	0.91	0.15	28,28,28,28	0
82	OHX	A	1921	7/7	0.91	0.29	140,140,140,140	0
83	MG	CD	302	1/1	0.91	0.57	27,27,27,27	0
83	MG	1	4177	1/1	0.91	0.50	66,66,66,66	0
83	MG	1	3964	1/1	0.91	0.34	30,30,30,30	0
83	MG	AR	3856	1/1	0.91	0.28	33,33,33,33	0
83	MG	1	4024	1/1	0.91	0.36	33,33,33,33	0
83	MG	AR	4019	1/1	0.91	0.12	31,31,31,31	0
83	MG	1	4187	1/1	0.91	0.20	34,34,34,34	0
83	MG	AR	4021	1/1	0.91	0.41	35,35,35,35	0
82	OHX	AR	3642	7/7	0.91	0.28	101,101,101,101	0
82	OHX	A	1932	7/7	0.91	0.23	215,215,215,215	0
83	MG	1	3969	1/1	0.91	0.16	35,35,35,35	0
83	MG	1	3882	1/1	0.91	0.52	45,45,45,45	0
83	MG	A	2049	1/1	0.91	0.20	54,54,54,54	0
83	MG	AH	201	1/1	0.91	0.48	49,49,49,49	0
83	MG	1	4033	1/1	0.91	0.26	30,30,30,30	0
83	MG	sR	2203	1/1	0.91	0.61	42,42,42,42	0
83	MG	1	4202	1/1	0.91	0.39	43,43,43,43	0
83	MG	CR	201	1/1	0.91	0.45	26,26,26,26	0
83	MG	AR	4170	1/1	0.91	0.34	31,31,31,31	0
82	OHX	AR	3724	7/7	0.91	0.41	115,115,115,115	0
83	MG	1	3805	1/1	0.91	0.29	33,33,33,33	0
83	MG	A	2063	1/1	0.91	0.77	76,76,76,76	0
82	OHX	1	3691	7/7	0.91	0.37	154,154,154,154	0
82	OHX	AR	3731	7/7	0.91	0.35	135,135,135,135	0
83	MG	A	2066	1/1	0.91	0.80	58,58,58,58	0
83	MG	1	3758	1/1	0.91	0.26	40,40,40,40	0
83	MG	D	301	1/1	0.91	0.68	66,66,66,66	0
83	MG	F	301	1/1	0.91	0.51	62,62,62,62	0
83	MG	1	3976	1/1	0.91	0.31	24,24,24,24	0
83	MG	1	4124	1/1	0.92	0.20	29,29,29,29	0
83	MG	AR	3848	1/1	0.92	0.47	36,36,36,36	0
82	OHX	AR	3649	7/7	0.92	0.31	101,101,101,101	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	A	2067	1/1	0.92	0.85	56,56,56,56	0
83	MG	1	3873	1/1	0.92	0.41	28,28,28,28	0
83	MG	1	4056	1/1	0.92	0.21	27,27,27,27	0
83	MG	1	4057	1/1	0.92	0.26	38,38,38,38	0
82	OHX	1	3718	7/7	0.92	0.43	94,94,94,94	0
82	OHX	AR	3713	7/7	0.92	0.40	121,121,121,121	0
83	MG	AR	4169	1/1	0.92	0.20	29,29,29,29	0
83	MG	1	4217	1/1	0.92	0.25	50,50,50,50	0
83	MG	AP	503	1/1	0.92	0.11	52,52,52,52	0
83	MG	AR	4177	1/1	0.92	0.28	33,33,33,33	0
83	MG	DC	202	1/1	0.92	0.38	41,41,41,41	0
83	MG	AR	3872	1/1	0.92	0.38	29,29,29,29	0
83	MG	sR	2060	1/1	0.92	0.32	69,69,69,69	0
83	MG	AR	3875	1/1	0.92	0.38	29,29,29,29	0
82	OHX	4	212	7/7	0.92	0.35	112,112,112,112	0
82	OHX	A	1934	7/7	0.92	0.48	103,103,103,103	0
83	MG	DH	202	1/1	0.92	0.57	29,29,29,29	0
83	MG	DI	201	1/1	0.92	0.39	53,53,53,53	0
82	OHX	CM	201	7/7	0.92	0.37	120,120,120,120	0
83	MG	1	3738	1/1	0.92	0.64	51,51,51,51	0
83	MG	1	3823	1/1	0.92	0.45	36,36,36,36	0
83	MG	sR	2071	1/1	0.92	0.82	47,47,47,47	0
83	MG	AR	3891	1/1	0.92	0.42	25,25,25,25	0
83	MG	1	4011	1/1	0.92	0.66	45,45,45,45	0
83	MG	A	1944	1/1	0.92	0.41	36,36,36,36	0
83	MG	A	1945	1/1	0.92	0.63	47,47,47,47	0
83	MG	sR	2078	1/1	0.92	0.34	48,48,48,48	0
83	MG	AR	4033	1/1	0.92	0.33	25,25,25,25	0
83	MG	1	3965	1/1	0.92	0.17	36,36,36,36	0
83	MG	AR	3748	1/1	0.92	0.24	44,44,44,44	0
83	MG	A	1949	1/1	0.92	0.67	53,53,53,53	0
83	MG	AR	4037	1/1	0.92	0.21	29,29,29,29	0
83	MG	AR	3901	1/1	0.92	0.43	42,42,42,42	0
83	MG	1	4152	1/1	0.92	0.20	40,40,40,40	0
83	MG	AR	4042	1/1	0.92	0.29	33,33,33,33	0
83	MG	AR	4044	1/1	0.92	0.24	42,42,42,42	0
83	MG	3	219	1/1	0.92	0.15	63,63,63,63	0
82	OHX	CS	201	1/7	0.92	0.05	137,137,137,137	0
83	MG	AR	3920	1/1	0.92	0.30	24,24,24,24	0
83	MG	1	4071	1/1	0.92	0.12	39,39,39,39	0
83	MG	AR	3923	1/1	0.92	0.38	31,31,31,31	0
82	OHX	z	201	7/7	0.92	0.39	123,123,123,123	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	3759	1/1	0.92	0.27	29,29,29,29	0
82	OHX	J	301	7/7	0.92	0.32	106,106,106,106	0
83	MG	1	3786	1/1	0.92	0.43	22,22,22,22	0
83	MG	AR	3763	1/1	0.92	0.36	36,36,36,36	0
83	MG	1	3910	1/1	0.92	0.72	40,40,40,40	0
83	MG	sR	2126	1/1	0.92	0.31	62,62,62,62	0
82	OHX	AR	3727	7/7	0.92	0.39	107,107,107,107	0
82	OHX	sR	1969	7/7	0.92	0.19	91,91,91,91	0
83	MG	1	3921	1/1	0.92	0.48	31,31,31,31	0
83	MG	4	229	1/1	0.92	0.22	45,45,45,45	0
83	MG	AR	4068	1/1	0.92	0.52	28,28,28,28	0
83	MG	1	3840	1/1	0.92	0.43	31,31,31,31	0
82	OHX	AR	3700	7/7	0.92	0.35	106,106,106,106	0
83	MG	AR	3776	1/1	0.92	0.30	52,52,52,52	0
82	OHX	A	1881	7/7	0.92	0.21	173,173,173,173	0
82	OHX	sR	2036	7/7	0.92	0.41	118,118,118,118	0
83	MG	1	3852	1/1	0.92	0.34	43,43,43,43	0
83	MG	AR	4086	1/1	0.92	0.13	38,38,38,38	0
83	MG	AR	3785	1/1	0.92	0.21	36,36,36,36	0
83	MG	sR	2144	1/1	0.92	0.20	51,51,51,51	0
83	MG	1	4172	1/1	0.92	0.38	42,42,42,42	0
83	MG	sR	2147	1/1	0.92	0.33	45,45,45,45	0
83	MG	1	3853	1/1	0.92	0.82	31,31,31,31	0
82	OHX	AR	3703	7/7	0.92	0.35	99,99,99,99	0
83	MG	1	3857	1/1	0.92	0.23	23,23,23,23	0
83	MG	1	3941	1/1	0.92	0.19	45,45,45,45	0
83	MG	sR	2155	1/1	0.92	0.21	44,44,44,44	0
83	MG	sR	2156	1/1	0.92	0.61	51,51,51,51	0
83	MG	AR	3965	1/1	0.92	0.27	30,30,30,30	0
83	MG	AR	3966	1/1	0.92	0.39	70,70,70,70	0
83	MG	AR	3967	1/1	0.92	0.21	42,42,42,42	0
83	MG	AR	3797	1/1	0.92	0.36	23,23,23,23	0
83	MG	AR	4108	1/1	0.92	0.41	24,24,24,24	0
83	MG	1	4179	1/1	0.92	0.52	34,34,34,34	0
82	OHX	A	1908	7/7	0.92	0.24	122,122,122,122	0
82	OHX	A	1909	7/7	0.92	0.26	117,117,117,117	0
83	MG	A	2020	1/1	0.92	0.41	78,78,78,78	0
83	MG	1	4045	1/1	0.92	0.20	33,33,33,33	0
83	MG	sR	2181	1/1	0.92	0.47	44,44,44,44	0
83	MG	A	2022	1/1	0.92	0.50	53,53,53,53	0
83	MG	AR	3978	1/1	0.92	0.32	41,41,41,41	0
83	MG	t	201	1/1	0.92	0.19	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AT	222	1/1	0.92	0.48	39,39,39,39	0
83	MG	1	4188	1/1	0.92	0.53	41,41,41,41	0
83	MG	AR	4121	1/1	0.92	0.27	26,26,26,26	0
83	MG	t	203	1/1	0.92	0.35	22,22,22,22	0
82	OHX	A	1912	7/7	0.92	0.35	125,125,125,125	0
83	MG	1	3948	1/1	0.92	0.49	40,40,40,40	0
83	MG	AR	3820	1/1	0.92	0.14	53,53,53,53	0
83	MG	sR	2200	1/1	0.92	0.25	36,36,36,36	0
83	MG	A	2034	1/1	0.92	0.70	73,73,73,73	0
83	MG	AR	3821	1/1	0.92	0.61	23,23,23,23	0
83	MG	1	4193	1/1	0.92	0.48	35,35,35,35	0
82	OHX	sR	2048	7/7	0.92	0.36	112,112,112,112	0
83	MG	AR	3827	1/1	0.92	0.20	22,22,22,22	0
83	MG	x	203	1/1	0.92	0.18	27,27,27,27	0
83	MG	1	3950	1/1	0.92	0.28	31,31,31,31	0
83	MG	1	3869	1/1	0.92	0.33	42,42,42,42	0
83	MG	1	4117	1/1	0.92	0.18	54,54,54,54	0
83	MG	AR	4003	1/1	0.92	0.62	38,38,38,38	0
83	MG	AR	4005	1/1	0.92	0.12	27,27,27,27	0
83	MG	1	4121	1/1	0.92	0.30	39,39,39,39	0
83	MG	1	4122	1/1	0.92	0.33	38,38,38,38	0
83	MG	AB	204	1/1	0.92	0.26	25,25,25,25	0
83	MG	AB	205	1/1	0.92	0.45	26,26,26,26	0
83	MG	AR	4012	1/1	0.92	0.24	29,29,29,29	0
85	ZN	d7	101	1/1	0.92	0.20	108,108,108,108	0
83	MG	A	2052	1/1	0.93	0.58	66,66,66,66	0
82	OHX	4	213	7/7	0.93	0.33	109,109,109,109	0
83	MG	AT	226	1/1	0.93	0.17	38,38,38,38	0
83	MG	1	3734	1/1	0.93	0.46	24,24,24,24	0
83	MG	AR	3960	1/1	0.93	0.21	41,41,41,41	0
83	MG	A	2059	1/1	0.93	0.85	69,69,69,69	0
83	MG	1	4113	1/1	0.93	0.20	43,43,43,43	0
83	MG	AR	3777	1/1	0.93	0.41	28,28,28,28	0
83	MG	1	3736	1/1	0.93	0.30	30,30,30,30	0
83	MG	1	3737	1/1	0.93	0.50	35,35,35,35	0
83	MG	1	4119	1/1	0.93	0.18	44,44,44,44	0
82	OHX	A	1918	7/7	0.93	0.33	124,124,124,124	0
83	MG	1	3740	1/1	0.93	0.14	43,43,43,43	0
82	OHX	1	3666	7/7	0.93	0.49	86,86,86,86	0
82	OHX	1	3708	7/7	0.93	0.36	110,110,110,110	0
82	OHX	A	1925	7/7	0.93	0.28	149,149,149,149	0
83	MG	1	3953	1/1	0.93	0.18	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3836	1/1	0.93	0.39	27,27,27,27	0
82	OHX	A	1926	7/7	0.93	0.38	115,115,115,115	0
83	MG	CO	202	1/1	0.93	0.22	34,34,34,34	0
82	OHX	AR	3715	7/7	0.93	0.30	111,111,111,111	0
82	OHX	1	3668	7/7	0.93	0.42	79,79,79,79	0
83	MG	sR	2056	1/1	0.93	0.37	61,61,61,61	0
82	OHX	AR	3566	7/7	0.93	0.22	100,100,100,100	0
82	OHX	AR	3725	7/7	0.93	0.41	111,111,111,111	0
83	MG	4	233	1/1	0.93	0.43	52,52,52,52	0
83	MG	1	4041	1/1	0.93	0.21	27,27,27,27	0
83	MG	AR	3811	1/1	0.93	0.24	44,44,44,44	0
82	OHX	AR	3607	7/7	0.93	0.19	124,124,124,124	0
83	MG	1	4043	1/1	0.93	0.19	35,35,35,35	0
83	MG	CR	206	1/1	0.93	0.43	33,33,33,33	0
83	MG	AR	3818	1/1	0.93	0.62	50,50,50,50	0
83	MG	1	3756	1/1	0.93	0.67	38,38,38,38	0
83	MG	CU	202	1/1	0.93	0.27	32,32,32,32	0
82	OHX	AR	3633	7/7	0.93	0.20	142,142,142,142	0
83	MG	AR	3822	1/1	0.93	0.14	38,38,38,38	0
83	MG	1	4153	1/1	0.93	0.24	42,42,42,42	0
83	MG	AR	4004	1/1	0.93	0.34	35,35,35,35	0
83	MG	sR	2075	1/1	0.93	0.61	42,42,42,42	0
82	OHX	AR	3641	7/7	0.93	0.28	104,104,104,104	0
83	MG	1	4156	1/1	0.93	0.12	46,46,46,46	0
83	MG	1	3858	1/1	0.93	0.48	26,26,26,26	0
82	OHX	sR	1932	7/7	0.93	0.17	88,88,88,88	0
83	MG	1	3968	1/1	0.93	0.54	28,28,28,28	0
83	MG	AR	4163	1/1	0.93	0.31	38,38,38,38	0
83	MG	1	3860	1/1	0.93	0.70	46,46,46,46	0
82	OHX	1	3608	7/7	0.93	0.27	96,96,96,96	0
83	MG	1	4053	1/1	0.93	0.32	34,34,34,34	0
83	MG	sR	2091	1/1	0.93	0.38	38,38,38,38	0
83	MG	sR	2092	1/1	0.93	0.81	58,58,58,58	0
83	MG	DQ	504	1/1	0.93	0.12	31,31,31,31	0
83	MG	sR	2096	1/1	0.93	0.58	37,37,37,37	0
82	OHX	sR	1966	7/7	0.93	0.19	101,101,101,101	0
83	MG	sR	2104	1/1	0.93	0.57	37,37,37,37	0
82	OHX	1	3712	7/7	0.93	0.48	99,99,99,99	0
83	MG	AR	4176	1/1	0.93	0.20	28,28,28,28	0
82	OHX	sR	1977	7/7	0.93	0.20	104,104,104,104	0
82	OHX	sR	1990	7/7	0.93	0.36	103,103,103,103	0
82	OHX	sR	2002	7/7	0.93	0.32	97,97,97,97	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	sR	2006	7/7	0.93	0.28	121,121,121,121	0
83	MG	1	3775	1/1	0.93	0.40	37,37,37,37	0
82	OHX	AR	3650	7/7	0.93	0.37	103,103,103,103	0
83	MG	AR	4185	1/1	0.93	0.21	29,29,29,29	0
82	OHX	sR	2019	7/7	0.93	0.38	113,113,113,113	0
83	MG	AR	3860	1/1	0.93	0.48	29,29,29,29	0
83	MG	sR	2122	1/1	0.93	0.36	48,48,48,48	0
83	MG	AR	3861	1/1	0.93	0.48	23,23,23,23	0
83	MG	1	4174	1/1	0.93	0.54	27,27,27,27	0
83	MG	AR	3863	1/1	0.93	0.46	30,30,30,30	0
83	MG	AR	4196	1/1	0.93	0.17	29,29,29,29	0
83	MG	A	1958	1/1	0.93	0.41	47,47,47,47	0
83	MG	AB	201	1/1	0.93	0.23	20,20,20,20	0
83	MG	1	3985	1/1	0.93	0.11	39,39,39,39	0
82	OHX	CF	401	7/7	0.93	0.35	107,107,107,107	0
83	MG	AB	207	1/1	0.93	0.19	29,29,29,29	0
82	OHX	sR	2027	7/7	0.93	0.33	114,114,114,114	0
83	MG	1	3885	1/1	0.93	0.61	32,32,32,32	0
83	MG	AR	4205	1/1	0.93	0.18	30,30,30,30	0
82	OHX	AR	3657	7/7	0.93	0.32	82,82,82,82	0
82	OHX	sR	2037	7/7	0.93	0.35	114,114,114,114	0
83	MG	1	3789	1/1	0.93	0.70	40,40,40,40	0
82	OHX	sR	2040	7/7	0.93	0.46	111,111,111,111	0
83	MG	1	4190	1/1	0.93	0.50	21,21,21,21	0
82	OHX	AR	3659	7/7	0.93	0.35	95,95,95,95	0
83	MG	1	3908	1/1	0.93	0.38	35,35,35,35	0
83	MG	sR	2151	1/1	0.93	0.39	48,48,48,48	0
83	MG	1	3996	1/1	0.93	0.31	21,21,21,21	0
82	OHX	CO	201	7/7	0.93	0.39	148,148,148,148	0
83	MG	A	1993	1/1	0.93	0.72	74,74,74,74	0
83	MG	AR	4219	1/1	0.93	0.57	39,39,39,39	0
83	MG	1	4196	1/1	0.93	0.63	29,29,29,29	0
82	OHX	sR	2044	7/7	0.93	0.36	126,126,126,126	0
83	MG	sR	2158	1/1	0.93	0.20	57,57,57,57	0
83	MG	AR	3912	1/1	0.93	0.90	38,38,38,38	0
83	MG	AR	4224	1/1	0.93	0.29	28,28,28,28	0
83	MG	AR	4052	1/1	0.93	0.34	39,39,39,39	0
83	MG	sR	2168	1/1	0.93	0.58	48,48,48,48	0
83	MG	1	4198	1/1	0.93	0.19	29,29,29,29	0
83	MG	sR	2172	1/1	0.93	0.27	70,70,70,70	0
83	MG	1	3914	1/1	0.93	0.56	28,28,28,28	0
83	MG	1	3915	1/1	0.93	0.45	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	4091	1/1	0.93	0.23	42,42,42,42	0
83	MG	AR	3930	1/1	0.93	0.14	37,37,37,37	0
82	OHX	1	3716	7/7	0.93	0.41	112,112,112,112	0
82	OHX	AR	3677	7/7	0.93	0.31	117,117,117,117	0
83	MG	1	3929	1/1	0.93	0.09	47,47,47,47	0
83	MG	AR	4241	1/1	0.93	0.49	25,25,25,25	0
83	MG	1	4095	1/1	0.93	0.15	38,38,38,38	0
82	OHX	1	3717	7/7	0.93	0.37	117,117,117,117	0
83	MG	AR	4070	1/1	0.93	0.35	27,27,27,27	0
82	OHX	1	3486	7/7	0.93	0.20	73,73,73,73	0
83	MG	sR	2190	1/1	0.93	0.41	53,53,53,53	0
83	MG	AR	3760	1/1	0.93	0.22	36,36,36,36	0
83	MG	A	2019	1/1	0.93	0.29	51,51,51,51	0
83	MG	1	3726	1/1	0.93	0.65	40,40,40,40	0
83	MG	sR	2198	1/1	0.93	0.49	60,60,60,60	0
83	MG	AR	3941	1/1	0.93	0.50	23,23,23,23	0
83	MG	AR	4078	1/1	0.93	0.41	34,34,34,34	0
83	MG	AR	4083	1/1	0.93	0.22	47,47,47,47	0
83	MG	AR	3943	1/1	0.93	0.29	43,43,43,43	0
82	OHX	AR	3697	7/7	0.93	0.43	106,106,106,106	0
83	MG	s4	302	1/1	0.93	0.38	47,47,47,47	0
83	MG	1	4104	1/1	0.93	0.17	39,39,39,39	0
83	MG	AS	216	1/1	0.93	0.34	37,37,37,37	0
83	MG	1	4218	1/1	0.93	0.16	23,23,23,23	0
83	MG	c1	203	1/1	0.93	0.33	51,51,51,51	0
83	MG	AR	3947	1/1	0.93	0.14	34,34,34,34	0
83	MG	AS	223	1/1	0.93	0.16	60,60,60,60	0
83	MG	AS	224	1/1	0.93	0.55	36,36,36,36	0
82	OHX	1	3698	7/7	0.93	0.38	131,131,131,131	0
83	MG	d4	202	1/1	0.93	0.35	43,43,43,43	0
83	MG	AR	3950	1/1	0.93	0.35	32,32,32,32	0
82	OHX	AR	3702	7/7	0.93	0.36	82,82,82,82	0
83	MG	AR	3770	1/1	0.93	0.32	40,40,40,40	0
83	MG	AR	4098	1/1	0.93	0.33	33,33,33,33	0
83	MG	AR	4101	1/1	0.93	0.17	27,27,27,27	0
83	MG	1	4014	1/1	0.93	0.44	33,33,33,33	0
82	OHX	1	3700	7/7	0.93	0.40	111,111,111,111	0
86	GOL	AR	4262	6/6	0.93	0.28	27,27,27,27	0
82	OHX	sR	2046	7/7	0.94	0.37	112,112,112,112	0
83	MG	1	3819	1/1	0.94	0.23	69,69,69,69	0
82	OHX	1	3655	7/7	0.94	0.37	111,111,111,111	0
83	MG	1	3822	1/1	0.94	0.24	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	4066	1/1	0.94	0.27	26,26,26,26	0
83	MG	AR	4183	1/1	0.94	0.37	36,36,36,36	0
83	MG	1	4200	1/1	0.94	0.49	29,29,29,29	0
83	MG	1	4201	1/1	0.94	0.65	33,33,33,33	0
82	OHX	A	1851	7/7	0.94	0.17	111,111,111,111	0
83	MG	AR	3989	1/1	0.94	0.21	36,36,36,36	0
82	OHX	1	3665	7/7	0.94	0.36	107,107,107,107	0
82	OHX	s4	301	7/7	0.94	0.24	118,118,118,118	0
82	OHX	A	1870	7/7	0.94	0.28	92,92,92,92	0
83	MG	AR	3784	1/1	0.94	0.57	29,29,29,29	0
83	MG	A	2015	1/1	0.94	0.43	75,75,75,75	0
82	OHX	AR	3661	7/7	0.94	0.28	109,109,109,109	0
83	MG	AR	3998	1/1	0.94	0.37	36,36,36,36	0
83	MG	1	4209	1/1	0.94	0.33	34,34,34,34	0
83	MG	AR	3788	1/1	0.94	0.31	24,24,24,24	0
83	MG	1	3833	1/1	0.94	0.41	28,28,28,28	0
83	MG	AR	3790	1/1	0.94	0.28	27,27,27,27	0
83	MG	1	4075	1/1	0.94	0.41	25,25,25,25	0
82	OHX	A	1877	7/7	0.94	0.31	118,118,118,118	0
83	MG	A	2024	1/1	0.94	0.77	53,53,53,53	0
82	OHX	1	3714	7/7	0.94	0.48	112,112,112,112	0
83	MG	AR	4007	1/1	0.94	0.25	35,35,35,35	0
83	MG	AR	4209	1/1	0.94	0.30	44,44,44,44	0
83	MG	AR	3795	1/1	0.94	0.34	22,22,22,22	0
82	OHX	1	3601	7/7	0.94	0.29	94,94,94,94	0
82	OHX	A	1893	7/7	0.94	0.31	111,111,111,111	0
83	MG	1	3732	1/1	0.94	0.43	33,33,33,33	0
82	OHX	A	1906	7/7	0.94	0.29	160,160,160,160	0
83	MG	1	3735	1/1	0.94	0.53	39,39,39,39	0
82	OHX	AR	3678	7/7	0.94	0.46	111,111,111,111	0
83	MG	3	212	1/1	0.94	0.63	59,59,59,59	0
83	MG	AR	3809	1/1	0.94	0.32	37,37,37,37	0
83	MG	1	4088	1/1	0.94	0.25	86,86,86,86	0
83	MG	A	2042	1/1	0.94	0.15	81,81,81,81	0
83	MG	1	3980	1/1	0.94	0.39	36,36,36,36	0
83	MG	AR	4225	1/1	0.94	0.38	45,45,45,45	0
83	MG	A	2047	1/1	0.94	0.36	60,60,60,60	0
83	MG	AR	4226	1/1	0.94	0.50	22,22,22,22	0
83	MG	A	2051	1/1	0.94	0.66	50,50,50,50	0
83	MG	AR	3812	1/1	0.94	0.61	41,41,41,41	0
82	OHX	1	3603	7/7	0.94	0.31	85,85,85,85	0
83	MG	AR	3815	1/1	0.94	0.34	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	A	2055	1/1	0.94	0.65	40,40,40,40	0
83	MG	A	2056	1/1	0.94	0.78	36,36,36,36	0
82	OHX	1	3669	7/7	0.94	0.34	112,112,112,112	0
83	MG	AR	3817	1/1	0.94	0.30	51,51,51,51	0
83	MG	1	3984	1/1	0.94	0.30	36,36,36,36	0
82	OHX	A	1915	7/7	0.94	0.35	125,125,125,125	0
83	MG	1	3741	1/1	0.94	0.28	25,25,25,25	0
82	OHX	A	1917	7/7	0.94	0.21	115,115,115,115	0
83	MG	1	3988	1/1	0.94	0.49	63,63,63,63	0
82	OHX	1	3671	7/7	0.94	0.30	115,115,115,115	0
83	MG	AR	4244	1/1	0.94	0.57	28,28,28,28	0
83	MG	AR	3825	1/1	0.94	0.25	43,43,43,43	0
82	OHX	1	3724	1/7	0.94	0.16	143,143,143,143	0
83	MG	4	217	1/1	0.94	0.53	41,41,41,41	0
83	MG	1	4101	1/1	0.94	0.23	69,69,69,69	0
83	MG	AR	4249	1/1	0.94	0.57	42,42,42,42	0
83	MG	1	4102	1/1	0.94	0.18	31,31,31,31	0
82	OHX	3	208	7/7	0.94	0.22	112,112,112,112	0
83	MG	Y	201	1/1	0.94	0.15	50,50,50,50	0
83	MG	b	202	1/1	0.94	0.46	63,63,63,63	0
83	MG	AR	3832	1/1	0.94	0.31	30,30,30,30	0
83	MG	sR	2050	1/1	0.94	0.58	40,40,40,40	0
83	MG	sR	2051	1/1	0.94	0.38	46,46,46,46	0
83	MG	AR	4040	1/1	0.94	0.49	30,30,30,30	0
83	MG	AR	4254	1/1	0.94	0.38	34,34,34,34	0
83	MG	sR	2054	1/1	0.94	0.68	47,47,47,47	0
83	MG	AR	4255	1/1	0.94	0.45	48,48,48,48	0
83	MG	4	224	1/1	0.94	0.32	36,36,36,36	0
83	MG	AR	4043	1/1	0.94	0.17	51,51,51,51	0
83	MG	AS	212	1/1	0.94	0.41	25,25,25,25	0
83	MG	4	226	1/1	0.94	0.38	42,42,42,42	0
83	MG	AR	3838	1/1	0.94	0.40	31,31,31,31	0
82	OHX	A	1924	7/7	0.94	0.29	126,126,126,126	0
83	MG	1	3748	1/1	0.94	0.28	32,32,32,32	0
83	MG	1	3870	1/1	0.94	0.27	55,55,55,55	0
82	OHX	1	3675	7/7	0.94	0.34	111,111,111,111	0
82	OHX	AR	3705	7/7	0.94	0.36	97,97,97,97	0
83	MG	1	4110	1/1	0.94	0.28	26,26,26,26	0
83	MG	AR	4055	1/1	0.94	0.57	29,29,29,29	0
83	MG	AS	229	1/1	0.94	0.24	43,43,43,43	0
82	OHX	AR	3710	7/7	0.94	0.38	112,112,112,112	0
83	MG	AT	218	1/1	0.94	0.53	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3604	7/7	0.94	0.32	101,101,101,101	0
83	MG	1	4114	1/1	0.94	0.23	58,58,58,58	0
82	OHX	4	214	7/7	0.94	0.23	106,106,106,106	0
82	OHX	A	1936	7/7	0.94	0.28	123,123,123,123	0
82	OHX	1	3690	7/7	0.94	0.36	123,123,123,123	0
83	MG	k	402	1/1	0.94	0.35	30,30,30,30	0
83	MG	sR	2082	1/1	0.94	0.29	70,70,70,70	0
83	MG	AR	4065	1/1	0.94	0.36	32,32,32,32	0
83	MG	sR	2084	1/1	0.94	0.37	61,61,61,61	0
83	MG	AR	3864	1/1	0.94	0.42	25,25,25,25	0
83	MG	l	403	1/1	0.94	0.25	25,25,25,25	0
83	MG	sR	2089	1/1	0.94	0.30	41,41,41,41	0
82	OHX	AR	3500	7/7	0.94	0.16	90,90,90,90	0
83	MG	AR	3868	1/1	0.94	0.24	24,24,24,24	0
83	MG	1	3764	1/1	0.94	0.35	28,28,28,28	0
83	MG	AR	3874	1/1	0.94	0.38	30,30,30,30	0
83	MG	1	4123	1/1	0.94	0.23	30,30,30,30	0
83	MG	sR	2098	1/1	0.94	0.43	38,38,38,38	0
83	MG	1	3766	1/1	0.94	0.34	21,21,21,21	0
82	OHX	AR	3716	7/7	0.94	0.24	120,120,120,120	0
83	MG	AR	4079	1/1	0.94	0.27	46,46,46,46	0
83	MG	CG	304	1/1	0.94	0.53	35,35,35,35	0
83	MG	AR	4080	1/1	0.94	0.17	43,43,43,43	0
83	MG	CJ	301	1/1	0.94	0.44	68,68,68,68	0
83	MG	sR	2112	1/1	0.94	0.43	50,50,50,50	0
83	MG	AR	4081	1/1	0.94	0.29	35,35,35,35	0
83	MG	AR	3884	1/1	0.94	0.31	38,38,38,38	0
83	MG	1	4007	1/1	0.94	0.21	28,28,28,28	0
83	MG	1	3889	1/1	0.94	0.42	25,25,25,25	0
83	MG	1	3892	1/1	0.94	0.37	23,23,23,23	0
83	MG	v	304	1/1	0.94	0.25	37,37,37,37	0
82	OHX	AR	3719	7/7	0.94	0.42	83,83,83,83	0
83	MG	sR	2121	1/1	0.94	0.28	45,45,45,45	0
83	MG	1	4012	1/1	0.94	0.32	30,30,30,30	0
83	MG	1	3903	1/1	0.94	0.61	29,29,29,29	0
83	MG	sR	2125	1/1	0.94	0.30	42,42,42,42	0
82	OHX	AR	3508	7/7	0.94	0.17	91,91,91,91	0
83	MG	AR	3902	1/1	0.94	0.49	21,21,21,21	0
83	MG	x	202	1/1	0.94	0.43	29,29,29,29	0
83	MG	1	4015	1/1	0.94	0.17	38,38,38,38	0
83	MG	1	4016	1/1	0.94	0.39	29,29,29,29	0
83	MG	AR	3910	1/1	0.94	0.57	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	CR	208	1/1	0.94	0.39	31,31,31,31	0
82	OHX	1	3499	7/7	0.94	0.17	89,89,89,89	0
83	MG	AR	3914	1/1	0.94	0.45	32,32,32,32	0
83	MG	AR	3918	1/1	0.94	0.44	25,25,25,25	0
83	MG	x	206	1/1	0.94	0.16	30,30,30,30	0
82	OHX	AR	3529	7/7	0.94	0.26	80,80,80,80	0
83	MG	1	4148	1/1	0.94	0.24	31,31,31,31	0
82	OHX	AR	3726	7/7	0.94	0.39	105,105,105,105	0
83	MG	AR	4114	1/1	0.94	0.31	64,64,64,64	0
82	OHX	sR	1972	7/7	0.94	0.35	110,110,110,110	0
82	OHX	1	3692	7/7	0.94	0.40	83,83,83,83	0
82	OHX	sR	1980	7/7	0.94	0.45	76,76,76,76	0
82	OHX	sR	1984	7/7	0.94	0.24	90,90,90,90	0
83	MG	1	3920	1/1	0.94	0.44	20,20,20,20	0
82	OHX	1	3614	7/7	0.94	0.35	111,111,111,111	0
83	MG	DL	102	1/1	0.94	0.41	27,27,27,27	0
83	MG	1	3924	1/1	0.94	0.40	22,22,22,22	0
83	MG	DO	202	1/1	0.94	0.28	37,37,37,37	0
83	MG	DP	101	1/1	0.94	0.35	38,38,38,38	0
83	MG	1	4032	1/1	0.94	0.13	63,63,63,63	0
83	MG	1	3781	1/1	0.94	0.37	20,20,20,20	0
83	MG	1	3782	1/1	0.94	0.40	32,32,32,32	0
83	MG	AR	3942	1/1	0.94	0.32	25,25,25,25	0
83	MG	sR	2166	1/1	0.94	0.21	56,56,56,56	0
82	OHX	AR	3571	7/7	0.94	0.30	76,76,76,76	0
83	MG	AR	4134	1/1	0.94	0.18	27,27,27,27	0
83	MG	1	3932	1/1	0.94	0.58	52,52,52,52	0
82	OHX	sR	2005	7/7	0.94	0.33	83,83,83,83	0
83	MG	1	4166	1/1	0.94	0.19	34,34,34,34	0
83	MG	AR	3741	1/1	0.94	0.70	50,50,50,50	0
83	MG	AR	3948	1/1	0.94	0.62	35,35,35,35	0
83	MG	AR	4140	1/1	0.94	0.13	27,27,27,27	0
82	OHX	AR	3600	7/7	0.94	0.28	110,110,110,110	0
82	OHX	sR	2013	7/7	0.94	0.34	83,83,83,83	0
83	MG	AR	4144	1/1	0.94	0.28	39,39,39,39	0
82	OHX	AR	3735	7/7	0.94	0.35	85,85,85,85	0
82	OHX	AR	3737	7/7	0.94	0.25	58,58,58,58	0
83	MG	sR	2187	1/1	0.94	0.38	43,43,43,43	0
82	OHX	AR	3603	7/7	0.94	0.34	85,85,85,85	0
82	OHX	sR	2025	7/7	0.94	0.33	110,110,110,110	0
83	MG	AR	4149	1/1	0.94	0.21	37,37,37,37	0
83	MG	1	3944	1/1	0.94	0.46	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	sR	2192	1/1	0.94	0.52	41,41,41,41	0
83	MG	A	1964	1/1	0.94	0.64	60,60,60,60	0
83	MG	AR	4152	1/1	0.94	0.27	25,25,25,25	0
83	MG	sR	2197	1/1	0.94	0.52	38,38,38,38	0
83	MG	A	1966	1/1	0.94	0.59	75,75,75,75	0
82	OHX	1	3618	7/7	0.94	0.16	170,170,170,170	0
83	MG	1	3797	1/1	0.94	0.33	24,24,24,24	0
82	OHX	sR	2029	7/7	0.94	0.40	86,86,86,86	0
83	MG	A	1972	1/1	0.94	0.29	59,59,59,59	0
83	MG	A	1974	1/1	0.94	0.61	54,54,54,54	0
83	MG	AR	4159	1/1	0.94	0.15	30,30,30,30	0
83	MG	A	1979	1/1	0.94	0.61	53,53,53,53	0
83	MG	A	1980	1/1	0.94	0.56	55,55,55,55	0
82	OHX	sR	2034	7/7	0.94	0.39	110,110,110,110	0
82	OHX	1	3645	7/7	0.94	0.33	99,99,99,99	0
83	MG	1	3804	1/1	0.94	0.12	59,59,59,59	0
83	MG	AR	4165	1/1	0.94	0.51	38,38,38,38	0
83	MG	c8	202	1/1	0.94	0.56	68,68,68,68	0
82	OHX	1	3702	7/7	0.94	0.26	162,162,162,162	0
83	MG	A	1987	1/1	0.94	0.47	60,60,60,60	0
82	OHX	CG	303	7/7	0.94	0.42	105,105,105,105	0
82	OHX	1	3707	7/7	0.94	0.32	111,111,111,111	0
82	OHX	1	3648	7/7	0.94	0.42	98,98,98,98	0
83	MG	A	1991	1/1	0.94	0.68	80,80,80,80	0
83	MG	AR	4171	1/1	0.94	0.28	34,34,34,34	0
83	MG	AR	4172	1/1	0.94	1.16	31,31,31,31	0
82	OHX	1	3597	7/7	0.94	0.35	100,100,100,100	0
82	OHX	A	1818	7/7	0.94	0.15	80,80,80,80	0
83	MG	A	1999	1/1	0.94	0.45	55,55,55,55	0
86	GOL	AR	4263	6/6	0.94	0.36	40,40,40,40	0
83	MG	AR	3992	1/1	0.95	0.35	23,23,23,23	0
83	MG	AR	4201	1/1	0.95	0.19	37,37,37,37	0
82	OHX	sR	2024	7/7	0.95	0.38	121,121,121,121	0
82	OHX	AP	502	7/7	0.95	0.28	63,63,63,63	0
83	MG	AR	3995	1/1	0.95	0.52	40,40,40,40	0
83	MG	1	3835	1/1	0.95	0.33	38,38,38,38	0
82	OHX	sR	2026	7/7	0.95	0.34	116,116,116,116	0
82	OHX	AR	3720	7/7	0.95	0.33	137,137,137,137	0
82	OHX	sR	2028	7/7	0.95	0.35	73,73,73,73	0
83	MG	1	4009	1/1	0.95	0.39	40,40,40,40	0
83	MG	1	3841	1/1	0.95	0.63	33,33,33,33	0
83	MG	1	3842	1/1	0.95	0.66	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	A	2026	1/1	0.95	0.25	59,59,59,59	0
82	OHX	1	3676	7/7	0.95	0.33	113,113,113,113	0
83	MG	1	3847	1/1	0.95	0.51	30,30,30,30	0
82	OHX	sR	2033	7/7	0.95	0.34	97,97,97,97	0
82	OHX	AR	3722	7/7	0.95	0.23	120,120,120,120	0
82	OHX	sR	2035	7/7	0.95	0.40	107,107,107,107	0
82	OHX	1	3557	7/7	0.95	0.19	109,109,109,109	0
83	MG	AR	3791	1/1	0.95	0.53	32,32,32,32	0
82	OHX	1	3689	7/7	0.95	0.43	115,115,115,115	0
82	OHX	sR	2039	7/7	0.95	0.35	118,118,118,118	0
82	OHX	1	3622	7/7	0.95	0.27	100,100,100,100	0
82	OHX	1	3640	7/7	0.95	0.36	95,95,95,95	0
83	MG	AR	4228	1/1	0.95	0.35	26,26,26,26	0
83	MG	A	2041	1/1	0.95	0.39	71,71,71,71	0
82	OHX	AR	3728	7/7	0.95	0.33	100,100,100,100	0
83	MG	AR	3798	1/1	0.95	0.20	25,25,25,25	0
83	MG	AR	3799	1/1	0.95	0.34	35,35,35,35	0
83	MG	1	3862	1/1	0.95	0.47	32,32,32,32	0
82	OHX	AR	3540	7/7	0.95	0.24	88,88,88,88	0
83	MG	1	3866	1/1	0.95	0.48	32,32,32,32	0
82	OHX	AR	3730	7/7	0.95	0.50	109,109,109,109	0
83	MG	AR	3805	1/1	0.95	0.32	27,27,27,27	0
82	OHX	AR	3544	7/7	0.95	0.10	127,127,127,127	0
82	OHX	AR	3557	7/7	0.95	0.24	77,77,77,77	0
83	MG	AR	3808	1/1	0.95	0.30	29,29,29,29	0
82	OHX	1	3644	7/7	0.95	0.24	134,134,134,134	0
82	OHX	sR	2049	7/7	0.95	0.30	72,72,72,72	0
82	OHX	1	3695	7/7	0.95	0.39	120,120,120,120	0
82	OHX	AR	3583	7/7	0.95	0.19	86,86,86,86	0
82	OHX	c3	201	7/7	0.95	0.28	113,113,113,113	0
82	OHX	c5	201	7/7	0.95	0.29	130,130,130,130	0
83	MG	AR	4035	1/1	0.95	0.13	41,41,41,41	0
82	OHX	AR	3587	7/7	0.95	0.18	107,107,107,107	0
83	MG	1	3880	1/1	0.95	0.43	30,30,30,30	0
82	OHX	AT	214	7/7	0.95	0.32	98,98,98,98	0
83	MG	1	4212	1/1	0.95	0.49	42,42,42,42	0
83	MG	AR	4256	1/1	0.95	0.19	26,26,26,26	0
83	MG	A	2071	1/1	0.95	0.41	56,56,56,56	0
82	OHX	1	3696	7/7	0.95	0.40	138,138,138,138	0
83	MG	1	4214	1/1	0.95	0.70	33,33,33,33	0
83	MG	AS	211	1/1	0.95	0.59	36,36,36,36	0
82	OHX	1	3561	7/7	0.95	0.28	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	O	202	1/1	0.95	0.88	59,59,59,59	0
82	OHX	AR	3605	7/7	0.95	0.15	118,118,118,118	0
83	MG	AS	215	1/1	0.95	0.60	26,26,26,26	0
82	OHX	CL	302	7/7	0.95	0.24	88,88,88,88	0
82	OHX	AR	3606	7/7	0.95	0.26	73,73,73,73	0
83	MG	AR	4047	1/1	0.95	0.32	52,52,52,52	0
83	MG	AS	220	1/1	0.95	0.32	41,41,41,41	0
83	MG	AS	221	1/1	0.95	0.74	37,37,37,37	0
83	MG	1	4221	1/1	0.95	0.49	41,41,41,41	0
82	OHX	1	3699	7/7	0.95	0.39	107,107,107,107	0
83	MG	1	3896	1/1	0.95	0.41	25,25,25,25	0
83	MG	1	3899	1/1	0.95	0.54	17,17,17,17	0
82	OHX	AR	3610	7/7	0.95	0.27	78,78,78,78	0
83	MG	AR	4053	1/1	0.95	0.29	33,33,33,33	0
83	MG	AR	4054	1/1	0.95	0.17	44,44,44,44	0
82	OHX	AR	3622	7/7	0.95	0.29	114,114,114,114	0
82	OHX	AR	3624	7/7	0.95	0.23	109,109,109,109	0
83	MG	AR	3837	1/1	0.95	0.22	24,24,24,24	0
82	OHX	AR	3626	7/7	0.95	0.22	119,119,119,119	0
83	MG	AR	4059	1/1	0.95	0.31	33,33,33,33	0
83	MG	sR	2068	1/1	0.95	0.54	35,35,35,35	0
83	MG	AT	224	1/1	0.95	0.23	37,37,37,37	0
83	MG	1	3739	1/1	0.95	0.39	29,29,29,29	0
83	MG	AR	4061	1/1	0.95	0.35	32,32,32,32	0
82	OHX	AR	3630	7/7	0.95	0.30	120,120,120,120	0
82	OHX	A	1854	7/7	0.95	0.25	97,97,97,97	0
83	MG	AR	3844	1/1	0.95	0.32	44,44,44,44	0
83	MG	AT	231	1/1	0.95	0.51	30,30,30,30	0
82	OHX	A	1855	7/7	0.95	0.15	97,97,97,97	0
82	OHX	AR	3631	7/7	0.95	0.21	108,108,108,108	0
82	OHX	1	3594	7/7	0.95	0.16	120,120,120,120	0
83	MG	1	3918	1/1	0.95	0.59	19,19,19,19	0
83	MG	AR	3855	1/1	0.95	0.44	23,23,23,23	0
82	OHX	A	1873	7/7	0.95	0.22	121,121,121,121	0
82	OHX	A	1875	7/7	0.95	0.14	123,123,123,123	0
83	MG	sR	2086	1/1	0.95	0.32	35,35,35,35	0
83	MG	1	3923	1/1	0.95	0.40	33,33,33,33	0
82	OHX	1	3650	7/7	0.95	0.25	98,98,98,98	0
83	MG	1	3926	1/1	0.95	0.26	31,31,31,31	0
83	MG	CI	301	1/1	0.95	0.19	29,29,29,29	0
82	OHX	1	3454	7/7	0.95	0.15	91,91,91,91	0
83	MG	4	225	1/1	0.95	0.28	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	sR	2093	1/1	0.95	0.63	40,40,40,40	0
83	MG	sR	2094	1/1	0.95	0.45	59,59,59,59	0
83	MG	1	3751	1/1	0.95	0.14	50,50,50,50	0
82	OHX	AR	3648	7/7	0.95	0.30	81,81,81,81	0
83	MG	sR	2097	1/1	0.95	0.52	44,44,44,44	0
83	MG	4	228	1/1	0.95	0.25	28,28,28,28	0
83	MG	1	4078	1/1	0.95	0.56	36,36,36,36	0
82	OHX	A	1888	7/7	0.95	0.22	90,90,90,90	0
82	OHX	1	3705	7/7	0.95	0.25	74,74,74,74	0
83	MG	CQ	202	1/1	0.95	0.08	33,33,33,33	0
82	OHX	A	1896	7/7	0.95	0.28	101,101,101,101	0
83	MG	sR	2108	1/1	0.95	0.60	40,40,40,40	0
83	MG	sR	2109	1/1	0.95	0.72	71,71,71,71	0
82	OHX	A	1899	7/7	0.95	0.38	100,100,100,100	0
83	MG	AR	3881	1/1	0.95	0.47	57,57,57,57	0
83	MG	AR	3882	1/1	0.95	0.41	25,25,25,25	0
83	MG	AR	3883	1/1	0.95	0.59	43,43,43,43	0
83	MG	AR	4096	1/1	0.95	0.14	31,31,31,31	0
83	MG	AR	4097	1/1	0.95	0.44	32,32,32,32	0
82	OHX	A	1904	7/7	0.95	0.36	94,94,94,94	0
83	MG	AR	4100	1/1	0.95	0.36	23,23,23,23	0
83	MG	AR	3885	1/1	0.95	0.46	40,40,40,40	0
82	OHX	1	3706	7/7	0.95	0.44	106,106,106,106	0
82	OHX	AR	3652	7/7	0.95	0.29	110,110,110,110	0
83	MG	1	3765	1/1	0.95	0.32	36,36,36,36	0
83	MG	1	3942	1/1	0.95	0.54	41,41,41,41	0
83	MG	AR	3892	1/1	0.95	0.51	40,40,40,40	0
82	OHX	AR	3655	7/7	0.95	0.27	110,110,110,110	0
82	OHX	1	3653	7/7	0.95	0.25	105,105,105,105	0
82	OHX	AR	3658	7/7	0.95	0.37	98,98,98,98	0
82	OHX	1	3462	7/7	0.95	0.15	80,80,80,80	0
82	OHX	1	3656	7/7	0.95	0.48	114,114,114,114	0
82	OHX	1	3659	7/7	0.95	0.29	118,118,118,118	0
83	MG	1	4097	1/1	0.95	0.33	39,39,39,39	0
83	MG	sR	2134	1/1	0.95	0.20	40,40,40,40	0
82	OHX	AR	3663	7/7	0.95	0.33	102,102,102,102	0
83	MG	1	3951	1/1	0.95	0.22	28,28,28,28	0
82	OHX	A	1922	7/7	0.95	0.40	85,85,85,85	0
83	MG	AR	4123	1/1	0.95	0.30	28,28,28,28	0
83	MG	sR	2139	1/1	0.95	1.21	59,59,59,59	0
82	OHX	A	1923	7/7	0.95	0.32	123,123,123,123	0
82	OHX	AR	3664	7/7	0.95	0.28	96,96,96,96	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3955	1/1	0.95	0.33	23,23,23,23	0
82	OHX	AR	3667	7/7	0.95	0.26	116,116,116,116	0
83	MG	1	3779	1/1	0.95	0.49	45,45,45,45	0
82	OHX	AR	3668	7/7	0.95	0.34	71,71,71,71	0
83	MG	sR	2149	1/1	0.95	0.15	64,64,64,64	0
83	MG	sM	302	1/1	0.95	0.26	38,38,38,38	0
82	OHX	A	1927	7/7	0.95	0.27	132,132,132,132	0
82	OHX	AR	3674	7/7	0.95	0.50	110,110,110,110	0
82	OHX	A	1931	7/7	0.95	0.42	87,87,87,87	0
82	OHX	AR	3676	7/7	0.95	0.40	109,109,109,109	0
83	MG	1	4112	1/1	0.95	0.25	36,36,36,36	0
83	MG	1	3787	1/1	0.95	0.38	21,21,21,21	0
82	OHX	1	3711	7/7	0.95	0.46	95,95,95,95	0
83	MG	1	4115	1/1	0.95	0.23	32,32,32,32	0
83	MG	AR	4141	1/1	0.95	0.18	82,82,82,82	0
82	OHX	1	3660	7/7	0.95	0.36	117,117,117,117	0
83	MG	AB	203	1/1	0.95	0.20	40,40,40,40	0
82	OHX	1	3661	7/7	0.95	0.31	83,83,83,83	0
83	MG	A	1957	1/1	0.95	0.85	63,63,63,63	0
82	OHX	AR	3684	7/7	0.95	0.31	108,108,108,108	0
83	MG	sR	2173	1/1	0.95	0.50	58,58,58,58	0
83	MG	AB	206	1/1	0.95	0.34	22,22,22,22	0
83	MG	sR	2175	1/1	0.95	0.20	82,82,82,82	0
83	MG	1	3793	1/1	0.95	0.70	51,51,51,51	0
82	OHX	1	3715	7/7	0.95	0.10	140,140,140,140	0
82	OHX	A	1940	7/7	0.95	0.23	128,128,128,128	0
83	MG	AR	4150	1/1	0.95	0.15	36,36,36,36	0
82	OHX	A	1941	7/7	0.95	0.38	78,78,78,78	0
82	OHX	AR	3696	7/7	0.95	0.40	91,91,91,91	0
83	MG	1	4130	1/1	0.95	0.15	48,48,48,48	0
83	MG	sR	2184	1/1	0.95	0.38	33,33,33,33	0
83	MG	1	3798	1/1	0.95	0.55	22,22,22,22	0
83	MG	AR	4157	1/1	0.95	0.10	31,31,31,31	0
83	MG	A	1973	1/1	0.95	0.71	67,67,67,67	0
82	OHX	1	3663	7/7	0.95	0.17	84,84,84,84	0
83	MG	A	1975	1/1	0.95	0.53	55,55,55,55	0
83	MG	A	1976	1/1	0.95	0.80	67,67,67,67	0
82	OHX	sR	1940	7/7	0.95	0.12	105,105,105,105	0
83	MG	1	3977	1/1	0.95	0.29	42,42,42,42	0
82	OHX	AR	3698	7/7	0.95	0.38	103,103,103,103	0
83	MG	1	4140	1/1	0.95	0.31	43,43,43,43	0
83	MG	AR	3959	1/1	0.95	0.25	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3530	7/7	0.95	0.10	128,128,128,128	0
82	OHX	AR	3701	7/7	0.95	0.30	114,114,114,114	0
83	MG	AR	3962	1/1	0.95	0.36	30,30,30,30	0
83	MG	1	3806	1/1	0.95	0.60	36,36,36,36	0
83	MG	1	3807	1/1	0.95	0.23	28,28,28,28	0
82	OHX	1	3550	7/7	0.95	0.12	125,125,125,125	0
82	OHX	1	3552	7/7	0.95	0.21	103,103,103,103	0
82	OHX	1	3609	7/7	0.95	0.25	105,105,105,105	0
82	OHX	AR	3706	7/7	0.95	0.27	112,112,112,112	0
83	MG	AR	3970	1/1	0.95	0.32	33,33,33,33	0
83	MG	1	3815	1/1	0.95	0.23	28,28,28,28	0
82	OHX	sR	1989	7/7	0.95	0.20	100,100,100,100	0
82	OHX	AR	3707	7/7	0.95	0.25	149,149,149,149	0
82	OHX	sR	2000	7/7	0.95	0.21	107,107,107,107	0
83	MG	AR	3758	1/1	0.95	0.20	76,76,76,76	0
82	OHX	AR	3708	7/7	0.95	0.39	103,103,103,103	0
82	OHX	1	3670	7/7	0.95	0.27	83,83,83,83	0
82	OHX	1	3610	7/7	0.95	0.41	91,91,91,91	0
83	MG	AR	3984	1/1	0.95	0.14	32,32,32,32	0
82	OHX	1	3672	7/7	0.95	0.31	114,114,114,114	0
82	OHX	1	3673	7/7	0.95	0.35	101,101,101,101	0
83	MG	AR	4194	1/1	0.95	0.51	52,52,52,52	0
82	OHX	r	301	7/7	0.95	0.19	74,74,74,74	0
82	OHX	1	3554	7/7	0.95	0.26	91,91,91,91	0
83	MG	1	3829	1/1	0.95	0.32	22,22,22,22	0
83	MG	1	3832	1/1	0.95	0.62	31,31,31,31	0
82	OHX	AR	3714	7/7	0.96	0.35	109,109,109,109	0
83	MG	AR	4094	1/1	0.96	0.29	68,68,68,68	0
83	MG	1	3928	1/1	0.96	0.21	33,33,33,33	0
83	MG	A	1967	1/1	0.96	0.96	64,64,64,64	0
82	OHX	1	3485	7/7	0.96	0.13	82,82,82,82	0
82	OHX	1	3688	7/7	0.96	0.27	100,100,100,100	0
82	OHX	AR	3717	7/7	0.96	0.33	95,95,95,95	0
82	OHX	AR	3718	7/7	0.96	0.33	134,134,134,134	0
83	MG	AR	3826	1/1	0.96	0.61	24,24,24,24	0
82	OHX	sR	2038	7/7	0.96	0.40	125,125,125,125	0
82	OHX	AR	3546	7/7	0.96	0.17	83,83,83,83	0
82	OHX	AR	3547	7/7	0.96	0.28	64,64,64,64	0
83	MG	A	1977	1/1	0.96	0.70	57,57,57,57	0
82	OHX	AR	3551	7/7	0.96	0.21	83,83,83,83	0
82	OHX	1	3625	7/7	0.96	0.25	110,110,110,110	0
82	OHX	sR	2043	7/7	0.96	0.28	120,120,120,120	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AR	4111	1/1	0.96	0.24	38,38,38,38	0
82	OHX	AR	3561	7/7	0.96	0.13	106,106,106,106	0
82	OHX	1	3626	7/7	0.96	0.23	109,109,109,109	0
82	OHX	AR	3570	7/7	0.96	0.16	96,96,96,96	0
82	OHX	1	3627	7/7	0.96	0.36	97,97,97,97	0
83	MG	AR	4116	1/1	0.96	0.34	23,23,23,23	0
82	OHX	AR	3573	7/7	0.96	0.22	90,90,90,90	0
82	OHX	AR	3574	7/7	0.96	0.23	103,103,103,103	0
83	MG	AR	4120	1/1	0.96	0.14	40,40,40,40	0
83	MG	AR	3842	1/1	0.96	0.30	35,35,35,35	0
82	OHX	AR	3580	7/7	0.96	0.10	135,135,135,135	0
82	OHX	1	3628	7/7	0.96	0.26	111,111,111,111	0
82	OHX	1	3693	7/7	0.96	0.32	90,90,90,90	0
82	OHX	AR	3734	7/7	0.96	0.35	64,64,64,64	0
83	MG	A	1998	1/1	0.96	0.26	58,58,58,58	0
82	OHX	c8	201	7/7	0.96	0.17	115,115,115,115	0
83	MG	1	3725	1/1	0.96	0.52	32,32,32,32	0
83	MG	AR	4129	1/1	0.96	0.23	38,38,38,38	0
82	OHX	AR	3594	7/7	0.96	0.26	88,88,88,88	0
82	OHX	AR	3595	7/7	0.96	0.28	79,79,79,79	0
83	MG	AR	3857	1/1	0.96	0.58	21,21,21,21	0
82	OHX	AR	3599	7/7	0.96	0.24	93,93,93,93	0
83	MG	AR	3859	1/1	0.96	0.33	34,34,34,34	0
82	OHX	AS	209	7/7	0.96	0.25	74,74,74,74	0
82	OHX	1	3629	7/7	0.96	0.25	113,113,113,113	0
83	MG	1	4185	1/1	0.96	0.40	24,24,24,24	0
83	MG	1	4186	1/1	0.96	0.25	22,22,22,22	0
82	OHX	AR	3601	7/7	0.96	0.25	89,89,89,89	0
82	OHX	AT	216	7/7	0.96	0.36	95,95,95,95	0
83	MG	1	4189	1/1	0.96	0.46	18,18,18,18	0
83	MG	1	3733	1/1	0.96	0.42	28,28,28,28	0
83	MG	AR	3869	1/1	0.96	0.34	26,26,26,26	0
83	MG	AR	3871	1/1	0.96	0.45	39,39,39,39	0
82	OHX	CE	402	7/7	0.96	0.40	112,112,112,112	0
83	MG	AR	3873	1/1	0.96	0.24	41,41,41,41	0
82	OHX	AR	3602	7/7	0.96	0.17	104,104,104,104	0
82	OHX	CG	301	7/7	0.96	0.23	109,109,109,109	0
83	MG	1	4194	1/1	0.96	0.31	38,38,38,38	0
83	MG	AR	3878	1/1	0.96	0.37	24,24,24,24	0
82	OHX	1	3632	7/7	0.96	0.29	90,90,90,90	0
82	OHX	1	3697	7/7	0.96	0.28	74,74,74,74	0
82	OHX	CK	201	7/7	0.96	0.28	97,97,97,97	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3633	7/7	0.96	0.35	128,128,128,128	0
82	OHX	1	3635	7/7	0.96	0.21	107,107,107,107	0
82	OHX	AR	3609	7/7	0.96	0.30	76,76,76,76	0
82	OHX	1	3637	7/7	0.96	0.28	91,91,91,91	0
83	MG	AR	4161	1/1	0.96	0.17	32,32,32,32	0
83	MG	AR	3887	1/1	0.96	0.75	43,43,43,43	0
83	MG	AR	3888	1/1	0.96	0.65	25,25,25,25	0
82	OHX	AR	3611	7/7	0.96	0.36	90,90,90,90	0
83	MG	A	2035	1/1	0.96	0.27	87,87,87,87	0
83	MG	1	4203	1/1	0.96	0.47	35,35,35,35	0
82	OHX	A	1831	7/7	0.96	0.11	105,105,105,105	0
82	OHX	A	1836	7/7	0.96	0.15	84,84,84,84	0
82	OHX	AR	3613	7/7	0.96	0.39	106,106,106,106	0
82	OHX	A	1849	7/7	0.96	0.23	103,103,103,103	0
83	MG	1	3978	1/1	0.96	0.37	28,28,28,28	0
83	MG	AR	3898	1/1	0.96	0.83	26,26,26,26	0
82	OHX	AR	3618	7/7	0.96	0.25	114,114,114,114	0
82	OHX	AR	3619	7/7	0.96	0.32	76,76,76,76	0
83	MG	A	2048	1/1	0.96	0.46	60,60,60,60	0
83	MG	1	3753	1/1	0.96	0.40	40,40,40,40	0
83	MG	A	2050	1/1	0.96	0.71	39,39,39,39	0
82	OHX	AR	3621	7/7	0.96	0.31	95,95,95,95	0
82	OHX	1	3444	7/7	0.96	0.20	66,66,66,66	0
82	OHX	A	1858	7/7	0.96	0.16	127,127,127,127	0
83	MG	AR	3911	1/1	0.96	0.53	26,26,26,26	0
82	OHX	A	1859	7/7	0.96	0.18	107,107,107,107	0
83	MG	1	3759	1/1	0.96	0.35	32,32,32,32	0
83	MG	AR	3915	1/1	0.96	0.54	32,32,32,32	0
83	MG	1	3760	1/1	0.96	0.30	38,38,38,38	0
83	MG	1	4219	1/1	0.96	0.19	31,31,31,31	0
82	OHX	AR	3623	7/7	0.96	0.36	98,98,98,98	0
82	OHX	1	3643	7/7	0.96	0.28	100,100,100,100	0
82	OHX	1	3704	7/7	0.96	0.41	99,99,99,99	0
83	MG	AR	3926	1/1	0.96	0.34	25,25,25,25	0
83	MG	AR	3928	1/1	0.96	0.82	34,34,34,34	0
82	OHX	A	1874	7/7	0.96	0.11	136,136,136,136	0
82	OHX	1	3496	7/7	0.96	0.16	74,74,74,74	0
82	OHX	1	3562	7/7	0.96	0.29	99,99,99,99	0
82	OHX	1	3646	7/7	0.96	0.24	103,103,103,103	0
83	MG	A	2069	1/1	0.96	0.51	58,58,58,58	0
82	OHX	A	1882	7/7	0.96	0.25	88,88,88,88	0
83	MG	1	3770	1/1	0.96	0.15	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	A	1883	7/7	0.96	0.27	101,101,101,101	0
82	OHX	AR	3636	7/7	0.96	0.33	88,88,88,88	0
82	OHX	AR	3637	7/7	0.96	0.22	103,103,103,103	0
82	OHX	AR	3638	7/7	0.96	0.39	100,100,100,100	0
82	OHX	A	1894	7/7	0.96	0.20	118,118,118,118	0
82	OHX	A	1895	7/7	0.96	0.31	110,110,110,110	0
83	MG	AR	4211	1/1	0.96	0.21	29,29,29,29	0
82	OHX	AR	3639	7/7	0.96	0.36	92,92,92,92	0
83	MG	AR	4213	1/1	0.96	0.39	25,25,25,25	0
82	OHX	AR	3640	7/7	0.96	0.41	90,90,90,90	0
82	OHX	A	1900	7/7	0.96	0.29	110,110,110,110	0
82	OHX	1	3579	7/7	0.96	0.24	82,82,82,82	0
82	OHX	A	1905	7/7	0.96	0.28	118,118,118,118	0
83	MG	AR	4218	1/1	0.96	0.48	21,21,21,21	0
83	MG	4	221	1/1	0.96	0.58	27,27,27,27	0
82	OHX	1	3593	7/7	0.96	0.20	99,99,99,99	0
83	MG	AR	3951	1/1	0.96	0.25	70,70,70,70	0
83	MG	1	3784	1/1	0.96	0.45	28,28,28,28	0
83	MG	1	3785	1/1	0.96	0.45	18,18,18,18	0
82	OHX	AR	3646	7/7	0.96	0.30	98,98,98,98	0
82	OHX	1	3469	7/7	0.96	0.13	80,80,80,80	0
82	OHX	A	1910	7/7	0.96	0.32	97,97,97,97	0
82	OHX	1	3595	7/7	0.96	0.49	110,110,110,110	0
82	OHX	A	1913	7/7	0.96	0.20	111,111,111,111	0
83	MG	AR	4230	1/1	0.96	0.48	35,35,35,35	0
83	MG	AR	4232	1/1	0.96	0.52	49,49,49,49	0
83	MG	AR	4233	1/1	0.96	0.45	57,57,57,57	0
82	OHX	A	1914	7/7	0.96	0.26	125,125,125,125	0
82	OHX	1	3596	7/7	0.96	0.36	99,99,99,99	0
82	OHX	AR	3651	7/7	0.96	0.34	90,90,90,90	0
82	OHX	1	3713	7/7	0.96	0.22	105,105,105,105	0
83	MG	1	4023	1/1	0.96	0.16	82,82,82,82	0
82	OHX	AR	3653	7/7	0.96	0.35	82,82,82,82	0
82	OHX	1	3505	7/7	0.96	0.24	74,74,74,74	0
82	OHX	1	3513	7/7	0.96	0.16	80,80,80,80	0
83	MG	AR	3968	1/1	0.96	0.55	40,40,40,40	0
82	OHX	1	3516	7/7	0.96	0.23	81,81,81,81	0
82	OHX	1	3479	7/7	0.96	0.13	88,88,88,88	0
83	MG	sR	2085	1/1	0.96	0.52	37,37,37,37	0
83	MG	1	4031	1/1	0.96	0.42	24,24,24,24	0
83	MG	AR	3973	1/1	0.96	0.15	26,26,26,26	0
82	OHX	1	3605	7/7	0.96	0.29	105,105,105,105	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3664	7/7	0.96	0.31	94,94,94,94	0
82	OHX	1	3722	7/7	0.96	0.35	58,58,58,58	0
83	MG	AR	3977	1/1	0.96	0.54	32,32,32,32	0
82	OHX	A	1928	7/7	0.96	0.27	118,118,118,118	0
82	OHX	1	3723	7/7	0.96	0.29	72,72,72,72	0
83	MG	AR	3981	1/1	0.96	0.28	80,80,80,80	0
82	OHX	AR	3665	7/7	0.96	0.28	117,117,117,117	0
82	OHX	AR	3666	7/7	0.96	0.19	143,143,143,143	0
82	OHX	A	1933	7/7	0.96	0.47	117,117,117,117	0
83	MG	1	3811	1/1	0.96	0.50	32,32,32,32	0
83	MG	sR	2099	1/1	0.96	0.81	63,63,63,63	0
83	MG	sR	2100	1/1	0.96	0.58	61,61,61,61	0
83	MG	sR	2101	1/1	0.96	0.49	57,57,57,57	0
83	MG	AR	3986	1/1	0.96	0.38	46,46,46,46	0
82	OHX	1	3606	7/7	0.96	0.21	95,95,95,95	0
82	OHX	A	1935	7/7	0.96	0.35	122,122,122,122	0
82	OHX	3	203	7/7	0.96	0.14	75,75,75,75	0
83	MG	1	3817	1/1	0.96	0.33	25,25,25,25	0
82	OHX	AR	3672	7/7	0.96	0.27	102,102,102,102	0
82	OHX	3	206	7/7	0.96	0.18	98,98,98,98	0
83	MG	sR	2110	1/1	0.96	0.31	39,39,39,39	0
83	MG	1	3820	1/1	0.96	0.22	33,33,33,33	0
82	OHX	1	3542	7/7	0.96	0.21	96,96,96,96	0
82	OHX	3	209	7/7	0.96	0.26	118,118,118,118	0
83	MG	6	201	1/1	0.96	0.48	25,25,25,25	0
82	OHX	4	208	7/7	0.96	0.28	79,79,79,79	0
83	MG	AR	3999	1/1	0.96	0.25	27,27,27,27	0
83	MG	1	3824	1/1	0.96	0.36	25,25,25,25	0
83	MG	9	201	1/1	0.96	0.39	34,34,34,34	0
82	OHX	A	1942	7/7	0.96	0.27	111,111,111,111	0
82	OHX	4	209	7/7	0.96	0.19	116,116,116,116	0
82	OHX	J	302	7/7	0.96	0.31	125,125,125,125	0
82	OHX	e	102	7/7	0.96	0.33	110,110,110,110	0
82	OHX	h	401	7/7	0.96	0.19	134,134,134,134	0
83	MG	1	3831	1/1	0.96	0.33	31,31,31,31	0
82	OHX	sR	1919	7/7	0.96	0.15	73,73,73,73	0
83	MG	1	4063	1/1	0.96	0.28	52,52,52,52	0
82	OHX	4	211	7/7	0.96	0.28	87,87,87,87	0
82	OHX	AR	3686	7/7	0.96	0.33	86,86,86,86	0
82	OHX	sR	1949	7/7	0.96	0.15	104,104,104,104	0
83	MG	AT	229	1/1	0.96	0.47	31,31,31,31	0
82	OHX	sR	1950	7/7	0.96	0.15	104,104,104,104	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	sR	1954	7/7	0.96	0.17	127,127,127,127	0
83	MG	1	3838	1/1	0.96	0.49	20,20,20,20	0
82	OHX	sR	1955	7/7	0.96	0.13	133,133,133,133	0
82	OHX	1	3667	7/7	0.96	0.26	103,103,103,103	0
83	MG	1	4073	1/1	0.96	0.28	41,41,41,41	0
82	OHX	sR	1961	7/7	0.96	0.18	86,86,86,86	0
83	MG	1	3844	1/1	0.96	0.50	35,35,35,35	0
82	OHX	sR	1962	7/7	0.96	0.31	102,102,102,102	0
82	OHX	AR	3688	7/7	0.96	0.39	97,97,97,97	0
83	MG	sR	2145	1/1	0.96	0.50	89,89,89,89	0
82	OHX	AR	3689	7/7	0.96	0.21	105,105,105,105	0
83	MG	CG	305	1/1	0.96	0.18	49,49,49,49	0
82	OHX	sR	1971	7/7	0.96	0.20	102,102,102,102	0
82	OHX	AR	3690	7/7	0.96	0.31	81,81,81,81	0
83	MG	CI	302	1/1	0.96	0.41	35,35,35,35	0
82	OHX	sR	1973	7/7	0.96	0.19	105,105,105,105	0
82	OHX	sR	1975	7/7	0.96	0.23	82,82,82,82	0
82	OHX	sR	1976	7/7	0.96	0.17	115,115,115,115	0
83	MG	CK	204	1/1	0.96	0.26	32,32,32,32	0
82	OHX	AR	3694	7/7	0.96	0.38	86,86,86,86	0
82	OHX	sR	1979	7/7	0.96	0.27	101,101,101,101	0
83	MG	AR	3757	1/1	0.96	0.36	58,58,58,58	0
83	MG	CP	503	1/1	0.96	0.10	35,35,35,35	0
82	OHX	AR	3695	7/7	0.96	0.46	107,107,107,107	0
83	MG	1	4090	1/1	0.96	0.12	27,27,27,27	0
82	OHX	sR	1981	7/7	0.96	0.32	88,88,88,88	0
82	OHX	1	3546	7/7	0.96	0.14	107,107,107,107	0
82	OHX	1	3480	7/7	0.96	0.15	69,69,69,69	0
82	OHX	1	3613	7/7	0.96	0.40	87,87,87,87	0
83	MG	AR	3765	1/1	0.96	0.47	35,35,35,35	0
82	OHX	sR	1992	7/7	0.96	0.21	94,94,94,94	0
82	OHX	sR	1993	7/7	0.96	0.25	93,93,93,93	0
82	OHX	sR	1994	7/7	0.96	0.27	104,104,104,104	0
82	OHX	sR	1998	7/7	0.96	0.31	107,107,107,107	0
82	OHX	AR	3699	7/7	0.96	0.42	109,109,109,109	0
82	OHX	sR	2001	7/7	0.96	0.28	83,83,83,83	0
82	OHX	x	201	7/7	0.96	0.41	101,101,101,101	0
82	OHX	sR	2004	7/7	0.96	0.31	105,105,105,105	0
82	OHX	1	3551	7/7	0.96	0.23	91,91,91,91	0
82	OHX	1	3616	7/7	0.96	0.26	114,114,114,114	0
82	OHX	sR	2007	7/7	0.96	0.19	111,111,111,111	0
82	OHX	sR	2008	7/7	0.96	0.17	106,106,106,106	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	sR	2009	7/7	0.96	0.20	85,85,85,85	0
83	MG	AR	3782	1/1	0.96	0.20	35,35,35,35	0
82	OHX	sR	2010	7/7	0.96	0.36	107,107,107,107	0
82	OHX	sR	2011	7/7	0.96	0.33	110,110,110,110	0
82	OHX	AR	3496	7/7	0.96	0.15	86,86,86,86	0
82	OHX	sR	2014	7/7	0.96	0.41	93,93,93,93	0
83	MG	1	3893	1/1	0.96	0.43	22,22,22,22	0
82	OHX	sR	2015	7/7	0.96	0.35	90,90,90,90	0
83	MG	1	3898	1/1	0.96	0.63	33,33,33,33	0
82	OHX	sR	2017	7/7	0.96	0.29	100,100,100,100	0
82	OHX	AR	3704	7/7	0.96	0.34	77,77,77,77	0
83	MG	1	4118	1/1	0.96	0.26	38,38,38,38	0
83	MG	1	3902	1/1	0.96	0.50	20,20,20,20	0
83	MG	1	4120	1/1	0.96	0.36	31,31,31,31	0
82	OHX	1	3483	7/7	0.96	0.13	95,95,95,95	0
83	MG	s2	301	1/1	0.96	0.19	48,48,48,48	0
82	OHX	sR	2020	7/7	0.96	0.26	111,111,111,111	0
83	MG	AR	4072	1/1	0.96	0.21	29,29,29,29	0
82	OHX	AR	3505	7/7	0.96	0.15	82,82,82,82	0
83	MG	1	3907	1/1	0.96	0.53	28,28,28,28	0
82	OHX	sR	2022	7/7	0.96	0.42	91,91,91,91	0
83	MG	1	3909	1/1	0.96	0.76	41,41,41,41	0
82	OHX	sR	2023	7/7	0.96	0.32	122,122,122,122	0
82	OHX	1	3674	7/7	0.96	0.37	113,113,113,113	0
83	MG	1	3912	1/1	0.96	0.51	20,20,20,20	0
82	OHX	1	3619	7/7	0.96	0.24	102,102,102,102	0
83	MG	d3	202	1/1	0.96	0.27	41,41,41,41	0
82	OHX	1	3620	7/7	0.96	0.31	93,93,93,93	0
82	OHX	1	3686	7/7	0.96	0.53	121,121,121,121	0
82	OHX	AR	3532	7/7	0.96	0.22	69,69,69,69	0
83	MG	1	3919	1/1	0.96	0.64	22,22,22,22	0
82	OHX	AR	3539	7/7	0.96	0.16	106,106,106,106	0
82	OHX	sR	2030	7/7	0.96	0.43	95,95,95,95	0
84	G5B	1	4224	26/26	0.96	0.20	27,27,27,27	0
84	G5B	AR	4264	26/26	0.96	0.20	29,29,29,29	0
83	MG	A	1959	1/1	0.96	0.48	55,55,55,55	0
85	ZN	g	501	1/1	0.96	0.08	102,102,102,102	0
82	OHX	sR	2031	7/7	0.96	0.33	110,110,110,110	0
85	ZN	e1	501	1/1	0.96	0.04	136,136,136,136	0
82	OHX	sR	2032	7/7	0.96	0.23	118,118,118,118	0
83	MG	1	4147	1/1	0.96	0.32	56,56,56,56	0
82	OHX	1	3719	7/7	0.97	0.22	93,93,93,93	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	AR	3625	7/7	0.97	0.24	106,106,106,106	0
83	MG	AR	3846	1/1	0.97	0.65	30,30,30,30	0
83	MG	AR	3847	1/1	0.97	0.46	22,22,22,22	0
82	OHX	1	3589	7/7	0.97	0.25	69,69,69,69	0
83	MG	AR	3849	1/1	0.97	0.59	24,24,24,24	0
83	MG	AR	3850	1/1	0.97	0.58	22,22,22,22	0
82	OHX	d9	102	7/7	0.97	0.38	125,125,125,125	0
82	OHX	A	1857	7/7	0.97	0.27	93,93,93,93	0
83	MG	A	1983	1/1	0.97	0.57	57,57,57,57	0
82	OHX	AR	3628	7/7	0.97	0.26	100,100,100,100	0
82	OHX	1	3721	7/7	0.97	0.27	55,55,55,55	0
82	OHX	A	1861	7/7	0.97	0.18	110,110,110,110	0
82	OHX	A	1863	7/7	0.97	0.20	114,114,114,114	0
82	OHX	A	1864	7/7	0.97	0.24	92,92,92,92	0
82	OHX	A	1865	7/7	0.97	0.21	103,103,103,103	0
83	MG	1	4182	1/1	0.97	0.54	31,31,31,31	0
83	MG	AR	4125	1/1	0.97	0.53	26,26,26,26	0
83	MG	A	1992	1/1	0.97	0.21	52,52,52,52	0
82	OHX	A	1866	7/7	0.97	0.22	100,100,100,100	0
82	OHX	A	1868	7/7	0.97	0.17	93,93,93,93	0
82	OHX	A	1869	7/7	0.97	0.32	108,108,108,108	0
82	OHX	1	3591	7/7	0.97	0.33	88,88,88,88	0
82	OHX	AR	3632	7/7	0.97	0.21	83,83,83,83	0
82	OHX	1	3654	7/7	0.97	0.17	114,114,114,114	0
82	OHX	AR	3635	7/7	0.97	0.21	96,96,96,96	0
82	OHX	1	3592	7/7	0.97	0.18	129,129,129,129	0
82	OHX	3	201	7/7	0.97	0.11	76,76,76,76	0
82	OHX	A	1879	7/7	0.97	0.20	114,114,114,114	0
82	OHX	A	1880	7/7	0.97	0.28	119,119,119,119	0
82	OHX	1	3430	7/7	0.97	0.18	62,62,62,62	0
82	OHX	3	205	7/7	0.97	0.20	94,94,94,94	0
82	OHX	1	3657	7/7	0.97	0.30	89,89,89,89	0
83	MG	AR	3877	1/1	0.97	0.37	21,21,21,21	0
82	OHX	A	1884	7/7	0.97	0.17	86,86,86,86	0
83	MG	AR	3879	1/1	0.97	0.53	33,33,33,33	0
82	OHX	3	207	7/7	0.97	0.20	97,97,97,97	0
83	MG	1	3749	1/1	0.97	0.28	37,37,37,37	0
82	OHX	A	1886	7/7	0.97	0.35	123,123,123,123	0
82	OHX	1	3658	7/7	0.97	0.28	114,114,114,114	0
82	OHX	A	1891	7/7	0.97	0.17	122,122,122,122	0
82	OHX	AR	3643	7/7	0.97	0.42	94,94,94,94	0
82	OHX	AR	3644	7/7	0.97	0.32	103,103,103,103	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3524	7/7	0.97	0.27	78,78,78,78	0
82	OHX	4	207	7/7	0.97	0.24	92,92,92,92	0
83	MG	1	3757	1/1	0.97	0.44	26,26,26,26	0
82	OHX	A	1897	7/7	0.97	0.26	119,119,119,119	0
82	OHX	A	1898	7/7	0.97	0.29	115,115,115,115	0
82	OHX	1	3526	7/7	0.97	0.13	110,110,110,110	0
83	MG	1	3761	1/1	0.97	0.33	24,24,24,24	0
83	MG	AR	3894	1/1	0.97	0.51	22,22,22,22	0
82	OHX	1	3529	7/7	0.97	0.25	74,74,74,74	0
83	MG	1	3983	1/1	0.97	0.24	27,27,27,27	0
82	OHX	A	1901	7/7	0.97	0.27	115,115,115,115	0
83	MG	AR	4164	1/1	0.97	0.18	36,36,36,36	0
82	OHX	A	1902	7/7	0.97	0.34	91,91,91,91	0
82	OHX	A	1903	7/7	0.97	0.25	113,113,113,113	0
82	OHX	1	3662	7/7	0.97	0.30	88,88,88,88	0
83	MG	AR	3904	1/1	0.97	0.52	26,26,26,26	0
83	MG	1	4222	1/1	0.97	0.52	32,32,32,32	0
82	OHX	1	3490	7/7	0.97	0.16	70,70,70,70	0
83	MG	AR	3907	1/1	0.97	0.53	27,27,27,27	0
83	MG	AR	3909	1/1	0.97	0.54	22,22,22,22	0
82	OHX	1	3599	7/7	0.97	0.14	117,117,117,117	0
82	OHX	1	3600	7/7	0.97	0.31	78,78,78,78	0
82	OHX	1	401	7/7	0.97	0.35	106,106,106,106	0
83	MG	A	2043	1/1	0.97	0.50	63,63,63,63	0
82	OHX	1	3532	7/7	0.97	0.32	79,79,79,79	0
83	MG	3	214	1/1	0.97	0.55	31,31,31,31	0
83	MG	AR	3916	1/1	0.97	0.65	37,37,37,37	0
82	OHX	A	1911	7/7	0.97	0.46	99,99,99,99	0
82	OHX	1	3534	7/7	0.97	0.26	82,82,82,82	0
82	OHX	y	201	7/7	0.97	0.26	97,97,97,97	0
83	MG	AR	4187	1/1	0.97	0.13	25,25,25,25	0
83	MG	AR	3922	1/1	0.97	0.39	22,22,22,22	0
82	OHX	1	3535	7/7	0.97	0.21	74,74,74,74	0
82	OHX	AG	201	7/7	0.97	0.27	83,83,83,83	0
83	MG	1	3777	1/1	0.97	0.37	38,38,38,38	0
83	MG	AR	3927	1/1	0.97	0.60	35,35,35,35	0
82	OHX	1	3536	7/7	0.97	0.15	95,95,95,95	0
83	MG	AR	4195	1/1	0.97	0.47	28,28,28,28	0
83	MG	AR	3929	1/1	0.97	0.70	30,30,30,30	0
82	OHX	AR	3428	7/7	0.97	0.20	57,57,57,57	0
82	OHX	AR	3457	7/7	0.97	0.14	70,70,70,70	0
82	OHX	A	1920	7/7	0.97	0.25	98,98,98,98	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	AR	3460	7/7	0.97	0.14	53,53,53,53	0
82	OHX	AR	3467	7/7	0.97	0.12	85,85,85,85	0
83	MG	AR	3935	1/1	0.97	0.34	31,31,31,31	0
82	OHX	AR	3670	7/7	0.97	0.21	99,99,99,99	0
82	OHX	AR	3671	7/7	0.97	0.41	97,97,97,97	0
82	OHX	AR	3468	7/7	0.97	0.14	64,64,64,64	0
83	MG	4	222	1/1	0.97	0.39	22,22,22,22	0
83	MG	A	2070	1/1	0.97	0.30	76,76,76,76	0
82	OHX	AR	3673	7/7	0.97	0.33	103,103,103,103	0
82	OHX	AR	3473	7/7	0.97	0.14	62,62,62,62	0
82	OHX	AR	3475	7/7	0.97	0.10	84,84,84,84	0
82	OHX	A	1929	7/7	0.97	0.28	116,116,116,116	0
82	OHX	AR	3476	7/7	0.97	0.13	71,71,71,71	0
82	OHX	1	3538	7/7	0.97	0.19	90,90,90,90	0
82	OHX	AR	3680	7/7	0.97	0.39	93,93,93,93	0
82	OHX	AR	3681	7/7	0.97	0.29	94,94,94,94	0
82	OHX	1	3540	7/7	0.97	0.22	78,78,78,78	0
82	OHX	1	3541	7/7	0.97	0.28	78,78,78,78	0
82	OHX	AR	3685	7/7	0.97	0.29	89,89,89,89	0
83	MG	1	3799	1/1	0.97	0.30	64,64,64,64	0
83	MG	AR	4220	1/1	0.97	0.30	38,38,38,38	0
82	OHX	1	3493	7/7	0.97	0.13	85,85,85,85	0
82	OHX	AR	3515	7/7	0.97	0.09	123,123,123,123	0
82	OHX	1	3612	7/7	0.97	0.26	87,87,87,87	0
83	MG	1	4025	1/1	0.97	0.33	42,42,42,42	0
82	OHX	AR	3525	7/7	0.97	0.21	76,76,76,76	0
82	OHX	1	3545	7/7	0.97	0.13	93,93,93,93	0
82	OHX	AR	3692	7/7	0.97	0.27	83,83,83,83	0
83	MG	sR	2062	1/1	0.97	0.51	32,32,32,32	0
82	OHX	1	3495	7/7	0.97	0.12	97,97,97,97	0
82	OHX	1	3679	7/7	0.97	0.32	106,106,106,106	0
82	OHX	Q	201	7/7	0.97	0.26	131,131,131,131	0
82	OHX	T	201	7/7	0.97	0.11	91,91,91,91	0
82	OHX	AR	3534	7/7	0.97	0.11	106,106,106,106	0
83	MG	1	3812	1/1	0.97	0.48	32,32,32,32	0
82	OHX	AR	3535	7/7	0.97	0.23	81,81,81,81	0
82	OHX	AR	3536	7/7	0.97	0.23	76,76,76,76	0
82	OHX	AR	3538	7/7	0.97	0.28	89,89,89,89	0
82	OHX	sR	1939	7/7	0.97	0.12	91,91,91,91	0
83	MG	AR	3971	1/1	0.97	0.45	30,30,30,30	0
82	OHX	1	3682	7/7	0.97	0.21	77,77,77,77	0
82	OHX	sR	1946	7/7	0.97	0.21	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3683	7/7	0.97	0.27	82,82,82,82	0
83	MG	AR	4243	1/1	0.97	0.27	20,20,20,20	0
82	OHX	AR	3541	7/7	0.97	0.16	99,99,99,99	0
82	OHX	sR	1951	7/7	0.97	0.15	102,102,102,102	0
82	OHX	AR	3543	7/7	0.97	0.20	99,99,99,99	0
82	OHX	1	3684	7/7	0.97	0.40	110,110,110,110	0
83	MG	AR	3979	1/1	0.97	0.30	37,37,37,37	0
82	OHX	sR	1958	7/7	0.97	0.18	84,84,84,84	0
82	OHX	AR	3545	7/7	0.97	0.25	98,98,98,98	0
83	MG	1	4050	1/1	0.97	0.32	25,25,25,25	0
82	OHX	1	3615	7/7	0.97	0.30	98,98,98,98	0
82	OHX	1	3548	7/7	0.97	0.17	99,99,99,99	0
82	OHX	sR	1965	7/7	0.97	0.22	82,82,82,82	0
83	MG	AB	202	1/1	0.97	0.33	22,22,22,22	0
83	MG	1	4054	1/1	0.97	0.19	51,51,51,51	0
82	OHX	AR	3548	7/7	0.97	0.20	85,85,85,85	0
83	MG	AR	4259	1/1	0.97	0.50	44,44,44,44	0
82	OHX	AR	3709	7/7	0.97	0.25	77,77,77,77	0
82	OHX	AR	3549	7/7	0.97	0.27	73,73,73,73	0
82	OHX	1	3549	7/7	0.97	0.27	80,80,80,80	0
83	MG	AS	213	1/1	0.97	0.41	47,47,47,47	0
82	OHX	AR	3555	7/7	0.97	0.26	80,80,80,80	0
82	OHX	1	3458	7/7	0.97	0.12	64,64,64,64	0
82	OHX	1	3482	7/7	0.97	0.10	105,105,105,105	0
83	MG	sR	2102	1/1	0.97	0.42	42,42,42,42	0
83	MG	AS	217	1/1	0.97	0.09	52,52,52,52	0
82	OHX	AR	3565	7/7	0.97	0.24	89,89,89,89	0
83	MG	1	3839	1/1	0.97	0.56	18,18,18,18	0
83	MG	AR	3997	1/1	0.97	0.15	22,22,22,22	0
82	OHX	sR	1978	7/7	0.97	0.31	81,81,81,81	0
82	OHX	1	3500	7/7	0.97	0.20	73,73,73,73	0
82	OHX	AR	3567	7/7	0.97	0.20	122,122,122,122	0
83	MG	1	3843	1/1	0.97	0.52	27,27,27,27	0
83	MG	AR	3739	1/1	0.97	0.16	45,45,45,45	0
82	OHX	1	3623	7/7	0.97	0.27	120,120,120,120	0
82	OHX	sR	1983	7/7	0.97	0.13	112,112,112,112	0
82	OHX	1	3501	7/7	0.97	0.09	105,105,105,105	0
83	MG	1	4072	1/1	0.97	0.13	32,32,32,32	0
83	MG	1	3848	1/1	0.97	0.44	22,22,22,22	0
83	MG	AT	220	1/1	0.97	0.59	37,37,37,37	0
83	MG	AR	4008	1/1	0.97	0.52	37,37,37,37	0
82	OHX	sR	1985	7/7	0.97	0.17	116,116,116,116	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	sR	1986	7/7	0.97	0.33	87,87,87,87	0
82	OHX	sR	1987	7/7	0.97	0.32	117,117,117,117	0
82	OHX	1	3694	7/7	0.97	0.34	81,81,81,81	0
82	OHX	1	3471	7/7	0.97	0.13	69,69,69,69	0
83	MG	1	3855	1/1	0.97	0.39	21,21,21,21	0
83	MG	1	3856	1/1	0.97	0.64	31,31,31,31	0
82	OHX	sR	1991	7/7	0.97	0.34	95,95,95,95	0
82	OHX	1	3560	7/7	0.97	0.15	102,102,102,102	0
82	OHX	AR	3582	7/7	0.97	0.26	95,95,95,95	0
82	OHX	1	3507	7/7	0.97	0.10	98,98,98,98	0
83	MG	1	3861	1/1	0.97	0.79	26,26,26,26	0
82	OHX	sR	1995	7/7	0.97	0.24	128,128,128,128	0
82	OHX	sR	1997	7/7	0.97	0.24	117,117,117,117	0
82	OHX	AR	3584	7/7	0.97	0.21	77,77,77,77	0
82	OHX	sR	1999	7/7	0.97	0.25	98,98,98,98	0
83	MG	AR	3764	1/1	0.97	0.34	31,31,31,31	0
82	OHX	1	3508	7/7	0.97	0.14	81,81,81,81	0
82	OHX	AR	3589	7/7	0.97	0.24	96,96,96,96	0
82	OHX	AR	3592	7/7	0.97	0.41	78,78,78,78	0
82	OHX	AR	3593	7/7	0.97	0.34	74,74,74,74	0
83	MG	sR	2142	1/1	0.97	0.20	65,65,65,65	0
82	OHX	1	3631	7/7	0.97	0.33	82,82,82,82	0
83	MG	1	3874	1/1	0.97	0.40	35,35,35,35	0
82	OHX	1	3563	7/7	0.97	0.21	99,99,99,99	0
82	OHX	AR	3596	7/7	0.97	0.27	81,81,81,81	0
82	OHX	AR	3597	7/7	0.97	0.25	86,86,86,86	0
82	OHX	AR	3736	7/7	0.97	0.31	53,53,53,53	0
83	MG	1	3879	1/1	0.97	0.58	24,24,24,24	0
82	OHX	AR	3598	7/7	0.97	0.35	98,98,98,98	0
82	OHX	AS	207	7/7	0.97	0.14	101,101,101,101	0
82	OHX	1	3565	7/7	0.97	0.20	103,103,103,103	0
83	MG	AR	3781	1/1	0.97	0.28	22,22,22,22	0
83	MG	1	3884	1/1	0.97	0.52	33,33,33,33	0
82	OHX	1	3571	7/7	0.97	0.19	103,103,103,103	0
82	OHX	1	3636	7/7	0.97	0.27	93,93,93,93	0
83	MG	1	3887	1/1	0.97	0.39	42,42,42,42	0
83	MG	sR	2161	1/1	0.97	0.17	53,53,53,53	0
83	MG	sR	2162	1/1	0.97	0.15	25,25,25,25	0
82	OHX	sR	2016	7/7	0.97	0.31	89,89,89,89	0
82	OHX	AT	208	7/7	0.97	0.26	85,85,85,85	0
83	MG	1	3890	1/1	0.97	0.56	27,27,27,27	0
83	MG	sR	2167	1/1	0.97	0.32	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	AT	210	7/7	0.97	0.26	85,85,85,85	0
83	MG	sR	2169	1/1	0.97	0.23	40,40,40,40	0
82	OHX	AT	212	7/7	0.97	0.26	93,93,93,93	0
83	MG	1	3894	1/1	0.97	0.39	19,19,19,19	0
83	MG	1	3895	1/1	0.97	0.59	38,38,38,38	0
82	OHX	AT	213	7/7	0.97	0.27	106,106,106,106	0
83	MG	AR	3796	1/1	0.97	0.43	24,24,24,24	0
83	MG	sR	2176	1/1	0.97	0.36	63,63,63,63	0
82	OHX	1	3572	7/7	0.97	0.24	91,91,91,91	0
82	OHX	AT	215	7/7	0.97	0.25	108,108,108,108	0
82	OHX	1	3638	7/7	0.97	0.16	116,116,116,116	0
83	MG	1	3901	1/1	0.97	0.14	22,22,22,22	0
82	OHX	1	3573	7/7	0.97	0.26	81,81,81,81	0
83	MG	1	4128	1/1	0.97	0.15	75,75,75,75	0
82	OHX	1	3641	7/7	0.97	0.25	92,92,92,92	0
82	OHX	1	3642	7/7	0.97	0.34	107,107,107,107	0
82	OHX	1	3577	7/7	0.97	0.20	81,81,81,81	0
83	MG	1	4132	1/1	0.97	0.72	27,27,27,27	0
82	OHX	1	3473	7/7	0.97	0.10	86,86,86,86	0
82	OHX	1	3582	7/7	0.97	0.24	86,86,86,86	0
82	OHX	CL	301	7/7	0.97	0.16	97,97,97,97	0
82	OHX	1	3585	7/7	0.97	0.20	103,103,103,103	0
83	MG	AR	4071	1/1	0.97	0.42	28,28,28,28	0
82	OHX	AR	3614	7/7	0.97	0.19	96,96,96,96	0
83	MG	AR	3813	1/1	0.97	0.10	64,64,64,64	0
83	MG	sR	2195	1/1	0.97	0.23	58,58,58,58	0
82	OHX	AR	3616	7/7	0.97	0.22	83,83,83,83	0
82	OHX	AR	3617	7/7	0.97	0.23	87,87,87,87	0
82	OHX	DQ	502	7/7	0.97	0.26	64,64,64,64	0
82	OHX	A	1807	7/7	0.97	0.13	83,83,83,83	0
83	MG	1	3917	1/1	0.97	0.48	22,22,22,22	0
83	MG	A	1943	1/1	0.97	1.25	72,72,72,72	0
82	OHX	A	1817	7/7	0.97	0.12	76,76,76,76	0
82	OHX	1	3647	7/7	0.97	0.18	93,93,93,93	0
83	MG	AR	4082	1/1	0.97	0.27	25,25,25,25	0
82	OHX	A	1821	7/7	0.97	0.12	95,95,95,95	0
82	OHX	1	3586	7/7	0.97	0.18	104,104,104,104	0
82	OHX	A	1833	7/7	0.97	0.21	90,90,90,90	0
82	OHX	AR	3620	7/7	0.97	0.24	86,86,86,86	0
83	MG	1	3925	1/1	0.97	0.44	26,26,26,26	0
82	OHX	A	1837	7/7	0.97	0.12	102,102,102,102	0
83	MG	1	3927	1/1	0.97	0.45	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	A	1843	7/7	0.97	0.23	83,83,83,83	0
83	MG	A	1955	1/1	0.97	1.56	71,71,71,71	0
82	OHX	A	1844	7/7	0.97	0.13	109,109,109,109	0
82	OHX	A	1845	7/7	0.97	0.14	110,110,110,110	0
83	MG	d3	203	1/1	0.97	0.25	40,40,40,40	0
82	OHX	1	3649	7/7	0.97	0.28	83,83,83,83	0
83	MG	AR	4095	1/1	0.97	0.46	37,37,37,37	0
82	OHX	A	1847	7/7	0.97	0.24	90,90,90,90	0
83	MG	AR	3835	1/1	0.97	0.52	28,28,28,28	0
82	OHX	A	1848	7/7	0.97	0.09	106,106,106,106	0
83	MG	AR	4099	1/1	0.97	0.13	45,45,45,45	0
82	OHX	Rb	401	7/7	0.97	0.26	127,127,127,127	0
82	OHX	1	3587	7/7	0.97	0.25	76,76,76,76	0
83	MG	AR	3839	1/1	0.97	0.36	24,24,24,24	0
83	MG	AR	4103	1/1	0.97	0.29	36,36,36,36	0
82	OHX	1	3651	7/7	0.97	0.27	109,109,109,109	0
83	MG	1	3938	1/1	0.97	0.28	36,36,36,36	0
83	MG	AR	4106	1/1	0.97	0.26	27,27,27,27	0
82	OHX	s8	301	7/7	0.97	0.37	127,127,127,127	0
82	OHX	AR	3733	7/7	0.98	0.25	76,76,76,76	0
82	OHX	1	3425	7/7	0.98	0.14	58,58,58,58	0
82	OHX	AR	3556	7/7	0.98	0.19	72,72,72,72	0
82	OHX	1	3558	7/7	0.98	0.20	74,74,74,74	0
82	OHX	AR	3558	7/7	0.98	0.17	78,78,78,78	0
82	OHX	sR	2012	7/7	0.98	0.19	106,106,106,106	0
82	OHX	AR	3738	7/7	0.98	0.29	71,71,71,71	0
82	OHX	AS	202	7/7	0.98	0.13	71,71,71,71	0
82	OHX	AS	203	7/7	0.98	0.16	72,72,72,72	0
82	OHX	AS	204	7/7	0.98	0.16	69,69,69,69	0
82	OHX	AS	205	7/7	0.98	0.09	79,79,79,79	0
83	MG	1	3963	1/1	0.98	0.29	30,30,30,30	0
82	OHX	AS	206	7/7	0.98	0.13	84,84,84,84	0
83	MG	DQ	503	1/1	0.98	0.09	34,34,34,34	0
82	OHX	AR	3559	7/7	0.98	0.23	78,78,78,78	0
82	OHX	AR	3560	7/7	0.98	0.18	100,100,100,100	0
82	OHX	1	3630	7/7	0.98	0.32	114,114,114,114	0
82	OHX	AR	3562	7/7	0.98	0.28	90,90,90,90	0
82	OHX	AT	204	7/7	0.98	0.15	78,78,78,78	0
82	OHX	AT	205	7/7	0.98	0.14	80,80,80,80	0
83	MG	v	303	1/1	0.98	0.32	27,27,27,27	0
82	OHX	AT	206	7/7	0.98	0.12	96,96,96,96	0
82	OHX	AT	207	7/7	0.98	0.15	91,91,91,91	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	AR	3563	7/7	0.98	0.11	110,110,110,110	0
82	OHX	AT	209	7/7	0.98	0.14	95,95,95,95	0
82	OHX	AR	3564	7/7	0.98	0.24	76,76,76,76	0
82	OHX	AT	211	7/7	0.98	0.14	108,108,108,108	0
82	OHX	1	3559	7/7	0.98	0.20	98,98,98,98	0
82	OHX	1	3506	7/7	0.98	0.19	73,73,73,73	0
82	OHX	1	3472	7/7	0.98	0.10	69,69,69,69	0
82	OHX	AR	3569	7/7	0.98	0.18	90,90,90,90	0
82	OHX	1	3634	7/7	0.98	0.30	93,93,93,93	0
82	OHX	CE	401	7/7	0.98	0.14	76,76,76,76	0
82	OHX	1	3445	7/7	0.98	0.09	71,71,71,71	0
82	OHX	AR	3572	7/7	0.98	0.24	105,105,105,105	0
82	OHX	1	3509	7/7	0.98	0.20	77,77,77,77	0
82	OHX	1	3564	7/7	0.98	0.24	82,82,82,82	0
82	OHX	AR	3575	7/7	0.98	0.31	88,88,88,88	0
82	OHX	AR	3576	7/7	0.98	0.28	83,83,83,83	0
82	OHX	AR	3577	7/7	0.98	0.20	86,86,86,86	0
83	MG	A	1963	1/1	0.98	0.46	48,48,48,48	0
82	OHX	AR	3578	7/7	0.98	0.28	87,87,87,87	0
82	OHX	AR	3579	7/7	0.98	0.34	94,94,94,94	0
82	OHX	1	3511	7/7	0.98	0.21	67,67,67,67	0
82	OHX	CQ	201	7/7	0.98	0.12	70,70,70,70	0
82	OHX	1	3639	7/7	0.98	0.22	88,88,88,88	0
82	OHX	CX	202	7/7	0.98	0.26	81,81,81,81	0
82	OHX	1	3567	7/7	0.98	0.27	80,80,80,80	0
83	MG	A	1971	1/1	0.98	0.70	61,61,61,61	0
83	MG	1	3997	1/1	0.98	0.15	56,56,56,56	0
82	OHX	A	1803	7/7	0.98	0.20	74,74,74,74	0
82	OHX	A	1806	7/7	0.98	0.14	78,78,78,78	0
82	OHX	1	3569	7/7	0.98	0.20	70,70,70,70	0
82	OHX	c1	201	7/7	0.98	0.34	101,101,101,101	0
82	OHX	A	1808	7/7	0.98	0.14	81,81,81,81	0
82	OHX	A	1809	7/7	0.98	0.23	94,94,94,94	0
82	OHX	A	1811	7/7	0.98	0.16	89,89,89,89	0
82	OHX	d4	201	7/7	0.98	0.26	116,116,116,116	0
82	OHX	A	1812	7/7	0.98	0.14	87,87,87,87	0
82	OHX	A	1813	7/7	0.98	0.15	83,83,83,83	0
82	OHX	A	1815	7/7	0.98	0.12	101,101,101,101	0
82	OHX	A	1816	7/7	0.98	0.13	83,83,83,83	0
82	OHX	AR	3585	7/7	0.98	0.30	78,78,78,78	0
82	OHX	AR	3586	7/7	0.98	0.17	81,81,81,81	0
82	OHX	A	1820	7/7	0.98	0.10	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3570	7/7	0.98	0.19	92,92,92,92	0
82	OHX	A	1822	7/7	0.98	0.12	77,77,77,77	0
83	MG	AR	4069	1/1	0.98	0.18	43,43,43,43	0
82	OHX	A	1824	7/7	0.98	0.10	91,91,91,91	0
83	MG	AR	3754	1/1	0.98	0.21	23,23,23,23	0
83	MG	AR	3755	1/1	0.98	0.54	17,17,17,17	0
83	MG	A	1994	1/1	0.98	0.77	86,86,86,86	0
82	OHX	A	1826	7/7	0.98	0.12	93,93,93,93	0
83	MG	1	4017	1/1	0.98	0.38	35,35,35,35	0
82	OHX	A	1827	7/7	0.98	0.08	96,96,96,96	0
82	OHX	A	1828	7/7	0.98	0.15	86,86,86,86	0
82	OHX	A	1829	7/7	0.98	0.16	82,82,82,82	0
82	OHX	A	1830	7/7	0.98	0.12	87,87,87,87	0
82	OHX	AR	3588	7/7	0.98	0.28	88,88,88,88	0
82	OHX	A	1832	7/7	0.98	0.18	98,98,98,98	0
82	OHX	1	3512	7/7	0.98	0.15	78,78,78,78	0
82	OHX	A	1834	7/7	0.98	0.12	111,111,111,111	0
83	MG	AR	3766	1/1	0.98	0.11	27,27,27,27	0
82	OHX	A	1835	7/7	0.98	0.18	107,107,107,107	0
82	OHX	AR	3590	7/7	0.98	0.19	94,94,94,94	0
82	OHX	1	3476	7/7	0.98	0.19	68,68,68,68	0
83	MG	1	3746	1/1	0.98	0.48	26,26,26,26	0
82	OHX	A	1838	7/7	0.98	0.20	78,78,78,78	0
83	MG	A	2011	1/1	0.98	0.77	72,72,72,72	0
82	OHX	A	1839	7/7	0.98	0.08	105,105,105,105	0
82	OHX	A	1840	7/7	0.98	0.22	99,99,99,99	0
82	OHX	A	1841	7/7	0.98	0.12	106,106,106,106	0
82	OHX	A	1842	7/7	0.98	0.22	88,88,88,88	0
82	OHX	1	3478	7/7	0.98	0.11	70,70,70,70	0
83	MG	1	4037	1/1	0.98	0.32	30,30,30,30	0
82	OHX	1	3575	7/7	0.98	0.26	85,85,85,85	0
82	OHX	1	3576	7/7	0.98	0.23	74,74,74,74	0
82	OHX	1	3517	7/7	0.98	0.18	63,63,63,63	0
82	OHX	1	3578	7/7	0.98	0.29	79,79,79,79	0
83	MG	AR	3783	1/1	0.98	0.34	34,34,34,34	0
82	OHX	3	202	7/7	0.98	0.19	76,76,76,76	0
82	OHX	1	3518	7/7	0.98	0.26	72,72,72,72	0
82	OHX	A	1850	7/7	0.98	0.19	95,95,95,95	0
83	MG	AR	3787	1/1	0.98	0.41	53,53,53,53	0
82	OHX	3	204	7/7	0.98	0.17	75,75,75,75	0
82	OHX	1	3580	7/7	0.98	0.18	95,95,95,95	0
82	OHX	1	3581	7/7	0.98	0.15	107,107,107,107	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3519	7/7	0.98	0.14	94,94,94,94	0
82	OHX	A	1856	7/7	0.98	0.21	103,103,103,103	0
82	OHX	AR	3604	7/7	0.98	0.28	97,97,97,97	0
82	OHX	1	3583	7/7	0.98	0.23	83,83,83,83	0
82	OHX	1	3584	7/7	0.98	0.15	102,102,102,102	0
82	OHX	A	1860	7/7	0.98	0.14	122,122,122,122	0
82	OHX	4	204	7/7	0.98	0.12	90,90,90,90	0
82	OHX	A	1862	7/7	0.98	0.26	91,91,91,91	0
82	OHX	AR	3608	7/7	0.98	0.15	96,96,96,96	0
82	OHX	4	206	7/7	0.98	0.27	78,78,78,78	0
83	MG	AR	4119	1/1	0.98	0.10	36,36,36,36	0
82	OHX	1	3520	7/7	0.98	0.13	81,81,81,81	0
82	OHX	1	3522	7/7	0.98	0.17	79,79,79,79	0
82	OHX	A	1867	7/7	0.98	0.20	82,82,82,82	0
82	OHX	1	3523	7/7	0.98	0.22	82,82,82,82	0
82	OHX	4	210	7/7	0.98	0.23	103,103,103,103	0
82	OHX	AR	3615	7/7	0.98	0.31	73,73,73,73	0
82	OHX	1	3588	7/7	0.98	0.22	110,110,110,110	0
82	OHX	A	1872	7/7	0.98	0.09	125,125,125,125	0
82	OHX	1	3447	7/7	0.98	0.11	65,65,65,65	0
82	OHX	1	3590	7/7	0.98	0.36	84,84,84,84	0
83	MG	AR	4130	1/1	0.98	0.08	26,26,26,26	0
82	OHX	1	3525	7/7	0.98	0.24	86,86,86,86	0
82	OHX	A	1876	7/7	0.98	0.29	89,89,89,89	0
82	OHX	k	401	7/7	0.98	0.20	87,87,87,87	0
82	OHX	A	1878	7/7	0.98	0.17	120,120,120,120	0
82	OHX	1	3448	7/7	0.98	0.13	67,67,67,67	0
82	OHX	1	3527	7/7	0.98	0.13	92,92,92,92	0
82	OHX	v	302	7/7	0.98	0.24	85,85,85,85	0
83	MG	AR	3819	1/1	0.98	0.47	34,34,34,34	0
83	MG	1	4076	1/1	0.98	0.15	32,32,32,32	0
83	MG	1	3790	1/1	0.98	0.31	48,48,48,48	0
82	OHX	1	3450	7/7	0.98	0.11	62,62,62,62	0
82	OHX	1	3451	7/7	0.98	0.10	75,75,75,75	0
82	OHX	1	3531	7/7	0.98	0.12	115,115,115,115	0
82	OHX	AR	3627	7/7	0.98	0.33	107,107,107,107	0
82	OHX	AE	201	7/7	0.98	0.19	91,91,91,91	0
82	OHX	A	1887	7/7	0.98	0.22	114,114,114,114	0
82	OHX	AR	3629	7/7	0.98	0.30	98,98,98,98	0
82	OHX	A	1889	7/7	0.98	0.29	130,130,130,130	0
83	MG	1	4087	1/1	0.98	0.35	24,24,24,24	0
82	OHX	A	1890	7/7	0.98	0.29	100,100,100,100	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3452	7/7	0.98	0.10	77,77,77,77	0
83	MG	AR	3833	1/1	0.98	0.40	23,23,23,23	0
82	OHX	A	1892	7/7	0.98	0.26	100,100,100,100	0
82	OHX	AK	102	7/7	0.98	0.08	71,71,71,71	0
82	OHX	1	3598	7/7	0.98	0.29	73,73,73,73	0
82	OHX	1	3416	7/7	0.98	0.14	56,56,56,56	0
82	OHX	AR	3634	7/7	0.98	0.31	91,91,91,91	0
82	OHX	AR	3431	7/7	0.98	0.10	58,58,58,58	0
82	OHX	AR	3433	7/7	0.98	0.14	53,53,53,53	0
82	OHX	AR	3441	7/7	0.98	0.11	65,65,65,65	0
82	OHX	AR	3442	7/7	0.98	0.10	63,63,63,63	0
83	MG	sR	2055	1/1	0.98	0.58	42,42,42,42	0
82	OHX	AR	3444	7/7	0.98	0.11	62,62,62,62	0
82	OHX	AR	3445	7/7	0.98	0.11	67,67,67,67	0
83	MG	AR	4166	1/1	0.98	0.10	60,60,60,60	0
83	MG	AR	3845	1/1	0.98	0.42	23,23,23,23	0
83	MG	1	3813	1/1	0.98	0.21	30,30,30,30	0
82	OHX	AR	3447	7/7	0.98	0.12	54,54,54,54	0
82	OHX	AR	3448	7/7	0.98	0.11	72,72,72,72	0
82	OHX	AR	3450	7/7	0.98	0.10	83,83,83,83	0
82	OHX	AR	3451	7/7	0.98	0.13	64,64,64,64	0
82	OHX	A	1907	7/7	0.98	0.22	88,88,88,88	0
82	OHX	AR	3645	7/7	0.98	0.30	90,90,90,90	0
83	MG	AR	3853	1/1	0.98	0.58	21,21,21,21	0
82	OHX	AR	3452	7/7	0.98	0.12	92,92,92,92	0
82	OHX	AR	3647	7/7	0.98	0.35	92,92,92,92	0
82	OHX	AR	3455	7/7	0.98	0.13	72,72,72,72	0
82	OHX	AR	3456	7/7	0.98	0.17	70,70,70,70	0
82	OHX	1	3487	7/7	0.98	0.16	68,68,68,68	0
82	OHX	AR	3459	7/7	0.98	0.11	69,69,69,69	0
82	OHX	1	3489	7/7	0.98	0.10	78,78,78,78	0
82	OHX	A	1916	7/7	0.98	0.19	130,130,130,130	0
82	OHX	AR	3461	7/7	0.98	0.11	57,57,57,57	0
82	OHX	AR	3654	7/7	0.98	0.27	83,83,83,83	0
83	MG	1	3830	1/1	0.98	0.49	37,37,37,37	0
83	MG	sR	2080	1/1	0.98	0.19	42,42,42,42	0
82	OHX	AR	3463	7/7	0.98	0.09	72,72,72,72	0
83	MG	AR	3866	1/1	0.98	0.52	27,27,27,27	0
82	OHX	AR	3656	7/7	0.98	0.32	104,104,104,104	0
82	OHX	AR	3464	7/7	0.98	0.11	72,72,72,72	0
82	OHX	1	3602	7/7	0.98	0.17	94,94,94,94	0
83	MG	AR	3870	1/1	0.98	0.60	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3537	7/7	0.98	0.24	78,78,78,78	0
83	MG	1	4126	1/1	0.98	0.31	21,21,21,21	0
83	MG	1	4127	1/1	0.98	0.14	51,51,51,51	0
82	OHX	AR	3660	7/7	0.98	0.26	81,81,81,81	0
82	OHX	AR	3469	7/7	0.98	0.12	72,72,72,72	0
82	OHX	AR	3470	7/7	0.98	0.09	74,74,74,74	0
82	OHX	1	3457	7/7	0.98	0.10	57,57,57,57	0
82	OHX	AR	3474	7/7	0.98	0.10	56,56,56,56	0
82	OHX	1	3539	7/7	0.98	0.21	87,87,87,87	0
82	OHX	1	3677	7/7	0.98	0.29	82,82,82,82	0
82	OHX	AR	3477	7/7	0.98	0.12	79,79,79,79	0
82	OHX	AR	3478	7/7	0.98	0.11	70,70,70,70	0
83	MG	1	4138	1/1	0.98	0.10	44,44,44,44	0
82	OHX	AR	3669	7/7	0.98	0.38	65,65,65,65	0
82	OHX	AR	3479	7/7	0.98	0.16	58,58,58,58	0
82	OHX	AR	3480	7/7	0.98	0.12	71,71,71,71	0
82	OHX	AR	3481	7/7	0.98	0.13	78,78,78,78	0
83	MG	1	3850	1/1	0.98	0.35	25,25,25,25	0
82	OHX	AR	3482	7/7	0.98	0.10	66,66,66,66	0
82	OHX	AR	3484	7/7	0.98	0.23	75,75,75,75	0
82	OHX	AR	3675	7/7	0.98	0.25	121,121,121,121	0
82	OHX	AR	3487	7/7	0.98	0.12	64,64,64,64	0
83	MG	1	4150	1/1	0.98	0.10	41,41,41,41	0
82	OHX	AR	3489	7/7	0.98	0.11	94,94,94,94	0
82	OHX	AR	3491	7/7	0.98	0.11	77,77,77,77	0
82	OHX	AR	3679	7/7	0.98	0.32	88,88,88,88	0
82	OHX	AR	3493	7/7	0.98	0.11	77,77,77,77	0
83	MG	AR	3899	1/1	0.98	0.53	26,26,26,26	0
83	MG	sR	2115	1/1	0.98	0.21	67,67,67,67	0
83	MG	AR	3900	1/1	0.98	0.27	21,21,21,21	0
83	MG	1	4155	1/1	0.98	0.12	42,42,42,42	0
82	OHX	O	201	7/7	0.98	0.18	125,125,125,125	0
82	OHX	AR	3494	7/7	0.98	0.22	71,71,71,71	0
83	MG	AR	4231	1/1	0.98	0.33	36,36,36,36	0
82	OHX	AR	3495	7/7	0.98	0.15	97,97,97,97	0
82	OHX	AR	3683	7/7	0.98	0.36	92,92,92,92	0
83	MG	1	3863	1/1	0.98	0.48	22,22,22,22	0
82	OHX	1	3491	7/7	0.98	0.17	56,56,56,56	0
83	MG	AR	3908	1/1	0.98	0.74	33,33,33,33	0
83	MG	1	3865	1/1	0.98	0.29	21,21,21,21	0
82	OHX	sR	1905	7/7	0.98	0.18	59,59,59,59	0
82	OHX	sR	1916	7/7	0.98	0.11	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	sR	1918	7/7	0.98	0.12	67,67,67,67	0
83	MG	AR	3913	1/1	0.98	0.44	26,26,26,26	0
82	OHX	AR	3497	7/7	0.98	0.17	69,69,69,69	0
82	OHX	sR	1921	7/7	0.98	0.12	95,95,95,95	0
83	MG	1	3871	1/1	0.98	0.17	37,37,37,37	0
83	MG	AR	3917	1/1	0.98	0.69	35,35,35,35	0
82	OHX	sR	1926	7/7	0.98	0.09	85,85,85,85	0
82	OHX	sR	1928	7/7	0.98	0.10	101,101,101,101	0
82	OHX	sR	1929	7/7	0.98	0.12	106,106,106,106	0
82	OHX	sR	1931	7/7	0.98	0.10	79,79,79,79	0
82	OHX	AR	3499	7/7	0.98	0.10	82,82,82,82	0
82	OHX	sR	1933	7/7	0.98	0.12	70,70,70,70	0
83	MG	AR	3925	1/1	0.98	0.52	22,22,22,22	0
83	MG	sR	2143	1/1	0.98	0.14	48,48,48,48	0
82	OHX	sR	1934	7/7	0.98	0.11	86,86,86,86	0
82	OHX	sR	1936	7/7	0.98	0.12	75,75,75,75	0
83	MG	1	4178	1/1	0.98	0.43	42,42,42,42	0
82	OHX	sR	1938	7/7	0.98	0.10	90,90,90,90	0
82	OHX	1	3680	7/7	0.98	0.33	98,98,98,98	0
82	OHX	AR	3502	7/7	0.98	0.09	83,83,83,83	0
82	OHX	sR	1941	7/7	0.98	0.12	81,81,81,81	0
83	MG	AR	4261	1/1	0.98	0.33	29,29,29,29	0
83	MG	1	4183	1/1	0.98	0.41	20,20,20,20	0
82	OHX	sR	1943	7/7	0.98	0.13	87,87,87,87	0
82	OHX	sR	1944	7/7	0.98	0.08	103,103,103,103	0
82	OHX	sR	1945	7/7	0.98	0.15	81,81,81,81	0
82	OHX	AR	3503	7/7	0.98	0.23	73,73,73,73	0
82	OHX	sR	1947	7/7	0.98	0.09	93,93,93,93	0
82	OHX	AR	3504	7/7	0.98	0.21	55,55,55,55	0
83	MG	sR	2160	1/1	0.98	0.27	42,42,42,42	0
83	MG	AR	3940	1/1	0.98	0.30	25,25,25,25	0
83	MG	1	3891	1/1	0.98	0.57	26,26,26,26	0
82	OHX	AR	3691	7/7	0.98	0.21	62,62,62,62	0
82	OHX	1	3681	7/7	0.98	0.31	96,96,96,96	0
83	MG	sR	2165	1/1	0.98	0.15	85,85,85,85	0
83	MG	AS	222	1/1	0.98	0.35	45,45,45,45	0
82	OHX	sR	1952	7/7	0.98	0.11	121,121,121,121	0
82	OHX	AR	3693	7/7	0.98	0.33	90,90,90,90	0
82	OHX	1	3607	7/7	0.98	0.24	94,94,94,94	0
82	OHX	sR	1956	7/7	0.98	0.07	135,135,135,135	0
82	OHX	AR	3509	7/7	0.98	0.10	101,101,101,101	0
82	OHX	sR	1959	7/7	0.98	0.17	92,92,92,92	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	AR	3512	7/7	0.98	0.11	85,85,85,85	0
82	OHX	AR	3513	7/7	0.98	0.18	77,77,77,77	0
82	OHX	AR	3514	7/7	0.98	0.18	81,81,81,81	0
83	MG	1	3904	1/1	0.98	0.57	33,33,33,33	0
82	OHX	sR	1963	7/7	0.98	0.23	83,83,83,83	0
82	OHX	sR	1964	7/7	0.98	0.16	97,97,97,97	0
83	MG	AR	3956	1/1	0.98	0.45	36,36,36,36	0
82	OHX	1	3492	7/7	0.98	0.11	86,86,86,86	0
82	OHX	AR	3516	7/7	0.98	0.15	70,70,70,70	0
83	MG	1	4208	1/1	0.98	0.39	39,39,39,39	0
82	OHX	sR	1967	7/7	0.98	0.22	98,98,98,98	0
82	OHX	AR	3518	7/7	0.98	0.16	80,80,80,80	0
82	OHX	sR	1970	7/7	0.98	0.25	90,90,90,90	0
82	OHX	1	3431	7/7	0.98	0.14	64,64,64,64	0
83	MG	1	3913	1/1	0.98	0.40	26,26,26,26	0
82	OHX	AR	3521	7/7	0.98	0.24	74,74,74,74	0
82	OHX	AR	3522	7/7	0.98	0.22	85,85,85,85	0
82	OHX	sR	1974	7/7	0.98	0.19	83,83,83,83	0
82	OHX	AR	3523	7/7	0.98	0.25	74,74,74,74	0
83	MG	sR	2193	1/1	0.98	0.54	37,37,37,37	0
82	OHX	AR	3524	7/7	0.98	0.12	84,84,84,84	0
82	OHX	1	3685	7/7	0.98	0.32	101,101,101,101	0
83	MG	1	4220	1/1	0.98	0.10	45,45,45,45	0
82	OHX	AR	3526	7/7	0.98	0.24	82,82,82,82	0
82	OHX	AR	3528	7/7	0.98	0.14	81,81,81,81	0
83	MG	1	3922	1/1	0.98	0.59	22,22,22,22	0
82	OHX	1	3543	7/7	0.98	0.17	98,98,98,98	0
82	OHX	1	3611	7/7	0.98	0.24	91,91,91,91	0
82	OHX	sR	1982	7/7	0.98	0.31	114,114,114,114	0
82	OHX	1	3544	7/7	0.98	0.20	97,97,97,97	0
82	OHX	AR	3533	7/7	0.98	0.19	81,81,81,81	0
82	OHX	1	3434	7/7	0.98	0.13	65,65,65,65	0
82	OHX	1	3463	7/7	0.98	0.11	83,83,83,83	0
83	MG	CL	303	1/1	0.98	0.56	26,26,26,26	0
82	OHX	1	3547	7/7	0.98	0.24	90,90,90,90	0
82	OHX	sR	1988	7/7	0.98	0.24	104,104,104,104	0
82	OHX	AR	3537	7/7	0.98	0.11	67,67,67,67	0
82	OHX	1	3498	7/7	0.98	0.17	76,76,76,76	0
82	OHX	1	3617	7/7	0.98	0.22	96,96,96,96	0
82	OHX	1	3467	7/7	0.98	0.07	84,84,84,84	0
82	OHX	1	3439	7/7	0.98	0.11	64,64,64,64	0
83	MG	1	3937	1/1	0.98	0.51	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3470	7/7	0.98	0.08	76,76,76,76	0
82	OHX	AR	3723	7/7	0.98	0.19	74,74,74,74	0
82	OHX	sR	1996	7/7	0.98	0.33	102,102,102,102	0
82	OHX	1	3502	7/7	0.98	0.14	74,74,74,74	0
82	OHX	1	3553	7/7	0.98	0.24	85,85,85,85	0
82	OHX	1	3624	7/7	0.98	0.25	82,82,82,82	0
82	OHX	1	3503	7/7	0.98	0.15	85,85,85,85	0
82	OHX	1	3555	7/7	0.98	0.23	87,87,87,87	0
82	OHX	1	3556	7/7	0.98	0.21	111,111,111,111	0
82	OHX	sR	2003	7/7	0.98	0.24	83,83,83,83	0
83	MG	CX	203	1/1	0.98	0.54	21,21,21,21	0
82	OHX	1	3703	7/7	0.98	0.41	98,98,98,98	0
82	OHX	AR	3552	7/7	0.98	0.23	78,78,78,78	0
83	MG	CY	201	1/1	0.98	0.17	69,69,69,69	0
82	OHX	AR	3553	7/7	0.98	0.11	104,104,104,104	0
82	OHX	sR	1907	7/7	0.99	0.14	59,59,59,59	0
82	OHX	sR	1908	7/7	0.99	0.15	60,60,60,60	0
82	OHX	sR	1909	7/7	0.99	0.13	72,72,72,72	0
82	OHX	sR	1910	7/7	0.99	0.13	52,52,52,52	0
82	OHX	sR	1911	7/7	0.99	0.14	65,65,65,65	0
82	OHX	sR	1912	7/7	0.99	0.11	62,62,62,62	0
83	MG	AS	228	1/1	0.99	0.29	44,44,44,44	0
82	OHX	sR	1913	7/7	0.99	0.11	64,64,64,64	0
82	OHX	sR	1914	7/7	0.99	0.11	80,80,80,80	0
82	OHX	sR	1915	7/7	0.99	0.13	64,64,64,64	0
82	OHX	AR	3425	7/7	0.99	0.14	55,55,55,55	0
83	MG	AR	3897	1/1	0.99	0.52	25,25,25,25	0
82	OHX	sR	1917	7/7	0.99	0.06	67,67,67,67	0
82	OHX	AR	3542	7/7	0.99	0.22	64,64,64,64	0
82	OHX	AR	3426	7/7	0.99	0.09	50,50,50,50	0
82	OHX	sR	1920	7/7	0.99	0.08	80,80,80,80	0
82	OHX	A	1814	7/7	0.99	0.11	76,76,76,76	0
82	OHX	sR	1922	7/7	0.99	0.17	66,66,66,66	0
83	MG	AR	4092	1/1	0.99	0.15	36,36,36,36	0
82	OHX	sR	1923	7/7	0.99	0.12	70,70,70,70	0
82	OHX	sR	1924	7/7	0.99	0.07	78,78,78,78	0
82	OHX	sR	1925	7/7	0.99	0.10	67,67,67,67	0
82	OHX	1	3424	7/7	0.99	0.14	63,63,63,63	0
82	OHX	sR	1927	7/7	0.99	0.20	67,67,67,67	0
82	OHX	AR	3429	7/7	0.99	0.09	57,57,57,57	0
82	OHX	AR	3430	7/7	0.99	0.08	55,55,55,55	0
82	OHX	sR	1930	7/7	0.99	0.13	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3494	7/7	0.99	0.13	73,73,73,73	0
82	OHX	A	1819	7/7	0.99	0.09	81,81,81,81	0
82	OHX	1	3453	7/7	0.99	0.07	61,61,61,61	0
82	OHX	AR	3434	7/7	0.99	0.14	72,72,72,72	0
82	OHX	sR	1935	7/7	0.99	0.15	71,71,71,71	0
82	OHX	AR	3550	7/7	0.99	0.17	91,91,91,91	0
82	OHX	sR	1937	7/7	0.99	0.12	81,81,81,81	0
83	MG	AR	3919	1/1	0.99	0.59	22,22,22,22	0
83	MG	1	3943	1/1	0.99	0.23	39,39,39,39	0
82	OHX	A	1823	7/7	0.99	0.07	83,83,83,83	0
82	OHX	AR	3435	7/7	0.99	0.10	56,56,56,56	0
82	OHX	A	1825	7/7	0.99	0.07	104,104,104,104	0
82	OHX	AR	3436	7/7	0.99	0.09	57,57,57,57	0
83	MG	1	4125	1/1	0.99	0.33	24,24,24,24	0
82	OHX	sR	1942	7/7	0.99	0.12	85,85,85,85	0
82	OHX	AR	3437	7/7	0.99	0.08	56,56,56,56	0
82	OHX	AR	3554	7/7	0.99	0.32	89,89,89,89	0
83	MG	sR	2072	1/1	0.99	0.34	61,61,61,61	0
82	OHX	AR	3438	7/7	0.99	0.10	53,53,53,53	0
82	OHX	AR	3439	7/7	0.99	0.12	66,66,66,66	0
82	OHX	AR	3440	7/7	0.99	0.09	70,70,70,70	0
82	OHX	sR	1948	7/7	0.99	0.14	80,80,80,80	0
82	OHX	1	3406	7/7	0.99	0.17	45,45,45,45	0
82	OHX	1	3497	7/7	0.99	0.10	45,45,45,45	0
83	MG	AR	3750	1/1	0.99	0.47	25,25,25,25	0
82	OHX	AR	3443	7/7	0.99	0.14	72,72,72,72	0
82	OHX	1	3455	7/7	0.99	0.09	68,68,68,68	0
83	MG	1	4137	1/1	0.99	0.10	70,70,70,70	0
82	OHX	sR	1953	7/7	0.99	0.12	91,91,91,91	0
82	OHX	1	3456	7/7	0.99	0.09	70,70,70,70	0
82	OHX	AR	3446	7/7	0.99	0.07	59,59,59,59	0
82	OHX	1	3427	7/7	0.99	0.12	59,59,59,59	0
82	OHX	sR	1957	7/7	0.99	0.11	89,89,89,89	0
82	OHX	1	3429	7/7	0.99	0.10	60,60,60,60	0
82	OHX	AR	3449	7/7	0.99	0.08	75,75,75,75	0
82	OHX	1	3459	7/7	0.99	0.10	60,60,60,60	0
82	OHX	AR	3568	7/7	0.99	0.23	82,82,82,82	0
82	OHX	1	3460	7/7	0.99	0.10	88,88,88,88	0
83	MG	1	4149	1/1	0.99	0.14	26,26,26,26	0
82	OHX	1	3504	7/7	0.99	0.22	83,83,83,83	0
82	OHX	AR	3453	7/7	0.99	0.07	80,80,80,80	0
82	OHX	AR	3454	7/7	0.99	0.11	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3461	7/7	0.99	0.10	68,68,68,68	0
83	MG	1	3800	1/1	0.99	0.23	25,25,25,25	0
82	OHX	1	3407	7/7	0.99	0.12	40,40,40,40	0
82	OHX	sR	1968	7/7	0.99	0.21	82,82,82,82	0
83	MG	AR	3772	1/1	0.99	0.30	23,23,23,23	0
82	OHX	1	3409	7/7	0.99	0.15	49,49,49,49	0
82	OHX	AR	3458	7/7	0.99	0.08	61,61,61,61	0
82	OHX	1	3464	7/7	0.99	0.08	62,62,62,62	0
82	OHX	A	1852	7/7	0.99	0.28	92,92,92,92	0
82	OHX	1	3465	7/7	0.99	0.08	66,66,66,66	0
82	OHX	1	3510	7/7	0.99	0.18	64,64,64,64	0
82	OHX	AR	3462	7/7	0.99	0.06	63,63,63,63	0
82	OHX	AR	3581	7/7	0.99	0.17	69,69,69,69	0
83	MG	AR	4156	1/1	0.99	0.12	50,50,50,50	0
82	OHX	1	3466	7/7	0.99	0.08	74,74,74,74	0
82	OHX	1	3432	7/7	0.99	0.10	61,61,61,61	0
82	OHX	AR	3465	7/7	0.99	0.14	60,60,60,60	0
82	OHX	AR	3466	7/7	0.99	0.11	74,74,74,74	0
82	OHX	1	3433	7/7	0.99	0.16	71,71,71,71	0
83	MG	1	4170	1/1	0.99	0.11	49,49,49,49	0
82	OHX	1	3514	7/7	0.99	0.10	57,57,57,57	0
82	OHX	1	3515	7/7	0.99	0.09	85,85,85,85	0
82	OHX	1	3411	7/7	0.99	0.12	49,49,49,49	0
82	OHX	AR	3471	7/7	0.99	0.10	78,78,78,78	0
82	OHX	AR	3591	7/7	0.99	0.20	83,83,83,83	0
82	OHX	AR	3472	7/7	0.99	0.09	66,66,66,66	0
82	OHX	1	3566	7/7	0.99	0.25	77,77,77,77	0
83	MG	sR	2124	1/1	0.99	0.20	42,42,42,42	0
82	OHX	1	3435	7/7	0.99	0.08	51,51,51,51	0
82	OHX	1	3568	7/7	0.99	0.10	115,115,115,115	0
82	OHX	1	3621	7/7	0.99	0.21	64,64,64,64	0
82	OHX	1	3436	7/7	0.99	0.08	60,60,60,60	0
83	MG	AR	4174	1/1	0.99	0.15	28,28,28,28	0
83	MG	AR	4175	1/1	0.99	0.09	49,49,49,49	0
82	OHX	1	3437	7/7	0.99	0.14	60,60,60,60	0
82	OHX	1	3474	7/7	0.99	0.07	78,78,78,78	0
83	MG	AR	3800	1/1	0.99	0.54	22,22,22,22	0
83	MG	1	4184	1/1	0.99	0.53	28,28,28,28	0
82	OHX	1	3678	7/7	0.99	0.17	94,94,94,94	0
82	OHX	1	3521	7/7	0.99	0.13	87,87,87,87	0
82	OHX	4	201	7/7	0.99	0.15	44,44,44,44	0
82	OHX	AR	3483	7/7	0.99	0.13	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	4	202	7/7	0.99	0.11	61,61,61,61	0
83	MG	AR	4186	1/1	0.99	0.61	23,23,23,23	0
82	OHX	AR	3485	7/7	0.99	0.15	69,69,69,69	0
82	OHX	AR	3486	7/7	0.99	0.12	69,69,69,69	0
82	OHX	4	203	7/7	0.99	0.12	71,71,71,71	0
82	OHX	AR	3488	7/7	0.99	0.09	72,72,72,72	0
82	OHX	1	3475	7/7	0.99	0.11	70,70,70,70	0
83	MG	AR	4192	1/1	0.99	0.16	37,37,37,37	0
82	OHX	4	205	7/7	0.99	0.20	94,94,94,94	0
82	OHX	AR	3492	7/7	0.99	0.15	66,66,66,66	0
82	OHX	AR	3612	7/7	0.99	0.19	63,63,63,63	0
83	MG	sR	2150	1/1	0.99	0.10	75,75,75,75	0
82	OHX	1	3574	7/7	0.99	0.18	100,100,100,100	0
82	OHX	1	3414	7/7	0.99	0.14	52,52,52,52	0
82	OHX	1	3477	7/7	0.99	0.08	82,82,82,82	0
83	MG	1	3845	1/1	0.99	0.15	26,26,26,26	0
82	OHX	1	3440	7/7	0.99	0.12	70,70,70,70	0
82	OHX	1	3441	7/7	0.99	0.12	66,66,66,66	0
82	OHX	AR	3498	7/7	0.99	0.06	95,95,95,95	0
82	OHX	AS	201	7/7	0.99	0.10	67,67,67,67	0
83	MG	AR	4204	1/1	0.99	0.17	49,49,49,49	0
82	OHX	1	3442	7/7	0.99	0.13	71,71,71,71	0
82	OHX	1	3528	7/7	0.99	0.08	102,102,102,102	0
82	OHX	AR	3501	7/7	0.99	0.14	65,65,65,65	0
82	OHX	1	3481	7/7	0.99	0.16	83,83,83,83	0
82	OHX	1	3443	7/7	0.99	0.11	54,54,54,54	0
82	OHX	1	3415	7/7	0.99	0.09	47,47,47,47	0
82	OHX	1	3484	7/7	0.99	0.08	65,65,65,65	0
82	OHX	AR	3506	7/7	0.99	0.15	70,70,70,70	0
82	OHX	AR	3507	7/7	0.99	0.15	78,78,78,78	0
82	OHX	AT	201	7/7	0.99	0.14	45,45,45,45	0
82	OHX	AT	202	7/7	0.99	0.09	57,57,57,57	0
83	MG	sR	2171	1/1	0.99	0.09	71,71,71,71	0
82	OHX	AT	203	7/7	0.99	0.12	84,84,84,84	0
82	OHX	1	3533	7/7	0.99	0.11	64,64,64,64	0
82	OHX	1	3404	7/7	0.99	0.20	45,45,45,45	0
82	OHX	AR	3510	7/7	0.99	0.07	49,49,49,49	0
82	OHX	AR	3511	7/7	0.99	0.15	69,69,69,69	0
83	MG	AR	4024	1/1	0.99	0.10	42,42,42,42	0
82	OHX	w	201	7/7	0.99	0.11	80,80,80,80	0
82	OHX	1	3446	7/7	0.99	0.09	64,64,64,64	0
82	OHX	1	3417	7/7	0.99	0.14	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	1	3488	7/7	0.99	0.14	69,69,69,69	0
82	OHX	2	201	7/7	0.99	0.12	53,53,53,53	0
82	OHX	AR	3517	7/7	0.99	0.16	76,76,76,76	0
82	OHX	AC	101	7/7	0.99	0.15	47,47,47,47	0
82	OHX	1	3418	7/7	0.99	0.10	45,45,45,45	0
82	OHX	AR	3520	7/7	0.99	0.07	96,96,96,96	0
82	OHX	1	3449	7/7	0.99	0.11	76,76,76,76	0
82	OHX	1	3419	7/7	0.99	0.11	55,55,55,55	0
82	OHX	AK	103	7/7	0.99	0.11	73,73,73,73	0
82	OHX	1	3422	7/7	0.99	0.14	64,64,64,64	0
82	OHX	AR	3401	7/7	0.99	0.20	37,37,37,37	0
82	OHX	AR	3404	7/7	0.99	0.15	40,40,40,40	0
82	OHX	CH	201	7/7	0.99	0.16	43,43,43,43	0
83	MG	AR	4041	1/1	0.99	0.17	69,69,69,69	0
82	OHX	AR	3527	7/7	0.99	0.10	88,88,88,88	0
83	MG	1	3883	1/1	0.99	0.34	22,22,22,22	0
82	OHX	AR	3405	7/7	0.99	0.16	41,41,41,41	0
82	OHX	AR	3406	7/7	0.99	0.14	45,45,45,45	0
82	OHX	AR	3407	7/7	0.99	0.18	44,44,44,44	0
82	OHX	AR	3531	7/7	0.99	0.15	61,61,61,61	0
82	OHX	CP	501	7/7	0.99	0.17	94,94,94,94	0
83	MG	4	223	1/1	0.99	0.28	30,30,30,30	0
82	OHX	AR	3411	7/7	0.99	0.18	52,52,52,52	0
82	OHX	AR	3412	7/7	0.99	0.11	47,47,47,47	0
82	OHX	CX	201	7/7	0.99	0.07	67,67,67,67	0
82	OHX	AR	3414	7/7	0.99	0.13	46,46,46,46	0
82	OHX	DD	101	7/7	0.99	0.14	50,50,50,50	0
82	OHX	DG	201	7/7	0.99	0.18	68,68,68,68	0
82	OHX	DH	201	7/7	0.99	0.11	82,82,82,82	0
82	OHX	AR	3415	7/7	0.99	0.13	50,50,50,50	0
83	MG	1	3897	1/1	0.99	0.61	26,26,26,26	0
82	OHX	A	1801	7/7	0.99	0.17	64,64,64,64	0
83	MG	A	2040	1/1	0.99	0.20	84,84,84,84	0
83	MG	AR	4257	1/1	0.99	0.70	32,32,32,32	0
82	OHX	A	1802	7/7	0.99	0.13	68,68,68,68	0
82	OHX	AR	3416	7/7	0.99	0.13	49,49,49,49	0
83	MG	A	2044	1/1	0.99	0.16	70,70,70,70	0
82	OHX	A	1804	7/7	0.99	0.12	70,70,70,70	0
82	OHX	A	1805	7/7	0.99	0.12	63,63,63,63	0
82	OHX	AR	3418	7/7	0.99	0.10	49,49,49,49	0
82	OHX	AR	3419	7/7	0.99	0.11	49,49,49,49	0
82	OHX	AR	3420	7/7	0.99	0.11	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	l	402	1/1	0.99	0.07	46,46,46,46	0
82	OHX	AR	3421	7/7	0.99	0.13	52,52,52,52	0
85	ZN	AN	500	1/1	0.99	0.12	40,40,40,40	0
85	ZN	AP	501	1/1	0.99	0.03	54,54,54,54	0
85	ZN	DO	201	1/1	0.99	0.13	29,29,29,29	0
85	ZN	DQ	501	1/1	0.99	0.03	51,51,51,51	0
85	ZN	DR	501	1/1	0.99	0.11	49,49,49,49	0
85	ZN	b	201	1/1	0.99	0.11	71,71,71,71	0
82	OHX	sR	1901	7/7	0.99	0.16	47,47,47,47	0
85	ZN	e	101	1/1	0.99	0.10	70,70,70,70	0
82	OHX	sR	1902	7/7	0.99	0.19	59,59,59,59	0
85	ZN	d6	201	1/1	0.99	0.12	44,44,44,44	0
82	OHX	sR	1903	7/7	0.99	0.13	50,50,50,50	0
85	ZN	d9	101	1/1	0.99	0.14	69,69,69,69	0
82	OHX	sR	1904	7/7	0.99	0.12	61,61,61,61	0
83	MG	AR	4073	1/1	0.99	0.22	52,52,52,52	0
82	OHX	A	1810	7/7	0.99	0.11	81,81,81,81	0
82	OHX	AR	3490	7/7	1.00	0.10	47,47,47,47	0
83	MG	AR	4153	1/1	1.00	0.09	44,44,44,44	0
83	MG	s1	302	1/1	1.00	0.12	63,63,63,63	0
82	OHX	AR	3432	7/7	1.00	0.09	48,48,48,48	0
82	OHX	1	3423	7/7	1.00	0.09	53,53,53,53	0
82	OHX	n	201	7/7	1.00	0.14	43,43,43,43	0
82	OHX	1	3413	7/7	1.00	0.10	51,51,51,51	0
82	OHX	v	301	7/7	1.00	0.12	43,43,43,43	0
82	OHX	AR	3408	7/7	1.00	0.14	45,45,45,45	0
82	OHX	AR	3409	7/7	1.00	0.15	44,44,44,44	0
82	OHX	AR	3410	7/7	1.00	0.12	35,35,35,35	0
82	OHX	1	3438	7/7	1.00	0.07	54,54,54,54	0
82	OHX	1	3402	7/7	1.00	0.14	40,40,40,40	0
82	OHX	AR	3413	7/7	1.00	0.10	43,43,43,43	0
82	OHX	1	3468	7/7	1.00	0.10	46,46,46,46	0
82	OHX	1	3426	7/7	1.00	0.09	53,53,53,53	0
83	MG	1	4085	1/1	1.00	0.28	45,45,45,45	0
82	OHX	1	3403	7/7	1.00	0.14	38,38,38,38	0
82	OHX	AR	3417	7/7	1.00	0.11	55,55,55,55	0
82	OHX	1	3428	7/7	1.00	0.06	55,55,55,55	0
82	OHX	1	3408	7/7	1.00	0.12	49,49,49,49	0
82	OHX	1	3401	7/7	1.00	0.15	33,33,33,33	0
82	OHX	1	3410	7/7	1.00	0.12	46,46,46,46	0
82	OHX	AR	3422	7/7	1.00	0.09	49,49,49,49	0
85	ZN	AK	101	1/1	1.00	0.11	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
82	OHX	AR	3423	7/7	1.00	0.13	48,48,48,48	0
82	OHX	AR	3424	7/7	1.00	0.11	52,52,52,52	0
85	ZN	AQ	501	1/1	1.00	0.08	43,43,43,43	0
85	ZN	DL	101	1/1	1.00	0.12	35,35,35,35	0
83	MG	1	4061	1/1	1.00	0.11	40,40,40,40	0
82	OHX	1	3405	7/7	1.00	0.13	39,39,39,39	0
83	MG	AR	4179	1/1	1.00	0.12	41,41,41,41	0
83	MG	1	4030	1/1	1.00	0.12	54,54,54,54	0
82	OHX	1	3420	7/7	1.00	0.12	53,53,53,53	0
82	OHX	AR	3427	7/7	1.00	0.09	47,47,47,47	0
82	OHX	1	3421	7/7	1.00	0.11	54,54,54,54	0
82	OHX	1	3412	7/7	1.00	0.09	46,46,46,46	0
82	OHX	AR	3402	7/7	1.00	0.15	33,33,33,33	0
83	MG	1	4103	1/1	1.00	0.09	47,47,47,47	0
83	MG	1	4139	1/1	1.00	0.12	44,44,44,44	0
82	OHX	AR	3403	7/7	1.00	0.15	34,34,34,34	0
82	OHX	sR	1906	7/7	1.00	0.11	56,56,56,56	0

6.5 Other polymers (i)

There are no such residues in this entry.