



wwPDB X-ray Structure Validation Summary Report

Dec 17, 2023 – 10:45 pm GMT

PDB ID : 4U4O
Title : Crystal structure of Geneticin bound to the yeast 80S ribosome
Authors : Garreau de Loubresse, N.; Prokhorova, I.; Yusupova, G.; Yusupov, M.
Deposited on : 2014-07-24
Resolution : 3.60 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

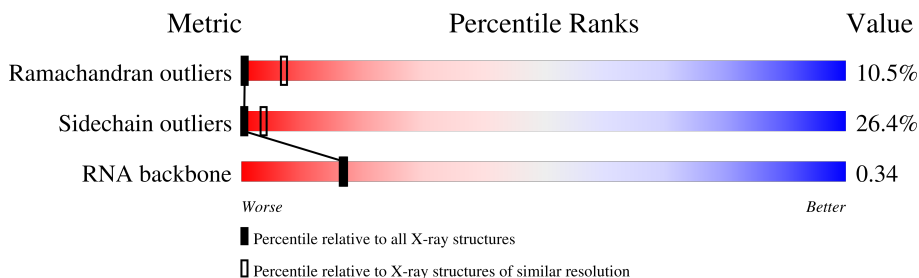
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.60 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	1307 (3.70-3.50)
Sidechain outliers	138945	1307 (3.70-3.50)
RNA backbone	3102	1017 (4.20-3.00)


























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

Note EDS failed to run properly.

Mol	Chain	Length	Quality of chain
1	2	1800	37% (green), 46% (yellow), 14% (orange), 3% (red), 0% (grey)
1	6	1800	26% (green), 52% (yellow), 22% (orange), 0% (red), 0% (grey)
2	S0	251	55% (green), 25% (yellow), 18% (orange), 2% (red), 0% (grey)
2	s0	251	54% (green), 25% (yellow), 18% (orange), 3% (red), 0% (grey)
3	S1	254	55% (green), 27% (yellow), 16% (orange), 2% (red), 0% (grey)
3	s1	254	59% (green), 24% (yellow), 15% (orange), 2% (red), 0% (grey)
4	S2	253	59% (green), 24% (yellow), 14% (orange), 3% (red), 0% (grey)
4	s2	253	54% (green), 29% (yellow), 14% (orange), 3% (red), 0% (grey)

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Mol	Chain	Length	Quality of chain
5	S3	239	 65% 26% 7%
5	s3	239	 63% 28% 7%
6	S4	260	 71% 27%
6	s4	260	 70% 26%
7	S5	224	 64% 27% 8%
7	s5	224	 58% 29% 8%
8	S6	236	 67% 28%
8	s6	236	 64% 25% 8%
9	S7	189	 71% 23%
9	s7	189	 68% 26% 5%
10	S8	200	 72% 18% 6%
10	s8	200	 66% 26% 6%
11	S9	196	 67% 25% 6%
11	s9	196	 65% 26% 6%
12	C0	105	 57% 30% 9%
12	c0	105	 58% 29% 5% 9%
13	C1	155	 78% 21%
13	c1	155	 65% 28% 6%
14	C2	142	 54% 30% 13%
14	c2	142	 57% 27% 13%
15	C3	150	 75% 24%
15	c3	150	 64% 33%
16	C4	136	 65% 25% 7%
16	c4	136	 66% 25% 6%
17	C5	141	 59% 25% 12%

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Mol	Chain	Length	Quality of chain
17	c5	141	60% 28% 7% . .
18	C6	142	68% 28% . . .
18	c6	142	65% 32% . .
19	C7	136	55% 29% . . 12%
19	c7	136	54% 30% . 14%
20	C8	145	77% 21% .
20	c8	145	66% 28% 6%
21	C9	143	73% 24% .
21	c9	143	75% 22% .
22	D0	120	62% 26% . 11%
22	d0	120	49% 38% 5% 8%
23	D1	87	68% 28% 5%
23	d1	87	70% 26% .
24	D2	129	72% 26% .
24	d2	129	78% 20% .
25	D3	144	58% 36% 6%
25	d3	144	71% 27% .
26	D4	134	78% 18% .
26	d4	134	73% 25% .
27	D5	107	46% 17% . 35%
27	d5	107	45% 18% . 36%
28	D6	97	60% 31% 9%
28	d6	97	60% 37% .
29	D7	81	75% 23% .
29	d7	81	72% 26% .


























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Mol	Chain	Length	Quality of chain
30	D8	66	65% 27% 5%
30	d8	66	65% 26% 5% 5%
31	D9	55	64% 27% 5%
31	d9	55	58% 35%
32	E0	60	62% 37%
33	E1	76	53% 37% 7%
34	SR	318	80% 19%
34	sR	318	80% 19%
35	SM	273	40% 16% 42%
35	sM	273	27% 9% 62%
36	1	3396	16% 54% 22% 7%
36	5	3396	15% 55% 23% 7%
37	3	121	29% 54% 17%
37	7	121	11% 64% 26%
38	4	158	27% 49% 23%
38	8	158	28% 52% 20%
39	L2	253	70% 28%
39	l2	253	72% 25%
40	L3	386	68% 28%
40	l3	386	67% 27% 5%
41	L4	361	68% 28%
41	l4	361	68% 29%
42	L5	296	72% 25%
42	l5	296	69% 26%
43	L6	175	69% 17% 11%









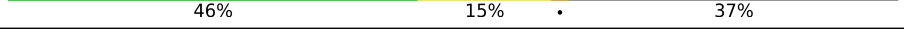

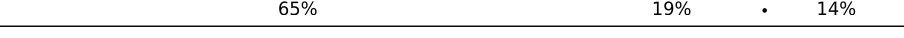
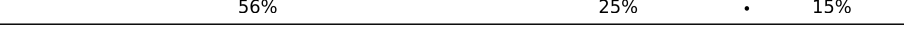

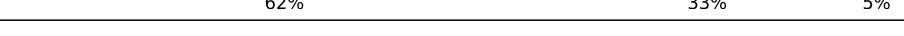


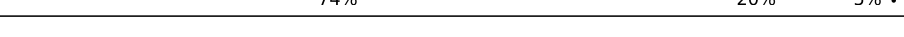

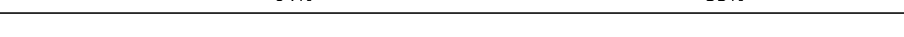






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Mol	Chain	Length	Quality of chain
43	l6	175	 63% 22% 10%
44	L7	243	 63% 23% 9%
44	l7	243	 67% 19% 6% 8%
45	L8	255	 65% 25% 9%
45	l8	255	 67% 21% 9%
46	L9	191	 59% 38%
46	l9	191	 60% 37%
47	M0	220	 68% 25%
47	m0	220	 63% 31%
48	M1	173	 66% 27%
48	m1	173	 57% 32% 8%
49	M3	198	 71% 24%
49	m3	198	 59% 37%
50	M4	137	 69% 29%
50	m4	137	 73% 26%
51	M5	203	 78% 20%
51	m5	203	 73% 25%
52	M6	198	 70% 24% 5%
52	m6	198	 64% 31%
53	M7	183	 67% 30%
53	m7	183	 54% 30% 15%
54	M8	185	 72% 26%
54	m8	185	 69% 27%
55	M9	188	 68% 31%
55	m9	188	 69% 28%

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Mol	Chain	Length	Quality of chain
56	N0	172	 66% 33% .
56	n0	172	 69% 26% 5%
57	N1	159	 70% 25% 5%
57	n1	159	 72% 23% 6%
58	N2	120	 62% 18% . 17%
58	n2	120	 63% 16% .. 18%
59	N3	136	 73% 26% .
59	n3	136	 70% 26% .
60	N4	155	 46% 15% . 37%
60	n4	155	 56% 28% . 13%
61	N5	141	 65% 19% . 14%
61	n5	141	 56% 25% . 15%
62	N6	126	 68% 27% . .
62	n6	126	 62% 33% 5%
63	N7	135	 69% 31%
63	n7	135	 76% 23% .
64	N8	148	 74% 20% 5% .
64	n8	148	 68% 30% .
65	N9	58	 64% 33% . .
65	n9	58	 47% 45% 7% .
66	O0	104	 73% 19% . 7%
66	o0	104	 63% 30% . .
67	O1	112	 69% 26% . .
67	o1	112	 55% 37% 5% .
68	O2	129	 63% 33% . . .

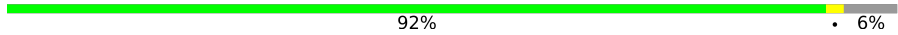

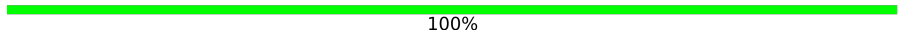
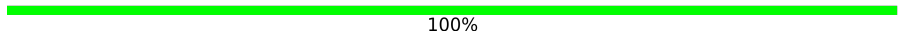
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Mol	Chain	Length	Quality of chain
68	o2	129	67% 25% 5% . .
69	O3	106	74% 23% .
69	o3	106	65% 30% 5%
70	O4	119	61% 27% 6% 6%
70	o4	119	65% 25% . . 6%
71	O5	119	61% 34% 5%
71	o5	119	66% 29% 5%
72	O6	99	70% 21% 9%
72	o6	99	67% 28% 5%
73	O7	87	72% 23% 5%
73	o7	87	69% 23% 7% .
74	O8	77	71% 27% .
74	o8	77	77% 22% .
75	O9	50	68% 30% .
75	o9	50	70% 30%
76	Q0	52	67% 27% 6%
76	q0	52	56% 35% 10%
77	Q1	25	52% 48%
77	q1	25	48% 40% 12%
78	Q2	105	69% 29% .
78	q2	105	66% 30% . .
79	Q3	91	66% 31% .
79	q3	91	70% 24% 5%
80	e0	62	68% 27% 5%
81	e1	76	46% 47% 7%

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Mol	Chain	Length	Quality of chain
82	m2	160	 92% 6%
83	p0	311	 36% 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 411095 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	1791	Total	C	N	O	P	0	0	0
			38149	17055	6738	12565	1791			

- 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			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C5	137	SER	ARG	conflict	UNP Q01855
c5	137	SER	ARG	conflict	UNP Q01855

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
18	C6	141	1105	708	203	194	0	0	0
18	c6	142	1111	711	204	196	0	0	0

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

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

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

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

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

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

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

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

- 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
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
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
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
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
28	D6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	E1	71	566	362	106	94	4	0	0	0

- 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
35	SM	159	Total	C	N	O	0	0	0
			1104	652	221	231			
35	sM	104	Total	C	N	O	0	0	0
			679	402	140	137			

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

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

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

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

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

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

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

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

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

- 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	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			
40	l3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			

- 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	C	N	O	S	0	0	0
			2748	1729	522	494	3			
41	l4	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			

- 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	C	N	O	S	0	0	0
			2375	1501	414	458	2			
42	l5	294	Total	C	N	O	S	0	0	0
			2359	1489	412	456	2			

- 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	C	N	O	S	0	0	0
			1239	800	222	216	1			
43	l6	157	Total	C	N	O	S	0	0	0
			1248	806	224	217	1			

- 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	C	N	O	S	0	0	0
			1784	1151	324	308	1			
44	l7	223	Total	C	N	O	S	0	0	0
			1791	1155	325	310	1			

- 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	C	N	O	S	0	0	0
			1804	1151	323	327	3			
45	l8	231	Total	C	N	O	S	0	0	0
			1763	1130	316	314	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
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
			Total	C	N	O	S			
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
			Total	C	N	O	S			
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
			Total	C	N	O			
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			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
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
			Total	C	N	O	S			
56	N0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			
56	n0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

- 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	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			
57	n1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			

- 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	Total	C	N	O	0	0	0
			796	516	131	149			
58	n2	98	Total	C	N	O	0	0	0
			778	505	127	146			

- 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	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			
59	n3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			

- 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	Total	C	N	O	S	0	0	0
			699	443	137	118	1			
60	n4	135	Total	C	N	O	S	0	0	0
			1038	651	206	180	1			

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

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

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

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

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

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

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

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

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

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

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

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

- 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			

There are 22 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
O4	110	GLU	-	expression tag	UNP P87262
O4	111	ALA	-	expression tag	UNP P87262
O4	112	ALA	-	expression tag	UNP P87262

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Chain	Residue	Modelled	Actual	Comment	Reference
O4	113	LYS	-	expression tag	UNP P87262
O4	114	SER	-	expression tag	UNP P87262
O4	115	GLU	-	expression tag	UNP P87262
O4	116	LYS	-	expression tag	UNP P87262
O4	117	LYS	-	expression tag	UNP P87262
O4	118	ALA	-	expression tag	UNP P87262
O4	119	LYS	-	expression tag	UNP P87262
O4	120	LYS	-	expression tag	UNP P87262
o4	110	GLU	-	expression tag	UNP P87262
o4	111	ALA	-	expression tag	UNP P87262
o4	112	ALA	-	expression tag	UNP P87262
o4	113	LYS	-	expression tag	UNP P87262
o4	114	SER	-	expression tag	UNP P87262
o4	115	GLU	-	expression tag	UNP P87262
o4	116	LYS	-	expression tag	UNP P87262
o4	117	LYS	-	expression tag	UNP P87262
o4	118	ALA	-	expression tag	UNP P87262
o4	119	LYS	-	expression tag	UNP P87262
o4	120	LYS	-	expression tag	UNP P87262

- 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			
72	o6	99	Total	C	N	O	S	0	0	0
			770	481	156	131	2			

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

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

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

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

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

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

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

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

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

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

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

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

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

- 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 Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
81	e1	76	Total 608	C 388	N 117	O 99	S 4	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 1076	C 686	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
			Total	C	N	O			
84	p1	47	Total 235	C 141	N 47	O 47	0	0	0

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

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

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	2	124	Total 124	Mg 124	0	0
86	S2	2	Total 2	Mg 2	0	0
86	S8	1	Total 1	Mg 1	0	0
86	D3	1	Total 1	Mg 1	0	0
86	D4	1	Total 1	Mg 1	0	0
86	SM	1	Total 1	Mg 1	0	0
86	1	468	Total 468	Mg 468	0	0
86	3	14	Total 14	Mg 14	0	0
86	4	23	Total 23	Mg 23	0	0
86	L2	2	Total 2	Mg 2	0	0
86	L3	2	Total 2	Mg 2	0	0
86	L4	2	Total 2	Mg 2	0	0
86	L5	1	Total 1	Mg 1	0	0
86	L6	2	Total 2	Mg 2	0	0
86	L7	2	Total 2	Mg 2	0	0
86	L8	1	Total 1	Mg 1	0	0
86	M0	3	Total 3	Mg 3	0	0
86	M1	1	Total 1	Mg 1	0	0
86	M3	2	Total 2	Mg 2	0	0
86	M5	2	Total 2	Mg 2	0	0
86	M6	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	M7	5	Total 5	Mg 5	0	0
86	M9	1	Total 1	Mg 1	0	0
86	N0	1	Total 1	Mg 1	0	0
86	N3	2	Total 2	Mg 2	0	0
86	N5	2	Total 2	Mg 2	0	0
86	N6	1	Total 1	Mg 1	0	0
86	N8	4	Total 4	Mg 4	0	0
86	N9	1	Total 1	Mg 1	0	0
86	O1	1	Total 1	Mg 1	0	0
86	O2	1	Total 1	Mg 1	0	0
86	O3	1	Total 1	Mg 1	0	0
86	O5	1	Total 1	Mg 1	0	0
86	O7	1	Total 1	Mg 1	0	0
86	6	150	Total 150	Mg 150	0	0
86	s1	1	Total 1	Mg 1	0	0
86	s2	1	Total 1	Mg 1	0	0
86	s8	2	Total 2	Mg 2	0	0
86	c7	1	Total 1	Mg 1	0	0
86	c8	1	Total 1	Mg 1	0	0
86	d3	1	Total 1	Mg 1	0	0
86	d6	1	Total 1	Mg 1	0	0

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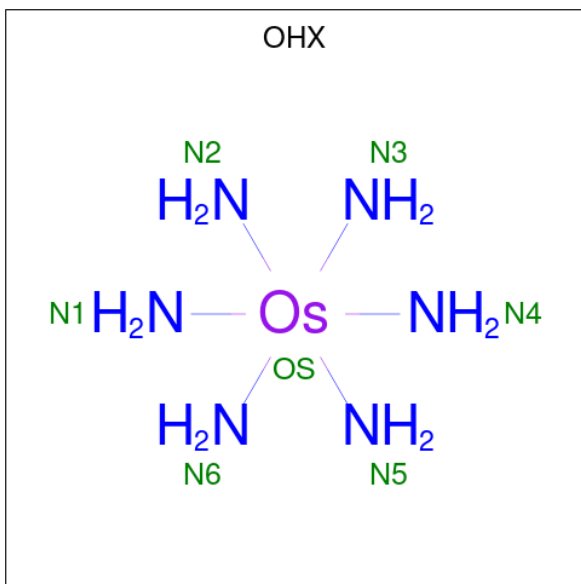
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	5	499	Total 499	Mg 499	0	0
86	7	15	Total 15	Mg 15	0	0
86	8	17	Total 17	Mg 17	0	0
86	12	1	Total 1	Mg 1	0	0
86	13	6	Total 6	Mg 6	0	0
86	14	1	Total 1	Mg 1	0	0
86	15	3	Total 3	Mg 3	0	0
86	17	2	Total 2	Mg 2	0	0
86	19	1	Total 1	Mg 1	0	0
86	m0	1	Total 1	Mg 1	0	0
86	m1	1	Total 1	Mg 1	0	0
86	m4	1	Total 1	Mg 1	0	0
86	m5	2	Total 2	Mg 2	0	0
86	m6	3	Total 3	Mg 3	0	0
86	m7	4	Total 4	Mg 4	0	0
86	n3	1	Total 1	Mg 1	0	0
86	n4	1	Total 1	Mg 1	0	0
86	n8	2	Total 2	Mg 2	0	0
86	n9	2	Total 2	Mg 2	0	0
86	o0	1	Total 1	Mg 1	0	0
86	o1	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
86	o2	1	Total Mg 1 1	0	0
86	o3	2	Total Mg 2 2	0	0
86	o4	1	Total Mg 1 1	0	0
86	q0	2	Total Mg 2 2	0	0
86	q1	1	Total Mg 1 1	0	0
86	q3	2	Total Mg 2 2	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
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
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

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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
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
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
87	2	1	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	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
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	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
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
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		
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

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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
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
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
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

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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

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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	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	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
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	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	M9	1	7	6	1	0	0
87	M9	1	7	6	1	0	0
87	N9	1	7	6	1	0	0
87	O1	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	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

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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
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
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87	6	1	7	6	1	0	0
87	6	1	7	6	1	0	0
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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
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87	6	1	7	6	1	0	0
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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

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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	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
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

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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
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
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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
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
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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	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
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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	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
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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
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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

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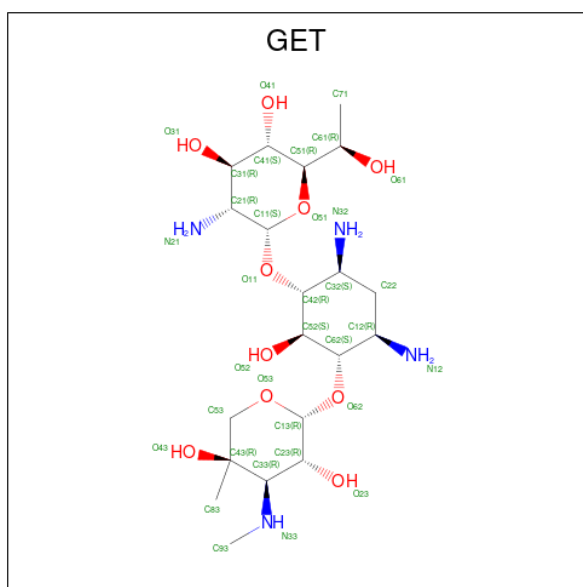
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	N	Os		
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87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	8	1	7	6	1	0	0
87	13	1	7	6	1	0	0
87	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	15	1	7	6	1	0	0
87	19	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	m0	1	7	6	1	0	0
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	m7	1	7	6	1	0	0
87	m9	1	7	6	1	0	0
87	n3	1	7	6	1	0	0
87	n9	1	7	6	1	0	0
87	o3	1	7	6	1	0	0
87	o7	1	7	6	1	0	0
87	o9	1	7	6	1	0	0
87	q1	1	7	6	1	0	0
87	q2	1	7	6	1	0	0

- Molecule 88 is GENETICIN (three-letter code: GET) (formula: C₂₀H₄₀N₄O₁₀).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	N	O		
88	2	1	34	20	4	10	0	0

- Molecule 89 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Zn		
89	D6	1	1	1	0	0
89	D7	1	1	1	0	0
89	D9	1	1	1	0	0
89	E1	1	1	1	0	0
89	O7	1	1	1	0	0
89	Q0	1	1	1	0	0
89	Q2	1	1	1	0	0
89	Q3	1	1	1	0	0
89	d6	1	1	1	0	0
89	d7	1	1	1	0	0
89	d9	1	1	1	0	0

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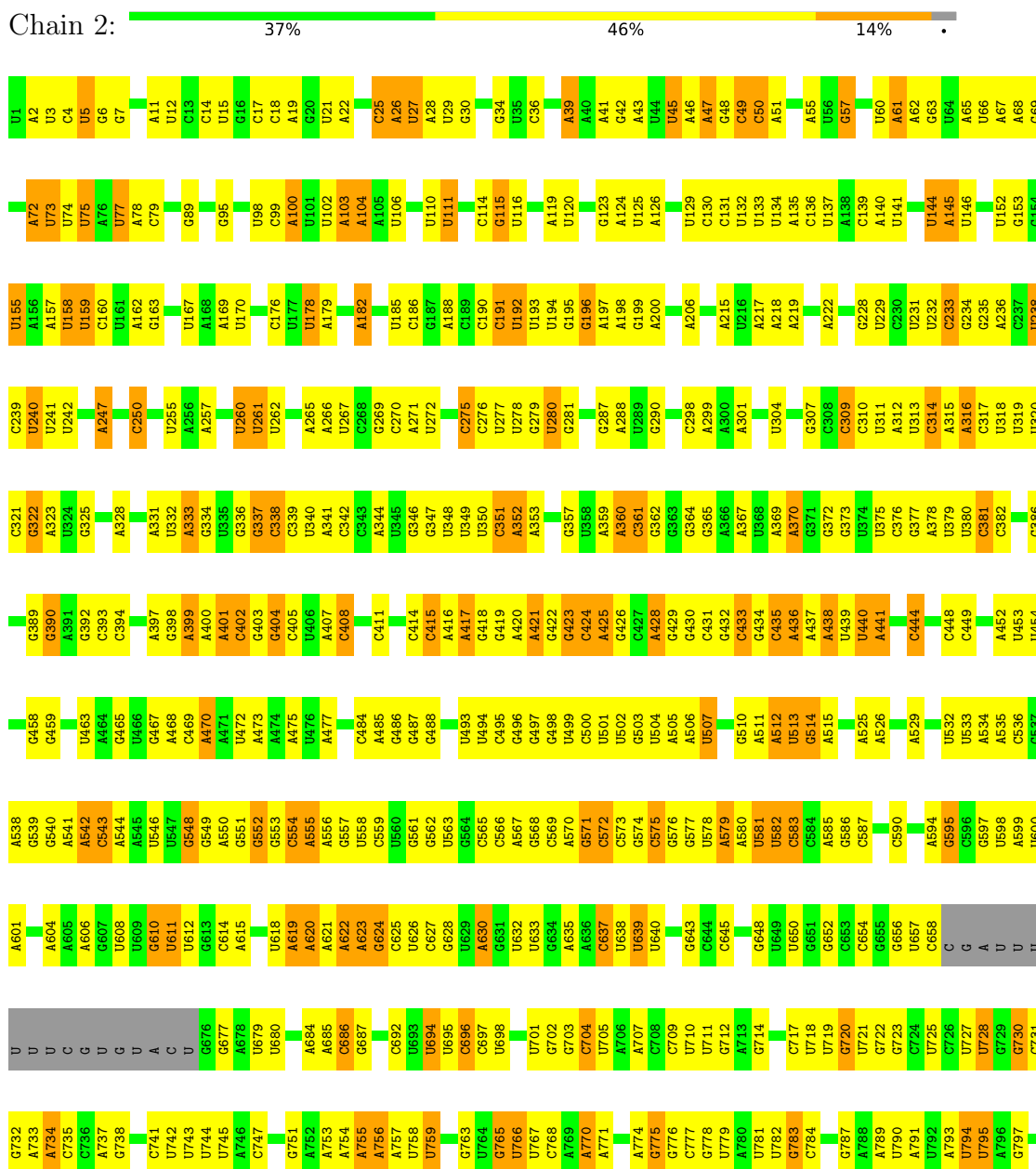
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
89	e1	1	Total 1	Zn 1	0	0
89	o7	1	Total 1	Zn 1	0	0
89	q0	1	Total 1	Zn 1	0	0
89	q2	1	Total 1	Zn 1	0	0
89	q3	1	Total 1	Zn 1	0	0

3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. Residues are color-coded 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.

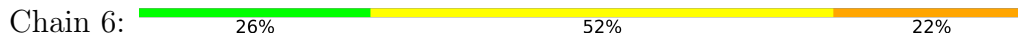
Note EDS failed to run properly.

- Molecule 1: 18S ribosomal RNA



U	C1619	A1550	A1475	G1412	U1320	U1250	C1177	G1111	C1033	U968	C880	A803
U	C1620	U1551	C1476	U1413	A1321	U1251	G1178	G1112	C1037	C969	C883	A804
G	C1623	U1552	G1477	U1414	A1322	C1252	C1179	A1113	C1038	A970	C884	U805
A	C1624	U1553	A1478	U1415	G1324	G1255	U1181	G1114	A1039	A971	C885	A806
G	C1625	U1554	G1480	G1416	G1329	G1256	U1182	G1119	A1040	G972	U866	A807
A	A1631	A1555	C1481	A1417	A1329	U1258	A1183	U1120	A1043	A974	G810	
A	A1632	U1556	C1482	G1418	C1332	U1259	A1184	U1121	A1044	C975	A811	
G	A1633	U1557	A1483	G1419	C1333	U1260	U1185	G1122	U1044	C976	A812	
G	A1634	U1558	G1484	C1420	A1336	G1261	U1186	C1123	G1045	A977	U813	
G	A1635	A1559	C1485	A1421	A1337	U1262	U1187	A1124	A1046	A978	A814	
C	C1636	U1560	G1486	A1422	C1338	G1263	A1189	A1125	G1046	A979	G815	
C	C1637	U1561	U1423	U1423	A1339	G1264	A1190	G1126	G1050	G980	G816	
A	G1638	C1565	A1489	A1484	C1339	G1265	U1191	G1127	G1051	U981	A817	
A	A1639	C1566	C1490	A1492	U1340	G1266	U1192	C1128	U1052	U982	C818	
A	C1640	C1567	U1491	C1426	A1341	G1267	A1193	C1129	G1053	U983	G819	
U	C1641	C1568	A1492	A1427	C1342	U1268	A1194	A1130	U1054	G984	U820	
C	C1642	A1569	A1493	G1428	U1343	G1269	A1195	G1131	U1055	G985	U821	
C	G1643	A1570	G1429	G1429	A1344	G1270	A1196	A1132	U1056	G986	U822	
A	U1643	C1571	U1430	U1430	A1345	G1271	C1197	A1133	U1057	G987	G823	
C	G1644	G1572	U1431	U1431	A1346	U1272	G1198	C1134	U1058	A988	G824	
C	G1645	U1573	G1498	U1432	U1347	U1273	G1199	U1135	U1059	U989	U825	
C	G1646	G1574	G1499	G1433	A1348	C1274	G1200	U1136	U1060	C990	U826	
U	U1647	U1575	C1500	U1434	A1349	A1275	G1201	U1137	A1061	G991	C827	
C	A1648	U1579	G1501	G1435	G1354	U1276	A1202	A1138	A1062	A992	U828	
A	G1649	U1582	G1502	A1436	C1355	G1277	A1203	A1139	G993	A993	A829	
G	U1650	U1583	A1503	U1437	U1356	G1278	A1204	G1140	U1071	G994	U830	
A	A1651	A1584	G1504	G1438	A1357	C1279	G1141	C1141	C1205	G1141	U831	
C	C1652	G1584	A1505	C1439	G1358	C1280	U1206	A1142	G1072	G1072	U832	
G	C1653	G1506	G1506	C1439	C1359	G1281	C1207	A1143	G1073	G1073	U833	
G	C1654	A1587	U1514	U1443	A1360	U1282	A1208	U1144	C1075	C1000	A929	
A	A1655	G1588	U1515	U1444	U1361	U1283	C1209	U1145	A1076	A1001	A930	
U	U1656	G1590	A1516	G1445	U1362	C1284	C1210	G1146	C1077	G1002	G837	
C	G1657	C1591	U1517	C1447	U1363	U1285	A1211	G1147	C1078	G1003	G838	
U	A1659	A1591	U1518	G1448	U1370	U1286	A1212	C1148	U1079	U1004	U840	
G	U1660	G1594	U1520	G1448	A1371	G1287	G1213	U1149	A1080	A1005	G846	
A	U1661	U1595	G1521	U1452	U1372	U1288	U1214	G1150	A1081	C1006	U955	
C	G1662	C1596	U1522	G1453	C1373	U1289	C1215	A1151	C1082	C1007	G956	
C	C1663	U1597	G1523	G1454	C1374	G1291	G1216	A1152	G1083	G1008	C847	
A	C1664	U1598	A1524	G1455	A1375	G1292	A1217	G1153	A1084	U1009	C848	
C	U1665	C1599	A1525	C1456	A1376	G1293	G1218	C1154	G1085	C1010	G942	
A	A1667	A1600	A1526	C1457	U1378	U1294	A1219	G1155	A1086	C1011	C943	
C	G1668	G1602	C1530	G1458	G1385	G1297	C1220	A1157	A1092	U1015	U945	
C	U1669	C1603	U1531	C1459	G1386	U1298	A1226	C1158	A1093	C1016	U946	
G	G1670	G1605	G1532	A1460	U1386	G1299	A1227	A1159	A1094	U1016	U947	
G	A1671	C1606	C1533	C1461	A1300	A1300	G1228	C1161	U1095	A1019	G948	
C	G1672	G1607	G1534	G1462	C1389	U1301	G1229	C1162	C1096	A1020	C949	
A	C1673	U1608	U1535	G1463	U1390	U1302	A1163	A1163	U1097	C1021	C950	
C	C1674	U1609	U1536	G1464	A1391	U1303	C1235	G1164	U1098	C1022	A951	
C	C1675	U1610	C1537	C1465	U1392	C1306	A1236	G1165	U1099	A1023	U864	
G	G1679	A1611	C1538	C1466	C1393	U1307	G1237	A1166	G1100	U1024	U958	
A	U1679	U1612	U1539	C1467	U1398	U1307	U1240	G1167	G1101	A1025	U959	
C	A1682	G1613	G1540	U1468	C1399	U1311	G1241	U1168	G1102	A1026	U960	
C	C1683	U1614	U1541	C1470	A1400	U1311	A1244	C1172	U1103	C1028	U873	
C	U1684	C1615	G1542	A1471	U1407	U1314	G1245	C1173	U1104	U1029	U964	
C	G1685	U1616	U1546	C1472	G1408	U1315	U1246	C1174	G1108	A1030	U965	
C	C	C1618	A1547	G1474	C1409	U1316	U1247	G1176	G1109	U1031	G876	

• Molecule 1: 18S ribosomal RNA



U1	A62	U128	U194	G273	C338	A400	U463	C531	G597	U686	U742	U805	G890	G954	U1018
A2	G63	U129	G195	G274	C339	A401	A464	U532	U598	U667	U743	U808	C891	A955	A1019
U3	U64	C130	A200	C275	U340	A402	A465	U533	A599	C668	U744	U809	A891	C956	A1020
C4	A65	C131	G201	C276	A341	G403	U466	A534	U600	G669	U745	A810	C897	G957	A1021
U5	U66	U132	G204	U277	C342	G404	G467	A538	A601	U670	U746	A811	C898	U958	A1022
G6	A67	U		U278	C343	G405	G468	G539	U603	G	U747	A812	C899	U959	A1023
G7	A68	A		G279	A344	U406	C469	G540	U604	U	G747	A813	C900	U960	U1024
U8	C70	C136	U208	U280	U345	A407	A470	G541	A606	A673	U748	U814	A901	U961	A1025
U9	C70	U137	U209	U281	G346	C408	A473	G542	A607	U676	U749	U815	A902	C962	A1026
A11	A71	U138	A210	C286	G347	C409	A474	C543	G607	G677	U750	U816	A903	A963	A1027
U12	A72	A130	U211	C287	U348	A410	A475	C544	U608	G678	U751	U817	A904	U964	C1028
C13	U73	C139	U212	A288	U349	C411	U476	A544	U609	A678	A752	U818	A905	U965	A1029
C14	U74	A140	U213	U289	U350	A412	U477	A545	G610	U679	A753	U819	A906	A966	A1030
U15	U75	U141	A213	U290	C351	U413	A477	U546	U611	U680	A754	U820	A907	A967	A1031
G16	A76	G142	G214	U291	A352	C414	A478	U547	U612	U681	U755	U821	A908	U968	U1032
U17	A77	G143	G215	U292	A353	C415	G480	G548	U613	C682	A756	U822	A909	C969	C1033
C17	A78	G144	A216	C294	A354	A416	C481	C549	C614	C683	A757	U823	A910	C970	C1034
C18	C79	U145	A217	A295	G355	A417	C482	U550	A615	A684	U758	U824	A911	A970	G1035
A19	A80	U146	A218	U296	G356	G418	A485	G552	A616	A685	U759	U825	A912	A971	G1036
G20	A85	A147	A219	U297	G357	G419	G486	G553	U617	C686	U760	U826	A913	G972	A1037
U21	A86	A148	A220	U298	U358	G420	G487	C554	U618	U687	U761	U827	A914	G973	U1038
A22	A87	C149	A221	A300	A359	A421	G488	A555	A619	C691	U764	U828	A915	G976	A1039
G23	C87	U150	A222	A301	A360	G422	G489	A556	A620	C692	U765	U829	A916	A977	G1040
U24	U88	G151	U227	A302	A361	G423	C490	C557	A621	C693	G765	U830	A917	G977	G1041
C25	G89	U152	G228	U303	G362	C424	C491	U558	A622	C694	U766	U831	A918	G980	G1042
A26	C90	G153	U229	U304	G363	A425	A492	C559	A623	U695	C766	U832	A919	U981	U1043
U27	A93	G154	C230	U305	A367	C426	U493	U560	A624	C696	A769	U833	A920	U982	G1044
A28	U94	U155	C231	C305	U368	G427	U494	C561	G625	C697	A770	U834	A921	U983	U1045
U29	U95	A156	U232	U306	U369	A428	U495	C562	U626	U698	A771	U835	A922	G984	G1046
G30	C95	A157	C233	G307	A369	G429	C496	G563	U627	U699	U772	U836	A923	G985	G1047
C31	G96	U158	G234	U308	A370	G430	C497	C564	G628	U700	C773	U837	A924	G986	G1048
U32	C97	U159	A235	C309	C371	G431	U499	C565	U629	G702	A774	U838	A925	G987	G1049
U33	U98	C160	A236	C310	G372	G432	C500	C566	A630	G703	A775	U839	A926	A988	U1050
G34	C99	U161	A237	U311	G373	G433	U501	C567	A631	C704	C777	U840	A927	U989	U1051
U35	U100	G163	A164	U312	U374	G434	U502	A570	U633	U705	C778	U841	A928	G990	U1052
C36	U101	A165	C239	U313	U375	C435	U503	G571	U634	C709	U779	U842	A929	G991	U1053
A39	A102	C166	U241	C314	G376	A436	A505	C572	A635	U710	A780	U843	A930	A992	U1054
A40	A103	U167	U242	A315	G377	A437	A506	C573	A636	U711	U781	U844	A931	A993	U1055
A41	A104	C168	G246	A316	A378	A438	U507	C574	U637	U712	A782	U845	A932	G994	U1056
G42	U106	A169	U247	U318	U379	U439	U508	G575	U638	C714	G783	U846	A933	A995	U1057
A43	C107	U170	U248	U319	C381	U441	G509	C576	U639	U715	C784	U847	A934	U996	U1058
U44	A108	A171	U249	U320	C382	C442	G510	C577	U640	U716	C785	U848	A935	G997	A1061
U45	G109	C172	C250	U321	G383	C443	A511	C578	U641	U717	U786	U849	A936	A998	U1062
A46	U110	U178	A251	C322	C384	C444	A512	U578	C646	U718	C786	U850	A937	U999	G1063
A47	U111	G175	U252	G323	C385	A444	U513	A579	U647	U719	U787	U851	A938	C1000	A1064
G48	U112	C176	A253	U324	G386	C448	G514	A580	U648	U720	A788	U852	A939	A1001	A1065
C49	U113	U177	A254	G325	U387	C449	A515	A581	U649	U721	A789	U853	A940	G1002	U1066
C50	U114	U178	U178	G326	G388	C452	G516	U582	U650	G722	U790	U854	A941	A1003	C1070
A51	G115	A179	U260	U327	G389	A452	U517	C583	G651	U723	U791	U855	A942	U1004	U1071
U52	A119	U185	U261	A328	C390	U453	A518	C584	G652	C724	U792	U856	A943	A1005	C1072
G53	U120	C186	G264	U329	A391	U454	C519	A585	C653	U725	U793	U857	A944	C1006	G1073
C54	U121	G187	A265	G330	G392	U455	A520	A586	U654	U726	U794	U858	A945	U1007	U1074
U55	U122	A188	A266	U331	C393	C455	A521	U587	C655	U727	U795	U859	A946	G1008	G1075
G57	G123	U189	U267	U332	C394	A456	U522	C589	C656	U728	U796	U860	A947	U1009	A1076
U58	U124	C190	A124	U333	C395	G523	U523	G590	G660	U729	C798	U861	A948	C1010	C1077
C59	U125	C191	A125	U334	U396	A459	U524	U592	A661	U730	U799	U862	A949	U1011	U1078
U60	U126	C192	A126	U335	G396	G459	A525	U593	A662	U731	U800	U863	A950	U1012	G1079
A61	G127	U193	C270	U336	A397	A460	A526	A594	U663	A733	U803	U864	A951	A1013	U1080
			A271	G336	G398	A461	A527	A595	U664	A734	A803	U865	A952	U1014	A1081
			U272	G337	A399	G462	A528	C596	U665	C735	A804		A953	U1015	C1082

G1083	A1084	G1085	A1086	G1087	A1088	G1089	A1090	G1091	A1092	G1093	A1094	G1095	A1096	G1097	A1098	G1099	A1100	G1101	A1102	G1103	A1104	G1105	A1106	G1107	A1108	G1109	A1110	G1111	A1112	G1113	A1114	G1115	A1116	G1117	A1118	G1119	A1120	G1121	A1122	G1123	A1124	G1125	A1126	G1127	A1128	G1129	A1130	G1131	A1132	G1133	A1134	G1135	A1136	G1137	A1138	G1139	A1140	G1141	A1142																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
A1143	U1144	G1145	A1146	G1147	A1148	G1149	A1150	U1151	A1152	G1153	A1154	G1155	A1156	G1157	A1158	G1159	A1160	G1161	A1162	G1163	A1164	G1165	A1166	G1167	A1168	G1169	U1170	A1171	G1172	A1173	G1174	A1175	G1176	A1177	G1178	A1179	U1180	U1181	A1182	A1183	G1184	A1185	G1186	A1187	G1188	A1189	G1190	A1191	G1192	A1193	G1194	A1195	G1196	A1197	G1198	A1199	G1200	A1201	G1202	A1203																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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● Molecule 2: 40S ribosomal protein S0-A

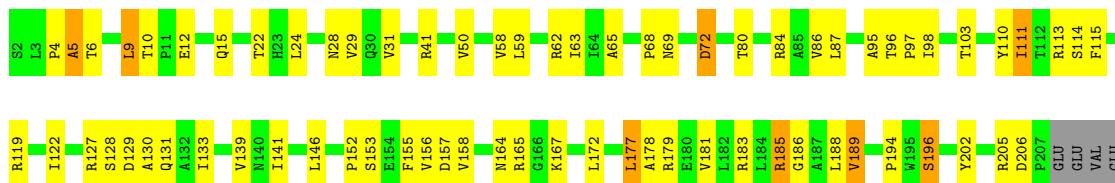


S2	L3	P4	A5	T6	F7	D8	L16	N21	T22	A26	R27	N28	V29	Q30	E34	F35	Y36	V37	F38	X39	D43	G44	V45	V50	R62	G66	L67	P68	S78	R79	T80	R84	L87	K88	A95	T96	P97	I98	R101	F102	T103	S106	Y110	I111
P118	T124	D129	A130	Q131	E135	A136	S137	N140	I141	P142	V143	L146	D150	V156	D157	V158	C162	R165	S169	I170	G171	L172	L177	V181	L184	R185	L188	V189	D190	R191	V195	S196	I197	M198	F203	D206	F207	GLU	GLY	VAL				

GLU
GLN
GLN
VAL
VAL
ALA
GLU
GLU
GLU
ALA
ALA
THR
THR
GLU
GLU
ALA
ALA
GLY
GLU
GLU
GLU
GLU
ALA
ALA
LYS
LYS
GLU
GLU
VAL
VAL
THR
THR
GLU
GLU
GLN
GLN
ALA
ALA
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GLU
ALA
ALA
ASP
ASN
VAL
VAL
TRP
TRP

- Molecule 2: 40S ribosomal protein S0-A

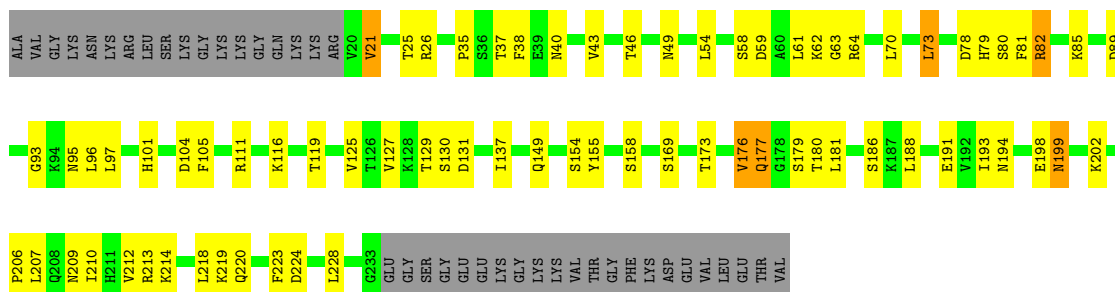
Chain s0: 54% 25% 18%



GLN
GLN
VAL
ALA
GLU
GLU
GLU
ALA
THR
THR
GLU
GLU
ALA
ALA
GLY
GLU
GLU
GLU
GLU
LYS
LYS
GLU
GLU
VAL
THR
GLU
GLU
GLN
ALA
ALA
GLU
GLU
VAL
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ASN
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ASP
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GLU
TRP

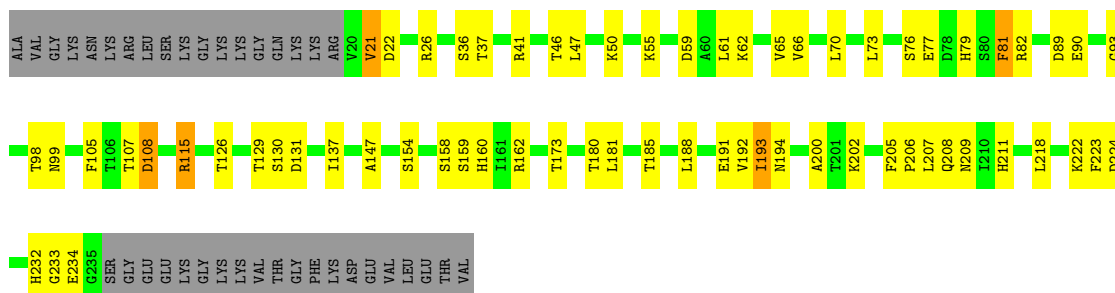
- Molecule 3: 40S ribosomal protein S1-A

Chain S1: 55% 27% 16%



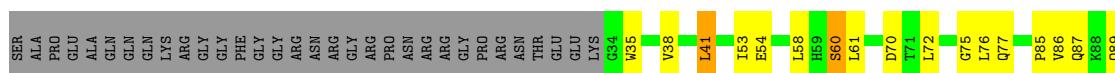
- Molecule 3: 40S ribosomal protein S1-A

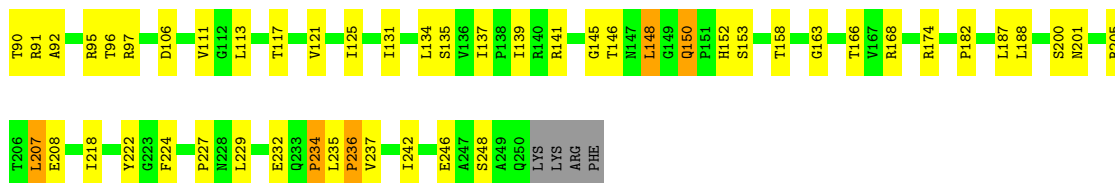
Chain s1: 59% 24% 15%



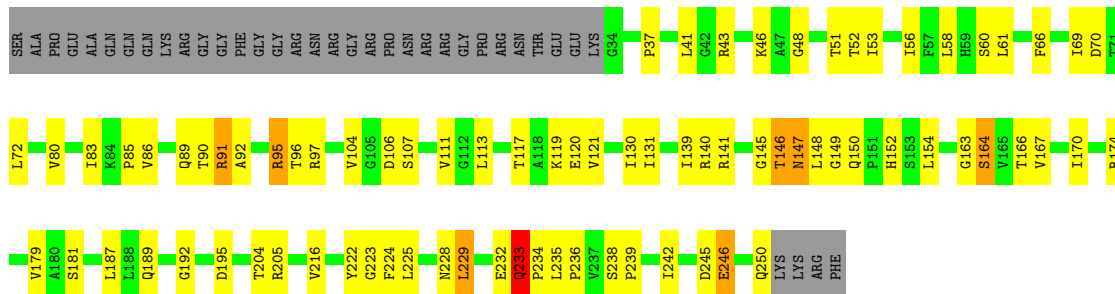
- Molecule 4: 40S ribosomal protein S2

Chain S2: 59% 24% 14%

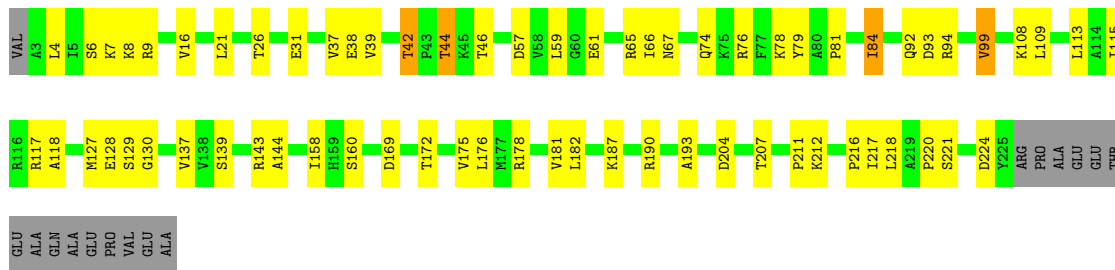




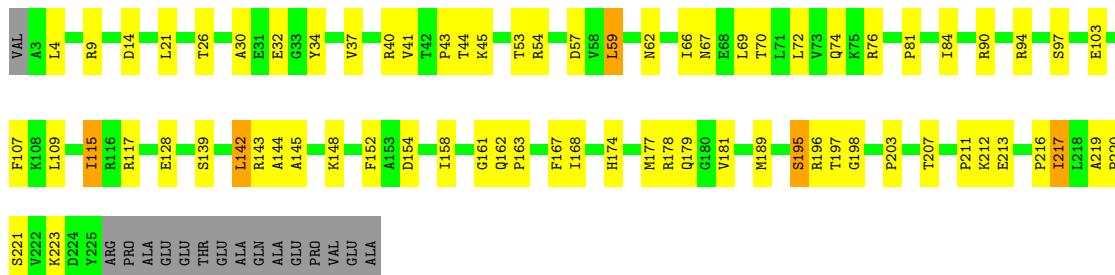
• Molecule 4: 40S ribosomal protein S2



• Molecule 5: 40S ribosomal protein S3

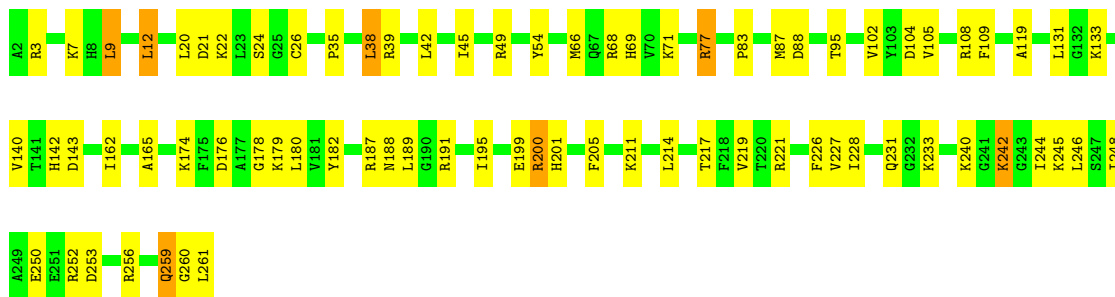


• Molecule 5: 40S ribosomal protein S3



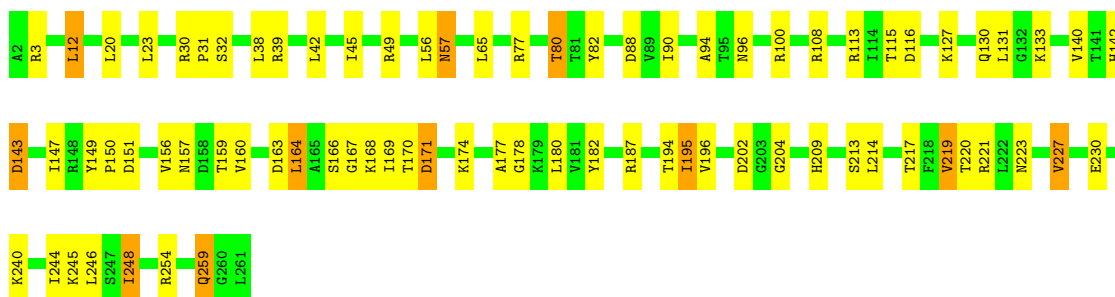
• Molecule 6: 40S ribosomal protein S4-A





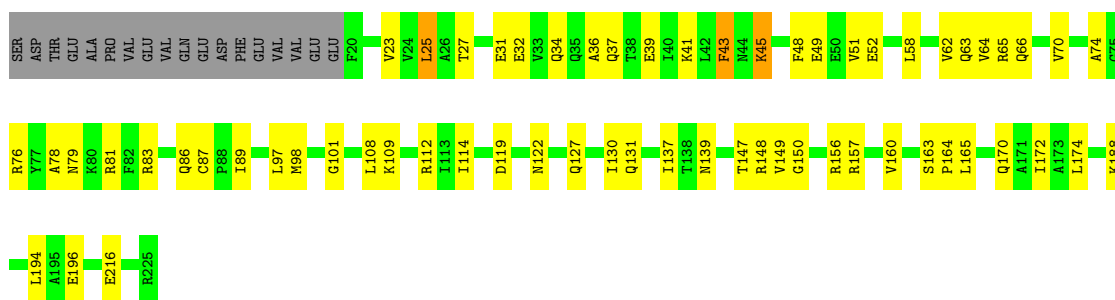
- Molecule 6: 40S ribosomal protein S4-A

Chain s4: 70% 26%



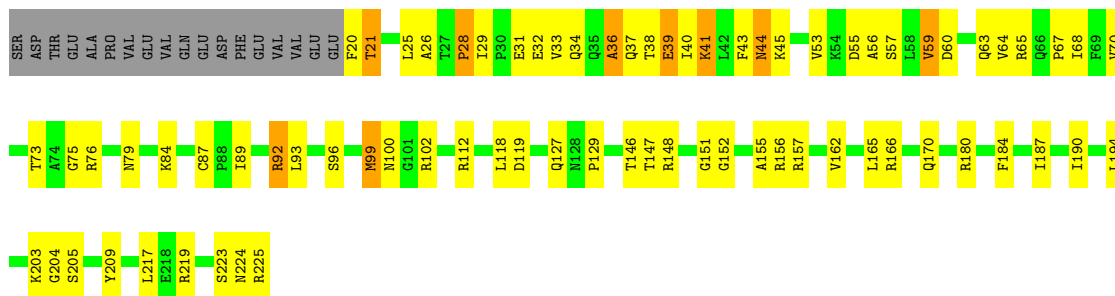
- Molecule 7: 40S ribosomal protein S5

Chain S5: 64% 27% 8%



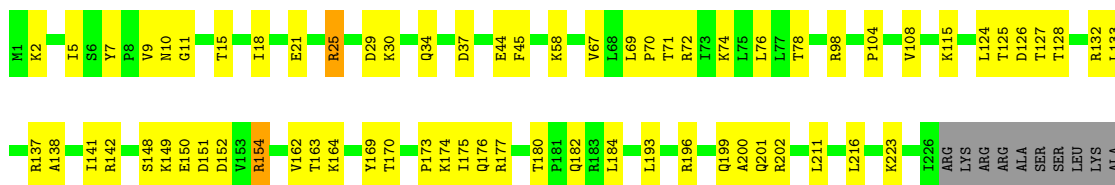
- Molecule 7: 40S ribosomal protein S5

Chain s5: 58% 29% 8%



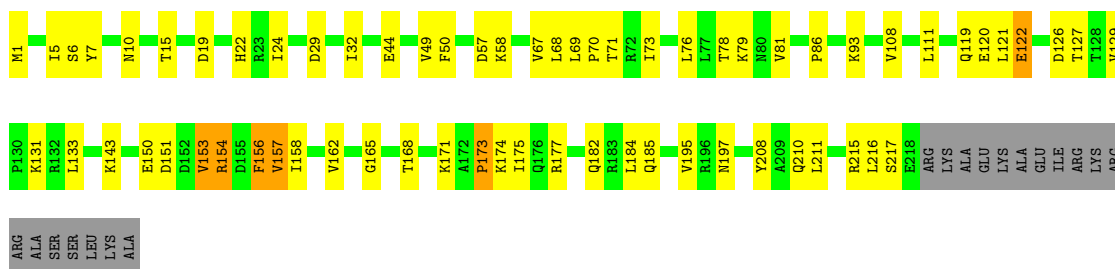
- Molecule 8: 40S ribosomal protein S6-A

Chain S6: 67% 28%



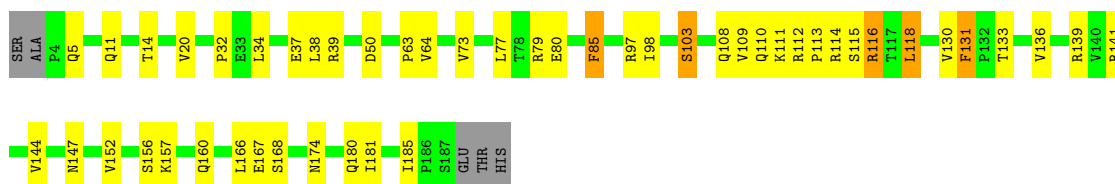
• Molecule 8: 40S ribosomal protein S6-A

Chain s6: 64% 25% 8%



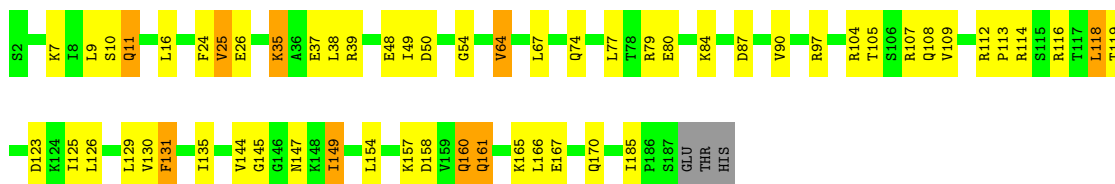
• Molecule 9: 40S ribosomal protein S7-A

Chain S7: 71% 23%



• Molecule 9: 40S ribosomal protein S7-A

Chain s7: 68% 26% 5%



• Molecule 10: 40S ribosomal protein S8-A

Chain S8: 72% 18% 6%





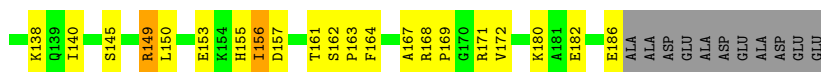
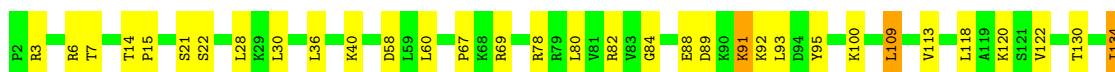
- Molecule 10: 40S ribosomal protein S8-A

Chain s8: 66% 26% 6%



- Molecule 11: 40S ribosomal protein S9-A

Chain S9: 67% 25% 6%



- Molecule 11: 40S ribosomal protein S9-A

Chain s9: 65% 26% 6%



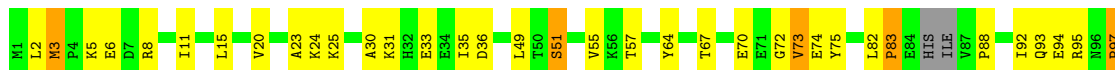
- Molecule 12: 40S ribosomal protein S10-A

Chain C0: 57% 30% 9%




- Molecule 12: 40S ribosomal protein S10-A

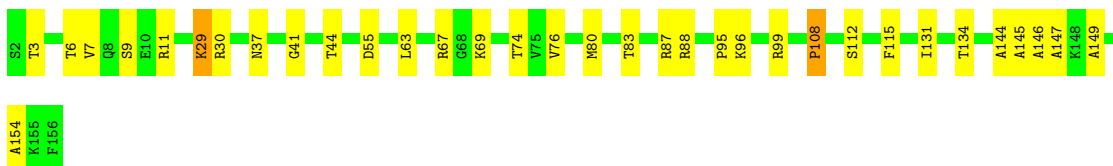
Chain c0: 58% 29% 5% 9%



T98
GLN
ARG
PRO
GLN
ARG
ARG
TYR

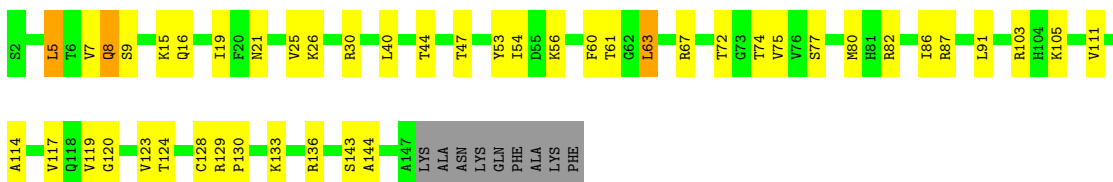
- Molecule 13: 40S ribosomal protein S11-A

Chain C1:  78% 21%



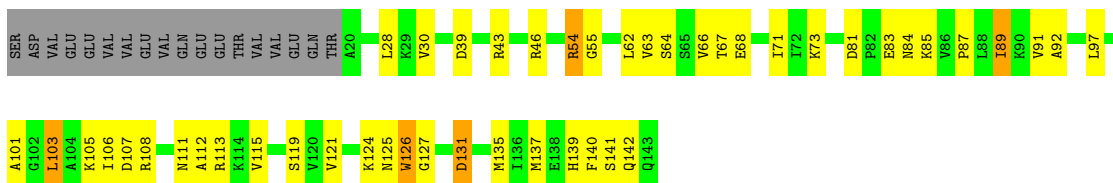
- Molecule 13: 40S ribosomal protein S11-A

Chain c1:  65% 28% 6%



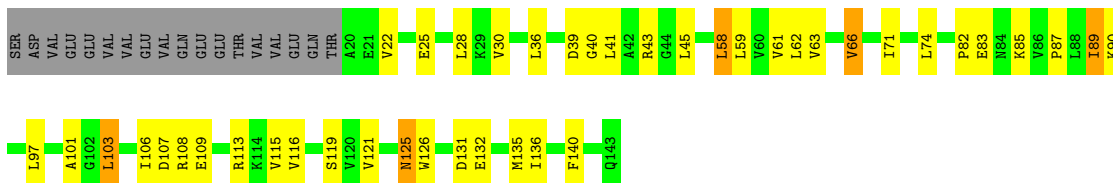
- Molecule 14: 40S ribosomal protein S12

Chain C2:  54% 30% 13%




- Molecule 14: 40S ribosomal protein S12

Chain c2:  57% 27% 13%



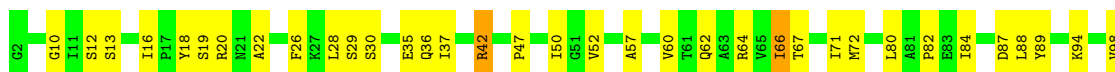
- Molecule 15: 40S ribosomal protein S13

Chain C3:  75% 24%

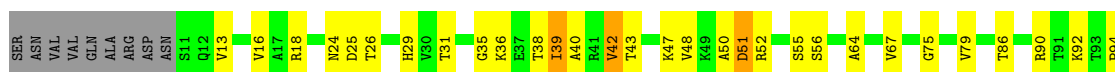




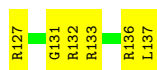
- Molecule 15: 40S ribosomal protein S13



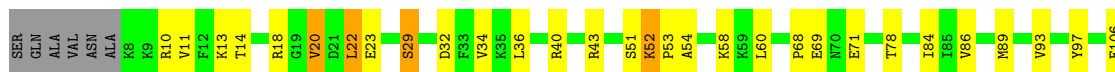
- Molecule 16: 40S ribosomal protein S14-A



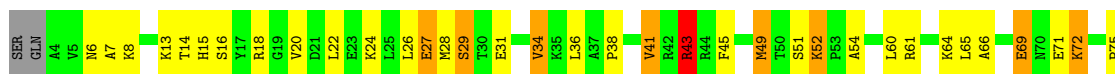
- Molecule 16: 40S ribosomal protein S14-A



- Molecule 17: 40S ribosomal protein S15



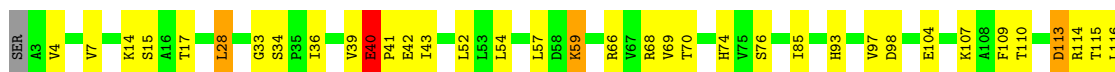
- Molecule 17: 40S ribosomal protein S15





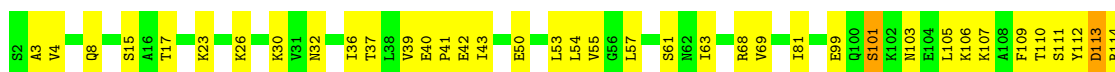
- Molecule 18: 40S ribosomal protein S16-A

Chain C6: 68% 28%



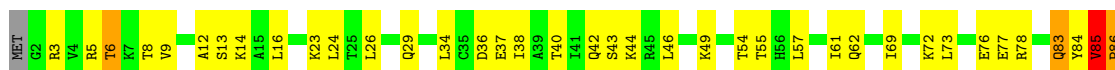
- Molecule 18: 40S ribosomal protein S16-A

Chain c6: 65% 32%



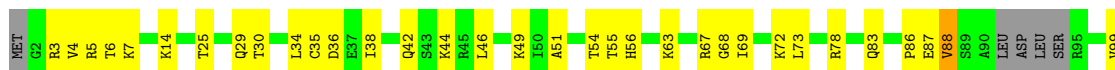
- Molecule 19: 40S ribosomal protein S17-A

Chain C7: 55% 29% 12%



- Molecule 19: 40S ribosomal protein S17-A

Chain c7: 54% 30% 14%



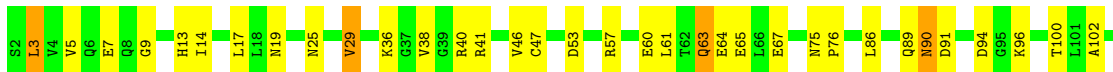
- Molecule 20: 40S ribosomal protein S18-A

Chain C8: 77% 21%




R145
A146


- Molecule 20: 40S ribosomal protein S18-A

Chain c8:  66% 28% 6%

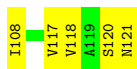
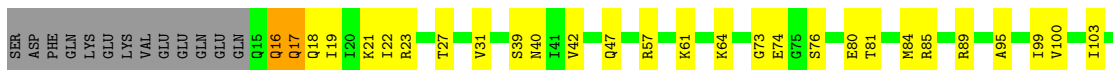
- Molecule 21: 40S ribosomal protein S19-A

Chain C9:  73% 24%

- Molecule 21: 40S ribosomal protein S19-A

Chain c9:  75% 22%

- Molecule 22: 40S ribosomal protein S20

Chain D0:  62% 26% 11%

- Molecule 22: 40S ribosomal protein S20

Chain d0:  49% 38% 5% 8%



- Molecule 23: 40S ribosomal protein S21-A



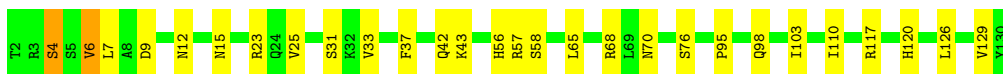
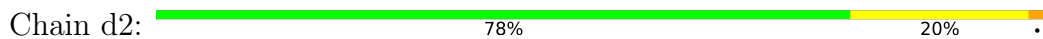
- Molecule 23: 40S ribosomal protein S21-A



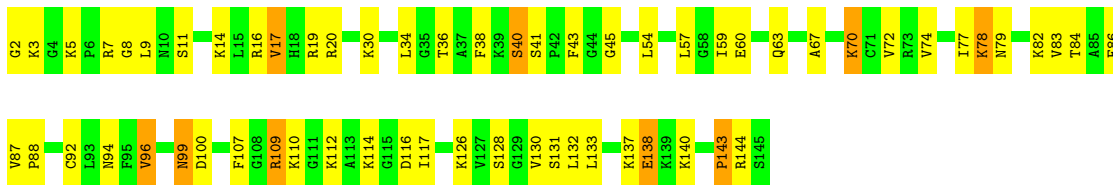
- Molecule 24: 40S ribosomal protein S22-A



- Molecule 24: 40S ribosomal protein S22-A

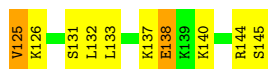


- Molecule 25: 40S ribosomal protein S23-A

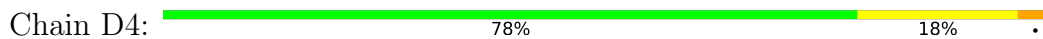


- Molecule 25: 40S ribosomal protein S23-A

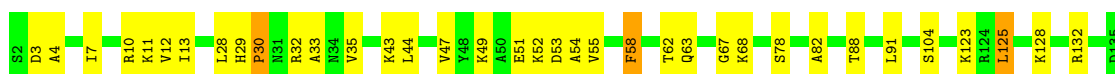




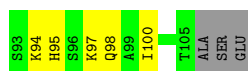
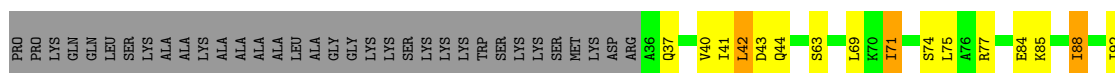
- Molecule 26: 40S ribosomal protein S24-A



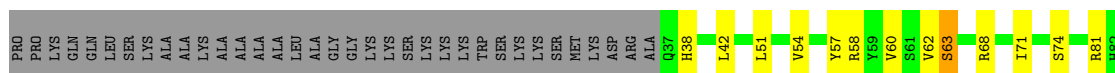
- Molecule 26: 40S ribosomal protein S24-A



- Molecule 27: 40S ribosomal protein S25-A



- Molecule 27: 40S ribosomal protein S25-A



- Molecule 28: 40S ribosomal protein S26-B



- Molecule 28: 40S ribosomal protein S26-B





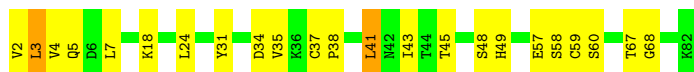
- Molecule 29: 40S ribosomal protein S27-A

Chain D7: 75% 23%



- Molecule 29: 40S ribosomal protein S27-A

Chain d7: 72% 26%



- Molecule 30: 40S ribosomal protein S28-A

Chain D8: 65% 27% 5%



- Molecule 30: 40S ribosomal protein S28-A

Chain d8: 65% 26% 5% 5%



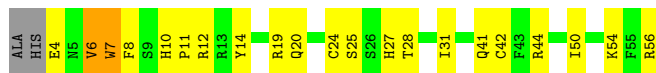
- Molecule 31: 40S ribosomal protein S29-A

Chain D9: 64% 27% 5%



- Molecule 31: 40S ribosomal protein S29-A

Chain d9: 58% 35%

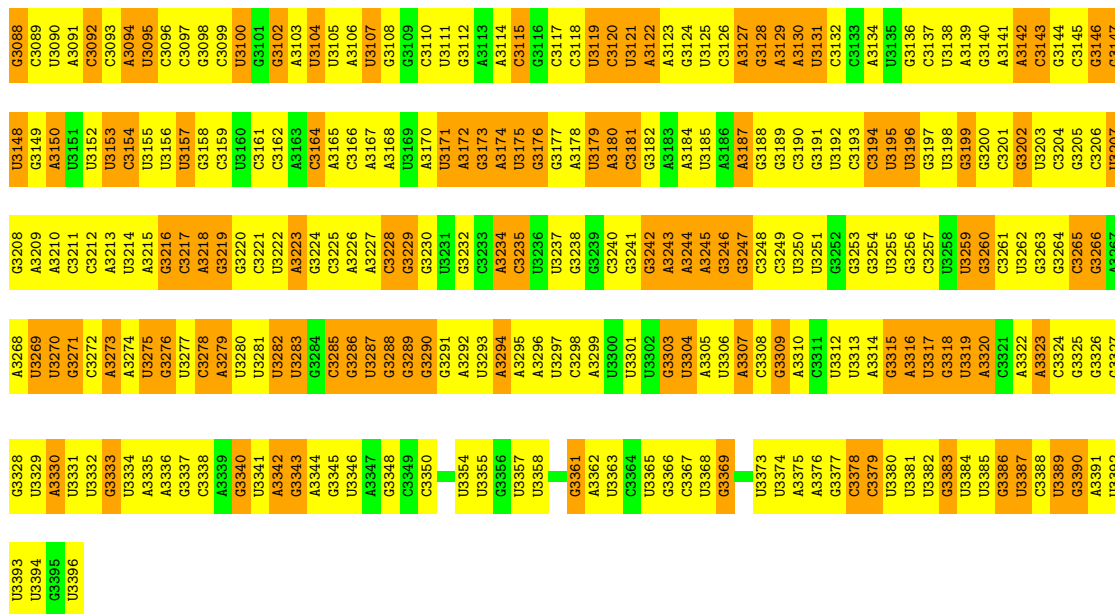


- Molecule 32: 40S ribosomal protein S30-A

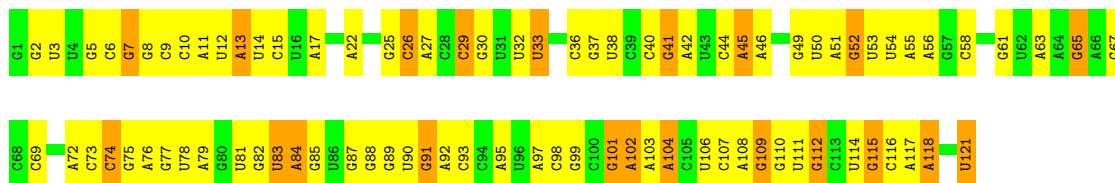
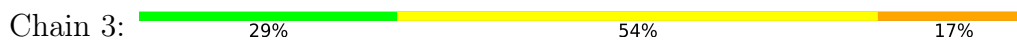
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C975	C975	A915	U855	C730	C730	G670	G606	G538	A418	C356	G290	U228	A159	A95
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U1041	G978	C918	A858	U796	G733	U673	G609	C543	G421	U359	C293	G231	G98	G98
U1042	U979	U919	G859	U797	C734	G674	G610	G544	A422	C360	U294	G232	A165	A99
C1043	A980	A920	G860	G798	A735	C675	A611	U545	A423	A361	A295	C233	C166	A100
U1044	U981	C921	C861	G799	A736	G676	G612	C546	G424	U362	A296	G234	U167	G101
C1045	C982	U922	U862	G800	A677	G677	G613	G547	G425	G363	G297	A235	U168	C102
A1046	G983	A923	C863	A801	G678	U679	C614	U548	G426	G364	U298	G236	U169	G103
U1047	G984	G924	G864	C802	U741	G680	G617	G552	G427	A365	G299	G237	G170	G104
U985	U985	A925	U865	C803	G742	G681	G618	U553	A428	A366	G300	A238	G171	C105
C1048	U986	A926	A866	C804	C743	U682	U627	A554	U429	A367	G301	G239	G172	G105
U987	U987	C927	G867	G805	A744	G683	A619	A555	U430	G368	U302	U240	G173	A108
U988	C928	A928	C868	A806	C745	U684	U620	U556	A431	A369	G303	G241	C174	A109
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U1071	U1071	C945	U885	C823	G763	C700	U640	A572	U509	A386	A325	C260	U195	G127
A1006	A1006	U946	C886	C824	G701	G701	G641	C573	U510	A387	A326	G261	G196	G128
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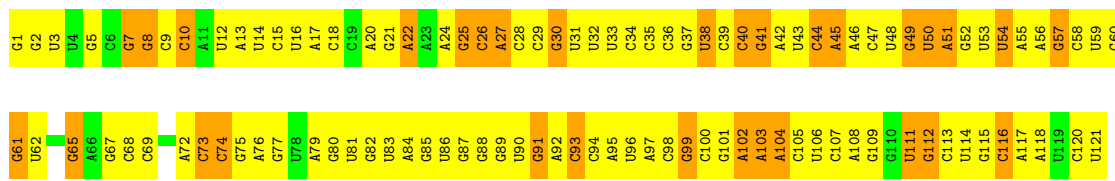
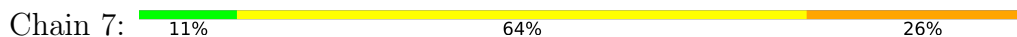
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A3032	A2911	A2911	G2850	G2727	G2606	U2666	U2536	G2409	U2349	U2289	G2229	A2166	A2104
A3033	A2912	A2792	A2851	G2728	G2607	U2667	U2537	U2410	C2350	A2291	A2230	A2167	G2105
C3034	C2913	G2793	A2852	G2729	G2608	U2668	U2538	U2411	U2351	U2292	G2231	A2168	A2106
A3035	G2914	G2794	A2853	G2730	A2609	U2669	C2539	G2412	A2352	C2293	G2232	G2169	A2107
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A3087	U3026	A2845	A2721	A2784	G2660	A2721	C2600	G	G2403	G2343	G2282	G2223	G2167
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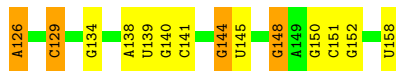
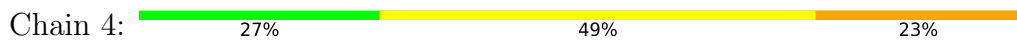
• Molecule 37: 5S ribosomal RNA



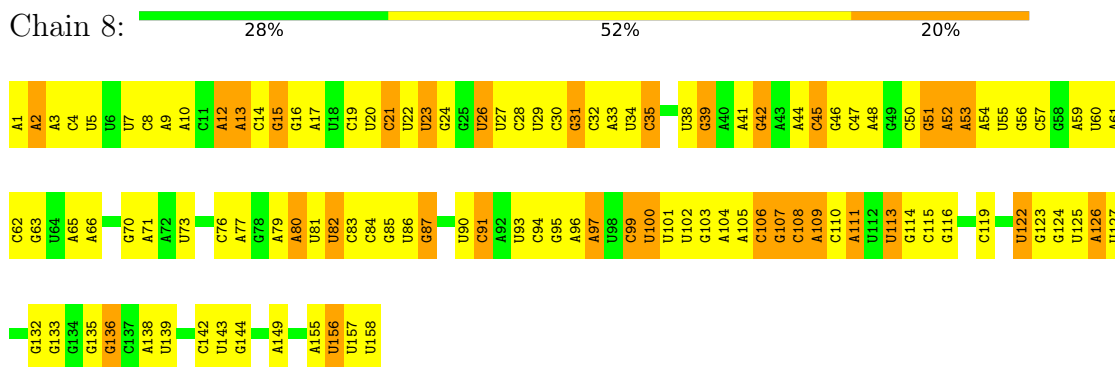
• Molecule 37: 5S ribosomal RNA



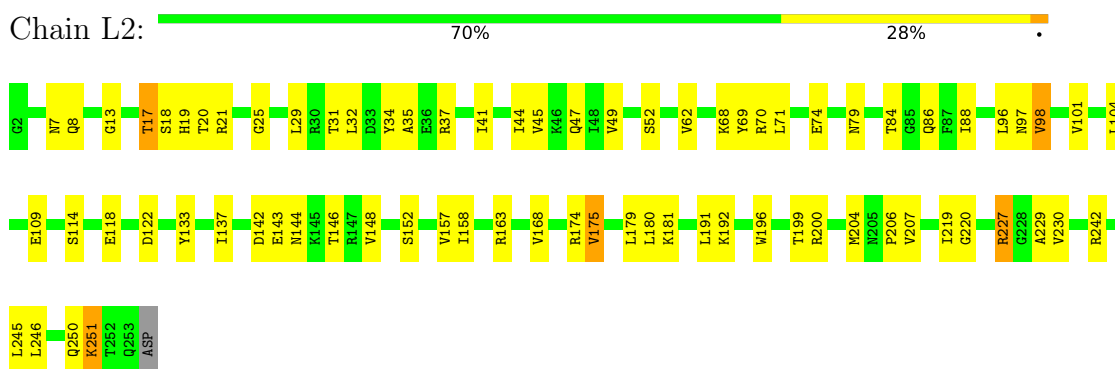
• Molecule 38: 5.8S ribosomal RNA



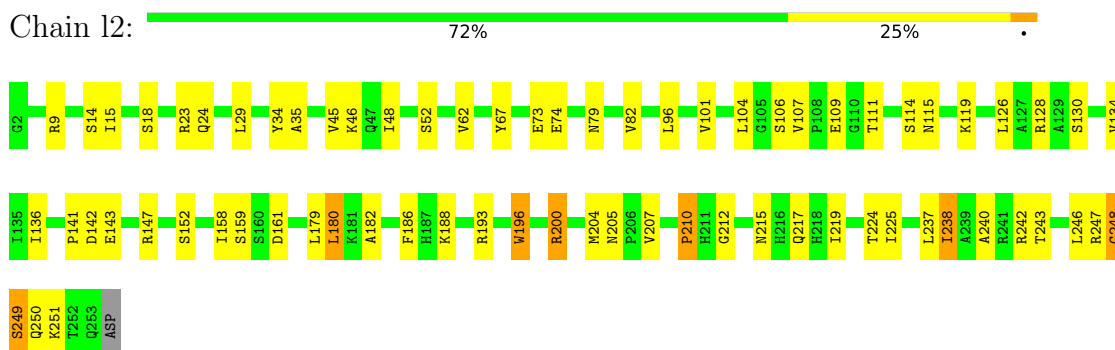
- Molecule 38: 5.8S ribosomal RNA



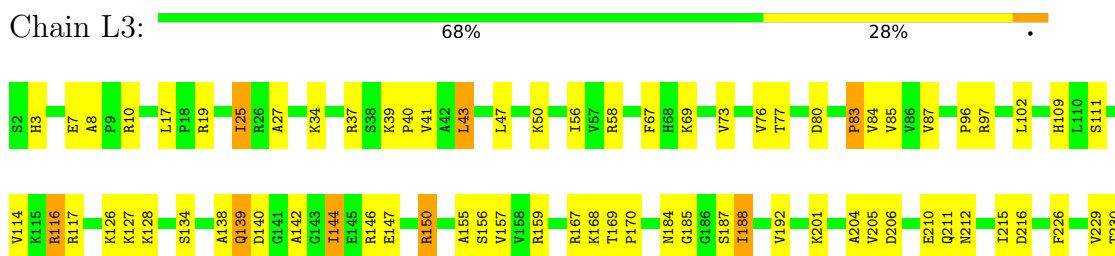
- Molecule 39: 60S ribosomal protein L2-A

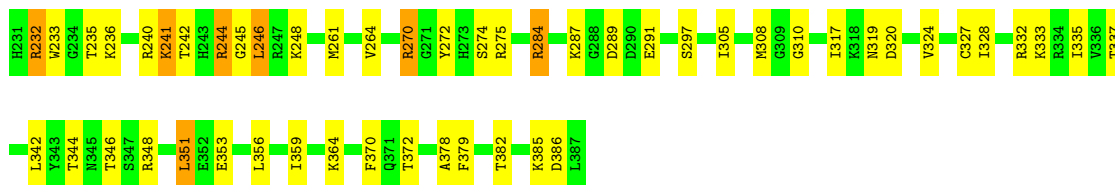


- Molecule 39: 60S ribosomal protein L2-A

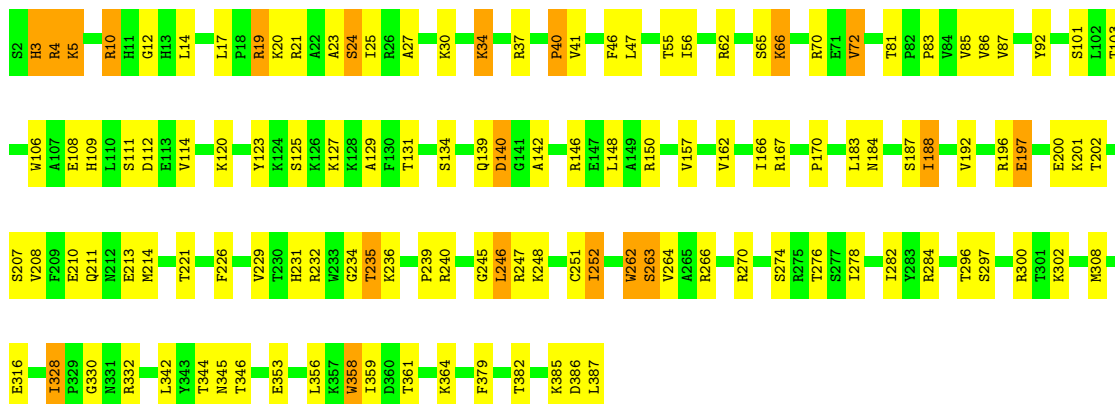


- Molecule 40: 60S ribosomal protein L3

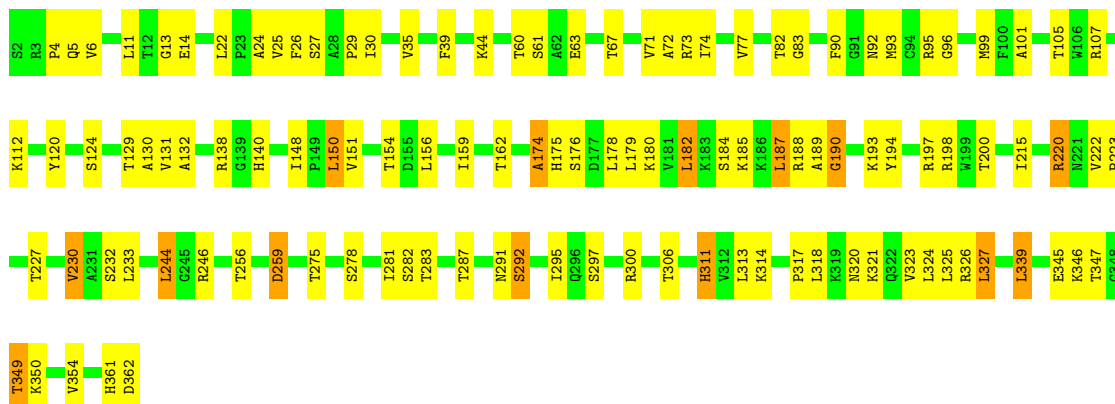




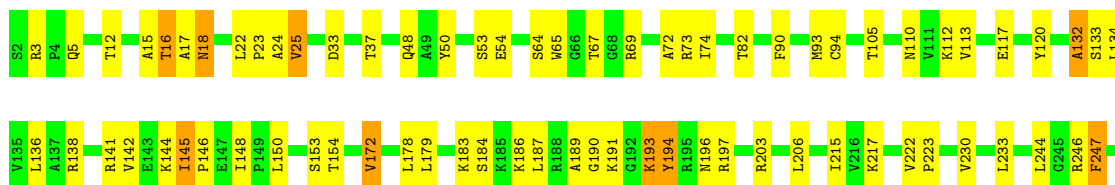
• Molecule 40: 60S ribosomal protein L3

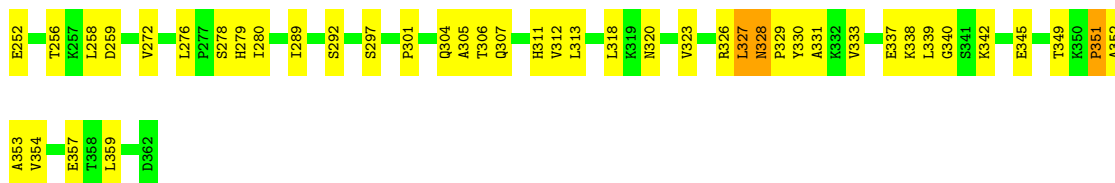


• Molecule 41: 60S ribosomal protein L4-A

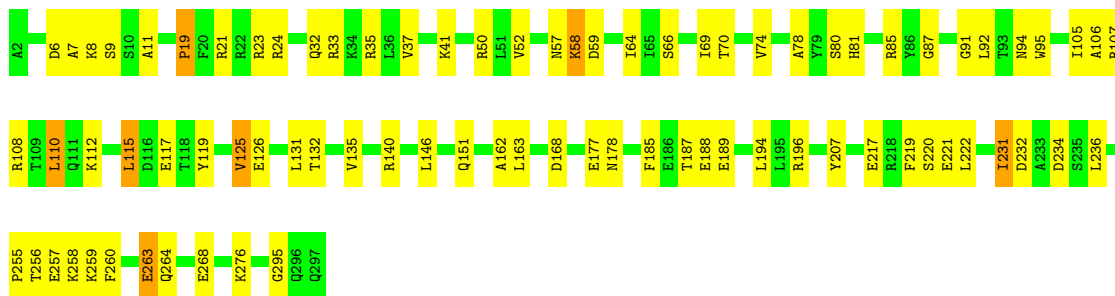


• Molecule 41: 60S ribosomal protein L4-A

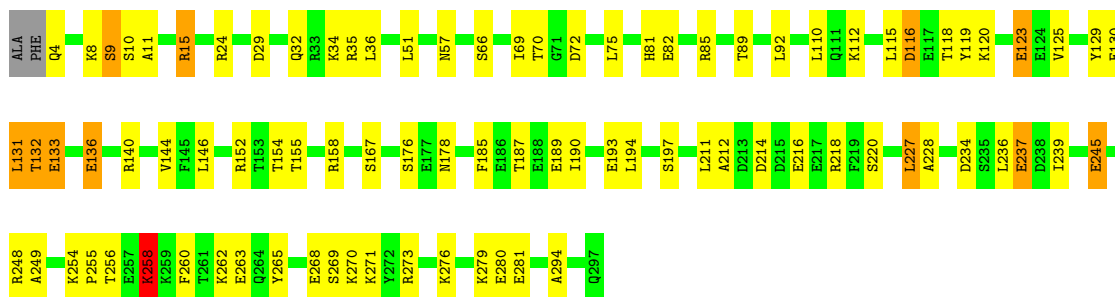




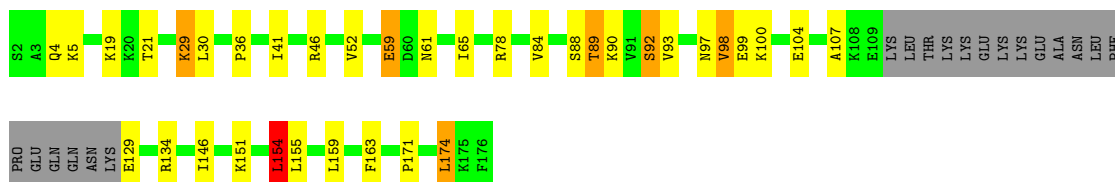
• Molecule 42: 60S ribosomal protein L5



• Molecule 42: 60S ribosomal protein L5

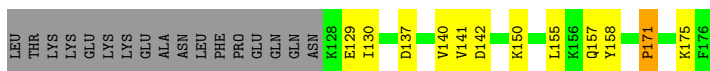


• Molecule 43: 60S ribosomal protein L6-A



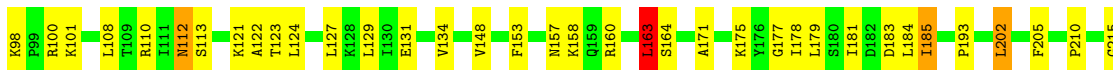
• Molecule 43: 60S ribosomal protein L6-A





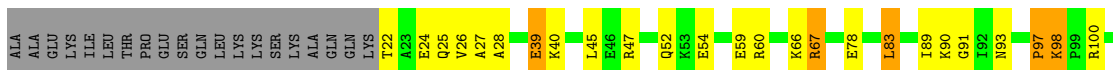
- Molecule 44: 60S ribosomal protein L7-A

Chain L7: 63% 23% 9%



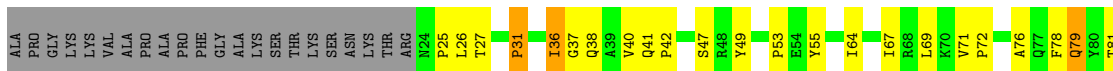
- Molecule 44: 60S ribosomal protein L7-A

Chain 17: 67% 19% 6% 8%



- Molecule 45: 60S ribosomal protein L8-A

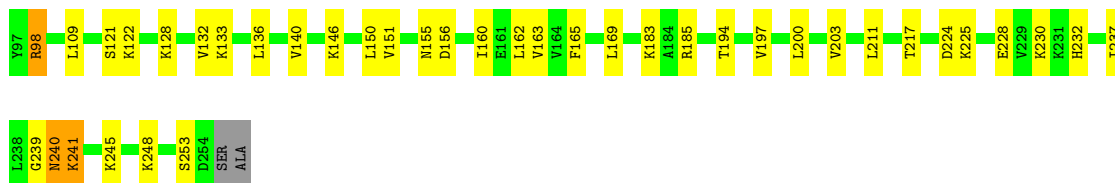
Chain L8: 65% 25% 9%



- Molecule 45: 60S ribosomal protein L8-A

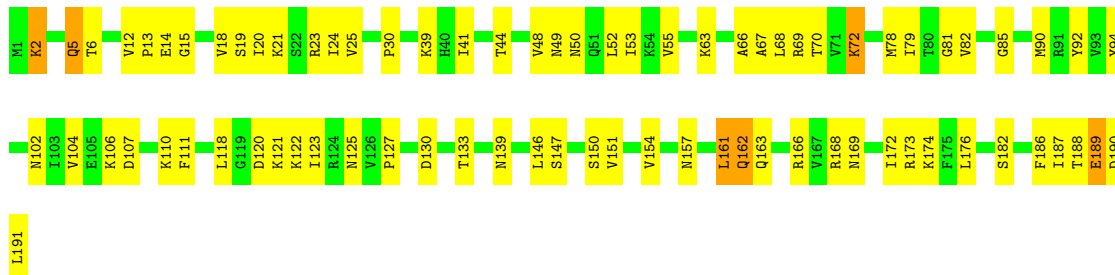
Chain l8: 67% 21% 9%





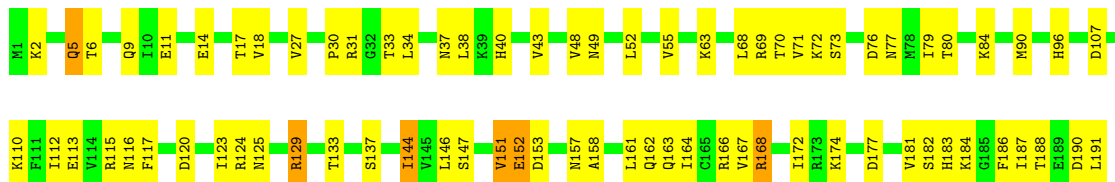
- Molecule 46: 60S ribosomal protein L9-A

Chain L9: 59% 38%



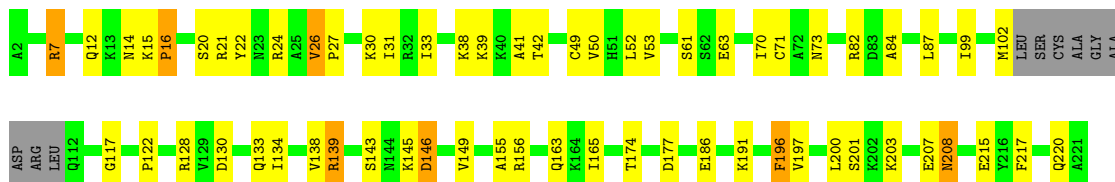
- Molecule 46: 60S ribosomal protein L9-A

Chain l9: 60% 37%



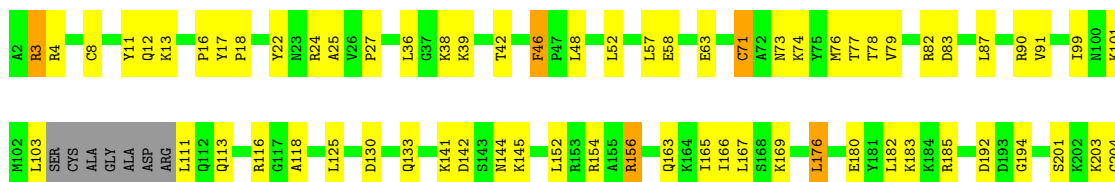
- Molecule 47: 60S ribosomal protein L10

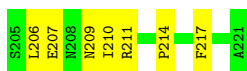
Chain M0: 68% 25%



- Molecule 47: 60S ribosomal protein L10

Chain m0: 63% 31%





- Molecule 48: 60S ribosomal protein L11-B

Chain M1: 66% 27%



- Molecule 48: 60S ribosomal protein L11-B

Chain m1: 57% 32% 8%



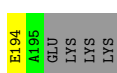
- Molecule 49: 60S ribosomal protein L13-A

Chain M3: 71% 24%



- Molecule 49: 60S ribosomal protein L13-A

Chain m3: 59% 37%



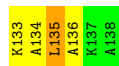
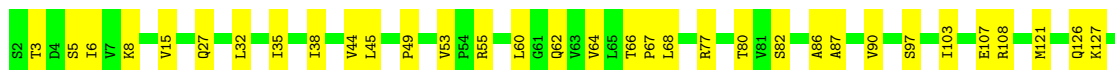
- Molecule 50: 60S ribosomal protein L14-A

Chain M4: 69% 29%



- Molecule 50: 60S ribosomal protein L14-A

Chain m4: 73% 26%



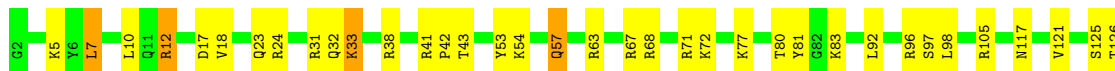
- Molecule 51: 60S ribosomal protein L15-A

Chain M5: 78% 20%



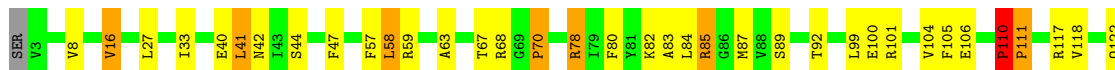
- Molecule 51: 60S ribosomal protein L15-A

Chain m5: 73% 25%



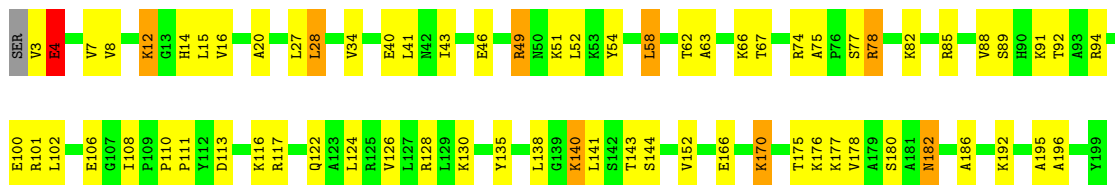
- Molecule 52: 60S ribosomal protein L16-A

Chain M6: 70% 24% 5%

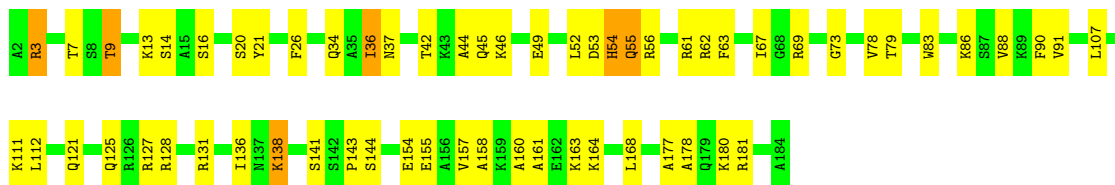


- Molecule 52: 60S ribosomal protein L16-A

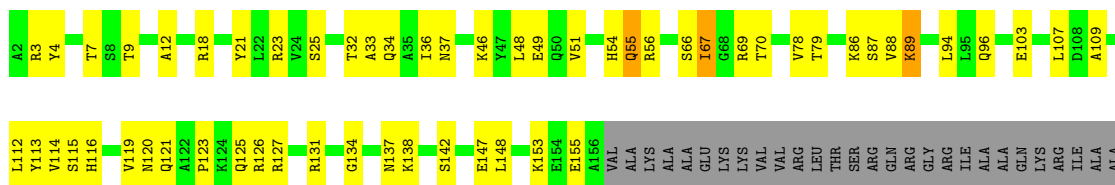
Chain m6: 64% 31%



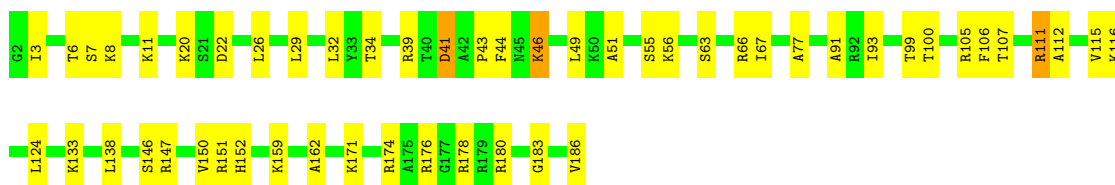
- Molecule 53: 60S ribosomal protein L17-A



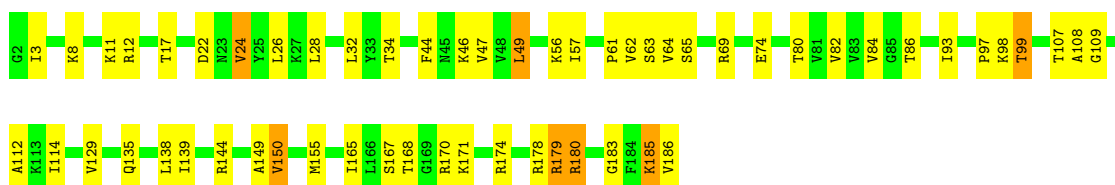
- Molecule 53: 60S ribosomal protein L17-A



- Molecule 54: 60S ribosomal protein L18-A

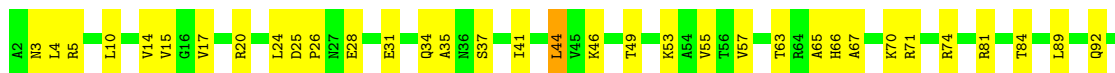


- Molecule 54: 60S ribosomal protein L18-A

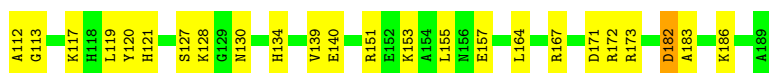
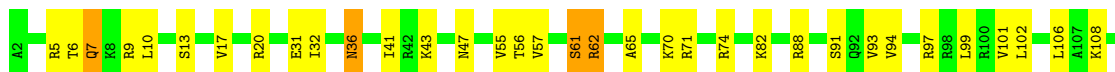


- Molecule 55: 60S ribosomal protein L19-A





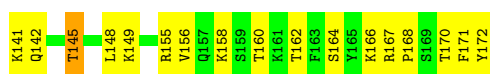
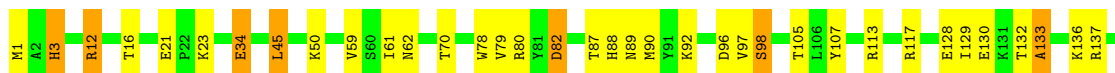
- Molecule 55: 60S ribosomal protein L19-A



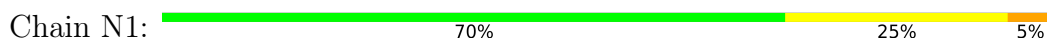
- Molecule 56: 60S ribosomal protein L20-A



- Molecule 56: 60S ribosomal protein L20-A

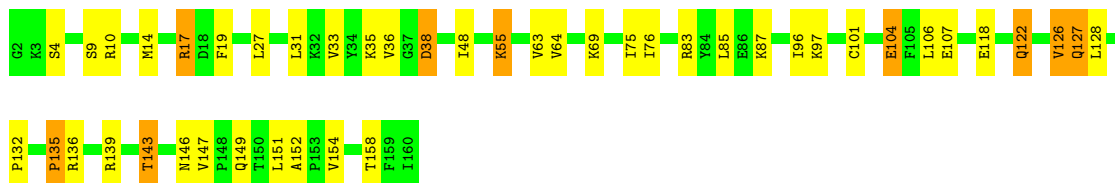


- Molecule 57: 60S ribosomal protein L21-A

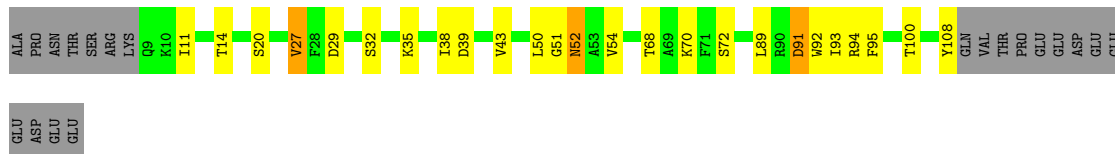


- Molecule 57: 60S ribosomal protein L21-A

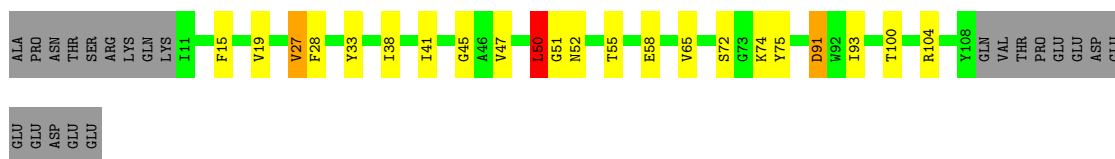




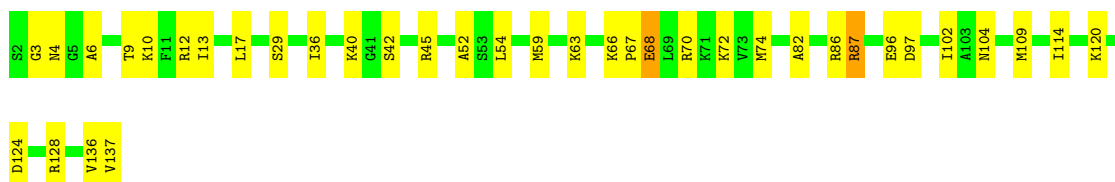
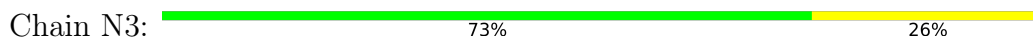
• Molecule 58: 60S ribosomal protein L22-A



• Molecule 58: 60S ribosomal protein L22-A



• Molecule 59: 60S ribosomal protein L23-A

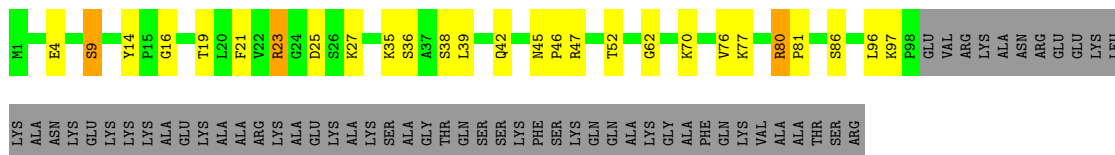


• Molecule 59: 60S ribosomal protein L23-A

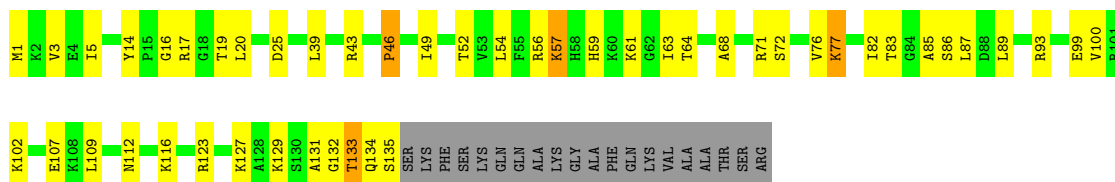


• Molecule 60: 60S ribosomal protein L24-A

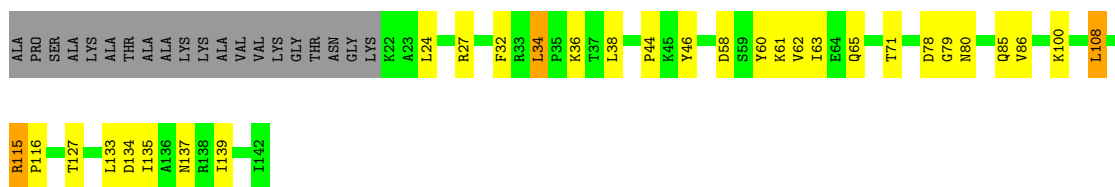




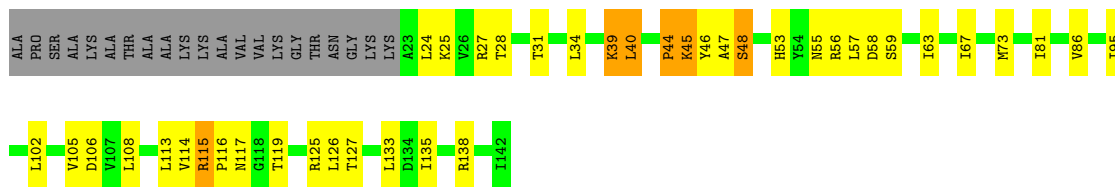
• Molecule 60: 60S ribosomal protein L24-A



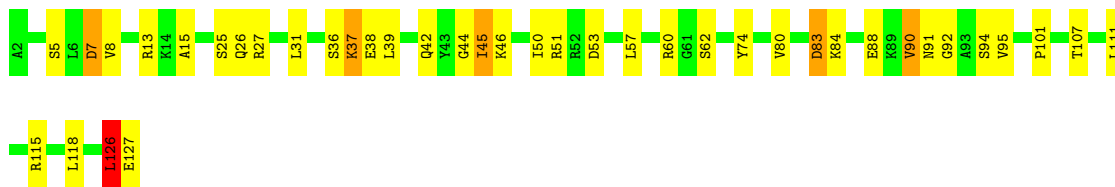
• Molecule 61: 60S ribosomal protein L25



• Molecule 61: 60S ribosomal protein L25

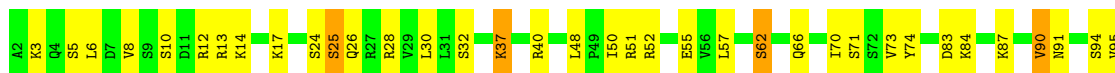


• Molecule 62: 60S ribosomal protein L26-A

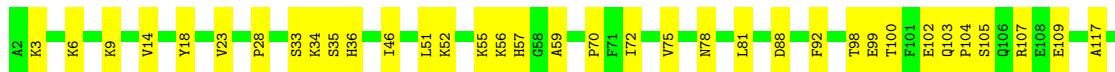


• Molecule 62: 60S ribosomal protein L26-A

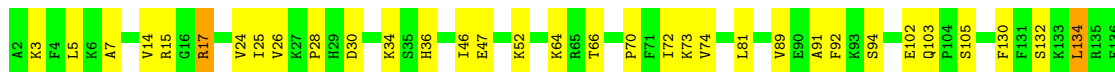
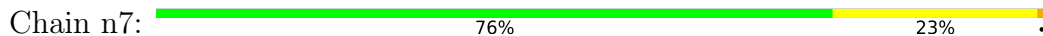




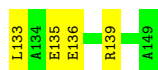
- Molecule 63: 60S ribosomal protein L27-A



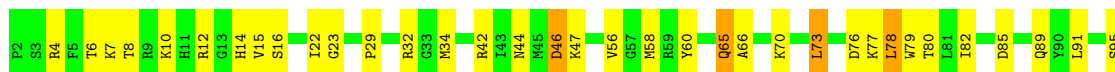
- Molecule 63: 60S ribosomal protein L27-A



- Molecule 64: 60S ribosomal protein L28



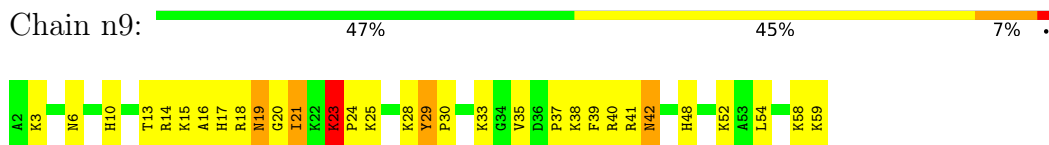
- Molecule 64: 60S ribosomal protein L28



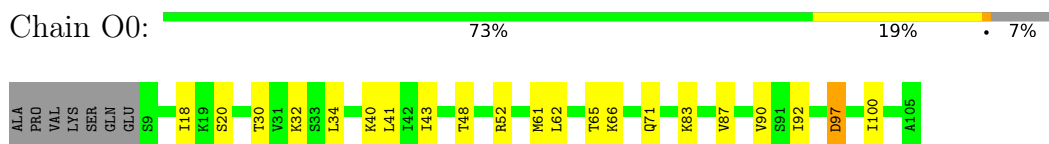
- Molecule 65: 60S ribosomal protein L29



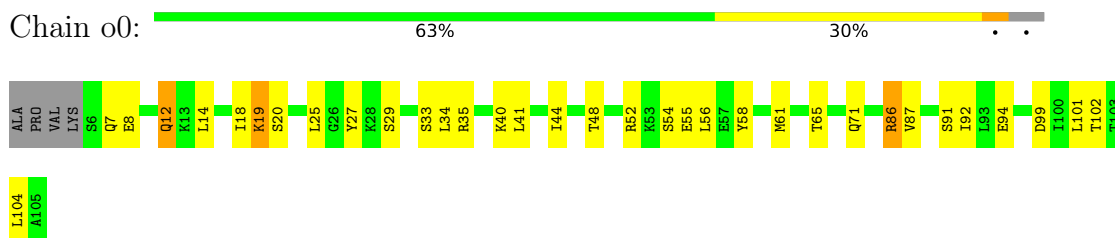
- Molecule 65: 60S ribosomal protein L29



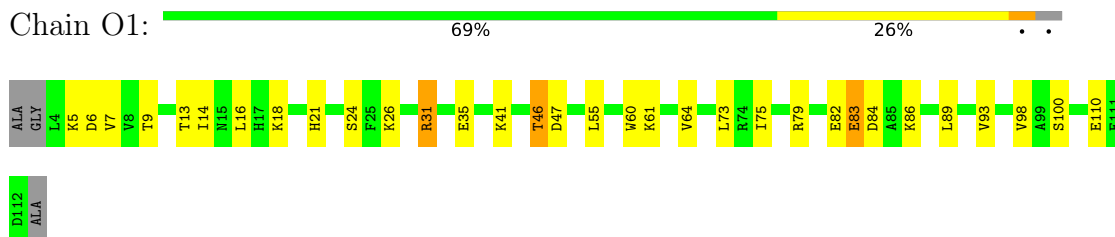
- Molecule 66: 60S ribosomal protein L30



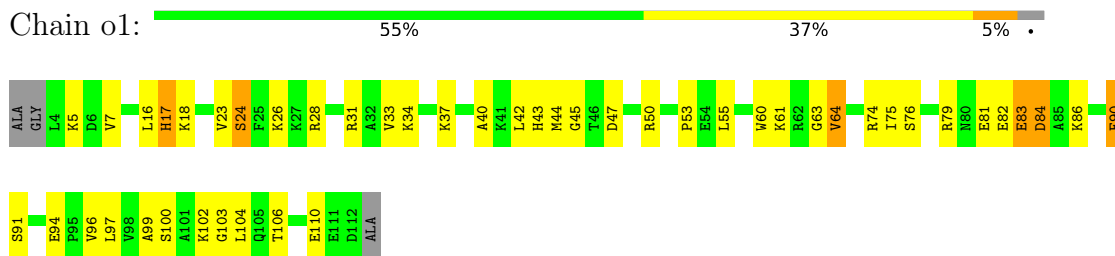
- Molecule 66: 60S ribosomal protein L30



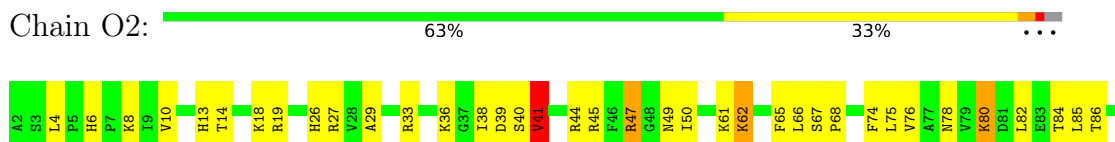
- Molecule 67: 60S ribosomal protein L31-A



- Molecule 67: 60S ribosomal protein L31-A



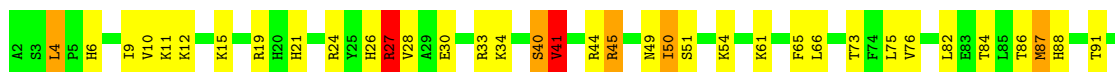
- Molecule 68: 60S ribosomal protein L32





- Molecule 68: 60S ribosomal protein L32

Chain o2: 67% 25% 5% ..



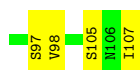
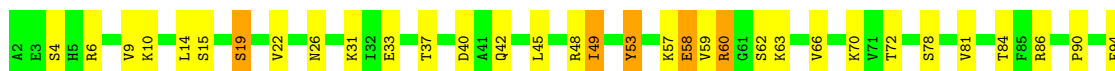
- Molecule 69: 60S ribosomal protein L33-A

Chain O3: 74% 23% .



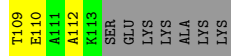
- Molecule 69: 60S ribosomal protein L33-A

Chain o3: 65% 30% 5%



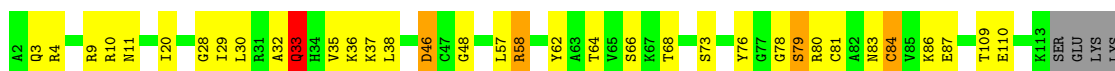
- Molecule 70: 60S ribosomal protein L34-A

Chain O4: 61% 27% 6% 6%

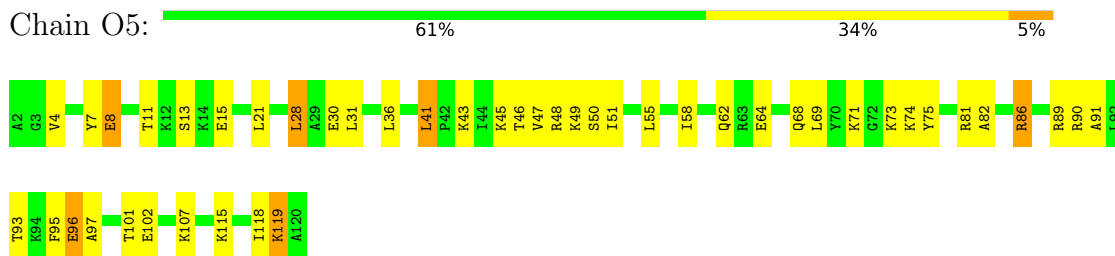


- Molecule 70: 60S ribosomal protein L34-A

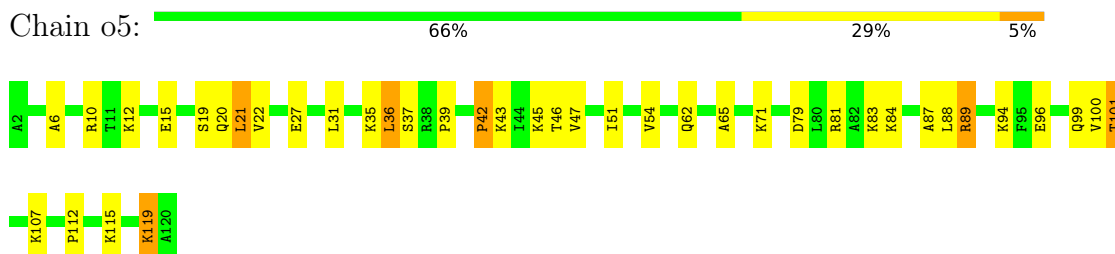
Chain o4: 65% 25% .. 6%



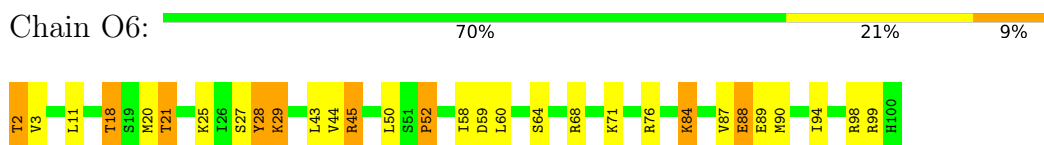
- Molecule 71: 60S ribosomal protein L35-A



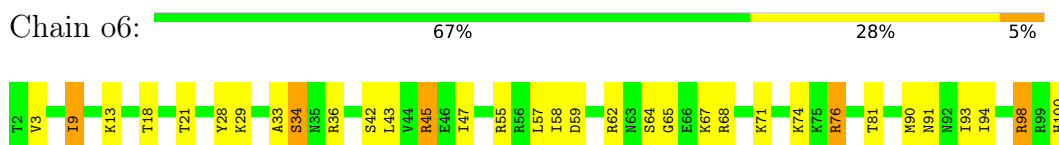
- Molecule 71: 60S ribosomal protein L35-A



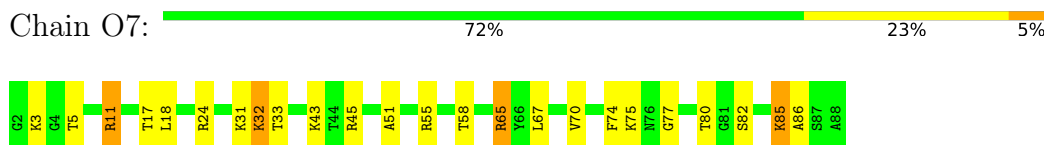
- Molecule 72: 60S ribosomal protein L36-A



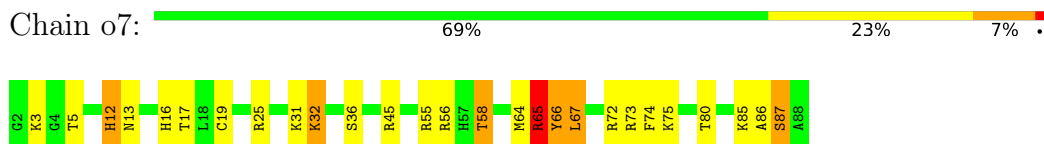
- Molecule 72: 60S ribosomal protein L36-A



- Molecule 73: 60S ribosomal protein L37-A



- Molecule 73: 60S ribosomal protein L37-A




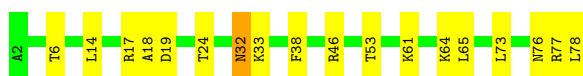
- Molecule 74: 60S ribosomal protein L38

Chain O8:  71% 27%



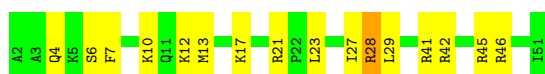
- Molecule 74: 60S ribosomal protein L38

Chain o8:  77% 22%



- Molecule 75: 60S ribosomal protein L39

Chain O9:  68% 30%



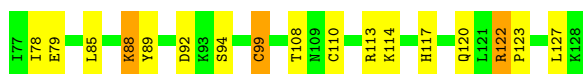
- Molecule 75: 60S ribosomal protein L39

Chain o9:  70% 30%



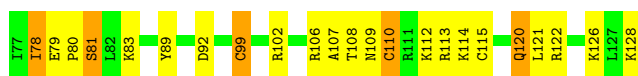
- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain Q0:  67% 27% 6%



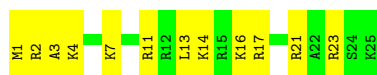
- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain q0:  56% 35% 10%



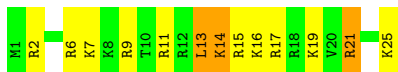
- Molecule 77: 60S ribosomal protein L41-A

Chain Q1:  52% 48%



- Molecule 77: 60S ribosomal protein L41-A

Chain q1:  48% 40% 12%



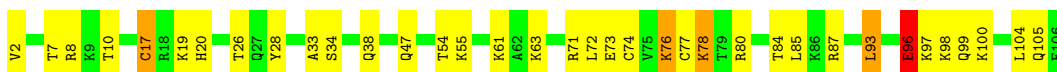
- Molecule 78: 60S ribosomal protein L42-A

Chain Q2:  69% 29%



- Molecule 78: 60S ribosomal protein L42-A

Chain q2:  66% 30%



- Molecule 79: 60S ribosomal protein L43-A

Chain Q3:  66% 31%



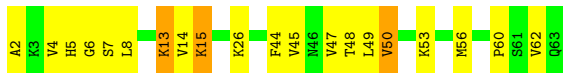
- Molecule 79: 60S ribosomal protein L43-A

Chain q3:  70% 24% 5%



- Molecule 80: 40S ribosomal protein S30-A

Chain e0:  68% 27% 5%



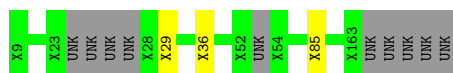
- Molecule 81: Ubiquitin-40S ribosomal protein S31

Chain e1:  46% 47% 7%




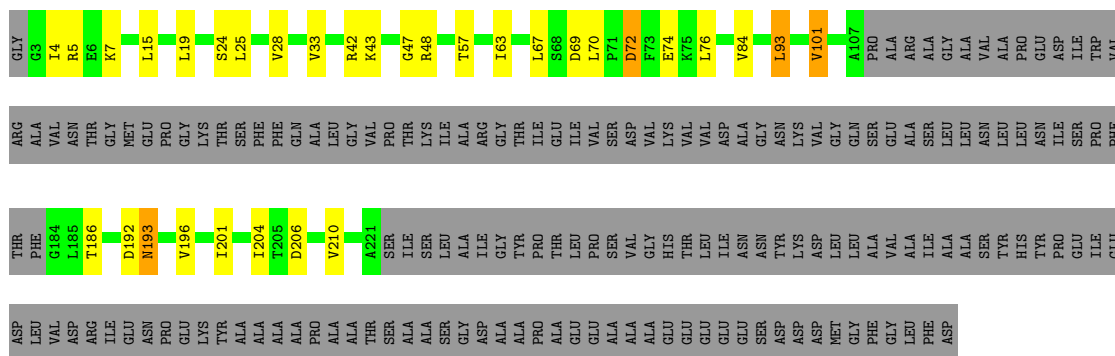
- Molecule 82: unknown protein chain m2

Chain m2:  92% . 6%



• Molecule 83: 60S acidic ribosomal protein P0

Chain p0:  36% 9% . 54%



• 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	437.00Å 286.75Å 305.18Å 90.00° 99.24° 90.00°	Depositor
Resolution (Å)	135.58 – 3.60	Depositor
% Data completeness (in resolution range)	100.0 (135.58-3.60)	Depositor
R_{merge}	0.52	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.26 (at 3.58Å)	Xtrriage
Refinement program	PHENIX (phenix.refine: dev_1702)	Depositor
R, R_{free}	0.190 , 0.267	Depositor
Wilson B-factor (Å ²)	115.6	Xtrriage
Anisotropy	0.083	Xtrriage
L-test for twinning ²	$\langle L \rangle = 0.43$, $\langle L^2 \rangle = 0.25$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
Total number of atoms	411095	wwPDB-VP
Average B, all atoms (Å ²)	98.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.62% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality i

5.1 Standard geometry i

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	2	1.08	91/41698 (0.2%)	1.83	1528/64972 (2.4%)
1	6	1.44	367/42663 (0.9%)	2.19	2982/66472 (4.5%)
2	S0	0.60	0/1617	0.83	0/2215
2	s0	0.75	0/1623	0.92	1/2222 (0.0%)
3	S1	0.46	0/1735	0.74	0/2335
3	s1	0.67	0/1748	0.87	3/2352 (0.1%)
4	S2	0.74	2/1665 (0.1%)	0.90	2/2263 (0.1%)
4	s2	0.87	1/1665 (0.1%)	1.01	4/2263 (0.2%)
5	S3	0.72	0/1759	0.86	1/2368 (0.0%)
5	s3	0.72	0/1759	0.89	1/2368 (0.0%)
6	S4	0.65	0/2109	0.86	2/2839 (0.1%)
6	s4	0.77	0/2109	0.90	1/2839 (0.0%)
7	S5	0.54	0/1629	0.76	0/2202
7	s5	0.89	1/1629 (0.1%)	1.02	4/2202 (0.2%)
8	S6	0.64	0/1823	0.79	0/2439
8	s6	0.88	0/1779	0.99	2/2379 (0.1%)
9	S7	0.54	0/1506	0.75	0/2028
9	s7	0.68	0/1516	0.91	2/2043 (0.1%)
10	S8	0.79	0/1514	0.92	1/2021 (0.0%)
10	s8	0.86	0/1514	0.94	1/2021 (0.0%)
11	S9	0.65	0/1519	0.84	1/2035 (0.0%)
11	s9	0.79	0/1519	0.91	2/2035 (0.1%)
12	C0	0.66	0/790	0.86	2/1069 (0.2%)
12	c0	0.56	0/777	0.87	2/1049 (0.2%)
13	C1	0.82	0/1240	0.88	0/1675
13	c1	0.91	0/1194	1.00	2/1610 (0.1%)
14	C2	0.51	0/900	0.80	1/1224 (0.1%)
14	c2	0.46	0/900	0.69	1/1224 (0.1%)
15	C3	0.59	0/1215	0.76	0/1638
15	c3	0.80	0/1215	0.96	2/1638 (0.1%)
16	C4	0.50	0/901	0.79	0/1217
16	c4	0.76	0/960	0.91	0/1290

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	C5	0.69	0/998	0.81	0/1341
17	c5	0.89	0/1060	1.05	3/1426 (0.2%)
18	C6	0.60	0/1125	0.89	3/1510 (0.2%)
18	c6	0.93	0/1131	1.06	2/1518 (0.1%)
19	C7	0.59	0/935	0.87	3/1254 (0.2%)
19	c7	0.80	0/914	0.91	1/1224 (0.1%)
20	C8	0.61	0/1211	0.82	0/1628
20	c8	0.92	2/1211 (0.2%)	1.08	5/1628 (0.3%)
21	C9	0.61	0/1130	0.83	0/1517
21	c9	0.94	1/1130 (0.1%)	1.01	2/1517 (0.1%)
22	D0	0.65	0/865	0.83	0/1169
22	d0	0.79	0/892	0.97	1/1205 (0.1%)
23	D1	0.65	0/693	0.88	2/935 (0.2%)
23	d1	0.79	0/693	0.92	0/935
24	D2	0.63	0/1038	0.89	1/1395 (0.1%)
24	d2	0.88	0/1038	0.98	1/1395 (0.1%)
25	D3	0.90	1/1139 (0.1%)	1.04	1/1518 (0.1%)
25	d3	1.17	5/1139 (0.4%)	1.14	4/1518 (0.3%)
26	D4	0.66	0/1087	0.80	0/1449
26	d4	0.77	0/1087	0.92	0/1449
27	D5	0.61	0/571	0.84	0/768
27	d5	0.81	0/566	0.96	0/761
28	D6	0.66	0/782	0.84	0/1047
28	d6	0.81	0/782	0.92	1/1047 (0.1%)
29	D7	0.53	0/620	0.81	1/838 (0.1%)
29	d7	0.67	0/620	0.93	2/838 (0.2%)
30	D8	0.49	0/499	0.74	0/670
30	d8	0.76	0/499	0.97	1/670 (0.1%)
31	D9	0.75	0/452	0.86	0/600
31	d9	0.97	0/452	0.97	0/600
32	E0	0.69	0/483	0.87	0/643
33	E1	0.65	0/577	0.90	0/770
34	SR	0.54	0/2494	0.72	0/3393
34	sR	0.69	0/2495	0.85	2/3395 (0.1%)
35	SM	0.72	0/1113	0.91	2/1502 (0.1%)
35	sM	0.77	0/682	0.98	1/921 (0.1%)
36	1	1.76	1434/75394 (1.9%)	2.53	7929/117545 (6.7%)
36	5	1.87	1867/75414 (2.5%)	2.61	8463/117575 (7.2%)
37	3	1.50	28/2883 (1.0%)	2.28	214/4491 (4.8%)
37	7	2.04	91/2883 (3.2%)	2.85	410/4491 (9.1%)
38	4	1.54	29/3746 (0.8%)	2.42	331/5832 (5.7%)
38	8	1.43	34/3746 (0.9%)	2.16	250/5832 (4.3%)
39	L2	0.98	1/1948 (0.1%)	1.08	2/2617 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
39	l2	0.96	1/1946 (0.1%)	1.03	4/2614 (0.2%)
40	L3	1.12	3/3146 (0.1%)	1.12	11/4228 (0.3%)
40	l3	1.32	9/3146 (0.3%)	1.24	17/4228 (0.4%)
41	L4	1.03	0/2800	1.15	13/3790 (0.3%)
41	l4	1.02	1/2800 (0.0%)	1.11	5/3790 (0.1%)
42	L5	0.84	1/2425 (0.0%)	0.97	2/3271 (0.1%)
42	l5	1.16	2/2408 (0.1%)	1.08	3/3248 (0.1%)
43	L6	1.15	2/1260 (0.2%)	1.17	4/1694 (0.2%)
43	l6	1.18	2/1269 (0.2%)	1.15	3/1705 (0.2%)
44	L7	1.09	0/1821	1.13	9/2451 (0.4%)
44	l7	1.26	3/1828 (0.2%)	1.17	7/2461 (0.3%)
45	L8	0.74	0/1836	0.91	0/2481
45	l8	0.72	0/1795	0.86	1/2429 (0.0%)
46	L9	0.97	0/1539	1.07	1/2073 (0.0%)
46	l9	1.33	4/1539 (0.3%)	1.23	8/2073 (0.4%)
47	M0	1.02	4/1741 (0.2%)	1.04	1/2335 (0.0%)
47	m0	1.23	5/1758 (0.3%)	1.20	7/2358 (0.3%)
48	M1	0.80	1/1374 (0.1%)	0.93	3/1842 (0.2%)
48	m1	1.09	3/1374 (0.2%)	1.09	5/1842 (0.3%)
49	M3	0.96	2/1568 (0.1%)	1.09	4/2106 (0.2%)
49	m3	0.87	0/1573	1.02	0/2113
50	M4	1.10	0/1068	1.13	1/1438 (0.1%)
50	m4	1.30	1/1074 (0.1%)	1.15	3/1446 (0.2%)
51	M5	0.97	0/1757	1.04	5/2354 (0.2%)
51	m5	0.84	0/1757	0.93	2/2354 (0.1%)
52	M6	1.25	6/1585 (0.4%)	1.28	12/2128 (0.6%)
52	m6	1.54	9/1585 (0.6%)	1.38	14/2128 (0.7%)
53	M7	1.21	3/1443 (0.2%)	1.09	3/1944 (0.2%)
53	m7	1.18	1/1250 (0.1%)	1.19	2/1683 (0.1%)
54	M8	1.03	0/1465	1.12	5/1965 (0.3%)
54	m8	0.98	1/1465 (0.1%)	1.06	3/1965 (0.2%)
55	M9	0.84	0/1538	0.92	3/2050 (0.1%)
55	m9	0.88	1/1538 (0.1%)	0.92	2/2050 (0.1%)
56	N0	1.05	0/1481	1.10	5/1990 (0.3%)
56	n0	1.46	7/1481 (0.5%)	1.21	5/1990 (0.3%)
57	N1	1.09	1/1300 (0.1%)	1.10	4/1743 (0.2%)
57	n1	1.28	6/1300 (0.5%)	1.17	5/1743 (0.3%)
58	N2	0.73	1/812 (0.1%)	0.89	1/1099 (0.1%)
58	n2	0.73	0/794	0.84	1/1076 (0.1%)
59	N3	1.09	2/1018 (0.2%)	1.07	3/1369 (0.2%)
59	n3	1.35	7/1018 (0.7%)	1.28	7/1369 (0.5%)
60	N4	0.90	0/712	0.98	1/958 (0.1%)
60	n4	1.04	0/1052	1.04	0/1398

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
61	N5	0.86	1/979 (0.1%)	1.00	4/1321 (0.3%)
61	n5	0.85	0/974	1.03	2/1314 (0.2%)
62	N6	0.92	0/1004	1.11	6/1341 (0.4%)
62	n6	0.89	0/1004	1.02	5/1341 (0.4%)
63	N7	0.68	0/1118	0.89	1/1497 (0.1%)
63	n7	0.67	0/1118	0.83	0/1497
64	N8	1.05	0/1204	1.10	5/1612 (0.3%)
64	n8	0.98	1/1204 (0.1%)	1.08	2/1612 (0.1%)
65	N9	0.98	0/473	1.07	1/629 (0.2%)
65	n9	1.12	1/473 (0.2%)	1.33	3/629 (0.5%)
66	O0	0.71	0/751	0.87	0/1008
66	o0	0.69	0/775	0.88	2/1040 (0.2%)
67	O1	0.90	0/890	1.00	1/1196 (0.1%)
67	o1	1.13	2/897 (0.2%)	1.20	3/1205 (0.2%)
68	O2	1.21	2/1041 (0.2%)	1.20	4/1394 (0.3%)
68	o2	1.15	2/1041 (0.2%)	1.13	5/1394 (0.4%)
69	O3	1.32	2/868 (0.2%)	1.23	3/1168 (0.3%)
69	o3	1.38	3/868 (0.3%)	1.19	2/1168 (0.2%)
70	O4	0.84	0/890	1.00	4/1189 (0.3%)
70	o4	0.83	1/890 (0.1%)	0.99	2/1189 (0.2%)
71	O5	0.98	2/978 (0.2%)	1.09	2/1301 (0.2%)
71	o5	0.82	0/974	0.89	1/1297 (0.1%)
72	O6	0.84	0/778	0.98	1/1034 (0.1%)
72	o6	0.79	0/777	0.98	1/1033 (0.1%)
73	O7	1.08	0/696	1.20	4/923 (0.4%)
73	o7	0.99	0/696	1.07	3/923 (0.3%)
74	O8	0.72	0/618	0.84	0/826
74	o8	0.66	0/614	0.90	0/822
75	O9	1.05	0/443	1.19	3/588 (0.5%)
75	o9	0.82	0/443	0.99	0/588
76	Q0	1.04	2/423 (0.5%)	1.14	1/562 (0.2%)
76	q0	1.58	3/423 (0.7%)	1.44	5/562 (0.9%)
77	Q1	0.76	0/234	1.11	2/300 (0.7%)
77	q1	1.03	0/234	1.30	3/300 (1.0%)
78	Q2	1.12	1/860 (0.1%)	1.07	2/1136 (0.2%)
78	q2	1.13	2/860 (0.2%)	1.09	2/1136 (0.2%)
79	Q3	1.04	0/701	1.10	3/934 (0.3%)
79	q3	1.07	1/701 (0.1%)	1.05	0/934
80	e0	0.81	0/499	0.95	0/665
81	e1	0.51	0/619	0.87	0/822
83	p0	0.75	0/1091	0.85	0/1472
All	All	1.39	4070/429970 (0.9%)	1.97	22469/631198 (3.6%)

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
2	S0	0	2
2	s0	0	2
3	s1	0	3
5	S3	0	2
5	s3	0	2
6	s4	0	2
7	s5	0	3
9	s7	0	1
11	S9	0	2
11	s9	0	1
12	C0	0	2
15	c3	0	1
16	C4	0	1
17	c5	0	1
18	C6	0	1
18	c6	0	3
19	C7	0	1
19	c7	0	2
20	c8	0	1
21	c9	0	1
22	d0	0	1
23	D1	0	1
24	D2	0	1
24	d2	0	2
25	D3	0	2
26	D4	0	1
26	d4	0	2
27	D5	0	1
27	d5	0	1
28	D6	0	1
28	d6	0	1
33	E1	0	2
35	SM	0	1
39	l2	0	2
40	L3	0	3
40	l3	0	5
41	L4	0	5
41	l4	0	2
42	L5	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
42	l5	0	3
43	L6	0	2
43	l6	0	1
44	L7	0	2
44	l7	0	3
45	l8	0	1
47	M0	0	2
47	m0	0	1
48	m1	0	1
49	m3	0	2
52	M6	0	2
52	m6	0	2
53	M7	0	1
53	m7	0	2
54	m8	0	1
56	n0	0	2
57	N1	0	1
57	n1	0	1
60	n4	0	1
61	n5	0	1
63	N7	0	2
64	N8	0	4
64	n8	0	2
65	N9	0	2
65	n9	0	1
67	o1	0	1
68	o2	0	2
69	O3	0	2
70	O4	0	2
70	o4	0	2
72	O6	0	1
76	q0	0	1
80	e0	0	2
81	e1	0	1
82	m2	0	3
83	p0	0	1
All	All	0	130

The worst 5 of 4070 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	Q2	17	CYS	CB-SG	15.17	2.08	1.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	806	A	N9-C4	-14.79	1.28	1.37
37	7	89	G	C6-O6	14.62	1.37	1.24
36	5	2397	A	N9-C4	-14.38	1.29	1.37
36	5	2875	U	N1-C2	13.97	1.51	1.38

The worst 5 of 22469 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	N3-C4-N9	-25.15	110.91	126.00
37	7	44	C	C6-N1-C2	24.27	130.01	120.30
36	5	648	C	N3-C4-C5	-23.62	112.45	121.90
36	5	884	A	N1-C6-N6	23.07	132.44	118.60
38	4	94	C	C6-N1-C2	22.99	129.50	120.30

There are no chirality outliers.

5 of 130 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	S0	29	VAL	Peptide
2	S0	6	THR	Peptide
5	S3	144	ALA	Peptide
5	S3	42	THR	Peptide
11	S9	15	PRO	Peptide

5.2 Too-close contacts [i](#)

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

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	S0	204/251 (81%)	137 (67%)	42 (21%)	25 (12%)	0	5
2	s0	204/251 (81%)	139 (68%)	31 (15%)	34 (17%)	0	3
3	S1	212/254 (84%)	142 (67%)	42 (20%)	28 (13%)	0	4
3	s1	214/254 (84%)	155 (72%)	39 (18%)	20 (9%)	0	9
4	S2	215/253 (85%)	148 (69%)	47 (22%)	20 (9%)	0	9
4	s2	215/253 (85%)	156 (73%)	30 (14%)	29 (14%)	0	4
5	S3	221/239 (92%)	154 (70%)	48 (22%)	19 (9%)	1	10
5	s3	221/239 (92%)	147 (66%)	51 (23%)	23 (10%)	0	7
6	S4	258/260 (99%)	184 (71%)	44 (17%)	30 (12%)	0	6
6	s4	258/260 (99%)	175 (68%)	53 (20%)	30 (12%)	0	6
7	S5	204/224 (91%)	129 (63%)	46 (22%)	29 (14%)	0	4
7	s5	204/224 (91%)	124 (61%)	51 (25%)	29 (14%)	0	4
8	S6	224/236 (95%)	166 (74%)	37 (16%)	21 (9%)	0	8
8	s6	216/236 (92%)	165 (76%)	36 (17%)	15 (7%)	1	14
9	S7	182/189 (96%)	131 (72%)	35 (19%)	16 (9%)	1	9
9	s7	184/189 (97%)	126 (68%)	37 (20%)	21 (11%)	0	6
10	S8	184/200 (92%)	132 (72%)	32 (17%)	20 (11%)	0	6
10	s8	184/200 (92%)	144 (78%)	26 (14%)	14 (8%)	1	12
11	S9	183/196 (93%)	128 (70%)	36 (20%)	19 (10%)	0	7
11	s9	183/196 (93%)	122 (67%)	42 (23%)	19 (10%)	0	7
12	C0	94/105 (90%)	54 (57%)	21 (22%)	19 (20%)	0	1
12	c0	92/105 (88%)	56 (61%)	17 (18%)	19 (21%)	0	1
13	C1	153/155 (99%)	113 (74%)	22 (14%)	18 (12%)	0	5
13	c1	144/155 (93%)	108 (75%)	20 (14%)	16 (11%)	0	6
14	C2	122/142 (86%)	71 (58%)	22 (18%)	29 (24%)	0	0
14	c2	122/142 (86%)	65 (53%)	36 (30%)	21 (17%)	0	2
15	C3	148/150 (99%)	107 (72%)	29 (20%)	12 (8%)	1	11
15	c3	148/150 (99%)	95 (64%)	28 (19%)	25 (17%)	0	2
16	C4	125/136 (92%)	80 (64%)	25 (20%)	20 (16%)	0	3
16	c4	126/136 (93%)	90 (71%)	24 (19%)	12 (10%)	0	8
17	C5	122/141 (86%)	78 (64%)	26 (21%)	18 (15%)	0	3
17	c5	133/141 (94%)	75 (56%)	29 (22%)	29 (22%)	0	1

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	C6	139/142 (98%)	105 (76%)	22 (16%)	12 (9%)	1	10
18	c6	140/142 (99%)	97 (69%)	24 (17%)	19 (14%)	0	4
19	C7	116/136 (85%)	76 (66%)	22 (19%)	18 (16%)	0	3
19	c7	113/136 (83%)	73 (65%)	29 (26%)	11 (10%)	0	8
20	C8	143/145 (99%)	107 (75%)	27 (19%)	9 (6%)	1	17
20	c8	143/145 (99%)	98 (68%)	27 (19%)	18 (13%)	0	5
21	C9	141/143 (99%)	99 (70%)	31 (22%)	11 (8%)	1	11
21	c9	141/143 (99%)	98 (70%)	36 (26%)	7 (5%)	2	21
22	D0	105/120 (88%)	74 (70%)	22 (21%)	9 (9%)	1	10
22	d0	108/120 (90%)	75 (69%)	15 (14%)	18 (17%)	0	3
23	D1	85/87 (98%)	53 (62%)	18 (21%)	14 (16%)	0	3
23	d1	85/87 (98%)	64 (75%)	14 (16%)	7 (8%)	1	10
24	D2	127/129 (98%)	91 (72%)	28 (22%)	8 (6%)	1	17
24	d2	127/129 (98%)	105 (83%)	17 (13%)	5 (4%)	3	27
25	D3	142/144 (99%)	87 (61%)	29 (20%)	26 (18%)	0	2
25	d3	142/144 (99%)	119 (84%)	16 (11%)	7 (5%)	2	21
26	D4	132/134 (98%)	98 (74%)	25 (19%)	9 (7%)	1	15
26	d4	132/134 (98%)	101 (76%)	17 (13%)	14 (11%)	0	7
27	D5	68/107 (64%)	43 (63%)	16 (24%)	9 (13%)	0	4
27	d5	67/107 (63%)	45 (67%)	14 (21%)	8 (12%)	0	5
28	D6	95/97 (98%)	53 (56%)	18 (19%)	24 (25%)	0	0
28	d6	95/97 (98%)	71 (75%)	16 (17%)	8 (8%)	1	10
29	D7	79/81 (98%)	58 (73%)	14 (18%)	7 (9%)	1	9
29	d7	79/81 (98%)	61 (77%)	11 (14%)	7 (9%)	1	9
30	D8	61/66 (92%)	45 (74%)	11 (18%)	5 (8%)	1	10
30	d8	61/66 (92%)	39 (64%)	14 (23%)	8 (13%)	0	4
31	D9	51/55 (93%)	32 (63%)	11 (22%)	8 (16%)	0	3
31	d9	51/55 (93%)	35 (69%)	8 (16%)	8 (16%)	0	3
32	E0	58/60 (97%)	34 (59%)	16 (28%)	8 (14%)	0	4
33	E1	69/76 (91%)	39 (56%)	13 (19%)	17 (25%)	0	0
34	SR	316/318 (99%)	237 (75%)	56 (18%)	23 (7%)	1	13

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
34	sR	316/318 (99%)	251 (79%)	46 (15%)	19 (6%)	1	17
35	SM	155/273 (57%)	90 (58%)	40 (26%)	25 (16%)	0	3
35	sM	98/273 (36%)	59 (60%)	20 (20%)	19 (19%)	0	2
39	L2	250/253 (99%)	197 (79%)	31 (12%)	22 (9%)	1	9
39	l2	250/253 (99%)	192 (77%)	42 (17%)	16 (6%)	1	17
40	L3	384/386 (100%)	290 (76%)	63 (16%)	31 (8%)	1	11
40	l3	384/386 (100%)	299 (78%)	53 (14%)	32 (8%)	1	10
41	L4	359/361 (99%)	260 (72%)	62 (17%)	37 (10%)	0	7
41	l4	359/361 (99%)	251 (70%)	68 (19%)	40 (11%)	0	6
42	L5	294/296 (99%)	200 (68%)	58 (20%)	36 (12%)	0	5
42	l5	292/296 (99%)	221 (76%)	44 (15%)	27 (9%)	1	9
43	L6	152/175 (87%)	123 (81%)	17 (11%)	12 (8%)	1	11
43	l6	153/175 (87%)	107 (70%)	27 (18%)	19 (12%)	0	5
44	L7	220/243 (90%)	154 (70%)	45 (20%)	21 (10%)	0	8
44	l7	221/243 (91%)	165 (75%)	34 (15%)	22 (10%)	0	8
45	L8	231/255 (91%)	137 (59%)	65 (28%)	29 (13%)	0	5
45	l8	229/255 (90%)	155 (68%)	52 (23%)	22 (10%)	0	8
46	L9	189/191 (99%)	137 (72%)	30 (16%)	22 (12%)	0	6
46	l9	189/191 (99%)	142 (75%)	27 (14%)	20 (11%)	0	7
47	M0	207/220 (94%)	148 (72%)	38 (18%)	21 (10%)	0	7
47	m0	209/220 (95%)	149 (71%)	41 (20%)	19 (9%)	1	9
48	M1	167/173 (96%)	116 (70%)	27 (16%)	24 (14%)	0	4
48	m1	167/173 (96%)	120 (72%)	27 (16%)	20 (12%)	0	5
49	M3	191/198 (96%)	134 (70%)	46 (24%)	11 (6%)	1	18
49	m3	192/198 (97%)	126 (66%)	37 (19%)	29 (15%)	0	3
50	M4	134/137 (98%)	97 (72%)	25 (19%)	12 (9%)	1	9
50	m4	135/137 (98%)	92 (68%)	35 (26%)	8 (6%)	1	18
51	M5	201/203 (99%)	151 (75%)	38 (19%)	12 (6%)	1	17
51	m5	201/203 (99%)	151 (75%)	35 (17%)	15 (8%)	1	12
52	M6	195/198 (98%)	146 (75%)	36 (18%)	13 (7%)	1	15
52	m6	195/198 (98%)	151 (77%)	26 (13%)	18 (9%)	1	9

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
53	M7	181/183 (99%)	128 (71%)	34 (19%)	19 (10%)	0	7
53	m7	153/183 (84%)	111 (72%)	29 (19%)	13 (8%)	1	10
54	M8	183/185 (99%)	132 (72%)	36 (20%)	15 (8%)	1	10
54	m8	183/185 (99%)	134 (73%)	36 (20%)	13 (7%)	1	14
55	M9	186/188 (99%)	136 (73%)	33 (18%)	17 (9%)	1	9
55	m9	186/188 (99%)	125 (67%)	40 (22%)	21 (11%)	0	6
56	N0	170/172 (99%)	139 (82%)	21 (12%)	10 (6%)	1	18
56	n0	170/172 (99%)	145 (85%)	16 (9%)	9 (5%)	2	19
57	N1	157/159 (99%)	115 (73%)	28 (18%)	14 (9%)	1	9
57	n1	157/159 (99%)	121 (77%)	27 (17%)	9 (6%)	1	18
58	N2	98/120 (82%)	65 (66%)	26 (26%)	7 (7%)	1	14
58	n2	96/120 (80%)	64 (67%)	24 (25%)	8 (8%)	1	10
59	N3	134/136 (98%)	109 (81%)	16 (12%)	9 (7%)	1	15
59	n3	134/136 (98%)	113 (84%)	12 (9%)	9 (7%)	1	15
60	N4	96/155 (62%)	63 (66%)	16 (17%)	17 (18%)	0	2
60	n4	133/155 (86%)	88 (66%)	25 (19%)	20 (15%)	0	3
61	N5	119/141 (84%)	81 (68%)	30 (25%)	8 (7%)	1	15
61	n5	118/141 (84%)	91 (77%)	17 (14%)	10 (8%)	1	10
62	N6	124/126 (98%)	94 (76%)	18 (14%)	12 (10%)	0	8
62	n6	124/126 (98%)	92 (74%)	17 (14%)	15 (12%)	0	5
63	N7	133/135 (98%)	98 (74%)	19 (14%)	16 (12%)	0	5
63	n7	133/135 (98%)	94 (71%)	26 (20%)	13 (10%)	0	8
64	N8	146/148 (99%)	100 (68%)	30 (20%)	16 (11%)	0	6
64	n8	146/148 (99%)	104 (71%)	28 (19%)	14 (10%)	0	8
65	N9	56/58 (97%)	40 (71%)	11 (20%)	5 (9%)	1	9
65	n9	56/58 (97%)	33 (59%)	14 (25%)	9 (16%)	0	3
66	O0	95/104 (91%)	82 (86%)	10 (10%)	3 (3%)	4	31
66	o0	98/104 (94%)	75 (76%)	18 (18%)	5 (5%)	2	20
67	O1	107/112 (96%)	86 (80%)	12 (11%)	9 (8%)	1	10
67	o1	107/112 (96%)	73 (68%)	14 (13%)	20 (19%)	0	2
68	O2	125/129 (97%)	95 (76%)	20 (16%)	10 (8%)	1	11

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
68	o2	125/129 (97%)	89 (71%)	23 (18%)	13 (10%)	0	7
69	O3	104/106 (98%)	90 (86%)	7 (7%)	7 (7%)	1	15
69	o3	104/106 (98%)	82 (79%)	13 (12%)	9 (9%)	1	9
70	O4	110/119 (92%)	80 (73%)	19 (17%)	11 (10%)	0	8
70	o4	110/119 (92%)	75 (68%)	24 (22%)	11 (10%)	0	8
71	O5	117/119 (98%)	75 (64%)	28 (24%)	14 (12%)	0	5
71	o5	117/119 (98%)	80 (68%)	18 (15%)	19 (16%)	0	3
72	O6	97/99 (98%)	69 (71%)	16 (16%)	12 (12%)	0	5
72	o6	97/99 (98%)	67 (69%)	18 (19%)	12 (12%)	0	5
73	O7	85/87 (98%)	63 (74%)	16 (19%)	6 (7%)	1	14
73	o7	85/87 (98%)	60 (71%)	14 (16%)	11 (13%)	0	5
74	O8	75/77 (97%)	55 (73%)	12 (16%)	8 (11%)	0	7
74	o8	75/77 (97%)	53 (71%)	18 (24%)	4 (5%)	2	19
75	O9	48/50 (96%)	34 (71%)	10 (21%)	4 (8%)	1	10
75	o9	48/50 (96%)	36 (75%)	8 (17%)	4 (8%)	1	10
76	Q0	50/52 (96%)	32 (64%)	12 (24%)	6 (12%)	0	5
76	q0	50/52 (96%)	39 (78%)	6 (12%)	5 (10%)	0	8
77	Q1	23/25 (92%)	18 (78%)	3 (13%)	2 (9%)	1	9
77	q1	23/25 (92%)	16 (70%)	3 (13%)	4 (17%)	0	2
78	Q2	103/105 (98%)	75 (73%)	20 (19%)	8 (8%)	1	11
78	q2	103/105 (98%)	83 (81%)	14 (14%)	6 (6%)	1	18
79	Q3	89/91 (98%)	59 (66%)	16 (18%)	14 (16%)	0	3
79	q3	89/91 (98%)	71 (80%)	9 (10%)	9 (10%)	0	7
80	e0	60/62 (97%)	37 (62%)	14 (23%)	9 (15%)	0	3
81	e1	74/76 (97%)	28 (38%)	26 (35%)	20 (27%)	0	0
83	p0	139/311 (45%)	103 (74%)	27 (19%)	9 (6%)	1	16
All	All	22333/24141 (92%)	15914 (71%)	4073 (18%)	2346 (10%)	0	7

5 of 2346 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	30	GLN

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Mol	Chain	Res	Type
2	S0	39	ASN
2	S0	95	ALA
2	S0	132	ALA

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%)	117 (71%)	47 (29%)	0	3
2	s0	165/209 (79%)	123 (74%)	42 (26%)	0	4
3	S1	191/223 (86%)	139 (73%)	52 (27%)	0	3
3	s1	192/223 (86%)	147 (77%)	45 (23%)	1	5
4	S2	176/204 (86%)	126 (72%)	50 (28%)	0	3
4	s2	176/204 (86%)	119 (68%)	57 (32%)	0	2
5	S3	182/194 (94%)	133 (73%)	49 (27%)	0	3
5	s3	182/194 (94%)	131 (72%)	51 (28%)	0	3
6	S4	221/221 (100%)	170 (77%)	51 (23%)	1	5
6	s4	221/221 (100%)	165 (75%)	56 (25%)	0	4
7	S5	173/190 (91%)	136 (79%)	37 (21%)	1	7
7	s5	173/190 (91%)	125 (72%)	48 (28%)	0	3
8	S6	188/201 (94%)	139 (74%)	49 (26%)	0	4
8	s6	187/201 (93%)	132 (71%)	55 (29%)	0	2
9	S7	165/169 (98%)	127 (77%)	38 (23%)	1	5
9	s7	165/169 (98%)	122 (74%)	43 (26%)	0	4
10	S8	150/161 (93%)	118 (79%)	32 (21%)	1	7
10	s8	150/161 (93%)	106 (71%)	44 (29%)	0	2
11	S9	158/165 (96%)	121 (77%)	37 (23%)	1	5
11	s9	158/165 (96%)	116 (73%)	42 (27%)	0	3
12	C0	77/98 (79%)	58 (75%)	19 (25%)	0	4

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
12	c0	73/98 (74%)	54 (74%)	19 (26%)	0	4
13	C1	129/136 (95%)	111 (86%)	18 (14%)	3	21
13	c1	129/136 (95%)	98 (76%)	31 (24%)	0	4
14	C2	88/118 (75%)	66 (75%)	22 (25%)	0	4
14	c2	88/118 (75%)	62 (70%)	26 (30%)	0	2
15	C3	127/127 (100%)	101 (80%)	26 (20%)	1	7
15	c3	127/127 (100%)	96 (76%)	31 (24%)	0	4
16	C4	81/104 (78%)	58 (72%)	23 (28%)	0	3
16	c4	97/104 (93%)	67 (69%)	30 (31%)	0	2
17	C5	101/117 (86%)	72 (71%)	29 (29%)	0	3
17	c5	103/117 (88%)	73 (71%)	30 (29%)	0	2
18	C6	117/118 (99%)	83 (71%)	34 (29%)	0	2
18	c6	118/118 (100%)	87 (74%)	31 (26%)	0	4
19	C7	94/124 (76%)	65 (69%)	29 (31%)	0	2
19	c7	92/124 (74%)	61 (66%)	31 (34%)	0	1
20	C8	128/128 (100%)	101 (79%)	27 (21%)	1	7
20	c8	128/128 (100%)	96 (75%)	32 (25%)	0	4
21	C9	115/115 (100%)	83 (72%)	32 (28%)	0	3
21	c9	115/115 (100%)	85 (74%)	30 (26%)	0	4
22	D0	100/113 (88%)	74 (74%)	26 (26%)	0	4
22	d0	103/113 (91%)	67 (65%)	36 (35%)	0	1
23	D1	74/74 (100%)	59 (80%)	15 (20%)	1	8
23	d1	74/74 (100%)	52 (70%)	22 (30%)	0	2
24	D2	110/110 (100%)	81 (74%)	29 (26%)	0	4
24	d2	110/110 (100%)	88 (80%)	22 (20%)	1	8
25	D3	119/119 (100%)	79 (66%)	40 (34%)	0	1
25	d3	119/119 (100%)	89 (75%)	30 (25%)	0	4
26	D4	112/112 (100%)	88 (79%)	24 (21%)	1	7
26	d4	112/112 (100%)	89 (80%)	23 (20%)	1	7
27	D5	61/88 (69%)	47 (77%)	14 (23%)	1	5
27	d5	61/88 (69%)	47 (77%)	14 (23%)	1	5

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
28	D6	83/83 (100%)	60 (72%)	23 (28%)	0	3
28	d6	83/83 (100%)	51 (61%)	32 (39%)	0	0
29	D7	70/70 (100%)	57 (81%)	13 (19%)	1	10
29	d7	70/70 (100%)	54 (77%)	16 (23%)	1	5
30	D8	56/59 (95%)	39 (70%)	17 (30%)	0	2
30	d8	56/59 (95%)	42 (75%)	14 (25%)	0	4
31	D9	47/48 (98%)	34 (72%)	13 (28%)	0	3
31	d9	47/48 (98%)	32 (68%)	15 (32%)	0	2
32	E0	51/51 (100%)	35 (69%)	16 (31%)	0	2
33	E1	62/66 (94%)	47 (76%)	15 (24%)	0	4
34	SR	260/261 (100%)	216 (83%)	44 (17%)	2	14
34	sR	260/261 (100%)	213 (82%)	47 (18%)	1	11
35	SM	97/228 (42%)	68 (70%)	29 (30%)	0	2
35	sM	54/228 (24%)	39 (72%)	15 (28%)	0	3
39	L2	193/195 (99%)	138 (72%)	55 (28%)	0	3
39	l2	192/195 (98%)	137 (71%)	55 (29%)	0	3
40	L3	321/322 (100%)	229 (71%)	92 (29%)	0	3
40	l3	321/322 (100%)	235 (73%)	86 (27%)	0	3
41	L4	288/288 (100%)	212 (74%)	76 (26%)	0	4
41	l4	288/288 (100%)	208 (72%)	80 (28%)	0	3
42	L5	244/244 (100%)	195 (80%)	49 (20%)	1	8
42	l5	243/244 (100%)	176 (72%)	67 (28%)	0	3
43	L6	134/152 (88%)	110 (82%)	24 (18%)	2	11
43	l6	135/152 (89%)	105 (78%)	30 (22%)	1	6
44	L7	186/204 (91%)	138 (74%)	48 (26%)	0	4
44	l7	187/204 (92%)	146 (78%)	41 (22%)	1	6
45	L8	187/207 (90%)	144 (77%)	43 (23%)	1	5
45	l8	177/207 (86%)	134 (76%)	43 (24%)	0	4
46	L9	171/171 (100%)	110 (64%)	61 (36%)	0	1
46	l9	171/171 (100%)	119 (70%)	52 (30%)	0	2
47	M0	177/186 (95%)	135 (76%)	42 (24%)	1	5

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
47	m0	179/186 (96%)	131 (73%)	48 (27%)	0	3
48	M1	147/150 (98%)	111 (76%)	36 (24%)	0	4
48	m1	147/150 (98%)	91 (62%)	56 (38%)	0	0
49	M3	154/158 (98%)	114 (74%)	40 (26%)	0	4
49	m3	154/158 (98%)	102 (66%)	52 (34%)	0	1
50	M4	107/108 (99%)	78 (73%)	29 (27%)	0	3
50	m4	108/108 (100%)	81 (75%)	27 (25%)	0	4
51	M5	175/175 (100%)	143 (82%)	32 (18%)	1	10
51	m5	175/175 (100%)	132 (75%)	43 (25%)	0	4
52	M6	160/161 (99%)	120 (75%)	40 (25%)	0	4
52	m6	160/161 (99%)	119 (74%)	41 (26%)	0	4
53	M7	140/145 (97%)	98 (70%)	42 (30%)	0	2
53	m7	125/145 (86%)	83 (66%)	42 (34%)	0	1
54	M8	150/150 (100%)	115 (77%)	35 (23%)	1	5
54	m8	150/150 (100%)	104 (69%)	46 (31%)	0	2
55	M9	153/153 (100%)	112 (73%)	41 (27%)	0	3
55	m9	153/153 (100%)	113 (74%)	40 (26%)	0	4
56	N0	156/156 (100%)	108 (69%)	48 (31%)	0	2
56	n0	156/156 (100%)	114 (73%)	42 (27%)	0	3
57	N1	136/136 (100%)	100 (74%)	36 (26%)	0	3
57	n1	136/136 (100%)	100 (74%)	36 (26%)	0	3
58	N2	87/106 (82%)	68 (78%)	19 (22%)	1	6
58	n2	85/106 (80%)	68 (80%)	17 (20%)	1	8
59	N3	104/104 (100%)	79 (76%)	25 (24%)	0	4
59	n3	104/104 (100%)	78 (75%)	26 (25%)	0	4
60	N4	57/129 (44%)	45 (79%)	12 (21%)	1	7
60	n4	100/129 (78%)	69 (69%)	31 (31%)	0	2
61	N5	104/117 (89%)	83 (80%)	21 (20%)	1	8
61	n5	104/117 (89%)	70 (67%)	34 (33%)	0	2
62	N6	109/109 (100%)	80 (73%)	29 (27%)	0	3
62	n6	109/109 (100%)	75 (69%)	34 (31%)	0	2

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
63	N7	115/115 (100%)	92 (80%)	23 (20%)	1	8
63	n7	115/115 (100%)	93 (81%)	22 (19%)	1	9
64	N8	118/118 (100%)	95 (80%)	23 (20%)	1	9
64	n8	118/118 (100%)	85 (72%)	33 (28%)	0	3
65	N9	46/46 (100%)	30 (65%)	16 (35%)	0	1
65	n9	46/46 (100%)	23 (50%)	23 (50%)	0	0
66	O0	81/87 (93%)	62 (76%)	19 (24%)	1	5
66	o0	84/87 (97%)	54 (64%)	30 (36%)	0	1
67	O1	92/96 (96%)	67 (73%)	25 (27%)	0	3
67	o1	94/96 (98%)	67 (71%)	27 (29%)	0	3
68	O2	109/110 (99%)	73 (67%)	36 (33%)	0	2
68	o2	109/110 (99%)	78 (72%)	31 (28%)	0	3
69	O3	90/90 (100%)	71 (79%)	19 (21%)	1	7
69	o3	90/90 (100%)	62 (69%)	28 (31%)	0	2
70	O4	95/101 (94%)	66 (70%)	29 (30%)	0	2
70	o4	95/101 (94%)	70 (74%)	25 (26%)	0	4
71	O5	104/104 (100%)	69 (66%)	35 (34%)	0	1
71	o5	103/104 (99%)	77 (75%)	26 (25%)	0	4
72	O6	81/81 (100%)	56 (69%)	25 (31%)	0	2
72	o6	80/81 (99%)	55 (69%)	25 (31%)	0	2
73	O7	70/70 (100%)	51 (73%)	19 (27%)	0	3
73	o7	70/70 (100%)	48 (69%)	22 (31%)	0	2
74	O8	68/68 (100%)	53 (78%)	15 (22%)	1	6
74	o8	67/68 (98%)	52 (78%)	15 (22%)	1	6
75	O9	45/45 (100%)	35 (78%)	10 (22%)	1	6
75	o9	45/45 (100%)	34 (76%)	11 (24%)	0	4
76	Q0	47/47 (100%)	36 (77%)	11 (23%)	1	5
76	q0	47/47 (100%)	33 (70%)	14 (30%)	0	2
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%)	65 (72%)	25 (28%)	0	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
78	q2	90/90 (100%)	58 (64%)	32 (36%)	0	1
79	Q3	71/71 (100%)	54 (76%)	17 (24%)	0	4
79	q3	71/71 (100%)	49 (69%)	22 (31%)	0	2
80	e0	53/53 (100%)	41 (77%)	12 (23%)	1	6
81	e1	66/66 (100%)	41 (62%)	25 (38%)	0	1
83	p0	105/253 (42%)	79 (75%)	26 (25%)	0	4
All	All	18730/20239 (92%)	13794 (74%)	4936 (26%)	0	4

5 of 4936 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
42	l5	158	ARG
65	n9	37	PRO
45	l8	81	THR
42	l5	146	LEU
52	m6	144	SER

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 122 such sidechains are listed below:

Mol	Chain	Res	Type
6	s4	36	HIS
62	n6	120	GLN
15	c3	49	GLN
62	n6	91	ASN
73	o7	13	ASN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	1747/1800 (97%)	613 (35%)	71 (4%)
1	6	1787/1800 (99%)	650 (36%)	64 (3%)
36	1	3145/3396 (92%)	1010 (32%)	106 (3%)
36	5	3145/3396 (92%)	1037 (32%)	115 (3%)
37	3	120/121 (99%)	34 (28%)	2 (1%)
37	7	120/121 (99%)	30 (25%)	3 (2%)
38	4	157/158 (99%)	51 (32%)	7 (4%)
38	8	157/158 (99%)	57 (36%)	3 (1%)
All	All	10378/10950 (94%)	3482 (33%)	371 (3%)

5 of 3482 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	2	2	A
1	2	4	C
1	2	5	U
1	2	25	C
1	2	26	A

5 of 371 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	6	1274	C
36	5	1329	U
1	6	1491	U
36	5	369	A
36	5	1817	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 2558 ligands modelled in this entry, 1426 are monoatomic - leaving 1132 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	1	4070	-	0,6,6	-	-	-		
87	OHX	1	3876	-	0,6,6	-	-	-		
87	OHX	1	3893	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	3885	-	0,6,6	-	-	-		
87	OHX	6	2052	-	0,6,6	-	-	-		
87	OHX	2	2176	-	0,6,6	-	-	-		
87	OHX	1	4099	-	0,6,6	-	-	-		
87	OHX	m0	303	-	0,6,6	-	-	-		
87	OHX	6	2123	-	0,6,6	-	-	-		
87	OHX	6	2133	-	0,6,6	-	-	-		
87	OHX	1	3969	-	0,6,6	-	-	-		
87	OHX	5	3922	-	0,6,6	-	-	-		
87	OHX	2	2106	-	0,6,6	-	-	-		
87	OHX	5	3989	-	0,6,6	-	-	-		
87	OHX	1	3912	-	0,6,6	-	-	-		
87	OHX	5	4233	-	0,6,6	-	-	-		
87	OHX	5	4119	-	0,6,6	-	-	-		
87	OHX	1	4190	-	0,6,6	-	-	-		
87	OHX	5	4155	-	0,6,6	-	-	-		
87	OHX	5	3933	-	0,6,6	-	-	-		
87	OHX	1	3892	-	0,6,6	-	-	-		
87	OHX	1	3903	-	0,6,6	-	-	-		
87	OHX	6	2098	-	0,6,6	-	-	-		
87	OHX	1	3979	-	0,6,6	-	-	-		
87	OHX	2	2087	-	0,6,6	-	-	-		
87	OHX	5	4002	-	0,6,6	-	-	-		
87	OHX	2	2089	-	0,6,6	-	-	-		
87	OHX	5	4064	-	0,6,6	-	-	-		
87	OHX	5	4174	-	0,6,6	-	-	-		
87	OHX	2	2050	-	0,6,6	-	-	-		
87	OHX	1	3909	-	0,6,6	-	-	-		
87	OHX	5	4204	-	0,6,6	-	-	-		
87	OHX	2	2134	-	0,6,6	-	-	-		
87	OHX	5	4107	-	0,6,6	-	-	-		
87	OHX	5	3990	-	0,6,6	-	-	-		
87	OHX	1	4015	-	0,6,6	-	-	-		
87	OHX	1	4109	-	0,6,6	-	-	-		
87	OHX	5	3924	-	0,6,6	-	-	-		
87	OHX	5	4056	-	0,6,6	-	-	-		
87	OHX	1	4034	-	0,6,6	-	-	-		
87	OHX	5	4181	-	0,6,6	-	-	-		
87	OHX	2	2076	-	0,6,6	-	-	-		
87	OHX	1	3902	-	0,6,6	-	-	-		
87	OHX	5	4205	-	0,6,6	-	-	-		
87	OHX	1	4073	-	0,6,6	-	-	-		
87	OHX	1	3973	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	3994	-	0,6,6	-	-	-		
87	OHX	1	4154	-	0,6,6	-	-	-		
87	OHX	6	2062	-	0,6,6	-	-	-		
87	OHX	5	4143	-	0,6,6	-	-	-		
87	OHX	6	2140	-	0,6,6	-	-	-		
87	OHX	5	4246	-	0,6,6	-	-	-		
87	OHX	1	4197	-	0,6,6	-	-	-		
87	OHX	6	2149	-	0,6,6	-	-	-		
87	OHX	1	4036	-	0,6,6	-	-	-		
87	OHX	sR	401	-	0,6,6	-	-	-		
87	OHX	1	4006	-	0,6,6	-	-	-		
87	OHX	6	2164	-	0,6,6	-	-	-		
87	OHX	1	4037	-	0,6,6	-	-	-		
87	OHX	1	4172	-	0,6,6	-	-	-		
87	OHX	1	4041	-	0,6,6	-	-	-		
87	OHX	1	3966	-	0,6,6	-	-	-		
87	OHX	6	2206	-	0,6,6	-	-	-		
87	OHX	8	231	-	0,6,6	-	-	-		
87	OHX	1	3934	-	0,6,6	-	-	-		
87	OHX	5	3964	-	0,6,6	-	-	-		
87	OHX	1	4144	-	0,6,6	-	-	-		
87	OHX	5	4113	-	0,6,6	-	-	-		
87	OHX	1	4060	-	0,6,6	-	-	-		
87	OHX	6	2160	-	0,6,6	-	-	-		
87	OHX	6	2114	-	0,6,6	-	-	-		
87	OHX	5	4077	-	0,6,6	-	-	-		
87	OHX	15	305	-	0,6,6	-	-	-		
87	OHX	1	3890	-	0,6,6	-	-	-		
87	OHX	1	3971	-	0,6,6	-	-	-		
87	OHX	5	4098	-	0,6,6	-	-	-		
87	OHX	2	2158	-	0,6,6	-	-	-		
87	OHX	1	4084	-	0,6,6	-	-	-		
87	OHX	14	403	-	0,6,6	-	-	-		
87	OHX	1	3986	-	0,6,6	-	-	-		
87	OHX	1	3940	-	0,6,6	-	-	-		
87	OHX	4	237	-	0,6,6	-	-	-		
87	OHX	6	2138	-	0,6,6	-	-	-		
87	OHX	5	4135	-	0,6,6	-	-	-		
87	OHX	5	4234	-	0,6,6	-	-	-		
87	OHX	1	4054	-	0,6,6	-	-	-		
87	OHX	4	236	-	0,6,6	-	-	-		
87	OHX	5	3919	-	0,6,6	-	-	-		
87	OHX	2	2052	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	3868	-	0,6,6	-	-	-		
87	OHX	6	2193	-	0,6,6	-	-	-		
87	OHX	5	4124	-	0,6,6	-	-	-		
87	OHX	2	2112	-	0,6,6	-	-	-		
87	OHX	1	4173	-	0,6,6	-	-	-		
87	OHX	M5	303	-	0,6,6	-	-	-		
87	OHX	1	4053	-	0,6,6	-	-	-		
87	OHX	1	4179	-	0,6,6	-	-	-		
87	OHX	5	4080	-	0,6,6	-	-	-		
87	OHX	2	2117	-	0,6,6	-	-	-		
87	OHX	5	4168	-	0,6,6	-	-	-		
87	OHX	1	3976	-	0,6,6	-	-	-		
87	OHX	5	3965	-	0,6,6	-	-	-		
87	OHX	1	4140	-	0,6,6	-	-	-		
87	OHX	2	2165	-	0,6,6	-	-	-		
87	OHX	6	2074	-	0,6,6	-	-	-		
87	OHX	5	3915	-	0,6,6	-	-	-		
87	OHX	6	2142	-	0,6,6	-	-	-		
87	OHX	2	2098	-	0,6,6	-	-	-		
87	OHX	5	4101	-	0,6,6	-	-	-		
87	OHX	5	4163	-	0,6,6	-	-	-		
87	OHX	5	4226	-	0,6,6	-	-	-		
87	OHX	5	4020	-	0,6,6	-	-	-		
87	OHX	8	226	-	0,6,6	-	-	-		
87	OHX	2	2059	-	0,6,6	-	-	-		
87	OHX	5	4044	-	0,6,6	-	-	-		
87	OHX	1	4010	-	0,6,6	-	-	-		
87	OHX	2	2032	-	0,6,6	-	-	-		
87	OHX	1	4095	-	0,6,6	-	-	-		
87	OHX	5	4224	-	0,6,6	-	-	-		
87	OHX	7	216	-	0,6,6	-	-	-		
87	OHX	8	224	-	0,6,6	-	-	-		
87	OHX	5	3918	-	0,6,6	-	-	-		
87	OHX	2	2095	-	0,6,6	-	-	-		
87	OHX	1	3907	-	0,6,6	-	-	-		
87	OHX	5	3988	-	0,6,6	-	-	-		
87	OHX	5	4198	-	0,6,6	-	-	-		
87	OHX	6	2051	-	0,6,6	-	-	-		
87	OHX	1	3964	-	0,6,6	-	-	-		
87	OHX	5	3917	-	0,6,6	-	-	-		
87	OHX	5	4127	-	0,6,6	-	-	-		
87	OHX	1	4161	-	0,6,6	-	-	-		
87	OHX	5	3998	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4005	-	0,6,6	-	-	-		
87	OHX	5	4167	-	0,6,6	-	-	-		
87	OHX	6	2124	-	0,6,6	-	-	-		
87	OHX	1	3922	-	0,6,6	-	-	-		
87	OHX	5	4085	-	0,6,6	-	-	-		
87	OHX	6	2107	-	0,6,6	-	-	-		
87	OHX	6	2184	-	0,6,6	-	-	-		
87	OHX	6	2073	-	0,6,6	-	-	-		
87	OHX	6	2064	-	0,6,6	-	-	-		
87	OHX	1	4118	-	0,6,6	-	-	-		
87	OHX	5	4146	-	0,6,6	-	-	-		
87	OHX	2	2029	-	0,6,6	-	-	-		
87	OHX	S8	302	-	0,6,6	-	-	-		
87	OHX	1	3900	-	0,6,6	-	-	-		
87	OHX	1	4033	-	0,6,6	-	-	-		
87	OHX	5	4008	-	0,6,6	-	-	-		
87	OHX	6	2113	-	0,6,6	-	-	-		
87	OHX	2	2067	-	0,6,6	-	-	-		
87	OHX	5	4105	-	0,6,6	-	-	-		
87	OHX	2	2173	-	0,6,6	-	-	-		
87	OHX	8	223	-	0,6,6	-	-	-		
87	OHX	6	2104	-	0,6,6	-	-	-		
87	OHX	1	4092	-	0,6,6	-	-	-		
87	OHX	2	2066	-	0,6,6	-	-	-		
87	OHX	1	3962	-	0,6,6	-	-	-		
87	OHX	5	3945	-	0,6,6	-	-	-		
87	OHX	6	2076	-	0,6,6	-	-	-		
87	OHX	M9	202	-	0,6,6	-	-	-		
87	OHX	1	3960	-	0,6,6	-	-	-		
87	OHX	2	2111	-	0,6,6	-	-	-		
87	OHX	1	3871	-	0,6,6	-	-	-		
87	OHX	1	4205	-	0,6,6	-	-	-		
87	OHX	2	2043	-	0,6,6	-	-	-		
87	OHX	1	3992	-	0,6,6	-	-	-		
87	OHX	6	2162	-	0,6,6	-	-	-		
87	OHX	6	2118	-	0,6,6	-	-	-		
87	OHX	1	4031	-	0,6,6	-	-	-		
87	OHX	2	2097	-	0,6,6	-	-	-		
87	OHX	1	4128	-	0,6,6	-	-	-		
87	OHX	15	306	-	0,6,6	-	-	-		
87	OHX	5	4195	-	0,6,6	-	-	-		
87	OHX	1	4112	-	0,6,6	-	-	-		
87	OHX	2	2033	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4106	-	0,6,6	-	-	-		
87	OHX	1	4158	-	0,6,6	-	-	-		
87	OHX	1	4199	-	0,6,6	-	-	-		
87	OHX	1	4096	-	0,6,6	-	-	-		
87	OHX	1	4166	-	0,6,6	-	-	-		
87	OHX	2	2075	-	0,6,6	-	-	-		
87	OHX	6	2115	-	0,6,6	-	-	-		
87	OHX	1	4115	-	0,6,6	-	-	-		
87	OHX	6	2205	-	0,6,6	-	-	-		
87	OHX	6	2145	-	0,6,6	-	-	-		
87	OHX	5	4028	-	0,6,6	-	-	-		
87	OHX	1	4069	-	0,6,6	-	-	-		
87	OHX	2	2034	-	0,6,6	-	-	-		
87	OHX	5	4051	-	0,6,6	-	-	-		
87	OHX	5	4201	-	0,6,6	-	-	-		
87	OHX	3	221	-	0,6,6	-	-	-		
87	OHX	5	4043	-	0,6,6	-	-	-		
87	OHX	5	4067	-	0,6,6	-	-	-		
87	OHX	1	4209	-	0,6,6	-	-	-		
87	OHX	1	4116	-	0,6,6	-	-	-		
87	OHX	1	4135	-	0,6,6	-	-	-		
87	OHX	6	2170	-	0,6,6	-	-	-		
87	OHX	2	2138	-	0,6,6	-	-	-		
87	OHX	1	4065	-	0,6,6	-	-	-		
87	OHX	1	4159	-	0,6,6	-	-	-		
87	OHX	8	219	-	0,6,6	-	-	-		
87	OHX	5	4137	-	0,6,6	-	-	-		
87	OHX	5	4149	-	0,6,6	-	-	-		
87	OHX	5	4000	-	0,6,6	-	-	-		
87	OHX	1	4134	-	0,6,6	-	-	-		
87	OHX	1	3897	-	0,6,6	-	-	-		
87	OHX	5	4019	-	0,6,6	-	-	-		
87	OHX	1	4187	-	0,6,6	-	-	-		
87	OHX	2	2090	-	0,6,6	-	-	-		
87	OHX	1	4076	-	0,6,6	-	-	-		
87	OHX	5	4215	-	0,6,6	-	-	-		
87	OHX	2	2037	-	0,6,6	-	-	-		
87	OHX	6	2148	-	0,6,6	-	-	-		
87	OHX	1	3989	-	0,6,6	-	-	-		
87	OHX	2	2040	-	0,6,6	-	-	-		
87	OHX	1	4148	-	0,6,6	-	-	-		
87	OHX	2	2084	-	0,6,6	-	-	-		
87	OHX	1	4196	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	2	2073	-	0,6,6	-	-	-		
87	OHX	1	3965	-	0,6,6	-	-	-		
87	OHX	1	4132	-	0,6,6	-	-	-		
87	OHX	6	2135	-	0,6,6	-	-	-		
87	OHX	5	4047	-	0,6,6	-	-	-		
87	OHX	1	3870	-	0,6,6	-	-	-		
87	OHX	1	3915	-	0,6,6	-	-	-		
87	OHX	2	2119	-	0,6,6	-	-	-		
87	OHX	5	3948	-	0,6,6	-	-	-		
87	OHX	1	3943	-	0,6,6	-	-	-		
87	OHX	5	4157	-	0,6,6	-	-	-		
87	OHX	5	4018	-	0,6,6	-	-	-		
87	OHX	5	4225	-	0,6,6	-	-	-		
87	OHX	5	4239	-	0,6,6	-	-	-		
87	OHX	1	4020	-	0,6,6	-	-	-		
87	OHX	6	2154	-	0,6,6	-	-	-		
87	OHX	2	2027	-	0,6,6	-	-	-		
87	OHX	1	3877	-	0,6,6	-	-	-		
87	OHX	2	2136	-	0,6,6	-	-	-		
87	OHX	5	3955	-	0,6,6	-	-	-		
87	OHX	2	2047	-	0,6,6	-	-	-		
87	OHX	5	4147	-	0,6,6	-	-	-		
87	OHX	5	4175	-	0,6,6	-	-	-		
87	OHX	2	2171	-	0,6,6	-	-	-		
87	OHX	1	4023	-	0,6,6	-	-	-		
87	OHX	1	4090	-	0,6,6	-	-	-		
87	OHX	5	4038	-	0,6,6	-	-	-		
87	OHX	5	4139	-	0,6,6	-	-	-		
87	OHX	1	4048	-	0,6,6	-	-	-		
87	OHX	1	4198	-	0,6,6	-	-	-		
87	OHX	2	2054	-	0,6,6	-	-	-		
87	OHX	5	3895	-	0,6,6	-	-	-		
87	OHX	5	3900	-	0,6,6	-	-	-		
87	OHX	2	2115	-	0,6,6	-	-	-		
87	OHX	5	4030	-	0,6,6	-	-	-		
87	OHX	2	2044	-	0,6,6	-	-	-		
87	OHX	5	3928	-	0,6,6	-	-	-		
87	OHX	2	2113	-	0,6,6	-	-	-		
87	OHX	6	2195	-	0,6,6	-	-	-		
87	OHX	2	2150	-	0,6,6	-	-	-		
87	OHX	5	3925	-	0,6,6	-	-	-		
87	OHX	2	2163	-	0,6,6	-	-	-		
87	OHX	2	2104	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	O7	104	-	0,6,6	-	-	-		
87	OHX	5	3942	-	0,6,6	-	-	-		
87	OHX	1	4009	-	0,6,6	-	-	-		
87	OHX	5	4087	-	0,6,6	-	-	-		
87	OHX	1	4014	-	0,6,6	-	-	-		
87	OHX	1	4176	-	0,6,6	-	-	-		
87	OHX	6	2116	-	0,6,6	-	-	-		
87	OHX	2	2046	-	0,6,6	-	-	-		
87	OHX	1	3879	-	0,6,6	-	-	-		
87	OHX	6	2172	-	0,6,6	-	-	-		
87	OHX	1	3959	-	0,6,6	-	-	-		
87	OHX	6	2210	-	0,6,6	-	-	-		
87	OHX	2	2083	-	0,6,6	-	-	-		
87	OHX	2	2070	-	0,6,6	-	-	-		
87	OHX	1	3872	-	0,6,6	-	-	-		
87	OHX	6	2122	-	0,6,6	-	-	-		
87	OHX	5	3983	-	0,6,6	-	-	-		
87	OHX	4	239	-	0,6,6	-	-	-		
87	OHX	5	4083	-	0,6,6	-	-	-		
87	OHX	5	3896	-	0,6,6	-	-	-		
87	OHX	L3	405	-	0,6,6	-	-	-		
87	OHX	2	2124	-	0,6,6	-	-	-		
87	OHX	5	4125	-	0,6,6	-	-	-		
87	OHX	1	4003	-	0,6,6	-	-	-		
87	OHX	5	4024	-	0,6,6	-	-	-		
87	OHX	5	4121	-	0,6,6	-	-	-		
87	OHX	5	4081	-	0,6,6	-	-	-		
87	OHX	6	2207	-	0,6,6	-	-	-		
87	OHX	5	3905	-	0,6,6	-	-	-		
87	OHX	1	4001	-	0,6,6	-	-	-		
87	OHX	1	4082	-	0,6,6	-	-	-		
87	OHX	5	4090	-	0,6,6	-	-	-		
87	OHX	1	4174	-	0,6,6	-	-	-		
87	OHX	2	2175	-	0,6,6	-	-	-		
87	OHX	6	2053	-	0,6,6	-	-	-		
87	OHX	4	226	-	0,6,6	-	-	-		
87	OHX	2	2091	-	0,6,6	-	-	-		
87	OHX	6	2075	-	0,6,6	-	-	-		
87	OHX	1	4068	-	0,6,6	-	-	-		
87	OHX	1	4040	-	0,6,6	-	-	-		
87	OHX	1	4170	-	0,6,6	-	-	-		
87	OHX	8	221	-	0,6,6	-	-	-		
87	OHX	1	4120	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	3881	-	0,6,6	-	-	-		
87	OHX	1	3875	-	0,6,6	-	-	-		
87	OHX	1	3927	-	0,6,6	-	-	-		
87	OHX	1	4074	-	0,6,6	-	-	-		
87	OHX	1	3880	-	0,6,6	-	-	-		
87	OHX	5	4145	-	0,6,6	-	-	-		
87	OHX	1	3917	-	0,6,6	-	-	-		
87	OHX	5	4199	-	0,6,6	-	-	-		
87	OHX	1	3985	-	0,6,6	-	-	-		
87	OHX	6	2139	-	0,6,6	-	-	-		
87	OHX	1	4210	-	0,6,6	-	-	-		
87	OHX	s8	303	-	0,6,6	-	-	-		
87	OHX	5	4007	-	0,6,6	-	-	-		
87	OHX	1	4122	-	0,6,6	-	-	-		
87	OHX	6	2121	-	0,6,6	-	-	-		
87	OHX	1	4155	-	0,6,6	-	-	-		
87	OHX	5	4013	-	0,6,6	-	-	-		
87	OHX	2	2137	-	0,6,6	-	-	-		
87	OHX	5	4153	-	0,6,6	-	-	-		
87	OHX	5	4213	-	0,6,6	-	-	-		
87	OHX	2	2116	-	0,6,6	-	-	-		
87	OHX	4	231	-	0,6,6	-	-	-		
87	OHX	5	4110	-	0,6,6	-	-	-		
87	OHX	8	225	-	0,6,6	-	-	-		
87	OHX	2	2056	-	0,6,6	-	-	-		
87	OHX	1	3886	-	0,6,6	-	-	-		
87	OHX	2	2180	-	0,6,6	-	-	-		
87	OHX	2	2145	-	0,6,6	-	-	-		
87	OHX	6	2197	-	0,6,6	-	-	-		
87	OHX	13	407	-	0,6,6	-	-	-		
87	OHX	1	4167	-	0,6,6	-	-	-		
87	OHX	1	3978	-	0,6,6	-	-	-		
87	OHX	M0	304	-	0,6,6	-	-	-		
87	OHX	5	4129	-	0,6,6	-	-	-		
87	OHX	5	4086	-	0,6,6	-	-	-		
87	OHX	6	2102	-	0,6,6	-	-	-		
87	OHX	6	2178	-	0,6,6	-	-	-		
87	OHX	6	2093	-	0,6,6	-	-	-		
87	OHX	5	3938	-	0,6,6	-	-	-		
87	OHX	5	3972	-	0,6,6	-	-	-		
87	OHX	1	4002	-	0,6,6	-	-	-		
87	OHX	2	2162	-	0,6,6	-	-	-		
87	OHX	1	3948	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4055	-	0,6,6	-	-	-		
87	OHX	14	402	-	0,6,6	-	-	-		
87	OHX	1	4026	-	0,6,6	-	-	-		
87	OHX	m4	202	-	0,6,6	-	-	-		
87	OHX	5	3977	-	0,6,6	-	-	-		
87	OHX	2	2166	-	0,6,6	-	-	-		
87	OHX	4	235	-	0,6,6	-	-	-		
87	OHX	o7	502	-	0,6,6	-	-	-		
87	OHX	5	4074	-	0,6,6	-	-	-		
87	OHX	2	2099	-	0,6,6	-	-	-		
87	OHX	5	4169	-	0,6,6	-	-	-		
87	OHX	6	2196	-	0,6,6	-	-	-		
87	OHX	5	3946	-	0,6,6	-	-	-		
87	OHX	7	222	-	0,6,6	-	-	-		
87	OHX	1	4102	-	0,6,6	-	-	-		
87	OHX	s1	302	-	0,6,6	-	-	-		
87	OHX	5	4151	-	0,6,6	-	-	-		
87	OHX	5	4214	-	0,6,6	-	-	-		
87	OHX	1	4138	-	0,6,6	-	-	-		
87	OHX	6	2176	-	0,6,6	-	-	-		
87	OHX	2	2170	-	0,6,6	-	-	-		
87	OHX	1	3963	-	0,6,6	-	-	-		
87	OHX	5	4191	-	0,6,6	-	-	-		
87	OHX	5	4194	-	0,6,6	-	-	-		
87	OHX	6	2157	-	0,6,6	-	-	-		
87	OHX	2	2157	-	0,6,6	-	-	-		
87	OHX	L4	403	-	0,6,6	-	-	-		
87	OHX	2	2042	-	0,6,6	-	-	-		
87	OHX	2	2096	-	0,6,6	-	-	-		
87	OHX	2	2102	-	0,6,6	-	-	-		
87	OHX	1	4162	-	0,6,6	-	-	-		
87	OHX	1	3918	-	0,6,6	-	-	-		
87	OHX	6	2171	-	0,6,6	-	-	-		
87	OHX	1	4022	-	0,6,6	-	-	-		
87	OHX	6	2127	-	0,6,6	-	-	-		
87	OHX	1	3921	-	0,6,6	-	-	-		
87	OHX	1	3936	-	0,6,6	-	-	-		
87	OHX	1	4007	-	0,6,6	-	-	-		
87	OHX	6	2183	-	0,6,6	-	-	-		
87	OHX	6	2125	-	0,6,6	-	-	-		
87	OHX	1	3947	-	0,6,6	-	-	-		
87	OHX	6	2201	-	0,6,6	-	-	-		
87	OHX	d9	102	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2208	-	0,6,6	-	-	-		
87	OHX	6	2061	-	0,6,6	-	-	-		
87	OHX	6	2112	-	0,6,6	-	-	-		
87	OHX	5	3991	-	0,6,6	-	-	-		
87	OHX	8	222	-	0,6,6	-	-	-		
87	OHX	6	2050	-	0,6,6	-	-	-		
87	OHX	1	4127	-	0,6,6	-	-	-		
87	OHX	1	4067	-	0,6,6	-	-	-		
87	OHX	6	2080	-	0,6,6	-	-	-		
87	OHX	2	2031	-	0,6,6	-	-	-		
87	OHX	5	4097	-	0,6,6	-	-	-		
87	OHX	2	2148	-	0,6,6	-	-	-		
87	OHX	c8	202	-	0,6,6	-	-	-		
87	OHX	1	4188	-	0,6,6	-	-	-		
87	OHX	1	4149	-	0,6,6	-	-	-		
87	OHX	2	2085	-	0,6,6	-	-	-		
87	OHX	1	4157	-	0,6,6	-	-	-		
87	OHX	1	3867	-	0,6,6	-	-	-		
87	OHX	6	2069	-	0,6,6	-	-	-		
87	OHX	5	4062	-	0,6,6	-	-	-		
87	OHX	2	2039	-	0,6,6	-	-	-		
87	OHX	1	4177	-	0,6,6	-	-	-		
87	OHX	2	2071	-	0,6,6	-	-	-		
87	OHX	1	4012	-	0,6,6	-	-	-		
87	OHX	6	2203	-	0,6,6	-	-	-		
87	OHX	1	4098	-	0,6,6	-	-	-		
87	OHX	5	3949	-	0,6,6	-	-	-		
87	OHX	5	4070	-	0,6,6	-	-	-		
87	OHX	2	2093	-	0,6,6	-	-	-		
87	OHX	1	3937	-	0,6,6	-	-	-		
87	OHX	2	2131	-	0,6,6	-	-	-		
87	OHX	1	3958	-	0,6,6	-	-	-		
87	OHX	1	4047	-	0,6,6	-	-	-		
87	OHX	d4	201	-	0,6,6	-	-	-		
87	OHX	2	2155	-	0,6,6	-	-	-		
87	OHX	5	4017	-	0,6,6	-	-	-		
87	OHX	1	4094	-	0,6,6	-	-	-		
87	OHX	1	4180	-	0,6,6	-	-	-		
87	OHX	6	2088	-	0,6,6	-	-	-		
87	OHX	5	3923	-	0,6,6	-	-	-		
87	OHX	1	4091	-	0,6,6	-	-	-		
87	OHX	1	3906	-	0,6,6	-	-	-		
87	OHX	1	4147	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	3953	-	0,6,6	-	-	-		
87	OHX	1	3866	-	0,6,6	-	-	-		
87	OHX	1	4195	-	0,6,6	-	-	-		
87	OHX	1	4207	-	0,6,6	-	-	-		
87	OHX	1	3929	-	0,6,6	-	-	-		
87	OHX	1	4105	-	0,6,6	-	-	-		
87	OHX	6	2130	-	0,6,6	-	-	-		
87	OHX	5	3967	-	0,6,6	-	-	-		
87	OHX	2	2057	-	0,6,6	-	-	-		
87	OHX	5	3999	-	0,6,6	-	-	-		
87	OHX	5	4241	-	0,6,6	-	-	-		
87	OHX	1	4211	-	0,6,6	-	-	-		
87	OHX	3	218	-	0,6,6	-	-	-		
87	OHX	2	2159	-	0,6,6	-	-	-		
87	OHX	5	3995	-	0,6,6	-	-	-		
87	OHX	5	3899	-	0,6,6	-	-	-		
87	OHX	1	4185	-	0,6,6	-	-	-		
87	OHX	8	232	-	0,6,6	-	-	-		
87	OHX	1	3939	-	0,6,6	-	-	-		
87	OHX	1	4051	-	0,6,6	-	-	-		
87	OHX	1	4057	-	0,6,6	-	-	-		
87	OHX	6	2117	-	0,6,6	-	-	-		
87	OHX	2	2139	-	0,6,6	-	-	-		
87	OHX	1	4042	-	0,6,6	-	-	-		
87	OHX	1	3968	-	0,6,6	-	-	-		
87	OHX	2	2082	-	0,6,6	-	-	-		
87	OHX	1	4111	-	0,6,6	-	-	-		
87	OHX	6	2192	-	0,6,6	-	-	-		
87	OHX	5	4172	-	0,6,6	-	-	-		
87	OHX	6	2089	-	0,6,6	-	-	-		
87	OHX	m5	303	-	0,6,6	-	-	-		
87	OHX	1	4131	-	0,6,6	-	-	-		
87	OHX	2	2144	-	0,6,6	-	-	-		
87	OHX	6	2099	-	0,6,6	-	-	-		
87	OHX	5	4066	-	0,6,6	-	-	-		
87	OHX	2	2094	-	0,6,6	-	-	-		
87	OHX	2	2140	-	0,6,6	-	-	-		
87	OHX	6	2155	-	0,6,6	-	-	-		
87	OHX	15	307	-	0,6,6	-	-	-		
87	OHX	5	3894	-	0,6,6	-	-	-		
87	OHX	6	2086	-	0,6,6	-	-	-		
87	OHX	5	4063	-	0,6,6	-	-	-		
87	OHX	5	3921	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4035	-	0,6,6	-	-	-		
87	OHX	1	4126	-	0,6,6	-	-	-		
87	OHX	1	4184	-	0,6,6	-	-	-		
87	OHX	6	2211	-	0,6,6	-	-	-		
87	OHX	5	3975	-	0,6,6	-	-	-		
87	OHX	5	4054	-	0,6,6	-	-	-		
87	OHX	5	4102	-	0,6,6	-	-	-		
87	OHX	5	4178	-	0,6,6	-	-	-		
87	OHX	6	2185	-	0,6,6	-	-	-		
87	OHX	1	4113	-	0,6,6	-	-	-		
87	OHX	5	4078	-	0,6,6	-	-	-		
87	OHX	6	2072	-	0,6,6	-	-	-		
87	OHX	1	4160	-	0,6,6	-	-	-		
87	OHX	2	2107	-	0,6,6	-	-	-		
87	OHX	2	2147	-	0,6,6	-	-	-		
87	OHX	5	4156	-	0,6,6	-	-	-		
87	OHX	5	4173	-	0,6,6	-	-	-		
87	OHX	5	4053	-	0,6,6	-	-	-		
87	OHX	1	4030	-	0,6,6	-	-	-		
87	OHX	6	2128	-	0,6,6	-	-	-		
87	OHX	2	2167	-	0,6,6	-	-	-		
87	OHX	1	4087	-	0,6,6	-	-	-		
87	OHX	1	4136	-	0,6,6	-	-	-		
87	OHX	5	3979	-	0,6,6	-	-	-		
87	OHX	5	4237	-	0,6,6	-	-	-		
87	OHX	1	4153	-	0,6,6	-	-	-		
87	OHX	2	2130	-	0,6,6	-	-	-		
87	OHX	1	3873	-	0,6,6	-	-	-		
87	OHX	8	220	-	0,6,6	-	-	-		
87	OHX	2	2028	-	0,6,6	-	-	-		
87	OHX	1	4052	-	0,6,6	-	-	-		
87	OHX	1	4062	-	0,6,6	-	-	-		
87	OHX	6	2209	-	0,6,6	-	-	-		
87	OHX	5	3909	-	0,6,6	-	-	-		
87	OHX	6	2060	-	0,6,6	-	-	-		
87	OHX	1	4061	-	0,6,6	-	-	-		
87	OHX	o9	101	-	0,6,6	-	-	-		
87	OHX	5	4150	-	0,6,6	-	-	-		
87	OHX	6	2087	-	0,6,6	-	-	-		
87	OHX	2	2081	-	0,6,6	-	-	-		
87	OHX	5	4015	-	0,6,6	-	-	-		
87	OHX	5	3907	-	0,6,6	-	-	-		
87	OHX	2	2174	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4109	-	0,6,6	-	-	-		
87	OHX	5	4034	-	0,6,6	-	-	-		
87	OHX	1	4175	-	0,6,6	-	-	-		
87	OHX	1	4025	-	0,6,6	-	-	-		
87	OHX	5	3902	-	0,6,6	-	-	-		
87	OHX	5	4058	-	0,6,6	-	-	-		
87	OHX	1	4079	-	0,6,6	-	-	-		
87	OHX	1	4141	-	0,6,6	-	-	-		
87	OHX	6	2058	-	0,6,6	-	-	-		
87	OHX	1	4083	-	0,6,6	-	-	-		
87	OHX	6	2106	-	0,6,6	-	-	-		
87	OHX	6	2187	-	0,6,6	-	-	-		
87	OHX	2	2156	-	0,6,6	-	-	-		
87	OHX	5	3931	-	0,6,6	-	-	-		
87	OHX	5	4152	-	0,6,6	-	-	-		
87	OHX	5	4161	-	0,6,6	-	-	-		
87	OHX	5	4197	-	0,6,6	-	-	-		
87	OHX	5	4036	-	0,6,6	-	-	-		
87	OHX	5	4006	-	0,6,6	-	-	-		
87	OHX	5	4211	-	0,6,6	-	-	-		
87	OHX	q2	502	-	0,6,6	-	-	-		
87	OHX	1	4077	-	0,6,6	-	-	-		
87	OHX	6	2059	-	0,6,6	-	-	-		
87	OHX	6	2071	-	0,6,6	-	-	-		
87	OHX	6	2100	-	0,6,6	-	-	-		
87	OHX	5	4073	-	0,6,6	-	-	-		
87	OHX	8	218	-	0,6,6	-	-	-		
87	OHX	1	3987	-	0,6,6	-	-	-		
87	OHX	5	4072	-	0,6,6	-	-	-		
87	OHX	6	2147	-	0,6,6	-	-	-		
87	OHX	5	4206	-	0,6,6	-	-	-		
87	OHX	2	2153	-	0,6,6	-	-	-		
87	OHX	5	4219	-	0,6,6	-	-	-		
87	OHX	l3	408	-	0,6,6	-	-	-		
87	OHX	1	3967	-	0,6,6	-	-	-		
87	OHX	6	2110	-	0,6,6	-	-	-		
87	OHX	1	3882	-	0,6,6	-	-	-		
87	OHX	1	3889	-	0,6,6	-	-	-		
87	OHX	5	4045	-	0,6,6	-	-	-		
87	OHX	5	4092	-	0,6,6	-	-	-		
87	OHX	5	4202	-	0,6,6	-	-	-		
87	OHX	D9	102	-	0,6,6	-	-	-		
87	OHX	5	3940	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4186	-	0,6,6	-	-	-		
87	OHX	1	4049	-	0,6,6	-	-	-		
87	OHX	1	3996	36	0,6,6	-	-	-		
87	OHX	5	3960	-	0,6,6	-	-	-		
87	OHX	5	4046	-	0,6,6	-	-	-		
87	OHX	5	4108	-	0,6,6	-	-	-		
87	OHX	3	219	-	0,6,6	-	-	-		
87	OHX	6	2175	-	0,6,6	-	-	-		
87	OHX	2	2114	-	0,6,6	-	-	-		
87	OHX	8	233	-	0,6,6	-	-	-		
87	OHX	1	3913	-	0,6,6	-	-	-		
87	OHX	5	4132	-	0,6,6	-	-	-		
87	OHX	1	4013	-	0,6,6	-	-	-		
87	OHX	1	3935	-	0,6,6	-	-	-		
87	OHX	1	4117	-	0,6,6	-	-	-		
87	OHX	5	4128	-	0,6,6	-	-	-		
87	OHX	1	3869	-	0,6,6	-	-	-		
87	OHX	6	2144	-	0,6,6	-	-	-		
87	OHX	5	3901	-	0,6,6	-	-	-		
87	OHX	1	3883	-	0,6,6	-	-	-		
87	OHX	1	3930	-	0,6,6	-	-	-		
87	OHX	4	225	-	0,6,6	-	-	-		
87	OHX	5	4158	-	0,6,6	-	-	-		
87	OHX	6	2167	-	0,6,6	-	-	-		
87	OHX	5	4166	-	0,6,6	-	-	-		
87	OHX	2	2125	-	0,6,6	-	-	-		
87	OHX	1	3952	-	0,6,6	-	-	-		
87	OHX	1	3928	-	0,6,6	-	-	-		
87	OHX	5	3976	-	0,6,6	-	-	-		
87	OHX	1	4044	-	0,6,6	-	-	-		
87	OHX	19	202	-	0,6,6	-	-	-		
87	OHX	1	4011	-	0,6,6	-	-	-		
87	OHX	5	4093	-	0,6,6	-	-	-		
87	OHX	8	227	-	0,6,6	-	-	-		
87	OHX	5	3987	-	0,6,6	-	-	-		
87	OHX	1	4058	-	0,6,6	-	-	-		
87	OHX	M7	206	-	0,6,6	-	-	-		
87	OHX	2	2126	-	0,6,6	-	-	-		
87	OHX	1	3904	-	0,6,6	-	-	-		
87	OHX	5	3920	-	0,6,6	-	-	-		
87	OHX	6	2137	-	0,6,6	-	-	-		
87	OHX	1	3993	-	0,6,6	-	-	-		
87	OHX	1	4203	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2083	-	0,6,6	-	-	-		
87	OHX	2	2168	-	0,6,6	-	-	-		
87	OHX	5	4116	-	0,6,6	-	-	-		
87	OHX	3	224	-	0,6,6	-	-	-		
88	GET	2	2181	-	33,36,36	0.49	0	43,55,55	1.87	12 (27%)
87	OHX	5	4016	-	0,6,6	-	-	-		
87	OHX	1	3974	-	0,6,6	-	-	-		
87	OHX	1	3998	-	0,6,6	-	-	-		
87	OHX	5	4227	-	0,6,6	-	-	-		
87	OHX	2	2038	-	0,6,6	-	-	-		
87	OHX	5	3981	-	0,6,6	-	-	-		
87	OHX	5	3957	-	0,6,6	-	-	-		
87	OHX	5	4120	-	0,6,6	-	-	-		
87	OHX	5	4187	-	0,6,6	-	-	-		
87	OHX	1	3941	-	0,6,6	-	-	-		
87	OHX	1	3944	-	0,6,6	-	-	-		
87	OHX	5	4216	-	0,6,6	-	-	-		
87	OHX	2	2055	-	0,6,6	-	-	-		
87	OHX	1	4164	-	0,6,6	-	-	-		
87	OHX	5	4218	-	0,6,6	-	-	-		
87	OHX	5	4196	-	0,6,6	-	-	-		
87	OHX	5	4228	-	0,6,6	-	-	-		
87	OHX	5	3910	-	0,6,6	-	-	-		
87	OHX	5	4200	-	0,6,6	-	-	-		
87	OHX	6	2056	-	0,6,6	-	-	-		
87	OHX	5	3980	-	0,6,6	-	-	-		
87	OHX	1	4104	-	0,6,6	-	-	-		
87	OHX	5	4118	-	0,6,6	-	-	-		
87	OHX	2	2025	-	0,6,6	-	-	-		
87	OHX	6	2166	-	0,6,6	-	-	-		
87	OHX	5	3943	-	0,6,6	-	-	-		
87	OHX	5	4033	-	0,6,6	-	-	-		
87	OHX	2	2058	-	0,6,6	-	-	-		
87	OHX	6	2168	-	0,6,6	-	-	-		
87	OHX	7	218	-	0,6,6	-	-	-		
87	OHX	5	4037	-	0,6,6	-	-	-		
87	OHX	1	3916	-	0,6,6	-	-	-		
87	OHX	5	4220	-	0,6,6	-	-	-		
87	OHX	2	2026	-	0,6,6	-	-	-		
87	OHX	5	3904	-	0,6,6	-	-	-		
87	OHX	1	3899	-	0,6,6	-	-	-		
87	OHX	5	4164	-	0,6,6	-	-	-		
87	OHX	5	3973	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	3951	-	0,6,6	-	-	-		
87	OHX	5	4048	-	0,6,6	-	-	-		
87	OHX	5	4059	-	0,6,6	-	-	-		
87	OHX	6	2066	-	0,6,6	-	-	-		
87	OHX	1	4100	-	0,6,6	-	-	-		
87	OHX	5	4244	-	0,6,6	-	-	-		
87	OHX	6	2055	-	0,6,6	-	-	-		
87	OHX	6	2084	-	0,6,6	-	-	-		
87	OHX	6	2189	-	0,6,6	-	-	-		
87	OHX	5	4114	-	0,6,6	-	-	-		
87	OHX	5	4243	-	0,6,6	-	-	-		
87	OHX	5	4031	-	0,6,6	-	-	-		
87	OHX	6	2119	-	0,6,6	-	-	-		
87	OHX	2	2133	-	0,6,6	-	-	-		
87	OHX	5	4133	-	0,6,6	-	-	-		
87	OHX	2	2152	-	0,6,6	-	-	-		
87	OHX	5	4096	-	0,6,6	-	-	-		
87	OHX	6	2136	-	0,6,6	-	-	-		
87	OHX	2	2132	-	0,6,6	-	-	-		
87	OHX	1	4078	-	0,6,6	-	-	-		
87	OHX	1	4183	-	0,6,6	-	-	-		
87	OHX	5	3956	-	0,6,6	-	-	-		
87	OHX	2	2062	-	0,6,6	-	-	-		
87	OHX	1	4045	-	0,6,6	-	-	-		
87	OHX	O3	202	-	0,6,6	-	-	-		
87	OHX	5	4069	-	0,6,6	-	-	-		
87	OHX	5	4209	-	0,6,6	-	-	-		
87	OHX	5	4222	-	0,6,6	-	-	-		
87	OHX	6	2150	-	0,6,6	-	-	-		
87	OHX	6	2097	-	0,6,6	-	-	-		
87	OHX	6	2163	-	0,6,6	-	-	-		
87	OHX	5	4065	-	0,6,6	-	-	-		
87	OHX	5	4159	-	0,6,6	-	-	-		
87	OHX	2	2160	-	0,6,6	-	-	-		
87	OHX	5	4027	-	0,6,6	-	-	-		
87	OHX	5	4134	-	0,6,6	-	-	-		
87	OHX	m7	205	-	0,6,6	-	-	-		
87	OHX	6	2085	-	0,6,6	-	-	-		
87	OHX	5	3897	-	0,6,6	-	-	-		
87	OHX	1	4181	-	0,6,6	-	-	-		
87	OHX	1	3898	-	0,6,6	-	-	-		
87	OHX	1	3999	-	0,6,6	-	-	-		
87	OHX	6	2169	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4143	-	0,6,6	-	-	-		
87	OHX	6	2063	-	0,6,6	-	-	-		
87	OHX	6	2146	-	0,6,6	-	-	-		
87	OHX	5	4148	-	0,6,6	-	-	-		
87	OHX	5	4040	-	0,6,6	-	-	-		
87	OHX	6	2198	-	0,6,6	-	-	-		
87	OHX	5	4229	-	0,6,6	-	-	-		
87	OHX	5	4154	-	0,6,6	-	-	-		
87	OHX	1	4093	-	0,6,6	-	-	-		
87	OHX	1	3920	-	0,6,6	-	-	-		
87	OHX	1	4163	-	0,6,6	-	-	-		
87	OHX	n9	103	-	0,6,6	-	-	-		
87	OHX	1	3911	-	0,6,6	-	-	-		
87	OHX	1	4038	-	0,6,6	-	-	-		
87	OHX	5	4071	-	0,6,6	-	-	-		
87	OHX	2	2123	-	0,6,6	-	-	-		
87	OHX	4	224	-	0,6,6	-	-	-		
87	OHX	5	4122	-	0,6,6	-	-	-		
87	OHX	6	2067	-	0,6,6	-	-	-		
87	OHX	5	3950	-	0,6,6	-	-	-		
87	OHX	1	4066	-	0,6,6	-	-	-		
87	OHX	5	4144	-	0,6,6	-	-	-		
87	OHX	5	3982	-	0,6,6	-	-	-		
87	OHX	1	4130	-	0,6,6	-	-	-		
87	OHX	1	3908	-	0,6,6	-	-	-		
87	OHX	1	4032	-	0,6,6	-	-	-		
87	OHX	1	3931	-	0,6,6	-	-	-		
87	OHX	1	4189	-	0,6,6	-	-	-		
87	OHX	O2	202	-	0,6,6	-	-	-		
87	OHX	5	3978	-	0,6,6	-	-	-		
87	OHX	5	4104	-	0,6,6	-	-	-		
87	OHX	1	4202	-	0,6,6	-	-	-		
87	OHX	5	4140	-	0,6,6	-	-	-		
87	OHX	4	233	-	0,6,6	-	-	-		
87	OHX	5	3916	-	0,6,6	-	-	-		
87	OHX	5	4009	-	0,6,6	-	-	-		
87	OHX	15	304	-	0,6,6	-	-	-		
87	OHX	1	3975	-	0,6,6	-	-	-		
87	OHX	5	4014	-	0,6,6	-	-	-		
87	OHX	2	2069	-	0,6,6	-	-	-		
87	OHX	C3	201	-	0,6,6	-	-	-		
87	OHX	1	4072	-	0,6,6	-	-	-		
87	OHX	1	4124	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4039	-	0,6,6	-	-	-		
87	OHX	2	2078	-	0,6,6	-	-	-		
87	OHX	1	4080	-	0,6,6	-	-	-		
87	OHX	1	4178	-	0,6,6	-	-	-		
87	OHX	3	225	-	0,6,6	-	-	-		
87	OHX	5	4075	-	0,6,6	-	-	-		
87	OHX	6	2134	-	0,6,6	-	-	-		
87	OHX	5	4212	-	0,6,6	-	-	-		
87	OHX	5	4221	-	0,6,6	-	-	-		
87	OHX	6	2156	-	0,6,6	-	-	-		
87	OHX	5	4231	-	0,6,6	-	-	-		
87	OHX	1	4088	-	0,6,6	-	-	-		
87	OHX	1	4119	-	0,6,6	-	-	-		
87	OHX	3	217	-	0,6,6	-	-	-		
87	OHX	2	2128	-	0,6,6	-	-	-		
87	OHX	1	4081	-	0,6,6	-	-	-		
87	OHX	1	4156	-	0,6,6	-	-	-		
87	OHX	1	3933	-	0,6,6	-	-	-		
87	OHX	3	216	-	0,6,6	-	-	-		
87	OHX	L3	403	-	0,6,6	-	-	-		
87	OHX	1	4101	-	0,6,6	-	-	-		
87	OHX	6	2141	-	0,6,6	-	-	-		
87	OHX	6	2180	-	0,6,6	-	-	-		
87	OHX	7	223	-	0,6,6	-	-	-		
87	OHX	5	4142	-	0,6,6	-	-	-		
87	OHX	m9	201	-	0,6,6	-	-	-		
87	OHX	1	4204	-	0,6,6	-	-	-		
87	OHX	2	2172	-	0,6,6	-	-	-		
87	OHX	1	3891	-	0,6,6	-	-	-		
87	OHX	5	3939	-	0,6,6	-	-	-		
87	OHX	1	4107	-	0,6,6	-	-	-		
87	OHX	5	4138	-	0,6,6	-	-	-		
87	OHX	5	4165	-	0,6,6	-	-	-		
87	OHX	1	3990	-	0,6,6	-	-	-		
87	OHX	5	4082	-	0,6,6	-	-	-		
87	OHX	1	3924	-	0,6,6	-	-	-		
87	OHX	1	3988	-	0,6,6	-	-	-		
87	OHX	1	4056	-	0,6,6	-	-	-		
87	OHX	5	4095	-	0,6,6	-	-	-		
87	OHX	5	4189	-	0,6,6	-	-	-		
87	OHX	6	2129	-	0,6,6	-	-	-		
87	OHX	5	3954	-	0,6,6	-	-	-		
87	OHX	2	2161	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4150	-	0,6,6	-	-	-		
87	OHX	1	4208	-	0,6,6	-	-	-		
87	OHX	6	2132	-	0,6,6	-	-	-		
87	OHX	c5	201	-	0,6,6	-	-	-		
87	OHX	1	4005	-	0,6,6	-	-	-		
87	OHX	5	3936	-	0,6,6	-	-	-		
87	OHX	5	4022	-	0,6,6	-	-	-		
87	OHX	5	4170	-	0,6,6	-	-	-		
87	OHX	5	4193	-	0,6,6	-	-	-		
87	OHX	1	4085	-	0,6,6	-	-	-		
87	OHX	6	2194	-	0,6,6	-	-	-		
87	OHX	1	4152	-	0,6,6	-	-	-		
87	OHX	5	3927	-	0,6,6	-	-	-		
87	OHX	5	4236	-	0,6,6	-	-	-		
87	OHX	1	4146	-	0,6,6	-	-	-		
87	OHX	5	4217	-	0,6,6	-	-	-		
87	OHX	5	3985	-	0,6,6	-	-	-		
87	OHX	2	2169	-	0,6,6	-	-	-		
87	OHX	1	4050	-	0,6,6	-	-	-		
87	OHX	3	220	-	0,6,6	-	-	-		
87	OHX	2	2024	-	0,6,6	-	-	-		
87	OHX	6	2190	-	0,6,6	-	-	-		
87	OHX	6	2096	-	0,6,6	-	-	-		
87	OHX	1	4206	-	0,6,6	-	-	-		
87	OHX	c3	201	-	0,6,6	-	-	-		
87	OHX	5	4223	-	0,6,6	-	-	-		
87	OHX	1	3896	-	0,6,6	-	-	-		
87	OHX	2	2065	-	0,6,6	-	-	-		
87	OHX	6	2081	-	0,6,6	-	-	-		
87	OHX	6	2054	-	0,6,6	-	-	-		
87	OHX	1	4000	-	0,6,6	-	-	-		
87	OHX	5	4012	-	0,6,6	-	-	-		
87	OHX	1	4192	-	0,6,6	-	-	-		
87	OHX	1	3884	-	0,6,6	-	-	-		
87	OHX	1	4186	-	0,6,6	-	-	-		
87	OHX	1	3919	-	0,6,6	-	-	-		
87	OHX	2	2146	-	0,6,6	-	-	-		
87	OHX	1	3874	-	0,6,6	-	-	-		
87	OHX	o3	203	-	0,6,6	-	-	-		
87	OHX	D3	202	-	0,6,6	-	-	-		
87	OHX	1	4168	-	0,6,6	-	-	-		
87	OHX	6	2108	-	0,6,6	-	-	-		
87	OHX	5	4026	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	3997	-	0,6,6	-	-	-		
87	OHX	2	2051	-	0,6,6	-	-	-		
87	OHX	5	3970	-	0,6,6	-	-	-		
87	OHX	1	4071	-	0,6,6	-	-	-		
87	OHX	6	2151	-	0,6,6	-	-	-		
87	OHX	1	4171	-	0,6,6	-	-	-		
87	OHX	5	4052	-	0,6,6	-	-	-		
87	OHX	1	3984	-	0,6,6	-	-	-		
87	OHX	5	4238	-	0,6,6	-	-	-		
87	OHX	L3	404	-	0,6,6	-	-	-		
87	OHX	5	3929	-	0,6,6	-	-	-		
87	OHX	1	4201	-	0,6,6	-	-	-		
87	OHX	2	2049	-	0,6,6	-	-	-		
87	OHX	1	4191	-	0,6,6	-	-	-		
87	OHX	1	4043	-	0,6,6	-	-	-		
87	OHX	1	4194	-	0,6,6	-	-	-		
87	OHX	6	2109	-	0,6,6	-	-	-		
87	OHX	2	2063	-	0,6,6	-	-	-		
87	OHX	2	2154	-	0,6,6	-	-	-		
87	OHX	1	4108	-	0,6,6	-	-	-		
87	OHX	5	3932	-	0,6,6	-	-	-		
87	OHX	1	4114	-	0,6,6	-	-	-		
87	OHX	6	2079	-	0,6,6	-	-	-		
87	OHX	5	4182	-	0,6,6	-	-	-		
87	OHX	4	227	-	0,6,6	-	-	-		
87	OHX	5	4057	-	0,6,6	-	-	-		
87	OHX	6	2120	-	0,6,6	-	-	-		
87	OHX	6	2159	-	0,6,6	-	-	-		
87	OHX	1	4137	-	0,6,6	-	-	-		
87	OHX	5	4088	-	0,6,6	-	-	-		
87	OHX	5	4106	-	0,6,6	-	-	-		
87	OHX	5	4171	-	0,6,6	-	-	-		
87	OHX	5	4042	-	0,6,6	-	-	-		
87	OHX	1	4019	-	0,6,6	-	-	-		
87	OHX	6	2090	-	0,6,6	-	-	-		
87	OHX	6	2182	-	0,6,6	-	-	-		
87	OHX	5	4192	-	0,6,6	-	-	-		
87	OHX	1	4039	-	0,6,6	-	-	-		
87	OHX	1	4016	-	0,6,6	-	-	-		
87	OHX	1	4212	-	0,6,6	-	-	-		
87	OHX	6	2091	-	0,6,6	-	-	-		
87	OHX	3	215	-	0,6,6	-	-	-		
87	OHX	6	2065	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4097	-	0,6,6	-	-	-		
87	OHX	1	4089	-	0,6,6	-	-	-		
87	OHX	5	3947	-	0,6,6	-	-	-		
87	OHX	6	2070	-	0,6,6	-	-	-		
87	OHX	5	4131	-	0,6,6	-	-	-		
87	OHX	C8	201	-	0,6,6	-	-	-		
87	OHX	2	2118	-	0,6,6	-	-	-		
87	OHX	1	3901	-	0,6,6	-	-	-		
87	OHX	1	3957	-	0,6,6	-	-	-		
87	OHX	4	228	-	0,6,6	-	-	-		
87	OHX	6	2057	-	0,6,6	-	-	-		
87	OHX	5	3914	-	0,6,6	-	-	-		
87	OHX	5	4076	-	0,6,6	-	-	-		
87	OHX	1	4008	-	0,6,6	-	-	-		
87	OHX	1	4123	-	0,6,6	-	-	-		
87	OHX	1	4142	-	0,6,6	-	-	-		
87	OHX	5	3898	-	0,6,6	-	-	-		
87	OHX	1	4200	-	0,6,6	-	-	-		
87	OHX	1	3980	-	0,6,6	-	-	-		
87	OHX	6	2143	-	0,6,6	-	-	-		
87	OHX	6	2179	-	0,6,6	-	-	-		
87	OHX	5	3984	-	0,6,6	-	-	-		
87	OHX	5	4184	-	0,6,6	-	-	-		
87	OHX	5	4188	-	0,6,6	-	-	-		
87	OHX	1	3955	-	0,6,6	-	-	-		
87	OHX	1	4165	-	0,6,6	-	-	-		
87	OHX	2	2036	-	0,6,6	-	-	-		
87	OHX	1	3945	-	0,6,6	-	-	-		
87	OHX	5	4099	-	0,6,6	-	-	-		
87	OHX	2	2108	-	0,6,6	-	-	-		
87	OHX	1	4139	-	0,6,6	-	-	-		
87	OHX	5	4162	-	0,6,6	-	-	-		
87	OHX	Q2	502	-	0,6,6	-	-	-		
87	OHX	5	4177	-	0,6,6	-	-	-		
87	OHX	5	4210	-	0,6,6	-	-	-		
87	OHX	1	3895	-	0,6,6	-	-	-		
87	OHX	7	226	-	0,6,6	-	-	-		
87	OHX	5	4029	-	0,6,6	-	-	-		
87	OHX	6	2191	-	0,6,6	-	-	-		
87	OHX	5	3912	-	0,6,6	-	-	-		
87	OHX	2	2164	-	0,6,6	-	-	-		
87	OHX	5	3937	-	0,6,6	-	-	-		
87	OHX	5	3958	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4023	-	0,6,6	-	-	-		
87	OHX	6	2094	-	0,6,6	-	-	-		
87	OHX	5	4235	-	0,6,6	-	-	-		
87	OHX	1	3951	-	0,6,6	-	-	-		
87	OHX	1	4046	-	0,6,6	-	-	-		
87	OHX	1	4059	-	0,6,6	-	-	-		
87	OHX	6	2101	-	0,6,6	-	-	-		
87	OHX	2	2077	-	0,6,6	-	-	-		
87	OHX	2	2105	-	0,6,6	-	-	-		
87	OHX	1	3981	-	0,6,6	-	-	-		
87	OHX	2	2149	-	0,6,6	-	-	-		
87	OHX	6	2204	-	0,6,6	-	-	-		
87	OHX	5	4094	-	0,6,6	-	-	-		
87	OHX	5	4180	-	0,6,6	-	-	-		
87	OHX	1	4021	-	0,6,6	-	-	-		
87	OHX	5	4060	-	0,6,6	-	-	-		
87	OHX	5	3963	-	0,6,6	-	-	-		
87	OHX	5	4091	-	0,6,6	-	-	-		
87	OHX	5	3906	-	0,6,6	-	-	-		
87	OHX	5	4089	-	0,6,6	-	-	-		
87	OHX	5	4136	-	0,6,6	-	-	-		
87	OHX	1	3995	-	0,6,6	-	-	-		
87	OHX	2	2135	-	0,6,6	-	-	-		
87	OHX	5	4207	-	0,6,6	-	-	-		
87	OHX	1	4133	-	0,6,6	-	-	-		
87	OHX	1	3982	-	0,6,6	-	-	-		
87	OHX	6	2200	-	0,6,6	-	-	-		
87	OHX	1	3956	-	0,6,6	-	-	-		
87	OHX	1	4103	-	0,6,6	-	-	-		
87	OHX	1	3878	-	0,6,6	-	-	-		
87	OHX	1	4125	-	0,6,6	-	-	-		
87	OHX	6	2131	-	0,6,6	-	-	-		
87	OHX	5	4185	-	0,6,6	-	-	-		
87	OHX	8	229	-	0,6,6	-	-	-		
87	OHX	m1	202	-	0,6,6	-	-	-		
87	OHX	1	4121	-	0,6,6	-	-	-		
87	OHX	SR	401	-	0,6,6	-	-	-		
87	OHX	6	2153	-	0,6,6	-	-	-		
87	OHX	5	4025	-	0,6,6	-	-	-		
87	OHX	2	2151	-	0,6,6	-	-	-		
87	OHX	1	3905	-	0,6,6	-	-	-		
87	OHX	4	229	-	0,6,6	-	-	-		
87	OHX	5	3966	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	6	2103	-	0,6,6	-	-	-		
87	OHX	5	4003	-	0,6,6	-	-	-		
87	OHX	2	2127	-	0,6,6	-	-	-		
87	OHX	5	3968	-	0,6,6	-	-	-		
87	OHX	5	4004	-	0,6,6	-	-	-		
87	OHX	5	4111	-	0,6,6	-	-	-		
87	OHX	5	4001	-	0,6,6	-	-	-		
87	OHX	8	234	-	0,6,6	-	-	-		
87	OHX	5	3971	-	0,6,6	-	-	-		
87	OHX	5	3926	-	0,6,6	-	-	-		
87	OHX	6	2082	-	0,6,6	-	-	-		
87	OHX	2	2120	-	0,6,6	-	-	-		
87	OHX	5	4068	-	0,6,6	-	-	-		
87	OHX	2	2121	-	0,6,6	-	-	-		
87	OHX	1	4145	-	0,6,6	-	-	-		
87	OHX	5	4190	-	0,6,6	-	-	-		
87	OHX	5	4049	-	0,6,6	-	-	-		
87	OHX	5	4126	-	0,6,6	-	-	-		
87	OHX	4	240	-	0,6,6	-	-	-		
87	OHX	1	4110	-	0,6,6	-	-	-		
87	OHX	6	2181	-	0,6,6	-	-	-		
87	OHX	6	2173	-	0,6,6	-	-	-		
87	OHX	2	2122	-	0,6,6	-	-	-		
87	OHX	5	4103	-	0,6,6	-	-	-		
87	OHX	2	2103	-	0,6,6	-	-	-		
87	OHX	4	238	-	0,6,6	-	-	-		
87	OHX	2	2068	-	0,6,6	-	-	-		
87	OHX	1	3961	-	0,6,6	-	-	-		
87	OHX	1	4193	-	0,6,6	-	-	-		
87	OHX	5	4123	-	0,6,6	-	-	-		
87	OHX	5	4160	-	0,6,6	-	-	-		
87	OHX	1	3925	-	0,6,6	-	-	-		
87	OHX	5	4230	-	0,6,6	-	-	-		
87	OHX	1	4086	-	0,6,6	-	-	-		
87	OHX	1	3938	-	0,6,6	-	-	-		
87	OHX	1	3942	-	0,6,6	-	-	-		
87	OHX	5	4183	-	0,6,6	-	-	-		
87	OHX	1	3972	-	0,6,6	-	-	-		
87	OHX	1	4055	-	0,6,6	-	-	-		
87	OHX	2	2179	-	0,6,6	-	-	-		
87	OHX	1	3997	-	0,6,6	-	-	-		
87	OHX	3	223	-	0,6,6	-	-	-		
87	OHX	1	3983	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	3946	-	0,6,6	-	-	-		
87	OHX	2	2035	-	0,6,6	-	-	-		
87	OHX	6	2095	-	0,6,6	-	-	-		
87	OHX	2	2143	-	0,6,6	-	-	-		
87	OHX	2	2060	-	0,6,6	-	-	-		
87	OHX	5	4061	-	0,6,6	-	-	-		
87	OHX	5	4130	-	0,6,6	-	-	-		
87	OHX	8	230	-	0,6,6	-	-	-		
87	OHX	m0	302	-	0,6,6	-	-	-		
87	OHX	5	4021	-	0,6,6	-	-	-		
87	OHX	1	4151	-	0,6,6	-	-	-		
87	OHX	1	4024	-	0,6,6	-	-	-		
87	OHX	5	4084	-	0,6,6	-	-	-		
87	OHX	1	4029	-	0,6,6	-	-	-		
87	OHX	1	3950	-	0,6,6	-	-	-		
87	OHX	6	2092	-	0,6,6	-	-	-		
87	OHX	6	2105	-	0,6,6	-	-	-		
87	OHX	5	3944	-	0,6,6	-	-	-		
87	OHX	5	4208	-	0,6,6	-	-	-		
87	OHX	M6	202	-	0,6,6	-	-	-		
87	OHX	6	2177	-	0,6,6	-	-	-		
87	OHX	O7	103	-	0,6,6	-	-	-		
87	OHX	6	2126	-	0,6,6	-	-	-		
87	OHX	5	4115	-	0,6,6	-	-	-		
87	OHX	6	2202	-	0,6,6	-	-	-		
87	OHX	1	4027	-	0,6,6	-	-	-		
87	OHX	5	3911	-	0,6,6	-	-	-		
87	OHX	5	3962	-	0,6,6	-	-	-		
87	OHX	2	2048	-	0,6,6	-	-	-		
87	OHX	2	2110	-	0,6,6	-	-	-		
87	OHX	1	3991	-	0,6,6	-	-	-		
87	OHX	M9	203	-	0,6,6	-	-	-		
87	OHX	5	3969	-	0,6,6	-	-	-		
87	OHX	5	4179	-	0,6,6	-	-	-		
87	OHX	2	2178	-	0,6,6	-	-	-		
87	OHX	1	3932	-	0,6,6	-	-	-		
87	OHX	O1	202	-	0,6,6	-	-	-		
87	OHX	6	2174	-	0,6,6	-	-	-		
87	OHX	6	2111	-	0,6,6	-	-	-		
87	OHX	6	2077	-	0,6,6	-	-	-		
87	OHX	5	3903	-	0,6,6	-	-	-		
87	OHX	5	3996	-	0,6,6	-	-	-		
87	OHX	1	4169	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4242	-	0,6,6	-	-	-		
87	OHX	2	2045	-	0,6,6	-	-	-		
87	OHX	5	4112	-	0,6,6	-	-	-		
87	OHX	5	3913	-	0,6,6	-	-	-		
87	OHX	2	2064	-	0,6,6	-	-	-		
87	OHX	6	2188	-	0,6,6	-	-	-		
87	OHX	8	235	-	0,6,6	-	-	-		
87	OHX	1	4129	-	0,6,6	-	-	-		
87	OHX	4	232	-	0,6,6	-	-	-		
87	OHX	1	3949	-	0,6,6	-	-	-		
87	OHX	5	3935	-	0,6,6	-	-	-		
87	OHX	5	4117	-	0,6,6	-	-	-		
87	OHX	5	3994	-	0,6,6	-	-	-		
87	OHX	n3	202	-	0,6,6	-	-	-		
87	OHX	1	4064	-	0,6,6	-	-	-		
87	OHX	5	3930	-	0,6,6	-	-	-		
87	OHX	2	2141	-	0,6,6	-	-	-		
87	OHX	1	3926	-	0,6,6	-	-	-		
87	OHX	1	4017	-	0,6,6	-	-	-		
87	OHX	5	3952	-	0,6,6	-	-	-		
87	OHX	5	4011	-	0,6,6	-	-	-		
87	OHX	1	3923	-	0,6,6	-	-	-		
87	OHX	5	4041	-	0,6,6	-	-	-		
87	OHX	5	4245	-	0,6,6	-	-	-		
87	OHX	1	3888	-	0,6,6	-	-	-		
87	OHX	5	3961	-	0,6,6	-	-	-		
87	OHX	1	3910	-	0,6,6	-	-	-		
87	OHX	1	3977	-	0,6,6	-	-	-		
87	OHX	1	4028	-	0,6,6	-	-	-		
87	OHX	5	3934	-	0,6,6	-	-	-		
87	OHX	1	3953	-	0,6,6	-	-	-		
87	OHX	2	2100	-	0,6,6	-	-	-		
87	OHX	5	4203	-	0,6,6	-	-	-		
87	OHX	7	221	-	0,6,6	-	-	-		
87	OHX	2	2177	-	0,6,6	-	-	-		
87	OHX	6	2158	-	0,6,6	-	-	-		
87	OHX	5	4232	-	0,6,6	-	-	-		
87	OHX	2	2101	-	0,6,6	-	-	-		
87	OHX	1	4075	-	0,6,6	-	-	-		
87	OHX	2	2061	-	0,6,6	-	-	-		
87	OHX	1	3954	-	0,6,6	-	-	-		
87	OHX	1	3970	-	0,6,6	-	-	-		
87	OHX	5	4240	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	q1	102	-	0,6,6	-	-	-		
87	OHX	6	2068	-	0,6,6	-	-	-		
87	OHX	2	2080	-	0,6,6	-	-	-		
87	OHX	6	2199	-	0,6,6	-	-	-		
87	OHX	5	3974	-	0,6,6	-	-	-		
87	OHX	5	3986	-	0,6,6	-	-	-		
87	OHX	2	2086	-	0,6,6	-	-	-		
87	OHX	8	228	-	0,6,6	-	-	-		
87	OHX	6	2152	-	0,6,6	-	-	-		
87	OHX	6	2078	-	0,6,6	-	-	-		
87	OHX	5	3941	-	0,6,6	-	-	-		
87	OHX	2	2074	-	0,6,6	-	-	-		
87	OHX	1	3887	-	0,6,6	-	-	-		
87	OHX	5	3992	-	0,6,6	-	-	-		
87	OHX	2	2109	-	0,6,6	-	-	-		
87	OHX	2	2142	-	0,6,6	-	-	-		
87	OHX	7	225	-	0,6,6	-	-	-		
87	OHX	1	4182	-	0,6,6	-	-	-		
87	OHX	5	3959	-	0,6,6	-	-	-		
87	OHX	7	217	-	0,6,6	-	-	-		
87	OHX	5	3993	-	0,6,6	-	-	-		
87	OHX	2	2030	-	0,6,6	-	-	-		
87	OHX	2	2041	-	0,6,6	-	-	-		
87	OHX	2	2129	-	0,6,6	-	-	-		
87	OHX	5	4050	-	0,6,6	-	-	-		
87	OHX	7	219	-	0,6,6	-	-	-		
87	OHX	2	2092	-	0,6,6	-	-	-		
87	OHX	7	224	-	0,6,6	-	-	-		
87	OHX	1	4018	-	0,6,6	-	-	-		
87	OHX	4	230	-	0,6,6	-	-	-		
87	OHX	1	3894	-	0,6,6	-	-	-		
87	OHX	2	2088	-	0,6,6	-	-	-		
87	OHX	4	234	-	0,6,6	-	-	-		
87	OHX	2	2079	-	0,6,6	-	-	-		
87	OHX	1	4063	-	0,6,6	-	-	-		
87	OHX	5	4079	-	0,6,6	-	-	-		
87	OHX	5	4141	-	0,6,6	-	-	-		
87	OHX	1	4035	-	0,6,6	-	-	-		
87	OHX	3	222	-	0,6,6	-	-	-		
87	OHX	1	3914	-	0,6,6	-	-	-		
87	OHX	N9	102	-	0,6,6	-	-	-		
87	OHX	5	3908	-	0,6,6	-	-	-		
87	OHX	5	4010	-	0,6,6	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	2	2072	-	0,6,6	-	-	-	-	-
87	OHX	6	2161	-	0,6,6	-	-	-	-	-
87	OHX	2	2053	-	0,6,6	-	-	-	-	-
87	OHX	5	4032	-	0,6,6	-	-	-	-	-
87	OHX	6	2186	-	0,6,6	-	-	-	-	-
87	OHX	5	4100	-	0,6,6	-	-	-	-	-
87	OHX	5	4176	-	0,6,6	-	-	-	-	-
87	OHX	7	220	-	0,6,6	-	-	-	-	-
87	OHX	6	2165	-	0,6,6	-	-	-	-	-
87	OHX	C5	201	-	0,6,6	-	-	-	-	-
87	OHX	1	4004	-	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
88	GET	2	2181	-	-	1/13/74/74	0/3/3/3

There are no bond length outliers.

The worst 5 of 12 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
88	2	2181	GET	C23-C33-N33	-6.00	94.93	110.84
88	2	2181	GET	O11-C42-C32	-5.70	95.57	109.18
88	2	2181	GET	O62-C62-C12	-3.45	100.96	109.18
88	2	2181	GET	O11-C11-C21	-3.34	102.47	108.22
88	2	2181	GET	C32-C22-C12	2.58	116.47	111.18

There are no chirality outliers.

All (1) torsion outliers are listed below:

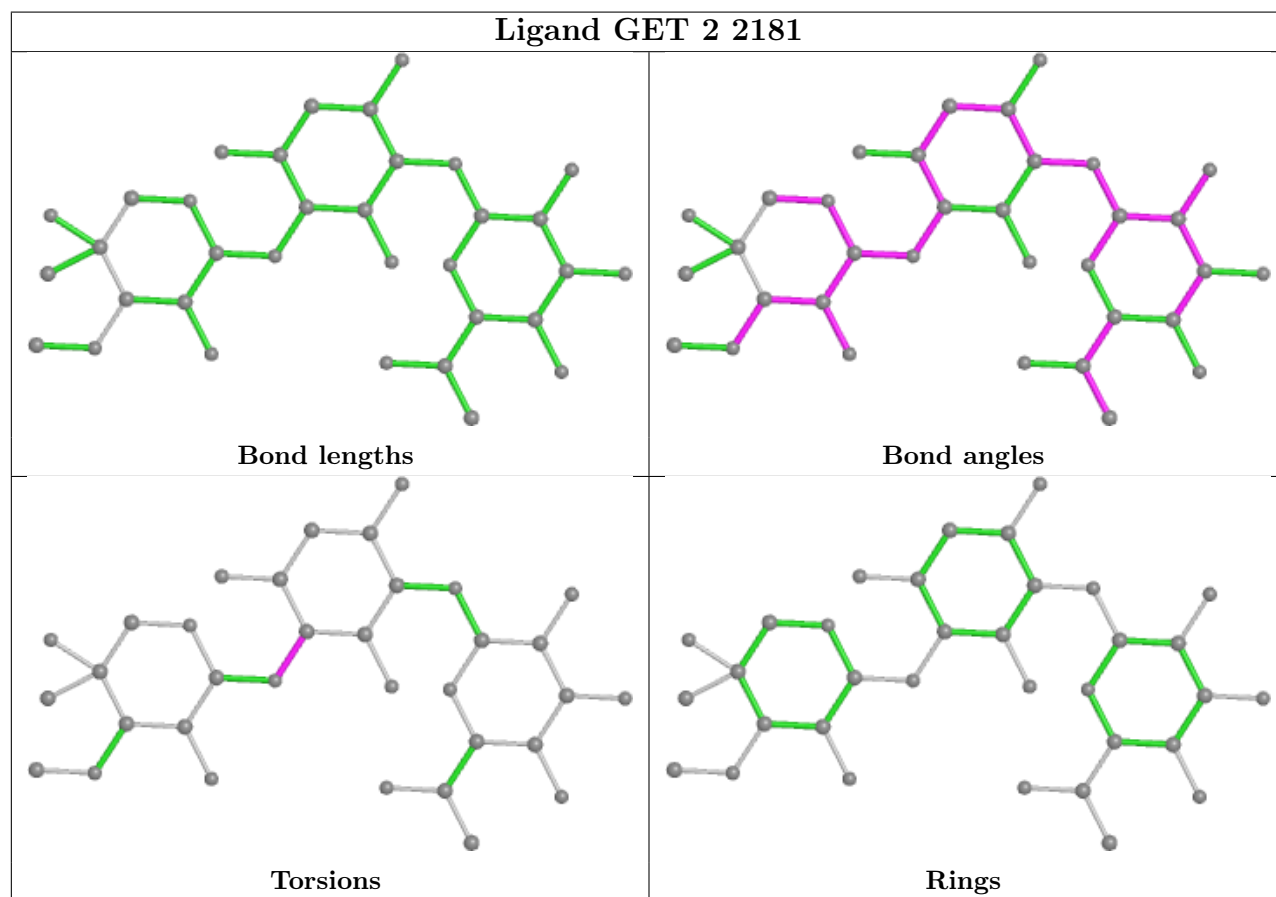
Mol	Chain	Res	Type	Atoms
88	2	2181	GET	C52-C62-O62-C13

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
87	1	4023	OHX	0	1

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less 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 [i](#)

6.1 Protein, DNA and RNA chains [i](#)

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

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

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

6.3 Carbohydrates [i](#)

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

6.4 Ligands [i](#)

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

6.5 Other polymers [i](#)

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