



wwPDB X-ray Structure Validation Summary Report

Dec 17, 2023 – 01:35 pm GMT


PDB ID : 4U4U
Title : Crystal structure of Lycorine bound to the yeast 80S ribosome
Authors : Garreau de Loubresse, N.; Prokhorova, I.; Yusupova, G.; Yusupov, M.
Deposited on : 2014-07-24
Resolution : 3.00 Å(reported)

This is a wwPDB X-ray Structure Validation Summary 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 : 1.8.4, CSD as541be (2020)
Xtrriage (Phenix) : 1.13
EDS : **FAILED**
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36

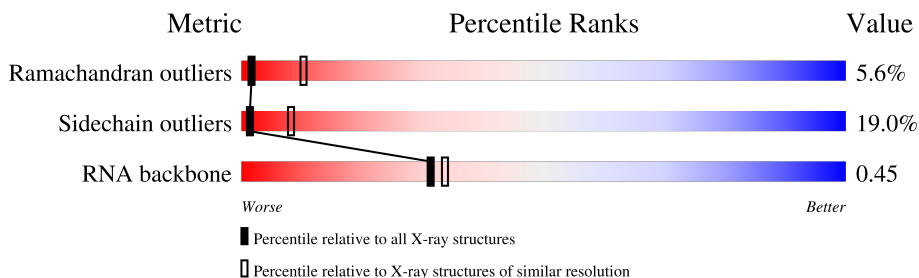
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.00 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Ramachandran outliers	138981	2333 (3.00-3.00)
Sidechain outliers	138945	2336 (3.00-3.00)
RNA backbone	3102	1173 (3.30-2.70)

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

Note EDS failed to run properly.

Mol	Chain	Length	Quality of chain
1	2	1800	66% 27% . .
1	6	1800	65% 28% 6%
2	S0	251	62% 19% . 18%
2	s0	251	61% 18% . 18%
3	S1	254	61% 21% . 16%
3	s1	254	70% 15% 15%
4	S2	253	69% 16% . 14%
4	s2	253	64% 21% . 14%









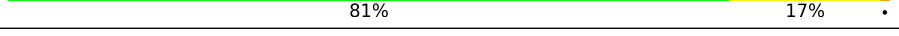

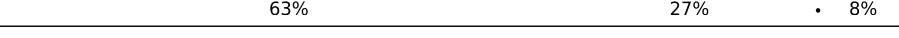
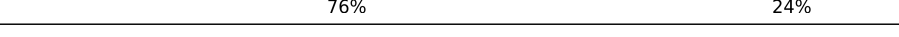

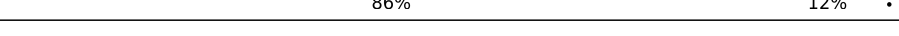


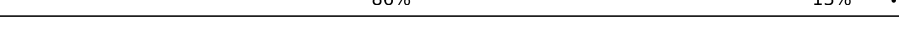

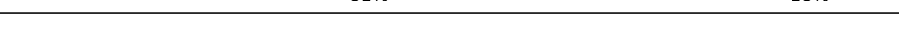






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Mol	Chain	Length	Quality of chain
5	S3	239	74% 18% 7%
5	s3	239	75% 16% 7%
6	S4	260	82% 16%
6	s4	260	80% 19%
7	S5	224	73% 17% 8%
7	s5	224	68% 22% 8%
8	S6	236	74% 21%
8	s6	236	74% 17% 8%
9	S7	189	75% 20%
9	s7	189	78% 17%
10	S8	200	80% 14% 6%
10	s8	200	80% 13% 6%
11	S9	196	72% 21% 6%
11	s9	196	76% 16% 6%
12	C0	105	71% 19% 9%
12	c0	105	70% 18% 9%
13	C1	155	79% 20%
13	c1	155	74% 19% 6%
14	C2	142	55% 30% 13%
14	c2	142	59% 25% 13%
15	C3	150	79% 19%
15	c3	150	78% 21%
16	C4	136	71% 18% 7%
16	c4	136	74% 18% 6%
17	C5	141	70% 16% 12%

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Mol	Chain	Length	Quality of chain
17	c5	141	 72% 20% . . .
18	C6	142	 78% 20% ..
18	c6	142	 77% 21% .
19	C7	136	 66% 18% . 12%
19	c7	136	 71% 13% . 14%
20	C8	145	 72% 24% .
20	c8	145	 77% 21% .
21	C9	143	 81% 19%
21	c9	143	 81% 17% .
22	D0	120	 68% 22% 11%
22	d0	120	 63% 27% . 8%
23	D1	87	 76% 24%
23	d1	87	 75% 24% .
24	D2	129	 86% 12% .
24	d2	129	 86% 13% .
25	D3	144	 81% 17% .
25	d3	144	 86% 13% .
26	D4	134	 81% 18% .
26	d4	134	 81% 18% .
27	D5	107	 40% 23% . 35%
27	d5	107	 50% 15% 36%
28	D6	97	 72% 20% 8%
28	d6	97	 80% 20%
29	D7	81	 86% 14%
29	d7	81	 80% 19% .

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Mol	Chain	Length	Quality of chain
30	D8	66	73% 21% 5%
30	d8	66	73% 21% 5%
31	D9	55	78% 16% 2%
31	d9	55	71% 25% 2%
32	E0	60	82% 17% 1%
33	E1	76	53% 38% 7%
33	e1	76	59% 34% 7%
34	SR	318	85% 14%
34	sR	318	88% 12%
35	SM	273	44% 13% 42%
36	1	3396	52% 34% 7% 7%
36	5	3396	49% 37% 7% 7%
37	3	121	67% 31% 1%
37	7	121	56% 37% 7%
38	4	158	52% 41% 7%
38	8	158	64% 31% 5%
39	L2	253	80% 18% 1%
39	l2	253	79% 19% 1%
40	L3	386	81% 18% 1%
40	l3	386	79% 20% 1%
41	L4	361	78% 21% 1%
41	l4	361	78% 20% 1%
42	L5	296	78% 20% 1%
42	l5	296	81% 17% 1%
43	L6	175	74% 14% 11%











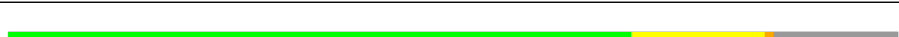


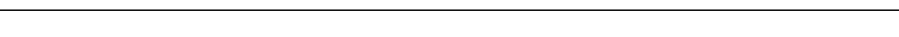
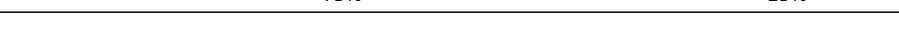
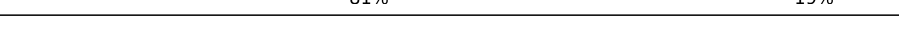



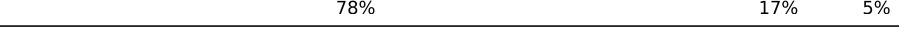





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Mol	Chain	Length	Quality of chain
43	l6	175	74% 15% 10%
44	L7	243	79% 10% 9%
44	l7	243	77% 13% 8%
45	L8	255	74% 17% 9%
45	l8	255	72% 17% 9%
46	L9	191	77% 23%
46	l9	191	81% 18%
47	M0	220	76% 18%
47	m0	220	74% 22%
48	M1	173	73% 20% 5%
48	m1	173	77% 18%
49	M3	198	80% 17%
49	m3	198	78% 18%
50	M4	137	80% 18%
50	m4	137	84% 15%
51	M5	203	78% 22%
51	m5	203	85% 14%
52	M6	198	83% 15%
52	m6	198	79% 19%
53	M7	183	79% 20%
53	m7	183	72% 13% 15%
54	M8	185	85% 14%
54	m8	185	79% 19%
55	M9	188	88% 12%
55	m9	188	82% 16%

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Mol	Chain	Length	Quality of chain
56	N0	172	 77% 20%
56	n0	172	 80% 19%
57	N1	159	 81% 17%
57	n1	159	 80% 19%
58	N2	120	 69% 13% 17%
58	n2	120	 68% 12% 18%
59	N3	136	 86% 14%
59	n3	136	 91% 8%
60	N4	155	 54% 9% 37%
60	n4	155	 71% 15% 13%
61	N5	141	 70% 15% 14%
61	n5	141	 66% 17% 15%
62	N6	126	 75% 25%
62	n6	126	 75% 25%
63	N7	135	 81% 19%
63	n7	135	 80% 16%
64	N8	148	 79% 18%
64	n8	148	 80% 18%
65	N9	58	 78% 17% 5%
65	n9	58	 79% 19%
66	O0	104	 80% 12% 7%
66	o0	104	 81% 13%
67	O1	112	 76% 19%
67	o1	112	 74% 22%
68	O2	129	 79% 18%

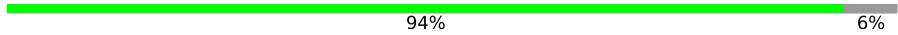

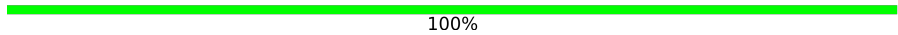
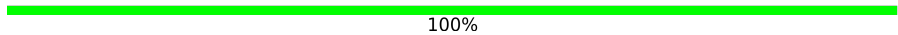
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Mol	Chain	Length	Quality of chain
68	o2	129	78% 18% ...
69	O3	106	89% 10%
69	o3	106	84% 16%
70	O4	119	76% 16% • 6%
70	o4	119	73% 20% • 6%
71	O5	119	79% 20% •
71	o5	119	80% 19% •
72	O6	99	81% 17% •
72	o6	99	72% 25% •
73	O7	87	84% 15% •
73	o7	87	84% 15% •
74	O8	77	77% 23%
74	o8	77	78% 21% •
75	O9	50	86% 14%
75	o9	50	82% 16% •
76	Q0	52	75% 23% •
76	q0	52	75% 23% •
77	Q1	25	68% 28% •
77	q1	25	64% 28% 8%
78	Q2	105	73% 24% •
78	q2	105	83% 16% •
79	Q3	91	81% 16% •
79	q3	91	90% 10%
80	e0	62	74% 24% •
81	sM	273	29% 8% • 62%

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Mol	Chain	Length	Quality of chain
82	m2	160	 94% 6%
83	p0	311	 37% 9% 54%
84	p1	47	 100%
85	p2	46	 100%

2 Entry composition [i](#)

There are 89 unique types of molecules in this entry. The entry contains 411211 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	2	1750	Total	C	N	O	P	0	0	0
			37283	16668	6591	12274	1750			
1	6	1795	Total	C	N	O	P	0	0	0
			38238	17095	6758	12590	1795			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	S0	206	Total	C	N	O	S	0	0	0
			1577	1014	278	283	2			
2	s0	206	Total	C	N	O	S	0	0	0
			1583	1017	281	283	2			

- Molecule 3 is a protein called 40S ribosomal protein S1-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	S1	214	Total	C	N	O	S	0	0	0
			1709	1084	310	311	4			
3	s1	216	Total	C	N	O	S	0	0	0
			1722	1091	312	315	4			

- Molecule 4 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	S2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			
4	s2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			

- Molecule 5 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	S3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			
5	s3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			

- Molecule 6 is a protein called 40S ribosomal protein S4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	S4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			
6	s4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			

- Molecule 7 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	S5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			
7	s5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			

- Molecule 8 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	S6	226	Total	C	N	O	S	0	0	0
			1799	1129	346	321	3			
8	s6	218	Total	C	N	O	S	0	0	0
			1755	1102	337	313	3			

- Molecule 9 is a protein called 40S ribosomal protein S7-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	S7	184	Total	C	N	O	0	0	0
			1481	951	265	265			
9	s7	186	Total	C	N	O	0	0	0
			1491	957	267	267			

- Molecule 10 is a protein called 40S ribosomal protein S8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	S8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

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

- Molecule 11 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	S9	185	1494	943	289	261	1	0	0	0
11	s9	185	1494	943	289	261	1	0	0	0

- Molecule 12 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	C0	96	773	500	126	145	2	0	0	0
12	c0	96	762	491	125	144	2	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C0	89	ALA	GLY	conflict	UNP Q08745
c0	89	ALA	GLY	conflict	UNP Q08745

- Molecule 13 is a protein called 40S ribosomal protein S11-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	C1	155	1214	775	230	206	3	0	0	0
13	c1	146	1168	747	221	197	3	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C1	147	ALA	GLY	conflict	UNP P0CX47
c1	147	ALA	GLY	conflict	UNP P0CX47

- Molecule 14 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	C2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			
14	c2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C2	104	ALA	GLY	conflict	UNP P48589
C2	110	ALA	GLY	conflict	UNP P48589
c2	104	ALA	GLY	conflict	UNP P48589
c2	110	ALA	GLY	conflict	UNP P48589

- Molecule 15 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	C3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			
15	c3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			

- Molecule 16 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	C4	127	Total	C	N	O	S	0	0	0
			891	545	182	163	1			
16	c4	128	Total	C	N	O	S	0	0	0
			949	582	188	176	3			

- Molecule 17 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	C5	124	Total	C	N	O	S	0	0	0
			977	622	182	166	7			
17	c5	135	Total	C	N	O	S	0	0	0
			1039	658	196	178	7			

- Molecule 18 is a protein called 40S ribosomal protein S16-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	C6	141	Total	C	N	O	0	0	0
			1105	708	203	194			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	c6	142	Total	C	N	O	0	0	0
			1111	711	204	196			

- Molecule 19 is a protein called 40S ribosomal protein S17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	C7	120	Total	C	N	O	S	0	0	0
			926	577	177	170	2			
19	c7	117	Total	C	N	O	S	0	0	0
			906	563	174	167	2			

- Molecule 20 is a protein called 40S ribosomal protein S18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	C8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			
20	c8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			

- Molecule 21 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	C9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			
21	c9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			

- Molecule 22 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	D0	107	Total	C	N	O	S	0	0	0
			855	539	156	159	1			
22	d0	110	Total	C	N	O	S	0	0	0
			882	554	161	166	1			

- Molecule 23 is a protein called 40S ribosomal protein S21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	D1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			
23	d1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			

- Molecule 24 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
24	D2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			
24	d2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			

- Molecule 25 is a protein called 40S ribosomal protein S23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
25	D3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			
25	d3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			

- Molecule 26 is a protein called 40S ribosomal protein S24-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
26	D4	134	Total	C	N	O	0	0	0
			1073	676	208	189			
26	d4	134	Total	C	N	O	0	0	0
			1073	676	208	189			

- Molecule 27 is a protein called 40S ribosomal protein S25-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
27	D5	70	Total	C	N	O	0	0	0
			563	360	104	99			
27	d5	69	Total	C	N	O	0	0	0
			558	357	103	98			

- Molecule 28 is a protein called 40S ribosomal protein S26-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
28	D6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			
28	d6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

- Molecule 29 is a protein called 40S ribosomal protein S27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	D7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			
29	d7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			

- Molecule 30 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	D8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			
30	d8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			

- Molecule 31 is a protein called 40S ribosomal protein S29-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	D9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			
31	d9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			

- Molecule 32 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	E0	60	Total	C	N	O	S	0	0	0
			475	299	98	77	1			

- Molecule 33 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	E1	71	Total	C	N	O	S	0	0	0
			566	362	106	94	4			
33	e1	76	Total	C	N	O	S	0	0	0
			608	388	117	99	4			

- Molecule 34 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	SR	318	Total	C	N	O	S	0	0	0
			2441	1544	419	470	8			
34	sR	318	Total	C	N	O	S	0	0	0
			2442	1544	418	472	8			

- Molecule 35 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
35	SM	159	1104	652	221	231	0	0	0

- Molecule 36 is a RNA chain called 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
36	1	3149	67355	30086	12142	21978	3149	0	0	0
36	5	3150	67376	30095	12145	21987	3149	0	0	0

- Molecule 37 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
37	3	121	2579	1152	461	845	121	0	0	0
37	7	121	2579	1152	461	845	121	0	0	0

- Molecule 38 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
38	4	158	3353	1500	586	1109	158	0	0	0
38	8	158	3353	1500	586	1109	158	0	0	0

- Molecule 39 is a protein called 60S ribosomal protein L2-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
39	L2	252	1914	1191	388	334	1	0	0	0
39	l2	252	1912	1190	388	333	1	0	0	0

- Molecule 40 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
40	L3	386	3075	1950	584	533	8	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
40	l3	386	Total 3075	C 1950	N 584	O 533	S 8	0	0	0

- Molecule 41 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
41	L4	361	Total 2748	C 1729	N 522	O 494	S 3	0	0	0
41	l4	361	Total 2748	C 1729	N 522	O 494	S 3	0	0	0

- Molecule 42 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	L5	296	Total 2375	C 1501	N 414	O 458	S 2	0	0	0
42	l5	294	Total 2359	C 1489	N 412	O 456	S 2	0	0	0

- Molecule 43 is a protein called 60S ribosomal protein L6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
43	L6	156	Total 1239	C 800	N 222	O 216	S 1	0	0	0
43	l6	157	Total 1248	C 806	N 224	O 217	S 1	0	0	0

- Molecule 44 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
44	L7	222	Total 1784	C 1151	N 324	O 308	S 1	0	0	0
44	l7	223	Total 1791	C 1155	N 325	O 310	S 1	0	0	0

- Molecule 45 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
45	L8	233	Total 1804	C 1151	N 323	O 327	S 3	0	0	0
45	l8	231	Total 1763	C 1130	N 316	O 314	S 3	0	0	0

- Molecule 46 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	L9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			
46	l9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			

- Molecule 47 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	M0	211	Total	C	N	O	S	0	0	0
			1705	1083	322	294	6			
47	m0	213	Total	C	N	O	S	0	0	0
			1722	1094	325	297	6			

- Molecule 48 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	M1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			
48	m1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			

- Molecule 49 is a protein called 60S ribosomal protein L13-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	M3	193	Total	C	N	O	0	0	0
			1543	962	315	266			
49	m3	194	Total	C	N	O	0	0	0
			1548	965	316	267			

- Molecule 50 is a protein called 60S ribosomal protein L14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	M4	136	Total	C	N	O	S	0	0	0
			1053	675	199	177	2			
50	m4	137	Total	C	N	O	S	0	0	0
			1059	678	200	179	2			

- Molecule 51 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	M5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			
51	m5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			

- Molecule 52 is a protein called 60S ribosomal protein L16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	M6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			
52	m6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			

- Molecule 53 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
53	M7	183	Total	C	N	O	0	0	0
			1420	882	281	257			
53	m7	155	Total	C	N	O	0	0	0
			1227	764	238	225			

- Molecule 54 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	M8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			
54	m8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			

- Molecule 55 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
55	M9	188	Total	C	N	O	0	0	0
			1521	935	326	260			
55	m9	188	Total	C	N	O	0	0	0
			1521	935	326	260			

- Molecule 56 is a protein called 60S ribosomal protein L20-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	N0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
56	n0	172	1445	930	267	244	4	0	0	0

- Molecule 57 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
57	N1	159	1276	805	246	221	4	0	0	0
57	n1	159	1276	805	246	221	4	0	0	0

- Molecule 58 is a protein called 60S ribosomal protein L22-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				
58	N2	100	796	516	131	149		0	0	0
58	n2	98	778	505	127	146		0	0	0

- Molecule 59 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
59	N3	136	1003	628	189	179	7	0	0	0
59	n3	136	1003	628	189	179	7	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
60	N4	98	699	443	137	118	1	0	0	0
60	n4	135	1038	651	206	180	1	0	0	0

- Molecule 61 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
61	N5	121	964	620	169	173	2	0	0	0
61	n5	120	959	617	168	172	2	0	0	0

- Molecule 62 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
62	N6	126	993	625	192	176	0	0	0
62	n6	126	993	625	192	176	0	0	0

- Molecule 63 is a protein called 60S ribosomal protein L27-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
63	N7	135	1092	710	202	180	0	0	0
63	n7	135	1092	710	202	180	0	0	0

- Molecule 64 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
64	N8	148	1173	749	231	190	3	0	0	0
64	n8	148	1173	749	231	190	3	0	0	0

- Molecule 65 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
65	N9	58	462	289	100	73	0	0	0
65	n9	58	462	289	100	73	0	0	0

- Molecule 66 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
66	O0	97	743	479	124	139	1	0	0	0
66	o0	100	767	492	128	146	1	0	0	0

- Molecule 67 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	O1	109	Total	C	N	O	S	0	0	0
			876	556	167	152	1			
67	o1	109	Total	C	N	O	S	0	0	0
			883	559	167	156	1			

- Molecule 68 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	O2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			
68	o2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

- Molecule 69 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	O3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			
69	o3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			

- Molecule 70 is a protein called 60S ribosomal protein L34-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	O4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			
70	o4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			

- Molecule 71 is a protein called 60S ribosomal protein L35-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	O5	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			
71	o5	119	Total	C	N	O	S	0	0	0
			965	612	185	167	1			

- Molecule 72 is a protein called 60S ribosomal protein L36-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	O6	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
72	o6	99	770	481	156	131	2	0	0	0

- Molecule 73 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
73	O7	87	681	414	148	114	5	0	0	0
73	o7	87	681	414	148	114	5	0	0	0

- Molecule 74 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
			Total	C	N	O				
74	O8	77	612	391	115	106		0	0	0
74	o8	77	608	388	114	106		0	0	0

- Molecule 75 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
75	O9	50	436	272	97	65	2	0	0	0
75	o9	50	436	272	97	65	2	0	0	0

- Molecule 76 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
76	Q0	52	417	259	86	67	5	0	0	0
76	q0	52	417	259	86	67	5	0	0	0

- Molecule 77 is a protein called 60S ribosomal protein L41-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
77	Q1	25	233	142	63	27	1	0	0	0
77	q1	25	233	142	63	27	1	0	0	0

- Molecule 78 is a protein called 60S ribosomal protein L42-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
78	Q2	105	Total 847	C 534	N 170	O 138	S 5	0	0	0
78	q2	105	Total 847	C 534	N 170	O 138	S 5	0	0	0

- Molecule 79 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
79	Q3	91	Total 694	C 429	N 138	O 121	S 6	0	0	0
79	q3	91	Total 694	C 429	N 138	O 121	S 6	0	0	0

- Molecule 80 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
80	e0	62	Total 491	C 309	N 101	O 80	S 1	0	0	0

- Molecule 81 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
81	sM	104	Total 681	C 404	N 140	O 137	0	0	0

- Molecule 82 is a protein called unknown protein chain m2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
82	m2	150	Total 750	C 450	N 150	O 150	0	0	0

- Molecule 83 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
83	p0	143	Total 1077	C 687	N 192	O 195	S 3	0	0	0

- Molecule 84 is a protein called unknown protein chain p1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
84	p1	47	Total	C	N	O	0	0	0
			235	141	47	47			

- Molecule 85 is a protein called unknown protein chain p2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
85	p2	46	Total	C	N	O	0	0	0
			230	138	46	46			

- Molecule 86 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	2	123	Total	Mg	0	0
			123	123		
86	S2	1	Total	Mg	0	0
			1	1		
86	S8	1	Total	Mg	0	0
			1	1		
86	D0	1	Total	Mg	0	0
			1	1		
86	D3	1	Total	Mg	0	0
			1	1		
86	D4	1	Total	Mg	0	0
			1	1		
86	SM	1	Total	Mg	0	0
			1	1		
86	1	477	Total	Mg	0	0
			477	477		
86	3	14	Total	Mg	0	0
			14	14		
86	4	21	Total	Mg	0	0
			21	21		
86	L2	1	Total	Mg	0	0
			1	1		
86	L3	2	Total	Mg	0	0
			2	2		
86	L4	2	Total	Mg	0	0
			2	2		
86	L5	2	Total	Mg	0	0
			2	2		
86	L7	2	Total	Mg	0	0
			2	2		
86	L8	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
86	M0	2	Total Mg 2 2	0	0
86	M1	1	Total Mg 1 1	0	0
86	M3	3	Total Mg 3 3	0	0
86	M5	1	Total Mg 1 1	0	0
86	M6	1	Total Mg 1 1	0	0
86	M7	6	Total Mg 6 6	0	0
86	M8	1	Total Mg 1 1	0	0
86	M9	1	Total Mg 1 1	0	0
86	N0	1	Total Mg 1 1	0	0
86	N3	3	Total Mg 3 3	0	0
86	N5	1	Total Mg 1 1	0	0
86	N8	3	Total Mg 3 3	0	0
86	O4	1	Total Mg 1 1	0	0
86	O7	1	Total Mg 1 1	0	0
86	O8	1	Total Mg 1 1	0	0
86	Q2	1	Total Mg 1 1	0	0
86	6	149	Total Mg 149 149	0	0
86	s1	1	Total Mg 1 1	0	0
86	s4	1	Total Mg 1 1	0	0
86	s8	2	Total Mg 2 2	0	0
86	c1	1	Total Mg 1 1	0	0

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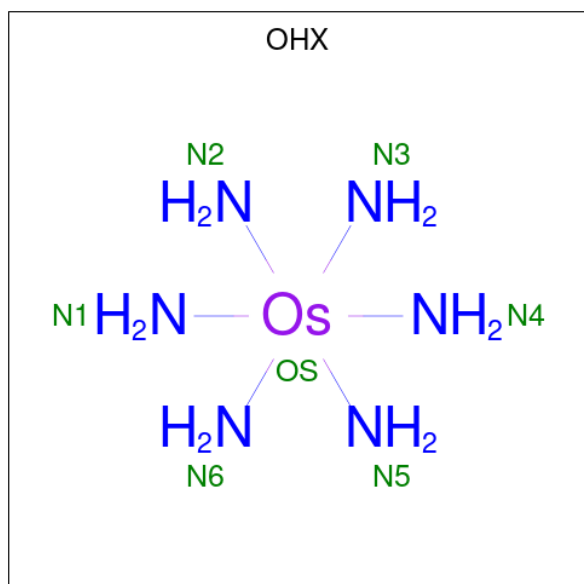
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	c7	1	Total 1	Mg 1	0	0
86	d3	2	Total 2	Mg 2	0	0
86	d4	1	Total 1	Mg 1	0	0
86	sM	2	Total 2	Mg 2	0	0
86	5	506	Total 506	Mg 506	0	0
86	7	16	Total 16	Mg 16	0	0
86	8	14	Total 14	Mg 14	0	0
86	l2	2	Total 2	Mg 2	0	0
86	l3	2	Total 2	Mg 2	0	0
86	l4	1	Total 1	Mg 1	0	0
86	l5	2	Total 2	Mg 2	0	0
86	l7	2	Total 2	Mg 2	0	0
86	l9	1	Total 1	Mg 1	0	0
86	m1	1	Total 1	Mg 1	0	0
86	m5	3	Total 3	Mg 3	0	0
86	m6	1	Total 1	Mg 1	0	0
86	m7	5	Total 5	Mg 5	0	0
86	n0	1	Total 1	Mg 1	0	0
86	n3	2	Total 2	Mg 2	0	0
86	n6	1	Total 1	Mg 1	0	0
86	n8	5	Total 5	Mg 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
86	o1	2	Total Mg 2 2	0	0
86	o3	2	Total Mg 2 2	0	0
86	o4	1	Total Mg 1 1	0	0
86	q0	1	Total Mg 1 1	0	0
86	q1	1	Total Mg 1 1	0	0
86	q3	1	Total Mg 1 1	0	0

- Molecule 87 is osmium (III) hexammine (three-letter code: OHX) (formula: $H_{12}N_6Os$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
87	2	1	Total N Os 7 6 1	0	0
87	2	1	Total N Os 7 6 1	0	0
87	2	1	Total N Os 7 6 1	0	0
87	2	1	Total N Os 7 6 1	0	0
87	2	1	Total N Os 7 6 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
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87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
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87	2	1	7	6	1	0	0
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87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
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87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
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87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
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87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
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87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	2	1	7	6	1	0	0
87	S8	1	7	6	1	0	0
87	C3	1	7	6	1	0	0
87	C5	1	7	6	1	0	0
87	C8	1	7	6	1	0	0
87	D3	1	7	6	1	0	0
87	D9	1	7	6	1	0	0
87	SR	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
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87	1	1	Total	N	Os		
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87	1	1	Total	N	Os		
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87	1	1	Total	N	Os		
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87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	Total	N	Os		
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
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87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
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87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0
87	1	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
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87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	1	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	3	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	4	1	7	6	1	0	0
87	L3	1	7	6	1	0	0
87	L3	1	7	6	1	0	0
87	L3	1	7	6	1	0	0
87	L4	1	7	6	1	0	0
87	M0	1	7	6	1	0	0
87	M5	1	7	6	1	0	0
87	M6	1	7	6	1	0	0
87	M7	1	7	6	1	0	0
87	M7	1	7	6	1	0	0
87	M8	1	7	6	1	0	0
87	M9	1	7	6	1	0	0
87	N1	1	7	6	1	0	0
87	N9	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	O2	1	7	6	1	0	0
87	O3	1	7	6	1	0	0
87	O7	1	7	6	1	0	0
87	O7	1	7	6	1	0	0
87	O9	1	7	6	1	0	0
87	Q2	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0
87	6	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
87	s1	1	7	6	1	0	0
87	s1	1	7	6	1	0	0
87	s4	1	7	6	1	0	0
87	s8	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	s9	1	7	6	1	0	0
87	c1	1	7	6	1	0	0
87	c3	1	7	6	1	0	0
87	c5	1	7	6	1	0	0
87	c8	1	7	6	1	0	0
87	d4	1	7	6	1	0	0
87	d9	1	7	6	1	0	0
87	sR	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
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87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0
87	5	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	5	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	7	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	13	1	7	6	1	0	0
87	13	1	7	6	1	0	0
87	14	1	7	6	1	0	0
87	14	1	7	6	1	0	0
87	15	1	7	6	1	0	0
87	15	1	7	6	1	0	0
87	15	1	7	6	1	0	0
87	19	1	7	6	1	0	0
87	m0	1	7	6	1	0	0
87	m0	1	7	6	1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
87	m1	1	7	6	1	0	0
87	m4	1	7	6	1	0	0
87	m5	1	7	6	1	0	0
87	m6	1	7	6	1	0	0
87	m7	1	7	6	1	0	0
87	m8	1	7	6	1	0	0
87	m9	1	7	6	1	0	0
87	n3	1	7	6	1	0	0
87	n6	1	7	6	1	0	0
87	n9	1	7	6	1	0	0
87	o2	1	7	6	1	0	0
87	o3	1	7	6	1	0	0
87	o7	1	7	6	1	0	0
87	o7	1	7	6	1	0	0
87	q2	1	7	6	1	0	0

- Molecule 88 is ZINC ION (three-letter code: ZN) (formula: Zn).

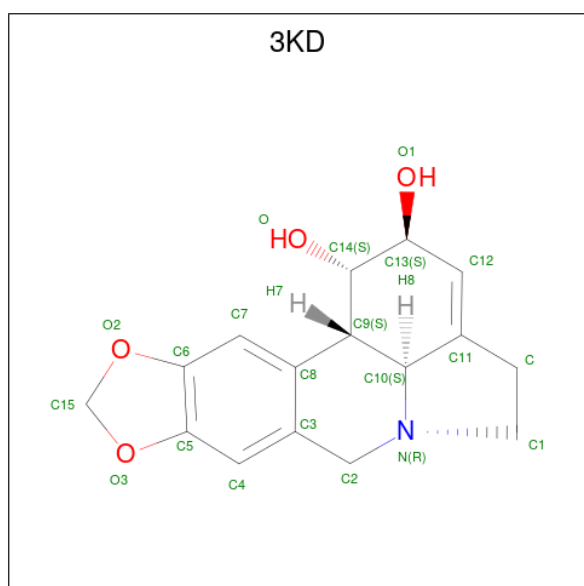
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Zn		
88	D6	1	1	1	0	0
88	D7	1	1	1	0	0
88	D9	1	1	1	0	0
88	E1	1	1	1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
88	O7	1	Total 1	Zn 1	0	0
88	Q0	1	Total 1	Zn 1	0	0
88	Q2	1	Total 1	Zn 1	0	0
88	Q3	1	Total 1	Zn 1	0	0
88	d6	1	Total 1	Zn 1	0	0
88	d7	1	Total 1	Zn 1	0	0
88	d9	1	Total 1	Zn 1	0	0
88	e1	1	Total 1	Zn 1	0	0
88	o7	1	Total 1	Zn 1	0	0
88	q0	1	Total 1	Zn 1	0	0
88	q2	1	Total 1	Zn 1	0	0
88	q3	1	Total 1	Zn 1	0	0

- Molecule 89 is (1S,2S,12bS,12cS)-2,4,5,7,12b,12c-hexahydro-1H-[1,3]dioxolo[4,5-j]pyrrolo[3,2,1-de]phenanthridine-1,2-diol (three-letter code: 3KD) (formula: C₁₆H₁₇NO₄).



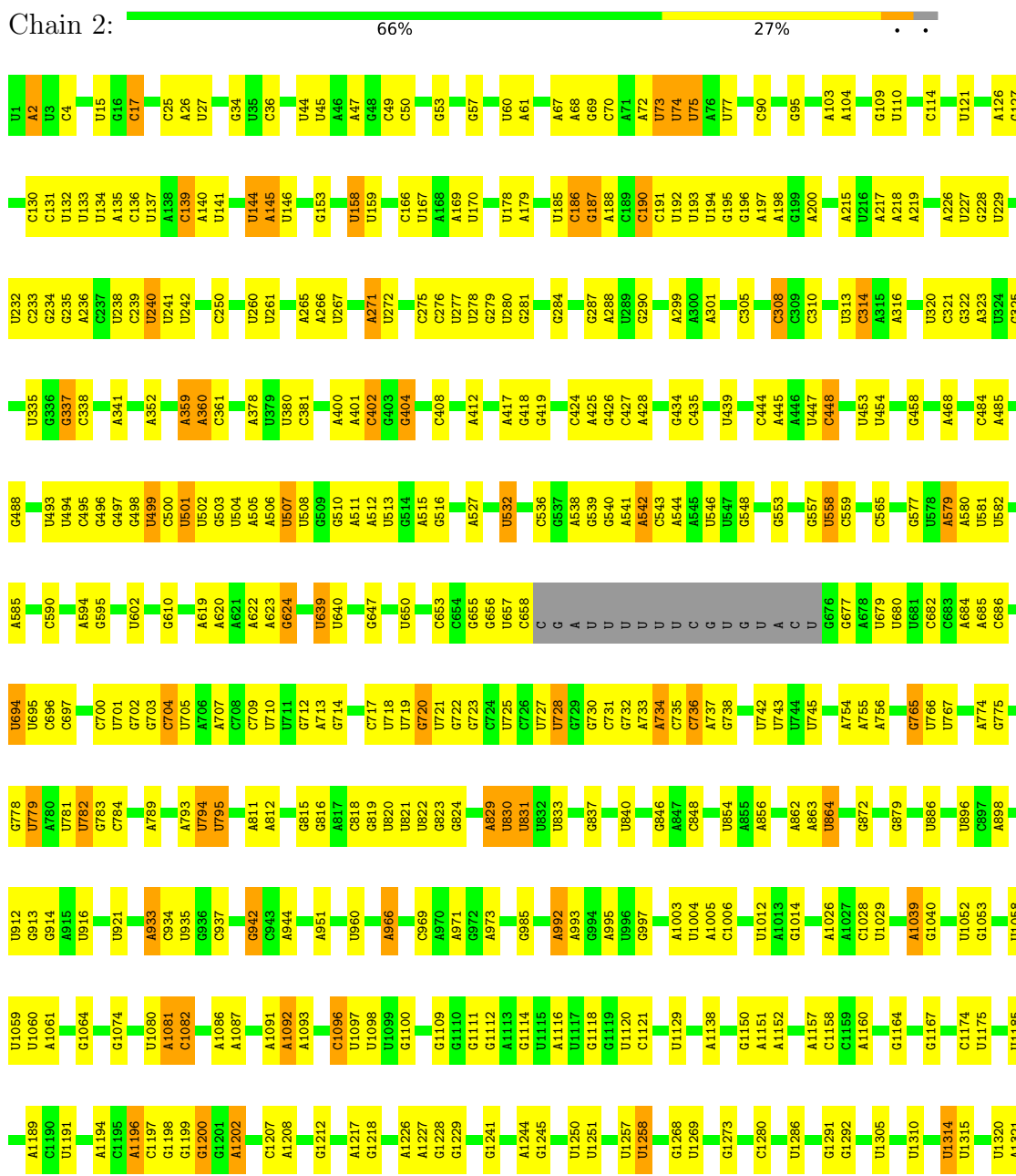
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
89	1	1	21	16	1	4	0	0
89	5	1	21	16	1	4	0	0

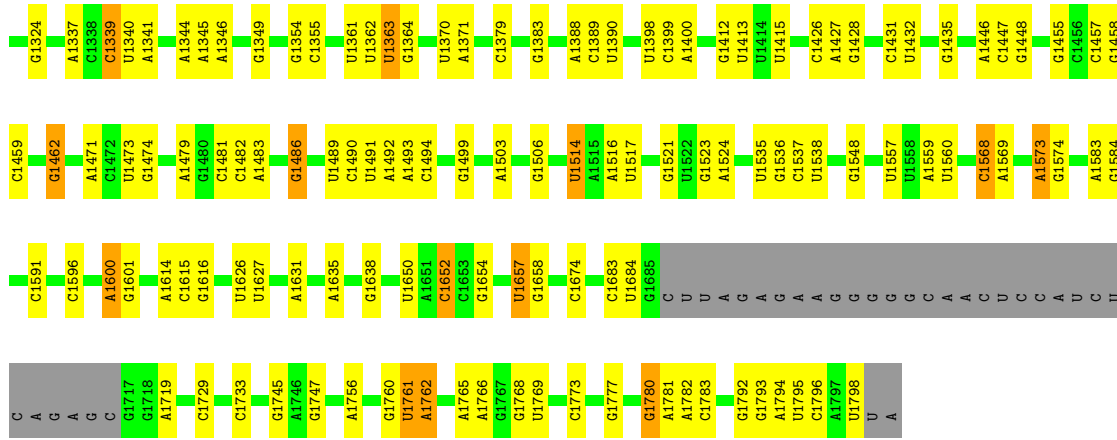
3 Residue-property plots

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. 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. 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.

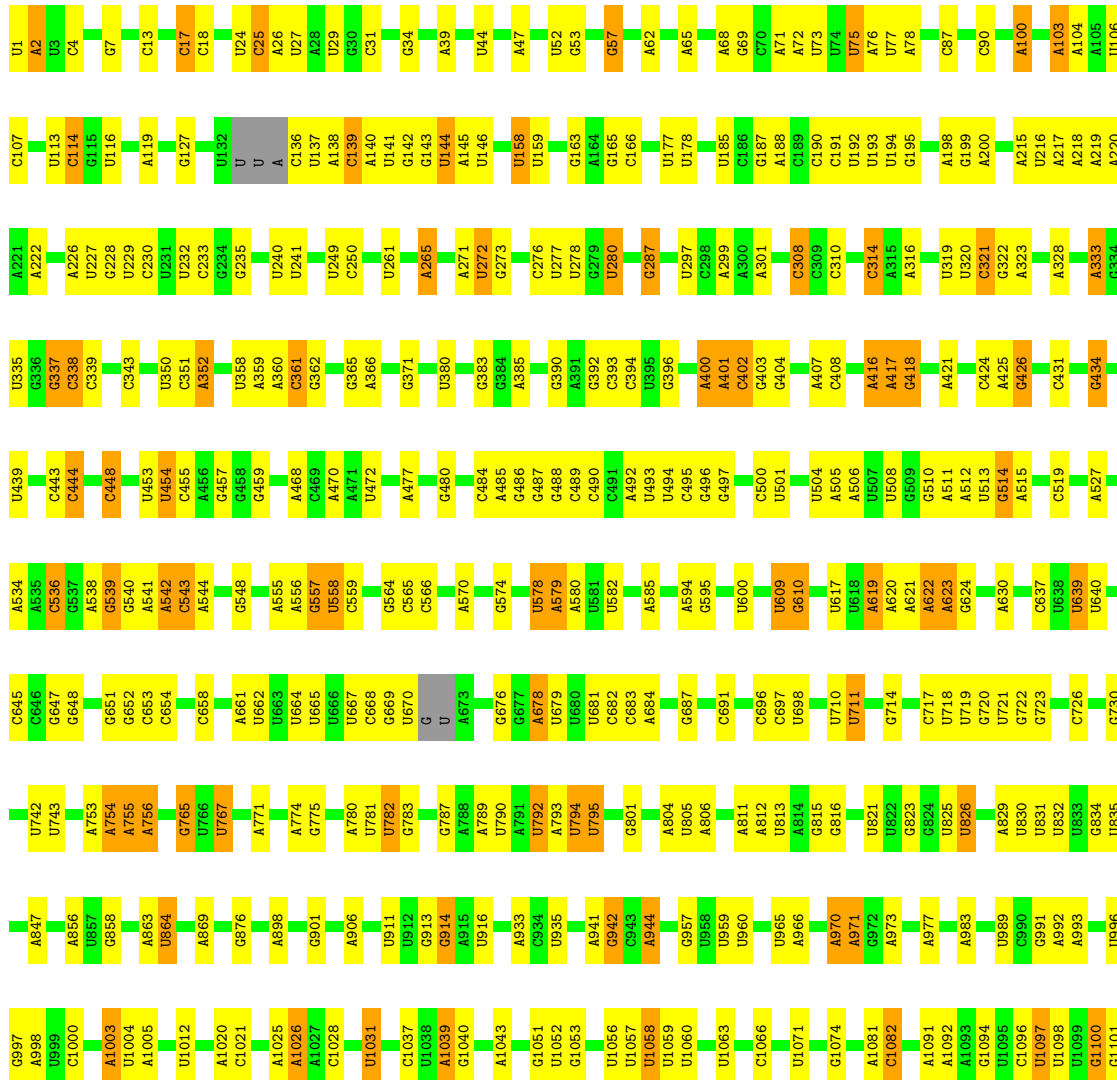
Note EDS failed to run properly.

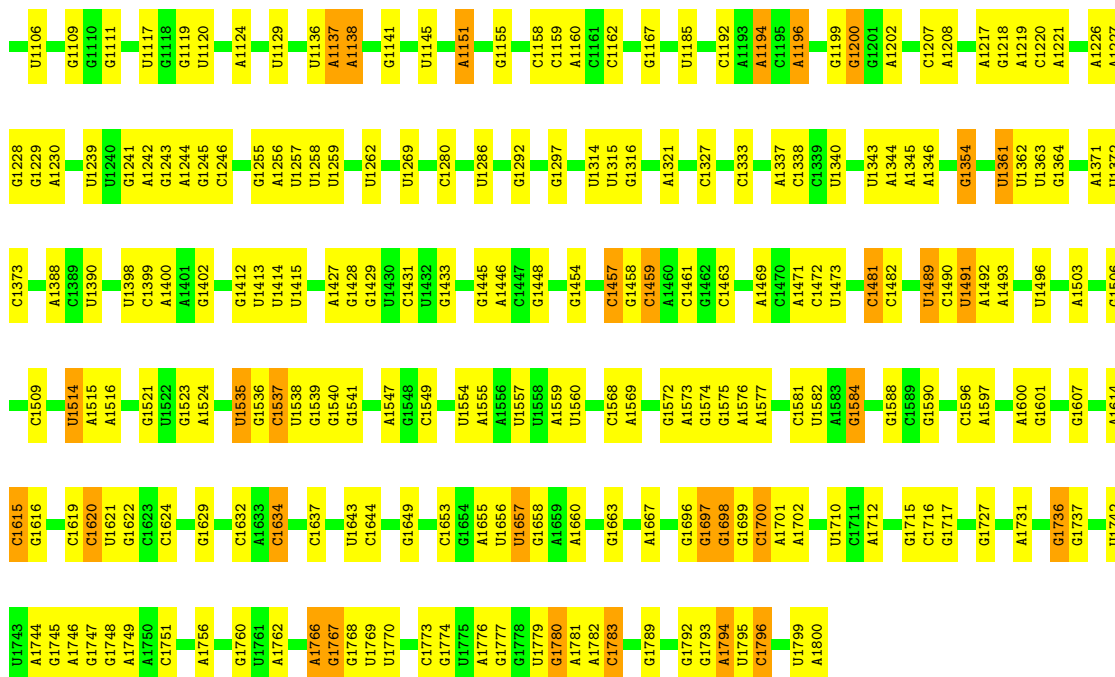
- Molecule 1: 18S ribosomal RNA



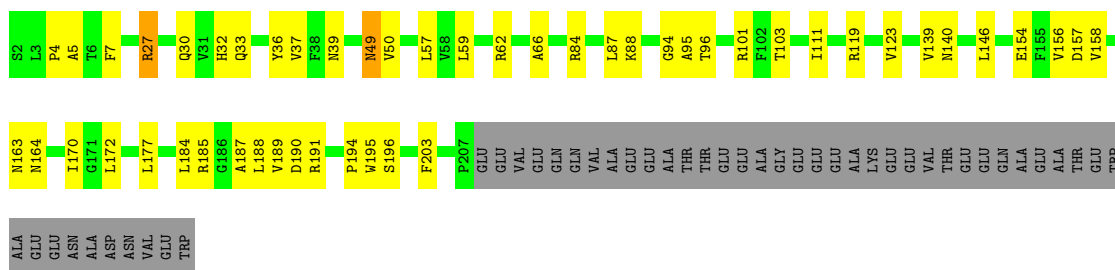


• Molecule 1: 18S ribosomal RNA

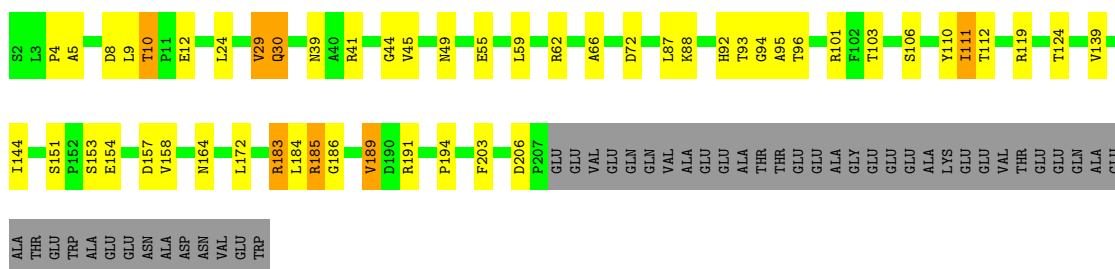




• Molecule 2: 40S ribosomal protein S0-A

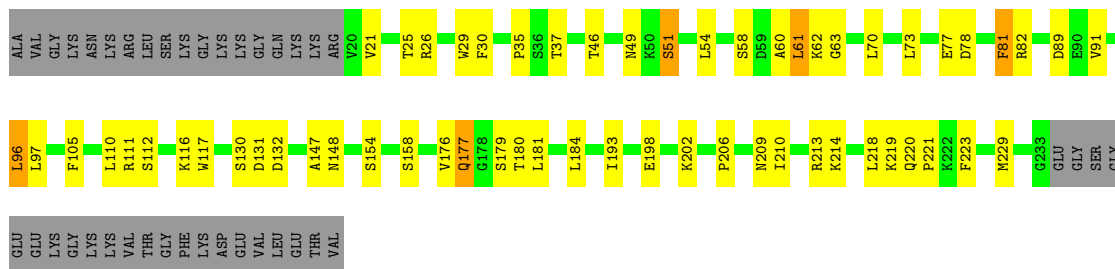


• Molecule 2: 40S ribosomal protein S0-A

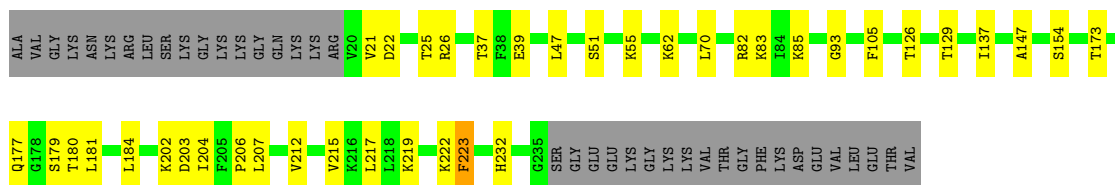


• Molecule 3: 40S ribosomal protein S1-A

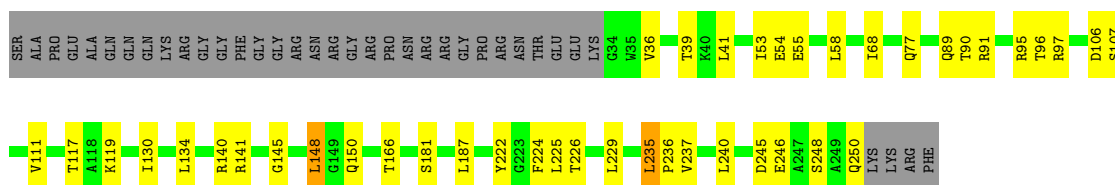




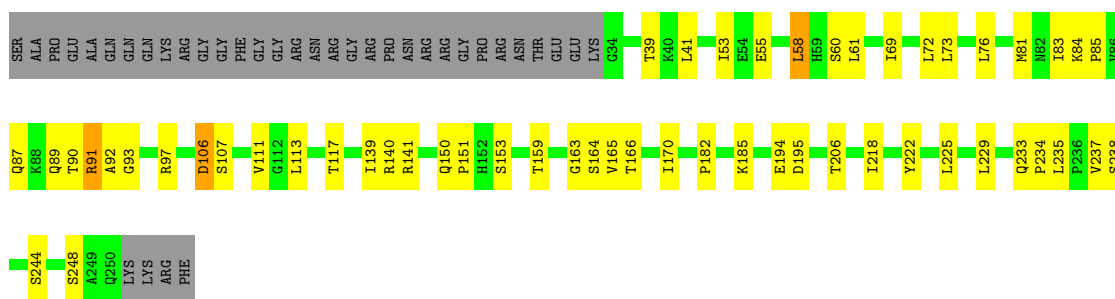
• Molecule 3: 40S ribosomal protein S1-A



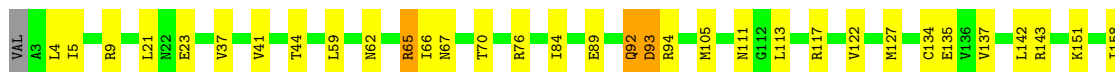
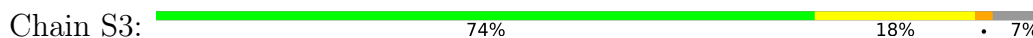
• Molecule 4: 40S ribosomal protein S2



• Molecule 4: 40S ribosomal protein S2

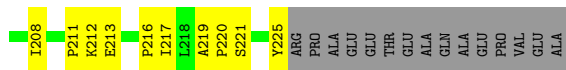
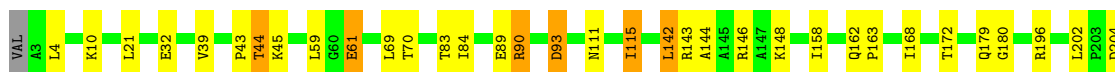


• Molecule 5: 40S ribosomal protein S3

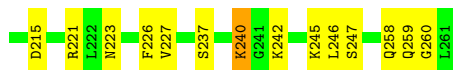
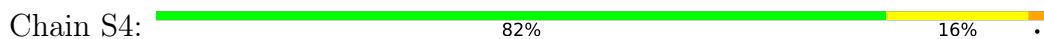




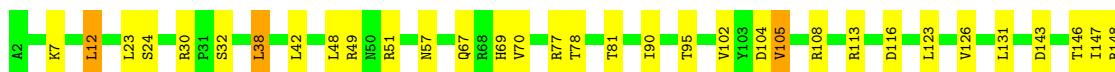
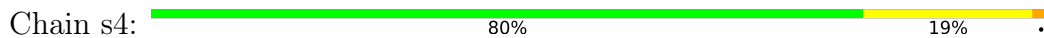
• Molecule 5: 40S ribosomal protein S3



• Molecule 6: 40S ribosomal protein S4-A



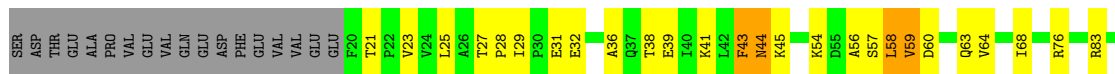
• Molecule 6: 40S ribosomal protein S4-A



• Molecule 7: 40S ribosomal protein S5

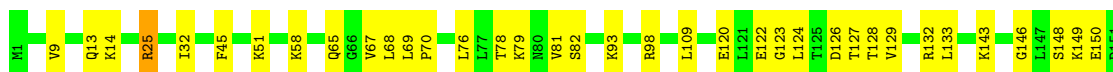


• Molecule 7: 40S ribosomal protein S5

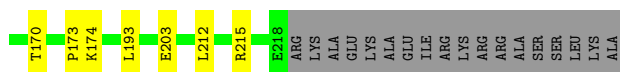




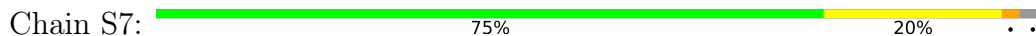
- Molecule 8: 40S ribosomal protein S6-A



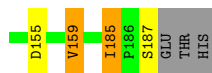
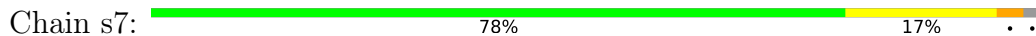
- Molecule 8: 40S ribosomal protein S6-A



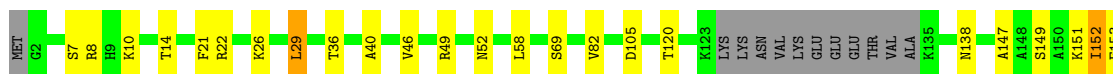
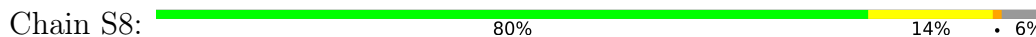
- Molecule 9: 40S ribosomal protein S7-A



- Molecule 9: 40S ribosomal protein S7-A



- Molecule 10: 40S ribosomal protein S8-A





- Molecule 10: 40S ribosomal protein S8-A

Chain s8: 80% 13% 6%



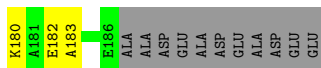
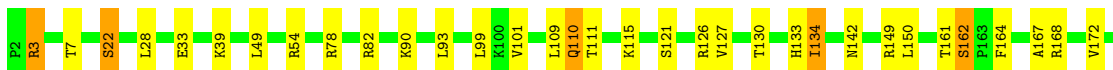
- Molecule 11: 40S ribosomal protein S9-A

Chain S9: 72% 21% 6%



- Molecule 11: 40S ribosomal protein S9-A

Chain s9: 76% 16% 6%



- Molecule 12: 40S ribosomal protein S10-A

Chain C0: 71% 19% 9%

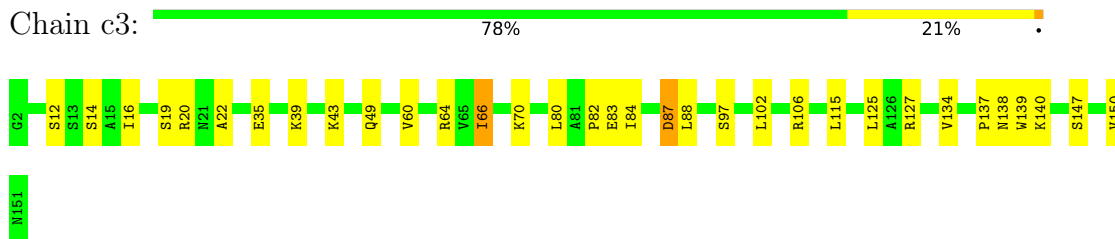


- Molecule 12: 40S ribosomal protein S10-A

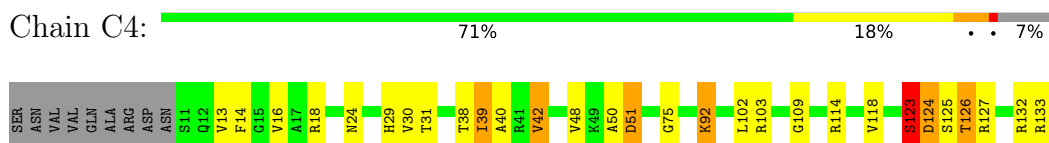
Chain c0: 70% 18% 9%



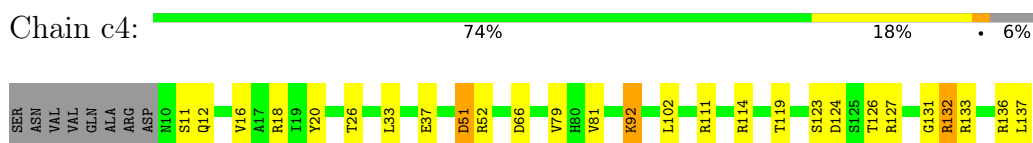
- Molecule 13: 40S ribosomal protein S11-A



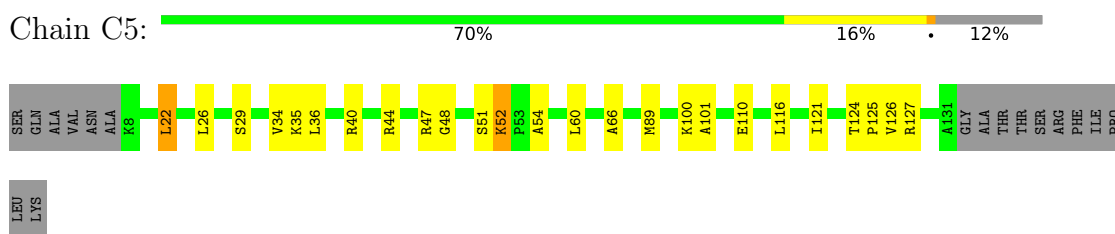
- Molecule 16: 40S ribosomal protein S14-A



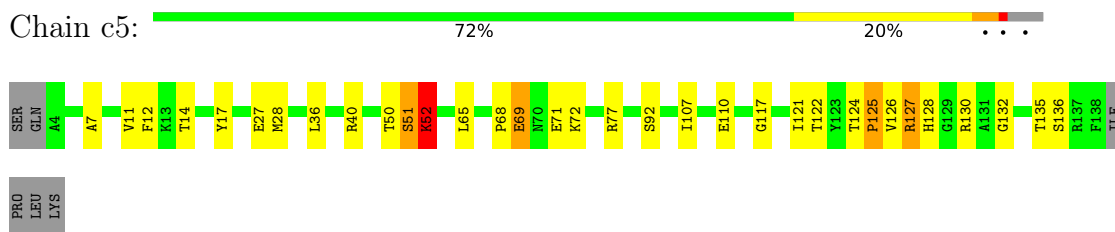
- Molecule 16: 40S ribosomal protein S14-A



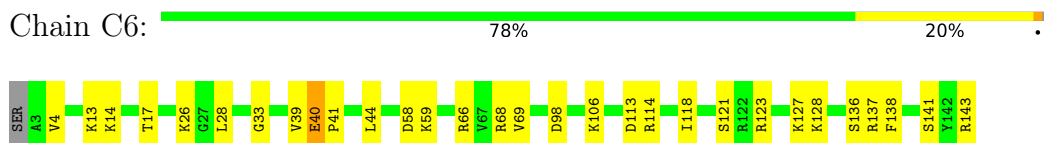
- Molecule 17: 40S ribosomal protein S15




- Molecule 17: 40S ribosomal protein S15



- Molecule 18: 40S ribosomal protein S16-A



- Molecule 18: 40S ribosomal protein S16-A

Chain c6:  77% 21%



- Molecule 19: 40S ribosomal protein S17-A

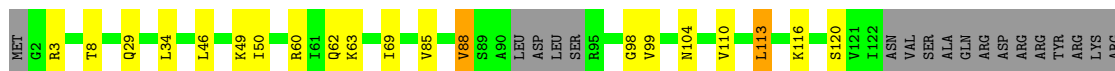
Chain C7:  66% 18% 12%



GLN
ARG
ASP
ASP
TYR
ARG
LYS
ARG
VAL

- Molecule 19: 40S ribosomal protein S17-A

Chain c7:  71% 13% 14%




VAL

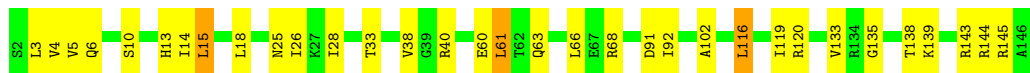
- Molecule 20: 40S ribosomal protein S18-A

Chain C8:  72% 24%




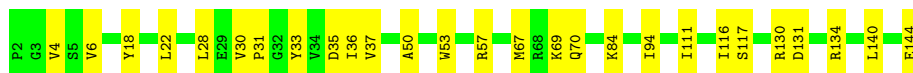
- Molecule 20: 40S ribosomal protein S18-A

Chain c8:  77% 21%




- Molecule 21: 40S ribosomal protein S19-A

Chain C9:  81% 19%



- Molecule 21: 40S ribosomal protein S19-A

Chain c9:  81% 17%



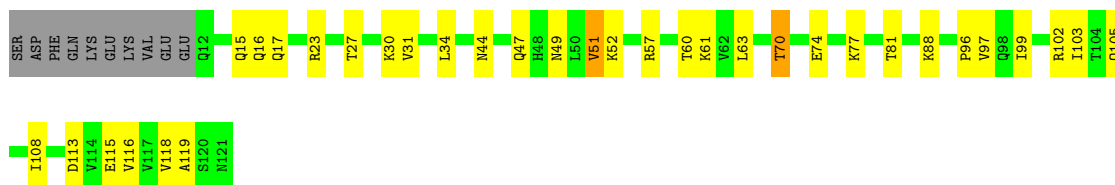
- Molecule 22: 40S ribosomal protein S20

Chain D0:  68% 22% 11%




- Molecule 22: 40S ribosomal protein S20

Chain d0:  63% 27% 8%




- Molecule 23: 40S ribosomal protein S21-A

Chain D1:  76% 24%




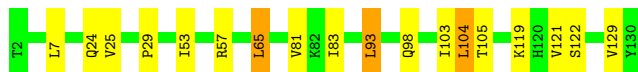
- Molecule 23: 40S ribosomal protein S21-A

Chain d1:  75% 24%




- Molecule 24: 40S ribosomal protein S22-A

Chain D2:  86% 12%

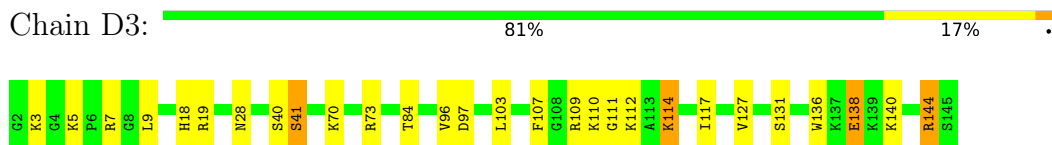


- Molecule 24: 40S ribosomal protein S22-A

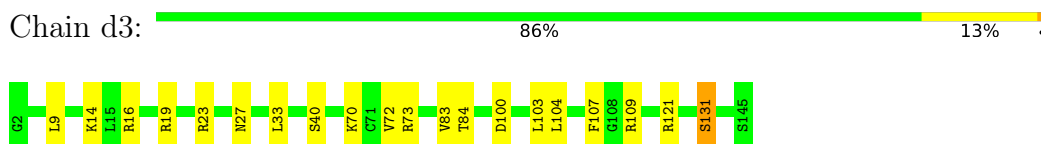
Chain d2:  86% 13%



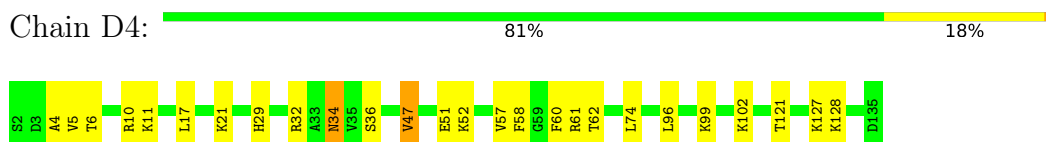
- Molecule 25: 40S ribosomal protein S23-A



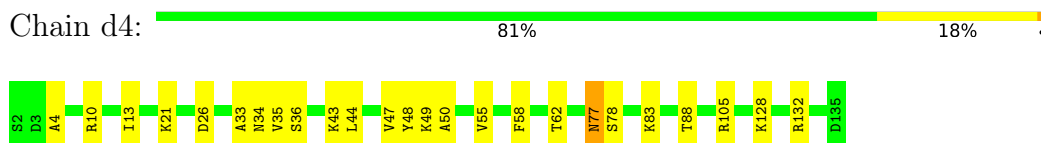
- Molecule 25: 40S ribosomal protein S23-A



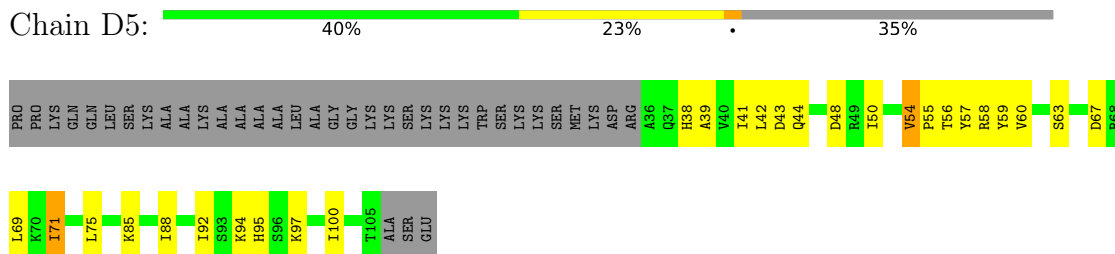
- Molecule 26: 40S ribosomal protein S24-A



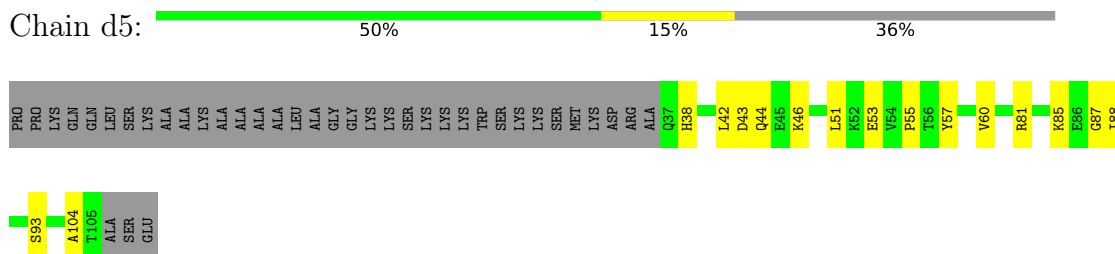
- Molecule 26: 40S ribosomal protein S24-A



- Molecule 27: 40S ribosomal protein S25-A



- Molecule 27: 40S ribosomal protein S25-A




- Molecule 28: 40S ribosomal protein S26-B

Chain D6:  72% 20% 8%




- Molecule 28: 40S ribosomal protein S26-B

Chain d6:  80% 20%



- Molecule 29: 40S ribosomal protein S27-A

Chain D7:  86% 14%



- Molecule 29: 40S ribosomal protein S27-A

Chain d7:  80% 19% .



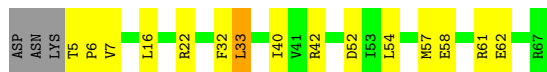
- Molecule 30: 40S ribosomal protein S28-A

Chain D8:  73% 21% . 5%




- Molecule 30: 40S ribosomal protein S28-A

Chain d8:  73% 21% . 5%



- Molecule 31: 40S ribosomal protein S29-A

Chain D9:  78% 16% . .




- Molecule 31: 40S ribosomal protein S29-A

Chain d9:  71% 25%



- Molecule 32: 40S ribosomal protein S30-A

Chain E0:  82% 17%



- Molecule 33: Ubiquitin-40S ribosomal protein S31

Chain E1:  53% 38% 7%




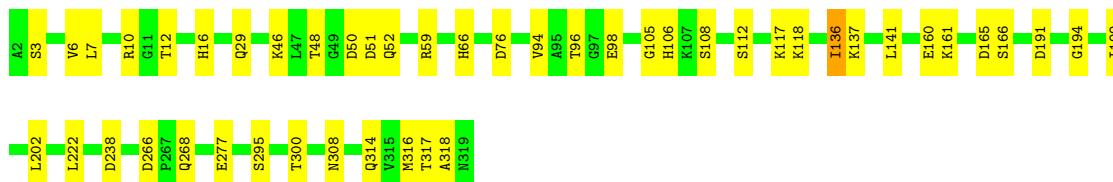
- Molecule 33: Ubiquitin-40S ribosomal protein S31

Chain e1:  59% 34% 7%




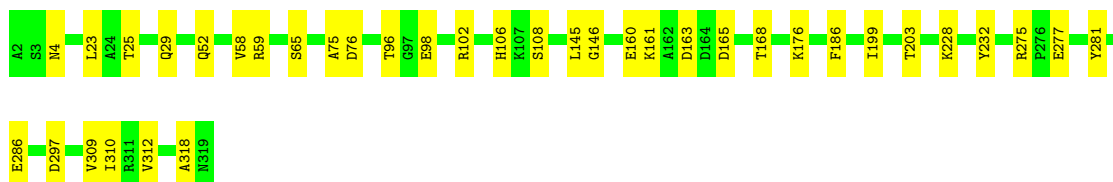
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

Chain SR:  85% 14%



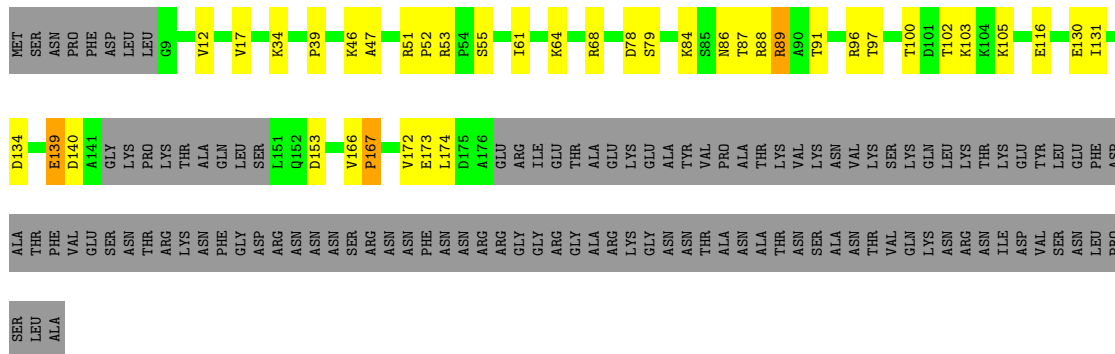
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

Chain sR:  88% 12%



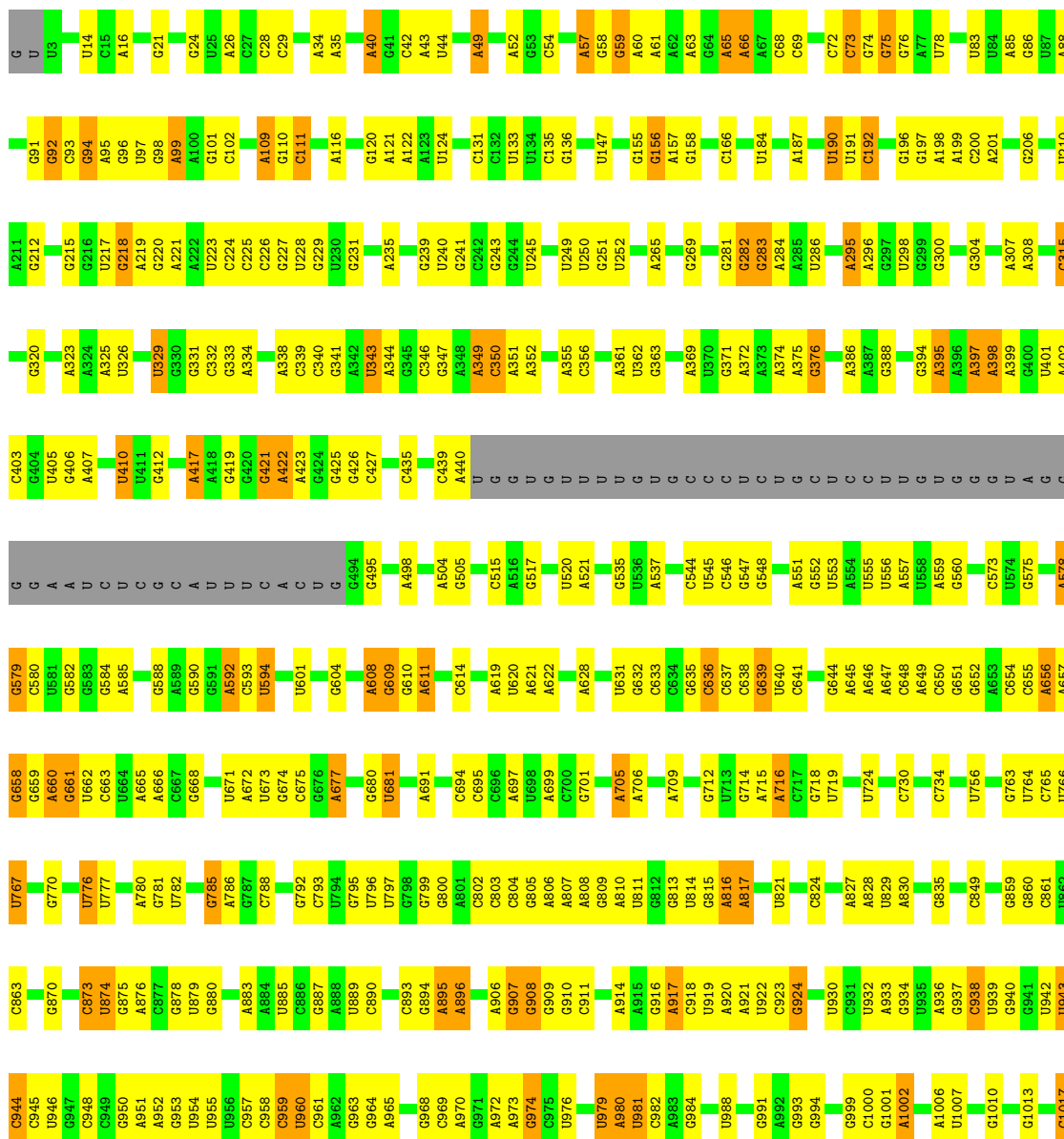
- Molecule 35: Suppressor protein STM1

Chain SM:  44% 13% 42%

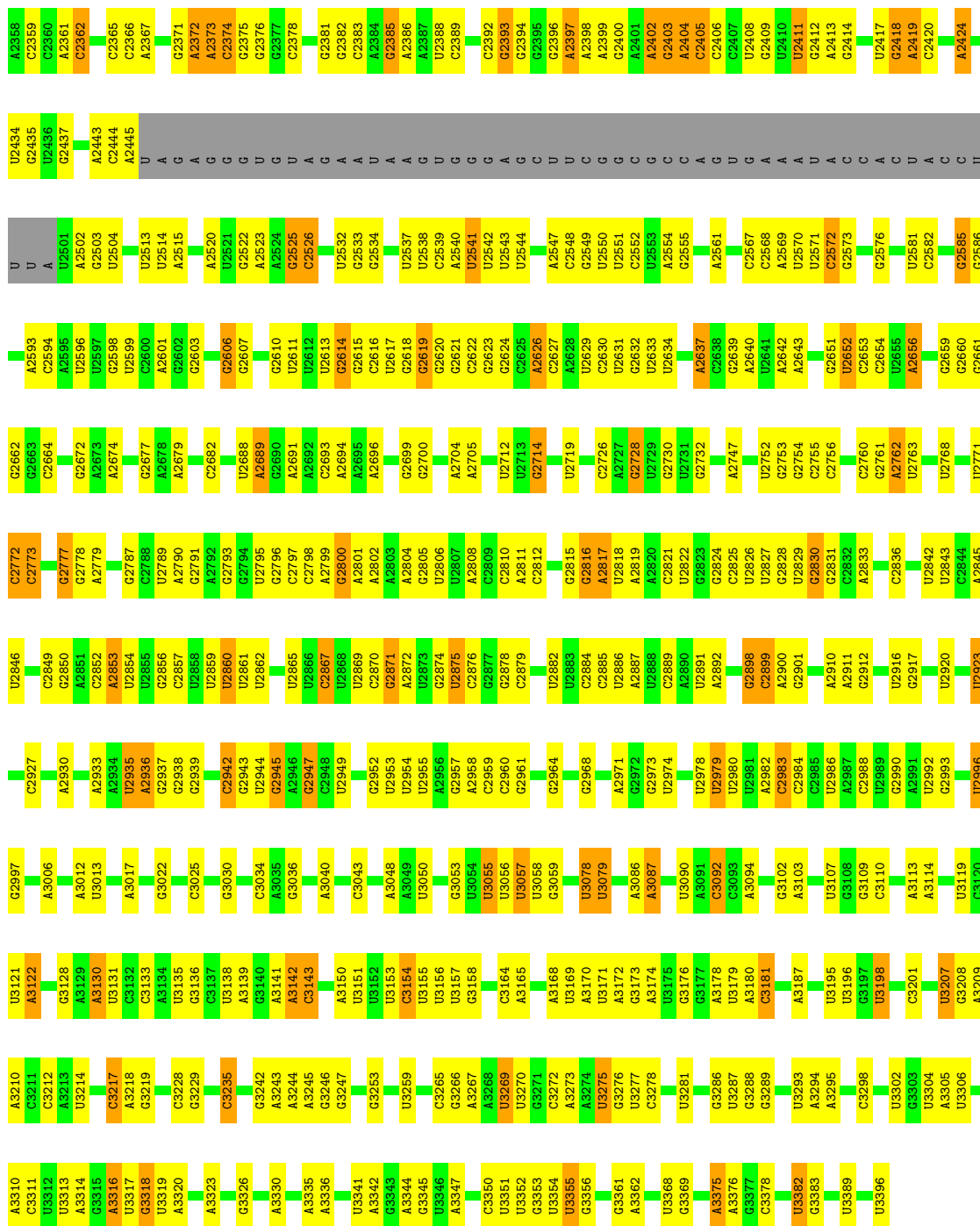


• Molecule 36: 25S ribosomal RNA

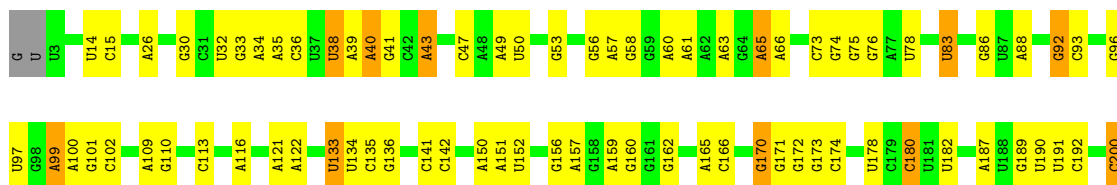
Chain 1: 52% 34% 7% 7%



C2284	C2285	C2286	C2287	C2288	C2292	C2293	C2294	C2295	C2296	C2297	C2298	C2299	C2300	C2301	C2302	C2303	C2304	C2305	C2306	C2307	C2308	C2309	C2310	C2311	C2312	C2313	C2314	C2315	C2319	C2322	C2323	C2324	C2326	C2329	C2330	C2333	C2334	C2335	C2336	C2339	C2343	C2344	C2345	C2349	C2350	C2351	C2354	C2355	C2356	C2357																																																																																								
A2188	U2189	U2190	U2191	C2192	U2193	C2194	A2198	C2199	U2200	C2201	C2202	U2205	U2206	U2207	A2208	U2209	C2210	C2212	A2215	C2216	U2219	C2230	A2231	C2232	C2233	C2234	C2235	C2236	C2237	C2238	C2239	C2240	U2241	C2242	C2243	C2244	C2245	C2246	C2247	C2248	C2249	C2250	A2255	A2256	C2257	C2272	C2273	C2278	C2279	C2280	A2281	U2282	C2283																																																																																					
C2094	C2101	U2102	C2106	A2107	G2111	U2112	A2113	C2114	G2115	C2116	A2120	C2121	C2122	C2123	A2126	U2129	C2130	A2131	C2132	U2133	C2134	A2138	A2139	U2140	U2141	A2142	A2144	A2147	U2148	C2249	A2152	A2158	U2159	C2163	A2164	C2165	C2169	U2170	U2173	U2176	C2177	C2181	C2187	A2093																																																																																														
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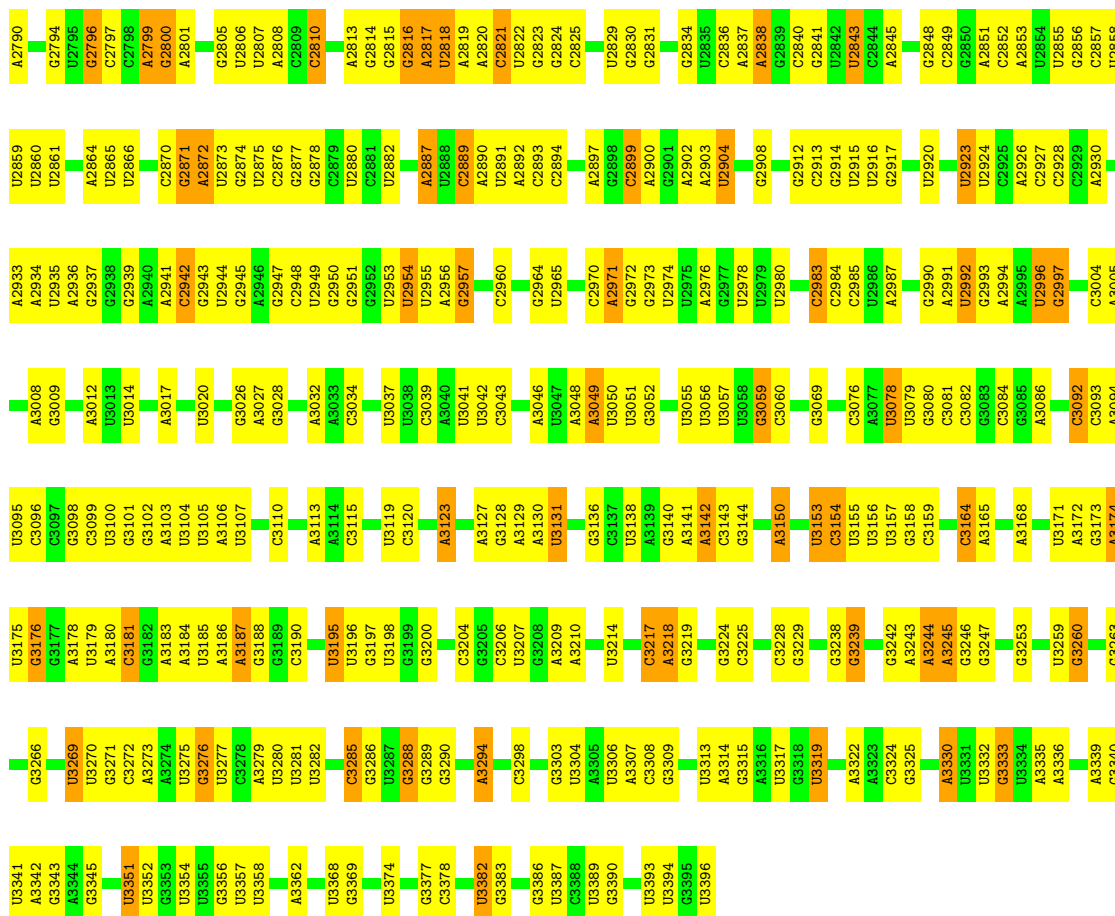


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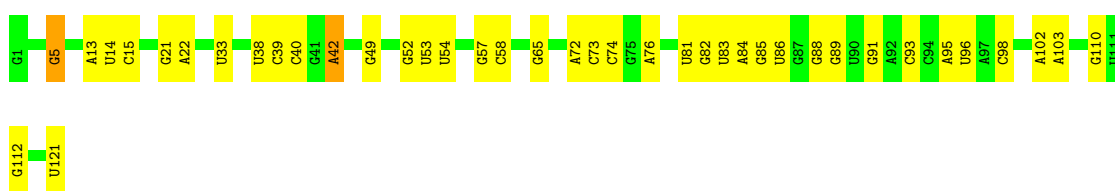


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C1338	G1151	C824	C824	U641	U642	G548	U411	G220	A219
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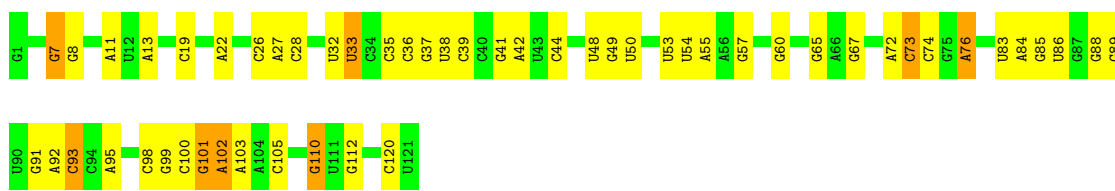
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C2389	A2390	G2391	C2392	G2393	G2394	G2395	G2396	A2397	C2398	U2399	G2400	A2401	A2402	G2403	A2404	C2405	C2406	C2407	U2408	G2409	U2410	U2411	U2412	A2413	U2416	U2417	U2418	C2419	U2421	U2433	U2434	G2437	A2438	A2439	G2440	A2441	G2442	A2443	C2444	U2445	U2446	U2447	U2448	U2449	U2450	U2451	U2452	U2453	U2454	U2455	U2456	U2457	U2458	U2459	U2460	U2461	U2462	U2463	U2464	U2465	U2466	U2467	U2468	U2469	U2470	U2471	U2472	U2473	U2474	U2475	U2476	U2477	U2478	U2479	U2480	U2481	U2482	U2483	U2484	U2485	U2486	U2487	U2488	U2489	U2490	U2491	U2492	U2493	U2494	U2495	U2496	U2497	U2498	U2499	U2500	U2501	U2502	U2503	U2504	U2505	U2506	U2507	U2508	U2509	U2510	A2511	U2512	U2513	U2514	A2515	G2522	A2523	A2524																																																																																	
C2526	A2529	C2530	C2531	U2532	G2533	U2534	U2537	U2538	U2539	A2540	U2541	U2542	U2543	G2549	C2552	G2555	C2556	C2567	C2568	U2569	U2570	U2571	C2572	G2574	G2584	C2585	A2588	C2594	U2599	C2600	A2601	G2602	G2606	G2607	C2608	A2609	C2610	U2611	U2612	U2613	C2614	C2615	C2616	U2617	G2618	G2619	G2620																																																																																																																																																			
C2621	C2622	C2623	C2627	A2628	U2631	G2632	U2633	U2634	A2635	A2636	A2637	C2638	U2643	C2644	C2645	U2650	U2652	C2653	C2654	U2655	U2656	A2657	U2658	C2659	A2660	A2661	A2667	A2674	C2675	A2676	C2677	U2681	C2682	U2683	C2684	C2685	A2686	C2687	U2688	A2689	U2771	A2691	C2692	C2693	A2694	U2695	A2696	U2697	C2699	G2700	U2783	G2784																																																																																																																																														
G2621	G2622	G2623	G2627	A2628	U2631	G2632	U2633	U2634	A2635	A2636	A2637	C2638	U2643	C2644	C2645	U2650	U2652	C2653	C2654	U2655	U2656	A2657	U2658	C2659	A2660	A2661	A2667	A2674	C2675	A2676	C2677	U2681	C2682	U2683	C2684	C2685	A2686	C2687	U2688	A2689	U2771	A2691	C2692	C2693	A2694	U2695	A2696	U2697	C2699	G2700	U2783	G2784																																																																																																																																														



• Molecule 37: 5S ribosomal RNA



• Molecule 37: 5S ribosomal RNA



• Molecule 38: 5.8S ribosomal RNA

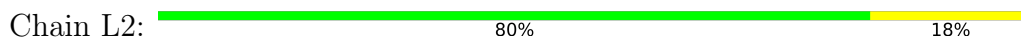




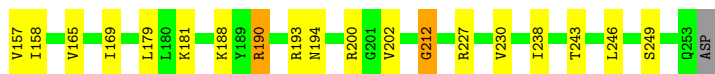
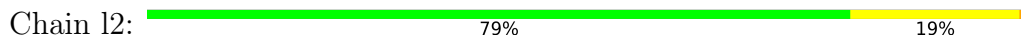
• Molecule 38: 5.8S ribosomal RNA



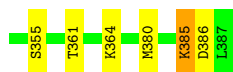
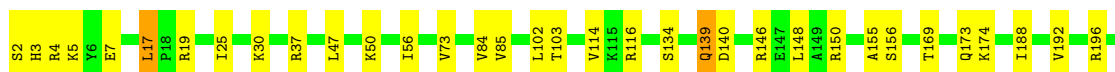
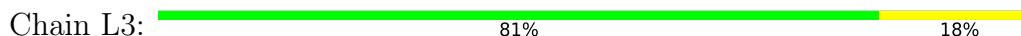
• Molecule 39: 60S ribosomal protein L2-A



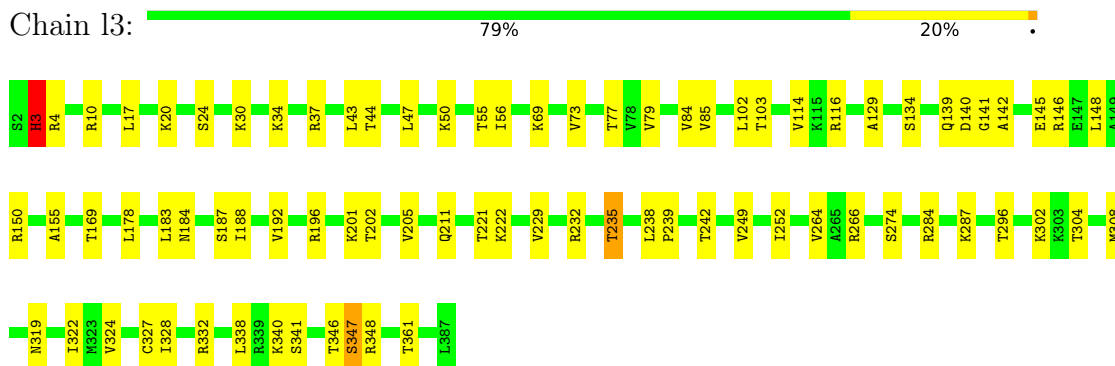
• Molecule 39: 60S ribosomal protein L2-A



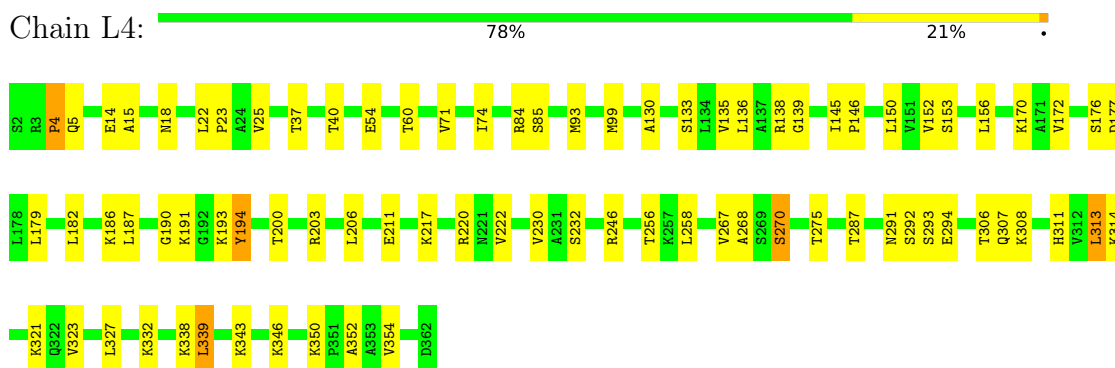
• Molecule 40: 60S ribosomal protein L3



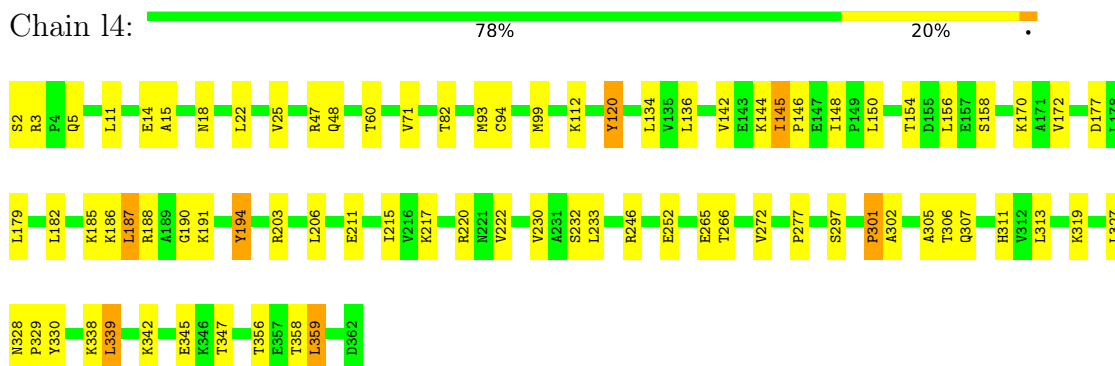
- Molecule 40: 60S ribosomal protein L3



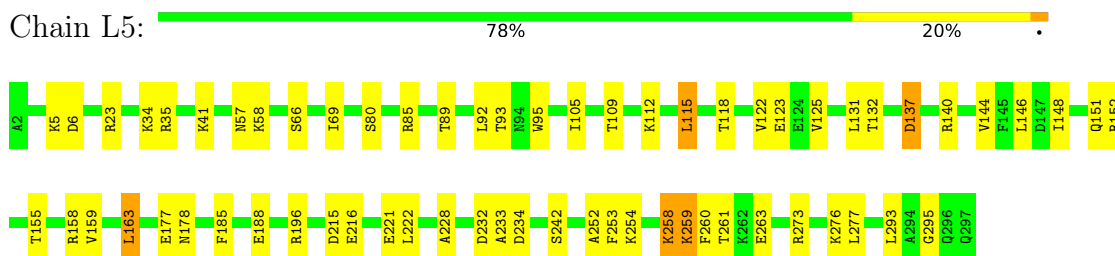
- Molecule 41: 60S ribosomal protein L4-A



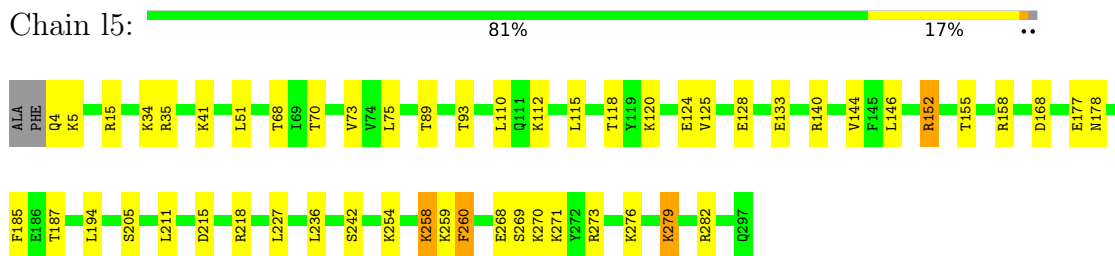
- Molecule 41: 60S ribosomal protein L4-A



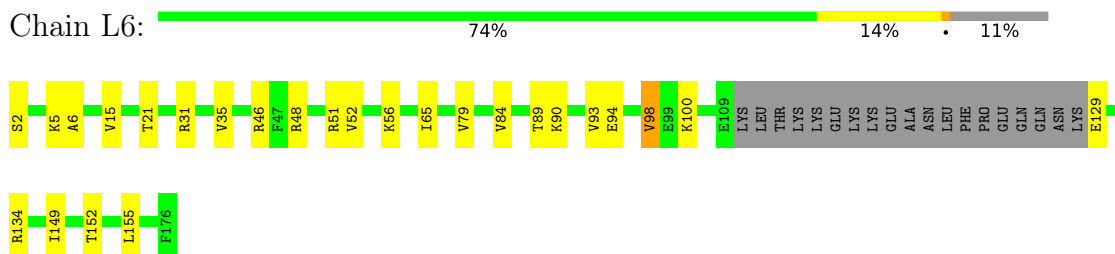
- Molecule 42: 60S ribosomal protein L5



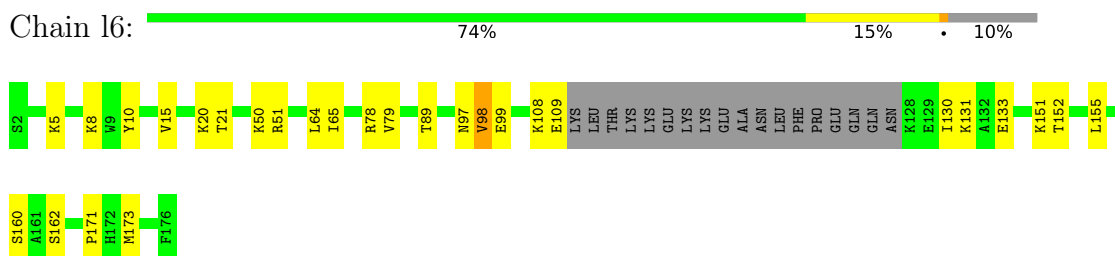
- Molecule 42: 60S ribosomal protein L5



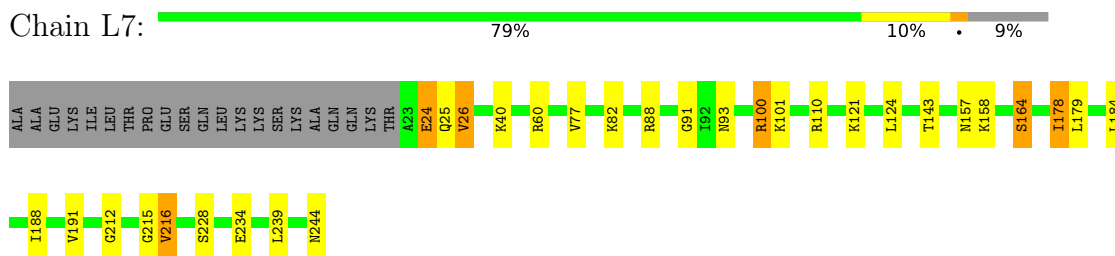
- Molecule 43: 60S ribosomal protein L6-A



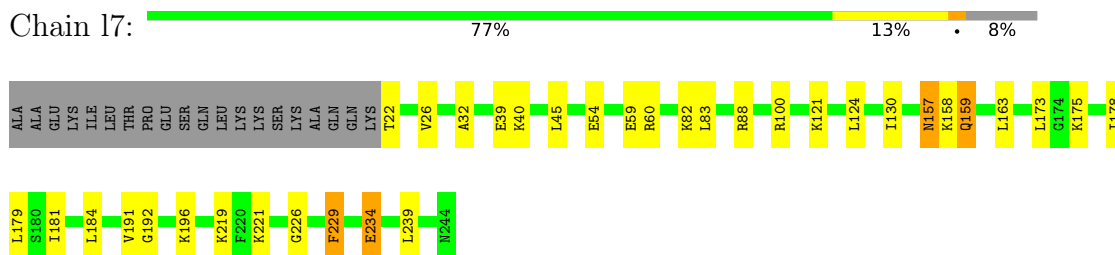
- Molecule 43: 60S ribosomal protein L6-A




- Molecule 44: 60S ribosomal protein L7-A

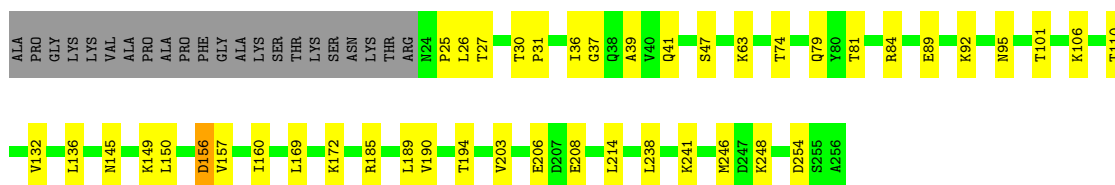


- Molecule 44: 60S ribosomal protein L7-A



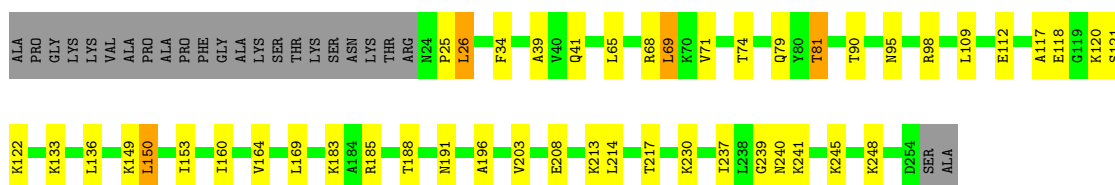
- Molecule 45: 60S ribosomal protein L8-A

Chain L8:  74% 17% 9%




- Molecule 45: 60S ribosomal protein L8-A

Chain l8:  72% 17% 9%




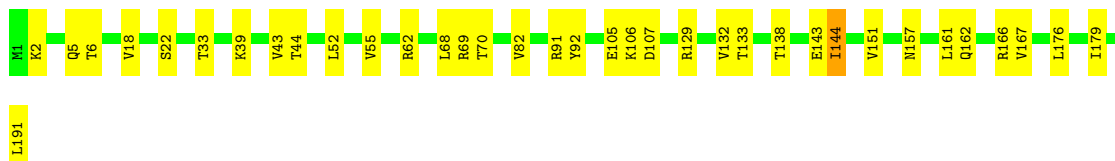
- Molecule 46: 60S ribosomal protein L9-A

Chain L9:  77% 23%




- Molecule 46: 60S ribosomal protein L9-A

Chain l9:  81% 18%

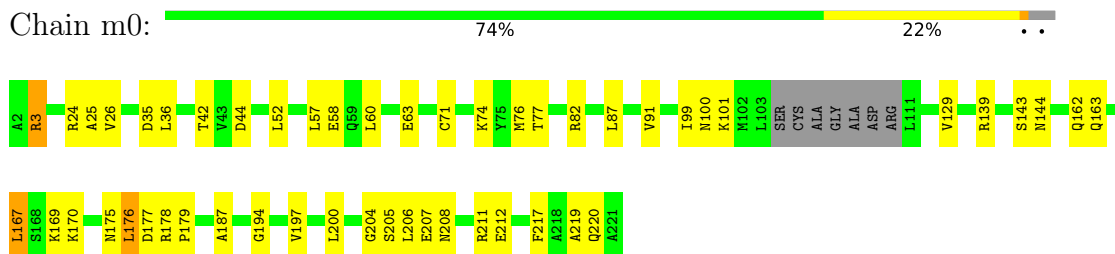


- Molecule 47: 60S ribosomal protein L10

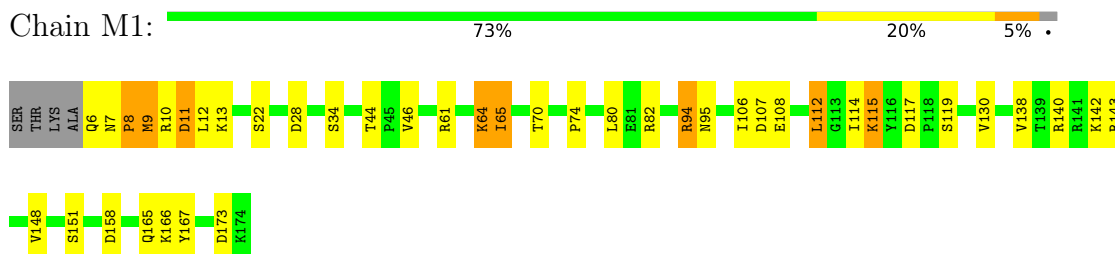
Chain M0:  76% 18%



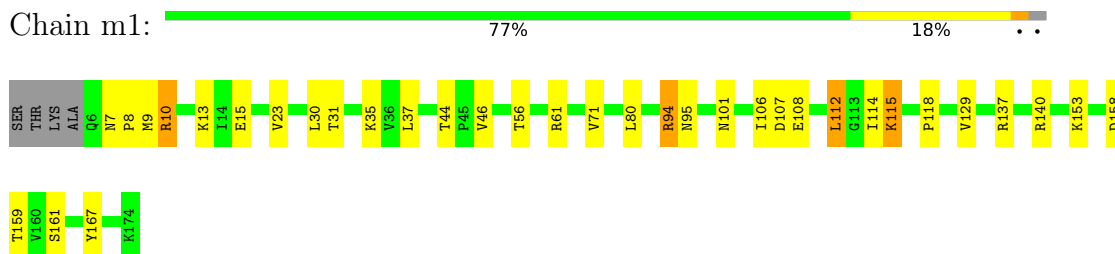
- Molecule 47: 60S ribosomal protein L10



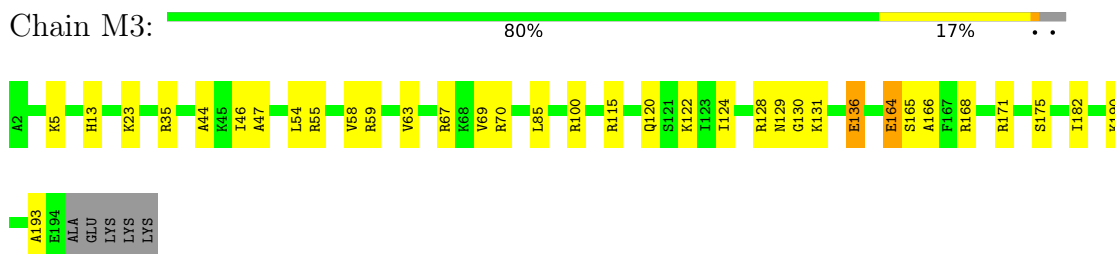
- Molecule 48: 60S ribosomal protein L11-B



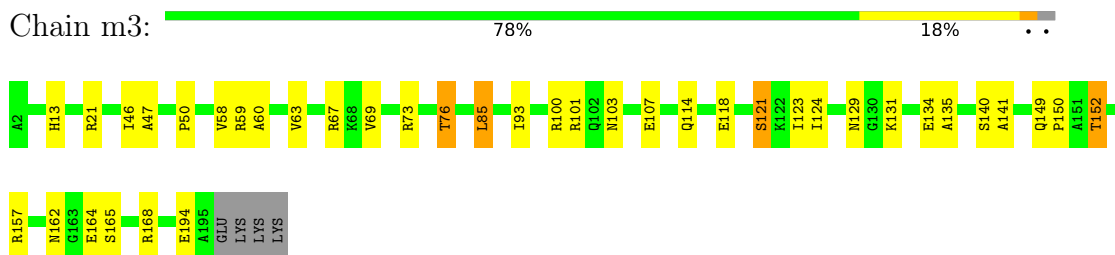
- Molecule 48: 60S ribosomal protein L11-B




- Molecule 49: 60S ribosomal protein L13-A



- Molecule 49: 60S ribosomal protein L13-A




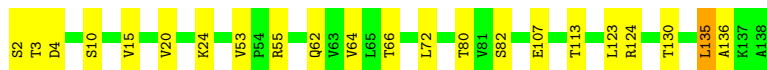
- Molecule 50: 60S ribosomal protein L14-A

Chain M4:  80% 18% ..




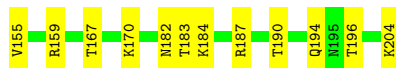
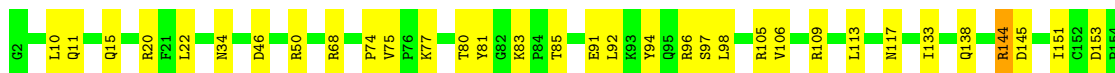
- Molecule 50: 60S ribosomal protein L14-A

Chain m4:  84% 15% .




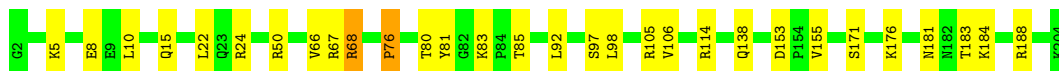
- Molecule 51: 60S ribosomal protein L15-A

Chain M5:  78% 22%




- Molecule 51: 60S ribosomal protein L15-A

Chain m5:  85% 14% .




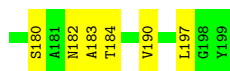
- Molecule 52: 60S ribosomal protein L16-A

Chain M6:  83% 15% ..




- Molecule 52: 60S ribosomal protein L16-A

Chain m6:  79% 19% ..



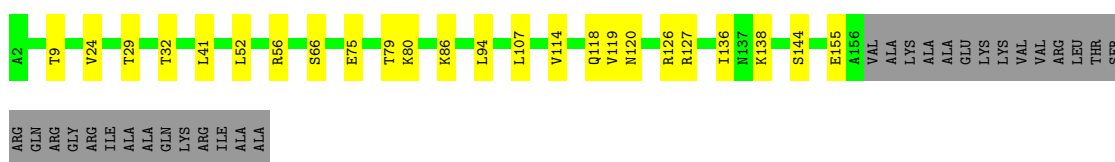
- Molecule 53: 60S ribosomal protein L17-A

Chain M7:  79% 20%




- Molecule 53: 60S ribosomal protein L17-A

Chain m7:  72% 13% 15%




- Molecule 54: 60S ribosomal protein L18-A

Chain M8:  85% 14%




- Molecule 54: 60S ribosomal protein L18-A

Chain m8:  79% 19%




- Molecule 55: 60S ribosomal protein L19-A

Chain M9:  88% 12%



- Molecule 55: 60S ribosomal protein L19-A

Chain m9:  82% 16%





- Molecule 56: 60S ribosomal protein L20-A

Chain N0: 77% 20%



- Molecule 56: 60S ribosomal protein L20-A

Chain n0: 80% 19%



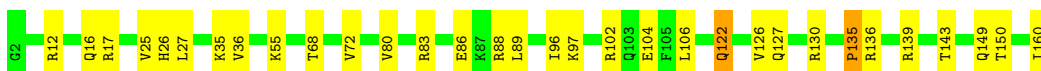
- Molecule 57: 60S ribosomal protein L21-A

Chain N1: 81% 17%



- Molecule 57: 60S ribosomal protein L21-A

Chain n1: 80% 19%



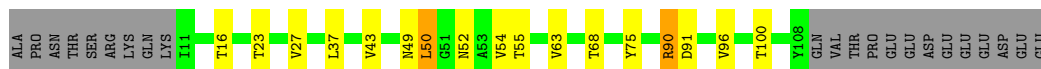
- Molecule 58: 60S ribosomal protein L22-A

Chain N2: 69% 13% 17%



- Molecule 58: 60S ribosomal protein L22-A

Chain n2: 68% 12% 18%



- Molecule 59: 60S ribosomal protein L23-A

Chain N3: 86% 14%



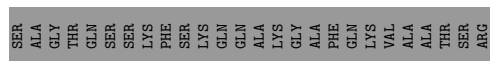
- Molecule 59: 60S ribosomal protein L23-A

Chain n3: 91% 8%



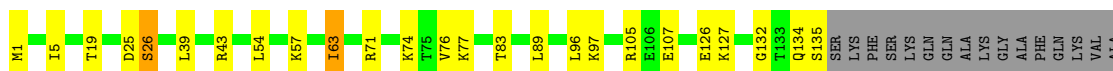
- Molecule 60: 60S ribosomal protein L24-A

Chain N4: 54% 9% 37%



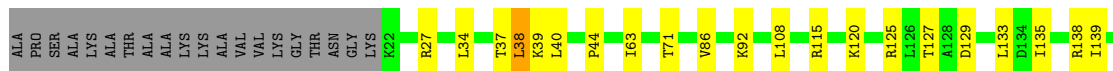
- Molecule 60: 60S ribosomal protein L24-A

Chain n4: 71% 15% 13%



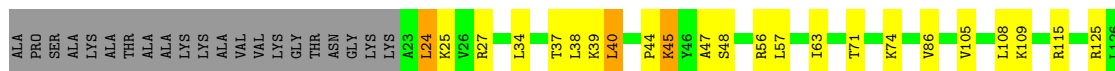
- Molecule 61: 60S ribosomal protein L25

Chain N5: 70% 15% 14%



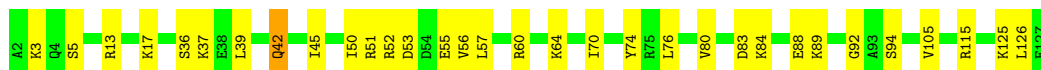
- Molecule 61: 60S ribosomal protein L25

Chain n5: 66% 17% 15%



- Molecule 62: 60S ribosomal protein L26-A

Chain N6: 75% 25%



- Molecule 62: 60S ribosomal protein L26-A

Chain n6: 75% 25%



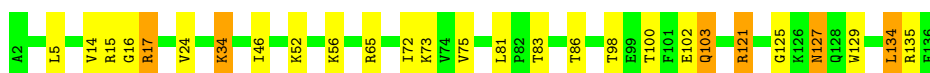
- Molecule 63: 60S ribosomal protein L27-A

Chain N7: 81% 19%



- Molecule 63: 60S ribosomal protein L27-A

Chain n7: 80% 16%



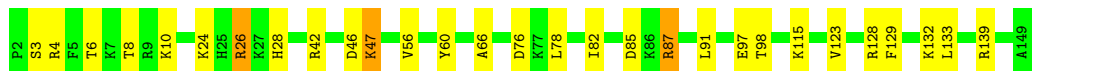
- Molecule 64: 60S ribosomal protein L28

Chain N8: 79% 18%




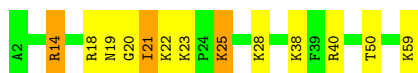
- Molecule 64: 60S ribosomal protein L28

Chain n8: 80% 18%




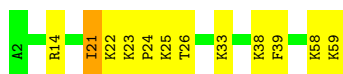
- Molecule 65: 60S ribosomal protein L29

Chain N9:  78% 17% 5%




- Molecule 65: 60S ribosomal protein L29

Chain n9:  79% 19%




- Molecule 66: 60S ribosomal protein L30

Chain O0:  80% 12% 7%




- Molecule 66: 60S ribosomal protein L30

Chain o0:  81% 13%



- Molecule 67: 60S ribosomal protein L31-A

Chain O1:  76% 19%




- Molecule 67: 60S ribosomal protein L31-A

Chain o1:  74% 22%




- Molecule 68: 60S ribosomal protein L32

Chain O2:  79% 18%



- Molecule 68: 60S ribosomal protein L32

Chain o2:  78% 18%




- Molecule 69: 60S ribosomal protein L33-A

Chain O3:  89% 10%




- Molecule 69: 60S ribosomal protein L33-A

Chain o3:  84% 16%



- Molecule 70: 60S ribosomal protein L34-A

Chain O4:  76% 16% 6%




- Molecule 70: 60S ribosomal protein L34-A

Chain o4:  73% 20% 6%




- Molecule 71: 60S ribosomal protein L35-A

Chain O5:  79% 20%




- Molecule 71: 60S ribosomal protein L35-A

Chain o5:  80% 19%



- Molecule 72: 60S ribosomal protein L36-A

Chain O6:  81% 17%




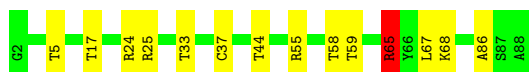
- Molecule 72: 60S ribosomal protein L36-A

Chain o6:  72% 25%




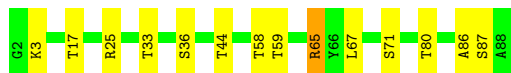
- Molecule 73: 60S ribosomal protein L37-A

Chain O7:  84% 15%




- Molecule 73: 60S ribosomal protein L37-A

Chain o7:  84% 15%




- Molecule 74: 60S ribosomal protein L38

Chain O8:  77% 23%




- Molecule 74: 60S ribosomal protein L38

Chain o8:  78% 21%




- Molecule 75: 60S ribosomal protein L39

Chain O9:  86% 14%




- Molecule 75: 60S ribosomal protein L39

Chain o9:  82% 16%




- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain Q0:  75% 23%



- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain q0:  75% 23%



- Molecule 77: 60S ribosomal protein L41-A

Chain Q1:  68% 28%




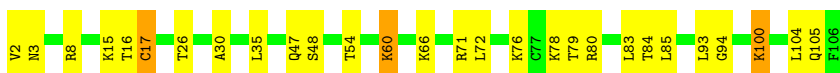
- Molecule 77: 60S ribosomal protein L41-A

Chain q1:  64% 28% 8%




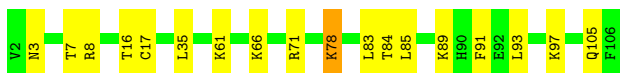
- Molecule 78: 60S ribosomal protein L42-A

Chain Q2:  73% 24%



- Molecule 78: 60S ribosomal protein L42-A

Chain q2:  83% 16%



- Molecule 79: 60S ribosomal protein L43-A

ASP ILE SER PRO TYR PHE VAL THR ARG ALA VAL ASN THR GLY MET GLU PRO GLY THR LYS THR SER PHE PHE GLN ALA VAL ASP ASP VAL LYS VAL VAL ASP ALA ASP ALA GLY THR LYS ASN HIS TYR PRO VAL GLY GLN SER SER ASP LEU LEU VAL VAL LYS VAL VAL ASP ALA SER TYR HIS TYR PRO VAL GLY ILE GLU ASP MET LEU LEU LEU PHE GLY LEU LEU PHE ASP

ILE SER PRO PHE THR PHE G184 P198 A221 SER ILE SER SER LEU ALA ILE SER GLY TYR PRO THR LEU PRO VAL VAL GLY HIS THR LEU ILE ILE ASN ASN TYR LYS ASP LEU LEU ALA VAL ALA ALA SER TYR HIS TYR PRO VAL GLY ILE GLU ASP MET LEU LEU LEU PHE GLY LEU LEU PHE ASP

GLU LYS TYR ALA ALA PRO ALA THR SER ALA ALA SER GLY ASP ALA PRO ALA ALA ALA ALA ALA GLU GLU GLU GLU SER ASP ASP MET GLY PHE GLY LEU PHE ASP

- Molecule 84: unknown protein chain p1

Chain p1:  100%

There are no outlier residues recorded for this chain.

- Molecule 85: unknown protein chain p2

Chain p2:  100%

There are no outlier residues recorded for this chain.

4 Data and refinement statistics

EDS failed to run properly - this section is therefore incomplete.

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	435.26Å 287.54Å 304.02Å 90.00° 98.97° 90.00°	Depositor
Resolution (Å)	73.99 – 3.00	Depositor
% Data completeness (in resolution range)	100.0 (73.99-3.00)	Depositor
R_{merge}	0.29	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.30 (at 3.01Å)	Xtrriage
Refinement program	PHENIX (phenix.refine: dev_1702)	Depositor
R, R_{free}	0.211 , 0.259	Depositor
Wilson B-factor (Å ²)	64.9	Xtrriage
Anisotropy	0.199	Xtrriage
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.30$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
Total number of atoms	411211	wwPDB-VP
Average B, all atoms (Å ²)	62.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.43% of the height of the origin peak. No significant pseudotranslation is detected.*

¹ Intensities estimated from amplitudes.

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

5 Model quality i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, 3KD, OHX, MG

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	2	0.71	1/41698 (0.0%)	1.27	275/64972 (0.4%)
1	6	0.88	13/42765 (0.0%)	1.38	436/66634 (0.7%)
2	S0	0.43	0/1617	0.66	0/2215
2	s0	0.49	0/1623	0.71	0/2222
3	S1	0.35	0/1735	0.63	1/2335 (0.0%)
3	s1	0.48	0/1748	0.66	0/2352
4	S2	0.49	0/1665	0.67	0/2263
4	s2	0.57	0/1665	0.75	2/2263 (0.1%)
5	S3	0.48	0/1759	0.66	1/2368 (0.0%)
5	s3	0.42	0/1759	0.60	0/2368
6	S4	0.46	0/2109	0.73	1/2839 (0.0%)
6	s4	0.55	0/2109	0.78	1/2839 (0.0%)
7	S5	0.36	0/1629	0.58	0/2202
7	s5	0.44	0/1629	0.64	0/2202
8	S6	0.44	0/1823	0.64	0/2439
8	s6	0.54	0/1779	0.70	0/2379
9	S7	0.42	0/1506	0.65	0/2028
9	s7	0.45	0/1516	0.67	1/2043 (0.0%)
10	S8	0.54	0/1514	0.72	1/2021 (0.0%)
10	s8	0.60	0/1514	0.76	1/2021 (0.0%)
11	S9	0.47	0/1519	0.64	0/2035
11	s9	0.55	0/1519	0.76	2/2035 (0.1%)
12	C0	0.42	0/790	0.70	1/1069 (0.1%)
12	c0	0.36	0/777	0.63	3/1049 (0.3%)
13	C1	0.55	0/1240	0.66	0/1675
13	c1	0.61	0/1194	0.77	0/1610
14	C2	0.38	0/900	0.62	0/1224
14	c2	0.28	0/900	0.56	0/1224
15	C3	0.47	0/1215	0.68	2/1638 (0.1%)
15	c3	0.56	0/1215	0.73	0/1638
16	C4	0.36	0/901	0.63	0/1217
16	c4	0.52	0/960	0.72	0/1290

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	C5	0.44	0/998	0.68	0/1341
17	c5	0.45	0/1060	0.66	0/1426
18	C6	0.41	0/1125	0.69	2/1510 (0.1%)
18	c6	0.49	0/1131	0.69	0/1518
19	C7	0.41	0/935	0.62	0/1254
19	c7	0.48	0/914	0.71	0/1224
20	C8	0.42	0/1211	0.63	0/1628
20	c8	0.49	0/1211	0.71	2/1628 (0.1%)
21	C9	0.41	0/1130	0.63	0/1517
21	c9	0.50	0/1130	0.70	2/1517 (0.1%)
22	D0	0.45	0/865	0.64	0/1169
22	d0	0.46	0/892	0.65	0/1205
23	D1	0.44	0/693	0.62	0/935
23	d1	0.54	0/693	0.71	0/935
24	D2	0.48	0/1038	0.73	3/1395 (0.2%)
24	d2	0.59	0/1038	0.74	1/1395 (0.1%)
25	D3	0.60	0/1139	0.77	1/1518 (0.1%)
25	d3	0.70	0/1139	0.89	3/1518 (0.2%)
26	D4	0.44	0/1087	0.63	0/1449
26	d4	0.53	0/1087	0.73	0/1449
27	D5	0.39	0/571	0.68	0/768
27	d5	0.41	0/566	0.63	0/761
28	D6	0.43	0/782	0.67	0/1047
28	d6	0.56	0/782	0.71	0/1047
29	D7	0.42	0/620	0.66	0/838
29	d7	0.46	0/620	0.66	0/838
30	D8	0.35	0/499	0.57	0/670
30	d8	0.44	0/499	0.64	0/670
31	D9	0.50	0/452	0.70	1/600 (0.2%)
31	d9	0.50	0/452	0.64	0/600
32	E0	0.46	0/483	0.63	0/643
33	E1	0.42	0/577	0.78	0/770
33	e1	0.39	0/619	0.72	0/822
34	SR	0.37	0/2494	0.57	0/3393
34	sR	0.38	0/2495	0.56	0/3395
35	SM	0.48	0/1113	0.70	2/1502 (0.1%)
36	1	1.16	153/75394 (0.2%)	1.66	1837/117545 (1.6%)
36	5	1.20	178/75414 (0.2%)	1.67	1863/117575 (1.6%)
37	3	0.95	2/2883 (0.1%)	1.47	39/4491 (0.9%)
37	7	1.16	5/2883 (0.2%)	1.62	57/4491 (1.3%)
38	4	1.13	5/3746 (0.1%)	1.66	86/5832 (1.5%)
38	8	0.98	2/3746 (0.1%)	1.48	42/5832 (0.7%)
39	L2	0.74	0/1948	0.84	3/2617 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
39	l2	0.71	0/1946	0.86	2/2614 (0.1%)
40	L3	0.74	1/3146 (0.0%)	0.82	1/4228 (0.0%)
40	l3	0.88	1/3146 (0.0%)	0.89	2/4228 (0.0%)
41	L4	0.84	1/2800 (0.0%)	0.94	7/3790 (0.2%)
41	l4	0.74	1/2800 (0.0%)	0.90	6/3790 (0.2%)
42	L5	0.57	0/2425	0.69	1/3271 (0.0%)
42	l5	0.73	0/2408	0.82	1/3248 (0.0%)
43	L6	0.76	0/1260	0.84	0/1694
43	l6	0.78	0/1269	0.84	1/1705 (0.1%)
44	L7	0.78	1/1821 (0.1%)	0.90	2/2451 (0.1%)
44	l7	0.85	1/1828 (0.1%)	0.90	4/2461 (0.2%)
45	L8	0.55	0/1836	0.70	1/2481 (0.0%)
45	l8	0.51	0/1795	0.65	1/2429 (0.0%)
46	L9	0.65	0/1539	0.77	1/2073 (0.0%)
46	l9	0.77	0/1539	0.85	0/2073
47	M0	0.71	0/1741	0.84	3/2335 (0.1%)
47	m0	0.75	0/1758	0.87	2/2358 (0.1%)
48	M1	0.54	0/1374	0.73	1/1842 (0.1%)
48	m1	0.65	0/1374	0.82	2/1842 (0.1%)
49	M3	0.75	0/1568	0.86	0/2106
49	m3	0.69	0/1573	0.85	3/2113 (0.1%)
50	M4	0.73	0/1068	0.80	1/1438 (0.1%)
50	m4	0.82	0/1074	0.85	0/1446
51	M5	0.77	0/1757	0.85	0/2354
51	m5	0.66	0/1757	0.79	0/2354
52	M6	0.86	1/1585 (0.1%)	0.92	3/2128 (0.1%)
52	m6	1.02	5/1585 (0.3%)	0.98	7/2128 (0.3%)
53	M7	0.80	0/1443	0.85	2/1944 (0.1%)
53	m7	0.89	0/1250	0.89	0/1683
54	M8	0.79	0/1465	0.92	3/1965 (0.2%)
54	m8	0.73	0/1465	0.95	2/1965 (0.1%)
55	M9	0.57	0/1538	0.69	0/2050
55	m9	0.61	0/1538	0.70	0/2050
56	N0	0.78	0/1481	0.87	4/1990 (0.2%)
56	n0	0.87	0/1481	0.91	2/1990 (0.1%)
57	N1	0.78	0/1300	0.82	0/1743
57	n1	0.85	1/1300 (0.1%)	0.86	1/1743 (0.1%)
58	N2	0.42	0/812	0.62	0/1099
58	n2	0.51	0/794	0.65	0/1076
59	N3	0.70	0/1018	0.81	0/1369
59	n3	0.87	0/1018	0.98	1/1369 (0.1%)
60	N4	0.56	0/712	0.68	0/958
60	n4	0.69	0/1052	0.75	0/1398

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
61	N5	0.63	0/979	0.80	2/1321 (0.2%)
61	n5	0.65	0/974	0.77	0/1314
62	N6	0.68	0/1004	0.90	1/1341 (0.1%)
62	n6	0.71	1/1004 (0.1%)	0.84	0/1341
63	N7	0.52	0/1118	0.66	0/1497
63	n7	0.46	0/1118	0.63	0/1497
64	N8	0.82	0/1204	0.92	2/1612 (0.1%)
64	n8	0.79	0/1204	0.90	0/1612
65	N9	0.67	0/473	0.83	2/629 (0.3%)
65	n9	0.80	0/473	0.97	0/629
66	O0	0.48	0/751	0.66	0/1008
66	o0	0.49	0/775	0.65	0/1040
67	O1	0.60	0/890	0.72	0/1196
67	o1	0.76	0/897	0.86	0/1205
68	O2	0.85	0/1041	0.89	2/1394 (0.1%)
68	o2	0.82	0/1041	0.94	2/1394 (0.1%)
69	O3	0.95	0/868	0.91	1/1168 (0.1%)
69	o3	0.92	0/868	0.84	0/1168
70	O4	0.58	0/890	0.82	4/1189 (0.3%)
70	o4	0.59	0/890	0.78	0/1189
71	O5	0.70	0/978	0.81	1/1301 (0.1%)
71	o5	0.59	0/974	0.72	0/1297
72	O6	0.64	0/778	0.79	0/1034
72	o6	0.54	0/777	0.73	0/1033
73	O7	0.78	0/696	0.90	1/923 (0.1%)
73	o7	0.75	0/696	0.85	1/923 (0.1%)
74	O8	0.51	0/618	0.64	0/826
74	o8	0.42	0/614	0.61	0/822
75	O9	0.83	1/443 (0.2%)	0.90	0/588
75	o9	0.76	0/443	0.83	0/588
76	Q0	0.73	0/423	0.84	0/562
76	q0	0.95	0/423	1.03	1/562 (0.2%)
77	Q1	0.72	0/234	0.96	1/300 (0.3%)
77	q1	0.82	0/234	1.05	2/300 (0.7%)
78	Q2	0.93	1/860 (0.1%)	0.85	1/1136 (0.1%)
78	q2	0.82	1/860 (0.1%)	0.83	0/1136
79	Q3	0.74	0/701	0.85	0/934
79	q3	0.72	0/701	0.81	0/934
80	e0	0.56	0/499	0.74	0/665
81	sM	0.50	0/684	0.69	1/925 (0.1%)
83	p0	0.46	0/1092	0.61	0/1474
All	All	0.90	376/430075 (0.1%)	1.30	4764/631366 (0.8%)

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
7	s5	0	2
9	S7	0	1
10	S8	0	1
16	C4	0	2
17	c5	0	1
18	c6	0	1
19	C7	0	2
22	d0	0	1
27	D5	0	2
28	D6	0	1
33	E1	0	1
39	l2	0	1
42	l5	0	2
43	L6	0	1
43	l6	0	1
44	l7	0	2
45	L8	0	1
48	M1	0	2
51	M5	0	1
52	M6	0	1
52	m6	0	1
53	M7	0	1
55	m9	0	1
56	N0	0	2
56	n0	0	2
57	N1	0	1
62	n6	0	1
64	N8	0	1
64	n8	0	2
65	N9	0	1
67	O1	0	1
67	o1	0	2
All	All	0	43

The worst 5 of 376 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	Q2	17	CYS	CB-SG	15.91	2.09	1.82
36	5	1152	G	N9-C4	-12.55	1.27	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	q2	17	CYS	CB-SG	11.87	2.02	1.82
36	1	3181	C	N3-C4	-9.25	1.27	1.33
36	5	2138	A	N7-C5	-8.87	1.33	1.39

The worst 5 of 4764 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	N3-C4-C5	24.25	140.73	128.60
36	5	1152	G	N3-C4-N9	-22.33	112.60	126.00
36	5	1152	G	C2-N3-C4	-20.90	101.45	111.90
36	1	2945	G	O5'-P-OP2	-17.25	90.00	110.70
36	1	1308	A	O5'-P-OP2	-17.00	90.30	110.70

There are no chirality outliers.

5 of 43 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
16	C4	123	SER	Peptide
16	C4	124	ASP	Peptide
19	C7	22	PRO	Peptide
9	S7	131	PHE	Peptide
10	S8	147	ALA	Peptide

5.2 Too-close contacts [i](#)

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

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
2	S0	204/251 (81%)	152 (74%)	31 (15%)	21 (10%)	0 2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	s0	204/251 (81%)	153 (75%)	26 (13%)	25 (12%)	0	1
3	S1	212/254 (84%)	146 (69%)	39 (18%)	27 (13%)	0	1
3	s1	214/254 (84%)	177 (83%)	26 (12%)	11 (5%)	2	12
4	S2	215/253 (85%)	187 (87%)	17 (8%)	11 (5%)	2	12
4	s2	215/253 (85%)	186 (86%)	16 (7%)	13 (6%)	1	9
5	S3	221/239 (92%)	179 (81%)	29 (13%)	13 (6%)	1	9
5	s3	221/239 (92%)	183 (83%)	19 (9%)	19 (9%)	1	3
6	S4	258/260 (99%)	206 (80%)	41 (16%)	11 (4%)	2	15
6	s4	258/260 (99%)	216 (84%)	24 (9%)	18 (7%)	1	6
7	S5	204/224 (91%)	158 (78%)	32 (16%)	14 (7%)	1	6
7	s5	204/224 (91%)	164 (80%)	25 (12%)	15 (7%)	1	5
8	S6	224/236 (95%)	194 (87%)	17 (8%)	13 (6%)	1	10
8	s6	216/236 (92%)	189 (88%)	15 (7%)	12 (6%)	2	10
9	S7	182/189 (96%)	137 (75%)	25 (14%)	20 (11%)	0	2
9	s7	184/189 (97%)	148 (80%)	21 (11%)	15 (8%)	1	4
10	S8	184/200 (92%)	154 (84%)	21 (11%)	9 (5%)	2	13
10	s8	184/200 (92%)	163 (89%)	16 (9%)	5 (3%)	5	26
11	S9	183/196 (93%)	151 (82%)	23 (13%)	9 (5%)	2	13
11	s9	183/196 (93%)	140 (76%)	34 (19%)	9 (5%)	2	13
12	C0	94/105 (90%)	68 (72%)	15 (16%)	11 (12%)	0	1
12	c0	92/105 (88%)	64 (70%)	14 (15%)	14 (15%)	0	1
13	C1	153/155 (99%)	126 (82%)	16 (10%)	11 (7%)	1	5
13	c1	144/155 (93%)	118 (82%)	17 (12%)	9 (6%)	1	7
14	C2	122/142 (86%)	70 (57%)	25 (20%)	27 (22%)	0	0
14	c2	122/142 (86%)	68 (56%)	32 (26%)	22 (18%)	0	0
15	C3	148/150 (99%)	123 (83%)	18 (12%)	7 (5%)	2	14
15	c3	148/150 (99%)	120 (81%)	17 (12%)	11 (7%)	1	5
16	C4	125/136 (92%)	94 (75%)	15 (12%)	16 (13%)	0	1
16	c4	126/136 (93%)	101 (80%)	16 (13%)	9 (7%)	1	5
17	C5	122/141 (86%)	88 (72%)	23 (19%)	11 (9%)	1	3
17	c5	133/141 (94%)	92 (69%)	22 (16%)	19 (14%)	0	1

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	C6	139/142 (98%)	116 (84%)	16 (12%)	7 (5%)	2	12
18	c6	140/142 (99%)	116 (83%)	16 (11%)	8 (6%)	1	10
19	C7	116/136 (85%)	91 (78%)	13 (11%)	12 (10%)	0	2
19	c7	113/136 (83%)	87 (77%)	18 (16%)	8 (7%)	1	5
20	C8	143/145 (99%)	115 (80%)	16 (11%)	12 (8%)	1	4
20	c8	143/145 (99%)	114 (80%)	20 (14%)	9 (6%)	1	7
21	C9	141/143 (99%)	115 (82%)	22 (16%)	4 (3%)	5	25
21	c9	141/143 (99%)	119 (84%)	16 (11%)	6 (4%)	2	15
22	D0	105/120 (88%)	88 (84%)	13 (12%)	4 (4%)	3	18
22	d0	108/120 (90%)	82 (76%)	16 (15%)	10 (9%)	0	3
23	D1	85/87 (98%)	61 (72%)	16 (19%)	8 (9%)	0	3
23	d1	85/87 (98%)	72 (85%)	8 (9%)	5 (6%)	1	9
24	D2	127/129 (98%)	106 (84%)	19 (15%)	2 (2%)	9	40
24	d2	127/129 (98%)	114 (90%)	12 (9%)	1 (1%)	19	57
25	D3	142/144 (99%)	113 (80%)	19 (13%)	10 (7%)	1	6
25	d3	142/144 (99%)	123 (87%)	16 (11%)	3 (2%)	7	33
26	D4	132/134 (98%)	103 (78%)	20 (15%)	9 (7%)	1	6
26	d4	132/134 (98%)	103 (78%)	21 (16%)	8 (6%)	1	8
27	D5	68/107 (64%)	47 (69%)	9 (13%)	12 (18%)	0	0
27	d5	67/107 (63%)	52 (78%)	9 (13%)	6 (9%)	1	3
28	D6	95/97 (98%)	59 (62%)	18 (19%)	18 (19%)	0	0
28	d6	95/97 (98%)	74 (78%)	12 (13%)	9 (10%)	0	3
29	D7	79/81 (98%)	66 (84%)	8 (10%)	5 (6%)	1	7
29	d7	79/81 (98%)	60 (76%)	12 (15%)	7 (9%)	1	3
30	D8	61/66 (92%)	51 (84%)	6 (10%)	4 (7%)	1	6
30	d8	61/66 (92%)	42 (69%)	15 (25%)	4 (7%)	1	6
31	D9	51/55 (93%)	41 (80%)	8 (16%)	2 (4%)	3	17
31	d9	51/55 (93%)	41 (80%)	6 (12%)	4 (8%)	1	4
32	E0	58/60 (97%)	44 (76%)	12 (21%)	2 (3%)	3	20
33	E1	69/76 (91%)	36 (52%)	17 (25%)	16 (23%)	0	0
33	e1	74/76 (97%)	36 (49%)	17 (23%)	21 (28%)	0	0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
34	SR	316/318 (99%)	271 (86%)	35 (11%)	10 (3%)	4	22
34	sR	316/318 (99%)	270 (85%)	36 (11%)	10 (3%)	4	22
35	SM	155/273 (57%)	113 (73%)	23 (15%)	19 (12%)	0	1
39	L2	250/253 (99%)	223 (89%)	21 (8%)	6 (2%)	6	29
39	l2	250/253 (99%)	210 (84%)	30 (12%)	10 (4%)	3	17
40	L3	384/386 (100%)	326 (85%)	45 (12%)	13 (3%)	3	20
40	l3	384/386 (100%)	340 (88%)	32 (8%)	12 (3%)	4	23
41	L4	359/361 (99%)	299 (83%)	43 (12%)	17 (5%)	2	14
41	l4	359/361 (99%)	300 (84%)	39 (11%)	20 (6%)	2	10
42	L5	294/296 (99%)	242 (82%)	31 (10%)	21 (7%)	1	5
42	l5	292/296 (99%)	255 (87%)	30 (10%)	7 (2%)	6	29
43	L6	152/175 (87%)	132 (87%)	16 (10%)	4 (3%)	5	27
43	l6	153/175 (87%)	129 (84%)	20 (13%)	4 (3%)	5	27
44	L7	220/243 (90%)	198 (90%)	12 (6%)	10 (4%)	2	14
44	l7	221/243 (91%)	195 (88%)	20 (9%)	6 (3%)	5	26
45	L8	231/255 (91%)	188 (81%)	35 (15%)	8 (4%)	3	20
45	l8	229/255 (90%)	188 (82%)	21 (9%)	20 (9%)	1	3
46	L9	189/191 (99%)	167 (88%)	15 (8%)	7 (4%)	3	19
46	l9	189/191 (99%)	171 (90%)	15 (8%)	3 (2%)	9	40
47	M0	207/220 (94%)	178 (86%)	18 (9%)	11 (5%)	2	11
47	m0	209/220 (95%)	167 (80%)	27 (13%)	15 (7%)	1	5
48	M1	167/173 (96%)	131 (78%)	21 (13%)	15 (9%)	1	3
48	m1	167/173 (96%)	139 (83%)	16 (10%)	12 (7%)	1	5
49	M3	191/198 (96%)	164 (86%)	16 (8%)	11 (6%)	1	10
49	m3	192/198 (97%)	159 (83%)	17 (9%)	16 (8%)	1	4
50	M4	134/137 (98%)	117 (87%)	12 (9%)	5 (4%)	3	19
50	m4	135/137 (98%)	122 (90%)	10 (7%)	3 (2%)	6	31
51	M5	201/203 (99%)	181 (90%)	12 (6%)	8 (4%)	3	17
51	m5	201/203 (99%)	179 (89%)	16 (8%)	6 (3%)	4	24
52	M6	195/198 (98%)	181 (93%)	11 (6%)	3 (2%)	10	42
52	m6	195/198 (98%)	179 (92%)	8 (4%)	8 (4%)	3	16

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
53	M7	181/183 (99%)	152 (84%)	22 (12%)	7 (4%)	3	17
53	m7	153/183 (84%)	138 (90%)	13 (8%)	2 (1%)	12	45
54	M8	183/185 (99%)	165 (90%)	14 (8%)	4 (2%)	6	31
54	m8	183/185 (99%)	155 (85%)	22 (12%)	6 (3%)	4	21
55	M9	186/188 (99%)	172 (92%)	13 (7%)	1 (0%)	29	68
55	m9	186/188 (99%)	172 (92%)	13 (7%)	1 (0%)	29	68
56	N0	170/172 (99%)	150 (88%)	15 (9%)	5 (3%)	4	24
56	n0	170/172 (99%)	158 (93%)	11 (6%)	1 (1%)	25	64
57	N1	157/159 (99%)	133 (85%)	18 (12%)	6 (4%)	3	18
57	n1	157/159 (99%)	141 (90%)	12 (8%)	4 (2%)	5	28
58	N2	98/120 (82%)	76 (78%)	17 (17%)	5 (5%)	2	12
58	n2	96/120 (80%)	77 (80%)	13 (14%)	6 (6%)	1	7
59	N3	134/136 (98%)	124 (92%)	9 (7%)	1 (1%)	22	60
59	n3	134/136 (98%)	121 (90%)	11 (8%)	2 (2%)	10	42
60	N4	96/155 (62%)	74 (77%)	13 (14%)	9 (9%)	0	3
60	n4	133/155 (86%)	107 (80%)	17 (13%)	9 (7%)	1	6
61	N5	119/141 (84%)	106 (89%)	12 (10%)	1 (1%)	19	57
61	n5	118/141 (84%)	98 (83%)	11 (9%)	9 (8%)	1	5
62	N6	124/126 (98%)	110 (89%)	8 (6%)	6 (5%)	2	13
62	n6	124/126 (98%)	113 (91%)	7 (6%)	4 (3%)	4	22
63	N7	133/135 (98%)	109 (82%)	18 (14%)	6 (4%)	2	14
63	n7	133/135 (98%)	104 (78%)	18 (14%)	11 (8%)	1	4
64	N8	146/148 (99%)	121 (83%)	15 (10%)	10 (7%)	1	6
64	n8	146/148 (99%)	119 (82%)	22 (15%)	5 (3%)	3	20
65	N9	56/58 (97%)	48 (86%)	6 (11%)	2 (4%)	3	19
65	n9	56/58 (97%)	40 (71%)	12 (21%)	4 (7%)	1	5
66	O0	95/104 (91%)	89 (94%)	4 (4%)	2 (2%)	7	33
66	o0	98/104 (94%)	88 (90%)	6 (6%)	4 (4%)	3	16
67	O1	107/112 (96%)	95 (89%)	7 (6%)	5 (5%)	2	14
67	o1	107/112 (96%)	90 (84%)	12 (11%)	5 (5%)	2	14
68	O2	125/129 (97%)	112 (90%)	10 (8%)	3 (2%)	6	29

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
68	o2	125/129 (97%)	106 (85%)	13 (10%)	6 (5%)	2	13
69	O3	104/106 (98%)	94 (90%)	7 (7%)	3 (3%)	4	24
69	o3	104/106 (98%)	92 (88%)	8 (8%)	4 (4%)	3	18
70	O4	110/119 (92%)	97 (88%)	12 (11%)	1 (1%)	17	55
70	o4	110/119 (92%)	93 (84%)	11 (10%)	6 (6%)	2	10
71	O5	117/119 (98%)	104 (89%)	12 (10%)	1 (1%)	17	55
71	o5	117/119 (98%)	102 (87%)	13 (11%)	2 (2%)	9	39
72	O6	97/99 (98%)	77 (79%)	15 (16%)	5 (5%)	2	12
72	o6	97/99 (98%)	77 (79%)	13 (13%)	7 (7%)	1	5
73	O7	85/87 (98%)	74 (87%)	8 (9%)	3 (4%)	3	20
73	o7	85/87 (98%)	75 (88%)	8 (9%)	2 (2%)	6	29
74	O8	75/77 (97%)	62 (83%)	11 (15%)	2 (3%)	5	26
74	o8	75/77 (97%)	60 (80%)	11 (15%)	4 (5%)	2	11
75	O9	48/50 (96%)	39 (81%)	8 (17%)	1 (2%)	7	33
75	o9	48/50 (96%)	41 (85%)	6 (12%)	1 (2%)	7	33
76	Q0	50/52 (96%)	46 (92%)	2 (4%)	2 (4%)	3	17
76	q0	50/52 (96%)	47 (94%)	2 (4%)	1 (2%)	7	34
77	Q1	23/25 (92%)	22 (96%)	1 (4%)	0	100	100
77	q1	23/25 (92%)	21 (91%)	1 (4%)	1 (4%)	2	15
78	Q2	103/105 (98%)	84 (82%)	13 (13%)	6 (6%)	1	10
78	q2	103/105 (98%)	92 (89%)	10 (10%)	1 (1%)	15	53
79	Q3	89/91 (98%)	77 (86%)	8 (9%)	4 (4%)	2	14
79	q3	89/91 (98%)	82 (92%)	6 (7%)	1 (1%)	14	50
80	e0	60/62 (97%)	43 (72%)	11 (18%)	6 (10%)	0	2
81	sM	98/273 (36%)	62 (63%)	22 (22%)	14 (14%)	0	1
83	p0	139/311 (45%)	120 (86%)	15 (11%)	4 (3%)	4	24
All	All	22333/24141 (92%)	18562 (83%)	2524 (11%)	1247 (6%)	2	10

5 of 1247 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	39	ASN

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Mol	Chain	Res	Type
2	S0	66	ALA
2	S0	158	VAL
2	S0	191	ARG

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	
2	S0	164/209 (78%)	133 (81%)	31 (19%)	1	8
2	s0	165/209 (79%)	131 (79%)	34 (21%)	1	6
3	S1	191/223 (86%)	155 (81%)	36 (19%)	1	8
3	s1	192/223 (86%)	163 (85%)	29 (15%)	3	14
4	S2	176/204 (86%)	142 (81%)	34 (19%)	1	8
4	s2	176/204 (86%)	133 (76%)	43 (24%)	0	3
5	S3	182/194 (94%)	145 (80%)	37 (20%)	1	6
5	s3	182/194 (94%)	151 (83%)	31 (17%)	2	10
6	S4	221/221 (100%)	183 (83%)	38 (17%)	2	10
6	s4	221/221 (100%)	183 (83%)	38 (17%)	2	10
7	S5	173/190 (91%)	142 (82%)	31 (18%)	2	9
7	s5	173/190 (91%)	133 (77%)	40 (23%)	1	4
8	S6	188/201 (94%)	148 (79%)	40 (21%)	1	5
8	s6	187/201 (93%)	151 (81%)	36 (19%)	1	8
9	S7	165/169 (98%)	140 (85%)	25 (15%)	3	14
9	s7	165/169 (98%)	138 (84%)	27 (16%)	2	11
10	S8	150/161 (93%)	130 (87%)	20 (13%)	4	17
10	s8	150/161 (93%)	128 (85%)	22 (15%)	3	15
11	S9	158/165 (96%)	123 (78%)	35 (22%)	1	4
11	s9	158/165 (96%)	128 (81%)	30 (19%)	1	8
12	C0	77/98 (79%)	67 (87%)	10 (13%)	4	19

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
12	c0	73/98 (74%)	63 (86%)	10 (14%)	3	17
13	C1	129/136 (95%)	107 (83%)	22 (17%)	2	10
13	c1	129/136 (95%)	106 (82%)	23 (18%)	2	9
14	C2	88/118 (75%)	66 (75%)	22 (25%)	0	3
14	c2	88/118 (75%)	66 (75%)	22 (25%)	0	3
15	C3	127/127 (100%)	100 (79%)	27 (21%)	1	5
15	c3	127/127 (100%)	103 (81%)	24 (19%)	1	8
16	C4	81/104 (78%)	60 (74%)	21 (26%)	0	2
16	c4	97/104 (93%)	76 (78%)	21 (22%)	1	5
17	C5	101/117 (86%)	85 (84%)	16 (16%)	2	12
17	c5	103/117 (88%)	84 (82%)	19 (18%)	1	9
18	C6	117/118 (99%)	94 (80%)	23 (20%)	1	7
18	c6	118/118 (100%)	93 (79%)	25 (21%)	1	5
19	C7	94/124 (76%)	72 (77%)	22 (23%)	1	4
19	c7	92/124 (74%)	78 (85%)	14 (15%)	3	14
20	C8	128/128 (100%)	95 (74%)	33 (26%)	0	2
20	c8	128/128 (100%)	103 (80%)	25 (20%)	1	7
21	C9	115/115 (100%)	92 (80%)	23 (20%)	1	7
21	c9	115/115 (100%)	93 (81%)	22 (19%)	1	8
22	D0	100/113 (88%)	78 (78%)	22 (22%)	1	4
22	d0	103/113 (91%)	78 (76%)	25 (24%)	0	3
23	D1	74/74 (100%)	61 (82%)	13 (18%)	2	10
23	d1	74/74 (100%)	56 (76%)	18 (24%)	0	3
24	D2	110/110 (100%)	94 (86%)	16 (14%)	3	15
24	d2	110/110 (100%)	93 (84%)	17 (16%)	2	13
25	D3	119/119 (100%)	98 (82%)	21 (18%)	2	10
25	d3	119/119 (100%)	104 (87%)	15 (13%)	4	20
26	D4	112/112 (100%)	93 (83%)	19 (17%)	2	10
26	d4	112/112 (100%)	94 (84%)	18 (16%)	2	12
27	D5	61/88 (69%)	46 (75%)	15 (25%)	0	3
27	d5	61/88 (69%)	51 (84%)	10 (16%)	2	11

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
28	D6	83/83 (100%)	67 (81%)	16 (19%)	1	8
28	d6	83/83 (100%)	73 (88%)	10 (12%)	5	22
29	D7	70/70 (100%)	64 (91%)	6 (9%)	10	37
29	d7	70/70 (100%)	60 (86%)	10 (14%)	3	15
30	D8	56/59 (95%)	44 (79%)	12 (21%)	1	5
30	d8	56/59 (95%)	44 (79%)	12 (21%)	1	5
31	D9	47/48 (98%)	39 (83%)	8 (17%)	2	10
31	d9	47/48 (98%)	37 (79%)	10 (21%)	1	5
32	E0	51/51 (100%)	41 (80%)	10 (20%)	1	7
33	E1	62/66 (94%)	46 (74%)	16 (26%)	0	2
33	e1	66/66 (100%)	51 (77%)	15 (23%)	1	4
34	SR	260/261 (100%)	222 (85%)	38 (15%)	3	15
34	sR	260/261 (100%)	233 (90%)	27 (10%)	7	27
35	SM	97/228 (42%)	76 (78%)	21 (22%)	1	5
39	L2	193/195 (99%)	150 (78%)	43 (22%)	1	4
39	l2	192/195 (98%)	152 (79%)	40 (21%)	1	5
40	L3	321/322 (100%)	257 (80%)	64 (20%)	1	7
40	l3	320/322 (99%)	251 (78%)	69 (22%)	1	5
41	L4	288/288 (100%)	228 (79%)	60 (21%)	1	5
41	l4	288/288 (100%)	229 (80%)	59 (20%)	1	6
42	L5	244/244 (100%)	197 (81%)	47 (19%)	1	8
42	l5	243/244 (100%)	196 (81%)	47 (19%)	1	8
43	L6	134/152 (88%)	112 (84%)	22 (16%)	2	11
43	l6	135/152 (89%)	112 (83%)	23 (17%)	2	10
44	L7	186/204 (91%)	162 (87%)	24 (13%)	4	19
44	l7	187/204 (92%)	160 (86%)	27 (14%)	3	15
45	L8	187/207 (90%)	152 (81%)	35 (19%)	1	8
45	l8	177/207 (86%)	147 (83%)	30 (17%)	2	11
46	L9	171/171 (100%)	134 (78%)	37 (22%)	1	5
46	l9	171/171 (100%)	137 (80%)	34 (20%)	1	7
47	M0	177/186 (95%)	143 (81%)	34 (19%)	1	8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
47	m0	179/186 (96%)	142 (79%)	37 (21%)	1	6
48	M1	147/150 (98%)	115 (78%)	32 (22%)	1	5
48	m1	147/150 (98%)	122 (83%)	25 (17%)	2	10
49	M3	154/158 (98%)	128 (83%)	26 (17%)	2	11
49	m3	154/158 (98%)	130 (84%)	24 (16%)	2	13
50	M4	107/108 (99%)	84 (78%)	23 (22%)	1	5
50	m4	108/108 (100%)	88 (82%)	20 (18%)	1	8
51	M5	175/175 (100%)	138 (79%)	37 (21%)	1	5
51	m5	175/175 (100%)	149 (85%)	26 (15%)	3	14
52	M6	160/161 (99%)	133 (83%)	27 (17%)	2	11
52	m6	160/161 (99%)	132 (82%)	28 (18%)	2	10
53	M7	140/145 (97%)	109 (78%)	31 (22%)	1	4
53	m7	125/145 (86%)	103 (82%)	22 (18%)	2	10
54	M8	150/150 (100%)	128 (85%)	22 (15%)	3	15
54	m8	150/150 (100%)	118 (79%)	32 (21%)	1	5
55	M9	153/153 (100%)	132 (86%)	21 (14%)	3	17
55	m9	153/153 (100%)	120 (78%)	33 (22%)	1	5
56	N0	156/156 (100%)	121 (78%)	35 (22%)	1	4
56	n0	156/156 (100%)	124 (80%)	32 (20%)	1	6
57	N1	136/136 (100%)	108 (79%)	28 (21%)	1	6
57	n1	136/136 (100%)	108 (79%)	28 (21%)	1	6
58	N2	87/106 (82%)	74 (85%)	13 (15%)	3	14
58	n2	85/106 (80%)	72 (85%)	13 (15%)	2	13
59	N3	104/104 (100%)	86 (83%)	18 (17%)	2	10
59	n3	104/104 (100%)	94 (90%)	10 (10%)	8	32
60	N4	57/129 (44%)	50 (88%)	7 (12%)	4	21
60	n4	100/129 (78%)	82 (82%)	18 (18%)	1	9
61	N5	104/117 (89%)	84 (81%)	20 (19%)	1	8
61	n5	104/117 (89%)	83 (80%)	21 (20%)	1	6
62	N6	109/109 (100%)	83 (76%)	26 (24%)	0	3
62	n6	109/109 (100%)	82 (75%)	27 (25%)	0	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
63	N7	115/115 (100%)	94 (82%)	21 (18%)	1	9
63	n7	115/115 (100%)	93 (81%)	22 (19%)	1	8
64	N8	118/118 (100%)	96 (81%)	22 (19%)	1	8
64	n8	118/118 (100%)	93 (79%)	25 (21%)	1	5
65	N9	46/46 (100%)	35 (76%)	11 (24%)	0	3
65	n9	46/46 (100%)	37 (80%)	9 (20%)	1	7
66	O0	81/87 (93%)	68 (84%)	13 (16%)	2	12
66	o0	84/87 (97%)	70 (83%)	14 (17%)	2	11
67	O1	92/96 (96%)	71 (77%)	21 (23%)	1	4
67	o1	94/96 (98%)	74 (79%)	20 (21%)	1	5
68	O2	109/110 (99%)	87 (80%)	22 (20%)	1	6
68	o2	109/110 (99%)	85 (78%)	24 (22%)	1	4
69	O3	90/90 (100%)	81 (90%)	9 (10%)	7	29
69	o3	90/90 (100%)	77 (86%)	13 (14%)	3	15
70	O4	95/101 (94%)	74 (78%)	21 (22%)	1	4
70	o4	95/101 (94%)	75 (79%)	20 (21%)	1	5
71	O5	104/104 (100%)	80 (77%)	24 (23%)	1	4
71	o5	103/104 (99%)	80 (78%)	23 (22%)	1	4
72	O6	81/81 (100%)	65 (80%)	16 (20%)	1	7
72	o6	80/81 (99%)	56 (70%)	24 (30%)	0	1
73	O7	70/70 (100%)	58 (83%)	12 (17%)	2	10
73	o7	70/70 (100%)	58 (83%)	12 (17%)	2	10
74	O8	68/68 (100%)	52 (76%)	16 (24%)	1	3
74	o8	67/68 (98%)	53 (79%)	14 (21%)	1	5
75	O9	45/45 (100%)	40 (89%)	5 (11%)	6	25
75	o9	45/45 (100%)	36 (80%)	9 (20%)	1	7
76	Q0	47/47 (100%)	35 (74%)	12 (26%)	0	3
76	q0	47/47 (100%)	35 (74%)	12 (26%)	0	3
77	Q1	23/23 (100%)	15 (65%)	8 (35%)	0	1
77	q1	23/23 (100%)	14 (61%)	9 (39%)	0	0
78	Q2	90/90 (100%)	67 (74%)	23 (26%)	0	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
78	q2	90/90 (100%)	73 (81%)	17 (19%)	1	8
79	Q3	71/71 (100%)	56 (79%)	15 (21%)	1	5
79	q3	71/71 (100%)	63 (89%)	8 (11%)	6	24
80	e0	53/53 (100%)	42 (79%)	11 (21%)	1	5
81	sM	54/228 (24%)	40 (74%)	14 (26%)	0	2
83	p0	105/253 (42%)	80 (76%)	25 (24%)	0	3
All	All	18729/20239 (92%)	15175 (81%)	3554 (19%)	1	8

5 of 3554 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	s2	69	ILE
83	p0	74	GLU
20	c8	143	ARG
78	q2	61	LYS
60	n4	97	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 51 such sidechains are listed below:

Mol	Chain	Res	Type
74	O8	32	ASN
11	s9	142	ASN
64	n8	25	HIS
78	Q2	23	HIS
9	s7	71	HIS

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	1747/1800 (97%)	451 (25%)	62 (3%)
1	6	1793/1800 (99%)	468 (26%)	56 (3%)
36	1	3145/3396 (92%)	662 (21%)	85 (2%)
36	5	3145/3396 (92%)	673 (21%)	84 (2%)
37	3	120/121 (99%)	16 (13%)	3 (2%)
37	7	120/121 (99%)	21 (17%)	0
38	4	157/158 (99%)	39 (24%)	3 (1%)
38	8	157/158 (99%)	36 (22%)	3 (1%)
All	All	10384/10950 (94%)	2366 (22%)	296 (2%)

5 of 2366 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	2	2	A
1	2	4	C
1	2	17	C
1	2	25	C
1	2	26	A

5 of 296 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
36	5	1241	U
36	5	3269	U
36	5	1434	G
36	5	2281	A
36	1	1507	G

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 2563 ligands modelled in this entry, 1428 are monoatomic - leaving 1135 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	$\# Z > 2$
87	OHX	2	2166	-	0,6,6	-	-	-		
87	OHX	2	2132	-	0,6,6	-	-	-		
87	OHX	1	4085	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	2	2171	-	0,6,6	-	-	-	-	-
87	OHX	1	4163	-	0,6,6	-	-	-	-	-
87	OHX	5	4113	-	0,6,6	-	-	-	-	-
87	OHX	1	3912	-	0,6,6	-	-	-	-	-
87	OHX	5	4010	-	0,6,6	-	-	-	-	-
87	OHX	1	4065	-	0,6,6	-	-	-	-	-
87	OHX	5	4025	-	0,6,6	-	-	-	-	-
87	OHX	1	3988	-	0,6,6	-	-	-	-	-
87	OHX	5	3982	-	0,6,6	-	-	-	-	-
87	OHX	2	2025	-	0,6,6	-	-	-	-	-
87	OHX	1	4192	-	0,6,6	-	-	-	-	-
87	OHX	1	3944	-	0,6,6	-	-	-	-	-
87	OHX	1	4088	-	0,6,6	-	-	-	-	-
87	OHX	6	2148	-	0,6,6	-	-	-	-	-
87	OHX	5	4221	-	0,6,6	-	-	-	-	-
87	OHX	4	231	-	0,6,6	-	-	-	-	-
87	OHX	6	2076	-	0,6,6	-	-	-	-	-
87	OHX	1	4152	-	0,6,6	-	-	-	-	-
87	OHX	1	3933	-	0,6,6	-	-	-	-	-
87	OHX	s9	201	-	0,6,6	-	-	-	-	-
87	OHX	5	3963	-	0,6,6	-	-	-	-	-
87	OHX	5	4074	-	0,6,6	-	-	-	-	-
87	OHX	4	232	-	0,6,6	-	-	-	-	-
87	OHX	5	4240	-	0,6,6	-	-	-	-	-
87	OHX	6	2165	-	0,6,6	-	-	-	-	-
87	OHX	5	4120	-	0,6,6	-	-	-	-	-
87	OHX	1	4175	-	0,6,6	-	-	-	-	-
87	OHX	5	4053	-	0,6,6	-	-	-	-	-
87	OHX	1	4180	-	0,6,6	-	-	-	-	-
87	OHX	1	4171	-	0,6,6	-	-	-	-	-
87	OHX	6	2158	-	0,6,6	-	-	-	-	-
87	OHX	5	4032	-	0,6,6	-	-	-	-	-
87	OHX	1	3891	-	0,6,6	-	-	-	-	-
87	OHX	1	4104	-	0,6,6	-	-	-	-	-
87	OHX	5	3972	-	0,6,6	-	-	-	-	-
87	OHX	5	4003	-	0,6,6	-	-	-	-	-
87	OHX	5	3974	-	0,6,6	-	-	-	-	-
87	OHX	1	3872	-	0,6,6	-	-	-	-	-
87	OHX	6	2171	-	0,6,6	-	-	-	-	-
87	OHX	5	4157	-	0,6,6	-	-	-	-	-
87	OHX	2	2172	-	0,6,6	-	-	-	-	-
87	OHX	l3	404	-	0,6,6	-	-	-	-	-
87	OHX	5	4173	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4017	-	0,6,6	-	-	-		
87	OHX	2	2110	-	0,6,6	-	-	-		
87	OHX	1	3960	-	0,6,6	-	-	-		
87	OHX	5	4135	-	0,6,6	-	-	-		
87	OHX	2	2068	-	0,6,6	-	-	-		
87	OHX	6	2099	-	0,6,6	-	-	-		
87	OHX	6	2107	-	0,6,6	-	-	-		
87	OHX	1	3982	-	0,6,6	-	-	-		
87	OHX	1	4179	-	0,6,6	-	-	-		
87	OHX	m7	206	-	0,6,6	-	-	-		
87	OHX	5	4045	-	0,6,6	-	-	-		
87	OHX	5	4047	-	0,6,6	-	-	-		
87	OHX	6	2108	-	0,6,6	-	-	-		
87	OHX	5	4196	-	0,6,6	-	-	-		
87	OHX	5	3983	-	0,6,6	-	-	-		
87	OHX	5	4022	-	0,6,6	-	-	-		
87	OHX	m9	201	-	0,6,6	-	-	-		
87	OHX	2	2038	-	0,6,6	-	-	-		
87	OHX	5	3904	-	0,6,6	-	-	-		
87	OHX	5	3993	-	0,6,6	-	-	-		
87	OHX	5	3999	-	0,6,6	-	-	-		
87	OHX	6	2085	-	0,6,6	-	-	-		
87	OHX	5	4180	-	0,6,6	-	-	-		
87	OHX	1	4129	-	0,6,6	-	-	-		
87	OHX	1	4121	-	0,6,6	-	-	-		
87	OHX	1	4055	-	0,6,6	-	-	-		
87	OHX	1	4190	-	0,6,6	-	-	-		
87	OHX	2	2153	-	0,6,6	-	-	-		
87	OHX	1	4114	-	0,6,6	-	-	-		
87	OHX	1	4021	-	0,6,6	-	-	-		
87	OHX	8	227	-	0,6,6	-	-	-		
87	OHX	5	4178	-	0,6,6	-	-	-		
87	OHX	1	3991	-	0,6,6	-	-	-		
87	OHX	1	3917	-	0,6,6	-	-	-		
87	OHX	1	3896	-	0,6,6	-	-	-		
87	OHX	2	2120	-	0,6,6	-	-	-		
87	OHX	1	4134	-	0,6,6	-	-	-		
87	OHX	6	2191	-	0,6,6	-	-	-		
87	OHX	6	2086	-	0,6,6	-	-	-		
87	OHX	1	4156	-	0,6,6	-	-	-		
87	OHX	6	2065	-	0,6,6	-	-	-		
87	OHX	5	3910	-	0,6,6	-	-	-		
87	OHX	2	2026	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4169	-	0,6,6	-	-	-		
87	OHX	2	2090	-	0,6,6	-	-	-		
87	OHX	2	2107	-	0,6,6	-	-	-		
87	OHX	5	3976	-	0,6,6	-	-	-		
87	OHX	1	3964	-	0,6,6	-	-	-		
87	OHX	1	3970	-	0,6,6	-	-	-		
87	OHX	1	3877	-	0,6,6	-	-	-		
87	OHX	5	4202	-	0,6,6	-	-	-		
87	OHX	6	2195	-	0,6,6	-	-	-		
87	OHX	5	3961	-	0,6,6	-	-	-		
87	OHX	5	4161	-	0,6,6	-	-	-		
87	OHX	5	3909	-	0,6,6	-	-	-		
87	OHX	2	2030	-	0,6,6	-	-	-		
87	OHX	5	4041	-	0,6,6	-	-	-		
87	OHX	5	4241	-	0,6,6	-	-	-		
87	OHX	5	3911	-	0,6,6	-	-	-		
87	OHX	1	3998	-	0,6,6	-	-	-		
87	OHX	1	3929	-	0,6,6	-	-	-		
87	OHX	2	2168	-	0,6,6	-	-	-		
87	OHX	1	3873	-	0,6,6	-	-	-		
87	OHX	1	4146	-	0,6,6	-	-	-		
87	OHX	1	4133	-	0,6,6	-	-	-		
87	OHX	6	2152	-	0,6,6	-	-	-		
87	OHX	5	4182	-	0,6,6	-	-	-		
87	OHX	5	4198	-	0,6,6	-	-	-		
87	OHX	5	4215	-	0,6,6	-	-	-		
87	OHX	6	2178	-	0,6,6	-	-	-		
87	OHX	1	4144	-	0,6,6	-	-	-		
87	OHX	2	2118	-	0,6,6	-	-	-		
87	OHX	5	4070	-	0,6,6	-	-	-		
87	OHX	2	2159	-	0,6,6	-	-	-		
87	OHX	8	221	-	0,6,6	-	-	-		
87	OHX	5	3948	-	0,6,6	-	-	-		
87	OHX	1	3907	-	0,6,6	-	-	-		
87	OHX	1	3949	-	0,6,6	-	-	-		
87	OHX	6	2114	-	0,6,6	-	-	-		
87	OHX	5	4229	-	0,6,6	-	-	-		
87	OHX	5	3921	-	0,6,6	-	-	-		
87	OHX	1	4072	-	0,6,6	-	-	-		
87	OHX	1	3950	-	0,6,6	-	-	-		
87	OHX	4	233	-	0,6,6	-	-	-		
87	OHX	M9	202	-	0,6,6	-	-	-		
87	OHX	6	2140	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4199	-	0,6,6	-	-	-		
87	OHX	1	3981	-	0,6,6	-	-	-		
87	OHX	5	4149	-	0,6,6	-	-	-		
87	OHX	6	2194	-	0,6,6	-	-	-		
87	OHX	3	219	-	0,6,6	-	-	-		
87	OHX	1	3992	-	0,6,6	-	-	-		
87	OHX	6	2115	-	0,6,6	-	-	-		
87	OHX	5	4083	-	0,6,6	-	-	-		
87	OHX	5	4093	-	0,6,6	-	-	-		
87	OHX	1	3966	-	0,6,6	-	-	-		
87	OHX	2	2079	-	0,6,6	-	-	-		
87	OHX	1	4150	-	0,6,6	-	-	-		
87	OHX	5	4036	-	0,6,6	-	-	-		
87	OHX	1	4166	-	0,6,6	-	-	-		
87	OHX	1	4044	-	0,6,6	-	-	-		
87	OHX	6	2153	-	0,6,6	-	-	-		
87	OHX	2	2176	-	0,6,6	-	-	-		
87	OHX	3	221	-	0,6,6	-	-	-		
87	OHX	6	2117	-	0,6,6	-	-	-		
87	OHX	2	2145	-	0,6,6	-	-	-		
87	OHX	5	3995	-	0,6,6	-	-	-		
87	OHX	6	2192	-	0,6,6	-	-	-		
87	OHX	1	4023	-	0,6,6	-	-	-		
87	OHX	5	4094	-	0,6,6	-	-	-		
87	OHX	1	4029	-	0,6,6	-	-	-		
87	OHX	6	2101	-	0,6,6	-	-	-		
87	OHX	5	4082	-	0,6,6	-	-	-		
87	OHX	5	4243	-	0,6,6	-	-	-		
89	3KD	1	4218	-	24,25,25	0.80	0	30,39,39	1.10	1 (3%)
87	OHX	8	228	-	0,6,6	-	-	-		
87	OHX	2	2103	-	0,6,6	-	-	-		
87	OHX	1	3875	-	0,6,6	-	-	-		
87	OHX	1	4008	-	0,6,6	-	-	-		
87	OHX	2	2128	-	0,6,6	-	-	-		
87	OHX	1	3884	-	0,6,6	-	-	-		
87	OHX	1	4168	-	0,6,6	-	-	-		
87	OHX	6	2066	-	0,6,6	-	-	-		
87	OHX	6	2162	-	0,6,6	-	-	-		
87	OHX	1	3926	-	0,6,6	-	-	-		
87	OHX	5	4037	-	0,6,6	-	-	-		
87	OHX	1	4153	-	0,6,6	-	-	-		
87	OHX	1	4174	-	0,6,6	-	-	-		
87	OHX	1	4099	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2111	-	0,6,6	-	-	-	-	-
87	OHX	6	2200	-	0,6,6	-	-	-	-	-
87	OHX	1	4024	-	0,6,6	-	-	-	-	-
87	OHX	6	2182	-	0,6,6	-	-	-	-	-
87	OHX	5	4181	-	0,6,6	-	-	-	-	-
87	OHX	5	4191	-	0,6,6	-	-	-	-	-
87	OHX	6	2146	-	0,6,6	-	-	-	-	-
87	OHX	5	4183	-	0,6,6	-	-	-	-	-
87	OHX	1	4108	-	0,6,6	-	-	-	-	-
87	OHX	3	223	-	0,6,6	-	-	-	-	-
87	OHX	2	2096	-	0,6,6	-	-	-	-	-
87	OHX	2	2054	-	0,6,6	-	-	-	-	-
87	OHX	1	3898	-	0,6,6	-	-	-	-	-
87	OHX	1	3962	-	0,6,6	-	-	-	-	-
87	OHX	5	4081	-	0,6,6	-	-	-	-	-
87	OHX	1	4195	-	0,6,6	-	-	-	-	-
87	OHX	6	2052	-	0,6,6	-	-	-	-	-
87	OHX	1	4017	-	0,6,6	-	-	-	-	-
87	OHX	5	4040	-	0,6,6	-	-	-	-	-
87	OHX	5	4085	-	0,6,6	-	-	-	-	-
87	OHX	1	4100	-	0,6,6	-	-	-	-	-
87	OHX	2	2100	-	0,6,6	-	-	-	-	-
87	OHX	1	3957	-	0,6,6	-	-	-	-	-
87	OHX	6	2128	-	0,6,6	-	-	-	-	-
87	OHX	1	4000	-	0,6,6	-	-	-	-	-
87	OHX	5	3942	-	0,6,6	-	-	-	-	-
87	OHX	1	4112	-	0,6,6	-	-	-	-	-
87	OHX	2	2043	-	0,6,6	-	-	-	-	-
87	OHX	1	3963	-	0,6,6	-	-	-	-	-
87	OHX	5	3998	-	0,6,6	-	-	-	-	-
87	OHX	L3	404	-	0,6,6	-	-	-	-	-
87	OHX	5	4133	-	0,6,6	-	-	-	-	-
87	OHX	5	4023	-	0,6,6	-	-	-	-	-
87	OHX	6	2119	-	0,6,6	-	-	-	-	-
87	OHX	1	4038	-	0,6,6	-	-	-	-	-
87	OHX	6	2087	-	0,6,6	-	-	-	-	-
87	OHX	5	4190	-	0,6,6	-	-	-	-	-
87	OHX	1	3990	-	0,6,6	-	-	-	-	-
87	OHX	6	2142	-	0,6,6	-	-	-	-	-
87	OHX	6	2188	-	0,6,6	-	-	-	-	-
87	OHX	1	3888	-	0,6,6	-	-	-	-	-
87	OHX	2	2137	-	0,6,6	-	-	-	-	-
87	OHX	5	4142	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	2	2065	-	0,6,6	-	-	-		
87	OHX	2	2126	-	0,6,6	-	-	-		
87	OHX	1	3972	-	0,6,6	-	-	-		
87	OHX	m5	304	-	0,6,6	-	-	-		
87	OHX	5	4247	-	0,6,6	-	-	-		
87	OHX	2	2124	-	0,6,6	-	-	-		
87	OHX	6	2123	-	0,6,6	-	-	-		
87	OHX	5	4130	-	0,6,6	-	-	-		
87	OHX	5	4197	-	0,6,6	-	-	-		
87	OHX	8	223	-	0,6,6	-	-	-		
87	OHX	5	4072	-	0,6,6	-	-	-		
87	OHX	7	227	-	0,6,6	-	-	-		
87	OHX	1	4096	-	0,6,6	-	-	-		
87	OHX	1	3986	-	0,6,6	-	-	-		
87	OHX	6	2109	-	0,6,6	-	-	-		
87	OHX	d9	102	-	0,6,6	-	-	-		
87	OHX	5	4131	-	0,6,6	-	-	-		
87	OHX	1	3883	-	0,6,6	-	-	-		
87	OHX	5	3992	-	0,6,6	-	-	-		
87	OHX	5	3920	-	0,6,6	-	-	-		
87	OHX	1	4058	-	0,6,6	-	-	-		
87	OHX	1	4071	-	0,6,6	-	-	-		
87	OHX	5	4107	-	0,6,6	-	-	-		
87	OHX	1	4013	-	0,6,6	-	-	-		
87	OHX	4	225	-	0,6,6	-	-	-		
87	OHX	5	4077	-	0,6,6	-	-	-		
87	OHX	2	2069	-	0,6,6	-	-	-		
87	OHX	5	4203	-	0,6,6	-	-	-		
87	OHX	2	2144	-	0,6,6	-	-	-		
87	OHX	1	3989	-	0,6,6	-	-	-		
87	OHX	1	4006	-	0,6,6	-	-	-		
87	OHX	1	4212	-	0,6,6	-	-	-		
87	OHX	1	4002	-	0,6,6	-	-	-		
87	OHX	5	3981	-	0,6,6	-	-	-		
87	OHX	6	2127	-	0,6,6	-	-	-		
87	OHX	5	3937	-	0,6,6	-	-	-		
87	OHX	5	4224	-	0,6,6	-	-	-		
87	OHX	1	3939	-	0,6,6	-	-	-		
87	OHX	1	3971	-	0,6,6	-	-	-		
87	OHX	1	4207	-	0,6,6	-	-	-		
87	OHX	2	2160	-	0,6,6	-	-	-		
87	OHX	1	4007	-	0,6,6	-	-	-		
87	OHX	1	3975	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	3918	-	0,6,6	-	-	-	-	-
87	OHX	1	3928	-	0,6,6	-	-	-	-	-
87	OHX	1	4043	-	0,6,6	-	-	-	-	-
87	OHX	1	4057	-	0,6,6	-	-	-	-	-
87	OHX	6	2163	-	0,6,6	-	-	-	-	-
87	OHX	5	4199	-	0,6,6	-	-	-	-	-
87	OHX	N1	201	-	0,6,6	-	-	-	-	-
87	OHX	5	4008	-	0,6,6	-	-	-	-	-
87	OHX	2	2063	-	0,6,6	-	-	-	-	-
87	OHX	1	3895	-	0,6,6	-	-	-	-	-
87	OHX	8	229	-	0,6,6	-	-	-	-	-
87	OHX	2	2022	-	0,6,6	-	-	-	-	-
87	OHX	1	4025	-	0,6,6	-	-	-	-	-
87	OHX	2	2051	-	0,6,6	-	-	-	-	-
87	OHX	C8	201	-	0,6,6	-	-	-	-	-
87	OHX	1	3909	-	0,6,6	-	-	-	-	-
87	OHX	1	3977	-	0,6,6	-	-	-	-	-
87	OHX	2	2042	-	0,6,6	-	-	-	-	-
87	OHX	5	4066	-	0,6,6	-	-	-	-	-
87	OHX	5	4111	-	0,6,6	-	-	-	-	-
87	OHX	5	4168	-	0,6,6	-	-	-	-	-
87	OHX	6	2173	-	0,6,6	-	-	-	-	-
87	OHX	5	4096	-	0,6,6	-	-	-	-	-
87	OHX	5	4119	-	0,6,6	-	-	-	-	-
87	OHX	1	4046	-	0,6,6	-	-	-	-	-
87	OHX	1	3874	-	0,6,6	-	-	-	-	-
87	OHX	5	4031	-	0,6,6	-	-	-	-	-
87	OHX	2	2046	-	0,6,6	-	-	-	-	-
87	OHX	2	2152	-	0,6,6	-	-	-	-	-
87	OHX	6	2106	-	0,6,6	-	-	-	-	-
87	OHX	6	2190	-	0,6,6	-	-	-	-	-
87	OHX	5	4251	-	0,6,6	-	-	-	-	-
87	OHX	O7	103	-	0,6,6	-	-	-	-	-
87	OHX	1	4032	-	0,6,6	-	-	-	-	-
87	OHX	1	4035	-	0,6,6	-	-	-	-	-
87	OHX	2	2154	-	0,6,6	-	-	-	-	-
87	OHX	5	3978	-	0,6,6	-	-	-	-	-
87	OHX	o3	203	-	0,6,6	-	-	-	-	-
87	OHX	5	4216	-	0,6,6	-	-	-	-	-
87	OHX	5	4026	-	0,6,6	-	-	-	-	-
87	OHX	5	4228	-	0,6,6	-	-	-	-	-
87	OHX	6	2135	-	0,6,6	-	-	-	-	-
87	OHX	7	221	-	0,6,6	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4034	-	0,6,6	-	-	-		
87	OHX	1	4081	-	0,6,6	-	-	-		
87	OHX	6	2063	-	0,6,6	-	-	-		
87	OHX	5	3955	-	0,6,6	-	-	-		
87	OHX	5	4245	-	0,6,6	-	-	-		
87	OHX	1	3974	-	0,6,6	-	-	-		
87	OHX	5	4027	-	0,6,6	-	-	-		
87	OHX	5	3954	-	0,6,6	-	-	-		
87	OHX	2	2134	-	0,6,6	-	-	-		
87	OHX	6	2139	-	0,6,6	-	-	-		
87	OHX	8	222	-	0,6,6	-	-	-		
87	OHX	o7	503	-	0,6,6	-	-	-		
87	OHX	1	4142	-	0,6,6	-	-	-		
87	OHX	6	2121	-	0,6,6	-	-	-		
87	OHX	1	4193	-	0,6,6	-	-	-		
87	OHX	2	2099	-	0,6,6	-	-	-		
87	OHX	1	3901	-	0,6,6	-	-	-		
87	OHX	6	2133	-	0,6,6	-	-	-		
87	OHX	sR	401	-	0,6,6	-	-	-		
87	OHX	5	4009	-	0,6,6	-	-	-		
87	OHX	2	2086	-	0,6,6	-	-	-		
87	OHX	2	2083	-	0,6,6	-	-	-		
87	OHX	6	2179	-	0,6,6	-	-	-		
87	OHX	1	4155	-	0,6,6	-	-	-		
87	OHX	1	4170	-	0,6,6	-	-	-		
87	OHX	1	4067	-	0,6,6	-	-	-		
87	OHX	5	4156	-	0,6,6	-	-	-		
87	OHX	5	3979	-	0,6,6	-	-	-		
87	OHX	1	3996	-	0,6,6	-	-	-		
87	OHX	5	4150	-	0,6,6	-	-	-		
87	OHX	1	4084	-	0,6,6	-	-	-		
87	OHX	5	4116	-	0,6,6	-	-	-		
87	OHX	1	4136	-	0,6,6	-	-	-		
87	OHX	6	2079	-	0,6,6	-	-	-		
87	OHX	1	4083	-	0,6,6	-	-	-		
87	OHX	5	4105	-	0,6,6	-	-	-		
87	OHX	2	2034	-	0,6,6	-	-	-		
87	OHX	15	305	-	0,6,6	-	-	-		
87	OHX	6	2150	-	0,6,6	-	-	-		
87	OHX	1	3923	-	0,6,6	-	-	-		
87	OHX	1	4068	-	0,6,6	-	-	-		
87	OHX	5	4038	-	0,6,6	-	-	-		
87	OHX	1	4145	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4191	-	0,6,6	-	-	-		
87	OHX	4	223	-	0,6,6	-	-	-		
87	OHX	5	3971	-	0,6,6	-	-	-		
87	OHX	1	4196	-	0,6,6	-	-	-		
87	OHX	1	4183	-	0,6,6	-	-	-		
87	OHX	1	4200	-	0,6,6	-	-	-		
87	OHX	5	3905	-	0,6,6	-	-	-		
87	OHX	2	2178	-	0,6,6	-	-	-		
87	OHX	5	3913	-	0,6,6	-	-	-		
87	OHX	5	3932	-	0,6,6	-	-	-		
87	OHX	5	4063	-	0,6,6	-	-	-		
87	OHX	5	4233	-	0,6,6	-	-	-		
87	OHX	1	4194	-	0,6,6	-	-	-		
87	OHX	5	4125	-	0,6,6	-	-	-		
87	OHX	2	2158	-	0,6,6	-	-	-		
87	OHX	5	3901	-	0,6,6	-	-	-		
87	OHX	1	4139	-	0,6,6	-	-	-		
87	OHX	5	3965	-	0,6,6	-	-	-		
87	OHX	5	4162	-	0,6,6	-	-	-		
87	OHX	5	4019	-	0,6,6	-	-	-		
87	OHX	5	4153	-	0,6,6	-	-	-		
87	OHX	1	4045	-	0,6,6	-	-	-		
87	OHX	6	2197	-	0,6,6	-	-	-		
87	OHX	3	225	-	0,6,6	-	-	-		
87	OHX	1	3945	-	0,6,6	-	-	-		
87	OHX	1	4138	-	0,6,6	-	-	-		
87	OHX	7	224	-	0,6,6	-	-	-		
87	OHX	5	4067	-	0,6,6	-	-	-		
87	OHX	5	4115	-	0,6,6	-	-	-		
87	OHX	5	4189	-	0,6,6	-	-	-		
87	OHX	1	3921	-	0,6,6	-	-	-		
87	OHX	2	2066	-	0,6,6	-	-	-		
87	OHX	5	3975	-	0,6,6	-	-	-		
87	OHX	5	3996	-	0,6,6	-	-	-		
87	OHX	5	4237	-	0,6,6	-	-	-		
87	OHX	6	2072	-	0,6,6	-	-	-		
87	OHX	5	3906	-	0,6,6	-	-	-		
87	OHX	M5	302	-	0,6,6	-	-	-		
87	OHX	5	3923	-	0,6,6	-	-	-		
87	OHX	2	2040	-	0,6,6	-	-	-		
87	OHX	1	3890	-	0,6,6	-	-	-		
87	OHX	6	2198	-	0,6,6	-	-	-		
87	OHX	5	4118	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4059	-	0,6,6	-	-	-		
87	OHX	1	4165	-	0,6,6	-	-	-		
87	OHX	1	3915	-	0,6,6	-	-	-		
87	OHX	1	4069	-	0,6,6	-	-	-		
87	OHX	d4	202	-	0,6,6	-	-	-		
87	OHX	5	4016	-	0,6,6	-	-	-		
87	OHX	5	3936	-	0,6,6	-	-	-		
87	OHX	1	4076	-	0,6,6	-	-	-		
87	OHX	1	4135	-	0,6,6	-	-	-		
87	OHX	s1	303	-	0,6,6	-	-	-		
87	OHX	2	2087	-	0,6,6	-	-	-		
87	OHX	6	2122	-	0,6,6	-	-	-		
87	OHX	1	4111	-	0,6,6	-	-	-		
87	OHX	1	4211	-	0,6,6	-	-	-		
87	OHX	5	4137	-	0,6,6	-	-	-		
87	OHX	2	2157	-	0,6,6	-	-	-		
87	OHX	1	4060	-	0,6,6	-	-	-		
87	OHX	1	3968	-	0,6,6	-	-	-		
87	OHX	5	4011	-	0,6,6	-	-	-		
87	OHX	1	4036	-	0,6,6	-	-	-		
87	OHX	3	220	-	0,6,6	-	-	-		
87	OHX	1	4208	-	0,6,6	-	-	-		
87	OHX	6	2102	-	0,6,6	-	-	-		
87	OHX	2	2131	-	0,6,6	-	-	-		
87	OHX	5	4246	-	0,6,6	-	-	-		
87	OHX	1	4092	-	0,6,6	-	-	-		
87	OHX	1	3983	-	0,6,6	-	-	-		
87	OHX	1	4107	-	0,6,6	-	-	-		
87	OHX	o7	502	-	0,6,6	-	-	-		
87	OHX	2	2119	-	0,6,6	-	-	-		
87	OHX	2	2044	-	0,6,6	-	-	-		
87	OHX	1	4186	-	0,6,6	-	-	-		
87	OHX	1	4037	-	0,6,6	-	-	-		
87	OHX	5	3926	-	0,6,6	-	-	-		
87	OHX	6	2130	-	0,6,6	-	-	-		
87	OHX	6	2177	-	0,6,6	-	-	-		
87	OHX	3	224	-	0,6,6	-	-	-		
87	OHX	5	4101	-	0,6,6	-	-	-		
87	OHX	2	2072	-	0,6,6	-	-	-		
87	OHX	2	2055	-	0,6,6	-	-	-		
87	OHX	1	3946	-	0,6,6	-	-	-		
87	OHX	5	4167	-	0,6,6	-	-	-		
87	OHX	5	4201	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4065	-	0,6,6	-	-	-		
87	OHX	5	3997	-	0,6,6	-	-	-		
87	OHX	1	4169	-	0,6,6	-	-	-		
87	OHX	6	2180	-	0,6,6	-	-	-		
87	OHX	6	2187	-	0,6,6	-	-	-		
87	OHX	5	4152	-	0,6,6	-	-	-		
87	OHX	5	3933	-	0,6,6	-	-	-		
87	OHX	4	222	-	0,6,6	-	-	-		
87	OHX	5	4033	-	0,6,6	-	-	-		
87	OHX	2	2088	-	0,6,6	-	-	-		
87	OHX	1	4102	-	0,6,6	-	-	-		
87	OHX	5	4172	-	0,6,6	-	-	-		
87	OHX	6	2056	-	0,6,6	-	-	-		
87	OHX	5	4232	-	0,6,6	-	-	-		
87	OHX	2	2175	-	0,6,6	-	-	-		
87	OHX	s1	302	-	0,6,6	-	-	-		
87	OHX	5	4024	-	0,6,6	-	-	-		
87	OHX	4	228	-	0,6,6	-	-	-		
87	OHX	5	4164	-	0,6,6	-	-	-		
87	OHX	m6	202	-	0,6,6	-	-	-		
87	OHX	2	2130	-	0,6,6	-	-	-		
87	OHX	M7	207	-	0,6,6	-	-	-		
87	OHX	2	2115	-	0,6,6	-	-	-		
87	OHX	2	2052	-	0,6,6	-	-	-		
87	OHX	5	4112	-	0,6,6	-	-	-		
87	OHX	2	2102	-	0,6,6	-	-	-		
87	OHX	2	2125	-	0,6,6	-	-	-		
87	OHX	1	3870	-	0,6,6	-	-	-		
87	OHX	2	2021	-	0,6,6	-	-	-		
87	OHX	1	4090	-	0,6,6	-	-	-		
87	OHX	1	4019	-	0,6,6	-	-	-		
87	OHX	1	4119	-	0,6,6	-	-	-		
87	OHX	L4	403	-	0,6,6	-	-	-		
87	OHX	1	3967	-	0,6,6	-	-	-		
87	OHX	1	3934	-	0,6,6	-	-	-		
87	OHX	1	4028	-	0,6,6	-	-	-		
87	OHX	5	4122	-	0,6,6	-	-	-		
87	OHX	5	4141	-	0,6,6	-	-	-		
87	OHX	6	2154	-	0,6,6	-	-	-		
87	OHX	6	2113	-	0,6,6	-	-	-		
87	OHX	5	3950	-	0,6,6	-	-	-		
87	OHX	1	3994	-	0,6,6	-	-	-		
87	OHX	2	2045	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2074	-	0,6,6	-	-	-		
87	OHX	1	3969	-	0,6,6	-	-	-		
87	OHX	6	2161	-	0,6,6	-	-	-		
87	OHX	8	226	-	0,6,6	-	-	-		
87	OHX	2	2143	-	0,6,6	-	-	-		
87	OHX	2	2141	-	0,6,6	-	-	-		
87	OHX	2	2150	-	0,6,6	-	-	-		
87	OHX	1	3905	-	0,6,6	-	-	-		
87	OHX	2	2039	-	0,6,6	-	-	-		
87	OHX	2	2167	-	0,6,6	-	-	-		
87	OHX	6	2175	-	0,6,6	-	-	-		
87	OHX	2	2036	-	0,6,6	-	-	-		
87	OHX	1	4015	-	0,6,6	-	-	-		
87	OHX	5	3945	-	0,6,6	-	-	-		
87	OHX	5	4075	-	0,6,6	-	-	-		
87	OHX	M7	208	-	0,6,6	-	-	-		
87	OHX	s8	303	-	0,6,6	-	-	-		
87	OHX	5	4014	-	0,6,6	-	-	-		
87	OHX	5	4176	-	0,6,6	-	-	-		
87	OHX	q2	502	-	0,6,6	-	-	-		
87	OHX	5	4055	-	0,6,6	-	-	-		
87	OHX	5	3938	-	0,6,6	-	-	-		
87	OHX	5	4138	-	0,6,6	-	-	-		
87	OHX	1	4079	-	0,6,6	-	-	-		
87	OHX	2	2098	-	0,6,6	-	-	-		
87	OHX	1	4009	-	0,6,6	-	-	-		
87	OHX	1	4082	-	0,6,6	-	-	-		
87	OHX	5	4060	-	0,6,6	-	-	-		
87	OHX	5	4160	-	0,6,6	-	-	-		
87	OHX	5	4163	-	0,6,6	-	-	-		
87	OHX	1	4056	-	0,6,6	-	-	-		
87	OHX	7	222	-	0,6,6	-	-	-		
87	OHX	6	2064	-	0,6,6	-	-	-		
87	OHX	2	2101	-	0,6,6	-	-	-		
87	OHX	1	4062	-	0,6,6	-	-	-		
87	OHX	5	4192	-	0,6,6	-	-	-		
87	OHX	5	3934	-	0,6,6	-	-	-		
87	OHX	1	4051	-	0,6,6	-	-	-		
87	OHX	5	4195	-	0,6,6	-	-	-		
87	OHX	1	4047	-	0,6,6	-	-	-		
87	OHX	n6	202	-	0,6,6	-	-	-		
87	OHX	5	4043	-	0,6,6	-	-	-		
87	OHX	1	3937	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2164	-	0,6,6	-	-	-		
87	OHX	5	4073	-	0,6,6	-	-	-		
87	OHX	2	2113	-	0,6,6	-	-	-		
87	OHX	1	4137	-	0,6,6	-	-	-		
87	OHX	6	2060	-	0,6,6	-	-	-		
87	OHX	5	4089	-	0,6,6	-	-	-		
87	OHX	2	2121	-	0,6,6	-	-	-		
87	OHX	6	2131	-	0,6,6	-	-	-		
87	OHX	C5	201	-	0,6,6	-	-	-		
87	OHX	2	2023	-	0,6,6	-	-	-		
87	OHX	1	4063	-	0,6,6	-	-	-		
87	OHX	2	2047	-	0,6,6	-	-	-		
87	OHX	5	3907	-	0,6,6	-	-	-		
87	OHX	5	3927	-	0,6,6	-	-	-		
87	OHX	5	3941	-	0,6,6	-	-	-		
87	OHX	6	2181	-	0,6,6	-	-	-		
87	OHX	5	4159	-	0,6,6	-	-	-		
87	OHX	1	3953	-	0,6,6	-	-	-		
87	OHX	1	4197	-	0,6,6	-	-	-		
87	OHX	5	4091	-	0,6,6	-	-	-		
87	OHX	6	2206	-	0,6,6	-	-	-		
87	OHX	5	4147	-	0,6,6	-	-	-		
87	OHX	2	2032	-	0,6,6	-	-	-		
87	OHX	8	220	-	0,6,6	-	-	-		
87	OHX	1	3978	-	0,6,6	-	-	-		
87	OHX	1	4101	-	0,6,6	-	-	-		
87	OHX	6	2082	-	0,6,6	-	-	-		
87	OHX	1	4061	-	0,6,6	-	-	-		
87	OHX	1	4185	-	0,6,6	-	-	-		
87	OHX	5	4248	-	0,6,6	-	-	-		
87	OHX	5	4231	-	0,6,6	-	-	-		
87	OHX	1	4167	-	0,6,6	-	-	-		
87	OHX	5	4044	-	0,6,6	-	-	-		
87	OHX	5	4175	-	0,6,6	-	-	-		
87	OHX	5	3917	-	0,6,6	-	-	-		
87	OHX	2	2106	-	0,6,6	-	-	-		
87	OHX	3	222	-	0,6,6	-	-	-		
87	OHX	1	4198	-	0,6,6	-	-	-		
87	OHX	8	217	-	0,6,6	-	-	-		
87	OHX	M0	303	-	0,6,6	-	-	-		
87	OHX	6	2169	-	0,6,6	-	-	-		
87	OHX	2	2077	-	0,6,6	-	-	-		
87	OHX	1	4026	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4033	-	0,6,6	-	-	-		
87	OHX	1	4054	-	0,6,6	-	-	-		
87	OHX	1	4130	-	0,6,6	-	-	-		
87	OHX	5	3988	-	0,6,6	-	-	-		
87	OHX	5	4029	-	0,6,6	-	-	-		
87	OHX	6	2059	-	0,6,6	-	-	-		
87	OHX	5	4188	-	0,6,6	-	-	-		
87	OHX	1	3900	-	0,6,6	-	-	-		
87	OHX	6	2144	-	0,6,6	-	-	-		
87	OHX	1	4078	-	0,6,6	-	-	-		
87	OHX	5	4211	-	0,6,6	-	-	-		
87	OHX	2	2122	-	0,6,6	-	-	-		
87	OHX	1	3954	-	0,6,6	-	-	-		
87	OHX	1	3931	-	0,6,6	-	-	-		
87	OHX	2	2105	-	0,6,6	-	-	-		
87	OHX	6	2183	-	0,6,6	-	-	-		
87	OHX	6	2207	-	0,6,6	-	-	-		
87	OHX	5	4123	-	0,6,6	-	-	-		
87	OHX	5	4092	-	0,6,6	-	-	-		
87	OHX	7	220	-	0,6,6	-	-	-		
87	OHX	1	4203	-	0,6,6	-	-	-		
87	OHX	6	2149	-	0,6,6	-	-	-		
87	OHX	5	3924	-	0,6,6	-	-	-		
87	OHX	1	4178	-	0,6,6	-	-	-		
87	OHX	m8	201	-	0,6,6	-	-	-		
87	OHX	1	3916	-	0,6,6	-	-	-		
87	OHX	2	2082	-	0,6,6	-	-	-		
87	OHX	6	2147	-	0,6,6	-	-	-		
87	OHX	N9	101	-	0,6,6	-	-	-		
87	OHX	1	3878	-	0,6,6	-	-	-		
87	OHX	m0	301	-	0,6,6	-	-	-		
87	OHX	5	4039	-	0,6,6	-	-	-		
87	OHX	5	4015	-	0,6,6	-	-	-		
87	OHX	1	4080	-	0,6,6	-	-	-		
87	OHX	2	2177	-	0,6,6	-	-	-		
87	OHX	6	2051	-	0,6,6	-	-	-		
87	OHX	5	4100	-	0,6,6	-	-	-		
87	OHX	6	2145	-	0,6,6	-	-	-		
87	OHX	1	3913	-	0,6,6	-	-	-		
87	OHX	1	3918	-	0,6,6	-	-	-		
87	OHX	5	4187	-	0,6,6	-	-	-		
87	OHX	5	3951	-	0,6,6	-	-	-		
87	OHX	1	3961	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	3997	-	0,6,6	-	-	-		
87	OHX	6	2129	-	0,6,6	-	-	-		
87	OHX	m4	201	-	0,6,6	-	-	-		
87	OHX	2	2057	-	0,6,6	-	-	-		
87	OHX	6	2088	-	0,6,6	-	-	-		
87	OHX	D9	102	-	0,6,6	-	-	-		
87	OHX	7	226	-	0,6,6	-	-	-		
87	OHX	6	2136	-	0,6,6	-	-	-		
87	OHX	M6	202	-	0,6,6	-	-	-		
87	OHX	1	4172	-	0,6,6	-	-	-		
87	OHX	1	3880	-	0,6,6	-	-	-		
87	OHX	2	2117	-	0,6,6	-	-	-		
87	OHX	1	3980	-	0,6,6	-	-	-		
87	OHX	5	3944	-	0,6,6	-	-	-		
87	OHX	1	4116	-	0,6,6	-	-	-		
87	OHX	7	217	-	0,6,6	-	-	-		
87	OHX	1	4066	-	0,6,6	-	-	-		
87	OHX	5	4184	-	0,6,6	-	-	-		
87	OHX	2	2112	-	0,6,6	-	-	-		
87	OHX	4	221	-	0,6,6	-	-	-		
87	OHX	5	4012	-	0,6,6	-	-	-		
87	OHX	2	2142	-	0,6,6	-	-	-		
87	OHX	6	2203	-	0,6,6	-	-	-		
87	OHX	1	4173	-	0,6,6	-	-	-		
87	OHX	6	2096	-	0,6,6	-	-	-		
87	OHX	6	2054	-	0,6,6	-	-	-		
87	OHX	5	4193	-	0,6,6	-	-	-		
87	OHX	1	3919	-	0,6,6	-	-	-		
87	OHX	1	4027	-	0,6,6	-	-	-		
87	OHX	6	2092	-	0,6,6	-	-	-		
87	OHX	6	2143	-	0,6,6	-	-	-		
87	OHX	6	2071	-	0,6,6	-	-	-		
87	OHX	6	2053	-	0,6,6	-	-	-		
87	OHX	6	2155	-	0,6,6	-	-	-		
87	OHX	5	3986	-	0,6,6	-	-	-		
87	OHX	1	4118	-	0,6,6	-	-	-		
87	OHX	c3	201	-	0,6,6	-	-	-		
87	OHX	2	2094	-	0,6,6	-	-	-		
87	OHX	5	3947	-	0,6,6	-	-	-		
87	OHX	6	2055	-	0,6,6	-	-	-		
87	OHX	C3	201	-	0,6,6	-	-	-		
87	OHX	1	4034	-	0,6,6	-	-	-		
87	OHX	5	4005	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	2	2041	-	0,6,6	-	-	-		
87	OHX	1	4113	-	0,6,6	-	-	-		
87	OHX	5	4128	-	0,6,6	-	-	-		
87	OHX	1	3927	-	0,6,6	-	-	-		
87	OHX	2	2129	-	0,6,6	-	-	-		
87	OHX	5	3930	-	0,6,6	-	-	-		
87	OHX	5	4220	-	0,6,6	-	-	-		
87	OHX	5	3959	-	0,6,6	-	-	-		
87	OHX	5	4250	-	0,6,6	-	-	-		
87	OHX	1	4031	-	0,6,6	-	-	-		
87	OHX	1	4094	-	0,6,6	-	-	-		
87	OHX	1	4181	-	0,6,6	-	-	-		
87	OHX	1	3911	-	0,6,6	-	-	-		
87	OHX	1	4074	-	0,6,6	-	-	-		
87	OHX	5	4108	-	0,6,6	-	-	-		
87	OHX	1	4049	-	0,6,6	-	-	-		
87	OHX	5	4165	-	0,6,6	-	-	-		
87	OHX	5	4143	-	0,6,6	-	-	-		
87	OHX	5	4207	-	0,6,6	-	-	-		
87	OHX	3	226	-	0,6,6	-	-	-		
87	OHX	5	4218	-	0,6,6	-	-	-		
87	OHX	8	216	-	0,6,6	-	-	-		
87	OHX	1	4188	-	0,6,6	-	-	-		
87	OHX	5	4095	-	0,6,6	-	-	-		
87	OHX	5	4057	-	0,6,6	-	-	-		
87	OHX	m1	202	-	0,6,6	-	-	-		
87	OHX	5	4121	-	0,6,6	-	-	-		
87	OHX	1	3897	-	0,6,6	-	-	-		
87	OHX	6	2170	-	0,6,6	-	-	-		
87	OHX	3	217	-	0,6,6	-	-	-		
87	OHX	5	4021	-	0,6,6	-	-	-		
87	OHX	2	2161	-	0,6,6	-	-	-		
87	OHX	5	4114	-	0,6,6	-	-	-		
87	OHX	8	215	-	0,6,6	-	-	-		
87	OHX	5	3946	-	0,6,6	-	-	-		
87	OHX	5	4217	-	0,6,6	-	-	-		
87	OHX	1	3973	-	0,6,6	-	-	-		
87	OHX	1	3965	-	0,6,6	-	-	-		
87	OHX	5	4204	-	0,6,6	-	-	-		
87	OHX	5	3900	-	0,6,6	-	-	-		
87	OHX	1	4105	-	0,6,6	-	-	-		
87	OHX	5	3908	-	0,6,6	-	-	-		
87	OHX	5	4227	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	14	403	-	0,6,6	-	-	-		
87	OHX	1	4087	-	0,6,6	-	-	-		
87	OHX	5	4235	-	0,6,6	-	-	-		
87	OHX	1	3956	-	0,6,6	-	-	-		
87	OHX	4	229	-	0,6,6	-	-	-		
87	OHX	6	2069	-	0,6,6	-	-	-		
87	OHX	5	4225	-	0,6,6	-	-	-		
87	OHX	2	2027	-	0,6,6	-	-	-		
87	OHX	O7	104	-	0,6,6	-	-	-		
87	OHX	5	4209	-	0,6,6	-	-	-		
87	OHX	1	4187	-	0,6,6	-	-	-		
87	OHX	1	3894	-	0,6,6	-	-	-		
87	OHX	1	3903	-	0,6,6	-	-	-		
87	OHX	2	2147	-	0,6,6	-	-	-		
87	OHX	6	2201	-	0,6,6	-	-	-		
87	OHX	5	3922	-	0,6,6	-	-	-		
87	OHX	5	4004	-	0,6,6	-	-	-		
87	OHX	5	4124	-	0,6,6	-	-	-		
87	OHX	1	3904	-	0,6,6	-	-	-		
87	OHX	5	4205	-	0,6,6	-	-	-		
87	OHX	c5	201	-	0,6,6	-	-	-		
87	OHX	1	4042	-	0,6,6	-	-	-		
87	OHX	5	4242	-	0,6,6	-	-	-		
87	OHX	5	4013	-	0,6,6	-	-	-		
87	OHX	5	4144	-	0,6,6	-	-	-		
87	OHX	5	4179	-	0,6,6	-	-	-		
87	OHX	5	3915	-	0,6,6	-	-	-		
87	OHX	1	4189	-	0,6,6	-	-	-		
87	OHX	5	4002	-	0,6,6	-	-	-		
87	OHX	5	4086	-	0,6,6	-	-	-		
87	OHX	6	2083	-	0,6,6	-	-	-		
87	OHX	2	2031	-	0,6,6	-	-	-		
87	OHX	2	2085	-	0,6,6	-	-	-		
87	OHX	1	3871	-	0,6,6	-	-	-		
87	OHX	1	4064	-	0,6,6	-	-	-		
87	OHX	2	2070	-	0,6,6	-	-	-		
87	OHX	5	4253	-	0,6,6	-	-	-		
87	OHX	O9	101	-	0,6,6	-	-	-		
87	OHX	5	4087	-	0,6,6	-	-	-		
87	OHX	1	4059	-	0,6,6	-	-	-		
87	OHX	7	219	-	0,6,6	-	-	-		
87	OHX	2	2097	-	0,6,6	-	-	-		
87	OHX	1	3936	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2062	-	0,6,6	-	-	-		
87	OHX	6	2080	-	0,6,6	-	-	-		
87	OHX	1	4157	-	0,6,6	-	-	-		
87	OHX	2	2049	-	0,6,6	-	-	-		
87	OHX	1	4184	-	0,6,6	-	-	-		
87	OHX	2	2064	-	0,6,6	-	-	-		
87	OHX	5	4042	-	0,6,6	-	-	-		
87	OHX	1	4005	-	0,6,6	-	-	-		
87	OHX	1	4077	-	0,6,6	-	-	-		
87	OHX	5	4103	-	0,6,6	-	-	-		
87	OHX	7	223	-	0,6,6	-	-	-		
87	OHX	1	3902	-	0,6,6	-	-	-		
87	OHX	2	2174	-	0,6,6	-	-	-		
87	OHX	1	3892	-	0,6,6	-	-	-		
87	OHX	5	3952	-	0,6,6	-	-	-		
87	OHX	5	4127	-	0,6,6	-	-	-		
87	OHX	5	4158	-	0,6,6	-	-	-		
87	OHX	5	3956	-	0,6,6	-	-	-		
87	OHX	6	2132	-	0,6,6	-	-	-		
87	OHX	5	3931	-	0,6,6	-	-	-		
87	OHX	8	225	-	0,6,6	-	-	-		
87	OHX	6	2091	-	0,6,6	-	-	-		
87	OHX	2	2035	-	0,6,6	-	-	-		
87	OHX	3	216	-	0,6,6	-	-	-		
87	OHX	1	3924	-	0,6,6	-	-	-		
87	OHX	1	4148	-	0,6,6	-	-	-		
87	OHX	1	3999	-	0,6,6	-	-	-		
87	OHX	2	2092	-	0,6,6	-	-	-		
87	OHX	1	4206	-	0,6,6	-	-	-		
87	OHX	2	2071	-	0,6,6	-	-	-		
87	OHX	5	4154	-	0,6,6	-	-	-		
87	OHX	2	2140	-	0,6,6	-	-	-		
87	OHX	5	3919	-	0,6,6	-	-	-		
87	OHX	1	4201	-	0,6,6	-	-	-		
87	OHX	1	3879	-	0,6,6	-	-	-		
87	OHX	5	4126	-	0,6,6	-	-	-		
87	OHX	2	2073	-	0,6,6	-	-	-		
87	OHX	1	3941	-	0,6,6	-	-	-		
87	OHX	5	3973	-	0,6,6	-	-	-		
87	OHX	2	2109	-	0,6,6	-	-	-		
87	OHX	1	3935	-	0,6,6	-	-	-		
87	OHX	1	3881	-	0,6,6	-	-	-		
87	OHX	5	4249	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4164	-	0,6,6	-	-	-		
87	OHX	2	2162	-	0,6,6	-	-	-		
87	OHX	4	227	-	0,6,6	-	-	-		
87	OHX	5	4050	-	0,6,6	-	-	-		
87	OHX	1	4205	-	0,6,6	-	-	-		
87	OHX	6	2084	-	0,6,6	-	-	-		
87	OHX	1	4091	-	0,6,6	-	-	-		
87	OHX	5	4170	-	0,6,6	-	-	-		
87	OHX	1	4160	-	0,6,6	-	-	-		
87	OHX	5	4206	-	0,6,6	-	-	-		
87	OHX	6	2151	-	0,6,6	-	-	-		
87	OHX	1	3987	-	0,6,6	-	-	-		
87	OHX	2	2059	-	0,6,6	-	-	-		
87	OHX	1	4141	-	0,6,6	-	-	-		
87	OHX	M8	202	-	0,6,6	-	-	-		
87	OHX	5	3916	-	0,6,6	-	-	-		
87	OHX	1	4122	-	0,6,6	-	-	-		
87	OHX	5	3960	-	0,6,6	-	-	-		
87	OHX	n3	203	-	0,6,6	-	-	-		
87	OHX	5	3943	-	0,6,6	-	-	-		
87	OHX	5	3968	-	0,6,6	-	-	-		
87	OHX	1	3955	-	0,6,6	-	-	-		
87	OHX	5	4068	-	0,6,6	-	-	-		
87	OHX	5	4145	-	0,6,6	-	-	-		
87	OHX	5	4051	-	0,6,6	-	-	-		
87	OHX	2	2146	-	0,6,6	-	-	-		
87	OHX	5	4236	-	0,6,6	-	-	-		
87	OHX	1	4147	-	0,6,6	-	-	-		
87	OHX	5	4177	-	0,6,6	-	-	-		
87	OHX	S8	302	-	0,6,6	-	-	-		
87	OHX	1	3886	-	0,6,6	-	-	-		
87	OHX	2	2058	-	0,6,6	-	-	-		
87	OHX	1	3984	-	0,6,6	-	-	-		
87	OHX	1	4093	-	0,6,6	-	-	-		
87	OHX	5	4054	-	0,6,6	-	-	-		
87	OHX	2	2164	-	0,6,6	-	-	-		
87	OHX	1	4014	-	0,6,6	-	-	-		
87	OHX	1	4176	-	0,6,6	-	-	-		
87	OHX	6	2070	-	0,6,6	-	-	-		
87	OHX	5	4110	-	0,6,6	-	-	-		
87	OHX	5	4129	-	0,6,6	-	-	-		
87	OHX	1	4217	-	0,6,6	-	-	-		
87	OHX	6	2104	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	3903	-	0,6,6	-	-	-		
87	OHX	1	4016	-	0,6,6	-	-	-		
87	OHX	4	226	-	0,6,6	-	-	-		
87	OHX	5	4064	-	0,6,6	-	-	-		
87	OHX	5	4106	-	0,6,6	-	-	-		
87	OHX	6	2050	-	0,6,6	-	-	-		
87	OHX	5	4194	-	0,6,6	-	-	-		
87	OHX	5	4223	-	0,6,6	-	-	-		
87	OHX	1	3995	-	0,6,6	-	-	-		
87	OHX	5	3991	-	0,6,6	-	-	-		
87	OHX	1	3914	-	0,6,6	-	-	-		
87	OHX	5	3925	-	0,6,6	-	-	-		
87	OHX	2	2053	-	0,6,6	-	-	-		
87	OHX	1	4140	-	0,6,6	-	-	-		
87	OHX	2	2084	-	0,6,6	-	-	-		
87	OHX	2	2076	-	0,6,6	-	-	-		
87	OHX	5	4102	-	0,6,6	-	-	-		
87	OHX	2	2170	-	0,6,6	-	-	-		
87	OHX	6	2184	-	0,6,6	-	-	-		
87	OHX	2	2135	-	0,6,6	-	-	-		
87	OHX	2	2111	-	0,6,6	-	-	-		
87	OHX	1	3925	-	0,6,6	-	-	-		
87	OHX	1	3882	-	0,6,6	-	-	-		
87	OHX	1	3940	-	0,6,6	-	-	-		
87	OHX	2	2037	-	0,6,6	-	-	-		
87	OHX	1	4073	-	0,6,6	-	-	-		
87	OHX	1	4125	-	0,6,6	-	-	-		
87	OHX	c8	201	-	0,6,6	-	-	-		
87	OHX	1	4089	-	0,6,6	-	-	-		
87	OHX	5	4069	-	0,6,6	-	-	-		
87	OHX	1	4020	-	0,6,6	-	-	-		
87	OHX	5	4088	-	0,6,6	-	-	-		
87	OHX	5	4076	-	0,6,6	-	-	-		
87	OHX	n9	101	-	0,6,6	-	-	-		
87	OHX	2	2050	-	0,6,6	-	-	-		
87	OHX	5	3929	-	0,6,6	-	-	-		
87	OHX	1	4162	-	0,6,6	-	-	-		
87	OHX	1	4010	-	0,6,6	-	-	-		
87	OHX	2	2123	-	0,6,6	-	-	-		
87	OHX	1	4052	-	0,6,6	-	-	-		
87	OHX	s4	302	-	0,6,6	-	-	-		
87	OHX	2	2075	-	0,6,6	-	-	-		
87	OHX	5	3990	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2186	-	0,6,6	-	-	-		
87	OHX	15	304	-	0,6,6	-	-	-		
87	OHX	6	2077	-	0,6,6	-	-	-		
87	OHX	1	4095	-	0,6,6	-	-	-		
87	OHX	1	4159	-	0,6,6	-	-	-		
87	OHX	L3	403	-	0,6,6	-	-	-		
87	OHX	2	2169	-	0,6,6	-	-	-		
87	OHX	5	4208	-	0,6,6	-	-	-		
87	OHX	5	3914	-	0,6,6	-	-	-		
87	OHX	1	4040	-	0,6,6	-	-	-		
87	OHX	8	218	-	0,6,6	-	-	-		
87	OHX	6	2172	-	0,6,6	-	-	-		
87	OHX	5	4018	-	0,6,6	-	-	-		
87	OHX	2	2091	-	0,6,6	-	-	-		
87	OHX	6	2110	-	0,6,6	-	-	-		
87	OHX	6	2073	-	0,6,6	-	-	-		
87	OHX	5	3970	-	0,6,6	-	-	-		
87	OHX	5	4001	-	0,6,6	-	-	-		
87	OHX	5	4171	-	0,6,6	-	-	-		
87	OHX	8	224	-	0,6,6	-	-	-		
87	OHX	2	2078	-	0,6,6	-	-	-		
87	OHX	2	2029	-	0,6,6	-	-	-		
87	OHX	2	2114	-	0,6,6	-	-	-		
87	OHX	1	4151	-	0,6,6	-	-	-		
87	OHX	5	4035	-	0,6,6	-	-	-		
87	OHX	6	2157	-	0,6,6	-	-	-		
87	OHX	6	2168	-	0,6,6	-	-	-		
87	OHX	5	3966	-	0,6,6	-	-	-		
87	OHX	2	2127	-	0,6,6	-	-	-		
87	OHX	5	4214	-	0,6,6	-	-	-		
87	OHX	1	4075	-	0,6,6	-	-	-		
87	OHX	5	4166	-	0,6,6	-	-	-		
87	OHX	6	2067	-	0,6,6	-	-	-		
87	OHX	5	4238	-	0,6,6	-	-	-		
87	OHX	5	4134	-	0,6,6	-	-	-		
87	OHX	8	219	-	0,6,6	-	-	-		
87	OHX	6	2137	-	0,6,6	-	-	-		
87	OHX	2	2149	-	0,6,6	-	-	-		
87	OHX	2	2155	-	0,6,6	-	-	-		
87	OHX	m0	302	-	0,6,6	-	-	-		
87	OHX	2	2024	-	0,6,6	-	-	-		
87	OHX	1	3932	-	0,6,6	-	-	-		
87	OHX	6	2125	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	3943	-	0,6,6	-	-	-		
87	OHX	2	2156	-	0,6,6	-	-	-		
87	OHX	2	2163	-	0,6,6	-	-	-		
87	OHX	6	2126	-	0,6,6	-	-	-		
87	OHX	5	3935	-	0,6,6	-	-	-		
87	OHX	5	4056	-	0,6,6	-	-	-		
87	OHX	1	3958	-	0,6,6	-	-	-		
87	OHX	14	402	-	0,6,6	-	-	-		
87	OHX	6	2095	-	0,6,6	-	-	-		
87	OHX	1	4216	-	0,6,6	-	-	-		
87	OHX	6	2124	-	0,6,6	-	-	-		
87	OHX	1	4109	-	0,6,6	-	-	-		
87	OHX	3	218	-	0,6,6	-	-	-		
87	OHX	1	4022	-	0,6,6	-	-	-		
87	OHX	1	3930	-	0,6,6	-	-	-		
87	OHX	1	4103	-	0,6,6	-	-	-		
87	OHX	6	2078	-	0,6,6	-	-	-		
87	OHX	1	4131	-	0,6,6	-	-	-		
87	OHX	2	2139	-	0,6,6	-	-	-		
87	OHX	1	3920	-	0,6,6	-	-	-		
87	OHX	6	2061	-	0,6,6	-	-	-		
87	OHX	1	4123	-	0,6,6	-	-	-		
87	OHX	7	218	-	0,6,6	-	-	-		
87	OHX	2	2173	-	0,6,6	-	-	-		
87	OHX	1	3947	-	0,6,6	-	-	-		
87	OHX	5	3987	-	0,6,6	-	-	-		
87	OHX	8	230	-	0,6,6	-	-	-		
87	OHX	1	4050	-	0,6,6	-	-	-		
87	OHX	5	3964	-	0,6,6	-	-	-		
87	OHX	2	2165	-	0,6,6	-	-	-		
87	OHX	5	4030	-	0,6,6	-	-	-		
87	OHX	1	4041	-	0,6,6	-	-	-		
87	OHX	1	4128	-	0,6,6	-	-	-		
87	OHX	5	4052	-	0,6,6	-	-	-		
87	OHX	6	2081	-	0,6,6	-	-	-		
87	OHX	1	3910	-	0,6,6	-	-	-		
87	OHX	5	3994	-	0,6,6	-	-	-		
87	OHX	5	4136	-	0,6,6	-	-	-		
87	OHX	6	2118	-	0,6,6	-	-	-		
87	OHX	5	3969	-	0,6,6	-	-	-		
87	OHX	5	3962	-	0,6,6	-	-	-		
87	OHX	5	4148	-	0,6,6	-	-	-		
87	OHX	6	2189	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	2	2095	-	0,6,6	-	-	-		
87	OHX	1	4039	-	0,6,6	-	-	-		
87	OHX	6	2156	-	0,6,6	-	-	-		
87	OHX	6	2205	-	0,6,6	-	-	-		
87	OHX	5	3902	-	0,6,6	-	-	-		
87	OHX	5	3984	-	0,6,6	-	-	-		
87	OHX	1	4048	-	0,6,6	-	-	-		
87	OHX	1	4097	-	0,6,6	-	-	-		
87	OHX	1	3893	-	0,6,6	-	-	-		
87	OHX	1	3951	-	0,6,6	-	-	-		
87	OHX	6	2068	-	0,6,6	-	-	-		
87	OHX	1	4126	-	0,6,6	-	-	-		
87	OHX	5	3957	-	0,6,6	-	-	-		
87	OHX	2	2089	-	0,6,6	-	-	-		
87	OHX	1	4115	-	0,6,6	-	-	-		
87	OHX	6	2193	-	0,6,6	-	-	-		
87	OHX	6	2090	-	0,6,6	-	-	-		
87	OHX	5	4151	-	0,6,6	-	-	-		
87	OHX	5	4061	-	0,6,6	-	-	-		
87	OHX	1	4215	-	0,6,6	-	-	-		
87	OHX	5	4185	-	0,6,6	-	-	-		
87	OHX	2	2116	-	0,6,6	-	-	-		
87	OHX	1	4120	-	0,6,6	-	-	-		
87	OHX	5	4079	-	0,6,6	-	-	-		
87	OHX	1	4106	-	0,6,6	-	-	-		
87	OHX	1	4209	-	0,6,6	-	-	-		
87	OHX	6	2141	-	0,6,6	-	-	-		
87	OHX	5	4099	-	0,6,6	-	-	-		
87	OHX	2	2104	-	0,6,6	-	-	-		
87	OHX	5	4140	-	0,6,6	-	-	-		
87	OHX	1	3948	-	0,6,6	-	-	-		
87	OHX	1	4182	-	0,6,6	-	-	-		
87	OHX	7	225	-	0,6,6	-	-	-		
87	OHX	5	4244	-	0,6,6	-	-	-		
87	OHX	1	4012	-	0,6,6	-	-	-		
87	OHX	5	4109	-	0,6,6	-	-	-		
87	OHX	2	2062	-	0,6,6	-	-	-		
87	OHX	6	2199	-	0,6,6	-	-	-		
87	OHX	2	2061	-	0,6,6	-	-	-		
87	OHX	1	3942	-	0,6,6	-	-	-		
87	OHX	5	4020	-	0,6,6	-	-	-		
87	OHX	6	2159	-	0,6,6	-	-	-		
87	OHX	5	4062	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	3967	-	0,6,6	-	-	-		
87	OHX	3	215	-	0,6,6	-	-	-		
87	OHX	5	4097	-	0,6,6	-	-	-		
87	OHX	5	4078	-	0,6,6	-	-	-		
87	OHX	6	2196	-	0,6,6	-	-	-		
87	OHX	1	4213	-	0,6,6	-	-	-		
87	OHX	6	2166	-	0,6,6	-	-	-		
87	OHX	5	4155	-	0,6,6	-	-	-		
87	OHX	o2	201	-	0,6,6	-	-	-		
87	OHX	6	2098	-	0,6,6	-	-	-		
87	OHX	1	4117	-	0,6,6	-	-	-		
87	OHX	5	4058	-	0,6,6	-	-	-		
87	OHX	2	2151	-	0,6,6	-	-	-		
87	OHX	2	2056	-	0,6,6	-	-	-		
87	OHX	5	3940	-	0,6,6	-	-	-		
87	OHX	5	4000	-	0,6,6	-	-	-		
87	OHX	1	3959	-	0,6,6	-	-	-		
87	OHX	6	2058	-	0,6,6	-	-	-		
87	OHX	6	2120	-	0,6,6	-	-	-		
87	OHX	D3	202	-	0,6,6	-	-	-		
87	OHX	1	4086	-	0,6,6	-	-	-		
87	OHX	1	4070	-	0,6,6	-	-	-		
87	OHX	1	4177	-	0,6,6	-	-	-		
87	OHX	5	3953	-	0,6,6	-	-	-		
87	OHX	5	4212	-	0,6,6	-	-	-		
87	OHX	6	2097	-	0,6,6	-	-	-		
87	OHX	6	2138	-	0,6,6	-	-	-		
87	OHX	5	4146	-	0,6,6	-	-	-		
87	OHX	1	4143	-	0,6,6	-	-	-		
87	OHX	1	4132	-	0,6,6	-	-	-		
87	OHX	1	3906	-	0,6,6	-	-	-		
87	OHX	6	2176	-	0,6,6	-	-	-		
87	OHX	6	2204	-	0,6,6	-	-	-		
87	OHX	5	3958	-	0,6,6	-	-	-		
87	OHX	5	4139	-	0,6,6	-	-	-		
87	OHX	5	4186	-	0,6,6	-	-	-		
87	OHX	6	2174	-	0,6,6	-	-	-		
87	OHX	4	224	-	0,6,6	-	-	-		
87	OHX	Q2	503	-	0,6,6	-	-	-		
87	OHX	O3	201	-	0,6,6	-	-	-		
87	OHX	2	2074	-	0,6,6	-	-	-		
87	OHX	1	3899	-	0,6,6	-	-	-		
87	OHX	5	4213	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4234	-	0,6,6	-	-	-		
87	OHX	5	4006	-	0,6,6	-	-	-		
87	OHX	1	3922	-	0,6,6	-	-	-		
87	OHX	5	3912	-	0,6,6	-	-	-		
87	OHX	L3	405	-	0,6,6	-	-	-		
87	OHX	6	2167	-	0,6,6	-	-	-		
87	OHX	1	4204	-	0,6,6	-	-	-		
87	OHX	1	4161	-	0,6,6	-	-	-		
87	OHX	6	2202	-	0,6,6	-	-	-		
87	OHX	1	3908	-	0,6,6	-	-	-		
87	OHX	1	3985	-	0,6,6	-	-	-		
87	OHX	6	2075	-	0,6,6	-	-	-		
87	OHX	2	2028	-	0,6,6	-	-	-		
87	OHX	5	4252	-	0,6,6	-	-	-		
87	OHX	5	4222	-	0,6,6	-	-	-		
87	OHX	5	3977	-	0,6,6	-	-	-		
87	OHX	1	4210	-	0,6,6	-	-	-		
87	OHX	5	4239	-	0,6,6	-	-	-		
87	OHX	1	3889	-	0,6,6	-	-	-		
87	OHX	O2	201	-	0,6,6	-	-	-		
87	OHX	l5	303	-	0,6,6	-	-	-		
87	OHX	c1	202	-	0,6,6	-	-	-		
87	OHX	5	4226	-	0,6,6	-	-	-		
87	OHX	5	4048	-	0,6,6	-	-	-		
87	OHX	1	4003	-	0,6,6	-	-	-		
87	OHX	19	202	-	0,6,6	-	-	-		
87	OHX	2	2048	-	0,6,6	-	-	-		
87	OHX	1	3938	-	0,6,6	-	-	-		
87	OHX	1	4004	-	0,6,6	-	-	-		
87	OHX	1	4124	-	0,6,6	-	-	-		
87	OHX	5	3949	-	0,6,6	-	-	-		
87	OHX	5	4132	-	0,6,6	-	-	-		
87	OHX	1	4030	-	0,6,6	-	-	-		
87	OHX	SR	401	-	0,6,6	-	-	-		
87	OHX	2	2080	-	0,6,6	-	-	-		
87	OHX	2	2108	-	0,6,6	-	-	-		
87	OHX	4	230	-	0,6,6	-	-	-		
87	OHX	1	4018	-	0,6,6	-	-	-		
87	OHX	1	4149	-	0,6,6	-	-	-		
87	OHX	5	4028	-	0,6,6	-	-	-		
87	OHX	1	4001	-	0,6,6	-	-	-		
87	OHX	1	4098	-	0,6,6	-	-	-		
87	OHX	5	3989	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2089	-	0,6,6	-	-	-		
87	OHX	1	3887	-	0,6,6	-	-	-		
87	OHX	6	2103	-	0,6,6	-	-	-		
87	OHX	2	2081	-	0,6,6	-	-	-		
87	OHX	13	403	-	0,6,6	-	-	-		
87	OHX	5	3985	-	0,6,6	-	-	-		
87	OHX	5	4080	-	0,6,6	-	-	-		
87	OHX	1	4214	-	0,6,6	-	-	-		
87	OHX	6	2116	-	0,6,6	-	-	-		
87	OHX	5	4049	-	0,6,6	-	-	-		
87	OHX	5	4071	-	0,6,6	-	-	-		
87	OHX	2	2093	-	0,6,6	-	-	-		
87	OHX	1	4053	-	0,6,6	-	-	-		
87	OHX	6	2105	-	0,6,6	-	-	-		
87	OHX	1	4158	-	0,6,6	-	-	-		
87	OHX	5	4090	-	0,6,6	-	-	-		
87	OHX	1	3993	-	0,6,6	-	-	-		
87	OHX	5	3928	-	0,6,6	-	-	-		
87	OHX	1	3976	-	0,6,6	-	-	-		
87	OHX	6	2112	-	0,6,6	-	-	-		
87	OHX	2	2033	-	0,6,6	-	-	-		
87	OHX	1	4110	-	0,6,6	-	-	-		
87	OHX	6	2057	-	0,6,6	-	-	-		
87	OHX	5	4098	-	0,6,6	-	-	-		
87	OHX	5	4117	-	0,6,6	-	-	-		
87	OHX	2	2060	-	0,6,6	-	-	-		
87	OHX	6	2100	-	0,6,6	-	-	-		
87	OHX	1	3876	-	0,6,6	-	-	-		
87	OHX	2	2067	-	0,6,6	-	-	-		
89	3KD	5	4254	-	24,25,25	1.04	2 (8%)	30,39,39	1.06	1 (3%)
87	OHX	6	2160	-	0,6,6	-	-	-		
87	OHX	5	3980	-	0,6,6	-	-	-		
87	OHX	2	2148	-	0,6,6	-	-	-		
87	OHX	5	4084	-	0,6,6	-	-	-		
87	OHX	1	3952	-	0,6,6	-	-	-		
87	OHX	1	4127	-	0,6,6	-	-	-		
87	OHX	2	2133	-	0,6,6	-	-	-		
87	OHX	6	2094	-	0,6,6	-	-	-		
87	OHX	1	4011	-	0,6,6	-	-	-		
87	OHX	5	4174	-	0,6,6	-	-	-		
87	OHX	6	2134	-	0,6,6	-	-	-		
87	OHX	2	2136	-	0,6,6	-	-	-		
87	OHX	5	3939	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4210	-	0,6,6	-	-	-		
87	OHX	5	4219	-	0,6,6	-	-	-		
87	OHX	5	4046	-	0,6,6	-	-	-		
87	OHX	1	4202	-	0,6,6	-	-	-		
87	OHX	6	2185	-	0,6,6	-	-	-		
87	OHX	6	2093	-	0,6,6	-	-	-		
87	OHX	1	3885	-	0,6,6	-	-	-		
87	OHX	5	4200	-	0,6,6	-	-	-		
87	OHX	5	4104	-	0,6,6	-	-	-		
87	OHX	5	4230	-	0,6,6	-	-	-		
87	OHX	2	2138	-	0,6,6	-	-	-		
87	OHX	1	4154	-	0,6,6	-	-	-		
87	OHX	5	4007	-	0,6,6	-	-	-		
87	OHX	1	3979	-	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
89	3KD	1	4218	-	-	-	0/5/5/5
89	3KD	5	4254	-	-	-	0/5/5/5

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
89	5	4254	3KD	C13-C12	3.04	1.54	1.50
89	5	4254	3KD	C8-C9	-2.40	1.47	1.51

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
89	5	4254	3KD	O-C14-C9	-3.44	101.86	109.57
89	1	4218	3KD	O-C14-C9	-2.91	103.05	109.57

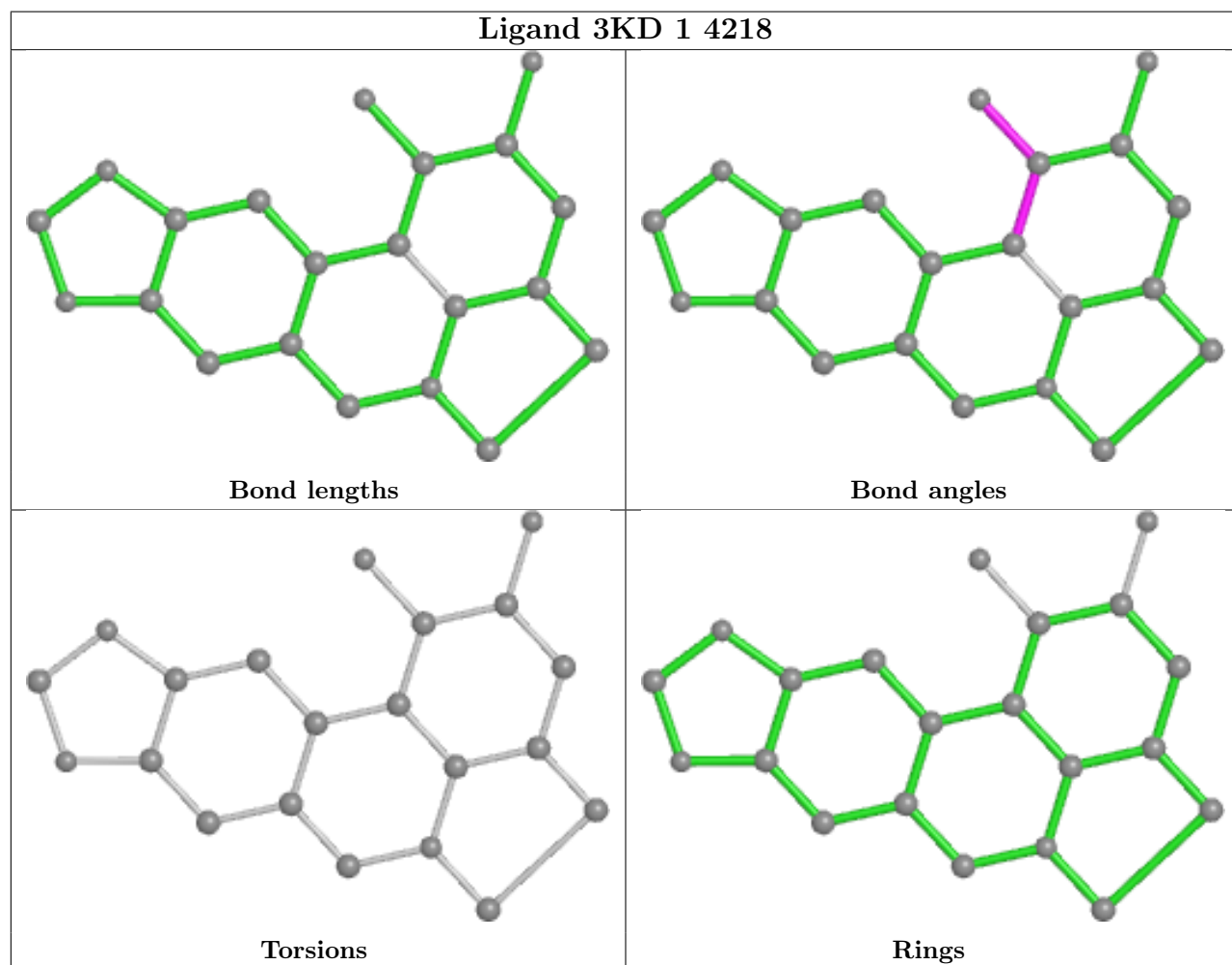
There are no chirality outliers.

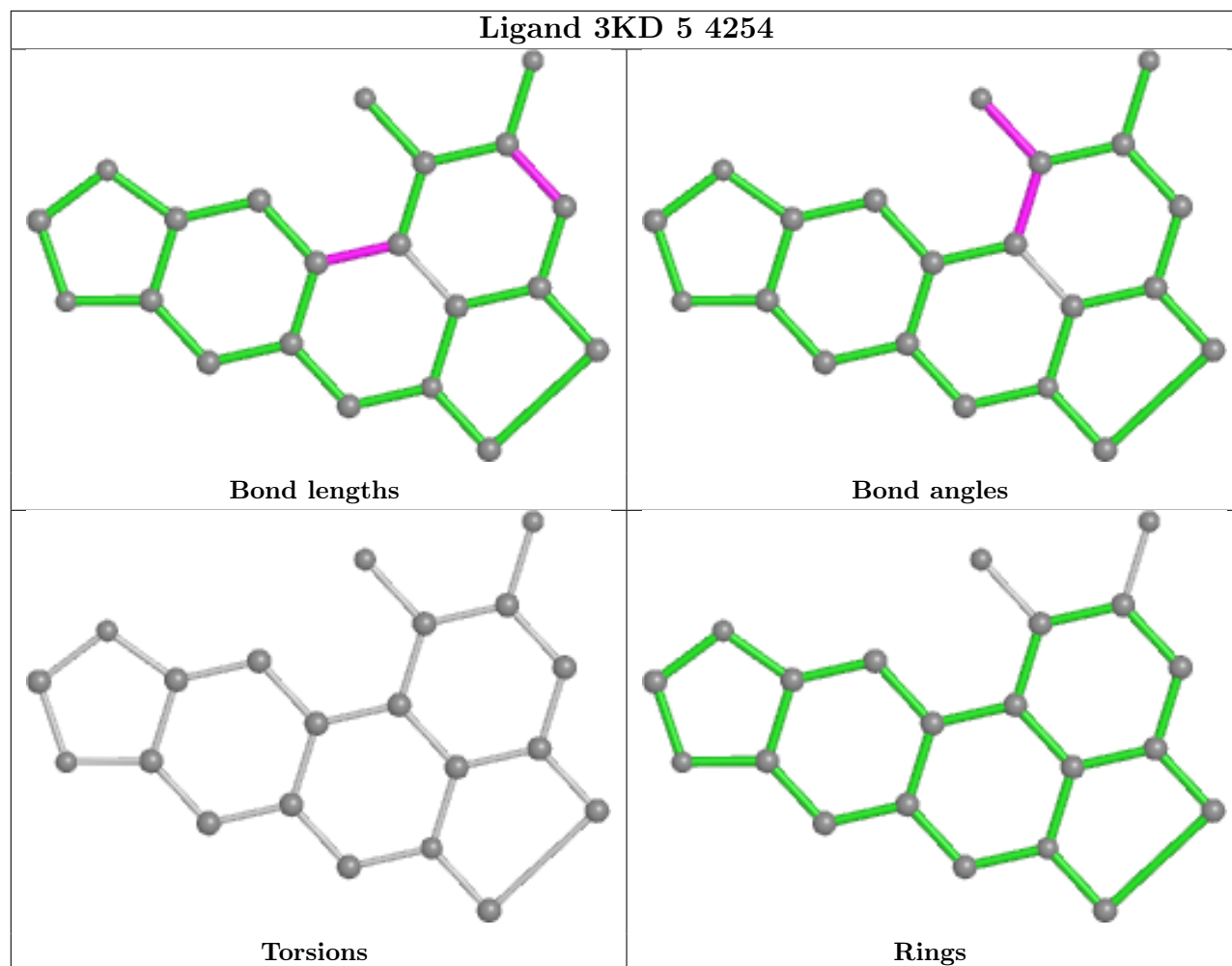
There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

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





5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

EDS failed to run properly - this section is therefore empty.

6.2 Non-standard residues in protein, DNA, RNA chains

EDS failed to run properly - this section is therefore empty.

6.3 Carbohydrates

EDS failed to run properly - this section is therefore empty.

6.4 Ligands

EDS failed to run properly - this section is therefore empty.

6.5 Other polymers

EDS failed to run properly - this section is therefore empty.