Full wwPDB EM Validation Report

Oct 6, 2024 – 04:17 AM EDT

PDB ID	:	6NCL
EMDB ID	:	EMD-0436
Title	:	Near-atomic structure of icosahedrally averaged PBCV-1 capsid
Authors	:	Fang, Q.; Rossmann, M.G.
Deposited on	:	2018-12-11
Resolution	:	3.50 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

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

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

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

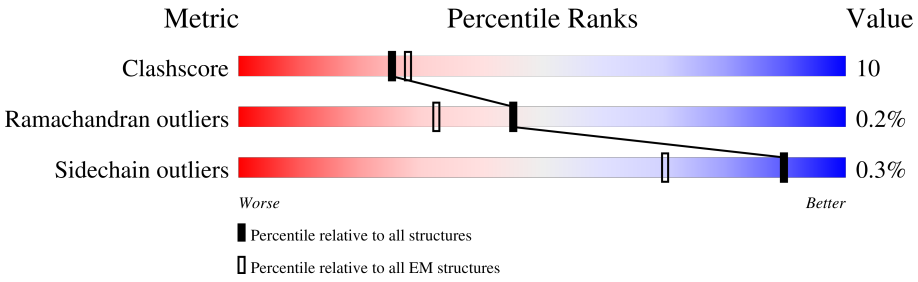
EMDB validation analysis	:	0.0.1.dev113
MolProbity	:	4.02b-467
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 3.50 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)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	a0	352	28% 72%
2	a1	210	47% 49%
3	a2	289	31% 67%
3	a3	289	26% 74%
4	a4	256	56% 40%
5	a5	216	5% 86% 12%
6	a6	170	98%
7	a7	151	47% 48%

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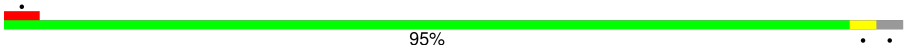
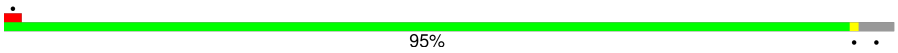
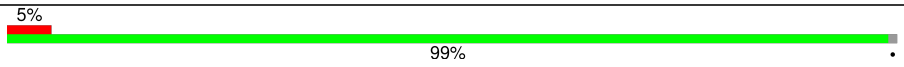
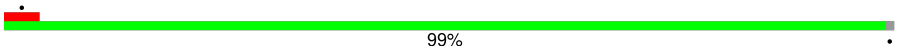
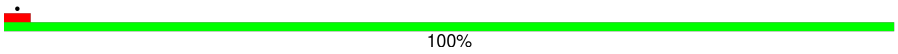
Mol	Chain	Length	Quality of chain
8	a8	146	
9	a9	207	
9	b0	207	
9	b1	207	
9	b2	207	
9	b3	207	
9	b4	207	
9	b5	207	
9	b7	207	
9	b8	207	
9	c0	207	
9	c1	207	
9	l5	207	
10	b6	576	
11	c2	181	
11	c3	181	
11	c4	181	
11	c5	181	
12	c6	171	
12	c7	171	
12	c8	171	
13	c9	173	
14	d0	437	
14	d1	437	
14	d2	437	

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Mol	Chain	Length	Quality of chain
14	d3	437	99%
14	d4	437	99%
14	d5	437	100%
14	d6	437	100%
14	d7	437	100%
14	d8	437	100%
14	d9	437	100%
14	e0	437	5% 99%
14	e1	437	99%
14	e2	437	99%
14	e3	437	9% 99%
14	e4	437	99%
14	e5	437	100%
14	e6	437	100%
14	e7	437	99%
14	e8	437	5% 100%
14	e9	437	99%
14	f0	437	99%
14	f1	437	100%
14	f2	437	99%
14	f3	437	100%
14	f4	437	99%
14	f5	437	5% 99%
14	f6	437	5% 100%
14	f7	437	99%

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Mol	Chain	Length	Quality of chain
14	f8	437	8% 99%
14	f9	437	5% 99%
14	g0	437	99%
14	g1	437	100%
14	g2	437	99%
14	g3	437	99%
14	g4	437	5% 99%
14	g5	437	99%
14	g6	437	100%
14	g7	437	99%
14	g8	437	100%
14	g9	437	5% 100%
14	h0	437	5% 100%
14	h1	437	8% 100%
14	h2	437	99%
14	h3	437	99%
14	h4	437	99%
14	h5	437	99%
14	h6	437	99%
14	h7	437	100%
14	h8	437	100%
14	h9	437	100%
14	i0	437	100%
14	i1	437	5% 99%
14	i2	437	99%

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Mol	Chain	Length	Quality of chain
14	i3	437	99%
14	i4	437	5% 100%
14	i5	437	7% 100%
14	i6	437	6% 99%
14	i7	437	5% 99%
14	i8	437	99%
14	i9	437	100%
14	j0	437	99%
14	j1	437	100%
14	j2	437	99%
14	j3	437	99%
14	j4	437	99%
14	j5	437	99%
14	j6	437	99%
14	j7	437	6% 100%
14	j8	437	6% 99%
14	j9	437	7% 100%
14	k0	437	99%
14	k1	437	100%
14	k2	437	99%
14	k3	437	99%
14	k4	437	100%
14	k5	437	5% 100%
14	k6	437	99%
14	k7	437	99%

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Mol	Chain	Length	Quality of chain
14	k8	437	99%
14	k9	437	100%
14	l0	437	100%
14	l1	437	99%
14	l2	437	99%
14	l3	437	5% 100%
15	l4	98	67% 33%

2 Entry composition

There are 15 unique types of molecules in this entry. The entry contains 305842 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 protein called P14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	a0	97	733	463	122	145	3	0	0

- Molecule 2 is a protein called P9.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	a1	107	718	445	122	146	5	0	0

- Molecule 3 is a protein called P10.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	a2	94	650	411	110	125	4	0	0
			Total	C	N	O	S		
3	a3	74	485	308	86	88	3	0	0

- Molecule 4 is a protein called P7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	a4	153	1088	689	192	197	10	0	0

- Molecule 5 is a protein called P6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	a5	189	1326	878	210	236	2	0	0

- Molecule 6 is a protein called P1.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	a6	167	Total	C	N	O	S	0	0
			1192	756	203	229	4		

- Molecule 7 is a protein called P12.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	a7	78	Total	C	N	O	S	0	0
			543	357	88	95	3		

- Molecule 8 is a protein called P5.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	a8	142	Total	C	N	O	S	0	0
			988	638	168	180	2		

- Molecule 9 is a protein called P11.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	a9	47	Total	C	N	O	S	0	0
			311	200	53	57	1		
9	b0	59	Total	C	N	O	S	0	0
			398	248	70	79	1		
9	b1	54	Total	C	N	O		0	0
			368	238	64	66			
9	b2	51	Total	C	N	O	S	0	0
			350	227	59	63	1		
9	b3	51	Total	C	N	O	S	0	0
			335	216	56	62	1		
9	b4	52	Total	C	N	O	S	0	0
			350	228	61	60	1		
9	b5	57	Total	C	N	O	S	0	0
			367	237	64	64	2		
9	b7	52	Total	C	N	O	S	0	0
			375	244	63	67	1		
9	b8	57	Total	C	N	O		0	0
			379	244	66	69			
9	c0	51	Total	C	N	O	S	0	0
			338	214	59	64	1		
9	c1	51	Total	C	N	O	S	0	0
			335	213	59	61	2		
9	l5	58	Total	C	N	O		0	0
			392	253	67	72			

- Molecule 10 is a protein called P2.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	b6	475	Total	C	N	O	S	0	0
			3210	2016	587	603	4		

- Molecule 11 is a protein called P4.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	c2	103	Total	C	N	O	S	0	0
			603	369	110	123	1		
11	c3	60	Total	C	N	O		0	0
			389	242	69	78			
11	c4	58	Total	C	N	O		0	0
			369	230	65	74			
11	c5	58	Total	C	N	O		0	0
			396	252	72	72			

- Molecule 12 is a protein called P3.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	c6	141	Total	C	N	O	S	0	0
			951	602	170	177	2		
12	c7	147	Total	C	N	O	S	0	0
			1004	648	172	180	4		
12	c8	116	Total	C	N	O	S	0	0
			813	519	141	149	4		

- Molecule 13 is a protein called P8.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	c9	166	Total	C	N	O	S	0	0
			1191	776	198	214	3		

- Molecule 14 is a protein called Major capsid protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	d0	432	Total	C	N	O	S	0	0
			3369	2142	570	649	8		
14	d1	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	d2	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		

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Mol	Chain	Residues	Atoms					AltConf	Trace
14	d3	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	d4	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	d5	435	Total	C	N	O	S	0	0
			3383	2150	574	651	8		
14	d6	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	d7	435	Total	C	N	O	S	0	0
			3381	2149	571	653	8		
14	d8	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	d9	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	e0	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	e1	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	e2	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	e3	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	e4	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	e5	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	e6	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	e7	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	e8	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	e9	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	f0	434	Total	C	N	O	S	0	0
			3375	2143	573	651	8		
14	f1	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	f2	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	f3	435	Total	C	N	O	S	0	0
			3383	2147	575	653	8		

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Mol	Chain	Residues	Atoms					AltConf	Trace
14	f4	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	f5	434	Total	C	N	O	S	0	0
			3376	2146	570	652	8		
14	f6	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	f7	434	Total	C	N	O	S	0	0
			3372	2142	572	650	8		
14	f8	433	Total	C	N	O	S	0	0
			3378	2147	572	651	8		
14	f9	434	Total	C	N	O	S	0	0
			3379	2145	574	652	8		
14	g0	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	g1	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	g2	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	g3	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	g4	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	g5	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	g6	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	g7	434	Total	C	N	O	S	0	0
			3376	2146	570	652	8		
14	g8	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	g9	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	h0	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	h1	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	h2	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	h3	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	h4	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		

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Mol	Chain	Residues	Atoms					AltConf	Trace
14	h5	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	h6	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	h7	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	h8	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	h9	435	Total	C	N	O	S	0	0
			3381	2149	571	653	8		
14	i0	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	i1	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	i2	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	i3	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	i4	435	Total	C	N	O	S	0	0
			3384	2150	572	654	8		
14	i5	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	i6	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	i7	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	i8	436	Total	C	N	O	S	0	0
			3388	2150	576	654	8		
14	i9	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	j0	436	Total	C	N	O	S	0	0
			3392	2155	576	653	8		
14	j1	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	j2	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	j3	435	Total	C	N	O	S	0	0
			3387	2152	575	652	8		
14	j4	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	j5	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		

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Mol	Chain	Residues	Atoms					AltConf	Trace
14	j6	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	j7	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	j8	435	Total	C	N	O	S	0	0
			3390	2153	575	654	8		
14	j9	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	k0	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	k1	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	k2	435	Total	C	N	O	S	0	0
			3387	2152	574	653	8		
14	k3	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	k4	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	k5	436	Total	C	N	O	S	0	0
			3395	2156	576	655	8		
14	k6	435	Total	C	N	O	S	0	0
			3391	2153	575	655	8		
14	k7	435	Total	C	N	O	S	0	0
			3387	2151	574	654	8		
14	k8	435	Total	C	N	O	S	0	0
			3391	2153	575	655	8		
14	k9	435	Total	C	N	O	S	0	0
			3381	2149	571	653	8		
14	l0	435	Total	C	N	O	S	0	0
			3391	2153	575	655	8		
14	l1	435	Total	C	N	O	S	0	0
			3391	2153	575	655	8		
14	l2	434	Total	C	N	O	S	0	0
			3382	2149	573	652	8		
14	l3	436	Total	C	N	O	S	0	0
			3396	2156	576	656	8		

- Molecule 15 is a protein called P13.

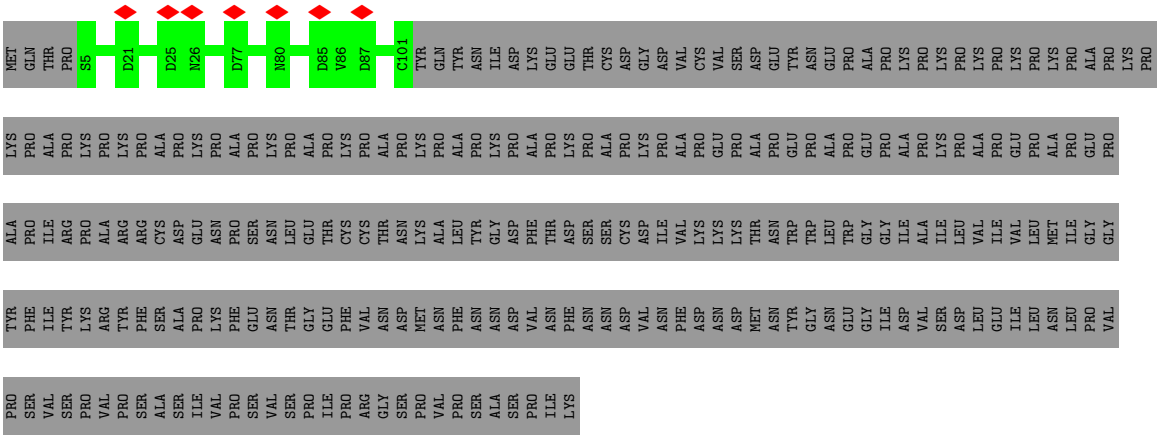
Mol	Chain	Residues	Atoms					AltConf	Trace
15	l4	66	Total	C	N	O	S	0	0
			487	313	82	90	2		

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

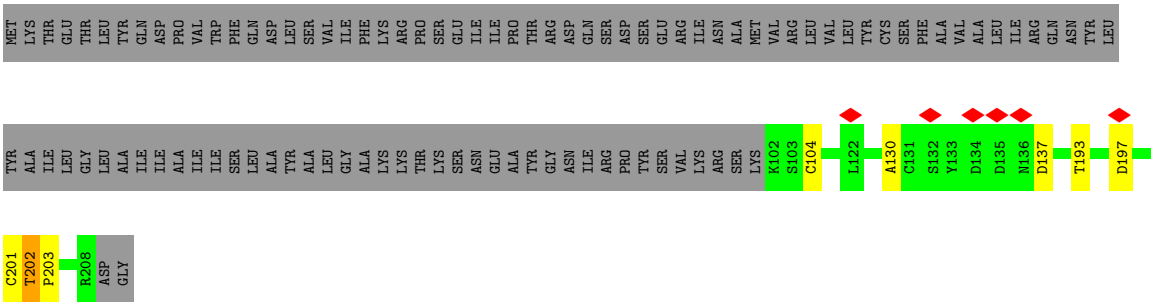
- Molecule 1: P14

Chain a0:



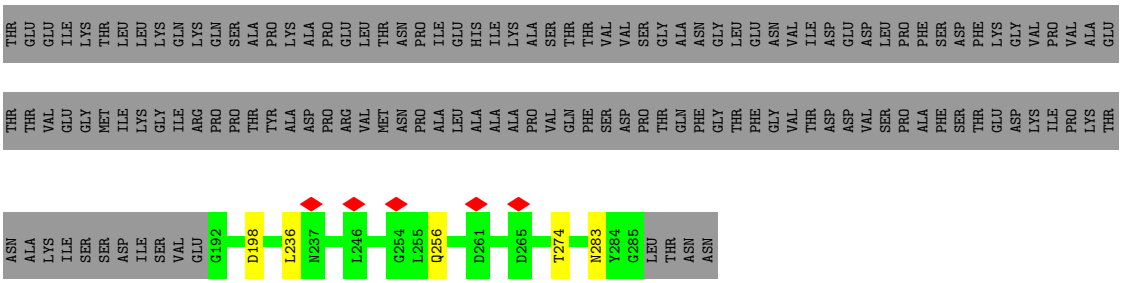
- Molecule 2: P9

Chain a1:



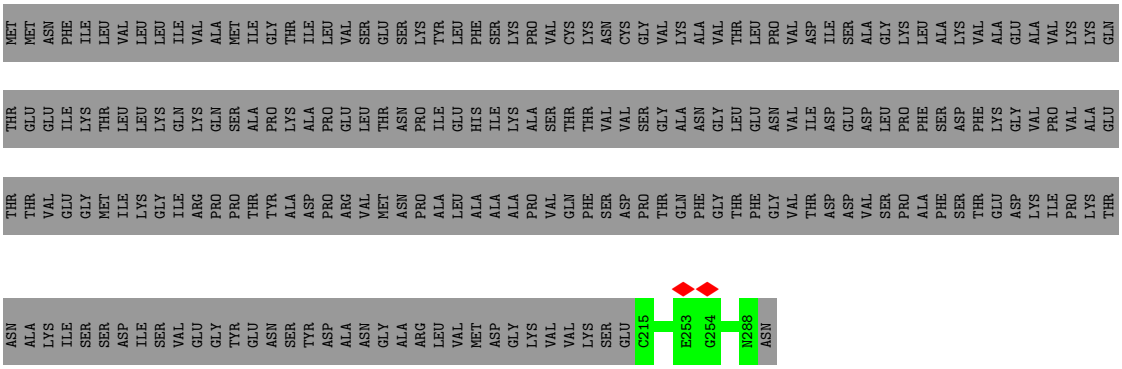
- Molecule 3: P10

Chain a2:



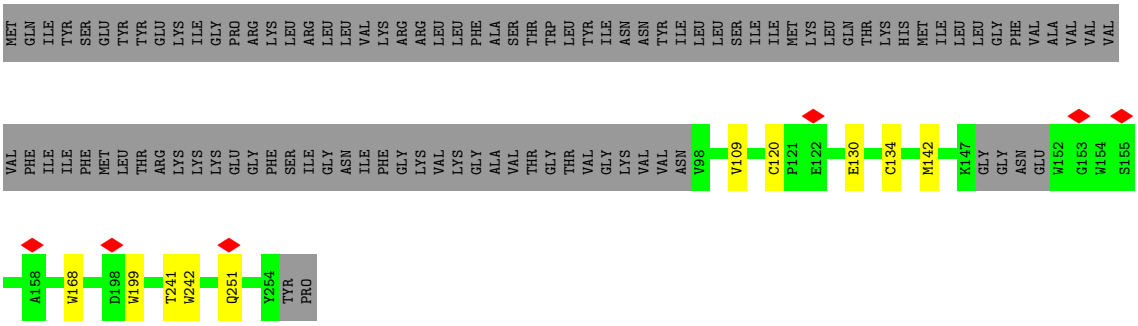
• Molecule 3: P10

Chain a3:



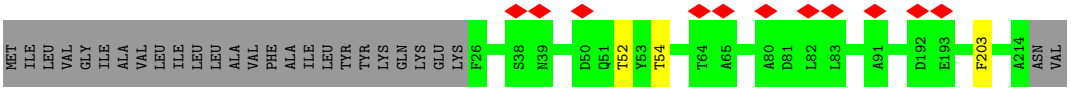
• Molecule 4: P7

Chain a4:



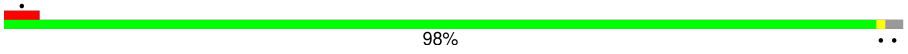
• Molecule 5: P6

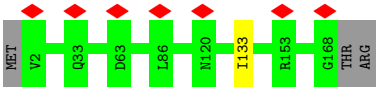
Chain a5:



• Molecule 6: P1

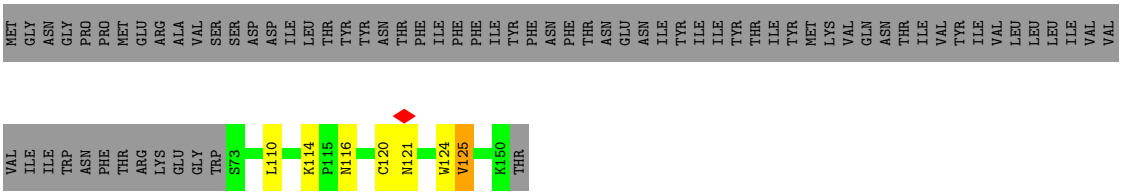
Chain a6:





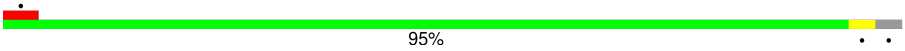
• Molecule 7: P12

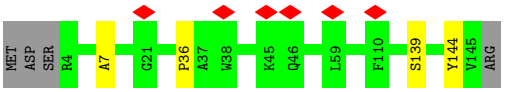
Chain a7:



• Molecule 8: P5

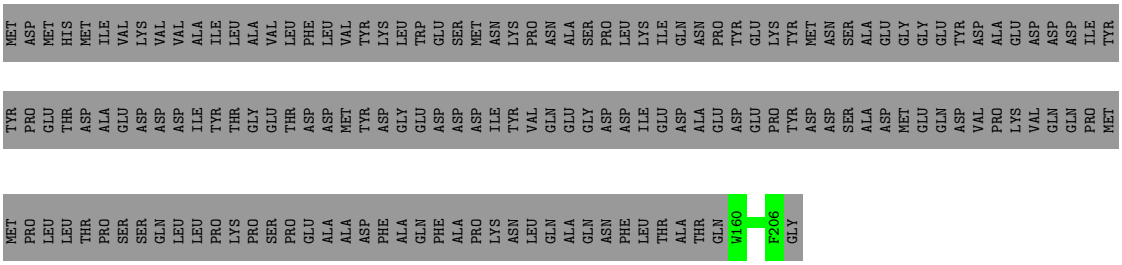
Chain a8:





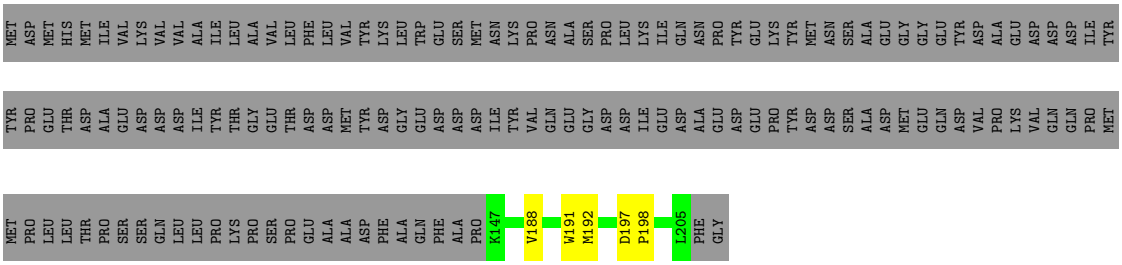
• Molecule 9: P11

Chain a9:



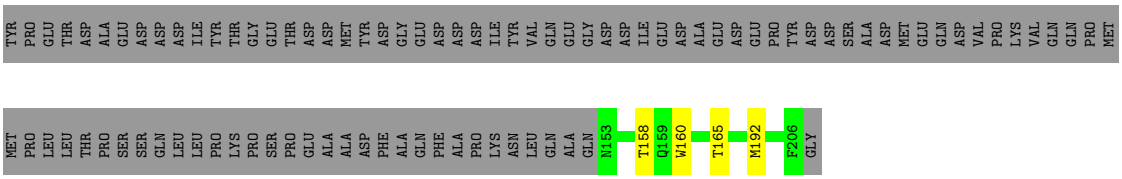
• Molecule 9: P11

Chain b0:



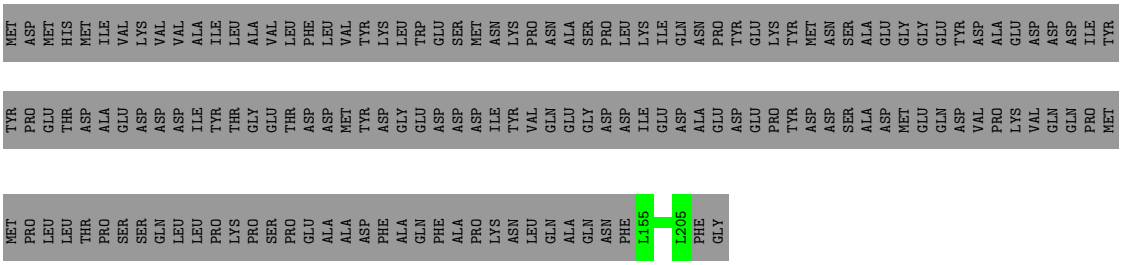
• Molecule 9: P11

Chain b1:



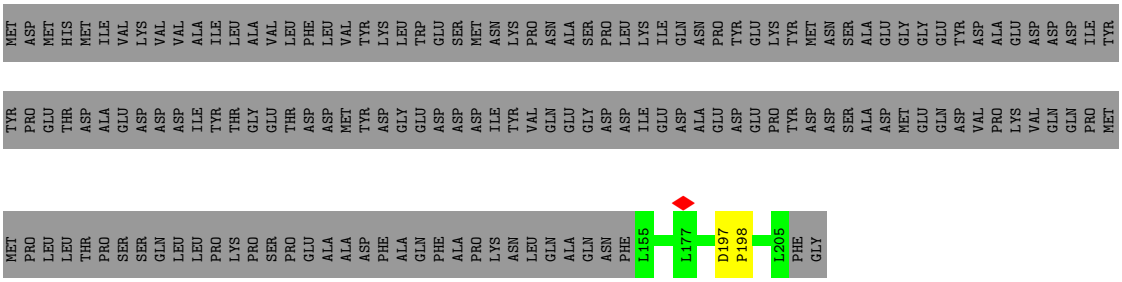
• Molecule 9: P11

Chain b2:



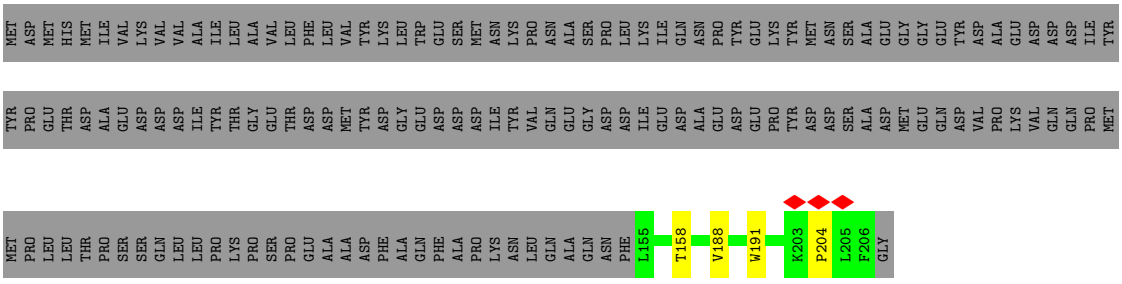
• Molecule 9: P11

Chain b3:



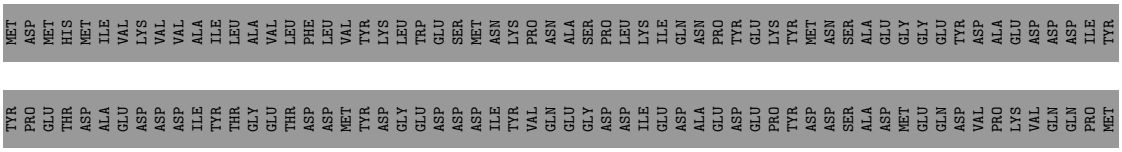
• Molecule 9: P11

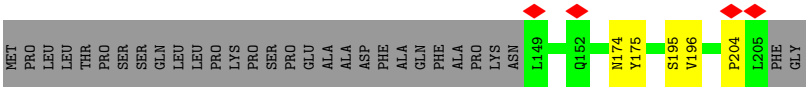
Chain b4:



• Molecule 9: P11

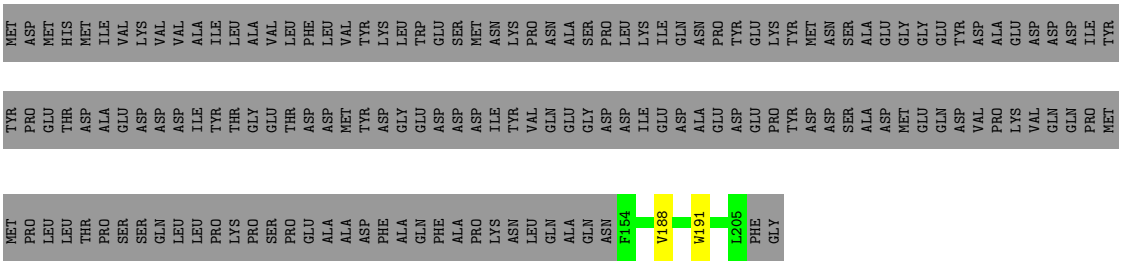
Chain b5:





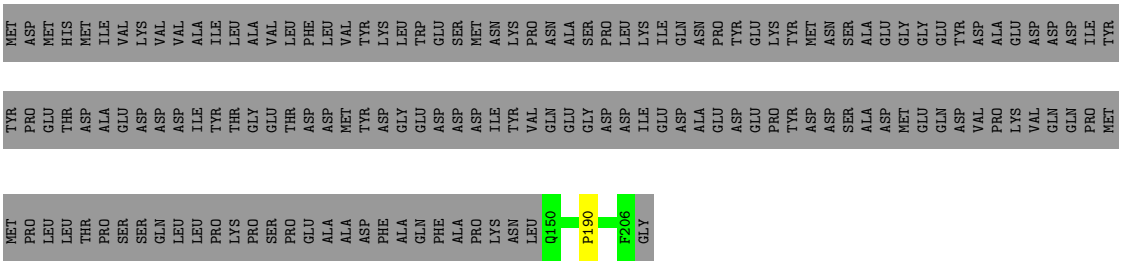
• Molecule 9: P11

Chain b7:



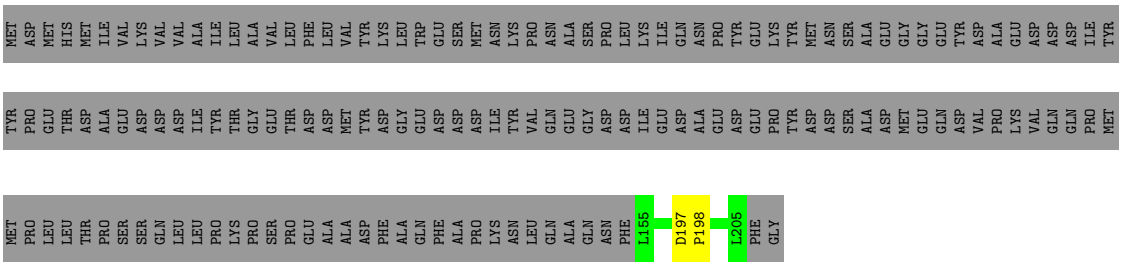
• Molecule 9: P11

Chain b8:



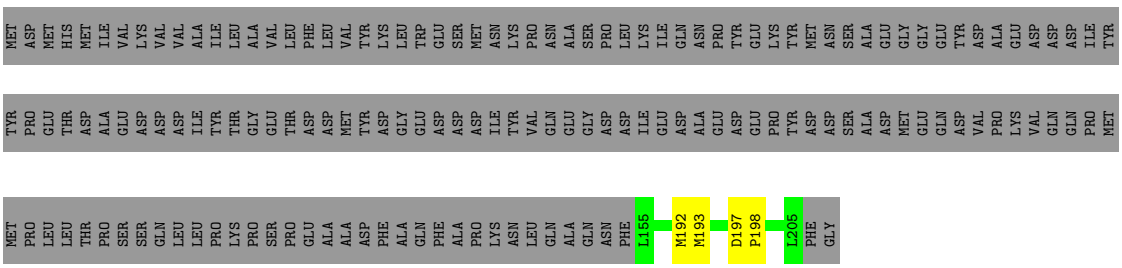
• Molecule 9: P11

Chain c0:



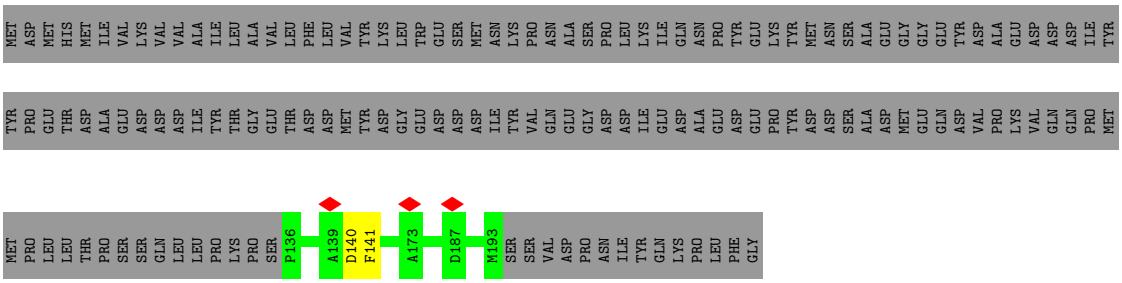
• Molecule 9: P11

Chain c1:



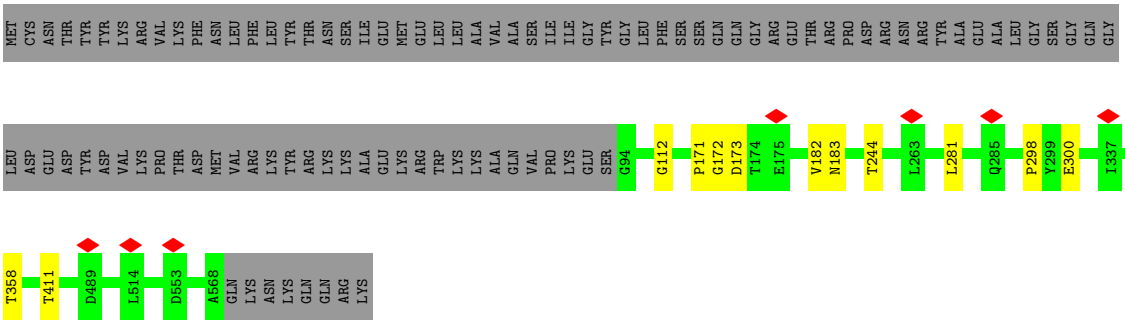
- Molecule 9: P11

Chain l5:



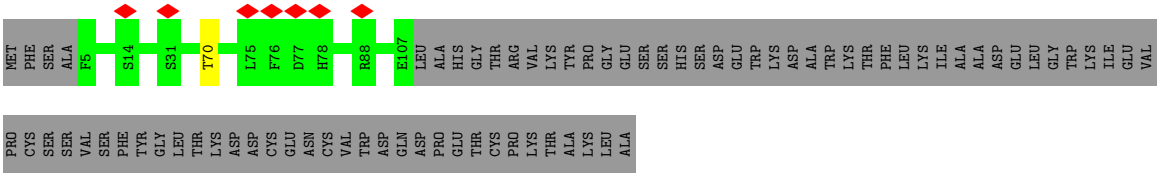
- Molecule 10: P2

Chain b6:



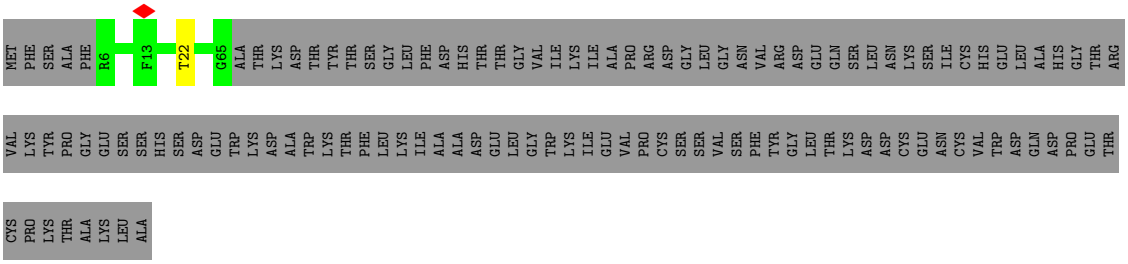
- Molecule 11: P4

Chain c2:



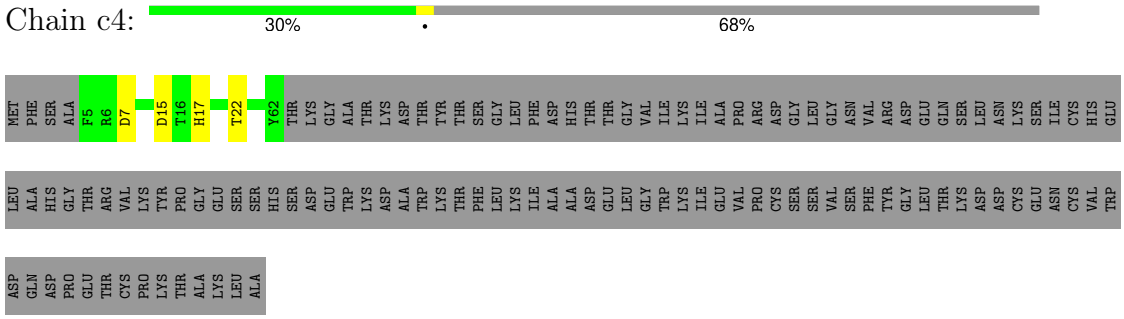
- Molecule 11: P4

Chain c3:



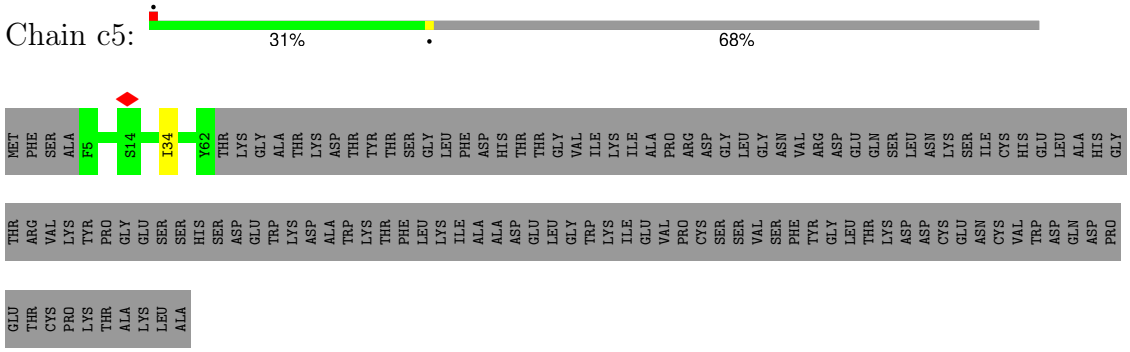
- Molecule 11: P4

Chain c4:



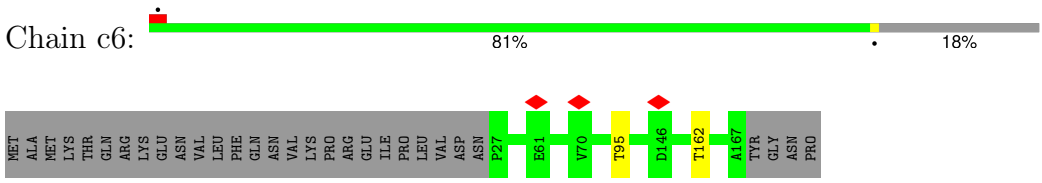
• Molecule 11: P4

Chain c5:



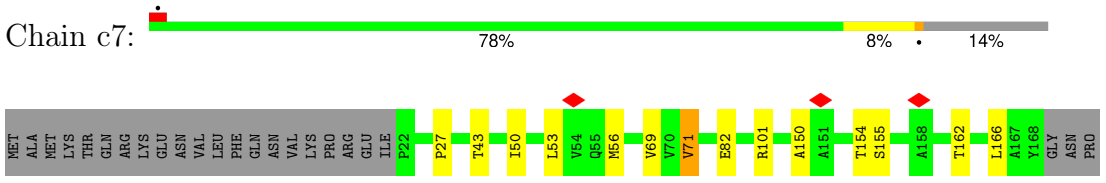
• Molecule 12: P3

Chain c6:



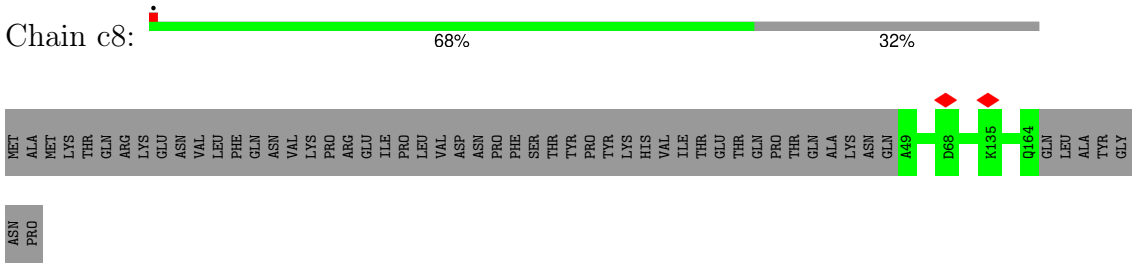
• Molecule 12: P3

Chain c7:



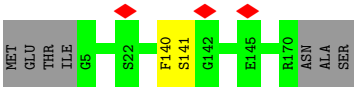
• Molecule 12: P3

Chain c8:



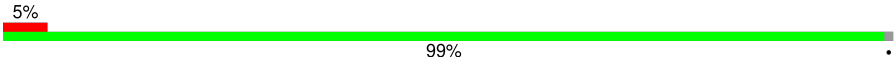
• Molecule 13: P8

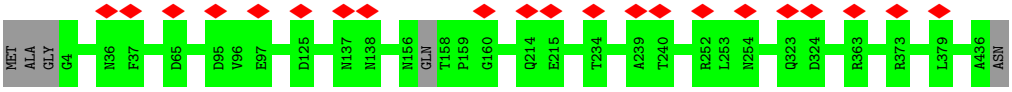
Chain c9:



• Molecule 14: Major capsid protein

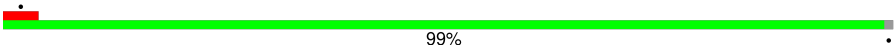
Chain d0:

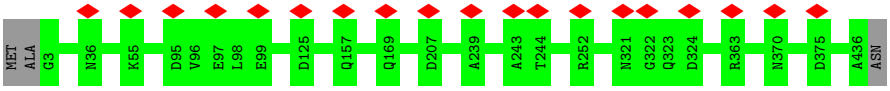




• Molecule 14: Major capsid protein

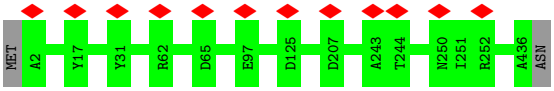
Chain d1:





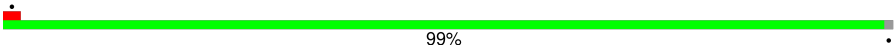
• Molecule 14: Major capsid protein

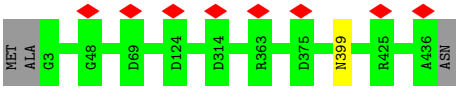
Chain d2:



• Molecule 14: Major capsid protein

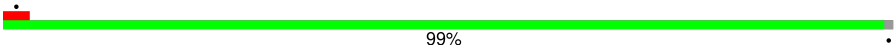
Chain d3:

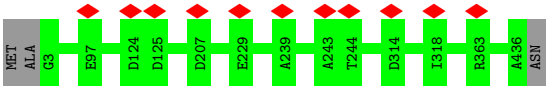




• Molecule 14: Major capsid protein

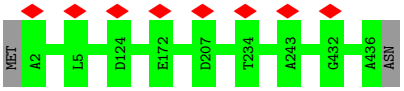
Chain d4:





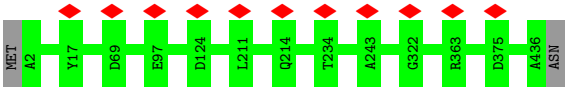
• Molecule 14: Major capsid protein

Chain d5:



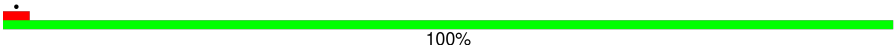
• Molecule 14: Major capsid protein

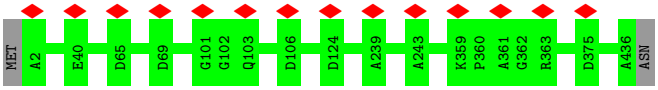
Chain d6:



• Molecule 14: Major capsid protein

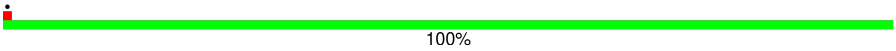
Chain d7:

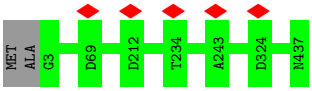




• Molecule 14: Major capsid protein

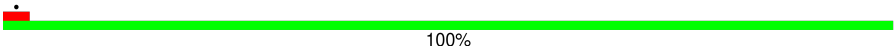
Chain d8:

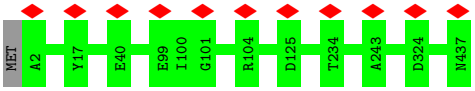




• Molecule 14: Major capsid protein

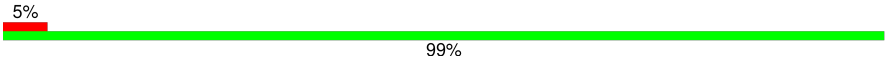
Chain d9:

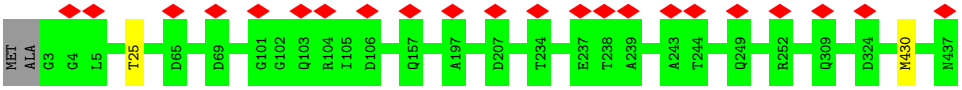




• Molecule 14: Major capsid protein

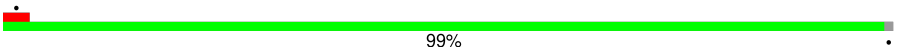
Chain e0:

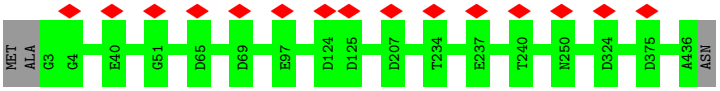




• Molecule 14: Major capsid protein

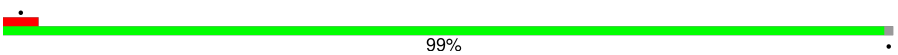
Chain e1:

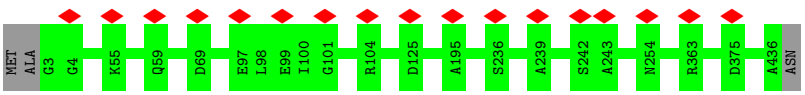




• Molecule 14: Major capsid protein

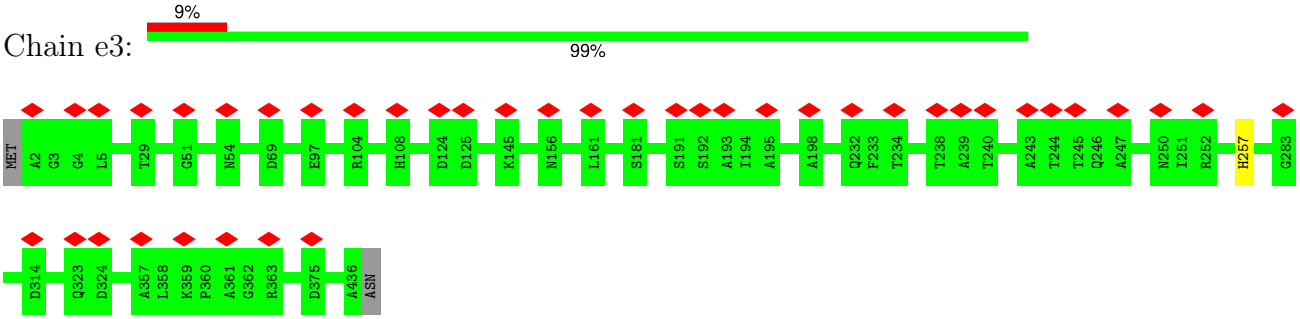
Chain e2:





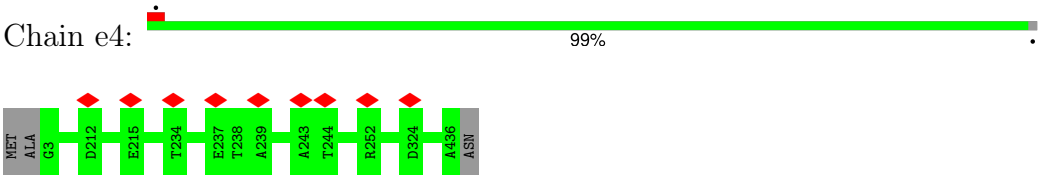
• Molecule 14: Major capsid protein

Chain e3:



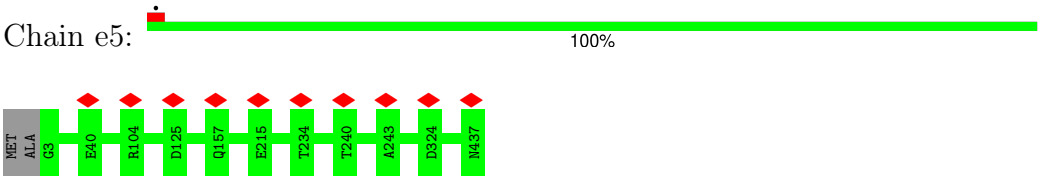
• Molecule 14: Major capsid protein

Chain e4:



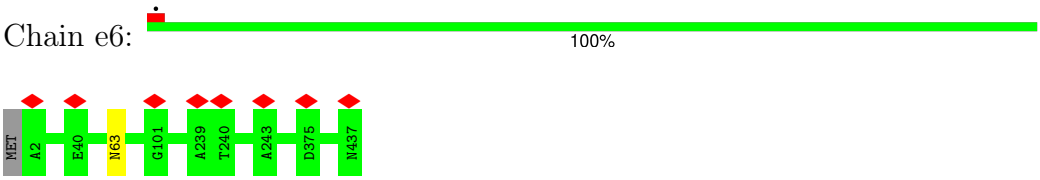
• Molecule 14: Major capsid protein

Chain e5:



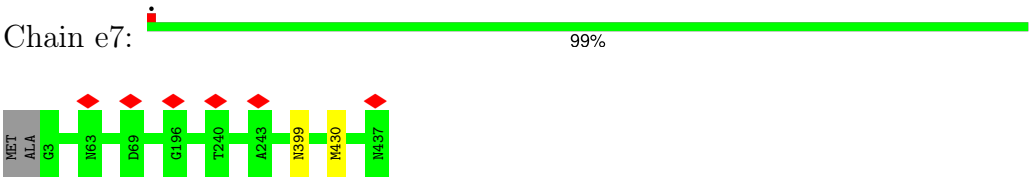
• Molecule 14: Major capsid protein

Chain e6:



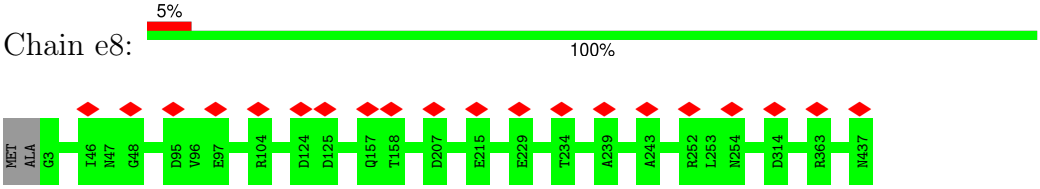
• Molecule 14: Major capsid protein

Chain e7:



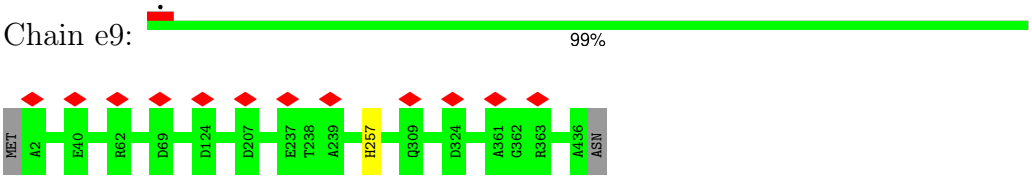
• Molecule 14: Major capsid protein

Chain e8:



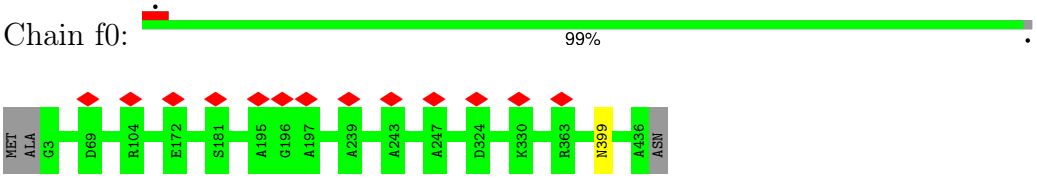
• Molecule 14: Major capsid protein

Chain e9:



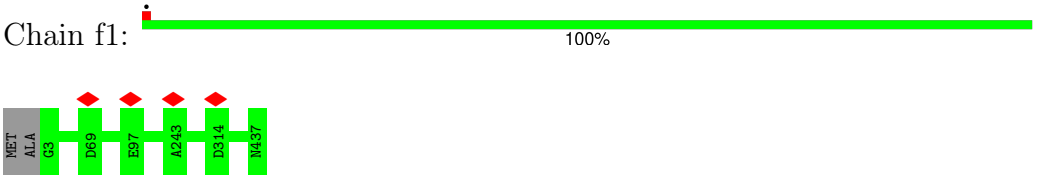
• Molecule 14: Major capsid protein

Chain f0:



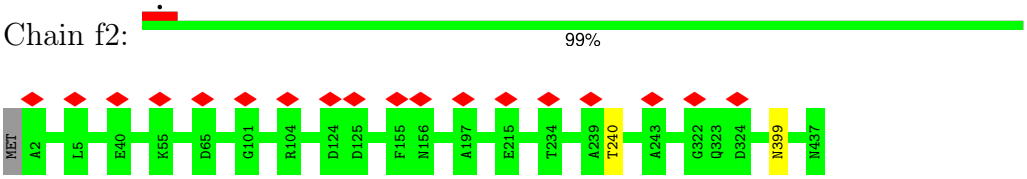
• Molecule 14: Major capsid protein

Chain f1:



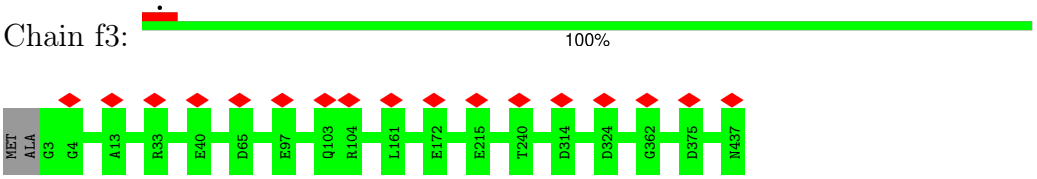
• Molecule 14: Major capsid protein

Chain f2:



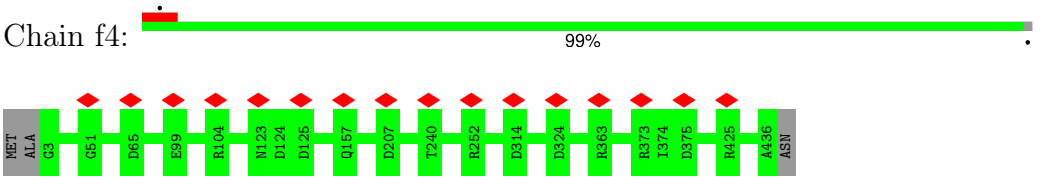
• Molecule 14: Major capsid protein

Chain f3:



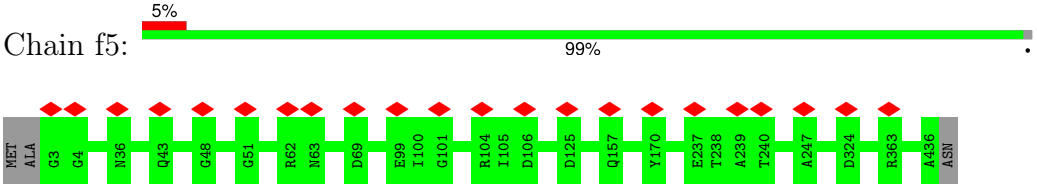
• Molecule 14: Major capsid protein

Chain f4:



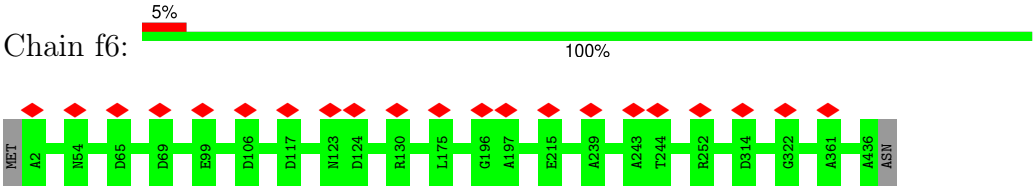
• Molecule 14: Major capsid protein

Chain f5:



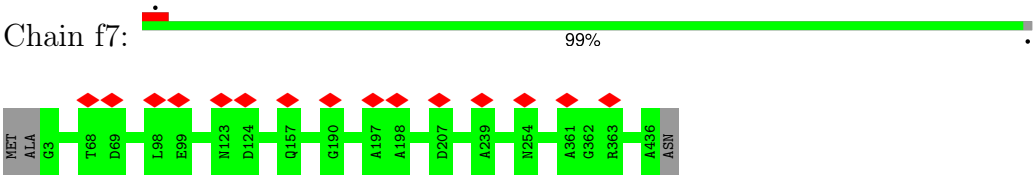
• Molecule 14: Major capsid protein

Chain f6:



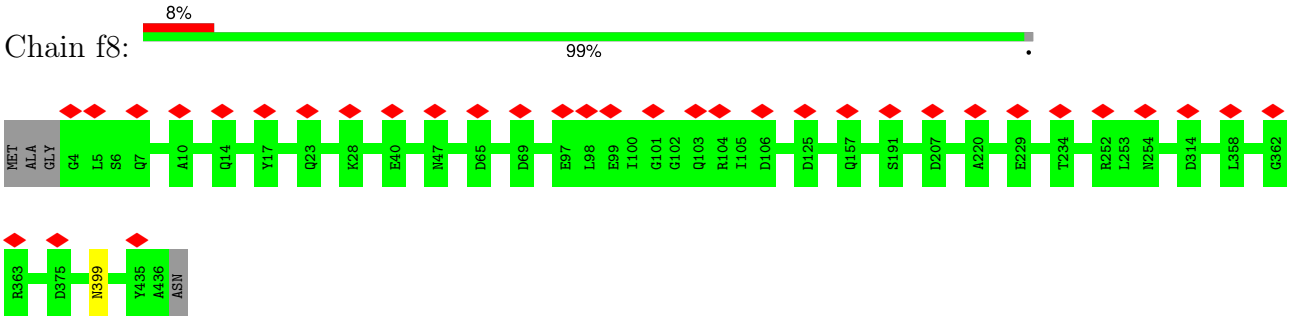
• Molecule 14: Major capsid protein

Chain f7:



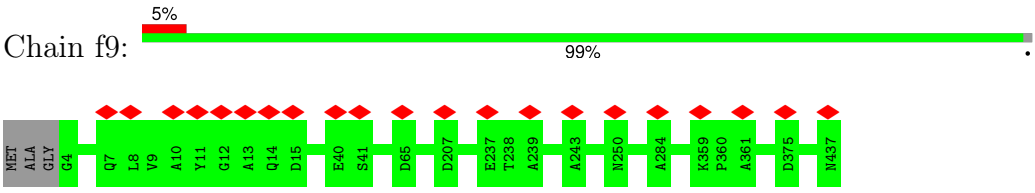
• Molecule 14: Major capsid protein

Chain f8:



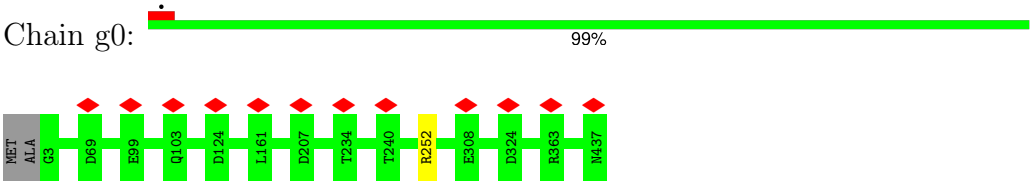
• Molecule 14: Major capsid protein

Chain f9:



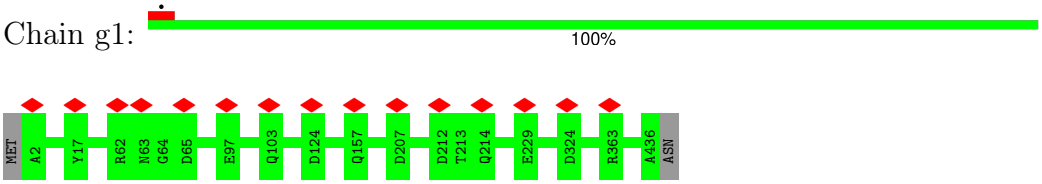
• Molecule 14: Major capsid protein

Chain g0:



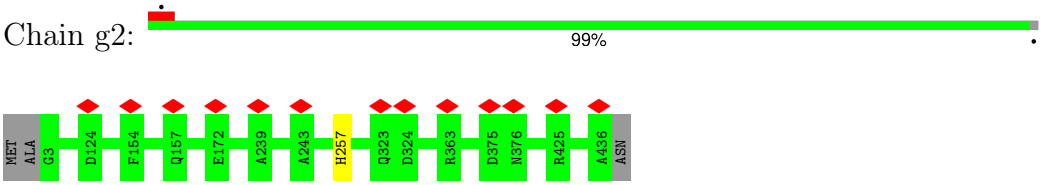
• Molecule 14: Major capsid protein

Chain g1:



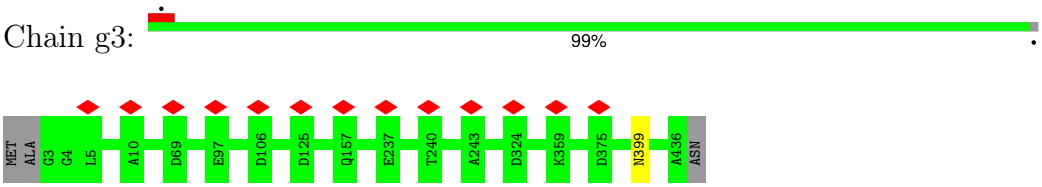
• Molecule 14: Major capsid protein

Chain g2:



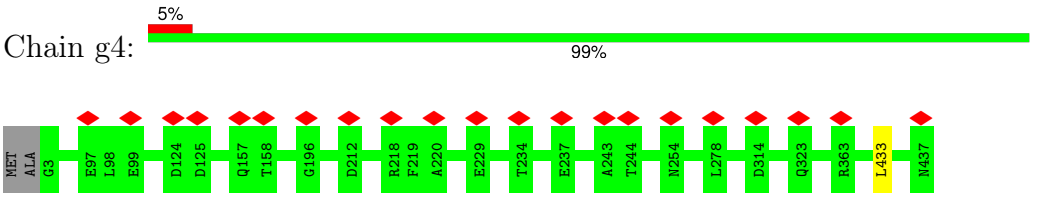
• Molecule 14: Major capsid protein

Chain g3:



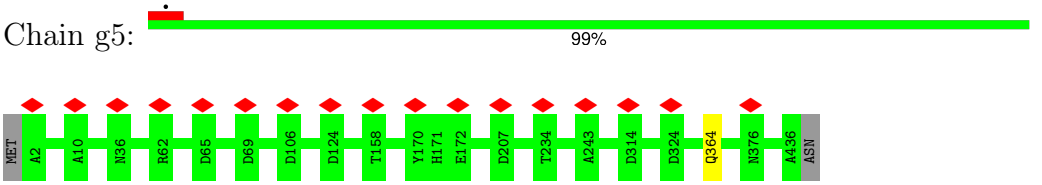
• Molecule 14: Major capsid protein

Chain g4:



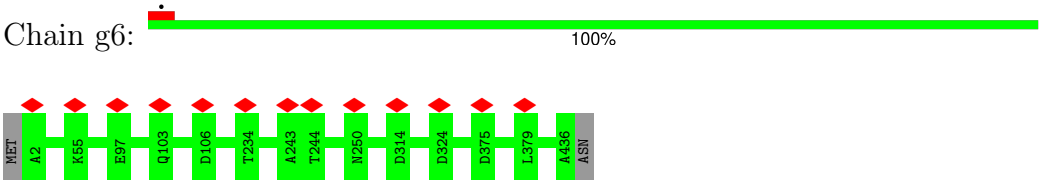
• Molecule 14: Major capsid protein

Chain g5:



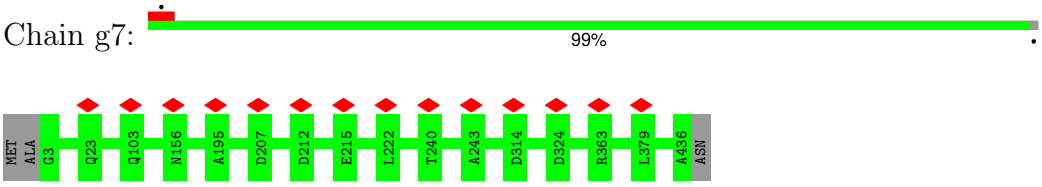
• Molecule 14: Major capsid protein

Chain g6:



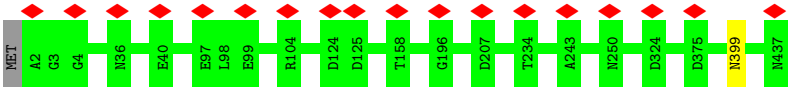
• Molecule 14: Major capsid protein

Chain g7:



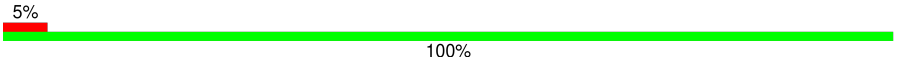
• Molecule 14: Major capsid protein

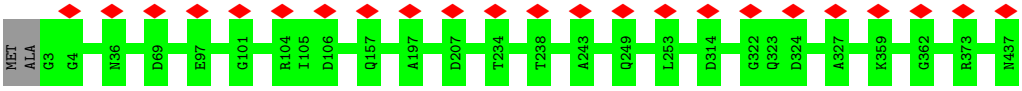
Chain g8:



• Molecule 14: Major capsid protein

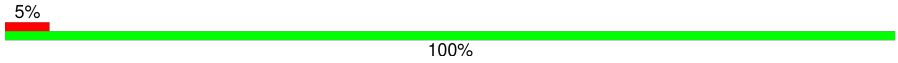
Chain g9:

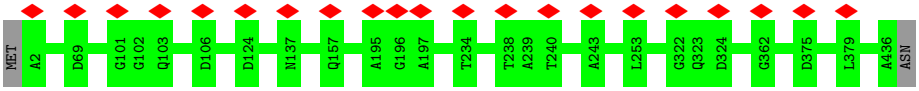




• Molecule 14: Major capsid protein

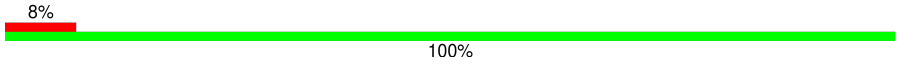
Chain h0:

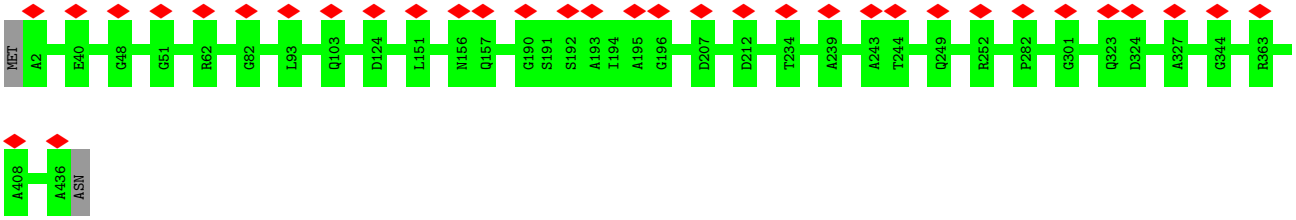




• Molecule 14: Major capsid protein

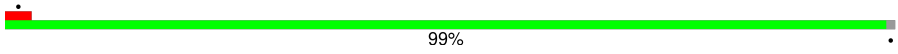
Chain h1:

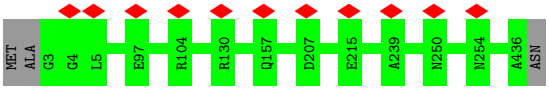




• Molecule 14: Major capsid protein

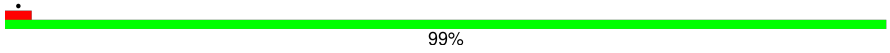
Chain h2:

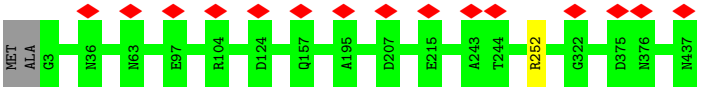




• Molecule 14: Major capsid protein

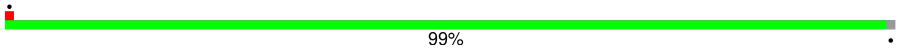
Chain h3:

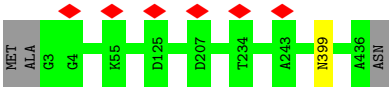




• Molecule 14: Major capsid protein

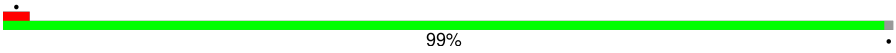
Chain h4:

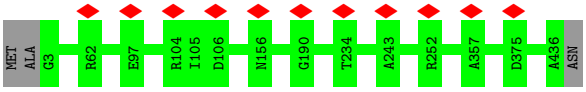




• Molecule 14: Major capsid protein

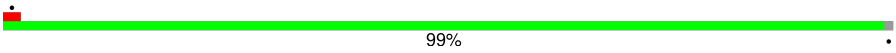
Chain h5:

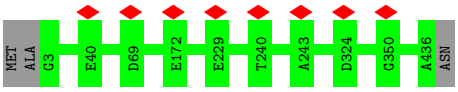




• Molecule 14: Major capsid protein

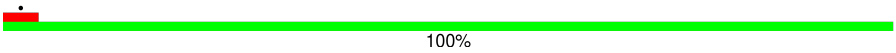
Chain h6:

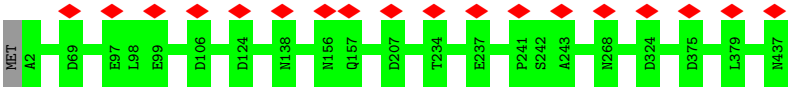




• Molecule 14: Major capsid protein

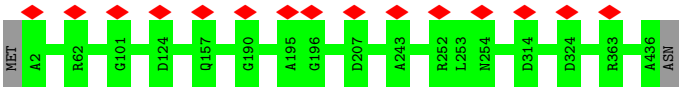
Chain h7:





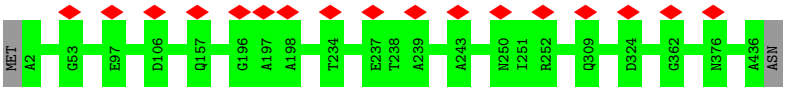
• Molecule 14: Major capsid protein

Chain h8:



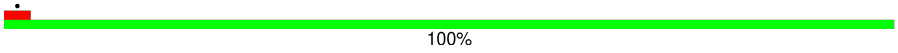
• Molecule 14: Major capsid protein

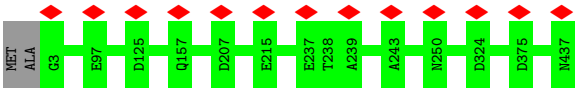
Chain h9:



• Molecule 14: Major capsid protein

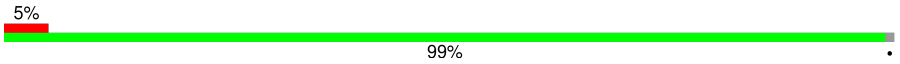
Chain i0:

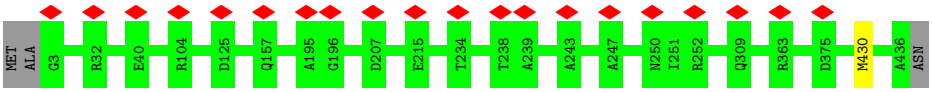




• Molecule 14: Major capsid protein

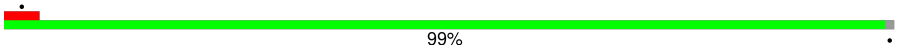
Chain i1:

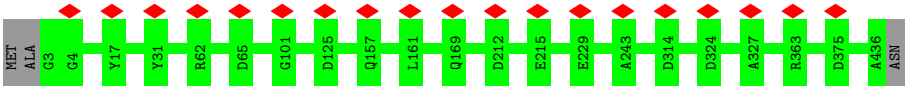




• Molecule 14: Major capsid protein

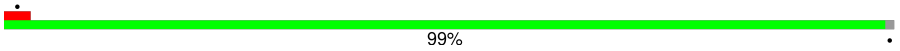
Chain i2:

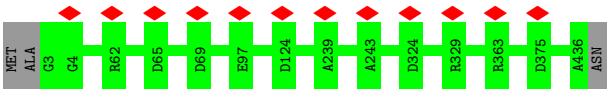




• Molecule 14: Major capsid protein

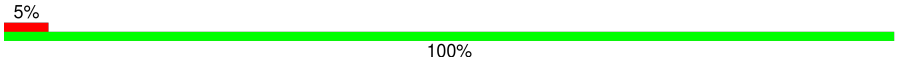
Chain i3:

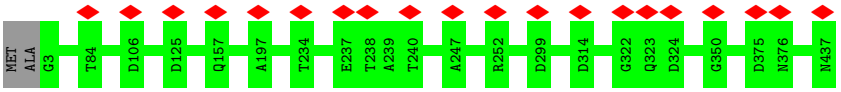




• Molecule 14: Major capsid protein

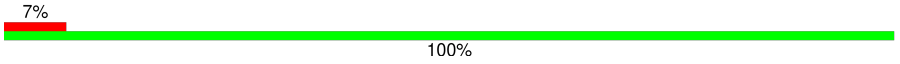
Chain i4:

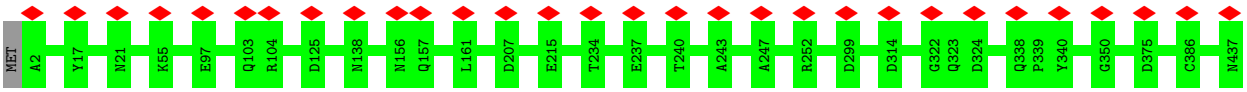




• Molecule 14: Major capsid protein

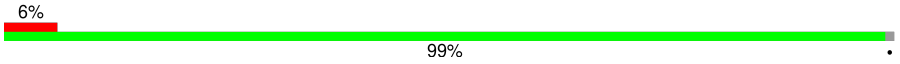
Chain i5:

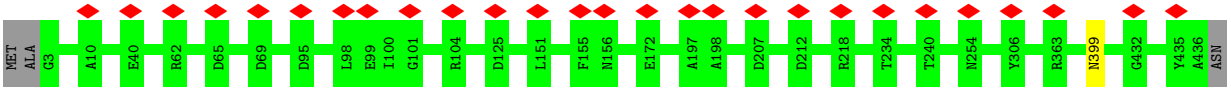




• Molecule 14: Major capsid protein

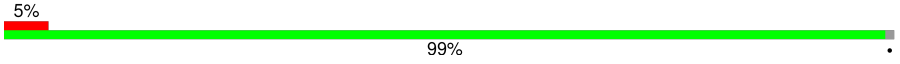
Chain i6:

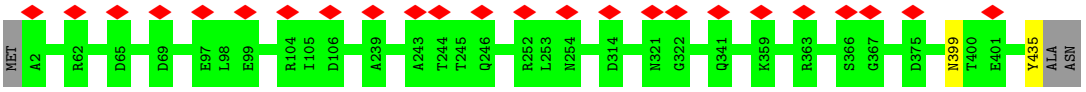




• Molecule 14: Major capsid protein

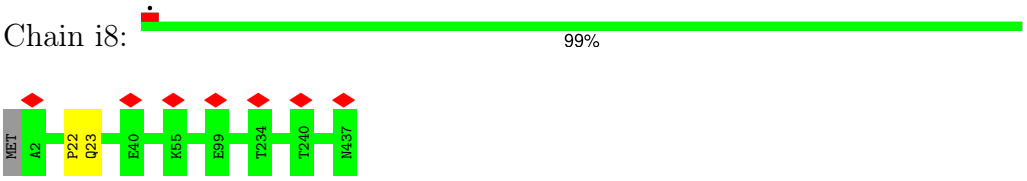
Chain i7:





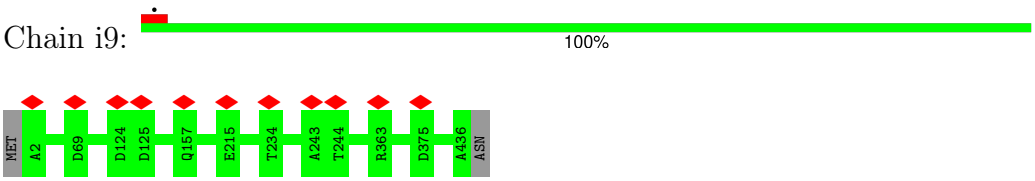
• Molecule 14: Major capsid protein

Chain i8:



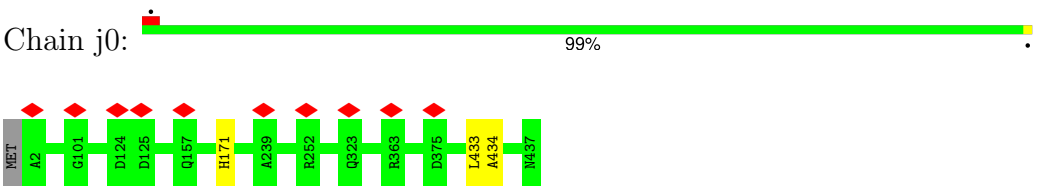
• Molecule 14: Major capsid protein

Chain i9:



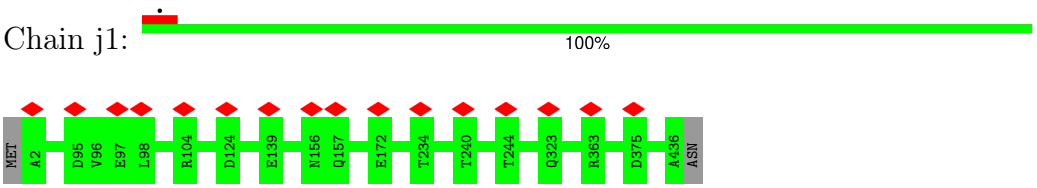
• Molecule 14: Major capsid protein

Chain j0:



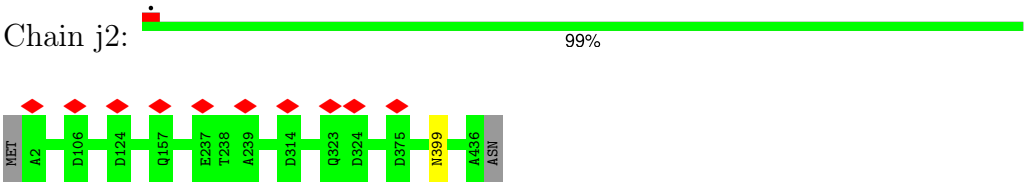
• Molecule 14: Major capsid protein

Chain j1:



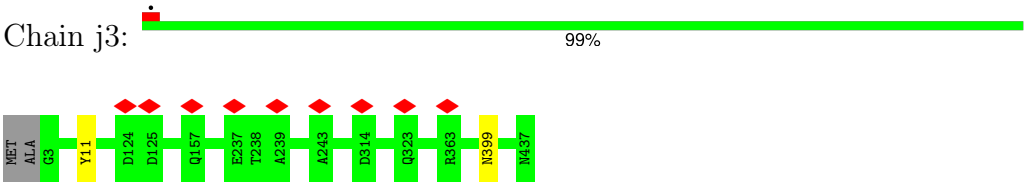
• Molecule 14: Major capsid protein

Chain j2:



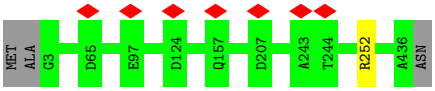
• Molecule 14: Major capsid protein

Chain j3:



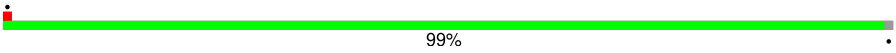
• Molecule 14: Major capsid protein

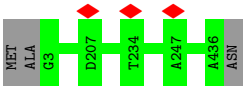
Chain j4:



• Molecule 14: Major capsid protein

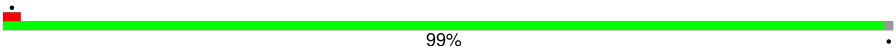
Chain j5:

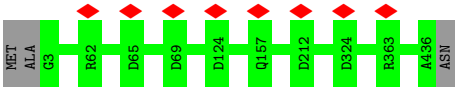




• Molecule 14: Major capsid protein

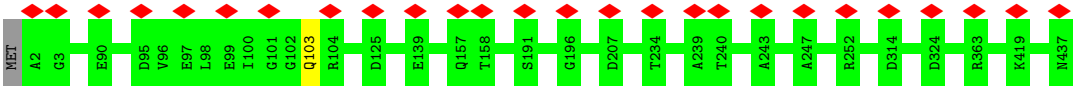
Chain j6:





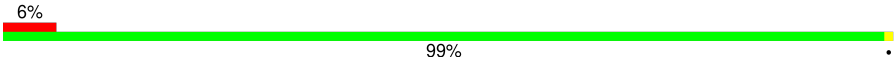
• Molecule 14: Major capsid protein

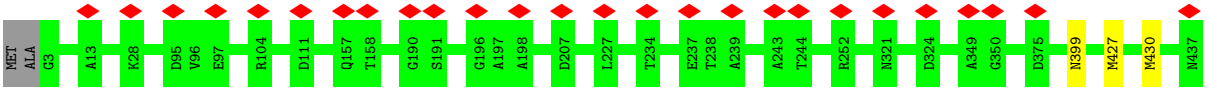
Chain j7:



• Molecule 14: Major capsid protein

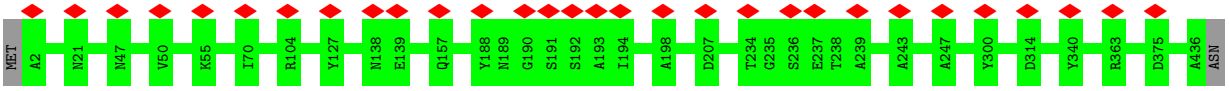
Chain j8:





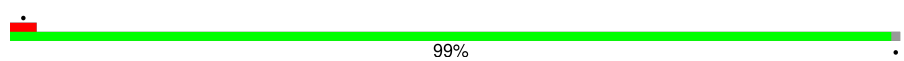
• Molecule 14: Major capsid protein

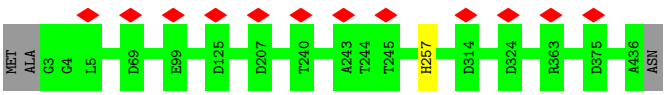
Chain j9:



• Molecule 14: Major capsid protein

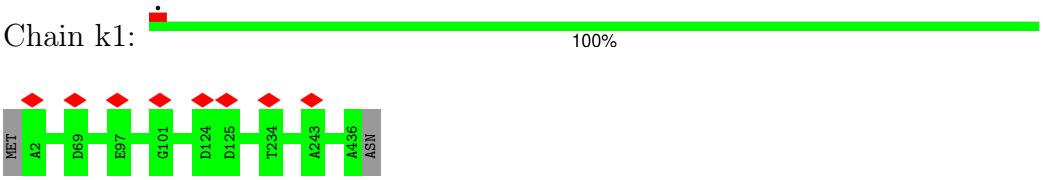
Chain k0:





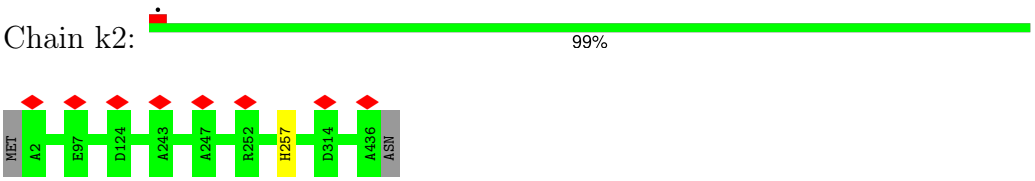
• Molecule 14: Major capsid protein

Chain k1:



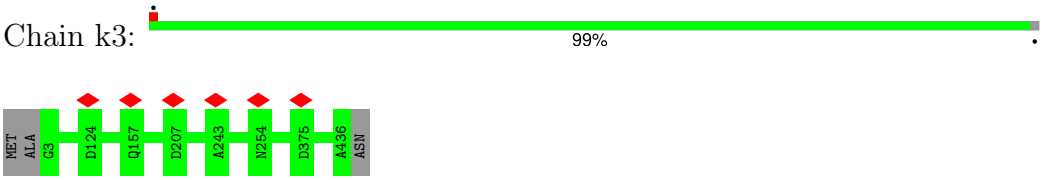
• Molecule 14: Major capsid protein

Chain k2:



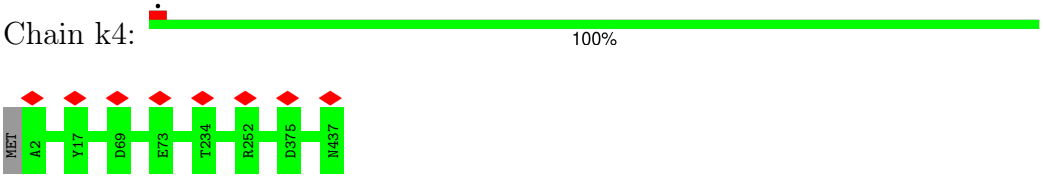
• Molecule 14: Major capsid protein

Chain k3:



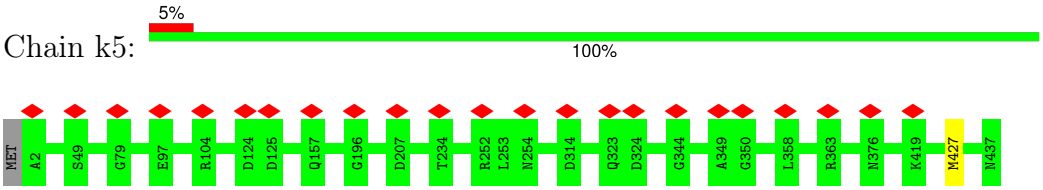
• Molecule 14: Major capsid protein

Chain k4:



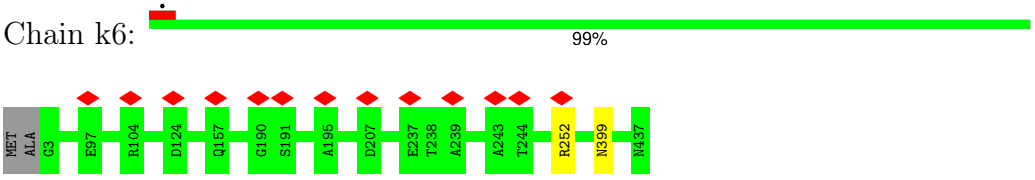
• Molecule 14: Major capsid protein

Chain k5:



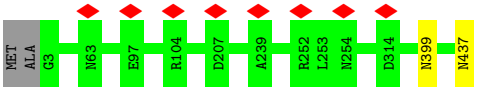
• Molecule 14: Major capsid protein

Chain k6:



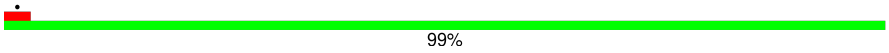
• Molecule 14: Major capsid protein

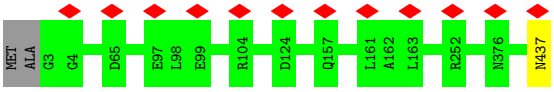
Chain k7:



• Molecule 14: Major capsid protein

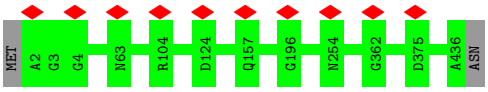
Chain k8:





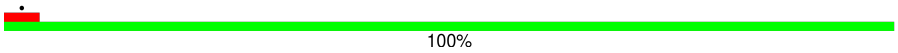
• Molecule 14: Major capsid protein

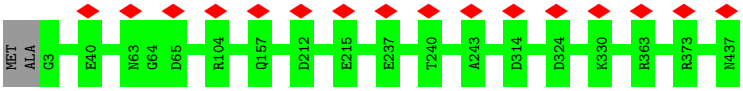
Chain k9:



• Molecule 14: Major capsid protein

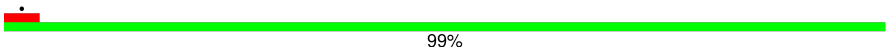
Chain l0:

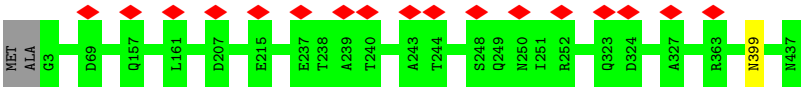




• Molecule 14: Major capsid protein

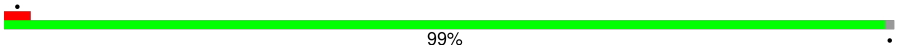
Chain l1:

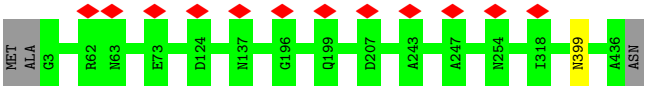




• Molecule 14: Major capsid protein

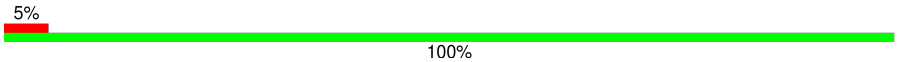
Chain l2:

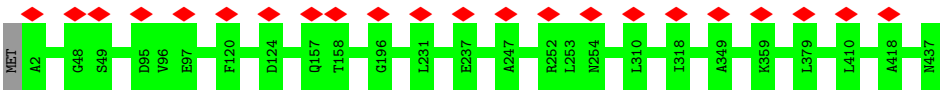




• Molecule 14: Major capsid protein

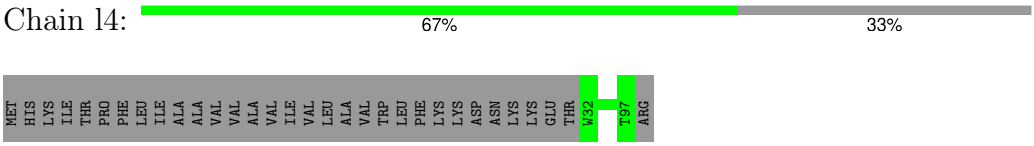
Chain l3:





• Molecule 15: P13

Chain l4:


67%
33%
MET
HIS
LYS
ILE
THR
PRO
PHE
LEU
ILE
ALA
ALA
VAL
VAL
ALA
ALA
VAL
ILE
VAL
LEU
ALA
VAL
TRP
LEU
PHE
LYS
LYS
ASP
ASN
LYS
LYS
GLU
THR
W32
I97
ARG

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, I	Depositor
Number of particles used	13000	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	24.4	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	69.604	Depositor
Minimum map value	-56.026	Depositor
Average map value	0.028	Depositor
Map value standard deviation	2.763	Depositor
Recommended contour level	7	Depositor
Map size (Å)	1944.0, 1944.0, 1944.0	wwPDB
Map dimensions	1200, 1200, 1200	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.62, 1.62, 1.62	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	a0	0.82	0/741	0.75	0/1006
2	a1	0.60	2/734 (0.3%)	0.80	0/1011
3	a2	0.48	0/667	0.79	0/920
3	a3	0.30	0/497	0.58	0/688
4	a4	0.90	2/1124 (0.2%)	0.92	0/1543
5	a5	0.38	0/1365	0.65	0/1883
6	a6	0.80	0/1220	0.88	0/1677
7	a7	0.89	1/559 (0.2%)	1.03	0/771
8	a8	0.83	0/1014	1.00	0/1402
9	a9	0.48	0/320	0.74	0/446
9	b0	0.39	0/408	0.71	0/567
9	b1	0.46	0/379	0.70	0/526
9	b2	0.46	0/360	0.68	0/500
9	b3	0.39	0/345	0.73	0/481
9	b4	0.41	0/360	0.68	0/500
9	b5	0.52	0/377	0.76	0/523
9	b7	0.42	0/386	0.66	0/533
9	b8	0.41	0/391	0.66	0/543
9	c0	0.49	0/346	0.65	0/480
9	c1	0.41	0/344	0.74	0/476
9	l5	0.42	0/404	0.69	0/559
10	b6	0.37	0/3289	0.65	0/4533
11	c2	0.44	0/608	0.74	0/838
11	c3	0.37	0/393	0.78	0/538
11	c4	0.45	0/374	0.74	0/515
11	c5	0.45	0/403	0.80	0/550
12	c6	0.41	0/972	0.66	0/1332
12	c7	0.50	0/1030	0.84	0/1417
12	c8	0.33	0/830	0.60	0/1133
13	c9	0.89	0/1218	0.90	0/1663
14	d0	0.96	0/3446	0.88	0/4697
14	d1	0.94	0/3460	0.87	0/4717
14	d2	0.97	0/3465	0.87	0/4724
14	d3	0.98	0/3460	0.89	0/4717

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
14	d4	1.00	0/3460	0.89	0/4717
14	d5	1.02	0/3461	0.90	0/4719
14	d6	0.98	0/3465	0.89	0/4724
14	d7	0.92	0/3459	0.89	0/4717
14	d8	1.01	0/3468	0.88	0/4728
14	d9	0.99	0/3473	0.90	0/4735
14	e0	0.98	0/3468	0.89	0/4728
14	e1	0.96	0/3460	0.88	0/4717
14	e2	1.00	0/3460	0.90	0/4717
14	e3	0.95	0/3465	0.89	0/4724
14	e4	0.96	0/3460	0.88	0/4717
14	e5	0.99	0/3468	0.89	0/4728
14	e6	0.97	0/3473	0.89	0/4735
14	e7	0.98	0/3468	0.90	0/4728
14	e8	0.99	0/3468	0.90	0/4728
14	e9	1.01	0/3465	0.89	0/4724
14	f0	0.95	0/3452	0.90	0/4706
14	f1	0.99	0/3465	0.88	0/4724
14	f2	0.97	0/3473	0.88	0/4735
14	f3	1.00	0/3460	0.89	0/4717
14	f4	0.97	0/3460	0.87	0/4717
14	f5	0.98	0/3454	0.88	0/4710
14	f6	0.97	0/3465	0.90	0/4724
14	f7	0.99	0/3449	0.89	0/4702
14	f8	0.97	0/3456	0.89	0/4712
14	f9	0.99	0/3456	0.90	0/4712
14	g0	1.00	0/3465	0.91	0/4724
14	g1	0.96	0/3465	0.88	0/4724
14	g2	1.00	0/3460	0.91	0/4717
14	g3	1.00	0/3460	0.89	0/4717
14	g4	0.96	0/3468	0.87	0/4728
14	g5	0.95	0/3465	0.88	0/4724
14	g6	0.94	0/3465	0.88	0/4724
14	g7	0.98	0/3454	0.90	0/4710
14	g8	0.94	0/3473	0.87	0/4735
14	g9	1.00	0/3468	0.90	0/4728
14	h0	0.95	0/3465	0.89	0/4724
14	h1	0.94	0/3465	0.87	0/4724
14	h2	0.97	0/3460	0.88	0/4717
14	h3	0.98	0/3468	0.89	0/4728
14	h4	0.98	0/3460	0.90	0/4717
14	h5	0.94	0/3460	0.88	0/4717
14	h6	1.00	0/3460	0.89	0/4717

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
14	h7	0.96	0/3473	0.89	0/4735
14	h8	0.96	0/3465	0.88	0/4724
14	h9	0.96	0/3459	0.88	0/4717
14	i0	1.00	0/3468	0.89	0/4728
14	i1	0.98	0/3460	0.88	0/4717
14	i2	1.01	0/3460	0.89	0/4717
14	i3	0.99	0/3460	0.91	0/4717
14	i4	0.98	0/3462	0.89	0/4721
14	i5	0.98	0/3473	0.88	0/4735
14	i6	0.94	0/3460	0.89	0/4717
14	i7	0.95	0/3460	0.87	0/4717
14	i8	0.96	0/3465	0.87	0/4724
14	i9	0.97	0/3465	0.88	0/4724
14	j0	0.98	0/3470	0.89	0/4731
14	j1	0.95	0/3465	0.87	0/4724
14	j2	1.02	0/3465	0.89	0/4724
14	j3	0.98	0/3465	0.89	0/4724
14	j4	0.99	0/3460	0.89	0/4717
14	j5	1.00	0/3460	0.88	0/4717
14	j6	1.03	0/3460	0.89	0/4717
14	j7	1.00	0/3473	0.89	0/4735
14	j8	0.95	0/3468	0.88	0/4728
14	j9	0.98	0/3465	0.90	0/4724
14	k0	0.97	0/3460	0.89	0/4717
14	k1	0.97	0/3465	0.88	0/4724
14	k2	0.96	0/3465	0.90	0/4724
14	k3	1.01	0/3460	0.90	0/4717
14	k4	1.00	0/3473	0.89	0/4735
14	k5	0.97	0/3473	0.88	0/4735
14	k6	0.97	0/3469	0.89	0/4728
14	k7	0.97	0/3465	0.88	0/4723
14	k8	0.97	0/3469	0.89	0/4728
14	k9	0.99	0/3459	0.88	0/4717
14	l0	0.98	0/3469	0.88	0/4728
14	l1	1.01	0/3469	0.90	0/4728
14	l2	0.97	0/3460	0.88	0/4717
14	l3	0.99	0/3474	0.89	0/4735
15	l4	0.84	0/501	0.82	0/684
All	All	0.96	5/312913 (0.0%)	0.88	0/426903

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	a1	197	ASP	C-N	8.48	1.50	1.34
7	a7	120	CYS	CB-SG	7.78	1.95	1.82
2	a1	202	THR	C-N	7.76	1.49	1.34
4	a4	134	CYS	CB-SG	-6.38	1.71	1.82
4	a4	120	CYS	CB-SG	-5.84	1.72	1.81

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	a0	733	0	706	0	0
2	a1	718	0	588	0	0
3	a2	650	0	564	0	0
3	a3	485	0	425	0	0
4	a4	1088	0	874	0	0
5	a5	1326	0	1193	0	0
6	a6	1192	0	1133	0	0
7	a7	543	0	455	0	0
8	a8	988	0	900	0	0
9	a9	311	0	257	0	0
9	b0	398	0	325	0	0
9	b1	368	0	314	0	0
9	b2	350	0	314	0	0
9	b3	335	0	275	0	0
9	b4	350	0	299	0	0
9	b5	367	0	296	0	0
9	b7	375	0	345	0	0
9	b8	379	0	301	0	0
9	c0	338	0	292	0	0
9	c1	335	0	285	0	0
9	l5	392	0	325	0	0
10	b6	3210	0	2777	0	0
11	c2	603	0	404	0	0
11	c3	389	0	308	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
11	c4	369	0	262	0	0
11	c5	396	0	327	0	0
12	c6	951	0	834	0	0
12	c7	1004	0	875	0	0
12	c8	813	0	754	0	0
13	c9	1191	0	1134	0	0
14	d0	3369	0	3266	0	0
14	d1	3382	0	3278	0	0
14	d2	3387	0	3283	0	0
14	d3	3382	0	3278	0	0
14	d4	3382	0	3278	0	0
14	d5	3383	0	3279	0	0
14	d6	3387	0	3283	0	0
14	d7	3381	0	3272	0	0
14	d8	3390	0	3284	0	0
14	d9	3395	0	3289	0	0
14	e0	3390	0	3284	0	0
14	e1	3382	0	3278	0	0
14	e2	3382	0	3278	0	0
14	e3	3387	0	3283	0	0
14	e4	3382	0	3278	0	0
14	e5	3390	0	3284	0	0
14	e6	3395	0	3289	0	0
14	e7	3390	0	3284	0	0
14	e8	3390	0	3284	0	0
14	e9	3387	0	3283	0	0
14	f0	3375	0	3271	0	0
14	f1	3387	0	3280	0	0
14	f2	3395	0	3289	0	0
14	f3	3383	0	3277	0	0
14	f4	3382	0	3278	0	0
14	f5	3376	0	3267	0	0
14	f6	3387	0	3283	0	0
14	f7	3372	0	3267	0	0
14	f8	3378	0	3275	0	0
14	f9	3379	0	3274	0	0
14	g0	3387	0	3280	0	0
14	g1	3387	0	3283	0	0
14	g2	3382	0	3278	0	0
14	g3	3382	0	3278	0	0
14	g4	3390	0	3284	0	0
14	g5	3387	0	3283	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
14	g6	3387	0	3283	0	0
14	g7	3376	0	3267	0	0
14	g8	3395	0	3289	0	0
14	g9	3390	0	3284	0	0
14	h0	3387	0	3283	0	0
14	h1	3387	0	3283	0	0
14	h2	3382	0	3278	0	0
14	h3	3390	0	3284	0	0
14	h4	3382	0	3278	0	0
14	h5	3382	0	3278	0	0
14	h6	3382	0	3278	0	0
14	h7	3395	0	3289	0	0
14	h8	3387	0	3283	0	0
14	h9	3381	0	3272	0	0
14	i0	3390	0	3284	0	0
14	i1	3382	0	3278	0	0
14	i2	3382	0	3278	0	0
14	i3	3382	0	3278	0	0
14	i4	3384	0	3273	0	0
14	i5	3395	0	3289	0	0
14	i6	3382	0	3278	0	0
14	i7	3382	0	3278	0	0
14	i8	3388	0	3282	0	0
14	i9	3387	0	3283	0	0
14	j0	3392	0	3287	0	0
14	j1	3387	0	3283	0	0
14	j2	3387	0	3283	0	0
14	j3	3387	0	3282	0	0
14	j4	3382	0	3278	0	0
14	j5	3382	0	3278	0	0
14	j6	3382	0	3278	0	0
14	j7	3395	0	3289	0	0
14	j8	3390	0	3284	0	0
14	j9	3387	0	3283	0	0
14	k0	3382	0	3278	0	0
14	k1	3387	0	3283	0	0
14	k2	3387	0	3283	0	0
14	k3	3382	0	3278	0	0
14	k4	3395	0	3289	0	0
14	k5	3395	0	3289	0	0
14	k6	3391	0	3284	0	0
14	k7	3387	0	3278	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
14	k8	3391	0	3284	0	0
14	k9	3381	0	3272	0	0
14	l0	3391	0	3284	0	0
14	l1	3391	0	3284	0	0
14	l2	3382	0	3278	0	0
14	l3	3396	0	3289	0	0
15	l4	487	0	428	0	0
All	All	305842	0	294139	0	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 10.

There are no clashes within the asymmetric unit.

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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
1	a0	95/352 (27%)	93 (98%)	2 (2%)	0	100 100
2	a1	105/210 (50%)	85 (81%)	17 (16%)	3 (3%)	3 27
3	a2	92/289 (32%)	76 (83%)	14 (15%)	2 (2%)	5 31
3	a3	72/289 (25%)	60 (83%)	12 (17%)	0	100 100
4	a4	149/256 (58%)	130 (87%)	14 (9%)	5 (3%)	3 24
5	a5	187/216 (87%)	162 (87%)	24 (13%)	1 (0%)	25 59
6	a6	165/170 (97%)	155 (94%)	9 (6%)	1 (1%)	22 56
7	a7	76/151 (50%)	65 (86%)	7 (9%)	4 (5%)	1 14
8	a8	140/146 (96%)	126 (90%)	12 (9%)	2 (1%)	9 40
9	a9	45/207 (22%)	34 (76%)	11 (24%)	0	100 100
9	b0	57/207 (28%)	45 (79%)	10 (18%)	2 (4%)	3 24

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
9	b1	52/207 (25%)	43 (83%)	8 (15%)	1 (2%)	6 34
9	b2	49/207 (24%)	39 (80%)	10 (20%)	0	100 100
9	b3	49/207 (24%)	38 (78%)	9 (18%)	2 (4%)	2 20
9	b4	50/207 (24%)	40 (80%)	9 (18%)	1 (2%)	6 33
9	b5	55/207 (27%)	36 (66%)	16 (29%)	3 (6%)	1 14
9	b7	50/207 (24%)	45 (90%)	5 (10%)	0	100 100
9	b8	55/207 (27%)	47 (86%)	8 (14%)	0	100 100
9	c0	49/207 (24%)	41 (84%)	6 (12%)	2 (4%)	2 20
9	c1	49/207 (24%)	38 (78%)	7 (14%)	4 (8%)	1 8
9	l5	56/207 (27%)	42 (75%)	13 (23%)	1 (2%)	7 35
10	b6	473/576 (82%)	392 (83%)	77 (16%)	4 (1%)	16 51
11	c2	101/181 (56%)	76 (75%)	25 (25%)	0	100 100
11	c3	58/181 (32%)	40 (69%)	17 (29%)	1 (2%)	7 36
11	c4	56/181 (31%)	46 (82%)	8 (14%)	2 (4%)	3 22
11	c5	56/181 (31%)	42 (75%)	13 (23%)	1 (2%)	7 35
12	c6	139/171 (81%)	114 (82%)	24 (17%)	1 (1%)	19 53
12	c7	145/171 (85%)	111 (77%)	27 (19%)	7 (5%)	2 17
12	c8	114/171 (67%)	100 (88%)	14 (12%)	0	100 100
13	c9	164/173 (95%)	160 (98%)	2 (1%)	2 (1%)	11 43
14	d0	428/437 (98%)	419 (98%)	9 (2%)	0	100 100
14	d1	432/437 (99%)	422 (98%)	10 (2%)	0	100 100
14	d2	433/437 (99%)	425 (98%)	8 (2%)	0	100 100
14	d3	432/437 (99%)	424 (98%)	7 (2%)	1 (0%)	44 75
14	d4	432/437 (99%)	422 (98%)	10 (2%)	0	100 100
14	d5	433/437 (99%)	425 (98%)	8 (2%)	0	100 100
14	d6	433/437 (99%)	427 (99%)	6 (1%)	0	100 100
14	d7	433/437 (99%)	423 (98%)	10 (2%)	0	100 100
14	d8	433/437 (99%)	424 (98%)	9 (2%)	0	100 100
14	d9	434/437 (99%)	422 (97%)	12 (3%)	0	100 100
14	e0	433/437 (99%)	424 (98%)	8 (2%)	1 (0%)	44 75
14	e1	432/437 (99%)	424 (98%)	8 (2%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	e2	432/437 (99%)	419 (97%)	13 (3%)	0	100	100
14	e3	433/437 (99%)	426 (98%)	6 (1%)	1 (0%)	44	75
14	e4	432/437 (99%)	425 (98%)	7 (2%)	0	100	100
14	e5	433/437 (99%)	428 (99%)	5 (1%)	0	100	100
14	e6	434/437 (99%)	424 (98%)	10 (2%)	0	100	100
14	e7	433/437 (99%)	423 (98%)	10 (2%)	0	100	100
14	e8	433/437 (99%)	424 (98%)	9 (2%)	0	100	100
14	e9	433/437 (99%)	423 (98%)	9 (2%)	1 (0%)	44	75
14	f0	432/437 (99%)	424 (98%)	8 (2%)	0	100	100
14	f1	433/437 (99%)	426 (98%)	7 (2%)	0	100	100
14	f2	434/437 (99%)	426 (98%)	7 (2%)	1 (0%)	44	75
14	f3	433/437 (99%)	426 (98%)	7 (2%)	0	100	100
14	f4	432/437 (99%)	425 (98%)	7 (2%)	0	100	100
14	f5	432/437 (99%)	423 (98%)	9 (2%)	0	100	100
14	f6	433/437 (99%)	423 (98%)	10 (2%)	0	100	100
14	f7	432/437 (99%)	420 (97%)	12 (3%)	0	100	100
14	f8	431/437 (99%)	421 (98%)	10 (2%)	0	100	100
14	f9	432/437 (99%)	419 (97%)	13 (3%)	0	100	100
14	g0	433/437 (99%)	423 (98%)	10 (2%)	0	100	100
14	g1	433/437 (99%)	424 (98%)	9 (2%)	0	100	100
14	g2	432/437 (99%)	423 (98%)	8 (2%)	1 (0%)	44	75
14	g3	432/437 (99%)	421 (98%)	11 (2%)	0	100	100
14	g4	433/437 (99%)	423 (98%)	10 (2%)	0	100	100
14	g5	433/437 (99%)	426 (98%)	6 (1%)	1 (0%)	44	75
14	g6	433/437 (99%)	426 (98%)	7 (2%)	0	100	100
14	g7	432/437 (99%)	422 (98%)	10 (2%)	0	100	100
14	g8	434/437 (99%)	427 (98%)	7 (2%)	0	100	100
14	g9	433/437 (99%)	427 (99%)	6 (1%)	0	100	100
14	h0	433/437 (99%)	429 (99%)	4 (1%)	0	100	100
14	h1	433/437 (99%)	426 (98%)	7 (2%)	0	100	100
14	h2	432/437 (99%)	425 (98%)	7 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	h3	433/437 (99%)	423 (98%)	10 (2%)	0	100	100
14	h4	432/437 (99%)	424 (98%)	8 (2%)	0	100	100
14	h5	432/437 (99%)	425 (98%)	7 (2%)	0	100	100
14	h6	432/437 (99%)	424 (98%)	8 (2%)	0	100	100
14	h7	434/437 (99%)	427 (98%)	7 (2%)	0	100	100
14	h8	433/437 (99%)	423 (98%)	10 (2%)	0	100	100
14	h9	433/437 (99%)	426 (98%)	7 (2%)	0	100	100
14	i0	433/437 (99%)	424 (98%)	9 (2%)	0	100	100
14	i1	432/437 (99%)	425 (98%)	7 (2%)	0	100	100
14	i2	432/437 (99%)	424 (98%)	8 (2%)	0	100	100
14	i3	432/437 (99%)	425 (98%)	7 (2%)	0	100	100
14	i4	433/437 (99%)	427 (99%)	6 (1%)	0	100	100
14	i5	434/437 (99%)	428 (99%)	6 (1%)	0	100	100
14	i6	432/437 (99%)	423 (98%)	9 (2%)	0	100	100
14	i7	432/437 (99%)	425 (98%)	7 (2%)	0	100	100
14	i8	434/437 (99%)	421 (97%)	11 (2%)	2 (0%)	25	59
14	i9	433/437 (99%)	425 (98%)	8 (2%)	0	100	100
14	j0	434/437 (99%)	426 (98%)	7 (2%)	1 (0%)	44	75
14	j1	433/437 (99%)	425 (98%)	8 (2%)	0	100	100
14	j2	433/437 (99%)	425 (98%)	8 (2%)	0	100	100
14	j3	433/437 (99%)	421 (97%)	12 (3%)	0	100	100
14	j4	432/437 (99%)	422 (98%)	10 (2%)	0	100	100
14	j5	432/437 (99%)	423 (98%)	9 (2%)	0	100	100
14	j6	432/437 (99%)	423 (98%)	9 (2%)	0	100	100
14	j7	434/437 (99%)	423 (98%)	11 (2%)	0	100	100
14	j8	433/437 (99%)	425 (98%)	8 (2%)	0	100	100
14	j9	433/437 (99%)	424 (98%)	9 (2%)	0	100	100
14	k0	432/437 (99%)	426 (99%)	5 (1%)	1 (0%)	44	75
14	k1	433/437 (99%)	427 (99%)	6 (1%)	0	100	100
14	k2	433/437 (99%)	424 (98%)	8 (2%)	1 (0%)	44	75
14	k3	432/437 (99%)	422 (98%)	10 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	k4	434/437 (99%)	426 (98%)	8 (2%)	0	100	100
14	k5	434/437 (99%)	425 (98%)	9 (2%)	0	100	100
14	k6	433/437 (99%)	426 (98%)	7 (2%)	0	100	100
14	k7	433/437 (99%)	424 (98%)	9 (2%)	0	100	100
14	k8	433/437 (99%)	425 (98%)	8 (2%)	0	100	100
14	k9	433/437 (99%)	424 (98%)	9 (2%)	0	100	100
14	l0	433/437 (99%)	424 (98%)	9 (2%)	0	100	100
14	l1	433/437 (99%)	423 (98%)	10 (2%)	0	100	100
14	l2	432/437 (99%)	423 (98%)	9 (2%)	0	100	100
14	l3	434/437 (99%)	426 (98%)	8 (2%)	0	100	100
15	l4	64/98 (65%)	63 (98%)	1 (2%)	0	100	100
All	All	39415/43355 (91%)	38213 (97%)	1138 (3%)	64 (0%)	45	75

All (64) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	a1	203	PRO
3	a2	283	ASN
4	a4	199	TRP
9	b0	198	PRO
9	b1	192	MET
9	b5	175	TYR
9	c1	193	MET
9	c1	198	PRO
11	c4	7	ASP
11	c4	15	ASP
12	c7	71	VAL
12	c7	82	GLU
14	e0	25	THR
14	g5	364	GLN
2	a1	137	ASP
4	a4	142	MET
7	a7	114	LYS
10	b6	172	GLY
10	b6	173	ASP
9	c0	198	PRO
11	c3	22	THR
11	c5	34	ILE

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Mol	Chain	Res	Type
14	e3	257	HIS
7	a7	116	ASN
7	a7	121	ASN
9	b3	198	PRO
10	b6	112	GLY
10	b6	171	PRO
9	c1	192	MET
12	c7	69	VAL
13	c9	141	SER
14	d3	399	ASN
4	a4	130	GLU
8	a8	7	ALA
12	c7	101	ARG
13	c9	140	PHE
14	f2	240	THR
14	i8	23	GLN
14	j0	434	ALA
2	a1	130	ALA
3	a2	256	GLN
4	a4	168	TRP
4	a4	251	GLN
5	a5	203	PHE
9	b5	174	ASN
12	c6	162	THR
12	c7	53	LEU
12	c7	150	ALA
14	i8	22	PRO
9	l5	140	ASP
6	a6	133	ILE
9	b3	197	ASP
9	b5	204	PRO
9	c0	197	ASP
9	c1	197	ASP
14	g2	257	HIS
14	e9	257	HIS
7	a7	125	VAL
8	a8	36	PRO
9	b4	204	PRO
12	c7	27	PRO
14	k2	257	HIS
9	b0	197	ASP
14	k0	257	HIS

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 PDB entries followed by that with respect to all EM entries.

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
1	a0	78/309 (25%)	78 (100%)	0	100 100
2	a1	64/179 (36%)	60 (94%)	4 (6%)	15 42
3	a2	60/249 (24%)	57 (95%)	3 (5%)	20 49
3	a3	42/249 (17%)	42 (100%)	0	100 100
4	a4	92/222 (41%)	89 (97%)	3 (3%)	33 61
5	a5	119/188 (63%)	117 (98%)	2 (2%)	56 75
6	a6	124/145 (86%)	124 (100%)	0	100 100
7	a7	45/139 (32%)	42 (93%)	3 (7%)	13 40
8	a8	87/125 (70%)	85 (98%)	2 (2%)	45 69
9	a9	25/181 (14%)	25 (100%)	0	100 100
9	b0	34/181 (19%)	31 (91%)	3 (9%)	8 31
9	b1	30/181 (17%)	27 (90%)	3 (10%)	6 26
9	b2	31/181 (17%)	31 (100%)	0	100 100
9	b3	26/181 (14%)	26 (100%)	0	100 100
9	b4	26/181 (14%)	23 (88%)	3 (12%)	4 22
9	b5	25/181 (14%)	23 (92%)	2 (8%)	10 34
9	b7	35/181 (19%)	33 (94%)	2 (6%)	17 45
9	b8	28/181 (16%)	27 (96%)	1 (4%)	30 59
9	c0	29/181 (16%)	29 (100%)	0	100 100
9	c1	27/181 (15%)	27 (100%)	0	100 100
9	l5	29/181 (16%)	28 (97%)	1 (3%)	32 60
10	b6	264/479 (55%)	256 (97%)	8 (3%)	36 63
11	c2	32/161 (20%)	31 (97%)	1 (3%)	35 63
11	c3	29/161 (18%)	29 (100%)	0	100 100
11	c4	24/161 (15%)	22 (92%)	2 (8%)	9 32
11	c5	31/161 (19%)	31 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
12	c6	78/144 (54%)	77 (99%)	1 (1%)	65 81
12	c7	81/144 (56%)	73 (90%)	8 (10%)	6 27
12	c8	73/144 (51%)	73 (100%)	0	100 100
13	c9	114/148 (77%)	114 (100%)	0	100 100
14	d0	355/358 (99%)	355 (100%)	0	100 100
14	d1	356/358 (99%)	356 (100%)	0	100 100
14	d2	356/358 (99%)	356 (100%)	0	100 100
14	d3	356/358 (99%)	356 (100%)	0	100 100
14	d4	356/358 (99%)	356 (100%)	0	100 100
14	d5	355/358 (99%)	355 (100%)	0	100 100
14	d6	356/358 (99%)	356 (100%)	0	100 100
14	d7	355/358 (99%)	355 (100%)	0	100 100
14	d8	357/358 (100%)	357 (100%)	0	100 100
14	d9	357/358 (100%)	357 (100%)	0	100 100
14	e0	357/358 (100%)	356 (100%)	1 (0%)	91 96
14	e1	356/358 (99%)	356 (100%)	0	100 100
14	e2	356/358 (99%)	356 (100%)	0	100 100
14	e3	356/358 (99%)	356 (100%)	0	100 100
14	e4	356/358 (99%)	356 (100%)	0	100 100
14	e5	357/358 (100%)	357 (100%)	0	100 100
14	e6	357/358 (100%)	356 (100%)	1 (0%)	91 96
14	e7	357/358 (100%)	355 (99%)	2 (1%)	84 91
14	e8	357/358 (100%)	357 (100%)	0	100 100
14	e9	356/358 (99%)	356 (100%)	0	100 100
14	f0	355/358 (99%)	354 (100%)	1 (0%)	91 96
14	f1	356/358 (99%)	356 (100%)	0	100 100
14	f2	357/358 (100%)	356 (100%)	1 (0%)	91 96
14	f3	356/358 (99%)	356 (100%)	0	100 100
14	f4	356/358 (99%)	356 (100%)	0	100 100
14	f5	355/358 (99%)	355 (100%)	0	100 100
14	f6	356/358 (99%)	356 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
14	f7	354/358 (99%)	354 (100%)	0	100	100
14	f8	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	f9	356/358 (99%)	356 (100%)	0	100	100
14	g0	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	g1	356/358 (99%)	356 (100%)	0	100	100
14	g2	356/358 (99%)	356 (100%)	0	100	100
14	g3	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	g4	357/358 (100%)	356 (100%)	1 (0%)	91	96
14	g5	356/358 (99%)	356 (100%)	0	100	100
14	g6	356/358 (99%)	356 (100%)	0	100	100
14	g7	355/358 (99%)	355 (100%)	0	100	100
14	g8	357/358 (100%)	356 (100%)	1 (0%)	91	96
14	g9	357/358 (100%)	357 (100%)	0	100	100
14	h0	356/358 (99%)	356 (100%)	0	100	100
14	h1	356/358 (99%)	356 (100%)	0	100	100
14	h2	356/358 (99%)	356 (100%)	0	100	100
14	h3	357/358 (100%)	356 (100%)	1 (0%)	91	96
14	h4	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	h5	356/358 (99%)	356 (100%)	0	100	100
14	h6	356/358 (99%)	356 (100%)	0	100	100
14	h7	357/358 (100%)	357 (100%)	0	100	100
14	h8	356/358 (99%)	356 (100%)	0	100	100
14	h9	355/358 (99%)	355 (100%)	0	100	100
14	i0	357/358 (100%)	357 (100%)	0	100	100
14	i1	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	i2	356/358 (99%)	356 (100%)	0	100	100
14	i3	356/358 (99%)	356 (100%)	0	100	100
14	i4	356/358 (99%)	356 (100%)	0	100	100
14	i5	357/358 (100%)	357 (100%)	0	100	100
14	i6	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	i7	356/358 (99%)	354 (99%)	2 (1%)	84	91

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
14	i8	356/358 (99%)	356 (100%)	0	100	100
14	i9	356/358 (99%)	356 (100%)	0	100	100
14	j0	356/358 (99%)	354 (99%)	2 (1%)	84	91
14	j1	356/358 (99%)	356 (100%)	0	100	100
14	j2	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	j3	356/358 (99%)	354 (99%)	2 (1%)	84	91
14	j4	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	j5	356/358 (99%)	356 (100%)	0	100	100
14	j6	356/358 (99%)	356 (100%)	0	100	100
14	j7	357/358 (100%)	356 (100%)	1 (0%)	91	96
14	j8	357/358 (100%)	354 (99%)	3 (1%)	79	88
14	j9	356/358 (99%)	356 (100%)	0	100	100
14	k0	356/358 (99%)	356 (100%)	0	100	100
14	k1	356/358 (99%)	356 (100%)	0	100	100
14	k2	356/358 (99%)	356 (100%)	0	100	100
14	k3	356/358 (99%)	356 (100%)	0	100	100
14	k4	357/358 (100%)	357 (100%)	0	100	100
14	k5	357/358 (100%)	356 (100%)	1 (0%)	91	96
14	k6	357/358 (100%)	355 (99%)	2 (1%)	84	91
14	k7	356/358 (99%)	354 (99%)	2 (1%)	84	91
14	k8	357/358 (100%)	356 (100%)	1 (0%)	91	96
14	k9	355/358 (99%)	355 (100%)	0	100	100
14	l0	357/358 (100%)	357 (100%)	0	100	100
14	l1	357/358 (100%)	356 (100%)	1 (0%)	91	96
14	l2	356/358 (99%)	355 (100%)	1 (0%)	91	96
14	l3	357/358 (100%)	357 (100%)	0	100	100
15	l4	42/79 (53%)	42 (100%)	0	100	100
All	All	31742/35831 (89%)	31655 (100%)	87 (0%)	90	96

All (87) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	a1	104	CYS

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Mol	Chain	Res	Type
2	a1	193	THR
2	a1	201	CYS
2	a1	202	THR
3	a2	198	ASP
3	a2	236	LEU
3	a2	274	THR
4	a4	109	VAL
4	a4	241	THR
4	a4	242	TRP
5	a5	52	THR
5	a5	54	THR
7	a7	110	LEU
7	a7	124	TRP
7	a7	125	VAL
8	a8	139	SER
8	a8	144	TYR
9	b0	188	VAL
9	b0	191	TRP
9	b0	192	MET
9	b1	158	THR
9	b1	160	TRP
9	b1	165	THR
9	b4	158	THR
9	b4	188	VAL
9	b4	191	TRP
9	b5	195	SER
9	b5	196	VAL
10	b6	182	VAL
10	b6	183	ASN
10	b6	244	THR
10	b6	281	LEU
10	b6	298	PRO
10	b6	300	GLU
10	b6	358	THR
10	b6	411	THR
9	b7	188	VAL
9	b7	191	TRP
9	b8	190	PRO
11	c2	70	THR
11	c4	17	HIS
11	c4	22	THR
12	c6	95	THR

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Mol	Chain	Res	Type
12	c7	43	THR
12	c7	50	ILE
12	c7	56	MET
12	c7	71	VAL
12	c7	154	THR
12	c7	155	SER
12	c7	162	THR
12	c7	166	LEU
14	e0	430	MET
14	e6	63	ASN
14	e7	399	ASN
14	e7	430	MET
14	f0	399	ASN
14	f2	399	ASN
14	f8	399	ASN
14	g0	252	ARG
14	g3	399	ASN
14	g4	433	LEU
14	g8	399	ASN
14	h3	252	ARG
14	h4	399	ASN
14	i1	430	MET
14	i6	399	ASN
14	i7	399	ASN
14	i7	435	TYR
14	j0	171	HIS
14	j0	433	LEU
14	j2	399	ASN
14	j3	11	TYR
14	j3	399	ASN
14	j4	252	ARG
14	j7	103	GLN
14	j8	399	ASN
14	j8	427	MET
14	j8	430	MET
14	k5	427	MET
14	k6	252	ARG
14	k6	399	ASN
14	k7	399	ASN
14	k7	437	ASN
14	k8	437	ASN
14	l1	399	ASN

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Mol	Chain	Res	Type
14	l2	399	ASN
9	l5	141	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (46) such sidechains are listed below:

Mol	Chain	Res	Type
2	a1	115	ASN
2	a1	153	ASN
2	a1	166	GLN
3	a2	237	ASN
3	a3	224	ASN
5	a5	176	ASN
9	a9	166	GLN
9	b0	148	ASN
9	b0	166	GLN
9	b1	172	ASN
9	b3	164	ASN
9	b3	166	GLN
10	b6	195	GLN
10	b6	215	HIS
10	b6	252	GLN
10	b6	257	ASN
10	b6	315	GLN
10	b6	338	ASN
10	b6	419	ASN
9	b7	199	ASN
11	c3	58	GLN
13	c9	42	HIS
14	d1	43	GLN
14	d1	63	ASN
14	d1	214	GLN
14	d8	256	ASN
14	e0	171	HIS
14	e0	254	ASN
14	e3	257	HIS
14	e6	63	ASN
14	e7	257	HIS
14	e9	14	GLN
14	f0	376	ASN
14	f3	14	GLN
14	f3	169	GLN
14	f5	14	GLN

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Mol	Chain	Res	Type
14	f8	23	GLN
14	g1	63	ASN
14	g2	169	GLN
14	h6	323	GLN
14	h7	256	ASN
14	i6	221	GLN
14	i9	63	ASN
14	j7	103	GLN
14	j8	103	GLN
14	l2	14	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

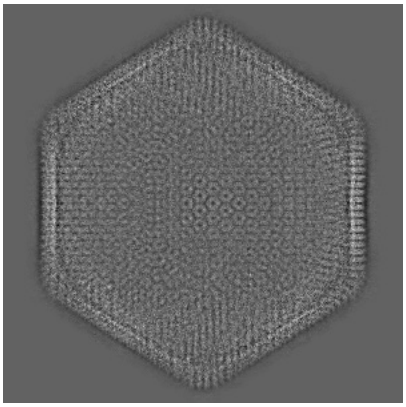
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-0436. These allow visual inspection of the internal detail of the map and identification of artifacts.

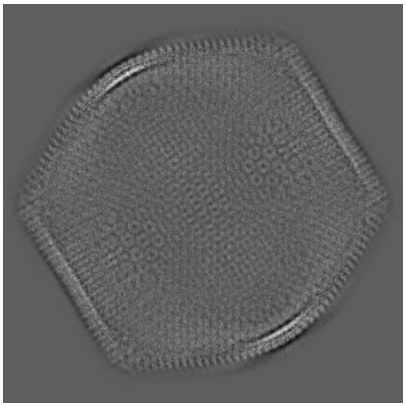
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

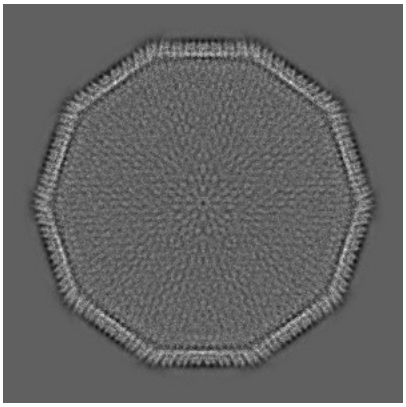
6.1.1 Primary map



X



Y

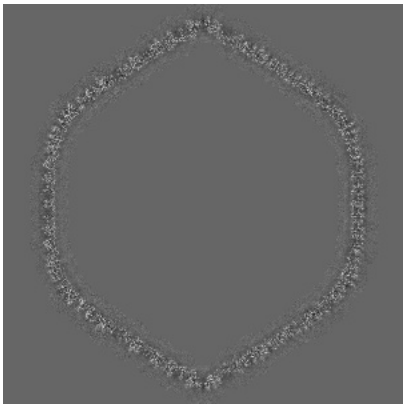


Z

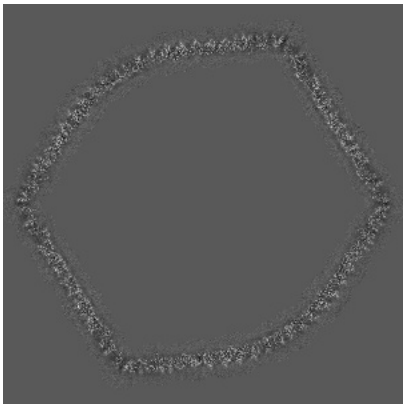
The images above show the map projected in three orthogonal directions.

6.2 Central slices

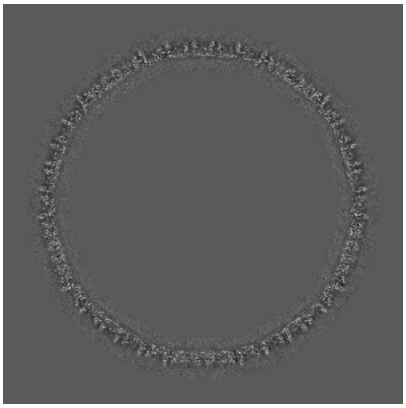
6.2.1 Primary map



X Index: 600



Y Index: 600

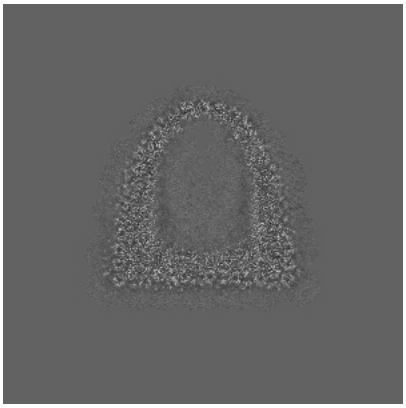


Z Index: 600

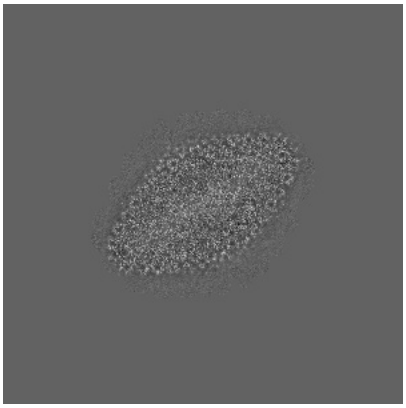
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

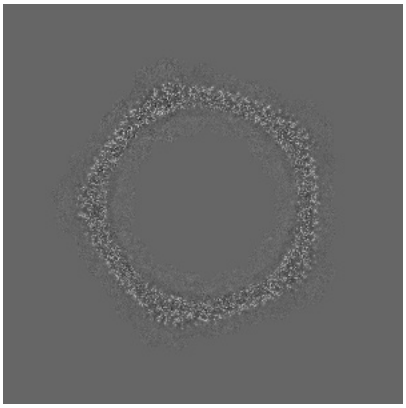
6.3.1 Primary map



X Index: 1020



Y Index: 1050

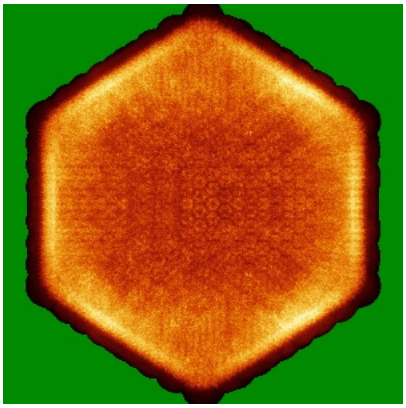


Z Index: 258

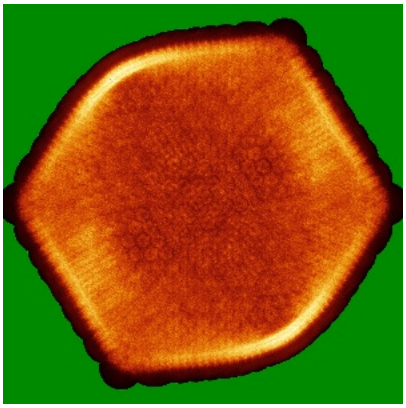
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

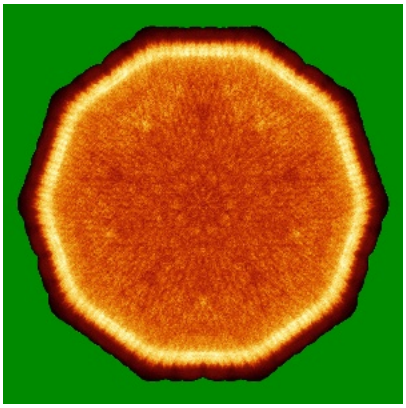
6.4.1 Primary map



X



Y

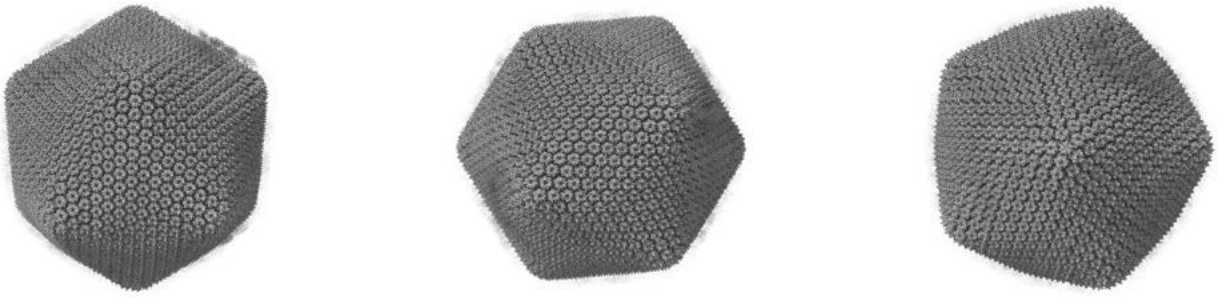


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 7.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

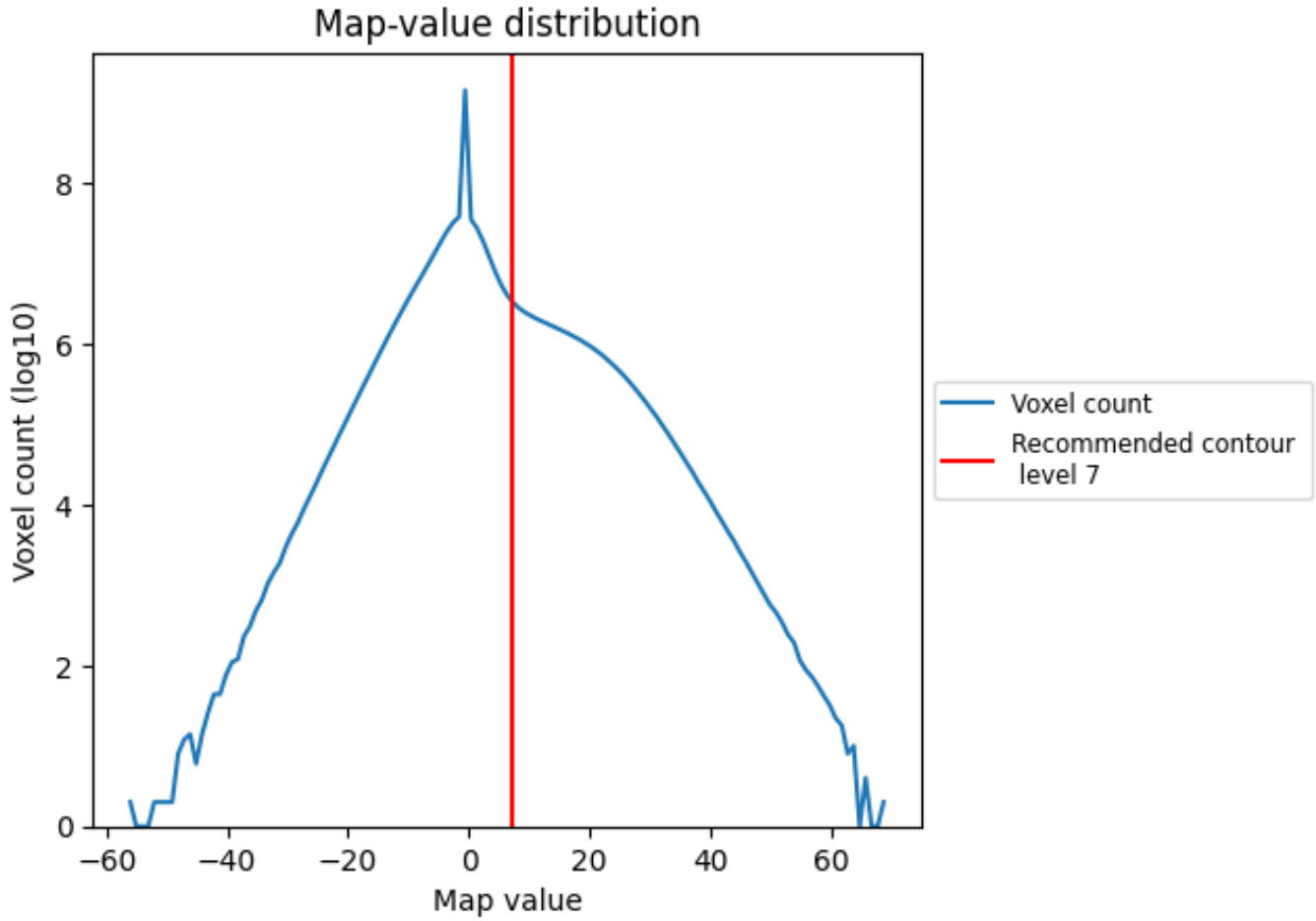
6.6 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

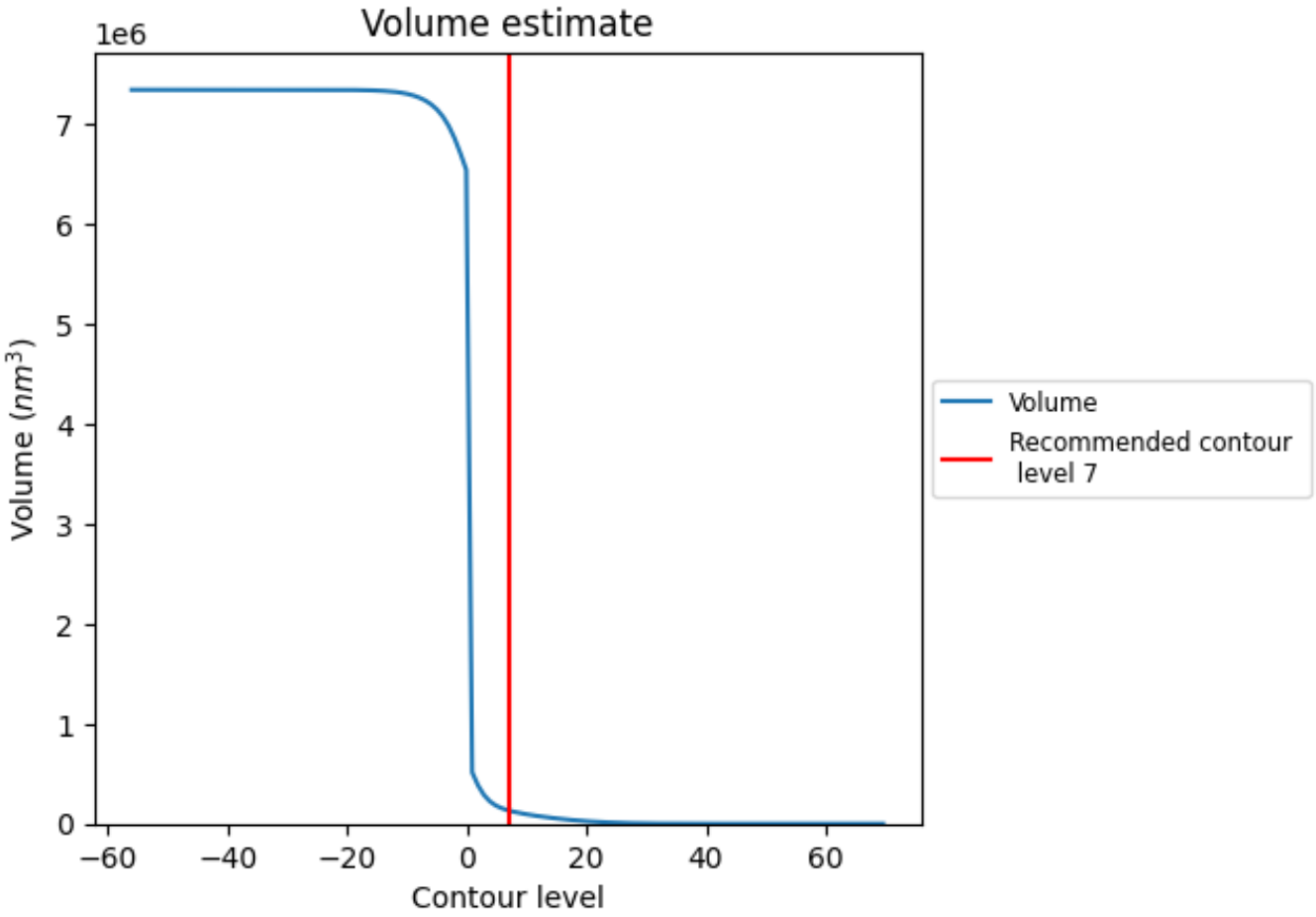
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

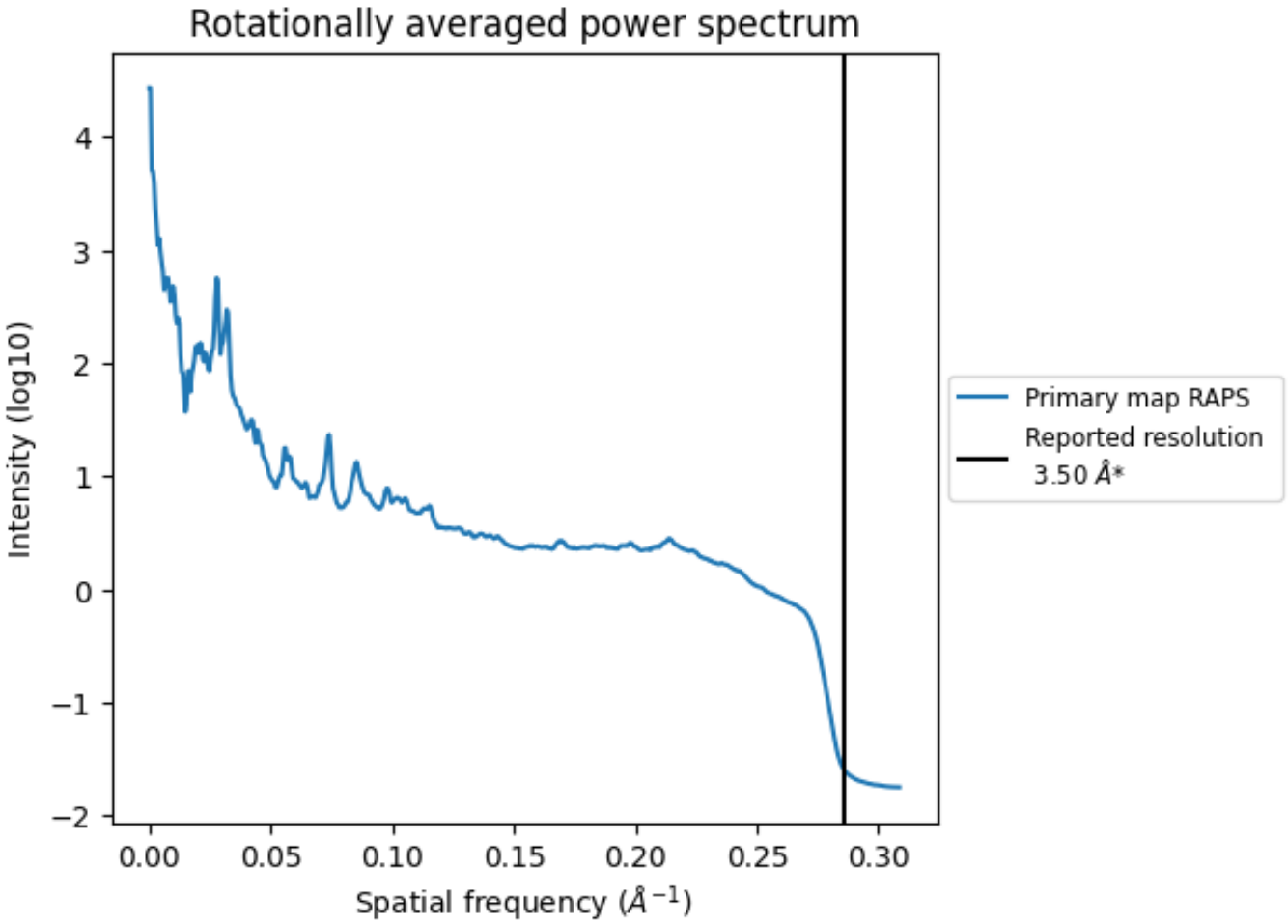
7.2 Volume estimate



The volume at the recommended contour level is 132822 nm^3; this corresponds to an approximate mass of 119981 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.286 Å^{-1}

8 Fourier-Shell correlation

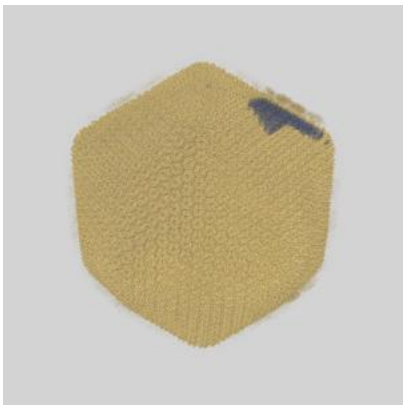
This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit

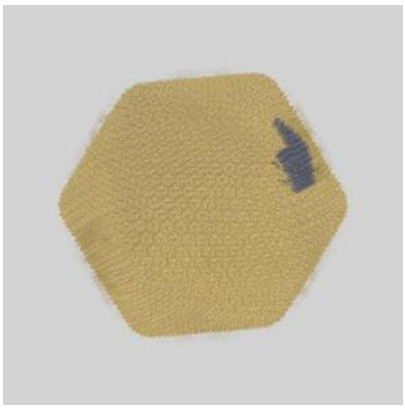
This section contains information regarding the fit between EMDB map EMD-0436 and PDB model 6NCL. Per-residue inclusion information can be found in section 3 on page 15.

9.1 Map-model overlays

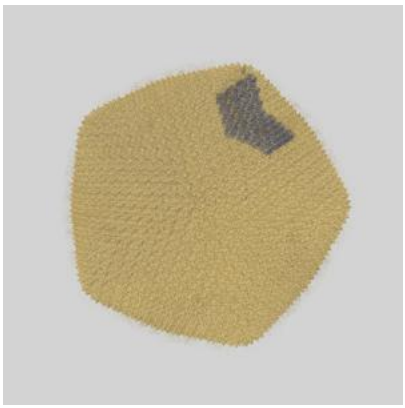
9.1.1 Map-model overlay



X

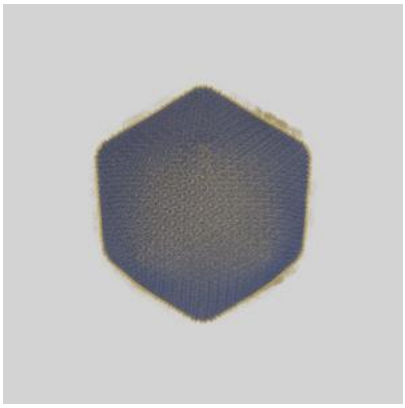


Y

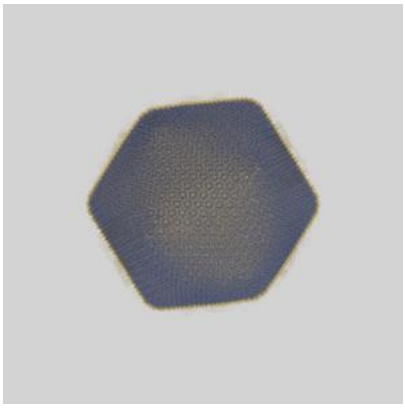


Z

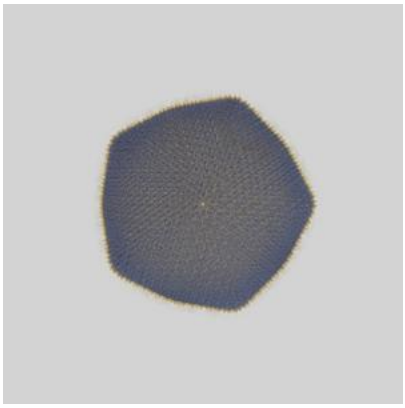
9.1.2 Map-model assembly overlay



X



Y



Z

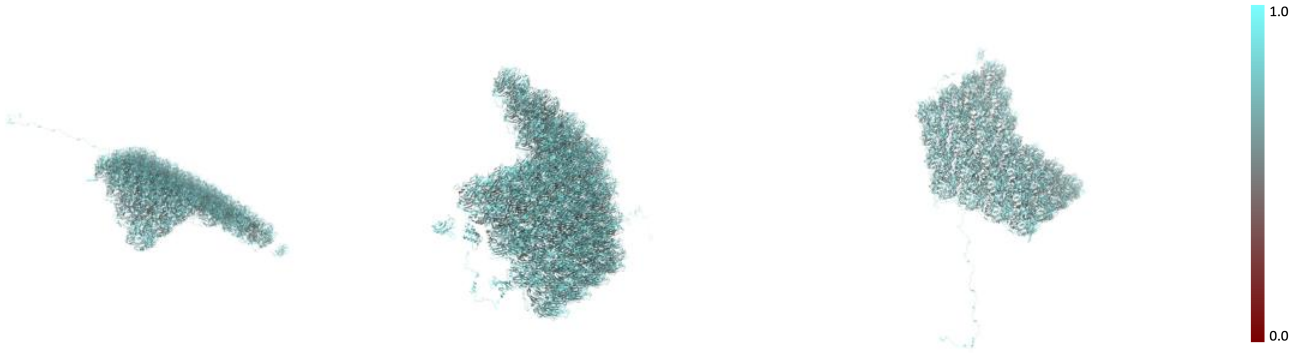
The images above show the 3D surface view of the map at the recommended contour level 7.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model

X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

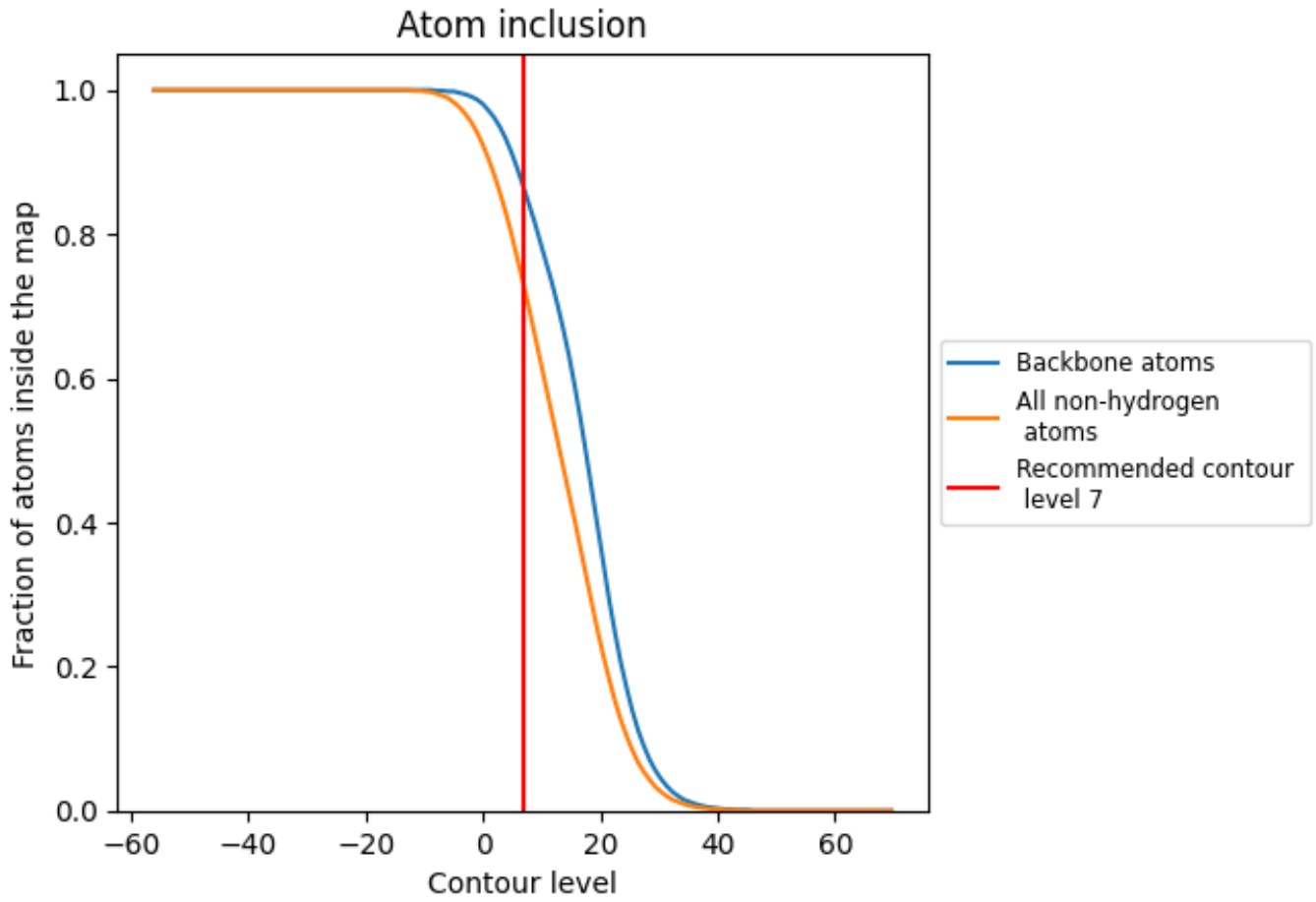
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (7).

9.4 Atom inclusion (i)



At the recommended contour level, 86% of all backbone atoms, 73% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (7) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7270	0.4260
a0	0.6990	0.3870
a1	0.7430	0.4520
a2	0.7520	0.4690
a3	0.7740	0.4660
a4	0.7370	0.4130
a5	0.7560	0.4520
a6	0.7510	0.4230
a7	0.8390	0.4030
a8	0.7430	0.4120
a9	0.8210	0.4770
b0	0.8250	0.4480
b1	0.8670	0.4970
b2	0.8080	0.4730
b3	0.8160	0.4540
b4	0.7330	0.4840
b5	0.7100	0.4780
b6	0.7920	0.4610
b7	0.8240	0.4850
b8	0.8530	0.4860
c0	0.8080	0.4950
c1	0.8390	0.4690
c2	0.8360	0.4500
c3	0.8330	0.4630
c4	0.8590	0.4730
c5	0.8900	0.4560
c6	0.8330	0.4740
c7	0.8100	0.4860
c8	0.7480	0.4550
c9	0.8100	0.4130
d0	0.6890	0.4130
d1	0.6790	0.4230
d2	0.7230	0.4280
d3	0.7370	0.4290
d4	0.7220	0.4340

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Chain	Atom inclusion	Q-score
d5	0.7240	0.4390
d6	0.7220	0.4290
d7	0.7260	0.4240
d8	0.7650	0.4330
d9	0.7320	0.4300
e0	0.7020	0.4270
e1	0.7160	0.4160
e2	0.7200	0.4010
e3	0.6440	0.3880
e4	0.7290	0.4290
e5	0.7570	0.4330
e6	0.7520	0.4280
e7	0.7420	0.4230
e8	0.7000	0.4200
e9	0.7400	0.4240
f0	0.7190	0.4230
f1	0.7810	0.4330
f2	0.7220	0.4340
f3	0.7060	0.4300
f4	0.7100	0.4270
f5	0.6930	0.4190
f6	0.6930	0.4060
f7	0.7150	0.4110
f8	0.6520	0.4110
f9	0.7140	0.4270
g0	0.7320	0.4350
g1	0.7290	0.4300
g2	0.7260	0.4330
g3	0.7270	0.4380
g4	0.7200	0.4300
g5	0.7380	0.4290
g6	0.7300	0.4290
g7	0.7310	0.4290
g8	0.7240	0.4250
g9	0.6880	0.4060
h0	0.7060	0.4050
h1	0.6590	0.3970
h2	0.7600	0.4350
h3	0.7410	0.4310
h4	0.7490	0.4300
h5	0.7430	0.4310
h6	0.7420	0.4300

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Chain	Atom inclusion	Q-score
h7	0.7150	0.4220
h8	0.7340	0.4190
h9	0.7170	0.4160
i0	0.7400	0.4290
i1	0.6980	0.4220
i2	0.7170	0.4390
i3	0.7280	0.4270
i4	0.7010	0.4130
i5	0.6870	0.4080
i6	0.6660	0.4130
i7	0.7020	0.4300
i8	0.7510	0.4310
i9	0.7290	0.4260
j0	0.7350	0.4310
j1	0.7120	0.4310
j2	0.7530	0.4340
j3	0.7640	0.4290
j4	0.7510	0.4290
j5	0.7620	0.4310
j6	0.7470	0.4340
j7	0.6920	0.4140
j8	0.7140	0.4080
j9	0.6600	0.3920
k0	0.7470	0.4270
k1	0.7450	0.4240
k2	0.7370	0.4250
k3	0.7570	0.4220
k4	0.7570	0.4340
k5	0.7000	0.4220
k6	0.7400	0.4210
k7	0.7540	0.4230
k8	0.7370	0.4300
k9	0.7300	0.4270
l0	0.7110	0.4320
l1	0.7230	0.4260
l2	0.7320	0.4150
l3	0.6990	0.4080
l4	0.7500	0.4140
l5	0.8090	0.4810